

ANEJO N° 6. ESTRUCTURAS

Viaducto de Borges Blanques

Subanejo 1.4

ESFUERZOS FASE 8
SECCIÓN INICIAL

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1: 1]CEXT

Coef. exc:

ESTRUCTURA INICIAL

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-78.87	0.00
1	2	1.00	0.00	-63.91	71.39
2	2	1.00	0.00	-63.91	71.39
2	3	1.18	0.00	-62.46	82.45
3	3	1.18	0.00	-62.46	82.45
3	4	2.35	0.00	-52.77	150.15
4	4	2.35	0.00	-52.77	150.15
4	5	3.53	0.00	-43.08	206.46
5	5	3.53	0.00	-43.08	206.46
5	6	4.70	0.00	-33.39	251.39
6	6	4.70	0.00	-33.39	251.39
6	7	5.88	0.00	-23.70	284.94
7	7	5.88	0.00	-23.70	284.94
7	8	7.05	0.00	-14.01	307.09
8	8	7.05	0.00	-14.01	307.09
8	9	8.23	0.00	-4.32	317.86
9	9	8.23	0.00	-4.32	317.86
9	10	9.40	0.00	5.37	317.25
10	10	9.40	0.00	5.37	317.25
10	11	10.58	0.00	15.06	305.25
11	11	10.58	0.00	15.06	305.25
11	12	11.75	0.00	24.75	281.86
12	12	11.75	0.00	24.75	281.86
12	13	12.93	0.00	34.44	247.09
13	13	12.93	0.00	34.44	247.09
13	14	14.10	0.00	44.13	200.93
14	14	14.10	0.00	44.13	200.93
14	15	15.28	0.00	53.82	143.39
15	15	15.28	0.00	53.82	143.39
15	16	16.45	0.00	63.51	74.45
16	16	16.45	0.00	63.51	74.45
16	17	17.63	0.00	73.20	-5.86
17	17	17.63	0.00	73.20	-5.86
17	18	18.80	0.00	82.89	-97.56
18	18	18.80	0.00	82.89	-97.56
18	19	19.98	0.00	92.58	-200.65
19	19	19.98	0.00	92.58	-200.65
19	20	21.15	0.00	102.27	-315.13
20	20	21.15	0.00	102.27	-315.13
20	21	22.33	0.00	111.96	-440.99
21	21	22.33	0.00	111.96	-440.99
21	22	22.50	0.00	113.40	-460.71
22	22	22.50	0.00	113.40	-460.71
22	23	23.50	0.00	127.09	-580.96
23	1023	23.50	0.00	-125.47	-580.96
23	24	24.50	0.00	-111.78	-462.33
24	24	24.50	0.00	-111.78	-462.33
24	25	24.95	0.00	-108.07	-412.87
25	25	24.95	0.00	-108.07	-412.87
25	26	26.40	0.00	-96.11	-264.84
26	26	26.40	0.00	-96.11	-264.84

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1: 1]CEXT

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	-84.15	-134.15
27	27	27.85	0.00	-84.15	-134.15
27	28	29.30	0.00	-72.19	-20.80
28	28	29.30	0.00	-72.19	-20.80
28	29	30.75	0.00	-60.24	75.22
29	29	30.75	0.00	-60.24	75.22
29	30	32.20	0.00	-48.28	153.89
30	30	32.20	0.00	-48.28	153.89
30	31	33.65	0.00	-36.32	215.22
31	31	33.65	0.00	-36.32	215.22
31	32	35.10	0.00	-24.36	259.22
32	32	35.10	0.00	-24.36	259.22
32	33	36.55	0.00	-12.40	285.87
33	33	36.55	0.00	-12.40	285.87
33	34	38.00	0.00	-0.45	295.19
34	34	38.00	0.00	-0.45	295.19
34	35	39.45	0.00	11.51	287.16
35	35	39.45	0.00	11.51	287.16
35	36	40.90	0.00	23.47	261.80
36	36	40.90	0.00	23.47	261.80
36	37	42.35	0.00	35.43	219.10
37	37	42.35	0.00	35.43	219.10
37	38	43.80	0.00	47.39	159.05
38	38	43.80	0.00	47.39	159.05
38	39	45.25	0.00	59.35	81.67
39	39	45.25	0.00	59.35	81.67
39	40	46.70	0.00	71.30	-13.05
40	40	46.70	0.00	71.30	-13.05
40	41	48.15	0.00	83.26	-125.11
41	41	48.15	0.00	83.26	-125.11
41	42	49.60	0.00	95.22	-254.51
42	42	49.60	0.00	95.22	-254.51
42	43	51.05	0.00	107.18	-401.25
43	43	51.05	0.00	107.18	-401.25
43	44	51.50	0.00	110.89	-450.31
44	44	51.50	0.00	110.89	-450.31
44	45	52.50	0.00	124.58	-568.05
45	1045	52.50	0.00	-122.86	-568.05
45	46	53.50	0.00	-109.18	-452.03
46	46	53.50	0.00	-109.18	-452.03
46	47	53.95	0.00	-105.46	-403.73
47	47	53.95	0.00	-105.46	-403.73
47	48	55.40	0.00	-93.51	-259.48
48	48	55.40	0.00	-93.51	-259.48
48	49	56.85	0.00	-81.55	-132.57
49	49	56.85	0.00	-81.55	-132.57
49	50	58.30	0.00	-69.59	-22.99
50	50	58.30	0.00	-69.59	-22.99
50	51	59.75	0.00	-57.63	69.24
51	51	59.75	0.00	-57.63	69.24
51	52	61.20	0.00	-45.67	144.14

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1: 1]CEXT

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-45.67	144.14
52	53	62.65	0.00	-33.71	201.69
53	53	62.65	0.00	-33.71	201.69
53	54	64.10	0.00	-21.76	241.91
54	54	64.10	0.00	-21.76	241.91
54	55	65.55	0.00	-9.80	264.79
55	55	65.55	0.00	-9.80	264.79
55	56	67.00	0.00	2.16	270.33
56	56	67.00	0.00	2.16	270.33
56	57	68.45	0.00	14.12	258.53
57	57	68.45	0.00	14.12	258.53
57	58	69.90	0.00	26.08	229.39
58	58	69.90	0.00	26.08	229.39
58	59	71.35	0.00	38.03	182.91
59	59	71.35	0.00	38.03	182.91
59	60	72.80	0.00	49.99	119.09
60	60	72.80	0.00	49.99	119.09
60	61	74.25	0.00	61.95	37.93
61	61	74.25	0.00	61.95	37.93
61	62	75.70	0.00	73.91	-60.57
62	62	75.70	0.00	73.91	-60.57
62	63	77.15	0.00	85.87	-176.40
63	63	77.15	0.00	85.87	-176.40
63	64	78.60	0.00	97.82	-309.58
64	64	78.60	0.00	97.82	-309.58
64	65	80.05	0.00	109.78	-460.09
65	65	80.05	0.00	109.78	-460.09
65	66	80.50	0.00	113.49	-510.33
66	66	80.50	0.00	113.49	-510.33
66	67	81.50	0.00	127.18	-630.67
67	1067	81.50	0.00	-132.76	-630.67
67	68	82.50	0.00	-119.06	-504.76
68	68	82.50	0.00	-119.06	-504.76
68	69	83.08	0.00	-114.32	-437.66
69	69	83.08	0.00	-114.32	-437.66
69	70	84.65	0.00	-101.33	-267.83
70	70	84.65	0.00	-101.33	-267.83
70	71	86.23	0.00	-88.34	-118.46
71	71	86.23	0.00	-88.34	-118.46
71	72	87.80	0.00	-75.36	10.45
72	72	87.80	0.00	-75.36	10.45
72	73	89.38	0.00	-62.37	118.91
73	73	89.38	0.00	-62.37	118.91
73	74	90.95	0.00	-49.38	206.91
74	74	90.95	0.00	-49.38	206.91
74	75	92.53	0.00	-36.39	274.45
75	75	92.53	0.00	-36.39	274.45
75	76	94.10	0.00	-23.40	321.53
76	76	94.10	0.00	-23.40	321.53
76	77	95.68	0.00	-10.41	348.16
77	77	95.68	0.00	-10.41	348.16

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1; 1]CEXT

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	2.58	354.33
78	78	97.25	0.00	2.58	354.33
78	79	98.83	0.00	15.57	340.04
79	79	98.83	0.00	15.57	340.04
79	80	100.40	0.00	28.56	305.29
80	80	100.40	0.00	28.56	305.29
80	81	101.98	0.00	41.54	250.09
81	81	101.98	0.00	41.54	250.09
81	82	103.55	0.00	54.53	174.43
82	82	103.55	0.00	54.53	174.43
82	83	105.13	0.00	67.52	78.31
83	83	105.13	0.00	67.52	78.31
83	84	106.70	0.00	80.51	-38.27
84	84	106.70	0.00	80.51	-38.27
84	85	108.28	0.00	93.50	-175.30
85	85	108.28	0.00	93.50	-175.30
85	86	109.85	0.00	106.49	-332.80
86	86	109.85	0.00	106.49	-332.80
86	87	111.43	0.00	119.48	-510.75
87	87	111.43	0.00	119.48	-510.75
87	88	112.00	0.00	124.22	-580.82
88	88	112.00	0.00	124.22	-580.82
88	89	113.00	0.00	137.91	-711.88
89	1089	113.00	0.00	-137.95	-711.88
89	90	114.00	0.00	-124.26	-580.75
90	90	114.00	0.00	-124.26	-580.75
90	91	114.58	0.00	-119.52	-510.68
91	91	114.58	0.00	-119.52	-510.68
91	92	116.15	0.00	-106.53	-332.66
92	92	116.15	0.00	-106.53	-332.66
92	93	117.73	0.00	-93.54	-175.10
93	93	117.73	0.00	-93.54	-175.10
93	94	119.30	0.00	-80.55	-38.00
94	94	119.30	0.00	-80.55	-38.00
94	95	120.88	0.00	-67.57	78.64
95	95	120.88	0.00	-67.57	78.64
95	96	122.45	0.00	-54.58	174.83
96	96	122.45	0.00	-54.58	174.83
96	97	124.03	0.00	-41.59	250.56
97	97	124.03	0.00	-41.59	250.56
97	98	125.60	0.00	-28.60	305.83
98	98	125.60	0.00	-28.60	305.83
98	99	127.18	0.00	-15.61	340.64
99	99	127.18	0.00	-15.61	340.64
99	100	128.75	0.00	-2.62	355.00
100	100	128.75	0.00	-2.62	355.00
100	101	130.33	0.00	10.37	348.89
101	101	130.33	0.00	10.37	348.89
101	102	131.90	0.00	23.36	322.33
102	102	131.90	0.00	23.36	322.33
102	103	133.48	0.00	36.35	275.32

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1; 1]CEXT

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	36.35	275.32
103	104	135.05	0.00	49.34	207.84
104	104	135.05	0.00	49.34	207.84
104	105	136.63	0.00	62.33	119.91
105	105	136.63	0.00	62.33	119.91
105	106	138.20	0.00	75.31	11.52
106	106	138.20	0.00	75.31	11.52
106	107	139.78	0.00	88.30	-117.33
107	107	139.78	0.00	88.30	-117.33
107	108	141.35	0.00	101.29	-266.64
108	108	141.35	0.00	101.29	-266.64
108	109	142.93	0.00	114.28	-436.40
109	109	142.93	0.00	114.28	-436.40
109	110	143.50	0.00	119.02	-503.49
110	110	143.50	0.00	119.02	-503.49
110	111	144.50	0.00	132.71	-629.35
111	1111	144.50	0.00	-129.15	-629.35
111	112	145.50	0.00	-115.46	-507.03
112	112	145.50	0.00	-115.46	-507.03
112	113	145.68	0.00	-114.02	-486.96
113	113	145.68	0.00	-114.02	-486.96
113	114	146.85	0.00	-104.33	-358.68
114	114	146.85	0.00	-104.33	-358.68
114	115	148.03	0.00	-94.64	-241.78
115	115	148.03	0.00	-94.64	-241.78
115	116	149.20	0.00	-84.95	-136.27
116	116	149.20	0.00	-84.95	-136.27
116	117	150.38	0.00	-75.26	-42.15
117	117	150.38	0.00	-75.26	-42.15
117	118	151.55	0.00	-65.57	40.58
118	118	151.55	0.00	-65.57	40.58
118	119	152.73	0.00	-55.88	111.93
119	119	152.73	0.00	-55.88	111.93
119	120	153.90	0.00	-46.19	171.90
120	120	153.90	0.00	-46.19	171.90
120	121	155.08	0.00	-36.50	220.48
121	121	155.08	0.00	-36.50	220.48
121	122	156.25	0.00	-26.81	257.67
122	122	156.25	0.00	-26.81	257.67
122	123	157.43	0.00	-17.12	283.47
123	123	157.43	0.00	-17.12	283.47
123	124	158.60	0.00	-7.43	297.89
124	124	158.60	0.00	-7.43	297.89
124	125	159.78	0.00	2.26	300.93
125	125	159.78	0.00	2.26	300.93
125	126	160.95	0.00	11.95	292.58
126	126	160.95	0.00	11.95	292.58
126	127	162.13	0.00	21.64	272.84
127	127	162.13	0.00	21.64	272.84
127	128	163.30	0.00	31.33	241.71
128	128	163.30	0.00	31.33	241.71

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1: 1]CEXT

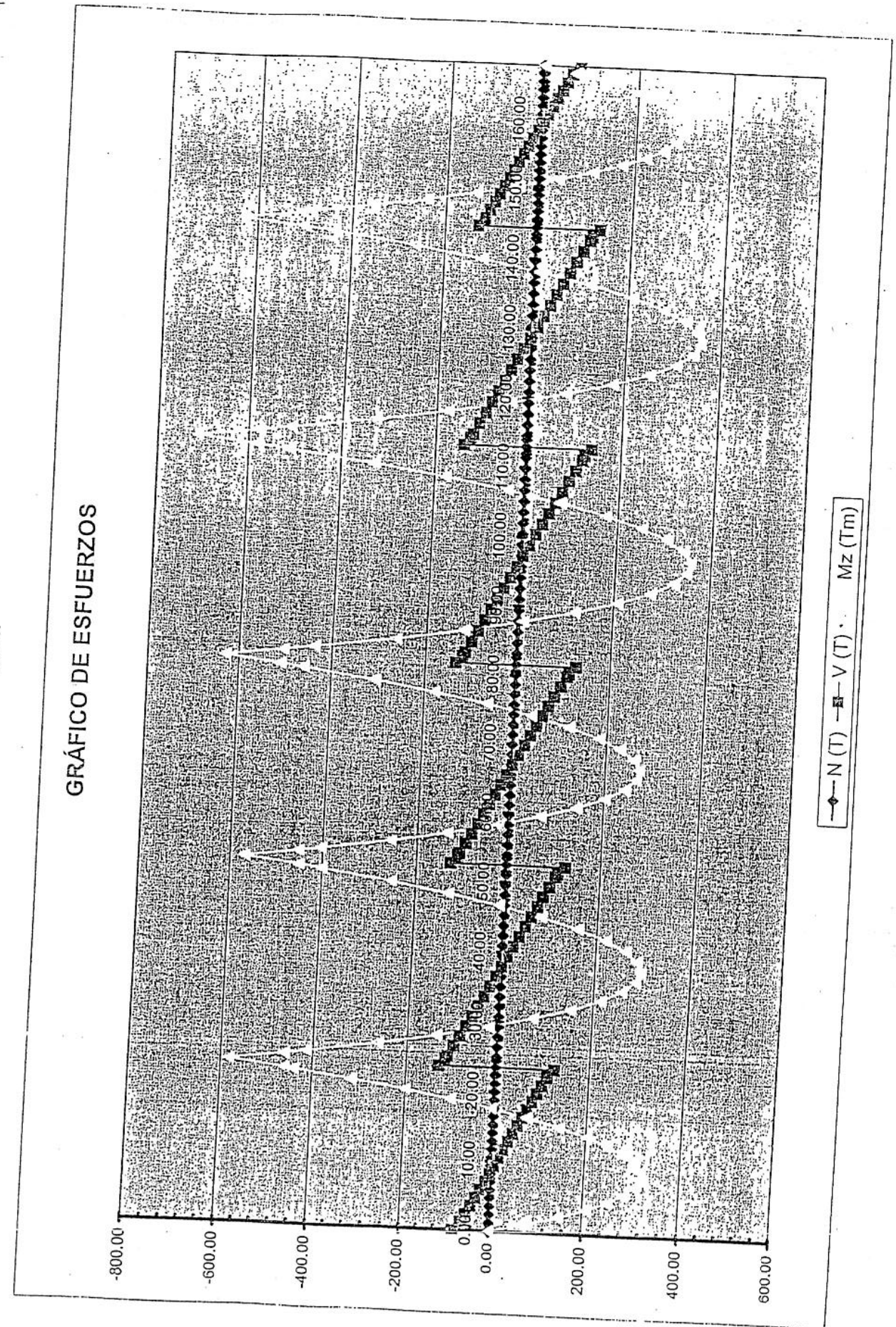
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	41.02	199.20
129	129	164.48	0.00	41.02	199.20
129	130	165.65	0.00	50.71	145.31
130	130	165.65	0.00	50.71	145.31
130	131	166.83	0.00	60.40	80.03
131	131	166.83	0.00	60.40	80.03
131	132	167.00	0.00	61.85	69.32
132	132	167.00	0.00	61.85	69.32
132	133	168.00	0.00	76.81	0.00

Programa DINTEL IDEAM S.A.
CEXT

17/08/01

GRÁFICO DE ESFUERZOS



esf f8.xls

Subanejo 1.5

**ESFUERZOS FASE 8
SECCIÓN FISURADA**

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1; 1]CEXT

Coef. exc:

ESTRUCTURA CON

INERCIAS FISURADAS

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-82.19	0.00
1	2	1.00	0.00	-67.23	74.71
2	2	1.00	0.00	-67.23	74.71
2	3	1.18	0.00	-65.79	86.35
3	3	1.18	0.00	-65.79	86.35
3	4	2.35	0.00	-56.10	157.95
4	4	2.35	0.00	-56.10	157.95
4	5	3.53	0.00	-46.41	218.17
5	5	3.53	0.00	-46.41	218.17
5	6	4.70	0.00	-36.71	267.01
6	6	4.70	0.00	-36.71	267.01
6	7	5.88	0.00	-27.02	304.45
7	7	5.88	0.00	-27.02	304.45
7	8	7.05	0.00	-17.33	330.51
8	8	7.05	0.00	-17.33	330.51
8	9	8.23	0.00	-7.64	345.19
9	9	8.23	0.00	-7.64	345.19
9	10	9.40	0.00	2.05	348.48
10	10	9.40	0.00	2.05	348.48
10	11	10.58	0.00	11.74	340.38
11	11	10.58	0.00	11.74	340.38
11	12	11.75	0.00	21.43	320.90
12	12	11.75	0.00	21.43	320.90
12	13	12.93	0.00	31.12	290.03
13	13	12.93	0.00	31.12	290.03
13	14	14.10	0.00	40.81	247.77
14	14	14.10	0.00	40.81	247.77
14	15	15.28	0.00	50.50	194.13
15	15	15.28	0.00	50.50	194.13
15	16	16.45	0.00	60.19	129.10
16	16	16.45	-0.71	60.18	129.10
16	17	17.63	-0.83	69.87	52.69
17	17	17.63	-0.83	69.87	52.69
17	18	18.80	-0.94	79.56	-35.11
18	18	18.80	0.00	79.57	-35.11
18	19	19.98	0.00	89.26	-134.30
19	19	19.98	0.00	89.26	-134.30
19	20	21.15	0.00	98.95	-244.87
20	20	21.15	0.00	98.95	-244.87
20	21	22.33	0.00	108.64	-366.83
21	21	22.33	0.00	108.64	-366.83
21	22	22.50	0.00	110.08	-385.97
22	22	22.50	0.00	110.08	-385.97
22	23	23.50	0.00	123.77	-502.90
23	1023	23.50	0.00	-125.00	-502.90
23	24	24.50	0.00	-111.31	-384.74
24	24	24.50	0.00	-111.31	-384.74
24	25	24.95	0.00	-107.59	-335.49
25	25	24.95	0.00	-107.59	-335.49
25	26	26.40	0.00	-95.64	-188.15
26	26	26.40	0.00	-95.64	-188.15

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1; 1]CEXT

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	-83.68	-58.15
27	27	27.85	0.00	-83.68	-58.15
27	28	29.30	0.00	-71.72	54.52
28	28	29.30	-0.69	-71.72	54.52
28	29	30.75	-0.57	-59.76	149.84
29	29	30.75	-0.57	-59.76	149.84
29	30	32.20	-0.46	-47.80	227.83
30	30	32.20	0.00	-47.80	227.83
30	31	33.65	0.00	-35.84	288.47
31	31	33.65	0.00	-35.84	288.47
31	32	35.10	0.00	-23.89	331.78
32	32	35.10	0.00	-23.89	331.78
32	33	36.55	0.00	-11.93	357.74
33	33	36.55	0.00	-11.93	357.74
33	34	38.00	0.00	0.03	366.37
34	34	38.00	0.00	0.03	366.37
34	35	39.45	0.00	11.99	357.66
35	35	39.45	0.00	11.99	357.66
35	36	40.90	0.00	23.95	331.60
36	36	40.90	0.00	23.95	331.60
36	37	42.35	0.00	35.90	288.21
37	37	42.35	0.00	35.90	288.21
37	38	43.80	0.00	47.86	227.48
38	38	43.80	-0.46	47.86	227.48
38	39	45.25	-0.57	59.82	149.41
39	39	45.25	-0.57	59.82	149.41
39	40	46.70	-0.69	71.78	54.00
40	40	46.70	0.00	71.78	54.00
40	41	48.15	0.00	83.74	-58.75
41	41	48.15	0.00	83.74	-58.75
41	42	49.60	0.00	95.70	-188.84
42	42	49.60	0.00	95.70	-188.84
42	43	51.05	0.00	107.65	-336.27
43	43	51.05	0.00	107.65	-336.27
43	44	51.50	0.00	111.37	-385.55
44	44	51.50	0.00	111.37	-385.55
44	45	52.50	0.00	125.06	-503.76
45	1045	52.50	0.00	-123.59	-503.76
45	46	53.50	0.00	-109.90	-387.01
46	46	53.50	0.00	-109.90	-387.01
46	47	53.95	0.00	-106.19	-338.39
47	47	53.95	0.00	-106.19	-338.39
47	48	55.40	0.00	-94.23	-193.08
48	48	55.40	0.00	-94.23	-193.08
48	49	56.85	0.00	-82.28	-65.11
49	49	56.85	0.00	-82.28	-65.11
49	50	58.30	0.00	-70.32	45.51
50	50	58.30	-0.67	-70.31	45.51
50	51	59.75	-0.56	-58.36	138.81
51	51	59.75	-0.56	-58.36	138.81
51	52	61.20	-0.44	-46.40	214.75

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1; 1]CEXT

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-46.40	214.75
52	53	62.65	0.00	-34.44	273.36
53	53	62.65	0.00	-34.44	273.36
53	54	64.10	0.00	-22.48	314.63
54	54	64.10	0.00	-22.48	314.63
54	55	65.55	0.00	-10.53	338.56
55	55	65.55	0.00	-10.53	338.56
55	56	67.00	0.00	1.43	345.16
56	56	67.00	0.00	1.43	345.16
56	57	68.45	0.00	13.39	334.41
57	57	68.45	0.00	13.39	334.41
57	58	69.90	0.00	25.35	306.32
58	58	69.90	0.00	25.35	306.32
58	59	71.35	0.00	37.31	260.90
59	59	71.35	0.00	37.31	260.90
59	60	72.80	0.00	49.27	198.13
60	60	72.80	-0.47	49.26	198.13
60	61	74.25	-0.59	61.22	118.03
61	61	74.25	-0.59	61.22	118.03
61	62	75.70	-0.70	73.18	20.58
62	62	75.70	0.00	73.18	20.58
62	63	77.15	0.00	85.14	-94.20
63	63	77.15	0.00	85.14	-94.20
63	64	78.60	0.00	97.10	-226.33
64	64	78.60	0.00	97.10	-226.33
64	65	80.05	0.00	109.06	-375.79
65	65	80.05	0.00	109.06	-375.79
65	66	80.50	0.00	112.77	-425.70
66	66	80.50	0.00	112.77	-425.70
66	67	81.50	0.00	126.46	-545.31
67	1067	81.50	0.00	-133.54	-545.31
67	68	82.50	0.00	-119.84	-418.62
68	68	82.50	0.00	-119.84	-418.62
68	69	83.08	0.00	-115.10	-351.08
69	69	83.08	0.00	-115.10	-351.08
69	70	84.65	0.00	-102.11	-180.02
70	70	84.65	0.00	-102.11	-180.02
70	71	86.23	0.00	-89.13	-29.42
71	71	86.23	0.00	-89.13	-29.42
71	72	87.80	0.00	-76.14	100.72
72	72	87.80	-0.67	-76.13	100.72
72	73	89.38	-0.56	-63.14	210.41
73	73	89.38	-0.56	-63.14	210.41
73	74	90.95	-0.44	-50.16	299.64
74	74	90.95	0.00	-50.16	299.64
74	75	92.53	0.00	-37.17	368.40
75	75	92.53	0.00	-37.17	368.40
75	76	94.10	0.00	-24.18	416.71
76	76	94.10	0.00	-24.18	416.71
76	77	95.68	0.00	-11.19	444.57
77	77	95.68	0.00	-11.19	444.57

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1: 1]CEXT

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	1.80	451.96
78	78	97.25	0.00	1.80	451.96
78	79	98.83	0.00	14.79	438.90
79	79	98.83	0.00	14.79	438.90
79	80	100.40	0.00	27.78	405.38
80	80	100.40	0.00	27.78	405.38
80	81	101.98	0.00	40.77	351.41
81	81	101.98	0.00	40.77	351.41
81	82	103.55	0.00	53.75	276.97
82	82	103.55	-0.47	53.75	276.97
82	83	105.13	-0.59	66.74	182.08
83	83	105.13	-0.59	66.74	182.08
83	84	106.70	-0.70	79.73	66.73
84	84	106.70	0.00	79.73	66.73
84	85	108.28	0.00	92.72	-69.08
85	85	108.28	0.00	92.72	-69.08
85	86	109.85	0.00	105.71	-225.35
86	86	109.85	0.00	105.71	-225.35
86	87	111.43	0.00	118.70	-402.07
87	87	111.43	0.00	118.70	-402.07
87	88	112.00	0.00	123.44	-471.70
88	88	112.00	0.00	123.44	-471.70
88	89	113.00	0.00	137.13	-601.98
89	1089	113.00	0.00	-137.36	-601.98
89	90	114.00	0.00	-123.67	-471.45
90	90	114.00	0.00	-123.67	-471.45
90	91	114.58	0.00	-118.93	-401.72
91	91	114.58	0.00	-118.93	-401.72
91	92	116.15	0.00	-105.94	-224.63
92	92	116.15	0.00	-105.94	-224.63
92	93	117.73	0.00	-92.95	-68.01
93	93	117.73	0.00	-92.95	-68.01
93	94	119.30	0.00	-79.96	68.16
94	94	119.30	-0.71	-79.96	68.16
94	95	120.88	-0.59	-66.97	183.87
95	95	120.88	-0.59	-66.97	183.87
95	96	122.45	-0.48	-53.98	279.12
96	96	122.45	0.00	-53.98	279.12
96	97	124.03	0.00	-40.99	353.91
97	97	124.03	0.00	-40.99	353.91
97	98	125.60	0.00	-28.00	408.24
98	98	125.60	0.00	-28.00	408.24
98	99	127.18	0.00	-15.01	442.12
99	99	127.18	0.00	-15.01	442.12
99	100	128.75	0.00	-2.03	455.54
100	100	128.75	0.00	-2.03	455.54
100	101	130.33	0.00	10.96	448.50
101	101	130.33	0.00	10.96	448.50
101	102	131.90	0.00	23.95	421.00
102	102	131.90	0.00	23.95	421.00
102	103	133.48	0.00	36.94	373.05

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1: 1]CEXT

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	36.94	373.05
103	104	135.05	0.00	49.93	304.64
104	104	135.05	-0.44	49.93	304.64
104	105	136.63	-0.56	62.92	215.77
105	105	136.63	-0.56	62.92	215.77
105	106	138.20	-0.67	75.91	106.44
106	106	138.20	0.00	75.91	106.44
106	107	139.78	0.00	88.90	-23.35
107	107	139.78	0.00	88.90	-23.35
107	108	141.35	0.00	101.89	-173.59
108	108	141.35	0.00	101.89	-173.59
108	109	142.93	0.00	114.88	-344.29
109	109	142.93	0.00	114.88	-344.29
109	110	143.50	0.00	119.62	-411.72
110	110	143.50	0.00	119.62	-411.72
110	111	144.50	0.00	133.31	-538.17
111	111	144.50	0.00	-125.27	-538.17
111	112	145.50	0.00	-111.58	-419.73
112	112	145.50	0.00	-111.58	-419.73
112	113	145.68	0.00	-110.14	-400.34
113	113	145.68	0.00	-110.14	-400.34
113	114	146.85	0.00	-100.45	-276.62
114	114	146.85	0.00	-100.45	-276.62
114	115	148.03	0.00	-90.76	-164.28
115	115	148.03	0.00	-90.76	-164.28
115	116	149.20	0.00	-81.07	-63.33
116	116	149.20	-0.96	-81.06	-63.33
116	117	150.38	-0.84	-71.37	26.23
117	117	150.38	-0.84	-71.37	26.23
117	118	151.55	-0.73	-61.68	104.41
118	118	151.55	0.00	-61.69	104.41
118	119	152.73	0.00	-52.00	171.20
119	119	152.73	0.00	-52.00	171.20
119	120	153.90	0.00	-42.31	226.60
120	120	153.90	0.00	-42.31	226.60
120	121	155.08	0.00	-32.62	270.62
121	121	155.08	0.00	-32.62	270.62
121	122	156.25	0.00	-22.93	303.26
122	122	156.25	0.00	-22.93	303.26
122	123	157.43	0.00	-13.24	324.50
123	123	157.43	0.00	-13.24	324.50
123	124	158.60	0.00	-3.55	334.37
124	124	158.60	0.00	-3.55	334.37
124	125	159.78	0.00	6.14	332.84
125	125	159.78	0.00	6.14	332.84
125	126	160.95	0.00	15.83	319.93
126	126	160.95	0.00	15.83	319.93
126	127	162.13	0.00	25.52	295.63
127	127	162.13	0.00	25.52	295.63
127	128	163.30	0.00	35.21	259.95
128	128	163.30	0.00	35.21	259.95

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CEXT

Cargas exteriores sobre EI

[1; 1]CEXT

Coef. exc:

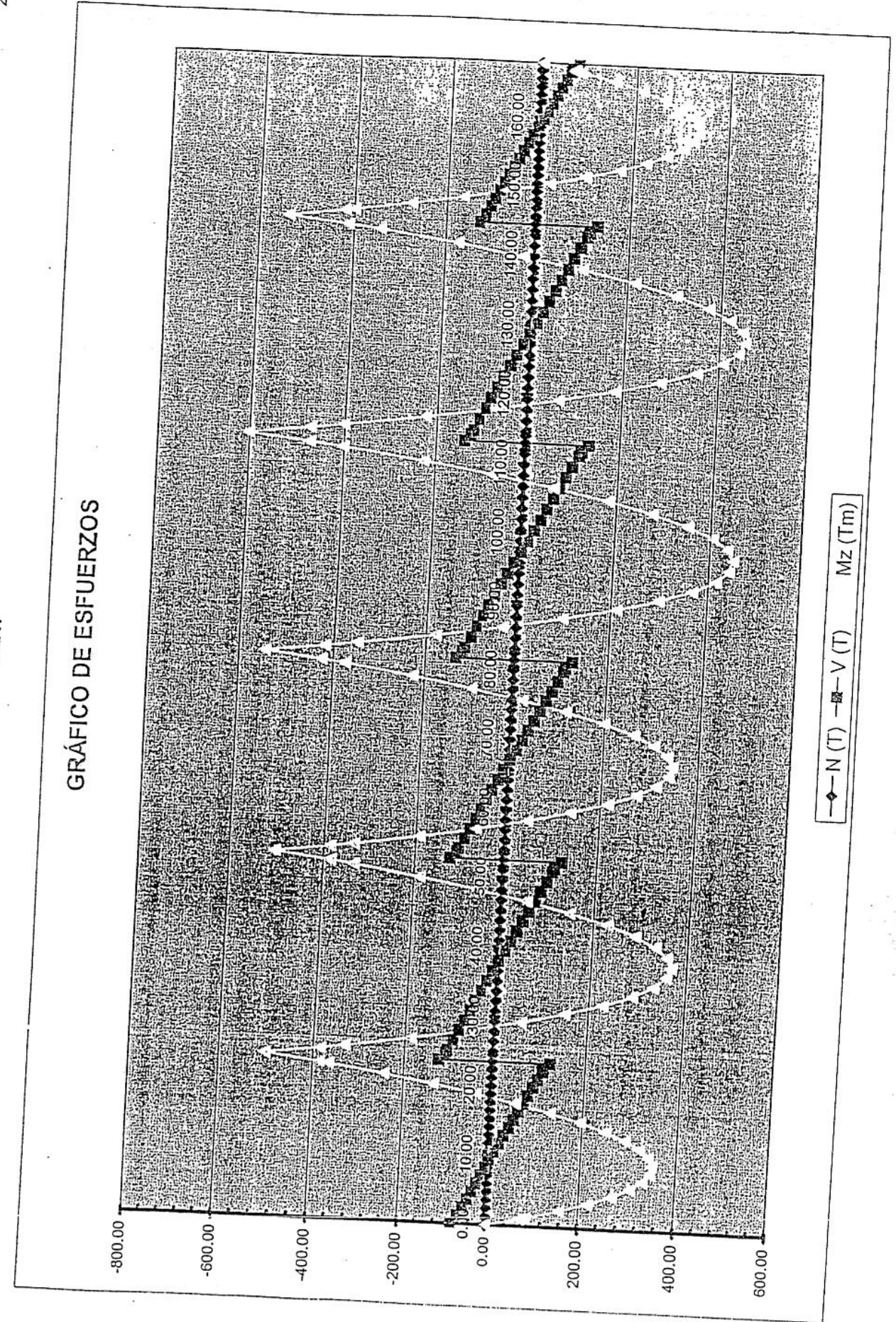
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	44.90	212.88
129	129	164.48	0.00	44.90	212.88
129	130	165.65	0.00	54.59	154.43
130	130	165.65	0.00	54.59	154.43
130	131	166.83	0.00	64.28	84.58
131	131	166.83	0.00	64.28	84.58
131	132	167.00	0.00	65.73	73.20
132	132	167.00	0.00	65.73	73.20
132	133	168.00	0.00	80.69	0.00

esf f8 fisurada.xls

Programa DINTEL IDEAM S.A.
CEXT

29/08/01

GRÁFICO DE ESFUERZOS



Subanejo 1.6

REDISTRIBUCIONES

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPTaller

Redistribución pret taller

[1; 1]RPT.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-46.25	0.00
1	2	1.00	0.00	-46.25	46.25
2	2	1.00	0.00	-46.25	46.25
2	3	1.18	0.00	-46.25	54.34
3	3	1.18	0.00	-46.25	54.34
3	4	2.35	0.00	-46.25	108.68
4	4	2.35	0.00	-46.25	108.68
4	5	3.53	0.00	-46.25	163.02
5	5	3.53	0.00	-46.25	163.02
5	6	4.70	0.00	-46.25	217.36
6	6	4.70	0.00	-46.25	217.36
6	7	5.88	0.00	-46.25	271.70
7	7	5.88	0.00	-46.25	271.70
7	8	7.05	0.00	-46.25	326.04
8	8	7.05	0.00	-46.25	326.04
8	9	8.23	0.00	-46.25	380.38
9	9	8.23	0.00	-46.25	380.38
9	10	9.40	0.00	-46.25	434.73
10	10	9.40	0.00	-46.25	434.73
10	11	10.58	0.00	-46.25	489.07
11	11	10.58	0.00	-46.25	489.07
11	12	11.75	0.00	-46.25	543.41
12	12	11.75	0.00	-46.25	543.41
12	13	12.93	0.00	-46.25	597.75
13	13	12.93	0.00	-46.25	597.75
13	14	14.10	0.00	-46.25	652.09
14	14	14.10	0.00	-46.25	652.09
14	15	15.28	0.00	-46.25	706.43
15	15	15.28	0.00	-46.25	706.43
15	16	16.45	0.00	-46.25	760.77
16	16	16.45	0.54	-46.24	760.80
16	17	17.63	0.54	-46.24	815.14
17	17	17.63	0.54	-46.24	815.14
17	18	18.80	0.54	-46.24	869.48
18	18	18.80	0.00	-46.25	869.44
18	19	19.98	0.00	-46.25	923.78
19	19	19.98	0.00	-46.25	923.78
19	20	21.15	0.00	-46.25	978.12
20	20	21.15	0.00	-46.25	978.12
20	21	22.33	0.00	-46.25	1032.46
21	21	22.33	0.00	-46.25	1032.46
21	22	22.50	0.00	-46.25	1040.55
22	22	22.50	0.00	-46.25	1040.55
22	23	23.50	0.00	-46.25	1086.80
23	1023	23.50	0.00	1.64	1086.80
23	24	24.50	0.00	1.64	1085.16
24	24	24.50	0.00	1.64	1085.16
24	25	24.95	0.00	1.64	1084.41
25	25	24.95	0.00	1.64	1084.41
25	26	26.40	0.00	1.64	1082.03
26	26	26.40	0.00	1.64	1082.03

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPTaller

Redistribución pret taller

[1; 1]RPT.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	1.64	1079.65
27	27	27.85	0.00	1.64	1079.65
27	28	29.30	0.00	1.64	1077.27
28	28	29.30	0.02	1.64	1077.30
28	29	30.75	0.02	1.64	1074.92
29	29	30.75	0.02	1.64	1074.92
29	30	32.20	0.02	1.64	1072.53
30	30	32.20	0.00	1.64	1072.49
30	31	33.65	0.00	1.64	1070.11
31	31	33.65	0.00	1.64	1070.11
31	32	35.10	0.00	1.64	1067.72
32	32	35.10	0.00	1.64	1067.72
32	33	36.55	0.00	1.64	1065.34
33	33	36.55	0.00	1.64	1065.34
33	34	38.00	0.00	1.64	1062.95
34	34	38.00	0.00	1.64	1062.95
34	35	39.45	0.00	1.64	1060.57
35	35	39.45	0.00	1.64	1060.57
35	36	40.90	0.00	1.64	1058.18
36	36	40.90	0.00	1.64	1058.18
36	37	42.35	0.00	1.64	1055.80
37	37	42.35	0.00	1.64	1055.80
37	38	43.80	0.00	1.64	1053.41
38	38	43.80	-0.02	1.64	1053.46
38	39	45.25	-0.02	1.64	1051.07
39	39	45.25	-0.02	1.64	1051.07
39	40	46.70	-0.02	1.64	1048.69
40	40	46.70	0.00	1.64	1048.65
40	41	48.15	0.00	1.64	1046.27
41	41	48.15	0.00	1.64	1046.27
41	42	49.60	0.00	1.64	1043.88
42	42	49.60	0.00	1.64	1043.88
42	43	51.05	0.00	1.64	1041.50
43	43	51.05	0.00	1.64	1041.50
43	44	51.50	0.00	1.64	1040.76
44	44	51.50	0.00	1.64	1040.76
44	45	52.50	0.00	1.64	1039.11
45	1045	52.50	0.00	-4.51	1039.11
45	46	53.50	0.00	-4.51	1043.62
46	46	53.50	0.00	-4.51	1043.62
46	47	53.95	0.00	-4.51	1045.65
47	47	53.95	0.00	-4.51	1045.65
47	48	55.40	0.00	-4.51	1052.19
48	48	55.40	0.00	-4.51	1052.19
48	49	56.85	0.00	-4.51	1058.73
49	49	56.85	0.00	-4.51	1058.73
49	50	58.30	0.00	-4.51	1065.26
50	50	58.30	-0.04	-4.51	1065.30
50	51	59.75	-0.04	-4.51	1071.83
51	51	59.75	-0.04	-4.51	1071.83
51	52	61.20	-0.04	-4.51	1078.37

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPTaller

Redistribución pret taller

[1; 1]RPT.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-4.51	1078.33
52	53	62.65	0.00	-4.51	1084.86
53	53	62.65	0.00	-4.51	1084.86
53	54	64.10	0.00	-4.51	1091.40
54	54	64.10	0.00	-4.51	1091.40
54	55	65.55	0.00	-4.51	1097.94
55	55	65.55	0.00	-4.51	1097.94
55	56	67.00	0.00	-4.51	1104.47
56	56	67.00	0.00	-4.51	1104.47
56	57	68.45	0.00	-4.51	1111.02
57	57	68.45	0.00	-4.51	1111.02
57	58	69.90	0.00	-4.51	1117.56
58	58	69.90	0.00	-4.51	1117.56
58	59	71.35	0.00	-4.51	1124.09
59	59	71.35	0.00	-4.51	1124.09
59	60	72.80	0.00	-4.51	1130.63
60	60	72.80	0.04	-4.51	1130.66
60	61	74.25	0.04	-4.51	1137.20
61	61	74.25	0.04	-4.51	1137.20
61	62	75.70	0.04	-4.51	1143.73
62	62	75.70	0.00	-4.51	1143.70
62	63	77.15	0.00	-4.51	1150.24
63	63	77.15	0.00	-4.51	1150.24
63	64	78.60	0.00	-4.51	1156.77
64	64	78.60	0.00	-4.51	1156.77
64	65	80.05	0.00	-4.51	1163.31
65	65	80.05	0.00	-4.51	1163.31
65	66	80.50	0.00	-4.51	1165.34
66	66	80.50	0.00	-4.51	1165.34
66	67	81.50	0.00	-4.51	1169.85
67	1067	81.50	0.00	-4.52	1169.85
67	68	82.50	0.00	-4.52	1174.37
68	68	82.50	0.00	-4.52	1174.37
68	69	83.08	0.00	-4.52	1176.97
69	69	83.08	0.00	-4.52	1176.97
69	70	84.65	0.00	-4.52	1184.10
70	70	84.65	0.00	-4.52	1184.10
70	71	86.23	0.00	-4.52	1191.22
71	71	86.23	0.00	-4.52	1191.22
71	72	87.80	0.00	-4.52	1198.35
72	72	87.80	-0.04	-4.52	1198.38
72	73	89.38	-0.04	-4.52	1205.50
73	73	89.38	-0.04	-4.52	1205.50
73	74	90.95	-0.04	-4.52	1212.63
74	74	90.95	0.00	-4.52	1212.58
74	75	92.53	0.00	-4.52	1219.71
75	75	92.53	0.00	-4.52	1219.71
75	76	94.10	0.00	-4.52	1226.83
76	76	94.10	0.00	-4.52	1226.83
76	77	95.68	0.00	-4.52	1233.96
77	77	95.68	0.00	-4.52	1233.96

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPTaller

Redistribución pret taller

[1; 1]RPT.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	-4.52	1241.09
78	78	97.25	0.00	-4.52	1241.09
78	79	98.83	0.00	-4.52	1248.21
79	79	98.83	0.00	-4.52	1248.21
79	80	100.40	0.00	-4.52	1255.33
80	80	100.40	0.00	-4.52	1255.33
80	81	101.98	0.00	-4.52	1262.45
81	81	101.98	0.00	-4.52	1262.45
81	82	103.55	0.00	-4.52	1269.58
82	82	103.55	0.04	-4.52	1269.62
82	83	105.13	0.04	-4.52	1276.75
83	83	105.13	0.04	-4.52	1276.75
83	84	106.70	0.04	-4.52	1283.87
84	84	106.70	0.00	-4.52	1283.84
84	85	108.28	0.00	-4.52	1290.96
85	85	108.28	0.00	-4.52	1290.96
85	86	109.85	0.00	-4.52	1298.09
86	86	109.85	0.00	-4.52	1298.09
86	87	111.43	0.00	-4.52	1305.21
87	87	111.43	0.00	-4.52	1305.21
87	88	112.00	0.00	-4.52	1307.81
88	88	112.00	0.00	-4.52	1307.81
88	89	113.00	0.00	-4.52	1312.33
89	1089	113.00	0.00	3.88	1312.33
89	90	114.00	0.00	3.88	1308.46
90	90	114.00	0.00	3.88	1308.46
90	91	114.58	0.00	3.88	1306.23
91	91	114.58	0.00	3.88	1306.23
91	92	116.15	0.00	3.88	1300.12
92	92	116.15	0.00	3.88	1300.12
92	93	117.73	0.00	3.88	1294.02
93	93	117.73	0.00	3.88	1294.02
93	94	119.30	0.00	3.88	1287.90
94	94	119.30	0.03	3.88	1287.94
94	95	120.88	0.03	3.88	1281.83
95	95	120.88	0.03	3.88	1281.83
95	96	122.45	0.03	3.88	1275.72
96	96	122.45	0.00	3.88	1275.68
96	97	124.03	0.00	3.88	1269.58
97	97	124.03	0.00	3.88	1269.58
97	98	125.60	0.00	3.88	1263.47
98	98	125.60	0.00	3.88	1263.47
98	99	127.18	0.00	3.88	1257.36
99	99	127.18	0.00	3.88	1257.36
99	100	128.75	0.00	3.88	1251.25
100	100	128.75	0.00	3.88	1251.25
100	101	130.33	0.00	3.88	1245.15
101	101	130.33	0.00	3.88	1245.15
101	102	131.90	0.00	3.88	1239.04
102	102	131.90	0.00	3.88	1239.04
102	103	133.48	0.00	3.88	1232.93

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPTaller

Redistribución pret taller

[1; 1]RPT.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	3.88	1232.93
103	104	135.05	0.00	3.88	1226.82
104	104	135.05	-0.03	3.88	1226.87
104	105	136.63	-0.03	3.88	1220.76
105	105	136.63	-0.03	3.88	1220.76
105	106	138.20	-0.03	3.88	1214.65
106	106	138.20	0.00	3.88	1214.62
106	107	139.78	0.00	3.88	1208.51
107	107	139.78	0.00	3.88	1208.51
107	108	141.35	0.00	3.88	1202.40
108	108	141.35	0.00	3.88	1202.40
108	109	142.93	0.00	3.88	1196.29
109	109	142.93	0.00	3.88	1196.29
109	110	143.50	0.00	3.88	1194.06
110	110	143.50	0.00	3.88	1194.06
110	111	144.50	0.00	3.88	1190.19
111	111	144.50	0.00	50.64	1190.19
111	112	145.50	0.00	50.64	1139.54
112	112	145.50	0.00	50.64	1139.54
112	113	145.68	0.00	50.64	1130.68
113	113	145.68	0.00	50.64	1130.68
113	114	146.85	0.00	50.64	1071.17
114	114	146.85	0.00	50.64	1071.17
114	115	148.03	0.00	50.64	1011.66
115	115	148.03	0.00	50.64	1011.66
115	116	149.20	0.00	50.64	952.15
116	116	149.20	0.60	50.64	952.19
116	117	150.38	0.60	50.64	892.68
117	117	150.38	0.60	50.64	892.68
117	118	151.55	0.60	50.64	833.17
118	118	151.55	0.00	50.64	833.14
118	119	152.73	0.00	50.64	773.63
119	119	152.73	0.00	50.64	773.63
119	120	153.90	0.00	50.64	714.12
120	120	153.90	0.00	50.64	714.12
120	121	155.08	0.00	50.64	654.61
121	121	155.08	0.00	50.64	654.61
121	122	156.25	0.00	50.64	595.10
122	122	156.25	0.00	50.64	595.10
122	123	157.43	0.00	50.64	535.59
123	123	157.43	0.00	50.64	535.59
123	124	158.60	0.00	50.64	476.09
124	124	158.60	0.00	50.64	476.09
124	125	159.78	0.00	50.64	416.57
125	125	159.78	0.00	50.64	416.57
125	126	160.95	0.00	50.64	357.06
126	126	160.95	0.00	50.64	357.06
126	127	162.13	0.00	50.64	297.55
127	127	162.13	0.00	50.64	297.55
127	128	163.30	0.00	50.64	238.03
128	128	163.30	0.00	50.64	238.03

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPTaller

Redistribución pret taller

[1; 1]RPT.Esfuerzos

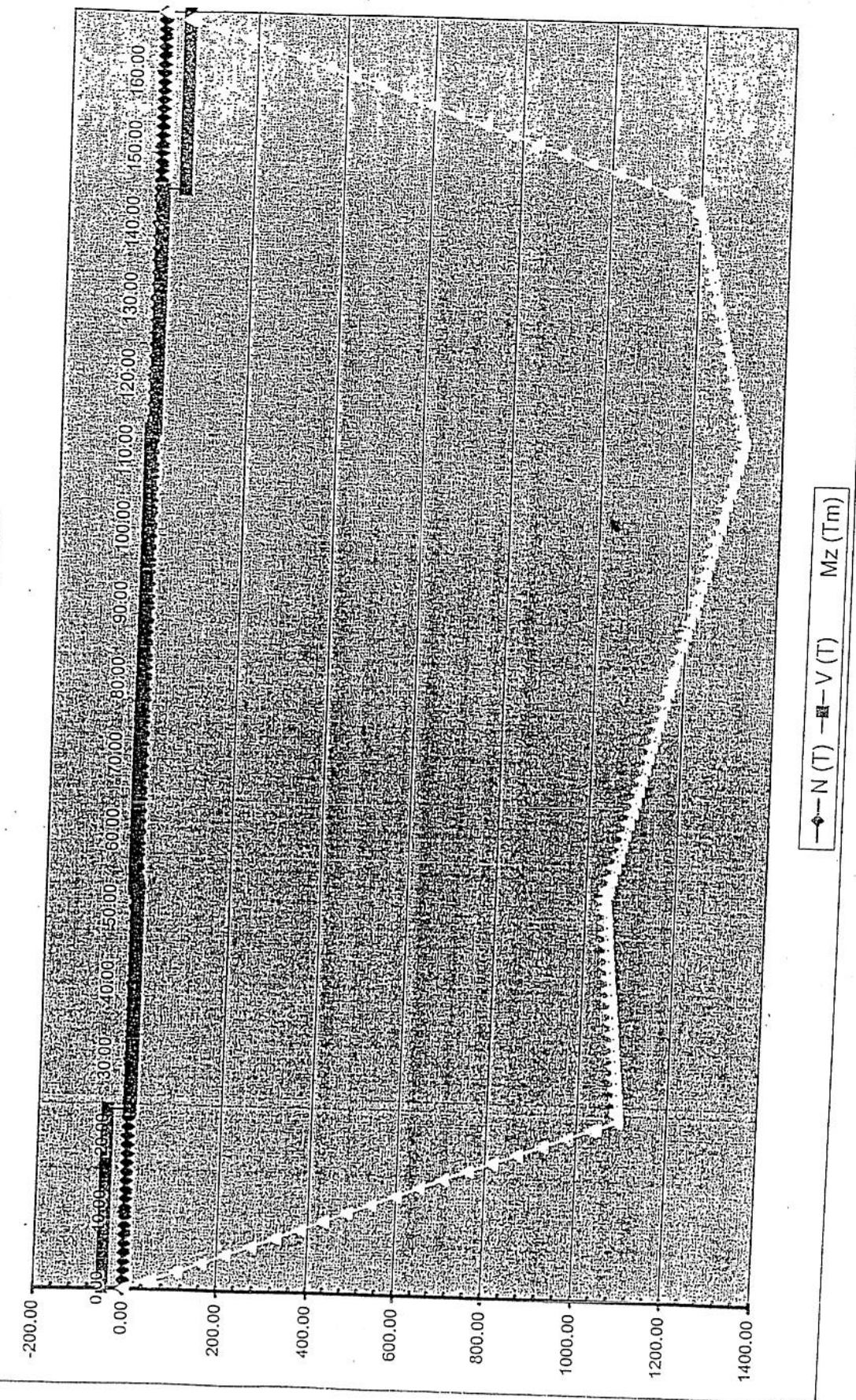
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	50.64	178.53
129	129	164.48	0.00	50.64	178.53
129	130	165.65	0.00	50.64	119.02
130	130	165.65	0.00	50.64	119.02
130	131	166.83	0.00	50.64	59.51
131	131	166.83	0.00	50.64	59.51
131	132	167.00	0.00	50.64	50.64
132	132	167.00	0.00	50.64	50.64
132	133	168.00	0.00	50.64	0.00

esfuerzos redistribuciones.xls

Programa DINTEL IDEAM S.A.
RPTaller

30/08/01

GRÁFICO DE ESFUERZOS

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPBarras

Redistribución cosido barras

[1; 1]RPB.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-3.60	0.00
1	2	1.00	0.00	-3.60	3.60
2	2	1.00	0.00	-3.60	3.60
2	3	1.18	0.00	-3.60	4.23
3	3	1.18	0.00	-3.60	4.23
3	4	2.35	0.00	-3.60	8.46
4	4	2.35	0.00	-3.60	8.46
4	5	3.53	0.00	-3.60	12.69
5	5	3.53	0.00	-3.60	12.69
5	6	4.70	0.00	-3.60	16.92
6	6	4.70	0.00	-3.60	16.92
6	7	5.88	0.00	-3.60	21.15
7	7	5.88	0.00	-3.60	21.15
7	8	7.05	0.00	-3.60	25.38
8	8	7.05	0.00	-3.60	25.38
8	9	8.23	0.00	-3.60	29.61
9	9	8.23	0.00	-3.60	29.61
9	10	9.40	0.00	-3.60	33.84
10	10	9.40	0.00	-3.60	33.84
10	11	10.58	0.00	-3.60	38.07
11	11	10.58	0.00	-3.60	38.07
11	12	11.75	0.00	-3.60	42.30
12	12	11.75	0.00	-3.60	42.30
12	13	12.93	0.00	-3.60	46.53
13	13	12.93	0.00	-3.60	46.53
13	14	14.10	0.00	-3.60	50.76
14	14	14.10	0.00	-3.60	50.76
14	15	15.28	0.00	-3.60	54.99
15	15	15.28	0.00	-3.60	54.99
15	16	16.45	0.00	-3.60	59.22
16	16	16.45	0.03	-3.60	59.22
16	17	17.63	0.03	-3.60	63.45
17	17	17.63	0.03	-3.60	63.45
17	18	18.80	0.03	-3.60	67.68
18	18	18.80	0.59	-3.53	67.68
18	19	19.98	0.59	-3.53	71.91
19	19	19.98	0.59	-3.53	71.91
19	20	21.15	0.59	-3.53	76.13
20	20	21.15	0.00	-3.60	76.13
20	21	22.33	0.00	-3.60	80.37
21	21	22.33	0.00	-3.60	80.37
21	22	22.50	0.00	-3.60	81.00
22	22	22.50	0.00	-3.60	81.00
22	23	23.50	0.00	-3.60	84.60
23	1023	23.50	0.00	0.77	84.60
23	24	24.50	0.00	0.77	83.84
24	24	24.50	0.00	0.77	83.84
24	25	24.95	0.00	0.77	83.49
25	25	24.95	0.00	0.77	83.49
25	26	26.40	0.00	0.77	82.37
26	26	26.40	0.10	0.75	82.37

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPBarras

Redistribución cosido barras

[1; 1]RPB.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.10	0.75	81.26
27	27	27.85	0.10	0.75	81.26
27	28	29.30	0.10	0.75	80.16
28	28	29.30	0.00	0.77	80.16
28	29	30.75	0.00	0.77	79.05
29	29	30.75	0.00	0.77	79.05
29	30	32.20	0.00	0.77	77.94
30	30	32.20	0.00	0.77	77.94
30	31	33.65	0.00	0.77	76.82
31	31	33.65	0.00	0.77	76.82
31	32	35.10	0.00	0.77	75.71
32	32	35.10	0.00	0.77	75.71
32	33	36.55	0.00	0.77	74.60
33	33	36.55	0.00	0.77	74.60
33	34	38.00	0.00	0.77	73.49
34	34	38.00	0.00	0.77	73.49
34	35	39.45	0.00	0.77	72.38
35	35	39.45	0.00	0.77	72.38
35	36	40.90	0.00	0.77	71.27
36	36	40.90	0.00	0.77	71.27
36	37	42.35	0.00	0.77	70.17
37	37	42.35	0.00	0.77	70.17
37	38	43.80	0.00	0.77	69.05
38	38	43.80	0.00	0.77	69.05
38	39	45.25	0.00	0.77	67.94
39	39	45.25	0.00	0.77	67.94
39	40	46.70	0.00	0.77	66.83
40	40	46.70	-0.10	0.75	66.83
40	41	48.15	-0.10	0.75	65.71
41	41	48.15	-0.10	0.75	65.71
41	42	49.60	-0.10	0.75	64.61
42	42	49.60	0.00	0.77	64.61
42	43	51.05	0.00	0.77	63.50
43	43	51.05	0.00	0.77	63.50
43	44	51.50	0.00	0.77	63.16
44	44	51.50	0.00	0.77	63.16
44	45	52.50	0.00	0.77	62.39
45	1045	52.50	0.00	-0.10	62.39
45	46	53.50	0.00	-0.10	62.49
46	46	53.50	0.00	-0.10	62.49
46	47	53.95	0.00	-0.10	62.53
47	47	53.95	0.00	-0.10	62.53
47	48	55.40	0.00	-0.10	62.70
48	48	55.40	-0.01	-0.10	62.70
48	49	56.85	-0.01	-0.10	62.84
49	49	56.85	-0.01	-0.10	62.84
49	50	58.30	-0.01	-0.10	62.99
50	50	58.30	0.00	-0.10	62.99
50	51	59.75	0.00	-0.10	63.14
51	51	59.75	0.00	-0.10	63.14
51	52	61.20	0.00	-0.10	63.30

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPBarras

Redistribución cosido barras

[1; 1]RPB.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-0.10	63.30
52	53	62.65	0.00	-0.10	63.44
53	53	62.65	0.00	-0.10	63.44
53	54	64.10	0.00	-0.10	63.60
54	54	64.10	0.00	-0.10	63.60
54	55	65.55	0.00	-0.10	63.74
55	55	65.55	0.00	-0.10	63.74
55	56	67.00	0.00	-0.10	63.90
56	56	67.00	0.00	-0.10	63.90
56	57	68.45	0.00	-0.10	64.05
57	57	68.45	0.00	-0.10	64.05
57	58	69.90	0.00	-0.10	64.20
58	58	69.90	0.00	-0.10	64.20
58	59	71.35	0.00	-0.10	64.35
59	59	71.35	0.00	-0.10	64.35
59	60	72.80	0.00	-0.10	64.51
60	60	72.80	0.00	-0.10	64.51
60	61	74.25	0.00	-0.10	64.65
61	61	74.25	0.00	-0.10	64.65
61	62	75.70	0.00	-0.10	64.80
62	62	75.70	0.01	-0.10	64.80
62	63	77.15	0.01	-0.10	64.96
63	63	77.15	0.01	-0.10	64.96
63	64	78.60	0.01	-0.10	65.11
64	64	78.60	0.00	-0.10	65.11
64	65	80.05	0.00	-0.10	65.26
65	65	80.05	0.00	-0.10	65.26
65	66	80.50	0.00	-0.10	65.31
66	66	80.50	0.00	-0.10	65.31
66	67	81.50	0.00	-0.10	65.41
67	1067	81.50	0.00	0.26	65.41
67	68	82.50	0.00	0.26	65.16
68	68	82.50	0.00	0.26	65.16
68	69	83.08	0.00	0.26	65.02
69	69	83.08	0.00	0.26	65.02
69	70	84.65	0.00	0.26	64.63
70	70	84.65	0.03	0.25	64.63
70	71	86.23	0.03	0.25	64.24
71	71	86.23	0.03	0.25	64.24
71	72	87.80	0.03	0.25	63.84
72	72	87.80	0.00	0.26	63.84
72	73	89.38	0.00	0.26	63.45
73	73	89.38	0.00	0.26	63.45
73	74	90.95	0.00	0.26	63.07
74	74	90.95	0.00	0.26	63.07
74	75	92.53	0.00	0.26	62.68
75	75	92.53	0.00	0.26	62.68
75	76	94.10	0.00	0.26	62.29
76	76	94.10	0.00	0.26	62.29
76	77	95.68	0.00	0.26	61.90
77	77	95.68	0.00	0.26	61.90

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPBarras

Redistribución cosido barras

[1; 1]RPB.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.26	61.51
78	78	97.25	0.00	0.26	61.51
78	79	98.83	0.00	0.26	61.12
79	79	98.83	0.00	0.26	61.12
79	80	100.40	0.00	0.26	60.72
80	80	100.40	0.00	0.26	60.72
80	81	101.98	0.00	0.26	60.34
81	81	101.98	0.00	0.26	60.34
81	82	103.55	0.00	0.26	59.95
82	82	103.55	0.00	0.26	59.95
82	83	105.13	0.00	0.26	59.56
83	83	105.13	0.00	0.26	59.56
83	84	106.70	0.00	0.26	59.17
84	84	106.70	-0.03	0.25	59.17
84	85	108.28	-0.03	0.25	58.78
85	85	108.28	-0.03	0.25	58.78
85	86	109.85	-0.03	0.25	58.39
86	86	109.85	0.00	0.26	58.39
86	87	111.43	0.00	0.26	58.00
87	87	111.43	0.00	0.26	58.00
87	88	112.00	0.00	0.26	57.86
88	88	112.00	0.00	0.26	57.86
88	89	113.00	0.00	0.26	57.60
89	1089	113.00	0.00	-0.77	57.60
89	90	114.00	0.00	-0.77	58.38
90	90	114.00	0.00	-0.77	58.38
90	91	114.58	0.00	-0.77	58.83
91	91	114.58	0.00	-0.77	58.83
91	92	116.15	0.00	-0.77	60.04
92	92	116.15	-0.10	-0.77	60.04
92	93	117.73	-0.10	-0.77	61.25
93	93	117.73	-0.10	-0.77	61.25
93	94	119.30	-0.10	-0.77	62.47
94	94	119.30	0.00	-0.77	62.47
94	95	120.88	0.00	-0.77	63.69
95	95	120.88	0.00	-0.77	63.69
95	96	122.45	0.00	-0.77	64.90
96	96	122.45	0.00	-0.77	64.90
96	97	124.03	0.00	-0.77	66.11
97	97	124.03	0.00	-0.77	66.11
97	98	125.60	0.00	-0.77	67.34
98	98	125.60	0.00	-0.77	67.34
98	99	127.18	0.00	-0.77	68.54
99	99	127.18	0.00	-0.77	68.54
99	100	128.75	0.00	-0.77	69.76
100	100	128.75	0.00	-0.77	69.76
100	101	130.33	0.00	-0.77	70.98
101	101	130.33	0.00	-0.77	70.98
101	102	131.90	0.00	-0.77	72.20
102	102	131.90	0.00	-0.77	72.20
102	103	133.48	0.00	-0.77	73.41

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPBarras

Redistribución cosido barras

[1: 1]RPB.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-0.77	73.41
103	104	135.05	0.00	-0.77	74.62
104	104	135.05	0.00	-0.77	74.62
104	105	136.63	0.00	-0.77	75.84
105	105	136.63	0.00	-0.77	75.84
105	106	138.20	0.00	-0.77	77.05
106	106	138.20	0.10	-0.77	77.05
106	107	139.78	0.10	-0.77	78.27
107	107	139.78	0.10	-0.77	78.27
107	108	141.35	0.10	-0.77	79.48
108	108	141.35	0.00	-0.77	79.48
108	109	142.93	0.00	-0.77	80.70
109	109	142.93	0.00	-0.77	80.70
109	110	143.50	0.00	-0.77	81.14
110	110	143.50	0.00	-0.77	81.14
110	111	144.50	0.00	-0.77	81.91
111	111	144.50	0.00	3.49	81.91
111	112	145.50	0.00	3.49	78.43
112	112	145.50	0.00	3.49	78.43
112	113	145.68	0.00	3.49	77.82
113	113	145.68	0.00	3.49	77.82
113	114	146.85	0.00	3.49	73.72
114	114	146.85	0.56	3.41	73.72
114	115	148.03	0.56	3.41	69.63
115	115	148.03	0.56	3.41	69.63
115	116	149.20	0.56	3.41	65.54
116	116	149.20	0.03	3.49	65.54
116	117	150.38	0.03	3.49	61.44
117	117	150.38	0.03	3.49	61.44
117	118	151.55	0.03	3.49	57.34
118	118	151.55	0.00	3.49	57.34
118	119	152.73	0.00	3.49	53.24
119	119	152.73	0.00	3.49	53.24
119	120	153.90	0.00	3.49	49.16
120	120	153.90	0.00	3.49	49.16
120	121	155.08	0.00	3.49	45.05
121	121	155.08	0.00	3.49	45.05
121	122	156.25	0.00	3.49	40.95
122	122	156.25	0.00	3.49	40.95
122	123	157.43	0.00	3.49	36.86
123	123	157.43	0.00	3.49	36.86
123	124	158.60	0.00	3.49	32.77
124	124	158.60	0.00	3.49	32.77
124	125	159.78	0.00	3.49	28.67
125	125	159.78	0.00	3.49	28.67
125	126	160.95	0.00	3.49	24.57
126	126	160.95	0.00	3.49	24.57
126	127	162.13	0.00	3.49	20.48
127	127	162.13	0.00	3.49	20.48
127	128	163.30	0.00	3.49	16.39
128	128	163.30	0.00	3.49	16.39

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RPBarras

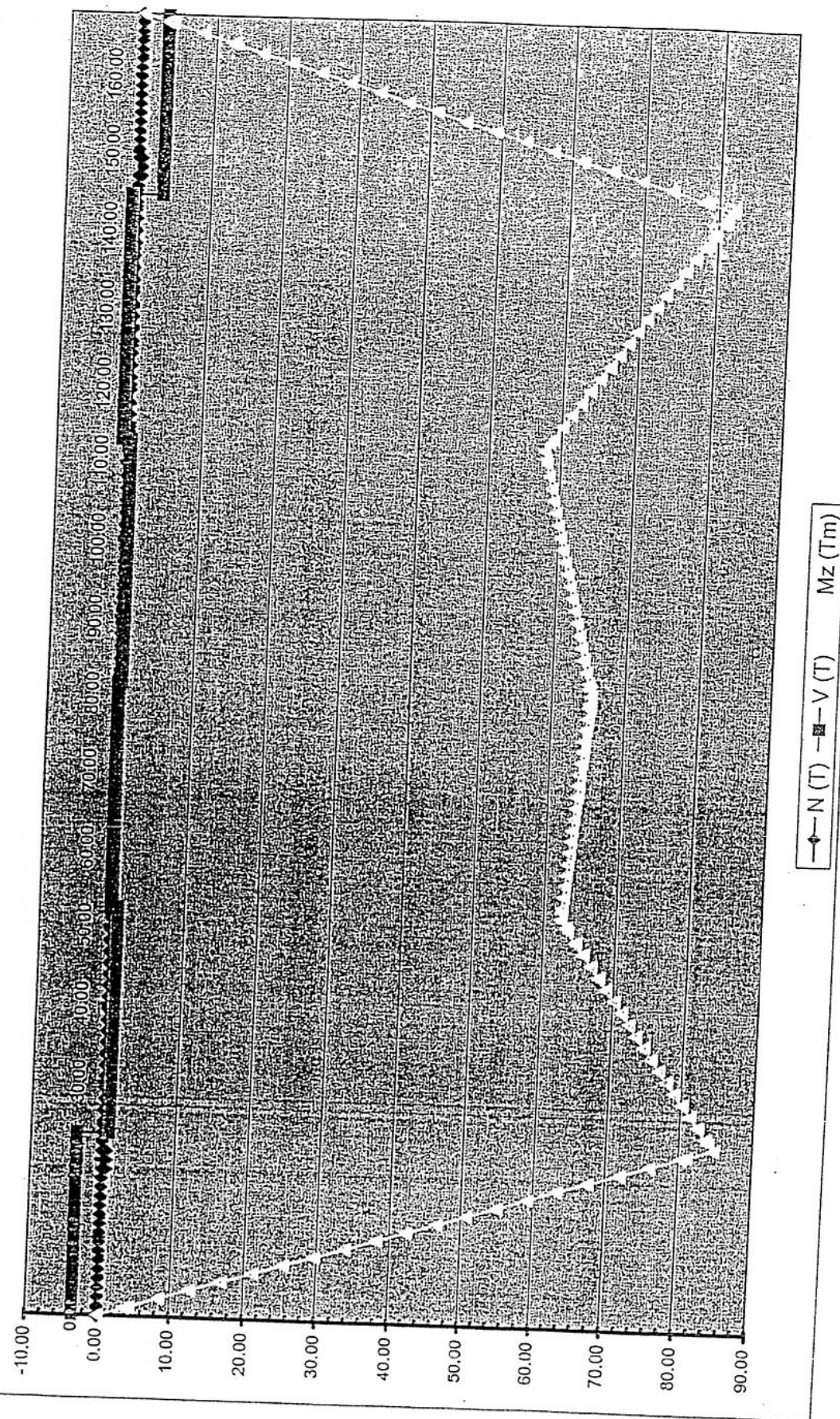
Redistribución cosido barras

[1: 1]RPB.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	3.49	12.29
129	129	164.48	0.00	3.49	12.29
129	130	165.65	0.00	3.49	8.19
130	130	165.65	0.00	3.49	8.19
130	131	166.83	0.00	3.49	4.10
131	131	166.83	0.00	3.49	4.10
131	132	167.00	0.00	3.49	3.49
132	132	167.00	0.00	3.49	3.49
132	133	168.00	0.00	3.49	0.00

GRÁFICO DE ESFUERZOS

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RCExt

Redistribución cargas exteriores

[1; 1]RCE.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	15.09	0.00
1	2	1.00	0.00	15.08	-15.10
2	2	1.00	0.00	15.08	-15.10
2	3	1.18	0.00	15.09	-17.73
3	3	1.18	0.00	15.09	-17.73
3	4	2.35	0.00	15.09	-35.45
4	4	2.35	0.00	15.09	-35.45
4	5	3.53	0.00	15.07	-53.18
5	5	3.53	0.00	15.07	-53.18
5	6	4.70	0.00	15.09	-70.90
6	6	4.70	0.00	15.09	-70.90
6	7	5.88	0.00	15.09	-88.63
7	7	5.88	0.00	15.09	-88.63
7	8	7.05	0.00	15.09	-106.37
8	8	7.05	0.00	15.09	-106.37
8	9	8.23	0.00	15.09	-124.08
9	9	8.23	0.00	15.09	-124.08
9	10	9.40	0.00	15.09	-141.82
10	10	9.40	0.00	15.09	-141.82
10	11	10.58	0.00	15.10	-159.55
11	11	10.58	0.00	15.10	-159.55
11	12	11.75	0.00	15.08	-177.27
12	12	11.75	0.00	15.08	-177.27
12	13	12.93	0.00	15.09	-195.00
13	13	12.93	0.00	15.09	-195.00
13	14	14.10	0.00	15.09	-212.74
14	14	14.10	0.00	15.09	-212.74
14	15	15.28	0.00	15.09	-230.46
15	15	15.28	0.00	15.09	-230.46
15	16	16.45	0.00	15.09	-248.18
16	16	16.45	-1.25	15.09	-248.18
16	17	17.63	-1.50	15.09	-265.91
17	17	17.63	-1.50	15.09	-265.91
17	18	18.80	-1.77	15.08	-283.64
18	18	18.80	0.00	15.08	-283.64
18	19	19.98	0.00	15.07	-301.37
19	19	19.98	0.00	15.07	-301.37
19	20	21.15	0.80	15.08	-319.03
20	20	21.15	0.00	14.98	-319.03
20	21	22.33	0.00	14.98	-336.63
21	21	22.33	0.00	14.98	-336.63
21	22	22.50	0.00	14.97	-339.25
22	22	22.50	0.00	14.97	-339.25
22	23	23.50	0.00	14.98	-354.23
23	1023	23.50	0.00	0.03	-354.23
23	24	24.50	0.00	0.03	-354.25
24	24	24.50	0.00	0.03	-354.25
24	25	24.95	0.00	0.03	-354.26
25	25	24.95	0.00	0.03	-354.26
25	26	26.40	0.00	0.03	-354.31
26	26	26.40	0.77	-0.05	-354.31

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RCExt

Redistribución cargas exteriores

[1: 1]RCE.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-0.03	-0.05	-354.28
27	27	27.85	-0.03	-0.05	-354.28
27	28	29.30	-0.03	-0.04	-354.20
28	28	29.30	-1.56	-0.06	-354.20
28	29	30.75	-1.28	-0.07	-354.12
29	29	30.75	-1.28	-0.07	-354.12
29	30	32.20	-1.04	-0.07	-354.03
30	30	32.20	0.00	-0.06	-354.03
30	31	33.65	0.00	-0.06	-353.95
31	31	33.65	0.00	-0.06	-353.95
31	32	35.10	0.00	-0.06	-353.85
32	32	35.10	0.00	-0.06	-353.85
32	33	36.55	0.00	-0.07	-353.76
33	33	36.55	0.00	-0.07	-353.76
33	34	38.00	0.00	-0.06	-353.69
34	34	38.00	0.00	-0.06	-353.69
34	35	39.45	0.00	-0.06	-353.58
35	35	39.45	0.00	-0.06	-353.58
35	36	40.90	0.00	-0.07	-353.51
36	36	40.90	0.00	-0.07	-353.51
36	37	42.35	0.00	-0.07	-353.42
37	37	42.35	0.00	-0.07	-353.42
37	38	43.80	0.00	-0.07	-353.34
38	38	43.80	-1.04	-0.06	-353.34
38	39	45.25	-1.28	-0.06	-353.24
39	39	45.25	-1.28	-0.06	-353.24
39	40	46.70	-1.56	-0.06	-353.15
40	40	46.70	0.03	-0.07	-353.15
40	41	48.15	0.03	-0.06	-353.06
41	41	48.15	0.03	-0.06	-353.06
41	42	49.60	0.82	-0.07	-352.91
42	42	49.60	0.00	-0.15	-352.91
42	43	51.05	0.00	-0.15	-352.71
43	43	51.05	0.00	-0.15	-352.71
43	44	51.50	0.00	-0.15	-352.63
44	44	51.50	0.00	-0.15	-352.63
44	45	52.50	0.00	-0.14	-352.48
45	1045	52.50	0.00	1.05	-352.48
45	46	53.50	0.00	1.05	-353.53
46	46	53.50	0.00	1.05	-353.53
46	47	53.95	0.00	1.05	-354.01
47	47	53.95	0.00	1.05	-354.01
47	48	55.40	0.00	1.06	-355.53
48	48	55.40	0.78	0.98	-355.53
48	49	56.85	-0.01	0.96	-356.98
49	49	56.85	-0.01	0.96	-356.98
49	50	58.30	-0.01	0.96	-358.39
50	50	58.30	-1.55	0.97	-358.39
50	51	59.75	-1.28	0.96	-359.79
51	51	59.75	-1.28	0.96	-359.79
51	52	61.20	-1.03	0.96	-361.20

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RCExt

Redistribución cargas exteriores

[1: 1]RCE.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.97	-361.20
52	53	62.65	0.00	0.96	-362.60
53	53	62.65	0.00	0.96	-362.60
53	54	64.10	0.00	0.97	-363.99
54	54	64.10	0.00	0.97	-363.99
54	55	65.55	0.00	0.95	-365.39
55	55	65.55	0.00	0.95	-365.39
55	56	67.00	0.00	0.96	-366.79
56	56	67.00	0.00	0.96	-366.79
56	57	68.45	0.00	0.97	-368.19
57	57	68.45	0.00	0.97	-368.19
57	58	69.90	0.00	0.96	-369.58
58	58	69.90	0.00	0.96	-369.58
58	59	71.35	0.00	0.96	-370.98
59	59	71.35	0.00	0.96	-370.98
59	60	72.80	0.00	0.96	-372.38
60	60	72.80	-1.05	0.96	-372.38
60	61	74.25	-1.30	0.96	-373.77
61	61	74.25	-1.30	0.96	-373.77
61	62	75.70	-1.57	0.96	-375.16
62	62	75.70	0.01	0.95	-375.16
62	63	77.15	0.01	0.96	-376.55
63	63	77.15	0.01	0.96	-376.55
63	64	78.60	0.81	0.96	-377.89
64	64	78.60	0.00	0.88	-377.89
64	65	80.05	0.00	0.87	-379.17
65	65	80.05	0.00	0.87	-379.17
65	66	80.50	0.00	0.88	-379.56
66	66	80.50	0.00	0.88	-379.56
66	67	81.50	0.00	0.88	-380.43
67	1067	81.50	0.00	1.25	-380.43
67	68	82.50	0.00	1.26	-381.68
68	68	82.50	0.00	1.26	-381.68
68	69	83.08	0.00	1.26	-382.42
69	69	83.08	0.00	1.26	-382.42
69	70	84.65	0.00	1.26	-384.38
70	70	84.65	0.77	1.18	-384.38
70	71	86.23	-0.02	1.17	-386.30
71	71	86.23	-0.02	1.17	-386.30
71	72	87.80	-0.02	1.17	-388.15
72	72	87.80	-1.55	1.17	-388.15
72	73	89.38	-1.28	1.16	-389.99
73	73	89.38	-1.28	1.16	-389.99
73	74	90.95	-1.03	1.16	-391.83
74	74	90.95	0.00	1.17	-391.83
74	75	92.53	0.00	1.16	-393.69
75	75	92.53	0.00	1.16	-393.69
75	76	94.10	0.00	1.16	-395.54
76	76	94.10	0.00	1.16	-395.54
76	77	95.68	0.00	1.17	-397.37
77	77	95.68	0.00	1.17	-397.37

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RCExt

Redistribución cargas exteriores

[1; 1]RCE.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	1.17	-399.21
78	78	97.25	0.00	1.17	-399.21
78	79	98.83	0.00	1.17	-401.06
79	79	98.83	0.00	1.17	-401.06
79	80	100.40	0.00	1.18	-402.92
80	80	100.40	0.00	1.18	-402.92
80	81	101.98	0.00	1.18	-404.75
81	81	101.98	0.00	1.18	-404.75
81	82	103.55	0.00	1.16	-406.61
82	82	103.55	-1.05	1.18	-406.61
82	83	105.13	-1.30	1.18	-408.45
83	83	105.13	-1.30	1.18	-408.45
83	84	106.70	-1.57	1.17	-410.30
84	84	106.70	0.02	1.16	-410.30
84	85	108.28	0.02	1.16	-412.15
85	85	108.28	0.02	1.16	-412.15
85	86	109.85	0.82	1.16	-413.92
86	86	109.85	0.00	1.09	-413.92
86	87	111.43	0.00	1.08	-415.64
87	87	111.43	0.00	1.08	-415.64
87	88	112.00	0.00	1.09	-416.26
88	88	112.00	0.00	1.09	-416.26
88	89	113.00	0.00	1.09	-417.36
89	1089	113.00	0.00	-1.18	-417.36
89	90	114.00	0.00	-1.18	-416.16
90	90	114.00	0.00	-1.18	-416.16
90	91	114.58	0.00	-1.18	-415.50
91	91	114.58	0.00	-1.18	-415.50
91	92	116.15	0.00	-1.19	-413.63
92	92	116.15	0.83	-1.27	-413.63
92	93	117.73	0.04	-1.27	-411.71
93	93	117.73	0.04	-1.27	-411.71
93	94	119.30	0.04	-1.27	-409.71
94	94	119.30	-1.58	-1.28	-409.71
94	95	120.88	-1.30	-1.28	-407.71
95	95	120.88	-1.30	-1.28	-407.71
95	96	122.45	-1.05	-1.28	-405.73
96	96	122.45	0.00	-1.27	-405.73
96	97	124.03	0.00	-1.28	-403.74
97	97	124.03	0.00	-1.28	-403.74
97	98	125.60	0.00	-1.28	-401.74
98	98	125.60	0.00	-1.28	-401.74
98	99	127.18	0.00	-1.27	-399.76
99	99	127.18	0.00	-1.27	-399.76
99	100	128.75	0.00	-1.28	-397.77
100	100	128.75	0.00	-1.28	-397.77
100	101	130.33	0.00	-1.28	-395.78
101	101	130.33	0.00	-1.28	-395.78
101	102	131.90	0.00	-1.27	-393.78
102	102	131.90	0.00	-1.27	-393.78
102	103	133.48	0.00	-1.27	-391.78

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RCExt

Redistribución cargas exteriores

[1; 1]RCE.Esfuerzos

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-1.27	-391.78
103	104	135.05	0.00	-1.28	-389.79
104	104	135.05	-1.03	-1.26	-389.79
104	105	136.63	-1.28	-1.26	-387.79
105	105	136.63	-1.28	-1.26	-387.79
105	106	138.20	-1.55	-1.27	-385.80
106	106	138.20	-0.04	-1.27	-385.80
106	107	139.78	-0.04	-1.27	-383.82
107	107	139.78	-0.04	-1.27	-383.82
107	108	141.35	0.76	-1.28	-381.74
108	108	141.35	0.00	-1.34	-381.74
108	109	142.93	0.00	-1.35	-379.62
109	109	142.93	0.00	-1.35	-379.62
109	110	143.50	0.00	-1.35	-378.85
110	110	143.50	0.00	-1.35	-378.85
110	111	144.50	0.00	-1.35	-377.50
111	1111	144.50	0.00	-15.96	-377.50
111	112	145.50	0.00	-15.96	-361.54
112	112	145.50	0.00	-15.96	-361.54
112	113	145.68	0.00	-15.96	-358.73
113	113	145.68	0.00	-15.96	-358.73
113	114	146.85	0.00	-15.96	-339.97
114	114	146.85	0.82	-16.06	-339.97
114	115	148.03	0.03	-16.07	-321.15
115	115	148.03	0.03	-16.07	-321.15
115	116	149.20	0.03	-16.08	-302.27
116	116	149.20	-1.79	-16.07	-302.27
116	117	150.38	-1.51	-16.07	-283.37
117	117	150.38	-1.51	-16.07	-283.37
117	118	151.55	-1.26	-16.07	-264.48
118	118	151.55	0.00	-16.07	-264.48
118	119	152.73	0.00	-16.07	-245.59
119	119	152.73	0.00	-16.07	-245.59
119	120	153.90	0.00	-16.07	-226.70
120	120	153.90	0.00	-16.07	-226.70
120	121	155.08	0.00	-16.08	-207.82
121	121	155.08	0.00	-16.08	-207.82
121	122	156.25	0.00	-16.07	-188.90
122	122	156.25	0.00	-16.07	-188.90
122	123	157.43	0.00	-16.08	-170.03
123	123	157.43	0.00	-16.08	-170.03
123	124	158.60	0.00	-16.07	-151.12
124	124	158.60	0.00	-16.07	-151.12
124	125	159.78	0.00	-16.07	-132.23
125	125	159.78	0.00	-16.07	-132.23
125	126	160.95	0.00	-16.07	-113.34
126	126	160.95	0.00	-16.07	-113.34
126	127	162.13	0.00	-16.07	-94.46
127	127	162.13	0.00	-16.07	-94.46
127	128	163.30	0.00	-16.08	-75.56
128	128	163.30	0.00	-16.08	-75.56

CÁLCULO TENSIONAL

Hipótesis de cálculo:

RCExt

Redistribución cargas exteriores

[1; 1]RCE.Esfuerzos

Coef. exc:

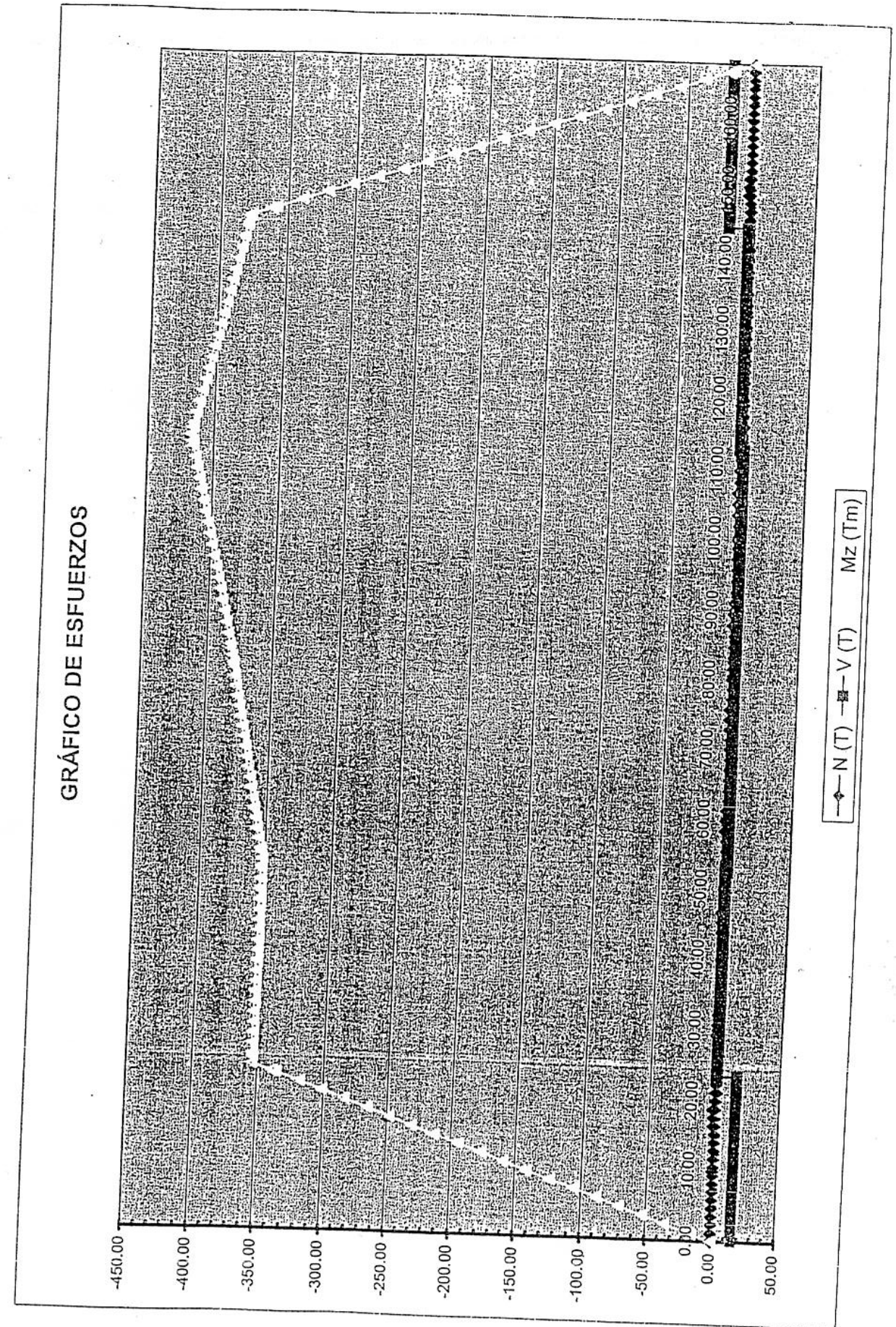
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	-16.07	-56.68
129	129	164.48	0.00	-16.07	-56.68
129	130	165.65	0.00	-16.08	-37.77
130	130	165.65	0.00	-16.08	-37.77
130	131	166.83	0.00	-16.08	-18.90
131	131	166.83	0.00	-16.08	-18.90
131	132	167.00	0.00	-16.07	-16.07
132	132	167.00	0.00	-16.07	-16.07
132	133	168.00	0.00	-16.07	0.00

esfuerzos redistribuciones.xls

Programa DINTEL IDEAM S.A.
RCExt

30/08/01

GRÁFICO DE ESFUERZOS



Subanejo 2

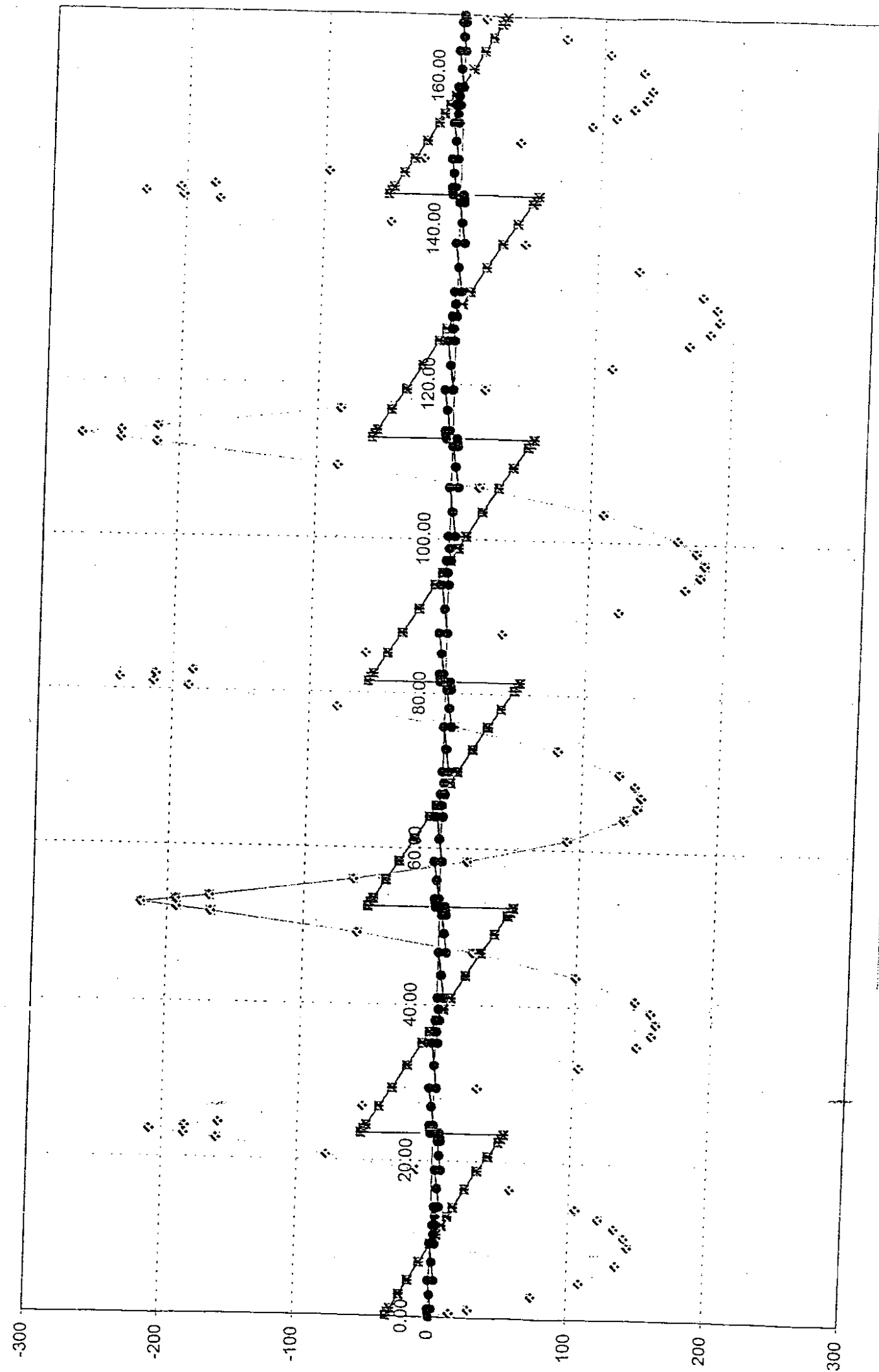
**ESFUERZOS EN ESTADOS DE CARGA
INDIVIDUALES EN EL EMPARRILLADO**

ARRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
(1)	0.00	-0.5	-31	0	-31	0	-0.5	0	-0.5	
(2)	0.50	-0.1	-29.4	15.1	-29.4	15.1	-0.1	15.1	-0.1	
(3)	1.00	0.2	-27.7	29.4	-27.7	29.4	0.2	29.4	0.2	
(1)	1.00	-2	-27.7	29.4	-27.7	29.4	-2	29.4	-2	
(2)	2.85	-0.7	-21.5	74.9	-21.5	74.9	-0.7	74.9	-0.7	
(3)	4.70	0.6	-15.3	108.9	-15.3	108.9	0.6	108.9	0.6	
(1)	4.70	-3.5	-15.3	108.9	-15.3	108.9	-3.5	108.9	-3.5	
(2)	7.05	-1.8	-7.4	135.6	-7.4	135.6	-1.8	135.6	-1.8	
(3)	9.40	-0.1	0.4	143.9	0.4	143.9	-0.1	143.9	-0.1	
(1)	9.40	-3.6	0.4	143.9	0.4	143.9	-3.6	143.9	-3.6	
(2)	10.58	-2.7	4.4	141.1	4.4	141.1	-2.7	141.1	-2.7	
(3)	11.75	-1.9	8.3	133.6	8.3	133.6	-1.9	133.6	-1.9	
(1)	11.75	-4.2	8.3	133.6	8.3	133.6	-4.2	133.6	-4.2	
(2)	12.93	-3.4	12.2	121.6	12.2	121.6	-3.4	121.6	-3.4	
(3)	14.10	-2.5	16.2	104.9	16.2	104.9	-2.5	104.9	-2.5	
(1)	14.10	-6	16.2	104.9	16.2	104.9	-6	104.9	-6	
(2)	16.45	-4.2	24.6	57	24.6	57	-4.2	57	-4.2	
(3)	18.80	-2.4	33.1	-10.8	33.1	-10.8	-2.4	-10.8	-2.4	
(1)	18.80	-6.6	33.1	-10.8	33.1	-10.8	-6.6	-10.8	-6.6	
(2)	20.65	-5.1	40.3	-78.6	40.3	-78.6	-5.1	-78.6	-5.1	
(3)	22.50	-3.6	47.5	-159.8	47.5	-159.8	-3.6	-159.8	-3.6	
(1)	22.50	-5.9	47.5	-159.8	47.5	-159.8	-5.9	-159.8	-5.9	
(2)	23.00	-5.5	49.4	-184	49.4	-184	-5.5	-184	-5.5	
(3)	23.50	-5.1	51.4	-209.2	51.4	-209.2	-5.1	-209.2	-5.1	
(1)	23.50	1.7	-52.8	-209.2	-52.8	-209.2	1.7	-209.2	1.7	
(2)	24.00	2.1	-50.9	-183.3	-50.9	-183.3	2.1	-183.3	2.1	
(3)	24.50	2.5	-48.9	-158.4	-48.9	-158.4	2.5	-158.4	2.5	
(1)	24.50	-0.4	-48.9	-158.4	-48.9	-158.4	-0.4	-158.4	-0.4	
(2)	26.90	1.5	-39.6	-52.2	-39.6	-52.2	1.5	-52.2	1.5	
(3)	29.30	3.5	-30.2	31.5	-30.2	31.5	3.5	31.5	3.5	
(1)	29.30	-1.8	-30.2	31.5	-30.2	31.5	-1.8	31.5	-1.8	
(2)	32.20	0.4	-19.8	104	-19.8	104	0.4	104	0.4	
(3)	35.10	2.6	-9.3	146.3	-9.3	146.3	2.6	146.3	2.6	
(1)	35.10	-1.8	-9.3	146.3	-9.3	146.3	-1.8	146.3	-1.8	
(2)	36.55	-0.7	-4.5	156.3	-4.5	156.3	-0.7	156.3	-0.7	
(3)	38.00	0.3	0.4	159.3	0.4	159.3	0.3	159.3	0.3	
(1)	38.00	-2.6	0.4	159.3	0.4	159.3	-2.6	159.3	-2.6	
(2)	39.45	-1.6	5.2	155.3	5.2	155.3	-1.6	155.3	-1.6	
(3)	40.90	-0.6	10.1	144.2	10.1	144.2	-0.6	144.2	-0.6	
(1)	40.90	-5	10.1	144.2	10.1	144.2	-5	144.2	-5	
(2)	43.80	-2.8	20.5	99.9	20.5	99.9	-2.8	99.9	-2.8	
(3)	46.70	-0.5	30.9	25.2	30.9	25.2	-0.5	25.2	-0.5	
(1)	46.70	-6	30.9	25.2	30.9	25.2				

80.50	-1.4	50	-188.3	50	-188.3	-1.4	-188.3	-1.4	50
80.50	-4.4	50	-188.3	50	-188.3	-4.4	-188.3	-4.4	50
81.00	-4	51.9	-213.7	51.9	-213.7	-4	-213.7	-4	51.9
81.50	-3.6	53.9	-240.2	53.9	-240.2	-3.6	-240.2	-3.6	53.9
81.50	3.7	-56.7	-240.2	-56.7	-240.2	3.7	-240.2	3.7	-56.7
82.00	4.1	-54.8	-212.3	-54.8	-212.3	4.1	-212.3	4.1	-54.8
82.50	4.5	-52.8	-185.4	-52.8	-185.4	4.5	-185.4	4.5	-52.8
82.50	1.2	-52.8	-185.4	-52.8	-185.4	1.2	-185.4	1.2	-52.8
85.15	3.4	-42.5	-59.1	-42.5	-59.1	3.4	-59.1	3.4	-42.5
87.80	5.6	-32.2	39.8	-32.2	39.8	5.6	39.8	5.6	-32.2
87.80	-0.4	-32.2	39.8	-32.2	39.8	-0.4	39.8	-0.4	-32.2
90.95	2	-20.8	123.3	-20.8	123.3	2	123.3	2	-20.8
94.10	4.4	-9.5	171.1	-9.5	171.1	4.4	171.1	4.4	-9.5
94.10	-0.4	-9.5	171.1	-9.5	171.1	-0.4	171.1	-0.4	-9.5
95.68	0.7	-4.2	181.9	-4.2	181.9	0.7	181.9	0.7	-4.2
97.25	1.8	1	184.5	1	184.5	1.8	184.5	1.8	1
97.25	-1.4	1	184.5	1	184.5	-1.4	184.5	-1.4	1
98.83	-0.3	6.3	178.7	6.3	178.7	-0.3	178.7	-0.3	6.3
100.40	0.8	11.6	164.6	11.6	164.6	0.8	164.6	0.8	11.6
100.40	-4	11.6	164.6	11.6	164.6	-4	164.6	-4	11.6
103.55	-1.6	22.9	110.2	22.9	110.2	-1.6	110.2	-1.6	22.9
106.70	0.8	34.3	20.1	34.3	20.1	0.8	20.1	0.8	34.3
106.70	-5.2	34.3	20.1	34.3	20.1	-5.2	20.1	-5.2	34.3
109.35	-3	44.6	-84.3	44.6	-84.3	-3	-84.3	-3	44.6
112.00	-0.8	54.9	-216.1	54.9	-216.1	-0.8	-216.1	-0.8	54.9
112.00	-4.1	54.9	-216.1	54.9	-216.1	-4.1	-216.1	-4.1	54.9
112.50	-3.7	56.8	-244.1	56.8	-244.1	-3.7	-244.1	-3.7	56.8
113.00	-3.3	58.8	-273	58.8	-273	-3.3	-273	-3.3	58.8
113.00	4.5	-59.1	-273	-59.1	-273	4.5	-273	4.5	-59.1
113.50	4.9	-57.2	-243.9	-57.2	-243.9	4.9	-243.9	4.9	-57.2
114.00	5.3	-55.2	-215.8	-55.2	-215.8	5.3	-215.8	5.3	-55.2
114.00	2.1	-55.2	-215.8	-55.2	-215.8	2.1	-215.8	2.1	-55.2
116.65	4.2	-44.9	-83.1	-44.9	-83.1	4.2	-83.1	4.2	-44.9
119.30	6.4	-34.6	22.2	-34.6	22.2	6.4	22.2	6.4	-34.6
119.30	0.5	-34.6	22.2	-34.6	22.2	0.5	22.2	0.5	-34.6
122.45	2.9	-23.3	113.3	-23.3	113.3	2.9	113.3	2.9	-23.3
125.60	5.3	-11.9	168.7	-11.9	168.7	5.3	168.7	5.3	-11.9
125.60	0.5	-11.9	168.7	-11.9	168.7	0.5	168.7	0.5	-11.9
127.18	1.6	-6.6	183.3	-6.6	183.3	1.6	183.3	1.6	-6.6
128.75	2.8	-1.4	189.6	-1.4	189.6	2.8	189.6	2.8	-1.4
128.75	-0.4	-1.4	189.6	-1.4	189.6	-0.4	189.6	-0.4	-1.4
130.33	0.7	3.9	187.6	3.9	187.6	0.7	187.6	0.7	3.9
131.90	1.8	9.2	177.3	9.2	177.3	1.8	177.3	1.8	9.2
131.90	-2.9	9.2	177.3	9.2	177.3	-2.9	177.3	-2.9	9.2
135.05	-0.5	20.5	130.5	20.5	130.5	-0.5	130.5	-0.5	20.5
138.20	1.9	31.9	48	31.9	48	1.9	48	1.9	31.9
138.20	-4	31.9	48	31.9	48	-4	48	-4	31.9
140.85	-1.8	42.2	-50	42.2	-50	-1.8	-50	-1.8	42.2
143.50	0.4	52.5	-175.5	52.5	-175.5	0.4	-175.5	0.4	52.5
143.50	-2.8	52.5	-175.5	52.5	-175.5	-2.8	-175.5	-2.8	52.5
144.00	-2.4	54.4	-202.2	54.4	-202.2	-2.4	-202.2	-2.4	54.4
144.50	-2	56.4	-229.9	56.4	-229.9	-2	-229.9	-2	56.4
144.50	5.2	-52.3	-229.9	-52.3	-229.9	5.2	-229.9	5.2	-52.3
145.00	5.6	-50.3	-204.3	-50.3	-204.3	5.6	-204.3	5.6	-50.3
145.50	6	-48.4	-179.6	-48.4	-179.6	6	-179.6	6	-48.4
145.50	3.6	-48.4	-179.6	-48.4	-179.6	3.6	-179.6	3.6	-48.4
147.35	5.1	-41.2	-96.8	-41.2	-96.8	5.1	-96.8	5.1	-41.2
149.20	6.6	-34	-27.3	-34	-27.3	6.6	-27.3	6.6	-34
149.20	2.4	-34	-27.3	-34	-27.3	2.4	-27.3	2.4	-34
151.55	4.2	-25.5	42.5	-25.5	42.5	4.2	42.5	4.2	-25.5
153.90	6.1	-17	92.5	-17	92.5	6.1	92.5	6.1	-17
153.90	2.6	-17	92.5	-17	92.5	2.6	92.5	2.6	-17
155.08	3.4	-13.1	110.2	-13.1	110.2	3.4	110.2	3.4	-13.1
156.25	4.2	-9.2	123.3	-9.2	123.3	4.2	123.3	4.2	-9.2
156.25	1.9	-9.2	123.3	-9.2	123.3	1.9	123.3	1.9	-9.2
157.43	2.8	-5.2	131.8	-5.2	131.8	2.8	131.8	2.8	-5.2
158.60	3.6	-1.3	135.6	-1.3	135.6	3.6	135.6	3.6	-1.3
158.60	0.2	-1.3	135.6	-1.3	135.6	0.2	135.6	0.2	-1.3
160.95	1.8	6.6	129.4	6.6	129.4	1.8	129.4	1.8	6.6
163.30	3.5	14.4	104.8	14.4	104.8	3.5	104.8	3.5	14.4
163.30	-0.6	14.4	104.8	14.4	104.8	-0.6	104.8	-0.6	14.4
165.15	0.7	20.6	72.4	20.6	72.4	0.7	72.4	0.7	20.6
167.00	2	26.8	28.5	26.8	28.5	2	28.5	2	26.8
167.00	-0.2	26.8	28.5	26.8	28.5	-0.2	28.5	-0.2	26.8
167.50	0.1	28.5	14.7	28.5	14.7	0.1	14.7	0.1	28.5
168.00	0.5	30.2	0	30.2	0	0.5	0	0.5	30.2
0.00	0.5	-31	0	-31	0	0.5	0	0.5	-31
0.50	0.1	-29.4	15.1	-29.4	15.1	0.1	15.1	0.1	-29.4
1.00	-0.2	-27.7	29.4	-27.7	29.4	-0.2	29.4	-0.2	-27.7
1.00	2	-27.7	29.4	-27.7	29.4	2	29.4	2	-27.7
2.85	0.7	-21.5	74.9	-21.5	74.9	0.7	74.9	0.7	-21.5
4.70	-0.6	-15.3	108.9	-15.3	108.9	-0.6	108.9	-0.6	108.9
4.70	3.5	-15.3	108.9	-15.3	108.9	3.5	108.9	3.5	-15.3

206

(1)	9.40	0.1	0.4	143.9	0.4	143.9	0.1	143.9	0.1	0.4	106.70	5.2	34.3	20.1	34.3	20.1	5.2	20.1	5.2	34.3
(2)	9.40	3.6	0.4	143.9	0.4	143.9	3.6	143.9	0.4	0.4	109.35	3	44.6	-84.3	44.6	-84.3	3	-84.3	3	44.6
(3)	10.58	2.7	4.4	141.1	4.4	141.1	2.7	141.1	3.6	0.4	112.00	0.8	54.9	-216.1	54.9	-216.1	0.8	-216.1	0.8	54.9
(1)	11.75	1.9	8.3	133.6	8.3	133.6	1.9	133.6	2.7	4.4	112.00	4.1	54.9	-216.1	54.9	-216.1	4.1	-216.1	4.1	54.9
(2)	11.75	4.2	8.3	133.6	8.3	133.6	4.2	133.6	1.9	8.3	112.50	3.7	56.8	-244.1	56.8	-244.1	3.7	-244.1	3.7	56.8
(3)	12.93	3.4	12.2	121.6	12.2	121.6	3.4	121.6	4.2	8.3	113.00	3.3	58.8	-273	58.8	-273	3.3	-273	3.3	58.8
(1)	14.10	2.5	16.2	104.9	16.2	104.9	2.5	104.9	3.4	12.2	113.00	-4.5	-59.1	-273	-59.1	-273	-4.5	-273	-4.5	-59.1
(2)	14.10	6	16.2	104.9	16.2	104.9	6	104.9	2.5	16.2	113.50	-4.9	-57.2	-243.9	-57.2	-243.9	-4.9	-243.9	-4.9	-57.2
(3)	16.45	4.2	24.6	57	24.6	57	4.2	57	6	16.2	114.00	-5.3	-55.2	-215.8	-55.2	-215.8	-5.3	-215.8	-5.3	-55.2
(1)	18.80	2.4	33.1	-10.8	33.1	-10.8	2.4	-10.8	4.2	24.6	114.00	-2.1	-55.2	-215.8	-55.2	-215.8	-2.1	-215.8	-2.1	-55.2
(2)	18.80	6.6	33.1	-10.8	33.1	-10.8	6.6	-10.8	2.4	33.1	116.65	-4.2	-44.9	-83.1	-44.9	-83.1	-4.2	-83.1	-4.2	-44.9
(3)	20.65	5.1	40.3	-78.6	40.3	-78.6	5.1	-78.6	6.6	33.1	119.30	-6.4	-34.6	22.2	-34.6	22.2	-6.4	22.2	-6.4	-34.6
(1)	22.50	3.6	47.5	-159.8	47.5	-159.8	3.6	-159.8	5.1	40.3	119.30	-0.5	-34.6	22.2	-34.6	22.2	-0.5	22.2	-0.5	-34.6
(2)	22.50	5.9	47.5	-159.8	47.5	-159.8	5.9	-159.8	3.6	47.5	122.45	-2.9	-23.3	113.3	-23.3	113.3	-2.9	113.3	-2.9	-23.3
(3)	23.00	5.5	49.4	-184	49.4	-184	5.5	-184	5.9	47.5	125.60	-5.3	-11.9	168.7	-11.9	168.7	-5.3	168.7	-5.3	-11.9
(1)	23.50	5.1	51.4	-209.2	51.4	-209.2	5.1	-209.2	5.5	49.4	125.60	-0.5	-11.9	168.7	-11.9	168.7	-0.5	168.7	-0.5	-11.9
(2)	23.50	-1.7	-52.8	-209.2	-52.8	-209.2	-1.7	-209.2	5.1	51.4	127.18	-1.6	-6.6	183.3	-6.6	183.3	-1.6	183.3	-1.6	-11.9
(3)	24.00	-2.1	-50.9	-183.3	-50.9	-183.3	-2.1	-183.3	-1.7	-52.8	128.75	-2.8	-1.4	189.6	-1.4	189.6	-2.8	189.6	-2.8	-6.6
(1)	24.50	-2.5	-48.9	-158.4	-48.9	-158.4	-2.5	-158.4	-2.1	-50.9	128.75	0.4	-1.4	189.6	-1.4	189.6	0.4	189.6	0.4	-1.4
(2)	24.50	0.4	-48.9	-158.4	-48.9	-158.4	0.4	-48.9	-2.5	-48.9	130.33	-0.7	3.9	187.6	3.9	187.6	-0.7	187.6	-0.7	3.9
(3)	26.90	-1.5	-39.6	-52.2	-39.6	-52.2	-1.5	-52.2	0.4	-48.9	131.90	-1.8	9.2	177.3	9.2	177.3	-1.8	177.3	-1.8	9.2
(1)	29.30	-3.5	-30.2	31.5	-30.2	31.5	-3.5	31.5	-1.5	-39.6	131.90	2.9	9.2	177.3	9.2	177.3	2.9	177.3	2.9	9.2
(2)	29.30	1.8	-30.2	31.5	-30.2	31.5	1.8	31.5	-3.5	-30.2	135.05	0.5	20.5	130.5	20.5	130.5	0.5	130.5	0.5	20.5
(3)	32.20	-0.4	-19.8	104	-19.8	104	-0.4	104	1.8	-30.2	138.20	-1.9	31.9	48	31.9	48	-1.9	48	-1.9	31.9
(1)	35.10	-2.6	-9.3	146.3	-9.3	146.3	-2.6	146.3	-0.4	-19.8	138.20	4	31.9	48	31.9	48	4	48	4	31.9
(2)	35.10	1.8	-9.3	146.3	-9.3	146.3	1.8	146.3	-2.6	-9.3	140.85	1.8	42.2	-50	42.2	-50	1.8	48	1.8	42.2
(3)	36.55	0.7	-4.5	156.3	-4.5	156.3	0.7	156.3	1.8	-9.3	143.50	-0.4	52.5	-175.5	52.5	-175.5	-0.4	-50	-0.4	52.5
(1)	38.00	-0.3	0.4	159.3	0.4	159.3	-0.3	159.3	0.7	-4.5	143.50	2.8	52.5	-175.5	52.5	-175.5	2.8	-175.5	2.8	52.5
(2)	38.00	2.6	0.4	159.3	0.4	159.3	2.6	159.3	-0.3	0.4	144.00	2.4	54.4	-202.2	54.4	-202.2	2.4	-175.5	2.4	52.5
(3)	39.45	1.6	5.2	155.3	5.2	155.3	1.6	155.3	2.6	0.4	144.50	2	56.4	-229.9	56.4	-229.9	2	-202.2	2	54.4
(1)	40.90	0.6	10.1	144.2	10.1	144.2	0.6	144.2	1.6	5.2	144.50	-5.2	-52.3	-229.9	-52.3	-229.9	-5.2	-229.9	-5.2	56.4
(2)	40.90	5	10.1	144.2	10.1	144.2	5	144.2	0.6	10.1	145.00	-5.6	-50.3	-204.3	-50.3	-204.3	-5.6	-229.9	-5.6	-52.3
(3)	43.80	2.8	20.5	99.9	20.5	99.9	2.8	99.9	5	10.1	145.50	-6	-48.4	-179.6	-48.4	-179.6	-6	-204.3	-6	-50.3
(1)	46.70	0.5	30.9	25.2	30.9	25.2	0.5	25.2	2.8	20.5	145.50	-3.6	-48.4	-179.6	-48.4	-179.6	-3.6	-179.6	-3.6	-48.4
(2)	46.70	6	30.9	25.2	30.9	25.2	6	25.2	0.5	30.9	147.35	-5.1	-41.2	-96.8	-41.2	-96.8	-5.1	-179.6	-5.1	-48.4
(3)	49.10	4	40.3	-60.2	40.3	-60.2	4	-60.2	6	30.9	149.20	-6.6	-34	-27.3	-34	-27.3	-6.6	-96.8	-6.6	-41.2
(1)	51.50	2	49.6	-168.2	49.6	-168.2	2	-168.2	4	40.3	149.20	-2.4	-34	-27.3	-34	-27.3	-2.4	-27.3	-2.4	-34
(2)	51.50	5	49.6	-168.2	49.6	-168.2	5	-168.2	2	49.6	151.55	-4.2	-25.5	42.5	-25.5	42.5	-4.2	-27.3	-4.2	-34
(3)	52.00	4.6	51.6	-193.5	51.6	-193.5	4.6	-193.5	5	49.6	153.90	-6.1	-17	92.5	-17	92.5	-6.1	42.5	-6.1	-25.5
(1)	52.50	4.2	53.5	-219.7	53.5	-219.7	4.2	-219.7	4.6	51.6	153.90	-2.6	-17	92.5	-17	92.5	-2.6	92.5	-2.6	-17
(2)	52.50	-2.7	-52.5	-219.7	-52.5	-219.7	-2.7	-219.7	4.2	53.5	155.08	-3.4	-13.1	110.2	-13.1	110.2	-3.4	92.5	-3.4	-13.1
(3)	53.00	-3.1	-50.5	-194	-50.5	-194	-3.1	-194	-2.7	-52.5	156.25	-4.2	-9.2	123.3	-9.2	123.3	-4.2	-204.3	-4.2	-52.3
(1)	53.50	-3.6	-48.6	-169.2	-48.6	-169.2	-3.6	-169.2	-3.1	-50.5	156.25	-1.9	-9.2	123.3	-9.2	123.3	-1.9	-229.9	-1.9	-52.3
(2)	53.50	-0.5	-48.6	-169.2	-48.6	-169.2	-0.5	-169.2	-3.6	-48.6	157.43	-2.8	-5.2	131.8	-5.2	131.8	-2.8	-229.9	-2.8	-52.3
(3)	55.90	-2.5	-39.2	-63.9	-39.2	-63.9	-2.5	-63.9	-0.5	-48.6	158.60	-3.6	-1.3	135.6	-1.3	135.6	-3.6	-229.9	-3.6	-52.3
(1)	58.30	-4.5	-29.9	19.1	-29.9	19.1	-4.5	19.1	-2.5	-39.2	158.60	-0.2	-1.3	135.6	-1.3	135.6	-0.2	-229.9	-0.2	-52.3
(2)	58.30	1	-29.9	19.1	-29.9	19.1	1	19.1	-4.5	-29.9	160.95	-1.8	6.6	129.4	6.6	129.4	-1.8	135.6	-1.8	-1.3
(3)	61.20	-1.3	-19.4	90.6	-19.4	90.6	-1.3	90.6	1	-29.9	163.30	-3.5	14.4	104.8	14.4	104.8	-3.5	129.4	-3.5	6.6
(1)	64.10	-3.5	-9	131.8	-9	131.8	-3.5	131.8	-1.3	-19.4	163.30	0.6	14.4	104.8	14.4	104.8	0.6	-229.9	0.6	14.4
(2)	64.10	1	-9	131.8	-9	131.8	1	131.8	-3.5	-9	165.15	-0.7	20.6	72.4	20.6	72.4	-0.7	-229.9	-0.7	14.4
(3)	65.55	-0.1	-4.1	141.3	-4.1	141.3	-0.1	141.3	1	131.8	167.00	-2	26.8	28.5	26.8	28.5	-2	-229.9	-2	20.6
(1)	67.00	-1.1	0.7	143.8	0.7	143.8	-1.1	143.8	-0.1	-4.1	167.00	0.2	26.8	28.5	26.8	28.5	0.2	-229.9	0.2	26.8
(2)	67.00	1.9	0.7	143.8	0.7	143.8	1.9	143.8	-1.1	0.7	167.50	-0.1	28.5	14.7	28.5	14.7	-0.1	-229.9	-0.1	26.8
(3)	68.45	0.9	5.6	139.3	5.6	139.3	0.9	139.3	1.9	0.7	168.00	-0.5	30.2	0	30.2	0	-0.1	14.7	-0.1	28.5
(1)	69.90	-0.2	10.4	127.7	10.4	127.7	-0.2	127.7	0.9	5.6		0	0	0.5	0	0.5	-0.5	0	-0.5	30.2
(2)	69.90	4.3	10.4	127.7	10.4	127.7	4.3	127.7	-0.2	10.4		0	0	0.5	0	0.5	0	0	0	0
(3)	72.80	2.1	20.9	82.4	20.9	82.4	2.1	82.4	4.3	10.4		0	0	0.5	0	0.5	0	0	0	0
(1)	75.70	-0.2	31.3	6.8	31.3	6.8	-0.2	6.8	2.1	20.9		0	0	2.3	0	2.3	0	0	0	0
(2)	75.70	5.3	31.3	6.8	31.3	6.8	5.3	6.8	-0.2	31.3		0	0	2.3	0	2.3	0	0	0	0
(3)	78.10	3.4	40.6	-79.5	40.6	-79.5	3.4	-79.5	5.3	31.3		0	0	2.3	0	2.3	0	0	0	0
(1)	80.50	1.4	50	-188.3	50	-188.3	1.4	-188.3	3.4	40.6		0	0	4.1	0	4.1	0	0	0	0
(2)	80.50	4.4	50	-188.3	50	-188.3	4.4	-188.3	1.4	50		0	0	4.1	0	4.1	0	0	0	0
(3)	81.00	4	51.9	-213.7	51.9	-213.7	4	-213.7	4.4	50		0	0	4.1	0	4.1	0	0	0	0
(1)	81.50	3.6	53.9	-240.2	53.9	-240.2	3.6	-240.2	4	51.9		0	0	3.4	0	3.4	0	0	0	0
(2)	81.50	-3.7	-56.7	-240.2	-56.7	-240.2	-3.7	-240.2	3.6	53.9		0	0	3.4	0	3.4	0	0	0	0
(3)	82.00	-4.1	-54.8	-212.3	-54.8	-212.3	-4.1	-212.3	-3.7	-56.7		0	0	3.4	0	3.4	0	0	0	0
(1)	82.50	-4.5	-52.8	-185.4	-52.8	-185.4	-4.5	-185.4	-4.1	-54.8		0	0	3.4	0	3.4	0	0	0	0
(2)	82.50	-1.2	-52.8	-185.4	-52.8	-185.4	-1.2	-185.4	-4.5	-52.8		0	0	2.3	0	2.3	0	0	0	0
(3)	85.15	-3.4	-42.5	-59.1	-42.5	-59.1														



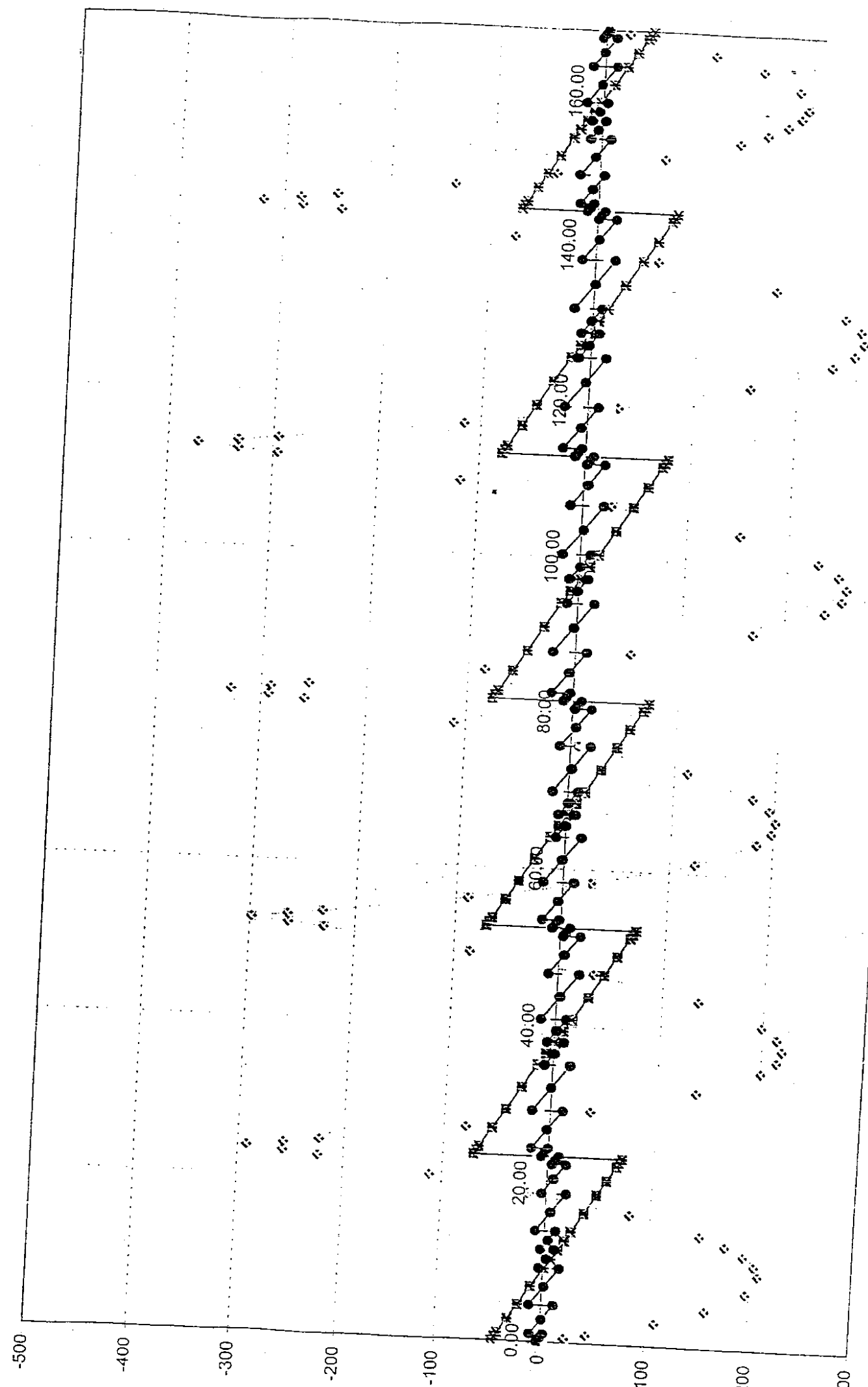
HIPOTESIS: Peso Propio losa

A	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
	0.00	2.7	-45.2	0	-45.2	0	2.7	0	2.7	-45.2
	0.50	-0.1	-42.7	22	-42.7	22	-0.1	22	-0.1	-42.7
	1.00	-2.9	-40.3	42.7	-40.3	42.7	-2.9	42.7	-2.9	-40.3
	1.00	9.5	-40.3	42.7	-40.3	42.7	9.5	42.7	9.5	-40.3
	2.85	-0.8	-31.2	108.8	-31.2	108.8	-0.8	108.8	-0.8	-31.2
	4.70	-11.1	-22.1	158.1	-22.1	158.1	-11.1	158.1	-11.1	-22.1
	4.70	11.1	-22.1	158.1	-22.1	158.1	11.1	158.1	11.1	-22.1
	7.05	-2	-10.6	196.6	-10.6	196.6	-2	196.6	-2	-10.6
	9.40	-15.1	0.9	208	0.9	208	-15.1	208	-15.1	0.9
	9.40	3.6	0.9	208	0.9	208	3.6	208	3.6	0.9
	10.58	-3	6.7	203.6	6.7	203.6	-3	203.6	-3	6.7
	11.75	-9.5	12.4	192.4	12.4	192.4	-9.5	192.4	-9.5	12.4
	11.75	2.9	12.4	192.4	12.4	192.4	2.9	192.4	2.9	12.4
	12.93	-3.7	18.2	174.4	18.2	174.4	-3.7	174.4	-3.7	18.2
	14.10	-10.2	23.9	149.7	23.9	149.7	-10.2	149.7	-10.2	23.9
	14.10	8.4	23.9	149.7	23.9	149.7	8.4	149.7	8.4	23.9
	16.45	-4.7	35.4	79.9	35.4	79.9	-4.7	79.9	-4.7	35.4
	18.80	-17.8	47	-16.9	47	-16.9	-17.8	-16.9	-17.8	47
	18.80	4.3	47	-16.9	47	-16.9	4.3	-16.9	4.3	47
	20.65	-6	56	-112.2	56	-112.2	-6	-112.2	-6	56
	22.50	-16.4	65.1	-224.2	65.1	-224.2	-16.4	-224.2	-16.4	65.1
	22.50	-4	65.1	-224.2	65.1	-224.2	-4	-224.2	-4	65.1
	23.00	-6.8	67.5	-257.4	67.5	-257.4	-6.8	-257.4	-6.8	67.5
	23.50	-9.6	70	-291.8	70	-291.8	-9.6	-291.8	-9.6	70
	23.50	6.2	-70.8	-291.8	-70.8	-291.8	6.2	-291.8	6.2	-70.8
	24.00	3.4	-68.4	-257	-68.4	-257	3.4	-257	3.4	-68.4
	24.50	0.6	-65.9	-223.4	-65.9	-223.4	0.6	-223.4	0.6	-65.9
	24.50	15.8	-65.9	-223.4	-65.9	-223.4	15.8	-223.4	15.8	-65.9
	26.90	2.4	-54.2	-79.3	-54.2	-79.3	2.4	-79.3	2.4	-54.2
	29.30	-10.9	-42.4	36.6	-42.4	36.6	-10.9	36.6	-10.9	-42.4
	29.30	16.9	-42.4	36.6	-42.4	36.6	16.9	36.6	16.9	-42.4
	32.20	0.7	-28.2	138.9	-28.2	138.9	0.7	138.9	0.7	-28.2
	35.10	-15.4	-14	200.1	-14	200.1	-15.4	200.1	-15.4	-14
	35.10	7.4	-14	200.1	-14	200.1	7.4	200.1	7.4	-14
	36.55	-0.7	-6.9	215.2	-6.9	215.2	-0.7	215.2	-0.7	-6.9
	38.00	-8.8	0.2	220	0.2	220	-8.8	220	-8.8	0.2
	38.00	6.5	0.2	220	0.2	220	6.5	220	6.5	0.2
	39.45	-1.6	7.3	214.5	7.3	214.5	-1.6	214.5	-1.6	7.3
	40.90	-9.7	14.4	198.7	14.4	198.7	-9.7	198.7	-9.7	14.4
	40.90	13.2	14.4	198.7	14.4	198.7	13.2	198.7	13.2	14.4
	43.80	-3	28.7	136.2	28.7	136.2	-3	136.2	-3	28.7
	46.70	-19.2	42.9	32.6	42.9	32.6	-19.2	32.6	-19.2	42.9
	46.70	8.6	42.9	32.6	42.9	32.6	8.6	32.6	8.6	42.9
	49.10	-4.8	54.6	-84.4	54.6	-84.4	-4.8	-84.4	-4.8	54.6
	51.50	-18.2	66.4	-229.6	66.4	-229.6	-18.2	-229.6	-18.2	66.4
	51.50	-3.1	66.4	-229.6	66.4	-229.6	-3.1	-229.6	-3.1	66.4
	52.00	-5.8	68.8	-263.4	68.8	-263.4	-5.8	-263.4	-5.8	68.8
	52.50	-8.6	71.3	-298.4	71.3	-298.4	-8.6	-298.4	-8.6	71.3
	52.50	7.2	-70	-298.4	-70	-298.4	7.2	-298.4	7.2	-70
	53.00	4.4	-67.6	-264.1	-67.6	-264.1	4.4	-264.1	4.4	-67.6
	53.50	1.6	-65.1	-230.9	-65.1	-230.9	1.6	-230.9	1.6	-65.1
	53.50	16.8	-65.1	-230.9	-65.1	-230.9	16.8	-230.9	16.8	-65.1
	55.90	3.4	-53.4	-88.7	-53.4	-88.7	3.4	-88.7	3.4	-53.4
	58.30	-10	-41.6	25.2	-41.6	25.2	-10	25.2	-10	-41.6
	58.30	17.7	-41.6	25.2	-41.6	25.2	17.7	25.2	17.7	-41.6
	61.20	1.5	-27.4	125.3	-27.4	125.3	1.5	125.3	1.5	-27.4
	64.10	-14.6	-13.2	184.1	-13.2	184.1	-14.6	184.1	-14.6	-13.2
	64.10	8.2	-13.2	184.1	-13.2	184.1	8.2	184.1	8.2	-13.2
	65.55	0.1	-6.1	198.1	-6.1	198.1	0.1	198.1	0.1	-6.1
	67.00	-8	1	201.7	1	201.7	-8	201.7	-8	1
	67.00	7.2	1	201.7	1	201.7	7.2	201.7	7.2	1
	68.45	-0.9	8.1	195.1	8.1	195.1	-0.9	195.1	-0.9	8.1
	69.90	-9	15.2	178.1	15.2	178.1	-9	178.1	-9	15.2
	69.90	13.8	15.2	178.1	15.2	178.1	13.8	178.1	13.8	15.2
	72.80	-2.4	29.5	113.3	29.5	113.3	-2.4	113.3	-2.4	29.5
	75.70	-18.6	43.7	7.3	43.7	7.3	-18.6	7.3	-18.6	43.7
	75.70	9.1	43.7	7.3	43.7	7.3	9.1	7.3	9.1	43.7
	78.10	-4.2	55.4	-111.6	55.4	-111.6	-4.2	-111.6	-4.2	55.4

1(1)	80.50	-2.5	67.2	-258.7	67.2	-258.7	-2.5	-258.7	-2.5	67.2	7.00	2	-10.0	190.0	-10.0	190.0	-	-	-	-
1(2)	81.00	-5.3	69.6	-292.9	69.6	-292.9	-5.3	-292.9	-5.3	69.6	9.40	15.1	0.9	208	0.9	208	15.1	15.1	15.1	15.1
1(3)	81.50	-8.1	72.1	-328.3	72.1	-328.3	-8.1	-328.3	-8.1	72.1	9.40	-3.6	0.9	208	0.9	208	-3.6	208	15.1	0.9
1(1)	81.50	8.2	-75.8	-328.3	-75.8	-328.3	8.2	-328.3	8.2	-75.8	10.58	3	6.7	203.6	6.7	203.6	3	203.6	-3.6	0.9
1(2)	82.00	5.4	-73.4	-291	-73.4	-291	5.4	-291	5.4	-73.4	11.75	9.5	12.4	192.4	12.4	192.4	9.5	192.4	-	6.7
1(3)	82.50	2.6	-70.9	-255	-70.9	-255	2.6	-255	2.6	-70.9	11.75	-2.9	12.4	192.4	12.4	192.4	-2.9	192.4	9.5	12.4
1(1)	82.50	19.1	-70.9	-255	-70.9	-255	19.1	-255	19.1	-70.9	12.93	3.7	18.2	174.4	18.2	174.4	-2.9	192.4	-2.9	12.4
1(2)	85.15	4.3	-57.9	-84.2	-57.9	-84.2	4.3	-84.2	4.3	-57.9	14.10	10.2	23.9	149.7	23.9	149.7	10.2	149.7	10.2	18.2
1(3)	87.80	-10.5	-44.9	52.1	-44.9	52.1	-10.5	52.1	-10.5	-44.9	14.10	-8.4	23.9	149.7	23.9	149.7	-8.4	149.7	-8.4	23.9
1(1)	87.80	19.8	-44.9	52.1	-44.9	52.1	19.8	52.1	19.8	-44.9	16.45	4.7	35.4	79.9	35.4	79.9	4.7	79.9	4.7	35.4
1(2)	90.95	2.3	-29.5	169.3	-29.5	169.3	2.3	169.3	2.3	-29.5	18.80	17.8	47	-16.9	47	-16.9	17.8	-16.9	17.8	35.4
1(3)	94.10	-15.3	-14.1	238	-14.1	238	-15.3	238	-15.3	-14.1	18.80	-4.3	47	-16.9	47	-16.9	-4.3	-16.9	17.8	47
1(1)	94.10	9.5	-14.1	238	-14.1	238	9.5	238	9.5	-14.1	20.65	6	56	-112.2	56	-112.2	6	-112.2	-4.3	47
1(2)	95.68	0.7	-6.4	254.1	-6.4	254.1	0.7	254.1	0.7	-6.4	22.50	16.4	65.1	-224.2	65.1	-224.2	16.4	-224.2	6	56
1(3)	97.25	-8.1	1.4	258	1.4	258	-8.1	258	-8.1	1.4	22.50	4	65.1	-224.2	65.1	-224.2	4	-224.2	16.4	65.1
1(1)	97.25	8.4	1.4	258	1.4	258	8.4	258	8.4	1.4	23.00	6.8	67.5	-257.4	67.5	-257.4	6.8	-257.4	4	65.1
1(2)	98.83	-0.4	9.1	249.8	9.1	249.8	-0.4	249.8	-0.4	9.1	23.50	9.6	70	-291.8	70	-291.8	9.6	-257.4	6.8	67.5
1(3)	100.40	-9.2	16.8	229.4	16.8	229.4	-9.2	229.4	-9.2	16.8	23.50	-6.2	-70.8	-291.8	-70.8	-291.8	-6.2	-291.8	9.6	70
1(1)	100.40	15.6	16.8	229.4	16.8	229.4	15.6	229.4	15.6	16.8	24.00	-3.4	-68.4	-257	-68.4	-257	-3.4	-291.8	-6.2	-70.8
1(2)	103.55	-2	32.2	152.2	32.2	152.2	-2	152.2	-2	32.2	24.50	-0.6	-65.9	-223.4	-65.9	-223.4	-0.6	-257	-3.4	-68.4
1(3)	106.70	-19.5	47.7	26.4	47.7	26.4	-19.5	26.4	-19.5	47.7	24.50	-15.8	-65.9	-223.4	-65.9	-223.4	-15.8	-223.4	-0.6	-65.9
1(1)	106.70	10.8	47.7	26.4	47.7	26.4	10.8	26.4	10.8	47.7	26.90	-2.4	-54.2	-79.3	-54.2	-79.3	-2.4	-79.3	-15.8	-65.9
1(2)	109.35	-4	60.6	-117.1	60.6	-117.1	-4	-117.1	-4	60.6	29.30	10.9	-42.4	36.6	-42.4	36.6	10.9	-79.3	-2.4	-54.2
1(3)	112.00	-18.8	73.6	-295.1	73.6	-295.1	-18.8	-295.1	-18.8	73.6	29.30	-16.9	-42.4	36.6	-42.4	36.6	-16.9	36.6	10.9	-42.4
1(1)	112.00	-2.3	73.6	-295.1	73.6	-295.1	-2.3	-295.1	-2.3	73.6	32.20	-0.7	-28.2	138.9	-28.2	138.9	-0.7	36.6	-16.9	-42.4
1(2)	112.50	-5.1	76.1	-332.5	76.1	-332.5	-5.1	-332.5	-5.1	76.1	35.10	15.4	-14	200.1	-14	200.1	15.4	138.9	-0.7	-28.2
1(3)	113.00	-7.9	78.5	-371.2	78.5	-371.2	-7.9	-371.2	-7.9	78.5	35.10	-7.4	-14	200.1	-14	200.1	-7.4	200.1	15.4	-14
1(1)	113.00	9.1	-78.8	-371.2	-78.8	-371.2	9.1	-371.2	9.1	-78.8	36.55	0.7	-6.9	215.2	-6.9	215.2	0.7	200.1	-7.4	-14
1(2)	113.50	6.3	-76.4	-332.4	-76.4	-332.4	6.3	-332.4	6.3	-76.4	38.00	8.8	0.2	220	0.2	220	8.8	215.2	0.7	-6.9
1(3)	114.00	-3.5	-73.9	-294.8	-73.9	-294.8	-3.5	-294.8	-3.5	-73.9	38.00	-6.5	0.2	220	0.2	220	-6.5	220	8.8	0.2
1(1)	114.00	20	-73.9	-294.8	-73.9	-294.8	20	-294.8	20	-73.9	39.45	1.6	7.3	214.5	7.3	214.5	1.6	220	-6.5	0.2
1(2)	116.65	5.2	-60.9	-116.1	-60.9	-116.1	5.2	-116.1	5.2	-60.9	40.90	9.7	14.4	198.7	14.4	198.7	9.7	214.5	1.6	7.3
1(3)	119.30	-9.6	-47.9	28.1	-47.9	28.1	-9.6	28.1	-9.6	-47.9	40.90	-13.2	14.4	198.7	14.4	198.7	-13.2	214.5	9.7	14.4
1(1)	119.30	20.8	-47.9	28.1	-47.9	28.1	20.8	28.1	20.8	-47.9	43.80	3	28.7	136.2	28.7	136.2	3	198.7	-13.2	14.4
1(2)	122.45	3.2	-32.5	154.8	-32.5	154.8	3.2	154.8	3.2	-32.5	46.70	19.2	42.9	32.6	42.9	32.6	19.2	136.2	3	28.7
1(3)	125.60	-14.4	-17.1	232.9	-17.1	232.9	-14.4	232.9	-14.4	-17.1	46.70	-8.6	42.9	32.6	42.9	32.6	-8.6	32.6	19.2	42.9
1(1)	125.60	10.5	-17.1	232.9	-17.1	232.9	10.5	232.9	10.5	-17.1	49.10	4.8	54.6	-84.4	54.6	-84.4	4.8	32.6	-8.6	42.9
1(2)	127.18	1.7	-9.4	253.7	-9.4	253.7	1.7	253.7	1.7	-9.4	51.50	18.2	66.4	-229.6	66.4	-229.6	18.2	-84.4	4.8	54.6
1(3)	128.75	-7.1	-1.6	262.3	-1.6	262.3	-7.1	262.3	-7.1	-1.6	51.50	3.1	66.4	-229.6	66.4	-229.6	3.1	-229.6	18.2	66.4
1(1)	128.75	9.4	-1.6	262.3	-1.6	262.3	9.4	262.3	9.4	-1.6	52.00	5.8	68.8	-263.4	68.8	-263.4	5.8	-229.6	3.1	66.4
1(2)	130.33	0.7	6.1	258.8	6.1	258.8	0.7	258.8	0.7	6.1	52.50	8.6	71.3	-298.4	71.3	-298.4	8.6	-263.4	5.8	66.4
1(3)	131.90	-8.1	13.8	243.2	13.8	243.2	-8.1	243.2	-8.1	13.8	52.50	-7.2	-70	-298.4	-70	-298.4	-7.2	-298.4	8.6	71.3
1(1)	131.90	16.7	13.8	243.2	13.8	243.2	16.7	243.2	16.7	13.8	53.00	-4.4	-67.6	-264.1	-67.6	-264.1	-4.4	-298.4	-7.2	-70
1(2)	135.05	-0.9	29.2	175.4	29.2	175.4	-0.9	175.4	-0.9	29.2	53.50	-1.6	-65.1	-230.9	-65.1	-230.9	-1.6	-264.1	-4.4	-67.6
1(3)	138.20	-18.4	44.7	59	44.7	59	-18.4	59	-18.4	44.7	53.50	-16.8	-65.1	-230.9	-65.1	-230.9	-16.8	-230.9	-1.6	-65.1
1(1)	138.20	12	44.7	59	44.7	59	12	59	12	44.7	55.90	-3.4	-53.4	-88.7	-53.4	-88.7	-3.4	-230.9	-16.8	-65.1
1(2)	140.85	-2.7	57.7	-76.6	57.7	-76.6	-2.7	-76.6	-2.7	57.7	58.30	10	-41.6	25.2	-41.6	25.2	10	-88.7	-3.4	-53.4
1(3)	143.50	-17.5	70.6	-246.6	70.6	-246.6	-17.5	-246.6	-17.5	70.6	58.30	-17.7	-41.6	25.2	-41.6	25.2	-17.7	25.2	10	-41.6
1(1)	143.50	-1	70.6	-246.6	70.6	-246.6	-1	-246.6	-1	70.6	61.20	-1.5	-27.4	125.3	-27.4	125.3	-1.5	-25.2	-17.7	-41.6
1(2)	144.00	-3.8	73.1	-282.5	73.1	-282.5	-3.8	-282.5	-3.8	73.1	64.10	14.6	-13.2	184.1	-13.2	184.1	14.6	-27.4	-1.5	-27.4
1(3)	144.50	-6.6	75.5	-319.7	75.5	-319.7	-6.6	-319.7	-6.6	75.5	64.10	-8.2	-13.2	184.1	-13.2	184.1	-8.2	-27.4	14.6	-13.2
1(1)	144.50	9.7	-71.2	-319.7	-71.2	-319.7	9.7	-319.7	9.7	-71.2	65.55	-0.1	-6.1	198.1	-6.1	198.1	-0.1	-319.7	-13.2	-13.2
1(2)	145.00	6.9	-68.7	-284.7	-68.7	-284.7	6.9	-284.7	6.9	-68.7	67.00	8	1	201.7	1	201.7	8	198.1	-0.1	-6.1
1(3)	145.50	4.1	-66.3	-251	-66.3	-251	4.1	-251	4.1	-66.3	67.00	-7.2	1	201.7	1	201.7	-7.2	201.7	8	1
1(1)	145.50	16.4	-66.3	-251	-66.3	-251	16.4	-251	16.4	-66.3	68.45	0.9	8.1	195.1	8.1	195.1	0.9	201.7	-7.2	1
1(2)	147.35	6.1	-57.2	-136.7	-57.2	-136.7	6.1	-136.7	6.1	-57.2	69.90	9	15.2	178.1	15.2	178.1	9	195.1	0.9	8.1
1(3)	149.20	-4.2	-48.1	-39.3	-48.1	-39.3	-4.2	-39.3	-4.2	-48.1	69.90	-13.8	15.2	178.1	15.2	178.1	-13.8	178.1	9	15.2
1(1)	149.20	17.9	-48.1	-39.3	-48.1	-39.3	17.9	-39.3	17.9	-48.1	72.80	2.4	29.5	113.3	29.5	113.3	2.4	-13.8	-13.8	15.2
1(2)	151.55	4.8	-36.6	60.3	-36.6	60.3	4.8	60.3	4.8	-36.6	75.70	18.6	43.7	7.3	43.7	7.3	18.6	113.3	2.4	29.5
1(3)	153.90	-8.4	-25.1	132.9	-25.1	132.9	-8.4	132.9	-8.4	-25.1	75.70	-9.1	43.7	7.3	43.7	7.3	-9.1	7.3	18.6	43.7
1(1)	153.90	10.2	-25.1	132.9	-25.1	132.9	10.2	132.9	10.2	-25.1	78.10	4.2	55.4	-111.6	55.4	-111.6	4.2	7.3	-9.1	43.7
1(2)	155.08	3.7	-19.4	159	-19.4	159	3.7	159	3.7	-19.4	80.50	17.6	67.2	-258.7	67.2	-258.7	17.6	-111.6	4.2	55.4
1(3)	156.25	-2.9	-13.6	178.4	-13.6	178.4	-2.9	178.4	-2.9	-13.6	80.50	2.5	67.2	-258.7	67.2	-258.7	2.5	-258.7	17.6	67.2
1(1)	156.25	9.6	-13.6	178.4	-13.6	178.4	9.6	178.4	9.6	-13.6	81.00	5.3	69.6	-292.9	69.6	-292.9	5.3	-258.7	2.5	67.2
1(2)	157.43	3	-7.8	191	-7.8	191	3	191	3	-7.8	81.50	8.1	72.1	-328.3	72.1	-328.3	8.1	-292.9	5.3	69.6
1(3)	158.60																			

9(2)	109.35	4	60.6	-117.1	60.6	-117.1	4	-117.1	-10.8	47.7	)	0	0	-15.2	0	-15.2	0	-15.2	0	0	0
9(3)	112.00	18.8	73.6	-295.1	73.6	-295.1	18.8	-295.1	18.8	73.6	)	0	0	-27.8	0	-27.8	0	-27.8	0	0	0
10(1)	112.00	2.3	73.6	-295.1	73.6	-295.1	2.3	-295.1	2.3	73.6	)	0	0	-27.8	0	-27.8	0	-27.8	0	0	0
10(2)	112.50	5.1	76.1	-332.5	76.1	-332.5	5.1	-332.5	5.1	76.1	)	0	0	-27.8	0	-27.8	0	-27.8	0	0	0
10(3)	113.00	7.9	78.5	-371.2	78.5	-371.2	7.9	-371.2	7.9	78.5	)	0	0	-22.9	0	-22.9	0	-22.9	0	0	0
11	113.00	-9.1	-78.8	-371.2	-78.8	-371.2	-9.1	-371.2	-9.1	-78.8	)	0	0	-22.9	0	-22.9	0	-22.9	0	0	0
11(3)	113.50	-6.3	-76.4	-332.4	-76.4	-332.4	-6.3	-332.4	-6.3	-76.4	)	0	0	-22.9	0	-22.9	0	-22.9	0	0	0
12(1)	114.00	-3.5	-73.9	-294.8	-73.9	-294.8	-3.5	-294.8	-3.5	-73.9	)	0	0	-15.2	0	-15.2	0	-15.2	0	0	0
12(2)	114.00	-20	-73.9	-294.8	-73.9	-294.8	-20	-294.8	-20	-73.9	)	0	0	-15.2	0	-15.2	0	-15.2	0	0	0
12(3)	116.65	-5.2	-60.9	-116.1	-60.9	-116.1	-5.2	-116.1	-5.2	-60.9	)	0	0	-15.2	0	-15.2	0	-15.2	0	0	0
13(1)	119.30	9.6	-47.9	28.1	-47.9	28.1	9.6	28.1	9.6	-47.9	)	0	0	-22.8	0	-22.8	0	-22.8	0	0	0
13(2)	119.30	-20.8	-47.9	28.1	-47.9	28.1	-20.8	28.1	-20.8	-47.9	)	0	0	-22.8	0	-22.8	0	-22.8	0	0	0
13(3)	122.45	-3.2	-32.5	154.8	-32.5	154.8	-3.2	154.8	-3.2	-32.5	)	0	0	-22.8	0	-22.8	0	-22.8	0	0	0
14(1)	125.60	14.4	-17.1	232.9	-17.1	232.9	14.4	232.9	14.4	-17.1	)	0	0	-27.8	0	-27.8	0	-27.8	0	0	0
14(2)	125.60	-10.5	-17.1	232.9	-17.1	232.9	-10.5	232.9	-10.5	-17.1	)	0	0	-27.8	0	-27.8	0	-27.8	0	0	0
14(3)	127.18	-1.7	-9.4	253.7	-9.4	253.7	-1.7	253.7	-1.7	-9.4	)	0	0	-27.8	0	-27.8	0	-27.8	0	0	0
15(1)	128.75	7.1	-1.6	262.3	-1.6	262.3	7.1	262.3	7.1	-1.6	)	0	0	-15.1	0	-15.1	0	-15.1	0	0	0
15(2)	128.75	-9.4	-1.6	262.3	-1.6	262.3	-9.4	262.3	-9.4	-1.6	)	0	0	-15.1	0	-15.1	0	-15.1	0	0	0
15(3)	130.33	-0.7	6.1	258.8	6.1	258.8	-0.7	258.8	-0.7	6.1	)	0	0	-15.1	0	-15.1	0	-15.1	0	0	0
16(1)	131.90	8.1	13.8	243.2	13.8	243.2	8.1	243.2	8.1	13.8	)	0	0	-5.2	0	-5.2	0	-5.2	0	0	0
16(2)	131.90	-16.7	13.8	243.2	13.8	243.2	-16.7	243.2	-16.7	13.8	)	0	0	-5.2	0	-5.2	0	-5.2	0	0	0
16(3)	135.05	0.9	29.2	175.4	29.2	175.4	0.9	175.4	0.9	29.2	)	0	0	-5.2	0	-5.2	0	-5.2	0	0	0
17(1)	138.20	18.4	44.7	59	44.7	59	18.4	59	18.4	44.7	)	0	0	-15.1	0	-15.1	0	-15.1	0	0	0
17(2)	138.20	-12	44.7	59	44.7	59	-12	59	-12	44.7	)	0	0	-15.1	0	-15.1	0	-15.1	0	0	0
17(3)	140.85	2.7	57.7	-76.6	57.7	-76.6	2.7	-76.6	2.7	57.7	)	0	0	-15.1	0	-15.1	0	-15.1	0	0	0
18(1)	143.50	17.5	70.6	-246.6	70.6	-246.6	17.5	-246.6	17.5	70.6	)	0	0	-27.7	0	-27.7	0	-27.7	0	0	0
18(2)	143.50	1	70.6	-246.6	70.6	-246.6	1	-246.6	1	70.6	)	0	0	-27.7	0	-27.7	0	-27.7	0	0	0
19	144.00	3.8	73.1	-282.5	73.1	-282.5	3.8	-282.5	3.8	73.1	)	0	0	-27.7	0	-27.7	0	-27.7	0	0	0
20	144.50	6.6	75.5	-319.7	75.5	-319.7	6.6	-319.7	6.6	75.5	)	0	0	-22.8	0	-22.8	0	-22.8	0	0	0
21	144.50	-9.7	-71.2	-319.7	-71.2	-319.7	-9.7	-319.7	-9.7	-71.2	)	0	0	-22.8	0	-22.8	0	-22.8	0	0	0
22	145.00	-6.9	-68.7	-284.7	-68.7	-284.7	-6.9	-284.7	-6.9	-68.7	)	0	0	-22.8	0	-22.8	0	-22.8	0	0	0
23	145.50	-4.1	-66.3	-251	-66.3	-251	-4.1	-251	-4.1	-66.3	)	0	0	-15.2	0	-15.2	0	-15.2	0	0	0
24	145.50	-16.4	-66.3	-251	-66.3	-251	-16.4	-251	-16.4	-66.3	)	0	0	-15.2	0	-15.2	0	-15.2	0	0	0
25	147.35	-6.1	-57.2	-136.7	-57.2	-136.7	-6.1	-136.7	-6.1	-57.2	)	0	0	-15.2	0	-15.2	0	-15.2	0	0	0
26	149.20	4.2	-48.1	-39.3	-48.1	-39.3	4.2	-39.3	4.2	-48.1	)	0	0	-22.8	0	-22.8	0	-22.8	0	0	0
27	149.20	-17.9	-48.1	-39.3	-48.1	-39.3	-17.9	-39.3	-17.9	-48.1	)	0	0	-22.8	0	-22.8	0	-22.8	0	0	0
28	151.55	-4.8	-36.6	60.3	-36.6	60.3	-4.8	60.3	-4.8	-36.6	)	0	0	-22.8	0	-22.8	0	-22.8	0	0	0
29	153.90	8.4	-25.1	132.9	-25.1	132.9	8.4	132.9	8.4	-25.1	)	0	0	-27.7	0	-27.7	0	-27.7	0	0	0
30	153.90	-10.2	-25.1	132.9	-25.1	132.9	-10.2	132.9	-10.2	-25.1	)	0	0	-27.7	0	-27.7	0	-27.7	0	0	0
31	155.08	-3.7	-19.4	159	-19.4	159	-3.7	159	-3.7	-19.4	)	0	0	-27.7	0	-27.7	0	-27.7	0	0	0
32	156.25	2.9	-13.6	178.4	-13.6	178.4	2.9	178.4	2.9	-13.6	)	0	0	-15.1	0	-15.1	0	-15.1	0	0	0
33	156.25	-9.6	-13.6	178.4	-13.6	178.4	-9.6	178.4	-9.6	-13.6	)	0	0	-15.1	0	-15.1	0	-15.1	0	0	0
34	157.43	-3	-7.8	191	-7.8	191	-3	191	-3	-7.8	)	0	0	-15.1	0	-15.1	0	-15.1	0	0	0
35	158.60	3.6	-2.1	196.8	-2.1	196.8	3.6	196.8	3.6	-2.1	)	0	0	-5.2	0	-5.2	0	-5.2	0	0	0
36	158.60	-15.1	-2.1	196.8	-2.1	196.8	-15.1	196.8	-15.1	-2.1	)	0	0	-5.2	0	-5.2	0	-5.2	0	0	0
37	160.95	-2	9.4	188.2	9.4	188.2	-2	188.2	-2	9.4	)	0	0	-5.2	0	-5.2	0	-5.2	0	0	0
38	163.30	11.1	20.9	152.5	20.9	152.5	11.1	152.5	11.1	20.9	)	0	0	-16.4	0	-16.4	0	-16.4	0	0	0
39	163.30	-11.1	20.9	152.5	20.9	152.5	-11.1	152.5	-11.1	20.9	)	0	0	-16.4	0	-16.4	0	-16.4	0	0	0
40	165.15	-0.8	30	105.4	30	105.4	-0.8	105.4	-0.8	30	)	0	0	-16.4	0	-16.4	0	-16.4	0	0	0
41	167.00	9.5	39.1	41.5	39.1	41.5	9.5	41.5	9.5	39.1	)	0	0	-30.3	0	-30.3	0	-30.3	0	0	0
42	167.00	-2.9	39.1	41.5	39.1	41.5	-2.9	41.5	-2.9	39.1	)	0	0	-30.3	0	-30.3	0	-30.3	0	0	0
43	167.50	-0.1	41.5	21.4	41.5	21.4	-0.1	21.4	-0.1	41.5	)	0	0	-30.3	0	-30.3	0	-30.3	0	0	0
44	168.00	2.6	44	0	44	0	2.6	0	2.6	44	)	0	0	-24.8	0	-24.8	0	-24.8	0	0	0
45		0	0	-2.7	0	-2.7	0	-2.7	0	-2.7	)	0	0	-24.8	0	-24.8	0	-24.8	0	0	0
46		0	0	-2.7	0	-2.7	0	-2.7	0	-2.7	)	0	0	-24.8	0	-24.8	0	-24.8	0	0	0
47		0	0	-2.7	0	-2.7	0	-2.7	0	-2.7	)	0	0	-24.8	0	-24.8	0	-24.8	0	0	0
48		0	0	-12.5	0	-12.5	0	-12.5	0	-12.5	)	0	0	-16.5	0	-16.5	0	-16.5	0	0	0
49		0	0	-12.5	0	-12.5	0	-12.5	0	-12.5	)	0	0	-16.5	0	-16.5	0	-16.5	0	0	0
50		0	0	-12.5	0	-12.5	0	-12.5	0	-12.5	)	0	0	-16.5	0	-16.5	0	-16.5	0	0	0
51		0	0	-22.3	0	-22.3	0	-22.3	0	-22.3	)	0	0	-24.8	0	-24.8	0	-24.8	0	0	0
52		0	0	-22.3	0	-22.3	0	-22.3	0	-22.3	)	0	0	-24.8	0	-24.8	0	-24.8	0	0	0
53		0	0	-22.3	0	-22.3	0	-22.3	0	-22.3	)	0	0	-24.8	0	-24.8	0	-24.8	0	0	0
54		0	0	-18.7	0	-18.7	0	-18.7	0	-18.7	)	0	0	-30.3	0	-30.3	0	-30.3	0	0	0
55		0	0	-18.7	0	-18.7	0	-18.7	0	-18.7	)	0	0	-30.3	0	-30.3	0	-30.3	0	0	0
56		0	0	-18.7	0	-18.7	0	-18.7	0	-18.7	)	0	0	-16.4	0	-16.4	0	-16.4	0	0	0
57		0	0	-12.4	0	-12.4	0	-12.4	0	-12.4	)	0	0	-16.4	0	-16.4	0	-16.4	0	0	0
58		0	0	-12.4	0	-12.4	0	-12.4	0	-12.4	)	0	0	-16.4	0	-16.4	0	-16.4	0	0	0
59		0	0	-18.6	0	-18.6	0	-18.6	0	-18.6	)	0	0	-5.2	0	-5.2	0	-5.2	0	0	0
60		0	0	-18.6	0	-18.6	0	-18.6	0	-18.6	)	0	0	-5.2	0	-5.2	0	-5.2	0	0	0
61		0	0	-22.1	0	-22.1	0	-22.1	0	-22.1	)	0	0	-16.4	0	-16.4	0	-16.4	0	0	0
62		0	0	-22.1	0	-22.1	0	-22.1	0	-22.1	)	0	0	-16.4	0	-16.4	0	-16.4	0	0	0
63		0	0	-22.1	0	-22.1	0	-22.1	0	-22.1	)	0	0	-30.4	0	-30.4	0	-30.4	0	0	0
64		0	0	-12.3	0	-12.3															

34(3)	0	0	-24.8	0	-24.8	0	-24.8	0	0
35(1)	0	0	-30.5	0	-30.5	0	-30.5	0	0
35(2)	0	0	-30.5	0	-30.5	0	-30.5	0	0
35(3)	0	0	-30.5	0	-30.5	0	-30.5	0	0
36(1)	0	0	-16.5	0	-16.5	0	-16.5	0	0
37(2)	0	0	-16.5	0	-16.5	0	-16.5	0	0
37(3)	0	0	-16.5	0	-16.5	0	-16.5	0	0
38(1)	0	0	-5.2	0	-5.2	0	-5.2	0	0
38(2)	0	0	-5.2	0	-5.2	0	-5.2	0	0
38(3)	0	0	-12.3	0	-12.3	0	-12.3	0	0
39(1)	0	0	-12.3	0	-12.3	0	-12.3	0	0
39(2)	0	0	-12.3	0	-12.3	0	-12.3	0	0
39(3)	0	0	-22.1	0	-22.1	0	-22.1	0	0
0(1)	0	0	-22.1	0	-22.1	0	-22.1	0	0
0(2)	0	0	-18.6	0	-18.6	0	-18.6	0	0
0(3)	0	0	-18.6	0	-18.6	0	-18.6	0	0
1(1)	0	0	-18.6	0	-18.6	0	-18.6	0	0
1(2)	0	0	-12.4	0	-12.4	0	-12.4	0	0
1(3)	0	0	-12.4	0	-12.4	0	-12.4	0	0
2(1)	0	0	-12.4	0	-12.4	0	-12.4	0	0
2(2)	0	0	-18.6	0	-18.6	0	-18.6	0	0
2(3)	0	0	-18.6	0	-18.6	0	-18.6	0	0
3(1)	0	0	-18.6	0	-18.6	0	-18.6	0	0
3(2)	0	0	-22.2	0	-22.2	0	-22.2	0	0
3(3)	0	0	-22.2	0	-22.2	0	-22.2	0	0
(1)	0	0	-12.5	0	-12.5	0	-12.5	0	0
(2)	0	0	-12.5	0	-12.5	0	-12.5	0	0
(3)	0	0	-2.6	0	-2.6	0	-2.6	0	0
(1)	0	0	-2.6	0	-2.6	0	-2.6	0	0
(2)	0	140.8	10.6	140.8	10.6	0	-2.6	0	0
(3)	0	140.8	5.3	140.8	5.3	0	10.6	0	140.8
1)	0	140.8	0	140.8	0	0	5.3	0	140.8
2)	0	141.3	10.6	141.3	10.6	0	0	0	140.8
3)	0	141.3	5.3	141.3	5.3	0	10.6	0	141.3
1)	0	141.3	0	141.3	0	0	5.3	0	141.3
2)	0	147.9	11.1	147.9	11.1	0	0	0	141.3
3)	0	147.9	5.5	147.9	5.5	0	11.1	0	147.9
1)	0	147.9	0	147.9	0	0	5.5	0	147.9
2)	0	157.3	11.8	157.3	11.8	0	0	0	147.9
3)	0	157.3	5.9	157.3	5.9	0	11.8	0	157.3
)	0	157.3	0	157.3	0	0	5.9	0	157.3
)	0	146.7	11	146.7	11	0	0	0	157.3
)	0	146.7	5.5	146.7	5.5	0	11	0	146.7
)	0	146.7	0	146.7	0	0	5.5	0	146.7
)	0	140.8	10.6	140.8	10.6	0	0	0	146.7
)	0	140.8	5.3	140.8	5.3	0	10.6	0	140.8
)	0	140.8	0	140.8	0	0	5.3	0	140.8
)	0	141.3	10.6	141.3	10.6	0	0	0	140.8
)	0	141.3	5.3	141.3	5.3	0	10.6	0	141.3
)	0	141.3	0	141.3	0	0	5.3	0	141.3
)	0	147.9	11.1	147.9	11.1	0	0	0	141.3
)	0	147.9	5.5	147.9	5.5	0	11.1	0	147.9
)	0	147.9	0	147.9	0	0	5.5	0	147.9
)	0	157.3	11.8	157.3	11.8	0	0	0	147.9
)	0	157.3	5.9	157.3	5.9	0	11.8	0	157.3
)	0	157.3	0	157.3	0	0	5.9	0	157.3
)	0	146.7	11	146.7	11	0	0	0	157.3
)	0	146.7	5.5	146.7	5.5	0	11	0	146.7
)	0	146.7	0	146.7	0	0	5.5	0	146.7

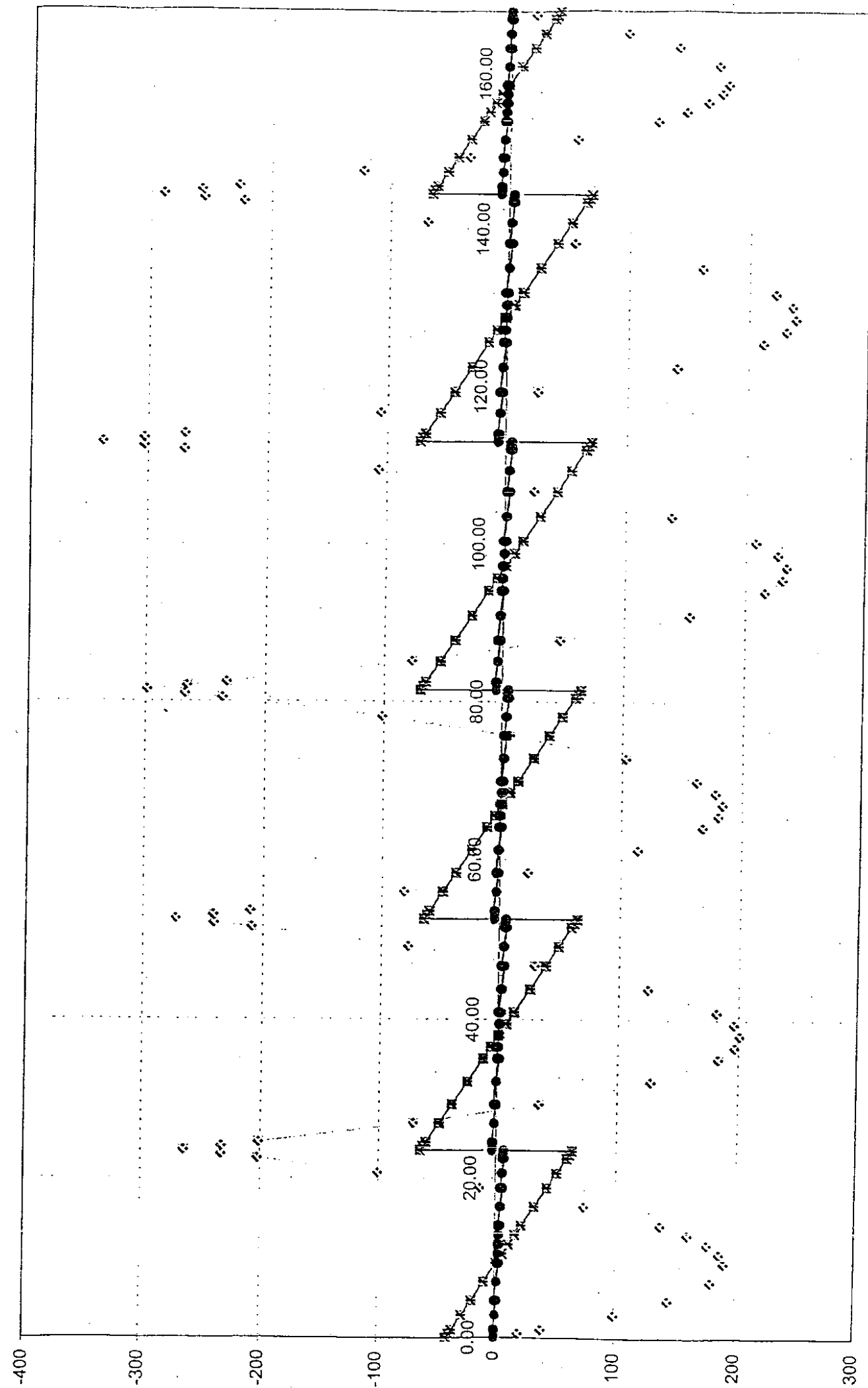


HIPOTESIS: Carga muerta balasto

CARRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)		60.50	-5.6	61.1	-235.3	61.1	-235.3	-5.6	-235.3	-5.6	61.1
(1)	0.00	0.2	-41.2	0	-41.2	0	0.2	0	0.2	-41.2		80.50	-4.5	61.1	-235.3	61.1	-235.3	-4.5	-235.3	-4.5	61.1
(2)	0.50	-0.1	-39	20	-39	20	-0.1	20	-0.1	-39		81.00	-4.8	63.4	-266.4	63.4	-266.4	-4.8	-266.4	-4.8	63.4
(3)	1.00	-0.5	-36.7	39	-36.7	39	-0.5	39	-0.5	-36.7		81.50	-5.2	65.6	-298.7	65.6	-298.7	-5.2	-298.7	-5.2	65.6
(1)	1.00	0.6	-36.7	39	-36.7	39	0.6	39	0.6	-36.7		81.50	5.3	-69	-298.7	-69	-298.7	5.3	-298.7	5.3	-69
(2)	2.85	-0.7	-28.5	99.3	-28.5	99.3	-0.7	99.3	-0.7	-28.5		82.00	4.9	-66.8	-264.7	-66.8	-264.7	4.9	-264.7	4.9	-66.8
(3)	4.70	-2	-20.2	144.3	-20.2	144.3	-2	144.3	-2	-20.2		82.50	4.6	-64.5	-231.9	-64.5	-231.9	4.6	-231.9	4.6	-64.5
(1)	4.70	-0.1	-20.2	144.3	-20.2	144.3	-0.1	144.3	-0.1	-20.2		82.50	5.8	-64.5	-231.9	-64.5	-231.9	5.8	-231.9	5.8	-64.5
(2)	7.05	-1.8	-9.7	179.5	-9.7	179.5	-1.8	179.5	-1.8	-9.7		85.15	3.9	-52.7	-76.6	-52.7	-76.6	3.9	-76.6	3.9	-52.7
(3)	9.40	-3.5	0.7	190.1	0.7	190.1	-3.5	190.1	-3.5	0.7		87.80	2	-40.9	47.5	-40.9	47.5	2	47.5	2	-40.9
(1)	9.40	-1.9	0.7	190.1	0.7	190.1	-1.9	190.1	-1.9	0.7		87.80	4.3	-40.9	47.5	-40.9	47.5	4.3	47.5	4.3	-40.9
(2)	10.58	-2.7	6	186.1	6	186.1	-2.7	186.1	-2.7	6		90.95	2.1	-26.8	154.1	-26.8	154.1	2.1	154.1	2.1	-26.8
(3)	11.75	-3.5	11.2	176	11.2	176	-3.5	176	-3.5	11.2		94.10	-0.2	-12.8	216.6	-12.8	216.6	-0.2	216.6	-0.2	-12.8
(1)	11.75	-2.5	11.2	176	11.2	176	-2.5	176	-2.5	11.2		94.10	1.7	-12.8	216.6	-12.8	216.6	1.7	216.6	1.7	-12.8
(2)	12.93	-3.3	16.5	159.8	16.5	159.8	-3.3	159.8	-3.3	16.5		95.68	0.6	-5.8	231.2	-5.8	231.2	0.6	231.2	0.6	-5.8
(3)	14.10	-4.2	21.7	137.3	21.7	137.3	-4.2	137.3	-4.2	21.7		97.25	-0.5	1.3	234.7	1.3	234.7	-0.5	234.7	-0.5	1.3
(1)	14.10	-2.6	21.7	137.3	21.7	137.3	-2.6	137.3	-2.6	21.7		97.25	0.8	1.3	234.7	1.3	234.7	0.8	234.7	0.8	1.3
(2)	16.45	-4.3	32.2	74	32.2	74	-4.3	74	-4.3	32.2		98.83	-0.4	8.3	227.2	8.3	227.2	-0.4	227.2	-0.4	8.3
(3)	18.80	-6	42.7	-13.9	42.7	-13.9	-6	-13.9	-6	42.7		100.40	-1.5	15.3	208.6	15.3	208.6	-1.5	208.6	-1.5	15.3
(1)	18.80	-4.2	42.7	-13.9	42.7	-13.9	-4.2	-13.9	-4.2	42.7		100.40	0.4	15.3	208.6	15.3	208.6	0.4	208.6	0.4	15.3
(2)	20.65	-5.5	50.9	-100.5	50.9	-100.5	-5.5	-100.5	-5.5	50.9		103.55	-1.8	29.4	138.3	29.4	138.3	-1.8	138.3	-1.8	29.4
(3)	22.50	-6.8	59.2	-202.3	59.2	-202.3	-6.8	-202.3	-6.8	59.2		106.70	-4	43.4	23.7	43.4	23.7	-4	23.7	-4	43.4
(1)	22.50	-5.8	59.2	-202.3	59.2	-202.3	-5.8	-202.3	-5.8	59.2		106.70	-1.7	43.4	23.7	43.4	23.7	-1.7	23.7	-1.7	43.4
(2)	23.00	-6.2	61.4	-232.4	61.4	-232.4	-6.2	-232.4	-6.2	61.4		109.35	-3.6	55.2	-107	55.2	-107	-3.6	-107	-3.6	55.2
(3)	23.50	-6.6	63.6	-263.7	63.6	-263.7	-6.6	-263.7	-6.6	63.6		112.00	-5.5	67	-269	67	-269	-5.5	-269	-5.5	67
(1)	23.50	3.5	-64.4	-263.7	-64.4	-263.7	3.5	-263.7	3.5	-64.4		112.00	-4.3	67	-269	67	-269	-4.3	-269	-4.3	67
(2)	24.00	3.1	-62.2	-232.1	-62.2	-232.1	3.1	-232.1	3.1	-62.2		112.50	-4.7	69.3	-303	69.3	-303	-4.7	-303	-4.7	69.3
(3)	24.50	2.7	-59.9	-201.5	-59.9	-201.5	2.7	-201.5	2.7	-59.9		113.00	-5	71.5	-338.2	71.5	-338.2	-5	-338.2	-5	71.5
(1)	24.50	3.9	-59.9	-201.5	-59.9	-201.5	3.9	-201.5	3.9	-59.9		113.00	6.1	-71.8	-338.2	-71.8	-338.2	6.1	-338.2	6.1	-71.8
(2)	26.90	2.2	-49.2	-70.6	-49.2	-70.6	2.2	-70.6	2.2	-49.2		113.50	5.8	-69.6	-302.9	-69.6	-302.9	5.8	-302.9	5.8	-69.6
(3)	29.30	0.5	-38.5	34.7	-38.5	34.7	0.5	34.7	0.5	-38.5		114.00	5.4	-67.3	-268.7	-67.3	-268.7	5.4	-268.7	5.4	-67.3
(1)	29.30	2.7	-38.5	34.7	-38.5	34.7	2.7	34.7	2.7	-38.5		114.00	6.6	-67.3	-268.7	-67.3	-268.7	6.6	-268.7	6.6	-67.3
(2)	32.20	0.7	-25.6	127.6	-25.6	127.6	0.7	127.6	0.7	-25.6		116.65	4.7	-55.5	-105.9	-55.5	-105.9	4.7	-105.9	4.7	-55.5
(3)	35.10	-1.4	-12.6	183.1	-12.6	183.1	-1.4	183.1	-1.4	-12.6		119.30	2.8	-43.7	25.6	-43.7	25.6	2.8	25.6	2.8	-43.7
(1)	35.10	0.4	-12.6	183.1	-12.6	183.1	0.4	183.1	0.4	-12.6		119.30	5.2	-43.7	25.6	-43.7	25.6	5.2	25.6	5.2	-43.7
(2)	36.55	-0.6	-6.2	196.7	-6.2	196.7	-0.6	196.7	-0.6	-6.2		122.45	2.9	-29.7	141.1	-29.7	141.1	2.9	141.1	2.9	-29.7
(3)	38.00	-1.6	0.3	201	0.3	201	-1.6	201	-1.6	0.3		125.60	0.7	-15.6	212.4	-15.6	212.4	0.7	212.4	0.7	-15.6
(1)	38.00	-0.4	0.3	201	0.3	201	-0.4	201	-0.4	0.3		125.60	2.6	-15.6	212.4	-15.6	212.4	2.6	212.4	2.6	-15.6
(2)	39.45	-1.5	6.8	195.9	6.8	195.9	-1.5	195.9	-1.5	6.8		127.18	1.5	-8.6	231.5	-8.6	231.5	1.5	231.5	1.5	-8.6
(3)	40.90	-2.5	13.2	181.4	13.2	181.4	-2.5	181.4	-2.5	13.2		128.75	0.4	-1.6	239.5	-1.6	239.5	0.4	239.5	0.4	-1.6
(1)	40.90	-0.7	13.2	181.4	13.2	181.4	-0.7	181.4	-0.7	13.2		128.75	1.7	-1.6	239.5	-1.6	239.5	1.7	239.5	1.7	-1.6
(2)	43.80	-2.8	26.2	124.3	26.2	124.3	-2.8	124.3	-2.8	26.2		130.33	0.6	5.5	236.4	5.5	236.4	0.6	236.4	0.6	5.5
(3)	46.70	-4.8	39.1	29.7	39.1	29.7	-4.8	29.7	-4.8	39.1		131.90	-0.5	12.5	222.2	12.5	222.2	-0.5	222.2	-0.5	12.5
(1)	46.70	-2.7	39.1	29.7	39.1	29.7	-2.7	29.7	-2.7	39.1		131.90	1.5	12.5	222.2	12.5	222.2	1.5	222.2	1.5	12.5
(2)	49.10	-4.4	49.8	-77	49.8	-77	-4.4	-77	-4.4	49.8		135.05	-0.8	26.5	160.8	26.5	160.8	-0.8	160.8	-0.8	26.5
(3)	51.50	-6.1	60.5	-209.3	60.5	-209.3	-6.1	-209.3	-6.1	60.5		138.20	-3	40.6	55	40.6	55	-3	55	-3	40.6
(1)	51.50	-5	60.5	-209.3	60.5	-209.3	-5	-209.3	-5	60.5		138.20	-0.6	40.6	55	40.6	55	-0.6	55	-0.6	40.6
(2)	52.00	-5.3	62.7	-240.2	62.7	-240.2	-5.3	-240.2	-5.3	62.7		140.85	-2.5	52.4	-68.2	52.4	-68.2	-2.5	-68.2	-2.5	52.4
(3)	52.50	-5.7	65	-272.1	65	-272.1	-5.7	-272.1	-5.7	65		143.50	-4.4	64.2	-222.7	64.2	-222.7	-4.4	-222.7	-4.4	64.2
(1)	52.50	4.4	-63.8	-272.1	-63.8	-272.1	4.4	-272.1	4.4	-63.8		143.50	-3.1	64.2	-222.7	64.2	-222.7	-3.1	-222.7	-3.1	64.2
(2)	53.00	4	-61.5	-240.8	-61.5	-240.8	4	-240.8	4	-61.5		144.00	-3.5	66.5	-255.4	66.5	-255.4	-3.5	-255.4	-3.5	66.5
(3)	53.50	3.7	-59.3	-210.6	-59.3	-210.6	3.7	-210.6	3.7	-59.3		144.50	-3.8	68.7	-289.2	68.7	-289.2	-3.8	-289.2	-3.8	68.7
(1)	53.50	4.8	-59.3	-210.6	-59.3	-210.6	4.8	-210.6	4.8	-59.3		144.50	6.6	-64.7	-289.2	-64.7	-289.2	6.6	-289.2	6.6	-64.7
(2)	55.90	3.1	-48.6	-81.1	-48.6	-81.1	3.1	-81.1	3.1	-48.6		145.00	6.2	-62.5	-257.4	-62.5	-257.4	6.2	-257.4	6.2	-62.5
(3)	58.30	1.4	-37.9	22.7	37.9	22.7	1.4	22.7	1.4	-37.9		145.50	5.9	-60.3	-226.7	-60.3	-226.7	5.9	-226.7	5.9	-60.3
(1)	58.30	3.5	-37.9	22.7	37.9	22.7	3.5	22.7	3.5	-37.9		145.50	6.8	-60.3	-226.7	-60.3	-226.7	6.8	-226.7	6.8	-60.3
(2)	61.20	1.4	-25	113.8	-25	113.8	1.4	113.8	1.4	-25		147.35	5.5	-52	-122.9	-52	-122.9	5.5	-122.9	5.5	-52
(3)	64.10	-0.7	-12	167.4	-12	167.4	-0.7	167.4	-0.7	-12		149.20	4.2	-43.7	-34.3	-43.7	-34.3	4.2	-34.3	4.2	-43.7
(1)	64.10	1.1	-12	167.4	-12	167.4	1.1	167.4	1.1	-12		149.20	6	-43.7	-34.3	-43.7	-34.3	6	-34.3	6	-43.7
(2)	65.55	0.1	-5.5	180.1	-5.5	180.1	0.1	180.1	0.1	-5.5		151.55	4.3	-33.3	56.2	-33.3	56.2	4.3	56.2	4.3	-33.3
(3)	67.00	-1	0.9	183.5	0.9	183.5	-1	183.5	-1	0.9		153.90	2.7	-22.8	122	-22.8	122	2.7	122	2.7	-22.8
(1)	67.00	0.2	0.9	183.5	0.9	183.5	0.2	183.5	0.2	0.9		153.90	4.2	-22.8	122	-22.8	122	4.2	122	4.2	-22.8
(2)	68.45	-0.8	7.4	177.5	7.4	177.5	-0.8	177.5	-0.8	7.4		155.08	3.4	-17.5	145.7	-17.5	145.7	3.4	145.7	3.4	-17.5
(3)	69.90	-1.9	13.9	162.1	13.9	162.1	-1.9	162.1	-1.9	13.9		156.25	2.5	-12.3	163.3	-12.3	163.3	2.5	163.3	2.5	-12.3
(1)																					

51(3)	9.40	3.5	0.7	190.1	0.7	190.1	3.5	190.1	3.5	-9	100.70	1.7	-3.4	23.7	43.4	23.7	1.7			
52(1)	9.40	1.9	0.7	190.1	0.7	190.1	1.9	190.1	1.9	0	109.35	3.6	55.2	-107	55.2	-107	3.6	23.7	1.7	43.4
52(2)	10.58	2.7	6	186.1	6	186.1	2.7	186.1	2.7	0	112.00	5.5	67	-269	67	-269	5.5	-269	5.5	55.2
52(3)	11.75	3.5	11.2	176	11.2	176	3.5	176	3.5	11	112.00	4.3	67	-269	67	-269	4.3	-269	4.3	67
53(1)	11.75	2.5	11.2	176	11.2	176	2.5	176	2.5	11	112.50	4.7	69.3	-303	69.3	-303	4.7	-303	4.7	67
()	12.93	3.3	16.5	159.8	16.5	159.8	3.3	159.8	3.3	16	113.00	-6.1	-71.8	-338.2	71.5	-338.2	5	-338.2	5	69.3
()	14.10	4.2	21.7	137.3	21.7	137.3	4.2	137.3	4.2	21	113.50	-5.8	-69.6	-302.9	-69.6	-302.9	-6.1	-338.2	-6.1	71.5
54(1)	14.10	2.6	21.7	137.3	21.7	137.3	2.6	137.3	2.6	21	114.00	-5.4	-67.3	-268.7	-67.3	-268.7	-5.8	-302.9	-5.8	-71.8
54(2)	16.45	4.3	32.2	74	32.2	74	4.3	74	4.3	32	114.00	-6.6	-67.3	-268.7	-67.3	-268.7	-5.4	-268.7	-5.4	-69.6
54(3)	18.80	6	42.7	-13.9	42.7	-13.9	6	-13.9	6	42	116.65	-4.7	-55.5	-105.9	-55.5	-105.9	-6.6	-268.7	-6.6	-67.3
55(1)	18.80	4.2	42.7	-13.9	42.7	-13.9	4.2	-13.9	4.2	42	119.30	-2.8	-43.7	25.6	-43.7	25.6	-4.7	-105.9	-4.7	-67.3
55(2)	20.65	5.5	50.9	-100.5	50.9	-100.5	5.5	-100.5	5.5	50	119.30	-5.2	-43.7	25.6	-43.7	25.6	-2.8	25.6	-2.8	-55.5
55(3)	22.50	6.8	59.2	-202.3	59.2	-202.3	6.8	-202.3	6.8	59	122.45	-2.9	-29.7	141.1	-29.7	141.1	-5.2	25.6	-5.2	-43.7
56(1)	22.50	5.8	59.2	-202.3	59.2	-202.3	5.8	-202.3	5.8	59	125.60	-0.7	-15.6	212.4	-15.6	212.4	-2.9	141.1	-2.9	-29.7
56(2)	23.00	6.2	61.4	-232.4	61.4	-232.4	6.2	-232.4	6.2	61	125.60	-2.6	-15.6	212.4	-15.6	212.4	-0.7	212.4	-0.7	-15.6
56(3)	23.50	6.6	63.6	-263.7	63.6	-263.7	6.6	-263.7	6.6	63	127.18	-1.5	-8.6	231.5	-8.6	231.5	-2.6	212.4	-2.6	-15.6
57(1)	23.50	-3.5	-64.4	-263.7	-64.4	-263.7	-3.5	-263.7	-3.5	-64	128.75	-0.4	-1.6	239.5	-1.6	239.5	-1.5	231.5	-1.5	-15.6
57(2)	24.00	-3.1	-62.2	-232.1	-62.2	-232.1	-3.1	-232.1	-3.1	-62	128.75	-1.7	-1.6	239.5	-1.6	239.5	-0.4	239.5	-0.4	-8.6
57(3)	24.50	-2.7	-59.9	-201.5	-59.9	-201.5	-2.7	-201.5	-2.7	-59	130.33	-0.6	5.5	236.4	5.5	236.4	-1.7	239.5	-1.7	-1.6
58(1)	24.50	-3.9	-59.9	-201.5	-59.9	-201.5	-3.9	-201.5	-3.9	-59	131.90	0.5	12.5	222.2	12.5	222.2	-0.6	236.4	-0.6	-1.6
58(2)	25.90	-2.2	-49.2	-70.6	-49.2	-70.6	-2.2	-70.6	-2.2	-49	131.90	-1.5	12.5	222.2	12.5	222.2	0.5	222.2	0.5	5.5
58(3)	29.30	-0.5	-38.5	34.7	-38.5	34.7	-0.5	34.7	-0.5	-38	135.05	0.8	26.5	160.8	26.5	160.8	-1.5	222.2	-1.5	12.5
59(1)	29.30	-2.7	-38.5	34.7	-38.5	34.7	-2.7	34.7	-2.7	-38	138.20	3	40.6	55	40.6	55	0.8	160.8	0.8	12.5
59(2)	32.20	-0.7	-25.6	127.6	-25.6	127.6	-0.7	127.6	-0.7	-25	138.20	0.6	40.6	55	40.6	55	3	55	3	26.5
59(3)	35.10	1.4	-12.6	183.1	-12.6	183.1	1.4	183.1	1.4	-12	140.85	2.5	52.4	-68.2	52.4	-68.2	0.6	55	0.6	40.6
60(1)	35.10	-0.4	-12.6	183.1	-12.6	183.1	-0.4	183.1	-0.4	-12	143.50	4.4	64.2	-222.7	64.2	-222.7	2.5	-68.2	2.5	40.6
60(2)	36.55	0.6	-6.2	196.7	-6.2	196.7	0.6	196.7	0.6	-6	143.50	3.1	64.2	-222.7	64.2	-222.7	4.4	-222.7	4.4	52.4
60(3)	38.00	1.6	0.3	201	0.3	201	1.6	201	1.6	0	144.00	3.5	66.5	-255.4	66.5	-255.4	3.1	-222.7	3.1	64.2
()	38.00	0.4	0.3	201	0.3	201	0.4	201	0.4	0	144.50	3.8	68.7	-289.2	68.7	-289.2	3.5	-255.4	3.5	64.2
1	39.45	1.5	6.8	195.9	6.8	195.9	1.5	195.9	1.5	6	144.50	-6.6	-64.7	-289.2	68.7	-289.2	3.8	-289.2	3.8	66.5
2(1)	40.90	2.5	13.2	181.4	13.2	181.4	2.5	181.4	2.5	13	145.00	-6.2	-62.5	-257.4	-64.7	-289.2	-6.6	-289.2	-6.6	68.7
2(2)	40.90	0.7	13.2	181.4	13.2	181.4	0.7	181.4	0.7	13	145.50	-5.9	-60.3	-226.7	-60.3	-226.7	-6.2	-257.4	-6.2	-64.7
2(3)	43.80	2.8	26.2	124.3	26.2	124.3	2.8	124.3	2.8	26	145.50	-6.8	-60.3	-226.7	-60.3	-226.7	-5.9	-226.7	-5.9	-62.5
3(1)	46.70	4.8	39.1	29.7	39.1	29.7	4.8	29.7	4.8	39	147.35	-5.5	-52	-122.9	-52	-122.9	-6.8	-226.7	-6.8	-60.3
3(2)	46.70	2.7	39.1	29.7	39.1	29.7	2.7	29.7	2.7	39	149.20	-4.2	-43.7	-34.3	-43.7	-34.3	-5.5	-122.9	-5.5	-60.3
3(3)	49.10	4.4	49.8	-77	49.8	-77	4.4	-77	4.4	49	149.20	-6	-43.7	-34.3	-43.7	-34.3	-4.2	-34.3	-4.2	-52
4(1)	51.50	6.1	60.5	-209.3	60.5	-209.3	6.1	-209.3	6.1	60	151.55	-4.3	-33.3	56.2	-33.3	56.2	-6	-34.3	-6	-43.7
4(2)	51.50	5	60.5	-209.3	60.5	-209.3	5	-209.3	5	60	153.90	-2.7	-22.8	122	-22.8	122	-4.3	56.2	-4.3	-43.7
4(3)	52.00	5.3	62.7	-240.2	62.7	-240.2	5.3	-240.2	5.3	62	153.90	-4.2	-22.8	122	-22.8	122	-2.7	122	-2.7	-33.3
5(1)	52.50	5.7	65	-272.1	65	-272.1	5.7	-272.1	5.7	62	155.08	-3.4	-17.5	145.7	-17.5	145.7	-4.2	122	-4.2	-22.8
5(2)	52.50	-4.4	-63.8	-272.1	-63.8	-272.1	-4.4	-272.1	-4.4	-62	156.25	-2.5	-12.3	163.3	-12.3	163.3	-3.4	145.7	-3.4	-22.8
5(3)	53.00	-4	-61.5	-240.8	-61.5	-240.8	-4	-240.8	-4	-61	156.25	-3.6	-12.3	163.3	-12.3	163.3	-2.5	163.3	-2.5	-17.5
6(1)	53.50	-3.7	-59.3	-210.6	-59.3	-210.6	-3.7	-210.6	-3.7	-59	157.43	-2.7	-7.1	174.7	-7.1	174.7	-3.6	163.3	-3.6	-12.3
6(2)	53.50	-4.8	-59.3	-210.6	-59.3	-210.6	-4.8	-210.6	-4.8	-59	158.60	-1.9	-1.8	179.9	-1.8	179.9	-2.7	174.7	-2.7	-7.1
6(3)	55.90	-3.1	-48.6	-81.1	-48.6	-81.1	-3.1	-81.1	-3.1	-48	158.60	-3.5	-1.8	179.9	-1.8	179.9	-1.9	179.9	-1.9	-1.8
7(1)	58.30	-1.4	-37.9	22.7	-37.9	22.7	-1.4	22.7	-1.4	-37	160.95	-1.8	8.7	171.9	8.7	171.9	-3.5	179.9	-3.5	-1.8
7(2)	58.30	-3.5	-37.9	22.7	-37.9	22.7	-3.5	22.7	-3.5	-37	163.30	-0.1	19.1	139.2	19.1	139.2	-1.8	171.9	-1.8	8.7
7(3)	61.20	-1.4	-25	113.8	-25	113.8	-1.4	113.8	-1.4	-	163.30	-2	19.1	139.2	19.1	139.2	-0.1	139.2	-0.1	19.1
8(1)	64.10	0.7	-12	167.4	-12	167.4	0.7	167.4	0.7	-	165.15	-0.7	27.4	96.2	27.4	96.2	-2	139.2	-2	19.1
8(2)	64.10	-1.1	-12	167.4	-12	167.4	-1.1	167.4	-1.1	-	167.00	0.6	35.6	37.9	35.6	37.9	-0.7	96.2	-0.7	19.1
8(3)	65.55	-0.1	-5.5	180.1	-5.5	180.1	-0.1	180.1	-0.1	-5	167.00	-0.5	35.6	37.9	35.6	37.9	0.6	37.9	0.6	27.4
9	67.00	1	0.9	183.5	0.9	183.5	1	183.5	1	0	167.50	-0.1	37.9	19.5	37.9	19.5	-0.5	37.9	-0.5	35.6
(2,)	67.00	-0.2	0.9	183.5	0.9	183.5	-0.2	183.5	-0.2	0	168.00	0.2	40.1	0	40.1	0	-0.1	19.5	-0.1	35.6
10	68.45	0.8	7.4	177.5	7.4	177.5	0.8	177.5	0.8	7		0	0	-0.2	0	-0.2	0.2	0	0.2	37.9
11	69.90	1.9	13.9	162.1	13.9	162.1	1.9	162.1	1.9	13		0	0	-0.2	0	-0.2	0	0	0	40.1
12	69.90	0.1	13.9	162.1	13.9	162.1	0.1	162.1	0.1	13		0	0	-0.2	0	-0.2	0	0	0	0
13	72.80	2.2	26.8	103.1	26.8	103.1	2.2	103.1	2.2	26		0	0	-0.2	0	-0.2	0	0	0	0
14	75.70	4.2	39.7	6.7	39.7	6.7	4.2	6.7	4.2	39		0	0	-1.1	0	-1.1	0	0	0	0
15	75.70	2.2	39.7	6.7	39.7	6.7	2.2	6.7	2.2	39		0	0	-1.1	0	-1.1	0	0	0	0
16	78.10	3.9	50.4	-101.5	50.4	-101.5	3.9	-101.5	3.9	50		0	0	-1.1	0	-1.1	0	0	0	0
17	80.50	5.6	61.1	-235.3	61.1	-235.3	5.6	-235.3	5.6	61		0	0	-1.9	0	-1.9	0	0	0	0
18	80.50	4.5	61.1	-235.3	61.1	-235.3	4.5	-235.3	4.5	61		0	0	-1.9	0	-1.9	0	0	0	0
19	81.00	4.8	63.4	-266.4	63.4	-266.4	4.8	-266.4	4.8	63		0	0	-1.9	0	-1.9	0	0	0	0
20	81.50	5.2	65.6	-298.7	65.6	-298.7	5.2	-298.7	5.2	65		0	0	-1.6	0	-1.6	0	0	0	0
21	81.50	-5.3	-69	-298.7	-69	-298.7	-5.3	-298.7	-5.3	65		0	0	-1.6	0	-1.6	0	0	0	0
22	82.00	-4.9	-66.8	-264.7	-66.8	-264.7	-4.9	-264.7	-4.9	66		0	0	-1.6	0	-1.6	0	0	0	0
23	82.50	-4.6	-64.5	-231.9	-64.5	-231.9	-4.6	-231.9	-4.6	64		0	0	-1	0	-1	0	0	0	0
24	82.50	-5.8	-64.5	-231.9	-64.5	-231.9	-5.8	-231.9	-5.8	64		0	0	-						

215

HIPOTESIS: Resto carga muerta

A	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
	0.00	5	-28.2	0	-28.2	0	5	0	5	-28.2
	0.50	-0.1	-26.7	13.7	-26.7	13.7	-0.1	13.7	-0.1	-26.7
	1.00	-5.2	-25.1	26.7	-25.1	26.7	-5.2	26.7	-5.2	-25.1
	1.00	18.4	-25.1	26.7	-25.1	26.7	18.4	26.7	18.4	-25.1
	2.85	-0.5	-19.4	67.9	-19.4	67.9	-0.5	67.9	-0.5	-19.4
	4.70	-19.4	-13.8	98.6	-13.8	98.6	-19.4	98.6	-19.4	-13.8
	4.70	22.8	-13.8	98.6	-13.8	98.6	22.8	98.6	22.8	-13.8
	7.05	-1.2	-6.5	122.5	-6.5	122.5	-1.2	122.5	-1.2	-6.5
	9.40	-25.3	0.7	129.3	0.7	129.3	-25.3	129.3	-25.3	0.7
	9.40	10.1	0.7	129.3	0.7	129.3	10.1	129.3	10.1	0.7
	10.58	-1.9	4.3	126.4	4.3	126.4	-1.9	126.4	-1.9	4.3
	11.75	-13.9	7.9	119.2	7.9	119.2	-13.9	119.2	-13.9	7.9
	11.75	9.7	7.9	119.2	7.9	119.2	9.7	119.2	9.7	7.9
	12.93	-2.3	11.5	107.8	11.5	107.8	-2.3	107.8	-2.3	11.5
	14.10	-14.3	15.1	92.2	15.1	92.2	-14.3	92.2	-14.3	15.1
	14.10	21.1	15.1	92.2	15.1	92.2	21.1	92.2	21.1	15.1
	16.45	-3	22.4	48.1	22.4	48.1	-3	48.1	-3	22.4
	18.80	-27	29.6	-12.9	29.6	-12.9	-27	-12.9	-27	29.6
	18.80	15.1	29.6	-12.9	29.6	-12.9	15.1	-12.9	15.1	29.6
	20.65	-3.8	35.3	-72.9	35.3	-72.9	-3.8	-72.9	-3.8	35.3
	22.50	-22.7	41	-143.4	41	-143.4	-22.7	-143.4	-22.7	41
	22.50	0.8	41	-143.4	41	-143.4	0.8	-143.4	0.8	41
	23.00	-4.3	42.5	-164.3	42.5	-164.3	-4.3	-164.3	-4.3	42.5
	23.50	-9.4	44	-185.9	44	-185.9	-9.4	-185.9	-9.4	44
	23.50	7.3	-44.6	-185.9	-44.6	-185.9	7.3	-185.9	7.3	-44.6
	24.00	2.1	-43	-164	-43	-164	2.1	-164	2.1	-43
	24.50	-3	-41.5	-142.9	-41.5	-142.9	-3	-142.9	-3	-41.5
	24.50	26.1	-41.5	-142.9	-41.5	-142.9	26.1	-142.9	26.1	-41.5
	26.90	1.5	-34.1	-52.2	-34.1	-52.2	1.5	-52.2	1.5	-34.1
	29.30	-23	-26.7	20.8	-26.7	20.8	-23	20.8	-23	-26.7
	29.30	30.1	-26.7	20.8	-26.7	20.8	30.1	20.8	30.1	-26.7
	32.20	0.5	-17.8	85.3	-17.8	85.3	0.5	85.3	0.5	-17.8
	35.10	-29.2	-8.9	124	-8.9	124	-29.2	124	-29.2	-8.9
	35.10	14.4	-8.9	124	-8.9	124	14.4	124	14.4	-8.9
	36.55	-0.4	-4.4	133.7	-4.4	133.7	-0.4	133.7	-0.4	-4.4
	38.00	-15.2	0	136.9	0	136.9	-15.2	136.9	-15.2	0
	38.00	13.8	0	136.9	0	136.9	13.8	136.9	13.8	0
	39.45	-1	4.5	133.6	4.5	133.6	-1	133.6	-1	4.5
	40.90	-15.8	8.9	123.9	8.9	123.9	-15.8	123.9	-15.8	8.9
	40.90	27.7	8.9	123.9	8.9	123.9	27.7	123.9	27.7	8.9
	43.80	-1.9	17.9	85.1	17.9	85.1	-1.9	85.1	-1.9	17.9
	46.70	-31.5	26.8	20.4	26.8	20.4	-31.5	20.4	-31.5	26.8
	46.70	21.5	26.8	20.4	26.8	20.4	21.5	20.4	21.5	26.8
	49.10	-3	34.1	-52.7	34.1	-52.7	-3	-52.7	-3	34.1
	51.50	-27.5	41.5	-143.5	41.5	-143.5	-27.5	-143.5	-27.5	41.5
	51.50	1.5	41.5	-143.5	41.5	-143.5	1.5	-143.5	1.5	41.5
	52.00	-3.7	43.1	-164.7	43.1	-164.7	-3.7	-164.7	-3.7	43.1
	52.50	-8.8	44.6	-186.6	44.6	-186.6	-8.8	-186.6	-8.8	44.6
	52.50	7.9	-43.9	-186.6	-43.9	-186.6	7.9	-186.6	7.9	-43.9
	53.00	2.8	-42.4	-165	-42.4	-165	2.8	-165	2.8	-42.4
	53.50	-2.4	-40.8	-144.2	-40.8	-144.2	-2.4	-144.2	-2.4	-40.8
	53.50	26.6	-40.8	-144.2	-40.8	-144.2	26.6	-144.2	26.6	-40.8
	55.90	2.1	-33.4	-55.1	-33.4	-55.1	2.1	-55.1	2.1	-33.4
	58.30	-22.4	-26.1	16.3	-26.1	16.3	-22.4	16.3	-22.4	-26.1
	58.30	30.6	-26.1	16.3	-26.1	16.3	30.6	16.3	30.6	-26.1
	61.20	1	-17.2	79	-17.2	79	1	79	1	-17.2
	64.10	-28.7	-8.2	115.8	-8.2	115.8	-28.7	115.8	-28.7	-8.2
	64.10	14.9	-8.2	115.8	-8.2	115.8	14.9	115.8	14.9	-8.2
	65.55	0	-3.8	124.5	-3.8	124.5	0	124.5	0	-3.8
	67.00	-14.8	0.7	126.7	0.7	126.7	-14.8	126.7	-14.8	0.7
	67.00	14.2	0.7	126.7	0.7	126.7	14.2	126.7	14.2	0.7
	68.45	-0.6	5.1	122.5	5.1	122.5	-0.6	122.5	-0.6	5.1
	69.90	-15.4	9.6	111.9	9.6	111.9	-15.4	111.9	-15.4	9.6
	69.90	28.1	9.6	111.9	9.6	111.9	28.1	111.9	28.1	9.6
	72.80	-1.5	18.5	71.1	18.5	71.1	-1.5	71.1	-1.5	18.5
	75.70	-31.1	27.4	4.5	27.4	4.5	-31.1	4.5	-31.1	27.4
	75.70	21.9	27.4	4.5	27.4	4.5	21.9	4.5	21.9	27.4
	78.10	-2.7	34.8	-70.2	34.8	-70.2	-2.7	-70.2	-2.7	34.8

4(1)	80.50	1.8	42.2	-162.5	42.2	-162.5	1.8	-162.5	1.8	42	9.40	25.3	0.7	129.3	0.7	129.3	1.2	122.5	1.2	122.5	0.7
4(2)	81.00	-3.3	43.7	-184	43.7	-184	-3.3	-184	-3.3	43	9.40	-10.1	0.7	129.3	0.7	129.3	25.3	129.3	25.3	129.3	0.7
4(3)	81.50	-8.4	45.3	-206.2	45.3	-206.2	-8.4	-206.2	-8.4	45	10.58	1.9	4.3	126.4	4.3	126.4	-10.1	129.3	-10.1	129.3	0.7
5(1)	81.50	8.5	-47.6	-206.2	-47.6	-206.2	8.5	-206.2	8.5	-47	11.75	13.9	7.9	119.2	7.9	119.2	1.9	126.4	1.9	126.4	4.3
5(2)	82.00	3.4	-46.1	-182.8	-46.1	-182.8	3.4	-182.8	3.4	-46	11.75	-9.7	7.9	119.2	7.9	119.2	13.9	119.2	13.9	119.2	7.9
	82.50	-1.7	-44.5	-160.2	-44.5	-160.2	-1.7	-160.2	-1.7	-44	12.93	2.3	11.5	107.8	11.5	107.8	-9.7	119.2	-9.7	119.2	7.9
	82.50	29.8	-44.5	-160.2	-44.5	-160.2	29.8	-160.2	-1.7	-44	14.10	14.3	15.1	92.2	15.1	92.2	2.3	107.8	2.3	107.8	7.9
5(2)	85.15	2.7	-36.4	-53	-36.4	-53	2.7	-53	2.7	-36	14.10	-21.1	15.1	92.2	15.1	92.2	14.3	92.2	14.3	92.2	11.5
5(3)	87.80	-24.4	-28.2	32.6	-28.2	32.6	-24.4	32.6	-24.4	-28	16.45	3	22.4	48.1	22.4	48.1	-21.1	92.2	-21.1	92.2	15.1
7(1)	87.80	33.6	-28.2	32.6	-28.2	32.6	33.6	32.6	33.6	-28	18.80	27	29.6	-12.9	29.6	-12.9	3	48.1	3	48.1	22.4
7(2)	90.95	1.4	-18.5	106.2	-18.5	106.2	1.4	106.2	1.4	-18	18.80	-15.1	29.6	-12.9	29.6	-12.9	27	-12.9	27	-12.9	29.6
7(3)	94.10	-30.8	-8.9	149.4	-8.9	149.4	-30.8	149.4	-30.8	-8	20.65	3.8	35.3	-72.9	35.3	-72.9	-15.1	-12.9	-15.1	-12.9	29.6
3(1)	94.10	16.5	-8.9	149.4	-8.9	149.4	16.5	149.4	16.5	-8	22.50	22.7	41	-143.4	41	-143.4	3.8	-72.9	3.8	-72.9	35.3
3(2)	95.68	0.4	-4	159.5	-4	159.5	0.4	159.5	0.4	.	22.50	-0.8	41	-143.4	41	-143.4	22.7	-143.4	22.7	-143.4	41
3(3)	97.25	-15.7	0.8	162	0.8	162	-15.7	162	-15.7	0	23.00	4.3	42.5	-164.3	42.5	-164.3	-0.8	-143.4	-0.8	-143.4	41
3(1)	97.25	15.9	0.8	162	0.8	162	15.9	162	15.9	0	23.50	9.4	44	-185.9	44	-185.9	4.3	-164.3	4.3	-164.3	42.5
3(2)	98.83	-0.2	5.7	156.9	5.7	156.9	-0.2	156.9	-0.2	5	23.50	-7.3	-44.6	-185.9	-44.6	-185.9	9.4	-185.9	9.4	-185.9	44
3(3)	100.40	-16.3	10.5	144.2	10.5	144.2	-16.3	144.2	-16.3	10	24.00	-2.1	-43	-164	-43	-164	-7.3	-185.9	-7.3	-185.9	-44.6
3(1)	100.40	31	10.5	144.2	10.5	144.2	31	144.2	31	10	24.50	3	-41.5	-142.9	-41.5	-142.9	-2.1	-164	-2.1	-164	-43
3(2)	103.55	-1.2	20.2	95.8	20.2	95.8	-1.2	95.8	-1.2	20	24.50	-26.1	-41.5	-142.9	-41.5	-142.9	3	-142.9	3	-142.9	-41.5
3(3)	106.70	-33.4	29.9	17	29.9	17	-33.4	17	-33.4	29	26.90	-1.5	-34.1	-52.2	-34.1	-52.2	-26.1	-142.9	-26.1	-142.9	-41.5
(1)	106.70	24.6	29.9	17	29.9	17	24.6	17	24.6	29	29.30	23	-26.7	20.8	-26.7	20.8	-1.5	-52.2	-1.5	-52.2	-34.1
(2)	109.35	-2.5	38	-73	38	-73	-2.5	-73	-2.5	3	29.30	-30.1	-26.7	20.8	-26.7	20.8	23	20.8	23	20.8	-26.7
(3)	112.00	-29.6	46.2	-184.5	46.2	-184.5	-29.6	-184.5	-29.6	46	32.20	-0.5	-17.8	85.3	-17.8	85.3	-30.1	20.8	-30.1	20.8	-26.7
(1)	112.00	1.9	46.2	-184.5	46.2	-184.5	1.9	-184.5	1.9	46	35.10	29.2	-8.9	124	-8.9	124	-0.5	85.3	-0.5	85.3	-17.8
(2)	112.50	-3.2	47.7	-208	47.7	-208	-3.2	-208	-3.2	47	35.10	-14.4	-8.9	124	-8.9	124	29.2	-14.4	29.2	-14.4	-8.9
(3)	113.00	-8.3	49.2	-232.2	49.2	-232.2	-8.3	-232.2	-8.3	49	36.55	0.4	-4.4	133.7	-4.4	133.7	-8.9	-14.4	-8.9	-14.4	-8.9
(1)	113.00	9.1	-49.3	-232.2	-49.3	-232.2	9.1	-232.2	9.1	-49	38.00	15.2	0	136.9	0	136.9	0.4	133.7	0.4	133.7	-4.4
	113.50	4	-47.8	-207.9	-47.8	-207.9	4	-207.9	4	-47	38.00	-13.8	0	136.9	0	136.9	15.2	136.9	15.2	136.9	0
	114.00	-1.2	-46.3	-184.4	-46.3	-184.4	-1.2	-184.4	-1.2	-46	39.45	1	4.5	133.6	4.5	133.6	-13.8	136.9	-13.8	136.9	0
(1)	114.00	30.3	-46.3	-184.4	-46.3	-184.4	30.3	-184.4	30.3	-46	40.90	15.8	8.9	123.9	8.9	123.9	1	133.6	1	133.6	4.5
(2)	116.65	3.2	-38.1	-72.6	-38.1	-72.6	3.2	-72.6	3.2	-38	40.90	-27.7	8.9	123.9	8.9	123.9	15.8	123.9	15.8	123.9	8.9
(3)	119.30	-23.8	-30	17.6	-30	17.6	-23.8	17.6	-23.8	-3	43.80	1.9	17.9	85.1	17.9	85.1	-27.7	123.9	-27.7	123.9	8.9
(1)	119.30	34.2	-30	17.6	-30	17.6	34.2	17.6	34.2	-3	46.70	31.5	26.8	20.4	26.8	20.4	1.9	85.1	1.9	85.1	17.9
(2)	122.45	2	-20.3	96.7	-20.3	96.7	2	96.7	2	-20	46.70	-21.5	26.8	20.4	26.8	20.4	31.5	20.4	31.5	20.4	26.8
(3)	125.60	-30.2	-10.6	145.4	-10.6	145.4	-30.2	145.4	-30.2	-10	49.10	3	34.1	-52.7	34.1	-52.7	-21.5	20.4	-21.5	20.4	26.8
(1)	125.60	17.1	-10.6	145.4	-10.6	145.4	17.1	145.4	17.1	-10	51.50	27.5	41.5	-143.5	41.5	-143.5	3	-52.7	3	-52.7	34.1
(2)	127.18	1	-5.8	158.2	-5.8	158.2	1	158.2	1	-5	51.50	-1.5	41.5	-143.5	41.5	-143.5	27.5	-143.5	27.5	-143.5	41.5
(3)	128.75	-15.1	-0.9	163.5	-0.9	163.5	-15.1	163.5	-15.1	-0	52.00	3.7	43.1	-164.7	43.1	-164.7	-1.5	-143.5	-1.5	-143.5	41.5
(1)	128.75	16.5	-0.9	163.5	-0.9	163.5	16.5	163.5	16.5	-0	52.50	8.8	44.6	-186.6	44.6	-186.6	-1.5	-164.7	-1.5	-164.7	43.1
(2)	130.33	0.4	3.9	161.1	3.9	161.1	0.4	161.1	0.4	3	52.50	-7.9	-43.9	-186.6	-43.9	-186.6	3.7	-164.7	3.7	-164.7	43.1
(3)	131.90	-15.7	8.8	151.1	8.8	151.1	-15.7	151.1	-15.7	8	53.00	-2.8	-42.4	-165	-42.4	-165	8.8	-186.6	8.8	-186.6	44.6
(1)	131.90	31.6	8.8	151.1	8.8	151.1	31.6	151.1	31.6	8	53.50	2.4	-40.8	-144.2	-40.8	-144.2	-7.9	-186.6	-7.9	-186.6	-43.9
(2)	135.05	-0.5	18.4	108.3	18.4	108.3	-0.5	108.3	-0.5	18	53.50	-26.6	-40.8	-144.2	-40.8	-144.2	-2.8	-165	-2.8	-165	-42.4
(3)	138.20	-32.7	28.1	34.9	28.1	34.9	-32.7	34.9	-32.7	28	55.90	-2.1	-33.4	-55.1	-33.4	-55.1	2.4	-144.2	2.4	-144.2	-40.8
(1)	138.20	25.4	28.1	34.9	28.1	34.9	25.4	34.9	25.4	28	58.30	22.4	-26.1	16.3	-26.1	16.3	-26.6	-144.2	-26.6	-144.2	-40.8
(2)	140.85	-1.7	36.3	-50.4	36.3	-50.4	-1.7	-50.4	-1.7	36	58.30	-30.6	-26.1	16.3	-26.1	16.3	-2.1	-55.1	-2.1	-55.1	-33.4
(3)	143.50	-28.8	44.4	-157.4	44.4	-157.4	-28.8	-157.4	-28.8	44	61.20	-1	-17.2	79	-17.2	79	22.4	16.3	22.4	16.3	-26.1
(1)	143.50	2.7	44.4	-157.4	44.4	-157.4	2.7	-157.4	2.7	44	64.10	28.7	-8.2	115.8	-8.2	115.8	-30.6	16.3	-30.6	16.3	-26.1
(2)	144.00	-2.4	46	-180	46	-180	-2.4	-180	-2.4	4	64.10	-14.9	-8.2	115.8	-8.2	115.8	-1	79	-1	79	-17.2
(3)	144.50	-7.5	47.5	-203.3	47.5	-203.3	-7.5	-203.3	-7.5	47	65.55	0	-3.8	124.5	-3.8	124.5	28.7	115.8	28.7	115.8	-8.2
	144.50	9.4	-44.8	-203.3	-44.8	-203.3	9.4	-203.3	9.4	-44	67.00	14.8	0.7	126.7	0.7	126.7	-14.9	115.8	-14.9	115.8	-8.2
	145.00	4.3	-43.2	-181.3	-43.2	-181.3	4.3	-181.3	4.3	-43	67.00	-14.2	0.7	126.7	0.7	126.7	0	124.5	0	124.5	-3.8
(3)	145.50	-0.8	-41.7	-160.1	-41.7	-160.1	-0.8	-160.1	-0.8	-41	68.45	0.6	5.1	122.5	5.1	122.5	14.8	126.7	14.8	126.7	0.7
(1)	145.50	22.7	-41.7	-160.1	-41.7	-160.1	22.7	-160.1	22.7	-41	69.90	15.4	9.6	111.9	9.6	111.9	-14.2	126.7	-14.2	126.7	0.7
(2)	147.35	3.8	-36	-88.2	-36	-88.2	3.8	-88.2	3.8	-3	69.90	-28.1	9.6	111.9	9.6	111.9	0.6	122.5	0.6	122.5	5.1
(3)	149.20	-15.1	-30.3	-26.9	-30.3	-26.9	-15.1	-26.9	-15.1	-30	72.80	1.5	18.5	71.1	18.5	71.1	15.4	111.9	15.4	111.9	9.6
(1)	149.20	27	-30.3	-26.9	-30.3	-26.9	27	-26.9	27	-30	75.70	31.1	27.4	4.5	27.4	4.5	-28.1	111.9	-28.1	111.9	9.6
(2)	151.55	3	-23.1	35.9	-23.1	35.9	3	35.9	3	-23	75.70	-21.9	27.4	4.5	27.4	4.5	1.5	71.1	1.5	71.1	18.5
(3)	153.90	-21	-15.9	81.7	-15.9	81.7	-21	81.7	-21	-15	78.10	2.7	34.8	-70.2	34.8	-70.2	31.1	4.5	31.1	4.5	27.4
(1)	153.90	14.3	-15.9	81.7	-15.9	81.7	14.3	81.7	14.3	-15	80.50	27.2	42.2	-162.5	42.2	-162.5	-21.9	4.5	-21.9	4.5	27.4
(2)	155.08	2.3	-12.3	98.2	-12.3	98.2	2.3	98.2	2.3	-12	80.50	-1.8	42.2	-162.5	42.2	-162.5	2.7	-70.2	2.7	-70.2	34.8
(3)	156.25	-9.7	-8.7	110.5	-8.7	110.5	-9.7	110.5	-9.7	-8	81.00	3.3	43.7	-184	43.7	-184	27.2</				

	(2)	109.35	2.5	38	-73	38	-73	2.5	-73	2.5	3	0	0	-29	0	-29	0	-29	0	-29	0	0
	(3)	112.00	29.6	46.2	-184.5	46.2	-184.5	29.6	-184.5	29.6	46.	0	0	-53.1	0	-53.1	0	-53.1	0	-53.1	0	0
	(1)	112.00	-1.9	46.2	-184.5	46.2	-184.5	-1.9	-184.5	-1.9	46.	0	0	-53.1	0	-53.1	0	-53.1	0	-53.1	0	0
	(2)	112.50	3.2	47.7	-208	47.7	-208	3.2	-208	3.2	47.	0	0	-53.1	0	-53.1	0	-53.1	0	-53.1	0	0
	(3)	113.00	8.3	49.2	-232.2	49.2	-232.2	8.3	-232.2	8.3	49.	0	0	-43.6	0	-43.6	0	-43.6	0	-43.6	0	0
	(1)	113.00	-9.1	-49.3	-232.2	-49.3	-232.2	-9.1	-232.2	-9.1	-49.	0	0	-43.6	0	-43.6	0	-43.6	0	-43.6	0	0
	(2)	113.50	-4	-47.8	-207.9	-47.8	-207.9	-4	-207.9	-4	-47.	0	0	-43.6	0	-43.6	0	-43.6	0	-43.6	0	0
	(3)	114.00	1.2	-46.3	-184.4	-46.3	-184.4	1.2	-184.4	1.2	-46.	0	0	-29	0	-29	0	-29	0	-29	0	0
	(1)	114.00	-30.3	-46.3	-184.4	-46.3	-184.4	-30.3	-184.4	-30.3	-46.	0	0	-29	0	-29	0	-29	0	-29	0	0
	(2)	116.65	-3.2	-38.1	-72.6	-38.1	-72.6	-3.2	-72.6	-3.2	-38.	0	0	-29	0	-29	0	-29	0	-29	0	0
	(3)	119.30	23.8	-30	17.6	-30	17.6	23.8	17.6	23.8	-3	0	0	-43.6	0	-43.6	0	-43.6	0	-43.6	0	0
	(1)	119.30	-34.2	-30	17.6	-30	17.6	-34.2	17.6	-34.2	-3	0	0	-43.6	0	-43.6	0	-43.6	0	-43.6	0	0
	(2)	122.45	-2	-20.3	96.7	-20.3	96.7	-2	96.7	-2	-20.	0	0	-43.6	0	-43.6	0	-43.6	0	-43.6	0	0
	(3)	125.60	30.2	-10.6	145.4	-10.6	145.4	30.2	145.4	30.2	-10.	0	0	-53	0	-53	0	-53	0	-53	0	0
	(1)	125.60	-17.1	-10.6	145.4	-10.6	145.4	-17.1	145.4	-17.1	-10.	0	0	-53	0	-53	0	-53	0	-53	0	0
	(2)	127.18	-1	-5.8	158.2	-5.8	158.2	-1	158.2	-1	-5.	0	0	-53	0	-53	0	-53	0	-53	0	0
	(3)	128.75	15.1	-0.9	163.5	-0.9	163.5	15.1	163.5	15.1	-0.	0	0	-29	0	-29	0	-29	0	-29	0	0
	(1)	128.75	-16.5	-0.9	163.5	-0.9	163.5	-16.5	163.5	-16.5	-0.	0	0	-29	0	-29	0	-29	0	-29	0	0
	(2)	130.33	-0.4	3.9	161.1	3.9	161.1	-0.4	161.1	-0.4	3.	0	0	-29	0	-29	0	-29	0	-29	0	0
	(3)	131.90	15.7	8.8	151.1	8.8	151.1	15.7	151.1	15.7	8.	0	0	-10	0	-10	0	-10	0	-10	0	0
	(1)	131.90	-31.6	8.8	151.1	8.8	151.1	-31.6	151.1	-31.6	8.	0	0	-10	0	-10	0	-10	0	-10	0	0
	(2)	135.05	0.5	18.4	108.3	18.4	108.3	0.5	108.3	0.5	18.	0	0	-10	0	-10	0	-10	0	-10	0	0
	(3)	138.20	32.7	28.1	34.9	28.1	34.9	32.7	34.9	32.7	28.	0	0	-29	0	-29	0	-29	0	-29	0	0
	(1)	138.20	-25.4	28.1	34.9	28.1	34.9	-25.4	34.9	-25.4	28.	0	0	-29	0	-29	0	-29	0	-29	0	0
	(2)	140.85	1.7	36.3	-50.4	36.3	-50.4	1.7	-50.4	1.7	36.	0	0	-29	0	-29	0	-29	0	-29	0	0
	(3)	143.50	28.8	44.4	-157.4	44.4	-157.4	28.8	-157.4	28.8	44.	0	0	-53	0	-53	0	-53	0	-53	0	0
	(1)	143.50	-2.7	44.4	-157.4	44.4	-157.4	-2.7	-157.4	-2.7	44.	0	0	-53	0	-53	0	-53	0	-53	0	0
	(2)	144.00	2.4	46	-180	46	-180	2.4	-180	2.4	4	0	0	-53	0	-53	0	-53	0	-53	0	0
	(3)	144.50	7.5	47.5	-203.3	47.5	-203.3	7.5	-203.3	7.5	47.	0	0	-43.5	0	-43.5	0	-43.5	0	-43.5	0	0
	(1)	144.50	-9.4	-44.8	-203.3	-44.8	-203.3	-9.4	-203.3	-9.4	-44.	0	0	-43.5	0	-43.5	0	-43.5	0	-43.5	0	0
	(2)	145.00	-4.3	-43.2	-181.3	-43.2	-181.3	-4.3	-181.3	-4.3	-43	0	0	-43.5	0	-43.5	0	-43.5	0	-43.5	0	0
	(3)	145.50	0.8	-41.7	-160.1	-41.7	-160.1	0.8	-160.1	0.8	-41	0	0	-29	0	-29	0	-29	0	-29	0	0
	(1)	145.50	-22.7	-41.7	-160.1	-41.7	-160.1	-22.7	-160.1	-22.7	-41	0	0	-29	0	-29	0	-29	0	-29	0	0
	(2)	147.35	-3.8	-36	-88.2	-36	-88.2	-3.8	-88.2	-3.8	-3	0	0	-29	0	-29	0	-29	0	-29	0	0
	(3)	149.20	15.1	-30.3	-26.9	-30.3	-26.9	15.1	-26.9	15.1	-30	0	0	-43.5	0	-43.5	0	-43.5	0	-43.5	0	0
	(1)	149.20	-27	-30.3	-26.9	-30.3	-26.9	-27	-26.9	-27	-30	0	0	-43.5	0	-43.5	0	-43.5	0	-43.5	0	0
	(2)	151.55	-3	-23.1	35.9	-23.1	35.9	-3	35.9	-3	-23	0	0	-43.5	0	-43.5	0	-43.5	0	-43.5	0	0
	(3)	153.90	21	-15.9	81.7	-15.9	81.7	21	81.7	21	-15	0	0	-53	0	-53	0	-53	0	-53	0	0
	(1)	153.90	-14.3	-15.9	81.7	-15.9	81.7	-14.3	81.7	-14.3	-15	0	0	-53	0	-53	0	-53	0	-53	0	0
	(2)	155.08	-2.3	-12.3	98.2	-12.3	98.2	-2.3	98.2	-2.3	-12	0	0	-53	0	-53	0	-53	0	-53	0	0
	(3)	156.25	9.7	-8.7	110.5	-8.7	110.5	9.7	110.5	9.7	-8	0	0	-29	0	-29	0	-29	0	-29	0	0
	(1)	156.25	-13.9	-8.7	110.5	-8.7	110.5	-13.9	110.5	-13.9	-8	0	0	-29	0	-29	0	-29	0	-29	0	0
	(2)	157.43	-1.9	-5	118.6	-5	118.6	-1.9	118.6	-1.9	-8	0	0	-29	0	-29	0	-29	0	-29	0	0
	(3)	158.60	10.1	-1.4	122.4	-1.4	122.4	10.1	122.4	10.1	-1	0	0	-10	0	-10	0	-10	0	-10	0	0
	(1)	158.60	-25.3	-1.4	122.4	-1.4	122.4	-25.3	122.4	-25.3	-1	0	0	-10	0	-10	0	-10	0	-10	0	0
	(2)	160.95	-1.2	5.8	117.2	5.8	117.2	-1.2	117.2	-1.2	5	0	0	-10	0	-10	0	-10	0	-10	0	0
	(3)	163.30	22.8	13	95.1	13	95.1	22.8	95.1	22.8	-	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(1)	163.30	-19.4	13	95.1	13	95.1	-19.4	95.1	-19.4	-	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(2)	165.15	-0.5	18.7	65.8	18.7	65.8	-0.5	65.8	-0.5	18	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(3)	167.00	18.4	24.4	25.9	24.4	25.9	18.4	25.9	18.4	24	0	0	-58	0	-58	0	-58	0	-58	0	0
	(1)	167.00	-5.2	24.4	25.9	24.4	25.9	-5.2	25.9	-5.2	24	0	0	-58	0	-58	0	-58	0	-58	0	0
	(2)	167.50	-0.1	25.9	13.3	25.9	13.3	-0.1	13.3	-0.1	25	0	0	-58	0	-58	0	-58	0	-58	0	0
	(3)	168.00	5	27.5	0	27.5	0	5	0	5	27	0	0	-47.3	0	-47.3	0	-47.3	0	-47.3	0	0
	(1)		0	0	-5	0	-5	0	-5	0	0	0	0	-47.3	0	-47.3	0	-47.3	0	-47.3	0	0
	(2)		0	0	-5	0	-5	0	-5	0	0	0	0	-47.3	0	-47.3	0	-47.3	0	-47.3	0	0
	(3)		0	0	-5	0	-5	0	-5	0	0	0	0	-47.3	0	-47.3	0	-47.3	0	-47.3	0	0
	(1)		0	0	-23.6	0	-23.6	0	-23.6	0	0	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(2)		0	0	-23.6	0	-23.6	0	-23.6	0	0	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(3)		0	0	-23.6	0	-23.6	0	-23.6	0	0	0	0	-47.3	0	-47.3	0	-47.3	0	-47.3	0	0
	(1)		0	0	-42.2	0	-42.2	0	-42.2	0	0	0	0	-47.3	0	-47.3	0	-47.3	0	-47.3	0	0
	(2)		0	0	-42.2	0	-42.2	0	-42.2	0	0	0	0	-47.3	0	-47.3	0	-47.3	0	-47.3	0	0
	(3)		0	0	-42.2	0	-42.2	0	-42.2	0	0	0	0	-58	0	-58	0	-58	0	-58	0	0
	(1)		0	0	-35.4	0	-35.4	0	-35.4	0	0	0	0	-58	0	-58	0	-58	0	-58	0	0
	(2)		0	0	-35.4	0	-35.4	0	-35.4	0	0	0	0	-58	0	-58	0	-58	0	-58	0	0
	(3)		0	0	-35.4	0	-35.4	0	-35.4	0	0	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(1)		0	0	-23.6	0	-23.6	0	-23.6	0	0	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(2)		0	0	-23.6	0	-23.6	0	-23.6	0	0	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(3)		0	0	-23.6	0	-23.6	0	-23.6	0	0	0	0	-10	0	-10	0	-10	0	-10	0	0
	(1)		0	0	-35.4	0	-35.4	0	-35.4	0	0	0	0	-10	0	-10	0	-10	0	-10	0	0
	(2)		0	0	-35.4	0	-35.4	0	-35.4	0	0	0	0	-10	0	-10	0	-10	0	-10	0	0
	(3)		0	0	-35.4	0	-35.4	0	-35.4	0	0	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(1)		0	0	-42.1	0	-42.1	0	-42.1	0	0	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(2)		0	0	-42.1	0	-42.1	0	-42.1	0	0	0	0	-31.5	0	-31.5	0	-31.5	0	-31.5	0	0
	(3)		0	0	-42.1	0																

HIPOTESIS: A Ambas vías sin ripado

Envolvente IPF75B positiva

Coef impacto 1.16

ARRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
1)	0.00	1.501	-122.196	0.000	11.600	0.000	-0.051	0.000	-2.139	-13.804
2)	0.50	1.552	-116.488	59.938	12.180	-5.916	0.000	72.906	0.689	-143.202
3)	1.00	1.603	-110.688	116.488	12.760	-6.960	0.051	142.332	1.199	-137.402
1)	1.00	8.209	-106.594	115.260	12.760	-6.960	-1.460	142.332	-2.654	-136.532
2)	2.85	8.929	-84.931	293.045	14.848	-31.716	-1.276	359.702	-0.817	-106.952
3)	4.70	9.123	-55.235	422.983	24.360	16.714	-0.038	537.414	1.888	-84.912
1)	4.70	2.239	-32.016	178.460	23.316	16.598	-3.957	537.298	-4.255	-84.912
2)	7.05	3.571	-29.348	251.612	25.984	-41.566	-3.712	690.288	-1.805	-49.532
3)	9.40	3.882	-26.564	318.581	50.344	150.878	-4.347	775.103	1.308	-21.692
1)	9.40	22.310	12.122	84.623	45.356	160.535	-13.551	775.103	-2.937	-21.808
2)	10.58	23.060	13.514	71.197	48.662	214.514	-16.328	783.146	-1.712	0.812
3)	11.75	23.182	14.906	57.393	62.582	116.223	-12.493	776.727	-0.487	11.078
1)	11.75	39.536	23.084	57.393	61.538	233.673	4.605	775.683	-5.487	11.078
2)	12.93	40.378	24.452	30.544	71.166	294.946	-1.060	754.132	-3.496	33.582
3)	14.10	40.501	25.844	0.442	86.652	204.369	0.165	708.447	-2.271	50.112
1)	14.10	65.844	39.000	1.486	90.944	284.409	22.671	708.447	-7.513	50.228
2)	16.45	67.620	42.044	-92.295	108.518	201.295	16.421	563.123	-1.940	75.458
3)	18.80	67.931	44.712	-192.091	140.592	-80.154	17.794	341.091	-2.019	109.098
1)	18.80	86.167	54.780	-193.159	147.610	-50.168	34.642	340.975	-7.684	108.982
2)	20.65	87.800	57.245	-297.360	168.780	-284.527	33.102	166.211	25.752	71.688
3)	22.50	88.061	59.333	-405.672	194.010	-607.717	33.965	61.125	28.024	20.532
1)	22.50	92.331	61.788	-407.921	196.272	-608.863	37.322	61.115	25.469	19.488
2)	23.00	92.749	62.460	-439.651	202.072	-705.563	36.788	51.149	-0.580	17.980
3)	23.50	92.877	63.040	-471.583	207.872	-807.778	37.299	44.015	-3.661	12.296
1)	23.50	108.083	-160.099	-481.439	14.964	34.619	39.563	44.015	-5.329	4.524
2)	24.00	108.501	-154.391	-402.666	15.544	26.489	39.614	43.193	-4.234	-0.116
3)	24.50	108.552	-148.591	-327.256	16.124	22.197	40.709	42.033	-4.183	5.684
1)	24.50	103.637	-142.342	-332.385	13.920	21.153	32.873	42.033	-4.711	6.612
2)	26.90	106.133	-114.762	-23.868	16.704	-15.223	33.118	122.759	-27.090	-92.394
3)	29.30	106.454	-78.222	205.270	25.752	14.657	40.671	372.237	-3.652	-110.848
1)	29.30	67.702	-95.492	202.476	18.560	14.647	19.830	371.356	-8.449	-110.374
2)	32.20	70.877	-53.244	421.538	21.924	-40.801	20.126	667.828	3.151	-80.214
3)	35.10	71.250	-19.604	527.189	48.604	109.988	30.688	855.665	6.111	-49.184
1)	35.10	29.019	-33.084	523.013	40.600	193.600	-1.727	855.665	-0.833	-48.314
2)	36.55	30.611	-16.844	559.398	42.224	131.922	-1.573	907.614	1.464	-21.634
3)	38.00	30.830	0.556	572.718	62.060	205.282	0.483	926.420	3.763	-8.584
1)	38.00	28.579	11.344	105.876	60.146	363.704	0.832	926.420	-2.733	-8.584
2)	39.45	30.079	13.060	87.824	64.554	406.967	1.227	923.056	-0.332	11.310
3)	40.90	30.299	14.800	65.793	83.694	316.144	3.618	888.159	1.863	38.106
1)	40.90	65.378	32.422	95.291	89.494	399.741	7.085	887.289	-4.225	37.990
2)	43.80	68.369	35.878	-2.025	105.734	330.876	0.476	732.990	-1.173	69.890
3)	46.70	68.742	39.242	-110.969	145.464	-11.310	1.592	465.276	12.506	101.360
1)	46.70	98.727	56.324	-113.733	153.932	78.300	35.076	466.146	7.246	102.520
2)	49.10	101.054	59.291	-252.830	178.814	-237.652	31.854	220.506	17.796	95.642
3)	51.50	101.452	62.075	-399.967	211.874	-702.482	36.809	118.194	-1.795	-1.798
1)	51.50	103.237	65.116	-401.838	216.804	-703.526	39.753	118.194	-2.313	-0.870
2)	52.00	103.747	65.788	-434.266	221.560	-809.608	39.220	117.208	-2.262	4.930
3)	52.50	103.875	66.368	-467.742	229.100	-920.254	40.600	117.150	-2.211	0.290
1)	52.50	119.782	-154.248	-473.789	20.126	58.686	46.059	117.150	-3.009	10.730
2)	53.00	120.369	-148.525	-397.624	20.706	47.492	46.110	113.264	-1.914	6.090
3)	53.50	120.420	-142.725	-324.388	21.286	39.024	47.205	107.928	-1.863	11.890
1)	53.50	111.508	-137.863	-331.412	19.198	42.040	38.325	107.812	-3.435	12.934
2)	55.90	114.264	-110.099	-31.558	21.982	-4.766	38.570	186.112	-29.216	-86.072
3)	58.30	114.601	-73.743	187.353	32.074	12.576	46.123	428.958	-8.771	-106.256
1)	58.30	74.928	-91.896	188.847	22.852	71.050	8.578	430.012	-11.460	-106.082
2)	61.20	78.347	-49.556	387.743	26.216	-1.054	8.874	719.562	3.000	-78.010
3)	64.10	78.827	-7.308	476.885	53.070	135.188	18.566	896.694	5.960	-46.980
1)	64.10	35.605	-31.924	432.707	47.850	194.812	-1.794	896.810	-2.042	-46.110
2)	65.55	37.187	-15.684	468.136	50.344	135.072	-1.651	944.428	0.153	-18.386
3)	67.00	37.509	1.716	476.807	68.266	191.226	0.416	960.828	1.684	-6.380
1)	67.00	34.319	13.374	64.775	66.526	303.963	-3.286	960.828	-2.807	-5.336
2)	68.45	35.911	14.998	43.527	70.064	336.052	-2.891	951.142	-1.276	13.514
3)	69.90	36.054	16.738	19.390	90.074	241.188	-1.370	910.832	0.919	41.354
1)	69.90	70.325	35.535	67.501	95.120	383.844	7.011	911.760	-6.039	41.354
2)	72.80	73.254	38.991	-38.191	112.230	299.106	2.315	746.808	-3.079	73.254
3)	75.70	73.704	42.355	-155.208	151.960	-57.130	2.561	471.308	13.525	101.500
1)	75.70	109.484	60.350	-154.864	160.312	57.420	42.449	470.322	9.013	102.544
2)	78.10	111.979	63.317	-303.068	186.064	-272.484	39.227	223.416	18.966	85.492
3)	80.50	112.301	66.101	-458.404	217.384	-758.292	47.766	123.888	0.419	-5.858

80.50	114.951	69.167	-458.839	222.430	-759.220	52.696	124.004	-1.153	-5.858
81.00	115.538	69.838	-492.489	228.230	-840.884	43.463	126.034	-1.102	-0.058
81.50	115.589	70.418	-528.667	236.640	-978.996	50.829	126.160	-0.007	-4.698
82.00	132.772	-166.428	-535.424	16.820	68.740	48.495	126.160	-0.573	6.380
82.50	133.359	-160.628	-453.475	17.400	60.030	48.546	123.714	-0.522	1.740
82.50	133.410	-146.220	-379.364	17.980	54.346	48.597	122.206	-0.471	7.540
85.15	126.058	-147.591	-380.043	14.848	59.692	38.410	122.332	-2.306	8.584
85.15	128.875	-116.271	-30.885	17.980	16.240	38.686	212.164	-18.560	-101.036
87.80	129.554	-77.687	226.005	29.348	48.256	48.347	502.570	-5.584	-122.032
87.80	81.834	-96.884	224.433	19.952	107.764	8.953	502.570	-10.490	-119.944
90.95	85.407	-52.224	457.009	23.548	62.466	8.410	834.233	3.970	-90.248
94.10	86.152	-6.496	557.707	53.708	201.830	22.820	1034.502	8.053	-46.168
94.10	34.519	-34.036	582.831	46.690	267.496	1.757	1034.488	-0.448	-46.052
95.68	36.372	-16.636	622.942	50.170	207.582	1.910	1084.716	1.160	-24.128
97.25	36.627	1.924	634.219	69.252	270.686	5.032	1100.840	2.946	-3.132
97.25	33.412	12.538	100.909	67.686	415.802	-1.128	1100.840	-1.800	-4.002
98.83	35.111	14.394	80.150	71.456	446.102	-1.593	1083.556	-0.193	25.868
100.40	35.351	16.250	57.196	93.496	348.681	-0.052	1032.342	1.441	46.864
100.40	77.233	39.885	151.427	100.340	522.870	8.934	1031.298	-6.893	46.748
103.55	80.535	43.689	22.786	117.972	428.750	-0.255	827.634	-2.963	90.828
106.70	81.015	47.285	-118.494	160.022	25.882	2.907	491.772	12.758	122.612
106.70	119.232	66.918	-116.395	170.288	129.688	44.117	491.874	7.450	124.700
109.35	122.126	70.326	-298.722	198.476	-249.096	37.373	187.388	33.524	111.998
112.00	122.468	73.342	-487.863	233.856	-795.978	39.923	70.460	2.295	-2.958
112.00	123.662	75.445	-491.087	237.162	-791.744	43.050	70.344	1.631	-2.958
112.50	124.249	76.025	-528.885	243.832	-908.092	43.560	71.620	1.682	2.842
113.00	124.300	76.697	-567.296	251.372	-1060.556	52.666	70.634	2.777	-1.798
113.00	141.507	-165.109	-572.917	8.990	-31.330	70.187	70.634	2.327	-5.104
113.50	142.018	-159.309	-490.454	9.570	-36.318	70.238	74.694	3.422	-9.744
114.00	142.145	-144.901	-417.064	10.150	-37.652	71.333	77.362	3.473	-3.944
114.00	132.744	-148.211	-420.156	6.148	-38.812	57.434	77.246	0.884	-2.900
116.65	135.638	-117.083	-69.011	9.164	-55.110	57.710	205.020	-18.154	-108.112
119.30	136.332	-78.291	188.165	20.648	1.044	66.327	512.076	-5.447	-120.640
119.30	84.458	-101.940	186.009	8.458	140.070	4.139	511.038	-12.527	-120.650
122.45	88.031	-56.120	432.779	13.040	110.722	3.596	829.690	1.188	-85.710
125.60	88.868	-11.552	551.116	43.954	288.512	16.092	1017.234	5.375	-42.790
125.60	35.397	-36.762	579.956	36.830	391.834	3.301	1017.016	-1.313	-41.818
127.18	37.183	-18.202	624.964	40.426	347.150	3.455	1061.256	1.086	-20.648
128.75	37.438	0.358	641.248	60.552	422.584	6.586	1069.260	2.002	9.222
128.75	31.520	4.186	112.114	59.682	616.072	5.863	1069.260	-2.770	8.352
130.33	33.230	5.926	103.718	64.380	655.976	5.408	1045.828	-1.137	30.276
131.90	33.470	7.782	93.936	85.376	569.010	6.950	986.610	0.496	52.316
131.90	70.505	32.370	207.500	94.308	658.736	27.576	986.726	-7.120	51.156
135.05	73.909	36.082	101.344	111.940	578.875	18.488	771.145	-3.011	94.192
138.20	75.007	48.469	-18.785	155.904	189.038	21.548	425.156	5.298	124.932
138.20	105.706	62.052	-17.750	165.416	189.908	30.513	424.097	-0.546	125.140
140.85	108.523	65.068	-186.206	193.488	-187.266	24.638	134.881	8.264	96.048
143.50	109.738	77.083	-374.763	228.984	-744.950	33.278	55.649	5.659	-6.612
143.50	106.902	77.089	-377.320	232.116	-745.917	36.173	56.649	4.067	-5.568
144.00	107.413	77.669	-414.432	238.786	-837.112	28.680	58.273	4.118	0.232
144.50	107.556	78.341	-455.072	245.456	-956.225	29.190	60.535	-0.007	-5.452
144.50	121.215	-147.651	-460.292	0.590	-69.095	69.433	60.535	0.355	-11.764
145.00	121.726	-141.851	-388.307	1.170	-68.109	69.484	68.829	-17.342	-22.668
145.50	121.869	-136.143	-318.649	1.750	-65.161	70.579	82.043	-40.259	-22.088
145.50	113.729	-138.419	-319.542	-2.436	-65.151	60.890	82.053	-43.858	-23.142
147.35	116.332	-108.723	-90.480	-0.232	-63.527	61.074	187.729	-24.882	-68.962
149.20	116.986	-86.983	89.657	6.032	-13.647	66.488	362.377	7.176	-106.556
149.20	82.999	-99.781	89.439	-1.102	102.459	20.761	361.206	-0.035	-107.508
151.55	86.112	-63.241	286.537	1.682	101.589	20.996	579.571	0.479	-73.486
153.90	87.184	-36.653	404.753	19.662	246.346	29.767	722.072	7.339	-49.416
153.90	52.354	-50.895	404.845	16.540	311.074	7.128	722.149	1.019	-48.270
155.08	53.655	-36.975	456.438	17.932	290.611	7.250	767.124	2.336	-32.784
156.25	54.916	-14.471	482.911	31.214	386.648	12.408	789.023	4.225	-10.280
156.25	32.204	-23.490	482.911	32.364	486.872	-6.734	787.979	2.401	-10.266
157.43	33.429	-10.614	502.979	33.756	449.172	-6.612	792.658	3.626	1.044
158.60	34.087	3.190	507.522	49.126	532.160	-2.488	783.933	4.851	23.548
158.60	8.697	-28.555	228.150	52.258	543.562	-1.605	783.933	-0.380	23.548
160.95	11.734	-1.759	262.331	61.828	613.510	1.786	697.726	2.733	50.344
163.30	13.250	26.057	235.254	94.772	456.407	5.002	541.242	5.183	86.768
163.30	8.709	7.542	47.203	93.902	457.374	-1.786	542.286	-1.786	85.724
165.15	11.312	9.630	30.698	110.258	357.918	0.817	362.964	0.817	-106.604
167.00	12.792	12.018	8.404	137.344	137.808	2.756	143.028	2.756	137.344
167.00	0.429	7.950	8.530	139.360	139.070	-1.199	143.246	-1.199	139.360
167.50	0.940	8.530	4.869	145.160	72.790	-0.689	72.790	-0.689	145.160
168.00	2.139	9.508	0.000	152.700	0.000	0.587	0.000	2.139	11.494
0.00	2.675	-12.402	0.000	11.600	0.000	0.587	0.000	2.675	-13.804
0.50	2.624	-11.914	5.998	12.180	-5.916	-0.689	72.906	0.000	-143.202
1.00	2.573	-11.334	11.914	12.760	-6.960	-1.199	142.332	-0.051	-137.402
1.00	15.107	-15.244	11.730	12.760	-6.960	2.654	142.332	1.460	-136.532
2.85	14.387	-13.417	37.613	14.848	-31.624	0.817	359.610	1.276	-106.952
4.70	14.193	-11.213	59.323	24.360	16.806	-2.932	537.322	1.082	-84.912
4.70	19.163	-26.274	239.360	23.316	16.767	6.162	537.206	2.739	-84.912
7.05	17.831	0.406	271.796	25.984	-41.382	2.946	690.104	2.404	-10.232
9.40	17.520	28.246	228.230	22.430	-759.220	52.696	124.004	-1.153	-5.858

1)	9.40	42.592	-5.452	531.977	45.356	160.274	13.520	774.842	2.906	-21.808	112.00	163.960	146.089	-419.573	237.162	-791.652	-43.739	70.252	-1.018	-2.958
2)	10.58	41.842	8.468	530.905	48.662	214.330	17.400	782.962	2.784	0.812	112.50	163.373	160.589	-494.259	243.832	-908.000	-43.790	71.604	-1.529	2.842
3)	11.75	41.720	22.388	510.141	62.582	115.962	14.668	776.466	2.662	11.078	113.00	163.322	166.481	-575.822	251.372	-1060.540	-51.671	70.542	-3.083	-1.798
1)	11.75	65.038	14.210	510.141	61.538	233.412	-4.866	775.422	5.226	11.078	113.00	146.985	-77.413	-572.743	8.990	-31.346	-69.039	70.542	-1.714	-5.104
2)	12.93	64.196	36.806	485.902	71.166	294.671	2.668	753.857	5.104	33.582	113.50	146.474	-76.833	-533.606	9.570	-36.410	-69.549	74.678	-3.269	-9.744
1)	14.10	64.073	49.682	436.138	86.652	204.017	2.546	708.095	4.982	50.112	114.00	146.347	-76.345	-495.886	10.150	-37.744	-71.103	77.270	-3.779	-3.944
2)	14.10	97.542	36.390	437.182	90.944	284.057	-23.651	708.095	6.717	50.228	114.00	144.612	-73.739	-494.802	6.148	-38.904	-54.035	77.154	2.056	-2.900
3)	16.45	95.766	64.490	318.519	108.518	200.943	-15.196	562.863	10.055	75.290	116.65	141.718	-70.799	-301.127	9.164	-55.202	-57.557	204.928	16.240	-108.112
1)	18.80	95.455	99.870	121.457	140.592	-80.521	-13.691	340.999	21.006	109.038	119.30	141.024	-67.851	-117.031	20.648	1.044	-69.329	511.816	-13.785	-120.640
2)	18.80	126.113	89.580	122.477	147.610	-50.535	-34.780	340.883	26.702	108.982	119.30	98.938	-46.434	-115.359	8.366	140.070	0.868	511.038	-9.139	-120.650
1)	20.65	124.480	110.837	-63.156	168.780	-284.971	-31.494	166.655	-24.910	71.688	122.45	95.365	-42.722	27.881	12.948	110.722	-2.294	829.690	-2.030	-85.618
2)	22.50	124.219	141.461	-297.270	194.010	-608.253	-29.938	61.584	-31.438	20.532	125.60	94.528	-39.218	159.790	43.862	288.696	-18.405	1017.050	-3.216	-42.698
1)	22.50	130.041	139.914	-296.387	196.272	-609.307	-35.561	61.482	-26.541	19.488	125.60	51.951	-17.970	46.124	36.830	391.834	14.108	1016.924	-1.229	-41.818
2)	23.00	129.623	145.806	-368.137	202.072	-706.099	-34.568	51.685	-0.951	17.980	127.18	50.165	-16.114	73.036	40.426	347.242	12.567	1061.072	-1.392	-20.648
1)	23.50	129.495	151.606	-442.351	207.872	-808.237	-34.619	44.474	1.058	12.296	128.75	49.910	-14.258	96.628	60.552	422.584	7.976	1069.076	-0.685	9.222
2)	24.00	114.463	-74.143	-434.459	14.964	35.155	-39.946	44.474	3.721	4.524	128.75	52.174	-12.170	697.972	59.682	615.980	12.251	1069.076	0.917	8.352
1)	24.50	113.994	-73.075	-359.968	16.124	22.641	-40.456	43.637	2.167	-0.116	130.33	50.464	14.974	695.144	64.380	655.976	14.176	1045.644	0.754	30.276
2)	24.50	112.993	-71.872	-359.877	13.920	21.520	-31.281	42.477	1.656	5.684	131.90	50.224	33.534	657.174	85.376	568.903	14.012	986.426	0.591	52.316
1)	26.90	110.497	-60.648	-201.696	16.704	-14.871	-34.496	123.034	23.936	-92.394	131.90	99.145	8.184	573.422	94.308	658.552	-30.424	986.542	3.506	51.156
2)	29.30	110.176	-57.864	-57.992	25.752	15.101	-44.254	372.145	-10.925	-110.480	135.05	95.741	52.960	471.268	111.940	578.523	-18.396	770.793	3.180	94.192
1)	29.30	83.852	-41.900	-58.002	18.560	14.999	-17.013	371.264	-8.808	-110.374	138.20	94.643	98.755	235.951	155.904	188.763	-17.843	424.972	8.100	124.932
2)	32.20	80.677	-29.928	40.130	21.924	-40.526	-20.738	667.553	-3.074	-80.214	138.20	139.460	79.452	235.594	165.416	189.633	-34.524	423.928	10.177	124.956
1)	35.10	80.304	-26.564	122.813	48.604	110.249	-33.965	855.404	-3.370	-49.184	140.85	136.643	119.356	-26.300	193.488	-187.541	-25.404	135.233	-5.217	96.048
2)	35.10	49.281	-9.420	45.035	40.600	193.585	15.262	855.404	-0.775	-48.314	143.50	135.428	149.815	-381.027	228.984	-745.317	-30.889	57.016	-6.211	-6.612
1)	36.55	47.689	-7.796	57.408	42.224	131.738	13.823	907.430	-0.928	-21.634	143.50	140.004	149.647	-381.670	232.116	-746.361	-37.475	57.016	-1.540	-5.568
2)	38.00	47.470	-6.056	65.856	62.060	205.190	10.388	926.328	-1.941	-8.584	144.00	139.493	164.147	-456.714	238.786	-837.479	-29.522	58.717	-2.051	0.232
1)	38.00	51.635	-0.314	518.082	60.146	363.612	8.753	926.328	1.661	-8.584	144.50	139.350	170.039	-541.550	245.456	-956.669	-29.573	60.979	1.002	-5.529
2)	39.45	50.135	16.018	507.860	64.554	406.706	9.644	922.964	0.638	11.310	145.00	121.004	-67.263	-537.374	0.682	-68.651	-66.830	60.979	1.636	-11.672
1)	40.90	49.915	33.418	472.779	83.694	316.144	8.631	887.990	0.495	38.106	145.00	120.861	-66.683	-504.539	1.262	-67.665	-67.340	69.196	18.873	-22.576
2)	40.90	94.006	11.716	511.325	89.494	399.572	-8.984	887.120	2.326	37.990	145.50	116.647	-66.195	-470.029	1.842	-64.886	-68.895	82.395	40.642	-21.996
1)	43.80	91.015	54.148	411.051	105.734	330.784	0.290	732.898	2.214	69.890	145.50	116.647	-64.469	-470.922	-2.436	-64.784	-56.863	82.497	46.583	-23.142
2)	46.70	90.642	96.488	197.533	145.464	-11.310	2.604	465.184	13.004	101.360	147.35	114.044	-62.265	-355.308	-0.232	-63.083	-59.466	188.096	23.504	-68.962
1)	46.70	136.521	73.028	206.079	153.932	78.300	-37.909	466.054	16.932	102.428	149.20	113.390	-60.361	-242.335	6.032	-13.280	-66.626	362.377	-28.950	-106.188
2)	49.10	134.194	109.751	-16.538	178.814	-237.636	-31.716	220.490	-15.790	95.642	149.20	90.653	-47.581	-242.553	-1.102	102.734	-16.658	361.206	-20.896	-107.232
1)	51.50	133.796	146.291	-310.183	211.874	-702.390	-33.701	118.178	-0.777	-1.798	151.55	87.540	-44.797	-133.673	1.682	101.941	-19.771	579.310	-11.489	-73.394
2)	51.50	141.929	143.416	-311.010	216.804	-703.434	-39.447	118.178	2.543	-0.870	153.90	86.468	-42.221	-31.291	19.662	246.530	-30.747	721.888	-6.543	-49.416
1)	52.00	141.419	149.308	-384.502	221.560	-809.516	-38.454	117.192	2.032	4.930	153.90	59.180	-27.927	-30.155	16.632	311.335	-4.417	721.888	-3.913	-48.362
2)	52.50	141.291	155.108	-459.390	229.100	-920.238	-39.375	117.134	1.522	0.290	155.08	57.879	-26.535	1.080	18.024	290.886	-5.642	766.849	-3.944	-32.876
1)	52.50	126.602	-62.376	-456.041	20.126	58.594	-45.217	117.134	3.315	10.730	156.25	56.618	-25.259	33.121	31.306	386.909	-12.577	788.762	-4.056	-10.372
2)	53.00	126.015	-61.873	-424.246	20.706	47.400	-45.727	113.248	1.761	6.090	156.25	37.918	-16.182	33.121	32.364	487.133	8.909	787.718	-4.576	-10.266
1)	53.50	125.964	-61.293	-394.336	21.286	38.932	-47.282	107.912	1.250	11.890	157.43	36.693	-14.790	51.275	33.756	449.356	7.684	792.474	-4.698	1.044
2)	53.50	124.784	-59.563	-394.226	19.198	41.948	-35.508	107.796	5.716	12.934	158.60	36.035	-13.514	67.302	49.126	532.329	2.457	783.764	-4.820	23.548
1)	55.90	122.028	-56.855	-255.148	21.982	-4.782	-38.723	186.020	25.572	-86.072	158.60	16.881	22.253	283.482	52.258	543.470	-1.273	783.764	-3.187	23.548
2)	58.30	121.691	-54.255	-123.933	32.074	12.484	-49.247	428.866	-16.249	-106.256	160.95	13.844	25.037	225.617	61.828	613.418	-2.552	697.634	-3.422	50.344
1)	58.30	90.546	-39.870	-125.049	22.852	71.050	-4.842	429.920	-15.275	-106.082	163.30	12.328	27.797	163.044	94.772	456.238	-2.797	541.150	-3.667	86.768
2)	61.20	87.127	-36.506	-13.153	26.216	-1.146	-8.568	719.654	-3.306	-78.010	163.30	15.651	53.652	418.171	93.902	457.282	-1.092	542.194	-1.092	85.724
1)	64.10	86.647	-33.234	89.735	53.070	135.096	-20.924	896.786	-3.602	-46.980	165.15	13.048	84.276	289.262	110.258	357.918	-1.276	362.964	-1.276	106.604
2)	64.10	54.005	-10.174	49.907	47.850	194.888	14.993	896.902	0.143	-46.110	167.00	11.568	105.456	115.066	137.344	137.808	-1.470	143.028	-1.470	137.344
1)	65.55	52.423	-8.550	63.064	50.344	134.980	13.564	944.520	0.000	-18.386	167.50	3.236	116.236	59.853	145.068	72.790	0.000	143.154	0.051	139.268
2)	67.00	52.101	-6.810	75.389	68.266	191.226	10.118	960.828	-0.153	-6.380	168.00	2.037	122.434	0.000	152.608	0.000	0.000	72.790	0.000	145.068
1)	67.00	56.335	-0.198	491.945	66.526	303.978	13.331	960.828	1.429	-5.336	0.000	0.000	1.044	1.211	1.044	2.255	0.000	0.000	-2.675	11.586
2)	68.45	54.743	16.042	480.615	70.064	336.052	14.222	951.142	1.276	13.514	0.000	0.000	1.044	0.041	1.044	0.041	0.000	0.000	0.000	1.044
1)	69.90	54.600	33.442	446.386	90.074	241.372	14.079	910.832	1.133	41.354	0.000	0.000	1.044	-0.877						

8(1)	0.000	-3.654	-2.509	20.358	36.293	0.000	37.380	0.000	19.715
8(2)	0.000	-3.654	2.769	20.358	2.769	0.000	4.943	0.000	-0.720
8(3)	0.000	-3.654	8.279	20.358	-31.741	0.000	39.631	0.000	-21.078
9(1)	0.000	-1.914	0.426	15.312	24.888	0.000	25.700	0.000	14.945
9(2)	0.000	-1.914	3.205	15.312	1.582	0.000	4.081	0.000	-0.444
9(3)	0.000	-1.914	5.994	15.312	-21.744	0.000	26.970	0.000	-15.756
10(1)	0.000	2.610	9.746	22.272	37.337	0.000	38.424	0.000	21.629
10(2)	0.000	2.610	7.118	22.272	2.769	0.000	4.943	0.000	-0.720
10(3)	0.000	2.610	3.830	22.272	-31.741	0.000	40.675	0.000	-22.992
11(1)	1.044	12.876	28.181	19.140	33.369	1.044	34.272	1.044	18.589
11(2)	1.044	12.876	8.371	19.140	3.103	1.044	7.901	0.000	-1.256
11(3)	1.044	12.876	-9.751	19.140	-26.487	1.044	37.794	-1.044	-19.599
12(1)	0.000	1.914	7.274	6.090	11.838	0.000	12.114	0.000	5.814
12(2)	0.000	1.914	4.249	6.090	1.582	0.000	4.081	0.000	-0.903
12(3)	0.000	1.914	0.140	6.090	-8.694	0.000	14.380	0.000	-6.366
13(1)	0.000	0.000	1.682	2.088	3.234	0.000	3.326	0.000	1.996
13(2)	0.000	0.000	0.470	2.088	0.102	0.000	0.561	0.000	-0.276
13(3)	0.000	0.000	1.682	2.088	-3.030	0.000	4.137	0.000	-2.180
14(1)	0.000	-1.914	0.740	6.090	11.838	0.000	12.114	0.000	5.906
14(2)	0.000	-1.914	2.838	6.090	1.582	0.000	4.081	0.000	-0.903
14(3)	0.000	-1.914	5.786	6.090	-8.694	0.000	14.380	0.000	-6.366
15(1)	1.044	-11.136	-13.263	19.140	33.369	-1.044	34.272	-1.044	18.589
15(2)	1.044	-11.136	3.103	19.140	3.103	-1.044	7.825	0.000	-1.256
15(3)	1.044	-11.136	19.275	19.140	-26.487	-1.044	37.794	1.044	-19.599
16(1)	0.000	-2.610	-2.157	22.272	37.337	0.000	38.424	0.000	21.629
16(2)	0.000	-2.610	3.290	22.272	2.769	0.000	4.943	0.000	-0.720
16(3)	0.000	-2.610	7.587	22.272	-32.785	0.000	40.599	0.000	-22.992
17(1)	0.000	-1.044	1.983	15.312	25.932	0.000	26.667	0.000	14.945
17(2)	0.000	-1.044	3.022	15.312	1.582	0.000	4.081	0.000	-0.444
17(3)	0.000	-1.044	3.027	15.312	-22.788	0.000	28.014	0.000	-15.756
18(1)	0.000	2.610	10.438	22.272	39.241	0.000	40.236	0.000	21.629
18(2)	0.000	2.610	7.350	22.272	3.001	0.000	7.263	0.000	-0.720
18(3)	0.000	2.610	2.782	22.272	-32.795	0.000	42.502	0.000	-22.992
19(1)	1.044	8.004	22.439	20.184	35.457	1.044	36.360	1.044	19.817
19(2)	1.044	8.004	8.371	20.184	3.103	1.044	7.825	0.000	-1.347
19(3)	1.044	8.004	-4.879	20.184	-28.401	1.044	39.806	-1.044	-20.643
20(1)	0.000	2.958	9.280	7.134	14.796	0.000	15.164	0.000	6.950
20(2)	0.000	2.958	4.433	7.134	1.582	0.000	4.081	0.000	-0.903
20(3)	0.000	2.958	-0.812	7.134	-9.738	0.000	17.246	0.000	-7.318
21(1)	0.000	0.000	1.798	2.088	4.394	0.000	4.486	0.000	1.996
21(2)	0.000	0.000	0.470	2.088	0.102	0.000	0.561	0.000	-0.276
21(3)	0.000	0.000	0.754	2.088	-2.914	0.000	5.297	0.000	-2.180
22(1)	1.044	0.000	1.896	8.178	13.946	0.000	14.314	0.000	6.858
22(2)	1.044	0.000	3.042	8.178	1.603	0.000	4.193	0.000	-0.995
22(3)	1.044	0.000	3.984	8.178	-9.718	0.000	16.657	0.000	-7.410
23(1)	1.044	-10.092	-11.878	21.228	37.712	-1.044	38.799	-1.044	20.677
23(2)	1.044	-10.092	3.144	21.228	3.144	-1.044	8.126	0.000	-1.347
23(3)	1.044	-10.092	18.398	21.228	-30.148	-1.044	42.505	1.044	-21.779
24(1)	0.000	-2.784	-1.492	25.404	43.574	0.000	44.845	0.000	24.853
24(2)	0.000	-2.784	3.042	25.404	3.042	0.000	7.488	0.000	-0.628
24(3)	0.000	-2.784	8.426	25.404	-36.640	0.000	46.927	0.000	-26.032
25(1)	0.000	-1.044	4.019	17.400	28.921	0.000	30.960	0.000	17.033
25(2)	0.000	-1.044	4.270	17.400	1.603	0.000	4.193	0.000	-0.367
25(3)	0.000	-1.044	4.019	17.400	-26.759	0.000	32.139	0.000	-17.767
26(1)	0.000	0.696	10.846	25.404	44.328	0.000	45.599	0.000	24.761
26(2)	0.000	0.696	7.758	25.404	3.042	0.000	7.488	0.000	-0.720
26(3)	0.000	0.696	4.060	25.404	-36.756	0.000	47.758	0.000	-26.124
27(1)	1.044	4.872	15.641	22.272	38.640	1.044	39.635	1.044	21.721
27(2)	1.044	4.872	9.976	22.272	3.144	1.044	8.126	0.000	-1.347
27(3)	1.044	4.872	2.069	22.272	-32.352	1.044	43.433	-1.044	-22.731
28(1)	1.044	1.044	6.536	8.178	15.871	0.000	16.238	0.000	7.994
28(2)	1.044	1.044	4.637	8.178	1.603	0.000	4.193	0.000	-0.995
28(3)	1.044	1.044	1.490	8.178	-11.795	0.000	18.673	0.000	-8.362
29(1)	0.000	0.000	0.754	2.088	5.264	0.000	5.356	0.000	1.996
29(2)	0.000	0.000	0.653	2.088	0.102	0.000	0.561	0.000	-0.276
29(3)	0.000	0.000	0.754	2.088	-2.914	0.000	6.167	0.000	-2.180
30(1)	1.044	-1.044	0.954	8.178	15.871	0.000	16.146	0.000	7.994
30(2)	1.044	-1.044	4.086	8.178	1.603	0.000	4.193	0.000	-0.995
30(3)	1.044	-1.044	6.000	8.178	-11.795	0.000	18.673	0.000	-8.362
31(1)	1.044	-4.872	-3.642	22.272	38.640	-1.044	39.635	-1.044	21.721
31(2)	1.044	-4.872	3.144	22.272	3.144	-1.044	8.126	0.000	-1.347
31(3)	1.044	-4.872	9.930	22.272	-32.352	-1.044	43.433	1.044	-22.731
32(1)	0.000	-0.696	0.306	25.404	44.328	0.000	45.599	0.000	24.761
32(2)	0.000	-0.696	3.042	25.404	3.042	0.000	7.488	0.000	-0.720
32(3)	0.000	-0.696	4.482	25.404	-36.756	0.000	47.758	0.000	-26.124
33(1)	0.000	1.044	3.989	17.400	28.921	0.000	29.916	0.000	15.989
33(2)	0.000	1.044	3.042	17.400	2.647	0.000	4.270	0.000	-0.367
33(3)	0.000	1.044	2.945	17.400	-25.715	0.000	31.095	0.000	-16.800
34(1)	0.000	2.784	13.011	23.490	41.370	0.000	42.641	0.000	22.939
34(2)	0.000	2.784	7.758	23.490	3.042	0.000	7.488	0.000	-0.628
34(3)	0.000	2.784	3.093	23.490	-36.756	0.000	44.800	0.000	-24.118
35(1)	1.044	9.048	21.982	19.314	32.724	1.044	33.719	1.044	18.686
35(2)	1.044	9.048	8.932	19.314	3.144	1.044	8.126	0.000	-1.347
35(3)	1.044	9.048	-5.162	19.314	-26.436	1.044	37.670	-1.044	-19.957

VIADUCTO BORGES BLANQUES									
1.044	0.000	4.051	7.134	14.932	0.000	15.208	0.000	6.950	
1.044	0.000	3.777	7.134	1.603	0.000	4.270	0.000	-1.072	
1.044	0.000	3.007	7.134	-9.602	0.000	17.735	0.000	-7.318	
0.000	0.000	-0.198	2.088	5.264	0.000	5.356	0.000	2.088	
0.000	0.000	0.653	2.088	0.102	0.000	0.638	0.000	-0.276	
0.000	0.000	1.890	2.088	-2.914	0.000	6.167	0.000	-2.088	
0.000	-2.958	-1.318	6.090	9.689	0.000	9.873	0.000	5.998	
0.000	-2.958	1.733	6.090	1.521	0.000	3.744	0.000	-0.720	
0.000	-2.958	5.990	6.090	-7.711	0.000	11.848	0.000	-6.182	
1.044	-8.004	-10.359	13.224	23.049	-1.044	23.508	-1.044	12.857	
1.044	-8.004	2.749	13.224	1.705	-1.044	4.908	0.000	-1.164	
1.044	-8.004	15.741	13.224	-17.493	-1.044	26.831	1.044	-13.591	
0.000	-1.914	-2.195	14.268	23.905	0.000	25.669	0.000	12.504	
0.000	-1.914	1.643	14.268	1.643	0.000	4.494	0.000	-0.720	
0.000	-1.914	5.461	14.268	-19.769	0.000	27.828	0.000	-13.944	
0.000	1.218	3.773	9.048	15.605	0.000	16.064	0.000	8.604	
0.000	1.218	0.477	9.048	0.477	0.000	3.821	0.000	-0.444	
0.000	1.218	-0.925	9.048	-13.627	0.000	17.488	0.000	-9.492	
0.000	10.092	19.944	12.180	20.947	0.000	21.759	0.000	11.552	
0.000	10.092	3.757	12.180	1.643	0.000	4.571	0.000	-0.628	
0.000	10.092	-12.420	12.180	-17.681	0.000	23.734	0.000	-12.808	
1.044	6.090	16.115	6.090	11.797	1.044	12.608	1.044	5.554	
1.044	6.090	7.067	6.090	1.705	1.044	4.908	0.000	-0.980	
0.000	6.090	-3.025	6.090	-8.387	1.044	15.380	-1.044	-6.549	
0.000	-4.002	-1.308	5.046	7.485	0.000	7.760	0.000	3.818	
0.000	-4.002	2.988	5.046	1.521	0.000	3.821	0.000	-0.720	
0.000	-4.002	8.784	5.046	-5.739	0.000	9.552	0.000	-4.186	
0.000	-1.044	-0.341	1.044	2.255	0.000	2.347	0.000	1.044	
0.000	-1.044	0.408	1.044	0.041	0.000	0.225	0.000	-0.184	
0.000	-1.044	2.791	1.044	-1.921	0.000	2.699	0.000	-1.136	
0.000	50.453	4.161	409.654	29.928	0.000	29.928	0.000	409.654	
0.000	50.453	2.146	409.654	15.544	0.000	15.544	0.000	409.654	
0.000	50.453	0.000	409.654	0.000	0.000	0.000	0.000	247.812	
0.000	259.917	19.662	429.432	32.016	0.000	32.016	0.000	429.432	
0.000	259.917	10.324	429.432	15.544	0.000	15.544	0.000	429.432	
0.000	259.917	0.000	429.432	0.000	0.000	0.000	0.000	312.135	
0.000	245.811	18.483	447.760	33.002	0.000	33.002	0.000	447.760	
0.000	245.811	9.372	447.760	16.588	0.000	16.588	0.000	447.760	
0.000	245.811	0.000	447.760	0.000	0.000	0.000	0.000	272.191	
0.000	203.076	15.050	460.448	34.278	0.000	34.278	0.000	460.448	
0.000	203.076	7.400	460.448	16.704	0.000	16.704	0.000	460.448	
0.000	203.076	0.000	460.448	0.000	0.000	0.000	0.000	283.060	
0.000	216.188	15.770	427.300	31.958	0.000	31.958	0.000	427.300	
0.000	216.188	8.236	427.300	15.544	0.000	15.544	0.000	427.300	
0.000	216.188	0.000	427.300	0.000	0.000	0.000	0.000	231.579	
0.000	272.786	19.846	409.654	29.928	0.000	29.928	0.000	409.654	
0.000	272.786	9.546	409.654	15.544	0.000	15.544	0.000	409.654	
0.000	272.786	0.000	409.654	0.000	0.000	0.000	0.000	254.225	
0.000	250.181	19.488	429.432	32.016	0.000	32.016	0.000	429.432	
0.000	250.181	9.280	429.432	15.544	0.000	15.544	0.000	429.432	
0.000	250.181	0.000	429.432	0.000	0.000	0.000	0.000	196.548	
0.000	224.748	16.830	447.760	33.002	0.000	33.002	0.000	447.760	
0.000	224.748	8.328	447.760	16.588	0.000	16.588	0.000	447.760	
0.000	224.748	0.000	447.760	0.000	0.000	0.000	0.000	202.426	
0.000	305.286	22.098	460.356	34.278	0.000	34.278	0.000	460.356	
0.000	305.286	11.484	460.356	16.704	0.000	16.704	0.000	460.356	
0.000	305.286	0.000	460.356	0.000	0.000	0.000	0.000	203.326	
0.000	161.678	12.302	427.392	31.958	0.000	31.958	0.000	427.392	
0.000	161.678	6.056	427.392	15.544	0.000	15.544	0.000	427.392	
0.000	161.678	0.000	427.392	0.000	0.000	0.000	0.000	180.920	

HIPOTESIS: A Ambas vias sin ripado

Envolvente IPF75B negativa

Coef impacto 1.16

RRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
	0.00	-2.231	-12.862	0.000	-150.742	0.000	-0.587	0.000	1.501	-123.598
	0.50	-1.031	-11.884	6.029	-143.202	72.906	0.689	-5.916	0.000	12.180
	1.00	-0.521	-11.304	11.884	-137.402	137.112	1.199	-12.180	0.051	12.760
	1.00	-11.738	-15.474	11.975	-137.576	138.156	-2.654	-11.136	-1.460	12.760
	2.85	-10.268	-13.202	37.016	-109.562	354.656	-0.817	-35.892	-1.276	14.848
	4.70	-7.655	-10.998	58.267	-93.090	452.502	1.888	-64.718	-1.082	17.052
	4.70	-11.369	-26.289	239.222	-92.916	452.463	-4.944	-64.834	-2.913	17.052
	7.05	-9.854	0.483	269.484	-61.016	607.116	-0.858	-107.338	-2.668	19.720
	9.40	-6.817	28.323	235.841	-50.402	536.646	2.533	-156.232	-2.433	22.504
	9.40	-31.047	-5.452	530.002	-46.516	513.842	0.400	-157.276	-4.820	22.388
	10.58	-30.389	8.468	527.903	-31.900	440.878	3.480	-183.434	-4.698	23.780
	11.75	-29.164	22.388	507.139	-29.638	468.138	3.602	-211.506	-4.576	25.172
	11.75	-52.176	14.042	507.139	-30.682	379.398	-13.404	-211.506	-6.096	25.172
	12.93	-50.905	36.546	482.074	-16.356	283.535	-9.280	-241.945	-5.974	26.448
	14.10	-49.603	49.422	432.463	-14.964	303.023	-9.158	-274.135	-5.852	27.840
	14.10	-82.322	36.329	433.507	-19.024	219.503	-36.901	-274.135	-7.587	27.956
	16.45	-81.250	64.077	313.864	-0.928	70.095	-26.216	-341.415	-10.925	30.572
	18.80	-78.137	99.457	117.705	1.740	70.163	-25.981	-415.553	-14.916	33.408
	18.80	-108.213	88.907	118.465	-4.466	14.541	-57.440	-415.669	-19.742	33.292
	20.65	-107.560	109.719	-65.376	1.914	-36.847	-52.026	-506.551	-43.646	77.256
	22.50	-104.865	140.343	-297.424	4.002	-39.969	-51.842	-710.802	-47.384	168.780
	22.50	-110.993	137.985	-294.167	0.000	-39.979	-59.443	-710.904	-50.019	169.824
	23.00	-110.850	143.693	-364.584	0.580	-43.855	-58.348	-797.957	-23.409	177.712
	23.50	-110.340	149.493	-437.574	1.160	-43.681	-58.297	-889.384	-20.894	194.300
	23.50	-95.675	-73.179	-428.854	-231.072	-877.301	-35.396	-889.384	8.807	-216.282
	24.00	-95.532	-72.599	-391.647	-223.532	-765.811	-34.016	-786.865	10.013	-203.522
	24.50	-95.022	-72.019	-355.130	-217.732	-657.873	-34.549	-685.713	11.394	-202.072
	24.50	-94.695	-71.351	-355.130	-213.846	-658.994	-32.925	-685.713	8.417	-200.274
	26.90	-93.501	-59.683	-197.806	-181.656	-189.393	-27.970	-343.808	41.140	-82.128
	29.30	-91.051	-56.899	-56.552	-155.904	131.681	-31.088	-219.977	17.015	-23.654
	29.30	-65.952	-41.915	-56.654	-147.436	131.579	-21.789	-219.988	9.678	-23.896
	32.20	-64.799	-29.760	40.313	-107.706	476.950	-20.674	-210.973	-0.754	3.132
	35.10	-61.609	-26.396	122.308	-91.466	546.989	-26.239	-223.918	-0.458	6.496
	35.10	-31.198	-9.604	44.530	-82.418	462.589	-4.474	-223.918	-3.227	5.626
	36.55	-30.953	-7.888	56.245	-63.568	548.468	-2.165	-234.010	-3.074	7.250
	38.00	-29.371	-6.148	64.892	-59.914	508.646	-2.732	-246.606	-2.931	8.990
	38.00	-33.460	-0.590	517.118	-58.870	360.828	-3.185	-246.606	-4.619	9.860
	39.45	-33.047	15.650	506.252	-41.064	292.040	-0.074	-260.584	-4.466	11.484
	40.90	-31.541	33.050	471.294	-38.454	340.156	0.069	-279.028	-4.323	13.224
	40.90	-75.019	11.808	509.748	-44.660	259.676	-13.984	-279.028	-6.154	13.108
	43.80	-74.279	54.056	408.203	-16.936	109.630	-3.422	-320.324	-6.042	16.472
	46.70	-71.012	96.396	195.129	-13.572	151.206	-3.126	-377.672	-17.876	29.324
	46.70	-115.544	73.211	202.863	-20.938	45.240	-57.269	-377.672	-25.980	27.260
	49.10	-114.962	109.568	-19.769	-10.846	2.310	-49.716	-486.124	-45.632	70.760
	51.50	-112.359	146.031	-312.817	-8.062	24.582	-49.471	-787.318	-15.753	196.214
	51.50	-120.309	142.773	-311.837	-11.136	25.626	-59.037	-787.318	-19.247	196.098
	52.00	-120.258	148.481	-384.855	-10.556	29.686	-58.986	-885.918	-20.476	200.158
	52.50	-119.671	154.205	-459.222	-9.976	34.848	-58.935	-988.636	-14.920	212.744
	52.50	-105.073	-62.637	-454.142	-233.044	-923.288	-40.565	-988.636	14.955	-216.688
	53.00	-104.946	-62.057	-421.903	-225.504	-809.550	-39.185	-883.076	18.771	-204.972
	53.50	-104.435	-61.477	-391.994	-220.748	-700.568	-39.718	-782.620	23.632	-201.782
	53.50	-103.623	-59.456	-390.597	-216.746	-704.860	-36.876	-782.736	18.296	-201.782
	55.90	-103.301	-56.672	-251.642	-184.556	-227.328	-31.921	-468.916	41.940	-75.632
	58.30	-100.698	-53.704	-121.438	-158.804	98.266	-34.273	-360.050	22.165	-19.604
	58.30	-70.840	-39.885	-122.829	-150.452	39.034	-9.948	-360.040	15.101	-20.822
	61.20	-70.544	-36.521	-10.734	-110.722	393.312	-8.832	-336.874	4.176	-3.886
	64.10	-67.461	-33.157	90.516	-92.568	473.004	-13.528	-327.826	4.472	-0.522
	64.10	-35.263	-10.450	50.612	-87.522	410.300	-2.465	-327.710	1.597	-2.436
	65.55	-35.044	-8.826	64.059	-66.758	497.074	-1.036	-326.202	-4.350	1.798
	67.00	-33.528	-6.994	75.650	-63.974	466.494	-1.592	-335.298	-0.717	8.758
	67.00	-37.685	-0.382	492.206	-62.930	302.238	-0.455	-335.298	-2.299	7.888
	68.45	-37.364	15.858	480.156	-44.254	229.042	1.786	-348.290	-2.146	9.512
	69.90	-35.781	33.258	446.202	-42.514	294.616	1.929	-366.676	-2.003	11.252
	69.90	-83.692	16.994	476.855	-49.474	209.844	-12.708	-366.792	-4.704	11.252
	72.80	-83.135	50.634	375.118	-22.620	62.640	-3.016	-405.942	-4.408	14.616
	75.70	-79.869	92.974	161.126	-19.256	125.396	-2.720	-457.852	-18.618	29.387
	75.70	-124.435	74.115	164.225	-27.608	9.570	-53.663	-457.968	-25.790	29.290
	78.10	-124.022	110.471	-54.544	-17.516	-19.140	-46.110	-575.070	-45.567	76.966
	80.50	-121.342	138.235	-350.202	-14.732	17.748	-45.865	-876.612	-19.954	199.636

VIADUCTO BORGES BLANQUES

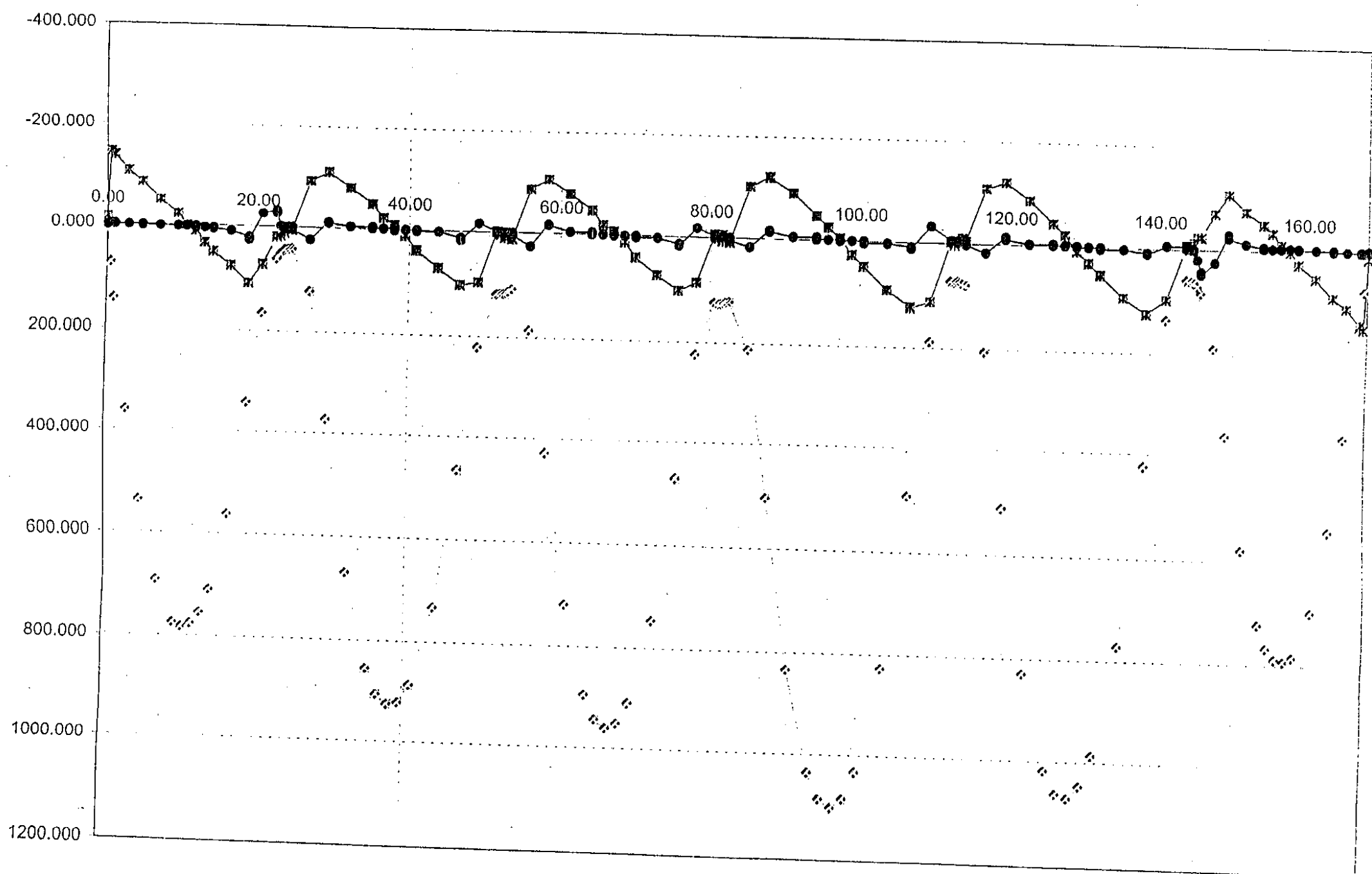
80.50	-132.158	142.053	-343.118	-18.038	-5.452	-69.013	-876.496	-24.420	200.680
81.00	-132.107	147.853	-414.338	-17.458	-0.464	-67.918	-977.648	-23.221	201.260
81.50	-131.520	153.577	-490.792	-16.878	8.710	-67.867	-1080.612	-25.494	216.630
82.00	-115.473	-69.075	-483.166	-247.660	-994.482	-34.357	-1080.612	-7.494	-231.130
82.50	-115.345	-68.495	-448.360	-240.990	-874.350	-33.846	-967.614	10.440	-218.370
82.50	-114.927	-67.823	-413.743	-234.320	-785.552	-40.470	-861.416	17.040	-215.180
82.50	-117.601	-66.764	-412.790	-230.144	-765.498	-31.826	-860.154	11.069	-215.006
85.15	-117.249	-63.632	-239.688	-194.648	-225.021	-29.174	-479.312	47.539	-75.632
87.80	-114.457	-60.432	-77.584	-166.576	152.656	-34.106	-351.422	21.677	-20.590
87.80	-78.094	-43.747	-76.897	-157.180	92.278	-9.667	-351.422	14.677	-22.678
90.95	-77.614	-40.151	55.136	-114.260	487.374	-6.505	-316.332	3.364	-7.598
94.10	-74.404	-36.347	173.873	-96.628	572.956	-14.929	-300.508	3.680	-3.886
94.10	-36.364	-11.436	57.960	-88.508	506.306	-5.722	-300.614	0.833	-2.726
95.68	-36.134	-9.696	75.229	-66.584	598.038	-4.191	-295.626	0.986	-0.986
97.25	-34.516	-7.840	87.521	-62.814	562.218	-4.646	-300.730	-1.461	6.960
97.25	-37.640	-8.710	666.071	-65.598	353.684	-6.427	-300.730	-3.053	5.916
98.83	-37.487	18.550	660.072	-45.472	284.374	-4.360	-314.012	-2.900	7.772
100.40	-35.624	37.110	616.713	-41.876	336.434	-4.197	-328.164	-2.737	9.628
100.40	-88.887	11.344	548.331	-49.996	231.942	-16.440	-328.164	-5.652	10.556
103.55	-88.234	56.028	434.065	-18.966	53.698	-3.770	-365.294	-5.336	14.268
106.70	-84.753	101.732	186.496	-15.370	107.754	-3.443	-419.036	-17.004	27.260
106.70	-136.585	78.451	186.159	-24.766	-2.900	-55.666	-419.026	-24.908	27.260
109.35	-136.065	117.243	-70.660	-13.282	-48.730	-45.994	-555.510	-48.639	78.416
112.00	-133.089	148.370	-424.232	-10.266	-17.236	-45.729	-925.434	-22.731	215.238
112.00	-141.344	146.196	-422.284	-15.312	-43.104	-69.013	-925.550	-29.258	215.238
112.50	-141.293	160.696	-496.969	-14.732	-38.696	-67.918	-1034.166	-26.137	216.688
113.00	-140.706	166.404	-578.272	-14.152	-32.374	-67.867	-1145.196	-16.231	231.188
113.00	-124.277	-78.224	-572.728	-248.356	-1059.686	-50.499	-1145.196	17.896	-228.172
113.50	-124.226	-77.644	-533.239	-240.816	-909.368	-42.159	-1035.094	27.977	-214.716
114.00	-123.731	-76.972	-494.875	-235.190	-794.992	-41.649	-928.450	25.877	-209.786
114.00	-122.271	-73.815	-492.169	-230.840	-795.108	-38.011	-928.566	19.868	-208.742
116.65	-121.919	-70.799	-297.896	-194.416	-257.216	-35.359	-568.676	48.662	-76.444
119.30	-119.219	-67.484	-114.076	-167.272	113.448	-42.205	-434.048	24.921	-29.464
119.30	-78.680	-46.618	-113.583	-157.108	8.526	-5.392	-433.956	18.013	-31.562
122.45	-78.201	-42.906	30.392	-113.898	401.476	-2.230	-360.992	6.728	-20.542
125.60	-75.082	-39.218	160.755	-97.426	486.534	-9.609	-303.088	7.044	-16.946
125.60	-33.393	-18.338	47.180	-89.320	315.100	0.682	-303.214	5.057	-15.892
127.18	-33.153	-16.482	74.552	-68.324	407.620	2.223	-279.424	5.220	-14.036
128.75	-31.459	-14.626	97.593	-64.554	375.082	1.768	-257.674	5.383	-12.180
128.75	-33.906	-12.538	698.937	-67.164	231.962	-5.639	-257.674	3.781	-13.224
130.33	-33.743	14.606	696.737	-47.154	165.818	-2.518	-239.694	3.944	-11.484
131.90	-31.972	33.166	658.047	-43.558	222.643	-2.354	-224.614	4.107	-9.628
131.90	-80.526	8.352	574.295	-53.766	133.942	-31.868	-224.498	0.322	-8.700
135.05	-80.046	53.128	471.727	-22.736	-35.001	-19.188	-202.041	0.648	-4.988
138.20	-76.575	98.740	235.232	-19.140	30.249	-18.871	-206.474	-7.578	13.572
138.20	-119.907	80.784	235.242	-27.376	30.249	-41.862	-206.474	-14.701	13.596
140.85	-119.478	120.688	-30.128	-17.052	-0.665	-32.190	-347.965	-33.933	89.958
143.50	-116.855	150.703	-386.876	-13.920	39.945	-31.925	-766.004	-3.359	216.282
143.50	-120.665	150.795	-386.233	-17.052	40.989	-40.825	-766.004	-9.074	215.412
144.00	-120.614	165.295	-461.966	-16.472	46.789	-39.730	-873.749	-8.563	216.862
144.50	-120.118	171.003	-546.786	-15.892	56.359	-39.679	-986.675	-5.874	232.329
144.50	-101.839	-69.560	-542.610	-214.904	-864.179	-45.574	-986.675	23.942	-192.980
145.00	-101.788	-68.980	-508.550	-206.494	-766.623	-48.544	-893.198	43.245	-176.740
145.50	-101.293	-68.308	-472.785	-200.694	-666.926	-48.033	-806.919	68.282	-170.070
145.50	-96.925	-65.878	-471.948	-197.664	-666.824	-43.709	-808.905	66.691	-169.128
147.35	-96.741	-63.674	-353.639	-173.188	-329.477	-39.366	-606.040	44.356	-82.534
149.20	-95.108	-61.402	-238.308	-150.220	-97.670	-44.386	-508.493	21.294	-37.458
149.20	-72.891	-47.811	-238.434	-143.956	-157.744	-11.704	-508.620	15.850	-37.458
151.55	-72.656	-45.027	-128.574	-111.766	120.907	-11.201	-422.234	12.533	-34.766
153.90	-70.880	-42.190	-27.524	-94.308	220.082	-15.537	-342.644	7.587	-32.190
153.90	-44.435	-28.004	-26.572	-91.074	116.455	6.679	-342.644	5.827	-33.224
155.08	-44.312	-26.612	4.816	-74.544	211.368	7.904	-305.165	5.858	-31.832
156.25	-43.496	-25.336	36.015	-66.830	178.283	4.747	-269.332	5.970	-30.556
156.25	-25.178	-16.182	36.015	-68.556	77.015	15.277	-269.158	4.750	-29.406
157.43	-25.056	-14.790	54.169	-54.636	149.380	16.502	-234.822	4.872	-28.014
158.60	-24.214	-13.514	69.017	-49.706	7.023	11.289	-204.034	4.994	-26.738
158.60	-6.086	22.330	285.748	-53.708	108.470	5.275	-203.164	4.231	-26.738
160.95	-5.775	25.114	227.730	-31.262	-75.622	4.466	-142.438	4.466	-23.954
163.30	-4.443	27.782	162.998	-28.594	-7.820	4.711	-89.252	4.711	-21.286
163.30	-9.021	53.959	419.779	-28.594	-7.820	0.918	-89.252	1.962	-21.286
165.15	-8.837	84.583	290.318	-20.242	-46.632	1.102	-50.808	2.146	-19.198
167.00	-8.199	105.410	115.096	-18.038	-12.354	1.296	-17.574	2.340	-16.994
167.00	-1.603	110.374	116.174	-18.028	-12.228	-0.051	-17.448	-0.051	-18.028
167.50	-1.552	116.174	59.622	-17.448	-7.076	0.000	-7.076	0.000	-17.448
168.00	-1.501	121.974	0.000	-16.868	0.000	0.051	0.000	-1.501	122.598
0.00	-1.945	-122.656	0.000	-150.742	0.000	0.051	0.000	-2.037	-123.598
0.50	-3.145	-116.458	59.969	-143.202	72.906	0.000	-5.916	-0.689	12.180
1.00	-3.655	-110.658	116.458	-137.402	137.112	-0.051	-12.180	-1.199	12.760
1.00	-11.578	-106.824	115.505	-137.576	138.156	1.460	-11.136	2.654	12.760
2.85	-13.048	-84.716	292.448	-109.562	354.564	1.276	-35.800	0.817	14.848
4.70	-15.661	-55.020	421.927	-93.090	452.410	1.082	-64.626	-1.888	17.052
4.70	-10.033	-32.031	178.322	-92.916	452.294	2.739	-64.742	4.429	17.052
7.05	-11.548	-29.271	249.300	-61.016	606.932	1.624	-107.154	1.979	19.720
9.40	-14.585	-26.487	316.055	-50.402	536.462	0.345	-155.971	-1.134	22.504

(1)	9.40	-33.855	12.122	82.648	-46.516	514.103	-0.369	-157.015	4.851	22.388	112.00	-146.278	75.552	-493.798	-15.312	-43.195	69.702	-925.458	28.645	215.238
(2)	10.58	-34.513	13.514	68.195	-31.900	441.062	-4.552	-183.250	3.626	23.780	112.50	-146.329	76.132	-531.595	-14.732	-38.788	68.148	-1034.150	25.984	216.688
(3)	11.75	-35.738	14.906	54.391	-29.638	468.399	-5.777	-211.245	2.401	25.172	113.00	-146.916	76.620	-569.746	-14.152	-32.390	66.872	-1145.104	16.537	221.188
(1)	11.75	-52.398	22.916	54.391	-30.682	379.659	13.665	-211.245	6.357	25.172	113.00	-164.215	-165.920	-572.902	-248.356	-1059.670	49.351	-1145.104	-18.509	+228.172
(2)	12.93	-53.669	24.192	26.716	-16.356	283.810	7.672	-241.670	4.366	26.448	113.50	-164.266	-160.120	-490.087	-240.816	-909.276	41.470	-1035.078	-28.130	-214.716
(1)	14.10	-54.971	25.584	-3.233	-14.964	303.375	6.447	-273.783	3.141	27.840	114.00	-164.761	-145.528	-416.053	-235.190	-794.900	41.419	-928.358	-25.571	-209.786
(2)	14.10	-81.064	38.939	-2.189	-19.024	219.855	37.881	-273.783	8.383	27.956	114.00	-155.085	-148.287	-417.523	-230.840	-795.016	34.612	-928.474	-22.808	-208.742
(3)	16.45	-82.136	41.631	-96.950	-0.928	70.447	24.991	-341.155	2.810	30.740	116.65	-155.437	-117.083	-65.780	-194.416	-257.124	35.206	-568.584	-46.748	-76.444
(1)	18.80	-85.249	44.299	-195.843	1.740	70.530	21.878	-415.461	-4.071	33.408	119.30	-158.137	-77.924	191.120	-167.272	113.448	45.207	-433.788	-5.689	-29.464
(2)	18.80	-104.067	54.107	-197.171	-4.466	14.908	57.578	-415.577	0.724	33.292	119.30	-104.716	-102.124	187.785	-157.016	8.526	0.385	-433.956	3.653	-31.562
(3)	20.65	-104.720	56.127	-299.580	1.914	-36.403	50.418	-506.995	42.804	77.256	122.45	-105.195	-56.304	435.290	-113.806	401.476	0.928	-360.992	-5.886	-20.634
(1)	22.50	-107.415	58.215	-405.826	4.002	-39.433	47.815	-711.261	50.798	168.780	125.60	-108.314	-11.552	552.081	-97.334	486.350	11.922	-302.904	-9.203	-17.038
(2)	22.50	-111.379	59.859	-405.701	0.000	-39.535	57.682	-711.271	51.091	169.824	125.60	-53.955	-37.130	581.012	-89.320	315.100	-18.091	-303.122	-2.515	-15.892
(3)	23.00	-111.522	60.347	-436.098	0.580	-43.319	56.128	-798.493	24.940	177.712	127.18	-54.195	-18.570	626.480	-68.324	407.528	-18.255	-279.240	-4.914	-14.036
(1)	23.50	-112.032	60.927	-466.806	1.160	-43.222	55.617	-889.843	23.497	194.300	128.75	-55.889	-0.010	642.213	-64.554	375.082	-16.330	-257.490	-6.700	-12.180
(2)	23.50	-126.871	-159.135	-475.834	-231.072	-877.837	35.779	-889.843	-7.199	-216.282	130.33	-49.951	5.558	105.311	-47.154	165.818	-17.066	-239.510	-3.561	-11.484
(3)	24.00	-127.014	-153.335	-397.215	-223.532	-766.255	34.858	-787.309	-7.946	-203.522	131.90	-51.722	7.414	94.809	-43.558	222.750	-18.608	-224.430	-5.194	-9.628
(1)	24.50	-127.524	-147.535	-322.418	-217.732	-658.317	35.851	-686.157	-8.867	-202.072	131.90	-89.124	32.538	208.373	-53.766	134.126	34.716	-224.314	3.292	-8.700
(2)	24.50	-121.935	-141.821	-327.638	-213.846	-659.361	31.333	-686.157	-8.861	-200.274	135.05	-89.604	36.250	101.803	-22.736	-34.649	19.096	-201.689	-0.817	-4.988
(3)	26.90	-123.129	-113.797	-19.978	-181.656	-189.745	29.348	-344.083	-37.986	-82.128	138.20	-93.075	48.454	-19.504	-19.140	30.524	15.166	-206.290	-5.820	13.572
(1)	29.30	-125.579	-77.257	206.710	-155.904	131.237	34.671	-219.885	-2.438	-24.022	140.85	-125.688	66.400	-190.034	-17.052	-0.390	32.956	-206.305	5.070	13.780
(2)	29.30	-85.602	-95.507	203.824	-147.436	131.227	18.972	-219.896	7.579	-23.896	143.50	-125.259	63.384	-18.102	-27.376	30.524	45.873	-206.305	5.070	13.780
(3)	32.20	-86.755	-53.076	421.721	-107.706	476.675	21.286	-210.698	0.677	3.132	143.50	-128.311	77.971	-380.612	-13.920	40.312	29.536	-766.371	3.911	216.282
(1)	35.10	-89.945	-19.436	526.684	-91.466	546.728	29.516	-223.657	-2.283	6.496	144.00	-126.241	78.237	-381.883	-17.052	41.433	42.127	-766.371	6.547	215.412
(2)	35.10	-47.102	-33.268	522.508	-82.418	462.604	-9.061	-223.657	4.835	5.626	144.50	-126.788	79.305	-460.308	-15.892	56.803	40.572	-874.193	6.496	216.862
(3)	38.00	-48.929	0.464	571.754	-59.914	508.738	-8.139	-246.514	1.109	8.990	144.50	-126.788	79.305	-460.308	-15.892	56.803	40.572	-874.193	6.496	216.862
(1)	38.00	-46.754	11.068	104.912	-58.870	360.920	-6.400	-246.514	5.691	9.860	144.50	-140.891	-149.948	-465.528	-214.996	-864.623	42.971	-987.119	4.879	232.406
(2)	39.45	-47.167	12.692	86.216	-41.064	292.301	-10.797	-260.492	4.160	11.484	145.00	-140.942	-144.148	-392.318	-206.586	-767.067	46.400	-893.565	-44.776	-176.832
(3)	40.90	-48.673	14.432	64.308	-38.454	340.156	-12.318	-278.859	1.965	13.224	145.50	-141.437	-138.256	-321.405	-200.786	-667.201	46.349	-807.271	-68.665	-170.162
(1)	40.90	-84.365	32.514	93.714	-44.660	259.845	15.883	-278.859	8.053	13.108	145.50	-133.451	-139.828	-320.568	-197.664	-667.191	39.682	-809.349	-69.416	-169.128
(2)	43.80	-85.105	35.786	-4.873	-16.936	109.722	2.656	-320.232	5.001	16.472	147.35	-133.635	-110.132	-88.811	-173.188	-329.921	37.758	-606.407	-42.978	-82.534
(3)	46.70	-88.372	39.150	-113.373	-13.572	151.206	-1.070	-377.580	-7.634	29.324	149.20	-135.268	-88.024	93.684	-150.220	-98.037	44.524	-508.493	0.480	-37.826
(1)	46.70	-119.704	56.507	-116.949	-20.938	45.240	60.102	-377.580	1.802	27.352	151.55	-100.996	-63.471	291.636	-111.766	120.555	7.601	-508.620	5.081	-37.734
(2)	49.10	-120.286	59.108	-256.061	-10.846	2.294	49.578	-486.108	43.626	70.760	153.90	-102.772	-36.622	408.520	-94.308	219.898	16.517	-342.460	-8.383	-32.190
(3)	51.50	-122.889	61.815	-402.601	-8.062	24.490	46.363	-787.302	18.325	196.214	155.08	-67.099	-50.972	408.428	-91.166	116.194	-9.390	-342.383	-2.933	-33.132
(1)	51.50	-124.857	64.473	-402.665	-11.136	25.534	58.731	-787.302	19.017	196.098	155.08	-67.222	-37.052	460.174	-74.636	211.093	-9.512	-304.890	-4.250	-31.740
(2)	52.00	-124.908	64.961	-434.619	-10.556	29.594	58.220	-885.902	20.706	200.158	156.25	-68.038	-14.548	485.805	-66.922	178.022	-4.578	-269.071	-6.139	-30.464
(3)	52.50	-125.495	65.465	-467.574	-9.976	34.832	57.710	-988.620	15.609	212.744	156.25	-44.944	-23.490	485.805	-68.556	76.754	-17.452	-268.897	-2.575	-29.406
(1)	52.50	-141.311	-154.509	-471.890	-233.044	-923.196	39.723	-988.620	-15.261	-216.688	157.43	-45.066	-10.614	505.873	-54.636	149.196	-17.574	-234.638	-3.800	-28.014
(2)	53.00	-141.438	-148.709	-395.281	-225.504	-809.458	38.802	-883.060	-18.618	-204.972	158.60	-45.908	3.190	509.237	-49.706	6.854	-11.258	-203.865	-5.025	-26.738
(3)	53.50	-141.949	-142.909	-322.046	-220.748	-700.476	39.795	-782.604	-23.019	-201.782	160.95	-19.492	-28.478	230.416	-53.708	108.562	-2.397	-202.995	-0.664	-26.738
(1)	53.50	-132.669	-137.756	-327.783	-216.746	-704.768	34.059	-782.720	-20.577	-201.782	163.30	-19.803	-1.682	264.444	-31.262	-75.530	-3.700	-142.346	-3.777	-23.954
(2)	55.90	-132.991	-109.916	-28.052	-184.556	-227.312	32.074	-468.824	-38.296	-75.632	163.30	-21.135	26.042	235.208	-28.594	-7.651	-6.916	-89.160	-6.227	-21.286
(3)	58.30	-135.594	-73.192	189.848	-158.804	98.358	37.397	-359.958	2.855	-19.604	165.15	-15.339	7.849	48.811	-28.594	-7.728	1.960	-89.160	0.916	-21.286
(1)	58.30	-94.634	-91.911	191.067	-150.452	39.034	6.212	-359.948	11.634	-20.822	165.15	-15.523	9.937	31.754	-20.242	-46.632	-0.643	-50.808	-1.687	-19.198
(2)	61.20	-94.930	-49.571	390.162	-110.722	393.404	8.526	-336.966	-3.870	-3.886	167.00	-16.161	11.972	8.434	-18.038	-12.354	-2.582	-17.574	-3.626	-16.994
(3)	64.10	-98.013	-7.231	477.666	-92.568	473.096	15.886	-327.918	-6.830	-0.522	167.00	-2.573	7.888	8.468	-17.936	-12.136	1.199	-17.356	1.199	-17.936
(1)	64.10	-54.347	-32.200	433.412	-87.522	410.224	-10.734	-327.802	0.302	-2.436	167.50	-2.624	8.468	8.468	-17.356	-7.076	0.689	-7.076	0.689	-17.356
(2)	65.55	-54.566	-15.960	469.131	-66.758	497.166	-10.877	-326.294	4.197	1.798	168.00	-2.675	9.048	0.000	-16.776	0.000	-0.587	0.000	2.037	122.506
(3)	67.00	-56.082	1.532	477.068	-63.974	466.494	-8.942	-335.298	-0.814	7.888	0.000	0.000	-1.044	-0.341	-1.044	-0.341	0.000	-0.433	0.000	-0.952
(1)	67.00	-52.969	13.190	65.036	-62.930	302.223	-9.590	-335.298	3.677	7.888	0.000	0.000	-1.044	0.408	-1.044	0.408	0.000	0.225	0.000	0.184
(2)	68.45	-53.290	14.814	43.068	-44.254	229.042	-13.117	-348.290	2.146	9.512	0.000	0.000	-1.044	1.747	-1.044	2.791	0.000	-0.785	0.000	1.044
(3)	69.90	-54.873	16.554	19.206	-42.514	294.432	-14.638	-366.676	-0.049	11.252	0.000	0.000	-4.002	-1.192	-4.002	-3.280	0.000	-3.556	0.000	-3.818

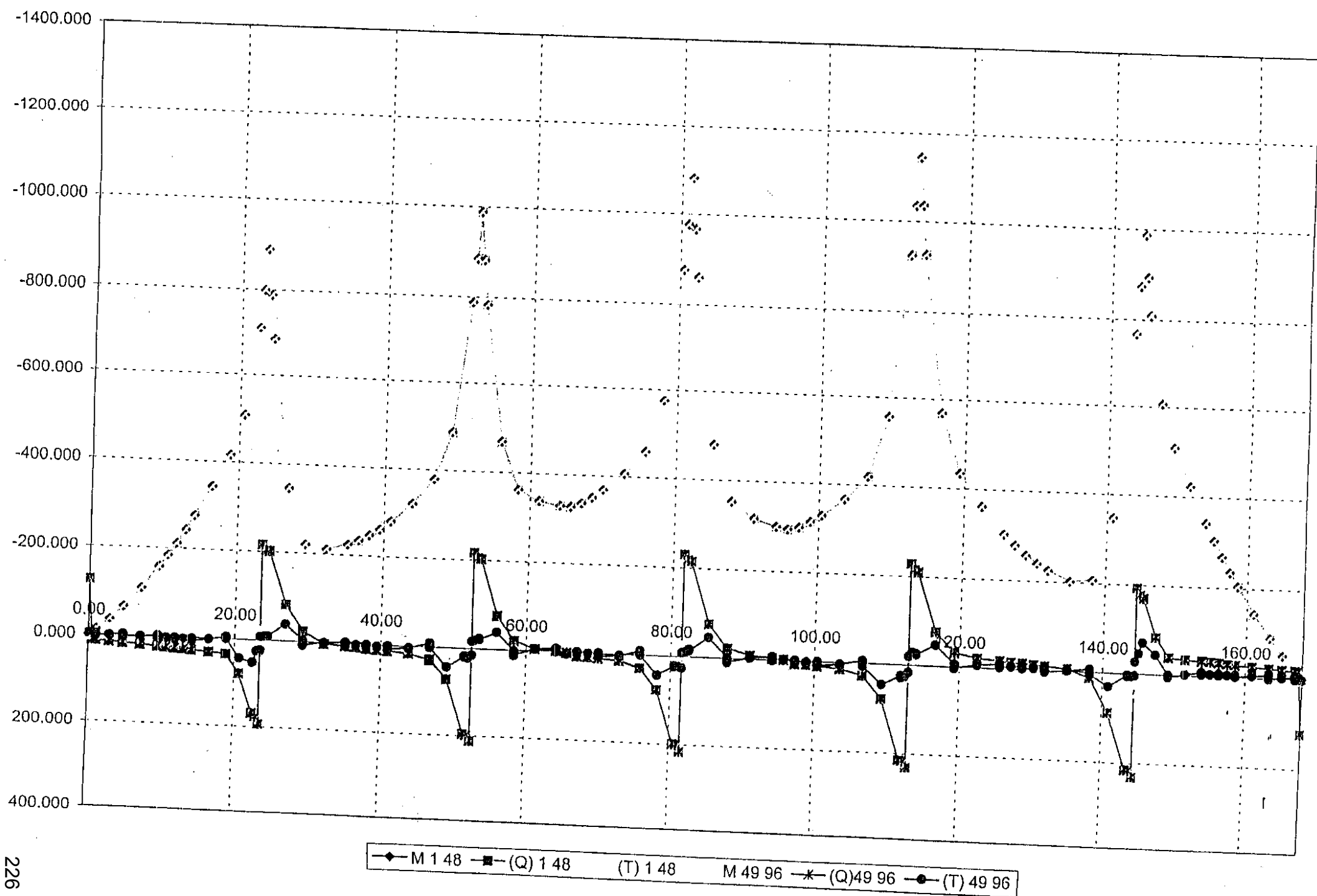
08(1)	0.000	3.654	12.704	-20.358	-27.316	0.000	-28.403	0.000	-19.638
08(2)	0.000	3.654	7.118	-20.358	7.118	0.000	2.855	0.000	0.720
08(3)	0.000	3.654	1.916	-20.358	40.718	0.000	-30.654	0.000	21.001
09(1)	0.000	1.914	5.780	-15.312	-18.850	0.000	-19.662	0.000	-14.868
09(2)	0.000	1.914	2.838	-15.312	4.492	0.000	1.993	0.000	0.444
0	0.000	0.212	-15.312	27.782	0.000	-20.932	0.000	15.679	0.000
0(2)	0.000	-2.610	-0.595	-22.272	-27.316	0.000	-28.403	0.000	-21.552
0(3)	0.000	-2.610	2.769	-22.272	7.118	0.000	2.855	0.000	0.720
1(1)	0.000	-2.610	5.321	-22.272	41.762	0.000	-30.654	0.000	22.915
1(2)	-1.044	-12.876	-15.003	-19.140	-21.235	-1.044	-22.062	-1.044	-18.681
1(3)	-1.044	-12.876	3.103	-19.140	8.371	-1.044	3.725	0.000	1.256
2(1)	-1.044	-12.876	22.929	-19.140	38.621	-1.044	-25.584	1.044	19.691
2(2)	0.000	-1.914	-0.213	-6.090	-5.877	0.000	-6.152	0.000	-5.814
2(3)	0.000	-1.914	3.882	-6.090	4.492	0.000	1.993	0.000	0.903
3(1)	0.000	-1.914	6.921	-6.090	14.655	0.000	-8.418	0.000	6.366
3(2)	0.000	0.000	1.682	-2.088	-2.035	0.000	-2.127	0.000	-1.996
3(3)	0.000	0.000	0.653	-2.088	1.021	0.000	0.561	0.000	0.276
4(1)	0.000	0.000	1.682	-2.088	4.229	0.000	-2.938	0.000	2.180
4(2)	0.000	1.914	6.413	-6.090	-5.877	0.000	-6.152	0.000	-5.814
4(3)	0.000	1.914	3.389	-6.090	4.492	0.000	1.993	0.000	0.903
5(1)	0.000	1.914	1.367	-6.090	14.655	0.000	-8.418	0.000	6.274
5(2)	-1.044	11.136	24.527	-19.140	-21.235	1.044	-22.062	1.044	-18.681
5(3)	-1.044	11.136	8.371	-19.140	8.371	1.044	3.649	0.000	1.256
6(1)	-1.044	11.136	-8.011	-19.140	38.621	1.044	-25.584	-1.044	19.691
6(2)	0.000	2.610	11.216	-22.272	-28.513	0.000	-29.523	0.000	-21.552
6(3)	0.000	2.610	6.750	-22.272	7.118	0.000	2.855	0.000	0.720
7(1)	0.000	2.610	1.472	-22.272	41.609	0.000	-31.698	0.000	22.915
7(2)	0.000	1.044	2.935	-15.312	-19.971	0.000	-20.706	0.000	-14.868
7(3)	0.000	1.044	3.022	-15.312	4.492	0.000	1.993	0.000	0.444
8(1)	0.000	1.044	1.891	-15.312	28.749	0.000	-22.053	0.000	15.679
8(2)	0.000	-2.610	-1.475	-22.272	-28.615	0.000	-29.534	0.000	-21.552
8(3)	0.000	-2.610	3.001	-22.272	7.350	0.000	3.087	0.000	0.720
9(1)	0.000	-2.610	6.181	-22.272	43.421	0.000	-31.800	0.000	22.915
9(2)	-1.044	-8.004	-10.131	-20.184	-23.226	-1.044	-25.096	-1.044	-19.725
9(3)	-1.044	-8.004	3.103	-20.184	8.371	-1.044	3.649	0.000	1.347
10(1)	-1.044	-8.004	17.187	-20.184	40.632	-1.044	-28.542	1.044	20.551
10(2)	0.000	-2.958	-1.348	-7.134	-6.921	0.000	-7.288	0.000	-6.950
10(3)	0.000	-2.958	3.882	-7.134	4.492	0.000	1.993	0.000	0.903
11(1)	0.000	-2.958	8.744	-7.134	17.613	0.000	-9.370	0.000	7.318
11(2)	0.000	0.000	0.754	-2.088	-1.919	0.000	-2.011	0.000	-1.996
11(3)	0.000	0.000	0.653	-2.088	1.021	0.000	0.561	0.000	0.276
12(1)	0.000	0.000	1.798	-2.088	5.389	0.000	-2.822	0.000	2.180
12(2)	-1.044	0.000	4.520	-8.178	-6.640	0.000	-7.007	0.000	-6.858
12(3)	-1.044	0.000	3.409	-8.178	4.696	0.000	2.105	0.000	0.995
13(1)	-1.044	0.000	2.432	-8.178	17.024	0.000	-9.350	0.000	7.410
13(2)	-1.044	10.092	24.109	-21.228	-24.437	1.044	-25.355	1.044	-20.677
13(3)	-1.044	10.092	8.779	-21.228	8.932	1.044	3.950	0.000	1.347
14(1)	-1.044	10.092	-6.167	-21.228	43.423	1.044	-29.061	-1.044	21.779
14(2)	0.000	2.784	13.050	-25.404	-32.016	0.000	-33.287	0.000	-24.776
14(3)	0.000	2.784	7.758	-25.404	7.758	0.000	3.312	0.000	0.628
15(1)	0.000	2.784	3.132	-25.404	48.198	0.000	-35.369	0.000	25.955
15(2)	0.000	1.044	4.019	-17.400	-23.590	0.000	-24.585	0.000	-17.033
15(3)	0.000	1.044	4.270	-17.400	4.696	0.000	2.105	0.000	0.367
16(1)	0.000	1.044	4.019	-17.400	32.090	0.000	-25.764	0.000	17.767
16(2)	0.000	-0.696	-0.564	-25.404	-32.055	0.000	-33.326	0.000	-24.684
16(3)	0.000	-0.696	3.042	-25.404	7.758	0.000	3.312	0.000	0.720
17(1)	0.000	-0.696	6.222	-25.404	49.029	0.000	-35.485	0.000	26.047
17(2)	-1.044	-4.872	-3.642	-22.272	-26.641	-1.044	-27.559	-1.044	-21.813
17(3)	-1.044	-4.872	4.188	-22.272	8.932	-1.044	3.950	0.000	1.347
18(1)	-1.044	-4.872	9.930	-22.272	44.351	-1.044	-31.357	1.044	22.823
18(2)	-1.044	-1.044	0.770	-8.178	-8.626	0.000	-8.993	0.000	-7.994
18(3)	-1.044	-1.044	3.902	-8.178	4.696	0.000	2.105	0.000	0.995
19(1)	-1.044	-1.044	5.816	-8.178	19.040	0.000	-11.428	0.000	8.362
19(2)	0.000	0.000	0.754	-2.088	-1.919	0.000	-2.011	0.000	-1.996
19(3)	0.000	0.000	0.470	-2.088	1.021	0.000	0.561	0.000	0.276
20(1)	0.000	0.000	0.754	-2.088	6.259	0.000	-2.822	0.000	2.180
20(2)	-1.044	1.044	6.444	-8.178	-8.626	0.000	-8.993	0.000	-7.994
20(3)	-1.044	1.044	4.453	-8.178	4.696	0.000	2.105	0.000	0.995
21(1)	-1.044	1.044	1.398	-8.178	19.040	0.000	-11.520	0.000	8.362
21(2)	-1.044	4.872	15.641	-22.272	-26.564	1.044	-27.559	1.044	-21.813
21(3)	-1.044	4.872	8.932	-22.272	8.932	1.044	3.950	0.000	1.347
22(1)	-1.044	4.872	2.069	-22.272	44.428	1.044	-31.357	-1.044	22.823
22(2)	0.000	0.696	9.183	-25.404	-32.055	0.000	-33.326	0.000	-24.684
22(3)	0.000	0.696	7.758	-25.404	7.758	0.000	3.312	0.000	0.720
23(1)	0.000	0.696	5.007	-25.404	49.029	0.000	-35.485	0.000	26.047
23(2)	0.000	-1.044	3.159	-17.400	-22.546	0.000	-23.541	0.000	-15.912
23(3)	0.000	-1.044	3.409	-17.400	5.893	0.000	2.182	0.000	0.367
24(1)	0.000	-1.044	4.203	-17.400	32.090	0.000	-24.720	0.000	16.723
24(2)	0.000	-2.784	-1.608	-23.490	-32.055	0.000	-33.326	0.000	-22.862
24(3)	0.000	-2.784	3.042	-23.490	7.758	0.000	3.312	0.000	0.628
25(1)	0.000	-2.784	8.310	-23.490	46.071	0.000	-35.485	0.000	24.041
25(2)	-1.044	-9.048	-10.950	-19.314	-20.571	-1.044	-21.490	-1.044	-18.671
25(3)	-1.044	-9.048	3.144	-19.314	8.932	-1.044	3.950	0.000	1.347
26(1)	-1.044	-9.048	16.194	-19.314	38.589	-1.044	-25.441	1.044	19.942

VIADUCTO BORGES BLANQUES									
-1.044	0.000	1.399	-7.134	-6.524	0.000	-6.799	0.000	-6.950	
-1.044	0.000	2.338	-7.134	4.849	0.000	2.182	0.000	1.072	
-1.044	0.000	2.443	-7.134	18.010	0.000	-9.326	0.000	7.318	
0.000	0.000	1.614	-2.088	-1.919	0.000	-2.011	0.000	-2.088	
0.000	0.000	0.623	-2.088	1.174	0.000	0.638	0.000	0.278	
0.000	0.000	-0.474	-2.088	6.259	0.000	-2.822	0.000	2.068	
0.000	2.958	5.791	-6.090	-5.368	0.000	-5.552	0.000	-5.998	
0.000	2.958	1.549	-6.090	3.879	0.000	1.656	0.000	0.720	
0.000	2.958	-1.517	-6.090	12.032	0.000	-7.527	0.000	6.182	
-1.044	8.004	19.982	-13.224	-13.252	1.044	-13.711	1.044	-12.857	
-1.044	8.004	7.067	-13.224	6.023	1.044	2.820	0.000	1.164	
-1.044	8.004	-6.118	-13.224	27.290	1.044	-17.034	-1.044	13.591	
0.000	1.914	9.060	-14.268	-16.170	0.000	-17.934	0.000	-12.504	
0.000	1.914	5.257	-14.268	5.257	0.000	2.406	0.000	0.720	
0.000	1.914	1.404	-14.268	27.504	0.000	-20.093	0.000	13.944	
0.000	-1.218	1.418	-9.048	-11.284	0.000	-12.788	0.000	-8.604	
0.000	-1.218	2.988	-9.048	2.988	0.000	1.733	0.000	0.444	
0.000	-1.218	6.116	-9.048	17.948	0.000	-14.212	0.000	9.492	
0.000	-10.092	-12.834	-12.180	-14.082	0.000	-14.894	0.000	-11.552	
0.000	-10.092	3.267	-12.180	5.410	0.000	2.483	0.000	0.628	
0.000	-10.092	19.530	-12.180	24.546	0.000	-16.869	0.000	12.808	
-1.044	-6.090	-7.343	-6.090	-4.069	-1.044	-4.804	-1.044	-5.631	
-1.044	-6.090	2.749	-6.090	6.023	-1.044	2.820	0.000	0.980	
0.000	4.002	11.797	-6.090	16.115	-1.044	-7.576	1.044	6.626	
0.000	4.002	6.441	-5.046	-3.396	0.000	-3.672	0.000	-3.818	
0.000	4.002	0.477	-5.046	4.032	0.000	1.733	0.000	0.720	
0.000	4.002	-3.651	-5.046	9.828	0.000	-5.464	0.000	4.186	
0.000	1.044	2.255	-1.044	-1.385	0.000	-1.477	0.000	-0.952	
0.000	1.044	0.041	-1.044	0.408	0.000	0.225	0.000	0.184	
0.000	1.044	-0.877	-1.044	2.791	0.000	-1.829	0.000	1.044	
0.000	382.017	29.058	7.018	0.348	0.000	0.348	0.000	7.018	
0.000	382.017	14.592	7.018	1.276	0.000	1.276	0.000	7.018	
0.000	382.017	0.000	7.018	0.000	0.000	0.000	0.000	171.771	

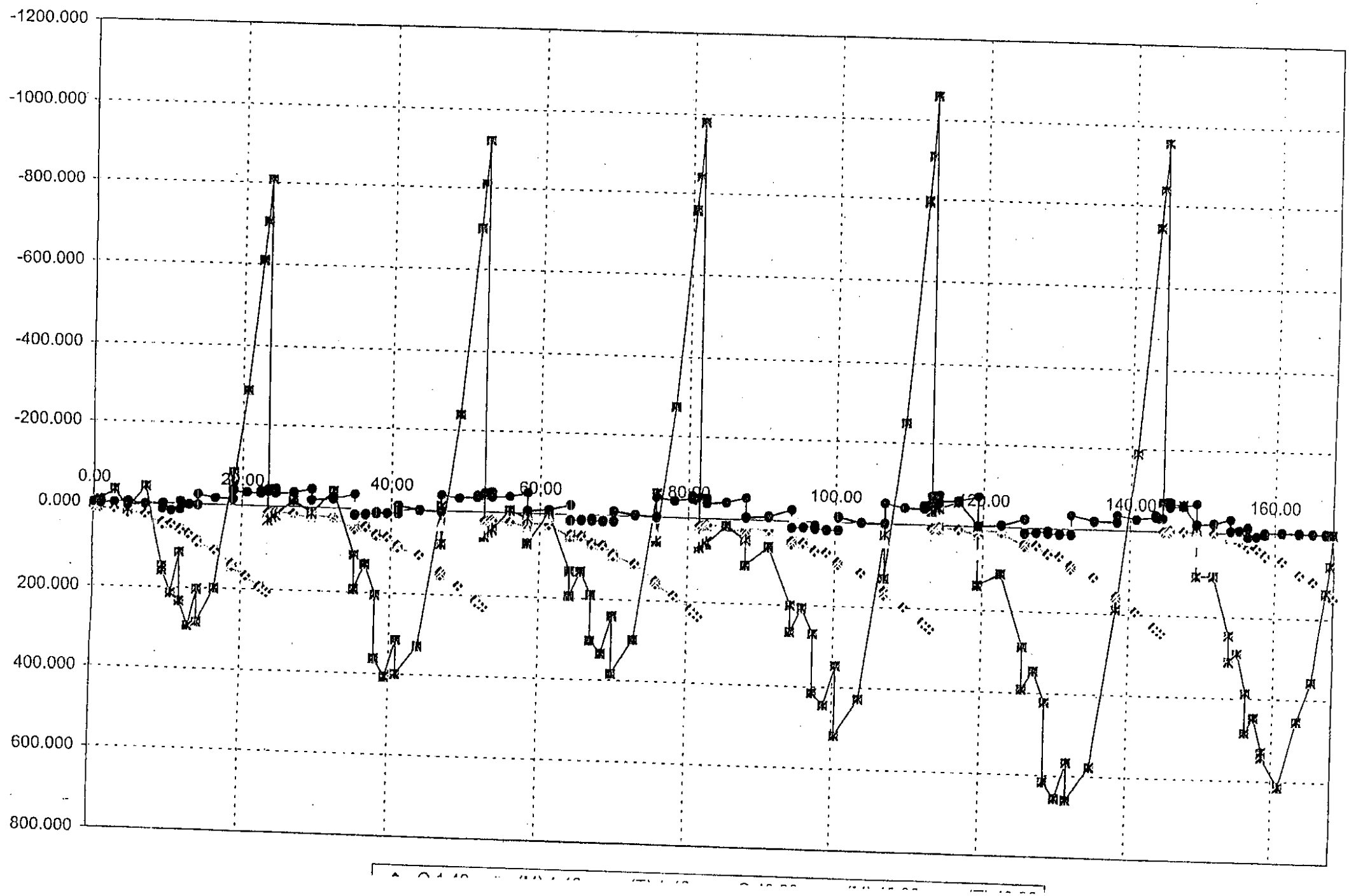
Hip A. M Qcon Tcon



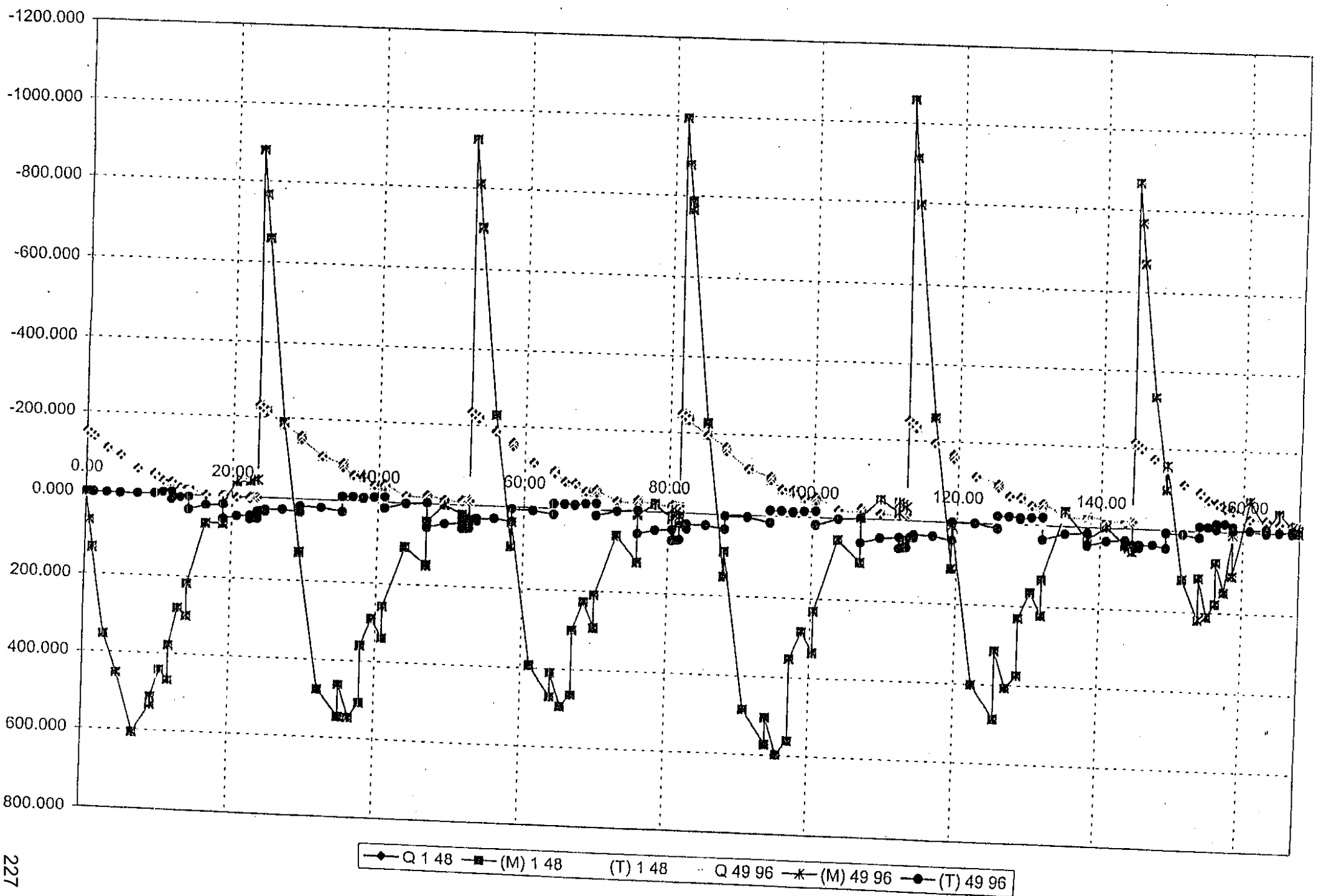
Hip A. M Qcon Tcon



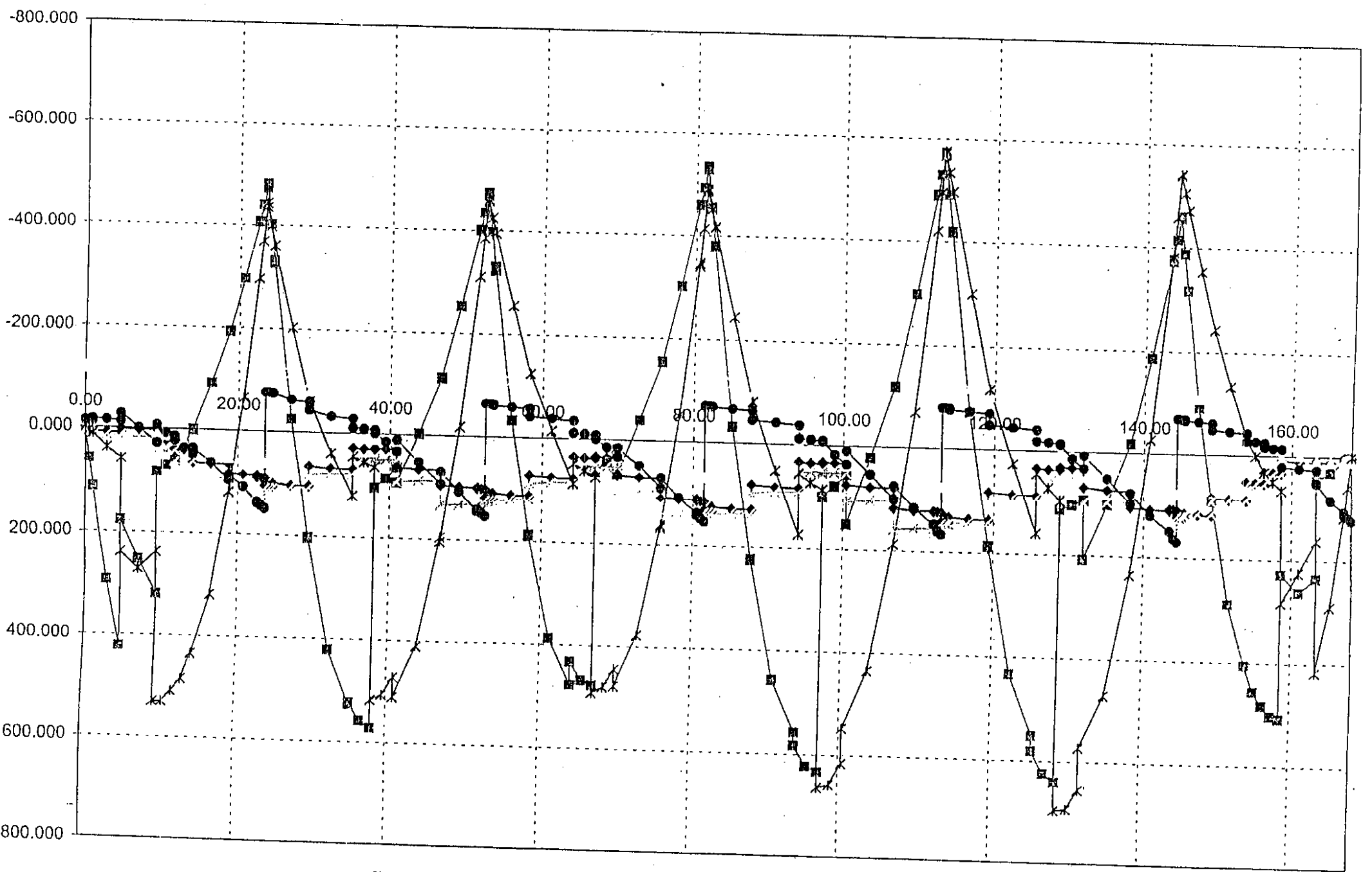
Hip A. Q Mcon Tcon



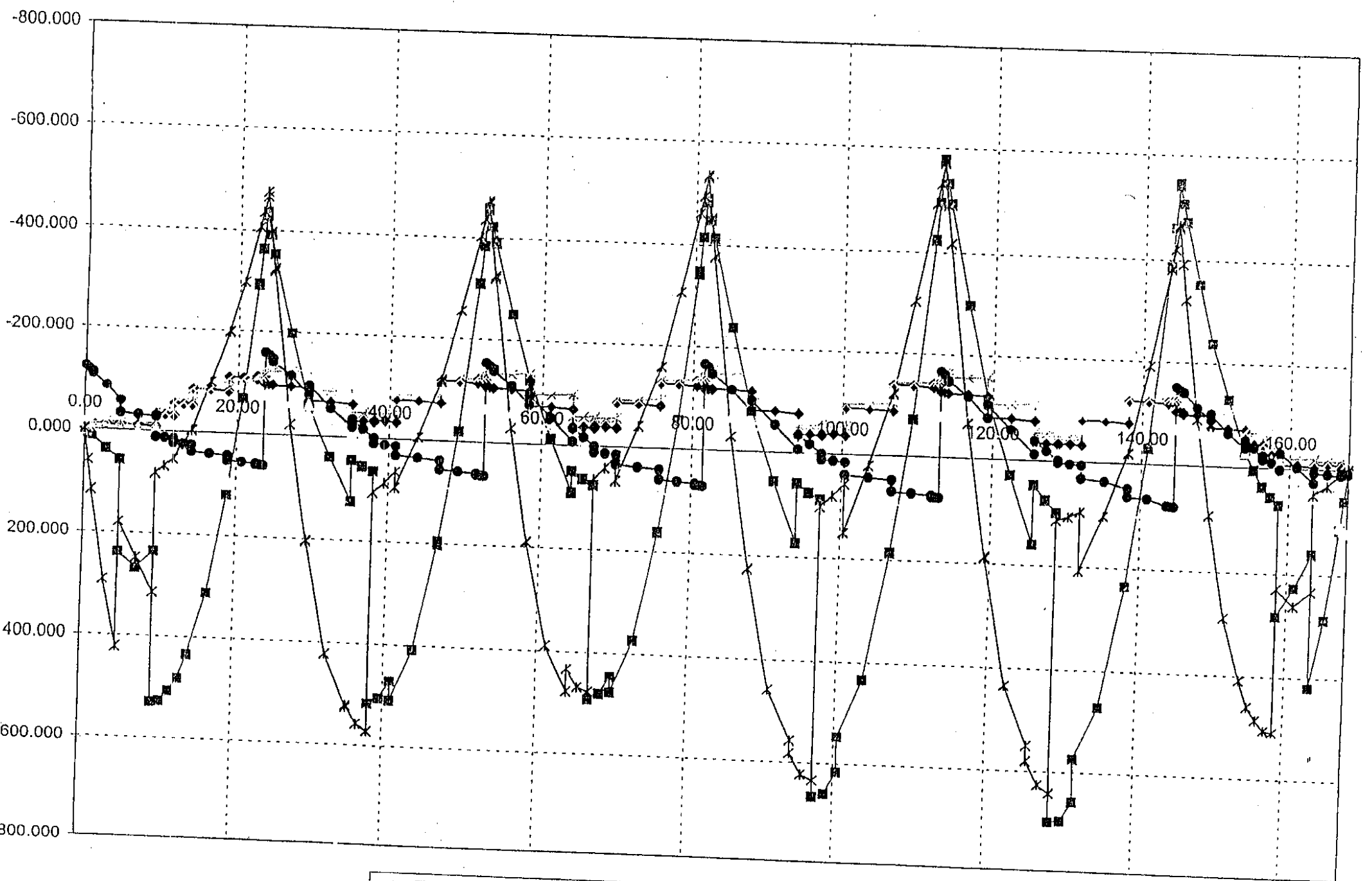
Hip A. Q Mcon Tcon



Hip A. T Mcon Qcon

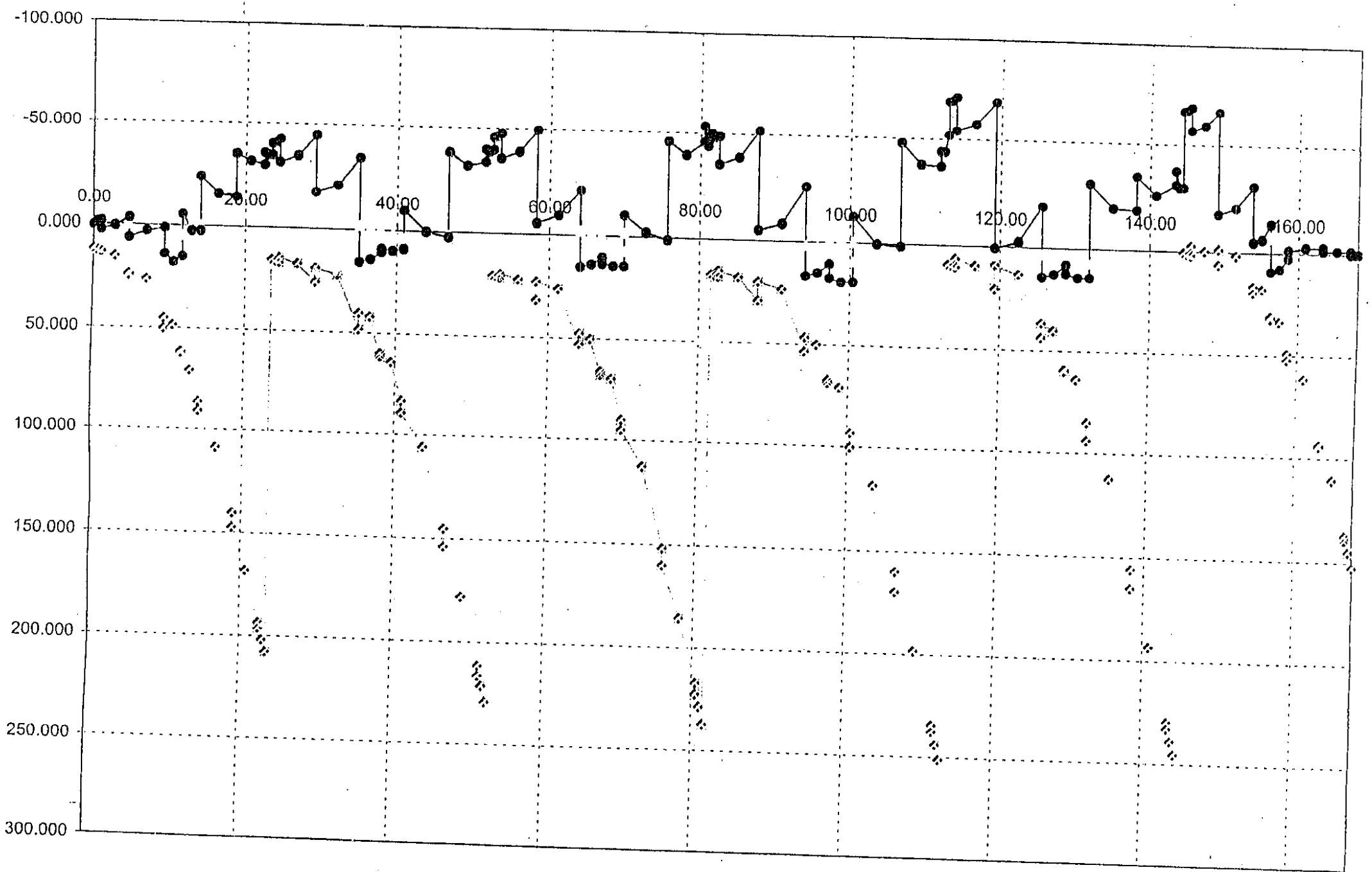


Hip A. T Mcon Qcon

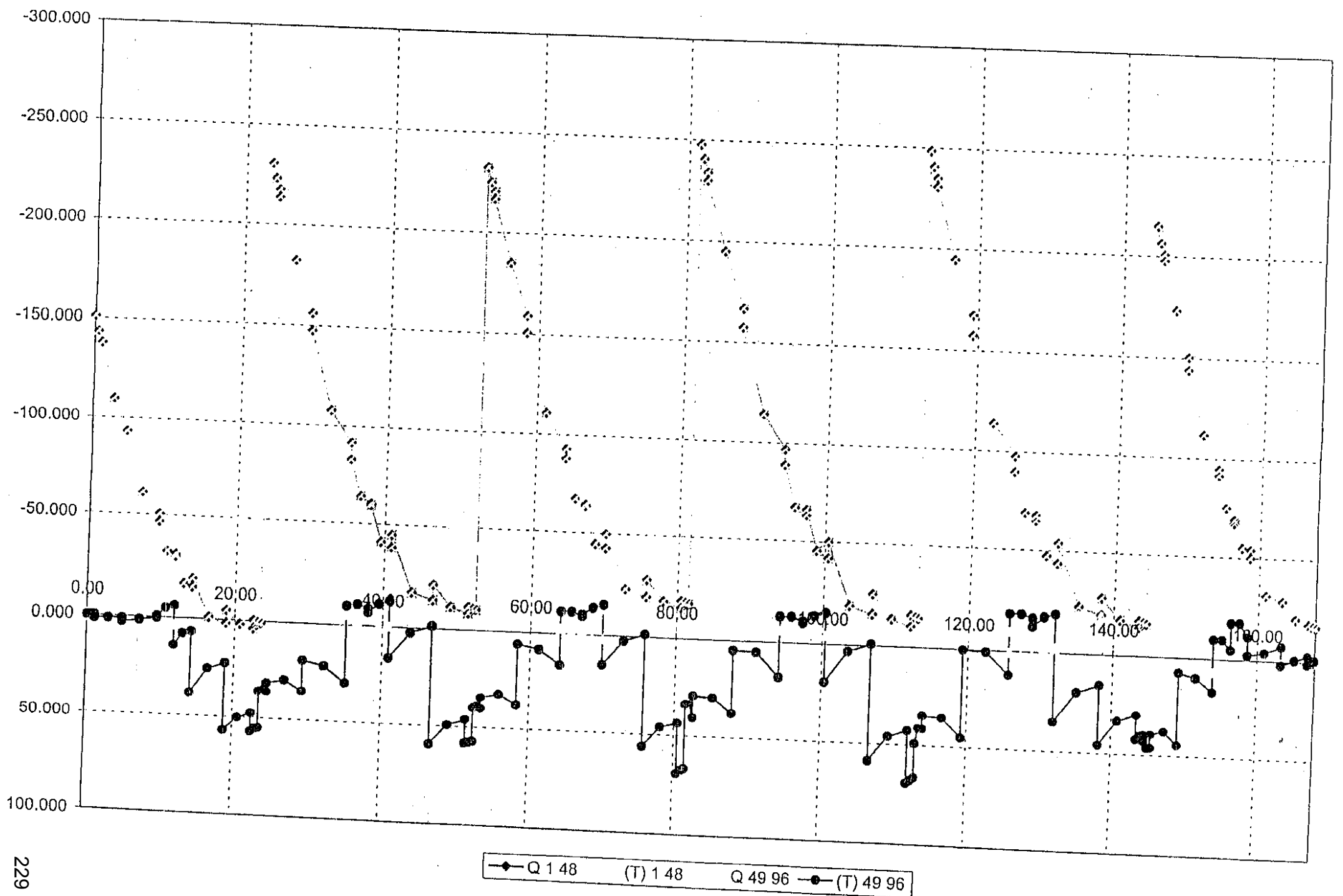


—●— T 1 48 —■— (M) 1 48 (Q) 1 48 —●— T 49 96 —×— (M) 49 96 —●— (Q) 49 96

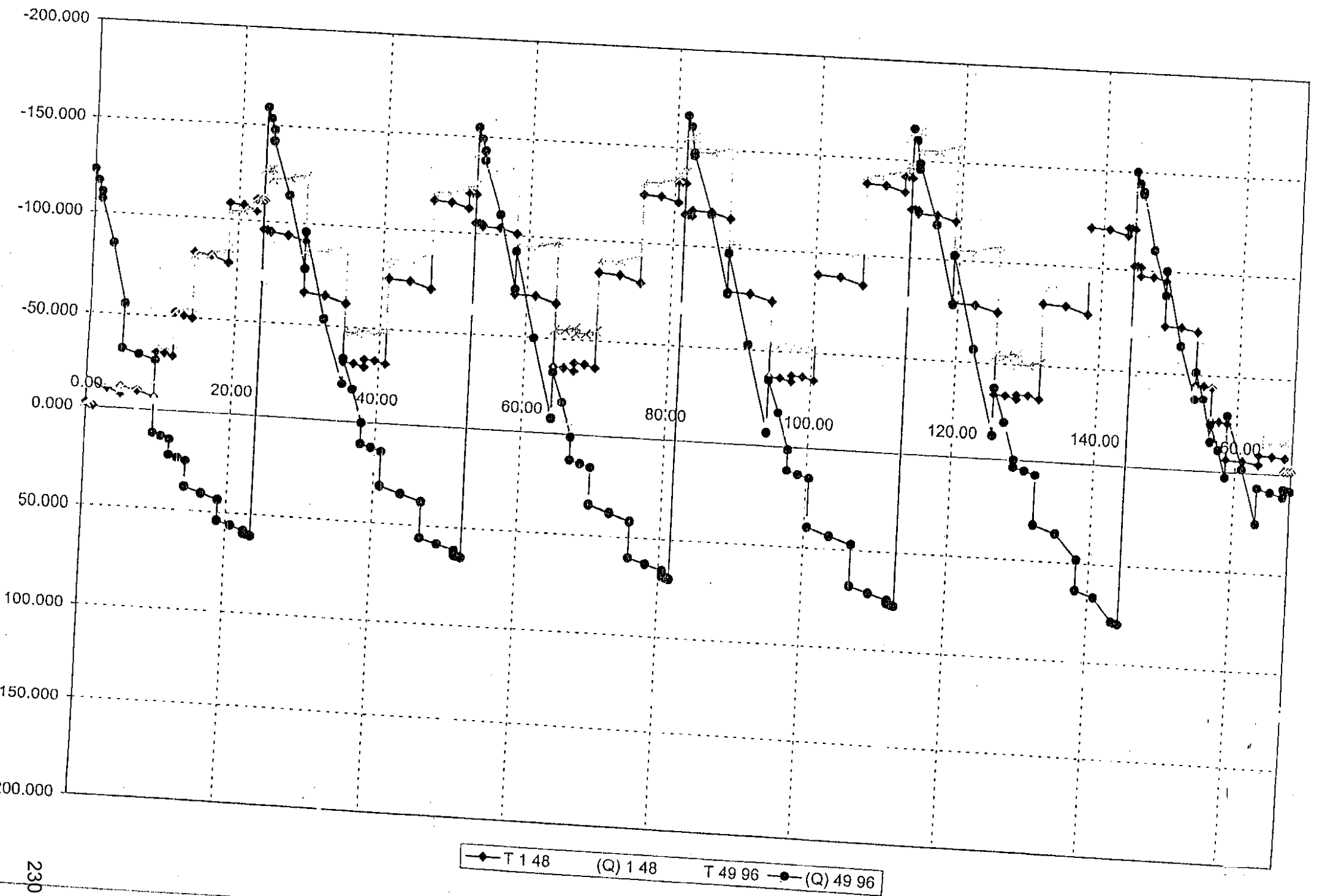
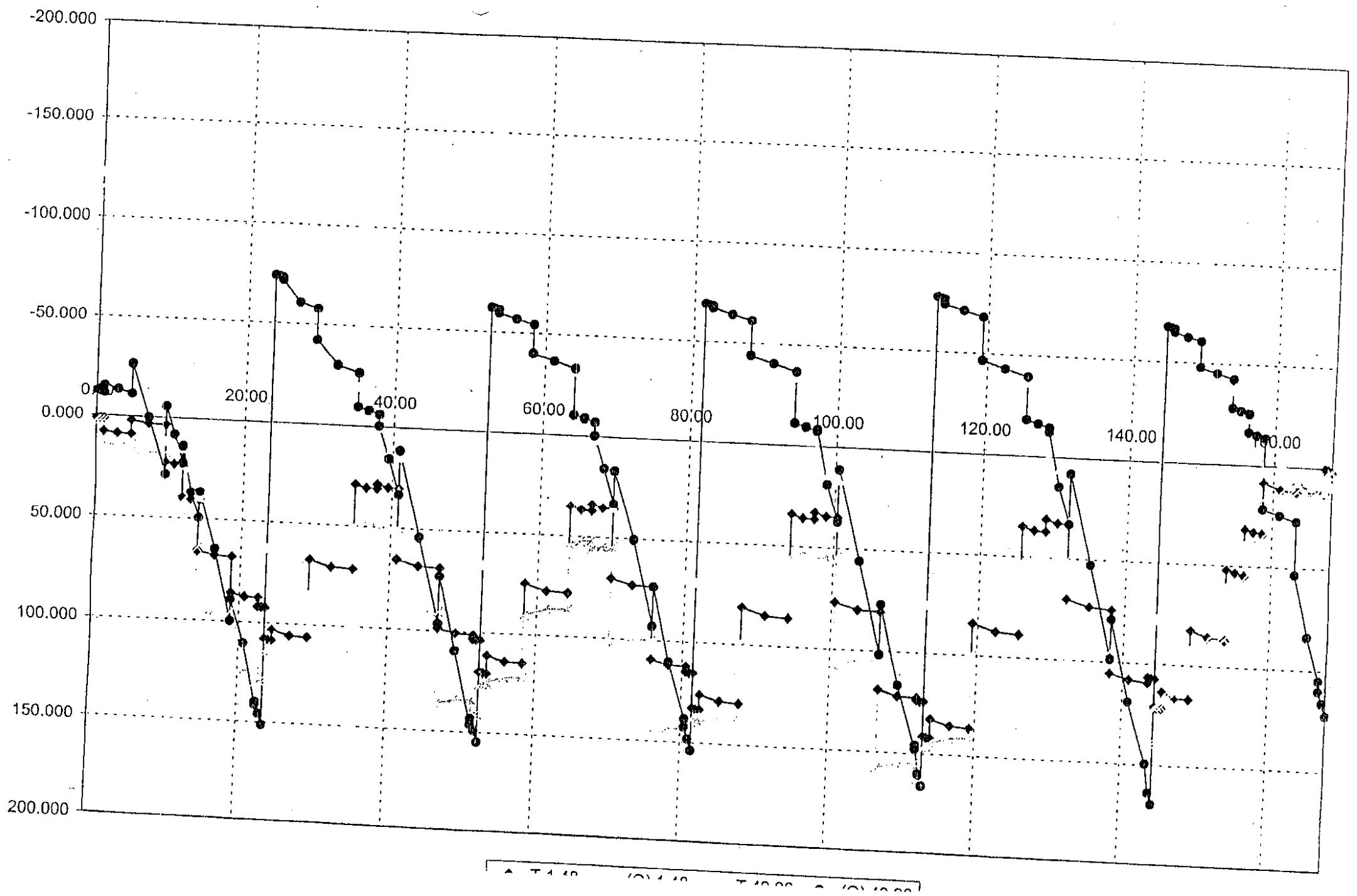
Hip A. Q Mcon Tcon



Hip A. Q Mcon Tcon



Q 1 48 (T) 1 48 Q 49 96 (T) 49 96



HIPOTESIS: B

Eje 1 (49-96) ripado +30cm; Eje 2 (1-48) sin ripar

Envolvente IPF75B positiva

Coef impacto 1.16

VIADUCTO BORGES BLANQUES

ARRA

X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
0.00	1.077	-115.261	0.000	12.246	0.000	-0.091	0.000	-2.167	-13.019
0.50	1.133	-109.527	56.608	12.829	-6.259	-0.035	68.894	0.408	-135.556
1.00	1.190	-103.692	109.527	13.413	-7.578	0.021	134.681	0.971	-129.721
1.00	4.902	-102.463	108.957	13.189	-7.578	-1.599	134.668	-4.754	-131.365
2.85	5.696	-80.694	279.025	15.290	-33.135	-1.396	342.460	-2.729	-101.607
4.70	5.909	-50.820	400.983	24.859	14.969	-0.132	510.713	0.253	-79.435
4.70	-2.948	-30.706	156.317	23.491	14.852	-3.982	510.584	-6.014	-83.457
7.05	-1.480	-28.022	226.965	26.175	-43.731	-3.712	660.142	-3.314	-47.865
9.40	-1.137	-25.221	290.941	50.681	149.796	-4.328	741.112	0.118	-19.858
9.40	16.746	11.801	55.587	44.782	125.626	-13.585	741.112	-3.258	-22.649
10.58	17.573	13.201	43.178	48.108	181.441	-16.261	750.558	-1.908	0.107
11.75	17.708	14.602	29.663	62.112	83.427	-12.285	744.796	-0.558	10.435
11.75	33.603	21.291	29.663	59.256	200.173	5.524	743.758	-4.862	8.556
12.93	34.532	22.676	5.295	68.941	265.145	0.016	725.335	-2.668	31.195
14.10	34.667	24.077	-23.015	84.520	177.091	1.367	682.354	-1.318	47.824
14.10	59.780	35.616	-21.965	85.832	256.546	24.380	682.354	-6.062	44.897
16.45	61.738	38.704	-107.517	103.512	186.113	18.328	549.254	-1.284	70.961
18.80	62.081	41.388	-198.982	135.778	-83.938	20.009	336.502	-5.740	105.507
18.80	78.321	47.802	-200.375	138.432	-54.132	35.288	336.399	-13.499	102.360
20.65	80.122	50.306	-292.053	159.729	-271.208	33.925	167.746	25.562	71.101
22.50	80.409	52.406	-387.597	185.111	-578.038	35.044	63.890	28.066	19.688
22.50	82.180	51.659	-385.537	184.475	-579.188	36.145	63.879	25.360	18.390
23.00	82.641	52.344	-412.243	190.310	-669.828	35.658	54.449	-0.527	16.961
23.50	82.782	52.928	-438.822	196.145	-766.034	36.220	47.819	-3.572	11.255
23.50	95.478	-151.452	-447.061	15.926	38.479	39.139	47.819	-5.484	5.549
24.00	95.939	-145.718	-372.889	16.509	29.911	39.195	46.540	-4.377	0.881
24.50	95.995	-139.883	-301.820	17.093	25.158	40.302	44.875	-4.321	6.715
24.50	88.188	-136.543	-306.970	14.579	24.120	32.341	44.875	-5.017	7.315
26.90	90.939	-108.823	-12.233	17.379	-13.836	32.611	124.277	-25.552	-91.937
29.30	91.294	-72.063	202.401	26.482	14.816	40.233	363.606	-1.989	-103.686
29.30	49.586	-93.736	199.626	18.879	14.841	19.394	363.085	-7.445	-107.728
32.20	53.085	-51.243	413.126	22.263	-41.546	19.721	650.484	-0.905	-76.705
35.10	53.496	-17.401	512.486	49.103	109.589	30.374	827.984	2.358	-45.488
35.10	11.412	-32.829	507.367	40.824	186.564	-4.597	827.984	-2.842	-47.744
36.55	13.167	-16.491	543.530	42.458	124.565	-4.428	878.950	-0.310	-20.904
38.00	13.409	1.013	556.118	62.413	198.391	-2.345	896.592	2.141	-7.776
38.00	11.721	10.658	84.932	59.621	338.966	-1.212	896.592	-3.086	-9.434
39.45	13.375	12.393	68.236	64.055	383.832	-0.676	894.387	-0.249	10.580
40.90	13.617	14.143	47.206	83.310	294.401	1.876	860.479	2.170	37.536
40.90	49.806	30.115	76.075	86.065	370.508	9.090	859.615	-2.537	34.290
43.80	53.103	33.600	-14.916	102.403	313.002	2.725	716.027	0.486	66.381
46.70	53.513	36.984	-117.996	142.371	-19.361	4.207	457.080	2.933	98.732
46.70	84.059	51.873	-122.447	145.684	70.010	37.243	457.969	-3.292	96.045
49.10	86.624	54.876	-250.368	170.715	-225.923	34.311	222.112	17.547	95.242
51.50	87.063	57.677	-386.738	203.973	-671.357	39.605	121.165	-1.486	-2.495
51.50	87.836	57.716	-385.628	205.255	-672.394	39.788	121.165	-2.232	-1.894
52.00	88.398	58.401	-414.497	210.040	-772.682	39.301	120.694	-2.175	3.941
52.50	88.539	58.984	-444.472	217.625	-877.564	40.738	121.135	-2.119	-0.727
52.50	102.919	-148.427	-447.563	21.081	63.022	45.645	121.135	-3.129	11.741
53.00	103.566	-142.676	-374.189	21.664	51.349	45.701	116.751	-2.022	7.073
53.50	103.622	-136.842	-304.022	22.248	42.420	46.808	110.911	-1.966	12.908
53.50	92.733	-133.278	-308.759	19.850	45.417	37.786	110.794	-3.724	13.624
55.90	95.771	-105.356	-20.276	22.651	-3.002	38.056	187.748	-29.009	-85.617
58.30	96.142	-68.799	187.057	32.803	13.086	45.678	420.392	0.842	-99.748
58.30	54.125	-90.120	188.190	23.170	71.209	8.247	421.781	-3.150	-103.424
61.20	57.894	-47.526	381.636	26.555	-1.858	8.573	702.581	-0.526	-74.501
64.10	58.423	-5.033	465.039	53.570	134.684	18.352	869.275	2.737	-43.285
64.10	15.715	-31.639	419.935	48.070	188.159	-4.029	869.391	-3.893	-45.540
65.55	17.459	-15.301	455.358	50.579	128.150	-3.872	915.748	-1.474	-17.649
67.00	17.813	2.203	463.278	68.608	184.695	-1.778	930.615	0.498	-5.571
67.00	15.500	12.713	46.579	66.002	279.513	-5.747	930.615	-2.727	-6.179
68.45	17.256	14.346	-26.360	69.561	313.498	-5.210	922.466	-1.039	12.784
69.90	17.413	16.097	3.190	89.691	220.047	-3.534	883.416	1.380	40.791
69.90	53.218	33.513	48.887	91.700	354.868	9.217	884.350	-4.199	37.662
72.80	56.448	36.999	-50.771	108.913	281.557	4.778	730.206	-0.936	69.753
75.70	56.943	40.383	-162.219	148.881	-64.868	5.384	463.121	3.184	98.851
75.70	93.564	55.879	-163.535	151.700	49.291	43.798	462.153	-2.655	96.013
78.10	96.315	58.882	-301.092	177.607	-259.60				

2(1)	9.40	14.566	-4.940	553.146	45.247	161.341	13.230	774.990	2.329	-21.650
2(2)	10.58	16.527	8.896	548.936	48.533	214.861	17.528	783.009	2.649	0.834
2(3)	11.75	16.848	22.733	527.793	62.369	116.907	15.254	776.546	2.969	11.039
3(1)	11.75	33.799	16.043	527.793	61.488	235.062	-5.203	775.496	4.594	11.268
3(2)	12.93	36.000	38.172	499.422	71.058	295.545	2.727	753.728	4.914	33.637
3(3)	14.10	36.320	50.971	448.007	86.451	205.050	3.047	707.943	5.235	50.067
4(1)	14.10	59.774	39.941	449.045	91.049	285.675	-24.580	707.943	5.188	50.552
4(2)	16.45	64.416	66.934	320.435	108.517	201.544	-15.292	562.142	-2.170	76.412
4(3)	18.80	65.230	102.101	117.162	140.399	-79.745	-12.949	336.539	0.089	110.698
5(1)	18.80	82.980	95.131	118.184	147.798	-49.579	-35.712	336.410	-3.389	112.645
5(2)	20.65	87.248	115.321	-76.772	168.841	-284.619	-31.746	149.318	-26.095	80.980
5(3)	22.50	87.929	145.761	-318.989	193.920	-607.958	-29.536	26.597	-17.217	30.366
6(1)	22.50	86.287	146.138	-318.191	196.405	-608.981	-36.073	26.864	-23.411	32.250
6(2)	23.00	87.381	151.663	-392.720	202.170	-705.885	-34.901	10.195	3.895	30.663
6(3)	23.50	87.714	157.429	-469.725	207.935	-808.065	-34.768	-3.216	9.993	25.001
7(1)	23.50	68.577	-82.405	-461.930	2.623	-12.584	-42.295	-3.216	5.499	-7.880
7(2)	24.00	69.671	-81.588	-419.769	3.199	-14.652	-40.961	2.127	5.795	-12.492
7(3)	24.50	69.804	-81.012	-378.498	3.776	-12.793	-40.665	7.162	7.129	-6.727
8(1)	24.50	60.464	-77.826	-378.738	5.239	-13.643	-43.207	7.162	-2.964	-2.113
8(2)	26.90	66.987	-65.731	-205.615	8.006	-29.019	-34.802	108.464	27.955	-100.874
8(3)	29.30	67.828	-62.963	-49.771	17.000	21.216	-35.663	370.646	14.820	-113.033
9(1)	29.30	28.757	-44.505	-49.781	14.884	21.390	-33.221	369.784	9.739	-111.028
9(2)	32.20	37.054	-32.273	53.619	18.228	-23.189	-23.482	667.122	-2.870	-80.366
9(3)	35.10	38.028	-28.930	142.380	44.748	137.004	-25.950	855.672	-2.096	-49.523
10(1)	35.10	-1.606	-10.115	63.847	39.693	214.507	-12.317	855.672	-1.279	-48.201
10(2)	36.55	2.556	-8.501	75.280	41.307	154.291	-8.555	907.650	-0.879	-21.681
10(3)	38.00	3.130	-6.771	85.112	61.024	228.631	-6.482	926.714	-1.370	-8.709
11(1)	38.00	1.211	0.167	533.073	59.988	371.083	-5.286	926.714	1.051	-8.417
11(2)	39.45	5.133	16.070	520.429	64.370	413.616	-3.848	923.215	0.576	11.358
11(3)	40.90	5.707	33.365	484.731	83.395	323.304	-4.339	888.284	0.949	37.993
12(1)	40.90	40.255	13.979	522.797	89.566	401.419	-9.987	887.407	1.007	38.333
12(2)	43.80	48.072	55.824	414.237	105.708	331.278	0.299	732.481	1.983	70.042
12(3)	46.70	49.046	97.910	196.645	145.200	-10.542	3.667	463.414	-12.790	102.016
13(1)	46.70	81.016	77.594	205.517	154.158	79.592	-39.079	464.265	-18.524	105.612
13(2)	49.10	87.099	113.434	-27.624	178.891	-237.212	-32.040	206.572	-19.738	103.780
13(3)	51.50	88.140	149.755	-329.837	211.752	-701.968	-33.129	83.777	12.668	6.921
14(1)	51.50	88.290	149.183	-330.748	216.973	-703.018	-40.021	83.777	2.298	11.534
14(2)	52.00	89.624	154.708	-406.916	221.701	-809.204	-38.850	76.586	3.632	17.299
14(3)	52.50	89.958	160.473	-484.194	229.195	-919.993	-39.581	70.340	4.681	12.687
15(1)	52.50	71.560	-70.277	-480.954	7.792	11.725	-50.503	70.340	-0.025	-1.661
15(2)	53.00	73.094	-69.501	-444.714	8.368	6.700	-49.169	72.641	0.271	-6.273
15(3)	53.50	73.228	-68.924	-411.013	8.945	4.382	-48.873	73.499	1.605	-0.508
16(1)	53.50	64.030	-65.208	-410.962	10.523	7.417	-50.730	73.384	-7.603	4.222
16(2)	55.90	71.234	-62.240	-258.224	13.291	-18.574	-42.326	172.064	31.373	-94.265
16(3)	58.30	72.114	-58.993	-114.270	23.322	19.681	-41.186	427.160	20.915	-109.464
17(1)	58.30	29.254	-42.473	-115.418	19.177	78.515	-23.412	428.185	12.875	-106.748
17(2)	61.20	38.191	-39.130	3.349	22.520	17.380	-13.674	719.308	-3.102	-78.162
17(3)	64.10	39.445	-35.546	109.801	49.213	163.051	-15.276	897.147	-2.328	-47.318
18(1)	64.10	-1.453	-10.842	69.495	46.948	216.208	-12.786	897.264	-0.367	-45.998
18(2)	65.55	2.683	-9.227	83.317	49.427	158.201	-9.051	944.834	0.007	-18.440
18(3)	67.00	3.523	-7.498	94.951	67.241	215.339	-6.951	961.283	0.407	-6.506
19(1)	67.00	1.919	0.295	506.823	66.368	311.186	-1.647	961.283	0.771	-5.176
19(2)	68.45	6.082	16.438	492.737	69.884	342.675	-0.209	951.426	1.171	13.561
19(3)	69.90	6.455	33.733	458.149	89.774	248.232	0.165	911.165	1.545	41.234
20(1)	69.90	46.095	19.140	489.352	95.183	385.736	-10.214	912.086	2.470	41.689
20(2)	72.80	53.752	52.339	380.687	112.190	299.642	-1.830	746.397	3.244	73.398
20(3)	75.70	54.926	94.424	162.044	151.682	-56.333	2.403	468.855	-15.263	102.699
21(1)	75.70	87.466	78.664	166.239	160.560	58.892	-46.550	467.851	-21.988	105.775
21(2)	78.10	93.989	114.504	-63.368	186.157	-271.931	-39.511	208.025	-21.870	94.043
21(3)	80.50	94.829	142.177	-368.667	217.289	-757.722	-44.924	87.245	7.885	3.237
22(1)	80.50	97.994	148.537	-362.933	222.613	-758.657	-53.916	87.360	-1.713	6.915
22(2)	81.00	99.528	154.062	-437.121	228.378	-840.609	-44.097	82.824	1.138	12.680
22(3)	81.50	99.662	159.828	-516.681	236.738	-978.760	-50.017	76.489	1.434	8.068
23(1)	81.50	79.772	-77.122	-511.956	4.110	18.724	-54.761	76.489	-4.082	-6.392
23(2)	82.00	81.307	-76.546	-473.154	4.687	16.457	-53.427	80.510	-2.748	-11.004
23(3)	82.50	81.440	-75.729	-434.373	5.263	17.290	-52.093	85.558	-1.414	-5.239
24(1)	82.50	75.282	-72.602	-435.363	6.169	22.392	-53.927	85.407	-11.650	-0.132
24(2)	85.15	82.645	-69.489	-246.460	9.283	2.174	-44.722	198.095	17.924	-109.169
24(3)	87.80	84.420	-65.771	-69.290	20.582	56.812	-45.124	501.555	15.663	-124.541
25(1)	87.80	34.142	-45.895	-68.215	16.655	116.678	-27.367	501.568	9.945	-120.530
25(2)	90.95	43.480	-42.321	70.532	20.230	81.906	-15.963	833.842	-4.402	-90.329
25(3)	94.10	45.428	-38.391	194.890	50.209	231.064	-19.701	1035.098	-3.575	-46.514
26(1)	94.10	-1.356	-11.743	77.947	45.782	288.571	-16.264	1034.956	-1.560	-45.927
26(2)	95.68	3.486	-10.014	95.479	49.241	230.052	-12.262	1085.123	-1.160	-24.135
26(3)	97.25	4.153	-8.169	107.632	68.209	294.237	-10.934	1101.402	-0.733	-3.265
27(1)	97.25	1.523	-8.129	681.408	67.536	427.068	-9.519	1101.402	-0.398	-3.822
27(2)	98.83	5.965	18.968	673.477	71.283	457.235	-7.043	1083.963	0.003	25.869
27(3)	100.40	6.592	37.416	629.667	93.191	360.029	-6.616	1032.812	0.429	46.739
28(1)	100.40	51.440	13.098	560.361	100.439	525.006	-12.469	1031.762	2.303	47.131
28(2)	103.55	60.071	57.366	439.361	117.965	429.435	0.638	827.339	3.130	90.947
28(3)	106.70	61.325	102.795	188.016	159.763	26.850	2.357	490.376	-12.915	123.223
29(1)	106.70	100.258	82.393	187.642	170.568	131.257	-48.795	490.373	-18.641	127.232
29(2)	109.35	107.822	120.415	-78.994	198.587	-248.590	-37.870	171.833	-34.395	120.544
29(3)	112.00	108.716	151.432	-440.810	233.754	-795.607	-36.311	31.836	10.366	6.130

VIADUCTO BORGES BLANQUES										
112.00	108.590	152.188	-441.378	237.362	-791.372	-44.375	31.719	-1.360	10.198	
112.50	110.124	166.601	-519.069	243.992	-907.840	-44.242	26.218	-0.026	15.963	
113.00	110.257	172.126	-602.990	251.487	-1060.283	-51.892	18.585	0.271	11.351	
113.00	90.153	-85.703	-600.067	-4.081	-83.907	-75.008	18.585	-5.624	-18.259	
113.50	91.487	-85.127	-556.781	-3.504	-82.155	-73.674	29.298	-5.328	-22.871	
114.00	91.821	-84.310	-514.243	-2.927	-76.961	-73.377	38.743	-3.994	-17.106	
114.00	81.689	-79.422	-513.603	-2.898	-78.127	-71.687	38.627	-13.597	-12.000	
116.65	89.253	-76.224	-304.704	0.100	-70.803	-62.483	189.482	19.178	-116.622	
119.30	91.067	-72.631	-106.951	11.515	8.903	-61.847	510.482	15.216	-123.160	
119.30	36.827	-48.678	-105.587	5.054	148.385	-21.638	509.353	11.629	-121.211	
122.45	46.165	-44.989	44.937	9.608	130.063	-10.235	829.337	-1.740	-85.706	
125.60	48.353	-41.174	180.470	40.337	317.768	-12.070	1017.485	-1.777	-43.044	
125.60	-1.889	-18.621	66.015	35.919	412.811	-18.076	1017.359	-1.713	-41.698	
127.18	2.780	-16.776	93.932	39.493	369.798	-14.047	1061.451	-1.286	-20.655	
128.75	3.447	-14.931	116.525	59.498	446.054	-12.718	1069.603	0.005	9.036	
128.75	0.484	-11.974	713.067	59.538	628.027	-17.030	1069.603	0.324	8.491	
130.33	4.953	15.008	710.048	64.208	667.453	-14.527	1046.023	0.751	30.284	
131.90	5.580	33.456	669.834	85.078	580.903	-14.100	986.860	1.178	52.191	
131.90	45.883	10.060	585.411	94.389	660.954	-31.552	986.976	2.175	51.496	
135.05	54.781	54.567	477.724	111.915	579.335	-18.418	770.452	3.028	94.273	
138.20	57.649	99.757	236.556	155.615	189.831	-16.726	423.951	-4.357	125.170	
138.20	88.862	83.867	236.179	165.698	190.682	-35.696	422.899	-8.680	126.824	
140.85	96.226	123.531	-37.279	193.602	-187.612	-25.636	120.259	-6.974	104.412	
143.50	99.401	153.145	-400.067	228.885	-745.411	-30.131	19.487	4.894	2.105	
143.50	95.768	155.274	-400.776	232.321	-746.462	-37.941	19.487	-5.521	7.212	
144.00	97.102	169.687	-478.753	238.951	-837.851	-29.852	14.344	-4.187	12.977	
144.50	97.475	175.212	-565.504	245.581	-957.106	-29.719	10.413	2.676	7.515	
144.50	76.272	-74.995	-561.353	-12.688	-119.982	-74.382	10.413	-3.573	-25.116	
145.00	77.606	-74.419	-524.514	-12.111	-112.166	-73.048	25.496	15.343	-36.030	
145.50	77.980	-73.602	-485.935	-11.535	-102.586	-72.752	45.301	41.584	-35.516	
145.50	68.064	-70.342	-486.958	-12.535	-102.853	-72.146	45.034	36.063	-33.365	
147.35	74.867	-68.152	-360.017	-10.344	-82.326	-65.343	169.291	27.736	-78.626	
149.20	76.575	-65.596	-236.629	-4.118	-13.718	-65.462	357.197	7.174	-110.886	
149.20	45.331	-50.533	-236.857	-6.557	102.984	-33.810	356.033	4.084	-109.482	
151.55	53.469	-47.765	-120.336	-3.790	115.301	-25.672	578.236	4.669	-74.864	
153.90	56.270	-44.873	-13.486	14.082	272.774	-27.744	721.779	-4.957	-49.731	
153.90	23.055	-29.367	-12.347	13.632	337.691	-14.891	721.779	-3.770	-48.353	
155.08	26.456	-27.983	20.588	15.016	320.552	-11.689	766.755	-3.690	-32.960	
156.25	29.751	-26.715	52.438	28.218	419.285	-11.769	788.871	-3.396	-10.591	
156.25	7.437	-16.467	52.438	31.481	520.111	1.191	787.833	-4.859	-10.220	
157.43	10.639	-15.084	70.895	32.865	483.894	4.393	792.593	-4.539	1.022	
158.60	12.359	-13.815	85.529	48.143	567.445	3.616	783.976	-4.219	23.391	
158.60	-11.663	22.930	299.381	52.270	545.124	-2.061	783.976	-3.963	23.732	
160.95	-3.725	25.697	240.172	61.783	613.926	-2.485	697.636	-3.350	50.368	
163.30	0.237	28.109	172.912	94.529	456.949	-1.845	541.352	-2.709	86.573	
163.30	-2.455	55.325	426.067	94.031	457.986	-1.733	542.388	-1.733	85.902	
165.15	4.348	85.765	294.331	110.289	357.958	-1.253	362.974	-1.253	106.657	
167.00	8.217	106.155	116.548	137.212	137.872	-0.746	143.060	-0.746	137.212	
167.00	-2.225	111.947	117.712	139.324	139.036	-0.123	143.187	-0.123	139.324	
167.50	-0.891	117.712	60.435	145.089	72.818	0.010	72.818	0.010	145.089	
168.00	2.244	122.437	0.000	152.584	0.000	0.143	0.000	-0.190	19.980	
	0.000	1.112	1.208	1.112	2.246	0.000	2.006	0.000	1.112	
	0.000	1.112	-0.031	1.112	-0.031	0.000	-0.511	0.000	0.542	
	0.000	1.112	-1.053	1.112	-1.053	0.000	0.583	0.000	-0.394	
	0.000	4.239	6.499	4.239	7.537	0.000	6.577	0.000	4.720	
	0.000	4.239	0.047	4.239	1.085	0.000	-1.147	0.000	2.105	
	0.000	4.239	-4.302	4.239	-6.390	0.000	0.470	0.000	-1.293	
	1.036	-5.736	-6.674	6.444	11.584	-1.052	9.463	-1.052	7.605	
	1.036	-5.736	1.996	6.444	0.946	-1.052	-3.647	-0.014	2.917	
	1.036	-5.736	9.454	6.444	-7.778	-1.052	0.798	1.036	-2.601	
	0.000	-9.492	-14.118	12.438	20.739	0.000	18.618	0.000	14.079	
	0.000	-9.492	-0.083	12.438	0.992	0.000	-2.880	0.000	1.924	
	0.000	-9.492	13.954	12.438	-17.689	0.000	12.617	0.000	-10.281	
	0.000	0.606	-0.283	8.358	15.360	0.000	14.159	0.000	9.518	
	0.000	0.606	-1.851	8.358	0.047	0.000	-1.147	0.000	1.354	
	0.000	0.606	-1.455	8.358	-14.445	0.000	9.871	0.000	-6.838	
	0.000	4.882	7.623	13.512	22.850	0.000	20.969	0.000	15.393	
	0.000	4.882	-1.726	13.512	0.992	0.000	-2.680	0.000	2.188	
	0.000	4.882	-9.999	13.512	-20.838	0.000	14.442	0.000	-11.055	
	1.052	13.564	21.169	11.669	19.948	1.052	18.747	1.052	12.869	
	1.052	13.564	-1.267	11.669	1.996	1.052	-3.647	0.014	3.142	
	0.000	4.838	5.242	5.276	-16.774	1.052	8.502	-1.036	-7.475	
	0.000	4.838	-0.763	5.276	8.585	0.000	8.104	0.000	5.756	
	0.000	4.838	-5.985	5.276	1.085	0.000	-0.947	0.000	2.080	
	0.000	0.440	1.740	2.186	-7.453	0.000	1.539	0.000	-2.345	
	0.000	0.440	-0.471	2.186	3.338	0.000	3.098	0.000	2.427	
	0.000	0.440	-1.295	2.186	-0.077	0.000	-1.478	0.000	0.806	
	0.000	-0.592	1.600	6.388	-3.261	0.000	0.301	0.000	-1.067	
	0.000	-0.592	0.483	6.388	11.764	0.000	11.044	0.000	6.868	
	0.000	-0.592	1.296	6.388	1.038	0.000	-1.913	0.000	2.623	
	1.036	-9.626	-12.542	17.686	-8.622	0.000	3.062	0.000	-2.638	
	1.036	-9.626	2.135	17.686	30.262	-1.052	28.141	-1.052	19.127	
	1.036	-9.626	16.411	17.686	2.135	-1.052	-2.860	-0.014	2.747	

232

18(1)	0.000	-3.319	-2.781	20.693	36.026	0.000	33.185	0.000	22.374
18(2)	0.000	-3.319	1.981	20.693	1.981	0.000	-3.702	0.000	2.275
18(3)	0.000	-3.319	6.974	20.693	-33.046	0.000	26.259	0.000	-18.142
19(1)	0.000	-1.036	-1.325	15.512	24.687	0.000	22.565	0.000	16.473
19(2)	0.000	-1.036	-0.176	15.512	1.038	0.000	-1.713	0.000	1.403
0(1)	0.000	-1.036	0.953	15.512	-22.582	0.000	18.607	0.000	-13.951
0(2)	0.000	5.613	5.892	22.595	37.064	0.000	34.223	0.000	24.276
0(3)	0.000	5.613	-1.306	22.595	1.981	0.000	-3.702	0.000	2.275
1(1)	1.052	17.989	-9.425	22.595	-33.046	0.000	27.309	0.000	-20.068
1(2)	1.052	17.989	26.117	19.588	33.145	1.052	30.784	1.052	21.028
1(3)	1.052	17.989	-1.845	19.588	2.135	1.052	-2.860	0.014	3.733
2(1)	0.000	4.545	-28.016	19.588	-28.169	1.052	19.445	-1.036	-14.533
2(2)	0.000	4.545	7.753	6.388	11.802	0.000	11.081	0.000	7.108
2(3)	0.000	4.545	0.862	6.388	1.038	0.000	-1.713	0.000	2.623
3(1)	0.000	4.545	-7.342	6.388	-9.697	0.000	2.883	0.000	-2.739
3(2)	0.000	0.781	1.724	2.186	3.222	0.000	2.981	0.000	2.427
3(3)	0.000	0.781	-0.355	2.186	-0.077	0.000	-1.278	0.000	0.806
4(1)	0.000	0.781	-0.601	2.186	-3.376	0.000	0.186	0.000	-1.067
4(2)	0.000	-0.307	0.479	6.388	11.802	0.000	11.081	0.000	6.868
4(3)	0.000	-0.307	0.089	6.388	1.038	0.000	-1.713	0.000	2.623
5(1)	0.000	-0.307	0.593	6.388	-9.697	0.000	2.883	0.000	-2.739
5(2)	1.036	-10.678	-13.477	19.588	33.145	-1.052	30.784	-1.052	21.028
5(3)	1.036	-10.678	2.135	19.588	2.135	-1.052	-2.660	-0.014	3.723
6(1)	0.000	-2.283	-2.748	22.594	-28.169	-1.052	19.445	1.036	-14.533
6(2)	0.000	-2.283	1.587	22.594	37.063	0.000	34.221	0.000	24.275
6(3)	0.000	-2.283	5.359	22.594	1.981	0.000	-3.702	0.000	2.251
7(1)	0.000	-0.171	0.544	22.594	-34.082	0.000	27.510	0.000	-20.069
7(2)	0.000	-0.171	-0.037	15.512	25.724	0.000	23.803	0.000	16.473
7(3)	0.000	-0.171	-1.675	15.512	1.038	0.000	-1.713	0.000	1.403
8(1)	0.000	5.611	6.925	22.594	-23.620	0.000	19.658	0.000	-13.951
8(2)	0.000	5.611	-1.074	22.594	38.992	0.000	36.390	0.000	24.275
8(3)	0.000	5.611	2.213	22.594	2.213	0.000	-1.382	0.000	2.261
9(1)	1.052	13.499	-10.201	22.594	-34.093	0.000	29.425	0.000	-20.069
9(2)	1.052	13.499	20.748	20.662	35.256	1.052	32.894	1.052	21.622
9(3)	1.052	13.499	-1.845	20.662	2.135	1.052	-2.660	0.014	3.997
10(1)	0.000	5.581	-23.524	20.662	-30.107	1.052	21.084	-1.036	-15.206
10(2)	0.000	5.581	9.755	7.424	14.741	0.000	13.780	0.000	7.904
10(3)	0.000	5.581	0.723	7.424	1.038	0.000	-1.713	0.000	2.609
11(1)	0.000	5.581	-8.618	7.424	-10.734	0.000	5.759	0.000	-3.689
11(2)	0.000	0.781	1.840	2.186	4.375	0.000	4.134	0.000	2.427
11(3)	0.000	0.781	-0.355	2.186	-0.077	0.000	-1.278	0.000	0.806
12(1)	0.000	0.781	-1.522	2.186	-3.259	0.000	1.353	0.000	-1.067
12(2)	1.038	1.632	1.638	8.500	13.897	0.000	12.937	0.000	8.183
12(3)	1.038	1.632	-0.065	8.500	1.023	0.000	-1.969	0.000	2.887
13(1)	1.036	-9.588	-12.104	21.727	-10.786	0.000	4.151	0.000	-3.411
13(2)	1.036	-9.588	2.105	21.727	37.470	-1.052	34.628	-1.052	23.168
13(3)	1.036	-9.588	16.533	21.727	2.105	-1.052	-3.371	-0.014	4.025
14(1)	0.000	-2.477	-1.811	25.711	-31.991	-1.052	22.382	1.036	-16.329
14(2)	0.000	-2.477	2.182	25.711	43.271	0.000	39.949	0.000	27.152
14(3)	0.000	-2.477	7.055	25.711	2.182	0.000	-1.893	0.000	2.025
15(1)	0.000	-0.145	2.224	17.616	-38.017	0.000	33.428	0.000	-23.456
15(2)	0.000	-0.145	0.847	17.616	28.675	0.000	27.124	0.000	18.576
15(3)	0.000	-0.145	-0.763	17.616	1.023	0.000	-1.969	0.000	1.231
16(1)	0.000	3.715	6.282	25.749	-27.667	0.000	23.375	0.000	-16.224
16(2)	0.000	3.715	-1.382	25.749	44.019	0.000	40.697	0.000	27.430
16(3)	0.000	3.715	-9.287	25.749	2.182	0.000	-1.893	0.000	2.303
17(1)	1.052	10.375	13.266	25.749	-38.132	0.000	33.988	0.000	-23.178
17(2)	1.052	10.375	22.764	22.764	38.390	1.052	35.788	1.052	24.204
17(3)	1.052	10.375	-1.219	22.764	2.105	1.052	-3.371	0.014	4.011
18(1)	1.050	4.033	-17.676	22.764	-34.180	1.052	23.318	-1.036	-17.280
18(2)	1.050	4.033	7.013	8.499	15.809	0.000	14.849	0.000	8.979
18(3)	1.050	4.033	0.569	8.499	1.023	0.000	-1.969	0.000	2.873
19(1)	0.000	0.781	-7.075	8.499	-12.886	0.000	5.811	0.000	-4.362
19(2)	0.000	0.781	0.789	2.186	5.239	0.000	4.999	0.000	2.427
19(3)	0.000	0.781	-0.494	2.186	-0.077	0.000	-1.278	0.000	0.806
20(1)	1.038	0.921	-1.522	2.186	-3.259	0.000	2.228	0.000	-1.067
20(2)	1.038	0.921	0.699	8.499	15.809	0.000	15.089	0.000	8.979
20(3)	1.038	0.921	0.985	8.499	1.023	0.000	-1.969	0.000	2.873
21(1)	1.036	-4.376	0.060	8.499	-12.886	0.000	5.811	0.000	-4.362
21(2)	1.036	-4.376	-3.883	22.764	38.390	-1.052	35.788	-1.052	24.204
21(3)	1.036	-4.376	2.092	22.764	2.105	-1.052	-3.371	-0.014	4.011
22(1)	0.000	-0.351	8.080	22.764	-34.180	-1.052	23.318	1.036	-17.280
22(2)	0.000	-0.351	-0.015	25.749	44.019	0.000	40.697	0.000	27.430
22(3)	0.000	-0.351	2.182	25.749	2.182	0.000	-1.893	0.000	2.303
23(1)	0.000	1.943	3.111	25.749	-38.132	0.000	33.988	0.000	-23.178
23(2)	0.000	1.943	2.248	17.616	28.675	0.000	26.073	0.000	17.539
23(3)	0.000	1.943	-0.065	17.616	2.073	0.000	-2.169	0.000	1.231
24(1)	0.000	5.425	-1.791	17.616	-26.616	0.000	22.337	0.000	-14.973
24(2)	0.000	5.425	8.456	23.810	41.067	0.000	37.746	0.000	25.251
24(3)	0.000	5.425	-1.382	23.810	2.182	0.000	-1.893	0.000	2.039
25(1)	1.052	14.566	-10.538	23.810	-38.133	0.000	31.023	0.000	-21.529
25(2)	1.052	14.566	19.250	19.814	32.461	1.052	29.860	1.052	21.455
25(3)	1.052	14.566	-2.269	19.814	2.105	1.052	-3.371	0.014	4.039
26(1)	1.052	14.566	-24.826	19.814	-28.252	1.052	17.640	-1.036	-14.516

VIADUCTO BORGES BLANQUES

1.050	2.997	3.902	7.462	14.879	0.000	14.158	0.000	7.942
1.050	2.997	-0.608	7.462	1.023	0.000	-2.169	0.000	3.087
1.050	2.997	-6.174	7.462	-10.670	0.000	5.243	0.000	-3.026
0.000	0.781	-0.147	2.186	5.239	0.000	4.999	0.000	2.186
0.000	0.781	-0.494	2.186	-0.077	0.000	-1.478	0.000	0.806
0.000	0.781	-0.724	2.186	-3.259	0.000	2.228	0.000	-0.681
0.000	-1.421	-1.903	6.312	9.648	0.000	9.167	0.000	6.552
0.000	-1.421	-0.902	6.312	1.085	0.000	-0.947	0.000	2.066
1.036	-1.421	1.026	6.312	-8.501	0.000	2.580	0.000	-3.295
1.036	-7.626	-10.517	13.608	22.885	-1.052	21.685	-1.052	14.568
1.036	-7.626	1.996	13.608	0.945	-1.052	-3.647	-0.014	3.407
0.000	-1.622	14.393	13.608	-18.847	-1.052	11.481	1.036	-8.921
0.000	-1.622	-2.389	14.549	23.701	0.000	22.870	0.000	15.392
0.000	-1.622	0.992	14.549	0.992	0.000	-2.680	0.000	2.174
0.000	-1.622	4.388	14.549	-20.836	0.000	16.369	0.000	-11.056
0.000	1.392	3.643	9.223	15.475	0.000	14.274	0.000	10.383
0.000	1.392	0.047	9.223	0.047	0.000	-1.147	0.000	1.354
0.000	1.392	-1.631	9.223	-14.328	0.000	9.988	0.000	-7.713
0.000	12.000	18.978	12.438	20.738	0.000	18.617	0.000	14.079
0.000	12.000	-0.605	12.438	0.992	0.000	-2.880	0.000	1.924
0.000	12.000	-20.183	12.438	-18.726	0.000	12.619	0.000	-10.281
1.052	10.086	13.953	6.444	11.583	1.052	9.462	1.052	7.845
1.052	10.086	-1.267	6.444	0.946	1.052	-3.647	0.014	2.917
0.000	10.086	-17.537	6.444	-9.679	1.052	0.799	-1.036	-2.601
0.000	-1.090	-1.184	5.277	7.420	0.000	6.700	0.000	4.720
0.000	-1.090	-1.851	5.277	1.085	0.000	-1.147	0.000	2.105
0.000	-1.090	-0.392	5.277	-6.506	0.000	0.355	0.000	-1.293
0.000	-0.293	-0.289	1.112	2.246	0.000	2.006	0.000	1.112
0.000	-0.293	-0.309	1.112	-0.031	0.000	-0.511	0.000	0.542
0.000	-0.293	0.685	1.112	-2.091	0.000	0.583	0.000	-0.394
0.000	39.861	3.369	385.133	27.914	0.000	27.914	0.000	385.133
0.000	39.861	1.742	385.133	14.866	0.000	14.866	0.000	385.133
0.000	39.861	0.000	385.133	0.000	0.000	0.000	0.000	385.133
0.000	250.016	18.908	405.179	30.002	0.000	30.002	0.000	405.179
0.000	250.016	9.969	405.179	14.866	0.000	14.866	0.000	405.179
0.000	250.016	0.000	405.179	0.000	0.000	0.000	0.000	405.179
0.000	230.081	17.386	422.439	30.994	0.000	30.994	0.000	422.439
0.000	230.081	8.678	422.439	15.916	0.000	15.916	0.000	422.439
0.000	230.081	0.000	422.439	0.000	0.000	0.000	0.000	422.439
0.000	185.855	13.666	434.446	32.276	0.000	32.276	0.000	434.446
0.000	185.855	6.657	434.446	15.654	0.000	15.654	0.000	434.446
0.000	185.855	0.000	434.446	0.000	0.000	0.000	0.000	434.446
0.000	201.459	14.383	402.080	29.956	0.000	29.956	0.000	402.080
0.000	201.459	7.868	402.080	14.866	0.000	14.866	0.000	402.080
0.000	201.459	0.000	402.080	0.000	0.000	0.000	0.000	402.080
0.000	280.541	20.278	409.823	29.951	0.000	29.951	0.000	409.823
0.000	280.541	9.916	409.823	15.539	0.000	15.539	0.000	409.823
0.000	280.541	0.000	409.823	0.000	0.000	0.000	0.000	409.823
0.000	260.383	20.244	429.617	32.039	0.000	32.039	0.000	429.617
0.000	260.383	9.642	429.617	15.539	0.000	15.539	0.000	429.617
0.000	260.383	0.000	429.617	0.000	0.000	0.000	0.000	429.617
0.000	233.694	17.292	447.989	33.019	0.000	33.019	0.000	447.989
0.000	233.694	8.705	447.989	16.577	0.000	16.577	0.000	447.989
0.000	233.694	0.000	447.989	0.000	0.000	0.000	0.000	447.989
0.000	317.191	22.839	460.557	34.288	0.000	34.288	0.000	460.557
0.000	317.191	11.870	460.557	16.730	0.000	16.730	0.000	460.557
0.000	317.191	0.000	460.557	0.000	0.000	0.000	0.000	460.557
0.000	179.378	13.720	427.603	31.968	0.000	31.968	0.000	427.603
0.000	179.378	6.768	427.603	15.539	0.000	15.539	0.000	427.603
0.000	179.378	0.000	427.603	0.000	0.000	0.000	0.000	427.603

HIPOTESIS: a Eje 1 (49-96) ripado +30cm; Eje 2 (1-48) sin ripar

Envolvente IPF75B negativa

Coef impacto 1.16

RA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
	0.00	-1.927	-11.184	0.000	-143.141	0.000	-0.998	0.000	1.077	-116.127
	0.50	-0.605	-10.161	5.314	-135.556	68.894	0.408	-6.259	-0.035	12.829
	1.00	-0.042	-9.578	10.161	-129.721	129.430	0.971	-12.829	0.021	13.413
	1.00	-10.711	-13.965	9.921	-132.415	130.467	-4.754	-11.779	-1.599	13.189
	2.85	-9.091	-11.662	31.998	-104.233	337.384	-2.729	-37.336	-1.396	15.290
	4.70	-6.211	-9.445	50.934	-87.662	425.292	0.253	-66.952	-1.183	17.507
	4.70	-7.776	-25.962	231.776	-91.509	425.247	-6.774	-67.068	-2.932	17.189
	7.05	-6.105	0.980	260.815	-59.417	576.755	-2.354	-109.897	-2.662	19.873
	9.40	-2.758	28.987	225.612	-48.740	501.502	1.284	-159.156	-2.403	22.674
	9.40	-25.404	-5.964	521.455	-46.822	512.328	0.341	-160.194	-4.604	22.359
	10.58	-24.678	8.040	519.828	-32.119	438.979	3.451	-186.298	-4.469	23.760
	11.75	-23.328	22.043	499.443	-29.843	466.408	3.586	-214.361	-4.334	25.160
	11.75	-45.111	13.158	499.443	-31.074	378.201	-13.315	-214.361	-5.709	25.029
	12.93	-43.710	35.797	475.468	-16.662	282.010	-9.154	-244.650	-5.574	26.313
	14.10	-42.276	48.750	426.897	-15.262	301.853	-9.019	-276.698	-5.439	27.713
	14.10	-73.782	34.346	427.947	-19.605	218.834	-36.609	-276.698	-6.990	27.619
	16.45	-72.601	62.252	313.390	-1.400	69.607	-25.836	-343.230	-9.304	29.893
	18.80	-69.169	97.844	121.893	1.284	70.713	-25.577	-413.391	-8.013	31.454
	18.80	-98.847	85.616	122.983	-5.262	15.425	-56.989	-413.506	-12.316	29.398
	20.65	-98.127	106.535	-55.345	1.157	-34.846	-51.524	-492.670	-41.139	68.220
	22.50	-95.156	137.343	-281.872	3.257	-36.598	-51.321	-680.353	-45.536	159.959
	22.50	-100.913	135.045	-282.877	-0.981	-36.609	-59.042	-680.466	-50.115	158.123
	23.00	-100.755	140.779	-351.833	-0.397	-40.010	-57.936	-761.787	-23.893	165.971
	23.50	-100.193	146.613	-423.681	0.186	-39.351	-57.880	-847.224	-21.316	182.633
	23.50	-86.370	-69.161	-416.240	-219.582	-835.459	-38.204	-847.224	5.277	-204.829
	24.00	-86.213	-68.578	-381.123	-211.997	-729.374	-36.766	-750.356	6.529	-191.992
	24.50	-85.650	-67.994	-346.496	-206.162	-627.221	-37.254	-654.967	7.956	-190.544
	24.50	-84.642	-68.340	-346.496	-205.919	-628.355	-37.640	-654.979	2.988	-192.377
	26.90	-83.326	-56.584	-196.217	-173.536	-178.123	-32.346	-332.134	34.518	-73.839
	29.30	-80.625	-53.784	-62.277	-147.630	122.610	-35.247	-220.482	11.364	-21.817
	29.30	-53.929	-40.602	-62.011	-144.330	122.578	-26.586	-220.457	3.665	-23.128
	32.20	-52.658	-28.364	29.890	-104.362	458.471	-25.105	-212.739	-1.285	3.359
	35.10	-49.141	-24.980	107.137	-88.024	517.466	-30.419	-226.321	-0.958	6.743
	35.10	-16.574	-9.250	30.114	-82.028	440.552	-2.819	-226.321	-3.368	5.665
	36.55	-16.304	-7.515	40.786	-63.065	525.613	-0.357	-236.495	-3.199	7.299
	38.00	-14.560	-5.765	48.694	-59.389	483.607	-0.781	-249.179	-3.042	9.050
	38.00	-17.359	-0.739	505.185	-59.228	353.906	-2.298	-249.179	-4.482	9.816
	39.45	-16.903	15.598	494.740	-41.315	284.701	0.847	-263.098	-4.313	11.450
	40.90	-15.243	33.103	460.389	-38.690	332.769	1.004	-281.488	-4.156	13.200
	40.90	-57.858	9.555	499.332	-45.171	258.896	-13.845	-281.486	-5.647	12.883
	43.80	-57.042	52.048	403.130	-17.281	108.663	-3.191	-322.169	-4.840	16.267
	46.70	-53.441	94.642	194.571	-13.897	151.240	-2.865	-377.312	-4.356	28.181
	46.70	-99.272	68.914	203.962	-21.674	45.923	-56.768	-377.310	-12.157	24.101
	49.10	-98.631	105.471	-8.519	-11.522	4.215	-49.146	-474.035	-41.634	62.710
	51.50	-95.761	142.145	-291.822	-8.721	28.114	-48.876	-755.748	-12.352	188.334
	51.50	-104.704	137.895	-294.384	-12.099	29.152	-58.615	-755.748	-18.558	184.600
	52.00	-104.647	143.629	-364.987	-11.515	33.685	-58.559	-848.603	-19.767	188.674
	52.50	-104.000	149.379	-436.892	-10.932	39.327	-58.503	-945.588	-14.475	201.315
	52.50	-90.593	-56.574	-435.052	-221.569	-880.588	-41.973	-945.588	12.966	-205.259
	53.00	-90.452	-55.991	-405.688	-213.984	-772.612	-40.535	-845.765	16.802	-193.483
	53.50	-89.889	-55.407	-378.960	-209.199	-669.418	-41.023	-751.054	21.699	-190.295
	53.50	-89.385	-55.722	-379.892	-208.840	-673.698	-40.575	-751.171	14.019	-193.913
	55.90	-89.031	-52.921	-250.083	-176.456	-215.566	-35.280	-456.549	36.836	-67.577
	58.30	-86.162	-49.918	-128.553	-150.550	89.608	-37.337	-359.694	7.553	-16.477
	58.30	-55.364	-36.232	-129.276	-147.365	30.444	-14.073	-359.684	0.438	-20.037
	61.20	-55.038	-34.848	-22.364	-107.397	375.263	-12.592	-338.689	3.600	-3.682
	64.10	-51.639	-31.464	73.260	-89.134	443.858	-17.030	-330.240	3.927	-0.298
	64.10	-17.635	-9.792	33.842	-87.137	387.908	-0.962	-330.125	1.399	-2.412
	65.55	-17.393	-8.158	46.616	-66.249	473.824	0.614	-328.672	-4.497	1.816
	67.00	-15.722	-6.306	57.440	-63.448	441.045	0.201	-337.869	-0.827	8.818
	67.00	-18.932	-0.875	478.680	-63.277	295.343	1.026	-337.869	-2.149	7.845
	68.45	-18.577	15.462	466.786	-44.489	221.696	3.296	-350.760	-1.980	9.479
	69.90	-16.833	32.957	433.181	-42.738	287.279	3.453	-369.103	-1.823	11.229
	69.90	-64.544	14.763	466.434	-49.979	209.150	-12.597	-369.219	-4.163	11.041
	72.80	-63.931	48.605	370.065	-22.963	61.708	-2.819	-407.758	-3.837	14.425
	75.70	-60.330	91.199	161.196	-19.579	125.462	-2.492	-457.130	-4.221	28.253
	75.70	-107.185	69.468	166.248	-28.384	10.321	-53.274	-457.246	-11.727	26.146
	78.10	-106.730	106.025	-41.966	-18.231	-17.104	-45.652	-561.663	-42.322	68.577
	80.50	-103.776	133.947	-327.519	-15.431	21.484	-45.382	-843.021	-17.358	191.410

80.50	-116.574	136.474	-322.941	-19.027	-1.576	-68.634	-842.905	-24.515	188.844
81.00	-116.518	142.309	-391.370	-18.444	3.915	-67.528	-937.947	-23.478	189.427
81.50	-115.871	148.059	-465.054	-17.860	13.555	-67.471	-1035.195	-25.726	204.890
81.50	-101.055	-62.947	-462.314	-235.827	-949.238	-36.839	-1035.195	4.438	-219.323
82.00	-100.914	-62.364	-430.417	-229.117	-834.863	-36.277	-927.935	7.409	-206.508
82.50	-100.453	-61.679	-399.022	-222.407	-752.381	-42.891	-827.853	14.025	-203.319
82.50	-103.794	-62.983	-401.056	-222.240	-732.134	-37.263	-826.587	5.062	-207.141
85.15	-103.406	-59.832	-237.440	-186.531	-213.168	-34.256	-467.252	40.809	-67.582
87.80	-100.328	-56.595	-84.955	-156.291	142.311	-38.889	-352.092	6.956	-18.143
87.80	-62.443	-42.110	-83.623	-154.460	82.271	-14.690	-352.093	0.640	-21.911
90.95	-61.914	-38.493	43.121	-111.282	467.915	-11.120	-318.196	2.666	-7.424
94.10	-58.375	-34.657	156.385	-93.544	541.910	-19.217	-302.978	3.015	-3.689
94.10	-18.164	-10.761	41.112	-88.129	484.357	-3.394	-303.083	0.604	-2.691
95.68	-17.911	-9.010	57.368	-66.074	574.917	-1.706	-298.143	0.772	-0.940
97.25	-16.127	-7.143	68.571	-62.281	537.200	-2.007	-303.314	-1.611	7.022
97.25	-18.277	-8.923	651.895	-65.964	342.843	-1.521	-303.314	-2.888	5.871
98.83	-18.108	18.500	646.062	-45.717	272.729	0.574	-316.530	-2.719	7.738
100.40	-16.054	37.172	602.671	-42.099	324.721	0.754	-330.635	-2.539	9.605
100.40	-68.742	9.081	535.129	-50.523	231.316	-16.209	-330.635	-5.007	10.334
103.55	-68.022	54.024	426.852	-19.307	52.673	-3.432	-367.144	-4.658	14.068
106.70	-64.185	100.003	184.568	-15.689	107.736	-3.072	-419.063	-4.346	26.455
106.70	-118.056	72.834	184.230	-25.533	-2.290	-55.096	-419.088	-11.866	24.788
109.35	-117.482	111.841	-57.709	-13.980	-46.700	-45.340	-541.753	-42.672	70.025
112.00	-114.202	143.148	-396.965	-10.946	-13.372	-45.047	-889.756	-17.431	207.035
112.00	-125.167	139.603	-399.326	-16.332	-39.097	-68.472	-889.872	-27.304	203.065
112.50	-125.111	154.190	-470.593	-15.748	-34.187	-67.366	-992.399	-24.147	204.514
113.00	-124.464	159.923	-548.775	-15.165	-27.364	-67.309	-1097.076	-14.247	219.069
113.00	-109.624	-70.748	-547.520	-236.172	-1012.303	-51.312	-1097.076	16.426	-216.046
113.50	-109.567	-70.165	-511.910	-228.587	-867.929	-42.872	-993.322	26.501	-202.551
114.00	-109.022	-69.480	-477.138	-222.927	-759.690	-42.310	-892.778	24.438	-197.592
114.00	-108.907	-69.360	-477.075	-222.583	-759.820	-41.712	-892.895	15.734	-200.524
116.65	-108.519	-66.326	-294.894	-185.941	-243.847	-38.705	-554.914	43.876	-68.053
119.30	-105.543	-62.973	-123.626	-158.634	103.217	-45.263	-434.118	11.750	-26.979
119.30	-64.177	-44.680	-121.111	-154.027	-0.616	-8.837	-433.980	5.536	-30.746
122.45	-63.648	-40.945	16.605	-110.558	382.547	-5.268	-362.848	6.042	-20.343
125.60	-60.210	-37.226	140.479	-93.987	455.316	-12.313	-305.602	6.391	-16.726
125.60	-16.708	-17.687	27.720	-88.942	293.983	3.277	-305.692	4.845	-15.869
127.18	-16.443	-15.820	54.061	-67.820	385.354	4.976	-281.991	5.025	-14.002
128.75	-14.575	-13.953	75.767	-64.027	350.884	4.676	-260.294	5.205	-12.135
128.75	-16.086	-12.734	681.913	-67.525	221.528	1.689	-260.294	3.917	-13.286
130.33	-15.906	14.573	679.913	-47.394	154.579	4.844	-242.233	4.097	-11.536
131.90	-13.954	33.244	641.135	-43.777	211.392	5.024	-227.078	4.277	-9.668
131.90	-61.702	6.117	558.054	-54.249	133.630	-31.474	-226.961	0.909	-8.912
135.05	-61.173	51.162	461.746	-23.032	-35.828	-18.686	-203.870	1.269	-5.178
138.20	-57.347	97.039	230.769	-19.415	30.351	-18.337	-207.389	-1.968	13.131
138.20	-103.312	73.971	229.774	-28.107	30.353	-41.248	-207.387	-9.355	12.057
140.85	-102.840	114.115	-18.117	-17.721	0.736	-31.492	-336.205	-25.250	81.637
143.50	-99.948	144.285	-357.636	-14.570	43.046	-31.199	-732.883	4.434	208.383
143.50	-107.341	141.731	-359.317	-18.042	44.083	-40.292	-732.883	-4.270	203.524
144.00	-107.284	156.318	-430.341	-17.459	50.381	-39.185	-834.481	-3.707	204.982
144.50	-106.739	162.052	-510.839	-16.875	60.423	-39.129	-941.678	-1.241	220.523
144.50	-91.301	-58.775	-506.638	-202.831	-819.802	-43.042	-941.678	25.766	-180.955
145.00	-91.244	-58.191	-478.304	-194.370	-728.668	-45.981	-854.273	44.723	-164.680
145.50	-90.699	-57.507	-447.595	-188.536	-634.744	-45.418	-773.962	69.751	-158.033
145.50	-88.579	-57.940	-449.745	-188.409	-634.644	-43.434	-775.938	65.844	-159.981
147.35	-88.376	-55.723	-346.219	-163.786	-314.965	-38.814	-590.481	42.935	-73.152
149.20	-86.576	-53.420	-245.420	-140.680	-101.211	-43.678	-505.978	14.984	-33.194
149.20	-66.987	-44.510	-245.510	-139.164	-160.289	-13.256	-506.068	9.677	-35.512
151.55	-66.728	-41.709	-144.332	-106.781	106.185	-12.450	-424.028	9.150	-33.496
153.90	-64.770	-38.839	-51.517	-89.218	192.380	-16.576	-345.182	6.998	-31.880
153.90	-38.535	-26.251	-50.226	-88.945	89.383	6.152	-345.182	5.447	-33.115
155.08	-38.400	-24.850	-20.646	-72.316	181.420	7.502	-307.886	5.481	-31.714
156.25	-37.500	-23.567	8.096	-64.556	144.777	4.507	-272.185	5.605	-30.431
156.25	-19.683	-15.897	8.096	-68.097	44.104	15.412	-272.023	4.506	-29.395
157.43	-19.548	-14.496	25.948	-54.094	115.633	16.763	-237.720	4.641	-27.995
158.60	-18.620	-13.213	39.826	-49.134	-28.751	11.636	-206.939	4.776	-26.711
158.60	-0.703	20.963	257.863	-54.039	107.430	5.263	-206.074	4.213	-26.907
160.95	-0.359	23.764	202.553	-31.458	-77.773	4.472	-144.990	4.472	-24.106
163.30	1.109	26.448	140.727	-28.774	-9.557	4.742	-91.478	4.742	-21.422
163.30	-5.798	49.198	396.408	-29.080	-9.556	1.007	-91.477	2.057	-21.728
165.15	-5.596	80.005	275.294	-20.678	-48.026	1.210	-52.227	2.260	-19.627
167.00	-4.893	100.942	108.130	-18.460	-12.953	1.423	-18.205	2.474	-17.410
167.00	-1.190	103.334	109.169	-18.698	-12.863	-0.021	-18.115	-0.021	-18.698
167.50	-1.133	109.169	56.493	-18.115	-7.412	0.035	-7.412	0.035	-18.115
168.00	-1.077	115.003	0.000	-17.531	0.000	0.091	0.000	-1.077	114.752
0.00	-2.143	-122.659	0.000	-150.718	0.000	-0.143	0.000	-2.244	-123.445
0.50	0.992	-117.934	60.552	-143.224	72.935	-0.010	-1.590	1.424	3.907
1.00	2.326	-112.169	117.934	-137.458	137.170	0.123	-3.907	2.758	4.483
1.00	-8.191	-107.528	116.998	-137.446	138.220	0.771	-2.869	-4.381	7.039
2.85	-4.349	-86.215	297.510	-109.600	354.570	1.252	-17.483	0.422	9.115
4.70	2.481	-56.698	429.817	-93.226	453.080	1.759	-36.245	7.492	11.306
4.70	2.092	-32.319	188.062	-92.673	452.977	1.811	-36.361	-3.464	15.265
7.05	6.054	-29.907	263.629	-60.964	607.369	1.586	-75.174	-2.022	

(1)	9.40	-10.158	12.443	100.693	-45.527	548.402	-1.139	-121.312	4.356	23.099
(2)	10.58	-8.437	13.827	87.621	-30.999	474.715	-0.878	-148.633	7.558	24.483
(3)	11.75	-5.235	15.210	73.528	-28.750	500.923	2.324	-177.596	10.760	25.867
(1)	11.75	-25.512	24.350	73.528	-27.957	411.650	13.237	-177.596	6.227	27.647
(2)	12.93	-22.190	25.618	46.020	-13.717	313.079	14.461	-211.222	11.430	28.916
(3)	14.10	-18.788	27.002	14.352	-12.333	329.337	17.663	-246.427	14.631	30.299
(1)	14.10	-50.820	41.615	15.390	-13.436	245.316	35.649	-246.427	6.798	33.300
(2)	16.45	-48.019	44.622	-83.813	4.551	84.063	31.675	-325.880	20.000	35.384
(3)	18.80	-39.882	47.274	-190.368	7.203	71.411	39.813	-409.830	32.861	37.353
(1)	18.80	-67.173	59.363	-191.436	5.319	15.455	57.760	-409.947	26.547	40.145
(2)	20.65	-65.466	62.034	-304.546	11.661	-53.922	57.641	-506.920	43.349	77.586
(3)	22.50	-58.422	64.109	-421.533	13.737	-75.019	64.444	-711.458	51.747	168.611
(1)	22.50	-68.055	67.241	-421.244	12.645	-74.753	63.243	-711.432	51.162	169.861
(2)	23.00	-67.681	68.057	-456.334	13.221	-85.354	63.539	-798.714	25.039	177.789
(3)	23.50	-66.347	68.634	-490.745	13.798	-91.438	64.873	-890.087	23.728	194.303
(1)	23.50	-84.911	-164.345	-499.692	-231.182	-878.041	35.882	-890.087	-7.374	-216.355
(2)	24.00	-84.538	-158.580	-419.111	-223.687	-766.376	35.151	-787.502	-7.943	-203.672
(3)	24.50	-83.204	-152.815	-341.384	-217.922	-658.343	36.322	-686.277	-8.685	-202.220
(1)	24.50	-84.747	-145.215	-346.552	-213.750	-659.380	30.700	-686.264	-9.756	-200.149
(2)	26.90	-81.626	-118.022	-31.326	-181.753	-189.707	29.611	-343.887	-38.486	-82.394
(3)	29.30	-75.222	-81.701	206.043	-156.156	132.187	35.786	-210.506	-22.925	-30.468
(1)	29.30	-47.766	-96.564	203.165	-147.185	132.190	17.976	-210.857	-28.970	-26.655
(2)	32.20	-44.751	-54.718	427.281	-107.693	477.379	21.344	-192.340	-3.844	-0.452
(3)	35.10	-36.414	-21.280	537.760	-91.551	548.838	30.593	-194.898	3.893	2.892
(1)	35.10	-2.370	-33.182	534.507	-82.125	470.021	6.120	-194.898	-3.531	4.904
(2)	36.55	-1.729	-17.279	572.192	-63.388	555.523	5.656	-203.684	2.472	6.518
(3)	38.00	2.406	0.016	586.462	-59.756	516.188	8.105	-214.892	6.207	8.248
(1)	38.00	-0.581	11.745	123.964	-57.829	384.715	10.031	-214.892	1.246	10.587
(2)	39.45	0.500	13.359	106.235	-40.130	314.879	10.853	-229.953	5.533	12.201
(3)	40.90	4.435	15.089	83.658	-37.536	361.409	14.828	-249.676	11.269	13.930
(1)	40.90	-38.846	34.489	113.360	-40.792	287.348	10.283	-249.677	2.822	16.690
(2)	43.80	-36.912	38.073	10.910	-13.234	127.676	7.816	-301.400	10.458	20.034
(3)	46.70	-28.374	41.417	-104.093	-9.890	158.455	17.554	-367.651	34.615	31.794
(1)	46.70	-70.731	61.227	-107.697	-12.179	51.555	52.202	-367.652	29.342	33.479
(2)	49.10	-69.211	64.475	-259.099	-2.148	-11.639	53.342	-485.759	44.209	71.071
(3)	51.50	-62.407	67.442	-418.927	0.620	-10.196	61.746	-787.316	19.272	196.071
(1)	51.50	-71.695	71.738	-418.884	1.206	-9.146	60.478	-787.316	18.867	196.216
(2)	52.00	-71.562	72.555	-454.942	1.783	-11.249	61.812	-885.971	20.709	200.262
(3)	52.50	-70.028	73.331	-492.008	2.359	-12.456	63.146	-988.733	15.764	212.793
(1)	52.50	-89.547	-159.836	-496.201	-233.139	-922.968	39.872	-988.733	-15.463	-216.737
(2)	53.00	-89.214	-154.071	-417.564	-225.645	-809.159	39.141	-883.125	-18.668	-205.081
(3)	53.50	-87.880	-148.306	-341.333	-220.917	-700.078	40.312	-782.614	-22.900	-201.890
(1)	53.50	-86.239	-141.235	-346.965	-216.630	-704.382	33.430	-782.729	-21.555	-201.628
(2)	55.90	-85.399	-113.562	-39.088	-184.633	-226.920	32.341	-468.476	-41.789	-75.949
(3)	58.30	-78.595	-77.722	189.335	-159.035	99.703	38.515	-349.648	-26.083	-26.031
(1)	58.30	-50.587	-93.329	190.528	-150.182	40.000	5.128	-350.015	-32.691	-23.599
(2)	61.20	-49.813	-51.243	393.403	-110.690	394.126	8.496	-317.430	-9.250	-7.447
(3)	64.10	-41.756	-9.157	489.193	-92.645	475.185	16.880	-298.053	-1.513	-4.103
(1)	64.10	-6.671	-32.153	445.588	-87.224	417.752	3.802	-297.936	-8.909	-3.143
(2)	65.55	-6.097	-16.011	481.589	-66.584	504.510	4.176	-295.064	2.954	1.097
(3)	67.00	-2.136	1.045	491.665	-63.817	474.362	6.652	-302.969	3.781	8.015
(1)	67.00	-4.532	13.851	84.300	-61.900	326.413	6.344	-302.969	-1.349	8.614
(2)	68.45	-3.692	15.466	63.312	-43.336	252.320	8.030	-317.428	2.653	10.228
(3)	69.90	0.444	17.195	38.813	-41.607	316.051	12.005	-337.165	8.389	11.958
(1)	69.90	-42.390	37.911	86.189	-45.612	237.621	8.406	-337.282	0.832	14.820
(2)	72.80	-40.936	41.255	-24.515	-18.920	80.584	6.804	-387.113	8.569	18.164
(3)	75.70	-32.398	44.598	-148.378	-15.576	132.271	16.542	-447.934	35.040	32.240
(1)	75.70	-80.916	65.457	-148.886	-18.468	15.476	47.619	-448.050	28.685	35.734
(2)	78.10	-79.835	68.704	-309.873	-8.437	-34.604	48.759	-574.764	44.111	77.275
(3)	80.50	-72.832	71.672	-478.402	-5.669	-19.501	55.163	-876.690	22.839	199.497
(1)	80.50	-83.474	76.424	-477.510	-5.328	-42.841	67.271	-876.574	23.310	200.795
(2)	81.00	-83.341	77.001	-515.087	-4.751	-44.387	67.567	-977.805	23.443	201.372
(3)	81.50	-81.806	77.777	-554.978	-4.175	-41.645	70.902	-1080.913	26.333	216.649
(1)	81.50	-102.632	-171.974	-558.838	-247.772	-994.611	33.464	-1080.913	-8.126	-231.216
(2)	82.00	-102.299	-166.209	-474.340	-241.142	-874.293	33.598	-967.749	-10.455	-218.511
(3)	82.50	-101.205	-152.036	-397.523	-234.512	-785.210	40.822	-861.466	-16.448	-215.320
(1)	82.50	-101.917	-150.917	-396.349	-230.025	-765.468	27.855	-860.326	-14.775	-214.849
(2)	85.15	-100.997	-119.785	-38.372	-194.742	-224.824	29.440	-478.969	-46.211	-75.943
(3)	87.80	-93.700	-81.639	228.287	-166.839	154.011	38.436	-340.397	-23.480	-27.362
(1)	87.80	-58.662	-98.015	226.346	-156.885	93.296	3.773	-340.396	-31.582	-25.436
(2)	90.95	-57.408	-53.623	462.708	-114.222	488.114	5.492	-295.664	-10.727	-10.788
(3)	94.10	-49.017	-8.318	570.062	-96.696	575.319	18.599	-269.029	-0.055	-7.098
(1)	94.10	-6.216	-34.344	596.393	-88.204	518.438	11.982	-269.411	-7.109	-3.444
(2)	95.68	-5.616	-17.048	636.944	-68.411	609.552	12.383	-263.351	-2.907	-1.714
(3)	97.25	-1.387	1.400	650.090	-62.664	574.403	14.885	-267.364	4.419	6.215
(1)	97.25	-3.790	12.855	121.261	-64.549	377.441	11.486	-267.364	-0.354	6.644
(2)	98.83	-3.390	14.700	100.646	-44.544	307.183	13.825	-281.736	3.848	8.489
(3)	100.40	1.479	16.545	77.438	-40.970	357.322	17.854	-296.959	8.117	10.334
(1)	100.40	-49.309	42.075	172.710	-46.112	261.302	12.873	-296.959	0.982	14.135
(2)	103.55	-47.601	46.004	38.280	-15.268	73.377	8.864	-344.706	11.538	17.825
(3)	106.70	-38.504	49.579	-109.783	-11.694	116.355	19.403	-408.251	32.977	30.056
(1)	106.70	-90.496	72.655	-107.672	-15.635	5.138	50.992	-408.140	25.489	34.397
(2)	109.35	-89.136	76.249	-306.056	-4.220	-64.254	50.857	-555.095	47.082	78.727
(3)	112.00	-81.358	79.447	-511.908	-1.222	-56.386	59.795	-925.432	26.284	215.077

VIADUCTO BORGES BLANQUES									
112.00	-92.275	83.561	-512.633	-2.230	-82.397	69.224	-925.549	28.547	215.348
112.50	-92.142	84.137	-554.605	-1.653	-84.522	69.520	-1034.290	26.055	216.800
113.00	-90.608	84.954	-597.251	-1.077	-84.932	72.655	-1145.289	16.734	231.247
113.00	-111.688	-171.610	-600.259	-248.478	-1059.395	49.558	-1145.289	-18.734	-228.235
113.50	-111.554	-165.845	-514.443	-240.983	-909.097	41.908	-1035.223	-28.224	-214.818
114.00	-110.260	-151.672	-437.987	-235.391	-794.614	42.042	-928.443	-25.497	-209.918
114.00	-109.629	-152.093	-439.368	-230.733	-794.717	33.989	-928.558	-23.912	-208.596
116.65	-108.709	-121.076	-77.878	-194.527	-256.698	35.574	-568.266	-47.463	-76.756
119.30	-101.652	-82.814	191.251	-167.546	115.030	46.472	-423.070	-25.445	-36.615
119.30	-63.306	-103.154	187.840	-156.713	9.361	-0.794	-423.292	-34.227	-34.334
122.45	-62.052	-57.609	438.969	-113.763	402.027	0.925	-340.474	-13.370	-23.822
125.60	-53.901	-13.457	564.351	-97.390	488.441	12.994	-272.051	-4.415	-20.248
125.60	-9.819	-37.070	594.244	-89.015	326.300	5.257	-272.279	-12.599	-16.598
127.18	-9.192	-18.622	639.704	-68.145	418.524	5.684	-247.309	-6.329	-14.753
128.75	-4.763	-0.173	657.866	-64.398	386.312	8.186	-224.197	-1.376	-12.908
128.75	-4.870	4.537	133.226	-66.121	255.342	10.576	-224.197	-6.500	-12.479
130.33	-4.443	6.266	124.118	-46.231	187.930	11.905	-207.607	-2.231	-10.750
131.90	0.186	8.111	114.844	-42.656	243.230	15.934	-193.626	2.037	-8.905
131.90	-46.172	34.881	229.276	-50.268	162.778	29.341	-193.511	-4.373	-5.472
135.05	-44.918	38.570	115.960	-19.424	-15.517	25.598	-181.554	6.366	-1.782
138.20	-35.846	51.033	-10.406	-15.849	38.991	35.870	-196.113	26.299	16.346
138.20	-81.262	68.545	-8.663	-18.622	38.989	37.850	-195.790	18.048	20.952
140.85	-80.141	71.543	-194.676	-8.360	-14.616	37.715	-348.144	31.463	90.257
143.50	-73.284	83.984	-401.890	-5.247	2.967	46.653	-766.540	4.899	216.159
143.50	-80.640	86.573	-403.094	-4.056	3.817	42.273	-766.540	6.366	215.579
144.00	-80.506	87.150	-445.096	-3.480	3.004	42.569	-874.470	6.499	217.021
144.50	-79.212	87.966	-490.862	-2.903	6.212	43.903	-987.436	5.013	232.484
144.50	-97.755	-156.180	-496.050	-215.090	-864.319	43.200	-987.436	-26.190	-193.118
145.00	-97.622	-150.415	-419.402	-206.730	-766.658	46.793	-893.848	-44.962	-176.913
145.50	-96.328	-144.890	-345.993	-200.965	-666.689	46.926	-807.526	-68.799	-170.220
145.50	-95.821	-144.800	-345.108	-197.588	-666.703	39.325	-809.641	-70.459	-168.944
147.35	-95.341	-115.282	-103.857	-173.259	-329.396	38.076	-606.368	-43.516	-82.869
149.20	-91.072	-93.970	88.421	-150.429	-96.820	45.501	-502.864	-29.690	-44.025
149.20	-69.569	-102.571	88.294	-143.741	-157.431	6.839	-502.991	-35.153	-41.320
151.55	-68.956	-66.250	292.694	-111.744	121.038	10.047	-407.041	-21.305	-39.476
153.90	-64.313	-40.170	420.536	-94.391	221.375	17.433	-314.484	-6.107	-37.507
153.90	-38.642	-52.635	420.448	-90.988	117.048	-9.899	-314.684	-14.050	-35.942
155.08	-38.321	-38.799	473.867	-74.557	211.773	-9.579	-274.084	-10.608	-34.558
156.25	-36.187	-16.430	503.635	-66.890	179.335	-4.270	-235.083	-5.672	-33.290
156.25	-19.723	-23.853	503.635	-68.332	77.472	-18.036	-234.897	-10.594	-30.100
157.43	-19.403	-11.054	524.138	-54.495	149.719	-17.716	-199.304	-7.392	-28.716
158.60	-17.202	2.667	530.917	-49.595	8.471	-10.996	-167.466	-4.190	-27.448
158.60	-1.079	-26.879	254.749	-51.727	143.089	-11.758	-166.591	-12.521	-24.919
160.95	-0.265	-0.244	285.955	-29.416	-43.534	-4.584	-109.665	-4.384	-22.152
163.30	3.217	27.313	257.869	-26.764	20.298	3.820	-60.446	2.020	-19.500
163.30	-5.516	12.688	73.175	-22.817	20.496	-7.064	-60.447	-8.102	-15.553
165.15	-5.036	14.764	47.593	-14.515	-27.997	-0.261	-32.148	-1.298	-13.477
167.00	-3.369	17.395	16.386	-12.324	-4.130	4.809	-9.319	3.771	-11.286
167.00	-0.457	16.176	16.753	-9.668	-3.903	-2.758	-9.091	-2.758	-9.668
167.50	-0.323	16.753	8.830	-9.091	-2.757	-1.424	-2.757	-1.424	-9.091
168.00	-0.190	17.329	0.000	-8.515	0.000	1.911	0.000	2.244	122.360
	0.000	-0.293	-0.289	-0.293	-0.289	0.000	-0.049	0.000	-0.533
	0.000	-0.293	-0.309	-0.293	-0.309	0.000	0.172	0.000	0.277
	0.000	-0.293	-0.366	-0.293	0.685	0.000	-0.952	0.000	1.112
	0.000	-1.090	-1.067	-1.090	-3.155	0.000	-2.435	0.000	-1.571
	0.000	-1.090	-1.851	-1.090	-0.801	0.000	1.431	0.000	1.055
	0.000	-1.090	-0.276	-1.090	0.774	0.000	-5.985	0.000	4.442
	-1.052	10.086	12.916	-2.094	-4.305	1.036	-2.384	1.036	-3.295
	-1.052	10.086	-1.267	-2.094	-2.305	1.036	2.288	-0.001	1.423
	0.000	10.086	-16.673	-2.094	1.608	1.036	-6.883	-1.052	6.934
	0.000	12.342	17.803	-9.589	-15.888	0.000	-13.767	0.000	-11.230
	0.000	12.342	-0.882	-9.589	-1.842	0.000	2.030	0.000	0.925
	0.000	12.342	-19.286	-9.589	13.512	0.000	-16.795	0.000	13.130
	0.000	1.392	3.528	-6.348	-12.991	0.000	-11.790	0.000	-7.509
	0.000	1.392	0.047	-6.348	-1.851	0.000	1.431	0.000	0.645
	0.000	1.392	-1.748	-6.348	10.377	0.000	-13.938	0.000	8.847
	0.000	-1.620	-2.375	-10.261	-18.662	0.000	-16.781	0.000	-12.142
	0.000	-1.620	0.992	-10.261	-1.726	0.000	1.946	0.000	1.063
	0.000	-1.620	5.425	-10.261	15.236	0.000	-20.045	0.000	14.306
	-1.036	-8.863	-13.640	-6.968	-12.232	-1.036	-11.032	-1.036	-8.169
	-1.036	-8.863	1.996	-6.968	-1.267	-1.036	2.288	0.001	1.558
	-1.036	-8.863	16.640	-6.968	9.008	-1.036	-16.268	1.052	12.175
	0.000	-1.704	-0.878	-2.142	-4.379	0.000	-3.656	0.000	-2.622
	0.000	-1.704	-0.902	-2.142	-0.685	0.000	1.346	0.000	1.053
	0.000	-1.704	-0.015	-2.142	1.843	0.000	-7.251	0.000	5.478
	0.000	0.781	0.664	-0.965	-1.829	0.000	-1.589	0.000	-1.205
	0.000	0.781	-0.494	-0.965	-0.887	0.000	0.514	0.000	0.415
	0.000	0.781	-0.624	-0.965	0.402	0.000	-3.159	0.000	2.288
	0.000	4.545	6.501	-2.435	-4.585	0.000	-3.864	0.000	-2.915
	0.000	4.545	-0.592	-2.435	-1.263	0.000	1.688	0.000	1.330
	0.000	4.545	-5.734	-2.435	3.366	0.000	-8.318	0.000	6.590
	-1.052	15.223	21.319	-12.100	-20.373	1.036	-18.452	1.036	-13.541
	-1.052	15.223	-1.961	-12.100	-1.961	1.036	3.035	-0.001	1.839
	-1.052	15.223	-25.365	-12.100	17.239	1.036			

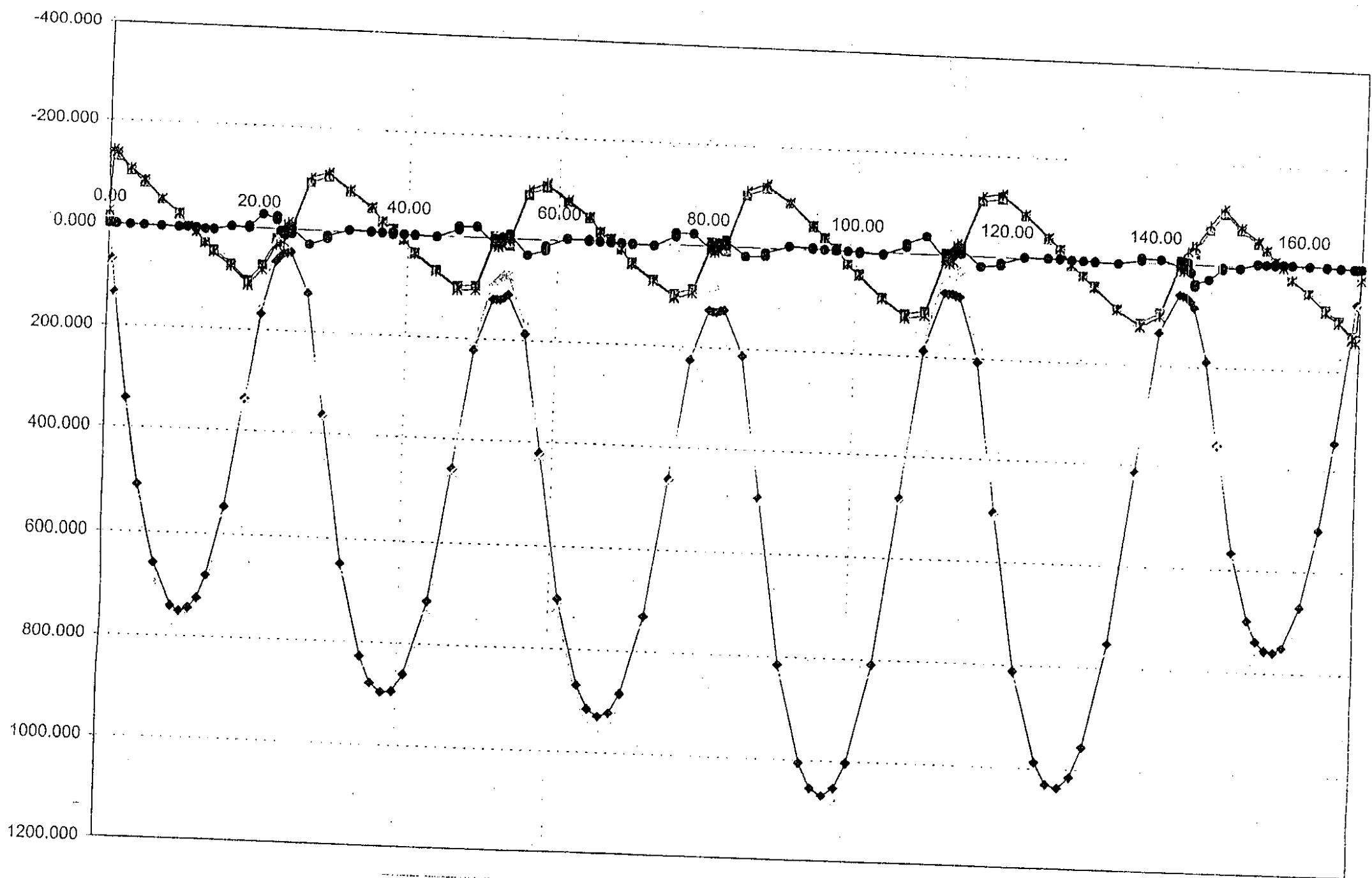
VIADUCTO BORGES BLANQUES

8(1)	0.000	6.663	8.845	-17.349	-31.175	0.000	-28.334	0.000	-19.230
9(2)	0.000	6.663	-1.306	-17.349	-1.306	0.000	2.289	0.000	1.069
3(3)	0.000	6.663	-11.340	-17.349	27.457	0.000	-31.848	0.000	21.402
3(1)	0.000	2.792	4.405	-13.462	-21.771	0.000	-19.650	0.000	-14.622
3(1)	0.000	2.792	0.089	-13.462	-1.148	0.000	1.604	0.000	0.648
3(1)	0.000	2.792	-4.453	-13.462	19.502	0.000	-21.687	0.000	15.918
1(1)	0.000	-2.281	-0.868	-19.275	-31.175	0.000	-28.334	0.000	-21.155
1(2)	0.000	-2.281	1.981	-19.275	-1.306	0.000	2.289	0.000	1.069
1(3)	0.000	-2.281	4.011	-19.275	28.507	0.000	-31.848	0.000	23.304
1(1)	-1.036	-12.428	-15.227	-14.027	-23.305	-1.036	-21.144	-1.036	-15.227
1(2)	-1.036	-12.428	2.135	-14.027	-1.845	-1.036	3.035	0.001	1.838
1(3)	-1.036	-12.428	21.241	-14.027	20.356	-1.036	-27.173	1.052	20.195
1(1)	0.000	-0.307	-0.458	-2.435	-5.340	0.000	-4.620	0.000	-3.155
1(2)	0.000	-0.307	1.140	-2.435	-1.148	0.000	1.604	0.000	1.330
1(3)	0.000	-0.307	1.390	-2.435	3.187	0.000	-9.393	0.000	6.692
1(1)	0.000	0.781	1.724	-0.965	-1.945	0.000	-1.705	0.000	-1.205
1(2)	0.000	0.781	-0.494	-0.965	-0.771	0.000	0.429	0.000	0.415
1(3)	0.000	0.781	-0.601	-0.965	0.287	0.000	-3.275	0.000	2.288
1(1)	0.000	4.545	6.564	-2.435	-5.340	0.000	-4.620	0.000	-3.155
1(2)	0.000	4.545	-0.315	-2.435	-1.148	0.000	1.604	0.000	1.330
1(3)	0.000	4.545	-6.430	-2.435	3.187	0.000	-9.393	0.000	6.590
1(1)	-1.052	16.260	22.472	-14.027	-23.305	1.036	-21.144	1.036	-15.227
1(2)	-1.052	16.260	-1.845	-14.027	-1.845	1.036	2.950	-0.001	1.838
1(3)	-1.052	16.260	-26.286	-14.027	20.356	1.036	-27.173	-1.052	20.195
1(1)	0.000	5.611	7.987	-19.276	-32.111	0.000	-29.470	0.000	-21.157
1(2)	0.000	5.611	-1.028	-19.276	-1.306	0.000	2.289	0.000	1.067
1(3)	0.000	5.611	-10.848	-19.276	28.624	0.000	-32.884	0.000	23.303
1(1)	0.000	1.917	1.480	-13.462	-22.621	0.000	-20.700	0.000	-14.622
1(2)	0.000	1.917	-0.049	-13.462	-1.148	0.000	1.604	0.000	0.648
1(3)	0.000	1.917	-2.485	-13.462	20.468	0.000	-22.810	0.000	15.918
1(1)	0.000	-2.283	-1.718	-19.276	-31.844	0.000	-29.443	0.000	-21.157
1(2)	0.000	-2.283	2.213	-19.276	-1.074	0.000	2.521	0.000	1.067
1(3)	0.000	-2.283	4.889	-19.276	30.437	0.000	-32.996	0.000	23.303
1(1)	-1.036	-7.516	-10.316	-14.699	-24.654	-1.036	-23.543	-1.036	-15.900
1(2)	-1.036	-7.516	2.135	-14.699	-1.845	-1.036	2.950	0.001	1.976
1(3)	-1.036	-7.516	15.467	-14.699	21.996	-1.036	-30.148	1.052	21.067
1(1)	0.000	-1.359	-1.610	-3.487	-6.392	0.000	-5.431	0.000	-3.967
1(2)	0.000	-1.359	1.140	-3.487	-1.148	0.000	1.604	0.000	1.329
1(3)	0.000	-1.359	3.557	-3.487	6.164	0.000	-10.329	0.000	7.627
1(1)	0.000	0.781	0.789	-0.965	-1.830	0.000	-1.590	0.000	-1.205
1(2)	0.000	0.781	-0.494	-0.965	-0.771	0.000	0.429	0.000	0.415
1(3)	0.000	0.781	-0.484	-0.965	1.454	0.000	-3.158	0.000	2.288
1(1)	-1.050	2.656	4.999	-4.158	-6.084	0.000	-5.123	0.000	-3.828
1(2)	-1.050	2.656	-0.330	-4.158	-1.302	0.000	1.690	0.000	1.468
1(3)	-1.050	2.656	-5.772	-4.158	4.556	0.000	-10.380	0.000	7.766
1(1)	-1.052	15.603	21.748	-15.722	-26.535	1.036	-24.134	1.036	-17.162
1(2)	-1.052	15.603	-2.154	-15.722	-2.269	1.036	3.207	-0.001	1.978
1(3)	-1.052	15.603	-25.927	-15.722	23.394	1.036	-30.793	-1.052	22.335
1(1)	0.000	5.424	8.487	-22.764	-36.574	0.000	-33.252	0.000	-24.405
1(2)	0.000	5.424	-1.382	-22.764	-1.382	0.000	2.693	0.000	0.932
1(3)	0.000	5.424	-10.222	-22.764	34.829	0.000	-36.616	0.000	26.319
1(1)	0.000	1.943	2.224	-15.819	-27.204	0.000	-24.602	0.000	-16.779
1(2)	0.000	1.943	0.847	-15.819	-1.302	0.000	1.690	0.000	0.567
1(3)	0.000	1.943	-0.763	-15.819	23.434	0.000	-26.570	0.000	18.021
1(1)	0.000	-0.351	-0.890	-22.385	-36.606	0.000	-33.285	0.000	-24.266
1(2)	0.000	-0.351	2.182	-22.385	-1.382	0.000	2.693	0.000	1.071
1(3)	0.000	-0.351	4.851	-22.385	35.389	0.000	-36.731	0.000	26.458
1(1)	-1.036	-4.376	-3.883	-16.773	-28.754	-1.036	-26.352	-1.036	-17.974
1(2)	-1.036	-4.376	3.142	-16.773	-2.269	-1.036	3.207	0.001	1.977
1(3)	-1.036	-4.376	8.080	-16.773	24.331	-1.036	-33.083	1.052	23.371
1(1)	-1.038	0.921	0.837	-4.159	-8.073	0.000	-7.113	0.000	-4.639
1(2)	-1.038	0.921	1.124	-4.159	-1.302	0.000	1.690	0.000	1.467
1(3)	-1.038	0.921	0.198	-4.159	6.216	0.000	-12.481	0.000	8.701
1(1)	0.000	0.781	0.789	-0.965	-1.830	0.000	-1.590	0.000	-1.205
1(2)	0.000	0.781	-0.355	-0.965	-0.771	0.000	0.429	0.000	0.415
1(3)	0.000	0.781	-1.522	-0.965	2.329	0.000	-3.158	0.000	2.288
1(1)	-1.050	3.692	6.912	-4.159	-8.073	0.000	-7.113	0.000	-4.639
1(2)	-1.050	3.692	0.708	-4.159	-1.302	0.000	1.690	0.000	1.467
1(3)	-1.050	3.692	-6.835	-4.159	6.216	0.000	-12.583	0.000	8.701
1(1)	-1.052	10.375	13.266	-16.773	-28.954	1.036	-26.352	1.036	-17.974
1(2)	-1.052	10.375	-2.257	-16.773	-2.269	1.036	3.207	-0.001	1.977
1(3)	-1.052	10.375	-17.676	-16.773	24.415	1.036	-33.083	-1.052	23.371
1(1)	0.000	3.715	4.627	-22.385	-36.606	0.000	-33.285	0.000	-24.266
1(2)	0.000	3.715	-1.382	-22.385	-1.382	0.000	2.693	0.000	1.071
1(3)	0.000	3.715	-8.622	-22.385	35.389	0.000	-36.731	0.000	26.458
1(1)	0.000	-0.145	1.048	-15.534	-26.166	0.000	-23.565	0.000	-15.645
1(2)	0.000	-0.145	-0.330	-15.534	-0.380	0.000	1.774	0.000	0.567
1(3)	0.000	-0.145	-0.902	-15.534	23.434	0.000	-25.519	0.000	16.983
1(1)	0.000	-2.476	-1.926	-20.837	-36.605	0.000	-33.283	0.000	-22.478
1(2)	0.000	-2.476	2.182	-20.837	-1.382	0.000	2.693	0.000	0.934
1(3)	0.000	-2.476	6.938	-20.837	32.424	0.000	-36.732	0.000	24.417
1(1)	-1.036	-8.537	-11.207	-13.807	-23.307	-1.036	-20.906	-1.036	-15.488
1(2)	-1.036	-8.537	2.105	-13.807	-2.269	-1.036	3.207	0.001	1.980
1(3)	-1.036	-8.537	14.366	-13.807	18.653	-1.036	-27.155	1.052	20.506

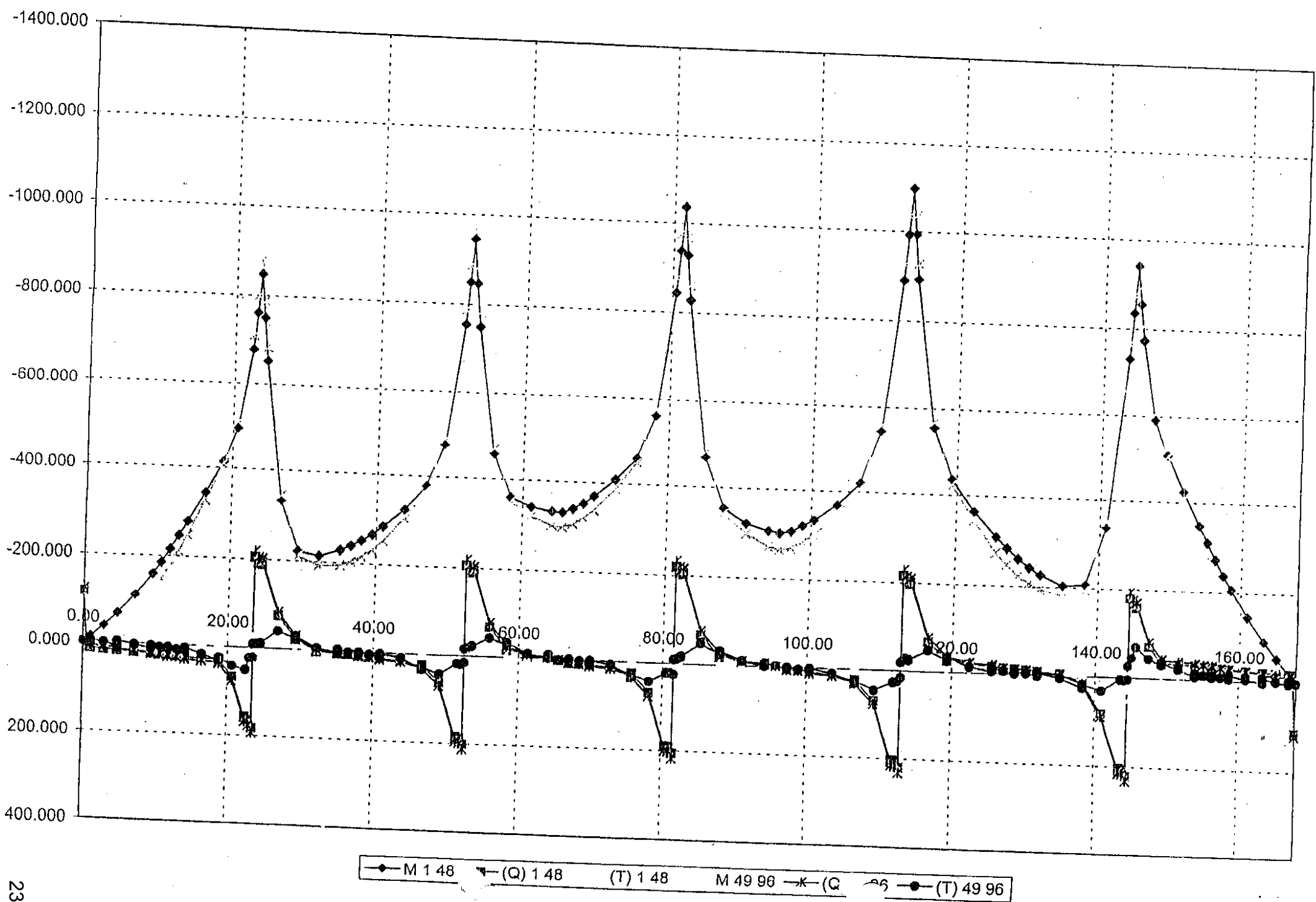
VIADUCTO BORGES BLANQUES

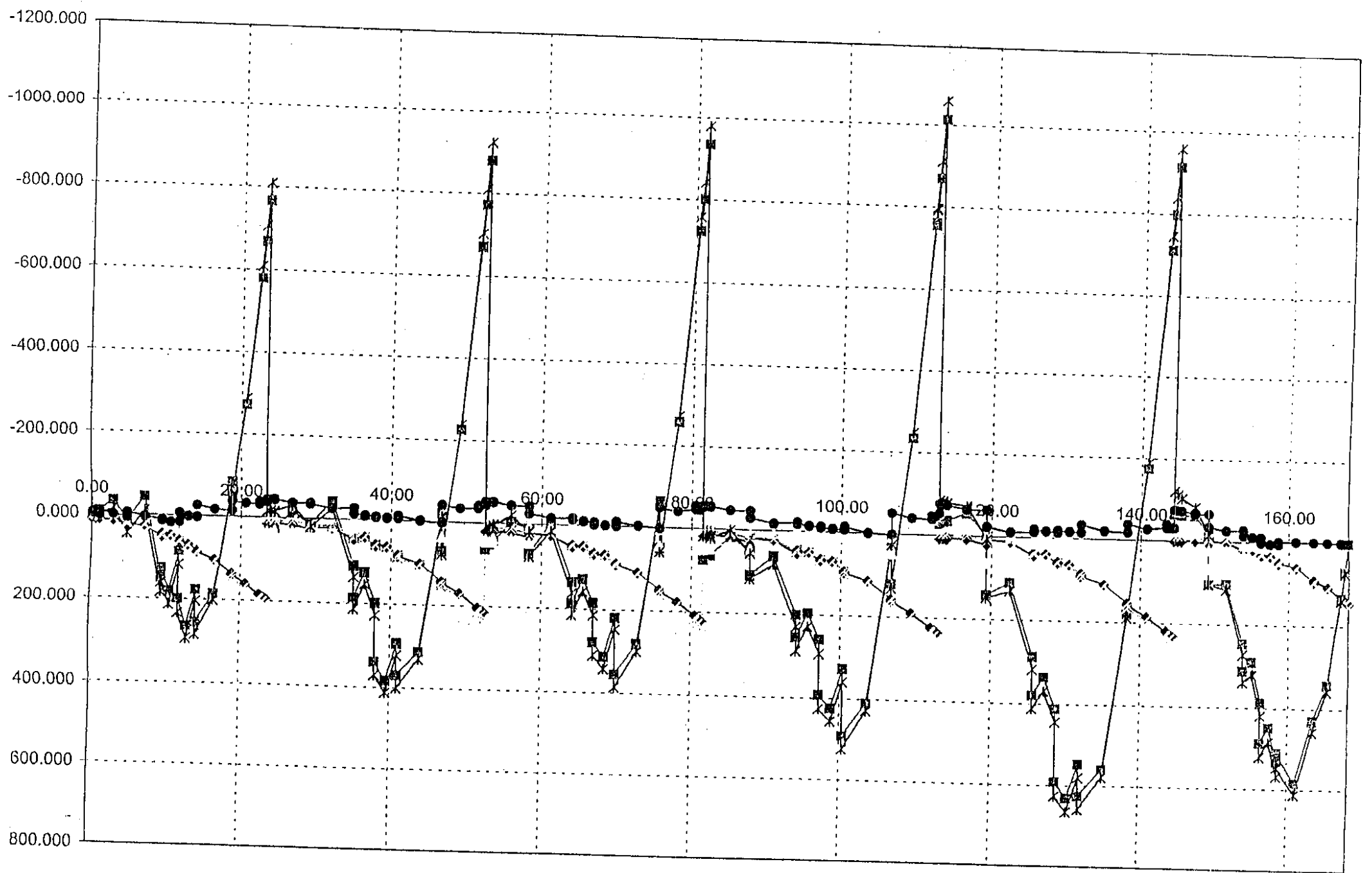
-1.038	1.347	1.762	-2.823	-5.967	0.000	-5.247	0.000	-3.303
-1.038	1.347	0.467	-2.823	-1.418	0.000	1.774	0.000	1.552
-1.038	1.347	-1.617	-2.823	5.547	0.000	-10.366	0.000	7.665
0.000	0.781	1.978	-0.681	-1.830	0.000	-1.590	0.000	-0.681
0.000	0.781	-0.471	-0.681	-0.887	0.000	0.514	0.000	0.415
0.000	0.781	-2.433	-0.681	2.329	0.000	-3.158	0.000	2.186
0.000	4.836	6.545	-3.194	-5.164	0.000	-4.683	0.000	-3.434
0.000	4.836	-0.763	-3.194	-0.685	0.000	1.346	0.000	1.052
0.000	4.836	-7.134	-3.194	2.782	0.000	-8.298	0.000	6.413
-1.052	12.706	18.893	-8.516	-14.336	1.036	-13.135	1.036	-9.476
-1.052	12.706	-1.267	-8.516	-2.305	1.036	2.288	-0.001	1.696
-1.052	12.706	-21.427	-8.516	11.987	1.036	-18.340	-1.052	14.013
0.000	4.881	6.572	-11.313	-18.663	0.000	-17.833	0.000	-12.144
0.000	4.881	-1.726	-11.313	-1.726	0.000	1.946	0.000	1.062
0.000	4.881	-9.986	-11.313	16.125	0.000	-21.081	0.000	14.304
0.000	0.606	-0.168	-7.223	-12.875	0.000	-12.725	0.000	-8.384
0.000	0.606	-1.851	-7.223	-1.851	0.000	1.431	0.000	0.645
0.000	0.606	-1.338	-7.223	10.494	0.000	-14.859	0.000	9.712
0.000	-9.151	-15.207	-9.589	-16.939	0.000	-14.818	0.000	-11.230
0.000	-9.151	-0.222	-9.589	-1.842	0.000	2.030	0.000	0.925
0.000	-9.151	14.627	-9.589	13.513	0.000	-17.831	0.000	13.130
-1.036	-5.736	-7.551	-2.094	-6.231	-1.036	-4.310	-1.036	-3.295
-1.036	-5.736	1.996	-2.094	-2.305	-1.036	2.288	0.001	1.423
-1.036	-5.736	10.505	-2.094	1.609	-1.036	-8.784	1.052	7.035
0.000	4.239	6.383	-2.141	-3.272	0.000	-2.552	0.000	-1.571
0.000	4.239	0.047	-2.141	-0.801	0.000	1.431	0.000	1.055
0.000	4.239	-4.418	-2.141	0.659	0.000	-6.202	0.000	4.442
0.000	1.112	2.246	-0.293	-1.340	0.000	-1.100	0.000	-0.533
0.000	1.112	-0.031	-0.293	-0.309	0.000	0.172	0.000	0.277
0.000	1.112	-1.053	-0.293	0.685	0.000	-1.990	0.000	1.112
0.000	365.164	27.722	4.846	0.173	0.000	0.173	0.000	4.846
0.000	365.164	13.930	4.846	1.208	0.000	1.208	0.000	4.846
0.000	365.164	0.000	4.846	0.000	0.000	0.000	0.000	151.939
0.000	168.007	12.281	-12.752	-0.865	0.000	-0.865	0.000	-12.752
0.000	168.007	6.578	-12.752	-0.880	0.000	-0.880	0.000	-12.752</

Hip B. M Qcon Tcon



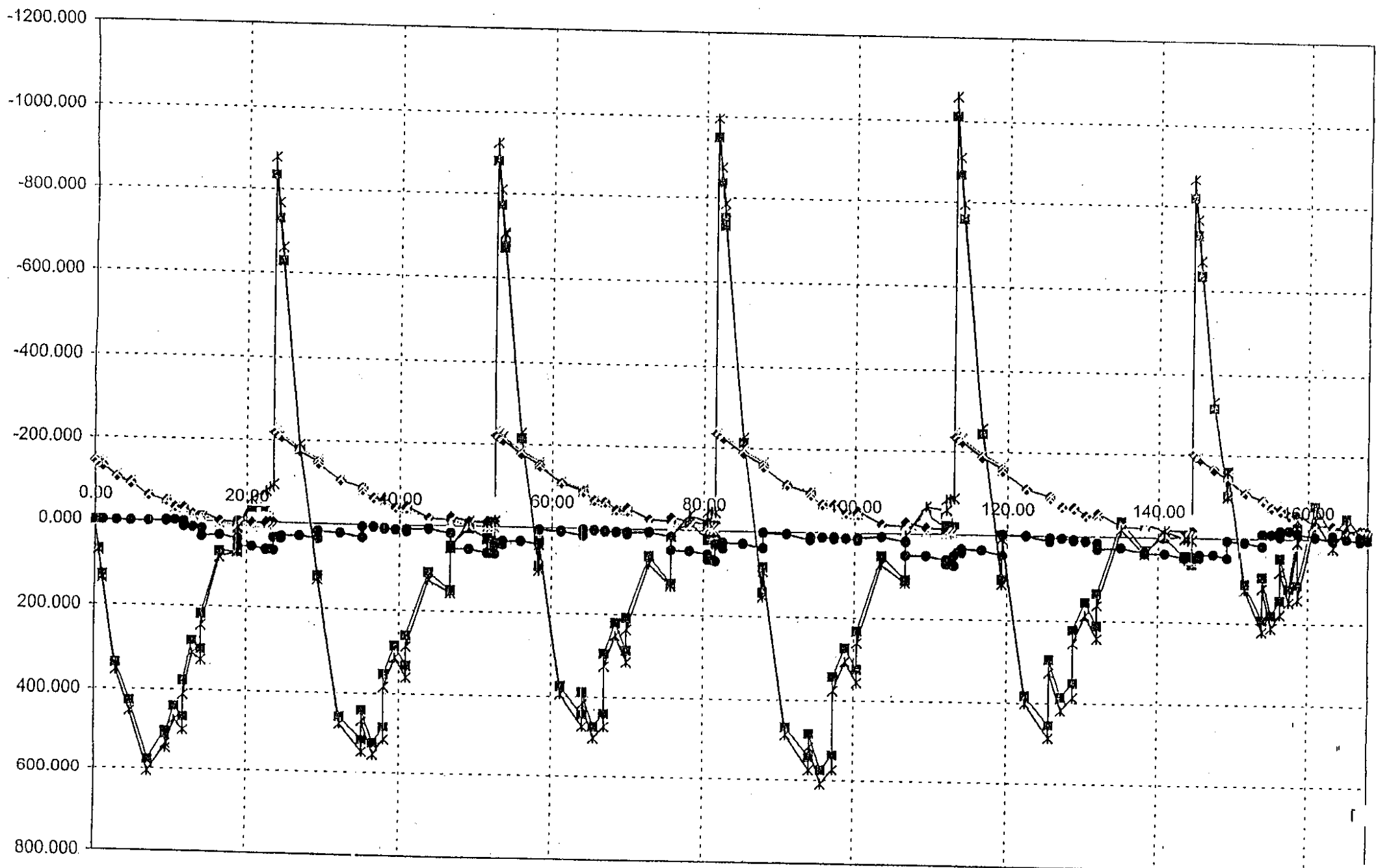
Hip B. M Qcon Tcon





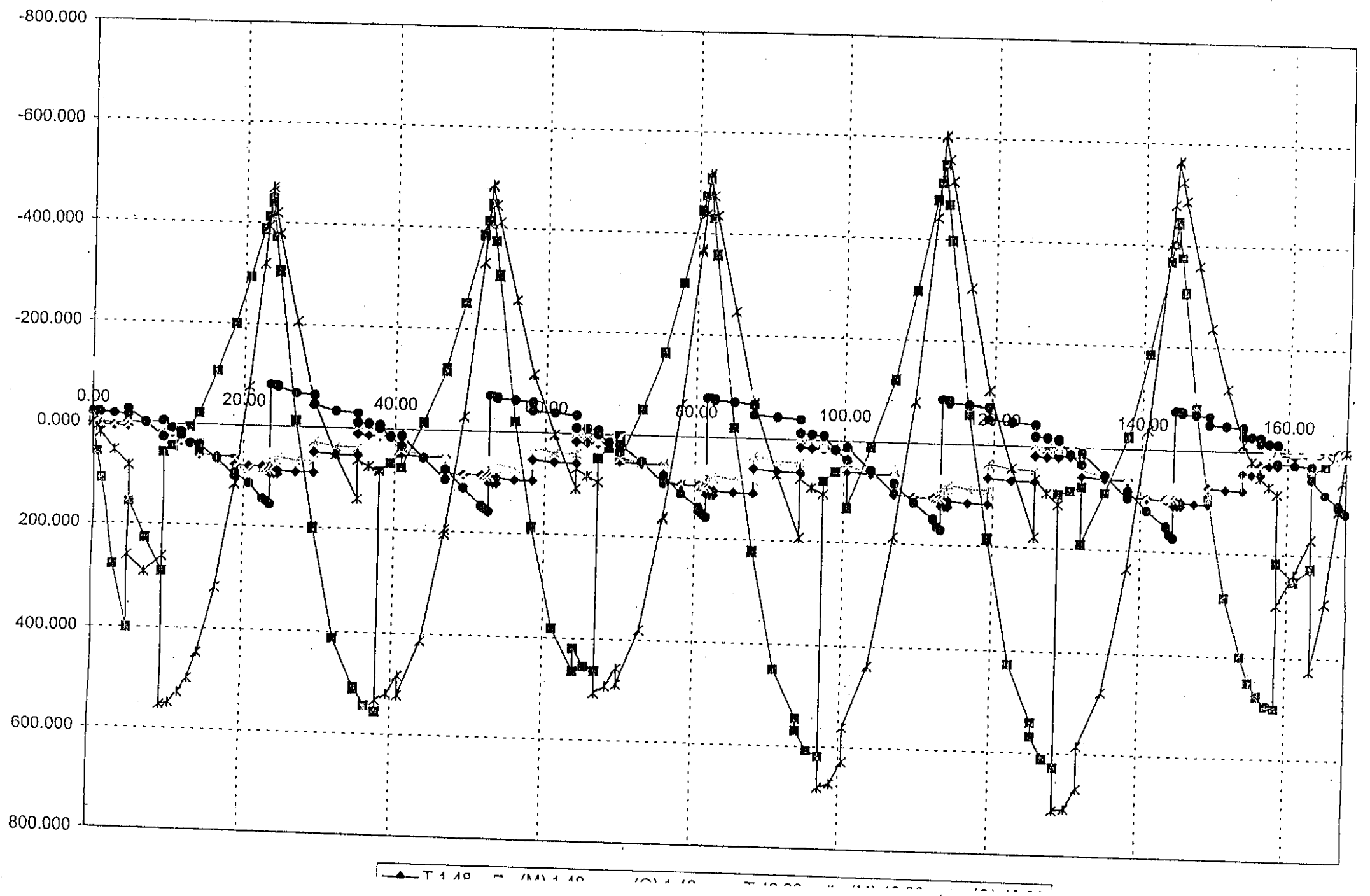
Q 1 48 (M) 1 48 (T) 1 48 Q 49 96 (M) 49 96 (T) 49 96

Hip B. Q Mcon Tcon

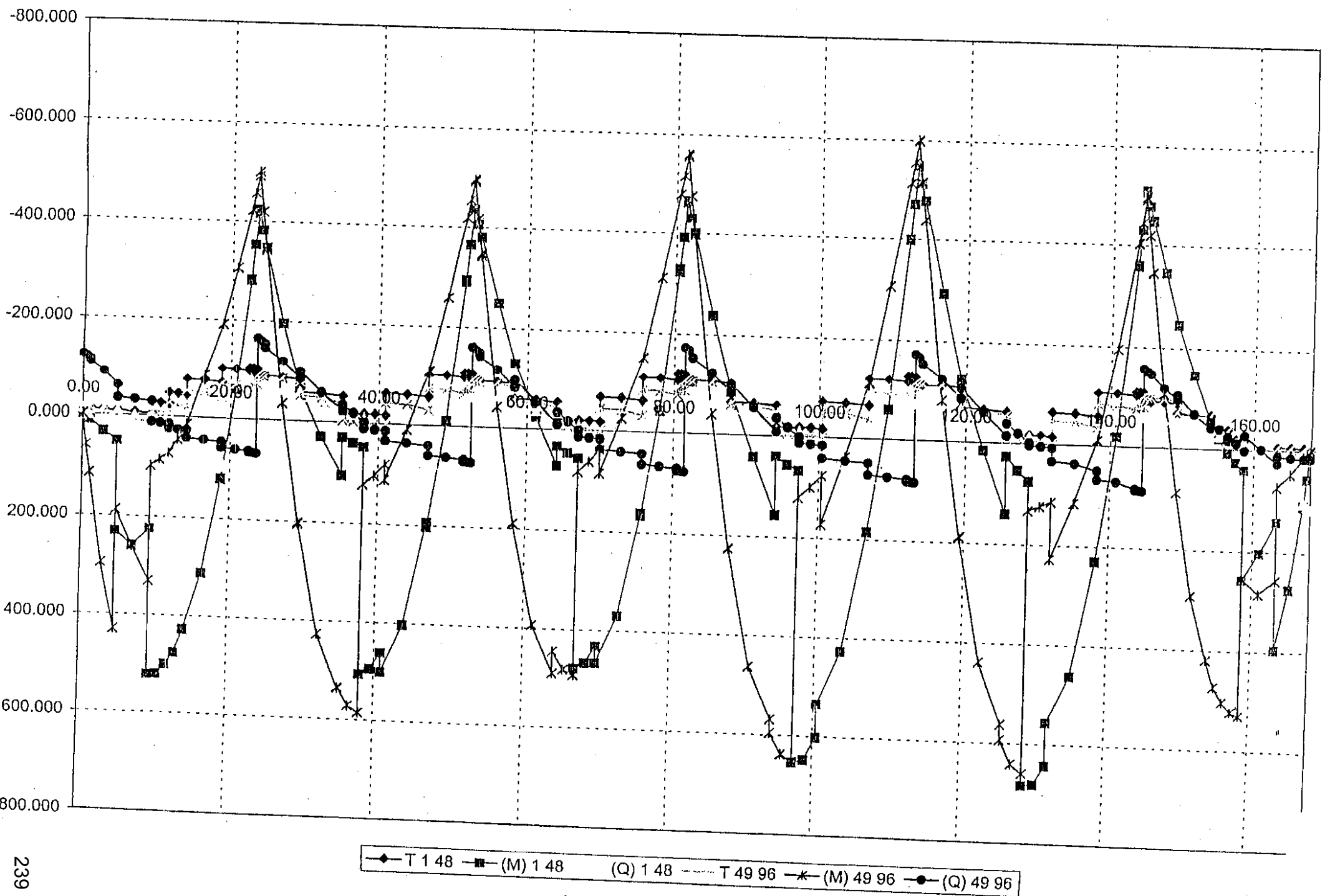


Q 1 48 (M) 1 48 (T) 1 48 Q 49 96 (M) 49 96 (T) 49 96

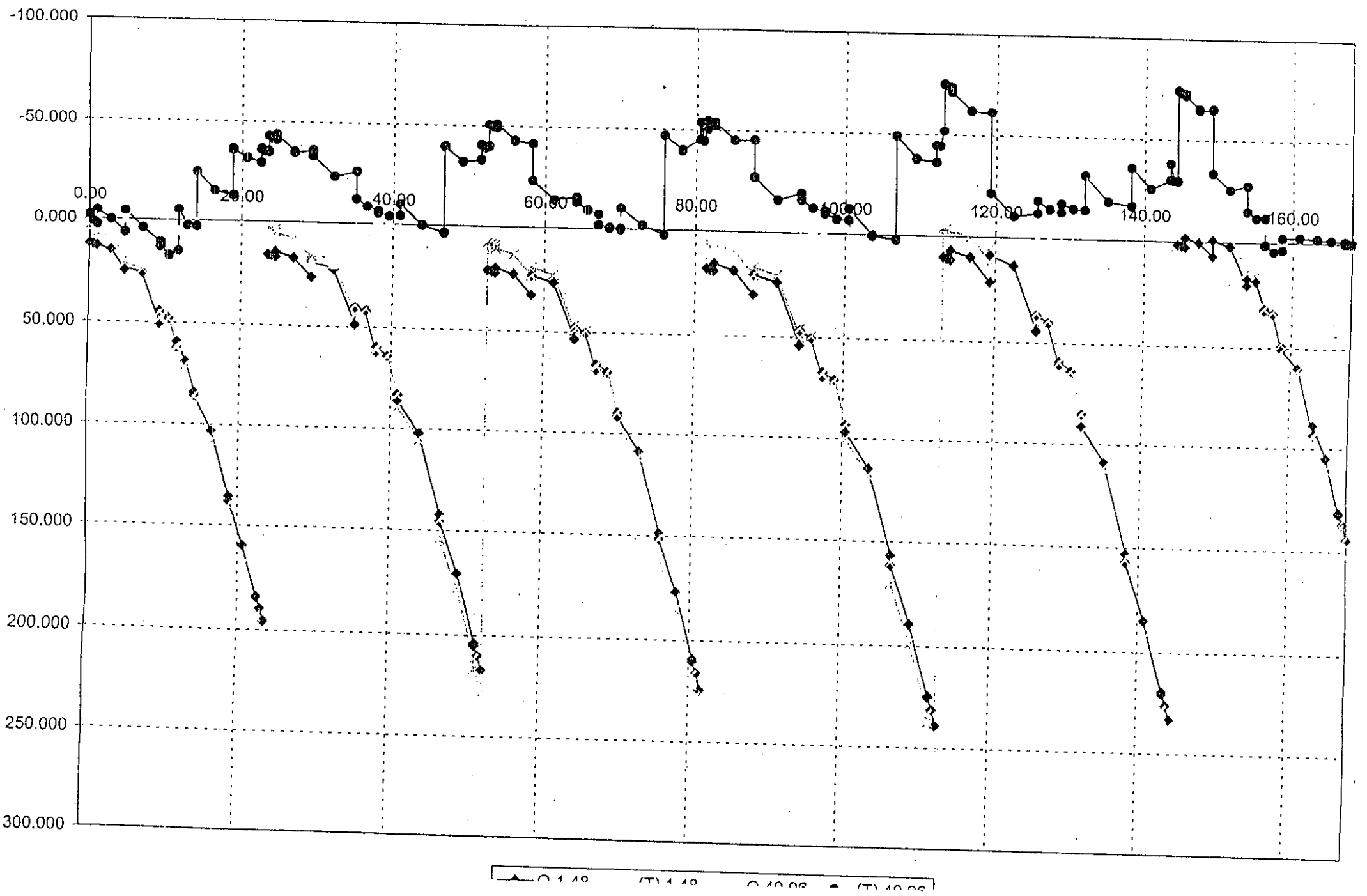
Hip B. T Mcon Qcon



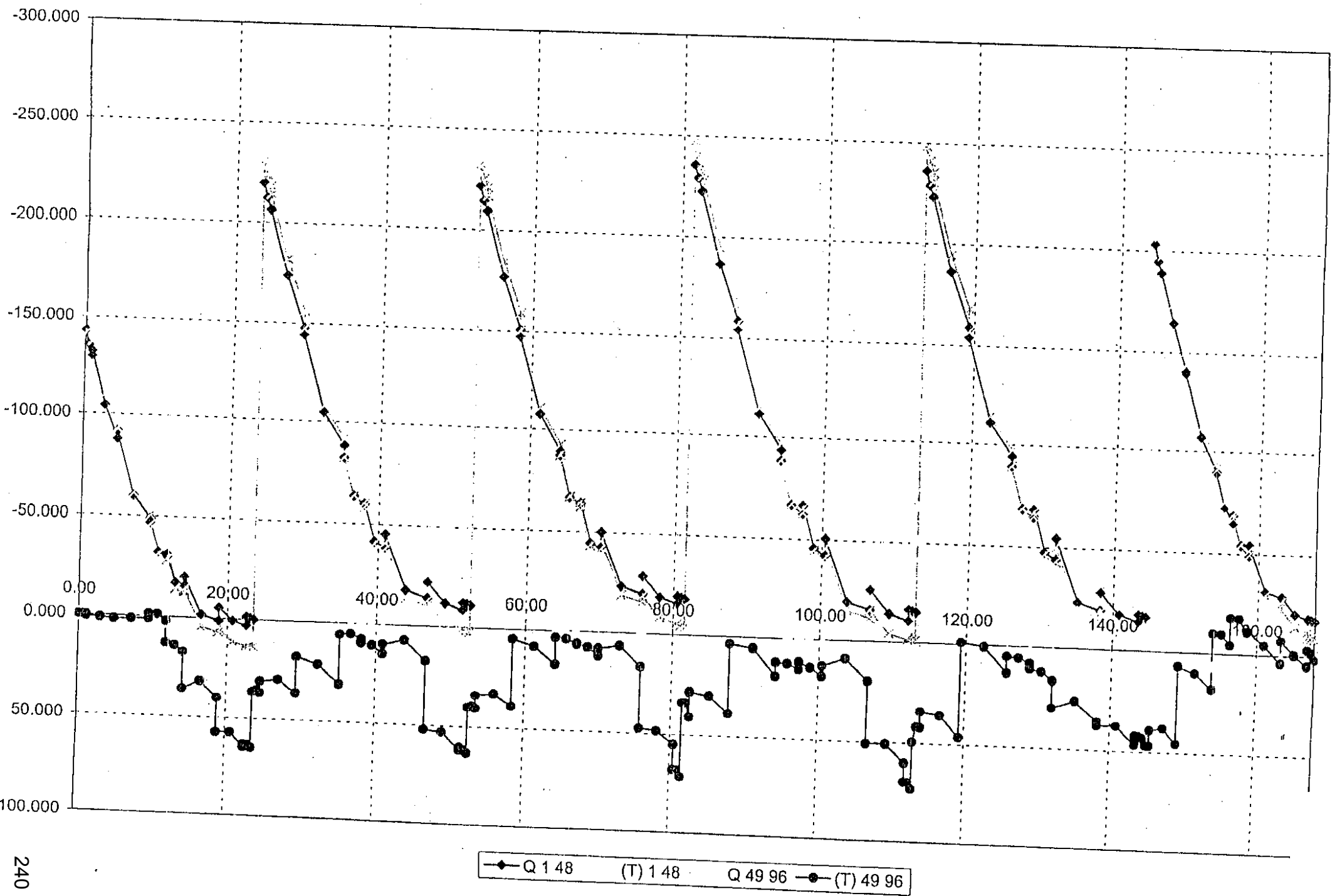
Hip B. T Mcon Qcon



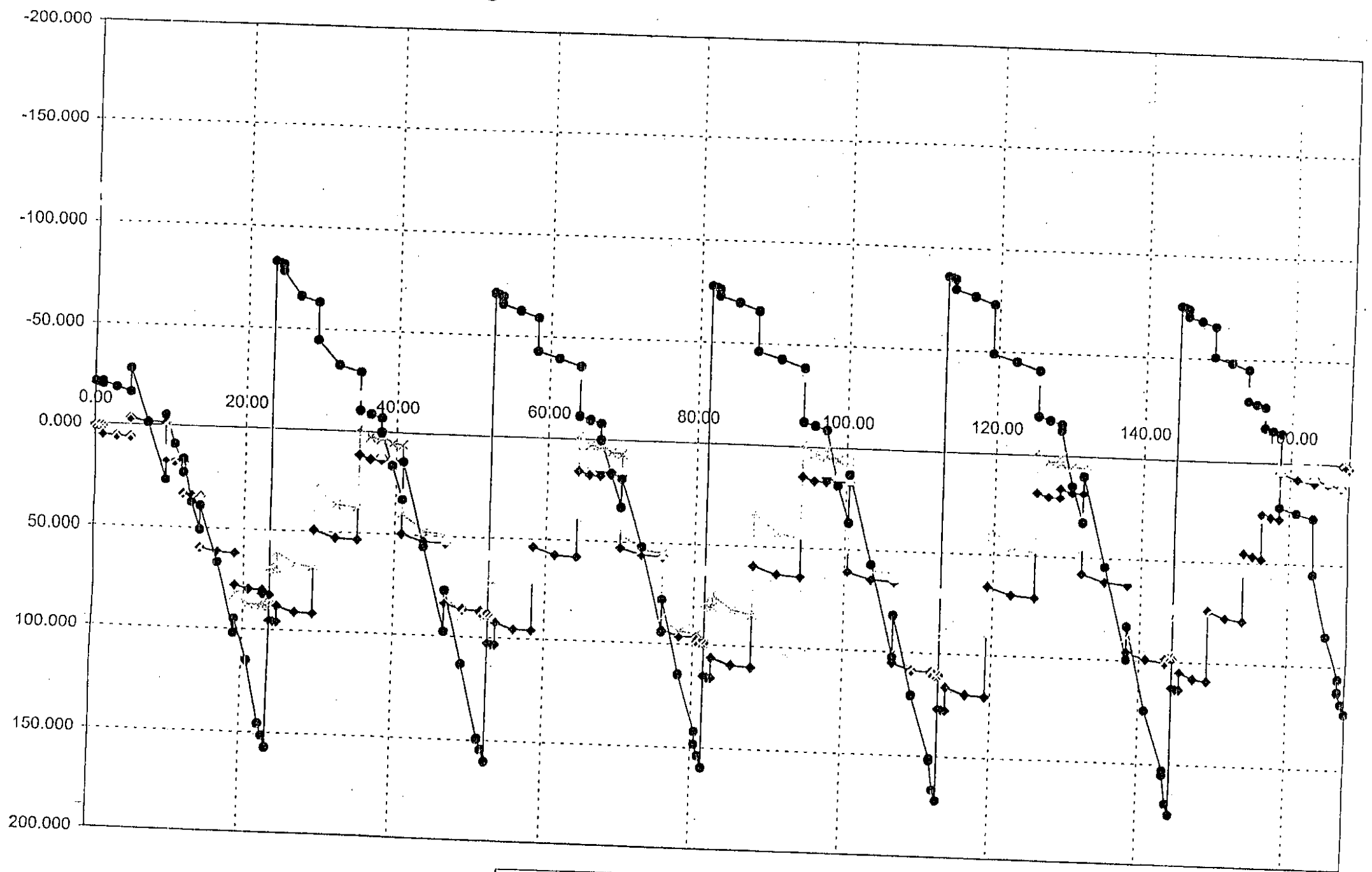
Hip B. Q Mcon Tcon



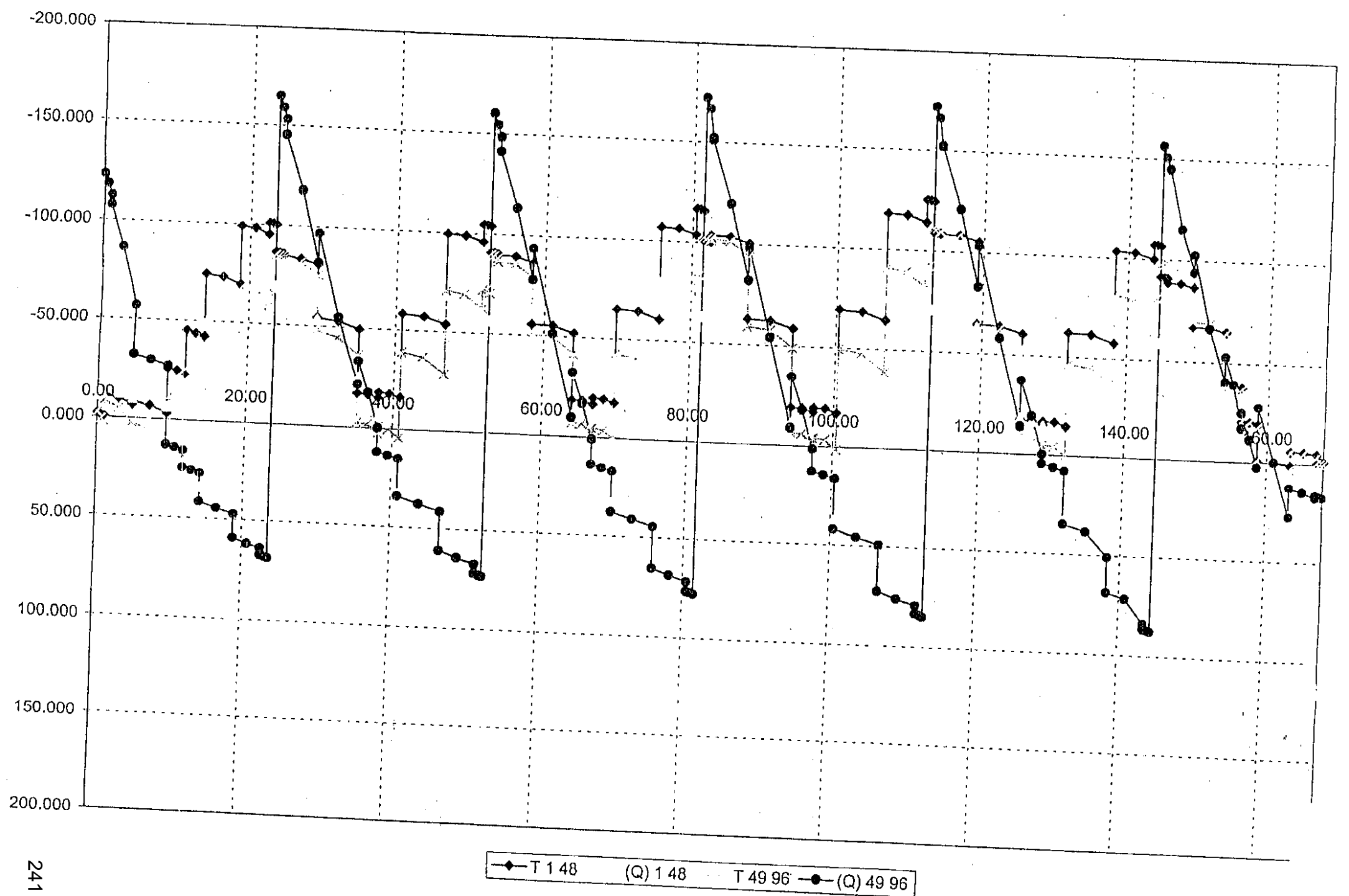
Hip B. Q Mcon Tcon



Hip B. T Mcon Qcon



Hip B. T Mcon Qcon



HIPOTESIS: c Eie 1 (49-96) ripado -30cm; Eie 2 (1-48) sin ripar

Envolvente IPF75B positiva

Coef impacto 1.16

VIADUCTO BORGES BLANQUES

RRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)	80.50	123.684	74.947	-476.968	234.165	-795.167	52.001	120.964	-1.103	-4.715
0.00	1.689	-129.466	0.000	10.902	0.000	-0.028	0.000	-2.089	-14.199	81.00	124.397	75.646	-513.546	240.040	-882.456	42.751	122.387	-1.041	-1.160	
0.50	1.751	-123.702	63.430	11.489	-5.556	0.034	76.907	1.180	-150.918	81.50	124.459	76.234	-552.348	248.560	-1026.622	50.472	121.932	0.078	-3.540	
1.00	1.813	-117.827	123.702	12.077	-6.201	0.096	150.037	1.801	-145.043	82.00	143.018	-174.305	-563.232	15.541	65.258	48.178	121.932	-0.252	5.236	
2.85	10.986	-89.603	308.639	14.370	-30.045	-1.095	377.255	1.109	-112.204	82.50	143.732	-168.429	-477.411	16.128	57.171	48.240	120.054	-0.190	0.536	
4.70	11.221	-59.521	446.838	24.006	20.218	0.198	563.997	4.398	-89.877	82.50	143.794	-153.853	-399.448	16.716	52.198	48.302	119.176	-0.128	6.411	
4.70	4.662	-33.427	197.042	23.253	20.100	-3.789	563.853	-3.365	-87.002	85.15	141.173	-122.122	-37.559	17.124	16.382	38.405	119.303	-1.781	7.769	
7.05	6.281	-30.724	273.370	25.956	-37.979	-3.491	720.995	-0.387	-51.162	87.80	141.998	-83.092	234.745	28.640	51.735	48.581	513.017	-16.662	-102.498	
9.40	6.660	-27.904	343.455	50.632	157.806	-4.087	809.070	3.399	-22.960	87.80	95.119	-99.595	233.672	19.678	110.466	9.449	512.987	-11.524	-127.922	
9.40	24.475	12.641	103.495	46.321	192.511	-13.349	809.070	-3.357	-21.422	90.95	99.464	-54.354	473.727	23.321	66.312	8.965	854.459	9.535	-123.024	
10.58	25.387	14.051	89.123	49.670	246.331	-15.913	816.013	-1.867	1.492	94.10	100.370	-8.050	580.598	53.873	209.188	23.627	1063.098	14.500	-48.542	
11.75	25.536	15.461	74.732	63.771	146.432	-11.780	808.809	-0.378	11.891	94.10	46.223	-34.388	603.214	46.957	281.553	7.813	1063.104	1.026	-47.050	
11.75	41.568	24.663	74.732	64.043	262.355	3.563	807.779	-7.166	13.063	95.68	48.476	-16.762	643.747	50.482	221.132	7.999	1114.556	2.981	-24.841	
12.93	42.592	26.068	45.860	73.796	322.262	-1.772	783.622	-4.746	35.859	97.25	48.786	2.040	655.133	69.812	285.579	11.194	1131.437	5.153	-3.572	
14.10	42.741	27.478	14.066	89.484	228.596	-0.282	735.242	-3.257	52.604	97.25	43.892	13.260	112.112	68.739	438.407	3.794	1131.437	-3.349	-3.664	
14.10	67.271	41.713	15.123	95.873	307.370	20.033	735.242	-10.710	54.682	98.83	45.959	15.140	90.387	72.558	468.357	3.653	1113.396	-1.394	26.595	
16.45	69.430	44.849	-85.170	113.675	214.481	14.199	579.153	-2.918	79.732	100.40	46.250	17.020	66.304	94.885	369.194	5.527	1060.955	0.591	47.864	
18.80	69.809	47.552	-191.968	146.166	-79.249	16.222	347.206	2.383	113.347	103.55	88.843	44.966	25.820	103.613	547.872	4.490	1059.924	-12.492	49.406	
18.80	88.762	60.409	-192.747	156.422	-49.653	32.732	347.119	-2.782	115.384	106.70	89.427	48.609	-119.637	164.071	32.532	-0.156	501.810	-7.924	94.059	
20.65	90.747	62.958	-307.173	177.867	-299.822	31.565	165.452	24.678	72.955	109.35	125.141	69.492	-117.532	178.325	135.143	38.073	502.247	12.266	125.749	
22.50	91.064	65.073	-426.060	203.425	-639.717	32.967	58.396	27.451	21.242	112.00	128.660	73.000	-306.187	206.880	-264.252	31.956	187.153	31.594	113.415	
22.50	96.991	70.135	-431.880	207.963	-640.871	37.523	58.383	25.013	20.421	112.00	129.076	76.055	-501.643	242.720	-833.437	35.233	67.207	1.932	-2.099	
23.00	97.500	70.834	-467.788	213.838	-743.482	37.086	47.925	-0.686	19.084	112.50	130.242	80.345	-508.397	249.224	-829.204	40.243	67.093	1.443	-1.796	
23.50	97.655	71.422	-504.176	219.714	-851.717	37.706	40.225	-3.688	13.353	113.00	130.956	80.932	-548.760	255.981	-951.541	40.864	67.785	1.505	4.080	
23.50	114.986	-169.837	-515.494	13.737	30.951	39.196	40.225	-5.112	3.433	113.00	131.018	81.631	-589.552	263.619	-1110.447	50.347	66.186	2.625	-0.621	
24.00	115.495	-164.073	-431.735	14.324	23.419	39.258	39.960	-3.993	-1.268	113.50	149.357	-172.199	-599.014	7.642	-34.452	69.418	66.186	2.440	-6.268	
24.50	115.557	-158.198	-351.492	14.912	19.782	40.378	39.360	-3.931	4.608	114.00	149.978	-166.323	-512.874	8.230	-38.777	69.480	70.846	3.560	-10.969	
24.50	112.609	-149.478	-356.668	13.029	18.751	32.716	39.360	-4.380	5.816	114.00	150.133	-151.747	-435.979	8.817	-39.419	70.600	74.100	3.622	-5.093	
26.90	115.644	-121.593	-31.762	15.850	-15.528	33.014	122.737	-26.569	-93.721	116.65	145.318	-122.713	-75.824	8.253	-54.429	57.018	73.982	1.203	-3.733	
29.30	116.035	-84.578	213.130	25.015	17.319	40.714	382.013	-4.320	-117.019	119.30	146.162	-83.454	195.229	19.886	5.184	57.353	204.749	-16.425	-109.607	
29.30	78.620	-98.476	210.266	18.258	17.275	19.991	380.807	-10.573	-113.416	119.30	94.716	-104.687	194.821	8.164	142.371	4.568	522.715	-11.293	-126.869	
32.20	82.480	-55.697	437.530	21.666	-37.339	20.351	686.814	7.885	-83.372	122.45	99.060	-58.271	448.873	12.806	113.934	4.084	849.620	5.640	-123.818	
35.10	82.933	-21.620	549.857	48.693	116.959	31.111	883.160	11.484	-51.938	125.60	100.078	-13.142	573.487	44.122	295.313	16.807	1046.171	10.343	-45.471	
35.10	39.434	-33.745	543.682	40.865	204.071	2.291	883.160	0.620	-49.287	125.60	44.362	-37.113	599.938	37.105	405.059	7.821	1045.648	-1.363	-42.806	
36.55	41.371	-17.294	580.862	42.510	142.029	2.477	936.289	3.412	-22.260	127.18	46.534	-18.312	645.604	40.747	359.879	8.020	1091.406	1.554	-21.361	
38.00	41.638	0.332	594.750	62.604	216.730	4.589	955.885	6.031	-9.041	128.75	46.845	0.490	662.007	61.135	436.644	11.215	1100.393	2.634	8.897	
38.00	38.079	12.065	118.496	61.216	385.656	3.933	955.885	-3.215	-8.218	130.33	41.132	6.598	113.733	65.481	676.816	10.582	1075.980	-3.680	30.988	
39.45	39.904	13.822	99.242	65.681	429.080	4.626	951.721	-0.706	11.935	131.90	41.423	8.478	103.077	86.750	588.381	12.456	1015.549	-1.694	53.314	
40.90	40.170	15.584	76.069	85.070	336.142	7.356	915.656	1.963	39.079	131.90	75.156	33.216	214.760	97.257	683.412	21.194	1015.666	-14.319	53.544	
40.90	73.201	34.211	105.199	92.827	423.873	4.266	914.800	-7.729	40.735	135.05	79.295	36.977	105.227	115.118	597.216	12.652	791.985	-9.323	97.140	
43.80	76.837	37.730	3.148	109.278	347.610	-1.828	751.699	-3.764	73.049	138.20	80.629	49.544	-18.428	159.654	196.496	16.549	435.938	4.613	128.025	
46.70	77.290	41.138	-110.638	149.524	-5.575	0.058	474.670	22.255	104.439	138.20	108.303	63.769	-17.900	173.084	197.408	22.477	435.103	-3.045	131.569	
46.70	105.699	59.760	-112.093	161.722	82.689	30.958	475.581	15.921	108.193	140.85	111.729	66.824	-190.688	201.521	-199.418	17.241	134.901	7.274	97.626	
49.10	108.529	62.804	-259.922	186.928	-251.145	28.347	220.344	16.375	97.093	143.50	113.206	79.033	-383.907	237.479	-778.823	26.687	53.657	5.085	-5.798	
51.50	109.013	65.624	-415.684	220.418	-736.035	34.019	115.359	-2.010	-0.990	144.00	110.378	81.011	-427.037	244.015	-779.761	30.937	53.657	3.646	-4.441	
51.50	111.265	71.101	-420.030	228.205	-737.066	38.448	115.359	-2.357	0.222	144.50	110.551	81.710	-469.490	250.772	-876.844	23.450	54.675	3.708	1.435	
52.00	111.885	71.800	-455.343	233.023	-848.805	38.011	113.835	-2.295	6.098	144.50	124.523	-152.298	-474.778	257.528	-1001.684	24.070	56.372	-0.324	-4.296	
52.50	112.041	72.387	-491.664	240.661	-965.175	39.513	113.201	-2.233	1.397	145.00	125.143	-146.423	-400.596	-0.672	-71.600	68.441	56.372	0.261	-12.865	
52.50	129.279	-161.669	-500.240	18.883	55.497	45.603	113.201	-2.827	9.609	145.00	125.143	-146.423	-400.596	-0.672	-71.600	68.441	56.372	0.261	-12.865	
53.00	129.992	-155.887	-420.519	19.471	44.921	45.666	109.893	-1.707	4.909	145.50	125.317	-140.659	-328.581	0.503	-66.370	68.503	65.223	-17.167	-23.748	
53.50	130.054	-150.012	-343.500	20.058	37.111	46.785	105.120	-1.645	10.784	145.50	116.899	-142.725	-332.162	-3.422	-66.357	69.623	78.921	-39.774	-23.025	
53.50	122.385	-143.990	-352.521	18.293	40.085	38.151	105.002	-3.066	12.111	147.35	120.064	-112.643	-95.434	-1.189	-62.938	60.174	78.933	-43.212	-23.858	
55.90	125.737	-115.881	-38.229	21.113	-4.586	38.449	186.014	-27.770	-87.404	149.20	120.858	-90.657	91.787	5.156	-10.636	60.398	186.734	-23.952	-70.274	
58.30	126.146	-79.089	193.950	31.337	15.779	46.150	438.654	-16.691	-111.856	149.20	86.315	-102.969	91.263	-1.566	103.927	65.921	368.373	1.367	-113.045	

VIADUCTO BORGES BLANQUES

1)	9.40	65.221	-5.557	504.219	44.898	153.535	13.994	766.112	2.758	-21.686
2)	10.58	62.236	8.182	505.451	48.162	206.761	17.457	774.344	2.271	0.640
3)	11.75	61.749	21.921	485.080	61.901	109.510	14.393	768.141	1.784	10.772
4)	11.75	90.138	12.719	485.080	60.766	228.487	-4.826	767.083	4.626	10.827
5)	12.93	86.788	35.296	464.357	70.269	288.949	2.244	745.961	4.141	33.038
6)	14.10	86.301	48.004	416.591	85.554	199.413	1.756	700.923	3.654	49.353
7)	14.10	127.855	33.047	417.622	89.736	280.719	-23.900	700.923	6.163	49.495
8)	16.45	120.790	61.560	308.694	107.082	198.713	-16.287	557.769	18.424	73.474
9)	18.80	119.552	96.481	119.700	138.739	-79.060	-15.504	341.711	37.121	106.328
10)	18.80	160.855	83.670	120.725	145.479	-48.684	-35.365	341.567	50.132	104.778
11)	20.65	154.359	105.428	-54.367	166.373	-279.682	-32.701	179.310	-24.999	63.952
12)	22.50	153.324	135.654	-278.107	191.275	-598.342	-31.715	88.423	-43.652	13.141
13)	22.50	165.317	132.700	-277.512	193.249	-599.440	-36.339	88.017	-29.687	9.887
14)	23.00	163.653	138.790	-345.898	198.973	-694.709	-35.511	83.475	-5.066	8.209
15)	23.50	163.145	144.514	-416.719	204.698	-795.281	-35.714	81.041	-6.333	2.571
16)	23.50	151.687	-67.538	-409.034	24.648	71.616	-38.964	81.041	2.062	14.072
17)	24.00	150.022	-67.331	-375.512	25.220	58.516	-40.994	75.383	-0.998	9.492
18)	24.50	149.819	-66.759	-341.661	25.792	49.341	-44.054	69.435	-3.028	15.217
19)	24.50	155.741	-67.057	-341.296	20.772	47.979	-22.363	69.435	11.565	13.369
20)	26.90	145.814	-56.758	-194.947	23.520	-4.964	-35.152	132.854	21.898	-85.105
21)	29.30	144.535	-54.010	-60.431	32.450	7.929	-52.109	370.000	-30.259	-107.734
22)	29.30	128.490	-39.763	-60.441	21.357	7.597	-4.135	369.159	-22.889	-108.811
23)	32.20	115.864	-28.222	33.816	24.677	-56.220	-18.954	661.874	-1.528	-79.551
24)	35.10	114.382	-24.901	112.228	51.010	83.781	-40.861	848.368	-2.705	-48.924
25)	35.10	90.129	-8.719	32.814	40.843	172.857	38.571	848.368	0.118	-47.848
26)	36.55	83.796	-7.116	45.797	42.445	110.405	32.847	899.959	-0.491	-21.515
27)	38.00	82.923	-5.399	52.995	62.024	181.531	24.908	918.775	-1.918	-8.635
28)	38.00	91.940	-0.486	495.980	59.584	354.524	20.473	918.775	1.773	-8.443
29)	39.45	85.972	15.908	487.629	63.934	396.732	20.895	915.450	0.282	11.193
30)	40.90	85.099	33.082	453.363	82.826	307.043	19.468	880.900	-0.286	37.640
31)	40.90	136.753	9.830	490.869	88.656	395.847	-8.841	880.015	1.784	37.740
32)	43.80	124.857	51.985	398.686	104.685	326.998	-0.573	727.138	0.830	69.225
33)	46.70	123.375	93.775	191.796	143.898	-11.633	0.826	463.170	33.765	99.800
34)	46.70	180.817	68.022	200.053	152.103	79.112	-38.570	463.998	45.054	99.228
35)	49.10	171.560	104.817	-10.049	176.662	-233.184	-33.190	229.792	-13.870	88.441
36)	51.50	169.977	140.882	-291.462	209.292	-692.314	-35.882	144.359	-11.641	-8.568
37)	51.50	184.920	136.208	-292.467	213.859	-693.371	-40.359	144.359	2.838	-10.419
38)	52.00	182.890	142.298	-362.485	218.553	-798.024	-39.532	148.139	0.808	-4.694
39)	52.50	182.382	148.022	-434.106	225.995	-907.234	-40.594	152.885	-1.010	-9.274
40)	52.50	171.023	-55.987	-430.989	29.825	93.357	-41.776	152.885	6.010	20.307
41)	53.00	168.689	-55.719	-402.806	30.398	77.317	-43.806	144.194	2.950	15.728
42)	53.50	168.486	-55.147	-375.940	30.970	63.962	-46.866	134.067	0.920	21.452
43)	53.50	174.041	-55.072	-375.955	26.065	67.021	-23.805	133.952	16.578	19.719
44)	55.90	163.079	-52.629	-247.677	28.812	3.966	-36.594	195.240	22.263	-78.989
45)	58.30	161.739	-50.612	-126.388	38.773	3.520	-56.596	426.770	-45.743	-103.108
46)	58.30	140.128	-37.730	-127.462	25.650	62.942	10.363	427.872	-37.989	-104.545
47)	61.20	126.527	-34.409	-21.208	28.970	-17.573	-4.456	713.826	-1.760	-77.345
48)	64.10	124.619	-31.454	78.911	55.475	107.919	-25.504	889.622	-2.937	-46.719
49)	64.10	98.522	-9.413	38.048	48.102	173.697	38.532	889.740	1.025	-45.646
50)	65.55	92.229	-7.810	50.328	50.564	112.776	32.848	936.923	0.457	-18.282
51)	67.00	90.950	-6.093	62.974	68.253	166.816	24.869	953.205	-0.152	-6.432
52)	67.00	99.854	-0.344	469.383	65.962	294.098	26.106	953.205	1.548	-5.210
53)	68.45	93.520	15.685	460.137	69.454	325.346	26.527	943.589	0.939	13.395
54)	69.90	92.952	32.858	426.455	89.204	231.511	25.959	903.717	0.370	40.873
55)	69.90	148.610	14.946	457.011	94.263	380.107	-8.951	904.630	3.305	41.087
56)	72.80	136.958	48.515	364.903	111.151	295.411	-2.572	741.062	2.127	72.573
57)	75.70	135.171	90.304	157.565	150.364	-57.280	-0.315	469.912	37.246	99.386
58)	75.70	192.785	68.396	161.785	158.421	58.732	-45.863	468.887	47.588	99.335
59)	78.10	182.859	105.192	-43.350	183.838	-267.312	-40.483	233.942	-14.160	78.081
60)	80.50	181.580	132.670	-326.543	214.751	-747.234	-47.468	151.833	-10.553	-12.918
61)	80.50	200.128	134.868	-320.916	219.405	-748.177	-53.963	151.948	5.366	-15.711
62)	81.00	197.794	140.958	-389.387	225.130	-828.698	-44.548	159.067	0.807	-9.986
63)	81.50	197.591	146.682	-462.087	233.430	-965.023	-50.762	164.401	-2.253	-14.566
64)	81.50	184.802	-62.203	-457.561	26.810	106.235	-42.357	164.401	5.125	16.234
65)	82.00	182.467	-61.630	-426.243	27.382	92.275	-44.387	156.760	3.095	11.654
66)	82.50	182.264	-61.423	-395.546	27.954	81.398	-46.417	150.140	1.065	17.379
67)	82.50	191.771	-62.421	-396.580	21.706	87.209	-20.650	150.663	18.371	15.361
68)	85.15	180.566	-59.329	-234.681	24.798	25.409	-34.657	221.416	16.845	-93.824
69)	87.80	177.866	-57.449	-81.463	36.018	38.097	-57.532	499.818	-39.987	-119.355
70)	87.80	149.689	-41.849	-80.347	22.467	98.381	14.622	499.848	-30.904	-118.344
71)	90.95	135.479	-38.299	45.465	26.016	44.709	-0.556	828.068	-2.647	-89.541
72)	94.10	132.515	-35.001	163.060	55.784	173.026	-30.098	1027.298	-3.906	-46.034
73)	94.10	100.497	-10.325	45.116	46.930	245.716	44.171	1027.224	0.002	-45.561
74)	95.68	93.129	-8.607	61.025	50.365	185.407	38.081	1076.989	-0.607	-23.922
75)	97.25	92.114	-6.775	74.193	69.199	245.829	28.666	1093.117	-1.257	-3.199
76)	97.25	99.871	-8.102	642.399	67.140	402.795	40.106	1093.117	0.258	-3.833
77)	98.83	93.111	18.804	638.689	70.861	432.038	41.558	1075.829	-0.351	25.649
78)	100.40	92.157	37.122	595.240	92.615	335.394	40.908	1025.082	-1.000	46.372
79)	100.40	153.653	9.548	524.944	99.562	519.220	-11.511	1024.024	2.833	46.585
80)	103.55	140.519	54.107	421.018	116.964	424.718	-0.576	821.567	1.575	90.092
81)	106.70	138.611	99.217	180.067	158.468	25.445	-1.017	489.242	26.087	120.955
82)	106.70	204.602	72.064	179.651	168.466	130.660	-48.521	489.224	35.223	121.964
83)	109.35	193.092	111.629	-60.104	196.288	-244.133	-39.485	197.668	-30.378	104.577
84)	112.00	191.732	142.428	-397.795	231.208	-784.906	-39.682	99.740	-16.948	-10.033

VIADUCTO BORGES BLANQUES

112.00	208.436	138.390	-398.506	234.064	-780.671	-45.008	99.623	-0.657	-13.084
112.50	206.102	152.701	-469.327	240.647	-895.512	-45.211	106.269	-2.687	-7.359
113.00	205.899	158.791	-547.446	248.089	-1046.075	-53.142	110.285	-5.748	-1.939
113.00	192.986	-70.655	-544.698	19.301	7.088	-65.422	110.285	-1.400	5.024
113.50	190.956	-70.083	-508.931	19.874	-3.350	-67.452	109.356	-1.661	0.445
114.00	190.449	-69.876	-475.119	20.446	-9.857	-70.513	106.652	-3.691	6.169
114.00	195.895	-69.222	-473.999	13.314	-11.029	-40.702	106.538	14.756	4.148
116.65	184.385	-66.549	-292.313	16.291	-45.957	-54.709	215.336	15.441	-100.613
119.30	181.625	-64.189	-118.802	27.625	-9.523	-76.554	509.312	-35.926	-117.878
119.30	149.500	-44.619	-116.697	10.848	131.596	19.403	508.877	-25.236	-118.995
122.45	135.290	-40.956	20.805	15.370	93.853	4.225	823.628	-0.187	-84.926
125.60	131.960	-37.772	150.241	45.883	260.902	-23.428	1009.824	-2.304	-42.564
125.60	95.334	-17.173	34.867	37.063	371.832	41.173	1009.697	-0.292	-41.337
127.18	88.229	-15.341	60.645	40.612	326.522	35.043	1053.395	-0.942	-20.442
128.75	87.214	-13.509	84.721	60.476	399.538	25.627	1061.388	-0.733	9.039
128.75	93.485	-11.966	675.660	59.150	604.774	36.884	1061.388	0.846	8.433
130.33	86.684	14.825	672.750	63.787	643.867	38.295	1037.965	0.196	30.072
131.90	85.730	33.144	637.035	84.510	557.265	37.646	979.199	-0.454	51.825
131.90	141.347	6.566	551.829	93.600	655.587	-30.993	979.313	2.495	51.009
135.05	127.807	50.760	455.788	111.003	574.985	-20.099	764.756	1.196	93.485
138.20	123.442	96.235	229.202	154.395	188.650	-20.499	422.317	16.734	123.572
138.20	179.598	74.286	228.804	163.710	189.478	-35.740	421.257	23.256	122.713
140.85	168.392	113.672	-18.533	191.417	-183.942	-27.563	145.280	-4.901	88.508
143.50	163.561	144.285	-359.885	226.451	-735.588	-33.770	85.798	-14.982	-13.387
143.50	175.281	142.196	-360.667	229.139	-736.646	-38.927	85.798	1.961	-15.405
144.00	173.251	156.508	-431.857	235.722	-826.585	-31.230	92.815	-0.069	-9.681
144.50	172.682	162.598	-513.558	242.305	-944.260	-31.433	99.870	-0.067	-15.622
144.50	158.031	-60.459	-509.436	11.172	-31.418	-61.685	99.870	6.067	-1.343
145.00	156.001	-59.886	-480.118	11.744	-35.777	-63.715	102.821	22.254	-12.268
145.50	155.433	-59.679	-449.152	12.317	-38.405	-66.775	111.017	40.750	-11.831
145.50	156.185	-59.319	-450.210	5.484	-37.999	-45.299	111.423	56.057	-15.491
147.35	145.832	-57.143	-344.482	7.659	-50.972	-55.652	201.985	21.092	-60.927
149.20	143.234	-55.813	-240.558	13.842	-16.715	-68.518	363.735	-57.346	-101.137
149.20	127.714	-44.927	-240.797	3.083	100.789	-2.797	362.578	-40.342	-103.885
151.55	115.331	-42.179	-138.646	5.830	90.047	-15.180	574.553	-23.303	-71.336
153.90	111.068	-39.911	-40.218	23.577	222.266	-33.339	714.697	-6.085	-48.664
153.90	88.641	-26.467	-39.076	18.686	288.140	4.331	714.697	-2.940	-47.571
155.08	83.464	-25.093	-9.566	20.060	265.481	-0.541	758.919	-3.062	-32.286
156.25	78.450	-23.833	22.336	33.169	357.720	-13.032	780.388	-3.508	-10.075
156.25	62.673	-15.586	22.336	32.659	459.247	15.628	779.357	-3.757	-9.946
157.43	57.801	-14.212	39.821	34.033	420.710	10.756	783.790	-4.244	1.216
158.60	55.182	-12.953	56.636	49.203	501.626	1.934	774.953	-4.731	23.428
158.60	39.984	21.456	267.772	51.843	537.782	-0.773	774.953	-2.662	23.506
160.95	27.906	24.204	211.631	61.288	606.239	-2.738	689.361	-3.596	49.954
163.30	21.876	27.203	153.633	93.804	450.494	-3.712	534.302	-4.571	85.904
163.30	30.256	51.373	404.491	92.746	451.521	-0.937	535.329	-0.937	84.674
165.15	19.903	81.599	280.105	108.889	353.259	-1.668	358.240	-1.668	105.283
167.00	14.016	103.053	111.877	135.623	135.849	-2.439	141.001	-2.439	135.623
167.00	8.624	107.309	113.034	137.292	137.006	0.114	141.128	0.114	137.292
167.50	6.594	113.034	58.356	143.017	71.747	-0.089	71.747	-0.089	143.017
168.00	1.824	120.342	0.000	150.459	0.000	-0.292	0.000	-4.738	5.490
	0.000	0.971	1.204	0.971	2.234	0.000	2.600	0.000	0.971
	0.000	0.971	0.106	0.971	0.106	0.000	0.837	0.000	-0.817
	0.000	0.971	-0.707	0.971	-0.707	0.000	4.458	0.000	-1.736
	0.000	3.744	6.541	3.744	7.572	0.000	9.033	0.000	3.013
	0.000	3.744	0.868	3.744	1.899	0.000	7.950	0.000	-3.150
	0.000	3.744	-2.770	3.744	-4.858	0.000	17.320	0.000	-6.471
	1.027	-6.316	-6.139	5.864	12.106	-1.061	15.334	-1.061	4.098
	1.027	-6.316	3.433	5.864	2.376	-1.061	12.020	-0.030	-4.121
	1.027	-6.316	11.799	5.864	-5.439	-1.061	27.361	1.027	-9.580
	0.000	-10.448	-9.845	12.077	21.377	0.000	24.605	0.000	9.580
	0.000	-10.448	5.981	12.077	2.217	0.000	10.765	0.000	-2.545
	0.000	-10.448	21.727	12.077	-15.940	0.000	32.742	0.000	-14.780
	0.000	-2.509	3.371	8.126	15.760	0.000	17.587	0.000	6.360
	0.000	-2.509	7.389	8.126	0.868	0.000	7.950	0.000	-1.788
	0.000	-2.509	12.185	8.126	-13.278	0.000	23.458	0.000	-9.996
	0.000	-0.209	13.261	13.076	23.404	0.000	26.266	0.000	10.214
	0.000	-0.209	11.627	13.076	2.217	0.000	10.460	0.000	-2.969
	0.000	-0.209	10.890	13.076	-18.997	0.000	35.257	0.000	-16.234
	1.061	5.936	24.304	10.984	20.220	1.061	22.047	1.061	9.157
	1.061	5.936	14.645	10.984	3.433	1.061	12.020	0.030	-4.628
	0.000	1.457	4.803	4.771	8.612	0.000	36.627	-1.027	-15.155
	0.000	1.457	3.651	4.771	1.899	0.000	9.342	0.000	4.040
	0.000	1.457	4.399	4.771	-5.845	0.000	7.645	0.000	-3.203
	0.000	-0.371	1.776	1.970	3.324	0.000	18.575	0.000	-7.532
	0.000	-0.371	1.617	1.970	0.265	0.000	3.689	0.000	1.605
	0.000	-0.371	2.323	1.970	-2.562	0.000	2.397	0.000	-1.241
	0.000	-3.023	1.105	5.742	11.786	0.000	7.549	0.000	-3.079
	0.000	-3.023	3.966	5.742	2.058	0.000	12.882	0.000	5.011
	0.000	-3.023	8.691	5.742	-6.666	0.000	9.205	0.000	-4.020
	1.027	-10.408	-12.013	16.899	30.791	-1.061	23.968	0.000	-9.156
	1.027	-10.408	3.983	16.899	3.983	-1.061	34.018	-1.061	14.707
	1.027	-10.408	19.496	16.899	-22.228	1.061	16.851	-0.030	-5.309

1)	0.000	-3.701	-1.887	20.311	36.926	0.000	41.250	0.000	17.753
2)	0.000	-3.701	3.486	20.311	3.486	0.000	12.134	0.000	-2.781
3)	0.000	-3.701	9.091	20.311	-30.929	0.000	50.370	0.000	-23.268
1)	0.000	-2.440	2.471	15.305	25.333	0.000	28.560	0.000	13.843
2)	0.000	-2.440	6.299	15.305	2.058	0.000	8.901	0.000	-1.683
3)	0.000	-2.440	10.127	15.305	-21.243	0.000	33.671	0.000	-17.085
1)	0.000	0.562	14.337	22.200	37.957	0.000	42.281	0.000	19.642
2)	0.000	0.562	14.778	22.200	3.486	0.000	12.134	0.000	-2.781
3)	0.000	0.562	14.818	22.200	-30.929	0.000	51.428	0.000	-25.206
1)	1.061	9.054	31.402	18.785	33.653	1.061	37.246	1.061	16.593
2)	1.061	9.054	17.660	18.785	3.983	1.061	16.851	0.030	-5.340
3)	1.061	9.054	5.554	18.785	-25.057	1.061	52.920	-1.027	-23.521
1)	0.000	-0.168	7.307	5.742	11.758	0.000	12.854	0.000	4.646
2)	0.000	-0.168	7.330	5.742	2.058	0.000	8.901	0.000	-4.020
3)	0.000	-0.168	6.490	5.742	-7.669	0.000	23.945	0.000	-9.268
1)	0.000	-0.625	1.770	1.970	3.206	0.000	3.572	0.000	1.605
2)	0.000	-0.625	1.219	1.970	0.265	0.000	2.092	0.000	-1.241
3)	0.000	-0.625	3.631	1.970	-2.676	0.000	7.435	0.000	-3.079
1)	0.000	-3.234	1.159	5.742	11.758	0.000	12.854	0.000	5.011
2)	0.000	-3.234	5.318	5.742	2.058	0.000	8.901	0.000	-4.020
3)	0.000	-3.234	10.309	5.742	-7.669	0.000	23.945	0.000	-9.268
1)	1.027	-11.468	-12.956	18.785	33.653	-1.061	37.246	-1.061	16.593
2)	1.027	-11.468	3.983	18.785	3.983	-1.061	16.546	-0.030	-5.362
3)	1.027	-11.468	20.671	18.785	-25.057	-1.061	52.920	1.027	-23.521
1)	0.000	-2.674	-1.235	22.197	37.954	0.000	42.278	0.000	19.639
2)	0.000	-2.674	4.838	22.197	3.486	0.000	12.134	0.000	-2.833
3)	0.000	-2.674	9.211	22.197	-31.956	0.000	51.126	0.000	-25.209
1)	0.000	-1.581	3.711	15.305	26.363	0.000	29.286	0.000	13.843
2)	0.000	-1.581	5.822	15.305	2.058	0.000	8.901	0.000	-1.683
3)	0.000	-1.581	6.902	15.305	-22.274	0.000	34.729	0.000	-17.085
1)	0.000	0.559	14.666	22.197	39.802	0.000	43.761	0.000	19.639
2)	0.000	0.559	15.010	22.197	3.718	0.000	14.454	0.000	-2.811
3)	0.000	0.559	13.533	22.197	-31.968	0.000	53.053	0.000	-25.209
1)	1.061	3.906	25.365	19.784	35.680	1.061	39.273	1.061	18.323
2)	1.061	3.906	17.660	19.784	3.983	1.061	16.546	0.030	-5.763
3)	1.061	3.906	10.704	19.784	-26.912	1.061	55.230	-1.027	-24.863
1)	0.000	0.860	9.305	6.769	14.674	0.000	16.136	0.000	6.039
2)	0.000	0.860	7.807	6.769	2.058	0.000	8.901	0.000	-4.050
3)	0.000	0.860	5.828	6.769	-8.696	0.000	26.833	0.000	-10.217
1)	0.000	-0.625	1.884	1.970	4.351	0.000	4.717	0.000	1.605
2)	0.000	-0.625	1.219	1.970	0.265	0.000	2.092	0.000	-1.241
3)	0.000	-0.625	2.718	1.970	-2.559	0.000	8.610	0.000	-3.079
1)	1.030	-1.377	2.320	7.772	13.838	0.000	15.299	0.000	5.645
2)	1.030	-1.377	5.848	7.772	2.111	0.000	9.319	0.000	-4.444
3)	1.030	-1.377	8.873	7.772	-8.612	0.000	27.071	0.000	-10.610
1)	1.027	-10.436	-11.489	20.875	38.067	-1.061	42.391	-1.061	18.683
2)	1.027	-10.436	4.089	20.875	4.089	-1.061	17.687	-0.030	-5.703
3)	1.027	-10.436	19.873	20.875	-28.626	-1.061	59.028	1.027	-25.972
1)	0.000	-2.781	-0.751	25.407	44.349	0.000	49.404	0.000	23.214
2)	0.000	-2.781	3.824	25.407	3.824	0.000	15.291	0.000	-2.327
3)	0.000	-2.781	9.205	25.407	-35.872	0.000	57.667	0.000	-27.898
1)	0.000	-1.525	6.190	17.426	29.489	0.000	34.506	0.000	15.964
2)	0.000	-1.525	7.383	17.426	2.111	0.000	9.319	0.000	-1.318
3)	0.000	-1.525	7.829	17.426	-26.299	0.000	39.073	0.000	-18.836
1)	0.000	-1.317	16.105	25.379	45.090	0.000	50.145	0.000	22.821
2)	0.000	-1.317	16.070	25.379	3.824	0.000	15.291	0.000	-2.720
3)	0.000	-1.317	15.124	25.379	-35.987	0.000	58.739	0.000	-28.292
1)	1.061	0.791	19.288	21.903	38.977	1.061	42.935	1.061	19.710
2)	1.061	0.791	20.176	21.903	4.089	1.061	17.687	0.030	-5.733
3)	1.061	0.791	18.578	21.903	-30.798	1.061	59.974	-1.027	-26.921
1)	1.058	-1.364	6.563	7.769	15.736	0.000	17.198	0.000	7.038
2)	1.058	-1.364	8.337	7.769	2.111	0.000	9.319	0.000	-4.474
3)	1.058	-1.364	8.802	7.769	-10.629	0.000	29.419	0.000	-11.559
1)	0.000	-0.625	0.827	1.970	5.210	0.000	5.575	0.000	1.605
2)	0.000	-0.625	1.696	1.970	0.265	0.000	2.092	0.000	-1.241
3)	0.000	-0.625	2.718	1.970	-2.559	0.000	9.491	0.000	-3.079
1)	1.030	-2.691	1.384	7.769	15.736	0.000	16.832	0.000	7.038
2)	1.030	-2.691	6.906	7.769	2.111	0.000	9.319	0.000	-4.474
3)	1.030	-2.691	11.221	7.769	-10.629	0.000	29.419	0.000	-11.559
1)	1.027	-5.232	-3.285	21.903	38.977	-1.061	42.935	-1.061	19.710
2)	1.027	-5.232	4.062	21.903	4.089	-1.061	17.687	-0.030	-5.733
3)	1.027	-5.232	11.436	21.903	-30.798	-1.061	59.974	1.027	-26.921
1)	0.000	-0.721	1.043	25.379	45.090	0.000	50.145	0.000	22.821
2)	0.000	-0.721	3.824	25.379	3.824	0.000	15.291	0.000	-2.720
3)	0.000	-0.721	5.263	25.379	-35.987	0.000	58.739	0.000	-28.292
1)	0.000	0.563	6.111	17.426	29.489	0.000	33.448	0.000	14.934
2)	0.000	0.563	5.848	17.426	3.168	0.000	9.624	0.000	-1.318
3)	0.000	0.563	6.692	17.426	-25.241	0.000	38.043	0.000	-18.083
1)	0.000	1.056	18.289	23.521	42.147	0.000	47.201	0.000	21.328
2)	0.000	1.056	16.070	23.521	3.824	0.000	15.291	0.000	-2.297
3)	0.000	1.056	14.368	23.521	-35.990	0.000	55.766	0.000	-25.956
1)	1.061	5.000	25.961	18.962	33.145	1.061	37.103	1.061	16.465
2)	1.061	5.000	19.118	18.962	4.089	1.061	17.687	0.030	-5.673
3)	1.061	5.000	11.246	18.962	-24.966	1.061	54.118	-1.027	-24.169

VALORES EXTREMOS

M max 1-48 1131.43715

Q max 1-48 263.618932

T max 1-48 150.133

M max 49-96 1093.11742

Q max 49-96 246.066652

T max 49-96 208.436282

HIPOTESIS: c

Eje 1 (49-96) ripado -30cm; Eje 2 (1-48) sin ripar

Envolvente IPF75B negativa

Coef impacto 1.16

VIADUCTO BORGES BLANQUES

RA

X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
0.00	-2.454	-14.301	0.000	-158.556	0.000	-0.371	0.000	1.689	-131.693
0.50	-0.996	-13.230	6.577	-150.918	76.907	1.180	-5.556	0.034	11.489
1.00	-0.375	-12.642	13.230	-145.043	144.749	1.801	-11.489	0.096	12.077
1.00	-12.056	-16.619	13.595	-143.226	145.779	-1.125	-10.432	-1.319	12.255
2.85	-10.268	-14.280	40.661	-114.848	372.144	1.109	-34.276	-1.095	14.370
4.70	-7.091	-12.048	63.411	-98.162	477.982	4.398	-62.273	-0.860	16.603
4.70	-13.145	-27.014	249.084	-95.110	477.930	-4.203	-62.391	-2.732	16.908
7.05	-11.302	0.124	280.510	-62.795	636.530	0.588	-104.606	-2.434	19.610
9.40	-7.609	28.326	247.461	-52.043	587.287	4.500	-153.297	-2.148	22.430
9.40	-33.806	-5.347	548.245	-46.959	519.833	0.052	-154.327	-4.571	22.547
10.58	-33.005	8.754	545.846	-32.153	445.703	3.197	-180.699	-4.422	23.957
11.75	-31.516	22.855	524.689	-29.861	473.109	3.346	-208.973	-4.273	25.367
11.75	-55.996	14.777	524.689	-30.870	385.523	-13.763	-208.973	-5.808	25.525
12.93	-54.451	37.574	498.401	-16.357	288.178	-9.560	-239.858	-5.659	26.818
14.10	-52.868	50.617	447.290	-14.947	307.663	-9.411	-272.514	-5.510	28.228
14.10	-87.253	38.435	448.348	-18.848	225.229	-37.149	-272.514	-7.174	28.662
16.45	-85.950	66.525	322.672	-0.516	72.902	-26.276	-341.483	-12.248	31.531
18.80	-82.164	102.365	119.668	2.186	72.017	-25.990	-419.810	-21.329	35.411
18.80	-113.129	93.092	120.153	-3.651	17.118	-57.124	-419.924	-26.773	36.996
20.65	-112.335	114.138	-71.232	2.812	-36.595	-51.600	-521.456	-44.832	85.548
22.50	-109.058	145.160	-311.688	4.927	-41.384	-51.377	-741.962	-47.539	178.365
22.50	-115.752	142.714	-304.923	1.186	-41.396	-58.796	-742.086	-49.128	181.723
23.00	-115.578	148.478	-377.643	1.774	-45.899	-57.676	-834.932	-22.535	189.524
23.50	-114.957	154.353	-452.800	2.362	-46.331	-57.614	-932.421	-19.891	206.273
23.50	-99.518	-76.563	-442.877	-242.601	-920.199	-31.824	-932.421	12.463	-227.891
24.00	-99.344	-75.976	-403.852	-234.963	-803.310	-30.322	-824.208	13.766	-214.965
24.50	-98.723	-75.388	-365.800	-229.088	-689.695	-30.759	-717.332	15.245	-213.518
24.50	-99.281	-73.934	-365.800	-222.334	-690.846	-28.230	-717.359	13.215	-208.825
26.90	-97.829	-62.077	-202.654	-189.725	-201.401	-22.558	-356.596	46.313	-89.831
29.30	-94.850	-59.257	-55.881	-163.638	137.686	-25.220	-220.741	22.602	-25.965
29.30	-72.118	-43.043	-56.290	-151.468	137.462	-17.816	-220.785	15.596	-25.212
32.20	-70.716	-30.711	44.330	-111.221	493.477	-15.929	-209.723	-0.800	2.629
35.10	-66.837	-27.303	129.562	-94.770	570.494	-20.966	-221.288	-0.440	6.037
35.10	-39.296	-10.051	53.419	-83.780	481.948	-8.124	-221.288	-3.200	5.490
36.55	-38.999	-8.295	66.022	-64.685	569.367	-5.493	-231.228	-3.014	7.136
38.00	-37.075	-6.532	75.385	-60.984	529.944	-5.758	-243.682	-2.841	8.898
38.00	-42.882	-0.691	536.851	-59.425	371.216	-5.432	-243.682	-4.542	9.986
39.45	-42.380	15.760	525.575	-41.388	301.194	-2.249	-257.865	-4.356	11.631
40.90	-40.549	33.386	489.781	-38.744	349.868	-2.075	-276.521	-4.182	13.393
40.90	-85.785	13.714	529.294	-44.774	265.823	-14.564	-276.518	-5.936	13.614
43.80	-84.885	56.492	421.888	-16.690	112.501	-3.805	-319.355	-6.307	17.021
46.70	-80.913	99.383	201.874	-13.282	153.266	-3.445	-379.706	-30.462	30.820
46.70	-125.264	77.973	208.400	-20.216	48.708	-57.065	-379.703	-38.888	30.515
49.10	-124.556	114.764	-26.345	-9.992	2.795	-49.364	-499.666	-48.271	78.153
51.50	-121.391	151.686	-332.388	-7.172	22.964	-49.066	-819.909	-18.058	204.803
51.50	-128.832	149.259	-328.490	-9.910	23.995	-58.344	-819.909	-19.961	207.610
52.00	-128.770	155.023	-404.722	-9.323	27.424	-58.282	-924.273	-21.148	211.700
52.50	-128.056	160.805	-482.366	-8.735	31.969	-58.220	-1032.781	-15.340	224.405
52.50	-112.390	-67.548	-474.542	-244.605	-968.187	-38.368	-1032.781	16.719	-228.349
53.00	-112.235	-66.961	-439.924	-236.967	-848.721	-36.866	-921.440	20.575	-216.503
53.50	-111.614	-66.373	-407.470	-232.149	-734.058	-37.303	-815.220	25.512	-213.317
53.50	-110.906	-62.459	-404.171	-225.277	-738.334	-33.283	-815.338	21.460	-210.395
55.90	-110.515	-59.639	-257.879	-192.669	-240.751	-27.611	-482.683	45.766	-83.013
58.30	-107.350	-56.595	-121.021	-166.582	102.961	-29.341	-361.981	35.953	-22.928
58.30	-79.297	-41.271	-122.949	-154.526	44.704	-6.997	-361.972	28.902	-22.101
61.20	-78.937	-37.863	-6.467	-114.279	409.669	-5.110	-335.839	4.033	-4.438
64.10	-75.189	-34.455	99.044	-95.889	496.498	-9.266	-325.219	4.393	-1.030
64.10	-45.517	-11.230	60.192	-88.896	429.885	-6.004	-325.105	1.611	-2.604
65.55	-45.250	-9.585	74.499	-67.862	518.112	-4.266	-323.386	-4.226	1.617
67.00	-43.407	-7.711	86.859	-65.042	488.009	-4.519	-332.260	-0.515	8.668
67.00	-49.032	-0.236	513.562	-63.461	312.796	-3.289	-332.260	-2.084	8.015
68.45	-48.641	16.215	501.410	-44.542	238.180	-0.988	-345.473	-1.897	9.660
69.90	-46.717	33.842	466.888	-42.780	304.435	-0.814	-364.099	-1.724	11.423
69.90	-95.838	18.948	497.218	-49.574	216.178	-13.239	-364.213	-4.303	11.788
72.80	-95.161	53.026	389.565	-22.371	65.477	-3.361	-405.021	-3.943	15.195
75.70	-91.190	95.916	168.129	-18.963	127.416	-3.001	-460.207	-32.002	30.904
75.70	-134.685	79.222	169.657	-26.851	13.073	-53.370	-460.321	-38.835	32.687
78.10	-134.183	116.014	-61.552	-16.638	-18.703	-45.670	-589.896	-47.355	84.728
80.50	-130.924	144.123	-370.638	-13.818	16.019	-45.372	-911.171	-21.516	208.580

											VIADUCTO BORGES BLANQUES										
(1)	9.40	-53.067	11.603	71.809	-46.581	483.837	-0.107	-184.239	5.710	21.722	112.00	-189.860	69.175	-473.070	-25.599	-15.273	71.421	-915.280	28.543	211.945	
(2)	10.58	-55.685	12.977	56.541	-32.155	412.707	-7.899	-209.515	0.838	23.096	112.50	-190.063	69.747	-507.550	-25.026	-5.704	68.360	-1022.311	25.696	213.399	
(3)	11.75	-60.557	14.351	43.325	-29.922	440.633	-12.771	-236.573	-4.034	24.470	113.00	-192.397	69.954	-542.086	-24.454	6.085	63.285	-1131.598	15.971	227.778	
(1)	11.75	-74.299	21.554	43.325	-32.228	350.739	13.839	-236.573	7.178	23.085	113.00	-206.303	-158.325	-544.928	-245.088	-1045.167	50.792	-1131.598	-17.995	-224.777	
(2)	12.93	-79.353	22.813	15.738	-18.088	258.648	1.972	-264.276	-0.740	24.345	113.50	-206.506	-152.600	-465.988	-237.646	-896.746	42.861	-1023.251	-27.893	-211.406	
(1)	14.10	-84.530	24.187	-12.528	-16.714	280.431	-2.900	-293.708	-5.612	25.719	114.00	-208.475	-137.923	-395.260	-232.093	-783.905	42.658	-918.166	-25.520	-206.540	
(1)	14.10	-105.787	36.681	-11.497	-22.921	195.825	39.937	-293.708	10.847	23.529	114.00	-191.036	-142.515	-396.541	-228.180	-783.993	37.344	-918.281	-21.116	-205.998	
(2)	16.45	-110.050	39.063	-102.470	-5.061	58.004	19.889	-350.997	-10.306	26.785	116.65	-192.437	-111.717	-59.054	-192.229	-252.226	37.107	-563.922	-47.193	-74.691	
(3)	18.80	-122.433	41.696	-194.788	-2.427	67.744	7.506	-416.892	-33.865	29.925	119.30	-203.176	-72.517	183.339	-165.438	114.447	46.184	-440.147	9.630	-23.158	
(1)	18.80	-134.074	49.713	-196.379	-11.962	11.399	58.247	-417.010	-19.490	27.389	119.30	-137.190	-99.664	179.952	-155.477	8.016	2.576	-440.321	34.697	-28.902	
(2)	20.65	-136.672	51.158	-289.751	-5.664	-24.971	45.381	-502.308	43.323	75.433	122.45	-139.099	-54.440	420.738	-112.829	397.371	2.135	-376.138	-0.860	-17.884	
(3)	22.50	-147.391	53.219	-386.882	-3.604	-13.892	35.028	-702.417	50.206	165.876	125.60	-151.502	-9.995	529.107	-96.571	482.712	12.040	-326.839	-14.266	-14.334	
(1)	22.50	-146.428	53.508	-386.519	-9.854	-14.298	54.011	-702.458	51.576	166.593	127.18	-90.030	-36.779	560.121	-88.439	301.729	-37.658	-327.078	5.422	-15.214	
(2)	23.00	-146.996	53.715	-412.903	-9.282	-12.710	50.951	-788.046	24.933	174.568	128.75	-96.770	-0.142	619.117	-63.995	362.107	-38.308	-304.150	-4.119	-13.382	
(3)	23.50	-149.026	54.288	-440.382	-8.709	-7.795	48.921	-877.790	23.225	190.995	128.75	-85.809	3.169	99.721	-67.111	207.621	-32.298	-283.589	-11.435	-11.550	
(1)	23.50	-160.463	-151.885	-449.236	-227.999	-865.696	37.106	-877.790	-6.476	-213.130	130.33	-86.459	4.886	93.187	-47.361	143.969	-41.714	-264.483	-4.545	-13.818	
(2)	24.00	-161.031	-146.160	-373.649	-220.557	-755.590	36.045	-776.800	-7.388	-200.536	131.90	-93.503	6.718	81.871	-43.812	201.670	-47.844	-248.473	-11.041	-10.269	
(3)	24.50	-163.061	-140.435	-302.723	-214.832	-649.101	36.872	-677.145	-8.472	-199.082	131.90	-123.945	30.936	197.316	-55.844	105.422	39.331	-248.358	10.393	-11.364	
(1)	24.50	-151.250	-136.427	-307.875	-211.320	-650.131	33.602	-677.117	-7.159	-197.685	135.05	-125.853	34.600	95.389	-25.218	-51.971	14.146	-216.840	-5.948	-7.700	
(2)	26.90	-156.001	-108.219	-12.128	-179.549	-186.020	30.911	-340.017	-38.078	-80.387	138.20	-139.657	46.370	-22.417	-21.668	21.273	-1.485	-212.829	-31.820	10.917	
(3)	29.30	-165.745	-72.154	201.564	-154.131	131.419	35.432	-225.612	13.404	-18.286	140.85	-162.882	62.639	-182.919	-23.882	9.623	30.018	-344.189	30.483	88.287	
(1)	29.30	-115.336	-92.995	198.695	-145.899	131.437	21.117	-225.368	37.269	-21.100	143.50	-173.316	73.282	-360.809	-20.790	68.666	16.417	-756.803	1.527	213.697	
(2)	32.20	-119.923	-50.840	407.830	-106.685	473.454	22.516	-224.180	3.575	6.129	143.50	-163.421	71.682	-361.938	-27.250	70.028	42.987	-756.803	5.712	212.353	
(3)	35.10	-132.611	-17.637	506.646	-90.657	543.682	29.753	-245.784	-8.199	9.449	144.00	-163.624	72.254	-396.476	-26.678	80.904	39.927	-863.093	5.509	213.784	
(1)	35.10	-82.748	-32.860	504.470	-81.563	454.171	-21.833	-245.784	11.532	6.269	144.50	-165.593	72.461	-433.009	-26.105	95.640	37.897	-974.450	3.625	229.153	
(2)	36.55	-83.722	-16.466	538.149	-62.958	539.697	-23.301	-257.094	2.397	7.872	145.00	-176.055	-136.804	-368.872	-203.367	-754.591	47.030	-882.588	-45.399	-173.475	
(3)	38.00	-90.015	0.708	551.032	-59.352	500.597	-21.808	-270.991	-3.287	9.589	145.50	-178.024	-130.714	-301.109	-197.642	-656.268	46.827	-798.001	-69.728	-166.756	
(1)	38.00	-83.803	10.328	93.602	-58.822	338.027	-20.492	-270.991	9.575	9.227	145.50	-163.791	-133.544	-300.063	-194.851	-656.201	41.226	-800.048	-69.358	-166.079	
(2)	39.45	-85.447	11.930	74.354	-41.248	271.904	-29.136	-284.004	3.274	10.830	147.35	-164.522	-104.234	-79.695	-170.693	-323.818	38.778	-601.355	-43.813	-80.611	
(3)	40.90	-91.435	13.648	53.314	-38.672	320.199	-35.186	-301.169	-5.455	12.547	149.20	-171.018	-81.864	92.035	-148.023	-95.401	44.876	-509.708	24.016	-32.383	
(1)	40.90	-121.124	30.999	83.362	-47.040	233.894	20.294	-301.172	13.262	10.108	151.55	-126.731	-60.276	281.884	-110.284	118.179	10.792	-431.453	13.697	-30.846	
(2)	43.80	-124.067	33.954	-12.278	-19.677	94.262	-1.613	-333.790	1.377	13.428	153.90	-133.796	-33.273	388.188	-93.053	216.143	16.515	-362.971	-11.557	-27.705	
(3)	46.70	-137.059	37.274	-115.444	-16.357	143.734	-16.432	-383.219	-42.610	26.895	155.08	-90.006	-49.002	388.104	-90.009	111.091	-8.839	-362.667	5.415	-30.667	
(1)	46.70	-159.348	52.826	-119.079	-27.622	36.572	67.525	-383.222	-20.367	21.918	156.25	-93.741	-13.052	460.028	-66.080	172.258	-4.793	-294.767	-7.334	-28.033	
(2)	49.10	-161.662	54.843	-248.506	-17.661	10.737	47.523	-481.819	44.117	69.117	156.25	-65.322	-23.062	460.028	-67.850	69.701	-17.284	-294.569	3.493	-28.701	
(3)	51.50	-172.015	57.287	-384.436	-14.914	49.226	34.734	-778.171	16.956	193.587	157.43	-65.809	-10.353	479.714	-54.111	141.388	-17.771	-261.558	-1.379	-27.327	
(1)	51.50	-167.723	58.527	-384.275	-20.818	50.283	58.379	-778.171	19.023	193.042	158.60	-69.158	3.272	480.546	-49.245	1.085	-11.904	-231.788	-6.251	-26.068	
(2)	52.00	-167.926	58.734	-412.872	-20.246	59.202	56.349	-875.236	20.492	197.072	160.95	-35.725	-2.816	243.168	-32.505	-101.403	5.172	-230.907	8.943	-28.040	
(3)	52.50	-170.261	59.002	-442.484	-19.673	69.514	54.319	-976.391	15.173	209.540	163.30	-41.023	24.547	213.449	-29.872	-30.705	-15.924	-111.383	-13.184	-22.659	
(1)	53.00	-183.245	-141.619	-372.985	-222.497	-797.992	39.977	-872.384	-18.284	-201.898	165.15	-24.191	6.378	19.934	-24.665	-61.168	-0.921	-65.290	-1.952	-23.635	
(2)	53.50	-185.275	-135.894	-303.523	-217.803	-690.453	40.805	-773.463	-22.871	-198.704	167.00	-26.728	7.883	2.375	-22.490	-18.819	-8.635	-23.971	-9.666	-21.459	
(3)	53.50	-169.434	-132.382	-309.038	-214.176	-694.771	36.337	-773.578	-19.055	-199.131	167.50	-4.332	1.564	2.137	-24.304	-18.580	4.483	-23.732	4.483	-24.304	
(1)	55.90	-170.713	-104.904	-21.457	-182.405	-222.931	33.645	-464.538	-36.266	-74.001	168.00	-4.738	2.709	0.000	-23.732	-10.411	2.453	-10.411	2.453	-23.732	
(2)	58.30	-181.066	-68.109	183.707	-156.988	99.065	38.166	-365.986	26.189	-13.827	0.000	0.000	-1.624	-0.232	-1.624	1.060	0.000	-0.598	0.000	-1.259	
(3)	58.30	-129.283	-89.189	184.983	-148.873	39.030	8.167	-365.689	48.293	-18.063	0.000	0.000	-1.624	1.060	-1.624	1.060	0.000	0.329	0.000	0.164	
(1)	61.20	-130.460	-47.399	377.698	-109.659	389.890	9.566	-351.204	-0.353	-0.840	0.000	0.000	-6.248	-0.660	-6.248	-2.748	0.000	-3.844	0.000	-5.517	
(2)	64.10	-142.721	-5.610	457.112	-91.741	469.676	15.945	-350.957	-12.127	2.480	0.000	0.000	-6.248	7.389	-6.248	8.446	0.000	2.395	0.000	0.669	
(3)	64.10	-92.224	-31.877	414.264	-86.655	401.701	-22.919	-350.840	7.651	-1.761	0.000	0.000	-6.248	16.597	-6.248	17.655	0.000	-4.411	0.000	3.967	
(1)	65.55	-93.097	-15.848	449.434	-66.161	487.914	-23.487	-350.516	5.091	2.486	-1.061	3.158	18.102	-9.022	0.887	1.027	-2.036	1.027	-7.195		
(2)	67.00	-99.126	1.691	455.717	-63.413	458.044	-22.035	-360.449	-4.645	9.356	-1.061	3.158	14.645	-9.022	13.615	1.027	3.970	-0.003	0.941		
(3)	67.00	-91.627	12.416	53.796	-62.906	278.808	-23.325	-360.449	8.231	7.253	0.000	0.000	8.509	20.985	-14.016	-9.577	0.000	-12.805	0.000	-11.519	
(1)	68.45	-92.905	14.019	31.414	-44.473	208.065	-31.111	-372.205	2.141	8.856	0.000	0.000	8.509	8.658	-14.016	12.025	0.000	3.476	0.000	0.606	
(2)	69.90	-99.198	15.736</																		

VIADUCTO BORGES BLANQUES

VIADUCTO BORGES BLANQUES

(1)	0.000	1.619	17.284	-22.393	-22.736	0.000	-27.060	0.000	-19.530
(2)	0.000	1.619	14.778	-22.393	14.778	0.000	4.042	0.000	0.699
(3)	0.000	1.619	12.902	-22.393	51.692	0.000	-29.607	0.000	21.093
(1)	0.000	1.388	7.482	-16.545	-15.539	0.000	-18.767	0.000	-14.779
(2)	0.000	1.388	5.318	-16.545	9.639	0.000	2.796	0.000	0.442
(3)	0.000	1.388	4.002	-16.545	34.658	0.000	-20.257	0.000	15.752
(1)	0.000	-2.671	0.025	-24.331	-22.736	0.000	-27.060	0.000	-21.469
(2)	0.000	-2.671	3.486	-24.331	14.778	0.000	4.042	0.000	0.699
(3)	0.000	-2.671	6.122	-24.331	52.750	0.000	-29.607	0.000	22.982
(1)	-1.027	-13.231	-14.719	-22.962	-18.028	-1.027	-21.316	-1.027	-21.135
(2)	-1.027	-13.231	3.983	-22.962	17.660	-1.027	5.191	0.003	1.185
(3)	-1.027	-13.231	24.346	-22.962	53.926	-1.027	-23.958	1.061	19.455
(1)	0.000	-3.234	0.241	-8.933	-5.560	0.000	-6.656	0.000	-7.836
(2)	0.000	-3.234	6.375	-8.933	9.639	0.000	2.796	0.000	0.830
(3)	0.000	-3.234	11.705	-8.933	24.280	0.000	-7.333	0.000	6.077
(1)	0.000	-0.625	1.770	-2.967	-1.847	0.000	-2.213	0.000	-2.601
(2)	0.000	-0.625	1.696	-2.967	2.651	0.000	0.824	0.000	0.245
(3)	0.000	-0.625	3.631	-2.967	7.546	0.000	-2.565	0.000	2.082
(1)	0.000	-0.168	6.726	-8.933	-5.560	0.000	-6.656	0.000	-7.836
(2)	0.000	-0.168	6.776	-8.933	9.639	0.000	2.796	0.000	0.830
(3)	0.000	-0.168	8.025	-8.933	24.280	0.000	-7.333	0.000	5.965
(1)	-1.061	7.337	27.768	-22.962	-18.028	1.027	-21.316	1.027	-21.135
(2)	-1.061	7.337	17.660	-22.962	17.660	1.027	5.098	-0.003	1.185
(3)	-1.061	7.337	7.271	-22.962	53.926	1.027	-23.958	-1.061	19.455
(1)	0.000	0.559	15.176	-24.334	-24.194	0.000	-28.214	0.000	-21.472
(2)	0.000	0.559	13.824	-24.334	14.778	0.000	4.042	0.000	0.696
(3)	0.000	0.559	11.673	-24.334	52.355	0.000	-30.634	0.000	22.979
(1)	0.000	0.507	4.630	-16.545	-16.902	0.000	-19.825	0.000	-14.779
(2)	0.000	0.507	5.795	-16.545	9.639	0.000	2.796	0.000	0.442
(3)	0.000	0.507	5.479	-16.545	35.622	0.000	-21.380	0.000	15.752
(1)	0.000	-2.674	-0.900	-24.334	-24.600	0.000	-28.254	0.000	-21.472
(2)	0.000	-2.674	3.718	-24.334	15.010	0.000	4.274	0.000	0.696
(3)	0.000	-2.674	7.021	-24.334	54.170	0.000	-30.758	0.000	22.979
(1)	-1.027	-8.381	-9.872	-24.304	-20.559	-1.027	-24.905	-1.027	-22.477
(2)	-1.027	-8.381	3.983	-24.304	17.660	-1.027	5.098	0.003	1.266
(3)	-1.027	-8.381	18.645	-24.304	56.235	-1.027	-26.844	1.061	20.231
(1)	0.000	-4.295	-0.932	-9.993	-6.620	0.000	-8.082	0.000	-9.262
(2)	0.000	-4.295	6.375	-9.993	9.639	0.000	2.796	0.000	0.827
(3)	0.000	-4.295	13.281	-9.993	27.280	0.000	-8.249	0.000	6.993
(1)	0.000	-0.625	0.827	-2.967	-1.733	0.000	-2.098	0.000	-2.601
(2)	0.000	-0.625	1.696	-2.967	2.651	0.000	0.824	0.000	0.245
(3)	0.000	-0.625	3.749	-2.967	8.721	0.000	-2.447	0.000	2.082
(1)	-1.058	-2.138	4.553	-11.333	-6.282	0.000	-7.744	0.000	-9.179
(2)	-1.058	-2.138	6.829	-11.333	10.169	0.000	2.961	0.000	0.910
(3)	-1.058	-2.138	9.423	-11.333	27.518	0.000	-8.165	0.000	7.076
(1)	-1.061	6.027	27.788	-25.302	-21.017	1.027	-24.671	1.027	-23.109
(2)	-1.061	6.027	18.721	-25.302	19.118	1.027	5.520	-0.003	1.272
(3)	-1.061	6.027	10.310	-25.302	60.145	1.027	-27.304	-1.061	21.545
(1)	0.000	1.053	18.311	-27.135	-26.744	0.000	-31.799	0.000	-24.638
(2)	0.000	1.053	16.070	-27.135	16.070	0.000	4.603	0.000	0.621
(3)	0.000	1.053	14.181	-27.135	59.213	0.000	-34.327	0.000	26.077
(1)	0.000	0.563	6.190	-18.389	-19.575	0.000	-23.533	0.000	-16.927
(2)	0.000	0.563	7.383	-18.389	10.169	0.000	2.961	0.000	0.355
(3)	0.000	0.563	7.829	-18.389	39.253	0.000	-25.088	0.000	17.873
(1)	0.000	-0.721	0.162	-27.417	-26.769	0.000	-31.823	0.000	-24.554
(2)	0.000	-0.721	3.824	-27.417	16.070	0.000	4.603	0.000	0.705
(3)	0.000	-0.721	7.003	-27.417	60.284	0.000	-34.442	0.000	26.161
(1)	-1.027	-5.232	-3.285	-26.362	-23.253	-1.027	-26.907	-1.027	-24.535
(2)	-1.027	-5.232	5.120	-26.362	19.118	-1.027	5.520	0.003	1.269
(3)	-1.027	-5.232	11.436	-26.362	61.091	-1.027	-29.588	1.061	22.573
(1)	-1.030	-2.691	0.907	-11.336	-8.276	0.000	-9.738	0.000	-10.605
(2)	-1.030	-2.691	6.428	-11.336	10.169	0.000	2.961	0.000	0.907
(3)	-1.030	-2.691	10.743	-11.336	29.866	0.000	-10.182	0.000	7.992
(1)	0.000	-0.625	0.827	-2.967	-1.733	0.000	-2.098	0.000	-2.601
(2)	0.000	-0.625	1.219	-2.967	2.651	0.000	0.824	0.000	0.245
(3)	0.000	-0.625	2.718	-2.967	9.603	0.000	-2.447	0.000	2.082
(1)	-1.058	-1.110	6.451	-11.336	-8.276	0.000	-9.738	0.000	-10.605
(2)	-1.058	-1.110	7.860	-11.336	10.169	0.000	2.961	0.000	0.907
(3)	-1.058	-1.110	8.437	-11.336	29.866	0.000	-10.294	0.000	7.992
(1)	-1.061	0.791	19.288	-26.362	-22.948	1.027	-26.907	1.027	-24.535
(2)	-1.061	0.791	19.145	-26.362	19.118	1.027	5.520	-0.003	1.269
(3)	-1.061	0.791	18.578	-26.362	61.185	1.027	-29.588	-1.061	22.573
(1)	0.000	-1.317	14.458	-27.417	-26.769	0.000	-31.823	0.000	-24.554
(2)	0.000	-1.317	16.070	-27.417	16.070	0.000	4.603	0.000	0.705
(3)	0.000	-1.317	16.287	-27.417	60.284	0.000	-34.442	0.000	26.161
(1)	0.000	-1.525	5.637	-18.600	-18.544	0.000	-22.503	0.000	-15.777
(2)	0.000	-1.525	6.829	-18.600	11.597	0.000	3.054	0.000	0.355
(3)	0.000	-1.525	8.306	-18.600	39.253	0.000	-24.031	0.000	16.842
(1)	0.000	-2.778	-0.865	-25.193	-26.765	0.000	-31.820	0.000	-22.696
(2)	0.000	-2.778	3.824	-25.193	16.070	0.000	4.603	0.000	0.624
(3)	0.000	-2.778	9.087	-25.193	57.312	0.000	-34.445	0.000	24.191
(1)	-1.027	-9.375	-10.518	-23.387	-16.601	-1.027	-20.255	-1.027	-20.829
(2)	-1.027	-9.375	4.089	-23.387	19.118	-1.027	5.520	0.003	1.275
(3)	-1.027	-9.375	17.639	-23.387	55.235	-1.027	-23.756	1.061	19.725

VALORES EXTREMÓS

M min 1-48 -1194.35601

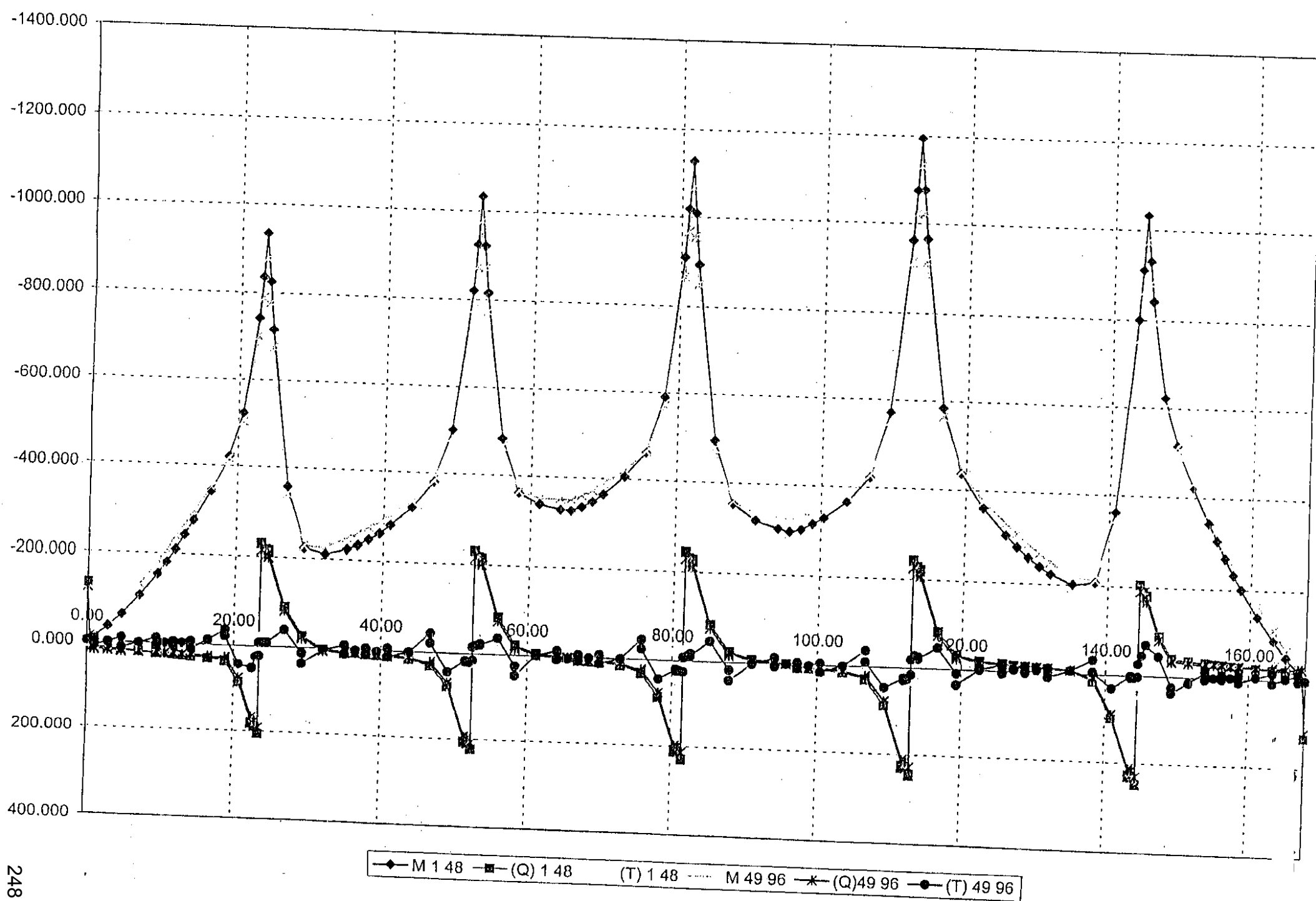
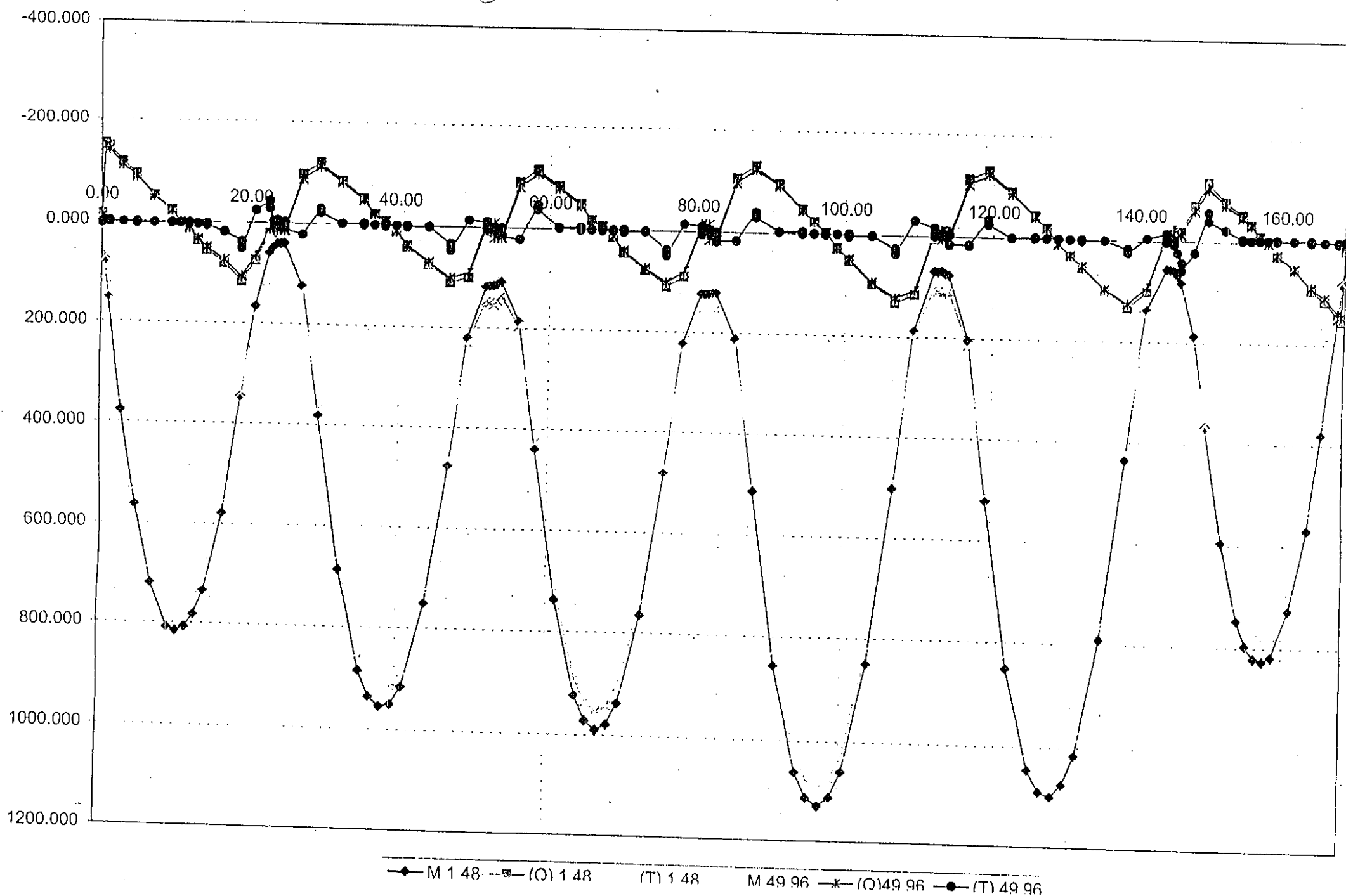
Q min 1-48 -260.587852

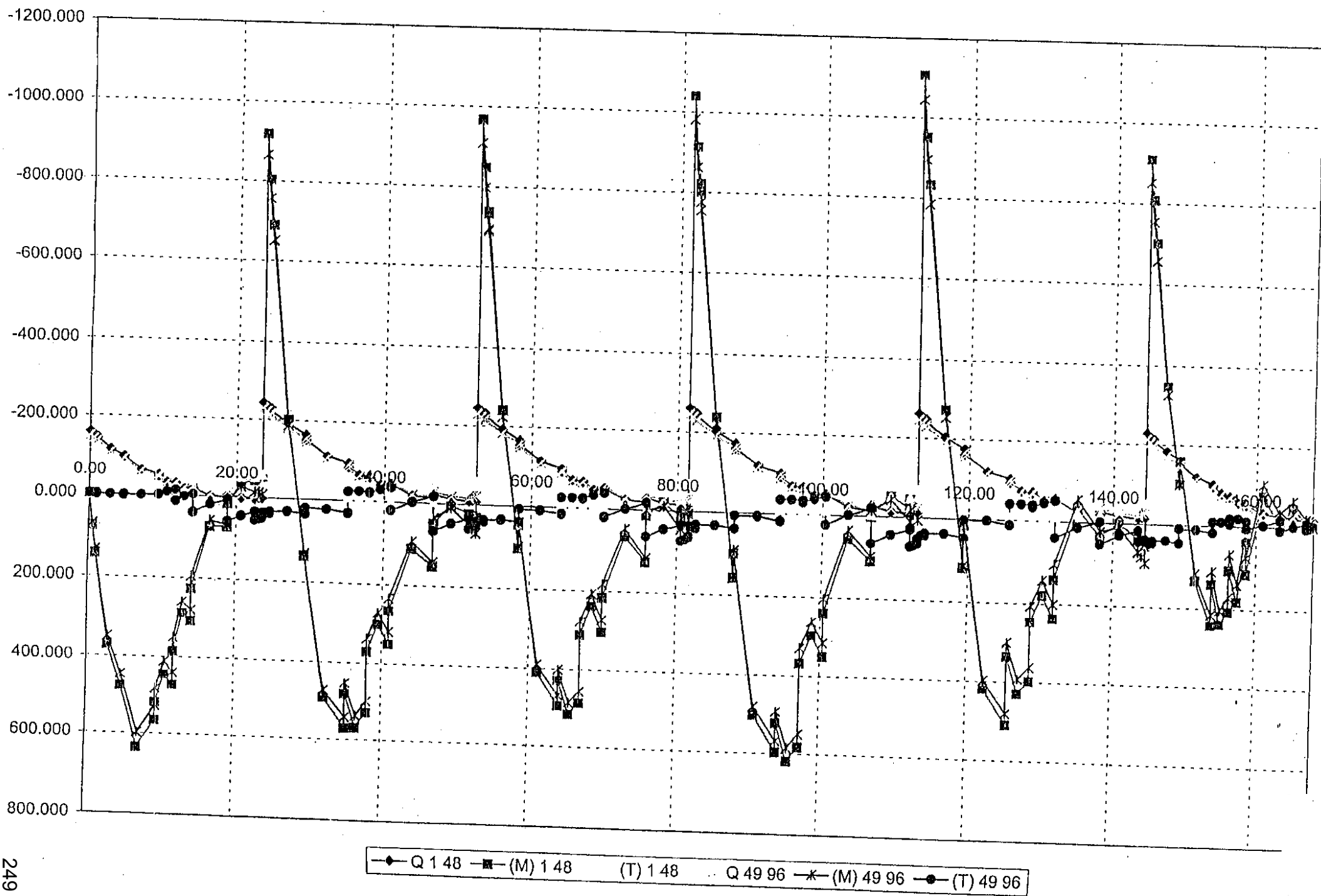
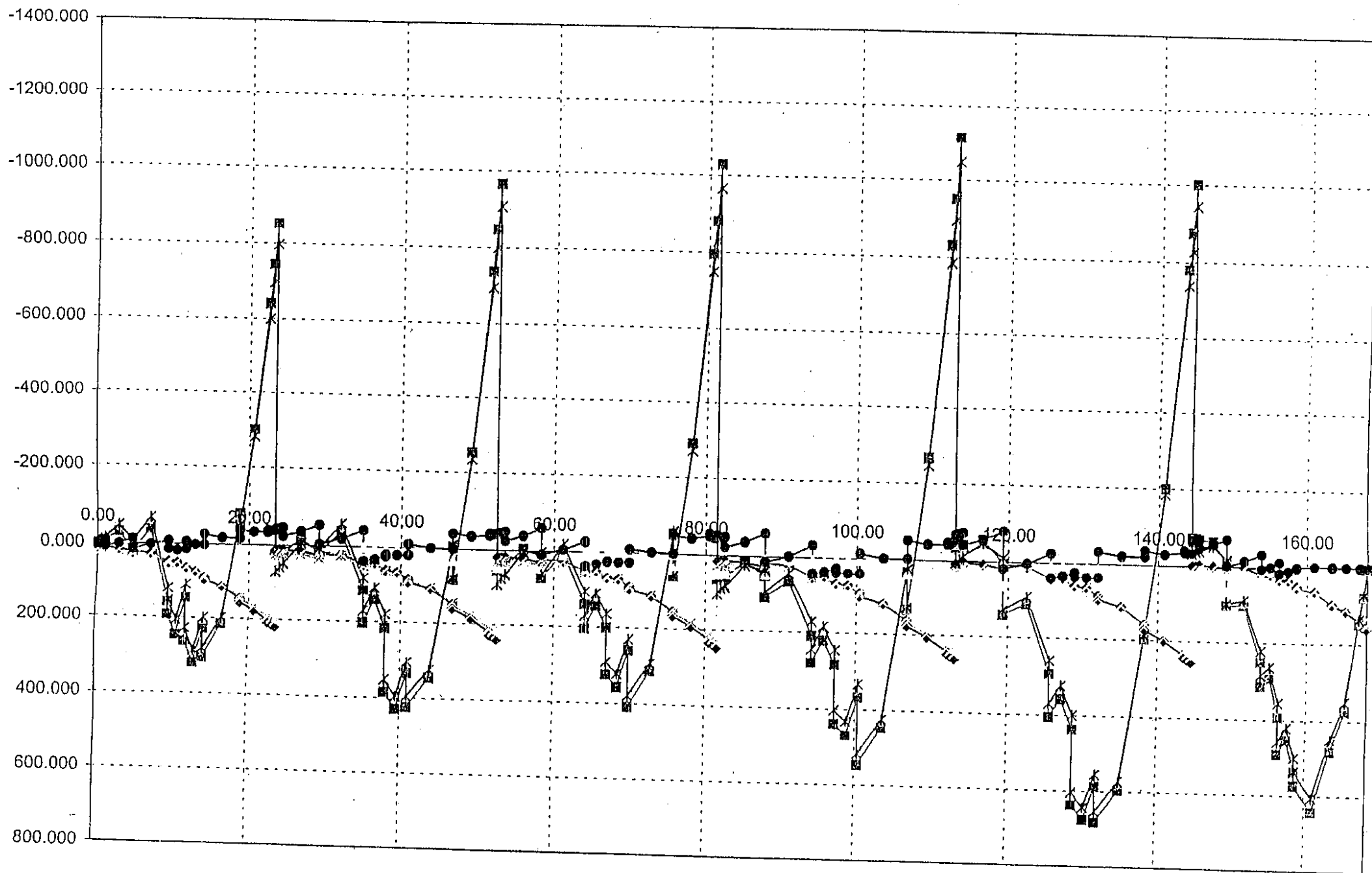
T min 1-48 -150.336668

M min 49-96 -1131.59815

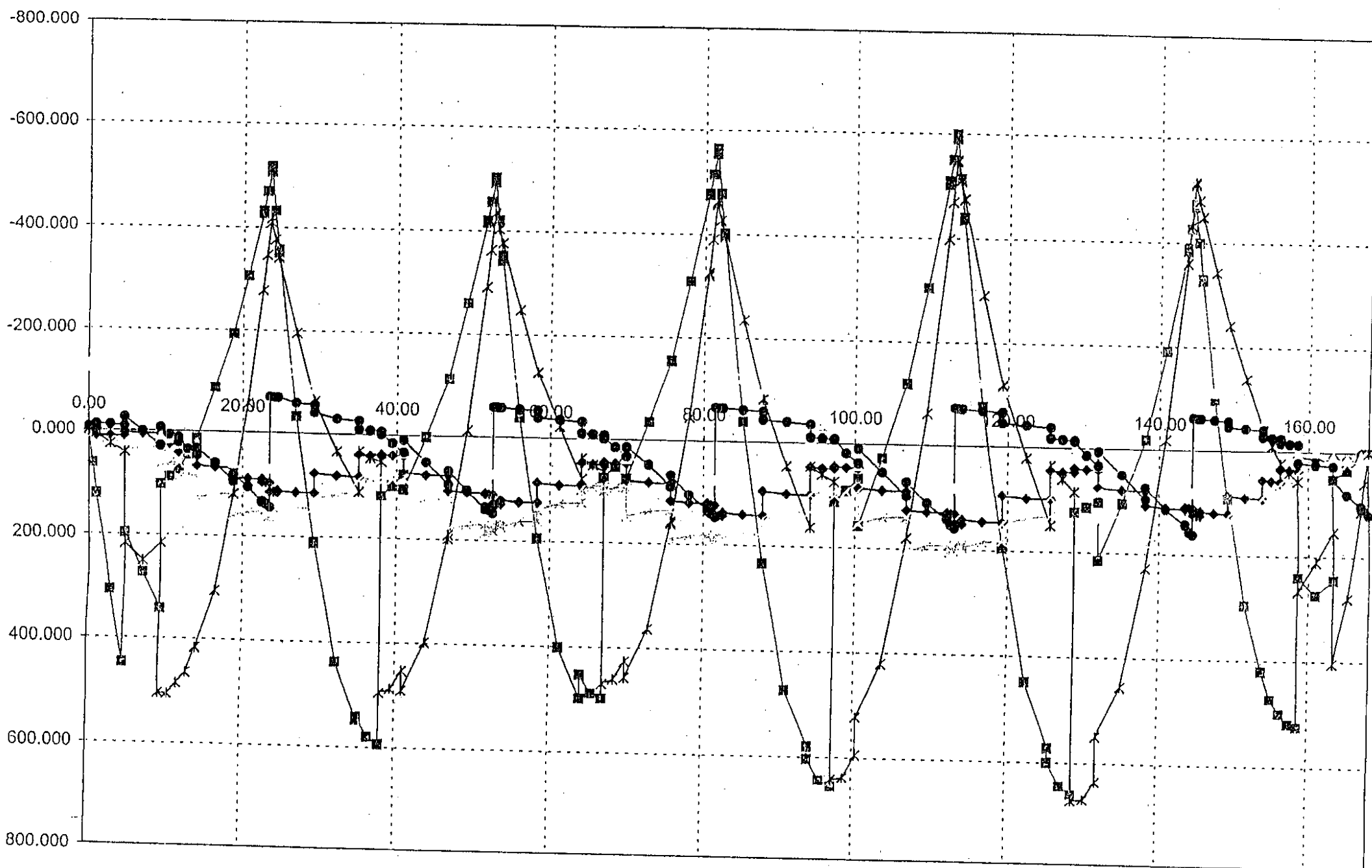
Q min 49-96 -245.087932

T min 49-96 -208.4752

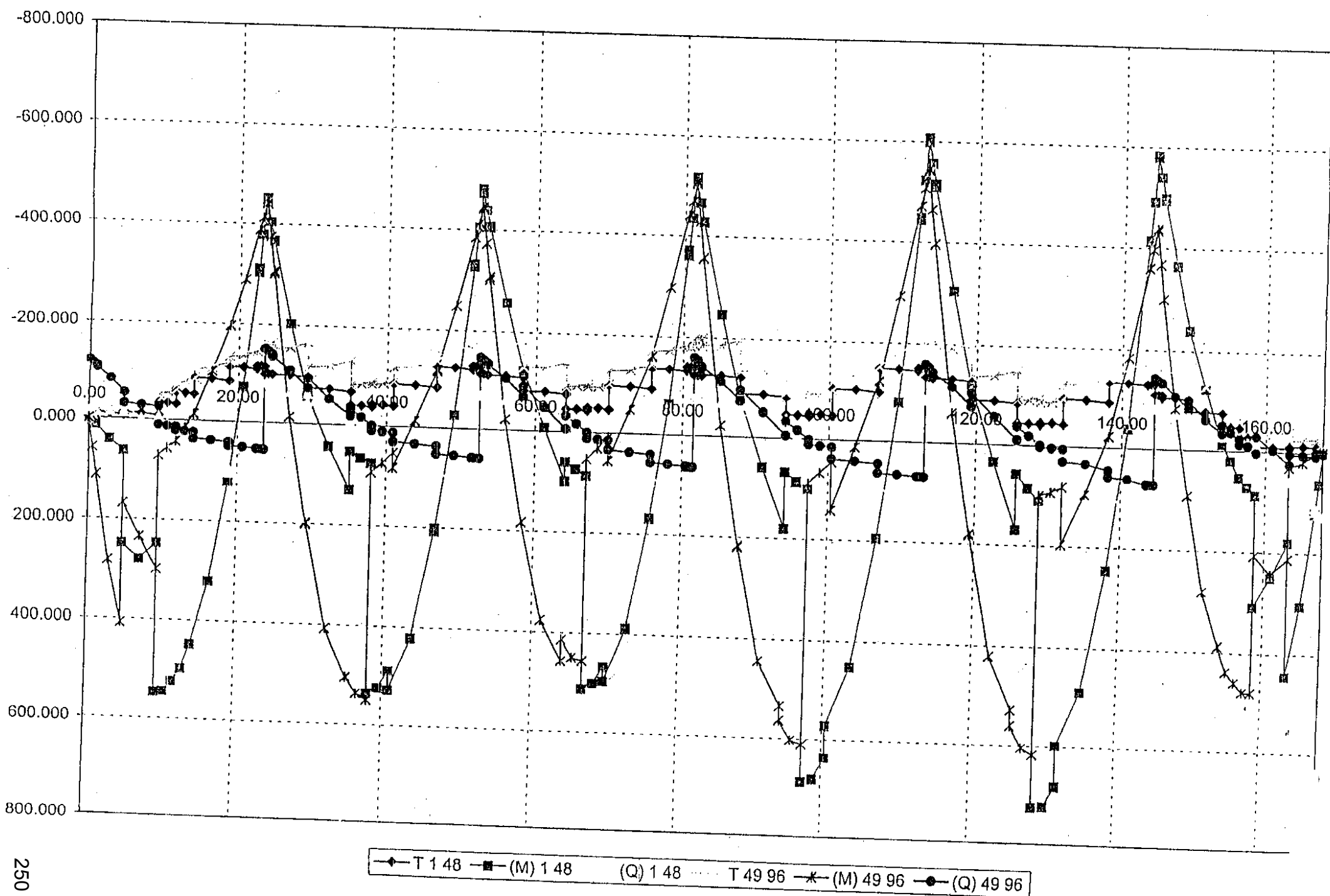




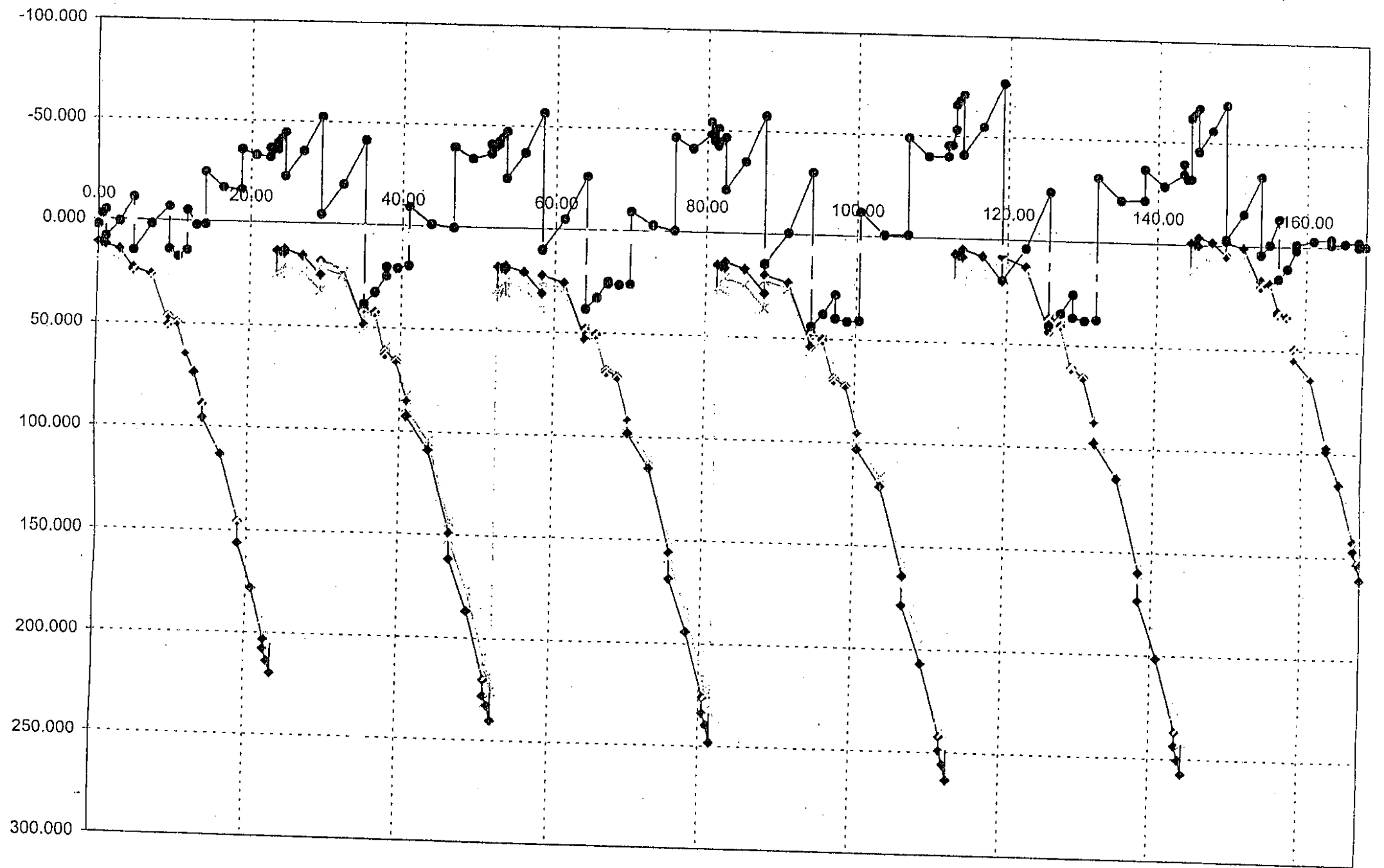
Hip C. T Mcon Qcon



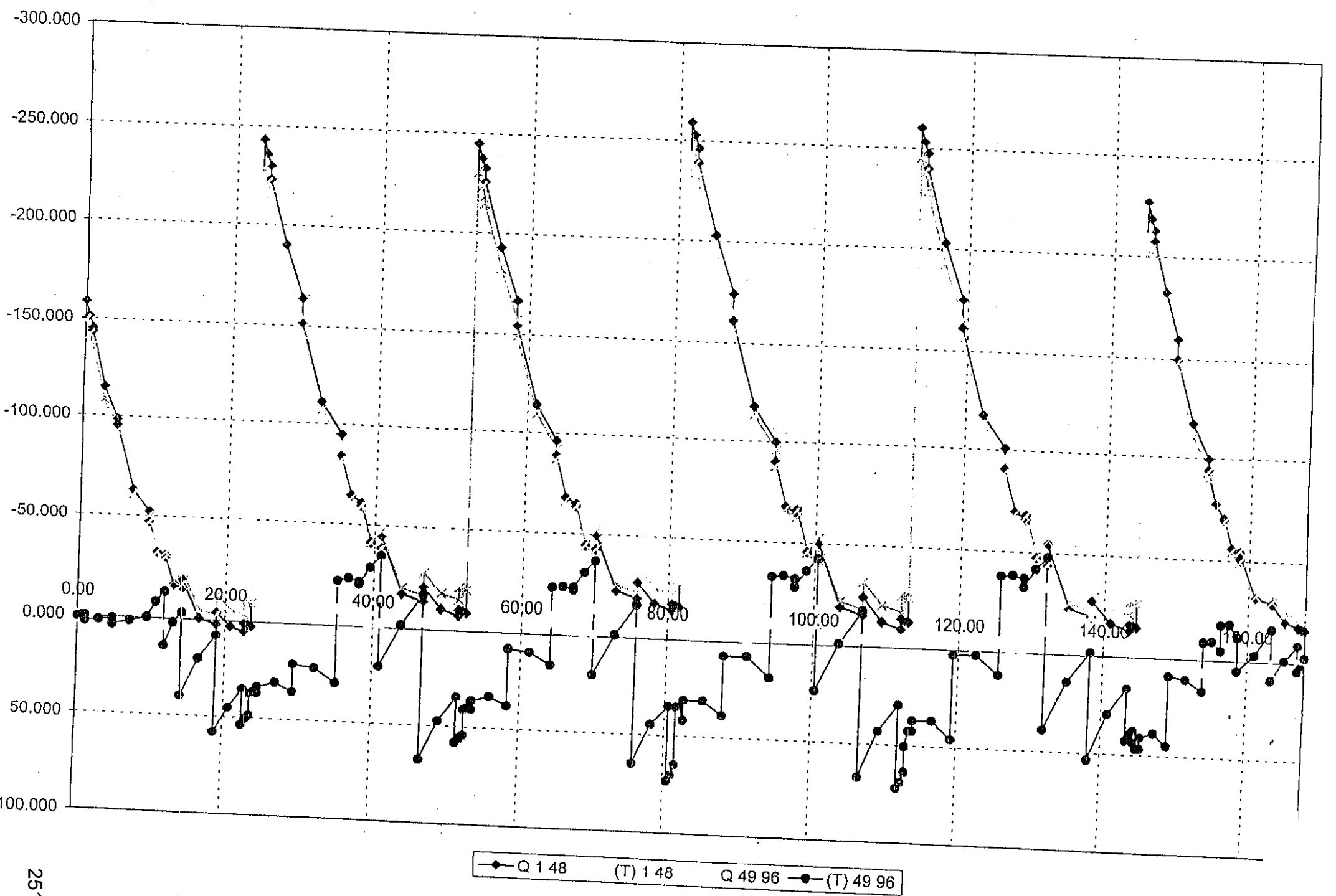
Hip C. T Mcon Qcon



Hip C. Q Mcon Tcon

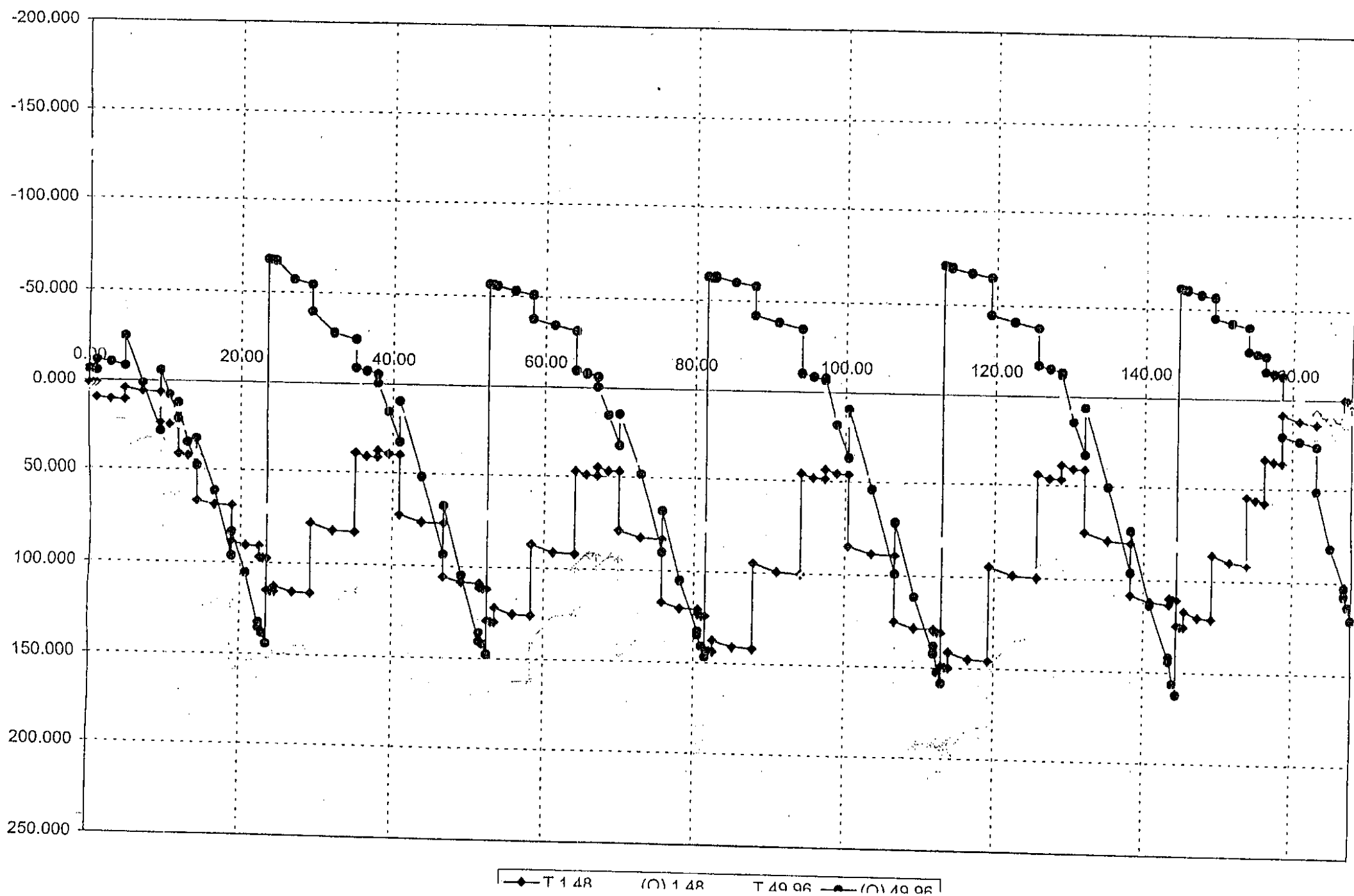


Hip C. Q Mcon Tcon

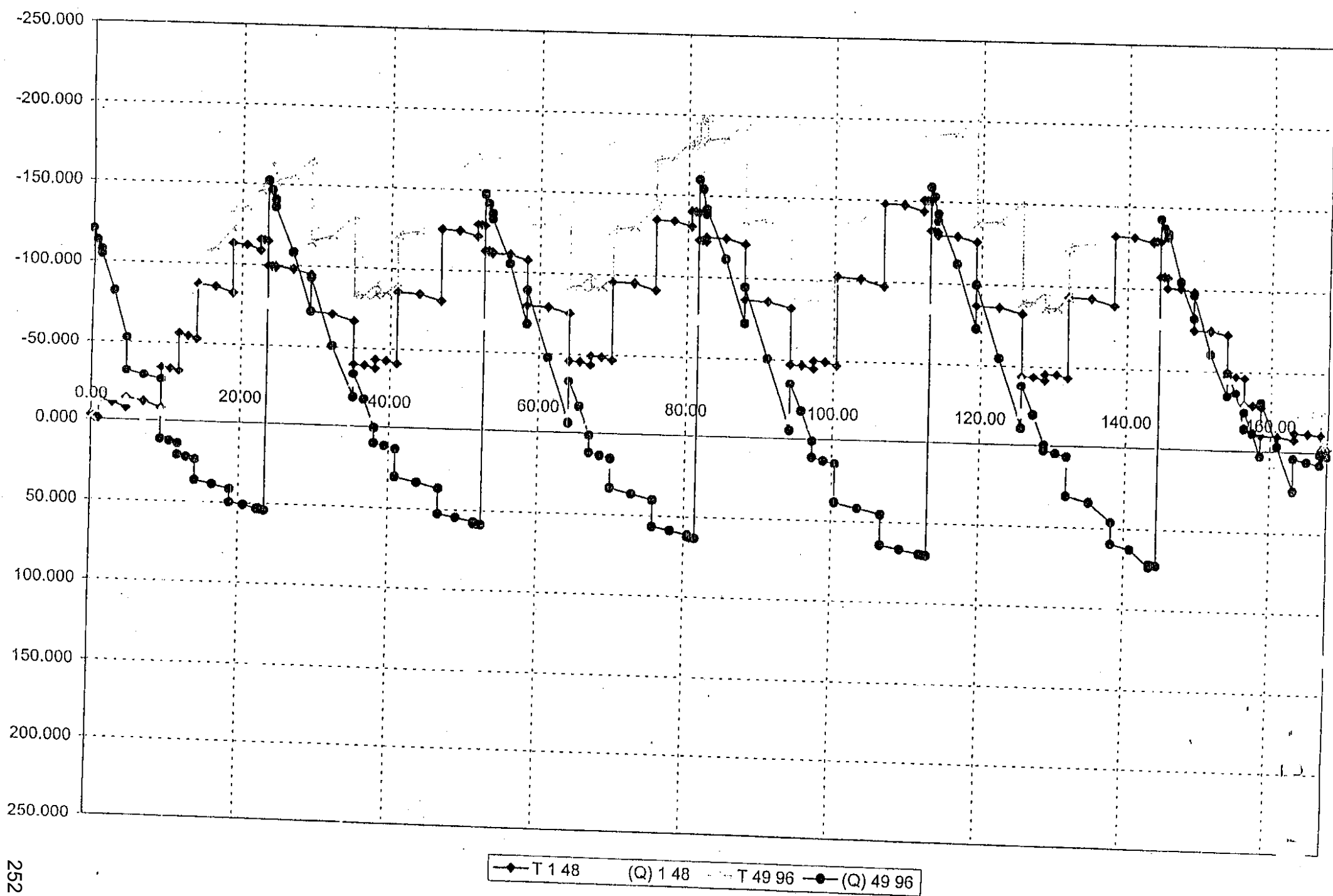


Q 1 48 (T) 1 48 Q 49 96 (T) 49 96

Hip C. 1 Mcon Qcon



Hip C. 1 Mcon Qcon



HIPOTESIS: o Eje 1 (49-96) ripado +30cm; Eje 2 (1-48) ripado +30cm

Envolvente IPF75B positiva

Coef Impacto 1.16

RA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)	80.50	53.231	56.397	-420.711	198.791	-690.323	50.441	130.175	-1.394	-8.053
	0.00	-0.986	-107.405	0.000	12.944	0.000	-0.278	0.000	-2.380	-12.623	81.00	55.626	57.348	-448.507	204.550	-760.043	42.847	133.346	-1.186	-2.293
	0.50	-0.777	-102.020	52.823	13.520	-6.619	-0.069	64.893	2.117	-127.840	81.50	55.834	57.923	-478.612	212.901	-886.163	54.100	134.583	0.059	-6.901
	1.00	-0.569	-96.261	102.020	14.096	-8.336	0.139	126.976	4.199	-122.081	81.50	68.096	-151.404	-480.701	19.088	76.761	48.095	134.583	-1.316	8.575
	1.00	-5.604	-96.975	101.424	13.694	-8.336	-2.327	126.991	-10.683	-125.728	82.00	70.491	-145.645	-406.222	19.664	66.919	48.303	131.034	-1.108	3.968
	2.85	-2.669	-76.266	263.708	15.768	-34.773	-1.577	325.233	-3.187	-96.356	82.50	70.699	-131.621	-339.909	20.240	60.036	48.511	128.371	-0.900	9.727
	4.70	-1.877	-46.778	377.650	25.213	11.498	0.251	484.456	7.848	-74.470	82.50	54.157	-136.565	-337.228	16.401	65.451	36.819	128.530	-4.182	10.093
	4.70	-22.484	-29.295	136.790	23.554	11.383	-4.932	484.355	-12.526	-81.367	85.15	65.651	-105.464	-17.357	19.511	17.845	37.943	213.864	-20.295	-99.179
	7.05	-17.050	-26.646	208.010	26.203	-47.252	-3.933	630.087	-2.532	-46.235	87.80	68.420	-68.001	212.049	30.799	45.211	48.356	482.783	-18.664	-109.309
	9.40	-15.779	-23.881	269.359	50.392	142.935	-3.839	708.041	10.170	-18.589	90.95	23.112	-48.160	429.205	24.078	57.899	6.929	482.799	-38.967	-114.287
	9.40	-5.857	11.282	39.128	43.818	94.545	-14.277	708.041	-3.328	-23.035	94.10	26.152	-3.036	520.144	54.027	194.014	22.684	976.369	-8.499	-84.203
	10.58	-2.796	12.664	29.423	47.100	150.276	-13.254	718.343	1.669	-0.573	94.10	-30.392	-33.158	546.651	46.648	242.505	17.664	976.670	-8.927	-44.496
	11.75	-2.296	14.047	16.496	60.923	54.114	-5.665	713.609	6.667	9.621	97.25	-22.833	-15.880	585.746	50.104	183.170	18.288	1024.711	-2.368	-22.725
	11.75	8.542	19.712	16.496	56.751	172.386	5.344	712.558	-4.405	6.571	97.25	-21.792	2.550	597.447	69.052	245.397	21.892	1038.899	4.920	-1.876
	12.93	11.978	21.354	-4.349	66.311	238.807	5.862	696.823	3.716	28.917	98.83	-28.570	11.717	69.366	66.100	369.015	13.112	1038.899	-4.948	-5.203
	14.10	12.478	22.736	-30.967	81.689	154.085	10.859	656.781	8.713	45.331	100.40	-21.636	13.560	51.780	69.844	401.579	17.660	1023.551	1.611	24.458
	14.10	29.506	32.610	-29.930	80.904	234.808	23.106	656.781	-6.484	40.443	100.40	-20.658	15.403	30.082	91.729	307.327	23.948	974.526	8.274	45.307
	16.45	36.752	36.437	-106.917	98.354	174.150	24.461	534.153	13.874	66.687	100.40	16.320	36.697	125.699	93.611	466.998	8.042	973.475	-8.984	40.350
	18.80	38.022	39.086	-192.424	130.204	-83.539	35.435	331.103	26.007	101.257	103.55	29.792	40.758	9.683	111.119	391.751	8.684	789.321	7.545	84.121
	18.80	43.620	43.004	-193.812	129.620	-53.343	36.139	330.972	9.289	95.957	106.70	31.749	44.329	-122.430	152.875	9.749	24.269	472.732	39.688	116.873
	20.65	50.283	46.255	-277.220	150.642	-254.365	40.596	168.635	26.636	69.834	106.70	59.222	59.107	-120.354	153.607	114.015	42.377	472.471	18.694	111.299
	22.50	51.345	48.328	-365.238	175.695	-544.164	49.487	66.782	29.225	18.978	109.35	71.028	63.342	-282.995	181.597	-220.885	46.550	189.366	35.123	110.114
	22.50	46.944	46.148	-363.452	172.784	-545.632	41.405	66.741	25.654	17.457	112.00	72.423	66.337	-454.278	216.730	-723.536	59.637	77.018	3.900	-4.541
	23.00	48.652	47.099	-387.659	178.543	-630.035	42.450	57.837	-0.421	15.858	112.00	65.413	63.593	-453.458	212.837	-719.302	44.616	76.901	1.773	-5.214
	23.50	49.172	47.675	-411.738	184.303	-720.465	44.532	51.771	-3.381	10.199	113.00	67.807	64.169	-485.223	219.461	-823.511	46.698	79.306	1.981	0.545
	23.50	58.292	-142.888	-419.981	17.153	42.310	39.343	51.771	-5.864	6.640	113.00	68.015	65.120	-518.377	226.948	-963.346	59.679	79.466	3.226	-4.062
	24.00	60.000	-137.503	-350.584	17.729	33.112	39.551	49.904	-4.619	2.032	113.00	80.547	-150.952	-519.649	11.346	-23.212	70.234	79.466	1.899	-2.847
	24.50	60.208	-131.744	-283.761	18.305	27.703	40.796	47.678	-4.410	7.792	113.50	82.629	-145.192	-444.431	11.922	-29.372	70.442	82.387	3.144	-7.454
	24.50	45.479	-129.993	-288.570	15.469	26.652	31.716	47.678	-6.131	8.110	114.00	83.150	-131.169	-378.755	12.498	-31.894	71.687	83.925	3.352	-1.695
	26.90	55.661	-103.410	-9.619	18.234	-13.433	32.716	124.396	-27.197	-90.610	114.00	64.901	-137.476	-378.219	7.780	-33.060	56.268	83.810	-0.678	-1.331
	29.30	56.973	-67.126	192.716	27.218	12.284	40.972	354.547	-20.390	-98.102	116.65	76.707	-106.803	-54.907	10.775	-53.625	57.393	207.018	-19.594	-106.186
	29.30	5.013	-90.459	189.978	19.181	12.310	18.288	354.319	-38.779	-104.686	119.30	79.539	-68.849	176.455	22.179	-2.306	66.769	492.393	-15.415	-107.225
	32.20	17.964	-48.790	396.743	22.522	-44.911	19.495	632.476	-5.394	-73.547	119.30	16.023	-97.526	172.848	9.042	137.761	2.304	492.015	-38.777	-114.927
	35.10	19.484	-15.386	490.274	49.015	102.684	30.897	801.385	6.683	-42.734	122.45	30.598	-52.027	406.316	13.592	106.547	2.773	791.450	-9.504	-79.325
	35.10	-29.318	-31.874	487.175	40.559	176.452	7.913	801.385	-9.917	-46.771	125.60	34.013	-8.054	515.126	44.289	281.044	16.159	959.387	5.390	-36.706
	36.55	-22.822	-15.748	523.695	42.172	115.110	8.537	850.927	-0.547	-20.278	125.60	-24.096	-35.884	545.436	36.784	367.159	19.848	959.516	-10.186	-40.267
	38.00	-21.926	1.530	535.097	61.869	187.563	11.021	867.452	6.147	-7.319	127.18	-16.808	-17.454	588.873	40.355	322.736	20.514	1001.227	-0.400	-19.245
	38.00	-28.387	10.231	73.323	58.551	317.340	12.604	867.452	-6.515	-9.800	128.75	-15.767	0.976	605.620	60.340	397.594	24.118	1006.792	6.520	10.416
	39.45	-22.265	12.218	58.708	62.928	362.583	17.439	866.048	1.103	9.955	130.33	-24.423	3.404	81.930	58.103	569.922	21.725	1006.792	-3.960	7.103
	40.90	-21.370	13.946	38.478	81.934	274.730	24.508	833.552	10.057	36.563	131.90	-17.448	5.132	74.724	62.769	612.358	26.314	985.799	2.703	28.874
	40.90	7.203	28.326	68.009	82.733	346.946	4.900	832.674	-6.041	31.545	131.90	16.297	29.592	182.615	88.263	603.183	32.603	928.762	9.366	50.760
	43.80	19.405	32.041	-15.999	98.859	296.593	7.474	697.644	5.816	63.222	135.05	-16.469	6.975	68.038	83.618	528.005	29.177	928.877	-7.143	45.413
	46.70	20.925	35.382	-114.855	138.311	-25.096	20.083	447.686	39.601	95.945	138.20	16.297	29.592	182.615	88.263	603.183	32.603	928.877	-7.143	45.413
	46.70	39.895	47.898	-119.443	137.893	65.621	31.500	448.534	21.542	90.666	138.20	30.185	33.278	86.036	105.771	541.185	30.235	732.110	9.618	88.147
	49.10	49.389	51.412	-237.930	162.601	-212.510	38.225	222.241	18.936	93.791	138.20	34.662	45.863	-23.437	149.427	171.737	45.404	405.607	34.576	119.267
	51.50	51.014	54.177	-366.018	195.430	-638.129	53.071	123.967	-0.522	-3.303	140.85	5.013	-90.459	189.978	19.181	12.310	18.288	354.319	-38.779	-104.686
	51.50	44.979	52.416	-365.072	193.854	-639.181	41.908	123.967	-2.351	-2.986	140.85	67.723	58.585	-173.236	177.319	-162.423	36.109	136.547	9.094	94.128
	52.00	47.061	53.367	-391.449	198.577	-733.811	42.954	124.034	-2.142	2.773	143.50	72.679	71.084	-347.232	212.566	-677.010	55.243	62.771	7.581	-8.120
	52.50	47.582	53.943	-419.165	206.064	-832.724	45.900	125.051	-1.934	-1.834	143.50	63.021	67.462	-347.603	208.007	-677.749	41.166	62.771	4.589	-7.754
	52.50	58.643	-139.979	-422.366	22.324	66.177	45.937	125.051	-3.474	12.862	144.00	65.103	68.038	-379.914	214.630	-756.721	35.300	65.537	4.797	-1.995
	53.00	61.037	-134.532	-353.625	22.900	53.886	46.146	120.090	-2.229	8.254	144.50	65.686	68.989	-416.353	221.253	-864.100	37.382	68.867	0.785	-7.654
	53.50	61.246	-128.772	-287.485	23.475	44.300	47.390	113.686	-2.021	14.014	144.50	75.951	-136.489	-421.536	2.882	-61.656	69.906	68.867	0.344	-9.559
	53.50	43.620	-126.956	-292.278	20.755	47.339	37.177	113.571	-4.875	14.447	145.00	78.033	-130.730	-3						

VIADUCTO BORGES BLANQUES

(1)	9.40	12.376	-4.835	583.316	45.704	168.146	13.148	783.786	2.869	-21.772
(2)	10.58	14.175	9.182	578.562	49.033	222.496	17.471	791.693	3.162	1.007
(3)	11.75	14.469	23.200	557.026	63.051	123.425	15.137	784.937	3.456	11.345
(1)	11.75	31.729	17.535	557.026	62.259	240.052	-4.852	783.900	5.583	11.519
(2)	12.93	33.748	39.976	526.638	71.955	301.365	3.151	761.721	5.877	34.181
(1)	14.10	34.042	52.942	473.226	87.549	209.752	3.445	715.212	6.171	50.826
(2)	14.10	58.309	42.991	474.277	92.257	289.110	-23.549	715.212	6.818	51.285
(3)	16.45	62.568	70.402	337.985	109.954	203.871	-14.201	567.333	1.195	77.690
(1)	18.80	63.314	106.029	125.601	142.252	-81.076	-11.886	336.251	8.454	113.468
(2)	18.80	80.345	101.873	126.912	149.929	-51.299	-34.508	336.150	6.217	116.849
(3)	20.65	84.261	122.391	-80.541	171.248	-289.777	-30.538	138.212	-23.317	88.716
(1)	22.50	84.865	153.230	-336.181	196.654	-617.706	-28.345	1.388	-16.494	37.756
(2)	22.50	81.586	156.189	-338.940	199.428	-618.718	-35.132	1.633	-23.524	41.851
(3)	23.00	82.590	161.809	-418.512	205.269	-717.112	-33.958	-19.720	3.121	40.434
(1)	23.50	82.895	167.650	-500.866	211.109	-820.857	-33.836	-38.153	8.909	34.725
(2)	23.50	61.635	-90.184	-494.329	-7.061	-47.171	-44.336	-38.153	2.187	-17.428
(3)	24.00	62.638	-89.379	-448.119	-6.477	-44.687	-43.113	-28.071	2.359	-22.100
(1)	24.50	62.761	-88.795	-402.982	-5.893	-37.944	-42.940	-18.247	3.583	-16.260
(2)	24.50	51.454	-83.228	-403.202	-1.614	-38.797	-46.257	-18.247	-7.174	-8.871
(3)	26.90	57.438	-71.039	-217.644	1.190	-37.704	-38.547	99.622	21.045	-108.163
(1)	29.30	58.209	-68.236	-49.157	10.301	29.936	-40.032	373.214	6.675	-115.193
(2)	29.30	17.774	-46.348	-49.200	12.087	30.014	-36.156	372.280	2.176	-112.591
(3)	32.20	25.386	-33.980	59.541	15.475	-6.517	-27.223	672.899	-4.416	-81.030
(1)	35.10	26.279	-30.592	153.421	42.342	164.368	-30.462	862.773	-3.706	-49.782
(2)	35.10	-12.139	-10.523	76.524	39.451	235.545	-8.930	862.773	-1.684	-48.667
(3)	36.55	-8.321	-8.888	88.522	41.086	175.690	-5.479	915.186	-1.316	-21.800
(1)	38.00	-7.795	-7.135	98.984	61.061	252.616	-3.759	934.299	-1.850	-8.659
(2)	38.00	-8.486	0.632	556.186	60.551	380.204	-3.316	934.299	1.428	-8.558
(3)	39.45	-4.888	16.766	542.551	64.990	423.622	-1.897	930.761	0.931	11.475
(1)	40.90	-4.362	34.288	505.695	84.264	332.731	-2.431	895.407	1.274	38.459
(2)	40.90	32.288	15.864	545.094	90.404	405.177	-9.185	894.544	2.494	38.583
(3)	43.80	39.459	58.280	430.693	106.757	335.097	1.162	738.274	3.954	70.706
(1)	46.70	40.352	100.917	205.854	146.766	-10.219	4.500	465.135	1.489	103.869
(2)	46.70	73.913	82.062	216.188	155.986	78.780	-37.603	466.027	-2.951	108.813
(3)	49.10	79.493	118.417	-28.767	181.043	-241.696	-30.533	197.189	-15.220	110.981
(1)	51.50	80.448	155.213	-343.554	214.334	-712.077	-31.697	57.515	14.568	13.691
(2)	51.50	80.129	157.076	-346.927	219.918	-713.113	-38.945	57.515	2.899	21.082
(3)	52.00	81.353	162.697	-426.961	224.707	-820.729	-37.772	45.557	4.123	26.923
(1)	52.50	81.659	168.537	-508.093	232.300	-933.030	-38.525	34.507	4.850	22.250
(2)	52.50	61.919	-75.640	-507.261	-1.908	-23.364	-51.092	34.507	-1.579	-11.238
(3)	53.00	63.326	-74.872	-468.484	-1.324	-23.543	-49.869	41.614	-1.406	-15.910
(1)	53.50	63.449	-74.288	-431.985	-0.739	-20.975	-49.696	47.264	-0.182	-10.070
(2)	53.50	53.008	-69.503	-433.861	3.657	-17.981	-52.654	47.147	-10.397	-2.564
(3)	55.90	59.617	-66.516	-270.716	6.460	-27.403	-44.944	162.517	25.588	-101.348
(1)	58.30	60.424	-63.271	-116.592	16.623	28.319	-44.593	428.929	4.448	-112.612
(2)	58.30	16.554	-44.321	-117.455	16.379	86.623	-25.741	429.940	-2.629	-108.285
(3)	61.20	24.754	-40.933	6.628	19.766	33.481	-16.808	725.102	-4.648	-78.826
(1)	64.10	25.904	-37.325	118.245	46.808	189.902	-19.171	904.278	-3.938	-47.579
(2)	64.10	-13.537	-11.309	79.220	46.695	237.611	-9.564	904.393	-0.792	-46.462
(3)	65.55	-9.743	-9.674	93.330	49.207	180.078	-6.137	952.399	-0.450	-18.544
(1)	67.00	-8.972	-7.921	105.850	67.254	239.749	-4.393	968.906	-0.082	-6.454
(2)	67.00	-9.134	0.735	527.870	66.931	321.065	0.735	968.906	1.141	-5.302
(3)	68.45	-5.315	17.088	513.118	70.494	353.380	2.154	958.979	1.509	13.680
(1)	69.90	-4.973	34.610	477.395	90.644	258.386	2.496	918.280	1.851	41.715
(2)	69.90	37.031	20.867	511.557	96.040	389.473	-9.533	919.216	3.944	41.956
(3)	72.80	44.056	54.522	397.245	113.270	303.337	-1.114	752.144	4.654	74.079
(1)	75.70	45.133	97.159	171.560	153.278	-56.183	3.100	470.251	-0.056	104.492
(2)	75.70	79.402	83.184	177.174	162.451	57.579	-45.248	469.287	-6.043	108.984
(3)	78.10	85.386	119.539	-63.815	188.383	-277.103	-38.178	197.499	-18.008	101.454
(1)	80.50	86.157	147.574	-381.877	219.923	-768.780	-43.723	59.300	9.275	10.297
(2)	80.50	89.128	156.188	-377.701	225.638	-769.700	-53.099	59.416	-1.590	16.768
(3)	81.00	90.536	161.808	-455.761	231.479	-852.794	-43.165	49.791	0.790	22.608
(1)	81.50	90.658	167.649	-538.939	239.948	-992.792	-49.175	38.666	0.963	17.936
(2)	81.50	69.407	-82.707	-538.190	-5.879	-18.352	-56.242	38.666	-6.545	-16.246
(3)	82.00	70.814	-82.123	-496.656	-5.295	-15.789	-55.018	47.464	-5.321	-20.919
(1)	82.50	70.936	-81.319	-455.088	-4.711	-9.761	-53.794	57.624	-4.097	-15.078
(2)	82.50	63.461	-76.793	-458.996	-0.689	-4.707	-57.196	57.494	-15.792	-6.909
(3)	85.15	70.216	-73.639	-258.773	2.465	-6.674	-48.751	188.843	10.971	-116.382
(1)	87.80	71.844	-69.941	-70.050	13.913	66.971	-50.014	504.307	-0.807	-127.217
(2)	87.80	20.710	-47.393	-68.515	14.141	126.061	-30.188	504.290	-4.879	-122.130
(3)	90.95	29.276	-43.772	74.777	17.762	99.653	-19.644	839.950	-6.337	-91.036
(1)	94.10	31.063	-39.814	203.971	48.133	259.771	-24.413	1042.361	-5.578	-46.647
(2)	94.10	-13.271	-11.900	89.015	45.542	309.965	-11.949	1042.220	-2.079	-46.418
(3)	95.68	-8.828	-10.148	106.797	49.046	252.227	-8.278	1092.850	-1.712	-24.341
(1)	97.25	-8.216	-8.279	119.260	68.262	318.709	-7.340	1109.125	-1.321	-3.198
(2)	97.25	-9.195	-7.783	703.380	68.082	440.075	-3.193	1109.125	0.102	-3.991
(3)	98.83	-5.120	19.668	694.837	71.878	471.391	-0.723	1091.690	0.469	26.088
(1)	100.40	-4.545	38.358	649.762	94.072	373.715	-0.331	1040.072	0.861	47.231
(2)	100.40	43.698	14.482	582.048	101.218	528.656	-11.347	1039.035	4.218	47.294
(3)	103.55	51.616	59.351	455.857	118.973	433.526	1.852	833.388	4.977	91.683
(1)	106.70	52.766	105.375	197.352	161.317	27.347	3.511	492.488	0.589	124.880
(2)	106.70	94.194	86.150	197.089	172.390	130.285	-46.909	492.546	-3.770	129.969
(3)	109.35	101.133	124.738	-79.618	200.775	-253.493	-35.911	161.135	-27.910	127.965
(1)	112.00	101.952	156.161	-452.597	236.403	-806.620	-34.398	2.138	13.834	13.205

VIADUCTO BORGES BLANQUES

112.00	101.876	159.105	-456.709	240.461	-802.386	-42.943	2.023	0.398	20.324
112.50	103.283	173.707	-538.019	247.177	-920.361	-42.821	-8.528	1.622	26.165
113.00	103.406	179.327	-625.434	254.770	-1074.780	-50.584	-21.484	1.794	21.492
113.00	82.159	-90.554	-626.238	-14.392	-122.422	-74.794	-21.484	-6.620	-28.387
113.50	83.383	-89.970	-580.364	-13.808	-115.541	-73.570	-5.460	-6.447	-33.060
114.00	83.689	-89.166	-535.336	-13.224	-105.174	-73.398	9.034	-5.224	-27.219
114.00	72.503	-83.451	-537.568	-10.064	-106.328	-73.285	8.918	-16.030	-19.049
116.65	79.442	-80.230	-318.489	-7.027	-80.374	-64.841	178.748	13.864	-124.121
119.30	81.106	-76.635	-110.509	4.538	19.469	-65.052	512.693	0.377	-125.922
119.30	26.424	-50.233	-107.575	2.246	156.859	-23.142	511.514	-1.644	-122.899
122.45	34.990	-46.495	47.515	6.860	146.932	-12.598	635.399	-3.583	-86.431
125.60	36.997	-42.653	187.982	37.990	346.214	-15.440	1024.776	-3.700	-43.211
125.60	-11.062	-18.831	74.909	35.686	433.139	-13.425	1024.618	-2.128	-42.179
127.18	-6.779	-16.962	103.406	39.307	390.877	-9.729	1069.194	-1.736	-20.861
128.75	-6.167	-15.093	126.395	59.574	469.458	-8.791	1077.357	-0.468	9.218
128.75	-7.204	-11.591	733.342	60.070	639.298	-8.284	1077.357	0.918	8.410
130.33	-3.104	15.743	729.525	64.801	679.921	-5.790	1053.767	1.309	30.488
131.90	-2.529	34.433	688.228	85.944	592.851	-5.398	994.153	1.701	52.682
131.90	41.167	11.140	605.259	95.097	663.984	-29.971	994.270	4.196	51.643
135.05	49.330	56.229	492.519	112.852	582.971	-16.748	776.586	4.979	94.980
138.20	51.961	102.033	244.626	157.124	190.042	-15.113	426.997	2.689	126.530
138.20	86.227	86.783	243.703	167.405	190.934	-33.600	425.962	-0.930	128.774
140.85	92.982	126.966	-37.908	195.673	-191.114	-23.478	111.433	1.608	111.952
143.50	95.895	157.013	-410.175	231.418	-755.010	-28.098	-7.991	11.058	8.880
143.50	92.875	160.525	-412.799	235.298	-756.047	-36.326	-7.991	-0.792	17.049
144.00	94.098	175.126	-493.310	242.015	-848.615	-28.144	-18.205	0.432	22.890
144.50	94.441	180.746	-582.951	248.732	-969.385	-28.021	-26.930	6.760	17.364
144.50	72.922	-77.855	-578.745	-22.852	-155.667	-71.052	-26.930	-1.485	-35.119
145.00	74.146	-77.271	-540.590	-22.268	-142.506	-69.828	-6.824	16.852	-46.012
145.50	74.488	-76.467	-500.505	-21.684	-128.089	-69.656	17.901	42.535	-45.355
145.50	64.854	-72.999	-504.215	-20.455	-128.334	-70.265	17.656	35.879	-41.016
147.35	71.095	-70.780	-372.327	-18.235	-92.889	-64.023	156.706	25.748	-86.661
149.20	72.662	-68.237	-243.996	-11.928	-8.979	-64.630	356.555	-1.866	-115.351
149.20	41.974	-52.698	-244.529	-10.742	105.906	-33.817	355.345	-3.932	-112.243
151.55	49.439	-49.895	-123.088	-7.938	128.417	-26.352	583.384	-0.384	-76.628
153.90	52.009	-46.988	-10.947	10.168	297.690	-29.063	729.035	-6.490	-50.483
153.90	20.144	-30.551	-9.521	11.905	361.781	-14.594	729.035	-4.645	-49.112
155.08	23.264	-29.149	24.682	13.306	346.935	-11.656	774.782	-4.572	-33.517
156.25	26.287	-27.864	57.861	26.681	449.370	-12.210	797.311	-4.303	-10.856
156.25	5.418	-17.063	57.861	31.186	548.893	1.806	796.259	-5.287	-10.540
157.43	8.355	-15.661	76.986	32.588	513.191	4.743	801.342	-4.994	0.849
158.60	9.934	-14.377	92.560	48.065	598.718	3.650	792.821	-4.700	23.511
158.60	-12.160	23.482	310.576	52.685	550.845	-1.811	792.821	-3.738	23.774
160.95	-4.878	26.286	249.888	62.322	621.137	-2.299	705.942	-3.175	50.758
163.30	-1.244	28.752	181.231	95.497	462.726	-1.712	548.232	-2.588	87.437
163.30	-1.904	56.871	436.015	95.187	463.779	-1.302	549.285	-1.302	86.951
165.15	4.337	87.709	300.944	111.657	362.617	-0.861	367.698	-0.861	107.978
167.00	7.886	108.412	119.346	138.933	139.831	-0.396	145.087	-0.396	138.933
167.00	-1.805	114.715	120.556	141.333	141.041	-0.024	145.246	-0.024	141.333
167.50	-0.582	120.556	61.737	147.173	73.861	0.099	73.861	0.099	147.173
168.00	2.294	125.442	0.000	154.766	0.000	0.221	0.000	-0.002	26.402
	0.000	1.185	1.378	1.185	2.429	0.000	2.209	0.000	1.185
	0.000	1.185	0.034	1.185	0.034	0.000	-0.406	0.000	0.589
	0.000	1.185	-1.060	1.185	-1.060	0.000	0.405	0.000	-0.087
	0.000	4.498	7.264	4.498	8.316	0.000	7.435	0.000	4.938
	0.000	4.498	0.438	4.498	1.489	0.000	-0.485	0.000	2.237
	0.000	4.498	-4.318	4.498	-6.406	0.000	0.169	0.000	0.406
	1.053	-5.510	-5.640	6.670	12.644	-1.035	10.698	-1.035	7.735
	1.053	-5.510	2.681	6.670	1.644	-1.035	-2.496	0.016	2.929
	1.053	-5.510	9.777	6.670	-7.443	-1.035	1.627	1.053	-1.036
	0.000	-9.136	-10.602	12.541	21.450	0.000	19.504	0.000	14.046
	0.000	-9.136	2.788	12.541	1.592	0.000	-1.887	0.000	1.837
	0.000	-9.136	16.175	12.541	-17.246	0.000	13.649	0.000	-10.314
	0.000	1.897	5.877	8.410	15.839	0.000	14.737	0.000	9.474
	0.000	1.897	2.550	8.410	0.438	0.000	-0.485	0.000	1.280
	0.000	1.897	0.590	8.410	-14.160	0.000	10.548	0.000	-6.882
	0.000	7.005	17.097	13.660	23.622	0.000	21.896	0.000	15.386
	0.000	7.005	4.616	13.660	1.592	0.000	-1.703	0.000	2.140
	0.000	7.005	-6.855	13.660	-20.469	0.000	15.433	0.000	-11.062
	1.035	16.850	34.022	11.995	21.188	1.035	20.086	1.035	13.097
	1.035	16.850	6.312	11.995	2.681	1.035	-2.496	-0.016	3.276
	1.035	16.850	-22.520	11.995	-16.631	1.035	9.194	-1.053	-5.556
	0.000	6.339	10.025	5.551	9.410	0.000	8.970	0.000	5.991
	0.000	6.339	1.339	5.551	1.489	0.000	-0.301	0.000	2.266
	0.000	6.339	-6.012	5.551	-7.483	0.000	1.455	0.000	-0.629
	0.000	0.811	3.414	2.304	3.690	0.000	3.470	0.000	2.525
	0.000	0.811	0.524	2.304	0.086	0.000	-1.199	0.000	0.892
	0.000	0.811	-1.212	2.304	-3.287	0.000	0.216	0.000	-0.461
	0.000	0.517	5.051	6.736	12.761	0.000	12.100	0.000	7.176
	0.000	0.517	2.159	6.736	1.541	0.000	-1.094	0.000	2.855
	0.000	0.517	1.163	6.736	-8.660	0.000	2.857	0.000	-0.342
	1.053	-9.311	-11.136	18.013	31.668	-1.035	29.722	-1.035	19.335
	1.053	-9.311	3.016	18.013	3.016	-1.035	1.035		

		VIADUCTO BORGES BLANQUES									
3(1)	0.000	-3.272	-1.969	20.740	36.827	0.000	34.221	0.000	22.282		
3(2)	0.000	-3.272	2.698	20.740	2.698	0.000	-2.516	0.000	2.038		
3(3)	0.000	-3.272	7.596	20.740	-32.424	0.000	27.613	0.000	-18.250		
3(1)	0.000	-0.510	2.808	15.520	25.187	0.000	23.241	0.000	16.401		
3(2)	0.000	-0.510	2.891	15.520	1.541	0.000	-0.910	0.000	1.224		
	0.000	-0.510	2.998	15.520	-22.137	0.000	19.502	0.000	-14.040		
3(1)	0.000	7.661	16.866	22.667	37.879	0.000	35.272	0.000	24.209		
3(2)	0.000	7.661	6.354	22.667	2.698	0.000	-2.516	0.000	2.038		
3(3)	0.000	7.661	-4.848	22.667	-32.424	0.000	28.649	0.000	-20.151		
3(1)	1.035	21.811	41.394	19.942	34.589	1.035	32.422	1.035	21.264		
3(2)	1.035	21.811	7.445	19.942	3.016	1.035	-1.395	-0.016	3.808		
3(3)	1.035	21.811	-24.822	19.942	-27.871	1.035	20.177	-1.053	-12.079		
3(1)	0.000	6.626	14.092	6.736	12.827	0.000	12.166	0.000	7.397		
3(2)	0.000	6.626	3.942	6.736	1.541	0.000	-0.910	0.000	2.855		
3(3)	0.000	6.626	-7.320	6.736	-9.777	0.000	2.379	0.000	-0.717		
3(1)	0.000	1.406	3.674	2.304	3.575	0.000	3.355	0.000	2.525		
3(2)	0.000	1.406	0.395	2.304	0.086	0.000	-1.016	0.000	0.892		
3(3)	0.000	1.406	-0.513	2.304	-3.404	0.000	0.099	0.000	-0.461		
3(1)	0.000	1.013	5.014	6.736	12.827	0.000	12.166	0.000	7.176		
3(2)	0.000	1.013	2.597	6.736	1.541	0.000	-0.910	0.000	2.855		
3(3)	0.000	1.013	1.024	6.736	-9.777	0.000	2.379	0.000	-0.717		
3(1)	1.053	-10.346	-12.056	19.942	34.589	-1.035	32.422	-1.035	21.264		
3(2)	1.053	-10.346	3.016	19.942	3.016	-1.035	-1.211	0.016	3.820		
3(3)	1.053	-10.346	17.909	19.942	-27.871	-1.035	20.177	1.053	-12.079		
3(1)	0.000	-2.219	-1.111	22.669	37.880	0.000	35.273	0.000	24.211		
3(2)	0.000	-2.219	3.135	22.669	2.698	0.000	-2.516	0.000	2.067		
3(3)	0.000	-2.219	6.294	22.669	-33.477	0.000	28.831	0.000	-20.149		
3(1)	0.000	0.366	4.405	15.520	26.238	0.000	24.476	0.000	16.401		
3(2)	0.000	0.366	2.737	15.520	1.541	0.000	-0.910	0.000	1.224		
3(3)	0.000	0.366	0.040	15.520	-23.189	0.000	20.538	0.000	-14.040		
3(1)	0.000	7.662	17.691	22.669	39.832	0.000	37.446	0.000	24.211		
3(2)	0.000	7.662	6.586	22.669	2.930	0.000	-0.196	0.000	2.054		
3(3)	0.000	7.662	-5.958	22.669	-33.518	0.000	30.690	0.000	-20.149		
3(1)	1.035	17.597	36.320	21.061	36.761	1.035	34.594	1.035	21.943		
3(2)	1.035	17.597	7.445	21.061	3.016	1.035	-1.211	-0.016	4.111		
3(3)	1.035	17.597	-20.610	21.061	-29.868	1.035	21.273	-1.053	-12.453		
3(1)	0.000	7.679	16.396	7.789	15.808	0.000	14.926	0.000	8.229		
3(2)	0.000	7.679	4.097	7.789	1.541	0.000	-0.910	0.000	2.871		
3(3)	0.000	7.679	-8.593	7.789	-10.830	0.000	4.940	0.000	-1.377		
3(1)	0.000	1.406	3.790	2.304	4.743	0.000	4.523	0.000	2.525		
3(2)	0.000	1.406	0.395	2.304	0.086	0.000	-1.016	0.000	0.892		
3(3)	0.000	1.406	-1.449	2.304	-3.288	0.000	1.251	0.000	-0.461		
3(1)	1.051	3.008	6.526	8.906	15.016	0.000	14.135	0.000	8.516		
3(2)	1.051	3.008	2.768	8.906	1.558	0.000	-1.113	0.000	3.157		
3(3)	1.051	3.008	-1.176	8.906	-10.881	0.000	3.401	0.000	-1.091		
3(1)	1.053	-9.245	-10.603	22.080	39.006	-1.035	36.399	-1.035	23.402		
3(2)	1.053	-9.245	3.050	22.080	3.050	-1.035	-1.801	0.016	4.078		
3(3)	1.053	-9.245	16.949	22.080	-31.623	-1.035	23.053	1.053	-13.897		
3(1)	0.000	-2.480	-1.020	25.708	44.027	0.000	40.980	0.000	27.030		
3(2)	0.000	-2.480	2.964	25.708	2.964	0.000	-0.602	0.000	1.719		
3(3)	0.000	-2.480	7.807	25.708	-37.252	0.000	34.927	0.000	-23.595		
3(1)	0.000	0.336	6.035	17.590	29.149	0.000	27.799	0.000	18.471		
3(2)	0.000	0.336	3.960	17.590	1.558	0.000	-1.113	0.000	1.008		
3(3)	0.000	0.336	1.408	17.590	-27.084	0.000	24.426	0.000	-16.329		
3(1)	0.000	5.728	17.321	25.774	44.788	0.000	41.741	0.000	27.316		
3(2)	0.000	5.728	6.930	25.774	2.964	0.000	-0.602	0.000	2.006		
3(3)	0.000	5.728	-4.052	25.774	-37.369	0.000	35.491	0.000	-23.308		
3(1)	1.035	14.456	29.747	23.133	39.943	1.035	37.557	1.035	24.455		
3(2)	1.035	14.456	8.954	23.133	3.050	1.035	-1.801	-0.016	4.094		
3(3)	1.035	14.456	-14.056	23.133	-33.844	1.035	23.971	-1.053	-14.557		
3(1)	1.037	6.441	14.336	8.908	16.987	0.000	16.106	0.000	9.348		
3(2)	1.037	6.441	4.269	8.908	1.558	0.000	-1.113	0.000	3.173		
3(3)	1.037	6.441	-7.037	8.908	-13.010	0.000	5.055	0.000	-1.751		
3(1)	0.000	1.406	2.754	2.304	5.619	0.000	5.399	0.000	2.525		
3(2)	0.000	1.406	0.549	2.304	0.086	0.000	-1.016	0.000	0.892		
3(3)	0.000	1.406	-1.449	2.304	-3.288	0.000	2.115	0.000	-0.461		
3(1)	1.051	2.568	5.908	8.908	16.987	0.000	16.326	0.000	9.348		
3(2)	1.051	2.568	3.805	8.908	1.558	0.000	-1.113	0.000	3.173		
3(3)	1.051	2.568	0.478	8.908	-13.010	0.000	5.055	0.000	-1.751		
3(1)	1.053	-4.016	-2.350	23.133	39.943	-1.035	37.557	-1.035	24.455		
3(2)	1.053	-4.016	3.064	23.133	3.050	-1.035	-1.801	0.016	4.094		
3(3)	1.053	-4.016	8.464	23.133	-33.844	-1.035	23.971	1.053	-14.557		
3(1)	0.000	-0.326	0.780	25.774	44.788	0.000	41.741	0.000	27.316		
3(2)	0.000	-0.326	2.964	25.774	2.964	0.000	-0.602	0.000	2.006		
3(3)	0.000	-0.326	3.863	25.774	-37.369	0.000	35.491	0.000	-23.308		
3(1)	0.000	2.424	6.009	17.590	29.149	0.000	26.762	0.000	17.420		
3(2)	0.000	2.424	2.768	17.590	2.595	0.000	-1.297	0.000	1.008		
3(3)	0.000	2.424	0.345	17.590	-26.048	0.000	23.375	0.000	-15.109		
3(1)	0.000	7.153	19.720	23.779	41.822	0.000	38.775	0.000	25.101		
3(2)	0.000	7.153	6.930	23.779	2.954	0.000	-0.602	0.000	1.703		
3(3)	0.000	7.153	-5.271	23.779	-37.368	0.000	32.540	0.000	-21.696		
3(1)	1.035	18.614	35.644	20.166	33.931	1.035	31.545	1.035	21.671		
3(2)	1.035	18.614	7.917	20.166	3.050	1.035	-1.801	-0.016	4.062		
3(3)	1.035	18.614	-20.861	20.166	-27.831	1.035	18.875	-1.053	-12.358		

VIADUCTO BORGES BLANQUES										
1.037	5.388	11.739	7.855	16.008	0.000	15.347	0.000	8.295		
1.037	5.388	3.372	7.855	1.558	0.000	-1.297	0.000	3.341		
1.037	5.388	-5.534	7.855	-10.764	0.000	4.757	0.000	-0.220		
0.000	1.406	2.077	2.304	5.619	0.000	5.399	0.000	2.304		
0.000	1.406	0.549	2.304	0.086	0.000	-1.199	0.000	0.892		
0.000	1.406	-0.618	2.304	-3.288	0.000	2.115	0.000	0.409		
0.000	-0.171	2.439	6.604	10.488	0.000	10.047	0.000	6.824		
0.000	-0.171	1.494	6.604	1.489	0.000	-0.301	0.000	2.282		
0.000	-0.171	1.722	6.604	-8.578	0.000	2.448	0.000	-1.290		
1.053	-7.230	-9.246	13.990	24.170	-1.035	23.068	-1.035	14.871		
1.053	-7.230	2.681	13.990	1.644	-1.035	-2.496	0.016	3.578		
0.000	-1.482	-1.598	14.713	-18.737	-1.035	12.128	1.053	-6.419		
0.000	-1.482	1.592	14.713	1.592	0.000	23.825	0.000	15.387		
0.000	-1.482	4.765	14.713	-20.471	0.000	-1.703	0.000	2.156		
0.000	1.457	4.123	9.286	15.955	0.000	17.332	0.000	-11.061		
0.000	1.457	0.438	9.286	0.438	0.000	14.854	0.000	10.350		
0.000	1.457	-1.337	9.286	-14.045	0.000	-0.485	0.000	1.280		
0.000	13.329	25.324	12.541	21.452	0.000	10.664	0.000	-7.746		
0.000	13.329	3.369	12.541	1.592	0.000	19.506	0.000	14.046		
0.000	13.329	-18.591	12.541	-18.299	0.000	-1.887	0.000	1.837		
1.035	13.018	26.095	6.670	12.645	1.035	13.647	0.000	-10.314		
1.035	13.018	6.312	6.670	1.644	1.035	10.699	1.035	7.955		
1.035	13.018	-14.509	6.670	-9.372	1.035	-2.496	-0.016	2.929		
0.000	1.155	6.515	5.549	8.201	0.000	1.626	-1.053	-1.036		
0.000	1.155	2.550	5.549	1.489	0.000	7.540	0.000	4.938		
0.000	1.155	0.140	5.549	-6.522	0.000	-0.485	0.000	2.237		
0.000	0.287	1.476	1.185	2.429	0.000	0.052	0.000	0.406		
0.000	0.287	0.343	1.185	0.034	0.000	2.209	0.000	1.185		
0.000	0.287	0.780	1.185	-2.111	0.000	-0.406	0.000	0.589		
0.000	29.865	2.663	360.449	25.931	0.000	0.405	0.000	-0.087		
0.000	29.865	1.404	360.449	14.127	0.000	25.931	0.000	360.449		
0.000	29.865	0.000	360.449	0.000	0.000	14.127	0.000	360.449		
0.000	236.005	18.004	380.741	28.019	0.000	0.000	0.000	223.022		
0.000	236.005	9.524	380.741	14.127	0.000	28.019	0.000	380.741		
0.000	236.005	0.000	380.741	0.000	0.000	14.127	0.000	380.741		
0.000	215.156	15.987	397.004	28.998	0.000	0.000	0.000	285.669		
0.000	215.156	8.267	397.004	15.164	0.000	28.998	0.000	397.004		
0.000	215.156	0.000	397.004	0.000	0.000	15.164	0.000	397.004		
0.000	176.616	13.138	408.606	30.267	0.000	0.000	0.000	248.068		
0.000	176.616	6.243	408.606	14.518	0.000	30.267	0.000	408.606		
0.000	176.616	0.000	408.606	0.000	0.000	14.618	0.000	408.606		
0.000	191.150	13.568	376.375	27.947	0.000	0.000	0.000	259.171		
0.000	191.150	7.451	376.375	14.127	0.000	27.947	0.000	376.375		
0.000	191.150	0.000	376.375	0.000	0.000	14.127	0.000	376.375		
0.000	298.468	21.475	416.410	30.453	0.000	0.000	0.000	203.594		
0.000	298.468	10.622	416.410	15.770	0.000	30.453	0.000	416.410		
0.000	298.468	0.000	416.410	0.000	0.000	15.770	0.000	416.410		
0.000	272.287	21.145	436.170	32.541	0.000	0.000	0.000	284.493		
0.000	272.287	10.072	436.170	15.770	0.000	32.541	0.000	436.170		
0.000	272.287	0.000	436.170	0.000	0.000	15.770	0.000	436.170		
0.000	250.141	18.423	454.778	33.534	0.000	0.000	0.000	225.875		
0.000	250.141	9.396	454.778	16.822	0.000	33.534	0.000	454.778		
0.000	250.141	0.000	454.778	0.000	0.000	16.822	0.000	454.778		
0.000	331.550	23.772	467.550	34.818	0.000	0.000	0.000	231.332		
0.000	331.550	12.358	467.550	17.005	0.000	34.818	0.000	467.550		
0.000	331.550	0.000	467.550	0.000	0.000	17.005	0.000	467.550		
0.000	189.294	14.467	434.398	32.498	0.000	0.000	0.000	234.135		
0.000	189.294	7.139	434.398	15.770	0.000	32.498	0.000	434.398		
0.000	189.294	0.000	434.398	0.000	0.000	15.770	0.000	434.398		
					0.000	0.000	0.000	206.601		

HIPOTESIS: D

Eje 1 (49-96) ripado +30cm; Eje 2 (1-48) ripado +30cm

Envolvente IPF75B negativa

Coef impacto 1.16

ARRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
1)	0.00	-2.160	-10.624	0.000	-135.327	0.000	-3.088	0.000	-0.986	-108.032
2)	0.50	2.733	-8.424	4.570	-127.840	64.893	2.117	-6.619	-0.069	13.520
3)	1.00	4.815	-7.848	8.424	-122.081	121.793	4.199	-13.520	0.139	14.096
4)	1.00	-8.243	-12.967	8.203	-126.765	122.844	-10.683	-12.483	-2.327	13.694
5)	2.85	-2.246	-10.144	26.723	-98.947	320.222	-3.187	-38.920	-1.577	15.768
6)	4.70	8.415	-7.955	42.938	-82.591	400.138	7.848	-69.364	-0.786	17.956
7)	4.70	1.774	-25.286	220.528	-89.315	400.350	-15.337	-69.479	-3.896	17.334
8)	7.05	7.958	1.582	245.209	-57.638	547.993	-1.355	-112.564	-2.896	19.983
9)	9.40	20.347	29.227	209.216	-47.098	471.514	9.259	-162.026	-1.938	22.747
10)	9.40	-6.217	-6.069	499.317	-46.379	506.403	0.297	-163.077	-5.245	22.201
11)	10.58	-3.531	7.754	496.474	-31.866	434.219	3.734	-188.967	-4.745	23.583
12)	11.75	1.466	21.576	476.482	-29.620	461.503	4.234	-216.828	-4.245	24.965
13)	11.75	-23.249	11.884	476.482	-30.887	372.142	-13.348	-216.828	-6.389	24.676
14)	12.93	-18.065	34.231	452.589	-16.661	277.464	-8.875	-246.639	-5.889	25.943
15)	14.10	-12.755	47.017	406.007	-15.279	297.310	-8.375	-278.222	-5.389	27.326
16)	14.10	-49.098	31.751	407.044	-19.781	213.206	-37.143	-278.222	-8.478	26.914
17)	16.45	-44.725	59.021	297.444	-1.812	66.898	-25.776	-343.064	-19.715	28.396
18)	18.80	-32.024	94.153	114.633	0.837	68.989	-24.819	-408.711	-26.080	29.451
19)	18.80	-68.881	80.110	115.460	-6.076	12.978	-57.924	-408.828	-38.321	25.694
20)	20.65	-66.215	100.209	-51.559	0.259	-34.968	-51.950	-476.217	-42.643	59.928
21)	22.50	-55.221	130.619	-266.124	2.332	-35.019	-51.200	-647.563	-33.890	150.374
22)	22.50	-65.905	126.991	-266.905	-2.167	-35.061	-59.853	-647.980	-47.746	146.224
23)	23.00	-65.322	132.376	-330.984	-1.591	-37.803	-58.608	-722.937	-19.877	154.159
24)	23.50	-63.240	138.135	-398.709	-1.015	-36.538	-58.400	-802.557	-13.844	170.660
25)	23.50	-52.816	-63.870	-391.297	-208.053	-790.687	-40.717	-802.557	6.592	-193.220
26)	24.00	-52.233	-63.294	-358.275	-200.566	-690.326	-37.771	-711.464	9.377	-180.550
27)	24.50	-50.151	-62.718	-326.553	-194.806	-593.850	-36.725	-621.800	12.335	-179.098
28)	24.50	-55.365	-64.681	-326.553	-197.432	-595.199	-48.203	-621.785	-4.010	-183.826
29)	26.90	-50.492	-52.528	-184.231	-165.467	-164.893	-33.357	-318.368	38.293	-66.136
30)	29.30	-40.498	-49.763	-60.178	-139.895	118.153	-28.892	-219.295	33.256	-18.919
31)	29.30	-24.261	-39.230	-59.931	-140.298	117.918	-40.502	-219.269	19.391	-21.812
32)	32.20	-19.555	-26.875	26.069	-100.846	442.922	-27.893	-213.892	-1.239	3.861
33)	35.10	-6.542	-23.535	98.726	-84.720	494.858	-24.283	-228.885	-0.031	7.202
34)	35.10	18.954	-9.096	20.068	-80.666	421.502	-25.865	-228.885	-3.884	5.801
35)	36.55	19.953	-7.109	28.923	-61.948	504.780	-19.129	-239.212	-3.259	7.414
36)	38.00	26.408	-5.381	36.131	-58.319	462.634	-14.998	-252.070	-2.676	9.141
37)	38.00	19.493	-1.224	483.382	-58.673	343.551	-13.742	-252.070	-5.048	9.690
38)	39.45	21.180	14.902	472.174	-40.992	275.580	-10.180	-265.785	-4.423	11.303
39)	40.90	27.322	32.180	438.708	-38.400	323.383	-9.597	-283.962	-3.840	13.031
40)	40.90	-21.244	7.942	476.591	-45.057	252.782	-14.210	-283.963	-6.810	12.377
41)	43.80	-18.224	49.611	384.441	-17.527	105.825	-2.808	-323.105	-5.162	15.718
42)	46.70	-4.898	91.655	183.621	-14.187	149.180	-1.601	-375.571	-26.810	26.978
43)	46.70	-59.760	64.201	192.802	-22.397	42.456	-57.787	-375.573	-42.944	20.846
44)	49.10	-57.386	99.736	-6.913	-12.375	3.697	-49.531	-460.574	-45.433	55.317
45)	51.50	-46.767	135.708	-275.657	-9.611	29.699	-48.531	-723.238	-1.083	179.745
46)	51.50	-61.971	130.040	-278.007	-13.324	30.751	-59.472	-723.238	-18.740	173.088
47)	52.00	-61.763	135.425	-344.272	-12.748	35.914	-59.263	-810.329	-18.362	177.132
48)	52.50	-59.368	140.872	-411.825	-12.172	42.173	-59.055	-901.524	-11.692	189.654
49)	52.50	-49.311	-51.467	-409.844	-210.008	-836.015	-47.023	-901.524	-10.061	-193.598
50)	53.00	-48.790	-50.891	-382.516	-202.521	-733.767	-44.076	-807.482	15.487	-181.952
51)	53.50	-46.708	-50.316	-358.578	-197.798	-636.244	-43.031	-718.535	21.938	-178.760
52)	53.50	-52.765	-52.181	-359.359	-200.308	-640.550	-53.947	-718.650	2.786	-185.300
53)	55.90	-51.454	-49.416	-237.669	-168.343	-202.224	-39.101	-443.108	42.104	-60.196
54)	58.30	-40.834	-45.902	-125.775	-142.772	84.586	-31.512	-358.088	39.725	-13.153
55)	58.30	-20.862	-36.602	-126.515	-143.292	24.774	-29.900	-358.045	24.855	-18.758
56)	61.20	-19.655	-33.262	-23.681	-103.840	358.580	-17.291	-339.757	3.744	-3.131
57)	64.10	-7.078	-29.922	64.846	-85.813	420.038	-12.817	-332.879	4.951	0.210
58)	64.10	20.032	-9.598	24.375	-85.763	368.536	-24.184	-332.763	0.929	-2.244
59)	65.55	20.927	-7.985	36.633	-65.144	452.460	-18.354	-331.521	-4.621	1.997
60)	67.00	27.111	-5.883	45.547	-62.380	419.530	-14.181	-340.907	-0.540	8.909
61)	67.00	19.502	-1.315	456.639	-62.746	284.785	-11.296	-340.907	-2.854	7.718
62)	68.45	20.814	-14.812	443.967	-44.201	212.558	-8.598	-353.576	-2.229	9.330
63)	69.90	27.269	32.090	411.224	-42.473	277.753	-8.015	-371.681	-1.646	11.058
64)	69.90	-26.647	12.809	443.040	-49.879	202.817	-13.011	-371.798	-5.509	10.505
65)	72.80	-24.378	46.213	350.532	-23.213	58.871	-2.474	-408.680	-4.302	13.846
66)	75.70	-11.051	88.257	149.940	-19.872	123.442	-1.266	-454.776	-29.545	26.492
67)	75.70	-67.012	64.703	154.597	-29.131	6.817	-54.349	-454.892	-45.473	22.749
68)	78.10	-65.326	100.238	-40.776	-19.109	-17.542	-46.092	-546.837	-47.135	60.815
69)	80.50	-54.394	127.571	-311.337	-16.345	23.213	-45.093	-808.462	-8.951	182.467

80.50	-73.442	128.334	-306.690	-20.306	-0.151	-69.729	-808.347	-27.932	176.962
81.00	-73.234	134.094	-370.492	-19.730	6.017	-68.484	-897.312	-23.535	177.538
81.50	-70.839	139.541	-440.055	-19.154	16.335	-68.276	-988.406	-24.205	192.800
81.50	-59.393	-57.871	-437.103	-223.938	-902.075	-43.883	-988.406	-0.232	-207.377
82.00	-58.873	-57.295	-407.497	-217.314	-793.764	-41.801	-887.252	4.318	-194.682
82.50	-57.165	-56.345	-378.325	-210.691	-716.913	-46.802	-793.235	12.533	-191.490
82.50	-67.786	-59.543	-380.149	-213.703	-696.758	-53.856	-791.650	-9.166	-198.520
85.15	-66.350	-56.433	-225.627	-178.456	-199.699	-40.353	-453.648	42.411	-60.189
87.80	-54.960	-52.688	-83.158	-150.580	136.028	-34.696	-351.193	34.200	-15.333
87.80	-29.061	-40.849	-81.825	-150.695	75.256	-34.515	-351.191	20.471	-20.703
90.95	-27.104	-37.279	41.397	-108.077	450.199	-18.929	-319.565	2.633	-6.918
94.10	-14.007	-33.218	147.783	-90.568	517.209	-15.164	-305.938	3.924	-3.232
94.10	18.864	-10.604	30.572	-86.742	465.064	-30.924	-306.011	0.059	-2.546
95.68	19.801	-8.876	46.594	-64.972	554.153	-24.678	-301.299	0.683	-0.818
97.25	26.401	-7.033	55.720	-61.228	516.113	-20.088	-306.655	-1.315	7.108
97.25	19.983	-9.269	628.700	-65.392	328.915	-23.973	-306.655	-3.515	5.748
98.83	20.608	17.800	622.202	-45.407	259.881	-21.448	-319.683	-2.890	7.591
100.40	28.208	36.230	579.848	-41.836	311.651	-20.781	-333.559	-2.224	9.434
100.40	-30.599	7.490	510.485	-50.374	224.395	-16.509	-333.559	-6.203	9.822
103.55	-27.934	51.578	406.335	-19.561	49.563	-2.951	-368.467	-4.912	13.508
106.70	-13.734	96.962	172.432	-15.991	105.424	-1.618	-417.841	-23.456	25.219
106.70	-77.349	68.072	172.017	-26.299	-6.040	-55.998	-417.867	-38.472	21.921
109.35	-75.225	106.025	-55.845	-14.895	-47.048	-45.543	-526.909	-45.840	62.267
112.00	-63.086	136.698	-378.461	-11.900	-11.292	-44.460	-853.424	-4.728	198.042
112.00	-81.718	131.207	-380.578	-17.654	-37.326	-69.366	-853.540	-27.588	190.809
112.50	-81.510	145.606	-447.473	-17.078	-31.738	-68.121	-949.698	-22.878	192.261
113.00	-79.116	150.991	-520.927	-16.503	-24.234	-67.913	-1048.242	-11.331	206.696
113.00	-67.680	-65.392	-519.471	-223.940	-962.455	-56.975	-1048.242	13.074	-203.688
113.50	-67.472	-64.816	-486.648	-216.453	-824.764	-47.118	-950.632	24.794	-190.277
114.00	-65.452	-63.865	-454.165	-210.866	-722.543	-45.036	-856.433	24.284	-185.382
114.00	-73.087	-65.578	-453.968	-213.707	-722.643	-57.314	-856.548	2.541	-191.564
116.65	-71.650	-62.584	-281.197	-177.538	-228.990	-43.810	-540.081	46.848	-60.296
119.30	-60.635	-58.724	-120.784	-150.584	97.790	-40.054	-432.881	37.157	-24.140
119.30	-31.847	-43.412	-118.344	-150.267	-7.299	-28.092	-432.438	23.692	-29.566
122.45	-29.889	-39.726	15.568	-107.360	364.785	-12.506	-364.125	6.314	-19.814
125.60	-17.167	-35.780	132.364	-91.003	430.618	-7.704	-308.478	7.605	-16.243
125.60	18.206	-17.477	17.917	-87.553	273.508	-23.578	-308.568	4.560	-15.698
127.18	19.184	-15.634	43.984	-66.704	363.152	-17.290	-285.082	5.227	-13.855
128.75	26.097	-13.791	63.561	-62.961	328.564	-12.700	-263.601	5.893	-12.012
128.75	19.779	-13.117	659.302	-66.964	206.674	-22.736	-263.601	3.651	-13.372
130.33	20.445	13.837	658.327	-47.094	141.101	-19.133	-245.386	4.318	-11.645
131.90	27.671	32.267	618.944	-43.523	197.393	-18.466	-230.062	4.984	-9.802
131.90	-26.947	4.282	534.409	-54.086	125.984	-31.795	-229.947	0.169	-9.335
135.05	-24.990	48.744	444.421	-23.273	-39.569	-18.195	-205.439	1.502	-5.649
138.20	-10.831	93.754	220.143	-19.702	27.467	-16.904	-206.780	-12.391	12.210
138.20	-67.433	69.051	218.933	-28.841	27.466	-41.803	-206.781	-25.248	9.800
140.85	-65.684	108.676	-14.854	-18.589	1.219	-31.349	-322.106	-26.985	74.004
143.50	-54.982	137.678	-336.870	-15.479	45.950	-30.266	-697.655	14.167	199.636
143.50	-70.199	133.260	-338.412	-19.319	47.001	-40.617	-697.655	-7.194	191.755
144.00	-69.991	147.658	-405.180	-18.743	53.987	-39.372	-793.012	-5.112	193.194
144.50	-67.971	153.043	-480.511	-18.167	64.662	-39.164	-894.410	0.601	208.332
144.50	-56.383	-53.143	-476.364	-190.308	-771.191	-49.843	-894.410	21.631	-168.328
145.00	-56.175	-52.567	-451.072	-181.956	-686.286	-51.217	-813.408	42.141	-152.128
145.50	-54.155	-51.616	-422.663	-176.197	-598.636	-49.135	-739.289	71.027	-145.432
145.50	-58.279	-53.305	-424.604	-178.661	-598.205	-56.672	-740.961	57.544	-149.998
147.35	-57.530	-51.117	-329.747	-154.356	-296.292	-44.325	-572.665	47.111	-64.506
149.20	-50.867	-48.294	-237.573	-131.549	-99.130	-43.324	-500.555	46.126	-28.601
149.20	-41.991	-41.863	-237.664	-133.543	-159.589	-27.911	-500.646	31.193	-32.905
151.55	-41.033	-39.098	-142.623	-101.578	94.330	-17.801	-423.501	23.113	-31.705
153.90	-33.787	-35.762	-59.335	-84.242	169.722	-14.545	-346.791	8.689	-31.116
153.90	-15.680	-24.553	-58.078	-85.781	65.604	-2.595	-346.791	5.842	-32.656
155.08	-15.180	-23.171	-30.232	-69.367	154.298	2.403	-309.951	5.967	-31.274
156.25	-11.849	-21.904	-5.066	-61.707	115.899	5.096	-274.767	6.425	-30.007
156.25	0.679	-15.301	-5.066	-66.884	13.936	9.152	-274.580	4.531	-29.198
157.43	1.179	-13.919	12.117	-53.061	83.721	14.149	-240.536	5.031	-27.816
158.60	4.615	-12.651	23.020	-48.166	-59.388	12.754	-209.994	5.531	-26.549
158.60	14.254	19.675	236.130	-53.764	100.335	4.870	-209.118	3.833	-26.983
160.95	15.524	22.440	183.316	-31.475	-81.468	4.791	-147.816	4.791	-24.218
163.30	20.958	25.089	121.074	-28.826	-13.155	5.790	-94.017	5.790	-21.569
163.30	2.295	44.913	372.843	-29.462	-13.157	0.668	-94.019	1.705	-22.205
165.15	3.045	75.322	259.728	-21.169	-49.751	1.418	-53.898	2.455	-20.132
167.00	5.648	95.484	100.634	-18.980	-13.752	2.209	-18.935	3.246	-17.943
167.00	0.569	95.628	101.387	-19.421	-13.661	-0.139	-18.845	-0.139	-19.421
167.50	0.777	101.387	52.706	-18.845	-7.788	0.069	-7.788	0.069	-18.845
168.00	0.986	107.146	0.000	-18.269	0.000	0.278	0.000	0.986	106.692
0.00	-1.920	-125.630	0.000	-152.867	0.000	-0.221	0.000	-2.294	-125.874
0.50	0.956	-120.744	61.852	-145.274	73.976	-0.099	1.730	0.988	-2.450
1.00	2.180	-114.904	120.744	-139.433	139.141	0.024	2.450	2.211	-1.866
1.00	-7.860	-110.068	120.068	-139.163	140.178	0.422	3.501	-5.701	2.602
2.85	-4.336	-88.431	304.942	-110.953	359.226	0.863	-3.036	-1.296	4.705
4.70	1.930	-58.527	440.548	-94.366	458.836	1.328	-14.078	5.190	6.924
4.70	3.906	-33.014	196.255	-93.641	458.705	1.736	-14.194	-4.460	13.894
7.05	7.540	-30.548	273.303	-61.518	614.545	1.447	-49.993	1.414	-15.681
9.40	14.822	-27.744	342.986	-51.220	612.735				

52(1)	9.40	-7.375	12.962	107.638	-45.462	579.564	-0.912	-93.192	3.987	23.766	112.00	-83.147	89.498	-536.278	8.057	-110.646	69.868	-935.760	28.812	218.641	
52(2)	10.58	-5.796	14.364	93.864	-30.744	503.722	-0.954	-121.715	6.924	25.167	112.50	-83.025	90.082	-581.323	8.641	-117.932	70.041	-1046.161	26.343	220.089	
52(3)	11.75	-2.859	15.765	79.183	-28.466	529.585	1.984	-151.372	9.861	26.569	113.00	-81.617	90.887	-626.801	9.225	-123.488	73.100	-1158.828	17.127	234.654	
53(1)	11.75	-21.653	25.174	79.183	-26.411	441.466	14.285	-151.372	6.629	29.734	113.00	-104.103	-179.890	-626.310	-251.746	-1073.931	48.280	-1158.828	-19.021	-231.582	
53(2)	12.93	-18.606	26.459	50.446	-11.985	339.219	15.028	-187.638	11.402	31.019	113.50	-103.980	-174.050	-536.277	-244.153	-921.659	40.517	-1047.083	-25.711	-218.129	
54(1)	14.10	-15.485	27.860	17.584	-10.583	353.503	17.955	-225.281	14.339	32.421	114.00	-102.793	-159.668	-455.880	-238.488	-805.642	40.640	-938.667	-25.711	-213.164	
54(2)	14.10	-45.851	43.384	18.635	-9.539	270.568	37.505	-225.281	7.952	37.726	114.00	-102.916	-157.621	-455.101	-233.393	-805.773	32.136	-938.784	-24.724	-211.340	
54(3)	16.45	-43.281	46.408	-85.431	8.684	97.728	32.866	-315.110	18.936	39.339	116.65	-102.072	-126.198	-79.257	-196.714	-261.628	33.673	-572.961	-47.018	-78.508	
5(1)	18.80	-35.816	49.095	-196.720	11.370	75.500	40.331	-407.682	26.506	40.836	119.30	-95.598	-87.390	203.139	-169.380	114.031	44.647	-416.172	-16.333	-42.921	
5(2)	20.65	-60.650	65.096	-316.445	19.240	-63.806	57.544	-511.477	42.830	79.409	119.30	-55.360	-105.940	198.019	-158.285	9.870	-1.942	-416.927	-25.455	-37.026	
5(3)	22.50	-54.188	67.198	-438.994	21.342	-98.686	63.786	-720.139	51.752	171.516	122.45	-54.209	-59.799	457.042	-114.773	406.132	-0.282	-325.328	-15.707	-26.899	
6(1)	22.50	-63.255	70.267	-435.211	22.499	-98.441	61.454	-720.114	50.840	173.092	125.60	-46.732	-15.047	588.368	-98.185	492.145	11.865	-247.463	-7.256	-23.278	
6(2)	23.00	-62.912	71.071	-471.738	23.083	-114.088	61.626	-808.999	25.045	180.933	125.60	0.252	-38.008	616.146	-89.896	339.997	0.947	-247.997	-11.898	-17.276	
6(3)	23.50	-61.689	71.655	-507.423	23.667	-125.235	62.850	-901.977	23.837	197.608	127.18	0.827	-19.318	662.869	-68.753	432.734	1.339	-221.746	-6.146	-15.407	
7(1)	23.50	-81.030	-169.689	-515.371	-234.255	-890.019	34.718	-901.977	-7.935	-219.508	128.75	4.890	-0.628	682.004	-64.957	399.646	3.833	-197.446	-1.367	-13.538	
7(2)	24.00	-80.688	-163.848	-432.035	-226.662	-776.911	33.964	-797.881	-8.501	-206.658	130.33	6.835	6.352	138.409	-46.024	210.137	5.936	-197.446	-3.941	-11.885	
7(3)	24.50	-79.464	-158.007	-351.785	-220.822	-667.428	35.138	-695.159	-9.243	-205.210	131.90	11.082	8.221	128.825	-42.402	264.962	6.874	-181.982	-0.025	-10.133	
8(1)	24.50	-80.123	-149.533	-357.042	-216.276	-668.480	29.213	-695.173	-10.675	-202.738	131.90	-33.321	36.483	241.376	-48.190	192.134	10.570	-168.931	3.891	-8.264	
8(2)	26.90	-77.259	-121.938	-32.038	-183.861	-193.334	28.048	-347.856	-37.269	-84.135	135.05	-32.171	40.221	123.156	-16.942	3.028	30.223	-165.181	10.927	0.930	
8(3)	29.30	-71.385	-85.143	213.960	-157.928	132.135	34.243	-204.062	-19.699	-36.791	138.20	-23.849	52.823	-8.472	-13.321	49.220	39.646	-188.596	25.195	19.000	
9(1)	29.30	-41.534	-98.832	210.739	-148.722	132.077	16.776	-204.700	-25.201	-29.451	140.85	-69.252	77.308	-206.876	-1.531	-23.651	43.097	-352.175	31.035	91.928	
9(2)	32.20	-38.768	-56.415	441.368	-108.714	480.697	20.114	-177.880	-6.986	-3.449	143.50	-62.962	89.847	-429.337	1.623	-24.082	51.297	-775.978	6.434	218.744	
9(3)	35.10	-31.119	-22.540	556.641	-92.360	551.949	29.410	-171.875	0.113	-0.061	143.50	-72.829	94.595	-428.629	6.142	-23.229	45.731	-775.978	7.363	218.638	
10(1)	35.10	5.846	-33.883	551.388	-82.980	478.813	2.366	-171.875	-4.606	4.261	144.00	-72.706	95.179	-474.775	6.726	-29.440	45.904	-885.439	7.486	220.098	
10(2)	36.55	6.434	-17.749	590.192	-63.998	565.130	1.857	-179.764	0.901	5.896	144.50	-71.519	95.984	-524.338	7.310	-31.077	47.127	-999.975	6.104	235.737	
10(3)	38.00	10.228	-0.228	605.114	-60.319	524.949	4.302	-190.089	4.328	7.649	145.00	-92.457	-166.989	-529.594	-218.385	-878.202	42.536	-999.975	-25.800	-196.518	
11(1)	39.45	9.038	11.899	133.204	-57.877	407.933	7.206	-190.089	1.274	11.220	145.00	-92.334	-161.148	-447.313	-209.917	-779.004	46.163	-904.694	-44.338	-180.237	
11(2)	40.90	13.640	15.286	91.457	-37.318	381.691	11.326	-226.795	10.703	14.607	145.50	-91.147	-155.528	-368.782	-204.076	-677.524	46.285	-816.699	-67.899	-173.593	
11(3)	40.90	-27.936	36.298	120.517	-38.411	313.869	12.880	-226.794	4.620	19.690	145.50	-92.128	-153.088	-365.433	-200.401	-677.563	38.367	-818.812	-69.930	-171.992	
12(1)	43.80	-26.161	39.906	13.312	-10.493	143.462	9.640	-287.516	11.343	23.078	147.35	-91.688	-123.184	-109.127	-175.754	-335.370	37.056	-611.289	-42.681	-84.792	
12(2)	46.70	-18.329	43.293	-106.226	-7.106	165.927	18.574	-362.012	23.175	34.517	149.20	-87.772	-101.548	97.339	-152.625	-99.326	44.530	-500.932	-21.135	-50.055	
12(3)	46.70	-60.881	64.957	-111.190	-5.495	60.223	54.639	-362.010	18.002	39.206	149.20	-67.546	-106.485	97.181	-145.641	-158.608	6.040	-501.091	-28.123	-44.881	
13(1)	49.10	-59.485	68.201	-271.624	4.668	-20.163	54.989	-490.080	43.751	72.714	151.55	-66.983	-69.689	311.003	-113.226	123.511	9.231	-396.338	-18.238	-43.488	
13(2)	51.50	-53.244	71.188	-440.498	7.471	-35.258	62.699	-796.480	19.891	198.698	153.90	-62.724	-43.226	446.507	-95.646	225.195	16.652	-293.321	-6.551	-41.991	
13(3)	51.50	-63.039	76.315	-437.551	10.888	-34.221	60.015	-796.480	19.024	199.272	153.90	-36.270	-54.572	446.118	-92.113	122.217	-10.058	-293.504	-13.059	-38.081	
14(1)	52.00	-62.917	77.119	-475.841	11.472	-41.183	61.239	-896.671	20.923	203.348	155.08	-35.976	-40.555	501.519	-75.467	218.123	-9.765	-250.171	-9.902	-36.679	
14(2)	52.50	-61.509	77.887	-515.175	12.056	-47.219	62.462	-1000.994	16.037	215.998	156.25	-34.018	-17.893	533.291	-67.699	185.165	-4.414	-208.490	-5.373	-35.394	
14(3)	52.50	-82.086	-166.806	-516.746	-236.244	-935.967	38.719	-1000.994	-15.856	-219.942	156.25	-17.289	-24.281	533.291	-69.038	84.591	-17.812	-208.330	-9.328	-30.804	
15(1)	53.00	-81.780	-160.965	-434.710	-228.651	-820.657	37.965	-893.834	-19.001	-208.156	157.43	-16.995	-11.315	554.176	-55.021	157.593	-17.519	-171.732	-6.391	-29.403	
15(2)	53.50	-80.556	-155.125	-354.949	-223.862	-710.134	39.139	-791.767	-23.211	-204.968	158.60	-14.976	2.586	561.450	-50.056	14.272	-10.742	-138.973	-3.453	-28.118	
15(3)	53.50	-78.811	-146.071	-358.750	-219.199	-714.412	31.934	-791.904	-22.295	-204.279	160.95	2.798	0.890	309.709	-28.173	175.394	-9.385	-138.109	-9.986	-23.617	
16(1)	55.90	-78.040	-118.036	-39.506	-186.784	-231.334	30.770	-472.795	-41.276	-77.580	163.30	5.992	28.808	278.389	-25.486	-43.921	-17.334	-2.704	-84.122	-2.521	-20.814
16(2)	58.30	-71.798	-81.681	198.670	-160.852	98.963	36.964	-343.653	-15.484	-31.808	163.30	-3.410	16.465	92.650	-18.502	44.107	5.006	-37.897	3.354	-18.127	
16(3)	58.30	-41.982	-95.807	199.252	-151.761	40.004	4.119	-344.274	-22.200	-26.357	165.15	-2.969	18.567	60.245	-10.092	-13.461	1.485	-17.666	0.433	-9.040	
17(1)	61.20	-41.273	-53.171	408.817	-111.753	397.606	7.457	-303.518	-11.789	-10.493	167.00	-1.439	21.190	22.152	-7.872	2.334	6.135	-2.922	5.084	-6.821	
17(2)	64.10	-33.881	-10.534	509.861	-93.472	478.572	15.876	-275.340	-4.691	-7.106	167.00	-0.246	21.946	22.530	-2.973	2.867	-2.211	-2.389	-2.211	-2.973	
17(3)	65.55	4.319	-33.063	464.850	-88.091	426.242	0.602	-275.225	-9.739	-3.818	167.50	-0.124	22.530	11.586	-2.389	0.578	-0.988	-0.988	-2.389	-2.389	
18(1)	67.00	7.954	0.593	512.331	-64.378	482.812	3.414	-277.818	2.233	7.417	168.00	-0.002	23.114	0.000	-1.805	0.000	2.072	0.000	2.294	124.806	
18(2)	67.00	7.038	14.332	94.855	-61.924	349.779	3.162	-277.818	-1.013	9.249	0.000	0.000	0.287	1.476	0.287	1.476	0.000	1.697	0.000	0.067	
18(3)	68.45	7.809	15.968	73.401	-43.117	273.297	4.510	-293.513	2.658	10.884	0.000	0.000	0.287	0.343	0.287	0.343	0.000	0.784	0.000	0.883	
19(1)	69.90	11.603	17.720	48.257	-41.365	336.189	8.157	-314.462	7.921	12.636	0.000	0.000	0.287	-0.257	0.287	0.780	0.000	-0.685	0.000	1.185	
19(2)	69.90	-30.097	39.718	93.075	-43.218	264.081	11.189	-314.577	2.683	17.851	0.000	0.000	1.155	6.631	1.155	4.543	0.000	5.203	0.000	0.715	
19(3)	72.80	-28.																			

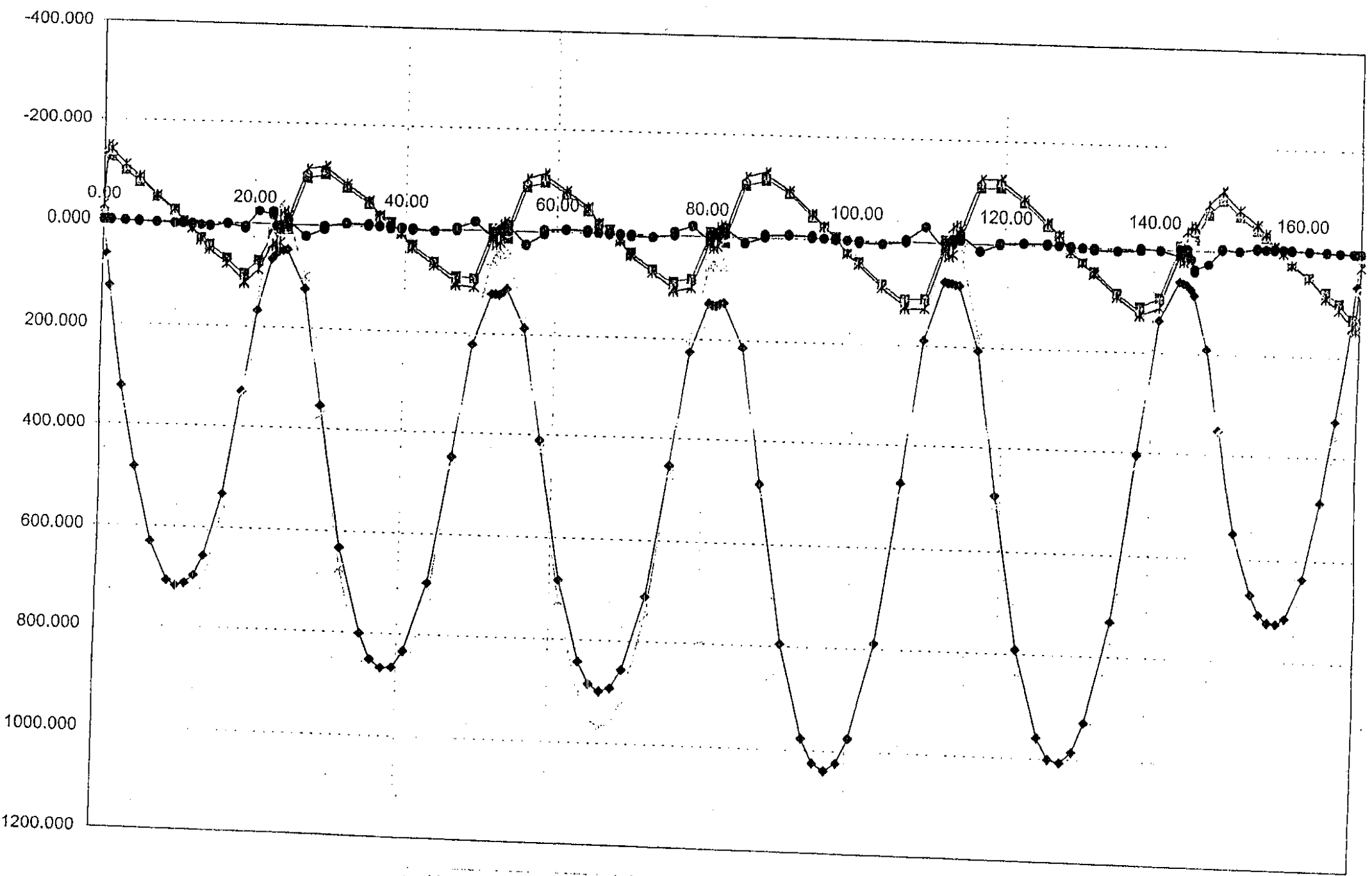
VIADUCTO BORGES BLANQUES

VIADUCTO BORGES BLANQUES

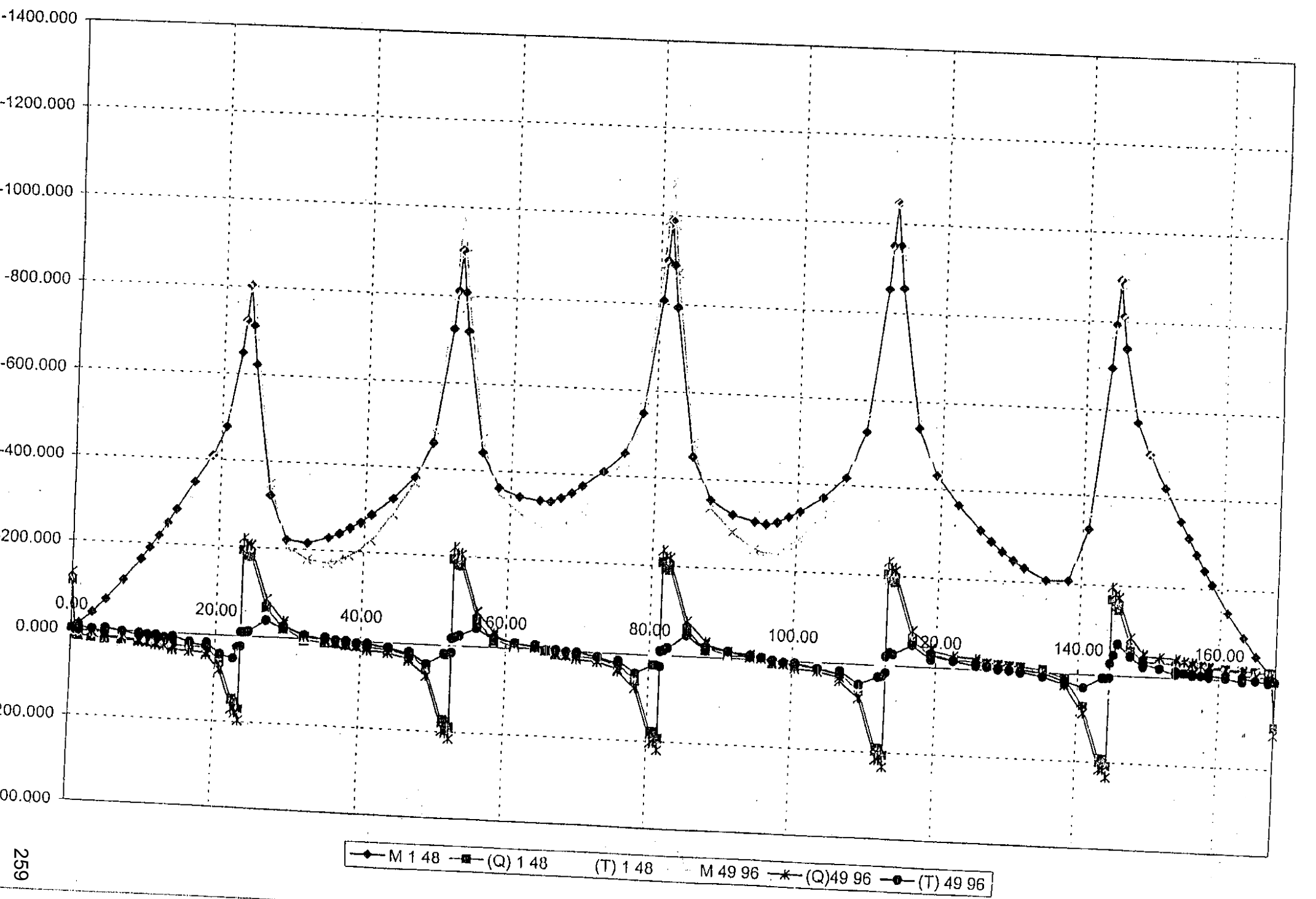
108(1)	0.000	8.698	19.830	-15.314	-20.190	0.000	-17.583	0.000	-17.040
108(2)	0.000	8.698	6.354	-15.314	6.354	0.000	9.480	0.000	3.387
108(3)	0.000	8.698	-6.760	-15.314	32.048	0.000	-27.989	0.000	23.364
109(1)	0.000	3.318	8.195	-12.228	-14.895	0.000	-12.950	0.000	-13.293
109(2)	0.000	3.318	2.597	-12.228	3.973	0.000	6.424	0.000	2.068
109(3)	0.000	3.318	-2.751	-12.228	22.812	0.000	-18.827	0.000	17.019
110(1)	0.000	-2.221	-0.053	-17.215	-20.190	0.000	-17.583	0.000	-18.941
110(2)	0.000	-2.221	2.698	-17.215	6.354	0.000	9.480	0.000	3.387
110(3)	0.000	-2.221	4.644	-17.215	33.084	0.000	-27.989	0.000	25.291
111(1)	-1.053	-12.074	-13.783	-10.205	-8.014	-1.053	-6.032	-1.053	-11.306
111(2)	-1.053	-12.074	3.016	-10.205	7.445	-1.053	11.984	-0.002	5.917
111(3)	-1.053	-12.074	21.552	-10.205	23.550	-1.053	-24.186	1.035	22.191
112(1)	0.000	1.013	4.337	0.407	4.285	0.000	4.946	0.000	-0.253
112(2)	0.000	1.013	3.633	0.407	3.973	0.000	6.424	0.000	4.289
112(3)	0.000	1.013	1.855	0.407	3.503	0.000	-8.653	0.000	7.860
113(1)	0.000	1.406	3.674	-0.087	1.372	0.000	1.592	0.000	-0.307
113(2)	0.000	1.406	0.549	-0.087	0.858	0.000	1.960	0.000	1.326
113(3)	0.000	1.406	-0.513	-0.087	0.474	0.000	-3.029	0.000	2.679
114(1)	0.000	6.626	13.210	0.407	4.285	0.000	4.946	0.000	-0.253
114(2)	0.000	6.626	3.046	0.407	3.973	0.000	6.424	0.000	4.289
114(3)	0.000	6.626	-6.129	0.407	3.503	0.000	-8.653	0.000	7.485
115(1)	-1.035	20.059	37.729	-10.205	-8.014	1.053	-6.032	1.053	-11.306
115(2)	-1.035	20.059	7.445	-10.205	7.445	1.053	11.672	0.002	5.917
115(3)	-1.035	20.059	-23.070	-10.205	23.550	1.053	-24.186	-1.035	22.191
116(1)	0.000	7.662	18.174	-17.213	-21.354	0.000	-18.931	0.000	-18.939
116(2)	0.000	7.662	6.045	-17.213	6.354	0.000	9.480	0.000	3.389
116(3)	0.000	7.662	-6.902	-17.213	32.954	0.000	-29.042	0.000	25.293
117(1)	0.000	2.454	5.082	-12.228	-15.749	0.000	-13.986	0.000	-13.293
117(2)	0.000	2.454	2.751	-12.228	3.973	0.000	6.424	0.000	2.068
117(3)	0.000	2.454	-0.777	-12.228	23.537	0.000	-20.190	0.000	17.019
118(1)	0.000	-2.219	-0.891	-17.213	-21.109	0.000	-18.906	0.000	-18.939
118(2)	0.000	-2.219	2.930	-17.213	6.586	0.000	9.712	0.000	3.389
118(3)	0.000	-2.219	5.450	-17.213	34.438	0.000	-29.458	0.000	25.293
119(1)	-1.053	-7.139	-8.847	-10.579	-9.067	-1.053	-8.121	-1.053	-11.680
119(2)	-1.053	-7.139	3.016	-10.579	7.445	-1.053	11.672	-0.002	6.360
119(3)	-1.053	-7.139	15.737	-10.579	24.647	-1.053	-27.234	1.035	22.561
120(1)	0.000	-0.022	2.927	-0.628	3.250	0.000	4.131	0.000	-1.068
120(2)	0.000	-0.022	3.633	-0.628	3.973	0.000	6.424	0.000	4.290
120(3)	0.000	-0.022	3.974	-0.628	6.439	0.000	-9.331	0.000	8.538
121(1)	0.000	1.406	2.754	-0.087	1.488	0.000	1.709	0.000	-0.307
121(2)	0.000	1.406	0.549	-0.087	0.858	0.000	1.960	0.000	1.326
121(3)	0.000	1.406	-0.397	-0.087	1.626	0.000	-2.914	0.000	2.679
122(1)	-1.037	4.793	11.991	-1.003	4.397	0.000	5.278	0.000	-0.627
122(2)	-1.037	4.793	3.063	-1.003	4.144	0.000	6.816	0.000	4.731
122(3)	-1.037	4.793	-5.739	-1.003	4.900	0.000	-9.382	0.000	8.979
123(1)	-1.035	19.667	38.198	-11.648	-9.827	1.053	-7.624	1.053	-12.970
123(2)	-1.035	19.667	7.788	-11.648	7.917	1.053	12.768	0.002	6.357
123(3)	-1.035	19.667	-22.275	-11.648	26.801	1.053	-27.187	-1.035	24.329
124(1)	0.000	7.155	19.524	-21.033	-25.548	0.000	-22.501	0.000	-22.539
124(2)	0.000	7.155	6.930	-21.033	6.930	0.000	10.496	0.000	2.943
124(3)	0.000	7.155	-4.972	-21.033	40.112	0.000	-32.068	0.000	27.957
125(1)	0.000	2.424	6.035	-14.830	-20.055	0.000	-17.668	0.000	-15.711
125(2)	0.000	2.424	3.960	-14.830	4.144	0.000	6.816	0.000	1.752
125(3)	0.000	2.424	1.408	-14.830	27.435	0.000	-23.024	0.000	19.089
126(1)	0.000	-0.326	-0.084	-20.372	-25.351	0.000	-22.303	0.000	-22.098
126(2)	0.000	-0.326	2.964	-20.372	6.930	0.000	10.496	0.000	3.384
126(3)	0.000	-0.326	5.603	-20.372	40.675	0.000	-32.185	0.000	28.398
127(1)	-1.053	-4.016	-2.350	-12.683	-12.014	-1.053	-9.811	-1.053	-13.784
127(2)	-1.053	-4.016	4.101	-12.683	7.917	-1.053	12.768	-0.002	6.358
127(3)	-1.053	-4.016	8.464	-12.683	27.719	-1.053	-29.783	1.035	25.382
128(1)	-1.051	2.568	5.753	-1.001	2.741	0.000	3.622	0.000	-1.442
128(2)	-1.051	2.568	3.651	-1.001	4.144	0.000	6.816	0.000	4.733
128(3)	-1.051	2.568	0.324	-1.001	6.555	0.000	-11.510	0.000	9.657
129(1)	0.000	1.406	2.754	-0.087	1.488	0.000	1.709	0.000	-0.307
129(2)	0.000	1.406	0.395	-0.087	0.858	0.000	1.960	0.000	1.326
129(3)	0.000	1.406	-1.449	-0.087	2.490	0.000	-2.914	0.000	2.679
130(1)	-1.037	5.846	13.962	-1.001	2.741	0.000	3.622	0.000	-1.442
130(2)	-1.037	5.846	4.114	-1.001	4.144	0.000	6.816	0.000	4.733
130(3)	-1.037	5.846	-6.817	-1.001	6.555	0.000	-11.885	0.000	9.657
131(1)	-1.035	14.456	29.747	-12.683	-12.197	1.053	-9.811	1.053	-13.784
131(2)	-1.035	14.456	7.902	-12.683	7.917	1.053	12.768	0.002	6.358
131(3)	-1.035	14.456	-14.056	-12.683	28.031	1.053	-29.783	-1.035	25.382
132(1)	0.000	5.728	15.893	-20.372	-25.351	0.000	-22.303	0.000	-22.098
132(2)	0.000	5.728	6.930	-20.372	6.930	0.000	10.496	0.000	3.384
132(3)	0.000	5.728	-3.360	-20.372	40.675	0.000	-32.185	0.000	28.398
133(1)	0.000	0.336	5.138	-14.334	-19.003	0.000	-16.617	0.000	-14.362
133(2)	0.000	0.336	3.063	-14.334	5.324	0.000	7.128	0.000	1.752
133(3)	0.000	0.336	1.562	-14.334	27.435	0.000	-21.987	0.000	18.038
134(1)	0.000	-2.481	-1.137	-19.134	-25.352	0.000	-22.305	0.000	-20.640
134(2)	0.000	-2.481	2.964	-19.134	6.930	0.000	10.496	0.000	2.942
134(3)	0.000	-2.481	7.692	-19.134	37.725	0.000	-32.183	0.000	26.028
135(1)	-1.053	-8.210	-9.749	-9.734	-6.560	-1.053	-4.457	-1.053	-11.276
135(2)	-1.053	-8.210	3.050	-9.734	7.917	-1.053	12.768	-0.002	6.355
135(3)	-1.053	-8.210	14.812	-9.734	22.623	-1.053	-23.771	1.035	22.727

-1.051	2.512	5.333	0.529	4.512	0.000	5.173	0.000	0.089
-1.051	2.512	2.176	0.529	4.273	0.000	7.128	0.000	5.044
-1.051	2.512	-1.817	0.529	5.881	0.000	-9.640	0.000	8.604
0.000	1.406	3.636	0.409	1.488	0.000	1.709	0.000	0.409
0.000	1.406	0.524	0.409	0.987	0.000	2.272	0.000	1.326
0.000	1.406	-2.640	0.409	2.490	0.000	-2.914	0.000	2.304
0.000	6.341	11.323	-0.915	2.638	0.000	3.078	0.000	-1.135
0.000	6.341	1.339	-0.915	3.458	0.000	5.248	0.000	3.407
0.000	6.341	-7.481	-0.915	3.198	0.000	-7.828	0.000	6.978
-1.035	16.315	31.777	-4.920	-1.463	1.053	-0.362	1.053	-5.801
-1.035	16.315	6.312	-4.920	5.260	1.053	9.400	0.002	5.480
0.000	16.315	-19.399	-4.920	14.002	1.053	-16.863	-1.035	15.489
0.000	7.007	16.062	-9.162	-9.162	0.000	-8.474	0.000	-9.850
0.000	7.007	4.616	-9.162	4.616	0.000	7.912	0.000	3.395
0.000	7.007	-6.872	-9.162	19.216	0.000	-18.586	0.000	16.598
0.000	1.897	5.994	-5.934	-6.702	0.000	-6.637	0.000	-6.999
0.000	1.897	2.550	-5.934	2.550	0.000	5.560	0.000	2.071
0.000	1.897	0.706	-5.934	12.538	0.000	-13.223	0.000	11.097
0.000	-8.541	-11.107	-7.753	-7.753	0.000	-5.808	0.000	-9.258
0.000	-8.541	2.943	-7.753	4.745	0.000	8.224	0.000	2.951
0.000	-8.541	17.144	-7.753	16.958	0.000	-14.988	0.000	15.102
-1.053	-5.510	-6.502	0.838	5.911	-1.053	7.673	-1.053	-0.264
-1.053	-5.510	2.681	0.838	5.260	-1.053	9.400	-0.002	4.591
-1.053	-5.510	10.812	0.838	4.624	-1.053	-6.062	1.035	8.856
0.000	4.498	7.149	0.118	4.427	0.000	5.088	0.000	0.715
0.000	4.498	0.438	0.118	3.586	0.000	5.560	0.000	3.404
0.000	4.498	-4.434	0.118	1.176	0.000	-5.398	0.000	5.247
0.000	1.185	2.429	0.287	0.440	0.000	0.660	0.000	0.067
0.000	1.185	0.034	0.287	0.343	0.000	0.784	0.000	0.883
0.000	1.185	-1.060	0.287	0.780	0.000	-1.737	0.000	1.185
0.000	347.979	26.257	2.598	0.000	0.000	0.000	0.000	2.598
0.000	347.979	13.451	2.598	1.135	0.000	1.135	0.000	2.598
0.000	347.979	0.000	2.598	0.000	0.000	0.000	0.000	139.467
0.000	154.612	11.251	-15.073	-1.051	0.000	-1.051	0.000	-15.073
0.000	154.612	6.194	-15.073	-0.953	0.000	-0.953	0.000	-15.073
0.000	154.612	0.000	-15.073	0.000	0.000	0.000	0.000	112.752
0.000	201.413	15.391	-15.744	-0.936	0.000	-0.936	0.000	-15.744
0.000	201.413	7.451	-15.744	-0.953	0.000	-0.953	0.000	-15.744
0.000	201.413	0.000	-15.744	0.000	0.000	0.000	0.000	153.272
0.000	256.338	18.454	-2.190	0.348	0.000	0.348	0.000	-2.190
0.000	256.338	9.199	-2.190	0.133	0.000	0.133	0.000	-2.190
0.000	256.338	0.000	-2.190	0.000	0.000	0.000	0.000	151.204
0.000	219.906	16.222	0.652	0.116	0.000	0.116	0.000	0.652
0.000	219.906	8.113	0.652	0.084	0.000	0.084	0.000	0.652
0.000	219.906	0.000	0.652	0.000	0.000	0.000	0.000	211.038
0.000	194.967	14.523	53.887	4.167	0.000	4.167	0.000	53.887
0.000	194.967	7.314	53.887	2.607	0.000	2.607	0.000	53.887
0.000	194.967	0.000	53.887	0.000	0.000	0.000	0.000	223.124
0.000	221.933	17.132	35.798	3.130	0.000	3.130	0.000	35.798
0.000	221.933	7.468	35.798	0.519	0.000	0.519	0.000	35.798
0.000	221.933	0.000	35.798	0.000	0.000	0.000	0.000	293.222
0.000	267.024	19.775	37.326	3.247	0.000	3.247	0.000	37.326
0.000	267.024	9.416	37.326	0.519	0.000	0.519	0.000	37.326
0.000	267.024	0.000	37.326	0.000	0.000	0.000	0.000	266.161
0.000	213.086	16.254	52.019	4.516	0.000	4.516	0.000	52.019
0.000	213.086	7.277	52.019	2.349	0.000	2.349	0.000	52.019
0.000	213.086	0.000	52.019	0.000	0.000	0.000	0.000	309.023
0.000	320.814	24.227	53.746	4.284	0.000	4.284	0.000	53.746
0.000	320.814	11.674	53.746	1.571	0.000	1.571	0.000	53.746
0.000	320.814	0.000	53.746	0.000	0.000	0.000	0.000	329.020

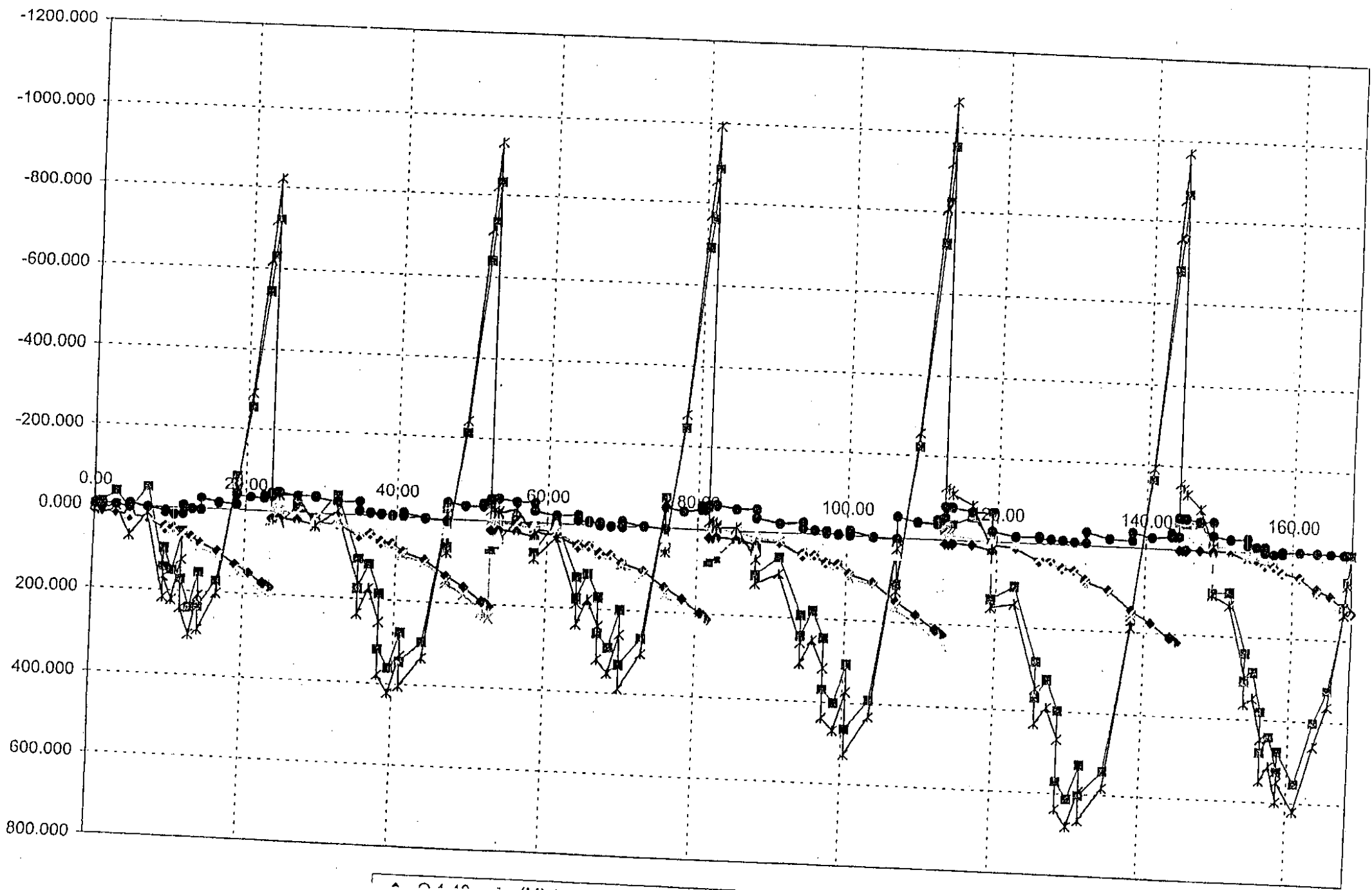
Hip D. M Qcon Tcon



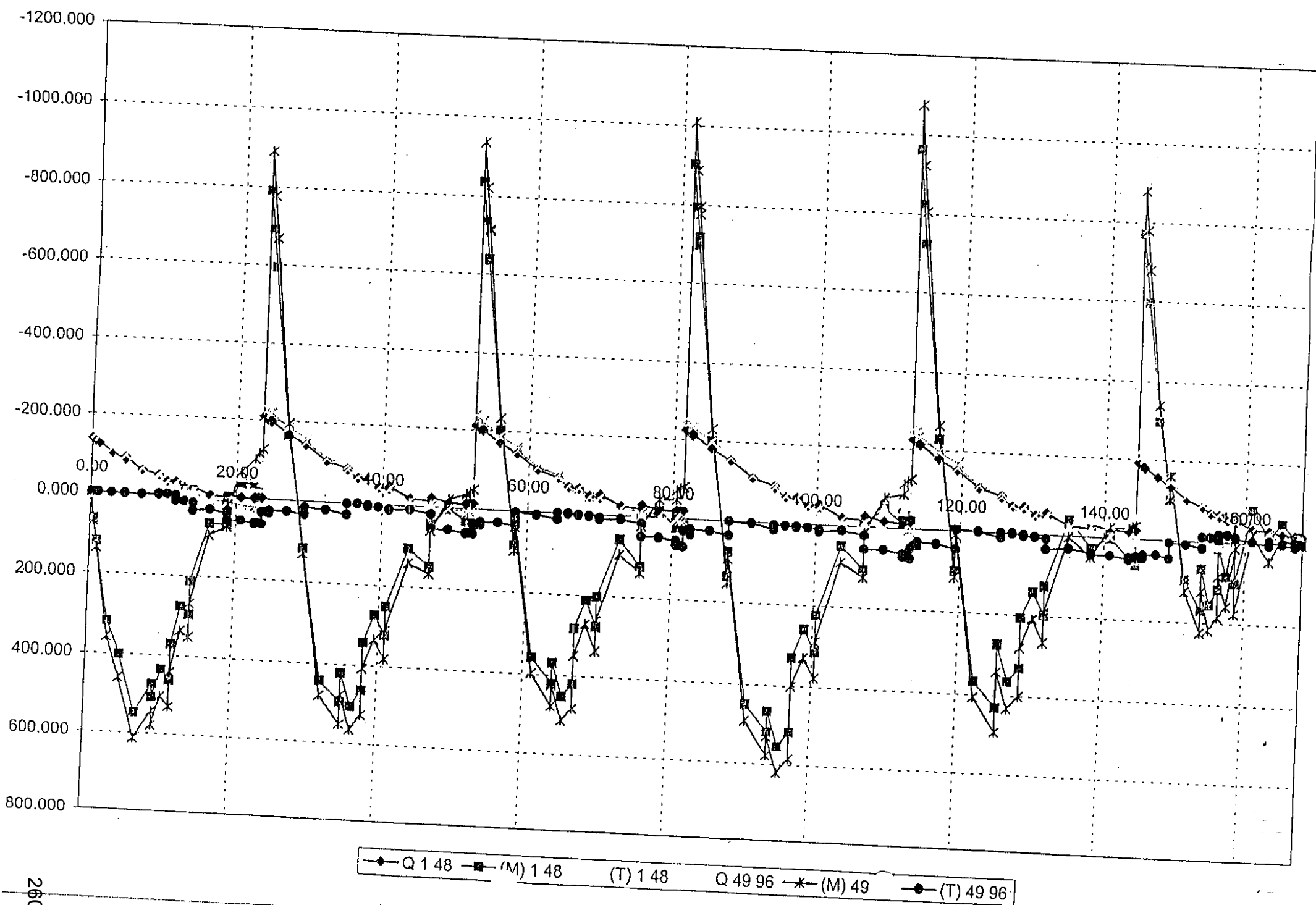
Hip D. M Qcon Tcon



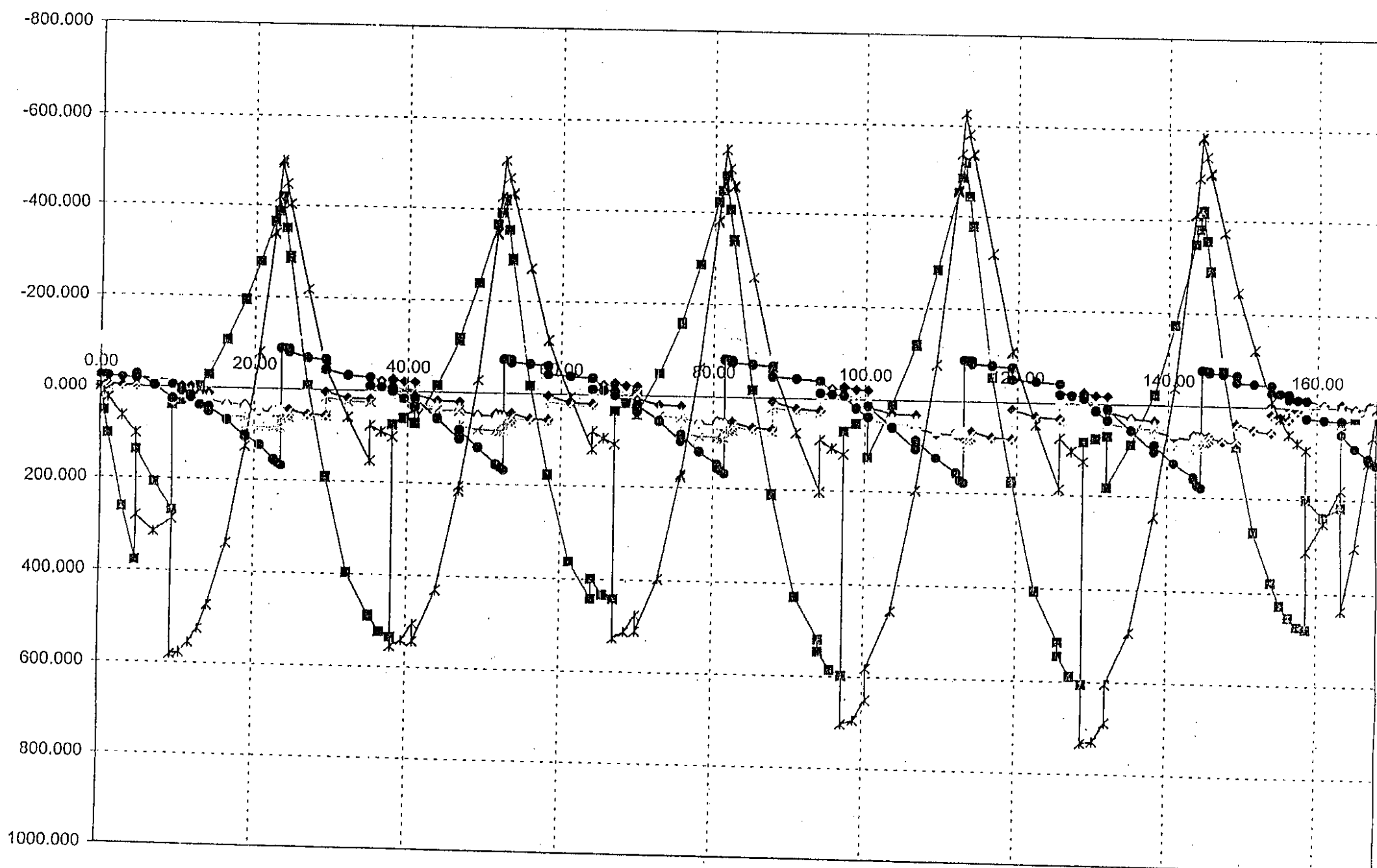
Hip D. Q Mcon Tcon



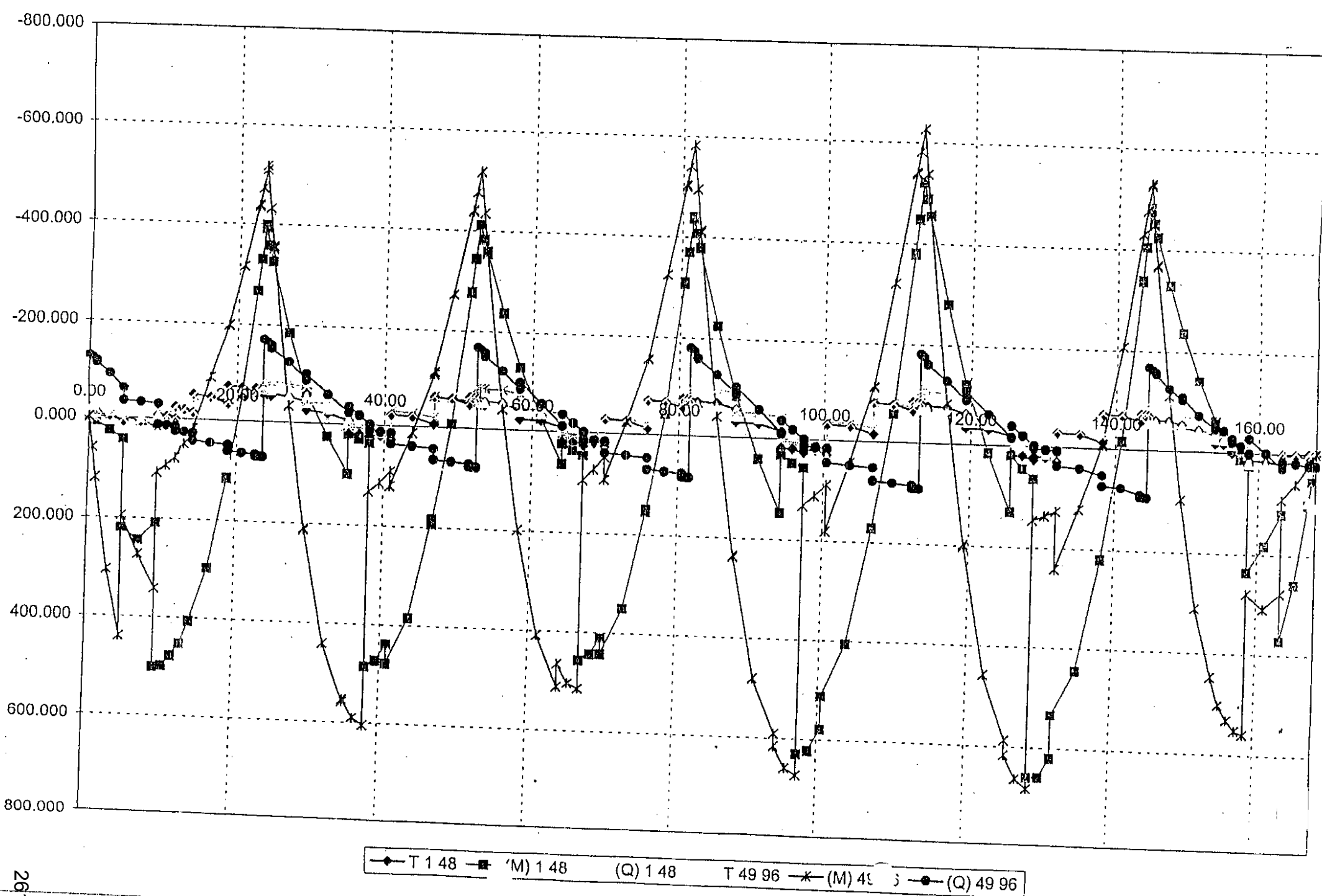
Hip D. Q Mcon Tcon



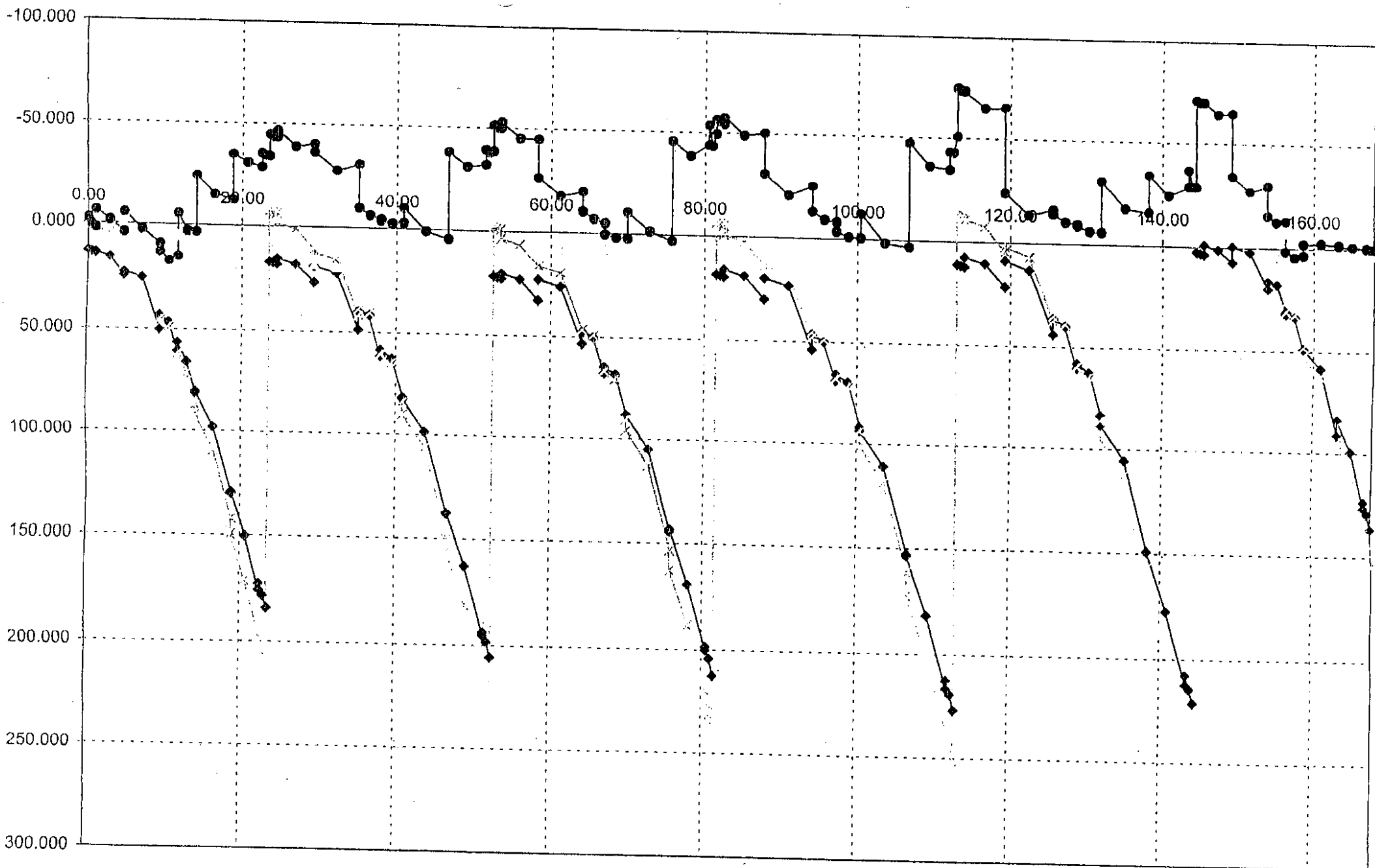
Hip D. T Mcon Qcon



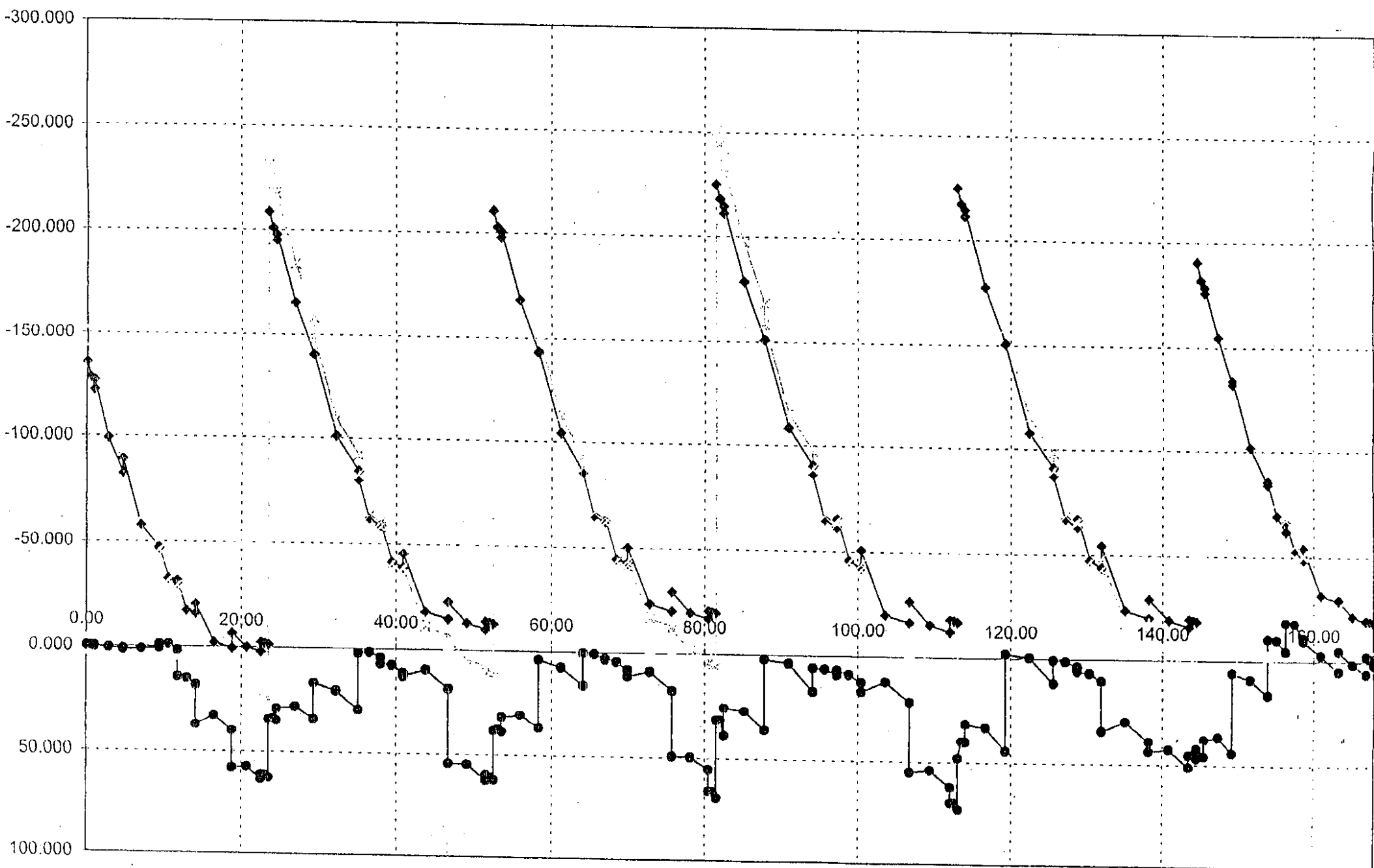
Hip D. T Mcon Qcon



Hip D. Q Mcon Tcon

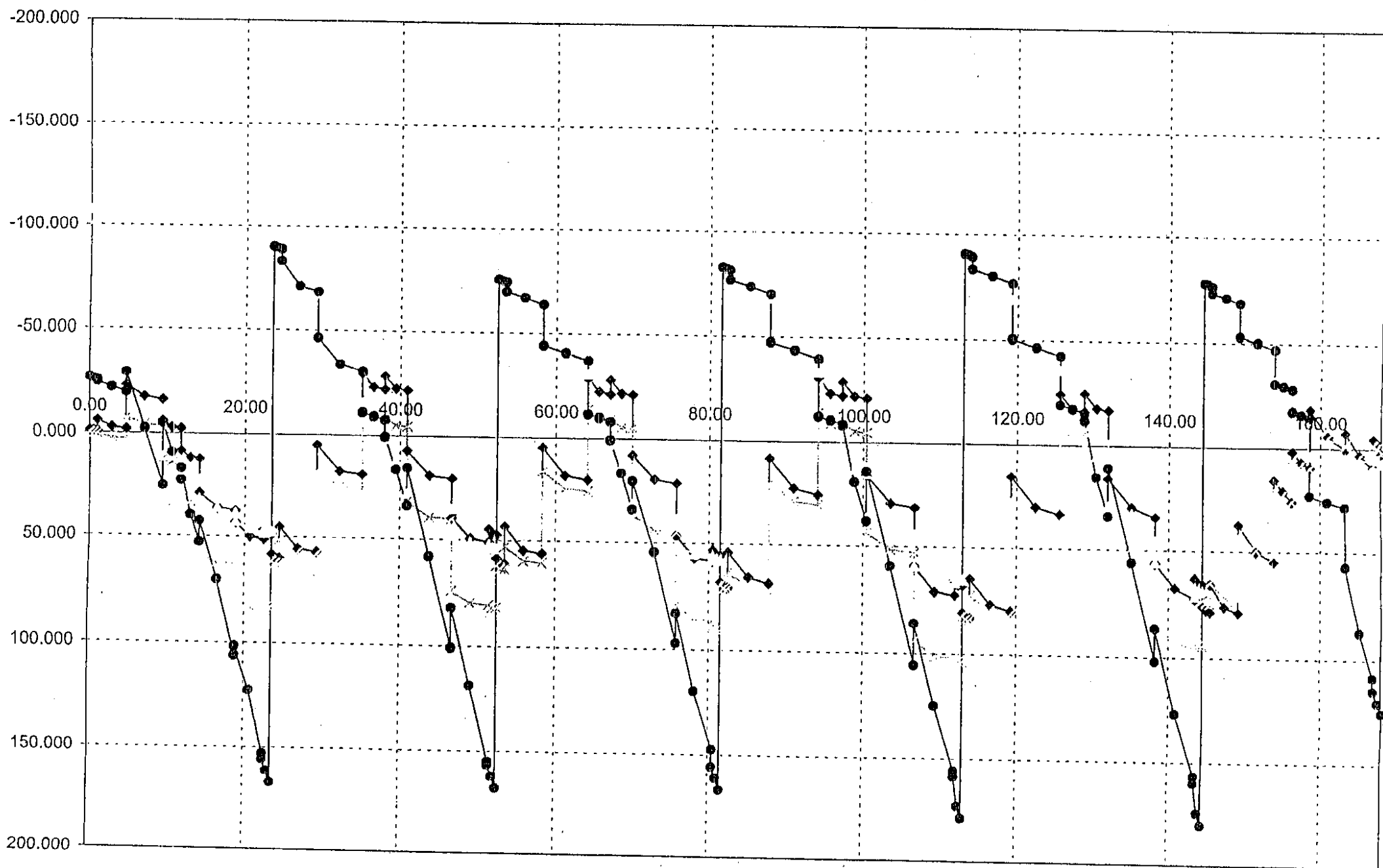


Hip D. Q Mcon Tcon

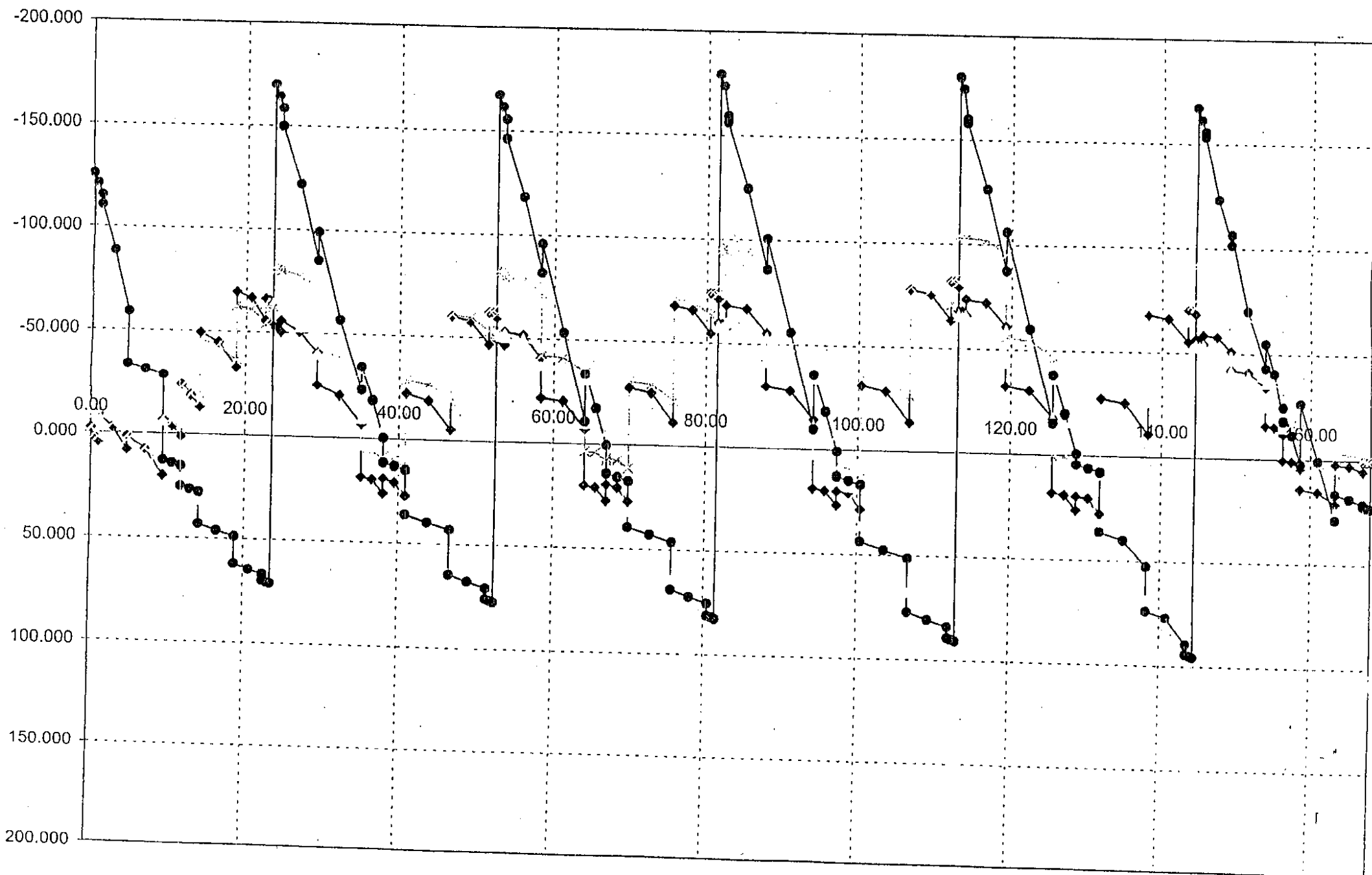


—◆— Q 1 48 (T) 1 48 —+— Q 49 96 —■— (T) 49 96

Hip D. T Mcon Qcon



Hip D. T Mcon Qcon



— T 1 48 (Q) 1 48 T 49 96 — (Q) 4 96

HIPOTESIS: E Eje 1 (49-96) ripado -30cm; Eje 2 (1-48) ripado +30cm

Envolvente IPF75B positiva

Coef impacto 1.16

ARRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)	80.50	78.264	69.264	-453.656	222.430	-759.220	50.578	124.004	-1.316	-5.858
1)	0.00	-0.373	-121.610	0.000	11.600	0.000	-0.214	0.000	-2.302	-13.804	81.00	80.725	70.230	-487.893	228.230	-840.884	42.974	126.034	-1.102	-0.058
2)	0.50	-0.159	-116.195	59.645	12.180	-5.916	0.000	72.906	2.889	-143.202	81.50	80.939	70.810	-523.843	236.640	-978.670	54.414	126.193	0.156	-4.698
3)	1.00	0.055	-110.395	116.195	12.760	-6.960	0.214	142.332	5.029	-137.402	81.50	96.134	-165.402	-534.951	16.820	68.773	48.332	126.193	-0.736	6.380
1)	1.00	-0.396	-106.008	114.380	12.760	-6.960	-2.046	142.332	-7.055	-136.532	82.00	98.596	-159.602	-453.572	17.400	60.030	48.546	123.714	-0.522	1.740
2)	2.85	2.621	-85.175	293.322	14.848	-31.683	-1.276	360.028	0.650	-106.952	82.50	98.810	-145.487	-380.244	17.980	54.346	48.760	122.206	-0.308	7.540
3)	4.70	3.435	-55.479	423.505	24.360	16.747	0.581	537.740	11.993	-84.912	82.50	85.573	-147.347	-384.020	14.848	59.725	37.530	122.365	-3.186	8.584
1)	4.70	-14.874	-32.016	177.515	23.316	16.631	-4.739	537.624	-9.878	-84.912	85.15	97.387	-116.027	-35.236	17.980	16.240	38.686	212.164	-18.560	-101.036
2)	7.05	-9.288	-29.348	254.415	25.984	-41.500	-3.712	690.940	0.395	-49.532	87.80	100.234	-78.323	222.973	29.348	48.256	49.195	502.570	-33.046	-122.032
3)	9.40	-7.983	-26.564	321.873	50.344	150.944	-3.598	775.999	13.450	-21.692	90.95	43.465	-96.591	221.939	19.952	107.764	7.910	502.570	-52.506	-119.944
1)	9.40	1.872	12.122	87.035	45.356	161.431	-14.040	775.999	-3.426	-21.808	94.10	61.591	-6.496	556.159	53.708	201.797	8.410	834.477	2.014	-90.248
2)	10.58	5.018	13.514	75.369	48.662	215.166	-12.906	783.798	1.710	0.812	94.10	1.027	-33.450	581.316	46.690	267.496	23.831	1034.176	19.135	-46.168
3)	11.75	5.532	14.906	61.565	62.582	117.119	-5.159	777.623	6.847	11.078	95.68	8.796	-16.050	620.791	50.170	207.582	28.111	1034.488	-5.582	-46.052
1)	11.75	16.507	23.084	61.565	61.538	234.569	3.383	776.579	-6.709	11.078	97.25	9.866	2.510	632.704	69.252	270.686	28.753	1084.716	1.160	-24.128
2)	12.93	20.038	24.745	36.216	71.166	295.924	4.074	755.110	1.638	33.582	97.25	0.457	13.124	99.394	67.686	415.802	32.396	1100.840	8.651	-3.132
3)	14.10	20.552	26.137	6.114	86.652	205.591	9.210	709.669	6.774	50.112	98.83	7.584	14.980	79.758	71.456	445.809	21.754	1100.840	-7.179	-4.002
1)	14.10	36.996	38.707	7.158	90.944	285.631	18.760	709.669	-11.131	50.228	100.40	8.590	16.836	55.925	93.496	348.632	32.936	1032.342	6.412	25.868
2)	16.45	44.444	42.582	-84.569	108.518	202.517	20.332	564.052	12.240	75.458	100.40	39.747	39.641	149.912	100.340	522.870	0.052	1031.298	-17.975	46.748
3)	18.80	45.750	45.250	-185.409	140.592	-78.850	31.648	341.808	34.130	109.098	103.55	53.594	43.738	24.611	117.972	428.424	0.967	827.553	-1.496	90.828
1)	18.80	54.060	55.612	-186.184	147.610	-48.864	33.583	341.692	20.006	108.982	106.70	55.606	47.334	-117.010	160.022	25.556	17.005	491.739	51.645	122.612
2)	20.65	60.909	58.907	-292.340	168.780	-282.979	38.236	166.341	25.752	71.688	106.70	78.992	65.207	-114.880	170.288	129.688	32.383	492.167	30.871	124.700
3)	22.50	62.000	60.995	-403.700	194.010	-605.843	47.411	61.288	28.610	20.532	109.35	91.127	69.494	-292.496	198.476	-249.422	36.884	187.355	33.524	111.998
1)	22.50	61.756	64.624	-409.795	196.272	-607.315	42.782	61.245	25.306	19.488	112.00	92.561	72.510	-478.312	233.856	-796.304	50.353	70.427	3.143	-2.958
2)	23.00	63.511	65.589	-443.204	202.072	-703.689	43.878	51.312	-0.580	17.980	112.00	85.900	74.663	-485.350	237.162	-792.070	40.687	70.311	1.468	-2.958
3)	23.50	64.046	66.169	-477.092	207.872	-806.148	46.018	44.178	-3.498	12.296	112.50	88.361	75.243	-522.903	243.832	-908.418	42.827	71.587	1.682	2.842
1)	23.50	77.801	-161.273	-488.414	14.964	34.782	39.400	44.178	-5.492	4.524	113.00	88.575	76.208	-561.364	251.372	-1060.637	56.007	70.601	2.940	-1.798
2)	24.00	79.556	-155.858	-409.430	15.544	26.619	39.614	43.323	-4.234	-0.116	113.00	103.501	-163.202	-571.043	8.990	-31.363	70.024	70.601	2.164	-5.104
3)	24.50	79.770	-150.058	-333.433	16.124	22.327	40.872	42.163	-4.020	5.684	113.50	105.641	-157.402	-489.362	9.570	-36.351	70.238	74.661	3.422	-9.744
1)	24.50	69.900	-142.928	-338.268	13.920	21.283	32.091	42.163	-5.493	6.612	114.00	106.176	-143.287	-417.390	10.150	-37.685	71.496	77.329	3.636	-3.944
2)	26.90	80.365	-116.180	-29.148	16.704	-15.126	33.118	122.856	-28.215	-92.394	116.65	102.782	-116.839	-73.982	9.164	-38.845	56.554	77.213	0.004	-2.900
3)	29.30	81.714	-79.640	203.445	25.752	14.787	41.453	372.954	-22.720	-111.434	119.30	105.692	-78.633	182.836	20.648	1.044	57.710	204.987	-18.154	-108.112
1)	29.30	34.047	-95.199	200.618	18.560	14.744	18.885	372.041	-41.908	-110.374	119.30	44.299	-101.680	182.684	8.425	140.070	3.096	512.614	-29.878	-120.640
2)	32.20	47.359	-53.244	421.146	21.924	-40.704	20.126	668.806	3.395	-80.214	122.45	59.281	-55.860	428.281	13.007	110.722	3.596	511.038	-52.343	-120.683
3)	35.10	48.921	-19.604	527.645	48.604	110.054	31.633	856.561	15.808	-49.184	125.60	62.791	-11.585	549.079	43.921	288.578	17.103	1017.886	13.280	-43.116
1)	35.10	-1.296	-32.791	523.469	40.600	193.959	14.800	856.561	-6.456	-48.314	125.60	1.187	-36.176	577.593	36.830	392.160	27.178	1017.342	-9.951	-41.818
2)	36.55	5.382	-16.551	561.028	42.224	132.574	15.442	908.266	3.175	-21.634	127.18	8.678	-17.616	622.047	40.426	347.216	27.863	1061.908	0.108	-20.648
3)	38.00	6.302	0.849	573.729	62.060	205.901	17.955	926.746	10.038	-8.584	128.75	9.748	0.944	639.211	60.552	422.943	31.506	1069.912	6.729	9.222
1)	38.00	-2.029	11.637	106.887	60.146	364.030	17.749	926.746	-6.644	-8.584	130.33	5.067	6.512	100.801	64.380	656.335	35.087	1046.480	-2.359	30.276
2)	39.45	4.263	13.646	89.715	64.554	407.830	22.741	923.382	0.646	11.310	131.90	6.073	8.368	92.192	85.376	569.662	41.550	987.262	4.489	52.316
3)	40.90	5.184	15.386	67.341	83.694	316.470	29.988	888.729	9.849	38.106	131.90	33.019	31.832	205.756	94.308	659.388	17.471	987.378	-19.670	51.156
1)	40.90	30.598	32.422	97.132	89.494	400.311	0.077	887.859	-11.233	37.990	135.05	47.295	35.544	100.659	111.940	580.097	18.814	772.367	-2.441	94.192
2)	43.80	43.140	36.171	2.066	105.734	331.202	2.920	733.316	1.566	69.890	138.20	51.896	48.225	-17.464	155.904	190.016	34.424	426.134	32.402	124.932
3)	46.70	44.702	39.535	-107.497	145.464	-11.310	15.934	465.276	58.923	101.653	138.20	68.204	59.803	-17.017	165.416	190.886	16.822	425.026	9.380	125.433
1)	46.70	61.535	55.786	-109.088	153.932	78.300	25.216	466.146	40.755	102.813	140.85	80.018	62.819	-179.068	193.488	-186.288	22.194	134.978	9.096	96.048
2)	49.10	71.294	59.340	-247.484	178.814	-237.733	32.261	220.473	17.763	95.642	143.50	85.112	75.421	-363.729	228.984	-743.646	41.753	56.779	6.507	-6.612
3)	51.50	72.963	62.124	-394.964	211.874	-702.808	47.484	118.161	-1.046	-1.798	143.50	74.518	74.889	-368.339	232.116	-744.369	31.854	56.779	3.904	-5.568
1)	51.50	68.408	65.801	-399.475	216.804	-703.852	40.568	118.161	-2.476	-0.870	144.00	76.658	75.469	-404.132	238.786	-835.808	25.991	58.403	4.118	0.232
2)	52.00	70.548	66.766	-432.294	221.560	-809.934	41.664	117.175	-2.262	4.930	144.50	77.258	76.434	-444.527	245.456	-954.677	28.131	60.665	0.156	-5.452
3)	52.50	71.083	67.346	-466.357	229.100	-920.335	44.675	117.117	-2.048	0.290	144.50	88.049	-143.707	-449.747	0.623	-68.965	69.270	60.665	0.192	-11.731
1)	52.50	85.002	-153.222	-475.044	20.126	58.653	45.896	117.117	-3.172	10.730	145.00	90.189	-137.907	-379.962	1.203	-67.979	69.484	68.959	-17.342	-22.635
2)	53.00	87.463	-147.743	-399.954	20.706	47.459	46.110	113.231	-1.914	6.090	145.50	90.788	-132.492	-312.341	1.783	-65.064	70.742	82.140	-40.096	-22.055
3)	53.50	87.677	-141.943	-326.964	21.286	38.991	47.368	107.895	-1.700	11.890	145.50	77.401	-135.925	-316.087	-2.436	-65.021	60.304	82.183	-44.444	-23.142
1)	53.50	73.273	-137.667	-336.040	19.198	42.007	37.543	107.7												

52(1)	9.40	63.030	-5.452	534.389	45.356	160.340	13.912	774.908	3.298	-21.808	112.00	201.722	145.307	-413.836	237.162	-791.685	-43.576	69.926	1.100	-2.958
52(2)	10.58	59.884	8.468	535.077	48.662	214.396	17.400	783.028	2.784	0.812	112.50	199.261	159.807	-488.277	243.832	-908.033	-43.790	71.523	-1.040	2.842
52(3)	11.75	59.370	22.388	514.313	62.582	116.028	14.276	776.532	2.270	11.078	113.00	199.047	165.992	-569.890	251.372	-1060.573	-51.834	70.216	-4.224	-1.798
53(1)	11.75	88.067	14.210	514.313	61.538	233.478	-4.474	775.488	5.618	11.078	113.00	184.991	-75.506	-570.869	8.990	-31.427	-65.209	70.216	-0.404	15.104
53(2)	12.93	84.536	37.099	491.574	71.166	294.768	2.668	753.954	5.104	33.582	113.50	182.851	-74.926	-532.514	9.570	-36.736	-67.349	74.597	-2.780	-9.744
54	14.10	84.022	49.975	441.810	86.652	204.114	2.154	708.192	4.590	50.112	114.00	182.316	-74.731	-496.212	10.150	-38.070	-70.533	76.944	-4.920	-3.944
54(2)	14.10	126.390	36.097	442.854	90.944	284.154	-22.869	708.192	7.793	50.228	114.00	186.709	-73.250	-497.964	6.148	-39.230	-42.301	76.828	12.323	-2.900
54(3)	16.45	118.942	65.028	326.245	108.518	201.040	-15.196	562.960	21.789	74.752	116.65	174.574	-70.555	-306.098	9.164	-55.528	-57.068	204.602	10.128	-108.112
55(1)	18.80	117.636	100.408	128.139	140.592	-80.391	-14.440	341.422	45.486	109.098	119.30	171.664	-68.193	-122.360	20.648	1.044	-79.759	511.523	-50.765	-120.640
55(2)	20.65	151.371	112.499	-58.136	168.780	-284.841	-31.494	341.306	59.738	108.982	119.30	139.097	-46.174	-118.684	8.040	140.070	17.899	511.038	-38.508	-120.683
55(3)	22.50	150.280	143.123	-295.298	194.010	-608.090	-30.524	63.214	-42.928	20.532	122.45	124.115	-42.462	23.383	12.622	110.722	1.862	829.690	-2.030	-85.651
56(1)	22.50	160.616	142.750	-298.261	196.272	-609.177	-35.398	62.786	-29.800	19.488	125.60	86.161	-17.384	43.761	36.830	392.160	45.824	1016.957	-0.707	-42.731
56(2)	23.00	158.861	148.935	-371.890	202.072	-705.936	-34.568	53.559	-5.841	17.980	127.18	78.670	-15.528	70.119	40.426	347.601	39.361	1061.138	-1.392	-20.648
56(3)	23.50	158.326	154.735	-447.860	207.872	-808.074	-34.782	46.104	-7.417	12.296	128.75	77.600	-13.672	94.591	60.552	422.943	29.554	1069.142	-1.207	9.222
57(1)	23.50	144.745	-75.317	-441.434	14.964	37.029	-41.005	46.104	-1.250	4.524	128.75	85.796	-11.584	695.935	59.682	616.046	45.629	1069.142	1.439	8.352
57(2)	24.00	142.990	-75.122	-403.862	15.544	28.481	-43.145	45.185	-4.434	-0.116	130.33	78.627	15.560	692.227	64.380	656.335	47.032	1045.710	0.754	30.276
57(3)	24.50	142.776	-74.542	-366.145	16.124	24.189	-46.330	44.025	-6.574	5.684	131.90	77.621	34.120	655.430	85.376	569.213	46.348	986.492	0.069	52.316
58(1)	24.50	146.730	-72.458	-365.760	13.920	22.824	-25.413	44.025	7.355	6.612	131.90	136.631	7.646	571.678	94.308	658.618	-29.413	986.608	4.517	51.156
58(2)	26.90	136.265	-62.066	-206.976	16.704	-13.649	-38.897	124.012	14.988	-92.394	135.05	122.355	52.422	470.583	111.940	578.620	-18.429	770.890	3.147	94.192
58(3)	29.30	134.916	-59.282	-59.817	25.752	16.649	-56.478	372.568	-38.404	-109.894	138.20	117.754	98.511	237.272	155.904	188.860	-18.886	425.364	23.779	124.932
59(1)	29.30	117.507	-41.607	-59.860	18.560	16.221	-7.071	371.656	-30.452	-110.374	138.20	176.962	77.203	236.327	165.416	189.730	-33.644	424.320	31.006	124.663
59(2)	32.20	104.195	-29.928	39.738	21.924	-39.548	-22.694	667.650	-3.074	-80.214	140.85	165.148	117.107	-19.162	193.488	-187.444	-25.404	136.455	3.681	96.048
59(3)	35.10	102.633	-26.564	123.269	48.604	111.145	-45.373	855.470	-4.315	-49.184	143.50	160.054	148.153	-369.993	228.984	-745.187	-31.737	58.320	-8.818	-6.612
60(1)	35.10	79.596	-9.127	45.491	40.600	193.895	41.958	855.470	-0.286	-48.314	143.50	172.388	147.447	-372.689	232.116	-746.231	-37.312	58.320	6.690	-5.568
60(2)	36.55	72.918	-7.503	59.038	42.224	131.804	35.923	907.496	-0.928	-21.634	144.00	170.248	161.947	-446.414	238.786	-837.349	-29.522	60.265	4.550	0.232
60(3)	38.00	71.998	-5.763	66.867	62.060	205.516	27.631	926.361	-2.397	-8.584	144.50	169.648	168.132	-531.005	245.456	-956.539	-29.736	62.527	4.017	-5.773
61(1)	38.00	82.243	-0.021	519.093	60.146	363.645	22.444	926.361	2.150	-8.584	144.50	154.681	-63.319	-526.829	1.008	-67.103	-58.355	62.527	8.155	-11.346
61(2)	39.45	75.951	16.604	509.751	64.554	406.739	22.846	922.997	0.638	11.310	145.00	152.541	-62.739	-496.194	1.588	-66.117	-60.495	70.500	23.763	-22.250
62	40.90	75.030	34.004	474.327	83.694	316.470	21.376	888.023	0.039	38.106	145.50	151.942	-62.544	-463.721	2.168	-63.908	-63.679	83.617	41.701	-21.670
62(2)	40.90	128.786	11.716	513.166	89.494	399.605	-8.039	887.153	3.271	37.990	145.50	152.975	-61.975	-467.467	-2.436	-63.480	-43.417	84.045	55.873	-23.142
62(3)	43.80	116.244	54.441	415.142	105.734	330.817	0.290	732.931	2.800	69.890	147.35	142.060	-59.771	-356.792	-0.232	-61.535	-54.332	189.400	19.103	-68.962
63(1)	46.70	114.682	96.781	201.005	145.464	-11.310	1.659	464.891	48.044	101.653	149.20	139.321	-58.454	-247.925	6.032	-11.976	-67.685	363.094	-66.386	-105.602
63(2)	46.70	173.713	72.490	210.724	153.932	78.300	-37.094	465.761	60.627	102.428	149.20	124.357	-47.092	-248.469	-1.102	103.712	-2.804	361.891	-48.358	-106.646
63(3)	49.10	163.954	109.800	-11.192	178.814	-237.669	-31.683	220.409	-9.352	95.642	151.55	111.302	-44.308	-141.399	1.682	103.163	-15.860	579.702	-28.357	-73.101
64(1)	51.50	162.285	146.340	-305.180	211.874	-702.423	-34.450	118.097	-9.741	-1.798	153.90	106.808	-42.025	-37.680	19.662	247.182	-34.658	721.954	-7.619	-49.416
64(2)	51.50	176.758	144.101	-308.647	216.804	-703.467	-39.284	118.097	3.439	-0.870	153.90	85.730	-27.650	-36.250	16.958	312.231	4.628	721.954	-3.816	-48.329
64(3)	52.00	174.618	150.286	-382.530	221.560	-809.549	-38.454	117.111	1.299	4.930	155.08	80.272	-26.258	-5.472	18.350	291.864	-0.508	766.946	-3.944	-32.843
65(1)	52.50	161.382	-61.350	-457.296	20.126	58.268	-42.365	117.053	4.456	10.730	156.25	74.986	-24.982	27.759	31.632	387.805	-13.473	788.828	-4.415	-10.339
65(2)	53.00	158.921	-61.091	-426.576	20.706	47.074	-44.505	113.167	1.272	6.090	156.25	60.654	-16.182	27.759	32.364	488.029	16.243	787.784	-4.184	-10.266
65(3)	53.50	158.707	-60.511	-396.912	21.286	38.606	-47.689	107.831	-0.868	11.890	157.43	55.517	-14.790	45.913	33.756	450.008	11.106	792.540	-4.698	1.044
66(1)	53.50	163.019	-59.367	-398.854	19.198	41.622	-25.729	107.715	13.784	12.934	158.60	52.756	-13.514	63.667	49.126	532.899	1.968	783.797	-5.212	23.548
66(2)	55.90	151.462	-56.904	-260.168	21.982	-4.863	-39.212	185.694	16.478	-86.072	158.60	39.487	22.009	278.968	52.258	543.503	-0.524	783.797	-2.438	23.548
66(3)	58.30	150.049	-54.891	-128.709	32.074	12.158	-60.003	428.540	-62.210	-106.256	160.95	26.752	24.793	221.347	61.828	613.451	-2.552	697.667	-3.422	50.344
67(1)	58.30	127.429	-39.577	-129.499	22.852	71.050	8.034	429.627	-53.494	-106.082	163.30	20.396	27.846	161.952	94.772	456.271	-3.579	541.183	-4.449	86.768
67(2)	61.20	113.089	-36.213	-17.929	26.216	-1.472	-7.590	719.621	-3.306	-78.010	163.30	30.808	52.919	414.439	93.902	457.315	-0.506	542.227	-0.506	85.724
67(3)	64.10	111.078	-33.234	87.355	53.070	134.770	-29.399	896.753	-4.547	-46.980	165.15	19.893	83.543	286.719	110.258	357.918	-1.276	362.964	-1.276	106.604
68(1)	64.10	86.438	-9.881	47.772	47.850	195.100	41.754	896.869	0.599	-46.110	167.00	13.686	105.309	114.674	137.344	137.808	-2.089	143.028	-2.089	137.344
68(2)	65.55	79.803	-8.257	60.342	50.344	134.654	35.762	944.487	0.000	-18.386	167.00	9.044	110.077	115.877	139.301	139.011	0.214	143.187	0.214	139.301
68(3)	67.00	78.455	-6.517	73.874	68.266	191.226	27.427	960.828	-0.642	-6.380	167.50	6.903	115.877	59.657	145.101	72.790	0.000	72.790	0.000	145.101
69(1)	67.00	88.801	0.095	490.430	66.526	303.978	28.488	960.828	1.918	-5.336	168.00	1.874	123.347	0.000	152.641	0.000	-0.214	0.000	-4.549	11.912
69(2)	68.45	82.123	16.335	480.518	70.064	336.052	28.890	951.142	1.276	13.514	0.000	0.000	1.044	1.374	1.044	2.418	0.000	2.803	0.000	1.044
69(3)	69.90	81.524	33.735	445.701	90.074	241.665	28.291	910.832	0.677	41.354	0.000	0.000	1.044	-0.714	1.044	0.171	0.000	0.942	0.000	-0.770
70(1)	69.90	139.547	16.673	479.217	95.120															

										VIADUCTO BORGES BLANQUES									
18(1)	0.000	-3.654	-1.075	20.358	37.727	0.000	42.286	0.000	17.661	1.044	0.000	12.542	7.134	15.943	0.000	17.099	0.000	6.364	
18(2)	0.000	-3.654	4.203	20.358	4.203	0.000	13.321	0.000	-3.018	1.044	0.000	11.763	7.134	2.646	0.000	10.496	0.000	-4.494	
18(3)	0.000	-3.654	9.713	20.358	-30.307	0.000	51.724	0.000	-23.376	1.044	0.000	11.498	7.134	-8.591	0.000	27.693	0.000	-7.904	
19(1)	0.000	-1.914	6.603	15.312	25.833	0.000	29.236	0.000	13.771	0.000	0.000	2.132	2.088	5.590	0.000	5.975	0.000	2.084	
19(2)	0.000	-1.914	9.366	15.312	2.560	0.000	9.704	0.000	-1.862	0.000	0.000	2.739	2.088	0.428	0.000	2.675	0.000	-1.158	
0(1)	0.000	-1.914	12.171	15.312	-20.799	0.000	34.565	0.000	-17.174	0.000	0.000	4.220	2.088	-2.588	0.000	9.378	0.000	-2.088	
0(2)	0.000	2.610	25.311	22.272	38.771	0.000	43.330	0.000	19.575	0.000	-2.958	3.735	6.090	10.438	0.000	11.209	0.000	5.705	
0(3)	0.000	2.610	22.438	22.272	4.203	0.000	13.321	0.000	-3.018	0.000	-2.958	6.524	6.090	2.303	0.000	8.291	0.000	-3.018	
1(1)	1.044	12.876	46.679	19.140	35.097	1.044	52.768	0.000	-25.290	1.044	-8.004	-8.990	13.224	24.418	-1.044	19.492	0.000	-6.475	
1(2)	1.044	12.876	26.950	19.140	4.863	1.044	18.316	0.000	-5.265	1.044	-8.004	4.118	13.224	3.074	-1.044	26.344	-1.044	11.683	
1(3)	1.044	12.876	8.747	19.140	-24.759	1.044	53.652	-1.044	-21.066	1.044	-8.004	17.110	13.224	-16.124	-1.044	40.277	1.044	-14.765	
2(1)	0.000	1.914	13.646	6.090	12.783	0.000	13.939	0.000	4.934	0.000	-1.914	-1.054	14.268	25.046	0.000	29.108	0.000	10.206	
2(2)	0.000	1.914	10.410	6.090	2.560	0.000	9.704	0.000	-3.788	0.000	-1.914	2.817	14.268	2.817	0.000	11.437	0.000	-3.018	
2(3)	0.000	1.914	6.512	6.090	-7.749	0.000	23.442	0.000	-7.246	0.000	-1.914	6.602	14.268	-18.628	0.000	38.161	0.000	-16.242	
3(1)	0.000	0.000	3.719	2.088	3.560	0.000	3.945	0.000	1.703	0.000	1.218	4.522	9.048	16.354	0.000	18.281	0.000	7.186	
3(2)	0.000	0.000	1.969	2.088	0.428	0.000	2.354	0.000	-1.156	0.000	1.218	1.259	9.048	1.259	0.000	8.612	0.000	-1.862	
3(3)	0.000	0.000	3.719	2.088	-2.704	0.000	7.348	0.000	-2.473	0.000	1.218	-0.176	9.048	-12.878	0.000	24.252	0.000	-10.910	
4(1)	0.000	-1.914	5.694	6.090	12.783	0.000	13.939	0.000	5.320	0.000	10.092	27.881	12.180	22.088	0.000	25.491	0.000	9.548	
4(2)	0.000	-1.914	7.825	6.090	2.560	0.000	9.704	0.000	-3.788	0.000	10.092	11.677	12.180	2.817	0.000	11.758	0.000	-2.632	
4(3)	0.000	-1.914	10.740	6.090	-7.749	0.000	23.442	0.000	-7.246	0.000	10.092	-4.483	12.180	-16.540	0.000	33.774	0.000	-14.812	
5(1)	1.044	-11.136	-11.535	19.140	35.097	-1.044	38.885	-1.044	16.829	1.044	6.090	31.272	6.090	13.166	1.044	16.569	1.044	3.843	
5(2)	1.044	-11.136	4.863	19.140	4.863	-1.044	17.995	0.000	-5.265	1.044	6.090	22.224	6.090	3.074	1.044	13.171	0.000	-4.109	
5(3)	1.044	-11.136	21.003	19.140	-24.759	-1.044	53.652	1.044	-21.066	1.044	6.090	12.132	6.090	-7.018	1.044	28.190	-1.044	-8.016	
6(1)	0.000	-2.610	0.402	22.272	38.771	0.000	43.330	0.000	19.575	0.000	-4.002	5.922	5.046	8.234	0.000	9.390	0.000	3.232	
6(2)	0.000	-2.610	6.386	22.272	4.203	0.000	13.321	0.000	-3.018	0.000	-4.002	11.789	5.046	2.303	0.000	8.612	0.000	-3.018	
6(3)	0.000	-2.610	10.146	22.272	-31.351	0.000	52.447	0.000	-25.290	0.000	-4.002	17.014	5.046	-4.990	0.000	16.902	0.000	-4.772	
7(1)	0.000	-1.044	7.573	15.312	26.877	0.000	29.959	0.000	13.771	0.000	-1.044	1.533	1.044	2.418	0.000	2.803	0.000	1.044	
7(2)	0.000	-1.044	8.595	15.312	2.560	0.000	9.704	0.000	-1.862	0.000	-1.044	1.712	1.044	0.171	0.000	0.942	0.000	-0.770	
7(3)	0.000	-1.044	-8.617	15.312	-21.843	0.000	35.609	0.000	-17.174	0.000	-1.044	4.665	1.044	-1.758	0.000	4.280	0.000	-1.429	
8(1)	0.000	2.610	25.432	22.272	40.643	0.000	44.816	0.000	19.575	0.000	49.132	4.112	409.654	29.928	0.000	29.928	0.000	409.654	
8(2)	0.000	2.610	22.670	22.272	4.435	0.000	15.641	0.000	-3.018	0.000	49.132	2.146	409.654	15.544	0.000	15.544	0.000	409.654	
8(3)	0.000	2.610	17.776	22.272	-31.393	0.000	54.318	0.000	-25.290	0.000	49.132	0.000	409.654	0.000	0.000	0.000	0.000	243.851	
9(1)	1.044	8.004	40.937	20.184	37.185	1.044	40.973	1.044	18.643	0.000	257.570	19.662	429.432	32.016	0.000	32.016	0.000	429.432	
9(2)	1.044	8.004	26.950	20.184	4.863	1.044	17.995	0.000	-5.650	0.000	257.570	10.324	429.432	15.544	0.000	15.544	0.000	429.432	
9(3)	1.044	8.004	13.619	20.184	-26.673	1.044	55.419	-1.044	-22.110	0.000	257.570	0.000	429.432	0.000	0.000	0.000	0.000	300.401	
10(1)	0.000	2.958	15.945	7.134	15.741	0.000	17.282	0.000	6.364	0.000	247.132	18.239	447.760	33.002	0.000	33.002	0.000	447.760	
10(2)	0.000	2.958	11.180	7.134	2.560	0.000	9.704	0.000	-3.788	0.000	247.132	9.665	447.760	16.588	0.000	16.588	0.000	447.760	
10(3)	0.000	2.958	5.853	7.134	-8.793	0.000	26.014	0.000	-7.904	0.000	247.132	0.000	447.760	0.000	0.000	0.000	0.000	263.293	
11(1)	0.000	0.000	1.969	2.088	0.428	0.000	2.354	0.000	-1.156	0.000	210.540	15.882	460.774	34.278	0.000	34.278	0.000	460.774	
11(2)	0.000	0.000	2.791	2.088	-2.588	0.000	8.508	0.000	-2.473	0.000	210.540	7.693	460.774	16.704	0.000	16.704	0.000	460.774	
11(3)	1.044	0.000	7.209	8.178	14.957	0.000	16.498	0.000	5.978	0.000	210.540	0.000	460.774	0.000	0.000	0.000	0.000	283.679	
12(1)	1.044	0.000	8.681	8.178	2.646	0.000	10.175	0.000	-4.173	0.000	220.702	16.308	426.974	31.958	0.000	31.958	0.000	426.974	
12(2)	1.044	0.000	9.297	8.178	-8.707	0.000	26.321	0.000	-8.290	0.000	220.702	8.236	426.974	15.544	0.000	15.544	0.000	426.974	
12(3)	1.044	-10.092	-9.987	21.228	39.603	-1.044	44.161	-1.044	18.917	0.000	220.702	0.000	426.974	0.000	0.000	0.000	0.000	239.125	
13(1)	1.044	-10.092	5.035	21.228	5.035	-1.044	19.258	0.000	-5.650	0.000	281.342	20.432	409.654	29.928	0.000	29.928	0.000	409.654	
13(2)	1.044	-10.092	20.289	21.228	-28.257	-1.044	59.699	1.044	-23.539	0.000	281.342	9.839	409.654	15.544	0.000	15.544	0.000	409.654	
13(3)	0.000	-2.784	0.040	25.404	45.106	0.000	50.435	0.000	23.093	0.000	281.342	0.000	409.654	0.000	0.000	0.000	0.000	243.517	
14(1)	0.000	-2.784	4.607	25.404	4.607	0.000	16.582	0.000	-2.632	0.000	250.084	19.488	429.432	32.016	0.000	32.016	0.000	429.432	
14(2)	0.000	-2.784	9.958	25.404	-35.108	0.000	59.167	0.000	-28.036	0.000	250.084	9.280	429.432	15.544	0.000	15.544	0.000	429.432	
14(3)	0.000	-1.044	10.001	17.400	29.964	0.000	35.181	0.000	15.859	0.000	250.084	0.000	429.432	0.000	0.000	0.000	0.000	191.316	
15(1)	0.000	-1.044	10.496	17.400	2.646	0.000	10.175	0.000	-1.541	0.000	231.593	17.416	447.760	33.002	0.000	33.002	0.000	447.760	
15(2)	0.000	-1.044	10.001	17.400	-25.716	0.000	40.125	0.000	-18.941	0.000	231.593	8.621	447.760	16.588	0.000	16.588	0.000	447.760	
15(3)	0.000	0.696	27.144	25.404	45.860	0.000	51.189	0.000	22.707	0.000	231.593	0.000	447.760	0.000	0.000	0.000	0.000	195.776	
16(1)	0.000	0.696	24.382	25.404	4.607	0.000	16.582	0.000	-3.018	0.000	305.759	22.098	460.389	34.278	0.000	34.278	0.000	460.389	
16(2)	0.000	0.696	20.358	25.404	-35.224	0.000	60.242	0.000	-28.422	0.000	305.759	11.484	460.389	16.704	0.000	16.704	0.000	460.389	
16(3)	1.044	4.872	35.769	22.272	40.531	1.044	44.704	1.044	19.961	0.000	305.759	0.000	460.389	0.000	0.000	0.000	0.000	198.812	
17(1)	1.044	4.872	30.349	22.272	5.035	1.044	19.258	0.000	-5.650	0.000	155.485	11.764	427.359	31.958	0.000	31.958	0.000	427.359	
17(2)	1.044	4.872	22.197	22.272	-30.461	1.044	60.627	-1.044	-24.198	0.000	155.485	5.763	427.359	15.544	0.000	15.544	0.000	427.359	
17(3)	1.044	1.044	13.886	8.178	16.914	0.000	18.455	0.000	7.408	0.000	155.485	0.000	427.359	0.000	0.000	0.000	0.000	175.607	
18(1)	1.044	1.044	12.037	8.178	2.646	0.000	10.175	0.000	-4.173										

HIPOTESIS: E Eie 1 (49-96) ripado -30cm; Eie 2 (1-48) ripado +30cm

Envolvente IPF75B negativa

Coef impacto 1.16

IRRA

	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
1)	0.00	-2.687	-13.742	0.000	-150.742	0.000	-2.461	0.000	-0.373	-123.598
2)	0.50	2.342	-11.492	5.833	-143.202	72.906	2.889	-5.916	0.000	12.180
3)	1.00	4.482	-10.912	11.492	-137.402	137.112	5.029	-12.180	0.214	12.760
4)	1.00	-9.587	-15.621	11.878	-137.576	138.156	-7.055	-11.136	-2.046	12.760
5)	2.85	-3.423	-12.762	35.386	-109.562	354.982	0.650	-35.859	-1.276	14.848
6)	4.70	7.535	-10.558	55.415	-93.090	452.828	11.993	-64.685	-0.463	17.052
7)	4.70	-3.595	-26.338	237.837	-92.916	453.033	-12.767	-64.801	-3.695	17.052
8)	7.05	2.761	0.727	264.904	-61.016	607.768	1.586	-107.272	-2.668	19.720
9)	9.40	15.495	28.567	231.065	-50.402	537.298	12.475	-156.166	-1.684	22.504
10)	9.40	-14.619	-5.452	526.107	-46.516	513.908	0.008	-157.210	-5.212	22.388
11)	10.58	-11.858	8.468	522.493	-31.900	440.944	3.480	-183.368	-4.698	23.780
12)	11.75	-6.721	22.388	501.729	-29.638	468.204	3.994	-211.440	-4.184	25.172
13)	11.75	-34.134	13.504	501.729	-30.682	379.464	-13.796	-211.440	-6.488	25.172
14)	12.93	-28.805	36.008	475.522	-16.356	283.632	-9.280	-241.848	-5.974	26.448
15)	14.10	-23.347	48.884	426.400	-14.964	303.120	-8.766	-274.038	-5.460	27.840
16)	14.10	-62.569	35.840	427.444	-19.024	219.600	-37.683	-274.038	-8.663	27.956
17)	16.45	-58.074	63.295	306.726	-0.928	70.192	-26.216	-341.318	-22.659	30.034
18)	16.80	-45.019	98.675	112.408	1.740	70.293	-25.232	-415.130	-39.396	33.408
19)	18.80	-83.163	87.586	112.630	-4.466	14.671	-58.059	-415.246	-52.778	33.292
20)	20.65	-80.424	107.812	-67.446	1.914	-36.717	-52.026	-505.003	-46.335	77.256
21)	22.50	-69.123	138.436	-295.940	4.002	-39.806	-51.256	-709.172	-35.894	168.780
22)	22.50	-80.744	134.660	-288.951	0.000	-39.849	-59.606	-709.600	-46.760	169.824
23)	23.00	-80.145	140.075	-356.794	0.580	-43.692	-58.348	-796.083	-18.519	177.712
24)	23.50	-78.004	145.875	-427.828	1.160	-43.518	-58.134	-887.754	-12.419	194.300
25)	23.50	-65.964	-71.272	-417.935	-231.072	-875.427	-34.337	-887.754	13.778	-216.282
26)	24.00	-65.365	-70.692	-381.004	-223.532	-764.263	-31.327	-785.317	16.614	-203.522
27)	24.50	-63.225	-70.112	-345.856	-217.732	-656.325	-30.230	-684.165	19.624	-202.072
28)	24.50	-70.004	-70.275	-345.856	-213.846	-657.690	-38.793	-684.165	6.217	-200.274
29)	26.90	-64.996	-58.021	-190.668	-181.656	-188.171	-23.569	-342.830	50.088	-82.128
30)	29.30	-54.723	-55.237	-53.782	-155.904	133.229	-18.865	-219.554	44.494	-23.068
31)	29.30	-42.450	-41.671	-54.210	-147.436	132.801	-31.731	-219.596	31.322	-23.896
32)	32.20	-37.613	-29.222	40.509	-107.706	477.928	-18.718	-210.876	0.754	3.132
33)	35.10	-24.237	-25.858	121.150	-91.466	547.885	-14.831	-223.852	0.487	6.496
34)	35.10	-3.768	-9.897	43.372	-82.418	462.899	-31.170	-223.852	-3.716	5.626
35)	36.55	-2.741	-7.888	54.159	-63.568	548.534	-24.265	-233.944	-3.074	7.250
36)	38.00	3.893	-6.148	62.822	-59.914	508.972	-19.975	-246.573	-2.475	8.990
37)	38.00	-6.030	-1.176	515.048	-58.870	360.861	-16.876	-246.573	-5.108	9.860
38)	39.45	-4.297	15.064	503.009	-41.064	292.073	-13.276	-260.551	-4.466	11.484
39)	40.90	2.017	32.464	468.099	-38.454	340.482	-12.676	-278.995	-3.867	13.224
40)	40.90	-49.170	12.101	506.553	-44.660	259.709	-14.929	-278.995	-7.099	13.108
41)	43.80	-46.067	54.056	403.200	-16.936	109.663	-3.422	-320.291	-6.628	16.472
42)	46.70	-32.370	96.396	190.924	-13.572	151.206	-2.181	-377.965	-52.916	29.617
43)	46.70	-85.751	73.260	197.240	-20.938	45.240	-58.084	-377.965	-69.675	27.260
44)	49.10	-83.311	109.030	-24.740	-10.846	2.277	-49.749	-486.205	-52.070	70.760
45)	51.50	-72.396	145.249	-316.223	-8.062	24.549	-48.722	-787.399	-6.789	196.214
46)	51.50	-86.099	141.404	-312.114	-11.136	25.593	-59.200	-787.399	-20.143	196.098
47)	52.00	-85.885	146.819	-384.007	-10.556	29.653	-58.986	-885.999	-19.743	200.158
48)	52.50	-83.424	152.298	-457.299	-9.976	34.815	-58.772	-988.717	-12.557	212.744
49)	52.50	-71.108	-62.441	-449.334	-233.044	-923.614	-43.417	-988.717	13.814	-216.688
50)	53.00	-70.573	-61.861	-416.753	-225.504	-809.876	-40.407	-883.157	19.260	-204.972
51)	53.50	-68.433	-61.281	-387.088	-220.748	-700.894	-39.311	-782.701	25.750	-201.782
52)	53.50	-74.286	-58.918	-383.637	-216.746	-705.186	-46.655	-782.817	10.228	-201.782
53)	55.90	-72.938	-56.134	-245.465	-184.556	-227.409	-31.432	-469.242	51.034	-75.632
54)	58.30	-62.023	-52.579	-118.243	-158.804	97.940	-23.517	-360.376	68.126	-19.604
55)	58.30	-44.796	-39.641	-120.189	-150.452	39.034	-22.824	-360.333	53.320	-20.822
56)	61.20	-43.554	-36.277	-7.784	-110.722	392.986	-9.810	-336.907	4.176	-3.886
57)	64.10	-30.627	-32.913	90.630	-92.568	472.678	-5.053	-327.859	5.417	-0.522
58)	64.10	-7.850	-11.036	50.726	-87.522	410.512	-29.226	-327.743	1.141	-2.436
59)	65.55	-6.930	-9.412	64.515	-66.758	496.748	-23.234	-326.235	4.350	1.796
60)	67.00	-0.573	-7.267	74.965	-63.974	466.494	-18.901	-335.298	-0.228	8.758
61)	67.00	-10.598	-0.675	491.521	-62.930	302.238	-15.612	-335.298	-2.788	7.888
62)	68.45	-9.250	15.565	478.591	-44.254	229.042	-12.882	-348.290	-2.146	9.512
63)	69.90	-2.615	32.965	444.931	-42.514	294.909	-12.283	-366.676	-1.547	11.252
64)	69.90	-57.941	16.994	473.823	-49.474	209.844	-13.653	-366.792	-5.649	11.252
65)	72.80	-55.608	50.634	370.033	-22.620	62.640	-3.016	-405.942	-4.408	14.616
66)	75.70	-41.911	92.974	156.872	-19.256	125.396	-1.775	-457.852	-57.326	29.143
67)	75.70	-94.512	74.457	158.016	-27.608	9.570	-54.445	-457.968	-72.581	29.290
68)	78.10	-92.778	110.227	-60.363	-17.516	-19.140	-46.110	-575.070	-52.168	76.966
69)	80.50	-81.542	137.746	-354.456	-14.732	17.748	-45.083	-876.612	-13.109	199.636

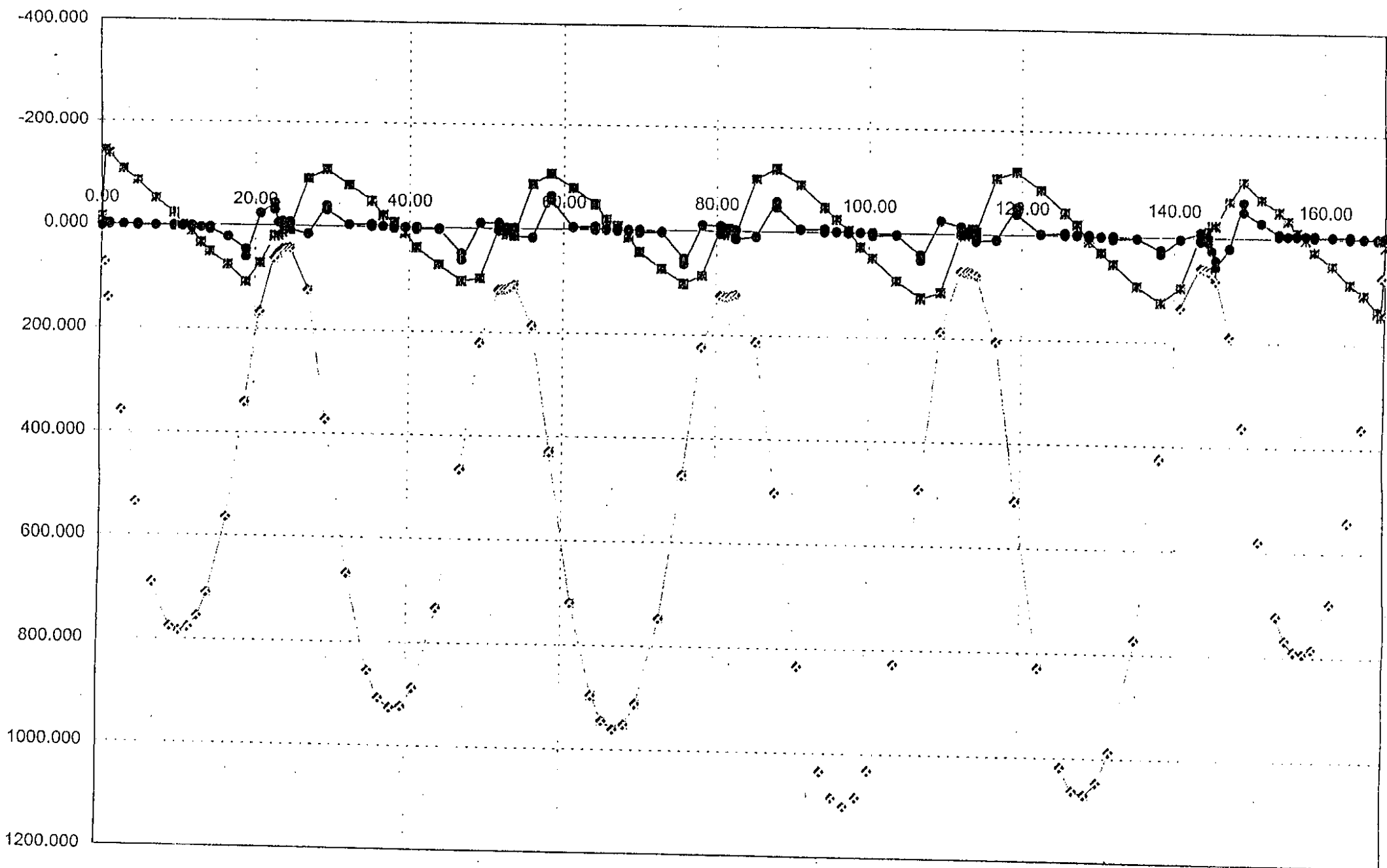
VIADUCTO BORGES BLANQUES

80.50	-97.264	140.977	-345.122	-18.038	-5.452	-69.176	-876.496	-27.761	200.680
81.00	-97.050	146.777	-415.218	-17.458	-0.464	-67.918	-977.648	-22.732	201.260
81.50	-94.589	152.256	-491.151	-16.878	8.743	-67.704	-1080.286	-23.376	216.630
81.50	-80.823	-68.879	-479.173	-247.660	-994.156	-37.942	-1080.286	-5.864	-231.130
82.00	-80.288	-68.299	-444.351	-240.990	-874.350	-35.802	-967.614	10.440	-218.370
82.50	-78.533	-67.334	-409.392	-234.320	-785.552	-40.796	-861.416	18.670	-215.180
82.50	-88.264	-66.226	-405.766	-230.144	-765.172	-43.071	-859.828	1.779	-215.006
85.15	-86.788	-63.094	-234.603	-194.648	-224.777	-29.174	-479.312	54.140	-75.632
87.80	-75.081	-59.307	-75.481	-166.576	152.656	-23.187	-351.422	62.373	-20.590
87.80	-53.174	-43.796	-75.382	-157.180	92.278	-25.721	-351.422	47.469	-22.678
90.95	-51.163	-40.200	57.287	-114.260	487.374	-9.683	-316.332	3.364	-7.598
94.10	-37.701	-36.103	172.911	-96.628	572.875	-5.558	-300.541	4.691	-3.886
94.10	-10.059	-12.022	57.275	-88.508	506.013	-37.699	-300.614	0.344	-2.726
95.68	-9.096	-10.282	75.425	-66.584	598.038	-31.278	-295.626	0.986	-0.986
97.25	-2.312	-8.426	86.592	-62.814	551.925	-26.517	-300.730	-0.939	6.960
97.25	-11.335	-9.296	665.142	-65.598	353.684	-35.470	-300.730	-3.542	5.916
98.83	-10.693	17.964	658.507	-45.472	284.374	-32.914	-314.012	-2.900	7.772
100.40	-2.881	36.524	615.784	-41.876	336.727	-32.229	-328.164	-2.215	9.628
100.40	-63.984	11.637	547.402	-49.996	231.942	-17.451	-328.164	-6.663	10.556
103.55	-61.244	56.028	430.707	-18.966	53.665	-3.770	-365.327	-5.336	14.268
106.70	-46.648	101.732	183.432	-15.370	107.721	-2.400	-419.362	-47.596	27.260
106.70	-107.493	79.673	183.127	-24.766	-2.900	-56.546	-419.319	-63.143	27.260
109.35	-105.310	117.879	-76.266	-13.282	-48.763	-45.994	-555.836	-55.973	78.416
112.00	-92.833	148.762	-430.963	-10.266	-17.269	-44.881	-925.760	-14.012	215.238
112.00	-106.890	145.756	-425.201	-15.312	-43.137	-69.176	-925.876	-31.376	215.238
112.50	-106.676	160.256	-499.642	-14.732	-38.729	-67.918	-1034.247	-26.626	216.688
113.00	-104.215	165.671	-580.163	-14.152	-32.407	-67.704	-1145.522	-15.090	231.188
113.00	-89.774	-78.909	-570.805	-246.356	-1059.767	-54.329	-1145.522	15.778	-228.172
113.50	-89.560	-78.329	-530.973	-240.816	-909.694	-44.359	-1035.175	27.488	-214.716
114.00	-87.484	-77.364	-491.974	-235.190	-795.318	-42.219	-928.776	27.018	-209.786
114.00	-93.033	-73.571	-486.921	-230.840	-795.434	-49.745	-928.892	9.601	-208.742
116.65	-91.556	-70.555	-292.550	-194.416	-257.542	-35.848	-569.002	54.774	-76.444
119.30	-80.234	-66.652	-109.969	-167.272	113.448	-31.775	-434.341	61.901	-29.464
119.30	-54.152	-46.944	-111.236	-157.434	8.526	-22.423	-433.956	47.382	-31.595
122.45	-52.140	-43.232	33.913	-114.224	401.476	-6.386	-360.992	6.728	-20.575
125.60	-39.064	-39.251	161.798	-97.752	487.186	-1.216	-303.022	8.055	-16.979
125.60	-8.343	-18.924	48.191	-89.320	315.426	-31.034	-303.181	4.535	-15.892
127.18	-7.337	-17.068	76.475	-68.324	407.979	-24.571	-279.358	5.220	-14.036
128.75	-0.232	-15.212	98.636	-64.554	375.441	-19.810	-257.608	5.905	-12.180
128.75	-9.199	-13.124	699.980	-67.164	232.028	-39.017	-257.608	3.259	-13.224
130.33	-8.514	14.020	698.904	-47.154	166.177	-35.374	-239.628	3.944	-11.484
131.90	-1.087	32.580	659.090	-43.558	222.953	-34.690	-224.548	4.629	-9.628
131.90	-58.556	8.352	575.338	-53.766	134.008	-32.879	-224.432	-0.689	-8.700
135.05	-56.544	53.128	472.509	-22.736	-34.904	-19.155	-201.944	0.681	-4.988
138.20	-41.991	98.447	234.254	-19.140	30.346	-17.828	-206.082	-23.257	13.572
138.20	-94.971	82.788	234.850	-27.376	30.346	-42.742	-206.082	-35.530	13.303
140.85	-93.173	122.692	-35.213	-17.052	-0.568	-32.190	-346.743	-42.831	89.958
143.50	-82.173	151.877	-394.520	-13.920	40.075	-31.077	-764.700	-0.752	216.282
143.50	-91.295	152.262	-391.823	-17.052	41.119	-40.988	-764.700	-17.304	215.412
144.00	-91.082	166.762	-468.437	-16.472	46.919	-39.730	-872.201	-15.164	216.862
144.50	-89.006	172.177	-552.963	-15.892	56.489	-39.516	-985.127	-8.889	232.085
144.50	-72.176	-72.950	-548.787	-214.578	-862.631	-54.049	-985.127	17.423	-192.654
145.00	-71.962	-72.370	-513.016	-206.168	-765.075	-55.389	-891.894	38.355	-176.414
145.50	-69.886	-71.404	-475.279	-200.368	-665.948	-53.249	-805.697	67.223	-169.744
145.50	-70.278	-67.882	-471.769	-197.664	-665.520	-57.155	-807.357	57.401	-169.128
147.35	-69.507	-65.678	-349.793	-173.188	-327.929	-44.500	-604.736	48.757	-82.534
149.20	-62.659	-62.820	-231.039	-150.220	-96.366	-43.327	-507.776	58.730	-36.872
149.20	-49.878	-48.055	-231.198	-143.956	-156.766	-25.558	-507.935	43.312	-36.872
151.55	-48.894	-45.271	-120.018	-111.766	122.129	-15.112	-421.842	29.401	-34.473
153.90	-41.446	-41.897	-21.885	-94.308	220.734	-11.626	-342.578	8.663	-32.190
153.90	-23.899	-27.971	-21.226	-90.748	117.351	-2.366	-342.578	5.730	-33.191
155.08	-23.386	-26.579	10.195	-74.218	212.346	2.770	-305.068	5.858	-31.799
156.25	-19.962	-25.303	39.894	-66.504	179.179	5.643	-269.266	6.329	-30.523
156.25	-7.234	-16.182	39.894	-68.556	77.911	7.943	-269.092	4.358	-29.406
157.43	-6.721	-14.790	58.048	-54.636	150.032	13.080	-234.756	4.872	-28.014
158.60	-3.189	-13.514	70.858	-49.706	7.593	11.778	-204.001	5.386	-26.738
158.60	5.779	22.330	288.470	-53.708	108.503	4.526	-203.131	3.482	-26.738
160.95	7.084	25.114	230.207	-31.262	-75.589	4.466	-142.405	4.466	-23.954
163.30	12.670	27.782	161.759	-28.594	-7.787	5.493	-89.219	5.493	-21.286
163.30	-3.007	54.203	421.181	-28.594	-7.787	0.332	-89.219	1.376	-21.286
165.15	-2.236	84.827	291.150	-20.242	-46.632	1.102	-50.808	2.146	-19.198
167.00	0.439	105.117	114.803	-18.038	-12.354	1.915	-17.574	2.959	-16.994
167.00	-0.055	109.820	115.620	-17.995	-12.195	-0.214	-17.415	-0.214	-17.995
167.50	0.159	115.620	59.529	-17.415	-7.076	0.000	-7.076	0.000	-17.415
168.00	0.373	121.420	0.000	-16.835	0.000	0.214	0.000	0.373	122.924
0.00	-1.489	-123.536	0.000	-150.742	0.000	0.214	0.000	-1.874	-123.598
0.50	-6.518	-116.066	59.773	-143.202	72.906	0.000	-5.916	-2.889	12.180
1.00	-8.658	-110.266	116.066	-137.402	137.112	-0.214	-12.180	-5.029	12.760
1.00	-13.729	-106.971	115.408	-137.576	138.156	2.046	-11.136	7.055	12.760
2.85	-19.893	-84.276	290.818	-109.562	354.597	1.276	-35.474	-0.650	14.848
4.70	-30.851	-54.580	419.075	-93.090	452.443	0.463	-64.300	-11.993	17.052
4.70	-17.807	-32.080	176.937	-92.916	452.327	3.521	-64.416	10.052	17.052
7.05	-24.163	-29.027	244.720	-61.016	606.998	1.624	-106.502	-0.221	19.720
9.40	-36.897	-26.243	311.279	-50.402	536.528	-0.404	-106.502	-0.221	19.720

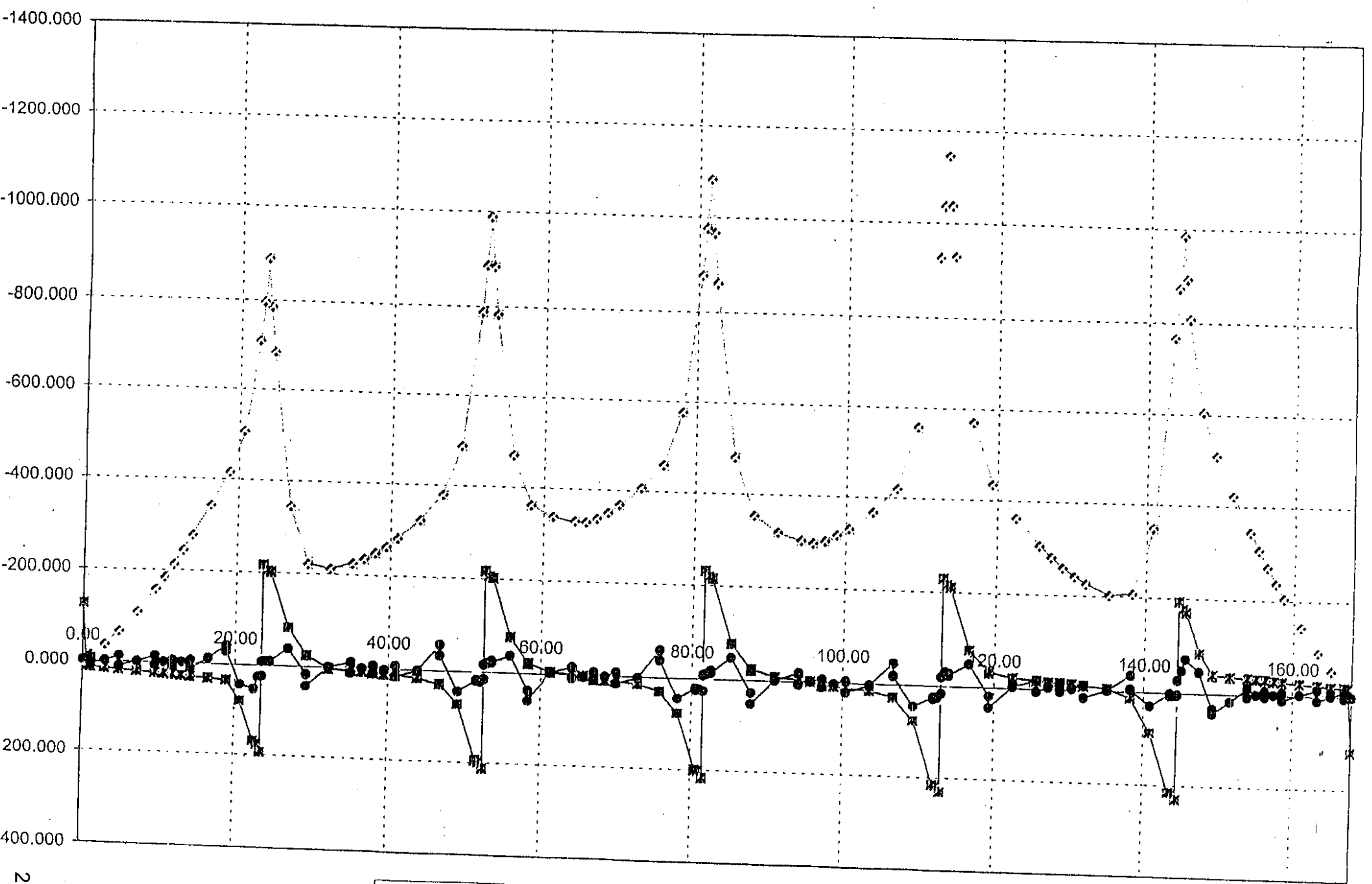
(1)	9.40	-50.283	12.122	78.753	-46.516	514.999	0.120	-156.119	5.340	22.388	112.00	-180.732	75.112	-496.715	-15.312	-43.522	72.065	-925.491	28.808	215.238
(2)	10.58	-53.044	13.514	62.785	-31.900	441.714	-7.974	-182.598	0.204	23.780	112.50	-180.946	75.692	-534.268	-14.732	-39.114	68.881	-1034.183	25.984	216.688
(3)	11.75	-58.181	14.906	48.981	-29.638	469.295	-13.111	-210.349	-4.933	25.172	113.00	-183.407	75.887	-571.637	-14.152	-32.471	63.531	-1145.137	16.374	231.188
(1)	11.75	-70.440	22.378	48.981	-30.682	380.555	14.887	-210.349	7.579	25.172	113.00	-198.718	-166.605	-570.979	-248.356	-1059.703	49.514	-1145.137	-18.346	-228.172
(1)	12.93	-75.769	23.654	20.164	-16.356	284.788	2.538	-240.692	-0.768	26.448	113.50	-198.932	-160.805	-487.821	-240.816	-909.309	41.470	-1035.111	-28.130	-214.716
(1)	14.10	-81.227	25.046	-9.296	-14.964	304.597	-2.598	-272.561	-5.904	27.840	114.00	-201.008	-145.920	-413.152	-235.190	-794.933	41.256	-928.391	-25.734	-209.786
(2)	14.10	-100.817	38.450	-8.252	-19.024	221.077	41.792	-272.561	12.001	27.956	114.00	-184.323	-148.043	-412.275	-230.840	-795.049	35.492	-928.507	-21.928	-208.742
(3)	16.45	-105.312	40.849	-104.088	-0.928	71.669	21.080	-340.226	-11.370	30.740	116.65	-185.800	-116.839	-60.434	-194.416	-257.157	35.206	-568.617	-46.748	-76.444
(1)	18.80	-118.367	43.517	-201.140	1.740	71.834	8.024	-414.744	-40.220	33.408	119.30	-197.122	-77.092	195.227	-167.272	113.448	44.359	-433.250	18.742	-29.454
(2)	18.80	-129.117	52.786	-203.006	-4.466	16.212	58.637	-414.860	-26.966	33.292	119.30	-129.244	-102.450	190.132	-157.049	8.526	1.428	-433.956	43.469	-31.595
(3)	20.65	-131.856	54.220	-301.650	1.914	-34.855	45.284	-506.865	42.804	77.256	122.45	-131.256	-56.630	438.811	-113.839	401.476	0.928	-360.992	-3.197	-20.960
(1)	22.50	-143.157	56.308	-404.342	4.002	-37.559	-34.369	-711.098	50.212	168.780	125.60	-144.332	-11.585	553.124	-97.367	486.416	10.911	-302.252	-17.108	-17.364
(2)	22.50	-141.628	56.534	-400.485	0.000	-37.987	52.222	-711.141	51.254	169.824	125.60	-79.005	-37.716	582.023	-89.320	315.426	-41.968	-302.796	6.123	-15.892
(3)	23.00	-142.227	56.729	-428.308	0.580	-41.445	49.038	-798.330	24.940	177.712	127.18	-80.011	-19.156	628.403	-68.324	407.594	-42.653	-278.588	-3.936	-14.036
(1)	23.50	-144.368	57.309	-457.060	1.160	-41.592	46.898	-889.680	23.334	194.300	128.75	-87.116	-0.596	643.256	-64.554	375.441	-41.250	-256.838	-11.427	-12.180
(2)	23.50	-156.582	-157.228	-464.915	-231.072	-877.674	35.942	-889.680	-7.036	-216.282	130.33	-75.180	4.972	107.478	-47.154	232.413	-36.938	-256.838	4.510	-13.224
(3)	24.00	-157.181	-151.428	-386.572	-223.532	-766.125	34.858	-787.179	-7.946	-203.522	131.90	-82.607	6.828	95.852	-43.558	223.402	-53.208	-223.778	-9.187	-9.628
(1)	24.50	-159.321	-145.628	-313.144	-217.732	-658.187	35.688	-686.027	-9.030	-202.072	131.90	-111.094	32.538	209.416	-53.766	134.778	44.821	-223.662	15.842	-8.700
(2)	24.50	-146.626	-140.745	-318.364	-213.846	-659.231	32.115	-686.027	-8.079	-200.274	138.20	-127.659	48.161	-20.482	-19.140	31.502	2.290	-205.312	-32.924	13.572
(3)	26.90	-151.634	-112.135	-12.840	-181.656	-189.648	29.348	-343.986	-36.861	-82.128	140.85	-151.993	68.404	-195.119	-17.052	0.588	35.400	-348.220	30.054	89.958
(1)	29.30	-161.907	-75.595	209.480	-155.904	131.367	33.889	-219.168	16.630	-24.608	143.50	-162.993	79.145	-388.256	-13.920	41.616	21.061	-766.241	3.063	216.282
(2)	29.30	-109.104	-95.263	206.268	-147.436	131.324	19.917	-219.211	41.038	-23.896	144.00	-155.824	80.284	-426.155	-16.472	42.981	46.446	-766.241	6.710	215.412
(3)	32.20	-113.941	-52.538	421.917	-107.706	476.772	21.286	-209.720	0.433	3.132	144.50	-157.900	80.479	-466.485	-15.892	58.351	41.121	-986.989	4.716	232.406
(1)	35.10	-127.317	-18.898	525.526	-91.466	546.794	28.571	-222.761	-11.980	6.496	145.00	-170.554	-153.338	-471.705	-214.963	-864.493	43.134	-986.989	-25.770	-193.039
(2)	35.10	-74.532	-33.561	521.350	-82.418	462.963	-25.588	-222.761	10.458	5.626	145.00	-172.844	-141.352	-323.899	-200.753	-667.104	46.186	-807.174	-68.828	-170.129
(3)	36.55	-75.559	-16.936	556.149	-63.568	549.304	-27.100	-233.174	0.827	7.250	145.50	-160.098	-141.832	-320.389	-197.664	-667.061	40.268	-809.219	-68.830	-169.128
(1)	38.00	-82.193	0.464	569.684	-59.914	509.357	-25.611	-246.188	-5.166	8.990	147.35	-160.869	-112.136	-84.965	-173.188	-329.791	37.758	-606.277	-42.978	-82.534
(2)	38.00	-74.184	10.482	102.842	-58.870	361.246	-23.317	-246.188	9.602	9.860	149.20	-167.717	-89.442	100.953	-150.220	-97.907	43.905	-507.776	32.571	-38.412
(3)	39.45	-75.917	12.106	82.973	-41.064	293.164	-32.311	-260.166	3.182	11.484	151.55	-124.758	-63.715	300.192	-111.766	120.652	9.976	-420.751	16.763	-34.858
(1)	40.90	-82.231	13.846	61.113	-38.454	340.482	-38.688	-278.289	-6.021	13.224	153.90	-132.206	-36.329	414.159	-94.308	219.964	15.735	-341.808	-12.001	-32.190
(2)	40.90	-110.214	32.807	90.519	-44.660	260.415	22.891	-278.289	15.061	13.108	155.08	-88.148	-37.019	465.553	-74.603	211.190	-8.998	-341.487	6.405	-32.806
(3)	43.80	-113.317	35.786	-9.876	-16.936	110.048	0.212	-319.906	2.262	16.472	156.25	-91.572	-14.515	489.684	-66.889	178.088	-4.937	-268.175	-7.035	-30.138
(1)	46.70	-127.014	39.150	-117.578	-13.572	151.206	-15.412	-377.580	-54.051	29.617	156.25	-62.888	-23.490	489.684	-68.556	76.820	-17.060	-268.001	4.759	-29.406
(2)	46.70	-149.497	56.556	-122.572	-20.938	45.240	69.962	-377.580	-31.707	27.645	157.43	-63.401	-10.614	509.752	-54.636	149.262	-17.574	-233.986	-0.378	-28.014
(3)	49.10	-151.937	58.570	-261.032	-10.846	2.213	49.171	-486.141	43.659	70.760	158.60	-66.933	3.190	511.078	-49.706	6.887	-11.650	-203.295	-5.514	-26.738
(1)	51.50	-162.852	61.033	-406.007	-8.062	24.164	35.688	-787.335	17.576	196.214	160.95	-32.662	-1.682	266.921	-31.262	-75.204	-1.256	-142.020	-1.577	-23.954
(2)	51.50	-159.067	63.104	-402.942	-11.136	25.208	57.916	-787.335	19.180	196.098	163.30	-21.353	8.093	50.213	-28.594	-7.402	11.739	-88.834	10.695	-21.286
(3)	52.00	-159.281	63.299	-433.771	-10.556	29.268	55.776	-885.935	20.706	200.158	165.15	-22.124	10.181	32.586	-20.242	-46.632	0.824	-50.808	-0.220	-19.198
(1)	52.50	-161.742	63.558	-465.651	-9.976	34.751	53.636	-988.653	15.446	212.744	167.00	-24.799	11.679	8.141	-18.038	-12.354	-7.309	-17.574	-8.353	-16.994
(2)	52.50	-175.276	-154.313	-467.082	-233.044	-923.229	39.886	-988.653	-15.098	-216.688	167.50	-4.335	7.914	4.545	-17.030	-7.076	2.889	-7.076	2.889	-17.030
(3)	53.00	-175.811	-148.513	-390.131	-225.504	-809.491	38.802	-883.093	-18.618	-204.972	0.000	-1.044	1.533	1.533	-1.044	1.533	0.000	1.148	0.000	1.874
(1)	53.50	-177.951	-142.713	-317.140	-220.748	-700.509	39.632	-782.637	-23.182	-201.782	0.000	-1.044	1.712	-1.044	1.712	0.000	0.942	0.000	0.000	-0.659
(2)	53.50	-162.006	-137.218	-320.823	-216.746	-704.801	34.841	-782.753	-19.795	-201.782	0.000	-1.044	3.621	-1.044	4.665	0.000	-0.329	0.000	1.044	1.044
(3)	55.90	-163.354	-109.378	-21.875	-184.556	-227.345	32.074	-468.857	-35.753	-75.632	0.000	-1.044	7.038	-4.002	4.950	0.000	3.794	0.000	-3.232	3.018
(1)	58.30	-174.269	-72.067	193.043	-158.804	98.325	36.615	-359.991	36.787	-19.604	0.000	-1.044	6.090	30.228	-6.090	13.002	1.044	9.920	1.044	-4.164
(2)	58.30	-120.678	-91.667	193.707	-150.452	39.034	7.157	-359.948	58.784	-20.822	-1.044	6.090	22.224	-6.090	21.180	1.044	11.083	0.000	4.109	4.109
(3)	61.20	-121.920	-49.327	393.112	-110.722	393.371	8.526	-337.292	-2.892	-3.886	0.000	10.092	27.607	-12.180	-0.407	0.000	-3.810	0.000	-9.548	2.632
(1)	64.10	-134.847	-6.987	477.780	-92.568	473.063	14.941	-328.244	6.821	-2.436	0.000	10.092	13.218	-12.180	18.612	0.000	9.670	0.000	0.000	14.812
(2)	64.10	-81.760	-32.786	433.526	-87.522	410.191	-26.119	-328.128	6.821	-2.436	0.000	1.218	4.406	-8.178	-3.170	0.000	-12.093	0.000	0.000	14.812
(3)	65.55	-82.680	-16.546	469.587	-66.758	497.133	-26.719	-326.620	3.708	1.798	0.000	1.218	1.259	-8.178	11.789	0.000	-5.096	0.000	-6.316	1.862
(1)	67.00	-89.037	1.239	476.383	-63.974	466.494	-25.273	-335.298	-8.193	8.758	0.000	1.218	-0.292	-8.178	26.062	0.000	-11.067	0.000	0.000	10.040
(2)	67.00	-80.056	12.897	64.351	-62.930	302.174	-26.507	-335.298	8.567	7.888	0.000	-1.914	2.817	-13.224	-3.539	0.000	-6.557	0.000	-10.206	3.018
(3)	68.45	-81.404	14.521	41.503	-44.254	229.042	-34.631	-348.290	2.146	9.512	-1.044	-1.914	7.646	-13.224						

108(1)	0.000	3.654	28.269	-20.358	-11.751	0.000	-16.310	0.000	-17.340	)	-1.044	0.000	4.757	-7.134	4.314	0.000	3.159	0.000	-6.364
108(2)	0.000	3.654	22.438	-20.358	22.438	0.000	11.233	0.000	3.018	)	-1.044	0.000	5.728	-7.134	16.257	0.000	8.408	0.000	4.494
108(3)	0.000	3.654	17.481	-20.358	56.283	0.000	-25.748	0.000	23.055	)	-1.044	0.000	5.801	-7.134	28.848	0.000	-7.435	0.000	7.904
109(1)	0.000	1.914	11.272	-15.312	-8.664	0.000	-12.067	0.000	-13.450	)	0.000	0.000	3.065	-2.088	1.585	0.000	1.200	-0.000	-2.088
109(2)	0.000	1.914	7.825	-15.312	14.759	0.000	7.616	0.000	1.862	)	0.000	0.000	2.611	-2.088	4.922	0.000	2.675	0.000	1.156
109(3)	0.000	1.914	5.704	-15.312	37.968	0.000	-17.396	0.000	16.853	)	0.000	0.000	0.977	-2.088	9.763	0.000	-2.203	0.000	2.088
110(1)	0.000	-2.610	0.839	-22.272	-11.751	0.000	-16.310	0.000	-19.254	)	0.000	2.958	10.208	-6.090	2.862	0.000	2.092	0.000	-5.705
110(2)	0.000	-2.610	4.203	-22.272	22.438	0.000	11.233	0.000	3.018	)	0.000	2.958	5.754	-6.090	12.191	0.000	6.203	0.000	3.018
110(3)	0.000	-2.610	6.755	-22.272	57.327	0.000	-25.748	0.000	24.969	)	0.000	2.958	2.900	-6.090	20.262	0.000	-6.191	0.000	6.475
111(1)	-1.044	-12.876	-13.275	-19.140	-2.737	-1.044	-6.204	-1.044	-17.214	)	-1.044	8.004	34.895	-13.224	1.661	1.044	-0.265	1.044	-11.683
111(2)	-1.044	-12.876	4.863	-19.140	26.950	-1.044	14.140	0.000	5.265	)	-1.044	8.004	22.224	-13.224	21.180	1.044	11.083	0.000	4.880
111(3)	-1.044	-12.876	24.657	-19.140	57.119	-1.044	-20.971	1.044	21.451	)	-1.044	8.004	8.795	-13.224	42.203	1.044	-14.198	-1.044	14.765
112(1)	0.000	-1.914	5.035	-6.090	4.065	0.000	2.910	0.000	-4.934	)	0.000	1.914	21.691	-14.268	-3.539	0.000	-7.601	0.000	-10.206
112(2)	0.000	-1.914	8.869	-6.090	14.759	0.000	7.616	0.000	3.788	)	0.000	1.914	17.970	-14.268	17.970	0.000	9.349	0.000	3.018
112(3)	0.000	-1.914	12.169	-6.090	24.597	0.000	-6.593	0.000	7.246	)	0.000	1.914	14.035	-14.268	40.135	0.000	-16.654	0.000	16.242
113(1)	0.000	0.000	3.719	-2.088	1.469	0.000	1.084	0.000	-1.703	)	0.000	-1.218	9.648	-9.048	-3.054	0.000	-6.024	0.000	-7.186
113(2)	0.000	0.000	2.739	-2.088	4.280	0.000	2.354	0.000	1.156	)	0.000	-1.218	11.789	-9.048	11.789	0.000	6.524	0.000	1.862
113(3)	0.000	0.000	3.719	-2.088	7.733	0.000	-2.319	0.000	2.473	)	0.000	-1.218	14.346	-9.048	26.178	0.000	-11.995	0.000	10.910
114(1)	0.000	1.914	13.373	-6.090	4.065	0.000	2.910	0.000	-4.934	)	0.000	-10.092	-6.217	-12.180	-1.451	0.000	-4.854	0.000	-9.548
114(2)	0.000	1.914	10.136	-6.090	14.759	0.000	7.616	0.000	3.788	)	0.000	-10.092	9.623	-12.180	18.612	0.000	9.670	0.000	2.632
114(3)	0.000	1.914	8.327	-6.090	24.597	0.000	-6.593	0.000	6.860	)	0.000	-10.092	26.147	-12.180	37.177	0.000	-13.137	0.000	14.812
115(1)	-1.044	11.136	43.025	-19.140	-2.737	1.044	-6.204	1.044	-17.214	)	-1.044	-6.090	-5.974	-6.090	11.088	-1.044	8.006	-1.044	-4.164
115(2)	-1.044	11.136	26.950	-19.140	26.950	1.044	13.819	0.000	5.265	)	-1.044	-6.090	4.118	-6.090	21.180	-1.044	11.083	0.000	4.109
115(3)	-1.044	11.136	10.487	-19.140	57.119	1.044	-20.971	-1.044	21.451	)	0.000	4.002	7.190	-5.046	4.834	0.000	3.678	0.000	-3.232
116(1)	0.000	2.610	25.363	-22.272	-13.437	0.000	-17.675	0.000	-19.254	)	0.000	4.002	1.259	-5.046	12.833	0.000	6.524	0.000	3.018
116(2)	0.000	2.610	20.897	-22.272	22.438	0.000	11.233	0.000	3.018	)	0.000	4.002	-2.902	-5.046	18.058	0.000	-3.834	0.000	4.772
116(3)	0.000	2.610	15.619	-22.272	56.685	0.000	-26.792	0.000	24.969	)	0.000	1.044	2.418	-1.044	0.489	0.000	0.104	0.000	-0.659
117(1)	0.000	1.044	8.232	-15.312	-10.029	0.000	-13.111	0.000	-13.450	)	0.000	1.044	0.171	-1.044	1.712	0.000	0.942	0.000	0.770
117(2)	0.000	1.044	8.595	-15.312	14.759	0.000	7.616	0.000	1.862	)	0.000	1.044	-0.714	-1.044	4.665	0.000	-1.373	0.000	1.044
117(3)	0.000	1.044	7.188	-15.312	38.691	0.000	-18.761	0.000	16.853	)	0.000	383.777	29.058	7.018	0.348	0.000	0.348	0.000	7.018
118(1)	0.000	-2.610	-0.073	-22.272	-13.865	0.000	-17.718	0.000	-19.254	)	0.000	383.777	14.885	7.018	1.276	0.000	1.276	0.000	7.018
118(2)	0.000	-2.610	4.435	-22.272	22.670	0.000	11.465	0.000	3.018	)	0.000	383.777	0.000	7.018	0.000	0.000	0.000	0.000	177.247
118(3)	0.000	-2.610	7.583	-22.272	58.171	0.000	-27.220	0.000	24.969	)	0.000	187.412	13.462	-10.614	-0.696	0.000	-0.696	0.000	-10.614
119(1)	-1.044	-8.004	-8.403	-20.184	-4.972	-1.044	-9.483	-1.044	-18.258	)	0.000	187.412	7.577	-10.614	-0.812	0.000	-0.812	0.000	-10.614
119(2)	-1.044	-8.004	4.863	-20.184	26.950	-1.044	13.819	0.000	5.650	)	0.000	187.412	0.000	-10.614	0.000	0.000	0.000	0.000	152.271
119(3)	-1.044	-8.004	18.915	-20.184	58.886	-1.044	-23.929	1.044	21.725	)	0.000	226.530	17.516	-11.078	-0.580	0.000	-0.580	0.000	-11.078
20(1)	0.000	-2.958	3.606	-7.134	3.021	0.000	1.480	0.000	-6.364	)	0.000	226.530	8.236	-11.078	-0.812	0.000	-0.812	0.000	-11.078
20(2)	0.000	-2.958	8.869	-7.134	14.759	0.000	7.616	0.000	3.788	)	0.000	226.530	0.000	-11.078	0.000	0.000	0.000	0.000	194.626
20(3)	0.000	-2.958	13.698	-7.134	27.555	0.000	-7.252	0.000	7.904	)	0.000	282.036	20.605	2.595	0.696	0.000	0.696	0.000	2.595
21(1)	0.000	0.000	2.791	-2.088	1.585	0.000	1.200	0.000	-1.703	)	0.000	282.036	10.055	2.595	0.348	0.000	0.348	0.000	2.595
21(2)	0.000	0.000	2.739	-2.088	4.280	0.000	2.354	0.000	1.156	)	0.000	282.036	0.000	2.595	0.000	0.000	0.000	0.000	186.614
21(3)	0.000	0.000	3.835	-2.088	8.893	0.000	-2.203	0.000	2.473	)	0.000	247.187	17.854	5.235	0.464	0.000	0.464	0.000	5.235
22(1)	-1.044	0.000	11.544	-8.178	4.198	0.000	2.657	0.000	-5.978	)	0.000	247.187	8.895	5.235	0.232	0.000	0.232	0.000	5.235
22(2)	-1.044	0.000	10.222	-8.178	15.615	0.000	8.087	0.000	4.173	)	0.000	247.187	0.000	5.235	0.000	0.000	0.000	0.000	235.898
22(3)	-1.044	0.000	9.456	-8.178	27.862	0.000	-7.166	0.000	8.290	)	0.000	157.896	11.198	7.018	0.348	0.000	0.348	0.000	7.018
23(1)	-1.044	10.092	44.237	-21.228	-4.309	1.044	-8.161	1.044	-18.917	)	0.000	157.896	5.937	7.018	1.276	0.000	1.276	0.000	7.018
23(2)	-1.044	10.092	28.662	-21.228	29.305	1.044	15.082	0.000	5.650	)	0.000	190.834	14.937	-10.614	-0.696	0.000	-0.696	0.000	-10.614
23(3)	-1.044	10.092	13.961	-21.228	63.551	1.044	-23.699	-1.044	23.539	)	0.000	190.834	6.707	-10.614	-0.812	0.000	-0.812	0.000	-10.614
24(1)	0.000	2.784	29.348	-25.404	-15.718	0.000	-21.047	0.000	-22.772	)	0.000	190.834	0.000	-10.614	0.000	0.000	0.000	0.000	269.838
24(2)	0.000	2.784	24.382	-25.404	24.382	0.000	12.406	0.000	2.632	)	0.000	229.128	16.920	-11.078	-0.580	0.000	-0.580	0.000	-11.078
24(3)	0.000	2.784	19.430	-25.404	64.496	0.000	-29.779	0.000	27.715	)	0.000	229.128	8.025	-11.078	-0.812	0.000	-0.812	0.000	-11.078
25(1)	0.000	1.044	10.001	-17.400	-12.426	0.000	-16.599	0.000	-15.859	)	0.000	229.128	0.000	-11.078	0.000	0.000	0.000	0.000	242.938
25(2)	0.000	1.044	10.496	-17.400	15.615	0.000	8.087	0.000	1.541	)	0.000	182.494	14.067	2.980	0.696	0.000	0.696	0.000	2.980
25(3)	0.000	1.044	10.001	-17.400	43.254	0.000	-21.543	0.000	18.941	)	0.000	182.494	0.000	2.980	0.348	0.000	0.348	0.000	2.980
26(1)	0.000	-0.696	0.968	-25.404	-15.513	0.000	-20.842	0.000	-22.386	)	0.000	297.136	22.572	4.850	0.464	0.000	0.464	0.000	4.850
26(2)	0.000	-0.696	4.607	-25.404	24.382	0.000	12.406	0.000	3.018	)	0.000	297.136	10.883	4.850	0.232	0.000	0.232	0.000	4.850
26(3)	0.000	-0.696	7.754	-25.404	65.571	0.000	-29.895	0.000	28.101	)	0.000	297.136	0.000	4.850	0.000	0.000	0.000	0.000	299.416
27(1)	-1.044	-4.872	-1.751	-22.272	-6.513	-1.044	-10.365	-1.044	-20.346	)									
27(2)	-1.044	-4.872	6.079	-22.272	29.305	-1.044	15.082	0.000	5.650	)									
27(3)	-1.044	-4.872	11.821	-22.272	64.479	-1.044	-26.288	1.044	24.583	)									
28(1)	-1.044	-1.044	5.823	-8.178	2.538	0.000	0.997	0.000	-7.408	)									
28(2)	-1.044	-1.044	8.955	-8.178	15.615	0.000	8.087	0.000	4.173	)									

Hip E. M Qcon Tcon

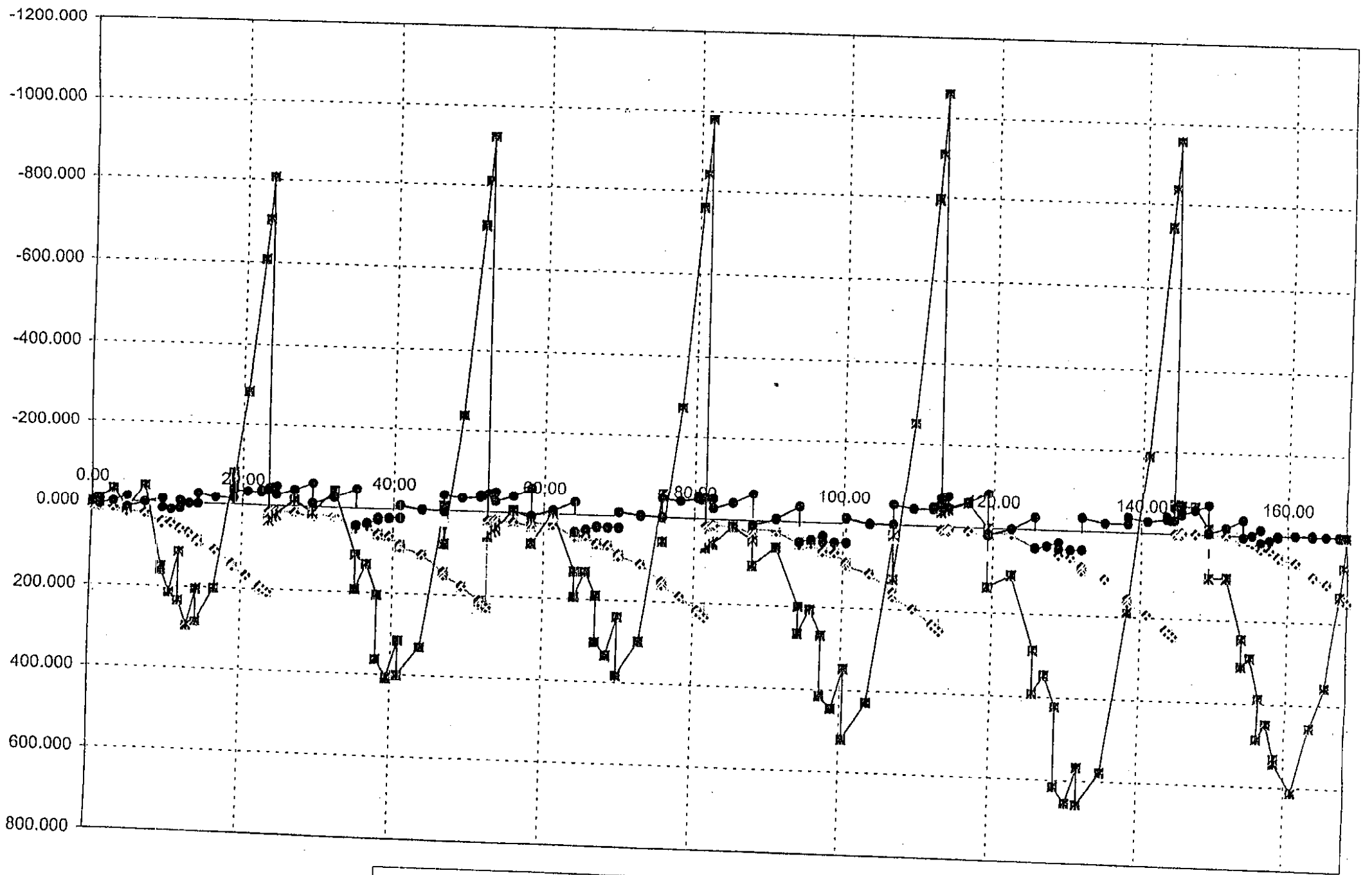


Hip E. M Qcon Tcon

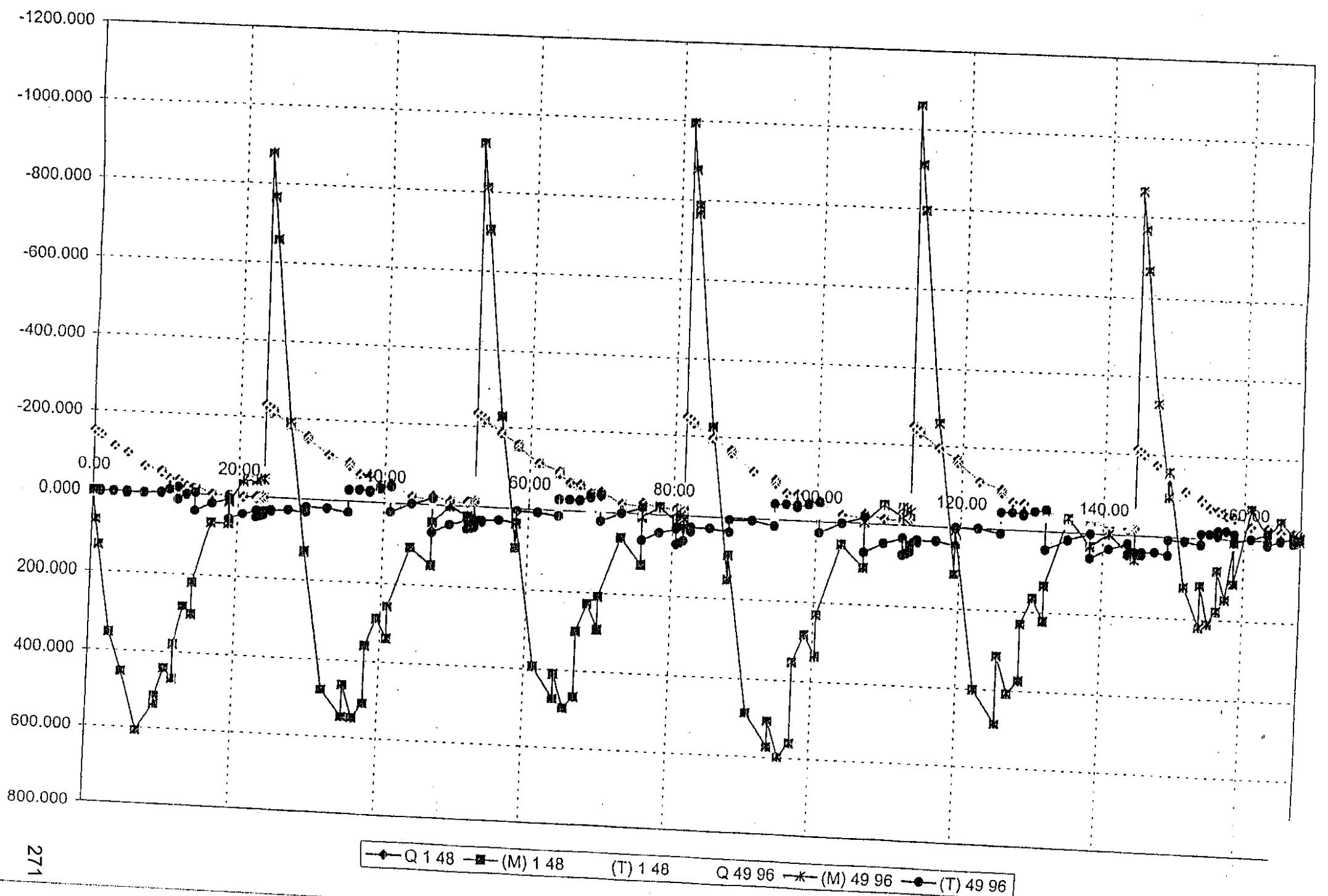


—●— M 1 48 —■— (Q) 1 48 (T) 1 48 M 49 96 —*— (Q) 49 96 —●— (T) 49 96

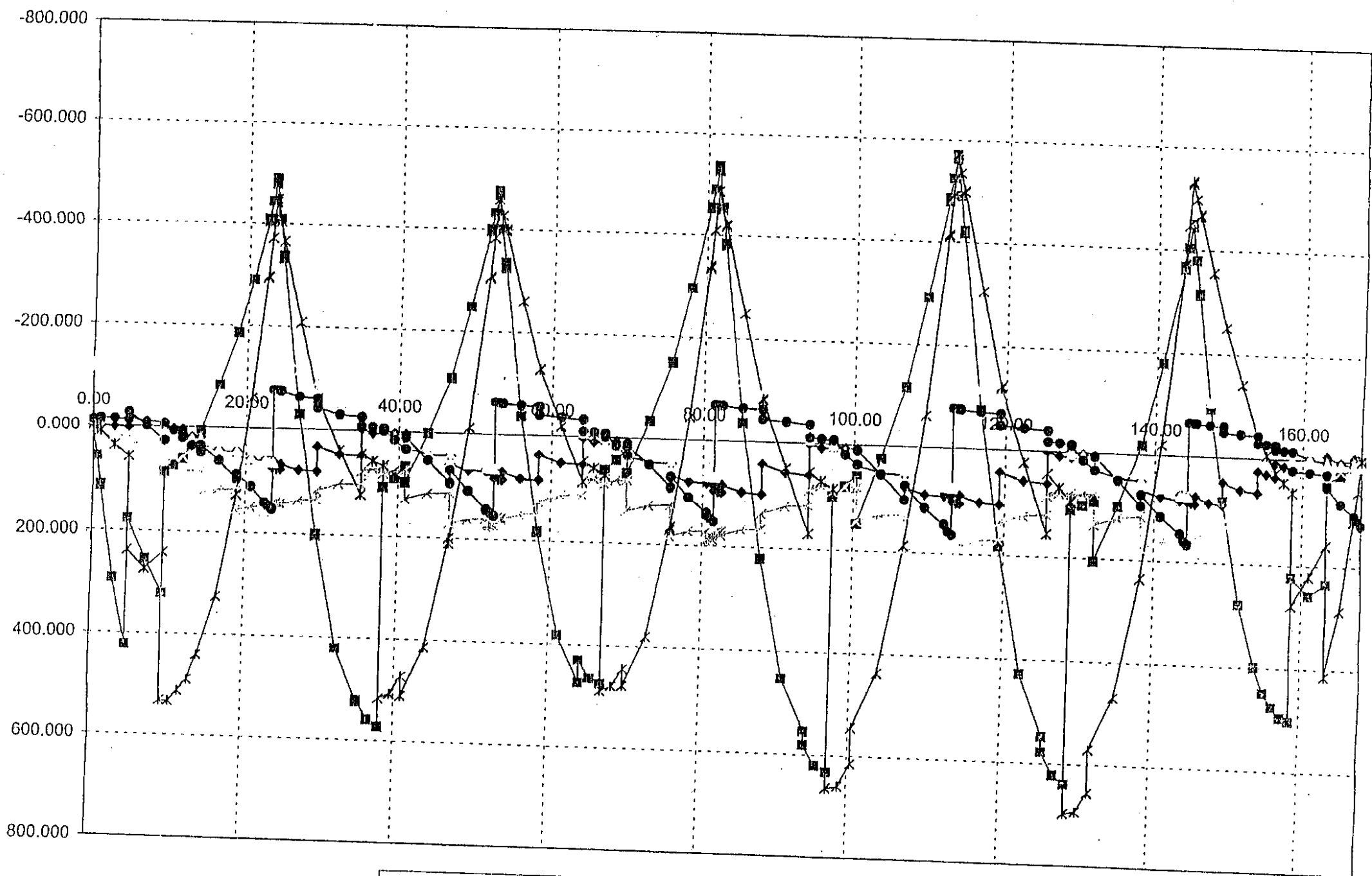
Hip E. Q Mcon Tcon



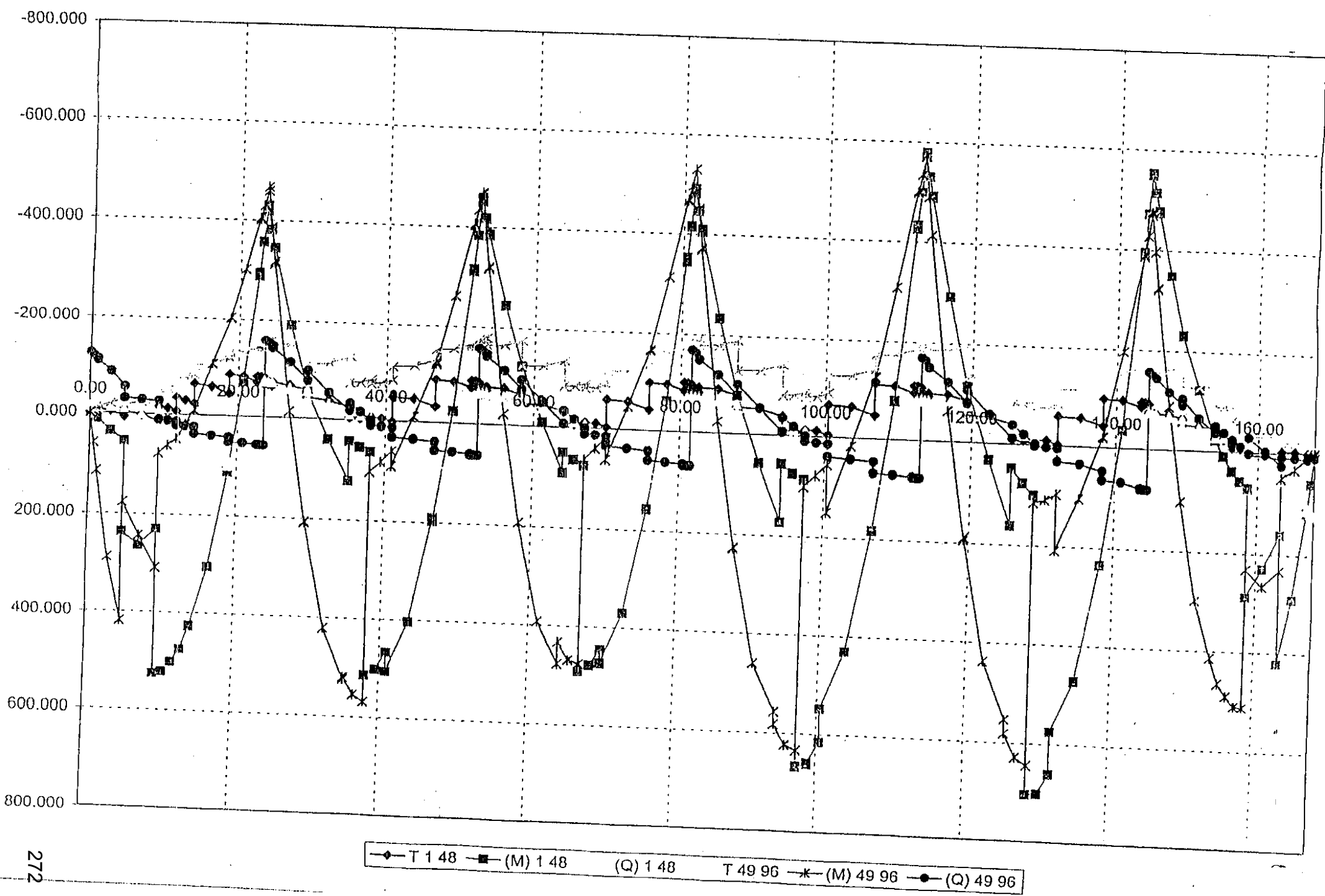
Hip E. Q Mcon Icon



Hip E. T Mcon Qcon

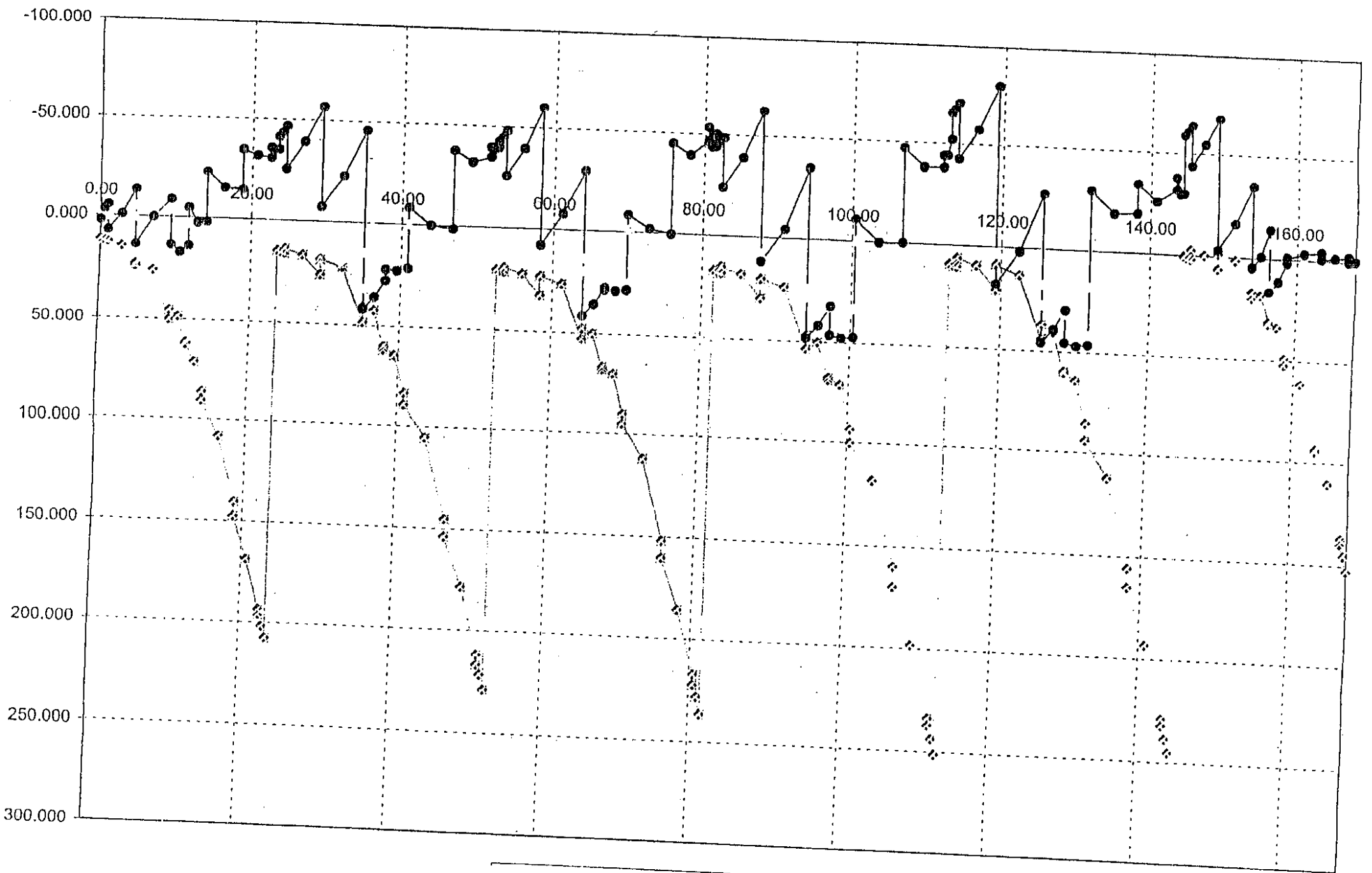


Hip E. I Mcon Qcon



—◆— T 1 48 —■— (M) 1 48 —×— (Q) 1 48 —●— T 49 96 —*— (M) 49 96 —+— (Q) 49 96

Hip E. Q Mcon Tcon



Hip E. Q Mcon Icon

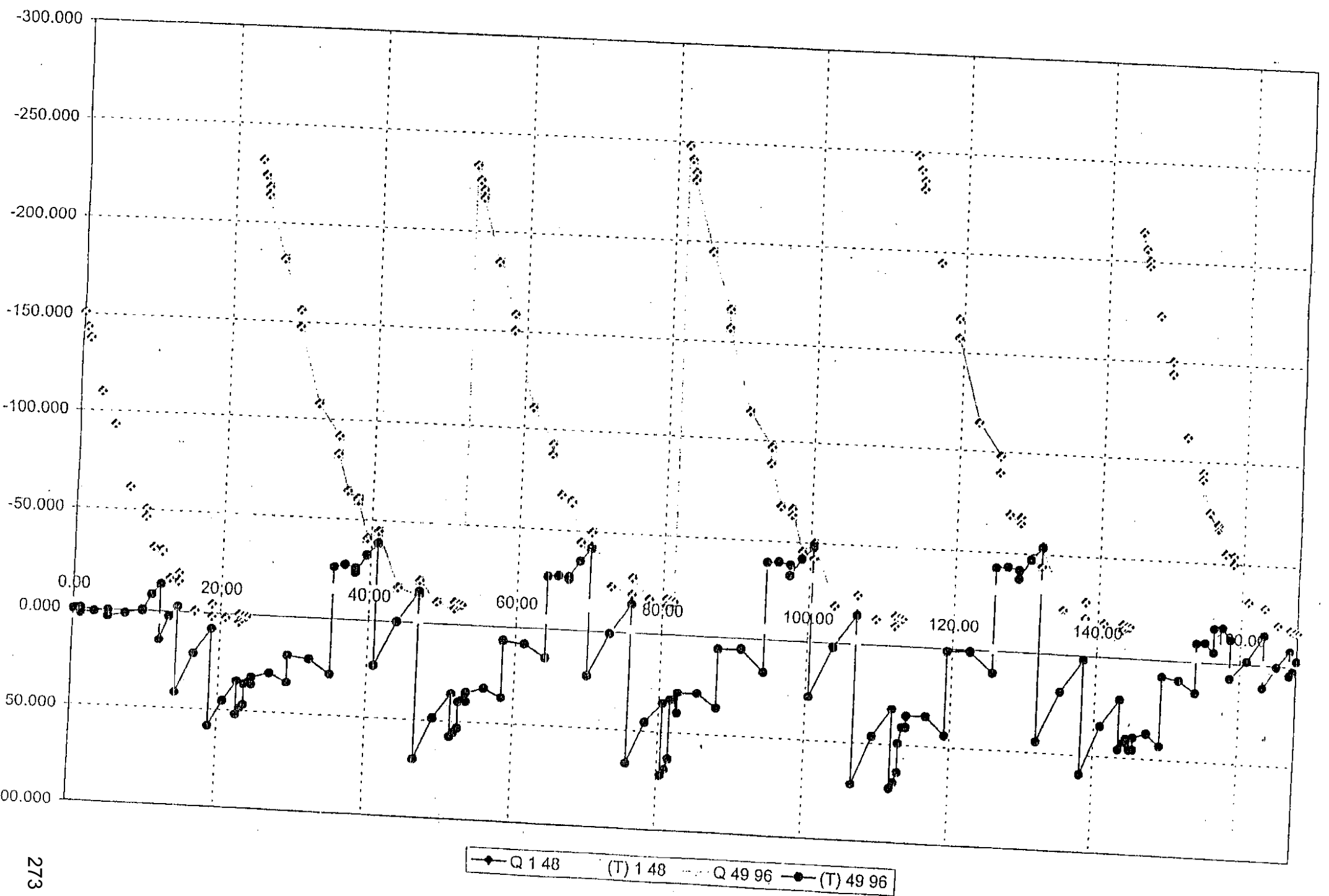


рис. 1 Мсн Qcon

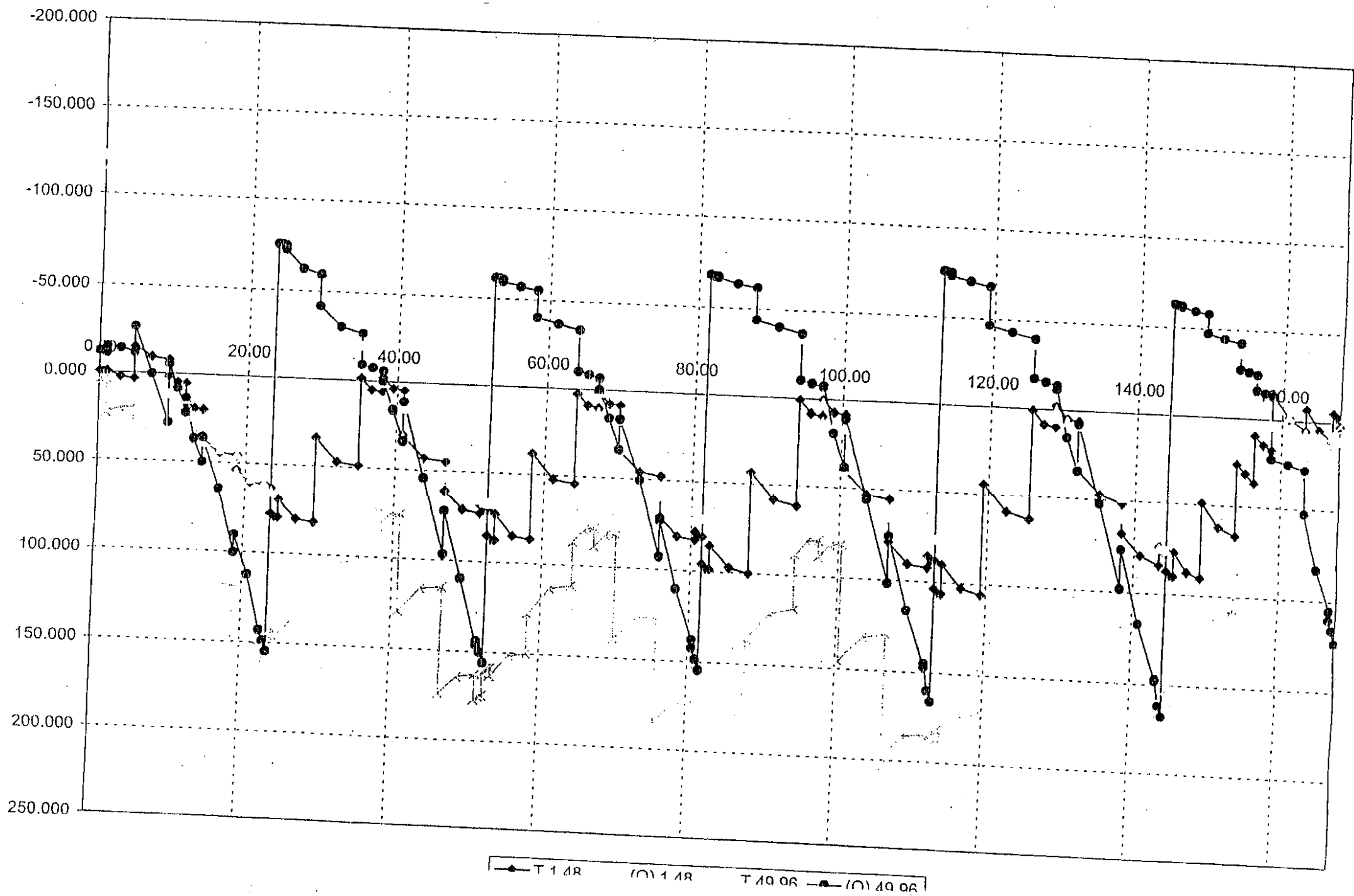
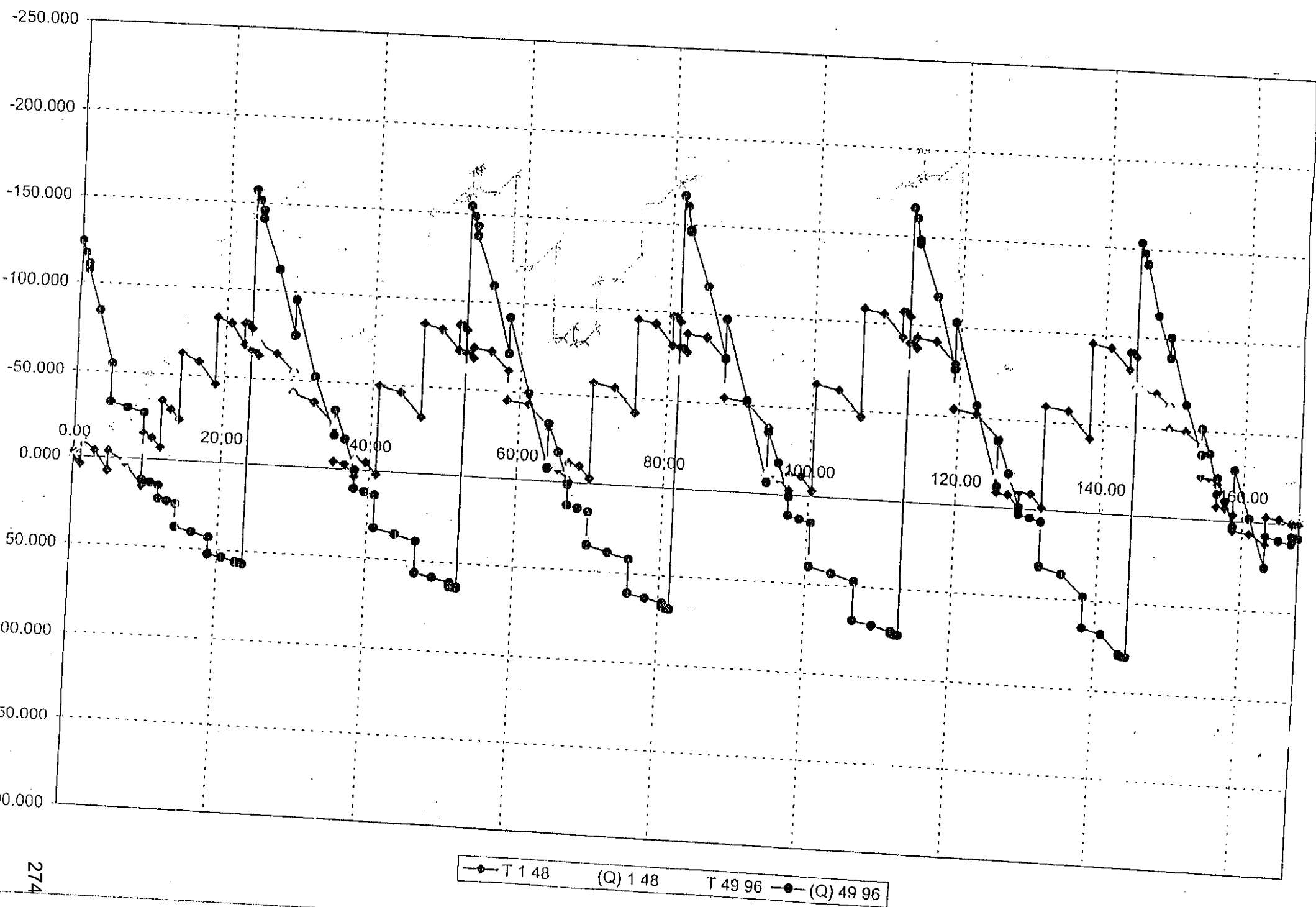


рис. 1 Мсн Qcon



HIPOTESIS: F

Eje 1 (49-96) ripado +30cm; Eje 2 (1-48) ripado -30cm

Envolvente IPF75B positiva

Coef impacto 1.16

ARRA

X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
0.00	3.562	-122.841	0.000	11.600	0.000	0.128	0.000	-1.960	-13.804
0.50	3.434	-116.811	60.261	12.180	-5.916	0.000	72.906	-1.730	-143.202
1.00	3.306	-111.011	116.811	12.760	-6.960	-0.128	142.332	-3.012	-137.402
1.00	17.672	-107.239	116.228	12.760	-6.960	-0.815	142.332	2.185	-136.532
2.85	15.865	-84.662	292.740	14.848	-31.752	-1.276	359.344	-2.430	-106.952
4.70	15.377	-54.966	422.410	24.360	16.678	-0.719	537.056	-9.223	-84.912
4.70	21.057	-32.016	179.499	23.316	16.562	-3.097	536.940	1.928	-84.912
7.05	17.711	-29.348	248.529	25.984	-41.637	-3.712	689.571	-4.224	-49.532
9.40	16.930	-26.564	314.961	50.344	150.807	-5.172	774.117	-12.043	-21.692
9.40	44.784	12.122	81.971	45.356	159.549	-13.013	774.117	-2.399	-21.808
10.58	42.900	13.514	66.609	48.662	213.797	-20.092	782.429	-5.476	0.812
11.75	42.592	14.906	52.805	62.582	115.237	-20.558	775.741	-8.552	11.078
11.75	64.860	23.084	52.805	61.538	232.687	5.949	774.697	-4.143	11.078
12.93	62.745	24.129	24.307	71.166	293.871	-6.706	753.057	-9.142	33.582
14.10	62.437	25.521	-5.795	86.652	203.025	-9.782	707.103	-12.218	50.112
14.10	97.566	39.323	-4.751	90.944	283.065	26.972	707.103	-3.534	50.228
16.45	93.105	41.453	-100.790	108.518	199.951	12.120	562.101	-17.532	75.458
18.80	92.323	44.121	-199.439	140.592	-81.587	2.561	340.302	-41.770	109.098
18.80	121.473	53.866	-200.830	147.610	-51.601	35.807	340.186	-38.134	108.982
20.65	117.372	55.417	-302.880	168.780	-286.230	27.456	166.067	25.752	71.688
22.50	116.718	57.505	-407.841	194.010	-609.778	19.179	60.946	27.379	20.532
22.50	125.953	58.670	-405.860	196.272	-610.566	31.318	60.971	25.648	19.488
23.00	124.901	59.019	-435.744	202.072	-707.624	28.992	50.970	-0.580	17.980
23.50	124.581	59.599	-465.526	207.872	-809.570	27.710	43.836	-3.840	12.296
23.50	141.382	-158.809	-473.768	14.964	34.440	39.742	43.836	-5.150	4.524
24.00	140.331	-152.778	-395.229	15.544	26.345	39.614	43.049	-4.234	-0.116
24.50	140.203	-146.978	-320.464	16.124	22.053	40.530	41.889	-4.362	5.684
24.50	140.735	-141.697	-325.915	13.920	21.009	33.733	41.889	-3.851	6.612
26.90	134.467	-113.203	-18.061	16.704	-15.331	33.118	122.651	-25.854	-92.394
29.30	133.660	-76.663	207.278	25.752	14.513	39.811	371.448	17.317	-110.203
29.30	104.711	-95.815	204.519	18.560	14.539	20.869	370.604	28.345	-110.374
32.20	96.738	-53.244	421.968	21.924	-40.909	20.126	666.753	2.882	-80.214
35.10	95.803	-19.604	526.687	48.604	109.917	29.649	854.679	-4.553	-49.184
35.10	62.353	-33.407	522.511	40.600	193.206	-19.899	854.679	5.350	-48.314
36.55	58.354	-17.167	557.606	42.224	131.205	-20.284	906.897	-0.418	-21.634
38.00	57.803	0.233	571.607	62.060	204.601	-18.729	926.062	-3.137	-8.584
38.00	62.236	11.021	104.765	60.146	363.346	-17.771	926.062	1.568	-8.584
39.45	58.468	12.415	85.745	64.554	406.017	-22.430	922.698	-1.407	11.310
40.90	57.917	14.155	64.090	83.694	315.786	-25.380	887.531	-6.919	38.106
40.90	103.624	32.422	93.266	89.494	399.113	14.792	886.661	3.482	37.990
43.80	96.112	35.555	-6.523	105.734	330.518	-2.213	732.632	-4.183	69.890
46.70	95.177	38.919	-114.786	145.464	-11.310	-14.180	465.276	-38.536	101.037
46.70	139.625	56.915	-118.841	153.932	78.300	45.919	466.146	-29.602	102.197
49.10	133.780	59.238	-258.708	178.814	-237.562	31.406	220.542	17.832	95.642
51.50	132.780	62.022	-405.469	211.874	-702.124	25.070	118.230	-2.620	-1.798
51.50	141.536	64.364	-404.437	216.804	-703.168	38.857	118.230	-2.134	-0.870
52.00	140.254	64.713	-436.435	221.560	-809.250	36.531	117.244	-2.262	4.930
52.50	139.934	65.293	-469.266	229.100	-920.164	36.120	117.186	-2.390	0.290
52.50	158.028	-155.378	-472.409	20.126	58.722	46.238	117.186	-2.830	10.730
53.00	156.554	-149.385	-395.061	20.706	47.528	46.110	113.300	-1.914	6.090
53.50	156.425	-143.585	-321.557	21.286	39.060	47.026	107.964	-2.042	11.890
53.50	153.553	-138.078	-326.322	19.198	42.076	39.185	107.848	-2.575	12.934
55.90	146.631	-110.046	-26.038	21.982	-4.730	38.570	186.148	-26.420	-86.072
58.30	145.785	-73.044	192.604	32.074	12.612	45.263	428.994	28.543	-106.256
58.30	115.485	-92.219	193.739	22.852	71.050	9.617	430.012	40.388	-106.082
61.20	106.897	-49.879	392.994	26.216	-1.018	8.874	719.920	4.075	-78.010
64.10	105.692	-7.308	479.501	53.070	135.224	17.527	897.052	-3.359	-46.980
64.10	71.270	-32.247	435.055	47.850	194.848	-18.712	897.168	5.127	-46.110
65.55	67.296	-16.007	471.129	50.344	135.108	-19.071	944.786	-0.385	-18.386
67.00	66.489	1.393	476.474	68.266	191.226	-17.542	960.828	-4.230	-6.380
67.00	70.019	13.051	66.442	66.526	304.016	-21.889	960.828	2.569	-5.335
68.45	66.020	14.675	43.635	70.064	336.052	-26.548	951.142	-1.276	13.514
69.90	65.661	16.415	20.142	90.074	241.511	-30.358	910.832	-6.788	41.354
69.90	110.345	35.804	66.318	95.120	383.844	15.793	911.760	2.743	41.354
72.80	102.987	36.938	-42.170	112.230	299.106	0.702	746.808	-4.692	73.254
75.70	101.859	42.302	-159.079	151.960	-57.130	-12.135	471.308	-39.668	101.500
75.70	152.120	61.264	-160.348	160.312	57.420	53.471	470.322	-29.967	102.544
78.10	145.852	63.586	-310.541	186.064	-272.484	38.958	223.416	18.966	85.492
80.50	145.044	66.370	-466.038	217.384	-758.292	38.895	123.888	-0.441	-5.858

VIADUCTO BORGES BLANQUES

80.50	155.293	69.059	-464.538	222.430	-759.220	55.026	124.004	-0.974	-5.858
81.00	153.819	69.408	-497.543	228.230	-840.884	44.001	126.034	-1.102	-0.058
81.50	153.691	69.988	-533.972	236.640	-979.354	46.886	126.124	-0.186	-4.698
81.50	173.061	-167.558	-535.944	16.820	68.704	48.674	126.124	-0.394	6.380
82.00	171.587	-161.758	-453.367	17.400	60.030	48.546	123.714	-0.522	1.740
82.50	171.459	-147.027	-378.396	17.980	54.346	48.418	122.206	-0.650	7.540
82.50	170.576	-147.860	-375.670	14.848	59.656	39.378	122.296	-1.338	8.584
85.15	163.500	-116.540	-26.100	17.980	16.240	38.686	212.164	-18.560	-101.036
87.80	161.796	-76.988	229.338	29.348	48.256	47.415	502.570	24.614	-122.032
87.80	124.005	-97.207	227.175	19.952	107.764	10.100	502.570	35.713	-119.944
90.95	115.032	-52.547	460.988	23.548	62.466	8.410	833.964	6.120	-90.248
94.10	113.161	-6.496	559.410	53.708	201.866	21.709	1034.860	-4.134	-46.168
94.10	71.349	-34.681	584.498	46.690	267.496	-27.223	1034.860	5.198	-46.052
95.68	66.696	-17.281	625.308	50.170	207.582	-27.607	1084.716	1.160	-24.128
97.25	66.055	1.279	635.886	69.252	270.686	-25.059	1100.840	-3.326	-3.132
97.25	69.650	11.893	102.576	67.686	415.802	-26.290	1100.840	4.114	-4.002
98.83	65.382	13.749	80.580	71.456	446.425	-32.455	1083.556	0.076	25.868
100.40	64.779	15.605	58.594	93.496	348.734	-36.326	1032.342	-4.025	46.864
100.40	118.453	40.154	153.094	100.340	522.870	18.702	1031.298	5.294	46.748
103.55	110.160	43.636	20.778	117.972	429.108	-1.599	827.724	-4.576	90.828
106.70	108.955	47.232	-120.124	160.022	26.240	-12.596	491.808	-30.004	122.612
106.70	163.482	68.800	-118.062	170.288	129.688	57.021	491.551	-18.303	124.700
109.35	156.214	71.240	-305.568	198.476	-248.738	37.911	187.424	33.524	111.998
112.00	155.355	74.256	-498.365	233.856	-795.620	28.452	70.496	1.363	-2.958
112.00	165.187	76.305	-497.396	237.162	-791.386	45.649	70.380	1.810	-2.958
112.50	163.713	76.885	-535.462	243.832	-907.734	44.367	71.656	1.682	2.842
113.00	163.585	77.235	-573.820	251.372	-1060.466	48.992	70.670	2.598	-1.798
113.00	183.302	-167.206	-574.978	8.990	-31.294	70.366	70.670	2.506	-5.104
113.50	182.020	-161.406	-491.655	9.570	-36.282	70.238	74.730	3.422	-9.744
114.00	181.699	-146.675	-416.706	10.150	-37.616	71.154	77.398	3.294	-3.944
114.00	179.037	-148.749	-416.679	6.148	-38.776	58.402	77.282	1.852	-2.900
116.65	171.769	-117.352	-63.545	9.164	-55.074	57.710	205.056	-18.154	-108.112
119.30	170.026	-77.915	194.025	20.648	1.044	65.395	511.485	21.418	-120.640
119.30	128.618	-102.227	189.665	8.494	140.070	5.286	511.038	31.256	-120.614
122.45	119.645	-56.407	437.726	13.076	110.722	3.596	829.690	4.145	-85.352
125.60	117.543	-11.516	553.356	43.990	288.441	14.981	1016.517	-3.317	-42.432
125.60	73.015	-37.407	582.555	36.830	391.476	-22.954	1016.658	8.186	-41.818
127.18	68.529	-18.847	628.172	40.426	347.079	-23.365	1060.539	2.161	-20.648
128.75	67.888	-0.287	643.488	60.552	422.190	-20.817	1068.543	-3.195	9.222
128.75	68.494	3.541	114.354	59.682	615.678	-21.038	1068.543	4.309	8.352
130.33	64.200	5.281	106.926	64.380	655.582	-27.228	1045.111	0.207	30.276
131.90	63.597	7.137	95.854	85.376	568.293	-31.099	985.893	-3.894	52.316
131.90	111.725	32.961	209.418	94.308	658.019	38.687	986.009	6.680	51.156
135.05	103.176	36.673	102.096	111.940	577.531	18.130	769.801	-3.639	94.192
138.20	100.420	48.738	-20.236	155.904	187.963	7.390	424.081	-24.506	124.932
138.20	146.944	64.525	-18.557	165.416	188.833	45.567	423.075	-11.460	124.817
140.85	139.869	67.541	-194.056	193.488	-188.341	27.327	134.773	7.350	96.048
143.50	136.818	78.911	-386.896	228.984	-746.383	23.959	56.505	4.727	-6.612
143.50	142.513	79.508	-387.195	232.116	-747.620	40.923	56.505	4.246	-5.568
144.00	141.232	80.088	-425.759	238.786	-838.545	31.637	58.129	4.118	0.232
144.50	140.873	80.438	-466.667	245.456	-957.928	30.355	60.391	-0.186	-5.452
144.50	157.687	-151.988	-471.887	0.554	-69.239	69.612	60.391	0.534	-11.800
145.00	156.405	-146.188	-397.483	1.134	-68.253	69.484	68.685	-17.342	-22.704
145.50	156.046	-140.157	-325.585	1.714	-65.269	70.400	81.935	-40.438	-22.124
145.50	153.677	-141.161	-323.341	-2.436	-65.295	61.535	81.909	-43.213	-23.142
147.35	147.140	-111.465	-88.850	-0.232	-63.671	61.074	187.585	-24.882	-68.962
149.20	145.499	-89.080	95.805	6.032	-13.791	65.807	361.588	42.465	-105.911
149.20	120.062	-100.319	95.945	-1.102	102.351	21.586	360.454	43.264	-107.185
151.55	112.243	-63.779	295.032	1.682	101.481	20.996	578.227	20.588	-73.486
153.90	109.551	-36.868	411.779	19.662	246.275	28.907	721.355	3.360	-49.416
153.90	81.549	-51.200	411.548	16.504	311.003	7.558	721.163	11.289	-48.628
155.08	78.280	-37.280	463.643	17.896	290.503	7.250	766.049	7.982	-33.142
156.25	75.114	-14.776	488.807	31.178	386.577	12.014	788.037	3.239	-10.638
156.25	57.205	-23.490	488.807	32.364	486.801	-6.304	786.993	10.466	-10.266
157.43	54.129	-10.614	508.875	33.756	449.101	-5.612	791.941	7.390	1.044
158.60	52.475	3.190	511.518	49.126	532.124	-2.918	783.305	4.313	23.548
158.60	33.555	-28.286	233.115	52.258	543.204	9.327	783.305	12.971	23.548
160.95	25.928	-1.490	267.026	61.828	613.152	4.475	697.368	5.152	50.344
163.30	22.121	26.004	236.455	94.772	455.779	-3.601	540.884	-1.000	86.768
163.30	25.377	8.349	51.307	93.902	457.016	8.967	541.928	8.967	85.724
165.15	18.840	10.437	33.494	110.258	357.918	2.430	362.964	2.430	106.604
167.00	15.122	12.179	8.834	137.344	137.808	-2.441	143.026	-2.441	137.344
167.00	6.254	8.344	8.924	139.002	138.712	3.012	142.888	3.012	139.002
167.50	4.972	8.924	5.084	144.802	72.790	1.730	72.790	1.730	144.802
168.00	1.960	8.504	0.000	152.342	0.000	-1.474	0.000	1.960	11.458
0.00	0.614	-13.047	0.000	11.600	0.000	-1.474	0.000	0.614	-13.804
0.50	0.742	-12.237	6.321	12.180	-5.916	1.730	72.906	0.000	-143.202
1.00	0.870	-11.657	12.237	12.760	-6.960	3.012	142.332	0.128	-137.402
1.00	5.644	-15.889	12.698	12.760	-6.960	-2.185	142.332	0.815	-136.532
2.85	7.451	-13.148	37.308	14.848	-31.982	2.430	359.574	1.276	-106.952
4.70	7.939	-10.944	58.750	24.360	16.448	8.179	537.286	1.763	-84.912
4.70	0.345	-26.274	240.399	23.316	16.139	-2.441	537.170	1.679	-84.912
7.05	3.691	0.406	268.713	25.984	-42.099	5.635	537.170	1.679	-84.912
9.40	4.472	28.000	28.000	25.984	-42.099	5.635	537.170	1.679	-84.912

27

VIADUCTO BORGES BLANQUES

1)	9.40	20.118	-5.452	529.325	45.356	160.203	13.090	774.771	2.476	-21.808
2)	10.58	22.002	8.468	526.317	48.662	214.259	17.400	782.891	2.784	0.812
3)	11.75	22.310	22.388	505.553	62.582	115.891	15.098	776.395	3.092	11.078
4)	11.75	39.714	14.210	505.553	61.538	233.341	-5.296	775.351	4.796	11.078
5)	12.93	41.829	36.483	479.665	71.166	294.563	2.668	753.749	5.104	33.582
6)	14.10	42.137	49.359	429.901	86.652	203.909	2.976	707.987	5.412	50.112
7)	14.10	65.820	36.713	430.945	90.944	283.949	-24.511	707.987	5.534	50.228
8)	16.45	70.281	63.899	310.024	108.518	200.835	-15.196	562.755	-2.849	75.881
9)	18.80	71.063	99.279	114.109	140.592	-80.665	-12.866	340.533	-5.913	109.098
10)	18.80	90.807	88.666	114.806	147.610	-50.679	-35.461	340.417	-9.626	108.982
11)	20.65	94.908	109.009	-68.676	168.780	-285.115	-31.494	164.952	-27.867	71.688
12)	22.50	95.562	139.633	-299.439	194.010	-608.432	-29.293	59.792	-18.803	20.532
13)	22.50	96.419	136.796	-294.326	195.272	-609.451	-35.740	60.049	-22.956	19.488
14)	23.00	97.471	142.365	-364.230	202.072	-706.278	-34.568	49.624	4.425	17.980
15)	23.50	97.791	148.165	-436.294	207.872	-808.416	-34.440	42.682	10.377	12.296
16)	23.50	81.164	-72.853	-426.788	14.964	33.094	-38.781	42.682	9.187	4.524
17)	24.00	82.215	-72.042	-389.661	15.544	25.230	-37.499	41.934	9.425	-0.116
18)	24.50	82.343	-71.462	-353.176	16.124	20.938	-37.261	40.774	10.707	5.684
19)	24.50	75.895	-71.227	-353.407	13.920	20.087	-37.732	40.774	2.736	6.612
20)	26.90	82.163	-59.089	-195.889	16.704	-16.215	-29.657	121.959	33.775	-92.394
21)	29.30	82.970	-56.305	-55.984	25.752	13.398	-30.813	371.679	19.291	-111.125
22)	29.30	46.843	-42.223	-55.959	18.560	13.655	-27.945	370.834	14.992	-110.374
23)	32.20	54.816	-29.928	40.560	21.924	-41.601	-18.588	667.445	-3.074	-80.214
24)	35.10	55.751	-26.564	122.311	48.604	109.263	-21.419	855.333	-2.331	-49.184
25)	35.10	15.947	-9.743	44.533	40.600	193.244	-14.094	855.333	-1.313	-48.314
26)	36.55	19.946	-8.119	55.616	42.224	131.667	-10.479	907.359	-0.928	-21.634
27)	38.00	20.497	-6.379	64.745	62.060	204.832	-8.573	926.292	-1.439	-8.584
28)	38.00	17.978	-0.637	516.971	60.146	363.576	-6.301	926.292	1.123	-8.584
29)	39.45	21.746	15.373	505.781	64.554	406.670	-4.873	922.928	0.638	11.310
30)	40.90	22.297	32.773	471.076	83.694	315.786	-5.384	887.954	0.997	38.106
31)	40.90	55.760	11.716	509.300	89.494	399.536	-10.023	887.084	1.287	37.990
32)	43.80	63.272	53.825	406.553	105.734	330.748	0.290	732.862	1.569	69.890
33)	46.70	64.207	96.165	193.716	145.464	-11.310	3.643	465.507	-25.529	101.037
34)	46.70	95.623	73.619	200.971	153.932	78.300	-38.805	466.377	-31.117	102.428
35)	49.10	101.468	109.698	-22.416	178.814	-237.600	-31.752	220.580	-22.869	95.642
36)	51.50	102.468	146.238	-315.685	211.874	-702.354	-32.876	118.268	9.080	-1.798
37)	51.50	103.630	142.664	-313.609	216.804	-703.398	-39.626	118.268	1.557	-0.870
38)	52.00	104.912	148.233	-386.671	221.560	-809.480	-38.454	117.282	2.839	4.930
39)	52.50	105.232	154.033	-460.914	229.100	-920.202	-39.196	117.224	4.121	0.290
40)	52.50	88.356	-63.506	-454.661	20.126	58.952	-48.353	117.224	2.061	10.730
41)	53.00	89.830	-62.733	-421.683	20.706	47.758	-47.071	113.338	2.299	6.090
42)	53.50	89.959	-62.153	-391.505	21.286	39.290	-46.834	108.002	3.580	11.890
43)	53.50	82.739	-59.778	-389.136	19.198	42.306	-46.261	107.886	-3.155	12.934
44)	55.90	89.661	-56.802	-249.628	21.982	-4.692	-38.185	186.378	35.572	-86.072
45)	58.30	90.507	-53.556	-118.682	32.074	12.842	-37.418	429.224	34.291	-106.256
46)	58.30	49.989	-40.193	-120.157	22.852	71.050	-19.000	430.243	26.752	-106.082
47)	61.20	58.577	-36.829	-7.902	26.216	-0.788	-9.643	719.690	-3.306	-78.010
48)	64.10	59.782	-33.234	92.351	53.070	135.454	-11.605	896.822	-2.563	-46.980
49)	64.10	18.340	-10.497	52.255	47.850	194.655	-14.435	896.938	-0.359	-46.110
50)	65.55	22.314	-8.873	66.057	50.344	135.338	-10.846	944.556	0.000	-18.386
51)	67.00	23.121	-7.133	77.056	68.266	191.226	-8.915	960.828	0.385	-6.380
52)	67.00	20.635	-0.521	493.612	66.526	303.978	-3.337	960.828	0.891	-5.336
53)	68.45	24.634	15.719	480.723	70.064	336.052	-1.908	951.142	1.276	13.514
54)	69.90	24.993	33.119	447.138	90.074	241.049	-1.549	910.832	1.635	41.354
55)	69.90	63.133	17.186	476.958	95.120	383.844	-10.255	911.760	2.795	41.354
56)	72.80	70.491	50.596	373.864	112.230	299.106	-1.856	746.808	3.538	73.254
57)	75.70	71.619	92.936	159.689	151.960	-57.130	2.367	471.308	-28.819	101.692
58)	75.70	103.312	74.662	162.248	160.312	57.420	-46.203	470.322	-34.712	102.544
59)	78.10	109.580	110.740	-58.067	186.064	-272.484	-39.150	223.416	-24.157	85.492
60)	80.50	110.388	138.580	-354.330	217.384	-758.292	-44.625	123.888	5.210	-5.858
61)	80.50	114.233	142.313	-346.566	222.430	-759.220	-53.488	124.004	-1.526	-5.858
62)	81.00	115.707	147.882	-417.677	228.230	-840.884	-43.616	126.034	1.487	-0.058
63)	81.50	115.835	153.682	-494.474	236.640	-979.124	-49.578	125.894	1.724	-4.698
64)	81.50	97.509	-69.944	-484.788	16.820	68.474	-51.366	125.894	-0.760	6.380
65)	82.00	98.983	-69.364	-449.539	17.400	60.030	-50.084	123.714	0.522	1.740
66)	82.50	99.111	-68.553	-414.414	17.980	54.346	-48.802	122.206	1.804	7.540
67)	82.50	94.948	-67.124	-411.862	14.848	59.426	-47.530	122.066	-5.276	8.584
68)	85.15	102.024	-63.992	-237.858	17.980	16.048	-38.686	212.164	23.751	-101.036
69)	87.80	103.728	-60.284	-75.858	29.348	48.256	-39.494	502.570	28.991	-122.032
70)	87.80	55.737	-43.963	-75.411	19.952	107.764	-21.906	502.570	23.122	-119.944
71)	90.95	64.710	-40.367	57.308	23.548	62.466	-10.910	834.156	-4.582	-90.248
72)	94.10	66.581	-36.424	175.392	53.708	201.904	-15.134	1034.630	-3.787	-46.168
73)	94.10	18.261	-11.713	59.366	46.690	267.727	-18.653	1034.488	-1.545	-46.052
74)	95.68	22.914	-9.973	76.860	50.170	207.582	-14.808	1084.716	-1.160	-24.128
75)	97.25	23.555	-8.117	89.004	69.252	270.917	-13.664	1100.840	-0.750	-3.132
76)	97.25	19.960	-8.987	667.554	67.686	415.802	-14.548	1100.840	-0.269	-4.002
77)	98.83	24.228	18.273	660.870	71.456	446.194	-12.075	1083.556	0.116	25.868
78)	100.40	24.831	36.833	618.004	93.496	348.465	-11.665	1032.342	0.526	46.864
79)	100.40	67.205	11.444	549.814	100.340	522.870	-12.511	1031.298	2.627	46.748
80)	103.55	75.498	55.990	433.680	117.972	428.678	0.638	827.686	3.422	90.828
81)	106.70	76.703	101.694	186.290	160.022	26.010	2.328	492.038	-24.639	122.612
82)	106.70	114.048	79.414	185.916	170.288	129.688	-48.484	492.013	-30.187	124.700
83)	109.35	121.316	117.698	-73.800	198.476	-248.968	-37.526	187.654	-39.292	111.998
84)	112.00	122.175	148.902	-429.635	233.856	-795.850	-35.984	70.722	4.828	1.055

VIADUCTO BORGES BLANQUES

112.00	122.435	146.949	-425.882	237.162	-791.616	-43.918	70.610	-3.348	-2.958
112.50	123.909	161.449	-500.836	243.832	-907.964	-43.790	71.694	-2.063	-2.842
113.00	124.037	167.019	-582.346	251.372	-1060.504	-51.492	70.900	-1.822	-1.788
113.50	105.190	-79.510	-574.804	8.990	-31.256	-73.250	70.900	-4.044	-5.104
114.00	106.472	-78.630	-534.807	9.570	-36.052	-71.968	74.768	-3.807	-9.744
114.00	106.793	-78.119	-495.528	10.150	-37.386	-71.731	77.628	-2.525	-3.944
114.00	98.319	-74.277	-491.325	6.148	-38.546	-66.939	77.512	-9.235	-2.900
116.65	105.587	-71.068	-295.661	9.164	-54.844	-58.095	205.286	22.961	-108.112
119.30	107.330	-67.475	-111.171	20.648	1.044	-57.858	512.139	26.880	-120.640
119.30	54.778	-46.721	-111.703	8.724	140.070	-17.861	511.038	23.156	-120.614
122.45	63.751	-43.009	32.828	13.306	110.722	-6.865	829.690	-2.030	-85.582
125.60	65.853	-39.182	162.030	44.220	287.979	-9.175	1016.979	-2.105	-42.662
125.60	14.333	-18.615	48.723	36.830	391.476	-20.768	1016.888	-1.802	-41.818
127.18	18.819	-16.759	76.244	40.426	346.848	-16.897	1061.001	-1.392	-20.648
128.75	19.460	-14.903	98.868	60.552	422.190	-15.753	1069.005	-0.112	9.222
128.75	15.200	-12.815	700.212	59.682	615.909	-24.453	1069.005	0.344	8.352
130.33	19.494	14.329	698.352	64.380	655.582	-21.955	1045.573	0.754	30.276
131.90	20.097	32.889	659.092	85.376	568.562	-21.545	986.355	1.164	52.316
131.90	57.925	8.775	575.340	94.308	658.481	-31.535	986.471	2.395	51.156
135.05	66.474	53.551	472.020	111.940	578.415	-18.360	770.685	3.216	94.192
138.20	69.230	99.024	234.500	155.904	188.655	-16.696	424.542	-9.141	124.932
138.20	98.222	81.925	234.787	165.416	189.525	-35.492	423.498	-12.727	125.279
140.85	105.297	121.829	-34.150	193.488	-187.649	-25.404	133.889	-15.003	96.048
143.50	108.348	151.643	-393.160	228.984	-745.461	-29.957	55.583	-3.343	-6.612
143.50	104.393	152.066	-391.545	232.116	-746.505	-37.654	55.583	-10.591	-5.568
144.00	105.674	166.566	-468.041	238.786	-837.623	-29.522	57.014	-9.309	0.232
144.50	106.033	172.136	-553.145	245.456	-956.813	-29.394	59.276	-2.313	-5.260
144.50	85.043	-71.600	-548.969	0.324	-70.354	-76.149	59.276	-5.533	-12.030
145.00	86.325	-71.020	-513.715	0.904	-69.368	-74.868	67.763	13.497	-22.934
145.50	86.684	-70.209	-476.965	1.484	-65.961	-74.630	81.051	39.477	-22.354
145.50	76.699	-67.211	-474.721	-2.436	-66.217	-71.649	80.794	36.368	-23.142
147.35	83.236	-65.007	-353.678	-0.232	-64.786	-65.112	186.663	28.343	-68.962
149.20	84.877	-62.458	-236.187	6.032	-14.713	-65.451	361.588	12.217	-106.833
149.20	53.590	-48.119	-236.047	-1.102	101.659	-31.891	360.454	9.302	-107.877
151.55	61.409	-45.335	-125.178	1.682	100.597	-24.072	578.880	7.061	-73.717
153.90	64.101	-42.436	-24.265	19.662	245.813	-26.446	721.817	-5.360	-49.416
153.90	29.985	-28.232	-23.452	16.274	310.349	-14.364	721.817	-4.021	-48.398
155.08	33.254	-26.840	8.285	17.666	289.811	-11.288	766.741	-3.944	-32.912
156.25	36.420	-25.564	39.017	30.948	385.923	-11.591	788.691	-3.662	-10.408
156.25	12.917	-16.182	39.017	32.364	486.147	0.844	787.647	-5.006	-10.266
157.43	15.993	-14.790	57.171	33.756	448.639	3.920	792.403	-4.698	1.044
158.60	17.647	-13.514	71.298	49.126	531.701	2.995	783.728	-4.390	23.548
158.60	-7.977	22.522	288.447	52.258	543.434	-2.098	783.728	-4.012	23.548
160.95	-0.350	25.306	230.312	61.828	613.382	-2.552	697.598	-3.422	50.344
163.30	3.457	27.744	164.245	94.772	456.202	-1.937	541.114	-2.807	86.768
163.30	-1.017	54.459	422.275	93.902	457.245	-1.737	542.158	-1.737	85.724
165.15	5.520	85.083	292.058	110.258	357.918	-1.276	362.964	-1.276	106.604
167.00	9.238	105.617	115.496	137.344	137.808	-0.789	143.028	-0.789	137.344
167.00	-2.078	110.830	116.630	139.232	138.942	-0.128	143.118	-0.128	139.232
167.50	-0.796	116.630	60.068	145.032	72.790	0.000	72.790	0.000	145.032
168.00	2.216	121.430	0.000	152.572	0.000	0.128	0.000	-0.614	11.228
	0.000	1.044	1.032	1.044	2.076	0.000	1.845	0.000	1.044
	0.000	1.044	-0.103	1.044	-0.103	0.000	-0.564	0.000	0.461
	0.000	1.044	-1.056	1.044	-1.056	0.000	0.961	0.000	-0.813
	0.000	4.002	5.732	4.002	6.776	0.000	5.853	0.000	4.463
	0.000	4.002	-0.383	4.002	0.661	0.000	-1.448	0.000	1.807
	0.000	4.002	-4.360	4.002	-6.448	0.000	1.585	0.000	-3.541
	1.044	-6.090	-7.979	6.090	10.291	-1.044	8.253	-1.044	7.205
	1.044	-6.090	1.243	6.090	0.199	-1.044	-4.179	0.000	2.461
	1.044	-6.090	9.247	6.090	-7.979	-1.044	1.293	1.044	-4.936
	0.000	-10.092	-18.374	12.180	19.693	0.000	17.655	0.000	13.757
	0.000	-10.092	-3.262	12.180	0.353	0.000	-3.333	0.000	1.577
	0.000	-10.092	11.902	12.180	-17.891	0.000	12.694	0.000	-10.603
	0.000	-1.218	-7.749	8.178	14.664	0.000	13.511	0.000	9.293
	0.000	-1.218	-6.690	8.178	-0.383	0.000	-1.448	0.000	1.115
	0.000	-1.218	-3.051	8.178	-14.568	0.000	9.935	0.000	-7.063
	0.000	1.914	-3.786	13.224	21.781	0.000	19.973	0.000	15.031
	0.000	1.914	-8.722	13.224	0.353	0.000	-3.140	0.000	1.807
	0.000	1.914	-12.486	13.224	-21.023	0.000	14.551	0.000	-11.417
	1.044	9.222	5.846	11.310	18.565	1.044	17.432	1.044	12.464
	1.044	9.222	-9.601	11.310	1.243	1.044	-4.179	0.000	2.692
	1.044	9.222	-25.648	11.310	-16.911	1.044	9.087	-1.044	-10.156
	0.000	2.958	-0.366	5.046	7.795	0.000	7.333	0.000	5.507
	0.000	2.958	-3.075	5.046	0.661	0.000	-1.256	0.000	1.807
	0.000	2.958	-5.586	5.046	-7.517	0.000	2.373	0.000	-4.585
	0.000	0.000	-0.212	2.088	2.992	0.000	2.761	0.000	2.319
	0.000	0.000	-1.564	2.088	-0.256	0.000	-1.602	0.000	0.692
	0.000	0.000	-1.256	2.088	-3.272	0.000	0.723	0.000	-1.857
	0.000	-1.914	-2.357	6.090	10.799	0.000	10.106	0.000	6.551
	0.000	-1.914	-1.339	6.090	0.507	0.000	-2.294	0.000	2.269
	0.000	-1.914	1.645	6.090	-8.689	0.000	4.223	0.000	-5.629
	1.044	-10.092	-14.235	17.226	28.569	-1.044	25.531	-1.044	18.610
	1.044	-10.092	1.168	17.226	1.168				

8(1)	0.000	-3.654	-4.085	20.358	34.716	0.000	31.985	0.000	21.973
8(2)	0.000	-3.654	1.192	20.358	1.192	0.000	-4.268	0.000	1.807
8(3)	0.000	-3.654	6.702	20.358	-33.318	0.000	26.333	0.000	-18.551
9(1)	0.000	-1.914	-6.366	15.312	23.849	0.000	21.810	0.000	16.235
9(2)	0.000	-1.914	-3.569	15.312	0.507	0.000	-2.102	0.000	1.115
	0.000	-1.914	-0.798	15.312	-22.783	0.000	18.619	0.000	-14.197
	0.000	2.610	-7.369	22.272	35.760	0.000	33.030	0.000	23.887
	0.000	2.610	-9.729	22.272	1.192	0.000	-4.268	0.000	1.807
	0.000	2.610	-13.285	22.272	-33.318	0.000	27.377	0.000	-20.465
1(1)	1.044	12.876	7.840	19.140	31.469	1.044	29.201	1.044	20.524
1(2)	1.044	12.876	-12.061	19.140	1.168	1.044	-3.551	0.000	3.153
1(3)	1.044	12.876	-30.092	19.140	-28.387	1.044	20.356	-1.044	-17.986
2(1)	0.000	1.914	0.266	6.090	10.799	0.000	10.106	0.000	6.782
2(2)	0.000	1.914	-2.525	6.090	0.507	0.000	-2.102	0.000	2.269
2(3)	0.000	1.914	-6.868	6.090	-9.733	0.000	4.415	0.000	-5.398
3(1)	0.000	0.000	-0.558	2.088	2.876	0.000	2.645	0.000	2.319
3(2)	0.000	0.000	-1.179	2.088	-0.256	0.000	-1.410	0.000	0.692
3(3)	0.000	0.000	-0.558	2.088	-3.388	0.000	0.607	0.000	-1.857
4(1)	0.000	-1.914	-4.709	6.090	10.799	0.000	10.106	0.000	6.551
4(2)	0.000	-1.914	-2.646	6.090	0.507	0.000	-2.102	0.000	2.269
4(3)	0.000	-1.914	0.337	6.090	-9.733	0.000	4.415	0.000	-5.398
5(1)	1.044	-11.136	-15.163	19.140	31.469	-1.044	29.201	-1.044	20.524
5(2)	1.044	-11.136	1.168	19.140	1.168	-1.044	-3.358	0.000	3.153
5(3)	1.044	-11.136	17.375	19.140	-28.387	-1.044	20.356	1.044	-17.986
6(1)	0.000	-2.610	-4.970	22.272	35.760	0.000	33.030	0.000	23.887
6(2)	0.000	-2.610	-0.115	22.272	1.192	0.000	-4.268	0.000	1.807
6(3)	0.000	-2.610	4.774	22.272	-34.362	0.000	27.569	0.000	-20.465
7(1)	0.000	-1.044	-4.165	15.312	24.893	0.000	23.047	0.000	16.235
7(2)	0.000	-1.044	-3.108	15.312	0.507	0.000	-2.102	0.000	1.115
7(3)	0.000	-1.044	-3.121	15.312	-23.827	0.000	19.663	0.000	-14.197
8(1)	0.000	2.610	-6.051	22.272	37.700	0.000	35.200	0.000	23.887
8(2)	0.000	2.610	-9.497	22.272	1.424	0.000	-1.948	0.000	1.807
8(3)	0.000	2.610	-13.707	22.272	-34.336	0.000	29.509	0.000	-20.465
9(1)	1.044	8.004	2.098	20.184	33.557	1.044	31.289	1.044	21.107
9(2)	1.044	8.004	-12.061	20.184	1.168	1.044	-3.358	0.000	3.384
9(3)	1.044	8.004	-25.220	20.184	-30.301	1.044	22.636	-1.044	-19.030
10(1)	0.000	2.958	1.949	7.134	13.757	0.000	12.834	0.000	7.595
10(2)	0.000	2.958	-2.987	7.134	0.507	0.000	-2.102	0.000	2.269
10(3)	0.000	2.958	-8.143	7.134	-10.777	0.000	7.604	0.000	-6.673
11(1)	0.000	0.000	-0.442	2.088	4.036	0.000	3.805	0.000	2.319
11(2)	0.000	0.000	-1.179	2.088	-0.256	0.000	-1.410	0.000	0.692
11(3)	0.000	0.000	-1.486	2.088	-3.272	0.000	1.767	0.000	-1.857
12(1)	1.044	0.000	-3.947	8.178	12.835	0.000	11.912	0.000	7.826
12(2)	1.044	0.000	-3.159	8.178	0.456	0.000	-2.384	0.000	2.500
12(3)	1.044	0.000	-1.859	8.178	-10.829	0.000	6.029	0.000	-6.442
13(1)	1.044	-10.092	-13.957	21.228	35.633	-1.044	32.903	-1.044	22.612
13(2)	1.044	-10.092	1.065	21.228	1.065	-1.044	-4.115	0.000	3.384
13(3)	1.044	-10.092	16.319	21.228	-32.227	-1.044	23.597	1.044	-19.844
14(1)	0.000	-2.784	-3.177	25.404	41.889	0.000	38.697	0.000	26.788
14(2)	0.000	-2.784	1.321	25.404	1.321	0.000	-2.512	0.000	1.577
14(3)	0.000	-2.784	6.741	25.404	-38.325	0.000	33.468	0.000	-23.827
15(1)	0.000	-1.044	-2.558	17.400	27.774	0.000	26.318	0.000	18.323
15(2)	0.000	-1.044	-2.576	17.400	0.456	0.000	-2.384	0.000	0.923
15(3)	0.000	-1.044	-2.558	17.400	-27.906	0.000	23.357	0.000	-16.477
16(1)	0.000	0.696	-7.076	25.404	42.643	0.000	39.451	0.000	27.019
16(2)	0.000	0.696	-10.522	25.404	1.321	0.000	-2.512	0.000	1.807
16(3)	0.000	0.696	-13.862	25.404	-38.441	0.000	34.029	0.000	-23.597
17(1)	1.044	4.872	-6.492	22.272	36.561	1.044	34.062	1.044	23.656
17(2)	1.044	4.872	-12.427	22.272	1.065	1.044	-4.115	0.000	3.384
17(3)	1.044	4.872	-20.064	22.272	-34.431	1.044	24.525	-1.044	-21.118
18(1)	1.044	1.044	-1.547	8.178	14.724	0.000	13.801	0.000	8.639
18(2)	1.044	1.044	-3.499	8.178	0.456	0.000	-2.384	0.000	2.500
18(3)	1.044	1.044	-5.593	8.178	-12.942	0.000	7.687	0.000	-7.717
19(1)	0.000	0.000	-1.486	2.088	4.906	0.000	4.675	0.000	2.319
19(2)	0.000	0.000	-1.641	2.088	-0.256	0.000	-1.410	0.000	0.692
19(3)	0.000	0.000	-1.486	2.088	-3.272	0.000	2.637	0.000	-1.857
20(1)	1.044	-1.044	-5.247	8.178	14.724	0.000	14.031	0.000	8.639
20(2)	1.044	-1.044	-2.115	8.178	0.456	0.000	-2.384	0.000	2.500
20(3)	1.044	-1.044	-0.201	8.178	-12.942	0.000	7.687	0.000	-7.717
21(1)	1.044	-4.872	-5.721	22.272	36.561	-1.044	34.062	-1.044	23.656
21(2)	1.044	-4.872	1.065	22.272	1.065	-1.044	-4.115	0.000	3.384
21(3)	1.044	-4.872	7.851	22.272	-34.431	-1.044	24.525	1.044	-21.118
22(1)	0.000	-0.696	-1.379	25.404	42.643	0.000	39.451	0.000	27.019
22(2)	0.000	-0.696	1.321	25.404	1.321	0.000	-2.512	0.000	1.807
22(3)	0.000	-0.696	2.797	25.404	-38.441	0.000	34.029	0.000	-23.597
23(1)	0.000	1.044	-2.481	17.400	27.774	0.000	25.274	0.000	17.279
23(2)	0.000	1.044	-3.159	17.400	1.500	0.000	-2.576	0.000	0.923
23(3)	0.000	1.044	-3.525	17.400	-26.862	0.000	22.313	0.000	-15.241
24(1)	0.000	2.784	-5.180	23.490	39.685	0.000	36.493	0.000	24.874
24(2)	0.000	2.784	-10.522	23.490	1.321	0.000	-2.512	0.000	1.577
24(3)	0.000	2.784	-15.098	23.490	-38.441	0.000	31.071	0.000	-21.913
25(1)	1.044	9.048	-0.421	19.314	30.645	1.044	28.146	1.044	20.891
25(2)	1.044	9.048	-13.471	19.314	1.065	1.044	-4.115	0.000	3.384
25(3)	1.044	9.048	-27.595	19.314	-28.515	1.044	18.224	-1.044	-17.699

VALORES EXTREMOS

M max 1-48 1100.84

Q max 1-48 251.372

T max 1-48 183.301576

M max 49-96 1100.84

Q max 49-96 251.372

T max 49-96 124.036944

VIADUCTO BORGES BLANQUES

1.044	0.000	-5.286	7.134	13.821	0.000	13.129	0.000	7.595
1.044	0.000	-5.005	7.134	0.456	0.000	-2.576	0.000	2.692
1.044	0.000	-5.330	7.134	-10.713	0.000	6.784	0.000	-6.673
0.000	0.000	-2.751	2.088	4.906	0.000	4.675	0.000	2.488
0.000	0.000	-1.641	2.088	-0.256	0.000	-1.602	0.000	0.692
0.000	0.000	-0.673	2.088	-3.272	0.000	2.637	0.000	-2.088
0.000	-2.958	-6.874	6.090	8.864	0.000	8.403	0.000	6.321
0.000	-2.958	-3.536	6.090	0.661	0.000	-1.256	0.000	1.807
0.000	-2.958	0.434	6.090	-8.536	0.000	3.442	0.000	-5.859
1.044	-8.004	-11.865	13.224	21.543	-1.044	20.390	-1.044	14.147
1.044	-8.004	1.243	13.224	0.199	-1.044	-4.179	0.000	2.923
1.044	-8.004	14.235	13.224	-18.999	-1.044	12.045	1.044	-12.301
0.000	-1.914	-3.449	14.268	22.651	0.000	21.887	0.000	15.031
0.000	-1.914	0.353	14.268	0.353	0.000	-3.140	0.000	1.807
0.000	-1.914	4.207	14.268	-21.023	0.000	16.465	0.000	-11.417
0.000	1.218	2.948	9.048	14.780	0.000	13.627	0.000	10.163
0.000	1.218	-0.383	9.048	-0.383	0.000	-1.448	0.000	1.115
0.000	1.218	-1.750	9.048	-14.452	0.000	10.051	0.000	-7.933
0.000	10.092	11.216	12.180	19.693	0.000	17.655	0.000	13.757
0.000	10.092	-4.954	12.180	0.353	0.000	-3.333	0.000	1.577
0.000	10.092	-21.148	12.180	-18.935	0.000	12.694	0.000	-10.603
1.044	6.090	-0.553	6.090	10.291	1.044	8.253	1.044	7.436
1.044	6.090	-9.601	6.090	0.199	1.044	-4.179	0.000	2.461
1.044	6.090	-19.693	6.090	-9.893	1.044	1.293	-1.044	-4.936
0.000	-4.002	-10.359	5.046	6.650	0.000	5.968	0.000	4.463
0.000	-4.002	-6.690	5.046	0.661	0.000	-1.448	0.000	1.807
0.000	-4.002	-0.267	5.046	-6.564	0.000	1.469	0.000	-3.541
0.000	-1.044	-2.402	1.044	2.076	0.000	1.845	0.000	1.044
0.000	-1.044	-1.025	1.044	-0.103	0.000	-0.564	0.000	0.461
0.000	-1.044	0.730	1.044	-2.100	0.000	0.961	0.000	-0.813
0.000	51.904	4.214	409.654	29.928	0.000	29.928	0.000	409.654

HIPOTESIS: F Eje 1 (49-96) ripado +30cm; Eje 2 (1-48) ripado -30cm

Envolvente IPF75B negativa

Coef impacto 1.16

IRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
	0.00	-1.729	-11.894	0.000	-150.742	0.000	1.474	0.000	3.562	-123.598
	0.50	-4.741	-12.314	6.244	-143.202	72.906	-1.730	-5.916	0.000	12.180
	1.00	-6.023	-11.734	12.314	-137.402	137.112	-3.012	-12.180	-0.128	12.760
	1.00	-14.104	-15.313	12.083	-137.576	138.156	2.185	-11.136	-0.815	12.760
	2.85	-17.796	-13.686	38.808	-109.562	354.298	-2.430	-35.928	-1.276	14.848
	4.70	-24.358	-11.482	61.403	-93.090	452.144	-9.223	-64.754	-1.763	17.052
	4.70	-19.918	-26.236	240.746	-92.916	451.835	3.659	-64.870	-2.053	17.052
	7.05	-23.725	0.214	274.520	-61.016	606.399	-3.547	-107.409	-2.668	19.720
	9.40	-31.352	28.054	241.092	-50.402	535.929	-8.399	-156.303	-3.258	22.504
	9.40	-49.113	-5.452	534.286	-46.516	513.771	0.830	-157.347	-4.390	22.388
	10.58	-50.766	8.468	533.854	-31.900	440.807	3.480	-183.505	-4.698	23.780
	11.75	-53.842	22.388	513.090	-29.638	468.067	3.172	-211.577	-5.006	25.172
	11.75	-72.016	14.633	513.090	-30.662	379.327	-12.974	-211.577	-5.666	25.172
	12.93	-75.207	37.137	489.279	-16.356	283.427	-9.280	-242.053	-5.974	26.448
	14.10	-78.476	50.013	439.130	-14.964	302.915	-9.588	-274.243	-6.282	27.840
	14.10	-104.043	36.867	440.174	-19.024	219.395	-36.041	-274.243	-6.404	27.956
	16.45	-106.735	64.937	321.714	-0.928	69.987	-26.216	-341.523	1.979	31.163
	18.80	-114.554	100.317	123.530	1.740	70.019	-26.806	-416.019	12.003	33.408
	18.80	-135.759	90.358	124.881	-4.466	14.397	-56.759	-416.135	16.586	33.292
	20.65	-137.400	111.816	-63.100	1.914	-36.991	-52.026	-508.254	-40.689	77.256
	22.50	-144.168	142.440	-299.054	4.002	-40.148	-52.487	-712.594	-60.019	168.780
	22.50	-144.256	141.641	-299.902	0.000	-40.123	-59.264	-712.337	-53.604	169.824
	23.00	-144.615	147.672	-373.151	0.580	-44.034	-58.348	-800.018	-28.785	177.712
	23.50	-145.897	153.472	-448.291	1.160	-43.860	-58.476	-891.176	-30.213	194.300
	23.50	-128.347	-75.276	-440.862	-231.072	-879.362	-36.561	-891.176	3.341	-216.282
	24.00	-128.706	-74.696	-403.350	-223.532	-767.514	-36.973	-788.568	2.755	-203.522
	24.50	-129.988	-74.116	-365.327	-217.732	-659.576	-39.299	-687.416	2.343	-202.072
	24.50	-121.847	-72.534	-365.327	-213.846	-660.427	-26.474	-687.416	10.836	-200.274
	26.90	-124.847	-61.511	-205.656	-181.656	-190.737	-32.809	-344.883	31.301	-82.128
	29.30	-130.999	-58.727	-59.599	-155.904	129.978	-44.530	-220.443	-13.201	-24.299
	29.30	-91.796	-42.184	-59.343	-147.436	130.235	-10.857	-220.418	-14.122	-23.896
	32.20	-94.692	-30.351	40.098	-107.706	475.875	-22.824	-211.081	-0.754	3.132
	35.10	-102.704	-26.987	123.580	-91.466	546.003	-38.765	-223.989	-1.497	6.496
	35.10	-61.361	-9.281	45.802	-82.418	462.248	24.882	-223.989	-2.689	5.626
	36.55	-61.976	-7.888	58.539	-63.568	548.397	22.137	-234.081	-3.074	7.250
	38.00	-65.950	-6.148	67.168	-59.914	508.288	16.229	-246.642	-3.433	8.990
	38.00	-63.623	0.055	519.394	-58.870	360.792	11.869	-246.642	-4.081	9.860
	39.45	-64.661	16.295	509.819	-41.064	292.004	14.443	-260.620	-4.466	11.484
	40.90	-68.442	33.695	474.806	-38.454	339.798	14.084	-279.064	-4.825	13.224
	40.90	-103.443	11.485	513.260	-44.660	259.640	-12.945	-279.064	-5.115	13.108
	43.80	-105.302	54.056	413.705	-16.936	109.594	-3.422	-320.360	-5.397	16.472
	46.70	-113.505	96.396	199.753	-13.572	151.206	-4.165	-377.349	20.657	29.001
	46.70	-148.305	73.158	209.046	-20.938	45.240	-56.373	-377.349	22.069	27.260
	49.10	-149.767	110.159	-14.303	-10.846	2.346	-49.680	-486.034	-38.553	70.760
	51.50	-156.304	146.891	-309.071	-8.062	24.618	-50.296	-787.228	-25.610	196.214
	51.50	-157.927	144.279	-311.532	-11.136	25.662	-58.858	-787.228	-18.261	196.098
	52.00	-158.055	150.309	-385.787	-10.556	29.722	-58.986	-885.828	-21.283	200.158
	52.50	-159.529	156.302	-461.337	-9.976	34.884	-59.114	-988.546	-17.519	212.744
	52.50	-142.423	-62.852	-459.429	-233.044	-922.930	-37.429	-988.546	16.209	-216.688
	53.00	-142.743	-62.272	-427.566	-225.504	-809.192	-37.841	-882.986	18.233	-204.972
	53.50	-144.025	-61.692	-397.388	-220.748	-700.210	-40.166	-782.530	21.302	-201.782
	53.50	-135.882	-60.047	-398.249	-216.746	-704.502	-26.123	-782.646	27.167	-201.782
	55.90	-136.690	-57.263	-258.434	-184.556	-227.238	-32.459	-468.558	31.940	-75.632
	58.30	-143.227	-54.940	-124.950	-158.804	98.624	-46.102	-359.692	-28.375	-19.604
	58.30	-99.479	-40.154	-125.733	-150.452	39.034	4.210	-359.717	-26.926	-20.822
	61.20	-100.223	-36.790	-13.978	-110.722	393.670	-7.757	-336.838	4.176	-3.886
	64.10	-107.965	-33.426	90.390	-92.568	473.362	-22.847	-327.790	3.433	-0.522
	64.10	-65.408	-9.805	50.486	-87.522	410.067	26.963	-327.674	2.099	-2.436
	65.55	-65.959	-8.181	63.557	-66.758	497.432	23.374	-326.166	-4.350	1.798
	67.00	-69.766	-6.571	76.402	-63.974	466.494	17.441	-335.298	-1.255	8.758
	67.00	-67.472	-0.059	492.958	-62.930	302.238	16.213	-335.298	-1.761	7.888
	68.45	-68.279	16.181	481.877	-44.254	229.042	17.916	-348.290	-2.146	9.512
	69.90	-72.253	33.581	447.600	-42.514	294.293	17.557	-366.676	-2.505	11.252
	69.90	-112.008	16.994	480.188	-49.474	209.844	-11.669	-366.792	-3.665	11.252
	72.80	-113.406	50.634	380.709	-22.620	62.640	-3.016	-405.942	-4.406	14.616
	75.70	-121.609	92.974	165.803	-19.256	125.396	-3.759	-457.852	23.947	29.656
	75.70	-157.340	73.739	171.054	-27.608	9.570	-52.803	-457.968	25.664	29.290
	78.10	-158.378	110.740	-48.146	-17.516	-19.140	-46.110	-575.070	-38.309	76.966
	80.50	-165.108	138.773	-345.525	-14.732	17.748	-46.725	-876.612	-27.482	199.636

1)	9.40	-15.789	12.122	86.932	-46.516	513.117	-0.907	-158.001	4.313	22.388
2)	10.58	-14.136	13.514	74.146	-31.900	440.345	-0.788	-183.967	7.390	23.780
3)	11.75	-11.060	14.906	60.342	-29.638	467.413	2.288	-212.231	10.466	25.172
1)	11.75	-32.558	23.507	60.342	-30.682	378.673	12.321	-212.231	5.013	25.172
2)	12.93	-29.367	24.783	33.921	-16.356	282.735	13.318	-242.745	10.012	26.448
	14.10	-26.098	26.175	3.434	-14.964	302.031	16.394	-275.127	13.088	27.840
	14.10	-59.343	39.477	4.478	-19.024	218.511	33.580	-275.127	4.404	27.956
	16.45	-56.651	42.491	-89.100	-0.928	69.103	29.292	-342.177	18.402	30.740
3)	18.80	-48.832	45.159	-190.018	1.740	69.097	37.111	-416.250	35.680	33.408
1)	18.80	-76.521	55.558	-190.755	-4.466	13.475	56.413	-416.366	31.174	33.292
2)	20.65	-74.880	58.224	-297.304	1.914	-38.106	56.064	-507.139	42.804	77.256
3)	22.50	-68.112	60.312	-407.456	4.002	-41.494	62.601	-711.440	51.443	168.780
)	22.50	-78.116	63.515	-411.436	0.000	-41.238	63.686	-711.415	50.912	169.824
3)	23.00	-77.757	64.326	-444.665	0.580	-45.380	63.924	-798.672	24.940	177.712
)	23.50	-76.475	64.906	-477.523	1.160	-45.014	65.206	-890.022	23.676	194.300
)	23.50	-94.199	-161.232	-487.842	-231.072	-878.016	35.600	-890.022	-7.378	-216.282
)	24.00	-93.840	-155.432	-408.918	-223.532	-766.399	34.858	-787.453	-7.946	-203.522
)	24.50	-92.558	-149.632	-332.615	-217.732	-658.461	36.030	-686.301	-8.688	-202.072
)	24.50	-94.783	-143.004	-337.835	-213.846	-659.505	30.473	-686.301	-9.721	-200.274
)	26.90	-91.783	-115.625	-27.828	-181.656	-189.853	29.348	-344.191	-39.222	-82.128
)	29.30	-85.631	-79.085	203.663	-155.904	131.093	35.531	-220.674	-23.407	-23.377
)	29.30	-59.758	-95.776	201.135	-147.436	131.119	17.933	-220.648	-29.215	-23.896
)	32.20	-55.862	-53.667	421.506	-107.706	476.567	21.286	-211.773	0.946	3.132
)	35.10	-48.850	-20.027	527.956	-91.466	546.657	30.555	-224.643	8.381	6.496
)	35.10	-16.939	-32.945	523.780	-82.418	462.210	9.111	-224.643	-1.348	5.626
)	36.55	-16.324	-16.936	560.529	-63.568	547.935	8.626	-234.543	4.420	7.250
)	38.00	-12.350	0.464	574.030	-59.914	508.057	11.073	-246.872	8.009	8.990
)	38.00	-16.591	11.713	107.188	-58.870	360.562	12.203	-246.872	1.390	9.860
)	39.45	-15.553	13.337	89.783	-41.064	291.351	12.860	-260.850	5.235	11.484
)	40.90	-11.772	15.077	67.820	-38.454	339.798	16.680	-279.487	10.747	13.224
)	40.90	-55.941	32.191	97.226	-44.660	259.217	8.176	-279.487	0.346	13.108
)	43.80	-54.082	35.786	0.629	-16.936	109.364	5.345	-320.590	8.011	16.472
)	46.70	-45.879	39.150	-108.749	-13.572	151.206	14.702	-377.580	43.408	29.001
)	46.70	-86.943	56.454	-110.766	-20.938	45.240	49.259	-377.580	38.650	27.029
)	49.10	-85.481	59.699	-250.595	-10.846	2.384	50.026	-486.072	43.590	70.760
)	51.50	-78.944	62.675	-398.855	-8.062	24.848	58.102	-787.266	19.150	196.214
)	51.50	-87.239	65.979	-402.360	-11.136	25.892	59.627	-787.266	18.838	196.098
)	52.00	-87.111	66.789	-435.551	-10.556	29.952	60.909	-885.866	20.706	200.158
)	52.50	-85.637	67.562	-469.689	-9.976	34.922	62.191	-988.584	15.788	212.744
)	52.50	-103.961	-154.724	-477.177	-233.044	-923.160	39.544	-988.584	-15.440	-216.688
)	53.00	-103.641	-148.924	-400.944	-225.504	-809.422	38.802	-883.024	-18.618	-204.972
)	53.50	-102.359	-143.124	-327.440	-220.748	-700.440	39.974	-782.568	-22.840	-201.782
)	53.50	-100.410	-138.347	-335.435	-216.746	-704.732	33.199	-782.568	-21.437	-201.782
)	55.90	-99.602	-110.507	-34.844	-184.556	-227.276	32.074	-468.788	-41.092	-75.632
)	58.30	-93.065	-74.428	186.336	-158.804	98.394	38.257	-359.922	-34.459	-19.604
)	58.30	-65.995	-92.180	188.163	-150.452	39.034	5.173	-359.948	-40.214	-20.822
)	61.20	-65.251	-49.840	386.918	-110.722	393.440	8.526	-336.608	-4.945	-3.886
)	64.10	-57.509	-7.500	477.540	-92.568	473.132	16.925	-327.560	2.489	-0.522
)	64.10	-24.202	-31.555	433.286	-87.522	410.260	6.184	-327.444	-6.867	-2.436
)	65.55	-23.651	-15.315	468.629	-66.758	497.202	6.543	-325.936	4.735	1.798
)	67.00	-19.844	1.855	477.820	-63.974	466.494	9.016	-335.298	5.100	8.758
)	67.00	-23.182	13.513	65.788	-62.930	302.276	9.013	-335.298	-1.699	7.888
)	68.45	-22.375	15.137	44.789	-44.254	229.042	10.540	-348.290	2.146	9.512
)	69.90	-18.401	16.877	20.604	-42.514	294.755	14.360	-366.676	7.658	11.252
)	69.90	-61.470	35.612	69.548	-49.474	209.844	6.131	-366.792	-1.873	11.252
)	72.80	-60.072	38.976	-35.325	-22.620	62.640	4.170	-405.942	5.562	14.616
)	75.70	-51.869	42.340	-152.965	-19.256	125.396	13.527	-457.852	44.540	29.464
)	75.70	-98.092	60.341	-151.542	-27.808	9.570	45.535	-457.968	39.015	29.290
)	78.10	-97.054	63.586	-300.620	-17.516	-19.140	46.302	-575.070	43.500	76.966
)	80.50	-90.324	66.563	-457.233	-14.732	17.748	52.455	-876.612	22.713	199.636
)	80.50	-98.997	69.982	-458.885	-18.038	-5.452	67.296	-876.496	23.246	200.680
)	81.00	-98.868	70.562	-453.236	-17.458	-0.464	67.533	-977.648	23.374	201.260
)	81.50	-97.394	71.334	-529.896	-16.878	8.444	70.738	-1080.740	26.286	216.630
)	81.50	-116.995	-166.904	-538.712	-247.660	-994.610	33.106	-1080.740	-8.132	-231.130
)	82.00	-116.674	-161.104	-456.597	-240.990	-874.350	33.234	-967.614	-10.440	-218.370
)	82.50	-115.623	-146.835	-382.510	-234.320	-785.552	40.496	-861.416	-16.402	-215.180
)	82.50	-115.664	-148.091	-384.323	-230.144	-765.626	27.612	-860.282	-14.670	-215.006
)	85.15	-114.779	-116.771	-33.521	-194.648	-225.098	29.174	-479.312	-45.472	-75.632
)	87.80	-107.768	-78.372	225.300	-166.576	152.656	38.193	-351.422	-30.530	-20.590
)	87.80	-74.245	-96.938	224.022	-157.180	92.278	3.820	-351.422	-37.453	-22.678
)	90.95	-73.040	-52.278	456.450	-114.260	487.374	5.510	-316.524	-4.902	-7.598
)	94.10	-64.978	-6.688	558.948	-96.628	573.008	18.659	-300.242	5.352	-3.886
)	94.10	-24.320	-33.759	583.844	-88.508	506.398	16.435	-300.614	-5.024	-2.726
)	95.68	-23.743	-16.359	623.462	-66.584	598.036	16.819	-295.626	-0.986	-0.986
)	97.25	-19.680	2.201	635.426	-62.814	562.310	19.317	-300.730	6.110	6.960
)	97.25	-23.044	12.815	102.115	-65.598	353.684	15.328	-300.730	-1.330	5.916
)	98.83	-22.659	14.671	81.503	-45.472	284.605	17.491	-314.012	2.708	7.772
)	100.40	-17.981	16.527	58.325	-41.876	336.380	21.362	-328.164	6.809	9.628
)	100.40	-69.386	39.731	152.633	-49.996	231.942	9.138	-328.164	-3.380	10.556
)	103.55	-67.745	43.674	24.855	-18.966	53.964	4.731	-365.220	6.490	14.268
)	106.70	-59.004	47.270	-116.548	-15.370	108.020	14.858	-418.908	38.008	27.260
)	106.70	-108.954	66.493	-114.486	-24.766	-2.900	46.161	-419.165	31.353	27.260
)	109.35	-107.646	70.086	-296.263	-13.282	-48.464	45.609	-555.382	45.342	78.416
)	112.00	-100.174	73.294	-485.560	-10.266	-16.970	54.198	-925.306	26.129	215.238

VIADUCTO BORGES BLANQUES

112.00	-108.391	76.036	-490.590	-15.312	-42.838	67.103	-925.422	28.466	215.238
112.50	-108.263	76.616	-528.656	-14.732	-38.430	67.341	-1034.114	25.984	216.688
113.00	-106.788	77.427	-567.667	-14.152	-32.300	70.546	-1145.068	16.716	231.188
113.00	-126.274	-165.168	-575.017	-248.356	-1059.634	49.172	-1145.068	-18.688	228.172
113.50	-126.146	-159.368	-492.578	-240.816	-909.240	41.470	-1035.042	-28.130	-214.716
114.00	-124.903	-145.098	-419.244	-235.190	-794.864	41.598	-928.322	-25.392	-209.786
114.00	-122.933	-148.556	-423.293	-230.840	-794.980	33.644	-928.438	-23.776	-208.742
116.65	-122.048	-117.352	-71.658	-194.416	-257.088	35.206	-568.548	-46.748	-76.444
119.30	-115.267	-78.838	186.604	-167.272	113.448	45.139	-434.379	-32.554	-29.464
119.30	-77.743	-101.766	185.204	-156.980	8.526	-0.762	-433.956	-40.130	-31.526
122.45	-76.538	-55.946	431.419	-113.770	401.476	0.928	-360.992	-8.843	-20.276
125.60	-68.706	-11.516	550.934	-97.298	486.279	13.033	-303.621	-0.511	-16.680
125.60	-26.409	-36.485	579.901	-89.320	314.742	8.164	-303.480	-12.014	-15.892
127.18	-25.806	-17.925	624.365	-68.324	407.457	8.575	-279.957	-5.989	-14.036
128.75	-21.551	0.635	641.066	-64.554	374.688	11.073	-258.207	-1.503	-12.180
128.75	-22.618	4.463	111.932	-67.164	231.660	14.426	-258.207	-9.007	-13.224
130.33	-22.208	6.203	102.927	-47.154	165.424	15.570	-240.227	-4.905	-11.484
131.90	-17.760	8.059	93.662	-43.558	222.033	19.441	-225.147	-0.804	-9.628
131.90	-64.965	32.538	207.226	-53.765	133.409	23.605	-225.031	-10.508	-8.700
135.05	-63.760	36.250	100.943	-22.736	-35.993	19.454	-203.033	-0.189	-4.988
138.20	-55.044	48.777	-18.429	-19.140	29.449	29.324	-207.365	23.984	13.572
138.20	-97.838	61.179	-17.672	-27.376	29.449	30.819	-207.327	15.984	13.457
140.85	-96.762	64.195	-184.443	-17.052	-1.465	30.267	-348.425	31.800	89.958
143.50	-90.173	76.681	-372.206	-13.920	38.879	38.855	-766.515	4.843	216.282
143.50	-93.946	76.624	-375.735	-17.052	39.730	37.377	-766.515	6.368	215.412
144.00	-93.818	77.204	-412.569	-16.472	45.723	37.615	-874.337	6.496	216.862
144.50	-92.574	78.015	-453.516	-15.892	55.100	38.897	-987.263	5.058	232.406
144.50	-108.273	-146.220	-458.736	-215.032	-864.767	42.792	-987.263	-26.112	-193.108
145.00	-108.145	-140.420	-387.408	-206.622	-767.211	46.400	-893.709	-44.776	-176.858
145.50	-106.902	-134.851	-318.663	-200.822	-667.309	46.528	-807.379	-68.486	-170.198
145.50	-104.149	-137.623	-320.765	-197.654	-667.335	39.037	-809.493	-70.061	-169.128
147.35	-103.687	-107.927	-93.041	-173.188	-330.065	37.758	-606.551	-42.978	-82.534
149.20	-99.585	-86.465	85.691	-150.220	-98.181	45.205	-509.282	-34.809	-37.181
149.20	-75.455	-99.742	85.601	-143.956	-158.127	6.776	-509.372	-38.218	-37.411
151.55	-74.865	-63.202	282.227	-111.766	120.447	9.976	-423.317	-21.632	-34.858
153.90	-70.405	-36.945	402.319	-94.308	219.827	17.377	-343.177	-4.404	-32.190
153.90	-44.517	-51.008	402.550	-91.202	116.123	-9.820	-343.369	-13.203	-33.490
155.08	-44.210	-37.088	454.260	-74.672	210.985	-9.512	-305.965	-9.896	-32.098
156.25	-42.159	-14.584	481.539	-66.958	177.951	-4.184	-270.057	-5.153	-30.822
156.25	-25.211	-23.490	481.539	-68.556	76.683	-17.882	-269.883	-10.640	-29.406
157.43	-24.904	-10.614	501.607	-54.636	149.125	-17.574	-235.355	-7.564	-28.014
158.60	-22.789	3.190	507.212	-49.706	6.818	-10.828	-204.493	-4.487	-26.738
158.60	-6.444	-28.478	227.423	-53.708	108.204	-13.329	-203.623	-14.015	-26.738
160.95	-5.663	-1.682	261.720	-31.262	-75.888	-6.389	-142.704	-6.196	-23.954
163.30	-2.317	26.042	236.570	-28.594	-8.279	1.687	-89.518	-0.044	-21.286
163.30	-8.726	7.580	47.270	-28.594	-8.086	-8.793	-89.518	-9.837	-21.286
165.15	-8.265	9.668	30.840	-20.242	-46.632	-2.256	-50.808	-3.300	-19.198
167.00	-6.662	12.295	8.757	-18.038	-12.354	2.615	-17.574	1.571	-16.994
167.00	-0.870	8.498	9.078	-18.294	-12.494	-3.012	-17.714	-3.012	-18.294
167.50	-0.742	9.078	5.161	-17.714	-7.076	-1.730	-7.076	-1.730	-17.714
168.00	-0.614	9.658	0.000	-17.134	0.000	1.474	0.000	2.216	122.470
0.000	-1.044	-2.402	-1.044	-1.044	-2.402	0.000	-2.171	0.000	-1.275
0.000	-1.044	-1.025	-1.044	-1.044	-1.025	0.000	-0.564	0.000	-0.461
0.000	-1.044	-0.314	-1.044	-1.044	0.730	0.000	-1.287	0.000	1.044
0.000	-4.002	-10.243	-4.002	-12.331	0.000	-11.639	0.000	0.000	-4.463
0.000	-4.002	-6.690	-4.002	-5.646	0.000	-3.536	0.000	0.000	-1.807
0.000	-4.002	-0.151	-4.002	0.893	0.000	-7.371	0.000	0.000	3.541
-1.044	6.090	-1.597	-6.090	-18.823	1.044	-16.977	1.044	0.000	-7.244
-1.044	6.090	-9.601	-6.090	-10.645	1.044	-6.267	0.000	0.000	-2.461
-1.044	6.090	-18.823	-6.090	-0.553	1.044	-10.017	-1.044	4.975	
0.000	10.092	9.710	-12.180	-26.928	0.000	-24.890	0.000	-13.757	
0.000	10.092	-5.876	-12.180	-9.107	0.000	-5.421	0.000	-1.577	
0.000	10.092	-20.566	-12.180	10.656	0.000	-19.929	0.000	10.603	
0.000	1.218	2.832	-8.178	-20.451	0.000	-19.297	0.000	-9.293	
0.000	1.218	-0.383	-8.178	-6.690	0.000	-3.536	0.000	-1.115	
0.000	1.218	-1.856	-8.178	8.781	0.000	-15.721	0.000	7.063	
0.000	-1.914	-3.449	-13.224	-30.060	0.000	-28.253	0.000	-15.031	
0.000	-1.914	0.353	-13.224	-8.722	0.000	-5.228	0.000	-1.807	
0.000	-1.914	5.251	-13.224	12.744	0.000	-22.831	0.000	11.417	
-1.044	-9.222	-14.997	-11.310	-27.562	-1.044	-26.409	-1.044	-12.464	
-1.044	-9.222	1.243	-11.310	-9.601	-1.044	-6.267	0.000	-2.692	
0.000	-2.958	16.497	-11.310	7.934	-1.044	-18.064	1.044	10.156	
0.000	-2.958	-5.855	-5.046	-13.631	0.000	-12.939	0.000	-5.507	
0.000	-2.958	-3.536	-5.046	-5.261	0.000	-3.344	0.000	-1.807	
0.000	-2.958	-0.635	-5.046	1.681	0.000	-7.979	0.000	4.585	
0.000	0.000	-1.948	-2.088	-5.772	0.000	-5.541	0.000	-2.319	
0.000	0.000	-1.641	-2.088	-2.948	0.000	-1.602	0.000	-0.692	
0.000	0.000	-0.904	-2.088	0.492	0.000	-3.503	0.000	1.857	
0.000	1.914	-1.931	-6.090	-15.957	0.000	-15.265	0.000	-6.551	
0.000	1.914	-4.954	-6.090	-7.184	0.000	-4.382	0.000	-2.259	
0.000	1.914	-5.933	-6.090	3.531	0.000	-9.382	0.000	5.629	
-1.044	10.092	3.026	-17.226	-38.927	1.044	-37.081	1.044	-18.610	
-1.044	10.092	-12.445	-17.226	-12.445	1.044	-7.727	0.000		
-1.044	10.092	-27.424	-17.226	-12.445	1.044				

27

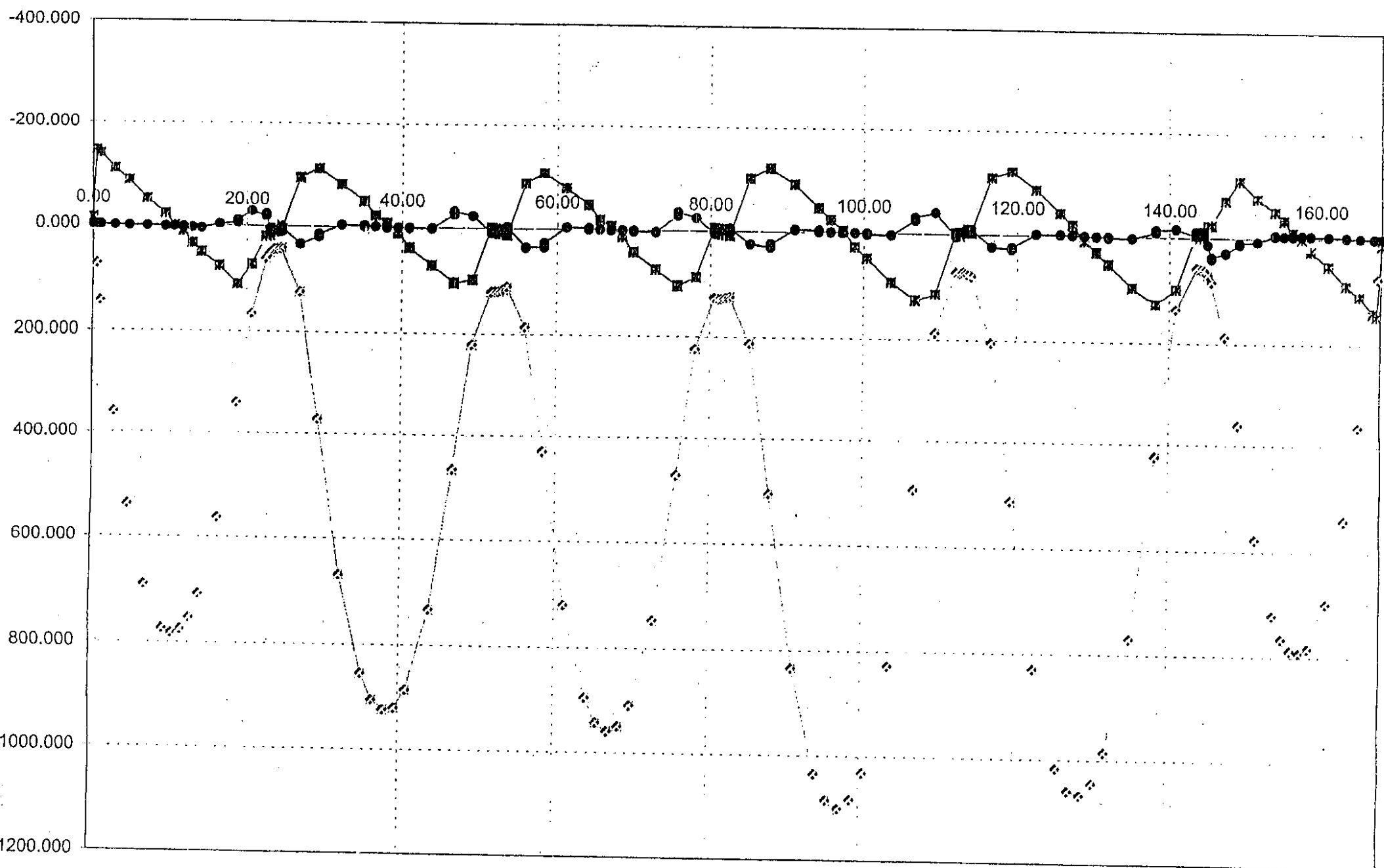
VIADUCTO BORGES BLANQUES

8(1)	0.000	3.654	-4.411	-20.358	-44.431	0.000	-41.701	0.000	-22.165
8(2)	0.000	3.654	-9.729	-20.358	-9.729	0.000	-6.356	0.000	-1.807
8(3)	0.000	3.654	-15.199	-20.358	23.603	0.000	-36.048	0.000	18.743
3(1)	0.000	1.914	-0.260	-15.312	-30.051	0.000	-28.013	0.000	-16.427
1)	0.000	1.914	-2.646	-15.312	-6.799	0.000	-4.190	0.000	-1.115
1)	0.000	1.914	-5.828	-15.312	16.581	0.000	-24.822	0.000	14.389
1)	0.000	-2.610	-2.172	-22.272	-44.431	0.000	-41.701	0.000	-24.079
1)	0.000	-2.610	1.192	-22.272	-9.729	0.000	-6.356	0.000	-1.807
1)	0.000	-2.610	3.744	-22.272	24.647	0.000	-36.048	0.000	20.657
1)	-1.044	-12.876	-16.903	-19.140	-41.576	-1.044	-39.500	-1.044	-20.294
1)	-1.044	-12.876	1.168	-19.140	-12.061	-1.044	-7.727	0.000	-3.153
1)	-1.044	-12.876	21.029	-19.140	18.280	-1.044	-30.655	1.044	17.756
1)	0.000	-1.914	-5.983	-6.090	-16.809	0.000	-16.117	0.000	-6.782
1)	0.000	-1.914	-1.602	-6.090	-6.799	0.000	-4.190	0.000	-2.269
1)	0.000	-1.914	1.151	-6.090	3.723	0.000	-10.426	0.000	5.398
1)	0.000	0.000	-0.558	-2.088	-5.888	0.000	-5.657	0.000	-2.319
1)	0.000	0.000	-1.641	-2.088	-2.564	0.000	-1.410	0.000	-0.692
1)	0.000	0.000	-0.558	-2.088	0.376	0.000	-3.619	0.000	1.857
1)	0.000	1.914	-1.239	-6.090	-16.809	0.000	-16.117	0.000	-6.782
1)	0.000	1.914	-4.031	-6.090	-6.799	0.000	-4.190	0.000	-2.269
1)	0.000	1.914	-6.285	-6.090	3.723	0.000	-10.426	0.000	5.629
1)	-1.044	11.136	4.186	-19.140	-41.576	1.044	-39.500	1.044	-20.294
1)	-1.044	11.136	-12.061	-19.140	-12.061	1.044	-7.534	0.000	-3.153
1)	-1.044	11.136	-28.352	-19.140	18.280	1.044	-30.655	-1.044	17.756
1)	0.000	2.610	-4.340	-22.272	-45.091	0.000	-42.553	0.000	-24.079
1)	0.000	2.610	-8.806	-22.272	-9.729	0.000	-6.356	0.000	-1.807
1)	0.000	2.610	-14.084	-22.272	25.031	0.000	-37.092	0.000	20.657
1)	0.000	1.044	-2.890	-15.312	-30.903	0.000	-29.057	0.000	-16.427
1)	0.000	1.044	-3.108	-15.312	-6.799	0.000	-4.190	0.000	-1.115
1)	0.000	1.044	-3.934	-15.312	17.817	0.000	-25.673	0.000	14.389
1)	0.000	-2.610	-3.016	-22.272	-44.834	0.000	-42.527	0.000	-24.079
1)	0.000	-2.610	1.424	-22.272	-9.497	0.000	-6.124	0.000	-1.807
1)	0.000	-2.610	4.640	-22.272	27.202	0.000	-36.836	0.000	20.657
1)	-1.044	-8.004	-12.031	-20.184	-43.298	-1.044	-42.266	-1.044	-21.338
1)	-1.044	-8.004	1.168	-20.184	-12.061	-1.044	-7.534	0.000	-3.384
1)	-1.044	-8.004	15.287	-20.184	20.560	-1.044	-33.613	1.044	19.261
1)	0.000	-2.958	-6.797	-7.134	-17.853	0.000	-16.930	0.000	-7.595
1)	0.000	-2.958	-1.602	-7.134	-6.799	0.000	-4.190	0.000	-2.269
1)	0.000	-2.958	3.295	-7.134	6.681	0.000	-11.700	0.000	6.673
1)	0.000	0.000	-1.486	-2.088	-5.772	0.000	-5.541	0.000	-2.319
1)	0.000	0.000	-1.641	-2.088	-2.564	0.000	-1.410	0.000	-0.692
1)	0.000	0.000	-0.442	-2.088	1.536	0.000	-3.503	0.000	1.857
1)	-1.044	0.000	-3.205	-8.178	-18.558	0.000	-17.635	0.000	-7.826
1)	-1.044	0.000	-4.082	-8.178	-7.312	0.000	-4.472	0.000	-2.500
1)	-1.044	0.000	-5.293	-8.178	5.106	0.000	-11.752	0.000	6.442
1)	-1.044	10.092	1.976	-21.228	-46.570	1.044	-44.263	1.044	-22.612
1)	-1.044	10.092	-13.086	-21.228	-13.471	1.044	-8.291	0.000	-3.384
1)	-1.044	10.092	-28.300	-21.228	21.290	1.044	-34.957	-1.044	19.844
1)	0.000	2.784	-4.872	-25.404	-49.938	0.000	-46.746	0.000	-26.981
1)	0.000	2.784	-10.522	-25.404	-10.522	0.000	-6.688	0.000	-1.577
1)	0.000	2.784	-14.790	-25.404	30.276	0.000	-41.517	0.000	24.020
1)	0.000	1.044	-2.558	-17.400	-35.866	0.000	-33.367	0.000	-19.323
1)	0.000	1.044	-2.576	-17.400	-7.312	0.000	-4.472	0.000	-0.923
1)	0.000	1.044	-2.558	-17.400	19.814	0.000	-30.406	0.000	16.477
1)	0.000	-0.696	-2.249	-25.404	-50.246	0.000	-47.055	0.000	-27.211
1)	0.000	-0.696	1.321	-25.404	-10.522	0.000	-6.688	0.000	-1.807
1)	0.000	-0.696	4.537	-25.404	30.838	0.000	-41.633	0.000	23.789
1)	-1.044	-4.872	-5.721	-22.272	-48.774	-1.044	-46.467	-1.044	-23.426
1)	-1.044	-4.872	2.109	-22.272	-13.471	-1.044	-8.291	0.000	-3.384
1)	-1.044	-4.872	7.851	-22.272	22.218	-1.044	-36.930	1.044	20.888
1)	-1.044	-1.044	-4.786	-8.178	-20.902	0.000	-19.979	0.000	-8.639
1)	-1.044	-1.044	-1.654	-8.178	-7.312	0.000	-4.472	0.000	-2.500
1)	-1.044	-1.044	0.260	-8.178	6.764	0.000	-13.865	0.000	7.717
1)	0.000	0.000	-1.486	-2.088	-5.772	0.000	-5.541	0.000	-2.319
1)	0.000	0.000	-1.179	-2.088	-2.564	0.000	-1.410	0.000	-0.692
1)	0.000	0.000	-1.486	-2.088	2.406	0.000	-3.503	0.000	1.857
1)	-1.044	1.044	-1.316	-8.178	-20.902	0.000	-19.979	0.000	-8.639
1)	-1.044	1.044	-3.038	-8.178	-7.312	0.000	-4.472	0.000	-2.500
1)	-1.044	1.044	-6.362	-8.178	6.764	0.000	-13.635	0.000	7.717
1)	-1.044	4.872	-6.492	-22.272	-48.967	1.044	-46.467	1.044	-23.426
1)	-1.044	4.872	-13.471	-22.272	-13.471	1.044	-8.291	0.000	-3.384
1)	-1.044	4.872	-20.064	-22.272	22.026	1.044	-36.930	-1.044	20.888
1)	0.000	0.696	-9.008	-25.404	-50.246	0.000	-47.055	0.000	-27.211
1)	0.000	0.696	-10.522	-25.404	-10.522	0.000	-6.688	0.000	-1.807
1)	0.000	0.696	-13.184	-25.404	30.838	0.000	-41.633	0.000	23.789
1)	0.000	-1.044	-4.064	-17.400	-34.822	0.000	-32.323	0.000	-17.471
1)	0.000	-1.044	-4.082	-17.400	-6.653	0.000	-4.664	0.000	-0.923
1)	0.000	-1.044	-3.020	-17.400	19.814	0.000	-29.362	0.000	15.433
1)	0.000	-2.784	-3.293	-23.490	-50.246	0.000	-47.055	0.000	-25.067
1)	0.000	-2.784	1.321	-23.490	-10.522	0.000	-6.688	0.000	-1.577
1)	0.000	-2.784	6.625	-23.490	27.880	0.000	-41.633	0.000	22.106
1)	-1.044	-9.048	-13.029	-19.314	-43.243	-1.044	-40.936	-1.044	-20.929
1)	-1.044	-9.048	1.065	-19.314	-13.471	-1.044	-8.291	0.000	-3.384
1)	-1.044	-9.048	14.115	-19.314	15.917	-1.044	-31.014	1.044	17.737

VIADUCTO BORGES BLANQUES

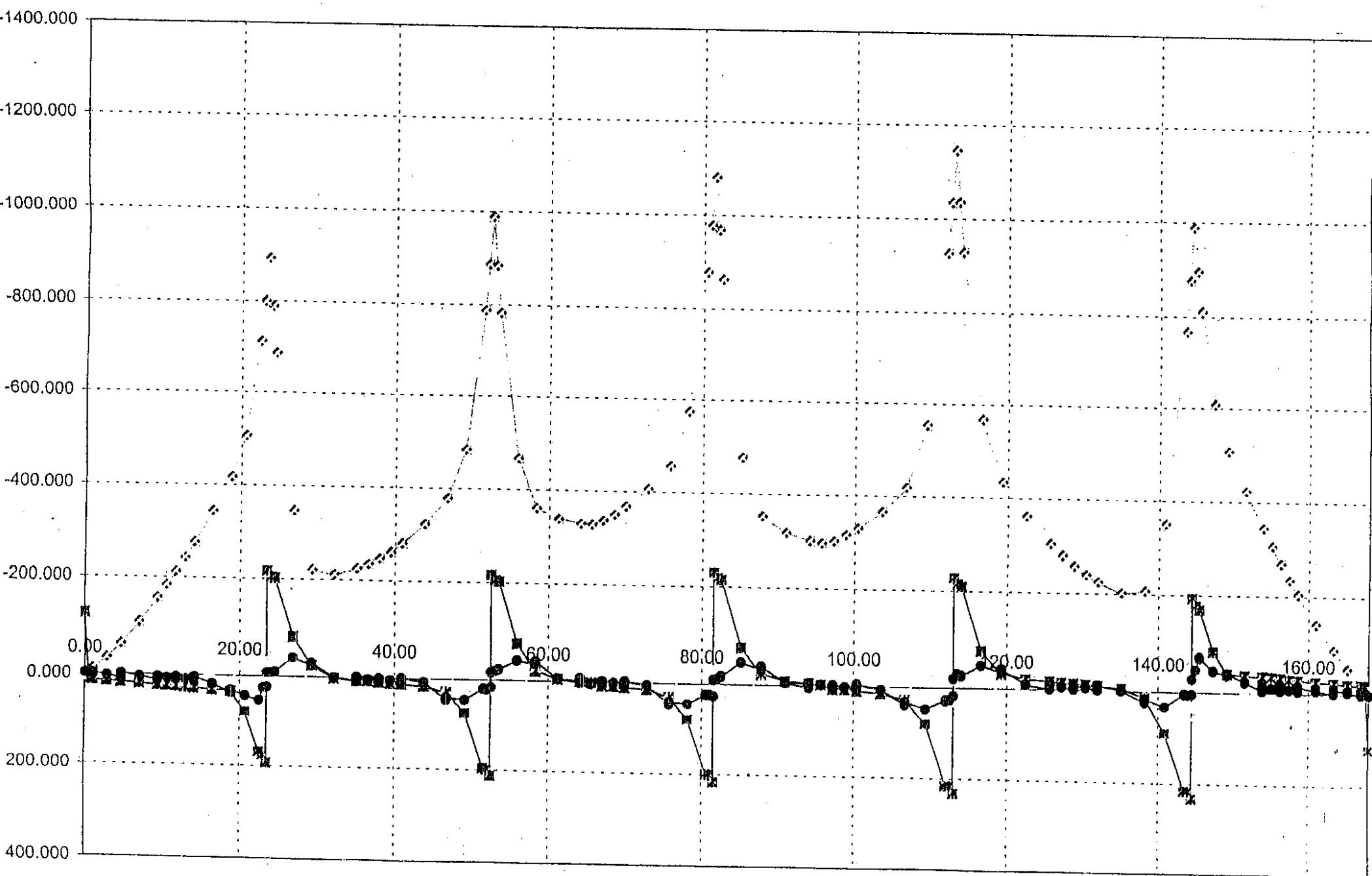
1)	-1.044	0.000	-2.293	-7.134	-18.442	0.000	-17.750	0.000	-7.595
1)	-1.044	0.000	-1.390	-7.134	-7.697	0.000	-4.664	0.000	-2.692
1)	-1.044	0.000	-1.249	-7.134	6.092	0.000	-11.405	0.000	6.673
1)	0.000	0.000	0.019	-2.088	-5.772	0.000	-5.541	0.000	-2.088
1)	0.000	0.000	-1.564	-2.088	-2.948	0.000	-1.602	0.000	-0.692
1)	0.000	0.000	-2.069	-2.088	2.406	0.000	-3.503	0.000	2.088
1)	0.000	2.958	0.934	-6.090	-14.419	0.000	-13.958	0.000	-6.321
1)	0.000	2.958	-3.075	-6.090	-5.261	0.000	-3.344	0.000	-1.807
1)	0.000	2.958	-6.374	-6.090	2.981	0.000	-8.997	0.000	5.859
1)	-1.044	8.004	3.584	-13.224	-29.650	1.044	-28.497	1.044	-14.147
1)	-1.044	8.004	-9.601	-13.224	-10.645	1.044	-6.267	0.000	-2.923
1)	-1.044	8.004	-22.516	-13.224	10.892	1.044	-20.152	-1.044	12.301
1)	0.000	1.914	-4.830	-14.268	-30.060	0.000	-29.297	0.000	-15.031
1)	0.000	1.914	-8.722	-14.268	-8.722	0.000	-5.228	0.000	-1.807
1)	0.000	1.914	-12.486	-14.268	13.614	0.000	-23.875	0.000	11.417
1)	0.000	-1.218	-7.633	-9.048	-20.335	0.000	-20.225	0.000	-10.163
1)	0.000	-1.218	-6.690	-9.048	-6.690	0.000	-3.536	0.000	-1.115
1)	0.000	-1.218	-2.935	-9.048	8.897	0.000	-16.649	0.000	7.933
1)	0.000	-10.092	-20.110	-12.180	-27.972	0.000	-25.934	0.000	-13.757
1)	0.000	-10.092	-3.723	-12.180	-9.107	0.000	-5.421	0.000	-1.577
1)	0.000	-10.092	12.254	-12.180	10.656	0.000	-20.973	0.000	10.603
1)	-1.044	-6.090	-8.849	-6.090	-20.737	-1.044	-18.891	-1.044	-7.244
1)	-1.044	-6.090	1.243	-6.090	-10.645	-1.044	-6.267	0.000	-2.461
1)	-1.044	-6.090	10.291	-6.090	-0.553	-1.044	-11.931	1.044	4.744
1)	0.000	4.002	5.616	-5.046	-12.447	0.000	-11.755	0.000	-4.463
1)	0.000	4.002	-0.383	-5.046	-5.646	0.000	-3.536	0.000	-1.807
1)	0.000	4.002	-4.476	-5.046	0.777	0.000	-7.256	0.000	3.541
1)	0.000	1.044	2.076	-1.044	-3.446	0.000	-3.215	0.000	-1.275
1)	0.000	1.044	-0.103	-1.044	-1.025	0.000	-0.564	0.000	-0.461
1)	0.000	1.044	-1.056	-1.044	0.730	0.000	-2.331	0.000	1.044
1)	0.000	380.082	29.058	7.018	0.348	0.000	0.348	0.000	7.018
1)	0.000	380.082	14.269	7.018	1.276	0.000	1.276	0.000	7.018
1)	0.000	380.082	0.000	7.018	0.000	0.000	0.000	0.000	165.749
1)	0.000	182.382	13.360	-10.614	-0.696	0.000	-0.696	0.000	-10.614
1)	0.000	182.382	6.961	-10.614	-0.812	0.000	-0.812	0.000	-10.614
1)	0.000	182.382	0.000	-10.614	0.000	0.000	0.000	0.000	130.815
1)	0.000	229.712	17.516	-11.078	-0.580	0.000	-0.580	0.000	-11.078
1)	0.000	229.712	8.236	-11.078	-0.812	0.000	-0.812	0.000	-11.078
1)	0.000	229.712	0.000	-11.078	0.000	0.000	0.000	0.000	176.763
1)	0.000	294.492	21.323	2.526	0.696	0.000	0.696	0.000	2.526
1)	0.000	294.492	10.671	2.526	0.348	0.000	0.348	0.000	2.526
1)	0.000	294.492	0.000	2.526	0.000	0.000	0.000	0.000	185.827
1)	0.000	256.290	18.983	5.304	0.464	0.000	0.464	0.000	5.304
1)	0.000	256.290	9.511	5.304	0.232	0.000	0.232	0.000	5.304
1)	0.000	256.290	0.000	5.304	0.000	0.000	0.000	0.000	251.366
1)	0.000	174.835	13.046	7.018	0.348	0.000	0.348	0.000	7.018
1)	0.000	174.835	6.553	7.018	1.276	0.000	1.276	0.000	7.018
1)	0.000	174.835	0.000	7.018	0.000	0.000	0.000	0.000	188.496
1)	0.000	188.678	14.424	-10.614	-0.696	0.000	-0.696	0.000	-10.614
1)	0.000	188.678	6.091	-10.614	-0.812	0.000	-0.812	0.000	-10.614
1)	0.000	188.678	0.000	-10.614	0.000	0.000	0.000	0.000	-11.078
1)	0.000	244.014	18.151	-11.078	-0.580	0.000	-0.580	0.000	259.880
1)	0.000	244.014	8.641	-11.078	-0.812	0.000	-0.812	0.000	-11.078
1)	0.000	244.014	0.000	-11.078	0.000	0.000	0.000	0.000	-11.078
1)	0.000	180.783	13.554	2.296	0.696	0.000	0.696	0.000	229.900
1)	0.000	180.783	6.438	2.296	0.348	0.000	0.348	0.000	2.296
1)	0.000	180.783	0.000	2.296	0.000	0.000	0.000	0.000	278.403
1)	0.000	285.912	21.443	5.534	0.464	0.000	0.464	0.000	5.534
1)	0.000	285.912	10.267	5.534	0.232	0.000	0.232	0.000	5.534
1)	0.000	285.912	0.000	5.534	0.000	0.000	0.000	0.000	287.884

Hip F. M Qcon Tcon



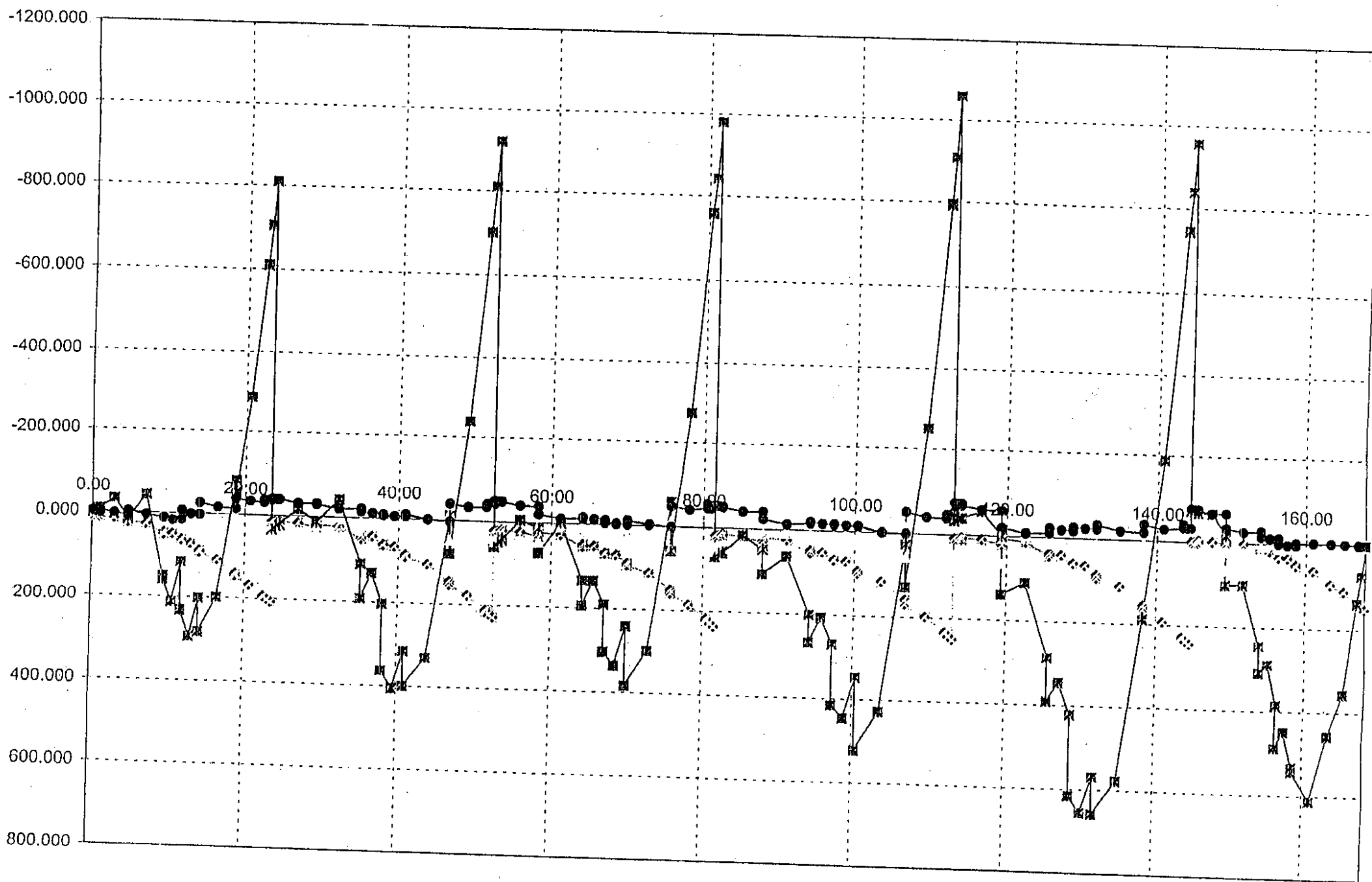
M 1 48 (Q) 1 48 (T) 1 48 M 49 96 (Q) 49 96 (T) 49 96

Hip F. M Qcon Tcon

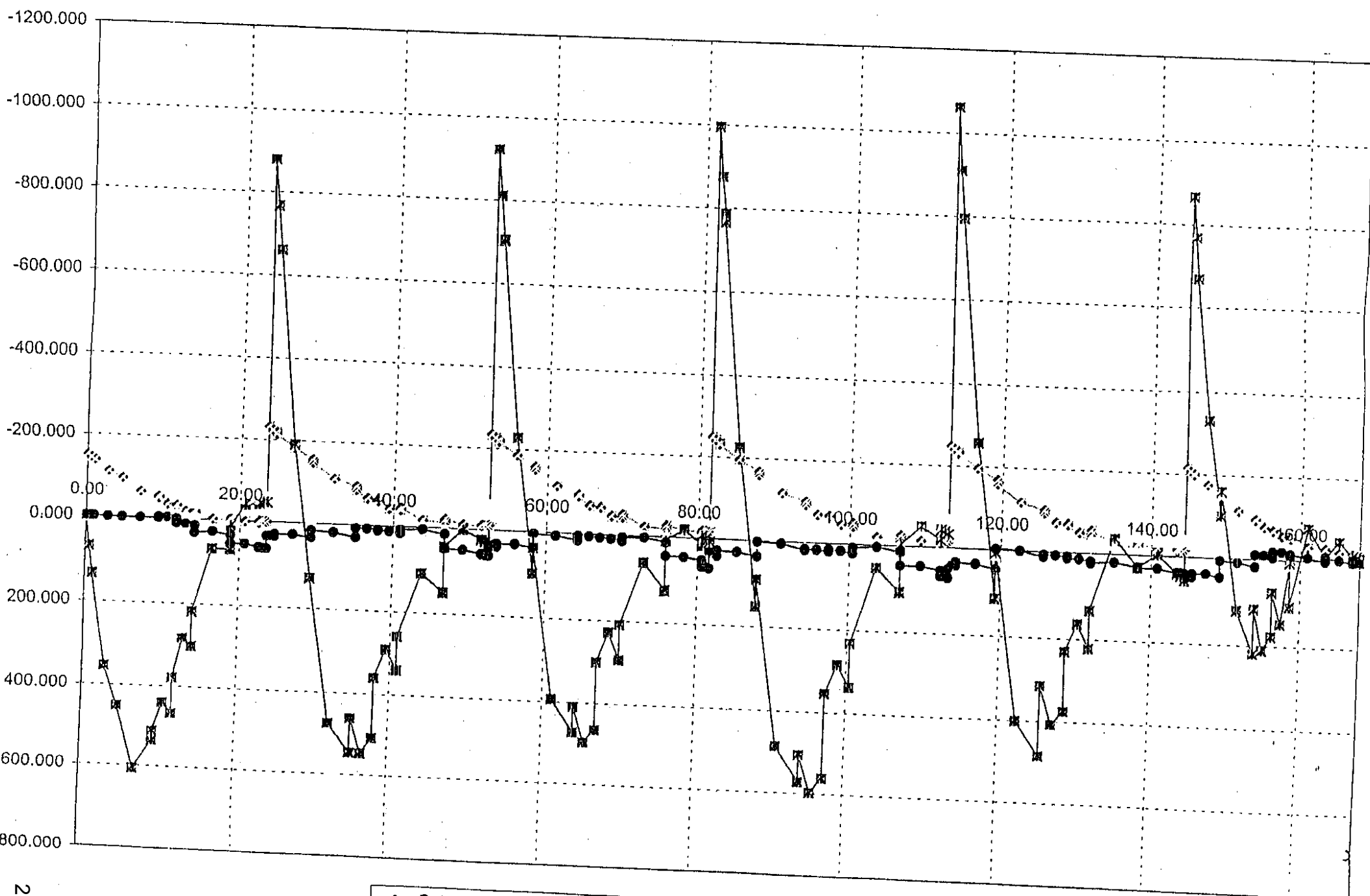


M 1 48 (Q) 1 48 (T) 1 48 M 49 96 (Q) 49 96 (T) 49 96

Hip F. Q Mcon Tcon

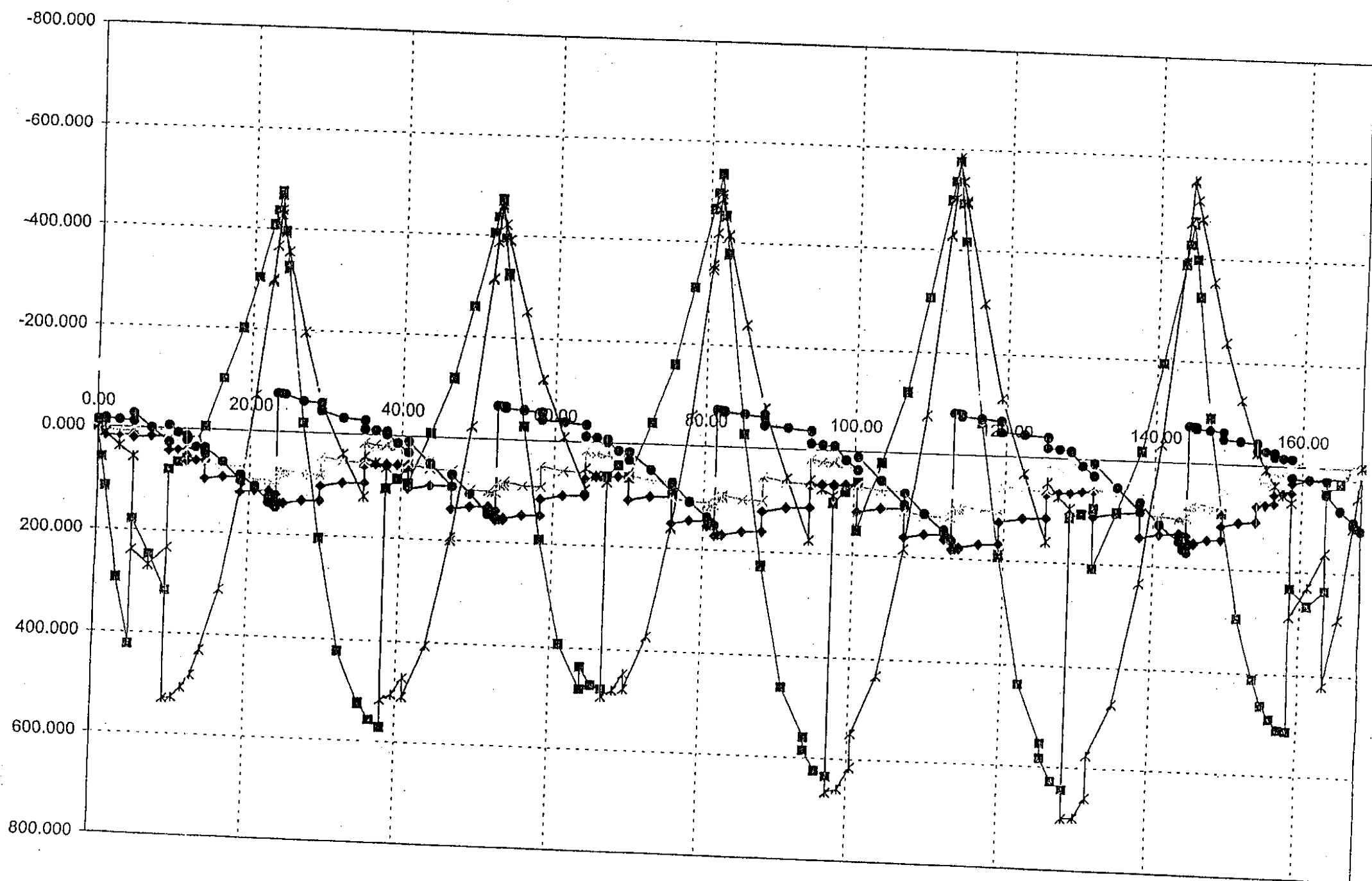


Hip F. Q Mcon Tcon

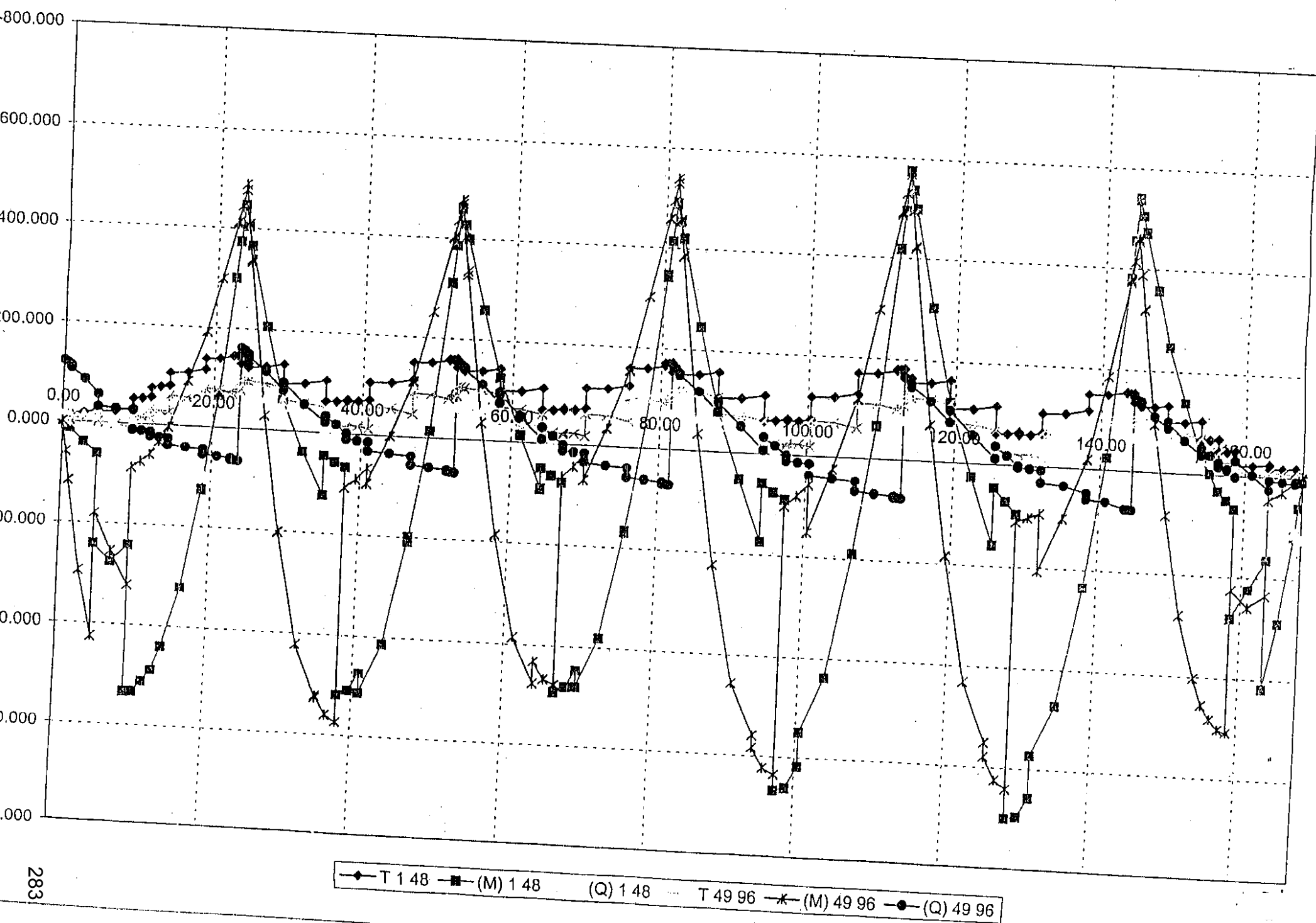


Q 1 48 (M) 1 48 (T) 1 48 Q 49 96 (M) 49 96 (T) 49 96

Hip F. T Mcon Qcon

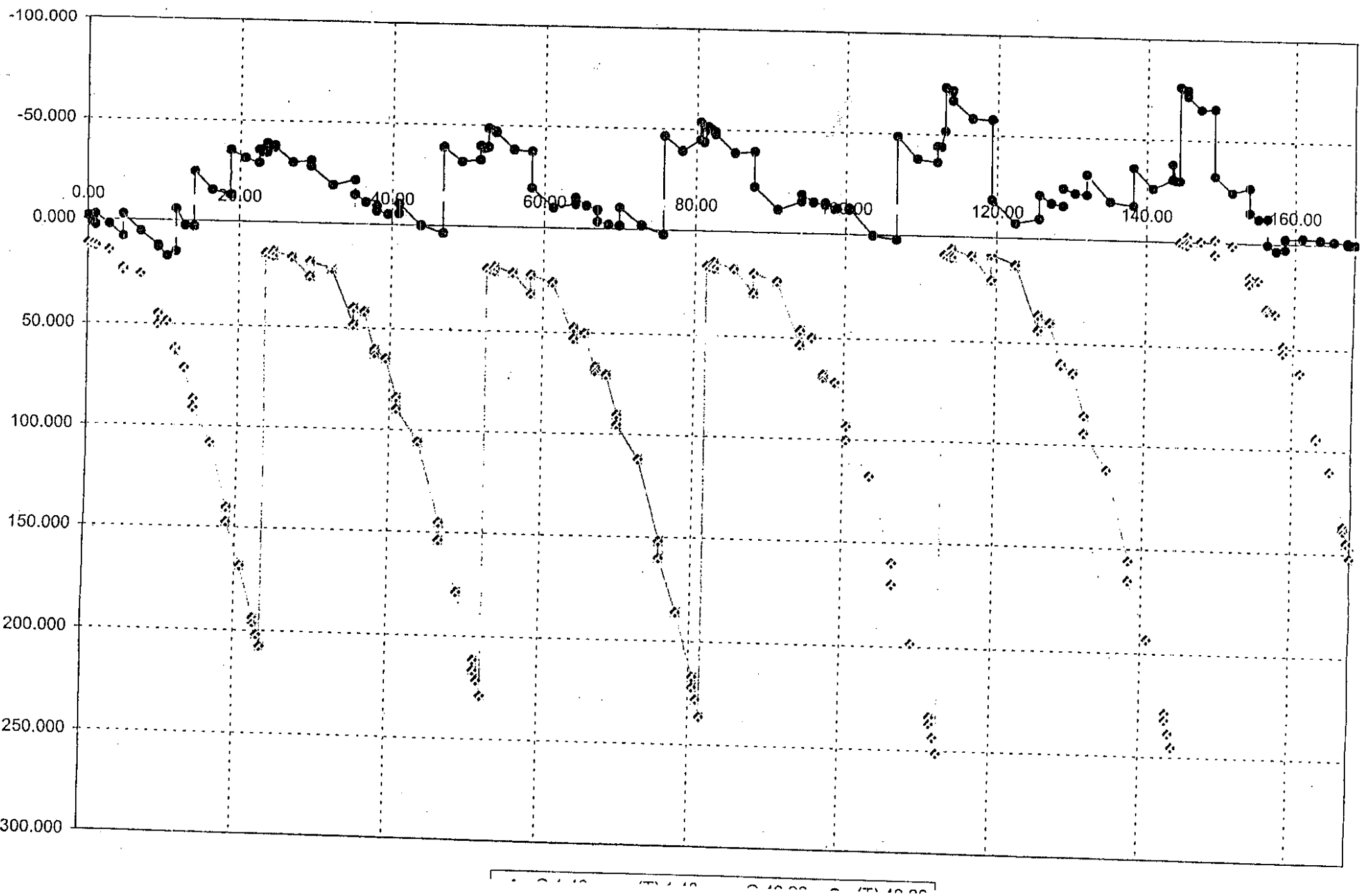


Hip F. T Mcon Qcon

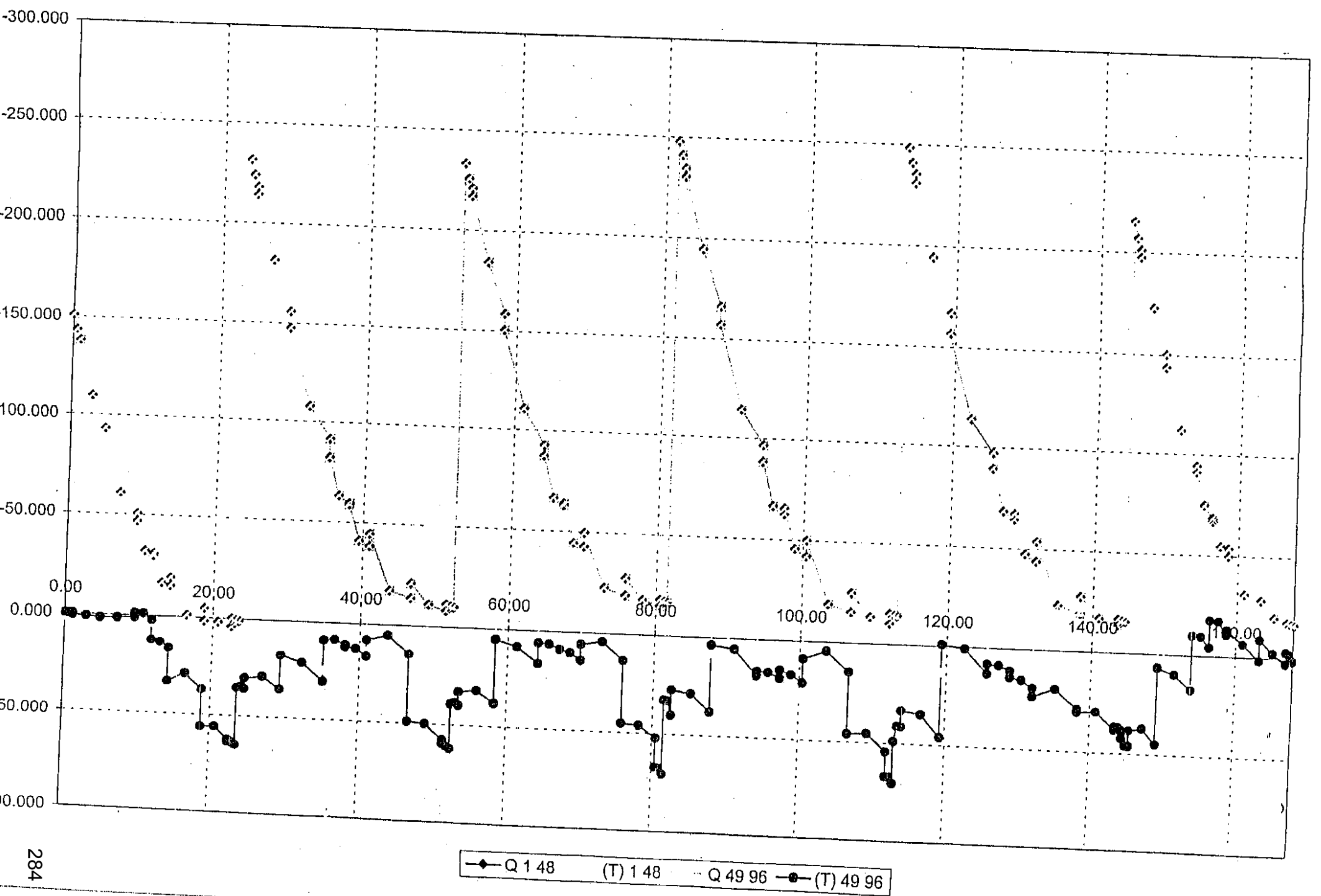


◆ T 1 48 ■ (M) 1 48 (Q) 1 48 — T 49 96 ✕ (M) 49 96 ● (Q) 49 96

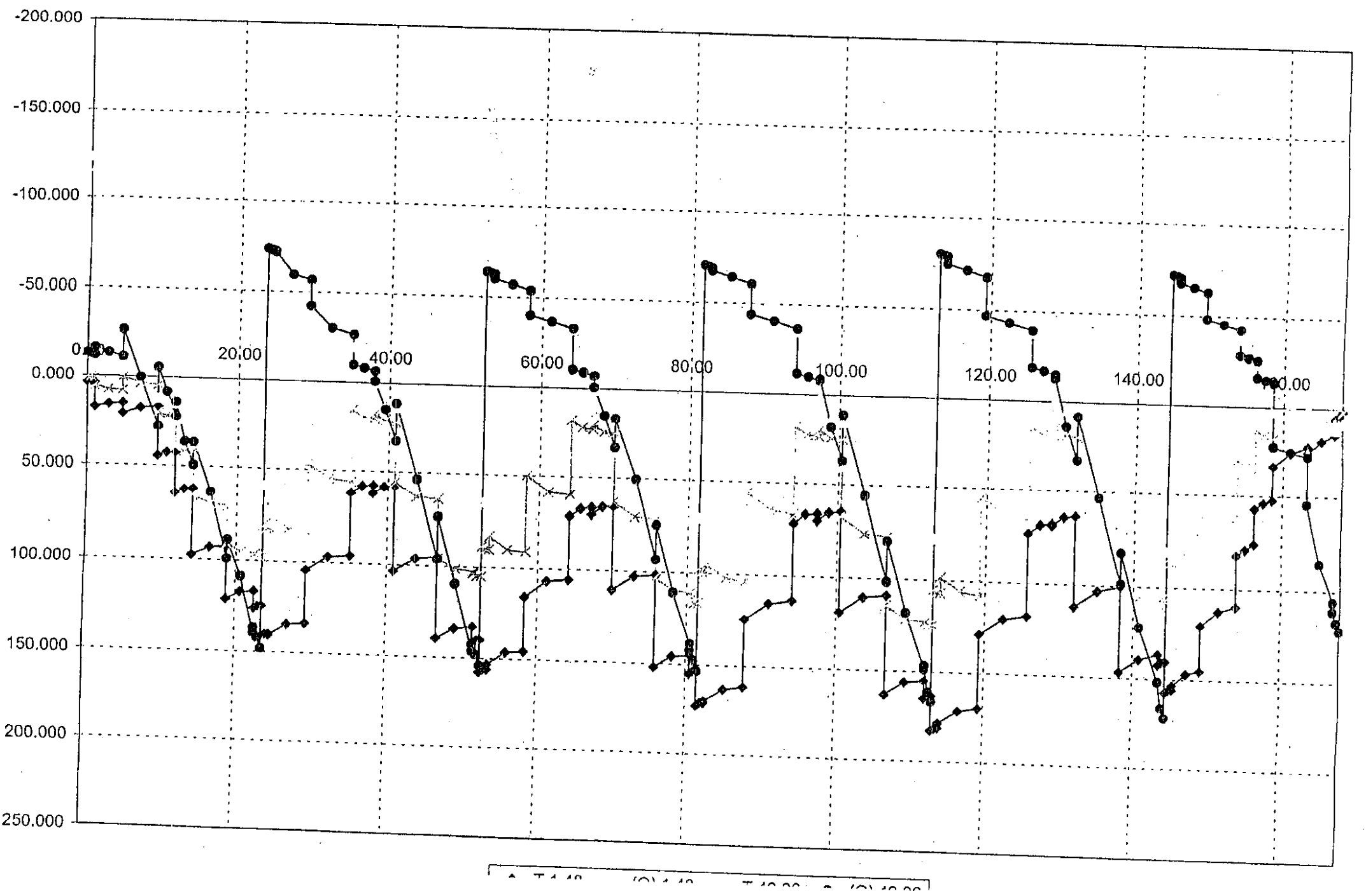
Hip F. Q Mcon Tcon



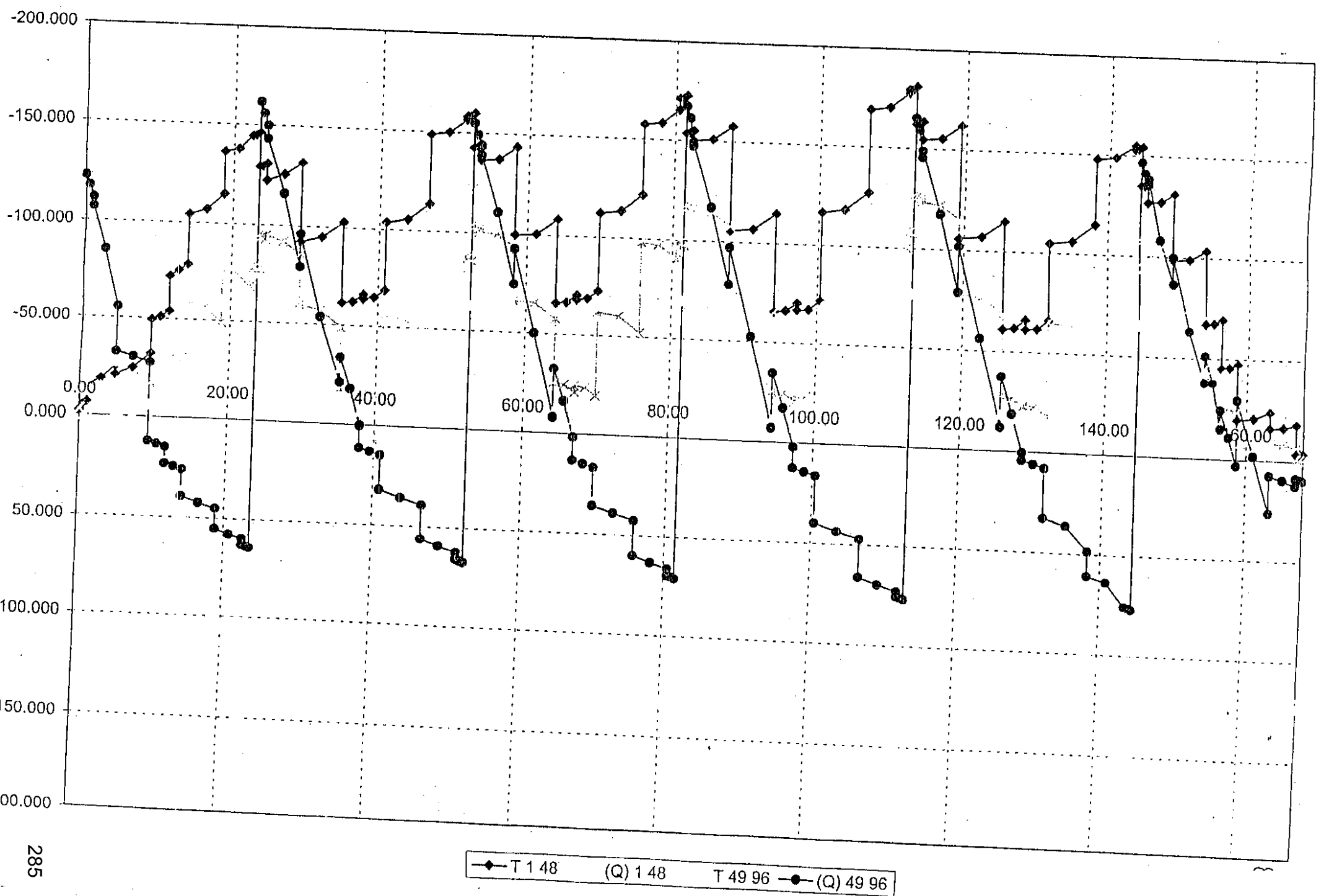
Hip F. Q Mcon Tcon



Hip F. T Mcon Qcon



Hip F. T Mcon Qcon



HIPOTESIS: G

Eje 1 (49-96) sin carga; Eje 2 (1-48) sin ripado

Envoltente IPF75B positiva

Coef impacto 1.16

VIADUCTO BORGES BLANQUES

BARRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
1(1)	0.00	0.193	-127.670	0.000	-1.041	0.000	0.071	0.000	0.345	0.970
1(2)	0.50	0.358	-121.408	62.015	-0.385	0.288	0.237	66.864	4.599	-132.800
1(3)	1.00	0.524	-114.848	121.408	0.271	6.288	0.402	131.816	6.252	-126.240
2(1)	1.00	0.474	-113.871	120.641	0.374	6.288	1.837	130.499	5.212	-124.647
2(2)	2.85	2.805	-89.918	309.598	2.736	3.903	2.432	322.511	11.163	-91.192
2(3)	4.70	3.433	-56.332	445.214	13.494	84.324	4.241	468.697	19.924	-66.264
3(1)	4.70	-15.683	-29.661	134.638	14.298	84.193	5.217	467.248	-5.854	-76.246
3(2)	7.05	-11.368	-26.644	205.229	17.315	46.327	6.010	594.940	2.080	-36.231
3(3)	9.40	-10.360	-23.495	264.854	44.866	291.877	5.787	645.471	12.163	-4.744
4(1)	9.40	-17.196	15.582	-102.905	41.028	241.568	0.680	645.471	-24.206	-20.662
4(2)	10.58	-14.767	17.157	-119.138	44.767	314.806	0.121	650.067	-20.239	4.922
4(3)	11.75	-14.370	18.731	-138.892	60.510	215.534	7.040	636.696	-16.272	16.532
5(1)	11.75	-17.327	17.699	-138.892	56.229	200.148	-6.135	636.832	-42.143	5.746
5(2)	12.93	-14.599	19.439	-158.731	67.118	285.317	-8.347	620.422	-35.696	31.198
5(3)	14.10	-14.203	21.014	-184.018	84.633	199.894	-4.380	576.549	-31.729	49.894
6(1)	14.10	-15.180	22.275	-182.837	78.191	178.430	-25.322	576.549	-68.270	34.777
6(2)	16.45	-9.428	26.266	-236.766	98.068	143.083	-27.228	462.744	-52.236	64.320
6(3)	18.80	-8.419	29.284	-300.642	134.343	-116.814	-19.112	258.419	-36.606	105.571
7(1)	18.80	-5.240	30.818	-300.697	131.226	-120.742	-30.106	259.752	-59.490	97.501
7(2)	20.65	0.050	34.154	-362.299	155.169	-318.716	-27.761	98.649	-30.705	64.566
7(3)	22.50	0.893	36.516	-428.824	183.704	-618.981	-21.298	10.205	-6.668	11.978
8(1)	22.50	3.256	38.222	-427.350	184.922	-619.174	-20.438	10.172	-6.178	12.309
8(2)	23.00	4.611	39.175	-447.547	191.481	-709.513	-19.965	2.544	-2.593	19.826
8(3)	23.50	5.025	39.831	-467.799	198.041	-806.611	-18.312	-7.099	-0.700	14.715
9(1)	23.50	21.746	-182.397	-476.075	-9.356	-5.868	-4.757	-7.099	1.124	-7.988
9(2)	24.00	23.101	-176.135	-388.140	-8.700	-0.791	-4.591	-0.344	2.470	-13.236
9(3)	24.50	23.266	-169.575	-300.982	-8.044	7.495	-3.245	4.896	2.636	-6.676
10(1)	24.50	22.193	-161.915	-306.588	-6.356	7.631	-2.123	4.896	2.801	-5.399
10(2)	26.90	30.277	-131.271	44.959	-3.208	20.101	-1.329	102.816	50.783	-80.703
10(3)	29.30	31.318	-89.944	306.963	7.026	106.323	7.729	291.441	67.522	-73.684
11(1)	29.30	-1.236	-105.680	303.691	7.442	106.199	5.799	289.521	30.008	-89.636
11(2)	32.20	9.045	-58.091	546.455	11.247	81.923	6.758	523.174	56.296	-54.517
11(3)	35.10	10.252	-20.044	659.198	41.422	292.033	19.327	631.528	65.884	-19.422
12(1)	35.10	-32.381	-33.680	560.052	36.003	272.313	21.604	631.528	8.948	-42.909
12(2)	36.55	-27.224	-15.313	596.914	37.840	218.830	22.100	672.631	16.386	-12.734
12(3)	38.00	-26.513	4.366	604.842	60.274	316.396	24.728	678.463	21.998	2.025
13(1)	38.00	-43.568	11.464	-85.432	53.510	271.690	12.368	678.463	-18.842	-15.001
13(2)	39.45	-38.708	13.598	-101.484	58.495	342.565	15.849	680.657	-13.576	7.499
13(3)	40.90	-37.998	15.566	-124.360	80.142	262.005	21.759	648.667	-6.469	37.805
14(1)	40.90	-38.811	15.437	-141.009	67.648	241.121	-23.713	648.927	-62.635	13.349
14(2)	43.80	-29.125	19.539	-187.092	86.015	261.228	-24.949	558.135	-53.255	49.428
14(3)	46.70	-27.918	23.344	-248.667	130.950	-26.387	-15.834	338.238	-27.612	86.223
15(1)	46.70	-21.240	27.502	-253.394	123.960	-36.242	-44.481	340.686	-63.885	71.667
15(2)	49.10	-13.702	31.246	-323.404	152.102	-271.559	-41.348	149.477	-48.616	88.330
15(3)	51.50	-12.413	34.395	-402.456	189.493	-675.897	-28.966	41.231	-1.746	8.428
16(1)	51.50	-7.653	37.229	-401.776	191.802	-675.760	-27.656	41.231	-0.050	9.852
16(2)	52.00	-6.000	38.183	-420.303	197.181	-768.415	-27.183	35.979	0.116	16.412
16(3)	52.50	-5.586	38.839	-439.130	205.708	-867.167	-24.546	29.361	0.281	11.164
17(1)	52.50	11.960	-181.322	-443.173	-7.543	37.020	-4.380	29.361	2.048	-6.312
17(2)	53.00	13.861	-175.010	-353.758	-6.887	40.061	-4.215	34.080	3.394	-11.560
17(3)	53.50	14.026	-168.450	-267.528	-6.231	46.405	-2.869	37.379	3.559	-5.000
18(1)	53.50	12.013	-159.573	-273.297	-4.413	45.864	-0.202	37.248	5.269	-3.592
18(2)	55.90	20.939	-128.333	74.218	-1.264	53.457	0.592	135.391	48.949	-77.799
18(3)	58.30	22.030	-87.602	332.215	10.150	134.789	9.650	320.588	65.165	-70.722
19(1)	58.30	-6.589	-101.759	329.517	9.515	127.017	11.153	320.843	28.849	-86.246
19(2)	61.20	4.487	-53.873	548.931	13.319	92.005	12.111	551.155	56.013	-53.488
19(3)	64.10	6.040	-6.284	646.576	43.691	293.899	23.697	653.171	65.600	-18.393
20(1)	64.10	-35.802	-29.953	556.021	39.152	278.834	24.290	653.156	7.415	-41.734
20(2)	65.55	-30.677	-11.586	586.459	41.973	232.546	24.753	691.882	14.523	-10.378
20(3)	67.00	-29.636	8.094	589.253	62.243	317.300	27.413	695.376	19.902	3.201
21(1)	67.00	-43.620	15.077	-107.542	56.773	277.015	17.669	695.376	-20.042	-12.645
21(2)	68.45	-38.463	16.914	-129.570	60.774	340.824	21.150	694.860	-15.083	8.674
21(3)	69.90	-38.000	18.882	-156.309	83.406	259.806	26.076	659.642	-7.975	40.161
22(1)	69.90	-36.303	18.119	-178.272	71.376	232.189	-19.770	660.838	-64.833	15.836
22(2)	72.80	-26.815	22.221	-234.145	90.727	241.086	-18.842	564.520	-55.246	51.915
22(3)	75.70	-25.360	26.026	-302.658	135.662	-55.764	-10.711	338.236	-26.182	84.870
23(1)	75.70	-13.723	32.099	-303.676	128.273	-69.032	-37.949	339.682	-62.810	70.420
23(2)	78.10	-5.640	35.843	-385.593	157.399	-316.192	-34.817	146.663	-46.561	79.722
23(3)	80.50	-4.598	38.992	-475.302	192.822	-739.607	-19.995	41.092	0.172	6.708
24(1)	80.50	2.732	42.164	-473.930	196.580	-739.339	-16.507	41.224	0.801	8.400
24(2)	81.00	4.633	43.117	-495.460	203.139	-803.963	-25.874	35.559	0.967	14.959
24(3)	81.50	4.799	43.773	-517.518	212.651	-932.702	-14.854	28.659	2.313	9.712
25(1)	81.50	23.732	-195.269	-520.553	-9.543	36.181	-2.142	28.659	4.286	-8.175
25(2)	82.00	25.633	-188.709	-424.829	-8.887	40.765	-1.977	33.740	4.451	-13.423
25(3)	82.50	25.798	-172.607	-337.079	-8.231	49.690	-1.812	40.800	4.616	-6.863
26(1)	82.50	27.137	-170.909	-334.659	-6.185	49.024	1.160	40.818	6.494	-5.364
26(2)	85.15	36.262	-135.486	70.652	-2.643	62.011	2.053	151.409	62.912	-91.576
26(3)	87.80	38.460	-92.428	370.842	10.214	160.228	13.539	362.448	88.821	-79.862
27(1)	87.80	2.525	-107.375	369.447	8.082	152.286	11.142	360.984	43.179	-97.662
27(2)	90.95	14.096	-56.865	624.348	12.149	148.126	11.216	614.955	66.813	-63.571
27(3)	94.10	16.509	-5.340	731.419	46.260	351.334	28.181	720.366	80.037	-13.717
28(1)	94.10	-34.887	-32.652	622.174	39.158	328.978	29.387	720.565	12.554	-42.986
28(2)	95.68	-28.886	-12.973	659.998	43.093	282.924	29.883	762.370	17.761	-18.190
28(3)	97.25	-28.060	8.018	665.099	64.675	375.427	33.757	764.433	23.547	5.557
29(1)	97.25	-47.714	11.397	-72.902	56.475	337.339	14.829	764.433	-23.881	-14.064
29(2)	98.83	-42.209	13.497	-90.152	60.738	402.420	17.724	761.790	-18.674	19.719
29(3)	100.40	-41.432	15.596	-111.572	85.666	324.154	22.716	719.309	-13.385	43.465
30(1)	100.40	-41.631	15.126	-165.696	70.179	289.342	-33.073	719.446	-80.991	13.520
30(2)	103.55	-30.936	19.622	-217.483	90.121	317.258	-36.797	611.571	-67.843	63.374
30(3)	106.70	-29.382	23.689	-287.093	137.680	-5.323	-24.722	352.953	-42.004	100.330
31(1)	106.70	-18.906	30.798	-287.243	129.894	-26.458	-54.144	354.187	-87.760	42.173
31(2)	109.35	-9.534	35.233	-373.690	161.775	-289.688	-54.349	135.082	-61.234	93.450
31(3)	112.00	-8.426	38.644	-471.648	201.790	-744.901	-44.258	12.747	-2.889	8.890
32(1)	112.00	-0.064	41.723	-468.695	205.581	-742.820	-41.338	12.762	-2.211	9.354
32(2)	112.50	1.837	42.379	-489.528	213.125	-842.427	-39.685	7.855	-2.046	15.914
32(3)	113.00	2.003	43.332	-511.669	221.653	-982.718	-26.697	0.390	-0.700	10.666
33(1)	113.00	21.218	-195.604	-513.729	-15.342	13.747	-7.541	0.390	1.349	-13.495
33(2)	113.50	22.871	-189.044	-						

32(1)	9.40	-5.920	7.845	-137.225	3.320	-130.372	14.550	80.293	-20.950	-2.155	112.00	26.429	-28.889	-82.725	13.764	3.397	-85.283	5.262	-2.363	5.504
32(2)	10.58	-4.232	6.021	-147.681	2.887	-147.869	14.302	85.502	-20.674	-5.118	112.50	27.750	-30.789	-66.971	12.890	-4.436	-85.168	2.365	-1.215	5.353
32(3)	11.75	-3.956	4.198	-154.654	1.063	-145.708	14.919	93.634	-20.399	-6.463	113.00	27.864	-31.755	-50.798	11.902	-7.528	-84.028	-0.313	0.070	4.745
33(1)	11.75	-2.791	5.230	-154.654	1.863	-12.872	-11.419	92.453	-37.335	1.886	113.00	30.848	-34.360	-55.484	6.515	-115.386	-81.909	-0.313	4.374	-9.426
33(2)	12.93	-0.897	2.076	-160.692	0.602	-32.364	-12.147	91.717	-37.060	-1.062	113.50	31.996	-34.436	-38.107	6.439	-118.224	-80.761	-0.313	-3.089	-8.818
33(3)	14.10	-0.621	0.389	-160.516	-1.427	-33.397	-11.871	94.026	-36.784	-3.227	114.00	32.284	-34.305	-20.352	6.363	-120.760	-79.476	9.320	-1.941	-9.578
34(1)	14.10	2.433	-0.938	-160.653	5.357	68.108	-48.576	94.026	-61.752	8.056	116.65	44.094	-36.214	75.644	5.122	-121.926	-74.145	9.336	-9.153	-4.716
34(2)	16.45	6.429	-5.171	-156.190	3.055	37.570	-49.164	79.530	-67.245	5.634	119.30	45.656	-36.211	173.213	3.618	-156.310	-57.433	130.076	105.425	-32.361
34(3)	18.80	7.130	-9.805	-138.302	-1.147	33.196	-48.864	70.185	-59.950	0.585	119.30	16.429	-21.918	176.013	0.831	0.514	-9.950	131.391	74.368	-16.941
35(1)	18.80	16.595	-12.660	-138.272	3.105	67.110	-65.787	68.736	-73.822	7.111	122.45	24.468	-22.405	249.647	0.231	-5.018	-0.992	188.980	72.772	-20.521
35(2)	20.65	20.270	-15.996	-111.347	0.332	55.520	-65.806	45.804	-55.327	19.981	125.60	26.352	-22.669	322.768	-3.819	-34.893	9.447	263.019	73.598	-26.144
35(3)	22.50	20.856	-20.007	-77.793	-2.973	56.921	-65.621	5.007	-25.242	21.832	125.60	-17.060	-0.197	183.822	1.228	68.829	-5.906	263.001	17.929	-0.416
36(1)	22.50	23.979	-20.056	-80.595	-5.878	55.763	-60.189	5.237	-29.908	24.408	127.18	-13.040	-0.440	186.297	0.757	65.022	-2.438	267.375	18.296	-3.190
36(2)	23.00	24.920	-21.022	-70.190	-6.638	58.431	-60.211	-5.884	0.339	15.383	128.75	-12.466	-0.683	185.279	-1.880	45.333	1.624	275.132	18.550	-7.103
36(3)	23.50	25.207	-21.782	-59.637	-7.398	61.968	-60.096	-12.027	7.726	14.810	130.33	-25.375	1.697	-26.635	6.244	216.483	-16.391	275.132	-19.949	10.949
37(1)	23.50	26.695	-29.802	-62.218	7.511	-22.406	-48.081	-12.027	4.608	-4.296	131.90	-24.835	-0.734	-30.844	3.494	204.459	-15.929	247.634	-19.214	5.190
37(2)	24.00	27.636	-29.671	-46.632	7.435	-27.506	-46.933	-11.249	5.893	-3.688	131.90	-27.409	0.221	-143.281	24.180	290.585	-69.536	247.619	-73.981	29.832
37(3)	24.50	27.751	-29.747	-30.531	7.359	-31.680	-45.648	-9.245	7.041	-4.448	135.05	-19.750	-5.645	-133.797	21.870	185.681	-70.419	160.493	-73.246	24.195
38(1)	24.50	28.618	-29.402	-30.738	8.426	-32.688	-45.641	-9.245	-1.390	0.161	138.20	-17.281	-11.838	-108.870	16.110	119.999	-69.821	88.356	-74.931	20.672
38(2)	26.90	34.234	-30.320	42.982	8.062	-52.926	-38.406	1.673	73.620	-23.540	140.85	-0.032	-20.630	-60.748	26.115	32.282	-95.499	87.029	-107.030	35.483
38(3)	29.30	34.957	-30.685	118.353	6.876	-80.815	-31.936	66.712	92.642	-30.173	143.50	2.702	-25.010	3.524	21.465	-28.920	-94.829	1.699	1.189	-1.039
39(1)	29.30	9.903	-18.354	118.466	6.160	-80.579	-27.097	68.257	65.315	-17.796	144.00	11.095	-27.983	1.441	15.686	-30.101	-83.921	1.699	-7.450	3.969
39(2)	32.20	17.046	-19.727	173.183	5.719	-97.207	-18.713	119.133	59.278	-20.739	144.50	12.564	-30.849	31.186	13.939	-48.644	-84.739	-1.123	1.845	2.808
39(3)	35.10	17.884	-20.168	230.143	2.224	-142.207	-10.708	184.295	59.944	-24.803	145.00	15.972	-16.995	30.639	-0.452	-146.417	-81.941	-1.123	-2.856	-14.424
40(1)	35.10	-16.648	0.130	111.872	3.589	-57.669	1.843	184.295	16.151	-4.396	145.50	17.121	-17.071	39.063	-0.528	-145.471	-80.793	7.841	19.263	-20.901
40(2)	36.55	-13.065	-0.082	110.584	3.376	-63.974	5.081	193.458	16.496	-7.891	145.50	17.442	-16.940	48.769	-0.604	-145.215	-79.507	21.101	47.938	-27.564
40(3)	38.00	-12.571	-0.310	110.469	0.777	-85.949	8.754	204.713	-13.459	5.409	147.35	25.936	-19.296	80.128	-1.629	-141.776	-76.518	20.871	44.040	-24.759
41(1)	38.00	-22.597	6.457	-111.927	5.628	66.754	-4.004	204.713	-13.459	5.409	149.20	27.406	-19.156	115.328	-2.450	-144.505	-65.614	83.043	75.193	-5.865
41(2)	39.45	-19.220	4.123	-120.226	5.050	41.032	-3.796	200.667	-14.098	2.803	151.55	23.418	-12.924	115.012	-3.954	-13.362	-27.850	83.162	62.219	1.343
41(3)	40.90	-18.727	1.843	-125.136	2.543	33.128	-3.360	199.445	-13.777	-0.708	153.90	25.829	-13.431	179.654	-6.674	-9.238	-20.845	89.129	66.265	-5.180
42(1)	40.90	-17.594	1.911	-157.032	16.888	118.572	-29.744	198.314	-57.357	19.682	153.90	4.420	-2.839	179.815	-3.176	63.797	-14.216	101.463	60.011	-6.698
42(2)	43.80	-10.865	-3.842	-156.062	14.760	44.221	-30.332	149.427	-56.096	15.503	155.08	7.348	-3.022	182.598	-3.358	67.152	-2.649	97.977	36.512	4.148
42(3)	46.70	-10.026	-9.389	-139.004	9.556	4.320	-30.008	112.033	-60.539	12.699	156.25	10.185	-3.189	185.445	-5.098	56.315	2.261	98.813	36.833	2.119
43(1)	46.70	3.893	-12.891	-138.747	18.122	104.205	-77.252	110.455	-87.593	26.184	157.43	-3.982	4.981	179.128	1.850	167.896	10.184	98.950	17.997	-0.829
43(2)	49.10	9.130	-18.091	-100.057	14.862	51.774	-77.545	52.742	-65.631	18.742	158.60	-2.500	4.814	172.087	-0.163	152.473	16.221	83.740	18.273	6.046
43(3)	51.50	10.026	-22.878	-49.695	10.531	19.768	-76.765	30.438	2.754	6.087	160.95	-14.812	1.856	31.796	11.677	115.219	-6.677	83.740	-6.426	15.438
44(1)	51.50	18.048	-25.631	-52.373	8.194	18.588	-68.683	30.438	2.754	6.087	163.30	-11.401	1.300	24.741	6.108	43.219	-6.012	53.968	-5.898	11.928
44(2)	52.00	19.196	-26.598	-39.154	7.571	13.565	-68.705	26.300	3.903	5.327	163.30	-15.008	-5.830	-48.504	9.361	42.936	-14.369	31.812	-14.369	10.433
44(3)	52.50	19.483	-27.358	-25.539	6.583	10.247	-68.476	24.456	4.631	5.935	165.15	-9.151	-9.841	-33.718	7.219	14.079	-13.955	13.418	-13.955	7.697
45(1)	52.50	22.273	-26.907	-28.764	10.861	-41.495	-54.772	24.456	1.510	0.234	167.00	-5.820	-13.005	-13.701	3.670	0.872	-13.519	0.188	-13.519	3.670
45(2)	53.00	23.593	-26.811	-14.678	10.785	-47.326	-53.624	24.255	2.795	0.842	167.00	-4.243	-13.060	-13.820	0.715	0.753	-2.987	0.206	-2.987	0.715
45(3)	53.50	23.708	-26.887	-1.574	10.709	-53.734	-52.338	24.024	3.943	0.082	167.50	-3.094	-13.820	-6.646	-0.045	0.028	-2.872	0.028	-2.872	-0.045
46(1)	53.50	25.541	-28.074	-2.658	11.761	-50.176	-50.248	24.039	-2.231	4.676	168.00	-0.395	-15.475	0.000	-1.033	0.000	-2.757	0.000	-0.773	22.425
46(2)	55.90	31.743	-28.266	64.946	11.396	-76.089	-43.013	32.186	79.297	-19.703	0.000	0.000	-0.171	-0.133	-0.171	-0.270	0.000	-0.477	0.000	-0.171
46(3)	58.30	32.501	-28.218	132.429	10.074	-111.165	-34.820	92.860	92.374	-30.660	0.000	0.000	-0.171	0.020	-0.171	0.020	0.000	-0.393	0.000	-0.938
47(1)	58.30	8.226	-17.156	131.692	8.379	-44.705	-11.298	94.165	63.484	-16.894	0.000	0.000	-0.571	-0.709	-0.571	-0.846	0.000	1.021	0.000	-0.504
47(2)	61.20	15.920	-17.596	179.446	7.938	-67.220	-2.915	142.569	59.162	-19.563	0.000	0.000	-0.571	0.237	-0.571	0.100	0.000	-1.544	0.000	-0.158
47(3)	64.10	17.000	-17.830	226.007	4.420	-118.501	4.977	203.313	59.828	-23.628	0.000	0.000	-0.571	2.218	-0.571	1.174	0.000	2.365	0.000	-1.218
48(1)	64.10	-16.506	2.645	155.212	7.689	-62.175	4.173	203.444	16.143	-3.368	0.000	0.000	-1.187	-0.295	4.903	7.632	-1.327	5.806	-1.327	5.902
48(2)	65.55	-12.946	2.432	150.606	7.363	-73.736	7.388	210.403	16.465	-6.999	0.000	0.000	-1.187	1.372	4.903	0.191	-1.327	-3.486	-1.464	4.173
48(3)	67.00	-12.223	2.204	145.899	5.015	-100.105	11.084	221.498	16.809	-8.572	0.000	0.000	-0.985	2.979	4.903	-6.183	-1.327	-4.406	-0.283	2.704
49(1)	67.00	-21.858	7.759	-138.359	8.745	1.448	6.063	221.498	-14.656	6.301	0.000	0.000	-0.985	2.190	9.647	17.189	0.000	15.363	0.000	11.059
49(2)	68.45	-18.275	5.632	-150.301	8.281	-28.303	6.270	214.345	-14.311	3.831	0.000	0.000	-0.985	1.369	9.647	-15.696	0.000	-2.896	0.000	7.604
49(3)	69.90	-17.954	3.352	-156.478	5.660	-39.621	6.592	211.186	-13.990	0.184	0.000	0.000	4.358	9.959	7.278	11.950	0.000	-2.516	0.	

VIADUCTO BORGES BLANQUES

VIADUCTO BORGES BLANQUES

08(1)	0.000	5.848	9.790	17.854	29.740	0.000	27.294	0.000	19.301
08(2)	0.000	5.848	1.382	17.854	1.382	0.000	-3.510	0.000	15.553
08(3)	0.000	5.848	-6.910	17.854	-26.920	0.000	-0.962	0.000	-0.885
09(1)	0.000	4.850	8.983	13.004	20.346	0.000	18.520	0.000	13.831
0	0.000	4.850	2.250	13.004	0.131	0.000	-1.962	0.000	10.739
10(1)	0.000	4.850	-5.794	13.004	-18.777	0.000	-0.147	0.000	-1.309
10(2)	0.000	12.271	22.618	17.603	29.603	0.000	27.157	0.000	19.050
10(3)	0.000	12.271	3.532	17.603	1.382	0.000	-3.510	0.000	15.553
11(1)	0.000	12.271	-15.227	17.603	-26.920	0.000	0.219	0.000	-3.049
11(2)	1.327	13.197	25.887	9.437	16.310	1.327	14.277	1.327	10.677
11(3)	1.327	13.197	4.152	9.437	1.548	1.327	-3.506	1.464	3.131
12(1)	1.327	13.197	-15.420	9.437	-13.534	1.327	6.088	0.283	-4.299
12(2)	0.000	0.332	2.616	-1.025	-0.260	0.000	-0.881	0.000	-0.405
12(3)	0.000	0.332	2.114	-1.025	0.131	0.000	-1.962	0.000	-5.881
13(1)	0.000	0.332	1.617	-1.025	1.829	0.000	4.443	0.000	-3.050
3(2)	0.000	-0.434	0.173	-0.398	-0.519	0.000	-0.726	0.000	-0.192
3(3)	0.000	-0.434	0.232	-0.398	0.050	0.000	-0.983	0.000	-2.140
4(1)	0.000	-0.434	1.502	-0.398	0.620	0.000	1.215	0.000	-1.271
4(2)	0.000	-3.095	-4.083	-1.025	-0.260	0.000	-0.881	0.000	-0.612
4(3)	0.000	-3.095	0.751	-1.025	0.131	0.000	-1.962	0.000	-5.881
5(1)	0.000	-3.095	6.779	-1.025	1.829	0.000	4.443	0.000	-3.050
5(2)	-0.283	-4.603	-5.908	9.437	16.310	-1.327	14.277	-1.327	10.677
5(3)	-0.283	-4.603	1.548	9.437	1.548	-1.327	-3.333	-1.464	2.033
6(1)	-0.283	-4.603	7.700	9.437	-13.534	-1.327	6.088	-0.283	-4.299
6(2)	0.000	-5.565	8.962	17.457	29.457	0.000	27.010	0.000	18.904
6(3)	0.000	-5.565	1.639	17.457	1.382	0.000	-3.510	0.000	12.991
7(1)	0.000	-5.565	-6.915	17.457	-26.637	0.000	0.537	0.000	-3.196
8	0.000	4.736	8.664	13.004	20.209	0.000	18.555	0.000	13.831
9	0.000	4.736	2.160	13.004	0.131	0.000	-1.962	0.000	10.739
3(2)	0.000	4.736	-5.520	13.004	-18.640	0.000	1.034	0.000	-1.309
3(3)	0.000	12.125	21.022	17.457	29.229	0.000	26.989	0.000	18.904
3(1)	0.000	12.125	3.648	17.457	1.498	0.000	-2.350	0.000	14.089
3(2)	0.000	12.125	-15.125	17.457	-26.670	0.000	2.669	0.000	-3.196
3(3)	1.327	11.614	22.954	9.210	15.800	1.327	13.767	1.327	10.037
3(1)	1.327	11.614	4.152	9.210	1.548	1.327	-3.333	1.464	1.930
3(2)	1.327	11.614	-13.691	9.210	-13.046	1.327	7.934	0.283	-5.066
3(3)	0.000	0.049	2.517	-1.309	-0.794	0.000	-1.621	0.000	-0.895
3(1)	0.000	0.049	2.205	-1.309	0.131	0.000	-1.962	0.000	-7.345
3(2)	0.000	0.049	1.693	-1.309	2.112	0.000	7.637	0.000	-4.079
3(3)	0.000	-0.434	0.158	-0.398	-0.671	0.000	-0.878	0.000	-0.192
3(1)	0.000	-0.434	0.232	-0.398	0.050	0.000	-0.983	0.000	-2.140
3(2)	0.000	-0.434	1.770	-0.398	0.751	0.000	2.527	0.000	-1.271
3(3)	-0.137	-3.436	-4.149	-1.389	-0.761	0.000	-1.588	0.000	-0.632
3(1)	-0.137	-3.436	0.852	-1.389	0.141	0.000	-2.158	0.000	-7.082
3(2)	-0.137	-3.436	7.070	-1.389	2.213	0.000	6.168	0.000	-3.817
3(3)	-0.283	-3.220	-3.046	12.001	20.102	-1.327	17.656	-1.327	13.241
3(1)	-0.283	-3.220	1.569	12.001	1.569	-1.327	-3.899	-1.464	4.858
3(2)	-0.283	-3.220	4.981	12.001	-16.986	-1.327	5.391	-0.283	-3.616
3(3)	0.000	7.289	13.015	21.383	37.195	0.000	34.335	0.000	22.623
3(1)	0.000	7.289	1.518	21.383	1.518	0.000	-2.743	0.000	18.218
3(2)	0.000	7.289	-10.102	21.383	-33.184	0.000	-1.171	0.000	-2.609
3(3)	0.000	7.445	14.562	15.658	25.298	0.000	24.240	0.000	16.485
3(1)	0.000	7.445	2.124	15.658	0.141	0.000	-2.158	0.000	13.494
3(2)	0.000	7.445	-10.564	15.658	-24.880	0.000	-1.410	0.000	-0.915
3(3)	0.000	13.035	25.348	21.439	36.949	0.000	34.090	0.000	22.886
3(1)	0.000	13.035	3.849	21.439	1.518	0.000	-2.743	0.000	18.481
3(2)	0.000	13.035	-16.745	21.439	-33.169	0.000	-0.344	0.000	-2.346
3(3)	1.327	10.853	22.102	11.718	19.688	1.327	17.449	1.327	12.958
3(1)	1.327	10.853	5.611	11.718	1.569	1.327	-3.899	1.464	3.394
3(2)	1.327	10.853	-12.000	11.718	-16.551	1.327	6.733	0.283	-4.646
3(3)	1.181	-1.702	-0.427	-1.536	-1.125	0.000	-1.952	0.000	-1.122
3(1)	1.181	-1.702	2.305	-1.536	0.141	0.000	-2.158	0.000	-8.546
3(2)	1.181	-1.702	3.865	-1.536	2.610	0.000	8.250	0.000	-4.846
3(3)	0.000	-0.434	-1.023	-0.398	-0.785	0.000	-0.992	0.000	-0.192
3(1)	0.000	-0.434	0.323	-0.398	0.050	0.000	-0.983	0.000	-2.140
3(2)	0.000	-0.434	1.770	-0.398	0.751	0.000	3.511	0.000	-1.271
3(3)	-0.137	-4.259	-5.146	-1.536	-1.125	0.000	-1.745	0.000	-1.122
3(1)	-0.137	-4.259	2.033	-1.536	0.141	0.000	-2.158	0.000	-8.546
3(2)	-0.137	-4.259	9.151	-1.536	2.610	0.000	8.250	0.000	-4.846
3(3)	-0.283	-1.415	-0.465	11.718	19.688	-1.327	17.449	-1.327	12.958
3(1)	-0.283	-1.415	0.251	11.718	1.569	-1.327	-3.899	-1.464	3.394
3(2)	-0.283	-1.415	2.285	11.718	-16.551	-1.327	6.733	-0.283	-4.646
3(3)	0.000	8.389	13.731	21.439	36.949	0.000	34.090	0.000	22.886
3(1)	0.000	8.389	1.518	21.439	1.518	0.000	-2.743	0.000	18.481
3(2)	0.000	8.389	-12.001	21.439	-33.169	0.000	-0.344	0.000	-2.346
3(3)	0.000	8.489	14.546	15.658	25.298	0.000	23.059	0.000	16.622
3(1)	0.000	8.489	0.852	15.658	1.321	0.000	-2.330	0.000	13.494
3(2)	0.000	8.489	-11.760	15.658	-23.699	0.000	-1.274	0.000	0.438
3(3)	0.000	13.665	26.787	21.780	36.166	0.000	33.306	0.000	23.020
3(1)	0.000	13.665	3.849	21.780	1.518	0.000	-2.743	0.000	19.682
3(2)	0.000	13.665	-18.245	21.780	-33.316	0.000	-2.519	0.000	-0.298
3(3)	1.327	14.551	26.532	11.081	19.382	1.327	17.143	1.327	12.493
3(1)	1.327	14.551	4.430	11.081	1.569	1.327	-3.899	1.464	6.322
3(2)	1.327	14.551	-17.536	11.081	-16.245	1.327	1.703	0.283	-2.920

VALORES EXTREMOS

M max 1-48 764.432982

Q max 1-48 221.652684

T max 1-48 38.460496

M max 49-96 290.940296

Q max 49-96 29.792744

T max 49-96 47.932302

1.181	-1.419	0.386	-1.253	-0.743	0.000	-1.354	0.000	-0.839
1.181	-1.419	2.533	-1.253	0.141	0.000	-2.330	0.000	-6.910
1.181	-1.419	3.771	-1.253	2.198	0.000	7.435	0.000	-3.099
0.000	-0.434	-0.589	-0.398	-0.785	0.000	-0.992	0.000	-0.396
0.000	-0.434	0.323	-0.398	0.050	0.000	-1.155	0.000	-2.140
0.000	-0.434	1.426	-0.398	0.751	0.000	3.511	0.000	-0.553
0.000	-3.070	-4.068	-1.138	-1.356	0.000	-1.770	0.000	-0.931
0.000	-3.070	0.858	-1.138	0.100	0.000	-1.372	0.000	-6.406
0.000	-3.070	7.045	-1.138	1.684	0.000	5.176	0.000	-3.575
-0.283	-7.558	-9.427	3.715	6.619	-1.327	5.585	-1.327	4.542
-0.283	-7.558	1.372	3.715	0.191	-1.327	-3.486	-1.464	-2.255
-0.283	-7.558	12.112	3.715	-5.054	-1.327	7.411	-0.283	-4.312
0.000	2.253	3.149	9.137	15.101	0.000	14.662	0.000	10.893
0.000	2.253	0.161	9.137	0.161	0.000	-2.724	0.000	4.939
0.000	2.253	-2.837	9.137	-14.903	0.000	2.187	0.000	-2.331
0.000	3.139	6.019	7.164	11.935	0.000	10.901	0.000	8.163
0.000	3.139	0.237	7.164	0.237	0.000	-1.544	0.000	5.615
0.000	3.139	-5.805	7.164	-11.607	0.000	-0.570	0.000	-0.885
0.000	11.040	20.282	9.647	17.043	0.000	15.217	0.000	11.059
0.000	11.040	1.205	9.647	0.161	0.000	-2.896	0.000	7.604
0.000	11.040	-16.549	9.647	-15.413	0.000	-2.370	0.000	-1.121
1.327	10.282	17.940	4.903	7.485	1.327	5.660	1.327	6.109
1.327	10.282	3.506	4.903	0.191	1.327	-3.486	1.464	4.173
1.327	10.282	-12.108	4.903	-5.786	1.327	-4.260	0.283	2.704
0.000	-0.623	1.617	-0.708	-0.977	0.000	-1.597	0.000	-0.158
0.000	-0.623	1.478	-0.708	0.100	0.000	-1.544	0.000	-2.380
0.000	-0.623	2.092	-0.708	1.189	0.000	2.380	0.000	-1.218
0.000	-0.207	0.559	-0.171	-0.270	0.000	-0.477	0.000	-0.171
0.000	-0.207	0.202	-0.171	0.020	0.000	-0.393	0.000	-0.938
0.000	-0.207	1.318	-0.171	0.436	0.000	1.021	0.000	-0.504
0.000	41.529	3.469	398.859	29.309	0.000	29.309	0.000	398.859
0.000	41.529	1.811	398.859	15.142	0.000	15.142	0.000	398.859</

HIPOTESIS: c Eie 1 (49-96) sin carga; Eie 2 (1-48) sin ripado

Envolvente IPF75B negativa

Coef impacto 1.16

ARRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
1)	0.00	0.552	-8.671	0.000	-141.328	0.000	0.467	0.000	0.193	-141.370
2)	0.50	4.436	-6.725	3.063	-132.800	66.864	4.599	0.288	0.237	-0.385
3)	1.00	6.089	-6.069	6.725	-126.240	125.912	6.252	0.385	0.402	0.271
1)	1.00	6.268	-5.988	6.519	-125.827	125.776	5.212	1.565	1.837	0.374
2)	2.85	11.028	-3.031	12.121	-94.144	316.804	11.163	-0.820	2.432	2.736
3)	4.70	19.492	-0.538	14.404	-75.514	372.661	19.924	-7.775	3.060	5.229
1)	4.70	12.490	-29.696	266.260	-85.299	371.460	-8.086	-7.906	6.398	7.213
2)	7.05	17.399	0.777	296.517	-49.220	501.292	3.312	-28.061	7.191	10.231
3)	9.40	27.235	32.264	257.711	-37.215	376.036	12.097	-55.464	7.951	13.379
1)	9.40	3.743	-13.297	685.656	-47.598	427.905	-12.870	-55.327	13.506	16.059
2)	10.58	5.875	2.447	690.786	-31.067	339.109	-9.127	-74.497	13.903	17.634
3)	11.75	9.842	18.190	676.995	-28.509	362.659	-8.731	-95.520	14.299	19.208
1)	11.75	-8.863	9.863	676.995	-32.988	374.284	-16.017	-95.520	19.038	21.180
2)	12.93	-4.747	35.315	654.179	-16.785	264.373	-11.094	-122.434	19.435	22.623
3)	14.10	-0.532	49.878	603.810	-15.211	283.952	-10.697	-151.202	19.832	24.197
1)	14.10	-26.469	38.980	604.991	-19.463	294.893	-17.209	-151.202	30.244	29.719
2)	16.45	-22.997	70.169	474.986	1.004	121.225	-4.608	-224.078	21.451	31.818
3)	18.80	-12.914	110.184	258.847	4.021	116.214	-3.848	-300.043	16.928	33.448
1)	18.80	-28.741	104.845	260.001	4.567	123.501	-3.333	-300.027	28.019	39.761
2)	20.65	-26.625	127.997	44.176	11.782	46.197	3.199	-400.102	12.610	81.501
3)	22.50	-17.898	162.632	-225.863	14.144	23.449	3.794	-618.490	-5.698	179.324
1)	22.50	-17.286	163.460	-227.505	14.861	23.416	4.946	-618.820	-3.890	181.799
2)	23.00	-16.823	169.723	-310.213	15.517	12.355	6.292	-709.926	-6.076	181.497
3)	23.50	-15.170	176.282	-396.806	16.173	4.389	6.457	-803.606	-7.233	197.623
1)	23.50	2.685	-49.533	-388.186	-205.157	-802.057	28.520	-803.606	23.821	-201.605
2)	24.00	3.148	-48.877	-362.538	-196.630	-704.258	31.157	-707.210	25.163	-187.173
3)	24.50	4.801	-48.221	-339.125	-190.070	-609.724	31.630	-613.763	26.703	-186.631
1)	24.50	9.882	-46.161	-339.125	-187.770	-611.153	33.378	-615.080	28.795	-184.059
2)	26.90	13.750	-32.577	-244.669	-151.363	-210.498	45.759	-303.654	-2.131	-83.813
3)	29.30	21.685	-29.428	-171.172	-122.238	22.448	47.396	-152.357	-17.662	-44.253
1)	29.30	25.910	-25.026	-171.089	-130.545	20.794	20.946	-152.480	-5.339	-37.371
2)	32.20	29.646	-11.084	-128.591	-85.610	308.389	30.061	-110.542	-16.857	-10.007
3)	35.10	39.977	-7.279	-101.656	-67.243	283.514	30.005	-85.614	-15.899	-6.202
1)	35.10	37.538	-10.147	-61.164	-78.846	304.288	-20.667	-85.614	-3.409	-0.918
2)	36.55	38.332	-8.012	-50.563	-57.526	379.813	-15.021	-87.535	-2.913	0.919
3)	38.00	43.456	-6.044	-41.437	-53.394	312.431	-12.457	-91.137	-2.450	2.887
1)	38.00	30.543	-6.656	633.184	-59.228	356.950	-23.319	-91.137	5.471	8.185
2)	39.45	31.882	11.711	627.747	-39.089	266.949	-19.478	-103.777	5.967	10.022
3)	40.90	36.758	31.391	597.385	-36.138	308.855	-19.015	-119.053	6.430	11.990
1)	40.90	-4.602	10.103	668.032	-40.694	326.994	-21.481	-118.907	21.191	18.273
2)	43.80	-2.205	57.692	562.161	-9.338	129.983	-8.912	-177.331	22.563	22.078
3)	46.70	8.374	105.578	332.606	-5.534	149.950	-7.953	-250.534	6.272	35.295
1)	46.70	-22.116	86.011	343.220	-5.314	165.295	-5.353	-250.388	20.444	41.295
2)	49.10	-20.232	126.743	82.450	6.100	71.780	3.706	-387.470	10.710	73.791
3)	51.50	-11.802	167.822	-258.530	9.249	53.494	4.499	-672.211	-16.879	183.858
1)	51.50	-11.296	169.484	-260.735	11.197	53.357	7.381	-672.211	-13.627	186.828
2)	52.00	-11.130	175.746	-347.000	11.853	46.127	7.546	-766.285	-16.138	190.322
3)	52.50	-9.229	182.058	-434.739	12.509	40.142	7.712	-863.699	-15.785	202.361
1)	52.50	8.464	-37.325	-432.049	-207.680	-867.028	25.628	-863.699	17.544	-204.333
2)	53.00	8.877	-36.669	-412.394	-199.153	-767.105	28.265	-765.340	17.447	-192.180
3)	53.50	10.530	-36.013	-395.083	-193.774	-672.341	28.737	-670.338	19.628	-190.768
1)	53.50	14.894	-33.664	-396.775	-191.343	-673.243	30.131	-670.469	22.093	-187.814
2)	55.90	15.935	-30.515	-319.646	-154.936	-262.957	42.513	-378.509	-7.633	-75.642
3)	58.30	24.365	-26.771	-252.632	-125.811	-24.830	46.629	-238.074	-18.578	-40.834
1)	58.30	32.143	-23.590	-252.392	-134.103	-18.611	16.388	-238.188	-4.139	-34.041
2)	61.20	33.101	-19.885	-185.672	-89.168	275.711	25.503	-182.185	-19.114	-15.895
3)	64.10	43.086	-16.080	-133.567	-68.636	259.617	26.432	-138.421	-18.155	-12.090
1)	64.10	42.745	-13.208	-102.428	-81.983	276.494	-19.832	-138.436	-3.111	-6.522
2)	65.55	43.455	-11.371	-84.730	-58.499	349.030	-15.204	-131.702	-1.650	-5.028
3)	67.00	48.365	-9.106	-70.166	-55.351	288.429	-12.606	-131.286	2.582	2.844
1)	67.00	34.849	-8.049	630.648	-60.087	334.598	-22.735	-131.286	11.919	7.272
2)	68.45	35.890	10.318	627.496	-38.964	234.763	-19.878	-142.828	12.414	9.109
3)	69.90	41.015	29.998	599.329	-36.996	291.364	-19.415	-159.355	12.877	11.077
1)	69.90	-2.367	15.774	680.145	-42.406	311.236	-19.875	-159.340	29.363	18.809
2)	72.80	-0.566	53.821	573.585	-12.034	106.369	-8.289	-220.917	30.321	22.614
3)	75.70	10.014	101.708	342.473	-8.229	136.552	-7.330	-292.667	10.972	37.646
1)	75.70	-18.445	88.277	347.775	-8.888	150.627	-3.617	-292.652	29.931	47.781
2)	78.10	-17.106	129.009	88.890	2.526	62.935	5.442	-441.044	20.394	80.543
3)	80.50	-8.427	160.248	-258.744	5.675	51.703	6.236	-730.695	-9.797	188.559

80.50	-9.335	169.409	-253.113	8.897	54.888	9.691	-730.563	-3.980	192.841
81.00	-9.170	175.968	-338.248	9.553	47.299	11.037	-826.890	-0.516	193.497
81.50	-7.269	182.280	-428.503	10.209	41.849	11.202	-927.075	-3.109	210.881
81.50	10.690	-37.596	-424.484	-216.697	-902.126	45.423	-927.075	30.604	-211.177
82.00	11.103	-36.940	-406.241	-209.153	-797.749	47.076	-824.179	30.621	-198.941
82.50	12.459	-35.987	-388.398	-201.610	-729.302	40.660	-725.951	31.476	-197.529
82.50	17.697	-32.413	-390.241	-198.298	-699.745	50.153	-725.773	36.296	-194.792
85.15	18.838	-28.871	-309.205	-158.152	-252.960	60.575	-387.251	-2.400	-76.227
87.80	27.880	-24.865	-239.112	-126.403	10.963	62.204	-226.460	-20.939	-42.006
87.80	35.982	-22.671	-240.277	-136.636	16.310	28.432	-226.606	-3.493	-32.976
90.95	37.536	-18.604	-175.531	-88.094	330.954	40.507	-161.497	-16.669	-16.929
94.10	47.933	-14.108	-127.346	-68.152	296.016	39.263	-114.922	-15.645	-12.730
94.10	44.198	-11.908	-89.159	-83.098	317.236	-17.973	-115.020	-2.808	-5.533
95.68	44.942	-9.940	-71.313	-58.302	392.496	-13.014	-105.740	-2.312	-3.565
97.25	50.182	-7.841	-58.956	-54.039	323.339	-10.086	-103.556	1.852	2.128
97.25	32.143	-17.450	732.407	-63.397	370.044	-29.821	-103.556	9.219	6.067
98.83	32.639	13.381	736.643	-40.635	274.483	-27.160	-115.043	9.715	8.166
100.40	38.673	34.372	698.220	-36.568	316.239	-26.632	-128.978	10.244	10.265
100.40	-13.957	8.846	752.413	-45.046	345.081	-24.574	-128.978	24.299	17.290
103.55	-11.841	59.190	635.078	-9.951	107.941	-9.576	-188.292	25.324	21.489
106.70	-0.568	110.881	370.093	-5.884	134.652	-8.519	-264.634	11.097	35.174
106.70	-35.319	92.469	373.776	-6.552	149.272	-8.977	-264.510	31.360	46.713
109.35	-33.633	135.955	74.229	6.436	43.703	2.543	-432.923	12.001	81.085
112.00	-23.996	170.999	-332.528	9.847	24.235	3.402	-770.762	-26.456	198.739
112.00	-23.224	173.311	-334.216	10.973	26.306	7.043	-770.747	-20.208	204.061
112.50	-23.058	189.711	-423.649	11.629	18.354	8.389	-873.743	-18.897	204.603
113.00	-21.158	195.973	-519.533	12.285	11.249	8.555	-978.275	-18.695	217.709
113.00	-2.035	-43.671	-517.300	-219.413	-984.150	26.737	-978.275	16.967	-215.469
113.50	-1.870	-43.015	-495.321	-210.885	-845.114	37.246	-873.621	17.367	-204.642
114.00	-0.266	-42.061	-473.856	-204.522	-745.103	38.899	-772.855	16.068	-199.066
114.00	6.401	-39.006	-473.280	-200.867	-746.552	44.032	-772.986	23.725	-193.881
116.65	7.542	-35.595	-375.703	-159.672	-295.066	54.454	-438.957	-12.571	-80.026
119.30	16.286	-31.457	-288.974	-128.972	-35.896	53.918	-272.790	-33.896	-46.424
119.30	28.120	-25.112	-287.961	-137.234	-13.173	21.895	-272.583	-12.183	-36.109
122.45	29.674	-20.914	-216.474	-88.364	304.486	33.970	-186.845	-25.506	-24.654
125.60	39.774	-16.549	-162.704	-69.734	272.197	33.907	-117.172	-24.481	-20.587
125.60	37.017	-17.957	-137.630	-83.578	307.584	-22.717	-117.280	-10.548	-13.397
127.18	37.793	-15.858	-112.711	-59.831	384.323	-17.725	-99.213	-10.019	-11.298
128.75	43.281	-13.759	-91.823	-55.567	318.255	-14.797	-82.101	-9.490	-9.199
128.75	23.183	-17.607	713.902	-63.631	355.772	-35.318	-82.101	-2.156	-5.260
130.33	23.712	13.093	719.131	-41.000	260.838	-31.443	-76.310	-1.627	-3.292
131.90	29.448	34.084	681.606	-36.933	305.938	-30.914	-72.701	-1.098	-1.193
131.90	-23.342	7.081	710.291	-46.179	332.826	-26.996	-72.570	9.411	4.790
135.05	-21.789	57.723	600.168	-11.084	95.961	-11.966	-92.961	10.469	8.989
138.20	-10.548	109.117	339.040	-7.017	124.004	-10.941	-137.541	4.133	27.280
138.20	-46.989	91.781	338.072	-7.984	124.150	-13.196	-137.395	17.189	34.453
140.85	-45.601	136.913	35.723	3.692	24.911	-1.677	-307.030	-7.707	84.324
143.50	-37.105	170.312	-369.664	7.235	7.482	-0.817	-669.111	-44.057	191.843
143.50	-36.663	172.532	-371.111	9.280	7.345	0.703	-669.111	-39.185	194.717
144.00	-36.498	188.932	-458.123	9.936	-0.350	2.049	-765.414	-37.532	196.357
144.50	-34.894	195.194	-554.099	10.592	-4.936	2.214	-868.298	-39.132	212.372
144.50	-16.152	-46.459	-549.376	-205.365	-872.267	9.086	-868.298	-6.062	-199.454
145.00	-15.987	-45.803	-527.294	-195.854	-781.013	6.803	-771.297	-7.291	-187.674
145.50	-14.384	-44.850	-503.374	-189.294	-687.978	8.456	-677.066	-5.432	-186.718
145.50	-10.463	-42.722	-505.201	-187.423	-688.965	11.354	-677.780	-2.857	-184.574
147.35	-9.868	-40.229	-428.681	-159.741	-373.022	21.752	-459.618	-20.342	-87.056
149.20	-4.579	-37.272	-356.366	-133.764	-178.762	20.162	-353.404	-33.108	-43.672
149.20	1.641	-34.058	-356.474	-138.294	-142.496	13.213	-353.512	-19.967	-37.788
151.55	2.401	-30.909	-281.797	-101.887	111.866	20.345	-267.071	-26.089	-35.945
153.90	8.154	-27.346	-218.809	-82.142	164.588	20.604	-182.813	-37.232	-34.654
153.90	9.813	-24.412	-217.421	-87.955	178.422	0.066	-182.813	-25.043	-28.801
155.08	10.210	-22.838	-189.397	-89.260	267.306	4.033	-151.831	-24.944	-27.227
156.25	12.855	-21.395	-164.784	-60.535	211.236	4.442	-120.281	-24.580	-25.783
157.43	10.971	-21.345	-164.784	-64.705	223.184	-8.894	-121.401	-18.292	-21.435
158.60	11.368	-19.771	-140.312	-48.961	290.012	-4.927	-95.911	-17.895	-19.860
158.60	14.095	-18.328	-121.574	-43.386	114.016	-8.241	-73.301	-17.499	-18.417
158.60	8.281	18.853	228.020	-45.889	279.043	-8.561	-73.415	-9.741	-15.386
160.95	9.289	22.001	177.736	-20.503	34.815	-8.981	-40.754	-8.981	-12.238
163.30	13.604	25.019	118.072	-17.486	76.796	-8.187	-15.304	-8.187	-9.220
163.30	-3.249	54.677	442.732	-14.257	76.942	-4.468	-15.157	-3.287	-5.991
165.15	-2.654	89.313	307.417	-4.811	-0.839	-3.873	-5.562	-2.692	-3.630
167.00	-0.588	112.514	120.126	-2.318	5.531	-3.245	-0.373	-2.064	-1.137
167.00	-0.524	114.558	121.118	-0.920	5.639	-0.402	-0.264	-0.402	-0.920
167.50	-0.358	121.118	62.030	-0.264	0.440	-0.237	0.440	-0.237	-0.264
168.00	-0.193	127.678	0.000	0.392	0.000	-0.071	0.000	-0.193	139.968
0.00	0.693	15.246	0.000	1.848	0.000	2.757	0.000	0.395	29.034
0.50	3.392	13.590	-6.515	0.860	0.159	2.872	-0.321	1.283	1.303
1.00	4.540	12.830	-13.590	0.100	-0.062	2.987	-1.303	2.431	1.227
1.00	5.697	12.582	-13.156	-3.933	1.119	13.395	-1.440	-2.250	4.570
2.85	9.004	9.297	-31.179	-7.603	12.593	13.809	-9.813	1.884	4.296
4.70	14.884	5.406	-45.488	-9.760	40.883	14.245	-17.986	7.970	4.008
4.70	11.320	-0.892	23.546	-5.180	42.216	4.061	-17.971	3.628	7.402
7.05	14.730	-1.448	28.548	-9.359	62.113	4.726			
9.40	21.563								

VIADUCTO BORGES BLANQUES

2(1)	9.40	1.189	-3.460	169.104	2.090	135.273	-13.591	-52.613	18.004	7.337
2(2)	10.58	2.671	-3.643	175.137	0.176	149.344	-10.448	-61.363	20.760	7.155
2(3)	11.75	5.427	-3.825	181.087	-0.121	151.873	-7.692	-69.592	23.516	6.973
3(1)	11.75	-10.777	4.336	181.087	5.752	51.508	-1.939	-69.592	25.808	7.438
3(2)	12.93	-7.917	4.169	177.866	3.875	61.150	3.064	-77.522	30.287	7.271
3(3)	14.10	-4.989	3.986	173.631	3.693	56.938	5.820	-85.066	33.043	7.088
4(1)	14.10	-27.636	15.015	173.494	7.835	-37.523	20.257	-85.066	38.809	5.633
4(2)	16.45	-25.224	14.857	139.538	5.464	-30.492	27.137	-96.493	49.333	4.260
4(3)	18.80	-18.219	14.508	105.706	5.115	-42.593	34.143	-103.029	57.249	2.902
5(1)	18.80	-28.555	20.685	104.269	4.246	-105.501	55.139	-103.160	69.759	-2.099
5(2)	20.65	-27.085	20.809	66.723	3.410	-104.382	60.187	-84.697	55.116	-17.103
5(3)	22.50	-21.022	20.536	29.372	3.137	-109.082	66.044	-46.406	32.279	-23.823
6(1)	22.50	-19.348	18.148	33.350	2.367	-108.852	66.837	-46.383	44.402	-29.203
6(2)	23.00	-19.026	18.279	23.700	2.291	-110.699	68.123	-33.550	14.998	-21.014
6(3)	23.50	-17.878	18.203	15.069	2.215	-111.211	69.271	-22.643	8.927	-20.552
7(1)	23.50	-14.674	28.451	16.172	-9.106	-12.358	67.681	-22.643	16.877	2.131
7(2)	24.00	-14.352	27.692	2.984	-10.094	-6.772	67.910	-24.875	15.986	0.460
7(3)	24.50	-13.204	26.932	-11.759	-10.854	-1.773	67.888	-25.574	15.116	1.368
8(1)	24.50	-5.516	23.783	-11.075	-14.226	-1.636	76.925	-24.257	29.269	-4.365
8(2)	26.90	-2.829	19.722	-64.952	-18.443	38.702	77.704	-21.888	-38.991	13.535
8(3)	29.30	2.684	14.935	-105.429	-21.816	98.377	77.526	-53.542	-56.117	13.607
9(1)	29.30	12.985	11.650	-105.248	-11.932	99.807	55.762	-53.933	-41.918	10.534
9(2)	32.20	15.580	5.897	-129.195	-17.137	143.041	56.086	-74.915	-22.234	8.181
9(3)	35.10	22.758	1.490	-138.185	-19.265	223.633	55.636	-98.465	-15.574	7.740
10(1)	35.10	23.975	1.009	-43.215	-2.564	137.255	5.260	-98.465	-6.574	5.535
10(2)	36.55	24.526	-1.326	-41.291	-5.033	145.719	5.718	-104.952	-1.406	5.322
10(3)	38.00	28.086	-3.605	-36.260	-5.512	171.047	5.766	-112.225	1.809	5.095
11(1)	38.00	14.442	-0.509	187.172	-1.367	29.136	-4.582	-112.225	7.425	2.684
11(2)	39.45	15.372	-0.722	188.044	-0.966	48.457	-0.956	-115.076	11.290	2.471
11(3)	40.90	18.760	-0.950	189.203	-1.308	52.310	2.466	-119.930	16.228	2.243
12(1)	40.90	-16.210	16.778	235.051	0.993	-27.273	-8.579	-120.076	26.263	-0.207
12(2)	43.80	-14.545	16.544	187.174	-2.639	5.073	-0.574	-117.567	32.626	-0.648
12(3)	46.70	-7.195	16.104	139.229	-3.080	12.014	7.810	-112.132	44.609	-3.534
13(1)	46.70	-30.458	28.914	138.055	-3.774	-109.718	49.574	-112.278	62.850	-9.368
13(2)	49.10	-29.149	28.963	68.411	-5.096	-87.337	57.766	-80.367	55.537	-14.461
13(3)	51.50	-23.292	28.770	-2.109	-5.461	-75.265	65.001	-68.581	-11.336	0.506
14(1)	51.50	-19.926	26.811	1.202	-5.524	-74.084	67.695	-68.581	5.125	-7.539
14(2)	52.00	-19.811	26.941	-12.674	-5.600	-71.198	68.843	-64.703	2.816	-6.973
14(3)	52.50	-18.490	27.038	-27.567	-5.676	-68.628	69.992	-61.603	-2.996	-6.426
15(1)	52.50	-16.561	28.664	-23.958	-8.555	6.902	70.515	-61.603	6.132	4.454
15(2)	53.00	-16.274	27.904	-38.707	-9.543	12.313	70.743	-62.806	1.190	4.017
15(3)	53.50	-15.126	27.144	-52.205	-10.166	18.127	70.722	-65.757	-2.517	5.795
16(1)	53.50	-6.552	23.989	-49.287	-13.553	14.737	78.690	-65.741	14.701	-2.118
16(2)	55.90	-5.828	20.342	-102.723	-17.770	53.496	79.469	-71.871	-50.681	11.439
16(3)	58.30	0.028	15.142	-146.091	-21.143	112.049	79.291	-106.465	-59.139	16.356
17(1)	58.30	13.202	10.821	-142.793	-11.391	46.383	40.160	-106.846	-42.446	10.278
17(2)	61.20	13.868	5.274	-165.690	-16.596	91.763	40.484	-128.849	-29.441	7.050
17(3)	64.10	20.804	-0.272	-171.607	-18.974	173.177	40.147	-149.194	-22.781	6.610
18(1)	64.10	23.089	-1.856	-125.479	-4.530	111.959	4.503	-149.063	-11.419	3.078
18(2)	65.55	23.583	-3.984	-120.133	-7.250	124.306	4.825	-152.357	0.407	5.817
18(3)	67.00	26.994	-6.470	-112.522	-7.615	152.096	4.896	-160.058	4.728	4.905
19(1)	67.00	16.434	-1.795	172.241	-1.835	-6.861	-7.382	-160.058	11.620	1.624
19(2)	68.45	17.157	-2.008	176.065	-4.281	17.811	-3.870	-163.525	15.065	1.412
19(3)	69.90	20.717	-2.236	179.056	-4.509	24.254	-0.447	-167.317	20.003	1.184
20(1)	69.90	-12.460	17.665	245.553	-2.110	-61.388	-8.601	-167.448	32.632	-2.599
20(2)	72.80	-11.208	17.224	199.048	-5.628	-18.601	-0.710	-159.896	39.293	-3.040
20(3)	75.70	-3.858	16.784	148.965	-6.068	-0.903	7.674	-149.469	51.396	-5.993
21(1)	75.70	-29.305	28.435	147.271	-6.366	-131.224	46.474	-149.600	73.583	-13.616
21(2)	78.10	-28.374	28.484	80.044	-7.688	-101.909	54.666	-113.772	66.387	-15.511
21(3)	80.50	-22.345	28.291	11.904	-8.052	-83.456	60.178	-96.417	2.548	-1.277
22(1)	80.50	-18.294	26.821	14.170	-9.623	-109.841	76.821	-96.432	22.752	-9.474
22(2)	81.00	-18.179	26.745	1.350	-9.699	-106.173	78.106	-92.349	22.867	-9.550
22(3)	81.50	-16.858	26.841	-12.977	-9.775	-100.159	80.977	-86.517	21.519	-11.563
23(1)	81.50	-14.818	30.935	-7.857	-13.650	-25.336	86.212	-86.517	28.593	-2.640
23(2)	82.00	-14.531	30.175	-22.967	-14.524	-18.192	86.327	-85.026	24.635	-2.116
23(3)	82.50	-13.589	28.069	-37.984	-15.398	-6.749	85.507	-85.964	17.862	-0.338
24(1)	82.50	-3.728	25.632	-35.221	-19.996	-16.047	97.142	-84.675	39.440	-8.364
24(2)	85.15	-2.935	21.529	-98.338	-24.646	46.011	97.649	-73.740	-45.406	12.025
24(3)	87.80	3.346	16.025	-147.016	-28.323	128.415	97.152	-109.667	-55.115	15.029
25(1)	87.80	17.157	11.151	-148.334	-16.090	62.689	55.258	-109.520	-37.821	7.356
25(2)	90.95	18.236	5.301	-172.905	-21.712	128.770	55.879	-126.937	-28.891	4.876
25(3)	94.10	25.460	-0.908	-177.061	-24.022	234.465	54.973	-142.938	-19.704	4.390
26(1)	94.10	25.640	-1.568	-42.444	-4.401	174.241	15.962	-143.153	-9.437	1.798
26(2)	95.68	26.157	-3.847	-39.711	-7.273	188.397	16.306	-145.932	-5.820	1.570
26(3)	97.25	29.797	-6.278	-30.783	-7.767	219.596	16.400	-151.707	4.445	3.823
27(1)	97.25	13.544	0.957	173.907	-1.192	2.718	-2.289	-151.707	10.254	0.858
27(2)	98.83	13.888	0.713	173.146	-3.829	26.234	1.614	-155.015	13.871	0.615
27(3)	100.40	18.080	0.470	172.061	-4.300	34.050	5.082	-156.745	17.546	0.372
28(1)	100.40	-24.947	25.306	320.665	0.008	-70.698	-8.137	-156.745	28.817	-1.776
28(2)	103.55	-23.477	25.027	245.931	-4.057	-26.891	0.602	-149.402	38.080	-2.262
28(3)	106.70	-15.645	24.555	171.883	-4.528	-14.421	9.674	-138.892	47.534	-4.973
29(1)	106.70	-44.971	38.093	174.131	-5.860	-139.398	45.845	-138.708	68.733	-12.561
29(2)	109.35	-43.799	38.096	71.265	-7.364	-112.564	54.999	-102.034	57.714	-14.603
29(3)	112.00	-37.104	37.873	-29.316	-7.759	-93.791	62.694	-102.352	-16.468	-4.145

VIADUCTO BORGES BLANQUES

112.00	-32.046	35.501	-27.744	-8.468	-121.730	76.943	-102.483	7.552	-6.640
112.50	-31.931	35.425	-45.718	-8.544	-118.278	78.228	-99.022	4.725	-5.732
113.00	-30.610	35.556	-63.583	-8.620	-113.932	81.099	-96.363	-6.006	-4.338
113.50	-28.908	30.297	-59.145	-11.126	-5.227	81.404	-96.363	-2.458	5.114
114.00	-28.793	29.537	-72.783	-12.114	-3.025	82.544	-100.072	-8.250	7.743
114.50	-27.679	27.431	-87.350	-12.851	2.432	82.659	-103.274	-8.478	7.097
115.00	-16.269	24.572	-84.681	-17.618	3.764	95.112	-103.259	15.897	-2.507
116.00	-15.477	20.484	-144.539	-22.390	57.982	95.619	-109.166	-59.215	15.516
117.00	-9.402	14.965	-188.111	-25.946	136.569	94.871	-145.202	-69.097	10.069
118.00	8.163	8.604	-189.441	-15.121	9.429	42.778	-145.658	-48.418	1.605
119.00	9.243	2.601	-206.716	-20.781	69.845	43.399	-146.581	-39.676	-0.640
120.00	16.259	-3.456	-202.119	-22.939	171.802	42.630	-143.384	-31.791	-1.111
121.00	16.724	-2.967	-86.488	-4.734	-6.604	4.903	-143.699	-21.493	-3.504
122.00	17.264	-5.399	-78.723	-7.484	6.946	5.270	-136.166	-16.096	-3.747
123.00	21.076	-7.830	-66.827	-7.978	38.252	5.364	-129.595	-11.656	-3.990
124.00	7.755	0.294	141.269	-2.524	-104.435	-8.287	-129.595	-6.326	-6.955
125.00	8.122	0.066	141.153	-5.146	-78.381	-4.224	-119.339	-2.651	-7.183
126.00	12.107	-0.177	143.985	-5.617	-68.830	-0.756	-109.381	1.024	-7.426

VIADUCTO BORGES BLANQUES

VIADUCTO BORGES BLANQUES

108(1)	0.000	13.452	23.548	1.446	3.538	0.000	5.984	0.000	-0.173
108(2)	0.000	13.452	3.532	1.446	3.532	0.000	7.380	0.000	3.748
108(3)	0.000	13.452	-16.293	1.446	2.559	0.000	-23.399	0.000	19.937
109(1)	0.000	6.764	11.661	0.129	1.948	0.000	3.774	0.000	-0.870
109(2)	0.000	6.764	0.751	0.129	2.886	0.000	4.978	0.000	2.394
110(1)	0.000	6.764	-8.684	0.129	2.482	0.000	-16.149	0.000	14.194
110(2)	0.000	5.711	10.637	-0.719	3.538	0.000	5.984	0.000	-2.338
110(3)	0.000	5.711	1.382	-0.719	3.532	0.000	7.380	0.000	3.748
111(1)	0.283	5.711	-8.938	-0.719	3.739	0.000	-23.399	0.000	19.686
111(2)	0.283	-6.571	-7.876	-2.811	0.520	0.283	2.381	0.283	-3.845
111(3)	0.283	-6.571	1.548	-2.811	4.152	0.283	9.282	0.146	4.592
112(1)	0.000	-3.095	-3.649	-2.157	-0.982	0.000	-10.608	1.327	11.222
112(2)	0.000	-3.095	1.932	-2.157	2.886	0.000	-0.362	0.000	-2.777
12(3)	0.000	-3.095	6.436	-2.157	5.336	0.000	4.978	0.000	2.698
13(1)	0.000	-0.434	0.173	-0.973	-0.428	0.000	2.722	0.000	-0.133
13(2)	0.000	-0.434	0.323	-0.973	0.505	0.000	-0.221	0.000	-1.180
13(3)	0.000	-0.434	1.502	-0.973	1.512	0.000	1.538	0.000	0.768
14(1)	0.000	0.332	1.526	-2.157	-0.982	0.000	0.917	0.000	-0.101
14(2)	0.000	0.332	2.341	-2.157	2.886	0.000	-0.362	0.000	-2.777
14(3)	0.000	0.332	2.888	-2.157	5.336	0.000	4.978	0.000	2.698
15(1)	-1.327	13.425	25.048	-2.811	0.520	-0.283	2.722	0.000	-0.430
15(2)	-1.327	13.425	4.152	-2.811	4.152	-0.283	2.381	-0.283	-3.845
15(3)	-1.327	13.425	-15.648	-2.811	8.766	-0.283	9.034	-0.146	4.592
16(1)	0.000	12.125	21.792	-0.865	2.135	0.000	-10.608	-1.327	11.222
16(2)	0.000	12.125	3.350	-0.865	3.532	0.000	4.409	0.000	-2.484
16(3)	0.000	12.125	-14.839	-0.865	3.810	0.000	7.380	0.000	3.601
17(1)	0.000	5.780	8.230	0.129	0.939	0.000	-23.116	0.000	19.540
17(2)	0.000	5.780	0.842	0.129	2.886	0.000	2.593	0.000	-0.870
17(3)	0.000	5.780	-6.494	0.129	3.415	0.000	4.978	0.000	2.394
18(1)	0.000	5.565	9.530	-0.865	2.365	0.000	-16.260	0.000	14.194
18(2)	0.000	5.565	1.498	-0.865	3.848	0.000	4.432	0.000	-2.484
18(3)	0.000	5.565	-6.523	-0.865	5.644	0.000	7.496	0.000	3.601
19(1)	0.283	-3.786	-5.238	-3.578	-1.205	0.283	-23.446	0.000	19.540
19(2)	0.283	-3.786	1.548	-3.578	4.152	0.283	-0.525	0.283	-4.612
19(3)	0.283	-3.786	8.210	-3.578	10.612	0.283	9.034	0.146	4.800
20(1)	0.000	-4.422	-5.273	-3.484	-2.309	0.000	-9.984	1.327	10.400
20(2)	0.000	-4.422	1.932	-3.484	2.886	0.000	-1.482	0.000	-3.898
20(3)	0.000	-4.422	8.953	-3.484	8.828	0.000	4.978	0.000	2.552
21(1)	0.000	-0.434	-1.023	-0.973	-0.443	0.000	3.302	0.000	-0.714
21(2)	0.000	-0.434	0.323	-0.973	0.505	0.000	-0.236	0.000	-1.180
21(3)	0.000	-0.434	1.633	-0.973	2.824	0.000	1.538	0.000	0.768
22(1)	-1.181	-1.923	-0.361	-4.105	-1.546	0.000	1.049	0.000	-0.101
22(2)	-1.181	-1.923	2.351	-4.105	2.987	0.000	-0.719	0.000	-3.544
22(3)	-1.181	-1.923	3.812	-4.105	7.358	0.000	5.286	0.000	2.905
23(1)	-1.327	14.268	27.873	-1.831	1.714	-0.283	3.403	0.000	-0.360
23(2)	-1.327	14.268	4.354	-1.831	4.430	-0.283	3.782	-0.283	-3.071
23(3)	-1.327	14.268	-17.656	-1.831	8.366	-0.283	9.897	-0.146	5.092
24(1)	0.000	13.518	26.523	-0.576	4.539	0.000	-13.465	-1.327	13.786
24(2)	0.000	13.518	3.849	-0.576	3.849	0.000	7.399	0.000	-1.988
24(3)	0.000	13.518	-17.941	-0.576	2.945	0.000	8.111	0.000	3.687
25(1)	0.000	8.489	14.562	0.275	2.919	0.000	-29.068	0.000	23.168
25(2)	0.000	8.489	2.124	0.275	2.987	0.000	5.159	0.000	-0.552
25(3)	0.000	8.489	-10.564	0.275	1.950	0.000	5.286	0.000	2.439
26(1)	0.000	8.389	12.747	-0.015	4.656	0.000	-21.657	0.000	16.848
26(2)	0.000	8.389	1.518	-0.015	3.849	0.000	7.516	0.000	-1.635
26(3)	0.000	8.389	-11.131	-0.015	3.772	0.000	8.111	0.000	4.040
27(1)	0.283	-1.415	-0.465	-3.158	-0.925	0.283	-29.053	0.000	23.521
27(2)	0.283	-1.415	1.432	-3.158	4.430	0.283	1.142	0.283	-4.192
27(3)	0.283	-1.415	2.285	-3.158	9.708	0.283	9.897	0.146	4.946
28(1)	0.137	-4.259	-5.236	-4.251	-3.723	0.000	-13.327	1.327	13.503
28(2)	0.137	-4.259	1.942	-4.251	2.987	0.000	-2.897	0.000	-4.664
28(3)	0.137	-4.259	9.061	-4.251	9.440	0.000	5.286	0.000	2.759
29(1)	0.000	-0.434	-1.023	-0.973	-0.443	0.000	3.800	0.000	-0.941
29(2)	0.000	-0.434	0.232	-0.973	0.505	0.000	-0.236	0.000	-1.180
29(3)	0.000	-0.434	1.770	-0.973	3.808	0.000	1.538	0.000	0.768
30(1)	-1.181	-2.206	-0.725	-4.251	-3.723	0.000	1.049	0.000	-0.101
30(2)	-1.181	-2.206	2.215	-4.251	2.987	0.000	-2.897	0.000	-4.664
30(3)	-1.181	-2.206	4.072	-4.251	9.440	0.000	5.286	0.000	2.759
31(1)	-1.327	10.853	22.102	-3.158	-1.097	-0.283	3.502	0.000	-0.941
31(2)	-1.327	10.853	5.747	-3.158	4.430	-0.283	1.142	-0.283	-4.192
31(3)	-1.327	10.853	-12.000	-3.158	9.956	-0.283	9.897	-0.146	4.946
32(1)	0.000	13.035	24.726	-0.015	4.656	0.000	-13.327	-1.327	13.503
32(2)	0.000	13.035	3.849	-0.015	3.849	0.000	7.516	0.000	-1.635
32(3)	0.000	13.035	-17.032	-0.015	3.772	0.000	8.111	0.000	4.040
33(1)	0.000	7.445	14.789	0.695	2.783	0.000	-29.053	0.000	23.521
33(2)	0.000	7.445	2.351	0.695	2.926	0.000	5.022	0.000	0.877
33(3)	0.000	7.445	-10.473	0.695	1.950	0.000	5.534	0.000	2.439
34(1)	0.000	7.435	13.030	1.735	4.803	0.000	-20.476	0.000	16.985
34(2)	0.000	7.435	1.518	1.735	3.849	0.000	7.662	0.000	0.323
34(3)	0.000	7.435	-10.234	1.735	1.597	0.000	8.111	0.000	3.833
35(1)	0.283	-1.893	-1.906	-0.838	4.257	0.283	-29.200	0.000	23.565
35(2)	0.283	-1.893	1.569	-0.838	4.430	0.283	6.324	0.283	-2.285
35(3)	0.283	-1.893	3.862	-0.838	4.678	0.283	9.897	0.146	5.239

VALORES EXTREMOS

M min 1-48 -978.27527

Q min 1-48 -219.412724

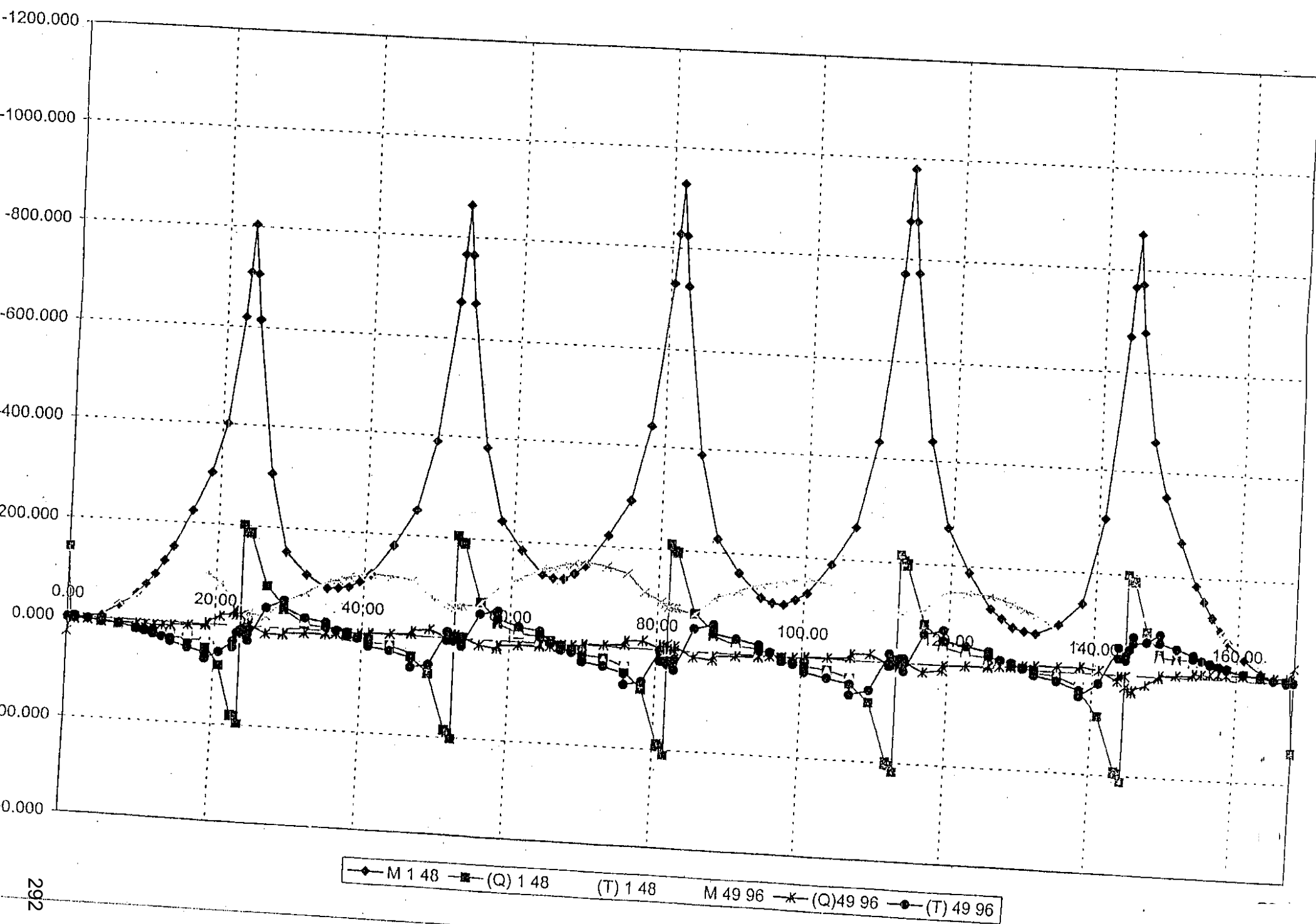
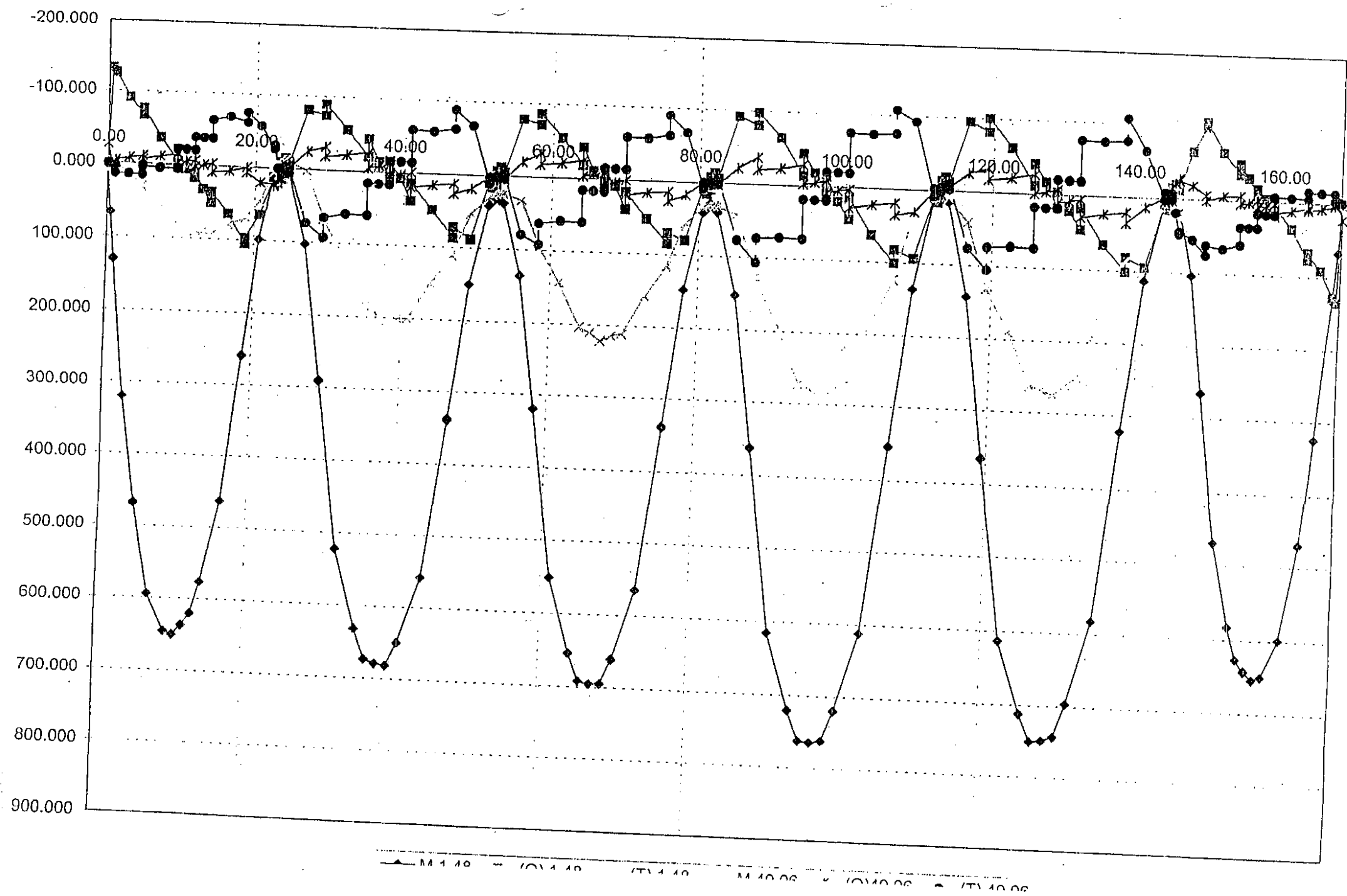
T min 1-48 -45.989454

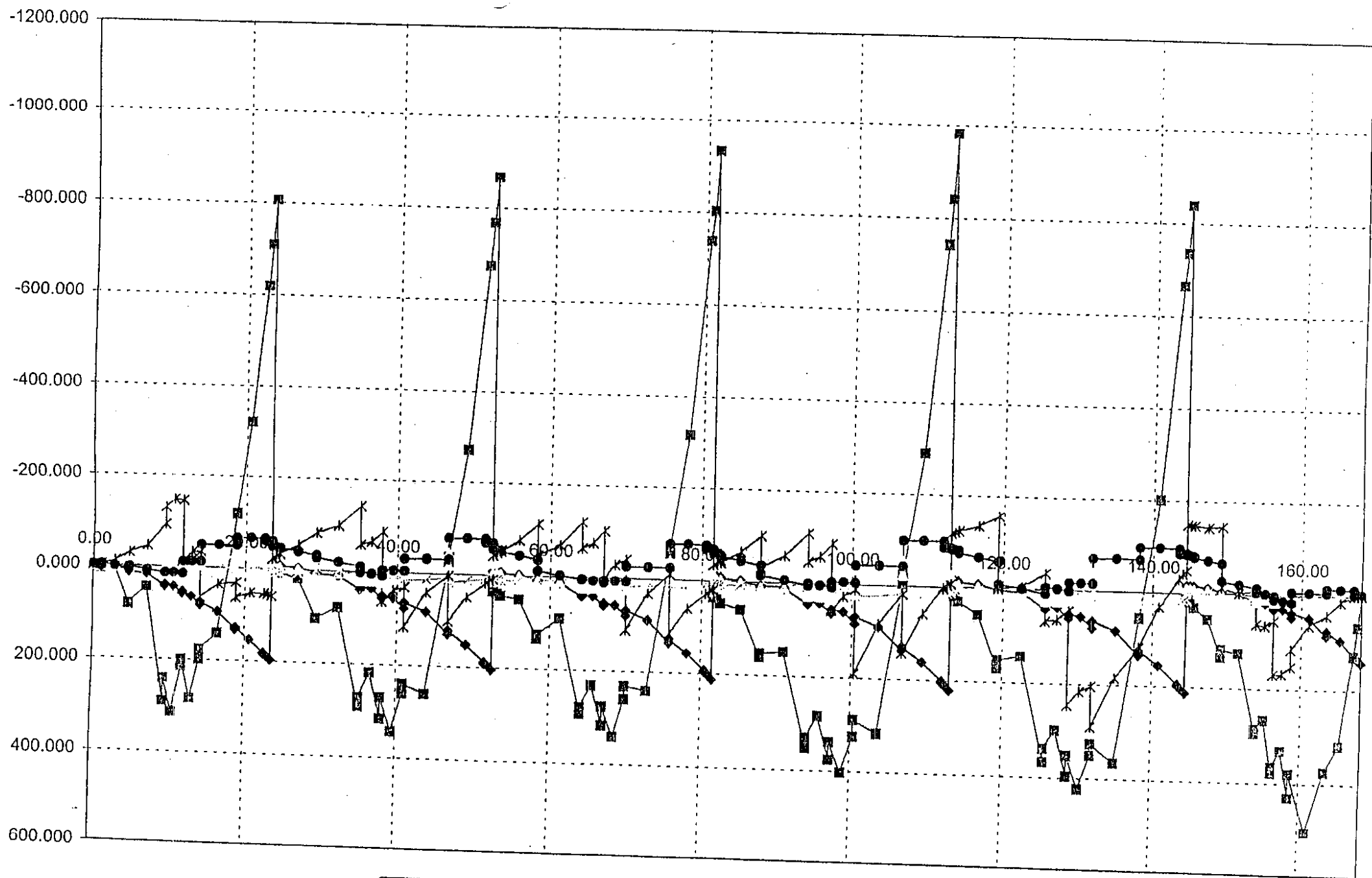
M min 49-96 -167.446068

Q min 49-96 -28.323256

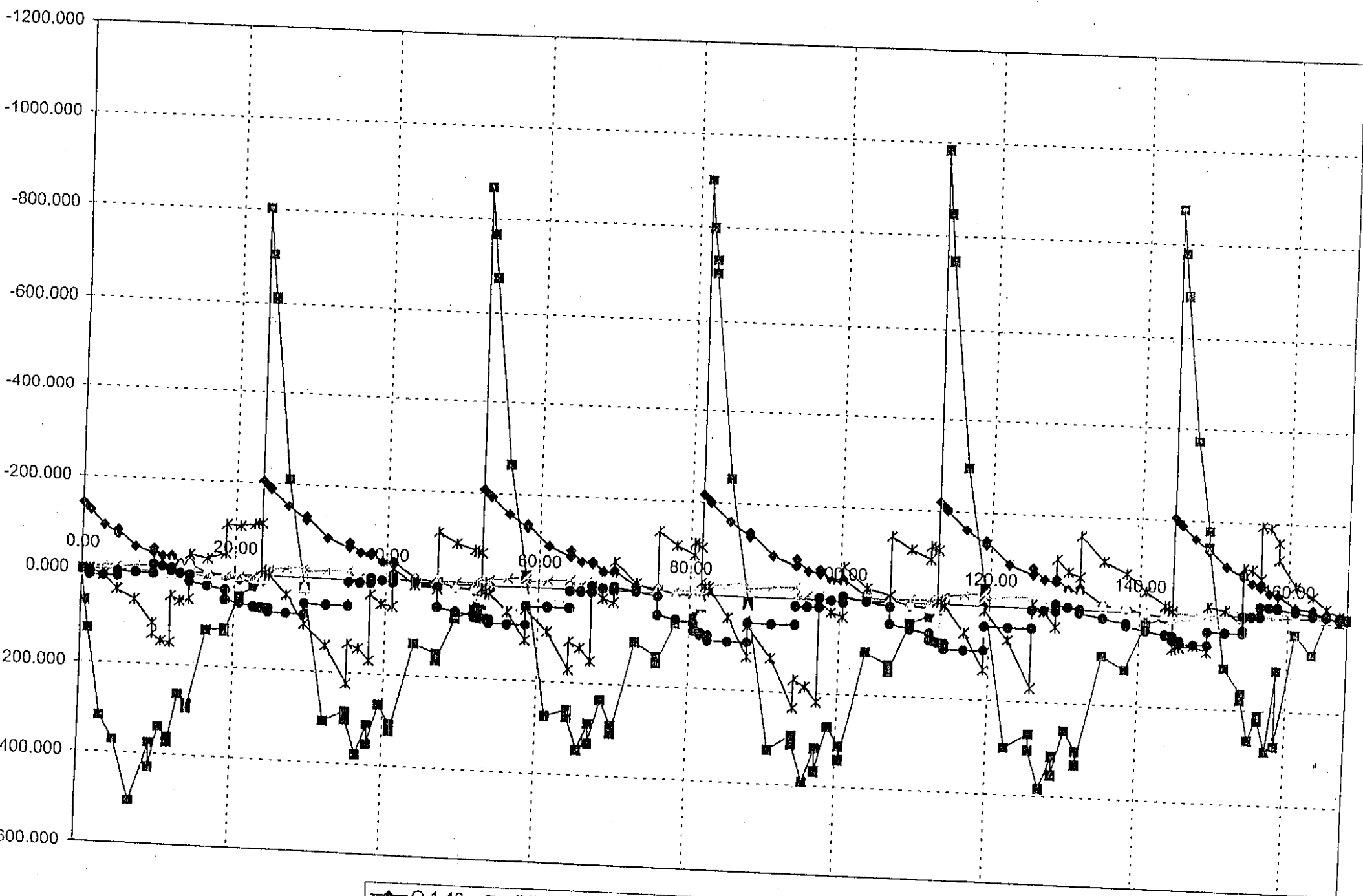
T min 49-96 -51.443332

0.137	-3.856	-4.993	-2.504	-1.415	0.000	-0.795	0.000	-2.917
0.137	-3.856	0.504	-2.504	3.063	0.000	5.534	0.000	3.153
0.137	-3.856	6.244	-2.504	8.327	0.000	3.090	0.000	-0.653
0.000	-0.434	0.067	-0.553	-0.443	0.000	-0.236	0.000	-0.553
0.000	-0.434	0.308	-0.553	0.580	0.000	1.786	0.000	0.768
0.000	-0.434	0.498	-0.553	3.808	0.000	1.049	0.000	-0.398
0.000	0.392	0.299	-3.278	-1.810	0.000	-1.397	0.000	-3.484
0.000	0.392	0.767	-3.278	2.583	0.000	4.056	0.000	1.991
0.000	0.392	1.163	-3.278	5.771	0.000	2.279	0.000	-0.840
-1.327	6.833	15.343	-3.122	-0.725	-0.283	0.308	-0.283	-3.949
-1.327	6.833	3.506	-3.122	3.643	-0.283	7.320	-0.146	3.946
-1.327	6.833	-8.464	-3.122	8.899	-0.283	-3.566	-1.327	4.905
0.000	8.117	15.998	-1.182	2.834	0.000	3.272	0.000	-1.620
0.000	8.117	3.265	-1.182	3.265	0.000	6.149	0.000	3.016
0.000	8.117	-9.494	-1.182	4.654	0.000	-12.436	0.000	11.604
0.000	4.358	9.944	0.553	3.044	0.000	2.896	0.000	-0.446
0.000	4.358	1.478	0.553	1.478	0.000	4.303	0.000	2.101
0.000	4.358	-4.999	0.553	0.917	0.000	-9.983	0.000	8.602
0.000	-0.481	0.744	0.913	4.928	0.000	6.754	0.000	-0.500
0.000	-0.481	2.281	0.913	3.340	0.000	6.397	0.000	2.955
0.000	-0.481	2.581	0.913	0.259	0.000	-12.785	0.000	11.680
0.283	-1.187	-1.426	4.192	7.848	0.283	9.502	0.283	3.159
0.283	-1.187	1.372	4.192	3.643	0.283	7.320	0.146	3.824
0.283	-1.187	4.306	4.192	-1.879	0.283	-3.157	1.327	6.639
0.000	-0.571	-0.841	-1.804	0.573	0.000	1.193	0.000	-1.037
0.000	-0.571	0.237	-1.804	2.659	0.000	4.303	0.000	2.284
0.000	-0.571	2.233	-1.804	3.272	0.000	2.081	0.000	0.024
0.000	-0.171	-0.270	-0.207	-0.622	0.000	-0.415	0.000	-0.413
0.000	-0.171	0.020	-0.207	0.202	0.000	0.615	0.000	0.561
0.000	-0.171	0.300	-0.207	1.318	0.000	0.734	0.000	-0.171
0.000	390.650	29.334	22.926	1.431	0.000	1.431	0.000	22.926
0.000	390.650	15.576	22.926	1.331	0.000	1.331	0.000	22.926
0.000	390.650	0.000	22.926	0.000	0.000	0.000	0.000	157.591
0.000	173.789	13.410	17.624	1.568	0.000	1.568	0.000	17.624
0.000	173.789	7.311	17.624	0.287	0.000	0.287	0.000	17.624
0.000	173.789	0.000	17.624	0.000	0.000	0.000	0.000	125.963
0.000	215.815	16.784	17.955	1.699	0.000	1.699	0.000	17.955
0.000	215.815	8.699	17.955	0.287	0.000	0.287	0.000	17.955
0.000	215.815	0.000	17.955	0.000	0.000	0.000	0.000	163.947
0.000	287.503	21.610	23.411	1.678	0.000	1.678	0.000	23.411
0.000	287.503	10.838	23.411	1.543	0.000	1.543	0.000	23.411
0.000	287.503	0.000	23.411	0.000	0.000	0.000	0.000	176.822
0.000	254.838	19.157	24.766	1.562	0.000	1.562	0.000	24.766
0.000	254.838	9.582	24.766	1.468	0.000	1.468	0.000	24.766
0.000	254.838	0.000	24.766	0.000	0.000	0.000	0.000	238.101
0.000	0.063	0.206	20.062	1.858	0.000	1.858	0.000	20.062
0.000	0.063	-0.005	20.062	0.953	0.000	0.953	0.000	20.062
0.000	0.063	0.000	20.062	0.000	0.000	0.000	0.000	0.955
0.000	14.555	1.444	7.312	0.678	0.000	0.678	0.000	7.312
0.000	14.555	0.086	7.312	-0.091	0.000	-0.091	0.000	7.312
0.000	14.555	0.000	7.312	0.000	0.000	0.000	0.000	-1.132
0.000	-5.430	-0.615	8.029	0.663	0.000	0.663	0.000	8.029
0.000	-5.430	-0.279	8.029	-0.091	0.000	-0.091	0.000	8.029
0.000	-5.430	0.000	8.029	0.000	0.000	0.000	0.000	13.815
0.000	17.521	1.704	17.016	1.959	0.000	1.959	0.000	17.016
0.000	17.521	-0.171	17.016	0.318	0.000	0.318	0.000	17.016
0.000	17.521	0.000	17.016	0.000	0.000	0.000	0.000	-3.705
0.000	-15.704	-1.030	17.687	1.843	0.000	1.843	0.000	17.687
0.000	-15.704	-0.461	17.687	-0.227	0.000	-0.227	0.000	17.687
0.000	-15.704	0.000	17.687	0.000	0.000	0.000	0.000	1.375



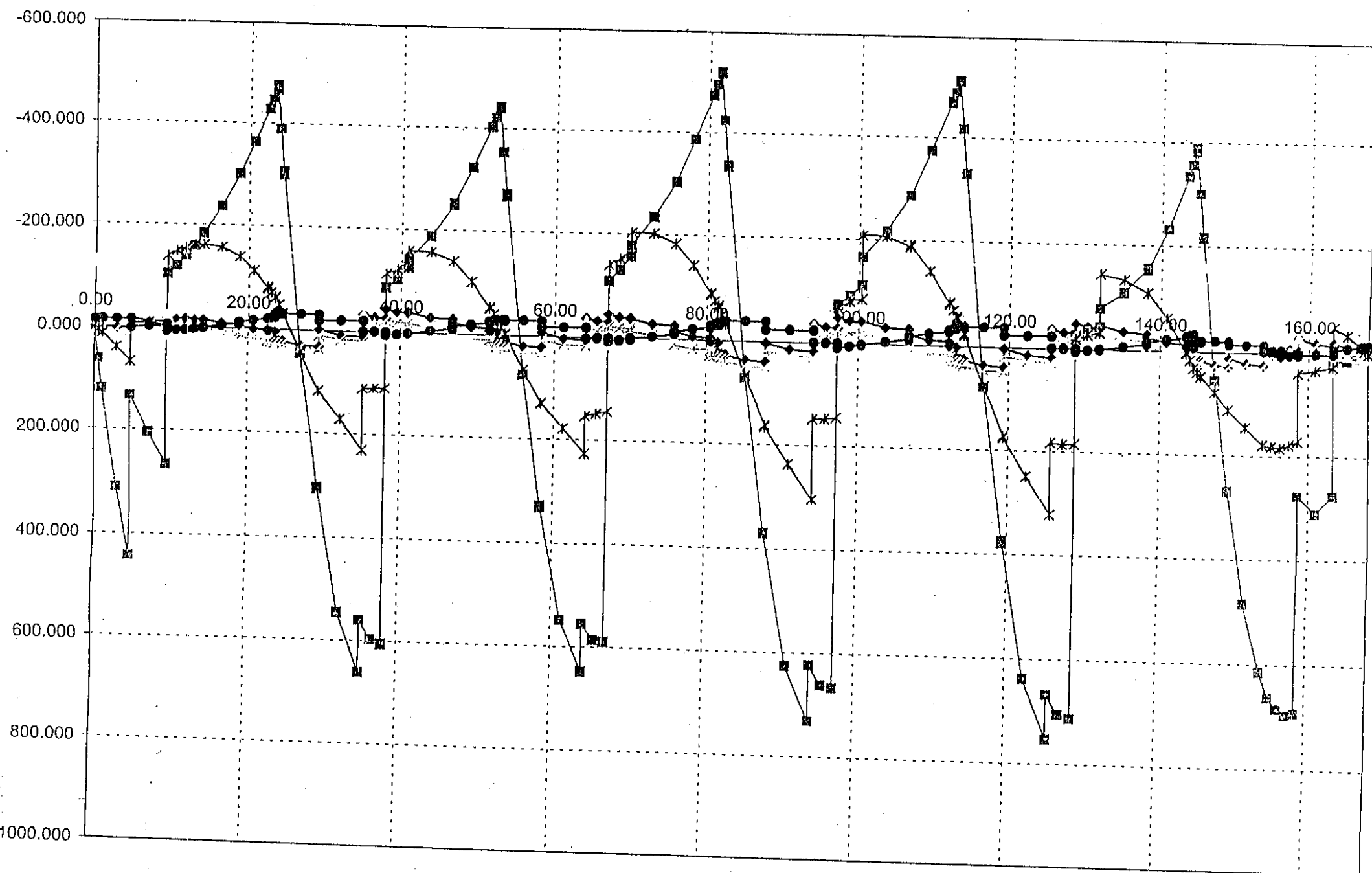


Hip G. Q Mcon Tcon

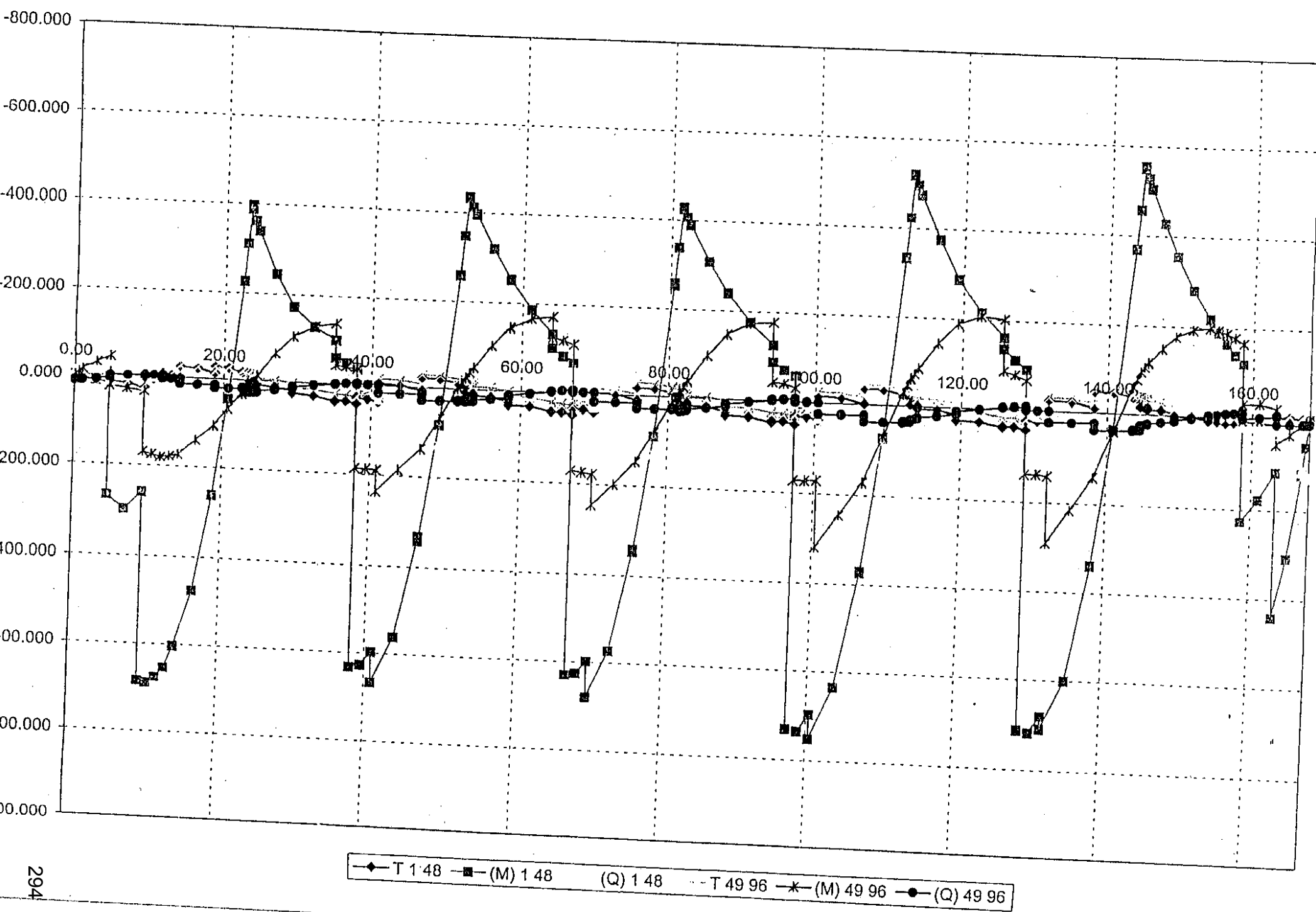


◆ Q 1 48 ■ (M) 1 48 (T) 1 48 Q 49 96 ✕ (M) 49 96 ● (T) 49 96

Hip G. T Mcon Qcon

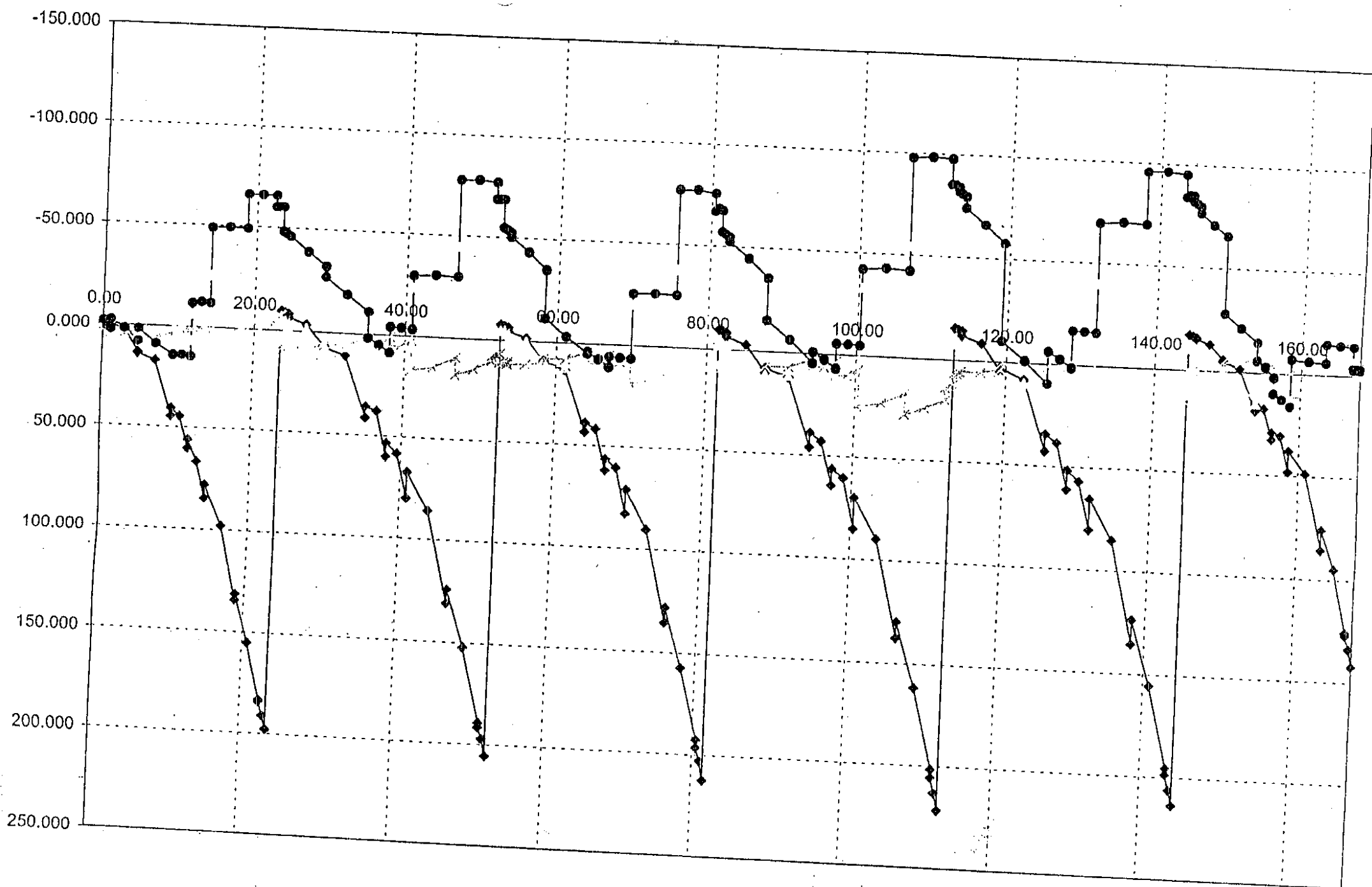


Hip G. I Mcon Qcon

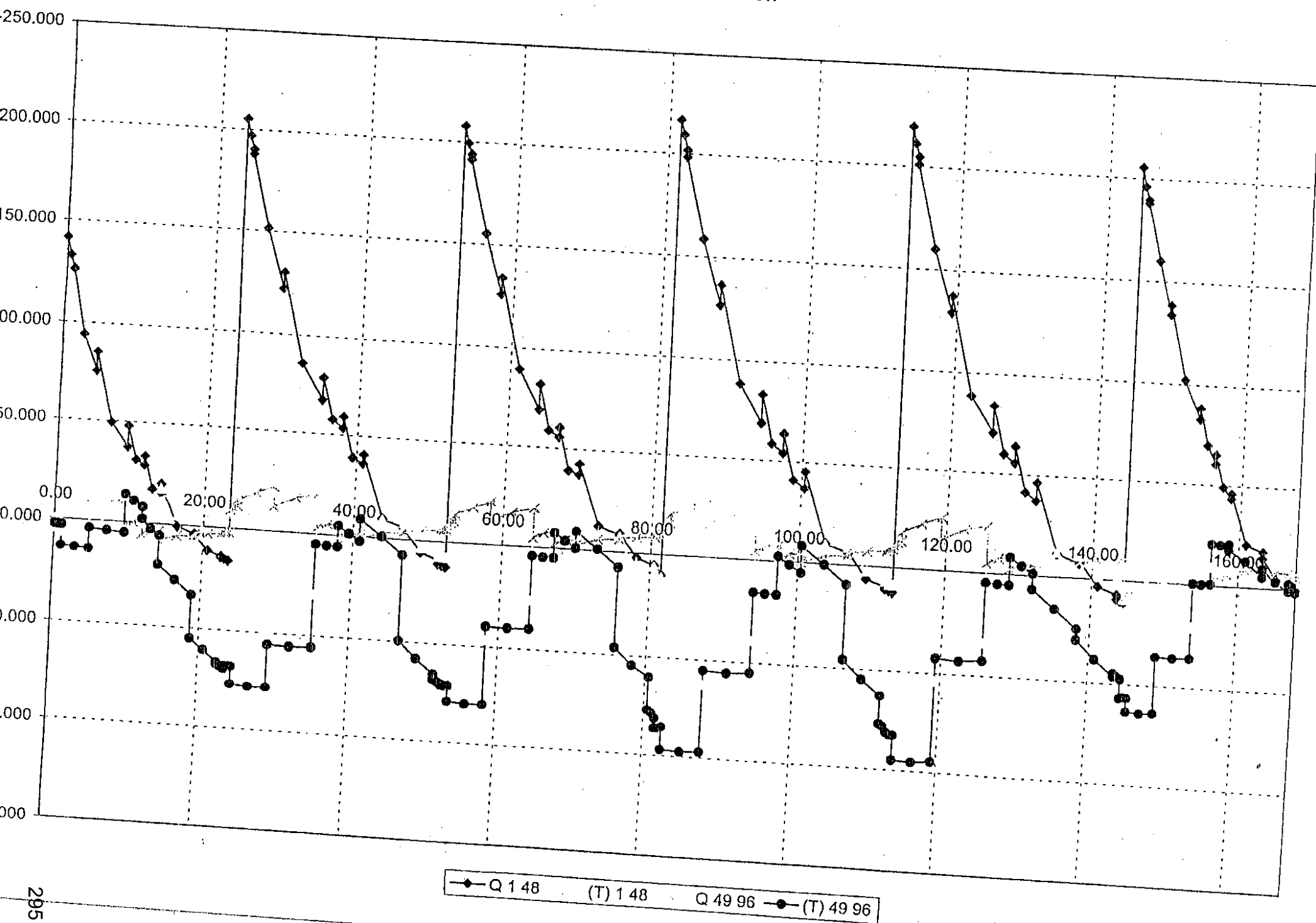


—◆— T 1 48 —■— (M) 1 48 (Q) 1 48 —◆— T 49 96 —*— (M) 49 96 —●— (Q) 49 96

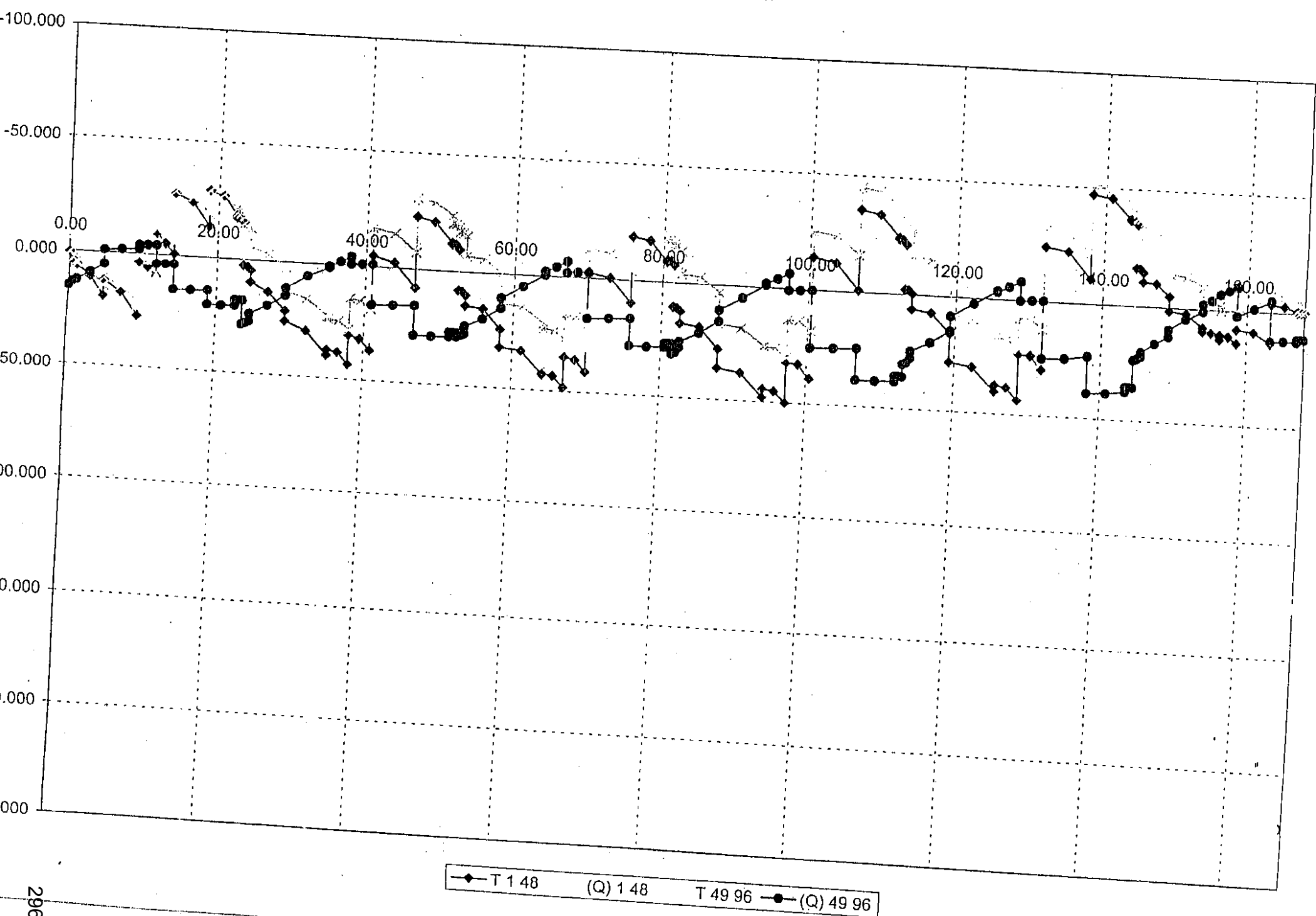
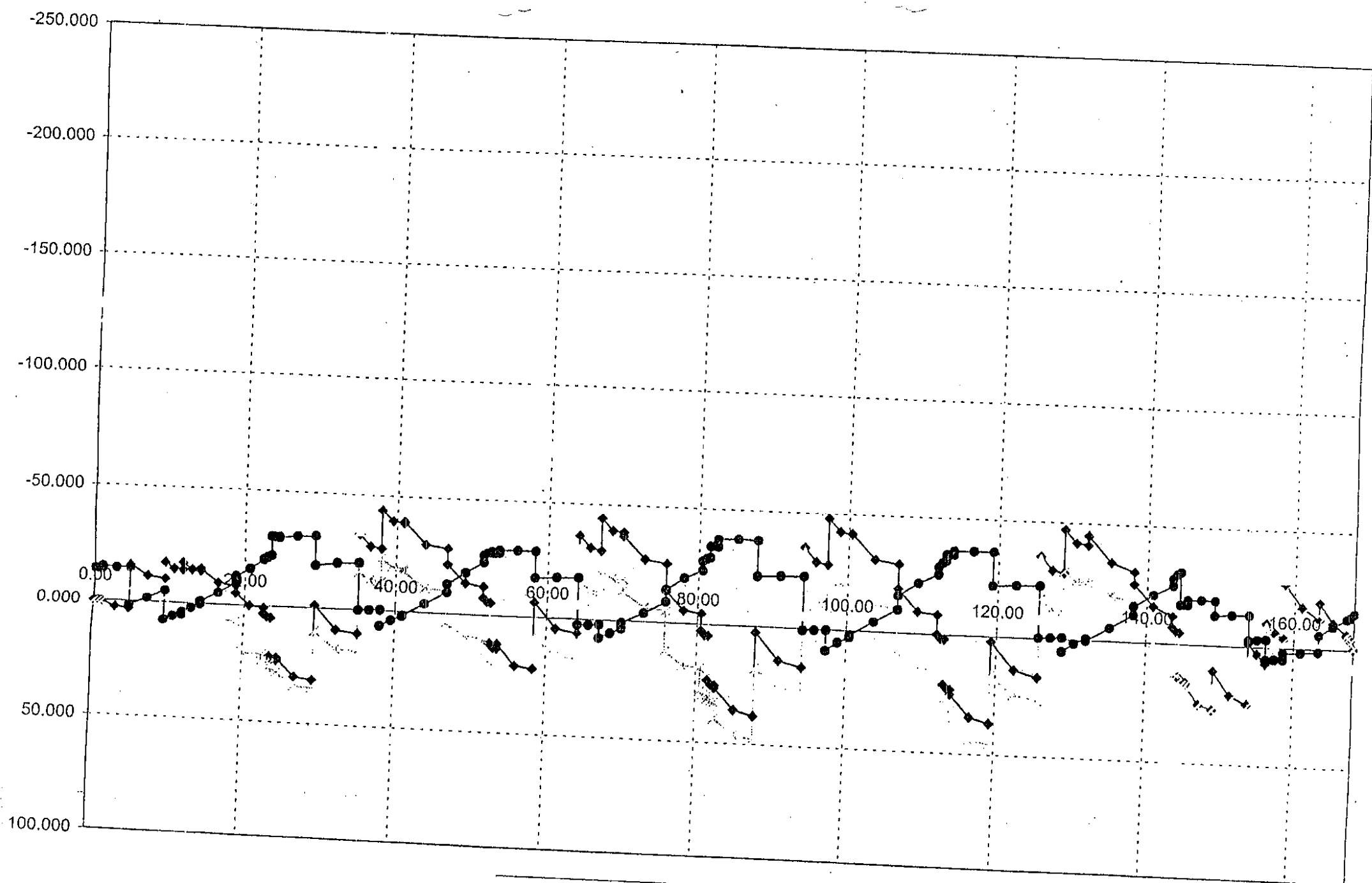
Hip G. Q Mcon Tcon



Hip G. Q Mcon Tcon



Q 1 48 (T) 1 48 Q 49 96 (T) 49 96



—●— T 1 48 (Q) 1 48 T 49 96 —●— (Q) 49 96

HIPOTESIS: H

Eje 1 (49-96) sin carga: Eje 2 (1-48) ripado +30cm

Envoltente IPF75B positiva

Coef impacto 1.16

VIADUCTO BORGES BLANQUES

RA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)	80.50	-42.641	36.504	-450.671	184.884	-703.505	-17.929	44.253	0.589	7.260
	0.00	-1.868	-119.838	0.000	-0.344	0.000	-0.115	0.000	0.132	1.363	81.00	-38.993	37.723	-469.870	191.368	-762.524	-25.650	39.194	0.906	13.745
	0.50	-1.551	-113.924	58.241	0.304	-0.071	0.203	62.876	6.310	-125.110	81.50	-38.675	36.371	-489.087	200.771	-884.901	-10.910	32.906	2.391	8.557
	1.00	-1.234	-107.440	113.924	0.952	5.532	0.520	124.137	9.482	-118.625	81.50	-23.101	-186.388	-492.361	-8.267	39.682	-1.987	32.906	-3.803	-7.035
	1.00	-10.023	-108.398	113.129	0.878	5.532	1.109	122.847	-0.711	-119.028	82.00	-19.452	-179.904	-401.069	-7.619	43.613	-1.670	37.388	4.120	-12.223
	2.85	-5.550	-85.505	294.329	3.212	2.270	2.252	305.341	10.711	-85.958	82.50	-19.135	-164.264	-317.942	-6.970	51.827	-1.353	43.820	4.437	-5.738
	4.70	-4.344	-52.305	421.955	13.847	80.861	4.624	442.528	27.526	-61.317	85.15	-7.467	-129.408	72.942	-1.789	51.261	0.287	43.869	5.091	-4.552
	4.70	-35.204	-28.255	115.181	14.360	80.732	4.267	441.108	-12.362	-74.162	87.80	-49.046	-104.377	357.730	8.355	156.752	14.154	352.033	67.273	-90.116
	7.05	-26.924	-25.272	186.353	17.343	42.815	5.790	564.986	2.867	-34.607	90.95	-26.838	-54.447	604.046	12.375	144.286	10.662	595.037	59.308	-60.634
	9.40	-24.988	-22.159	243.362	44.577	285.025	6.277	612.513	22.220	-3.482	94.10	-22.206	-3.792	707.034	46.094	343.952	28.386	691.540	84.689	-11.352
	9.40	-39.785	15.065	-119.278	40.065	210.601	-0.011	612.513	-24.275	-21.045	95.68	-68.509	-12.261	637.096	38.890	314.960	49.702	692.045	5.952	-41.990
	10.58	-35.121	16.621	-132.810	43.761	283.750	3.129	617.961	-16.661	4.244	97.25	-66.923	8.489	642.724	64.115	269.414	50.654	732.630	15.946	-17.479
	11.75	-34.360	18.177	-151.977	59.324	186.327	13.661	605.616	-9.047	15.721	97.25	-91.095	11.265	-85.566	55.424	314.813	32.802	733.939	27.050	5.994
	11.75	-42.372	16.125	-151.977	53.732	172.468	-6.319	605.739	-41.689	3.769	98.83	-80.530	13.340	-100.729	59.639	379.946	40.557	732.050	-17.720	-14.400
	12.93	-37.138	18.123	-168.302	64.496	259.076	-2.505	592.007	-29.316	28.929	100.40	-79.039	15.415	-121.904	84.279	303.661	50.138	690.793	-7.568	42.468
	14.10	-36.376	19.679	-191.902	81.809	176.977	5.109	551.064	-21.701	47.409	100.40	-86.667	13.678	-173.955	66.918	264.436	-37.524	690.916	-86.489	10.873
	14.10	-45.439	19.279	-190.735	73.279	156.779	-26.603	551.064	-68.698	30.340	103.55	-66.140	18.399	-218.662	86.630	299.265	-31.666	591.637	-61.429	60.154
	16.45	-34.398	24.010	-236.123	92.927	131.168	-21.101	447.692	-37.081	60.061	106.70	-63.158	22.419	-284.453	133.642	-12.271	-7.575	342.913	-9.090	97.203
	18.80	-32.463	26.993	-294.068	128.786	-116.405	-3.693	253.038	-4.846	101.335	106.70	-65.017	26.524	-284.577	121.885	-31.884	-59.850	344.140	-69.134	75.993
	18.80	-39.921	26.043	-294.117	122.444	-119.943	-29.259	254.342	-36.683	91.120	109.35	-47.028	31.738	-360.011	153.399	-274.905	-49.436	135.280	-59.306	92.036
	20.65	-29.768	30.125	-347.488	146.112	-301.919	-6.859	99.534	-29.632	63.302	112.00	-44.903	35.110	-448.356	192.954	-707.887	-29.153	15.955	-1.679	8.033
	22.50	-28.150	32.459	-406.527	174.319	-585.208	-5.510	11.271	-5.885	11.379	112.00	-44.368	36.060	-445.700	193.560	-705.806	-40.900	15.969	-2.187	8.196
	22.50	-31.952	32.742	-405.342	173.270	-585.719	-15.176	13.025	-5.885	11.379	112.50	-40.719	36.709	-463.733	201.017	-799.444	-37.727	11.644	-1.869	14.680
	23.00	-29.350	33.962	-423.055	179.754	-669.841	-13.170	5.921	-2.488	18.726	113.00	-40.402	37.928	-483.551	209.446	-933.069	-21.042	4.790	-0.385	9.493
	23.50	-28.557	34.610	-440.824	186.239	-761.182	-9.998	-3.159	-0.510	13.661	113.00	-24.596	-186.626	-485.844	-13.998	16.822	-6.617	12.572	2.557	-17.522
	23.50	-15.404	-173.863	-449.109	-8.132	-2.050	-4.552	-3.159	0.745	-6.900	114.00	-20.630	-180.142	-394.056	-13.349	23.090	-6.617	12.572	2.557	-17.522
	24.00	-12.802	-167.950	-365.933	-7.484	2.398	-4.235	3.008	2.230	-12.088	114.00	-25.674	-165.112	-311.777	-10.775	32.506	-4.059	18.811	2.614	-9.708
	24.50	-12.485	-161.465	-283.007	-6.835	10.031	-2.750	7.690	2.547	-5.603	116.65	-7.686	-130.702	79.497	-7.404	57.581	-2.346	142.375	58.867	-93.785
	24.50	-20.471	-155.386	-288.272	-5.468	10.154	-2.747	7.690	1.688	-4.606	119.30	-3.371	-88.269	365.578	5.436	165.992	8.641	355.876	71.043	-75.181
	25.90	-4.957	-125.879	47.538	-2.356	20.500	-1.224	102.932	49.134	-79.379	119.30	-48.060	-107.130	361.893	3.135	149.527	8.274	353.894	10.528	-97.642
	29.30	-2.958	-85.027	297.293	7.760	103.793	8.469	282.412	49.116	-68.122	122.45	-25.851	-55.904	616.157	8.258	139.680	9.332	593.277	59.400	-57.534
	29.30	-45.756	-102.410	294.058	7.743	103.670	4.694	280.783	-1.331	-86.603	125.60	-20.648	-6.545	729.571	42.820	359.210	24.916	683.493	81.625	-9.549
	32.20	-26.023	-55.645	530.107	11.504	78.563	6.534	505.226	51.821	-51.371	127.18	-78.445	-33.042	645.140	34.319	324.265	45.093	683.570	2.171	-39.407
	35.10	-23.707	-18.036	637.043	41.332	285.137	19.851	605.021	70.222	-16.679	128.75	-65.754	8.459	689.469	60.840	382.162	50.430	717.773	27.845	17.656
	35.10	-73.060	-32.727	539.897	35.736	262.228	34.124	605.021	1.878	-41.938	128.75	-88.118	3.648	-38.023	50.777	330.695	30.525	717.773	-26.633	-4.030
	36.55	-63.162	-14.571	577.139	37.553	209.403	35.076	644.703	16.155	-12.110	130.33	-77.490	5.593	-46.077	56.029	402.445	38.343	712.795	-16.481	20.481
	38.00	-61.797	4.882	583.882	59.730	305.596	38.104	649.422	26.011	2.480	131.90	-75.999	7.668	-53.603	79.502	331.435	47.924	668.253	-6.329	45.122
	38.00	-83.628	11.039	-96.980	52.442	250.144	26.192	649.422	-22.271	-15.365	131.90	-86.884	7.368	-86.216	62.735	301.690	-43.755	668.383	-85.817	14.491
	39.45	-74.300	13.425	-110.954	57.370	321.392	33.972	652.414	-12.225	6.876	135.05	-65.723	11.518	-114.080	82.448	347.851	-37.262	562.809	-60.277	62.606
	40.90	-72.936	15.371	-133.035	78.769	242.404	44.399	621.832	1.417	36.834	138.20	-58.902	25.836	-155.972	131.600	48.921	-13.805	312.144	-18.690	97.730
	40.90	-81.370	13.655	-149.021	64.326	217.651	-27.910	622.078	-66.147	10.616	138.20	-65.056	24.013	-153.020	116.132	51.328	-69.557	311.685	-79.823	75.133
	43.80	-62.779	17.987	-188.139	82.483	244.878	-20.208	539.811	-47.932	46.280	140.85	-47.543	27.385	-220.898	147.517	-188.527	-58.170	112.411	-59.065	93.142
	46.70	-60.463	21.748	-245.510	126.901	-32.098	0.034	328.873	9.089	8.763	143.50	-39.992	41.755	-314.533	187.201	-631.732	-31.078	8.406	-4.321	5.466
	46.70	-65.364	23.542	-250.368	116.197	-40.607	-50.233	331.279	-39.018	66.309	143.50	-42.423	42.841	-314.297	186.838	-631.133	-43.118	8.406	-4.921	6.652
	49.10	-50.896	27.796	-310.979	144.015	-258.187	-37.443	149.602	-47.229	86.881	144.00	-39.251	43.489	-334.039	194.295	-696.409	-48.894	3.179	-4.604	13.137
	51.50	-48.422	30.909	-381.782	180.976	-642.776	-15.510	44.023	-0.783	7.622	144.50	-38.363	44.709	-357.603	201.752	-793.589	-45.722	-1.203	-2.503	8.073
	51.50	-50.466	31.952	-381.276	180.439	-642.653	-25.537	44.023	-0.169	8.763	144.50	-22.596	-168.633	-363.439	-15.607	12.803	-9.352	-1.203	-1.201	-14.149
	52.00	-47.293	33.172	-397.322	185.756	-729.669	-23.531	39.307	0.148	15.247	145.00	-19.423	-162.148	-281.128	-14.958	21.521	-9.035	6.653	2.501	-18.597
	52.50	-46.500	33.820	-413.901	194.186	-822.472	-19.386	33.264	0.466	10.060	145.50	-18.535	-156.235	-201.848	-14.310	32.321	-7.550	14.951	5.529	-11.497
	52.50	-32.268	-172.895	-418.065	-6.304	40.162	-4.087	33.264	1.703	-5.195	147.35	-6.521	-122.496	57.476	-11.432	54.431	-5.882	104.786	27.488	-62.679
	53.00	-28.620	-166.886	-333.272	-5.655	42.587	-3.770	37.407	3.187	-10.383	149.20	-2.460	-99.127	261.540	-4.428	130.428	1.160	260.874	27.360	-91.769
	53.50	-28.362	-160.402	-251.058	-5.007	48.275	-2.286	40.145	3.504	-3.898	149.20	-26.269	-106.717	261.617	-4.082	116.603	3.157	259.598	-2.394	-102.534
	53.50	-37.046	-153.267	-256.890	-3.510	47.776	-0.809	40.015	4.118	-2.771	151.55	-6.917	-65.865	468.587	-0.969	121.626	4.617			

VIADUCTO BORGES BLANQUES

1)	9.40	-8.023	7.949	-107.132	3.777	-123.577	14.469	89.079	-20.409	-2.277
2)	10.58	-6.505	6.306	-118.123	3.387	-140.244	14.245	94.177	-20.161	-4.946
3)	11.75	-6.257	4.664	-125.487	1.745	-139.200	14.801	102.016	-19.913	-6.157
1)	11.75	-4.764	6.716	-125.487	2.634	-7.890	-11.067	100.849	-36.345	2.137
"	12.93	-3.061	3.874	-133.529	1.498	-26.552	-11.723	99.703	-36.097	-0.519
	14.10	-2.813	2.355	-135.345	-0.329	-28.702	-11.475	101.288	-35.850	-2.469
1)	14.10	1.086	2.100	-135.468	6.563	71.536	-47.543	101.288	-60.119	8.787
2)	16.45	4.678	-1.711	-138.654	4.490	39.894	-48.074	84.718	-63.843	6.908
3)	18.80	5.308	-5.886	-129.855	0.705	31.865	-47.805	69.907	-51.520	3.348
)	18.80	14.095	-5.937	-129.537	5.234	65.389	-64.581	68.487	-64.123	11.302
)	20.65	17.399	-8.941	-115.076	2.736	50.366	-64.600	34.750	-52.546	27.687
1)	22.50	17.925	-12.555	-94.915	-0.241	47.182	-64.433	-20.094	-24.564	29.193
)	22.50	19.414	-10.027	-101.274	-2.858	46.036	-59.248	-19.887	-30.032	33.970
)	23.00	20.261	-10.897	-95.902	-3.543	47.215	-59.268	-35.672	-0.450	25.115
)	23.50	20.519	-11.582	-90.688	-4.227	49.189	-59.165	-46.817	6.613	24.495
)	23.50	19.896	-37.555	-94.529	-2.134	-56.846	-50.116	-46.817	1.290	-13.806
)	24.00	20.743	-37.437	-74.908	-2.202	-57.413	-49.083	-41.319	2.445	-13.258
)	24.50	20.846	-37.506	-54.954	-2.271	-56.723	-47.928	-34.546	3.478	-13.943
)	24.50	19.772	-34.785	-55.140	1.601	-57.735	-48.655	-34.546	-5.575	-6.569
)	26.90	24.821	-35.613	30.969	1.272	-61.568	-42.151	-7.125	66.699	-30.802
)	29.30	25.471	-35.942	118.946	0.205	-72.117	-36.333	69.282	84.418	-32.324
)	29.30	-0.908	-20.189	119.026	3.374	-71.977	-29.982	70.755	57.695	-19.356
)	32.20	5.514	-21.427	179.068	2.977	-80.591	-22.445	124.905	57.732	-21.401
)	35.10	6.267	-21.823	241.128	-0.171	-114.931	-15.246	191.388	58.331	-25.062
)	35.10	-27.023	-0.275	124.494	3.348	-36.701	5.317	191.388	15.749	-4.862
)	36.55	-23.802	-0.467	123.773	3.157	-42.649	8.229	200.986	16.059	-8.010
)	38.00	-23.358	-0.672	124.284	0.816	-62.042	11.531	212.290	16.450	-9.550
)	38.00	-32.137	6.921	-88.871	6.190	75.849	-1.989	212.290	-13.080	5.267
)	39.45	-29.101	4.819	-98.154	5.670	51.012	-1.802	208.205	-13.743	2.920
)	40.90	-28.657	2.765	-104.219	3.411	42.529	-1.411	206.560	-13.454	-0.242
)	40.90	-25.394	3.790	-134.782	17.725	122.322	-28.940	205.444	-55.867	19.931
)	43.80	-19.344	-1.392	-139.626	15.808	48.034	-29.470	155.216	-54.126	16.167
)	46.70	-18.591	-6.388	-129.799	11.120	4.641	-29.180	113.756	-46.180	14.549
)	46.70	-3.037	-8.439	-128.082	19.948	103.391	-75.774	112.220	-71.910	29.374
)	49.10	1.670	-13.122	-101.169	17.012	47.293	-76.038	43.401	-61.102	25.917
)	51.50	2.476	-17.434	-63.348	13.111	9.669	-75.337	4.282	12.152	8.367
)	51.50	10.053	-17.759	-68.488	11.135	8.502	-67.607	4.282	3.356	15.597
)	52.00	11.086	-18.629	-59.125	10.574	2.051	-67.627	-4.603	4.389	14.913
)	52.50	11.344	-19.313	-49.355	9.684	-2.777	-67.422	-11.233	4.790	15.460
)	52.50	12.804	-32.245	-54.987	1.200	-76.440	-55.345	-11.233	-0.034	-9.305
)	53.00	13.991	-32.159	-38.379	1.131	-77.445	-54.313	-6.647	1.122	-8.757
)	53.50	14.094	-32.227	-22.488	1.063	-78.985	-53.157	-2.106	2.154	-9.442
)	53.50	14.710	-32.351	-25.499	4.921	-75.470	-52.124	-2.092	-4.983	-2.082
)	55.90	20.285	-32.525	52.470	4.592	-84.877	-45.620	22.681	73.495	-26.760
)	58.30	20.966	-32.482	130.083	3.402	-102.553	-38.254	94.632	75.792	-33.797
)	58.30	-4.281	-18.995	129.630	5.592	-36.622	-13.569	95.922	47.892	-18.428
)	61.20	2.636	-19.392	182.679	5.195	-51.178	-6.032	148.358	57.616	-20.227
)	64.10	3.606	-19.603	234.394	2.026	-91.742	1.064	210.435	58.215	-23.888
)	64.10	-28.417	2.179	164.880	7.439	-40.843	7.483	210.565	15.719	-3.832
)	65.55	-25.216	1.988	160.560	7.145	-51.934	10.374	217.959	16.008	-7.103
)	67.00	-24.566	1.782	156.741	5.030	-75.775	13.697	229.112	16.318	-8.520
)	67.00	-32.742	8.197	-117.370	9.308	11.301	8.492	229.112	-14.284	6.174
)	68.45	-29.520	6.281	-129.969	8.891	-17.624	8.679	221.890	-13.974	3.950
)	69.90	-29.231	4.228	-137.279	6.530	-29.493	8.968	218.293	-13.685	0.665
)	69.90	-21.767	2.691	-180.906	19.642	115.380	-24.695	218.040	-55.914	20.825
)	72.80	-15.841	-1.464	-185.018	17.623	36.581	-25.000	162.901	-55.315	17.060
)	75.70	-14.933	-6.461	-173.347	12.935	-11.471	-24.812	118.756	-46.179	16.153
)	75.70	4.176	-9.842	-171.073	21.573	115.305	-75.560	116.363	-73.660	30.448
)	78.10	9.224	-14.525	-141.367	18.534	58.374	-75.824	46.019	-62.100	25.088
)	80.50	9.874	-17.810	-99.613	14.839	19.768	-74.610	5.463	8.748	6.820
)	80.50	20.202	-19.541	-103.792	11.559	18.587	-66.511	5.449	-0.234	12.869
)	81.00	21.390	-20.411	-93.042	10.875	9.315	-67.557	-0.834	1.561	12.184
)	81.50	21.493	-21.096	-82.644	9.882	6.707	-66.735	-7.188	2.717	12.732
)	81.50	21.749	-39.137	-91.854	-0.900	-71.384	-58.542	-7.188	-3.076	-12.572
)	82.00	22.936	-39.205	-71.235	-0.968	-71.257	-57.510	-1.349	-2.044	-12.024
)	82.50	23.040	-39.088	-50.309	-1.037	-71.784	-56.478	4.084	-1.011	-12.709
)	82.50	28.446	-40.839	-56.292	2.352	-66.024	-55.668	4.007	-9.539	-4.651
)	85.15	34.145	-41.209	54.020	1.982	-72.650	-48.544	33.223	70.006	-28.077
)	87.80	35.518	-41.007	162.925	0.641	-88.564	-40.518	127.578	90.386	-38.450
)	87.80	4.329	-23.229	166.379	4.911	-21.891	-17.780	129.011	58.391	-20.938
)	90.95	11.556	-23.653	240.436	4.487	-40.317	-9.727	197.461	69.761	-22.928
)	94.10	13.063	-23.905	313.599	0.928	-78.418	-0.114	278.744	70.401	-28.130
)	94.10	-26.247	0.501	161.237	6.286	-25.328	3.816	278.737	18.251	-2.548
)	95.68	-22.500	0.296	160.460	5.875	-36.097	6.913	286.110	18.570	-5.135
)	97.25	-21.984	0.077	157.957	3.624	-61.065	10.566	298.653	18.901	-7.613
)	97.25	-35.457	9.270	-44.511	10.748	72.353	1.241	298.653	-19.583	8.885
)	98.83	-32.019	6.053	-58.102	10.304	41.456	1.304	285.530	-19.273	5.360
)	100.40	-31.533	3.863	-64.749	7.703	24.318	1.635	277.843	-18.943	2.882
)	100.40	-25.596	3.329	-185.979	25.979	194.728	-40.915	276.676	-71.090	28.432
)	103.55	-19.916	-2.141	-190.199	23.899	88.226	-41.733	194.508	-70.450	23.231
)	106.70	-18.946	-7.534	-177.546	18.937	19.223	-41.175	125.422	-60.594	20.994
)	106.70	2.175	-12.249	-181.456	29.859	142.397	-95.575	124.052	-92.763	38.363
)	109.35	8.029	-17.406	-141.778	26.533	55.826	-96.229	21.102	-85.365	37.875
)	112.00	8.721	-21.088	-90.328	22.358	-9.759	-95.795	-24.186	11.013	7.553

VIADUCTO BORGES BLANQUES

112.00	19.888	-21.994	-97.984	16.859	-7.606	-83.851	-24.316	-0.604	15.590
112.50	21.075	-23.705	-85.838	16.072	-16.944	-83.748	-32.242	0.428	14.905
113.00	21.178	-24.575	-73.151	15.182	-22.011	-82.721	-40.222	1.584	15.453
113.00	23.031	-39.185	-81.564	-3.756	-153.741	-81.678	-40.222	-5.357	-19.513
113.50	24.064	-39.253	-61.611	-3.825	-151.471	-80.646	-30.095	-4.202	-18.966
114.00	24.322	-39.136	-41.382	-3.893	-148.855	-79.490	-20.269	-3.169	-19.650
114.00	28.594	-40.002	-47.892	-1.621	-150.008	-75.689	-20.256	-11.537	-11.736
116.65	34.448	-40.203	61.877	-1.976	-143.066	-68.565	31.639	71.431	-32.240
119.30	35.852	-40.201	169.630	-3.332	-145.773	-60.663	132.287	90.497	-35.114
119.30	6.221	-23.465	174.002	-1.967	8.961	-11.383	133.554	61.031	-18.625
122.45	13.448	-23.903	252.179	-2.508	11.789	-3.330	195.036	70.931	-21.245
125.60	15.141	-24.142	330.222	-6.156	-6.542	6.057	270.302	71.674	-26.310
125.60	-26.065	-0.405	192.659	0.997	89.088	-1.153	270.252	17.516	-0.897
127.18	-22.452	-0.624	195.710	0.573	86.027	1.965	275.109	17.846	-3.395
128.75	-21.935	-0.843	195.091	-1.802	68.660	5.617	282.876	18.074	-6.920
128.75	-36.749	5.636	1.116	7.392	256.529	-7.553	282.876	-19.355	10.868
130.33	-33.291	2.433	-7.216	6.837	228.912	-7.469	267.323	-19.024	8.281
131.90	-32.806	0.243	-12.499	4.360	216.367	-7.138	254.918	-18.694	5.680
131.90	-31.960	1.295	-123.482	24.887	293.607	-67.953	254.904	-71.957	29.979
135.05	-25.074	-3.989	-119.033	22.806	189.310	-68.751	166.623	-71.297	24.900
138.20	-22.854	-9.567	-100.809	17.618	120.207	-68.213	91.402	-67.848	22.030
138.20	-8.849	-12.502	-102.074	31.497	118.671	-93.402	90.092	-99.223	37.426
140.85	-3.150	-17.211	-61.344	28.184	28.784	-93.953	-4.762	-53.636	20.693
143.50	-0.693	-21.155	-6.519	23.996	-38.508	-92.801	-25.663	7.318	5.709
143.50	8.339	-22.753	-10.516	18.660	-39.676	-82.306	-25.663	-2.708	13.766
144.00	9.372	-24.464	1.566	17.873	-51.991	-83.147	-32.339	-1.676	13.082
144.50	9.661	-25.334	13.823	17.086	-60.909	-83.044	-38.310	5.924	12.617
144.50	12.763	-19.830	13.330	-10.574	-181.946	-78.589	-38.310	-0.751	-24.386
145.00	13.796	-19.899	23.059	-10.642	-175.675	-77.556	-24.345	20.783	-30.841
145.50	14.085	-19.781	34.257	-10.711	-170.604	-76.401	-6.185	48.887	-37.362
145.50	17.021	-21.645	28.621	-9.229	-170.811	-74.590	-6.391	43.889	-32.378
147.35	22.287	-21.905	67.840	-9.489	-152.282	-69.325	47.512	52.887	-26.341
149.20	23.608	-21.780	107.950	-10.228	-139.768	-64.786	82.414	66.041	-10.314
149.20	13.197	-15.080	107.329	-8.122	-10.441	-27.804	82.488	54.126	-1.409
151.55	19.495	-15.408	144.984	-8.450	10.759	-21.506	94.275	61.162	-6.939
153.90	21.663	-15.537	182.142	-10.572	15.592	-15.545	108.713	58.475	-7.449
153.90	1.622	-4.018	182.590	-4.895	87.803	-5.075	108.713	35.637	3.390
155.08	4.255	-4.182	186.637	-5.059	93.440	-2.597	105.996	35.699	1.563
156.25	6.805	-4.333	190.812	-6.626	86.296	1.818	107.244	35.926	-1.092
156.25	-8.661	4.569	190.812	1.740	198.346	10.823	107.368	17.571	7.208
157.43	-6.184	4.405	185.163	1.575	197.085	13.301	98.671	17.819	5.874
158.60	-4.852	4.254	179.066	-0.238	183.634	16.251	92.574	18.067	3.218
158.60	-22.053	2.771	48.580	12.092	120.929	-6.425	92.574	-6.199	15.480
160.95	-15.910	2.443	41.464	10.963	72.203	-5.827	62.266	-5.724	12.318
163.30	-12.844	1.942	33.028	7.075	48.988	-5.331	38.968	-5.229	8.020
163.30	-14.399	-4.290	-38.588	10.516	48.722	-13.936	38.702	-13.936	11.481
165.15	-9.134	-7.904	-27.125	8.586	18.732	-13.564	18.137	-13.564	9.017
167.00	-6.140	-10.753	-10.910	5.389	2.828	-13.172	2.212	-13.172	5.389
167.00	-3.804	-10.299	-10.983	2.721	2.755	-2.887	2.262	-2.887	2.721
167.50	-2.772	-10.983	-5.348	2.036	1.069	-2.783	1.069	-2.783	2.036
168.00	-0.346	-12.473	0.000	1.147	0.000	-2.680	0.000	-0.593	28.821
	0.000	-0.098	0.037	-0.098	-0.086	0.000	-0.272	0.000	-0.098
	0.000	-0.098	0.086	-0.098	0.086	0.000	-0.286	0.000	-0.894
	0.000	-0.098	0.293	-0.098	0.293	0.000	0.849	0.000	-0.200
	0.000	-0.314	0.056	-0.314	-0.067	0.000	-0.811	0.000	0.058
	0.000	-0.314	0.630	-0.314	0.506	0.000	-0.866	0.000	-2.257
	0.000	-0.314	2.205	-0.314	1.161	0.000	2.092	0.000	0.471
	-0.267	-0.962	0.740	5.128	8.692	-1.311	7.051	-1.311	6.026
	-0.267	-0.962	2.059	5.128	0.892	-1.311	-2.308	-1.434	4.173
	-0.267	-0.962	3.306	5.128	-5.844	-1.311	-3.531	-0.267	4.256
	0.000	-0.630	5.206	9.749	17.901	0.000	16.259	0.000	11.019
	0.000	-0.630	5.071	9.749	0.763	0.000	-1.879	0.000	7.509
	0.000	-0.630	3.603	9.749	-15.250	0.000	-1.449	0.000	-1.161
	0.000	5.644	16.125	7.329	12.430	0.000	11.500	0.000	8.227
	0.000	5.644	5.895	7.329	0.630	0.000	-0.866	0.000	5.536
	0.000	5.644	-3.061	7.329	-11.452	0.000	-0.001	0.000	0.049
	0.000	10.378	26.807	9.566	17.452	0.000	15.996	0.000	11.022
	0.000	10.378	9.630	9.566	0.763	0.000	-1.724	0.000	6.346
	0.000	10.378	-7.778	9.566	-14.677	0.000	0.902	0.000	-2.202
	1.311	12.168	30.832	4.381	8.539	1.311	7.610	1.311	5.310
	1.311	12.168	11.112	4.381	2.059	1.311	-2.308	1.434	-0.934
	1.311	12.168	-8.885	4.381	-5.473	1.311	4.513	0.267	-0.954
	0.000	2.034	5.135	-0.580	-0.271	0.000	-0.642	0.000	-0.209
	0.000	2.034	2.877	-0.580	0.506	0.000	-0.711	0.000	-4.766
	0.000	2.034	1.202	-0.580	1.407	0.000	3.827	0.000	-0.839
	0.000	-0.568	1.681	-0.281	-0.035	0.000	-0.221	0.000	-0.095
	0.000	-0.568	1.306	-0.281	0.214	0.000	-0.870	0.000	-2.058
	0.000	-0.568	0.602	-0.281	0.580	0.000	1.127	0.000	-0.669
	0.000	-2.410	-0.186	-0.679	0.681	0.000	0.123	0.000	-0.307
	0.000	-2.410	2.176	-0.679	0.635	0.000	-1.295	0.000	-5.660
	0.000	-2.410	5.560	-0.679	1.713	0.000	4.662	0.000	-0.468
	-0.267	-2.961	-3.305	10.160	18.097	-1.311	16.455	-1.311	11.275
	-0.267	-2.961	2.432	10.160	2.432	-1.311	-2.006	-1.434	4.624
	-0.267	-2.961	6.740	10.160	10.160				

VIADUCTO BORGES BLANQUES

8(1)	0.000	5.895	10.603	17.901	30.542	0.000	28.343	0.000	19.201
8(2)	0.000	5.895	2.102	17.901	2.102	0.000	-2.296	0.000	15.307
8(3)	0.000	5.895	-6.284	17.901	-26.294	0.000	0.433	0.000	-1.002
9(1)	0.000	5.374	13.121	13.011	20.847	0.000	19.206	0.000	13.754
9(2)	0.000	5.374	5.328	13.011	0.635	0.000	-1.140	0.000	10.554
9(3)	0.000	5.374	-3.734	13.011	-18.330	0.000	0.774	0.000	-1.403
10(1)	0.000	14.311	33.606	17.675	30.419	0.000	28.220	0.000	18.976
10(2)	0.000	14.311	11.219	17.675	2.102	0.000	-2.296	0.000	15.307
10(3)	0.000	14.311	-10.608	17.675	-26.294	0.000	1.501	0.000	-3.142
11(1)	1.311	17.003	41.173	9.791	17.754	1.311	15.927	1.311	10.906
11(2)	1.311	17.003	13.475	9.791	2.432	1.311	-2.006	1.434	3.190
11(3)	1.311	17.003	-12.169	9.791	-13.231	1.311	6.877	0.267	-1.860
12(1)	0.000	2.406	8.955	-0.679	0.765	0.000	0.207	0.000	-0.121
12(2)	0.000	2.406	5.205	-0.679	0.635	0.000	-1.140	0.000	-5.660
12(3)	0.000	2.406	1.662	-0.679	1.752	0.000	3.976	0.000	-1.039
13(1)	0.000	0.189	2.122	-0.281	-0.165	0.000	-0.351	0.000	-0.095
13(2)	0.000	0.189	0.984	-0.281	0.214	0.000	-0.715	0.000	-2.058
13(3)	0.000	0.189	1.597	-0.281	0.593	0.000	1.141	0.000	-0.669
14(1)	0.000	-1.779	0.453	-0.679	0.765	0.000	0.207	0.000	-0.307
14(2)	0.000	-1.779	3.267	-0.679	0.635	0.000	-1.140	0.000	-5.660
14(3)	0.000	-1.779	7.227	-0.679	1.752	0.000	3.976	0.000	-1.039
15(1)	-0.267	-4.272	-4.486	9.791	17.754	-1.311	15.927	-1.311	10.906
15(2)	-0.267	-4.272	2.432	9.791	2.432	-1.311	-1.851	-1.434	2.115
15(3)	-0.267	-4.272	8.037	9.791	-13.231	-1.311	6.877	-0.267	-1.860
16(1)	0.000	5.628	10.602	17.531	30.275	0.000	28.076	0.000	18.832
16(2)	0.000	5.628	3.193	17.531	2.102	0.000	-2.296	0.000	12.798
16(3)	0.000	5.628	-5.973	17.531	-26.027	0.000	1.899	0.000	-3.285
17(1)	0.000	5.271	12.531	13.011	20.724	0.000	19.237	0.000	13.754
17(2)	0.000	5.271	4.943	13.011	0.635	0.000	-1.140	0.000	10.554
17(3)	0.000	5.271	-3.791	13.011	-18.207	0.000	1.941	0.000	-1.403
18(1)	0.000	14.167	31.800	17.531	30.070	0.000	28.057	0.000	18.832
18(2)	0.000	14.167	11.335	17.531	2.218	0.000	-1.136	0.000	13.873
18(3)	0.000	14.167	-10.841	17.531	-26.091	0.000	3.975	0.000	-3.285
19(1)	1.311	15.695	38.533	9.608	17.305	1.311	15.478	1.311	10.351
19(2)	1.311	15.695	13.475	9.608	2.432	1.311	-1.851	1.434	2.027
19(3)	1.311	15.695	-10.717	9.608	-12.803	1.311	8.182	0.267	-2.330
20(1)	0.000	2.139	9.156	-0.945	0.272	0.000	-0.471	0.000	-0.574
20(2)	0.000	2.139	5.590	-0.945	0.635	0.000	-1.140	0.000	-7.094
20(3)	0.000	2.139	1.743	-0.945	2.019	0.000	6.855	0.000	-1.778
21(1)	0.000	0.189	2.108	-0.281	-0.302	0.000	-0.488	0.000	-0.095
21(2)	0.000	0.189	0.984	-0.281	0.214	0.000	-0.715	0.000	-2.058
21(3)	0.000	0.189	1.850	-0.281	0.723	0.000	2.438	0.000	-0.669
22(1)	-0.123	-2.064	0.741	-0.984	0.359	0.000	-0.385	0.000	-0.304
22(2)	-0.123	-2.064	3.695	-0.984	0.678	0.000	-1.283	0.000	-6.824
22(3)	-0.123	-2.064	7.512	-0.984	2.121	0.000	5.458	0.000	-1.509
23(1)	-0.267	-2.877	-1.543	12.352	21.639	-1.311	19.440	-1.311	13.467
23(2)	-0.267	-2.877	2.517	12.352	2.517	-1.311	-2.292	-1.434	4.894
23(3)	-0.267	-2.877	5.403	12.352	-16.612	-1.311	6.125	-0.267	-1.201
24(1)	0.000	7.285	13.807	21.379	37.953	0.000	35.382	0.000	22.494
24(2)	0.000	7.285	2.303	21.379	2.303	0.000	-1.422	0.000	17.904
24(3)	0.000	7.285	-9.346	21.379	-32.416	0.000	0.370	0.000	-2.755
25(1)	0.000	7.923	18.378	15.632	25.774	0.000	24.928	0.000	16.375
25(2)	0.000	7.923	5.248	15.632	0.678	0.000	-1.283	0.000	13.267
25(3)	0.000	7.923	-8.378	15.632	-24.295	0.000	-0.331	0.000	-1.025
26(1)	0.000	15.038	36.403	21.463	37.720	0.000	35.150	0.000	22.764
26(2)	0.000	15.038	12.191	21.463	2.303	0.000	-1.422	0.000	18.174
26(3)	0.000	15.038	-11.469	21.463	-32.403	0.000	1.202	0.000	-2.485
27(1)	1.311	14.917	38.592	12.086	21.243	1.311	19.230	1.311	13.201
27(2)	1.311	14.917	15.819	12.086	2.517	1.311	-2.292	1.434	3.460
27(3)	1.311	14.917	-8.318	12.086	-16.208	1.311	7.449	0.267	-1.940
28(1)	1.167	0.697	6.895	-1.128	0.053	0.000	-0.690	0.000	-0.756
28(2)	1.167	0.697	6.018	-1.128	0.678	0.000	-1.283	0.000	-8.257
28(3)	1.167	0.697	3.931	-1.128	2.490	0.000	7.535	0.000	-2.248
29(1)	0.000	0.189	0.941	-0.281	-0.405	0.000	-0.591	0.000	-0.095
29(2)	0.000	0.189	1.370	-0.281	0.214	0.000	-0.715	0.000	-2.058
29(3)	0.000	0.189	1.850	-0.281	0.723	0.000	3.411	0.000	-0.669
30(1)	-0.123	-2.618	0.065	-1.128	0.053	0.000	-0.505	0.000	-0.756
30(2)	-0.123	-2.618	4.863	-1.128	0.678	0.000	-1.283	0.000	-8.257
30(3)	-0.123	-2.618	9.589	-1.128	2.490	0.000	7.535	0.000	-2.248
31(1)	-0.267	-1.056	1.070	12.086	21.243	-1.311	19.230	-1.311	13.201
31(2)	-0.267	-1.056	1.227	12.086	2.517	-1.311	-2.292	-1.434	3.460
31(3)	-0.267	-1.056	2.675	12.086	-16.208	-1.311	7.449	-0.267	-1.940
32(1)	0.000	8.413	14.527	21.463	37.720	0.000	35.150	0.000	22.764
32(2)	0.000	8.413	2.303	21.463	2.303	0.000	-1.422	0.000	18.174
32(3)	0.000	8.413	-11.246	21.463	-32.403	0.000	1.202	0.000	-2.485
33(1)	0.000	8.967	18.314	15.632	25.774	0.000	23.761	0.000	16.498
33(2)	0.000	8.967	3.695	15.632	1.845	0.000	-1.438	0.000	13.267
33(3)	0.000	8.967	-9.609	15.632	-23.128	0.000	-0.208	0.000	0.297
34(1)	0.000	15.385	38.066	21.748	36.922	0.000	34.352	0.000	22.863
34(2)	0.000	15.385	12.191	21.748	2.303	0.000	-1.422	0.000	19.338
34(3)	0.000	15.385	-12.935	21.748	-32.546	0.000	-0.958	0.000	-0.472
35(1)	1.311	18.582	42.936	11.431	20.853	1.311	18.840	1.311	12.701
35(2)	1.311	18.582	14.652	11.431	2.517	1.311	-2.292	1.434	6.328
35(3)	1.311	18.582	-13.509	11.431	-15.819	1.311	3.001	0.267	-0.779

VIADUCTO BORGES BLANQUES

1.167	0.963	8.224	-0.861	0.386	0.000	-0.172	0.000	-0.489
1.167	0.963	6.527	-0.861	0.678	0.000	-1.438	0.000	-0.689
1.167	0.963	4.441	-0.861	2.107	0.000	6.988	0.000	-0.307
0.000	0.189	1.635	-0.281	-0.405	0.000	-0.591	0.000	-0.281
0.000	0.189	1.370	-0.281	0.214	0.000	-0.870	0.000	-2.058
0.000	0.189	1.541	-0.281	0.723	0.000	3.411	0.000	0.533
0.000	-1.824	0.276	-0.847	-0.516	0.000	-0.888	0.000	-0.661
0.000	-1.824	3.262	-0.847	0.506	0.000	-0.711	0.000	-6.200
0.000	-1.824	7.758	-0.847	1.610	0.000	5.074	0.000	-1.579
-0.267	-7.163	-8.155	4.096	7.904	-1.311	6.974	-1.311	4.839
-0.267	-7.163	2.059	4.096	0.892	-1.311	-2.308	-1.434	-2.098
-0.267	-7.163	12.215	4.096	-4.940	-1.311	8.107	-0.267	-1.825
0.000	2.392	3.941	9.300	15.915	0.000	15.627	0.000	10.879
0.000	2.392	0.763	9.300	0.763	0.000	-1.724	0.000	4.912
0.000	2.392	-2.457	9.300	-14.534	0.000	3.185	0.000	-2.345
0.000	3.204	6.500	7.226	12.416	0.000	11.487	0.000	8.124
0.000	3.204	0.630	7.226	0.630	0.000	-0.866	0.000	5.536
0.000	3.204	-5.509	7.226	-11.323	0.000	0.129	0.000	-0.924
0.000	12.363	26.631	9.749	17.757	0.000	16.116	0.000	11.019
0.000	12.363	5.193	9.749	0.763	0.000	-1.879	0.000	7.509
0.000	12.363	-14.933	9.749	-14.983	0.000	-1.306	0.000	-1.161
1.311	13.202	30.091	5.128	8.549	1.311	6.907	1.311	6.212
1.311	13.202	11.112	5.128	0.892	1.311	-2.308	1.434	4.173
0.000	1.613	9.316	-0.437	-0.197	0.000	-3.387	0.267	4.256
0.000	1.613	5.895	-0.437	0.506	0.000	-0.755	0.000	0.058
0.000	1.613	2.652	-0.437	1.174	0.000	-0.866	0.000	-2.257
0.000	0.371	2.324	-0.098	-0.086	0.000	2.106	0.000	0.471
0.000	0.371	0.856	-0.098	0.086	0.000	-0.272	0.000	-0.098
0.000	0.371	1.420	-0.098	0.416	0.000	-0.286	0.000	-0.894
0.000	31.566	2.765	374.257	27.333	0.000	0.849	0.000	-0.200
0.000	31.566	1.474	374.257	14.406	0.000	27.333	0.000	374.257
0.000	31.566	0.000	374.257	0.000	0.000	14.406	0.000	374.257
0.000	260.535	20.048	383.164	28.377	0.000	0.000	0.000	245.039
0.000	260.535	10.617	383.164	14.406	0.000	28.377	0.000	383.164
0.000	260.535	0.000	383.164	0.000	0.000	14.406	0.000	383.164
0.000	243.880	18.873	396.974	29.480	0.000	0.000	0.000	308.976
0.000	243.880	9.264	396.974	15.573	0.000	29.480	0.000	396.974
0.000	243.880	0.000	396.974	0.000	0.000	15.573	0.000	396.974
0.000	187.824	14.688	409.137	30.763	0.000	0.000	0.000	275.330
0.000	187.824	6.975	409.137	14.862	0.000	30.763	0.000	409.137
0.000	187.824	0.000	409.137	0.000	0.000	14.862	0.000	409.137
0.000	203.253	15.168	388.127	29.603	0.000	0.000	0.000	276.315
0.000	203.253	8.283	388.127	14.406	0.000	29.603	0.000	388.127
0.000	203.253	0.000	388.127	0.000	0.000	14.406	0.000	388.127
0.000	16.257	-0.001	-18.595	-1.821	0.000	0.000	0.000	228.432
0.000	16.257	0.381	-18.595	-0.376	0.000	-1.821	0.000	-18.595
0.000	16.257	0.000	-18.595	0.000	0.000	-0.376	0.000	-18.595
0.000	-5.234	-0.365	-7.093	-0.777	0.000	0.000	0.000	5.883
0.000	-5.234	-0.170	-7.093	-0.376	0.000	-0.777	0.000	-7.093
0.000	-5.234	0.000	-7.093	0.000	0.000	-0.376	0.000	-7.093
0.000	19.959	1.646	-4.846	-0.893	0.000	0.000	0.000	12.094
0.000	19.959	0.524	-4.846	-0.499	0.000	-0.893	0.000	-4.846
0.000	19.959	0.000	-4.846	0.000	0.000	-0.499	0.000	-4.846
0.000	3.822	-0.530	-5.323	-0.900	0.000	0.000	0.000	-0.009
0.000	3.822	-0.346	-5.323	-0.428	0.000	-0.900	0.000	-5.323
0.000	3.822	0.000	-5.323	0.000	0.000	-0.428	0.000	-5.323
0.000	26.629	2.094	-16.845	-2.060	0.000	0.000	0.000	23.990
0.000	26.629	0.385	-16.845	-0.376	0.000	-2.060	0.000	-16.845
0.000	26.629	0.000	-16.845	0.000	0.000	-0.376	0.000	-16.845
								8.214

HIPOTESIS: H

Eje 1 (49-96) sin carga: Eje 2 (1-48) ripado +30cm

Envolvente IPF75B negativa

Coef impacto 1.16

VIADUCTO BORGES BLANQUES

RRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
)	0.00	0.318	-8.116	0.000	-133.539	0.000	-1.622	0.000	-1.868	-133.301
)	0.50	7.773	-4.993	2.321	-125.110	62.876	6.310	-0.071	0.203	0.304
)	1.00	10.946	-4.345	4.993	-118.625	118.301	9.482	-0.304	0.520	0.952
)	1.00	8.734	-4.994	4.807	-120.195	118.178	-0.711	0.863	1.109	0.878
)	2.85	17.871	-1.517	6.861	-88.876	299.700	10.711	-2.399	2.252	3.212
)	4.70	34.115	0.947	6.430	-70.460	347.596	27.526	-10.180	3.457	5.676
)	4.70	22.030	-29.021	255.039	-83.110	346.652	-16.645	-10.309	5.434	7.357
)	7.05	31.452	1.378	280.942	-47.446	472.630	4.315	-30.718	6.957	10.340
)	9.40	50.329	32.503	241.351	-35.580	346.159	20.077	-58.324	8.416	13.452
)	9.40	22.914	-13.401	663.556	-47.155	421.989	-12.913	-58.201	12.865	15.901
)	10.58	27.006	2.162	667.470	-30.814	334.359	-8.845	-77.157	13.626	17.457
)	11.75	34.621	17.724	654.070	-28.285	357.763	-8.084	-97.978	14.388	19.013
)	11.75	12.979	8.592	654.070	-32.800	368.235	-16.050	-97.978	18.358	20.827
)	12.93	20.879	33.751	631.332	-16.783	259.836	-10.815	-124.415	19.119	22.254
)	14.10	28.969	48.147	582.948	-15.227	279.416	-10.053	-152.718	19.881	23.810
)	14.10	-1.809	36.391	584.115	-19.638	289.272	-17.744	-152.718	28.755	29.015
)	16.45	4.854	66.945	459.050	0.593	118.520	-4.550	-223.909	11.034	30.323
)	18.80	24.207	106.500	251.579	3.576	114.491	-3.090	-295.372	-1.161	31.451
)	18.80	1.199	99.351	252.470	3.754	121.055	-4.269	-295.358	1.990	36.070
)	20.65	5.259	121.683	47.932	10.887	46.071	2.773	-383.696	11.099	73.238
)	22.50	22.011	155.920	-210.165	13.221	25.017	3.915	-585.802	5.944	169.769
)	22.50	17.694	155.418	-211.570	13.678	24.954	4.135	-586.436	-1.520	169.939
)	23.00	18.582	161.331	-289.406	14.327	14.551	5.620	-671.197	-2.058	169.725
)	23.50	21.755	167.816	-371.881	14.975	7.189	5.937	-759.080	0.241	185.689
)	23.50	36.213	-44.255	-363.287	-193.666	-757.426	26.017	-759.080	25.148	-190.035
)	24.00	37.102	-43.606	-339.728	-185.236	-665.333	30.163	-668.440	28.024	-175.769
)	24.50	40.274	-42.958	-319.212	-178.752	-576.457	32.168	-580.699	31.093	-175.223
)	24.50	39.132	-42.512	-319.212	-179.310	-578.100	22.831	-581.989	21.814	-175.535
)	26.90	46.556	-28.530	-232.692	-143.321	-197.307	44.764	-289.927	1.664	-76.137
)	29.30	61.784	-25.418	-169.060	-114.530	18.018	53.767	-151.169	4.248	-41.361
)	29.30	55.545	-23.658	-168.996	-126.525	16.160	7.045	-151.292	10.406	-36.058
)	32.20	62.715	-9.599	-132.384	-82.107	292.899	27.287	-111.689	-16.810	-9.506
)	35.10	82.543	-5.838	-110.025	-63.950	260.997	36.156	-88.170	-14.970	-5.745
)	35.10	73.025	-9.994	-71.168	-77.486	285.309	-43.721	-88.170	-3.924	-0.782
)	36.55	74.547	-7.607	-62.381	-56.411	359.053	-33.801	-90.243	-2.972	1.033
)	38.00	84.383	-5.662	-53.952	-52.326	291.538	-26.682	-94.020	-2.084	2.979
)	38.00	67.348	-7.141	611.429	-58.673	346.622	-34.767	-94.020	4.905	8.059
)	39.45	69.918	11.015	605.228	-38.766	257.854	-30.509	-106.456	5.857	9.875
)	40.90	79.277	30.469	575.748	-35.848	299.496	-29.620	-121.519	6.745	11.820
)	40.90	31.962	8.497	645.336	-40.579	320.888	-21.847	-121.375	20.027	17.769
)	43.80	36.562	55.262	543.499	-9.583	127.150	-8.530	-178.261	22.238	21.530
)	46.70	56.867	102.599	321.664	-5.822	147.892	-6.689	-248.797	-16.226	34.096
)	46.70	17.349	81.314	332.064	-6.034	161.830	-6.373	-248.653	-10.388	38.051
)	49.10	20.966	121.023	84.023	5.249	71.259	3.320	-374.050	6.899	66.424
)	51.50	37.146	161.399	-242.433	8.361	55.069	4.843	-639.808	-5.620	175.297
)	51.50	31.392	161.647	-244.415	9.974	54.946	6.525	-639.808	-13.811	175.355
)	52.00	31.710	167.560	-326.351	10.623	48.345	6.842	-728.137	-14.735	178.819
)	52.50	35.358	173.568	-409.747	11.271	42.975	7.159	-819.780	-13.003	190.739
)	52.50	49.705	-32.237	-406.906	-196.158	-822.599	20.584	-819.780	14.645	-192.711
)	53.00	50.498	-31.588	-389.278	-187.728	-728.385	24.729	-727.182	16.138	-180.688
)	53.50	53.670	-30.940	-374.747	-182.411	-639.274	26.734	-637.925	19.872	-179.272
)	53.50	51.474	-30.134	-376.280	-182.839	-640.201	16.771	-638.054	10.874	-179.228
)	55.90	53.472	-27.022	-307.242	-146.850	-249.656	38.704	-365.110	-2.349	-68.287
)	58.30	69.653	-22.767	-249.838	-118.059	-29.826	52.466	-236.472	13.642	-37.521
)	58.30	66.600	-22.065	-249.617	-130.040	-24.255	0.574	-236.552	20.327	-32.765
)	61.20	68.440	-18.304	-186.958	-85.622	259.086	20.816	-183.248	-18.969	-15.344
)	64.10	87.603	-14.543	-141.932	-65.326	235.889	30.658	-141.052	-17.129	-11.584
)	64.10	80.361	-13.016	-111.846	-80.611	257.193	-43.062	-141.066	-3.581	-6.355
)	65.55	81.725	-11.201	-94.662	-57.397	327.741	-34.178	-134.542	-1.974	-4.847
)	67.00	91.147	-8.684	-82.006	-54.285	266.994	-26.995	-134.314	2.869	2.934
)	67.00	73.228	-8.487	608.660	-59.556	324.067	-35.064	-134.314	11.214	7.145
)	68.45	75.227	9.669	604.730	-38.676	225.652	-31.778	-145.636	12.166	8.961
)	69.90	85.062	29.122	577.423	-36.731	281.865	-30.890	-161.924	13.054	10.906
)	69.90	35.473	13.827	656.795	-42.305	304.911	-20.290	-161.911	28.016	18.275
)	72.80	38.932	51.437	554.079	-12.282	103.537	-7.945	-221.833	29.856	22.036
)	75.70	59.236	98.773	331.224	-8.521	134.533	-6.105	-290.316	-14.398	35.889
)	75.70	21.679	83.529	336.125	-9.632	147.126	-4.692	-290.303	-3.861	44.394
)	78.10	24.249	123.238	90.044	1.650	62.493	5.001	-426.264	15.572	72.808
)	80.50	40.905	153.887	-242.635	4.763	53.422	6.524	-696.248	-1.398	179.644

80.50	33.753	161.289	-236.927	7.622	56.303	8.596	-696.118	-7.397	180.994
81.00	34.070	167.773	-317.445	8.271	49.389	10.081	-786.388	-0.572	181.647
81.50	37.719	173.782	-403.590	8.919	44.614	10.398	-880.438	-1.587	198.831
81.50	52.312	-32.540	-399.343	-204.847	-855.116	38.388	-880.438	25.945	-199.270
82.00	53.105	-31.891	-383.381	-197.390	-756.783	41.561	-783.629	27.540	-187.155
82.50	55.706	-30.672	-367.752	-189.933	-693.946	36.758	-691.446	29.994	-185.739
82.50	53.666	-28.985	-369.375	-189.788	-664.482	33.578	-690.948	22.087	-186.198
85.15	55.855	-25.484	-297.404	-150.104	-239.532	54.496	-373.689	-0.777	-68.860
87.80	73.209	-20.970	-237.299	-118.719	4.711	66.415	-225.560	6.353	-39.205
87.80	69.319	-21.415	-238.464	-132.883	9.326	8.623	-225.704	16.383	-31.770
90.95	72.302	-17.395	-177.223	-84.898	313.301	32.713	-162.860	-16.701	-16.424
94.10	92.257	-12.674	-135.901	-65.186	271.411	43.331	-117.873	-14.734	-12.274
94.10	81.173	-11.753	-99.651	-81.714	298.013	-45.514	-117.939	-3.353	-5.389
95.68	82.601	-9.808	-82.035	-57.203	371.807	-35.996	-108.887	-2.401	-3.443
97.25	92.658	-7.733	-71.751	-52.988	302.331	-28.178	-106.888	2.148	2.214
97.25	70.347	-17.796	709.268	-62.825	356.156	-52.291	-106.888	8.591	5.944
98.83	71.299	12.681	712.839	-40.324	261.674	-49.200	-118.187	9.543	8.019
100.40	82.879	33.431	675.452	-36.304	303.209	-48.185	-131.893	10.558	10.094
100.40	24.126	7.262	727.824	-44.896	338.169	-24.875	-131.893	23.101	16.780
103.55	28.187	56.750	614.596	-10.204	104.837	-9.096	-189.610	25.068	20.930
106.70	49.824	107.847	357.972	-6.184	132.343	-7.066	-263.413	-8.053	33.941
106.70	5.333	87.725	361.576	-7.315	145.524	-9.880	-263.290	4.712	43.854
109.35	8.570	130.158	76.056	5.524	43.351	2.338	-418.126	8.815	73.354
112.00	27.066	164.568	-314.113	8.896	26.304	3.988	-734.549	-13.770	189.774
112.00	20.178	164.939	-315.543	9.654	28.066	6.149	-734.535	-20.499	191.845
112.50	20.496	181.150	-400.616	10.302	20.790	7.634	-831.182	-17.634	192.391
113.00	24.144	187.064	-491.784	10.951	14.365	7.951	-929.603	-15.785	205.376
113.00	39.867	-38.338	-489.336	-207.221	-934.462	21.078	-929.603	13.620	-203.151
113.50	40.184	-37.690	-470.133	-198.792	-802.089	33.004	-831.072	15.663	-192.409
114.00	43.262	-36.470	-450.945	-192.502	-708.075	36.177	-736.630	15.918	-186.897
114.00	42.184	-35.238	-450.227	-192.020	-709.495	28.443	-736.760	10.544	-184.949
116.65	44.373	-31.866	-362.021	-151.298	-280.256	49.362	-424.172	-9.585	-72.2

VIADUCTO BORGES BLANQUES

(1)	9.40	3.899	-2.943	175.996	2.153	166.325	-13.362	-24.603	17.636	8.001
(2)	10.58	5.230	-3.107	181.324	0.428	178.245	-10.535	-34.552	20.114	7.837
(3)	11.75	7.708	-3.271	186.688	0.161	180.432	-8.058	-43.471	22.592	7.673
(1)	11.75	-7.002	5.155	186.688	7.290	81.220	-0.889	-43.471	26.211	9.517
(2)	12.93	-4.432	5.005	182.237	5.599	87.197	3.610	-54.032	30.237	9.366
(3)	14.10	-1.799	4.840	176.813	5.435	81.021	6.087	-64.003	32.715	9.202
(1)	14.10	-22.761	16.776	176.690	11.715	-12.354	22.120	-64.003	39.970	10.043
(2)	16.45	-20.593	16.633	137.884	9.580	-16.871	28.307	-85.767	48.216	8.200
(3)	18.80	-14.295	16.319	99.343	9.265	-38.508	34.605	-100.895	50.779	6.372
(1)	18.80	-23.714	23.741	97.630	11.711	-100.693	55.530	-101.025	62.202	3.782
(2)	20.65	-22.392	23.853	54.845	10.959	-114.215	60.069	-89.249	54.596	-15.283
(3)	22.50	-16.941	23.606	11.967	10.712	-132.641	65.334	-55.077	32.282	-20.921
(1)	22.50	-14.684	21.151	19.439	12.182	-132.434	65.032	-55.056	44.080	-25.975
(2)	23.00	-14.395	21.268	8.366	12.114	-139.306	66.188	-43.822	15.004	-17.874
(3)	23.50	-13.363	21.200	-1.527	12.045	-144.861	67.220	-34.520	9.035	-17.250
(1)	23.50	-10.924	23.128	0.576	-12.176	-24.323	66.518	-34.520	16.318	-1.017
(2)	24.00	-10.635	22.443	-9.865	-13.066	-17.295	66.724	-35.242	15.428	-2.523
(3)	24.50	-9.602	21.759	-22.117	-13.750	-10.849	66.704	-34.447	14.559	-1.619
(1)	24.50	-1.007	19.478	-21.501	-16.749	-10.725	75.441	-33.156	28.354	-6.952
(2)	26.90	1.409	15.821	-65.630	-20.548	35.078	76.142	-25.854	-37.774	11.796
(3)	29.30	6.364	11.510	-97.516	-23.586	98.322	75.981	-47.125	-52.827	7.305
(1)	29.30	19.099	9.387	-97.679	-13.468	99.693	54.567	-47.802	-38.034	7.747
(2)	32.20	21.433	4.205	-115.135	-18.157	146.353	54.858	-60.511	-25.363	5.195
(3)	35.10	27.885	0.235	-119.351	-20.073	226.737	54.451	-75.531	-19.375	4.798
(1)	35.10	32.051	0.308	-26.381	-3.418	146.021	1.457	-75.531	-7.623	4.895
(2)	36.55	32.547	-1.794	-23.344	-5.643	155.301	1.869	-81.125	-2.977	4.703
(3)	38.00	35.747	-3.847	-17.663	-6.074	179.782	1.912	-87.520	-0.086	4.498
(1)	38.00	23.917	-0.358	196.356	1.316	52.276	-7.460	-87.520	7.467	3.314
(2)	39.45	24.753	-0.549	196.604	-0.785	69.645	-4.199	-91.333	11.194	3.123
(3)	40.90	27.798	-0.755	196.947	-1.093	72.523	-1.123	-97.139	15.634	2.917
(1)	40.90	-5.442	18.581	242.153	3.362	-0.842	-5.965	-97.282	28.079	2.782
(2)	43.80	-3.945	18.370	189.532	0.090	20.803	1.235	-103.740	33.496	2.385
(3)	46.70	2.662	17.973	137.072	-0.307	19.461	8.771	-106.521	33.036	-0.820
(1)	46.70	-20.761	32.629	134.538	2.883	-101.073	52.037	-106.665	51.424	-3.660
(2)	49.10	-19.584	32.672	55.901	1.692	-95.820	59.403	-84.685	55.078	-12.820
(3)	51.50	-14.319	32.499	-23.624	1.364	-100.221	65.907	-77.735	-10.720	3.130
(1)	51.50	-11.436	31.365	-17.409	4.120	-99.054	67.227	-77.735	5.283	-4.487
(2)	52.00	-11.333	31.482	-33.503	4.051	-101.008	68.259	-75.391	3.030	-3.891
(3)	52.50	-10.145	31.569	-50.652	3.983	-103.246	69.292	-73.851	-2.723	-3.225
(1)	52.50	-9.261	21.714	-44.420	-11.656	-6.084	69.363	-73.851	5.740	1.253
(2)	53.00	-9.003	21.029	-55.779	-12.546	0.826	69.569	-73.504	0.857	0.946
(3)	53.50	-7.971	20.345	-65.759	-13.107	8.081	69.549	-74.920	-2.828	2.720
(1)	53.50	0.732	19.167	-61.008	-16.120	4.716	77.199	-74.907	13.965	-4.767
(2)	55.90	1.382	15.882	-103.108	-19.919	49.086	77.900	-76.186	-50.159	9.811
(3)	58.30	6.648	11.199	-136.761	-22.957	111.307	77.738	-100.500	-48.451	10.600
(1)	58.30	21.669	8.349	-134.074	-12.969	46.385	39.154	-101.134	-31.816	7.528
(2)	61.20	22.268	3.353	-150.296	-17.657	95.238	39.445	-114.997	-31.964	4.016
(3)	64.10	28.504	-1.643	-150.987	-19.799	176.556	39.141	-126.573	-25.976	3.619
(1)	64.10	33.405	-2.766	-106.265	-5.397	120.423	1.257	-126.444	-12.220	2.405
(2)	65.55	33.849	-4.682	-100.029	-7.847	133.499	1.546	-128.558	-0.972	5.131
(3)	67.00	36.915	-6.921	-91.911	-8.176	160.519	1.609	-135.007	3.166	4.310
(1)	67.00	27.853	-1.317	182.741	-1.861	16.426	-10.614	-135.007	11.972	2.257
(2)	68.45	28.504	-1.508	186.095	-4.064	38.712	-7.456	-139.706	15.069	2.065
(3)	69.90	31.704	-1.714	188.444	-4.270	44.322	-4.380	-144.704	19.508	1.860
(1)	69.90	-0.314	19.465	252.384	0.274	-35.019	-5.798	-144.834	34.503	0.420
(2)	72.80	0.811	19.068	200.976	-2.895	-3.178	1.299	-146.390	40.491	0.023
(3)	75.70	7.418	18.672	145.857	-3.292	6.253	8.835	-143.946	38.924	-3.243
(1)	75.70	-19.053	32.512	142.551	0.568	-122.796	48.315	-144.075	60.894	-7.788
(2)	78.10	-18.216	32.555	65.846	-0.622	-111.405	55.681	-118.404	65.613	-13.755
(3)	80.50	-12.796	32.381	-11.754	-0.951	-109.976	60.637	-106.061	2.825	1.448
(1)	80.50	-10.090	31.990	-7.389	0.327	-136.057	75.777	-106.075	22.504	-6.305
(2)	81.00	-9.987	31.922	-22.754	0.258	-137.527	76.932	-103.586	22.607	-6.374
(3)	81.50	-8.800	32.008	-39.672	0.190	-136.347	79.513	-99.373	21.306	-8.188
(1)	81.50	-7.849	23.784	-30.565	-16.826	-38.565	84.554	-99.373	27.697	-5.873
(2)	82.00	-7.591	23.099	-42.238	-17.613	-29.893	84.657	-96.310	23.786	-5.228
(3)	82.50	-6.744	21.202	-53.632	-18.400	-17.304	83.919	-95.668	17.081	-3.454
(1)	82.50	2.932	20.676	-48.404	-22.568	-26.202	95.073	-94.391	38.124	-11.021
(2)	85.15	3.644	16.980	-99.397	-26.757	41.780	95.528	-78.122	-45.348	10.384
(3)	87.80	9.291	12.023	-137.219	-30.069	128.014	95.080	-102.902	-46.086	9.028
(1)	87.80	25.633	8.634	-139.088	-17.611	63.020	53.818	-102.759	-29.022	4.677
(2)	90.95	26.603	3.364	-156.581	-22.676	132.569	54.376	-111.492	-32.531	2.140
(3)	94.10	33.097	-2.228	-155.662	-24.756	237.727	53.558	-118.777	-24.272	1.702
(1)	94.10	36.427	-2.506	-23.325	-5.281	185.863	9.960	-118.969	-10.423	1.149
(2)	95.68	36.891	-4.559	-19.306	-7.868	200.496	10.270	-120.763	-7.171	0.943
(3)	97.25	40.164	-6.749	-9.635	-8.312	230.772	10.354	-125.595	2.586	3.232
(1)	97.25	25.586	1.089	185.345	-1.259	26.164	-7.014	-125.595	11.181	1.486
(2)	98.83	25.896	0.870	184.258	-3.634	47.106	-3.505	-129.848	14.433	1.267
(3)	100.40	29.664	0.651	182.910	-4.058	54.171	-0.388	-132.565	17.736	1.048
(1)	100.40	-11.709	27.010	329.424	2.342	-42.521	-4.085	-132.565	32.341	1.219
(2)	103.55	-10.387	26.758	249.584	-1.319	-10.239	3.774	-134.309	40.921	0.781
(3)	106.70	-3.346	26.334	170.450	-1.743	-6.018	11.930	-132.545	39.401	-2.266
(1)	106.70	-33.358	42.880	172.704	1.093	-129.249	50.008	-132.053	60.614	-6.249
(2)	109.35	-32.305	42.882	56.971	-0.262	-122.456	58.240	-106.737	57.323	-12.851
(3)	112.00	-26.286	42.681	-56.479	-0.618	-122.230	65.157	-112.553	-15.593	6.920

VIADUCTO BORGES BLANQUES

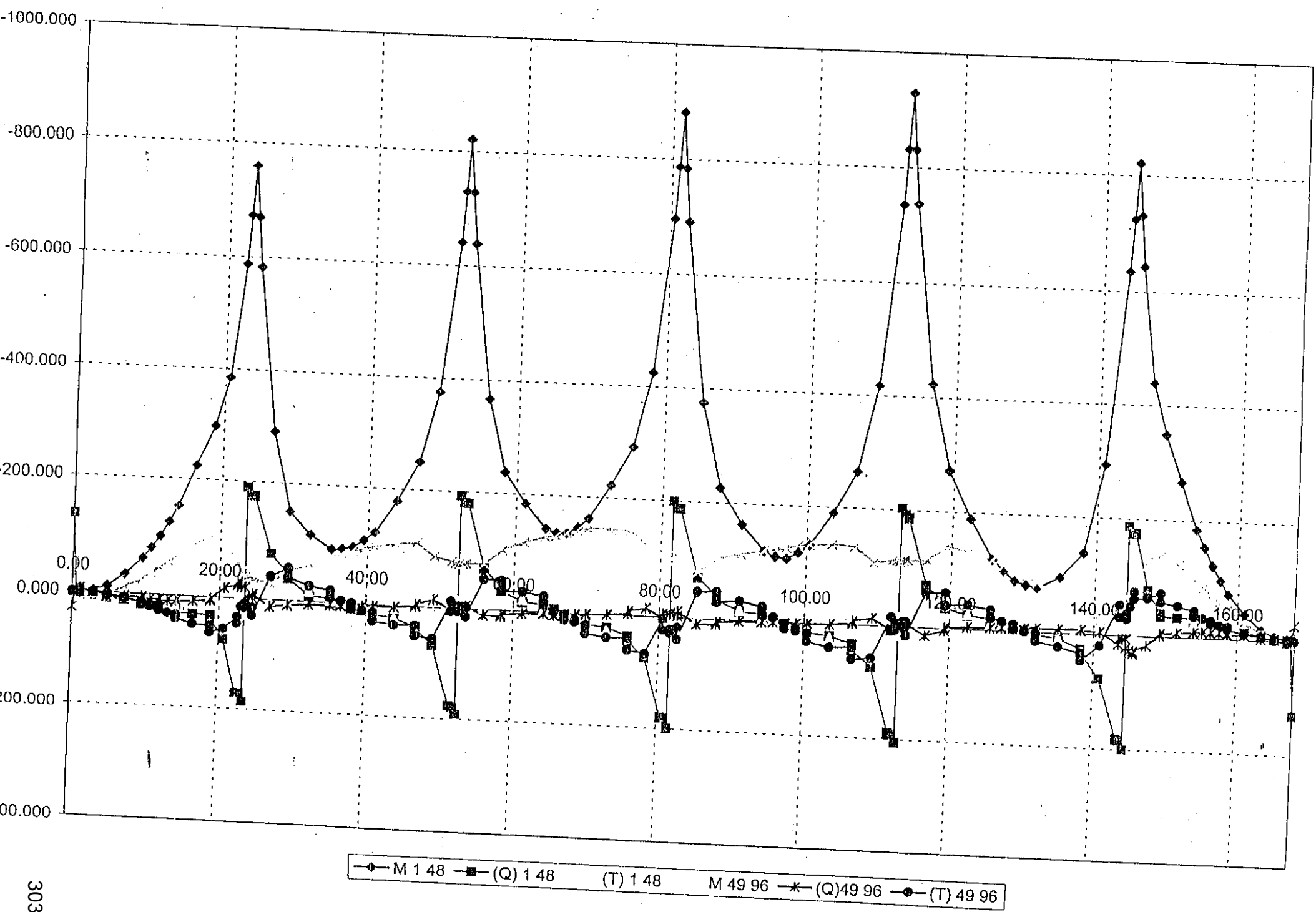
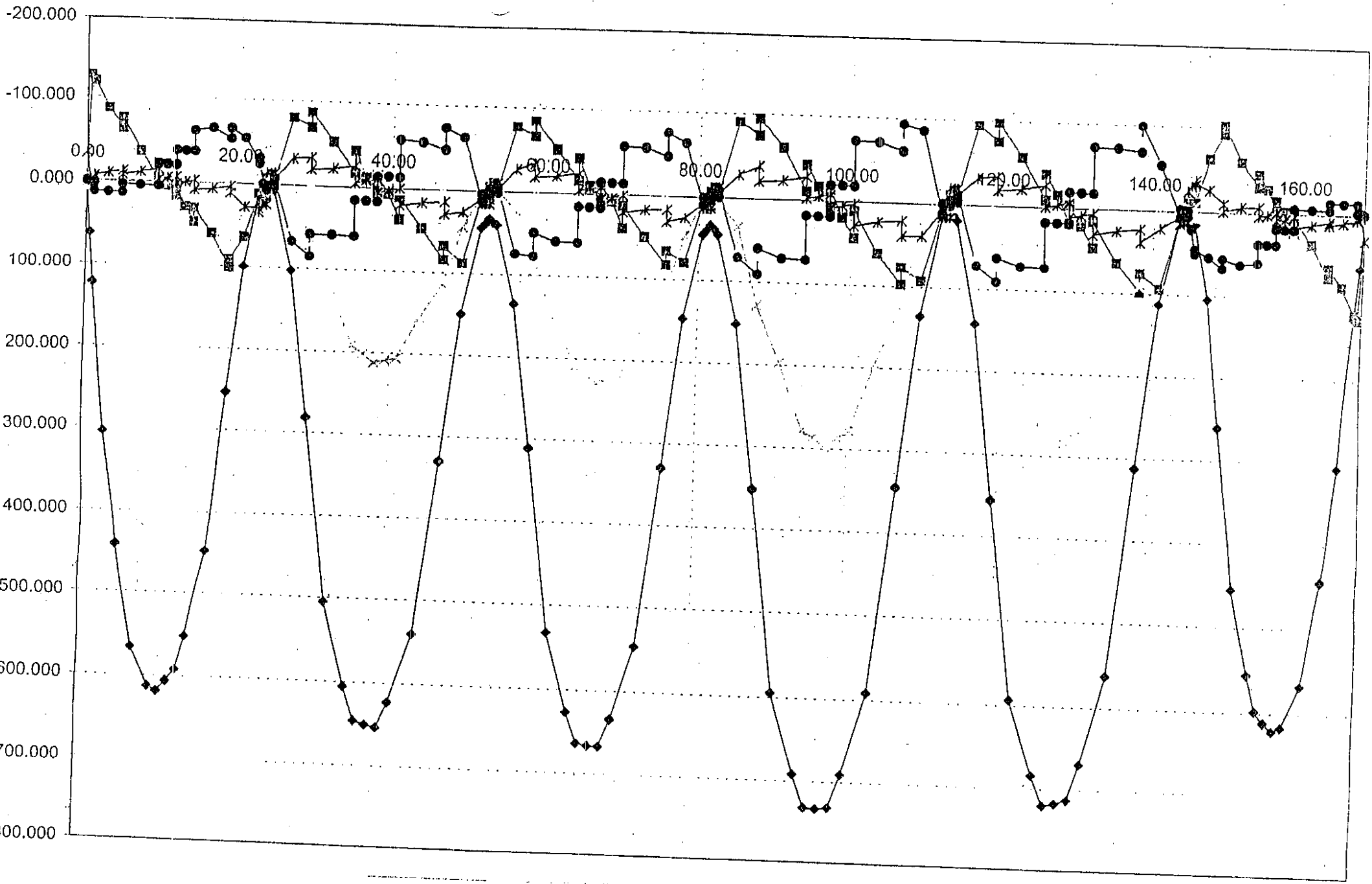
112.00	-23.087	41.413	-51.325	1.778	-149.860	77.590	-112.683	7.827	-3.351
112.50	-22.983	41.345	-72.359	1.710	-151.549	78.746	-110.881	5.013	-2.447
113.00	-21.796	41.462	-93.041	1.641	-152.328	81.327	-109.887	-5.604	-0.932
113.00	-21.487	22.038	-85.104	-14.391	-19.748	80.127	-109.887	-2.109	1.723
113.50	-21.384	21.354	-94.536	-15.280	-15.575	81.154	-111.918	-8.467	4.437
114.00	-20.382	19.457	-105.171	-15.944	-8.585	81.257	-113.488	-8.692	3.855
114.00	-9.698	19.059	-100.343	-20.276	-7.281	93.264	-113.474	15.090	-5.249
116.65	-8.985	15.377	-145.885	-24.574	53.056	93.719	-113.857	-58.769	13.765
119.30	-3.524	10.406	-176.231	-27.777	135.567	93.045	-138.336	-59.924	3.785
119.30	15.981	5.823	-179.270	-16.691	9.936	41.635	-139.324	-39.527	-1.078
122.45	16.951	0.416	-188.666	-21.790	73.944	42.193	-131.498	-41.990	-3.707
125.60	23.259	-5.040	-178.154	-23.734	175.497	41.499	-118.892	-34.649	-4.131
125.60	26.658	-3.904	-64.638	-5.615	7.054	0.519	-119.513	-20.761	-4.180
127.18	27.143	-6.095	-55.610	-8.092	21.117	0.850	-110.702	-15.909	-4.399
128.75	30.571	-8.285	-42.748	-8.537	51.547	0.934	-102.946	-11.664	-4.618
128.75	18.928	0.354	155.610	-2.580	-79.722	-13.000	-102.946	-3.752	-6.364
130.33	19.259	0.149	155.389	-4.941	-56.246	-9.347	-93.813	-0.449	-6.569
131.90	22.841	-0.070	157.907	-5.365	-47.167	-6.230	-84.781	2.855	-6.788
131.90	-18.031	26.268	304.084	-1.065	-127.091	12.288	-84.795	15.169	-6.382
135.05	-17.061	25.830	223.398	-4.726	-84.194	20.353	-64.483	23.480	-6.820
138.20	-10.040	24.565	145.135	-5.150	-69.889	28.303	-46.564	33.705	-7.617
138.20	-40.600	44.196	145.672	-0.873	-70.032	36.012	-46.046	46.829	-6.025
140.85	-39.732	43.841	29.011	-2.092	-52.502	44.244	-26.442	18.837	-4.548
143.50	-34.426	42.971	-88.203	-2.461	-43.707	51.161	-56.570	-51.744	15.171
143.50	-33.545	42.971	-85.055	1.558	-42.695	48.697	-56.670	-30.939	6.437
144.00	-33.442	42.902	-107.029	1.490	-43.733	49.853	-60.562	-30.835	6.266
144.50	-32.441	43.020	-129.819	1.421	-42.979	50.885	-63.768	-36.999	5.722
144.50	-32.496	12.668	-129.203	5.108	61.354	56.294	-63.768	-28.268	21.016
145.00	-32.393	11.983	-134.746	4.115	59.862	55.986	-74.681	-49.174	25.552
145.50	-31.391	11.113	-141.502	3.431	59.252	56.089	-89.819	-74.647	31.217
145.50	-27.033	11.645	-136.383	0.731	60.522	62.532	-90.884	-62.665	26.183
147.35	-26.661	8.141	-154.834	-2.157	60.926	63.109	-127.320	-65.435	15.965
149.20	-23.357	5.182	-167.958	-4.867	76.131	62.680	-139.980	-74.441	-2.837
149.20	-12.262	5.871	-168.008	-0.165	-18.581	35.071	-140.030	-58.852	-5.543
151.55	-11.787	1.559	-174.733	-3.963	-8.629	35.238	-123.660	-53.062	-7.571
153.90	-8.194	-1.930	-172.172	-6.023	21.059	34.932	-100.507	-45.241	-9.400
153.90	-1.688	-3.831	-171.453	-0.591	-94.882	-0.453	-100.662	-36.609	-10.206
155.08	-1.440	-5.474	-166.365	-2.542	-92.093	-0.205	-87.023	-33.946	-10.370
156.25	0.211	-8.129	-157.053	-3.452	-74.034	-0.574	-75.665	-30.126	-10.521
156.25	2.739	-7.043	-157.053	-3.549	-185.961	-19.836	-74.395	-25.888	-9.682
157.43	2.987	-8.562	-148.089	-5.191	-181.353	-19.588	-62.865	-23.410	-9.846
158.60	4.690	-10.191	-135.710	-5.773	-151.250	-20.100	-52.306	-20.933	-9.997
158.60	2.826	3.229	-3.210	-4.435	-88.582	-15.140	-51.334	-16.657	-7.618
160.95	3.456	0.067	-6.900	-7.084	-39.918	-10.514	-31.403	-10.359	-7.946
163.30	6.150	-3.204	-0.737	-7.399	-21.791	-4.010	-12.027	-5.403	-8.261
163.30	-5.628	16.548	77.537	-2.224	-21.779	-6.672	-12.170	-6.549	-3.087
165.15	-5.257	16.302	48.038	-3.210	-5.850	-1.407	-5.357	-1.284	-3.333
167.00	-3.966	16.382	17.100	-3.470	-0.185	2.516	0.431	2.639	-3.593
167.00	-0.799	17.404	17.336	1.121	0.436	-1.872	1.052	-1.672	1.121
167.50	-0.696	17.336	8.837	1.052	1.689	-0.839	1.689	-0.839	1.052
168.00	-0.593	17.267	0.000	0.984	0.000	1.742	0.000	-0.346	-26.486
	0.000	0.371	2.324	0.371	2.324	0.000	2.510	0.000	0.186
	0.000	0.371	0.856	0.371	0.856	0.000	1.228	0.000	1.167
	0.000	0.371	0.253	0.371	1.420	0.000	0.864	0.000	-0.098
	0.000	1.613	9.446	1.613	8.402	0.000	8.959	0.000	1.242
	0.000	1.613	5.895	1.613	7.062	0.000	8.434	0.000	4.632
	0.000	1.613	2.638	1.613	3.805	0.000	3.445	0.000	0.828
	-1.311	13.202	30.357	7.112	22.282	-0.267	23.769	-0.267	6.183
	-1.311	13.202	11.112	7.112	11.235	-0.267	14.435	-0.143	6.992
	-1.311	13.202	-9.280	7.112	1.038	-0.267	-0.800	-1.311	7.888
	0.000	13.120	27.283	2.741	15.435	0.000	17.078	0.000	1.471
	0.000	13.120	5.964	2.741	9.951	0.000	12.593	0.000	4.980
	0.000	13.120	-14.814	2.741	3.595	0.000	-10.205	0.000	13.651
	0.000	3.204	6.514	2.809	9.236	0.000	10.166	0.000	1.911
	0.000	3.204	0.630	2.809	5.895	0.000	8.434	0.000	3.527
	0.000	3.204	-5.639	2.809	2.855	0.000	-8.597	0.000	10.089
	0.000	2.535	5.374	2.271	12.487	0.000	13.943	0.000	0.816
	0.000	2.535	0.763	2.271	9.630	0.000	12.117	0.000	5.492
	0.000	2.535	-2.723	2.271	5.375	0.000	-10.204	0.000	14.040
	0.267	-5.885	-8.789	1.902	14.773	0.267	15.702	0.267	0.973
	0.267	-5.885	2.059	1.902	11.112	0.267	14.435	0.143	7.217
	0.267	-5.885	11.876	1.902	7.369	0.267	-2.617	1.311	7.237
	0.000	-2.312	1.566	0.303	7.095	0.000	7.653	0.000	-0.069
	0.000	-2.312	3.262	0.303	6.741	0.000	7.958	0.000	4.489
	0.000	-2.312	6.511	0.303	5.540	0.000	2.549	0.000	0.562
	0.000	0.189	2.760	-0.098	3.019	0.000	3.205	0.000	-0.284
	0.000	0.189	1.370	-0.098	2.461	0.000	3.545	0.000	1.679
	0.000	0.189	1.969	-0.098	1.698	0.000	1.151	0.000	0.290
	0.000	2.406	10.335	0.674	9.444	0.000	10.002	0.000	0.303
	0.000	2.406	6.484	0.674	8.346	0.000	10.276	0.000	5.656
	0.000	2.406	3.375	0.674	6.375	0.000	3.427	0.000	0.464
	-1.311	17.475	40.450	3.278	18.326	-0.267	19.812	-0.267	2.163
	-1.311	17.475	13.796	3.278	13.796	-0.267	18.234	-0.143	8.814
	-1.311	17.475	-12.627	3.278	8.620	-0.267	7.375	-0.267	1.325

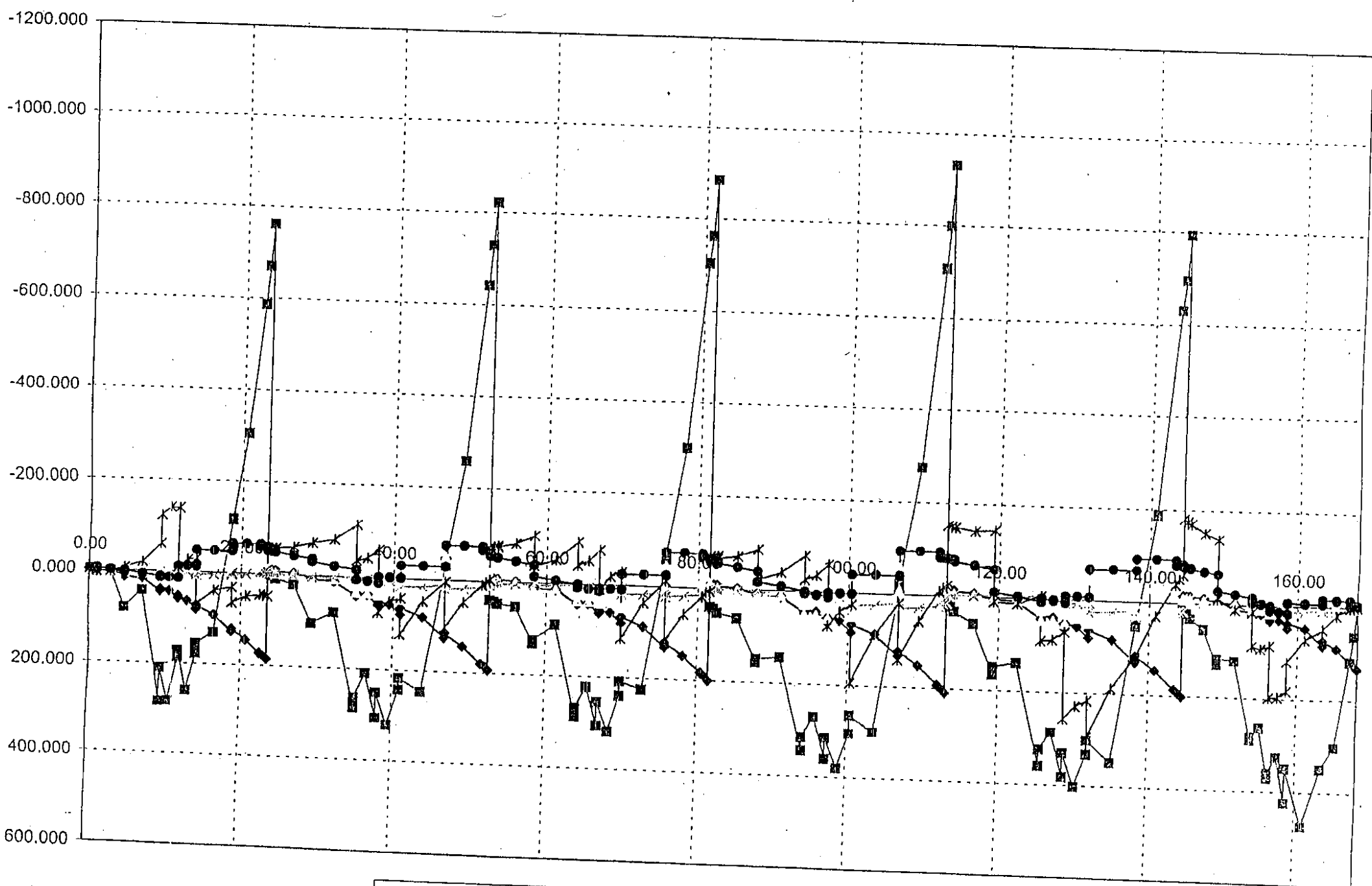
VIADUCTO BORGES BLANQUES

(1)	0.000	15.478	34.547	3.472	14.537	0.000	16.736	0.000	2.016
(2)	0.000	15.478	11.219	3.472	11.219	0.000	14.573	0.000	6.066
(3)	0.000	15.478	-11.672	3.472	7.191	0.000	-19.536	0.000	21.898
(1)	0.000	7.288	15.456	1.357	8.834	0.000	10.475	0.000	0.459
(2)	0.000	7.288	3.267	1.357	8.025	0.000	9.800	0.000	3.813
(3)	0.000	7.288	-6.967	1.357	5.818	0.000	-13.285	0.000	15.295
(1)	0.000	5.771	11.453	1.332	14.537	0.000	16.736	0.000	-0.124
(2)	0.000	5.771	2.102	1.332	11.219	0.000	14.573	0.000	6.066
(3)	0.000	5.771	-8.301	1.332	8.358	0.000	-19.536	0.000	21.672
(1)	0.267	-6.217	-6.432	0.995	15.819	0.267	17.492	0.267	0.066
(2)	0.267	-6.217	2.432	0.995	13.475	0.267	18.234	0.143	8.670
(3)	0.267	-6.217	10.832	0.995	12.017	0.267	-7.616	1.311	13.217
(1)	0.000	-1.779	1.147	0.674	8.642	0.000	9.200	0.000	0.117
(2)	0.000	-1.779	4.435	0.674	8.025	0.000	9.800	0.000	5.656
(3)	0.000	-1.779	6.918	0.674	5.689	0.000	3.466	0.000	1.035
(1)	0.000	0.189	2.122	-0.098	2.889	0.000	3.075	0.000	-0.284
(2)	0.000	0.189	1.370	-0.098	2.140	0.000	3.069	0.000	1.679
(3)	0.000	0.189	1.597	-0.098	1.712	0.000	1.164	0.000	0.290
(1)	0.000	2.406	8.173	0.674	8.642	0.000	9.200	0.000	0.117
(2)	0.000	2.406	5.713	0.674	8.025	0.000	9.800	0.000	5.656
(3)	0.000	2.406	3.215	0.674	5.689	0.000	3.466	0.000	0.464
(1)	-1.311	17.208	40.313	0.995	15.819	-0.267	17.492	-0.267	0.066
(2)	-1.311	17.208	13.475	0.995	13.475	-0.267	17.758	-0.143	8.670
(3)	-1.311	17.208	-12.374	0.995	12.017	-0.267	-7.616	-1.311	13.217
(1)	0.000	14.167	31.990	1.188	12.906	0.000	14.950	0.000	-0.267
(2)	0.000	14.167	10.448	1.188	11.219	0.000	14.573	0.000	5.922
(3)	0.000	14.167	-10.854	1.188	8.181	0.000	-19.270	0.000	21.529
(1)	0.000	6.315	11.837	1.357	7.822	0.000	9.308	0.000	0.459
(2)	0.000	6.315	3.653	1.357	8.025	0.000	9.800	0.000	3.813
(3)	0.000	6.315	-4.772	1.357	6.510	0.000	-13.638	0.000	15.295
(1)	0.000	5.628	10.357	1.188	13.112	0.000	14.970	0.000	-0.267
(2)	0.000	5.628	2.218	1.188	11.335	0.000	14.689	0.000	5.922
(3)	0.000	5.628	-5.958	1.188	9.686	0.000	-19.904	0.000	21.529
(1)	0.267	-3.411	-3.768	0.525	14.389	0.267	14.894	0.267	-0.404
(2)	0.267	-3.411	2.432	0.525	13.475	0.267	17.758	0.143	9.182
(3)	0.267	-3.411	8.486	0.525	13.321	0.267	-7.064	1.311	11.892
(1)	0.000	-3.090	-0.735	-0.636	7.332	0.000	8.075	0.000	-1.008
(2)	0.000	-3.090	4.435	-0.636	8.025	0.000	9.800	0.000	5.512
(3)	0.000	-3.090	9.387	-0.636	9.139	0.000	4.303	0.000	0.197
(1)	0.000	0.189	0.941	-0.098	2.876	0.000	3.062	0.000	-0.284
(2)	0.000	0.189	1.370	-0.098	2.140	0.000	3.069	0.000	1.679
(3)	0.000	0.189	1.727	-0.098	3.009	0.000	1.294	0.000	0.290
(1)	-1.167	0.206	6.630	-0.963	8.933	0.000	9.677	0.000	-0.353
(2)	-1.167	0.206	5.756	-0.963	8.453	0.000	10.414	0.000	6.167
(3)	-1.167	0.206	3.870	-0.963	7.742	0.000	4.405	0.000	0.852
(1)	-1.311	18.316	44.332	2.226	18.431	-0.267	20.290	-0.267	1.111
(2)	-1.311	18.316	14.331	2.226	14.652	-0.267	19.462	-0.143	9.469
(3)	-1.311	18.316	-13.942	2.226	11.835	-0.267	-9.854	-1.311	15.779
(1)	0.000	15.241	37.577	1.147	15.581	0.000	18.152	0.000	-0.123
(2)	0.000	15.241	12.191	1.147	12.191	0.000	15.917	0.000	5.697
(3)	0.000	15.241	-12.650	1.147	8.270	0.000	-24.517	0.000	24.805
(1)	0.000	8.967	18.378	1.259	10.081	0.000	12.094	0.000	0.516
(2)	0.000	8.967	5.248	1.259	8.453	0.000	10.414	0.000	3.624
(3)	0.000	8.967	-8.378	1.259	5.979	0.000	-18.109	0.000	17.916
(1)	0.000	8.413	13.554	1.988	15.928	0.000	18.498	0.000	0.532
(2)	0.000	8.413	2.303	1.988	12.191	0.000	15.917	0.000	6.352
(3)	0.000	8.413	-10.376	1.988	9.101	0.000	-24.503	0.000	25.461
(1)	0.267	-1.056	1.070	0.915	15.824	0.267	17.682	0.267	-0.014
(2)	0.267	-1.056	2.394	0.915	14.652	0.267	19.462	0.143	9.326
(3)	0.267	-1.056	2.675	0.915	13.160	0.267	-10.022	1.311	15.512
(1)	0.123	-2.618	-0.321	-1.106	7.090	0.000	7.833	0.000	-1.478
(2)	0.123	-2.618	4.477	-1.106	8.453	0.000	10.414	0.000	6.024
(3)	0.123	-2.618	9.204	-1.106	9.819	0.000	4.774	0.000	0.015
(1)	0.000	0.189	0.941	-0.098	2.876	0.000	3.062	0.000	-0.284
(2)	0.000	0.189	0.984	-0.098	2.140	0.000	3.069	0.000	1.679
(3)	0.000	0.189	1.850	-0.098	3.982	0.000	1.294	0.000	0.290
(1)	-1.167	-0.060	6.324	-1.106	7.090	0.000	7.833	0.000	-1.478
(2)	-1.167	-0.060	5.633	-1.106	8.453	0.000	10.414	0.000	6.024
(3)	-1.167	-0.060	4.116	-1.106	9.819	0.000	4.203	0.000	0.015
(1)	-1.311	14.917	38.592	0.915	15.669	-0.267	17.682	-0.267	-0.014
(2)	-1.311	14.917	15.943	0.915	14.652	-0.267	19.462	-0.143	9.326
(3)	-1.311	14.917	-8.318	0.915	13.636	-0.267	-10.022	-1.311	15.512
(1)	0.000	15.038	36.009	1.988	15.928	0.000	18.498	0.000	0.532
(2)	0.000	15.038	12.191	1.988	12.191	0.000	15.917	0.000	6.352
(3)	0.000	15.038	-11.727	1.988	9.101	0.000	-24.503	0.000	25.461
(1)	0.000	7.923	18.887	1.890	9.958	0.000	11.971	0.000	2.159
(2)	0.000	7.923	5.756	1.890	8.651	0.000	10.890	0.000	3.624
(3)	0.000	7.923	-7.992	1.890	5.979	0.000	-16.941	0.000	18.039
(1)	0.000	7.428	13.820	3.430	16.071	0.000	18.642	0.000	2.161
(2)	0.000	7.428	2.303	3.430	12.191	0.000	15.917	0.000	5.841
(3)	0.000	7.428	-9.475	3.430	6.941	0.000	-24.646	0.000	25.175
(1)	0.267	-1.567	-0.446	3.219	20.914	0.267	22.773	0.267	1.918
(2)	0.267	-1.567	2.517	3.219	14.652	0.267	19.462	0.143	9.612
(3)	0.267	-1.567	4.314	3.219	8.711	0.267	-9.632	1.311	15.334

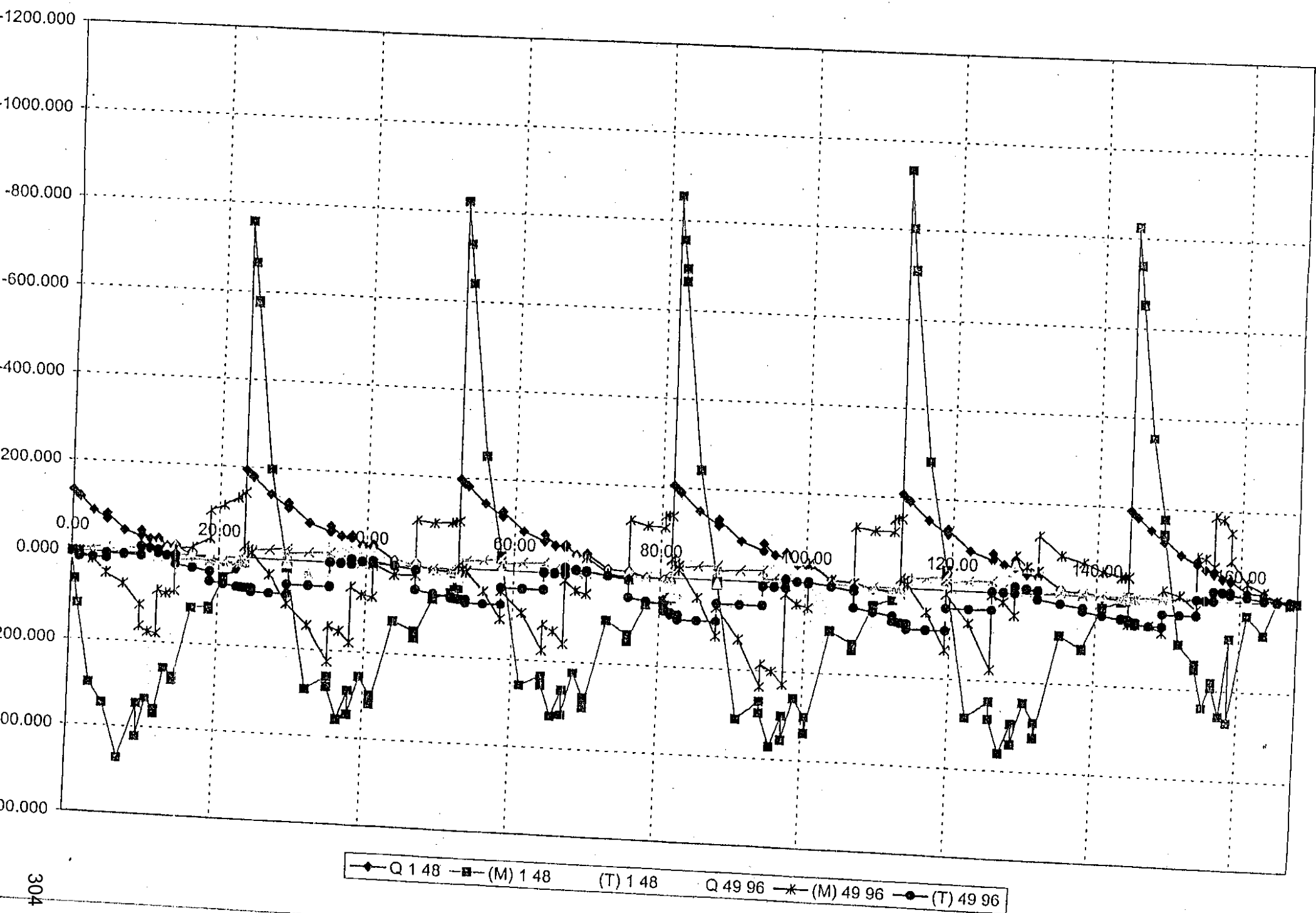
VIADUCTO BORGES BLANQUES

)	0.123	-2.695	-1.423	0.835	9.063	0.000	9.621	0.000	0.464
)	0.123	-2.695	2.219	0.835	8.774	0.000	10.890	0.000	6.643
)	0.123	-2.695	6.056	0.835	8.701	0.000	3.821	0.000	0.281
)	0.000	0.189	1.723	0.533	2.876	0.000	3.062	-0.000	0.533
)	0.000	0.189	1.306	0.533	2.461	0.000	3.545	0.000	1.679
)	0.000	0.189	0.298	0.533	3.982	0.000	1.294	0.000	-0.281
)	0.000	1.891	5.075	-1.008	5.991	0.000	6.363	0.000	-1.194
)	0.000	1.891	2.877	-1.008	6.741	0.000	7.958	0.000	4.345
)	0.000	1.891	0.834	-1.008	6.216	0.000	2.752	0.000	-0.276
)	-1.311	10.428	28.231	0.459	12.152	-0.267	13.081	-0.267	-0.284
)	-1.311	10.428	11.112	0.459	11.235	-0.267	14.435	-0.143	7.729
)	-1.311	10.428	-6.387	0.459	10.963	-0.267	-2.084	-1.311	6.380
)	0.000	10.235	25.497	0.961	12.344	0.000	12.633	0.000	0.672
)	0.000	10.235	9.630	0.961	9.630	0.000	12.117	0.000	5.349
)	0.000	10.235	-6.344	0.961	7.782	0.000	-9.938	0.000	13.896
)	0.000	5.644	16.111	1.836	9.223	0.000	8.985	0.000	0.938
)	0.000	5.644	5.895	1.836	5.895	0.000	8.434	0.000	3.527
)	0.000	5.644	-2.932	1.836	2.984	0.000	-8.344	0.000	9.986
)	0.000	0.127	4.852	2.741	14.124	0.000	15.766	0.000	1.471
)	0.000	0.127	5.457	2.741	9.951	0.000	12.593	0.000	4.980
)	0.000	0.127	5.113	2.741	3.738	0.000	-9.939	0.000	13.651
)	0.267	-0.962	-0.376	7.112	19.999	0.267	21.485	0.267	6.183
)	0.267	-0.962	2.059	7.112	11.235	0.267	14.435	0.143	6.992
)	0.267	-0.962	4.617	7.112	1.181	0.267	-0.431	1.311	8.459
)	0.000	-0.314	-0.074	0.446	8.272	0.000	8.830	0.000	1.242
)	0.000	-0.314	0.630	0.446	7.062	0.000	8.434	0.000	4.632
)	0.000	-0.314	2.218	0.446	3.819	0.000	2.888	0.000	0.828
)	0.000	-0.098	-0.086	0.371	1.157	0.000	1.343	0.000	0.186
)	0.000	-0.098	0.086	0.371	0.856	0.000	1.228	0.000	1.167
)	0.000	-0.098	0.293	0.371	1.420	0.000	0.987	0.000	-0.098
)	0.000	373.523	27.875	20.685	1.259	0.000	1.259	0.000	20.685
)	0.000	373.523	15.100	20.685	1.258	0.000	1.258	0.000	20.685
)	0.000	373.523	0.000	20.685	0.000	0.000	0.000	0.000	145.183
)	0.000	160.449	12.383	15.310	1.382	0.000	1.382	0.000	15.310
)	0.000	160.449	6.930	15.310	0.214	0.000	0.214	0.000	15.310
)	0.000	160.449	0.000	15.310	0.000	0.000	0.000	0.000	117.617
)	0.000	201.756	15.727	15.542	1.512	0.000	1.512	0.000	15.542
)	0.000	201.756	8.283	15.542	0.214	0.000	0.214	0.000	15.542
)	0.000	201.756	0.000	15.542	0.000	0.000	0.000	0.000	152.902
)	0.000	268.286	20.164	20.998	1.505	0.000	1.505	0.000	20.998
)	0.000	268.286	10.092	20.998	1.427	0.000	1.427	0.000	20.998
)	0.000	268.286	0.000	20.998	0.000	0.000	0.000	0.000	160.358
)	0.000	236.691	17.769	22.379	1.389	0.000	1.389	0.000	22.379
)	0.000	236.691	8.879	22.379	1.382	0.000	1.382	0.000	22.379
)	0.000	236.691	0.000	22.379	0.000	0.000	0.000	0.000	218.298
)	0.000	9.845	0.908	40.325	3.504	0.000	3.504	0.000	40.325
)	0.000	9.845	0.365	40.325	1.531	0.000	1.531	0.000	40.325
)	0.000	9.845	0.000	40.325	0.000	0.000	0.000	0.000	17.992
)	0.000	30.425	2.733	27.438	2.337	0.000	2.337	0.000	27.438
)	0.000	30.425	0.750	27.438	0.487	0.000	0.487	0.000	27.438
)	0.000	30.425	0.000	27.438	0.000	0.000	0.000	0.000	15.772
)	0.000	6.293	0.219	29.012	2.323	0.000	2.323	0.000	29.012
)	0.000	6.293	0.119	29.012	0.487	0.000	0.487	0.000	29.012
)	0.000	6.293	0.000	29.012	0.000	0.000	0.000	0.000	31.601
)	0.000	32.855	2.979	38.557	3.607	0.000	3.607	0.000	38.557
)	0.000	32.855	0.250	38.557	1.192	0.000	1.192	0.000	38.557
)	0.000	32.855	0.000	38.557	0.000	0.000	0.000	0.000	12.062
)	0.000	2.348	0.401	38.548	3.491	0.000	3.491	0.000	38.548
)	0.000	2.348	0.257	38.548	0.364	0.000	0.364	0.000	38.548
)	0.000	2.348	0.000	38.548	0.000	0.000	0.000	0.000	21.911

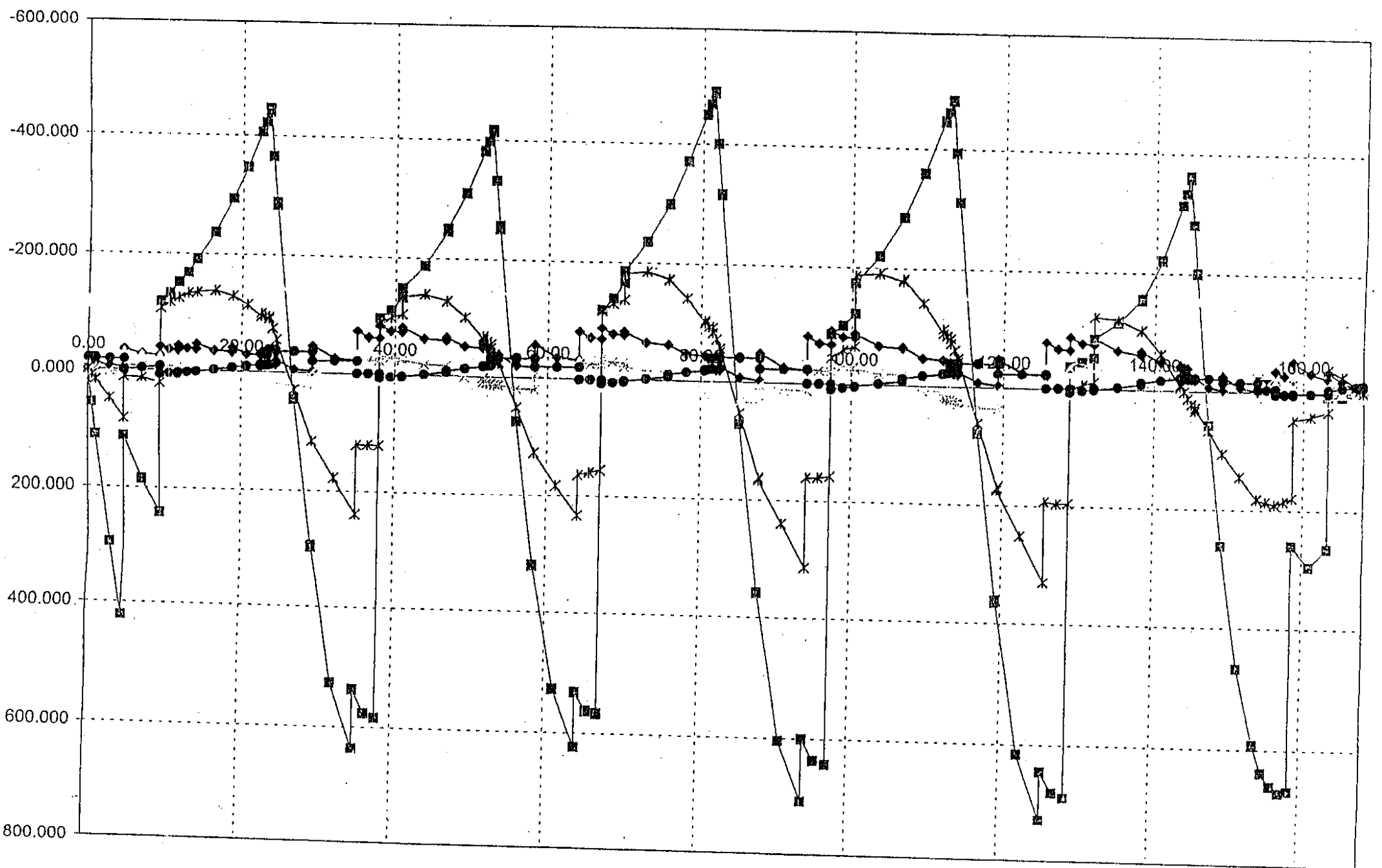




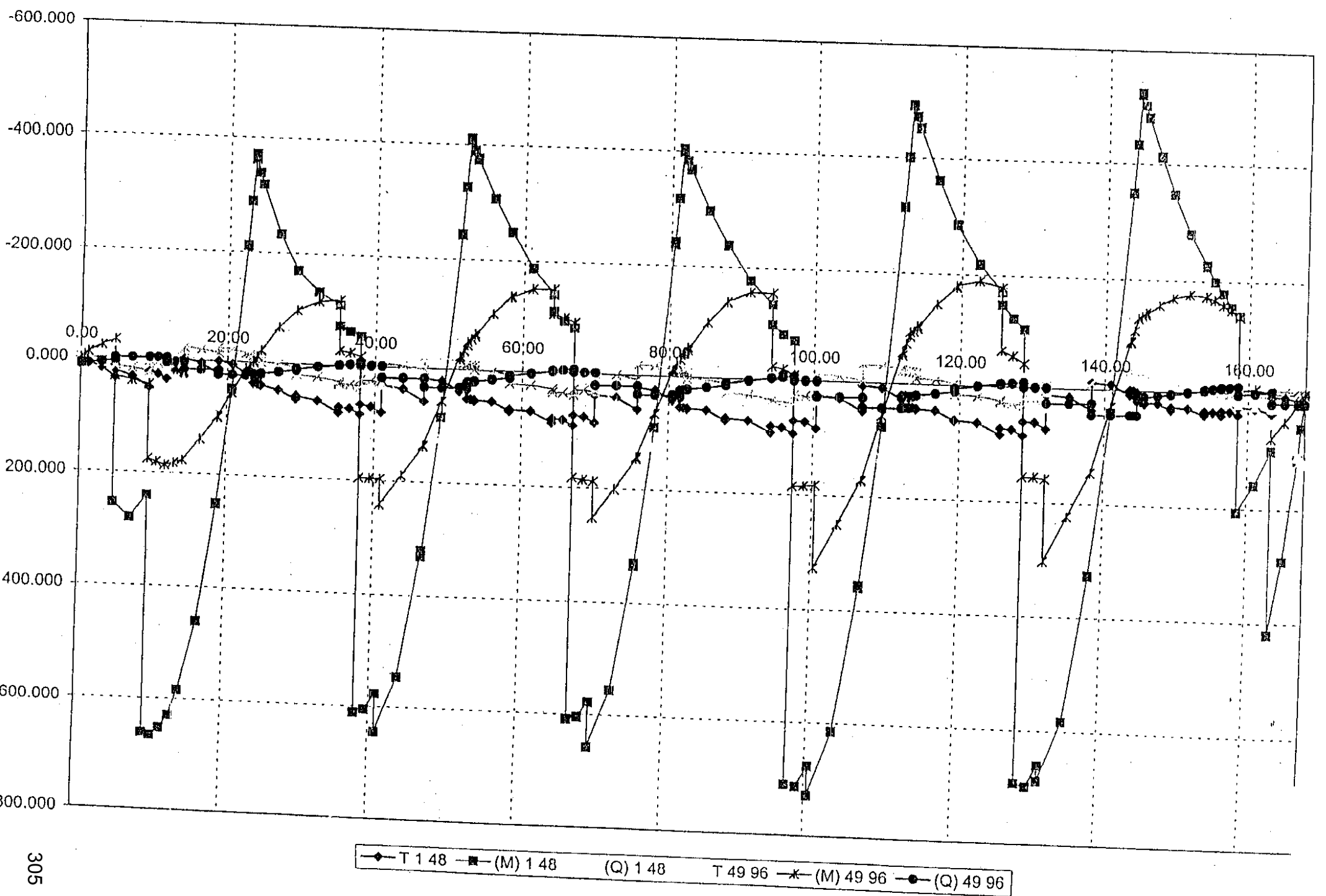
Hip H. Q Mcon Icon

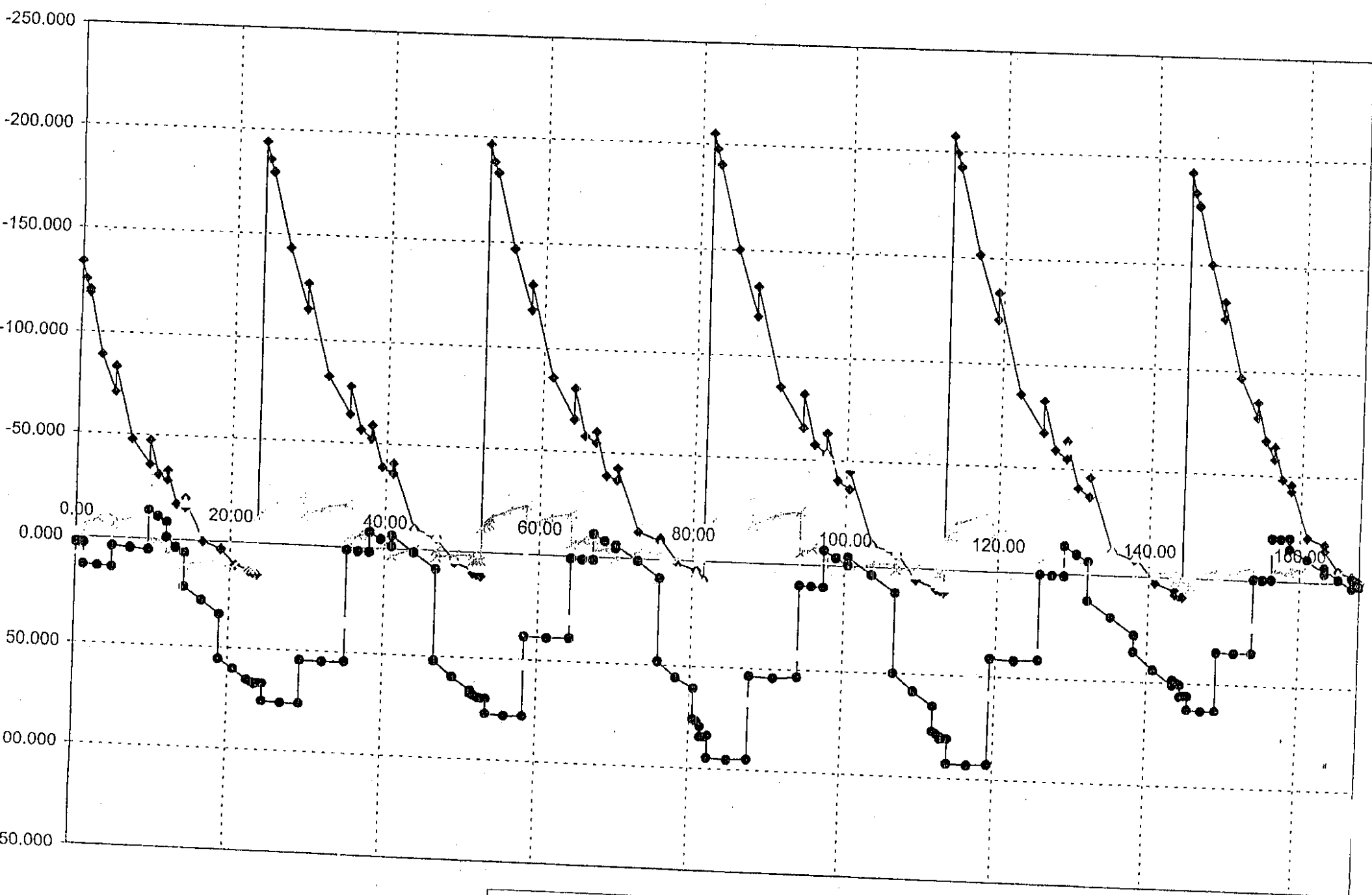
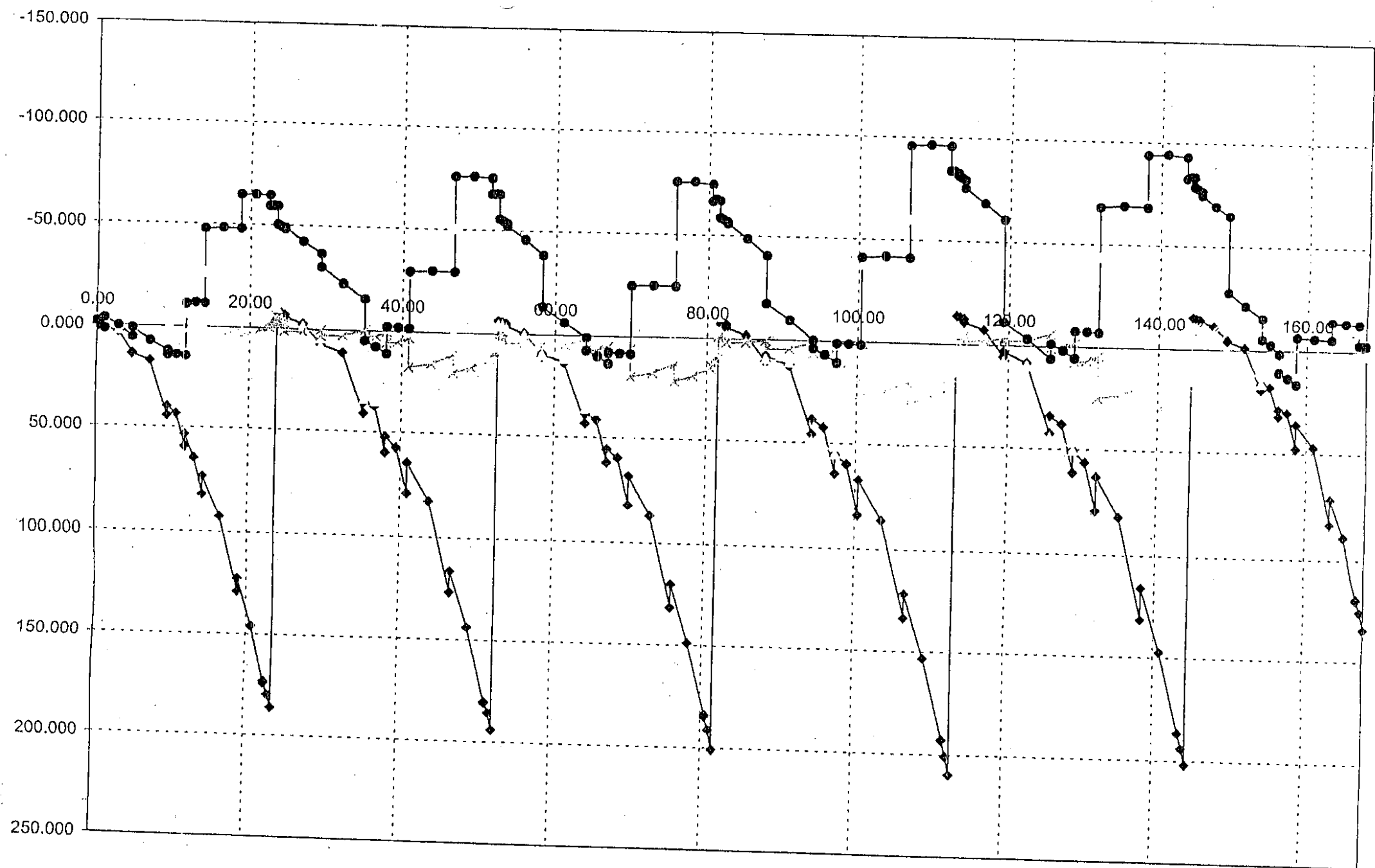


Hip H. T Mcon Qcon

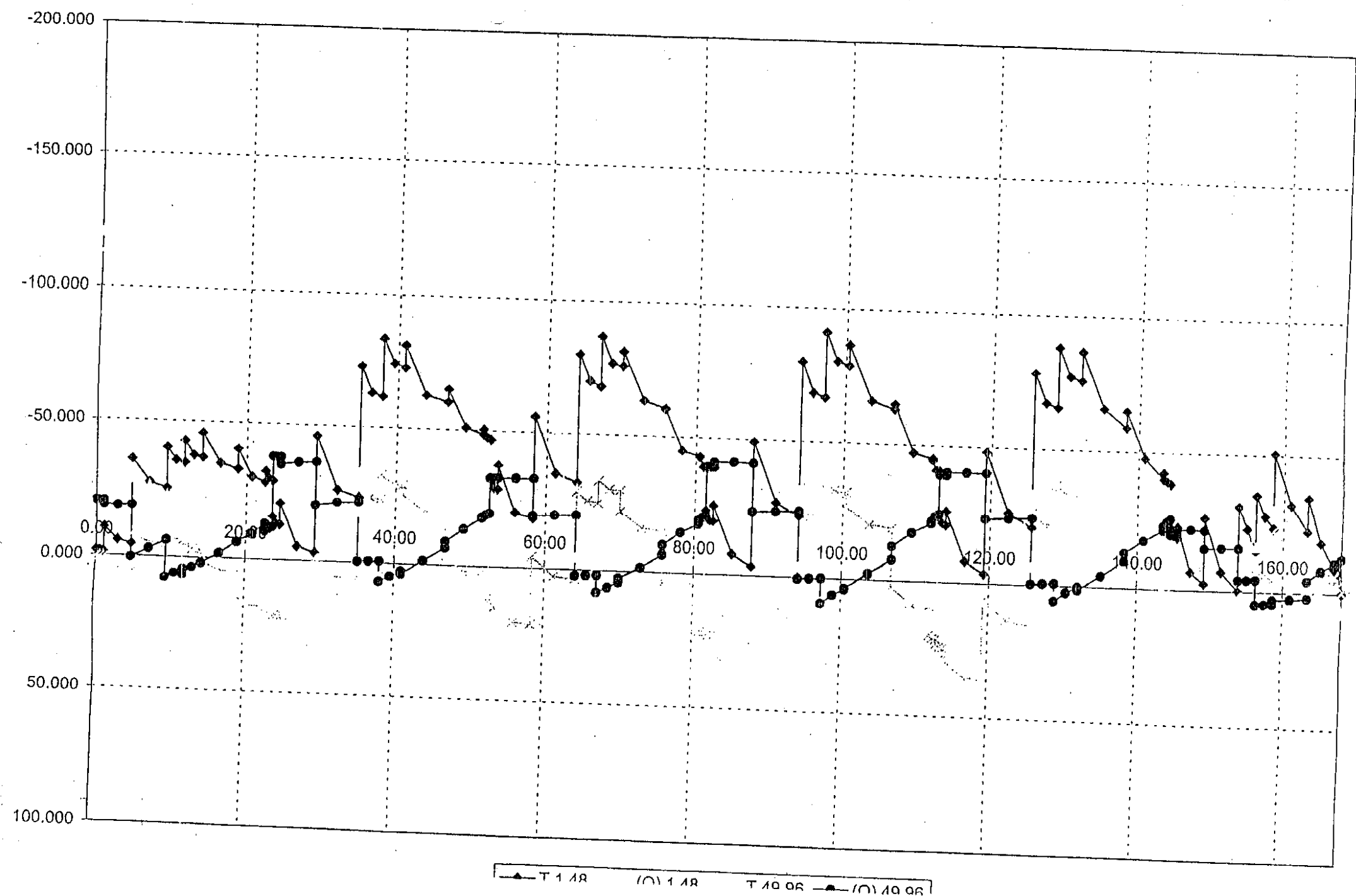


Hip H. T Mcon Qcon

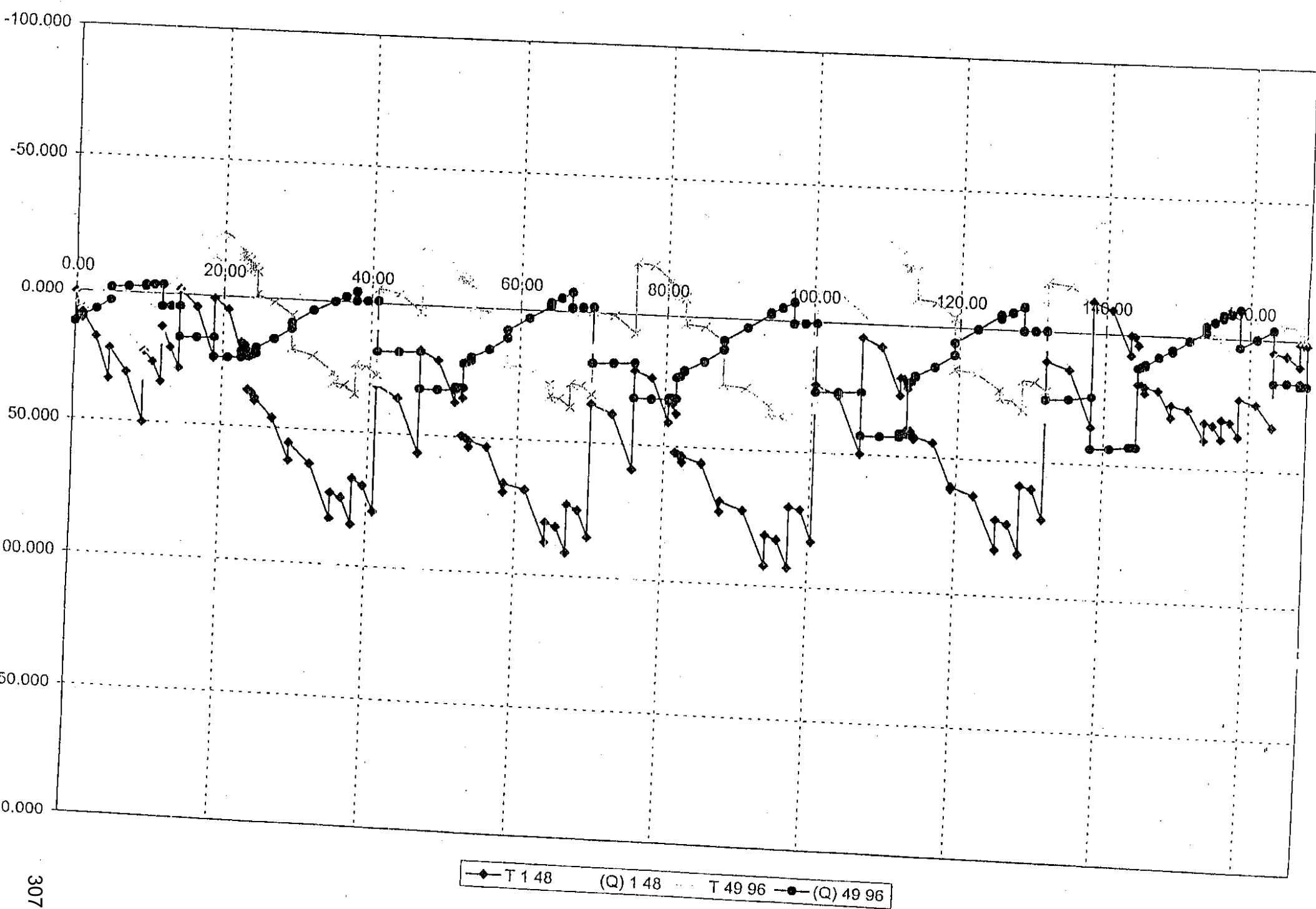




Q 1 48 (T) 1 48 Q 49 96 (T) 49 96



Hip H. I Mcon Qcon



HIPOTESIS: I Eje 1 (49-96) sin carga; Eje 2 (1-48) ripado -30cm

Envolvente IPF75B positiva

Coef impacto 1.16

VIADUCTO BORGES BLANQUES

RA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
	0.00	2.679	-135.274	0.000	-1.688	0.000	0.291	0.000	0.552	0.182
	0.50	2.660	-128.715	65.679	-1.036	0.632	0.272	70.889	2.462	-140.472
	1.00	2.641	-122.190	128.715	-0.383	6.908	0.253	139.493	2.270	-133.947
	1.00	13.253	-118.663	127.933	-0.056	6.908	2.621	138.188	12.157	-129.832
	2.85	12.983	-93.901	323.362	2.293	5.291	2.553	339.452	11.468	-96.554
	4.70	12.911	-60.493	466.715	12.994	86.041	3.654	495.128	10.454	-71.759
	4.70	8.337	-30.976	157.890	14.122	85.911	6.102	493.693	2.093	-77.707
	7.05	7.837	-27.974	226.872	17.124	48.430	6.011	624.470	1.174	-37.904
	9.40	7.721	-24.842	288.963	44.529	292.897	4.944	678.589	0.007	-6.584
	9.40	10.856	15.904	-76.435	41.603	275.605	1.252	678.589	-23.347	-19.819
	10.58	10.575	17.470	-95.624	45.323	347.271	-3.709	682.047	-23.806	5.629
	11.75	10.529	19.036	-115.669	60.983	247.450	-1.233	667.747	-24.266	17.178
	11.75	13.945	19.497	-115.669	58.519	232.769	-5.713	667.878	-41.427	8.277
	12.93	13.629	20.898	-139.645	69.351	314.139	-15.072	648.241	-42.173	33.594
	14.10	13.583	22.464	-166.730	86.772	225.916	-15.532	601.386	-42.632	52.190
	14.10	22.621	25.992	-165.555	83.320	205.036	-22.736	601.386	-65.749	40.124
	16.45	21.955	29.026	-229.996	103.091	156.968	-33.443	475.640	-68.486	68.832
	18.80	21.838	32.028	-301.084	139.174	-114.454	-36.568	262.236	-72.623	109.175
	18.80	37.933	36.905	-301.135	140.434	-118.202	-29.590	263.556	-84.106	104.145
	20.65	37.320	39.287	-373.148	164.250	-333.783	-34.233	96.966	-30.516	65.155
	22.50	37.223	41.636	-449.130	192.634	-650.822	-37.166	7.252	-7.356	12.825
	22.50	47.057	45.264	-447.749	196.758	-650.653	-25.262	7.256	-5.890	13.410
	23.00	46.900	45.882	-471.140	203.283	-747.430	-26.628	-0.946	-2.647	20.848
	23.50	46.852	46.535	-494.612	209.808	-850.287	-26.819	-11.095	-0.969	15.759
	23.50	67.686	-189.784	-502.896	-10.321	-9.920	-4.153	-11.095	1.459	-9.016
	24.00	67.529	-183.225	-410.578	-9.669	-4.368	-4.172	3.846	2.614	-14.236
	24.50	67.510	-176.700	-319.709	-9.016	4.381	-3.016	1.902	2.595	-7.711
	24.50	74.785	-167.089	-325.616	-7.017	4.512	-0.730	1.902	3.968	-6.104
	26.90	73.849	-135.672	39.096	-3.885	18.602	-0.822	101.187	50.478	-81.163
	29.30	73.728	-94.564	311.854	6.294	106.023	7.308	299.313	86.823	-80.223
	29.30	53.942	-107.766	308.599	7.122	105.899	7.275	297.068	65.793	-92.291
	32.20	52.751	-60.099	555.332	10.906	82.565	7.164	539.503	60.097	-58.038
	35.10	52.612	-22.254	673.456	40.921	292.370	18.603	658.315	58.987	-23.129
	35.10	18.611	-34.260	575.233	35.778	278.983	6.312	658.315	17.145	-43.481
	36.55	18.014	-15.990	611.050	37.605	225.498	6.255	700.674	16.284	-13.466
	38.00	17.932	3.585	620.393	59.921	322.634	8.355	708.032	16.727	1.215
	38.00	6.995	11.829	-65.537	54.037	296.149	-4.183	708.032	-14.187	-14.149
	39.45	6.433	13.622	-83.918	58.996	364.826	-5.897	709.064	-14.735	8.232
	40.90	6.350	15.579	-107.423	80.529	283.460	-5.488	675.811	-15.558	38.377
	40.90	15.050	17.751	-123.765	71.088	269.819	-18.018	676.065	-56.625	17.061
	43.80	13.929	21.502	-178.664	89.358	278.803	-29.895	574.798	-57.931	52.948
	46.70	13.789	25.286	-245.441	134.054	-18.312	-34.228	346.462	-69.048	88.538
	46.70	34.367	32.559	-249.766	132.236	-27.928	-35.814	348.891	-90.161	77.840
	49.10	33.494	35.622	-331.757	160.228	-283.239	-44.263	147.903	-48.333	88.732
	51.50	33.344	38.754	-421.233	197.420	-706.770	-43.511	38.286	-2.880	9.127
	51.50	46.091	43.900	-420.641	203.389	-706.640	-28.588	38.286	0.048	10.879
	52.00	45.900	44.518	-442.308	208.739	-805.108	-29.954	32.517	0.029	17.404
	52.50	45.852	45.170	-464.001	217.222	-909.912	-29.167	25.399	0.010	12.184
	52.50	67.117	-188.293	-468.107	-8.501	32.707	-3.787	25.399	2.347	-7.327
	53.00	66.896	-181.740	-374.708	-7.849	36.229	-3.806	30.617	3.502	-12.547
	53.50	66.877	-175.215	-285.130	-7.196	43.035	-2.650	34.422	3.483	-6.022
	53.50	72.887	-164.389	-290.933	-5.067	42.513	1.199	34.291	6.419	-4.284
	55.90	71.854	-133.040	68.423	-1.935	51.724	1.107	133.787	51.539	-78.256
	58.30	71.727	-91.864	337.770	9.418	134.316	9.237	329.220	92.836	-77.251
	58.30	54.833	-103.865	335.076	9.195	126.860	12.524	329.102	72.360	-88.913
	61.20	53.550	-56.233	560.317	12.980	92.850	12.413	568.553	60.626	-57.008
	64.10	53.370	-8.566	661.087	43.191	294.447	22.873	681.039	59.516	-22.099
	64.10	19.811	-30.562	571.190	38.932	285.549	9.616	681.025	16.442	-42.307
	65.55	19.218	-12.292	602.279	41.738	239.530	9.562	721.016	15.619	-11.117
	67.00	19.097	7.283	604.502	61.900	323.858	11.658	725.689	15.179	2.390
	67.00	10.953	15.418	-87.627	57.300	301.598	1.536	725.689	-14.747	-11.800
	68.45	10.356	17.245	-112.246	61.280	363.453	-0.178	723.631	-15.321	9.406
	69.90	10.302	19.203	-139.311	83.791	281.340	-0.749	687.149	-16.144	40.726
	69.90	20.872	20.416	-160.789	74.807	261.255	-13.203	688.338	-57.899	19.540
	72.80	19.773	24.166	-225.511	94.056	258.692	-22.926	581.179	-59.009	55.428
	75.70	19.604	27.951	-299.502	138.752	-48.002	-28.238	346.451	-68.999	87.528
	75.70	44.877	37.498	-300.469	136.913	-60.881	-28.283	347.880	-90.086	76.972
	78.10	43.941	40.561	-395.054	165.884	-329.112	-36.731	144.980	-46.216	80.195
	80.50	43.821	43.693	-495.806	201.119	-772.663	-30.799	37.952	-0.894	-7.442

VIADUCTO BORGES BLANQUES

1)	9.40	-0.281	7.332	-161.123	3.429	-131.520	14.412	80.064	-20.801	-2.313
2)	10.58	1.322	5.592	-170.368	3.016	-148.481	14.173	85.375	-20.540	-5.141
3)	11.75	1.584	3.852	-176.960	1.276	-146.733	14.761	93.474	-20.278	-6.424
4)	11.75	3.221	3.391	-176.960	1.913	-14.602	-11.511	92.299	-37.132	1.696
5)	12.93	5.020	0.382	-180.502	0.710	-33.353	-12.206	91.731	-36.871	-1.117
6)	14.10	5.282	-1.228	-178.670	-1.226	-34.545	-11.944	94.063	-36.609	-3.184
7)	14.10	8.597	-4.178	-178.800	5.251	66.375	-48.505	94.063	-61.403	7.730
8)	16.45	12.392	-8.214	-166.615	3.054	36.857	-49.069	80.140	-67.887	5.098
9)	18.80	13.057	-12.636	-141.347	-0.955	32.276	-48.785	74.189	-65.887	-1.021
10)	18.80	24.557	-19.143	-141.642	2.915	66.010	-65.535	72.754	-79.966	3.435
11)	20.65	28.046	-22.324	-103.210	0.269	55.029	-65.555	61.491	-57.096	10.659
12)	22.50	28.602	-26.152	-58.174	-2.885	56.456	-65.380	38.310	-26.873	11.968
13)	22.50	34.248	-29.420	-56.660	-6.015	55.303	-59.857	38.529	-29.464	11.607
14)	23.00	35.142	-30.341	-41.621	-6.740	58.050	-59.878	33.672	0.854	2.661
15)	23.50	35.414	-31.066	-26.115	-7.465	61.630	-59.769	34.018	8.081	2.066
16)	23.50	39.426	-20.224	-26.987	19.891	23.419	-44.560	34.018	8.291	8.146
17)	24.00	40.320	-20.100	-16.449	19.819	12.504	-43.470	28.686	9.511	8.726
18)	24.50	40.429	-20.173	-5.148	19.746	2.160	-42.249	24.475	10.602	8.001
19)	24.50	44.213	-22.783	-5.345	17.135	1.149	-40.130	24.475	4.335	8.913
20)	26.90	49.545	-23.663	52.724	16.787	-40.079	-33.261	15.212	79.429	-15.034
21)	29.30	50.232	-24.011	112.119	15.656	-88.655	-27.114	67.746	97.034	-28.257
22)	29.30	28.161	-16.063	112.268	9.847	-88.337	-21.771	69.309	70.512	-17.139
23)	32.20	34.944	-17.375	160.086	9.426	-115.675	-13.811	119.451	59.074	-20.585
24)	35.10	35.740	-17.795	210.018	6.091	-170.037	-6.203	183.947	59.707	-24.464
25)	35.10	1.063	0.505	92.503	4.498	-79.001	0.153	183.947	16.120	-4.509
26)	36.55	4.465	0.302	90.868	4.295	-86.672	3.228	193.158	16.447	-7.844
27)	38.00	4.934	0.084	90.045	1.815	-109.827	6.717	204.283	16.861	-9.475
28)	38.00	-5.673	5.652	-128.086	5.785	59.221	-4.974	204.283	-13.385	5.241
29)	39.45	-2.467	3.425	-134.924	5.234	34.060	-4.778	200.372	-14.036	2.755
30)	40.90	-1.998	1.250	-138.838	2.842	25.584	-4.364	199.107	-13.731	-0.595
31)	40.90	-1.921	-0.359	-170.576	16.815	116.682	-29.779	197.984	-57.075	19.338
32)	43.80	4.468	-5.848	-163.767	14.785	43.686	-30.342	149.804	-56.511	15.351
33)	46.70	5.264	-11.140	-141.938	9.819	3.550	-30.036	114.128	-73.197	11.718
34)	46.70	18.673	-16.882	-143.299	17.894	102.911	-76.976	112.570	-100.075	22.989
35)	49.10	23.646	-21.842	-94.818	14.783	51.389	-77.257	66.792	-68.751	10.578
36)	51.50	24.496	-26.409	-35.479	10.651	19.391	-76.516	65.035	6.664	-7.122
37)	51.50	33.554	-32.171	-35.169	8.021	18.217	-68.288	65.035	2.015	-6.355
38)	52.00	34.645	-33.092	-18.835	7.427	13.300	-68.310	67.121	3.105	-7.080
39)	52.50	34.917	-33.817	-2.176	6.484	10.051	-68.092	71.484	4.061	-6.500
40)	52.50	39.241	-20.111	-2.388	23.233	5.876	-52.606	71.484	3.606	12.663
41)	53.00	40.495	-20.020	8.422	23.161	-6.143	-51.516	65.077	4.826	13.243
42)	53.50	40.604	-20.092	17.992	23.088	-18.720	-50.295	58.633	5.917	12.518
43)	53.50	44.440	-22.626	19.226	20.462	-15.182	-45.732	58.648	2.259	13.415
44)	55.90	50.328	-22.811	73.558	20.114	-62.166	-38.862	46.543	83.480	-11.484
45)	58.30	51.048	-22.766	127.992	18.853	-118.029	-31.079	94.927	105.635	-27.441
46)	58.30	29.153	-14.867	126.928	12.065	-52.196	-6.828	96.224	77.273	-16.225
47)	61.20	36.459	-15.287	168.149	11.645	-85.446	1.132	142.945	58.958	-19.411
48)	64.10	37.484	-15.512	208.501	8.288	-146.190	8.631	202.979	59.591	-23.289
49)	64.10	3.460	2.992	137.915	8.594	-83.798	2.611	203.109	16.153	-3.480
50)	65.55	6.840	2.789	133.286	8.282	-96.674	5.665	210.116	16.458	-6.945
51)	67.00	7.527	2.571	127.947	6.042	-124.299	9.175	221.034	16.785	-8.446
52)	67.00	-2.973	6.942	-151.627	8.903	-5.786	4.420	221.034	-14.534	6.140
53)	68.45	0.429	4.912	-162.365	8.460	-34.953	4.617	214.053	-14.207	3.784
54)	69.90	0.734	2.737	-167.536	5.959	-46.829	4.922	210.845	-13.901	0.304
55)	69.90	4.335	-0.990	-215.506	18.722	109.751	-25.418	210.584	-57.064	20.223
56)	72.80	10.594	-5.391	-208.398	16.583	32.350	-25.742	157.565	-56.431	16.235
57)	75.70	11.553	-10.684	-185.218	11.617	-12.418	-25.545	119.813	-74.942	13.353
58)	75.70	28.086	-18.364	-185.999	19.434	115.146	-76.515	117.399	-102.329	24.008
59)	78.10	33.418	-23.324	-135.619	16.215	62.993	-76.796	71.936	-68.249	9.126
60)	80.50	34.105	-26.804	-72.066	12.300	30.256	-75.512	70.051	4.683	-9.335
61)	80.50	45.307	-33.416	-72.657	8.351	29.067	-66.900	70.036	-0.171	-9.757
62)	81.00	46.561	-34.337	-54.958	7.626	21.225	-68.008	75.409	2.257	-10.482
63)	81.50	46.670	-35.062	-38.180	6.575	20.375	-67.138	80.039	3.478	-9.902
64)	81.50	49.852	-26.373	-38.452	21.799	15.442	-53.667	80.039	2.709	10.054
65)	82.00	51.106	-26.446	-24.119	21.727	4.562	-52.576	74.901	3.799	10.634
66)	82.50	51.215	-26.322	-9.635	21.654	-7.676	-51.486	68.666	4.889	9.909
67)	82.50	59.933	-31.171	-9.159	17.889	-1.891	-46.002	68.579	0.977	10.842
68)	85.15	65.952	-31.562	74.935	17.497	-49.929	-38.479	56.544	82.787	-12.731
69)	87.80	67.403	-31.350	157.117	16.076	-107.280	-29.998	125.841	120.183	-33.265
70)	87.80	39.357	-19.798	159.483	10.723	-40.188	-9.498	127.291	86.392	-18.752
71)	90.95	46.989	-20.248	222.966	10.273	-77.514	-0.992	191.687	71.516	-22.140
72)	94.10	48.581	-20.515	285.020	6.503	-136.285	9.165	271.012	72.192	-27.650
73)	94.10	5.284	0.688	131.588	7.434	-67.566	-2.899	271.005	18.795	-2.182
74)	95.68	9.243	0.470	130.523	6.999	-80.742	0.383	277.975	19.123	-4.922
75)	97.25	9.788	0.238	127.701	4.614	-108.857	4.242	290.369	19.472	-7.547
76)	97.25	-6.301	8.065	-80.338	10.353	48.080	-10.114	290.369	-19.953	8.874
77)	98.83	-2.670	4.658	-92.069	9.881	16.259	-10.048	277.395	-19.626	5.140
78)	100.40	-2.158	2.338	-96.508	7.126	-0.932	-9.699	270.113	-19.277	2.515
79)	100.40	-3.089	0.291	-218.214	25.102	188.942	-42.079	268.939	-72.681	27.886
80)	103.55	3.966	-5.502	-212.375	22.898	83.578	-42.947	188.805	-72.005	22.376
81)	106.70	4.990	-11.215	-188.609	17.642	17.886	-42.358	124.973	-85.822	18.726
82)	106.70	22.030	-18.985	-192.629	27.757	141.800	-97.150	123.519	-119.180	33.095
83)	109.35	28.213	-24.446	-135.960	24.234	60.351	-97.844	47.621	-96.747	21.908
84)	112.00	28.943	-28.347	-67.366	19.811	1.011	-27.286			

VIADUCTO BORGES BLANQUES

112.00	40.447	-34.150	-67.157	13.560	3.164	-84.826	44.272	-4.351	
112.50	41.701	-35.963	-48.656	12.726	-4.548	-84.717	47.980	-3.260	
113.00	41.810	-36.884	-30.062	11.784	-7.735	-83.629	52.163	-2.040	
113.00	46.063	-28.140	-30.130	19.626	-62.575	-80.135	52.163	-2.782	
113.50	47.153	-28.213	-16.054	19.553	-71.982	-79.044	50.133	-1.561	
114.00	47.426	-28.089	-1.573	19.481	-81.066	-77.823	48.325	-0.471	
114.00	54.410	-30.828	-1.649	14.591	-82.226	-69.342	48.339	-4.742	
116.65	60.593	-31.041	84.706	14.214	-117.536	-61.819	58.177	80.527	-16.231
119.30	62.076	-31.040	168.969	12.779	-164.198	-53.469	131.733	116.999	-29.832
119.30	34.576	-19.954	169.873	4.512	-7.829	-6.102	133.078	85.830	-16.341
122.45	42.209	-20.418	237.491	3.939	-24.421	2.403	189.327	72.483	-20.397
125.60	43.997	-20.671	304.271	0.075	-64.777	12.322	262.504	73.268	-25.762
125.60	-0.670	-0.189	166.472	2.142	47.425	-8.497	262.522	17.842	-0.536
127.18	3.147	-0.421	168.548	1.692	41.998	-5.204	266.915	18.191	-3.182
128.75	3.692	-0.653	167.564	-0.824	21.392	-1.345	274.524	18.431	-6.916
128.75	-14.345	4.411	-32.014	7.003	233.140	-23.722	274.524	-19.928	10.809
130.33	-10.692	1.018	-38.388	6.416	204.573	-23.634	259.129	-19.579	8.069
131.90	-10.179	-1.302	-41.636	3.791	192.079	-23.285	247.120	-19.230	5.314
131.90	-15.202	-1.070	-153.402	24.098	288.104	-69.517	247.105	-73.758	29.492
135.05	-7.929	-6.667	-139.532	21.894	184.755	-70.363	160.721	-73.060	24.412
138.20	-5.585	-12.576	-110.935	16.398	118.820	-69.796	88.947	-79.678	20.412
138.20	3.146	-17.360	-110.989	29.508	117.261	-95.294	87.628	-111.020	33.912
140.85	9.165	-22.348	-57.586	25.999	32.249	-95.880	17.693	-70.246	4.712
143.50	11.760	-26.525	10.497	21.562	-28.959	-94.660	37.911	-7.083	-9.712
143.50	19.857	-31.211	10.738	15.478	-30.133	-83.634	37.911	-12.507	-8.812
144.00	20.948	-33.023	26.835	14.644	-40.999	-84.525	42.880	-11.417	-9.512
144.50	21.253	-33.944	43.628	13.810	-48.337	-84.416	47.896	-3.150	-10.012
144.50	24.885	-13.575	43.106	12.601	-96.633	-83.686	47.896	-4.800	-1.212
145.00	25.975	-13.647	49.933	12.529	-102.537	-82.595	50.242	17.428	-7.712
145.50	26.281	-13.523	57.798	12.456	-108.476	-81.375	56.965	45.829	-14.312
145.50	28.866	-15.857	58.115	8.790	-108.694	-75.974	56.747	44.378	-14.512
147.35	34.427	-16.132	86.489	8.514	-124.179	-70.413	77.468	55.482	-8.612
149.20	35.823	-16.001	115.758	7.731	-145.503	-65.617	87.447	80.124	-1.792
149.20	24.814	-10.500	115.811	1.518	-14.689	-25.878	87.596	67.360	2.952
151.55	31.465	-10.848	142.894	1.170	-17.061	-19.227	89.771	68.607	-4.022
153.90	33.755	-10.985	168.824	-1.077	-36.285	-12.927	101.494	59.605	-6.382
153.90	11.464	-1.699	168.659	-0.525	36.371	-4.845	101.494	36.261	4.102
155.08	14.244	-1.873	170.239	-0.699	36.316	-2.228	97.955	36.327	2.162
156.25	16.938	-2.033	171.969	-2.360	22.848	2.437	98.625	36.566	-0.642
156.25	-1.162	5.450	171.969	2.917	135.600	9.861	98.755	17.853	7.482
157.43	1.455	5.276	165.348	2.743	132.533	12.478	89.732	18.114	6.062
158.60	2.861	5.116	157.804	0.822	116.617	15.596	83.482	18.376	3.252
158.60	-17.870	1.811	26.450	11.665	113.519	-6.712	83.482	-6.472	15.252
160.95	-11.382	1.463	21.889	10.468	64.449	-6.080	53.922	-5.971	11.904
163.30	-8.143	0.933	16.041	6.350	42.464	-5.556	31.850	-5.447	7.351
163.30	-13.512	-6.702	-52.328	9.231	42.189	-14.371	31.575	-14.371	10.253
165.15	-7.951	-10.530	-36.012	7.186	14.033	-13.979	13.403	-13.979	7.643
167.00	-4.789	-13.547	-14.760	3.801	0.806	-13.564	0.153	-13.564	3.801
167.00	-4.077	-14.184	-14.909	0.621	0.657	-2.991	0.135	-2.991	0.621
167.50	-2.986	-14.909	-7.017	-0.104	-0.001	-2.882	-0.001	-2.882	-0.104
168.00	-0.424	-16.484	0.000	-1.047	0.000	-2.773	0.000	-1.205	13.647
	0.000	-0.240	-0.309	-0.240	-0.440	0.000	-0.636	0.000	-0.240
	0.000	-0.240	-0.051	-0.240	-0.051	0.000	-0.444	0.000	-1.021
	0.000	-0.240	0.297	-0.240	0.297	0.000	1.405	0.000	-0.925
	0.000	-0.809	-1.476	-0.809	-1.607	0.000	-2.392	0.000	-0.417
	0.000	-0.809	-0.192	-0.809	-0.322	0.000	-1.830	0.000	-2.687
	0.000	-0.809	2.163	-0.809	1.119	0.000	3.509	0.000	-3.475
	-0.276	-1.542	-1.599	4.548	6.340	-1.320	4.606	-1.320	5.497
	-0.276	-1.542	0.622	4.548	-0.553	-1.320	-3.991	-1.450	3.705
	-0.276	-1.542	2.777	4.548	-6.380	-1.320	-3.865	-0.276	0.356
	0.000	-1.586	-2.566	9.388	16.143	0.000	14.410	0.000	10.729
	0.000	-1.586	-0.978	9.388	-0.476	0.000	-3.325	0.000	7.249
	0.000	-1.586	-0.670	9.388	-15.895	0.000	-2.404	0.000	-1.451
	0.000	2.529	2.499	7.097	11.255	0.000	10.274	0.000	8.046
	0.000	2.529	-3.345	7.097	-0.192	0.000	-1.830	0.000	5.371
	0.000	2.529	-6.703	7.097	-11.859	0.000	-0.615	0.000	-0.132
	0.000	5.287	5.925	9.130	15.610	0.000	14.073	0.000	10.668
	0.000	5.287	-3.709	9.130	-0.476	0.000	-3.161	0.000	6.013
	0.000	5.287	-13.408	9.130	-15.232	0.000	0.020	0.000	-2.556
	1.320	4.540	2.655	3.696	5.937	1.320	4.956	1.320	4.677
	1.320	4.540	-4.800	3.696	0.622	1.320	-3.991	1.450	-1.518
	1.320	4.540	-12.013	3.696	-5.752	1.320	4.407	0.276	-5.554
	0.000	-1.347	-5.256	-1.085	-1.886	0.000	-2.279	0.000	-0.692
	0.000	-1.347	-1.538	-1.085	-0.322	0.000	-1.666	0.000	-5.224
	0.000	-1.347	1.628	-1.085	1.372	0.000	4.745	0.000	-4.794
	0.000	-1.379	-1.945	-0.497	-0.734	0.000	-0.931	0.000	-0.301
	0.000	-1.379	-0.782	-0.497	-0.128	0.000	-1.273	0.000	-2.257
	0.000	-1.379	0.559	-0.497	0.594	0.000	1.634	0.000	-2.065
	0.000	-4.841	-7.594	-1.324	-1.282	0.000	-1.871	0.000	-0.932
	0.000	-4.841	-1.322	-1.324	-0.399	0.000	-2.496	0.000	-6.246
	0.000	-4.841	6.042	-1.324	1.684	0.000	6.028	0.000	-5.754
	-0.276	-3.743	-6.404	9.373	14.998	-1.320	13.264	-1.320	10.550
	-0.276	-3.743	0.584	9.373	0.584				

VIADUCTO BORGES BLANQUES

1)	0.000	5.513	8.486	17.519	28.431	0.000	26.108	0.000	18.893
2)	0.000	5.513	0.596	17.519	0.596	0.000	-4.049	0.000	15.076
3)	0.000	5.513	-7.178	17.519	-27.188	0.000	-0.846	0.000	-1.302
1)	0.000	3.970	3.948	12.803	19.509	0.000	17.775	0.000	13.588
	0.000	3.970	-1.132	12.803	-0.399	0.000	-2.332	0.000	10.446
	0.000	3.970	-7.530	12.803	-18.976	0.000	-0.109	0.000	-1.560
	0.000	9.260	9.370	17.279	28.300	0.000	25.978	0.000	18.653
	0.000	9.260	-4.864	17.279	0.596	0.000	-4.049	0.000	15.076
	0.000	9.260	-19.045	17.279	-27.188	0.000	0.329	0.000	-3.455
	1.320	8.068	7.618	8.988	14.635	1.320	12.705	1.320	10.166
	1.320	8.068	-6.030	8.988	0.584	1.320	-4.162	1.450	2.536
	1.320	8.068	-17.439	8.988	-13.746	1.320	7.057	0.276	-7.768
	0.000	-2.307	-4.871	-1.324	-1.264	0.000	-1.853	0.000	-0.736
	0.000	-2.307	-1.263	-1.324	-0.399	0.000	-2.332	0.000	-6.246
	0.000	-2.307	2.114	-1.324	1.796	0.000	6.012	0.000	-5.720
	0.000	-1.217	-2.110	-0.497	-0.865	0.000	-1.061	0.000	-0.301
	0.000	-1.217	-0.590	-0.497	-0.128	0.000	-1.110	0.000	-2.257
	0.000	-1.217	1.552	-0.497	0.608	0.000	1.649	0.000	-2.065
	0.000	-4.706	-9.270	-1.324	-1.264	0.000	-1.853	0.000	-0.932
	0.000	-4.706	-1.976	-1.324	-0.399	0.000	-2.332	0.000	-6.246
	0.000	-4.706	6.540	-1.324	1.796	0.000	6.012	0.000	-5.720
	-0.276	-5.062	-7.593	8.988	14.635	-1.320	12.705	-1.320	10.166
	-0.276	-5.062	0.584	8.988	0.584	-1.320	-3.999	-1.450	1.448
	-0.276	-5.062	7.503	8.988	-13.746	-1.320	7.057	-0.276	-7.768
	0.000	5.237	6.742	17.134	28.155	0.000	25.833	0.000	18.508
	0.000	5.237	-0.058	17.134	0.596	0.000	-4.049	0.000	12.538
	0.000	5.237	-7.493	17.134	-26.913	0.000	0.637	0.000	-3.600
	0.000	3.861	3.961	12.803	19.378	0.000	17.808	0.000	13.588
	0.000	3.861	-0.901	12.803	-0.399	0.000	-2.332	0.000	10.446
	0.000	3.861	-6.951	12.803	-18.846	0.000	1.066	0.000	-1.560
	0.000	9.115	8.059	17.134	27.938	0.000	25.812	0.000	18.508
	0.000	9.115	-4.748	17.134	0.712	0.000	-2.889	0.000	13.626
	0.000	9.115	-18.590	17.134	-26.909	0.000	2.794	0.000	-3.600
	1.320	6.102	4.311	8.731	14.102	1.320	12.172	1.320	9.516
	1.320	6.102	-6.030	8.731	0.584	1.320	-3.999	1.450	1.300
	1.320	6.102	-15.328	8.731	-13.235	1.320	9.545	0.276	-8.908
	0.000	-2.582	-5.290	-1.600	-1.779	0.000	-2.564	0.000	-1.207
	0.000	-2.582	-1.493	-1.600	-0.399	0.000	-2.332	0.000	-7.696
	0.000	-2.582	2.193	-1.600	2.072	0.000	9.519	0.000	-7.074
	0.000	-1.217	-2.124	-0.497	-1.010	0.000	-1.206	0.000	-0.301
	0.000	-1.217	-0.590	-0.497	-0.128	0.000	-1.110	0.000	-2.257
	0.000	-1.217	1.813	-0.497	0.739	0.000	2.954	0.000	-2.065
	-0.131	-5.072	-9.732	-1.712	-1.822	0.000	-2.608	0.000	-0.993
	-0.131	-5.072	-2.232	-1.712	-0.425	0.000	-2.554	0.000	-7.481
	-0.131	-5.072	6.830	-1.712	2.173	0.000	8.086	0.000	-6.860
	-0.276	-3.725	-4.897	11.500	18.267	-1.320	15.944	-1.320	12.678
	-0.276	-3.725	0.533	11.500	0.533	-1.320	-4.606	-1.450	4.200
	-0.276	-3.725	4.773	11.500	-17.216	-1.320	6.669	-0.276	-7.148
	0.000	6.981	11.650	21.075	35.815	0.000	33.099	0.000	22.253
	0.000	6.981	0.661	21.075	0.661	0.000	-3.333	0.000	17.762
	0.000	6.981	-10.412	21.075	-33.489	0.000	-1.089	0.000	-2.988
	0.000	6.544	9.785	15.442	24.398	0.000	23.447	0.000	16.227
	0.000	6.544	-1.288	15.442	-0.425	0.000	-2.554	0.000	13.182
	0.000	6.544	-12.344	15.442	-25.117	0.000	-1.400	0.000	-1.173
	0.000	10.006	12.006	21.093	35.575	0.000	32.860	0.000	22.467
	0.000	10.006	-5.261	21.093	0.661	0.000	-3.333	0.000	17.976
	0.000	10.006	-21.279	21.093	-33.474	0.000	-0.260	0.000	-2.774
	1.320	5.333	2.353	11.225	17.861	1.320	15.734	1.320	12.402
	1.320	5.333	-5.561	11.225	0.533	1.320	-4.606	1.450	2.750
	1.320	5.333	-14.326	11.225	-16.796	1.320	8.003	0.276	-8.502
	1.175	-4.701	-8.988	-1.857	-2.210	0.000	-2.996	0.000	-1.465
	1.175	-4.701	-1.750	-1.857	-0.425	0.000	-2.554	0.000	-8.931
	1.175	-4.701	4.374	-1.857	2.557	0.000	10.166	0.000	-8.213
	0.000	-1.217	-3.299	-0.497	-1.119	0.000	-1.315	0.000	-0.301
	0.000	-1.217	-0.820	-0.497	-0.128	0.000	-1.110	0.000	-2.257
	0.000	-1.217	1.813	-0.497	0.739	0.000	3.932	0.000	-2.065
	-0.131	-6.230	-11.090	-1.857	-2.210	0.000	-2.799	0.000	-1.465
	-0.131	-6.230	-1.058	-1.857	-0.425	0.000	-2.554	0.000	-8.931
	-0.131	-6.230	8.910	-1.857	2.557	0.000	10.166	0.000	-8.213
	-0.276	-1.912	-2.302	11.225	17.861	-1.320	15.734	-1.320	12.402
	-0.276	-1.912	-0.772	11.225	0.533	-1.320	-4.606	-1.450	2.750
	-0.276	-1.912	2.062	11.225	-16.796	-1.320	8.003	-0.276	-8.502
	0.000	8.043	12.368	21.093	35.575	0.000	32.860	0.000	22.467
	0.000	8.043	0.661	21.093	0.661	0.000	-3.333	0.000	17.976
	0.000	8.043	-12.311	21.093	-33.474	0.000	-0.260	0.000	-2.774
	0.000	7.588	9.824	15.442	24.398	0.000	22.272	0.000	16.358
	0.000	7.588	-2.232	15.442	0.750	0.000	-2.718	0.000	13.182
	0.000	7.588	-13.480	15.442	-23.943	0.000	-1.270	0.000	0.165
	0.000	11.016	13.166	21.459	34.785	0.000	32.070	0.000	22.637
	0.000	11.016	-5.261	21.459	0.661	0.000	-3.333	0.000	19.212
	0.000	11.016	-22.762	21.459	-33.619	0.000	-2.427	0.000	-0.690
	1.320	9.016	6.872	10.579	17.567	1.320	15.441	1.320	11.921
	1.320	9.016	-6.735	10.579	0.533	1.320	-4.606	1.450	5.650
	1.320	9.016	-20.212	10.579	-16.502	1.320	8.003	0.276	-8.502

VIADUCTO BORGES BLANQUES

1.175	-4.425	-8.801	-1.582	-1.801	0.000	-2.389	0.000	-1.189
1.175	-4.425	-1.850	-1.582	-0.425	0.000	-2.718	0.000	-7.318
1.175	-4.425	3.645	-1.582	2.159	0.000	9.015	0.000	-6.759
0.000	-1.217	-3.203	-0.497	-1.119	0.000	-1.315	-0.000	-0.497
0.000	-1.217	-0.820	-0.497	-0.128	0.000	-1.273	0.000	-2.257
0.000	-1.217	1.486	-0.497	0.739	0.000	3.932	0.000	-1.955
0.000	-4.612	-9.037	-1.360	-2.140	0.000	-2.532	0.000	-1.164
0.000	-4.612	-1.768	-1.360	-0.322	0.000	-1.666	0.000	-6.674
0.000	-4.612	6.470	-1.360	1.652	0.000	6.068	0.000	-6.148
-0.276	-7.937	-10.774	3.330	5.277	-1.320	4.296	-1.320	4.115
-0.276	-7.937	0.622	3.330	-0.553	-1.320	-3.991	-1.450	-2.754
-0.276	-7.937	11.959	3.330	-5.201	-1.320	8.024	-0.276	-7.707
0.000	1.960	2.089	8.855	14.052	0.000	13.689	0.000	10.523
0.000	1.960	-0.476	8.855	-0.476	0.000	-3.161	0.000	4.563
0.000	1.960	-3.015	8.855	-15.087	0.000	2.319	0.000	-2.701
0.000	2.965	5.325	6.988	11.241	0.000	10.259	0.000	7.937
0.000	2.965	-0.192	6.988	-0.192	0.000	-1.830	0.000	5.371
0.000	2.965	-5.922	6.988	-11.729	0.000	-0.484	0.000	-1.111
0.000	9.126	12.523	9.388	15.998	0.000	14.265	0.000	10.729
0.000	9.126	-3.129	9.388	-0.476	0.000	-3.325	0.000	7.249
0.000	9.126	-17.490	9.388	-15.620	0.000	-2.259	0.000	-1.451
1.320	6.274	3.443	4.548	6.195	1.320	4.461	1.320	5.693
1.320	6.274	-4.800	4.548	-0.553	1.320	-3.991	1.450	3.705
1.320	6.274	-14.218	4.548	-5.996	1.320	-3.720	0.276	0.356
0.000	-3.544	-7.558	-0.940	-1.737	0.000	-2.326	0.000	-0.417
0.000	-3.544	-3.345	-0.940	-0.322	0.000	-1.830	0.000	-2.687
0.000	-3.544	2.245	-0.940	1.133	0.000	3.523	0.000	-3.475
0.000	-0.960	-1.554	-0.240	-0.440	0.000	-0.636	0.000	-0.240
0.000	-0.960	-0.513	-0.240	-0.051	0.000	-0.444	0.000	-1.021
0.000	-0.960	1.371	-0.240	0.427	0.000	1.405	0.000	-0.925
0.000	53.606	4.317	423.462	31.330	0.000	31.330	0.000	423.462
0.000	53.606	2.216	423.462	15.822	0.000	15.822	0.000	423.462
0.000	53.606	0.000	423.462	0.000	0.000	0.000	0.000	274.184
0.000	287.028	21.706	431.855	32.374	0.000	32.374	0.000	431.855
0.000	287.028	11.417	431.855	15.822	0.000	15.822	0.000	431.855
0.000	287.028	0.000	431.855	0.000	0.000	0.000	0.000	348.346
0.000	273.084	21.638	447.730	33.483	0.000	33.483	0.000	447.730
0.000	273.084	10.046	447.730	16.997	0.000	16.997	0.000	447.730
0.000	273.084	0.000	447.730	0.000	0.000	0.000	0.000	309.238
0.000	206.075	15.686	460.621	34.774	0.000	34.774	0.000	460.621
0.000	206.075	7.809	460.621	16.948	0.000	16.948	0.000	460.621
0.000	206.075	0.000	460.621	0.000	0.000	0.000	0.000	299.523
0.000	223.326	16.779	439.410	33.614	0.000	33.614	0.000	439.410
0.000	223.326	9.068	439.410	15.822	0.000	15.822	0.000	439.410
0.000	223.326	0.000	439.410	0.000	0.000	0.000	0.000	248.120
0.000	-18.834	-2.275	-25.352	-2.346	0.000	-2.346	0.000	-25.352
0.000	-18.834	-1.018	-25.352	-0.602	0.000	-0.602	0.000	-25.352
0.000	-18.834	0.000	-25.352	0.000	0.000	0.000	0.000	-12.610
0.000	-27.232	-2.022	-13.831	-1.302	0.000	-1.302	0.000	-13.831
0.000	-27.232	-0.962	-13.831	-0.602	0.000	-0.602	0.000	-13.831
0.000	-27.232	0.000	-13.831	0.000	0.000	0.000	0.000	-11.480
0.000	-12.962	-0.593	-11.863	-1.425	0.000	-1.425	0.000	-11.863
0.000	-12.962	-0.866	-11.863	-0.733	0.000	-0.733	0.000	-11.863
0.000	-12.962	0.000	-11.863	0.000	0.000	0.000	0.000	-21.603
0.000	-22.961	-2.204	-12.552	-1.440	0.000	-1.440	0.000	-12.552
0.000	-22.961	-1.220	-12.552	-0.729	0.000	-0.729	0.000	-12.552
0.000	-22.961	0.000	-12.552	0.000	0.000	0.000	0.000	-1.855
0.000	5.823	0.520	-23.815	-2.600	0.000	-2.600	0.000	-23.815
0.000	5.823	-0.374	-23.815	-0.602	0.000	-0.602	0.000	-23.815
0.000	5.823	0.000	-23.815	0.000	0.000	0.000	0.000	-11.624

HIPOTESIS: I Eje 1 (49-96) sin carga: Eje 2 (1-48) ripado -30cm

Envolvente IPF75B negativa

Coef impacto 1.16

RRA	X (m)	T	(Q)	(M)	Q	(M)	(T)	M	(T)	(Q)
)	0.00	0.748	-9.386	0.000	-148.954	0.000	2.940	0.000	2.679	-148.867
)	0.50	0.299	-8.883	3.995	-140.472	70.889	2.462	0.632	0.272	-1.036
)	1.00	0.107	-8.231	8.883	-133.947	133.620	2.270	1.036	0.253	-0.383
)	1.00	2.872	-7.340	8.687	-131.006	133.490	12.157	2.210	2.621	-0.056
)	2.85	2.321	-5.060	18.946	-99.490	333.775	11.468	0.593	2.553	2.293
)	4.70	1.341	-2.580	24.895	-80.959	399.602	10.454	-5.570	2.480	4.772
)	4.70	0.338	-29.971	275.256	-86.711	398.138	2.351	-5.700	7.277	7.075
)	7.05	-0.231	0.009	310.253	-50.824	531.037	2.124	-25.564	7.185	10.077
)	9.40	-1.369	31.329	273.227	-38.883	410.575	2.418	-52.601	7.097	13.209
)	9.40	-19.982	-12.784	698.525	-47.291	429.357	-12.381	-52.471	13.719	16.088
)	10.58	-20.228	2.876	704.849	-30.848	340.946	-9.099	-71.695	13.673	17.654
)	11.75	-20.688	18.536	690.677	-28.304	364.327	-9.145	-92.727	13.627	19.220
)	11.75	-35.788	11.340	690.677	-32.595	375.420	-15.676	-92.727	19.080	21.323
)	12.93	-36.264	36.657	668.022	-16.478	265.798	-11.220	-119.829	19.034	22.759
)	14.10	-36.752	51.143	616.071	-14.912	285.021	-11.266	-148.739	18.988	24.325
)	14.10	-56.755	41.507	617.246	-18.881	295.461	-16.642	-148.739	30.829	30.057
)	16.45	-57.156	72.861	483.321	1.477	121.609	-4.989	-222.368	32.728	33.090
)	18.80	-58.324	112.664	260.476	4.479	115.522	-5.077	-302.680	36.922	35.408
)	18.80	-65.680	109.600	261.890	5.365	122.474	-3.104	-302.666	56.897	43.668
)	20.65	-65.925	133.289	36.392	12.542	44.048	2.696	-415.733	13.053	90.566
)	22.50	-66.936	167.741	-243.096	14.891	19.889	2.627	-650.833	-20.185	188.175
)	22.50	-60.657	170.068	-244.567	15.846	19.893	4.724	-650.794	-7.378	193.539
)	23.00	-60.711	176.627	-331.574	16.498	8.319	5.879	-748.278	-10.966	193.278
)	23.50	-60.902	183.152	-421.463	17.151	-0.133	5.860	-847.699	-16.129	209.329
)	23.50	-39.318	-55.661	-412.852	-216.685	-846.101	30.173	-847.699	21.897	-213.096
)	24.00	-39.371	-55.008	-384.803	-208.203	-742.521	30.961	-745.544	21.401	-198.741
)	24.50	-39.563	-54.356	-357.987	-201.678	-642.182	29.595	-646.315	21.101	-198.198
)	24.50	-27.350	-50.364	-357.987	-195.724	-643.328	44.560	-647.620	36.661	-191.983
)	26.90	-27.798	-37.514	-254.117	-159.510	-223.151	45.312	-316.442	-5.328	-92.129
)	29.30	-28.717	-34.382	-168.481	-130.539	29.843	38.129	-152.317	-42.209	-46.742
)	29.30	-11.990	-26.612	-168.408	-133.662	28.477	36.690	-152.441	-23.107	-38.143
)	32.20	-12.422	-13.075	-118.355	-88.966	325.852	32.356	-108.878	-16.326	-10.235
)	35.10	-13.619	-9.290	-85.171	-70.696	312.142	21.654	-83.274	-16.437	-6.450
)	35.10	-7.290	-10.179	-45.434	-79.238	326.055	7.026	-83.274	-2.730	-0.957
)	36.55	-7.382	-8.386	-32.765	-58.032	402.670	7.465	-85.112	-2.787	0.870
)	38.00	-7.975	-6.429	-22.915	-53.921	337.191	4.546	-88.591	-2.841	2.827
)	38.00	-15.768	-5.861	647.442	-58.870	363.864	-9.157	-88.591	5.872	8.229
)	39.45	-15.923	12.409	642.872	-38.838	274.278	-5.886	-101.290	5.814	10.056
)	40.90	-16.487	31.984	611.847	-35.902	315.911	-5.940	-116.621	5.761	12.014
)	40.90	-50.238	12.040	682.005	-40.182	327.746	-20.582	-116.476	21.722	18.500
)	43.80	-50.516	59.707	572.763	-8.992	130.920	-9.143	-175.516	22.004	22.284
)	46.70	-51.741	107.340	337.796	-5.208	149.918	-9.254	-250.575	31.240	36.119
)	46.70	-71.197	90.270	348.307	-4.575	164.614	-4.959	-250.430	54.625	44.465
)	49.10	-71.415	131.446	76.634	6.778	69.907	3.171	-399.510	13.778	81.867
)	51.50	-72.391	172.582	-275.847	9.910	49.988	3.079	-703.797	-30.147	191.765
)	51.50	-64.563	175.885	-277.941	12.163	49.857	7.138	-703.797	-13.332	198.364
)	52.00	-64.583	182.445	-367.866	12.815	42.152	7.119	-803.636	-17.656	201.844
)	52.50	-64.803	188.998	-459.259	13.468	35.686	7.100	-906.802	-18.830	213.829
)	52.50	-43.407	-43.621	-456.491	-219.194	-909.513	30.177	-906.802	20.794	-215.801
)	53.00	-43.455	-42.968	-434.328	-210.711	-803.810	30.965	-802.686	18.884	-203.708
)	53.50	-43.646	-42.316	-413.557	-205.361	-703.239	29.599	-701.919	19.236	-202.294
)	53.50	-31.643	-38.001	-415.170	-199.276	-704.153	44.595	-702.050	35.254	-195.709
)	55.90	-31.764	-34.869	-328.007	-163.063	-274.670	45.346	-390.560	-12.514	-83.723
)	58.30	-32.740	-31.806	-249.013	-134.092	-15.788	37.877	-238.075	-54.458	-43.972
)	58.30	-12.017	-25.617	-248.835	-137.200	-9.995	34.684	-238.224	-31.455	-34.829
)	61.20	-12.128	-21.832	-177.255	-92.504	294.177	30.350	-180.330	-18.537	-16.100
)	64.10	-13.284	-18.048	-116.388	-72.081	289.213	20.627	-135.963	-18.648	-12.315
)	64.10	-5.079	-13.223	-85.735	-82.370	298.725	8.086	-135.978	-2.411	-6.547
)	65.55	-5.161	-11.396	-67.738	-59.011	372.713	7.550	-129.188	-1.703	-5.046
)	67.00	-5.730	-9.473	-51.150	-55.879	313.959	4.626	-128.705	2.154	2.784
)	67.00	-13.745	-7.232	644.980	-59.740	341.519	-7.555	-128.705	12.306	7.316
)	68.45	-13.866	11.038	642.640	-38.729	242.136	-5.264	-140.349	12.249	9.143
)	69.90	-14.459	30.613	613.799	-36.772	298.406	-5.317	-156.920	12.195	11.100
)	69.90	-49.888	18.012	693.944	-41.900	311.938	-18.947	-156.905	29.860	19.022
)	72.80	-50.096	55.857	584.256	-11.689	107.306	-8.487	-219.096	29.749	22.806
)	75.70	-51.321	103.490	347.088	-7.905	136.487	-8.598	-293.393	39.093	39.053
)	75.70	-68.649	92.564	352.582	-8.110	149.878	-3.146	-293.378	67.277	50.936
)	78.10	-68.804	133.740	82.674	3.244	60.895	4.984	-454.497	24.399	88.959
)	80.50	-69.809	165.089	-276.823	6.376	47.957	4.892	-764.398	-19.928	-196.813

80.50	-63.335	176.191	-271.150	9.890	51.002	9.491	-764.267	-0.211	204.717
81.00	-63.354	182.716	-360.323	10.542	42.908	10.647	-866.724	-0.795	205.369
81.50	-63.574	189.269	-453.933	11.195	36.954	10.628	-973.003	-5.206	222.661
81.50	-41.870	-43.958	-449.797	-228.569	-947.882	51.857	-973.003	35.463	-223.023
82.00	-41.918	-43.306	-428.654	-221.066	-837.369	51.666	-863.991	33.662	-210.843
82.50	-42.075	-42.688	-407.956	-213.562	-762.585	43.448	-759.627	32.709	-209.429
82.50	-28.408	-36.797	-409.740	-206.229	-733.580	67.974	-759.811	52.537	-202.684
85.15	-28.540	-33.274	-317.057	-166.296	-265.124	65.675	-399.353	-2.908	-84.303
87.80	-29.587	-29.950	-234.036	-134.715	21.338	54.996	-225.790	-50.922	-44.462
87.80	-7.116	-24.259	-235.202	-139.367	26.348	51.123	-225.935	-25.470	-33.745
90.95	-7.296	-20.214	-165.850	-91.082	350.477	48.632	-159.627	-15.970	-17.104
94.10	-8.500	-16.072	-108.753	-71.246	327.248	33.260	-112.407	-16.088	-12.928
94.10	-2.981	-11.940	-71.510	-83.479	339.578	14.852	-112.542	-2.041	-5.568
95.68	-3.067	-9.982	-53.615	-58.815	415.692	14.277	-103.214	-2.098	-3.611
97.25	-3.674	-7.894	-38.928	-54.574	348.758	11.316	-100.963	1.429	2.066
97.25	-16.203	-16.591	747.661	-63.031	380.924	-2.809	-100.963	9.591	6.112
98.83	-16.260	14.076	752.430	-40.389	286.168	-0.713	-112.516	9.533	8.200
100.40	-16.959	34.956	713.339	-36.344	327.669	-0.774	-126.498	9.472	10.288
100.40	-61.547	10.793	766.691	-44.517	345.716	-23.696	-126.498	24.763	17.514
103.55	-61.792	61.201	646.017	-9.609	109.007	-9.916	-186.401	24.645	21.690
106.70	-63.097	112.618	375.405	-5.563	134.708	-10.038	-264.250	32.038	35.982
106.70	-85.893	96.760	379.052	-5.782	148.664	-8.580	-264.127	60.321	49.193
109.35	-86.089	140.677	67.406	7.137	41.704	1.887	-446.369	14.081	89.503
112.00	-87.204	175.810	-352.482	10.530	20.395	1.788	-806.201	-41.362	206.970
112.00	-77.334	180.412	-354.041	11.996	22.324	6.681	-806.186	-19.838	216.275
112.50	-77.354	196.724	-447.173	12.649	13.868	7.837	-915.560	-20.356	216.819
113.00	-77.574	203.284	-547.049	13.301	6.260	7.818	-1026.198	-21.939	229.869
113.00	-54.670	-50.418	-544.707	-231.638	-1031.603	31.765	-1026.198	20.772	-227.636
113.50	-54.689	-49.765	-519.214	-223.155	-886.335	40.383	-915.444	19.384	-216.848
114.00	-54.875	-49.147	-494.846	-216.826	-780.166	40.191	-808.289	16.257	-211.301
116.65	-39.284	-40.351	-494.197	-209.152	-781.602	60.650	-808.419	39.162	-202.127
119.30	-40.297	-36.896	-283.918	-137.638	-308.123	58.350	-452.408	-14.491	-88.

VIADUCTO BORGES BLANQUES

(1)	9.40	-4.516	-3.782	155.290	1.099	99.878	-13.357	-89.412	17.953	6.624
(2)	10.58	-3.110	-3.956	161.605	-0.728	114.868	-10.370	-96.803	20.580	6.450
(3)	11.75	-0.493	-4.130	167.846	-1.011	118.260	-7.753	-104.330	23.197	6.276
(1)	11.75	-17.908	3.488	167.846	3.019	18.427	-2.854	-104.330	24.595	4.955
(1)	12.93	-15.193	3.329	165.712	1.228	30.714	1.899	-109.139	28.847	4.795
(1)	14.10	-12.412	3.155	162.664	1.054	29.548	4.516	-113.850	31.464	4.621
(1)	14.10	-36.253	12.868	162.533	2.230	-64.412	18.195	-113.850	36.422	0.273
(2)	15.45	-33.963	12.717	134.215	-0.032	-45.497	24.734	-112.834	47.682	-0.399
(3)	18.80	-27.312	12.383	106.045	-0.365	-44.912	31.385	-109.463	59.953	-1.056
(1)	18.80	-38.018	16.864	104.938	-5.569	-107.486	53.792	-109.593	74.305	-8.974
(2)	20.65	-36.623	16.981	73.986	-6.367	-88.514	58.588	-84.910	54.570	-17.436
(3)	22.50	-30.865	16.720	43.504	-6.628	-75.449	64.149	-46.378	31.973	-23.656
(1)	22.50	-29.545	14.399	43.214	-10.317	-75.231	67.264	-46.356	44.152	-29.244
(2)	23.00	-29.239	14.523	35.440	-10.389	-70.597	68.485	-33.496	14.898	-21.095
(3)	23.50	-28.149	14.450	28.373	-10.462	-64.640	69.576	-22.565	8.874	-20.558
(1)	23.50	-24.092	31.584	28.105	-8.993	-12.320	67.400	-22.565	16.875	2.208
(2)	24.00	-23.787	30.859	13.251	-9.935	-6.783	67.618	-24.814	15.983	0.613
(3)	24.50	-22.696	30.134	-2.947	-10.660	-1.881	67.596	-25.588	15.114	1.520
(1)	24.50	-15.667	26.007	-2.294	-14.319	-1.750	76.701	-24.283	29.308	-4.488
(2)	26.90	-13.115	22.134	-61.420	-18.343	38.560	77.442	-22.188	-39.727	13.803
(3)	29.30	-7.862	17.567	-107.813	-21.562	97.281	77.270	-63.737	-56.535	20.719
(1)	29.30	0.875	12.442	-107.282	-12.182	98.735	55.723	-63.750	-42.048	13.303
(2)	32.20	3.339	6.953	-134.998	-17.149	142.224	56.029	-94.404	-17.431	11.775
(3)	35.10	10.154	2.748	-148.036	-19.179	221.444	55.596	-128.298	-11.106	11.355
(1)	35.10	9.266	1.245	-53.989	-2.856	129.418	8.203	-128.298	-4.365	6.260
(2)	36.55	9.789	-0.981	-53.007	-5.212	138.106	8.639	-135.904	0.542	6.057
(3)	38.00	13.169	-3.156	-48.747	-5.669	162.890	8.683	-144.303	3.595	5.839
(1)	38.00	-1.713	-0.543	170.341	0.323	4.904	-2.463	-144.303	7.582	1.955
(2)	39.45	-0.830	-0.746	171.533	-1.902	24.856	0.982	-146.068	10.988	1.752
(3)	40.90	2.387	-0.963	173.311	-2.229	30.630	4.231	-149.830	15.677	1.534
(1)	40.90	-33.447	14.474	218.862	-2.887	-55.493	-10.669	-149.975	23.805	-3.800
(2)	43.80	-31.866	14.250	176.849	-6.352	-13.296	-3.061	-136.814	30.164	-4.221
(3)	46.70	-24.887	13.830	134.550	-6.773	4.740	4.899	-122.089	53.269	-6.336
(1)	46.70	-46.823	24.126	134.963	-12.560	-116.057	46.657	-122.234	72.072	-15.837
(2)	49.10	-45.580	24.170	76.930	-13.821	-73.273	54.440	-80.677	54.918	-14.775
(3)	51.50	-40.019	23.986	18.019	-14.169	-40.115	61.310	-68.522	-11.462	0.646
(1)	51.50	-35.636	21.029	17.782	-17.905	-38.941	66.839	-68.522	5.096	-7.660
(2)	52.00	-35.527	21.152	6.787	-17.977	-29.872	67.930	-64.587	2.813	-7.080
(3)	52.50	-34.273	21.243	-5.166	-18.050	-21.105	69.020	-61.442	-2.973	-6.479
(1)	52.50	-31.136	33.796	-4.852	-8.456	6.723	70.188	-61.442	6.156	4.507
(2)	53.00	-30.864	33.071	-22.014	-9.399	12.060	70.405	-62.694	1.240	4.130
(3)	53.50	-29.773	32.346	-38.249	-9.993	17.775	70.384	-65.702	-2.457	5.906
(1)	53.50	-20.867	26.891	-37.693	-13.667	14.396	78.463	-65.687	14.823	-2.270
(2)	55.90	-20.180	23.411	-98.446	-17.691	53.144	79.204	-72.180	-49.974	11.759
(3)	58.30	-14.619	18.451	-149.096	-20.910	110.737	79.031	-116.769	-67.425	22.804
(1)	58.30	-2.343	11.976	-145.162	-11.660	45.415	40.208	-116.808	-49.831	13.063
(2)	61.20	-1.711	6.683	-172.195	-16.627	91.072	40.514	-148.086	-25.120	10.623
(3)	64.10	4.875	1.391	-183.308	-18.896	171.115	40.190	-178.793	-18.796	10.202
(1)	64.10	5.410	-1.258	-137.829	-4.828	104.440	6.839	-178.663	-9.348	3.787
(2)	65.55	5.879	-3.288	-133.142	-7.424	116.971	7.144	-183.324	2.192	6.521
(3)	67.00	9.117	-5.659	-126.422	-7.772	144.202	7.210	-192.488	6.033	5.651
(1)	67.00	-2.367	-2.136	153.675	-2.867	-31.077	-4.763	-192.488	11.285	0.896
(2)	68.45	-1.680	-2.339	157.483	-5.201	-5.542	-1.427	-194.483	14.557	0.693
(3)	69.90	1.700	-2.557	160.790	-5.419	2.888	1.822	-196.919	19.245	0.476
(1)	69.90	-31.687	15.359	228.857	-5.983	-89.256	-10.856	-197.049	29.947	-6.178
(2)	72.80	-30.499	14.939	188.193	-9.339	-36.602	-3.357	-178.782	36.271	-6.599
(3)	75.70	-23.520	14.518	144.357	-9.760	-7.801	4.603	-159.416	60.758	-8.779
(1)	75.70	-46.638	23.305	144.591	-15.534	-137.153	44.418	-159.546	83.823	-20.081
(2)	78.10	-45.754	23.349	89.312	-16.795	-86.400	52.201	-114.074	65.775	-15.823
(3)	80.50	-40.030	23.165	33.132	-17.143	-46.094	57.435	-96.329	2.419	-1.141
(1)	80.50	-33.985	20.355	32.853	-22.372	-72.339	76.855	-96.343	22.689	-9.593
(2)	81.00	-33.876	20.282	23.274	-22.445	-62.117	78.076	-92.179	22.798	-9.665
(3)	81.50	-32.622	20.373	12.189	-22.517	-49.917	80.802	-86.330	21.471	-11.586
(1)	81.50	-29.344	36.025	12.353	-13.535	-25.321	85.855	-86.330	28.588	-2.551
(2)	82.00	-29.071	35.300	-5.149	-14.369	-18.237	85.964	-84.879	24.651	-1.971
(3)	82.50	-28.177	33.291	-22.905	-15.202	-7.081	85.182	-85.903	17.909	-0.195
(1)	82.50	-17.617	28.472	-23.128	-20.112	-16.195	96.904	-84.620	39.549	-8.519
(2)	85.15	-16.865	24.557	-93.457	-24.549	45.741	97.384	-74.079	-44.665	12.339
(3)	87.80	-10.900	19.307	-150.011	-28.058	127.057	96.907	-120.724	-62.094	21.823
(1)	87.80	1.441	12.234	-150.667	-16.384	61.669	55.310	-120.579	-43.565	10.123
(2)	90.95	2.466	6.651	-179.187	-21.749	128.024	55.900	-147.861	-23.043	8.077
(3)	94.10	9.324	0.727	-188.226	-23.953	232.145	55.031	-174.249	-14.319	7.613
(1)	94.10	7.390	-0.982	-55.044	-4.705	162.162	20.337	-174.452	-7.328	2.519
(2)	95.68	7.891	-3.157	-53.244	-7.445	176.844	20.664	-178.307	-3.893	2.301
(3)	97.25	11.338	-5.477	-45.507	-7.917	207.464	20.752	-185.177	6.122	4.570
(1)	97.25	-5.860	0.914	154.701	-2.243	-21.118	1.485	-185.177	9.294	0.128
(2)	98.83	-5.533	0.682	153.942	-4.759	3.581	5.193	-187.391	12.728	-0.104
(3)	100.40	-1.553	0.450	152.890	-5.208	13.040	8.486	-188.046	16.218	-0.336
(1)	100.40	-45.172	22.957	300.529	-3.887	-100.154	-11.853	-188.046	24.481	-5.366
(2)	103.55	-43.777	22.689	232.460	-7.766	-46.366	-3.548	-169.978	33.012	-5.830
(3)	106.70	-36.340	22.240	165.092	-8.216	-22.785	5.066	-149.581	52.446	-7.778
(1)	106.70	-63.586	31.916	167.292	-15.019	-147.465	41.040	-149.764	74.536	-19.721
(2)	109.35	-62.474	31.917	81.075	-16.455	-96.729	49.738	-102.317	56.973	-14.916
(3)	112.00	-56.117	31.703	-2.904	-16.832	-54.256	57.044	-102.317	56.973	-14.916

VIADUCTO BORGES BLANQUES

112.00	-48.330	27.951	-5.636	-21.591	-82.052	74.825	-102.345	7.481	-6.754
112.50	-48.221	27.879	-19.691	-21.663	-72.047	76.046	-98.834	4.654	-2.848
113.00	-46.967	28.002	-33.907	-21.736	-61.140	78.772	-96.127	-6.025	-4.398
113.00	-43.659	36.761	-33.811	-11.001	-5.452	81.019	-96.127	-2.502	5.181
113.50	-43.550	36.036	-50.837	-11.943	-3.156	82.107	-99.878	-8.156	7.849
114.00	-42.492	34.027	-68.535	-12.647	2.192	82.216	-103.143	-8.373	7.233
114.00	-29.714	28.123	-68.535	-17.723	3.512	94.772	-103.128	16.037	-2.650
116.65	-28.962	24.223	-138.286	-22.276	57.596	95.252	-109.444	-58.499	15.830
119.30	-23.194	18.958	-192.767	-25.669	134.985	94.536	-156.543	-76.145	17.242
119.30	-6.402	9.997	-192.085	-15.387	8.592	42.815	-156.352	-54.202	4.421
122.45	-5.377	4.269	-214.289	-20.788	69.289	43.404	-167.162	-35.126	2.917
125.60	1.285	-1.509	-215.589	-22.847	169.632	42.666	-175.050	-27.904	2.467
125.60	-0.003	-2.381	-100.883	-5.038	-18.202	7.736	-174.997	-20.877	-2.796
127.18	0.509	-4.701	-94.114	-7.663	-4.161	8.085	-168.913	-15.752	-3.028
128.75	4.129	-7.021	-83.687	-8.134	26.589	8.173	-163.708	-11.800	-3.260
128.75	-10.133	0.218	119.915	-3.570	-128.195	-4.510	-163.708	-8.818	-7.702
130.33	-9.784	0.001	119.906	-6.071	-100.959	-0.651	-152.057	-5.329	-7.920
131.90	-6.001	-0.231	122.744	-6.521	-90.095	2.642	-140.996	-1.839	-8.152
131.90	-49.676	22.323	269.933	-6.641	-185.816	1.062	-141.011	3.585	-12.274
135.05	-48.651	21.859	201.185	-10.520	-123.215	9.585	-102.335	12.363	-12.738
138.20	-41.236	20.518	135.178	-10.969	-89.660	17.981	-65.334	32.494	-13.045
138.20	-68.158	31.105	133.886	-16.323	-89.805	22.716	-65.311	45.080	-19.962
140.85	-67.242	30.728	51.444	-17.613	-30.315	31.414	-22.692	19.602	-6.517
143.50	-61.638	29.805	-31.072	-18.005	19.254	38.720	-47.207	-53.335	12.710
143.50	-54.663	25.000	-32.161	-21.635	20.265	40.344	-47.207	-31.934	3.211
144.00	-54.554	24.928	-44.823	-21.708	31.429	41.565	-49.459	-31.825	3.030
144.00	-53.496	25.051	-58.997	-21.780	43.198	42.655	-51.056	-38.045	2.392
144.50	-48.313	33.437	-58.344	8.462	74.790	56.549	-51.056	-28.580	24.426
144.50	-48.204	32.712	-74.840	7.410	71.655	56.223	-63.695	-49.612	28.921
145.00	-47.146	31.790	-91.383	6.685	69.467	56.333	-80.499	-75.233	34.612
145.00	-39.053	27.110	-91.715	3.469	70.750	63.201	-81.565	-62.796	29.047
147.35	-38.661	23.398	-138.749	0.409	66.231	63.811	-122.581	-65.732	18.223
149.20	-35.171	20.265	-179.606	-2.462	77.277	63.356	-148.330	-88.114	10.037
149.20	-20.171	12.614	-179.588	1.521	-18.100	35.807	-148.312	-68.947	1.927
151.55	-19.670	8.047	-203.510	-2.503	-11.692	35.983	-150.640	-56.455	1.059
153.90	-15.875	4.352	-216.360	-4.685	15.690	35.658	-150.363	-43.095	0.402
153.90	-9.936	-0.267	-215.020	0.320	-100.977	-0.214	-150.527	-36.753	-5.615
155.08	-9.674	-2.007	-213.623	-1.746	-99.231	0.048	-142.817	-33.940	-5.789
156.25	-7.929	-4.820	-208.805	-2.711	-81.248	-0.343	-137.232	-29.905	-5.948
156.25	-5.183	-6.252	-208.805	-3.066	-193.869	-19.905	-135.949	-27.201	-8.284
157.43	-4.922	-7.861	-200.658	-4.806	-189.821	-19.644	-126.488	-24.584	-8.458
158.60	-3.122	-9.587	-189.948	-5.423	-158.704	-20.187	-117.826	-21.967	-8.617
158.60	-5.670	0.844	-56.202	-7.367	-155.773	-19.084	-116.847	-20.686	-10.739
160.95	-5.004	-2.505	-54.889	-10.173	-98.472	-14.198	-89.985	-14.035	-11.087
163.30	-2.158	-5.971	-42.556	-10.507	-73.991	-7.329	-63.648	-8.801	-11.420
163.30	-10.945	7.663	32.157	-12.316	-73.972	-10.708	-63.793	-10.578	-13.230
165.15	-10.553	7.402	18.634	-13.360	-39.021	-5.147	-38.499	-5.017	-13.491
167.00	-9.190	7.487	3.705	-13.636	-14.873	-1.004	-14.220	-0.873	-13.766
167.00	-1.423	3.955	3.883	-14.200	-14.925	-2.673	-14.273	-2.673	-14.200
167.50	-1.314	3.883	2.412	-14.273	-5.965	-1.582	-5.965	-1.582	-14.273
168.00	-1.205	3.810	0.000	-14.345	0.000	1.144	0.000	-0.424	-28.822
	0.000	-0.960	-1.554	-0.960	-1.554	0.000	-1.358	0.000	-1.156
	0.000	-0.960	-0.513	-0.960	-0.513	0.000	-0.120	0.000	-0.178
	0.000	-0.960	0.196	-0.960	1.371	0.000	0.263	0.000	-0.240
	0.000	-3.544	-7.428	-3.544	-8.472	0.000	-7.883	0.000	-3.936
	0.000	-3.544	-3.345	-3.544	-2.170	0.000	-0.662	0.000	-0.579
	0.000	-3.544	2.231	-3.544	3.405	0.000	0.981	0.000	-0.878
	-1.320	6.274	3.718	0.184	-4.351	-0.276	-2.781	-0.276	-0.797
	-1.320	6.274	-4.800	0.184	-4.670	-0.276	-1.232	-0.145	-0.061
	0.000	9.288	12.568	-1.686	-4.141	-0.276	-6.684	-1.320	4.382
	0.000	9.288	-3.591	-1.686	-4.775	0.000	-3.041	0.000	-3.028
	0.000	9.288	-17.996	-1.686	-3.901	0.000	-1.052	0.000	0.452
	0.000	2.965	5.339	-0.299	-2.709	0.000	-16.200	0.000	9.152
	0.000	2.965	-0.192	-0.299	-4.396	0.000	-3.414	0.000	-1.247
	0.000	2.965	-6.052	-0.299	-3.345	0.000	-0.662	0.000	0.340
	0.000	2.105	3.539	-2.826	-0.787	0.000	-12.032	0.000	6.931
	0.000	2.105	-0.476	-2.826	-8.409	0.000	-6.871	0.000	-4.364
	0.000	2.105	-3.291	-2.826	-3.709	0.000	-1.023	0.000	0.291
	0.276	-6.570	-11.398	-5.726	-0.249	0.000	-15.502	0.000	8.860
	0.276	-6.570	0.622	-5.726	-13.396	0.276	-12.415	0.276	-6.707
	0.276	-6.570	11.604	-5.726	-4.800	0.276	-1.232	0.145	-0.512
	0.000	-4.601	-7.739	-4.863	-4.234	0.276	-5.925	1.320	3.524
	0.000	-4.601	-1.768	-4.863	-9.964	0.000	-9.376	0.000	-5.256
	0.000	-4.601	5.147	-4.863	-1.978	0.000	-0.634	0.000	-0.724
	0.000	-1.217	-2.079	-2.100	4.641	0.000	1.303	0.000	-1.154
	0.000	-1.217	-0.820	-2.100	-4.240	0.000	-4.043	0.000	-2.296
	0.000	-1.217	1.306	-2.100	-1.474	0.000	-0.329	0.000	-0.339
	0.000	-2.307	-5.255	-5.823	1.600	0.000	0.559	0.000	-0.532
	0.000	-2.307	-1.824	-5.823	-11.485	0.000	-10.897	0.000	-6.216
	0.000	-2.307	2.518	-5.823	-2.939	0.000	-0.843	0.000	-0.902
	-1.320	8.561	6.915	-5.642	5.925	0.000	1.580	0.000	-1.393
	-1.320	8.561	6.915	-5.642	-15.734	-0.276	-14.164	-0.276	-0.276

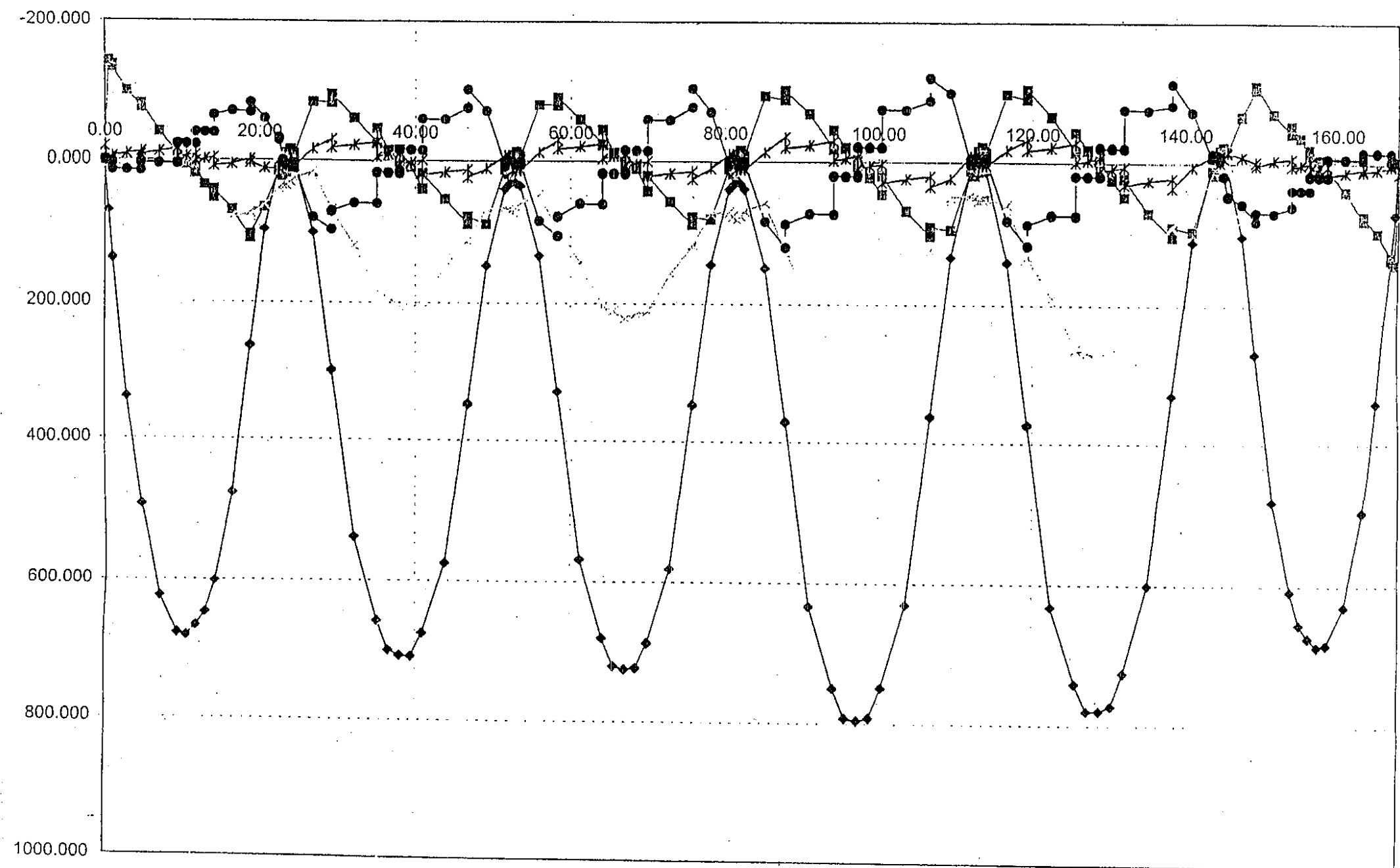
VIADUCTO BORGES BLANQUES

0.000	10.434	10.306	-1.572	-9.704	0.000	-7.382	0.000	-3.109
0.000	10.434	-4.864	-1.572	-4.864	0.000	-1.263	0.000	0.871
0.000	10.434	-20.111	-1.572	-1.254	0.000	-27.596	0.000	17.277
0.000	5.884	7.001	-1.727	-6.322	0.000	-4.588	0.000	-2.676
0.000	5.884	-1.976	-1.727	-2.747	0.000	-0.814	0.000	0.630
0.000	5.884	-10.044	-1.727	-0.413	0.000	-19.280	0.000	12.665
0.000	5.382	9.334	-3.725	-9.704	0.000	-7.382	0.000	-5.263
0.000	5.382	0.596	-3.725	-4.864	0.000	-1.263	0.000	0.871
0.000	5.382	-9.201	-3.725	-0.079	0.000	-27.596	0.000	17.038
0.276	-7.020	-9.551	-7.940	-17.742	0.276	-15.976	0.276	-8.922
0.276	-7.020	0.584	-7.940	-6.030	0.276	-1.477	0.145	-0.400
0.276	-7.020	10.309	-7.940	6.747	0.276	-14.085	1.320	8.782
0.000	-4.706	-9.174	-5.823	-12.451	0.000	-11.863	0.000	-6.412
0.000	-4.706	-0.801	-5.823	-2.747	0.000	-0.814	0.000	-0.902
0.000	-4.706	6.213	-5.823	5.908	0.000	1.693	0.000	-1.428
0.000	-1.217	-2.110	-2.100	-4.370	0.000	-4.174	0.000	-2.296
0.000	-1.217	-0.820	-2.100	-1.282	0.000	-0.300	0.000	-0.339
0.000	-1.217	1.552	-2.100	1.614	0.000	0.574	0.000	-0.532
0.000	-2.307	-6.277	-5.823	-12.451	0.000	-11.863	0.000	-6.412
0.000	-2.307	-1.363	-5.823	-2.747	0.000	-0.814	0.000	-0.902
0.000	-2.307	3.058	-5.823	5.908	0.000	1.693	0.000	-1.393
-1.320	8.285	6.770	-7.940	-17.742	-0.276	-15.976	-0.276	-8.922
-1.320	8.285	-6.030	-7.940	-6.030	-0.276	-1.448	-0.145	-0.400
-1.320	8.285	-17.657	-7.940	6.747	-0.276	-14.085	-1.320	8.782
0.000	9.115	9.476	-3.870	-10.832	0.000	-8.673	0.000	-5.408
0.000	9.115	-4.403	-3.870	-4.864	0.000	-1.263	0.000	0.726
0.000	9.115	-18.036	-3.870	0.258	0.000	-27.320	0.000	16.893
0.000	4.905	3.865	-1.727	-7.333	0.000	-5.763	0.000	-2.676
0.000	4.905	-2.206	-1.727	-2.747	0.000	-0.814	0.000	0.630
0.000	4.905	-7.929	-1.727	0.790	0.000	-19.121	0.000	12.665
0.000	5.237	8.232	-3.870	-10.613	0.000	-8.651	0.000	-5.408
0.000	5.237	0.712	-3.870	-4.748	0.000	-1.147	0.000	0.726
0.000	5.237	-6.768	-3.870	2.450	0.000	-27.282	0.000	16.893
0.276	-4.276	-6.952	-9.080	-19.842	0.276	-19.250	0.276	-10.061
0.276	-4.276	0.584	-9.080	-6.030	0.276	-1.448	0.145	-0.562
0.276	-4.276	8.036	-9.080	9.234	0.276	-13.443	1.320	8.593
0.000	-6.026	-10.459	-7.143	-13.771	0.000	-12.986	0.000	-7.535
0.000	-6.026	-0.801	-7.143	-2.747	0.000	-0.814	0.000	-1.047
0.000	-6.026	8.708	-7.143	9.381	0.000	1.934	0.000	-1.669
0.000	-1.217	-3.299	-2.100	-4.385	0.000	-4.188	0.000	-2.296
0.000	-1.217	-0.820	-2.100	-1.282	0.000	-0.300	0.000	-0.339
0.000	-1.217	1.682	-2.100	2.919	0.000	0.704	0.000	-0.532
-1.175	-4.587	-8.566	-8.137	-14.021	0.000	-13.236	0.000	-7.552
-1.175	-4.587	-1.388	-8.137	-3.004	0.000	-0.874	0.000	-1.063
-1.175	-4.587	4.317	-8.137	7.948	0.000	2.035	0.000	-1.685
-1.320	8.741	8.110	-7.354	-18.312	-0.276	-16.350	-0.276	-8.532
-1.320	8.741	-6.543	-7.354	-6.735	-0.276	-1.597	-0.145	-0.417
-1.320	8.741	-19.967	-7.354	6.325	-0.276	-17.624	-1.320	11.294
0.000	10.871	13.181	-3.223	-8.809	0.000	-6.094	0.000	-4.565
0.000	10.871	-5.261	-3.223	-5.261	0.000	-1.268	0.000	1.177
0.000	10.871	-22.468	-3.223	-1.566	0.000	-33.965	0.000	20.868
0.000	7.588	9.785	-1.311	-5.731	0.000	-3.604	0.000	-2.096
0.000	7.588	-1.288	-1.311	-3.004	0.000	-0.874	0.000	0.949
0.000	7.588	-12.344	-1.311	-1.643	0.000	-25.491	0.000	15.304
0.000	8.043	11.389	-3.044	-8.968	0.000	-6.253	0.000	-4.581
0.000	8.043	0.661	-3.044	-5.261	0.000	-1.268	0.000	1.161
0.000	8.043	-11.441	-3.044	-0.736	0.000	-33.951	0.000	20.852
0.276	-1.912	-2.302	-8.674	-20.937	0.276	-18.974	0.276	-9.655
0.276	-1.912	0.402	-8.674	-6.735	0.276	-1.597	0.145	-0.417
0.276	-1.912	2.062	-8.674	7.659	0.276	-17.169	1.320	11.018
0.131	-6.230	-10.859	-8.282	-16.553	0.000	-15.768	0.000	-8.675
0.131	-6.230	-0.827	-8.282	-3.004	0.000	-0.874	0.000	-1.208
0.131	-6.230	9.141	-8.282	10.028	0.000	2.420	0.000	-1.926
0.000	-1.217	-3.299	-2.100	-4.385	0.000	-4.188	0.000	-2.296
0.000	-1.217	-0.590	-2.100	-1.282	0.000	-0.300	0.000	-0.339
0.000	-1.217	1.813	-2.100	3.898	0.000	0.704	0.000	-0.532
-1.175	-4.862	-8.954	-8.282	-16.553	0.000	-15.768	0.000	-8.675
-1.175	-4.862	-1.519	-8.282	-3.004	0.000	-0.874	0.000	-1.208
-1.175	-4.862	4.571	-8.282	10.028	0.000	2.454	0.000	-1.926
-1.320	5.333	2.353	-8.674	-21.100	-0.276	-18.974	-0.276	-9.655
-1.320	5.333	-5.430	-8.674	-6.735	-0.276	-1.597	-0.145	-0.417
-1.320	5.333	-14.326	-8.674	7.630	-0.276	-17.169	-1.320	11.018
0.000	10.006	11.107	-3.044	-8.968	0.000	-6.253	0.000	-4.581
0.000	10.006	-5.261	-3.044	-5.261	0.000	-1.268	0.000	1.161
0.000	10.006	-21.551	-3.044	-0.736	0.000	-33.951	0.000	20.852
0.000	6.544	9.685	-1.176	-5.861	0.000	-3.735	0.000	-0.950
0.000	6.544	-1.388	-1.176	-3.326	0.000	-0.903	0.000	0.949
0.000	6.544	-12.574	-1.176	-1.643	0.000	-24.316	0.000	15.435
0.000	7.126	11.665	-0.925	-8.823	0.000	-6.108	0.000	-2.266
0.000	7.126	0.661	-0.925	-5.261	0.000	-1.268	0.000	1.322
0.000	7.126	-10.542	-0.925	-2.904	0.000	-34.096	0.000	21.252
0.276	-2.405	-3.726	-6.361	-15.668	0.276	-13.706	0.276	-7.735
0.276	-2.405	0.533	-6.361	-6.735	0.276	-1.597	0.145	-0.127
0.276	-2.405	3.617	-6.361	2.006	0.276	-16.875	1.320	10.344

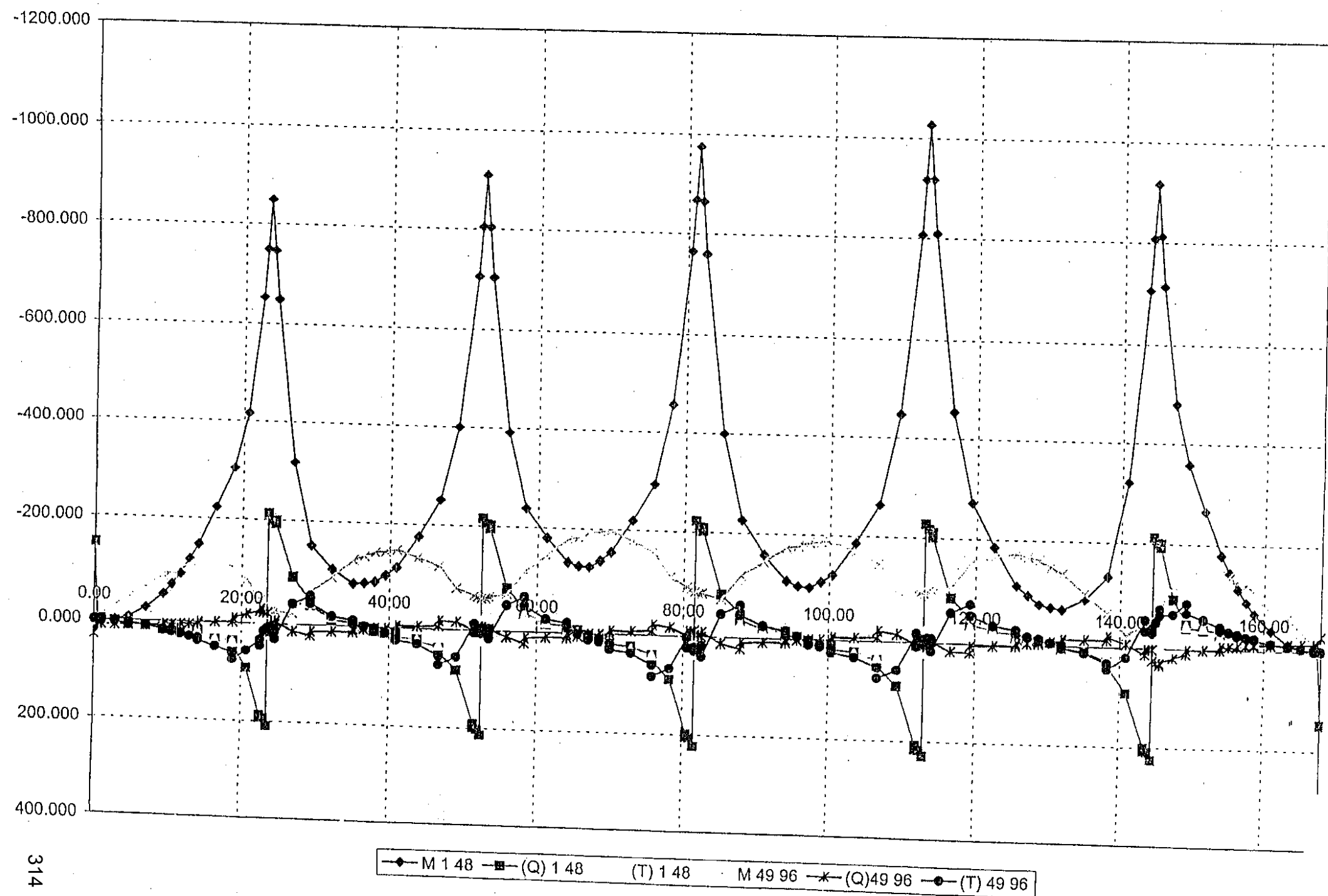
VIADUCTO BORGES BLANQUES

0.131	-5.207	-9.048	-6.828	-13.891	0.000	-13.302	0.000	-7.221
0.131	-5.207	-1.348	-6.828	-3.196	0.000	-0.903	0.000	-1.092
0.131	-5.207	6.625	-6.828	8.912	0.000	2.055	0.000	-1.651
0.000	-1.217	-1.894	-1.965	-4.385	0.000	-4.188	0.000	-1.965
0.000	-1.217	-0.782	-1.965	-1.474	0.000	-0.329	0.000	-0.339
0.000	-1.217	0.869	-1.965	3.898	0.000	0.704	0.000	-0.497
0.000	-1.492	-5.314	-6.183	-11.066	0.000	-10.673	0.000	-6.379
0.000	-1.492	-1.538	-6.183	-1.978	0.000	-0.634	0.000	-0.869
0.000	-1.492	1.941	-6.183	5.999	0.000	1.583	0.000	-1.395
-1.320	2.117	0.038	-7.845	-16.035	-0.276	-15.054	-0.276	-8.630
-1.320	2.117	-4.800	-7.845	-4.670	-0.276	-1.232	-0.145	-0.674
-1.320	2.117	-9.504	-7.845	7.852	-0.276	-5.374	-1.320	3.192
0.000	5.142	4.605	-4.146	-8.554	0.000	-8.191	0.000	-4.509
0.000	5.142	-3.709	-4.146	-3.709	0.000	-1.023	0.000	0.146
0.000	5.142	-11.958	-4.146	2.179	0.000	-15.226	0.000	8.715
0.000	2.529	2.484	-1.277	-4.410	0.000	-4.603	0.000	-2.226
0.000	2.529	-3.345	-1.277	-3.345	0.000	-0.662	0.000	0.340
0.000	2.529	-6.572	-1.277	-0.656	0.000	-11.771	0.000	6.822
0.000	-1.424	-4.151	-1.686	-6.094	0.000	-4.361	0.000	-3.028
0.000	-1.424	-1.209	-1.686	-3.901	0.000	-1.052	0.000	0.452
0.000	-1.424	0.223	-1.686	-2.564	0.000	-15.924	0.000	9.152
0.276	-1.542	-2.723	0.184	-6.649	0.276	-5.079	0.276	-0.797
0.276	-1.542	0.622	0.184	-4.670	0.276	-1.232	0.145	-0.061
0.276	-1.542	4.096	0.184	-3.996	0.276	-6.300	1.320	4.347
0.000	-0.809	-1.607	-4.718	-8.602	0.000	-8.013	0.000	-3.936
0.000	-0.809	-0.192	-4.718	-2.170	0.000	-0.662	0.000	-0.579
0.000	-0.809	2.177	-4.718	3.420	0.000	1.030	0.000	-0.878
0.000	-0.240	-0.440	-0.960	-2.729	0.000	-2.532	0.000	-1.156
0.000	-0.240	-0.051	-0.960	-0.513	0.000	-0.120	0.000	-0.178
0.000	-0.240	0.297	-0.960	1.371	0.000	0.393	0.000	-0.240
0.000	405.625	30.675	25.105	1.607	0.000	1.607	0.000	25.105
0.000	405.625	15.918	25.105	1.400	0.000	1.400	0.000	25.105
0.000	405.625	0.000	25.105	0.000	0.000	0.000	0.000	171.465
0.000	188.219	14.492	19.769	1.737	0.000	1.737	0.000	19.769
0.000	188.219	7.697	19.769	0.356	0.000	0.356	0.000	19.769
0.000	188.219	0.000	19.769	0.000	0.000	0.000	0.000	135.681
0.000	230.055	17.852	20.208	1.868	0.000	1.868	0.000	20.208
0.000	230.055	9.068	20.208	0.356	0.000	0.356	0.000	20.208
0.000	230.055	0.000	20.208	0.000	0.000	0.000	0.000	176.393
0.000	306.440	23.033	25.715	1.853	0.000	1.853	0.000	25.715
0.000	306.440	11.564	25.715	1.643	0.000	1.643	0.000	25.715
0.000	306.440	0.000	25.715	0.000	0.000	0.000	0.000	194.982
0.000	273.075	20.530	27.030	1.737	0.000	1.737	0.000	27.030
0.000	273.075	10.277	27.030	1.530	0.000	1.530	0.000	27.030
0.000	273.075	0.000	27.030	0.000	0.000	0.000	0.000	258.625
0.000	-10.287	-0.569	-6.544	-0.315	0.000	-0.315	0.000	-6.544
0.000	-10.287	-0.396	-6.544	0.200	0.000	0.200	0.000	-6.544
0.000	-10.287	0.000	-6.544	0.000	0.000	0.000	0.000	-16.637
0.000	-2.829	0.025	-18.975	-1.489	0.000	-1.489	0.000	-18.975
0.000	-2.829	-0.627	-18.975	-0.844	0.000	-0.844	0.000	-18.975
0.000	-2.829	0.000	-18.975	0.000	0.000	0.000	0.000	-17.570
0.000	-16.717	-1.405	-19.392	-1.504	0.000	-1.504	0.000	-19.392
0.000	-16.717	-0.657	-19.392	-0.844	0.000	-0.844	0.000	-19.392
0.000	-16.717	0.000	-19.392	0.000	0.000	0.000	0.000	-4.660
0.000	0.552	0.278	-11.167	-0.213	0.000	-0.213	0.000	-11.167
0.000	0.552	-0.589	-11.167	-0.809	0.000	-0.809	0.000	-11.167
0.000	0.552	0.000	-11.167	0.000	0.000	0.000	0.000	-18.558
0.000	-32.554	-2.383	-9.664	-0.329	0.000	-0.329	0.000	-9.664
0.000	-32.554	-1.149	-9.664	-0.974	0.000	-0.974	0.000	-9.664
0.000	-32.554	0.000	-9.664	0.000	0.000	0.000	0.000	-19.224

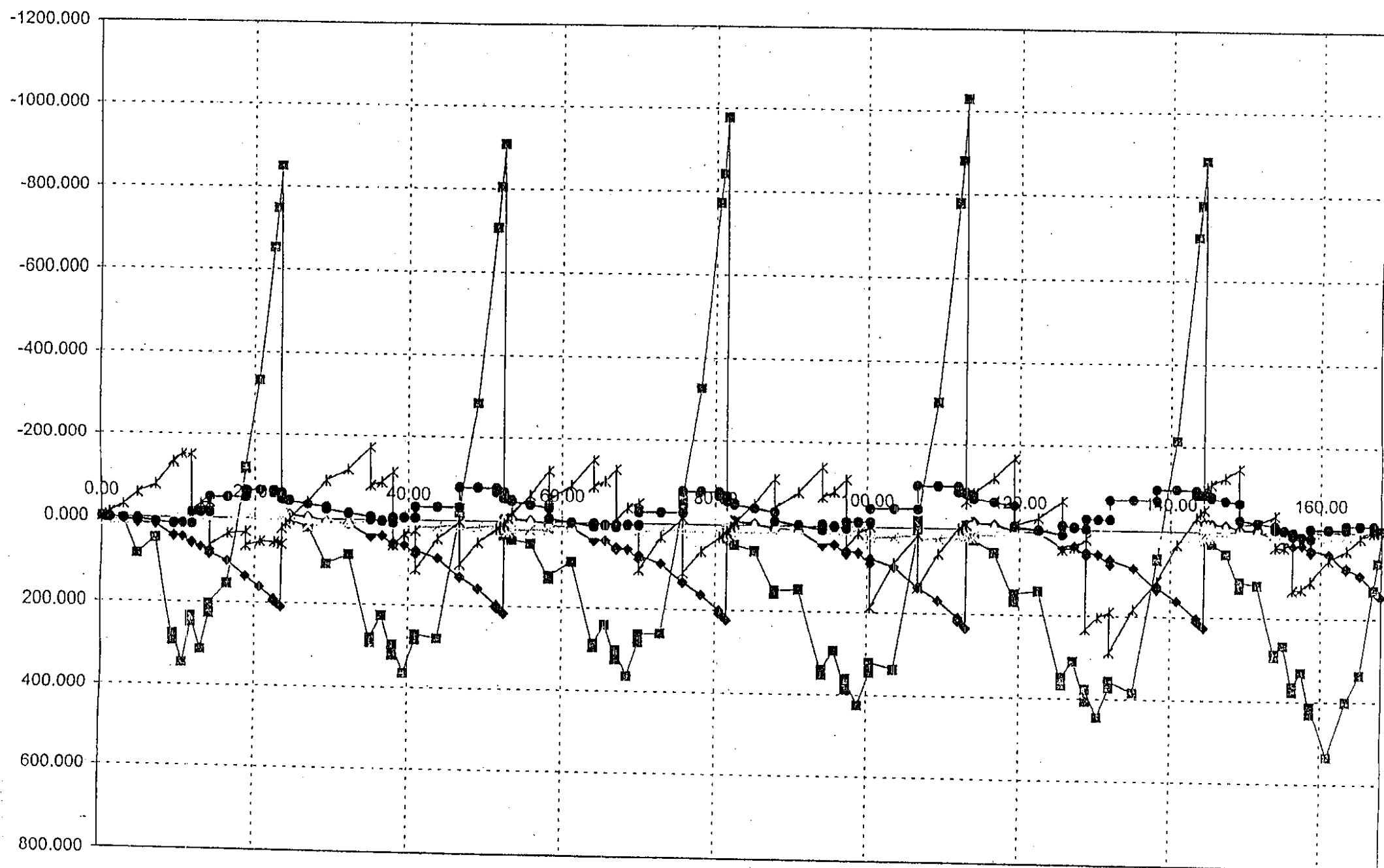
Hip I. M Qcon Tcon



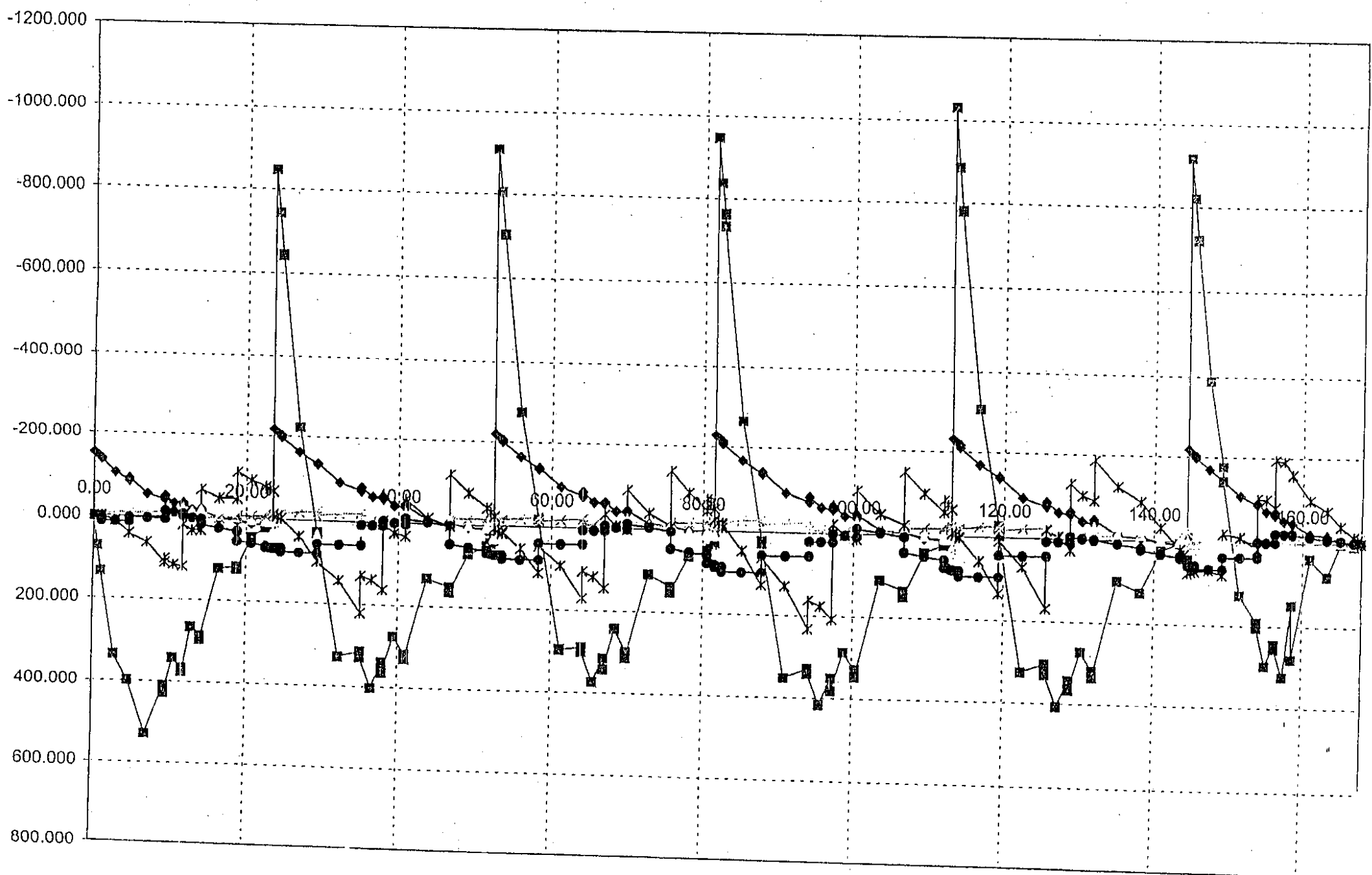
Hip I. M Qcon Tcon



Hip I. Q Mcon Tcon

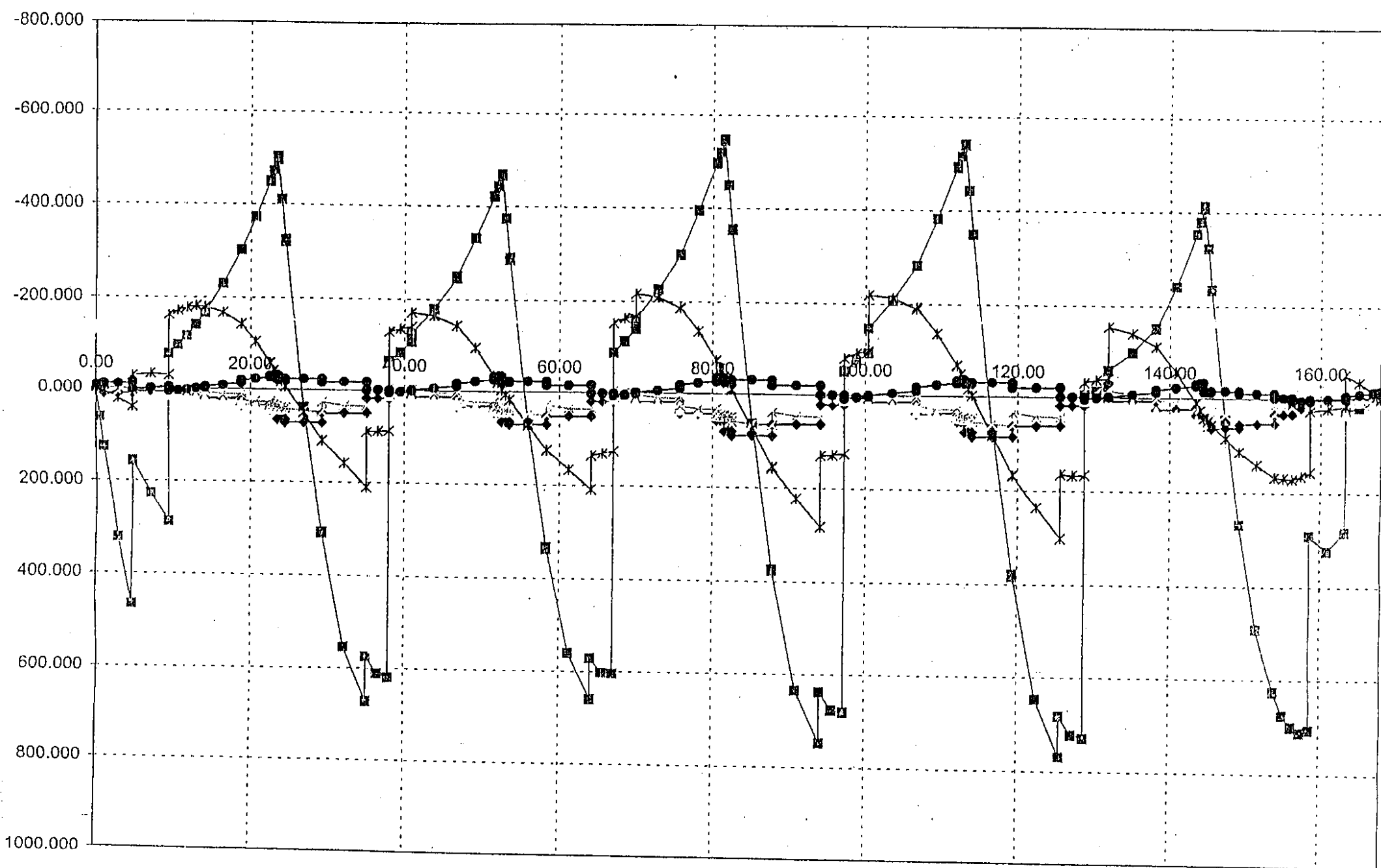


Hip I. Q Mcon Tcon

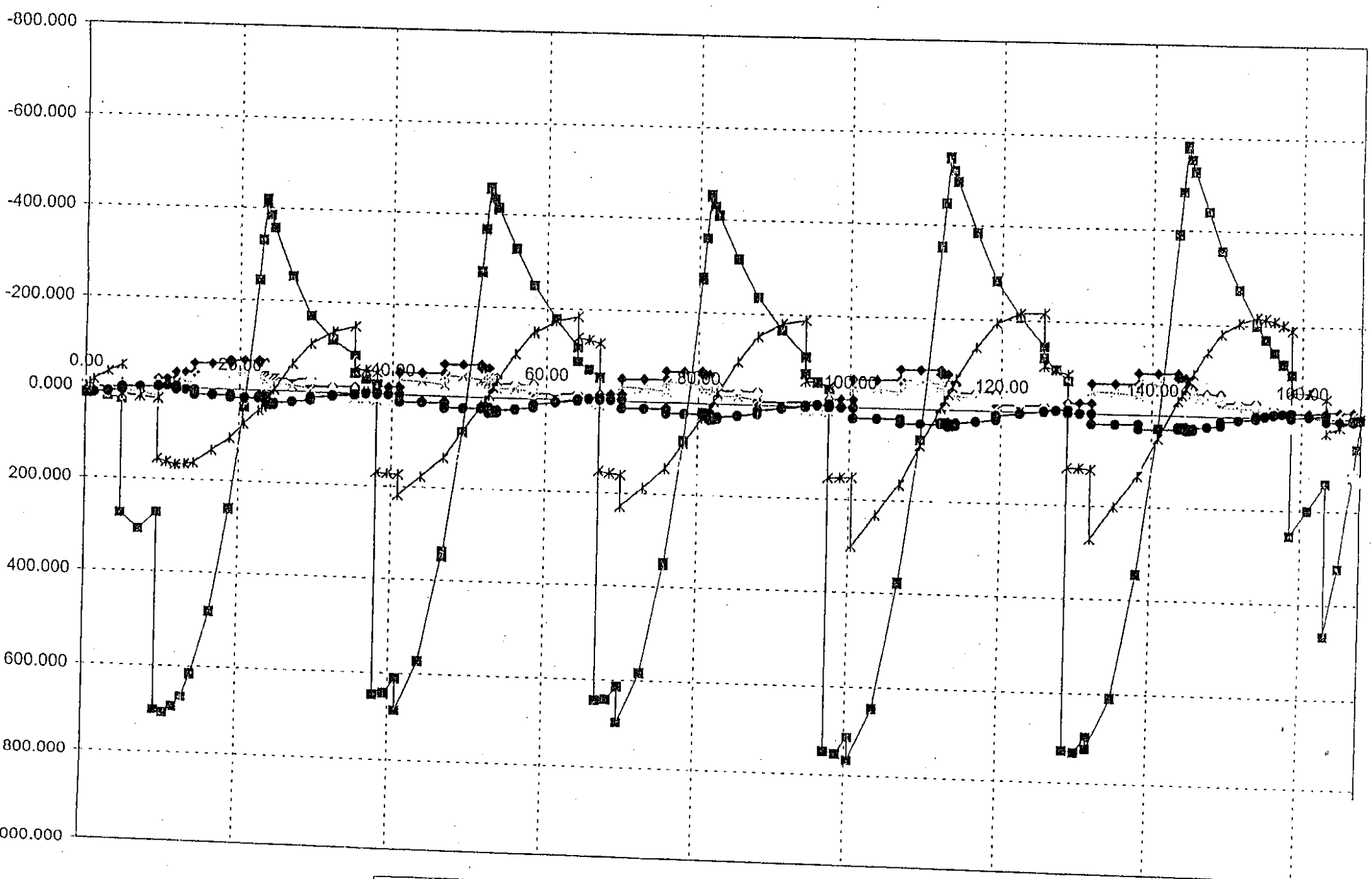


Q 1 48 (M) 1 48 (T) 1 48 Q 49 96 (M) 49 96 (T) 49 96

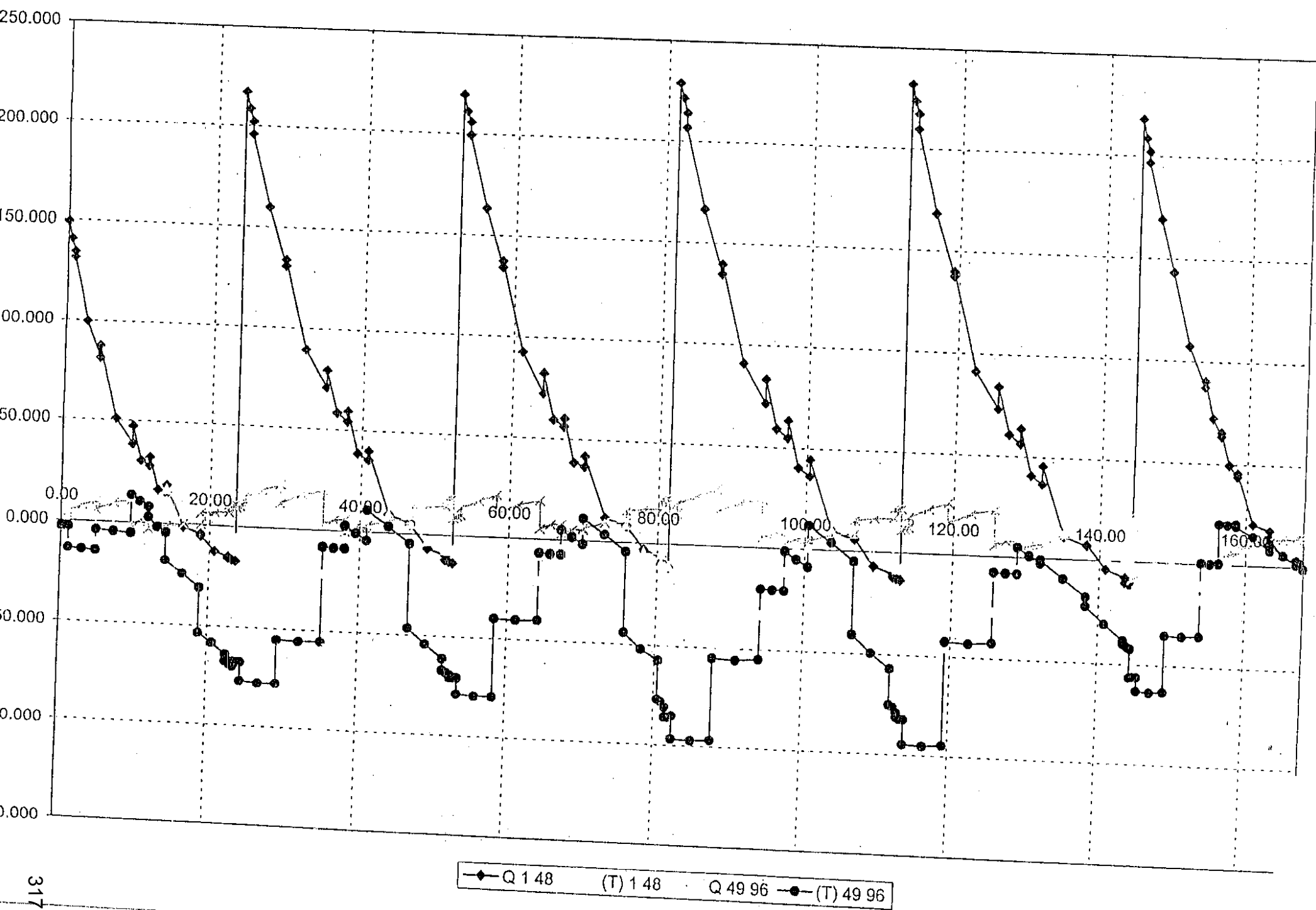
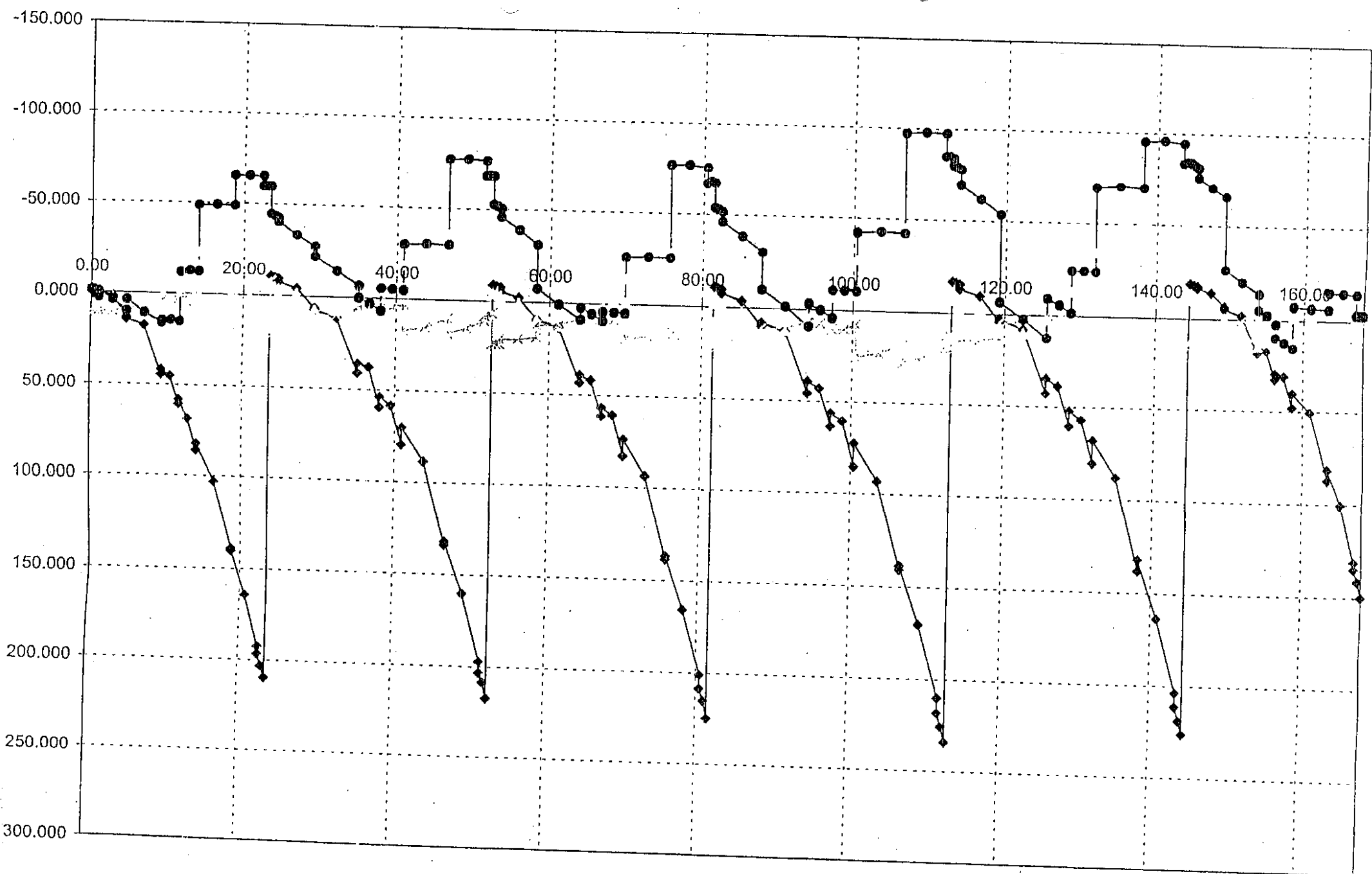
Hip I. T Mcon Qcon



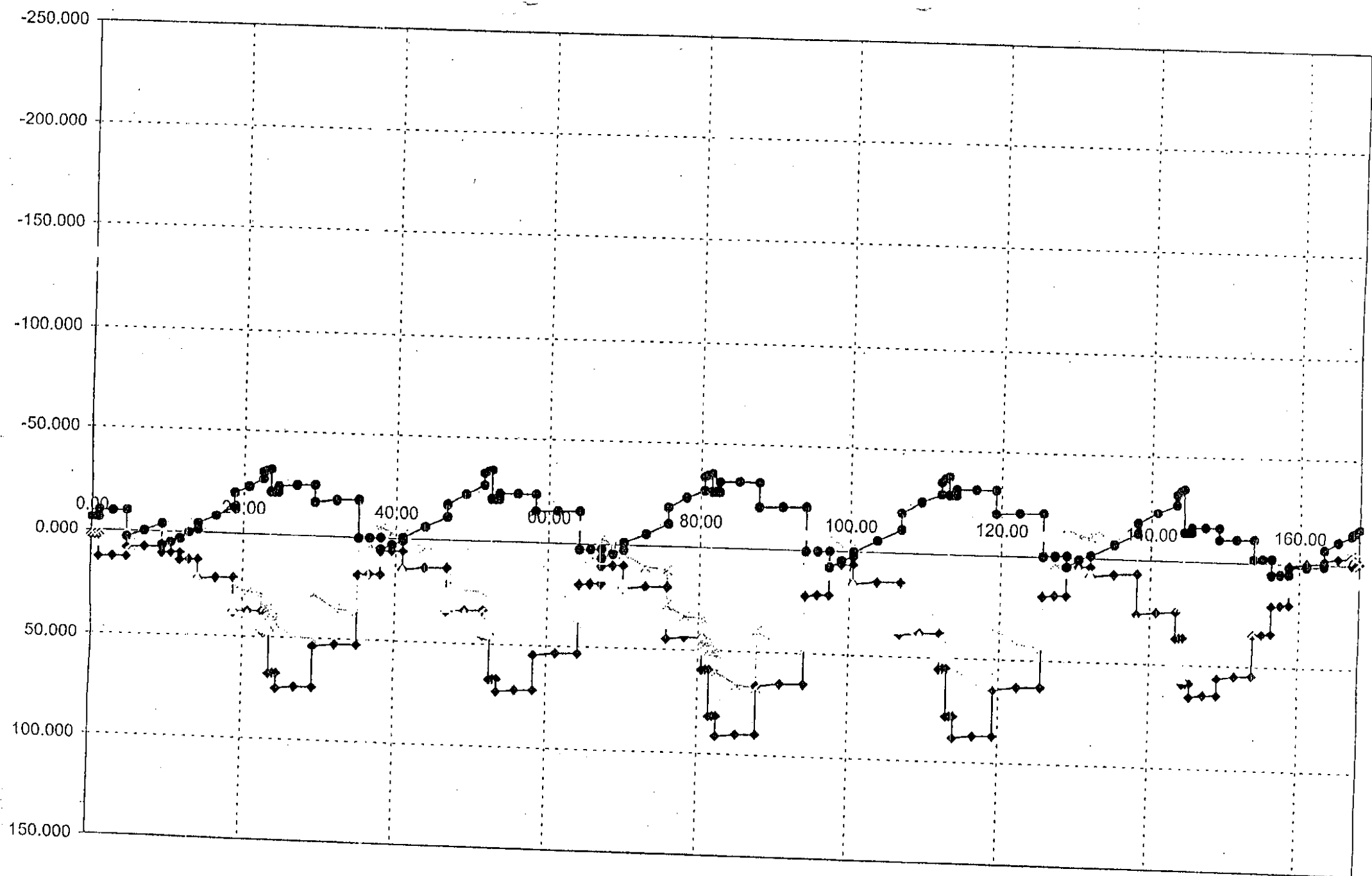
Hip I. T Mcon Qcon



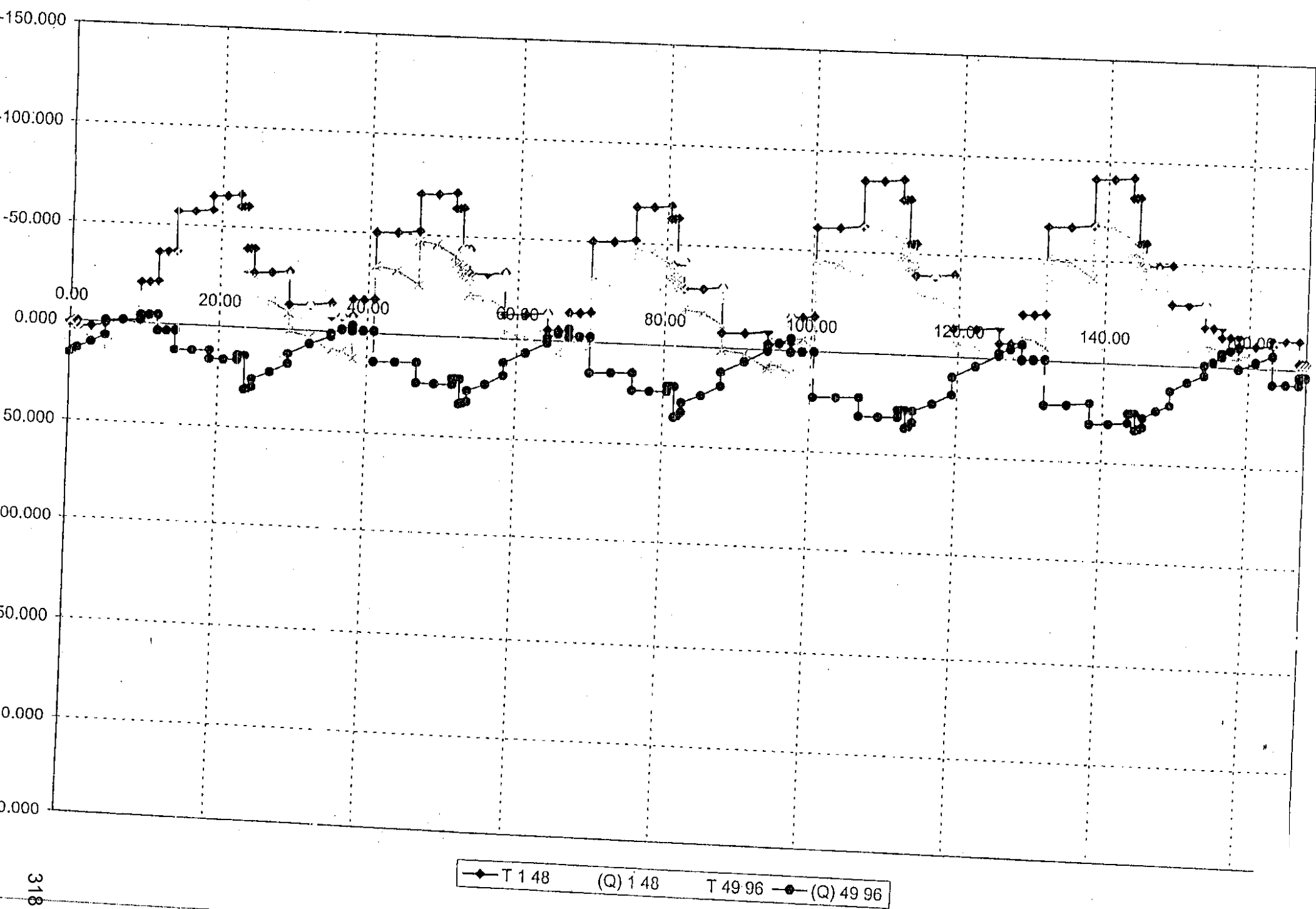
—◆— T 1 48 —■— (M) 1 48 —(Q) 1 48 —◆— T 49 96 —×— (M) 49 96 —●— (Q) 49 96



Q 1 48 (T) 1 48 Q 49 96 (T) 49 96



Hip I. I Mcon Qcon



—●— T 1 48 (Q) 1 48 T 49 96 —●— (Q) 49 96

UTE BORGES BLANQUES

VIADUCTO BORGES BLANQUES

Subanejo 3

**CÁLCULO DE LAS REDISTRIBUCIONES POR
FISURACION DE LA LOSA**

SUBANEJO 3. CÁLCULO DE LAS REDISTRIBUCIONES POR
FISURACIÓN DE LA LOSA

ÍNDICE

Subanejo 3. Cálculo de las redistribuciones por fisuración de la losa

Subanejo 3.1. Inercias iniciales (brutas)

Subanejo 3.2. Inercias en primera iteración

Subanejo 3.3. Inercias en segunda iteración

Subanejo 3.4. Inercias en tercera iteración

Subanejo 3.5. Inercias en cuarta iteración

Subanejo 3.1

INERCIAS INICIALES (BRUTAS)

82	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
83	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
84	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
85	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
86	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
87	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
88	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
89	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
90	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
91	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
92	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
93	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
94	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
95	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
96	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
97	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
98	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
99	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
100	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
101	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
102	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
103	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
104	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
105	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
106	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
107	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
108	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
109	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
110	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
111	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
112	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
113	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
114	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
115	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
116	SX=3.259684	IX=1	IY=1	<td>VY=0.872793</td> <td>VPY=1.477207</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
117	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
118	SX=3.041284	IX=1	IY=1	<td>VY=0.844987</td> <td>VPY=1.505013</td> <td>VZ=7</td> <td>VPZ=0.001</td>	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1: 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.03	0.45
1	2	1.00	0.00	0.03	0.42
2	2	1.00	0.00	0.03	0.42
2	3	1.18	0.00	0.03	0.42
3	3	1.18	0.00	0.03	0.42
3	4	2.35	0.00	0.03	0.39
4	4	2.35	0.00	0.03	0.39
4	5	3.53	0.00	0.03	0.35
5	5	3.53	0.00	0.03	0.35
5	6	4.70	0.00	0.03	0.32
6	6	4.70	0.00	0.03	0.32
6	7	5.88	0.00	0.03	0.29
7	7	5.88	0.00	0.03	0.29
7	8	7.05	0.00	0.03	0.26
8	8	7.05	0.00	0.03	0.26
8	9	8.23	0.00	0.03	0.22
9	9	8.23	0.00	0.03	0.22
9	10	9.40	0.00	0.03	0.19
10	10	9.40	0.00	0.03	0.19
10	11	10.58	0.00	0.03	0.16
11	11	10.58	0.00	0.03	0.16
11	12	11.75	0.00	0.03	0.13
12	12	11.75	0.00	0.03	0.13
12	13	12.93	0.00	0.03	0.09
13	13	12.93	0.00	0.03	0.09
13	14	14.10	0.00	0.03	0.06
14	14	14.10	0.00	0.03	0.06
14	15	15.28	0.00	0.03	0.03
15	15	15.28	0.00	0.03	0.03
15	16	16.45	0.00	0.03	0.00
16	16	16.45	0.00	0.03	0.00
16	17	17.63	0.00	0.03	-0.04
17	17	17.63	0.00	0.03	-0.04
17	18	18.80	0.00	0.03	-0.07
18	18	18.80	-0.01	0.03	-0.07
18	19	19.98	-0.01	0.03	-0.10
19	19	19.98	-0.01	0.03	-0.10
19	20	21.15	-1.06	3.53	-2.28
20	20	21.15	0.00	3.69	-2.28
20	21	22.33	0.00	7.19	-8.67
21	21	22.33	0.00	7.19	-8.67
21	22	22.50	0.00	7.71	-9.98
22	22	22.50	0.00	7.71	-9.98
22	23	23.50	0.00	10.69	-19.18
23	1023	23.50	0.00	-12.95	-19.18
23	24	24.50	0.00	-9.97	-7.72
24	24	24.50	0.00	-9.97	-7.72
24	25	24.95	0.00	-8.62	-3.54
25	25	24.95	0.00	-8.62	-3.54
25	26	26.40	0.00	-4.30	5.83
26	26	26.40	-1.02	-4.18	5.83

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1: 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	0.15	8.84
27	27	27.85	0.04	0.15	8.84
27	28	29.30	0.04	0.15	8.62
28	28	29.30	0.00	0.15	8.62
28	29	30.75	0.00	0.15	8.40
29	29	30.75	0.00	0.15	8.40
29	30	32.20	0.00	0.15	8.18
30	30	32.20	0.00	0.15	8.18
30	31	33.65	0.00	0.15	7.97
31	31	33.65	0.00	0.15	7.97
31	32	35.10	0.00	0.15	7.75
32	32	35.10	0.00	0.15	7.75
32	33	36.55	0.00	0.15	7.53
33	33	36.55	0.00	0.15	7.53
33	34	38.00	0.00	0.15	7.31
34	34	38.00	0.00	0.15	7.31
34	35	39.45	0.00	0.15	7.09
35	35	39.45	0.00	0.15	7.09
35	36	40.90	0.00	0.15	6.87
36	36	40.90	0.00	0.15	6.87
36	37	42.35	0.00	0.15	6.66
37	37	42.35	0.00	0.15	6.66
37	38	43.80	0.00	0.15	6.44
38	38	43.80	0.00	0.15	6.44
38	39	45.25	0.00	0.15	6.22
39	39	45.25	0.00	0.15	6.22
39	40	46.70	0.00	0.15	6.00
40	40	46.70	-0.04	0.15	6.00
40	41	48.15	-0.04	0.15	5.78
41	41	48.15	-0.04	0.15	5.78
41	42	49.60	-1.09	4.47	2.34
42	42	49.60	0.00	4.60	2.34
42	43	51.05	0.00	8.92	-7.47
43	43	51.05	0.00	8.92	-7.47
43	44	51.50	0.00	10.27	-11.78
44	44	51.50	0.00	10.27	-11.78
44	45	52.50	0.00	13.25	-23.54
45	1045	52.50	0.00	-13.05	-23.54
45	46	53.50	0.00	-10.07	-11.99
46	46	53.50	0.00	-10.07	-11.99
46	47	53.95	0.00	-8.72	-7.76
47	47	53.95	0.00	-8.72	-7.76
47	48	55.40	0.00	-4.40	1.76
48	48	55.40	-1.04	-4.27	1.76
48	49	56.85	0.01	0.05	4.91
49	49	56.85	0.01	0.05	4.91
49	50	58.30	0.01	0.05	4.84
50	50	58.30	0.00	0.05	4.84
50	51	59.75	0.00	0.05	4.76
51	51	59.75	0.00	0.05	4.76
51	52	61.20	0.00	0.05	4.69

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1; 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.05	4.69
52	53	62.65	0.00	0.05	4.62
53	53	62.65	0.00	0.05	4.62
53	54	64.10	0.00	0.05	4.54
54	54	64.10	0.00	0.05	4.54
54	55	65.55	0.00	0.05	4.47
55	55	65.55	0.00	0.05	4.47
55	56	67.00	0.00	0.05	4.40
56	56	67.00	0.00	0.05	4.40
56	57	68.45	0.00	0.05	4.32
57	57	68.45	0.00	0.05	4.32
57	58	69.90	0.00	0.05	4.25
58	58	69.90	0.00	0.05	4.25
58	59	71.35	0.00	0.05	4.18
59	59	71.35	0.00	0.05	4.18
59	60	72.80	0.00	0.05	4.10
60	60	72.80	0.00	0.05	4.10
60	61	74.25	0.00	0.05	4.03
61	61	74.25	0.00	0.05	4.03
61	62	75.70	0.00	0.05	3.96
62	62	75.70	-0.01	0.05	3.96
62	63	77.15	-0.01	0.05	3.88
63	63	77.15	-0.01	0.05	3.88
63	64	78.60	-1.07	4.37	0.58
64	64	78.60	0.00	4.50	0.58
64	65	80.05	0.00	8.82	-9.08
65	65	80.05	0.00	8.82	-9.08
65	66	80.50	0.00	10.17	-13.35
66	66	80.50	0.00	10.17	-13.35
66	67	81.50	0.00	13.15	-25.01
67	1067	81.50	0.00	-14.09	-25.01
67	68	82.50	0.00	-11.11	-12.41
68	68	82.50	0.00	-11.11	-12.41
68	69	83.08	0.00	-9.40	-6.51
69	69	83.08	0.00	-9.40	-6.51
69	70	84.65	0.00	-4.70	4.59
70	70	84.65	-1.03	-4.58	4.59
70	71	86.23	0.03	0.11	8.20
71	71	86.23	0.03	0.11	8.20
71	72	87.80	0.03	0.11	8.02
72	72	87.80	0.00	0.11	8.02
72	73	89.38	0.00	0.11	7.84
73	73	89.38	0.00	0.11	7.84
73	74	90.95	0.00	0.11	7.66
74	74	90.95	0.00	0.11	7.66
74	75	92.53	0.00	0.11	7.48
75	75	92.53	0.00	0.11	7.48
75	76	94.10	0.00	0.11	7.30
76	76	94.10	0.00	0.11	7.30
76	77	95.68	0.00	0.11	7.12
77	77	95.68	0.00	0.11	7.12

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1; 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.11	6.94
78	78	97.25	0.00	0.11	6.94
78	79	98.83	0.00	0.11	6.76
79	79	98.83	0.00	0.11	6.76
79	80	100.40	0.00	0.11	6.58
80	80	100.40	0.00	0.11	6.58
80	81	101.98	0.00	0.11	6.40
81	81	101.98	0.00	0.11	6.40
81	82	103.55	0.00	0.11	6.21
82	82	103.55	0.00	0.11	6.21
82	83	105.13	0.00	0.11	6.03
83	83	105.13	0.00	0.11	6.03
83	84	106.70	0.00	0.11	5.85
84	84	106.70	-0.03	0.11	5.85
84	85	108.28	-0.03	0.11	5.67
85	85	108.28	-0.03	0.11	5.67
85	86	109.85	-1.08	4.81	1.70
86	86	109.85	0.00	4.93	1.70
86	87	111.43	0.00	9.62	-9.76
87	87	111.43	0.00	9.62	-9.76
87	88	112.00	0.00	11.34	-15.79
88	88	112.00	0.00	11.34	-15.79
88	89	113.00	0.00	14.32	-28.61
89	1089	113.00	0.00	-14.43	-28.61
89	90	114.00	0.00	-11.44	-15.68
90	90	114.00	0.00	-11.44	-15.68
90	91	114.58	0.00	-9.73	-9.59
91	91	114.58	0.00	-9.73	-9.59
91	92	116.15	0.00	-5.03	2.03
92	92	116.15	-1.10	-4.91	2.03
92	93	117.73	-0.05	-0.21	6.17
93	93	117.73	-0.05	-0.21	6.17
93	94	119.30	-0.05	-0.21	6.52
94	94	119.30	0.00	-0.22	6.52
94	95	120.88	0.00	-0.22	6.86
95	95	120.88	0.00	-0.22	6.86
95	96	122.45	0.00	-0.22	7.21
96	96	122.45	0.00	-0.22	7.21
96	97	124.03	0.00	-0.22	7.55
97	97	124.03	0.00	-0.22	7.55
97	98	125.60	0.00	-0.22	7.90
98	98	125.60	0.00	-0.22	7.90
98	99	127.18	0.00	-0.22	8.25
99	99	127.18	0.00	-0.22	8.25
99	100	128.75	0.00	-0.22	8.59
100	100	128.75	0.00	-0.22	8.59
100	101	130.33	0.00	-0.22	8.94
101	101	130.33	0.00	-0.22	8.94
101	102	131.90	0.00	-0.22	9.28
102	102	131.90	0.00	-0.22	9.28
102	103	133.48	0.00	-0.22	9.63

CÁLCULO TENSIONAL

Hipótesis de cálculo:
Fase5Neg

Fase 5 Fisuración

[1; 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-0.22	9.63
103	104	135.05	0.00	-0.22	9.98
104	104	135.05	0.00	-0.22	9.98
104	105	136.63	0.00	-0.22	10.32
105	105	136.63	0.00	-0.22	10.32
105	106	138.20	0.00	-0.22	10.67
106	106	138.20	0.05	-0.21	10.67
106	107	139.78	0.05	-0.21	11.01
107	107	139.78	0.05	-0.21	11.01
107	108	141.35	-1.01	4.48	7.57
108	108	141.35	0.00	4.59	7.57
108	109	142.93	0.00	9.29	-3.36
109	109	142.93	0.00	9.29	-3.36
109	110	143.50	0.00	11.01	-9.20
110	110	143.50	0.00	11.01	-9.20
110	111	144.50	0.00	13.99	-21.70
111	111	144.50	0.00	-10.86	-21.70
111	112	145.50	0.00	-7.88	-12.32
112	112	145.50	0.00	-7.88	-12.32
112	113	145.68	0.00	-7.36	-10.99
113	113	145.68	0.00	-7.36	-10.99
113	114	146.85	0.00	-3.85	-4.40
114	114	146.85	-1.11	-3.69	-4.40
114	115	148.03	-0.06	-0.19	-2.03
115	115	148.03	-0.06	-0.19	-2.03
115	116	149.20	-0.06	-0.19	-1.80
116	116	149.20	0.00	-0.20	-1.80
116	117	150.38	0.00	-0.20	-1.57
117	117	150.38	0.00	-0.20	-1.57
117	118	151.55	0.00	-0.20	-1.34
118	118	151.55	0.00	-0.20	-1.34
118	119	152.73	0.00	-0.20	-1.11
119	119	152.73	0.00	-0.20	-1.11
119	120	153.90	0.00	-0.20	-0.88
120	120	153.90	0.00	-0.20	-0.88
120	121	155.08	0.00	-0.20	-0.65
121	121	155.08	0.00	-0.20	-0.65
121	122	156.25	0.00	-0.20	-0.42
122	122	156.25	0.00	-0.20	-0.42
122	123	157.43	0.00	-0.20	-0.19
123	123	157.43	0.00	-0.20	-0.19
123	124	158.60	0.00	-0.20	0.04
124	124	158.60	0.00	-0.20	0.04
124	125	159.78	0.00	-0.20	0.27
125	125	159.78	0.00	-0.20	0.27
125	126	160.95	0.00	-0.20	0.50
126	126	160.95	0.00	-0.20	0.50
126	127	162.13	0.00	-0.20	0.73
127	127	162.13	0.00	-0.20	0.73
127	128	163.30	0.00	-0.20	0.96
128	128	163.30	0.00	-0.20	0.96

CÁLCULO TENSIONAL

Hipótesis de cálculo:
Fase5Neg

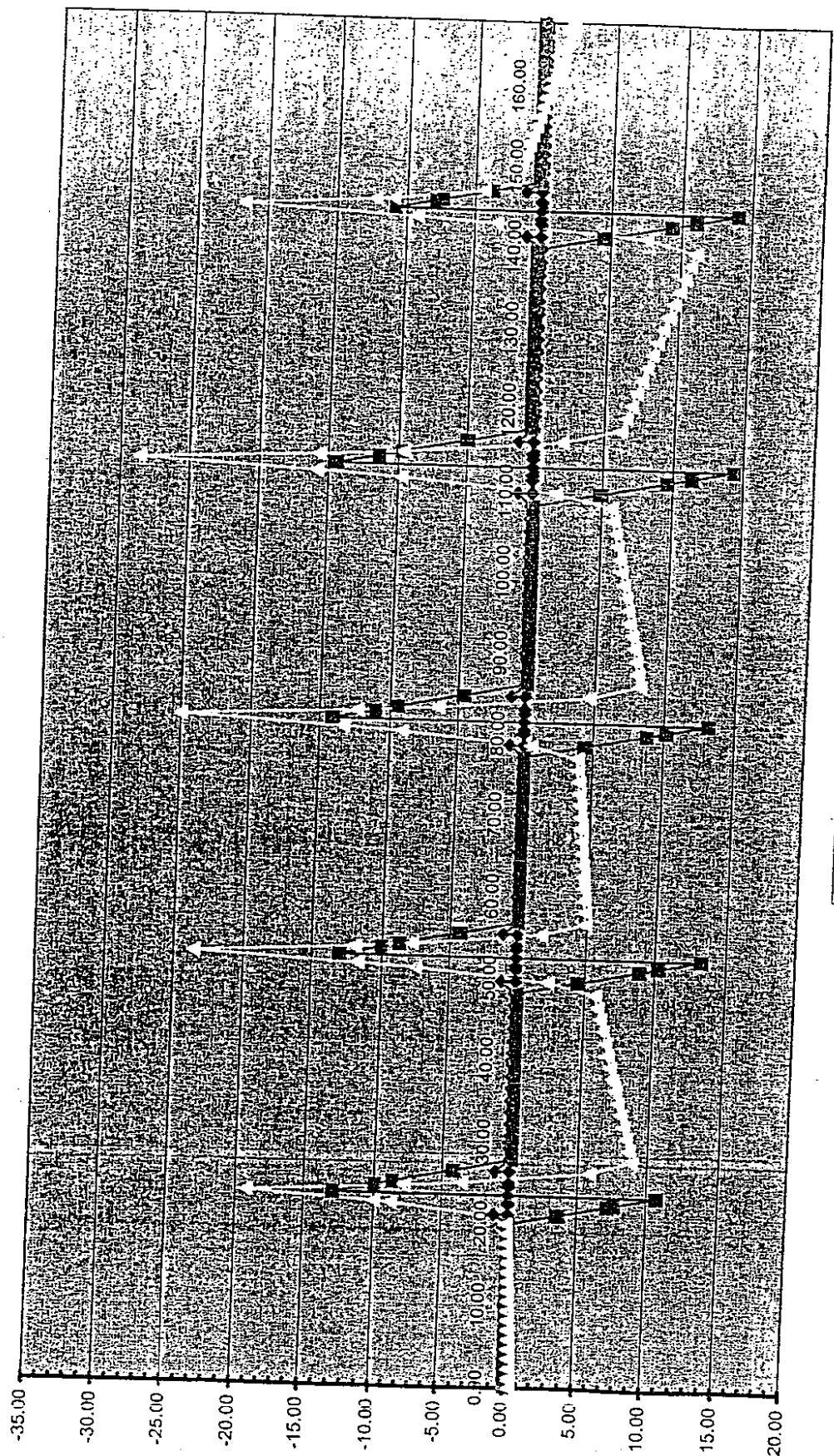
Fase 5 Fisuración

[1; 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	-0.20	1.18
129	129	164.48	0.00	-0.20	1.18
129	130	165.65	0.00	-0.20	1.41
130	130	165.65	0.00	-0.20	1.41
130	131	166.83	0.00	-0.20	1.64
131	131	166.83	0.00	-0.20	1.64
131	132	167.00	0.00	-0.20	1.68
132	132	167.00	0.00	-0.20	1.68
132	133	168.00	0.00	-0.20	1.87

GRÁFICO DE ESFUERZOS



—●— N (T) —■— V (T) —▲— Mz (Tm)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1: 1]HBCP + [1: 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-8.27	0.45
1	2	1.00	0.00	-7.32	8.24
2	2	1.00	0.00	-7.32	8.24
2	3	1.18	0.00	-7.16	9.52
3	3	1.18	0.00	-7.16	9.52
3	4	2.35	0.00	-6.04	17.27
4	4	2.35	0.00	-6.04	17.27
4	5	3.53	0.00	-4.93	23.72
5	5	3.53	0.00	-4.93	23.72
5	6	4.70	0.00	-3.82	28.87
6	6	4.70	0.00	-3.82	28.87
6	7	5.88	0.00	-2.71	32.71
7	7	5.88	0.00	-2.71	32.71
7	8	7.05	0.00	-1.60	35.24
8	8	7.05	0.00	-1.60	35.24
8	9	8.23	0.00	-0.49	36.46
9	9	8.23	0.00	-0.49	36.46
9	10	9.40	0.00	0.63	36.38
10	10	9.40	0.00	0.63	36.38
10	11	10.58	0.00	1.74	35.00
11	11	10.58	0.00	1.74	35.00
11	12	11.75	0.00	2.85	32.31
12	12	11.75	0.00	2.85	32.31
12	13	12.93	0.00	3.96	28.31
13	13	12.93	0.00	3.96	28.31
13	14	14.10	0.00	5.07	23.00
14	14	14.10	0.00	5.07	23.00
14	15	15.28	0.00	6.18	16.40
15	15	15.28	0.00	6.18	16.40
15	16	16.45	0.00	7.30	8.48
16	16	16.45	0.00	7.30	8.48
16	17	17.63	0.00	8.41	-0.75
17	17	17.63	0.00	8.41	-0.75
17	18	18.80	0.00	9.52	-11.27
18	18	18.80	-0.01	9.52	-11.27
18	19	19.98	-0.01	10.63	-23.10
19	19	19.98	-0.01	10.63	-23.10
19	20	21.15	-1.06	15.24	-38.39
20	20	21.15	0.00	15.40	-38.39
20	21	22.33	0.00	20.01	-59.20
21	21	22.33	0.00	20.01	-59.20
21	22	22.50	0.00	20.70	-62.76
22	22	22.50	0.00	20.70	-62.76
22	23	23.50	0.00	24.62	-85.43
23	1023	23.50	0.00	-26.71	-85.43
23	24	24.50	0.00	-22.79	-60.67
24	24	24.50	0.00	-22.79	-60.67
24	25	24.95	0.00	-21.01	-50.82
25	25	24.95	0.00	-21.01	-50.82
25	26	26.40	0.00	-15.32	-24.48
26	26	26.40	-1.02	-15.20	-24.48

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-9.50	-6.48
27	27	27.85	0.04	-9.50	-6.48
27	28	29.30	0.04	-8.13	6.29
28	28	29.30	0.00	-8.13	6.29
28	29	30.75	0.00	-6.76	17.08
29	29	30.75	0.00	-6.76	17.08
29	30	32.20	0.00	-5.38	25.88
30	30	32.20	0.00	-5.38	25.88
30	31	33.65	0.00	-4.01	32.70
31	31	33.65	0.00	-4.01	32.70
31	32	35.10	0.00	-2.64	37.52
32	32	35.10	0.00	-2.64	37.52
32	33	36.55	0.00	-1.27	40.35
33	33	36.55	0.00	-1.27	40.35
33	34	38.00	0.00	0.10	41.20
34	34	38.00	0.00	0.10	41.20
34	35	39.45	0.00	1.47	40.05
35	35	39.45	0.00	1.47	40.05
35	36	40.90	0.00	2.85	36.91
36	36	40.90	0.00	2.85	36.91
36	37	42.35	0.00	4.22	31.80
37	37	42.35	0.00	4.22	31.80
37	38	43.80	0.00	5.59	24.69
38	38	43.80	0.00	5.59	24.69
38	39	45.25	0.00	6.96	15.58
39	39	45.25	0.00	6.96	15.58
39	40	46.70	0.00	8.33	4.49
40	40	46.70	-0.04	8.33	4.49
40	41	48.15	-0.04	9.70	-8.59
41	41	48.15	-0.04	9.70	-8.59
41	42	49.60	-1.09	15.40	-26.88
42	42	49.60	0.00	15.53	-26.88
42	43	51.05	0.00	21.22	-53.52
43	43	51.05	0.00	21.22	-53.52
43	44	51.50	0.00	22.99	-63.46
44	44	51.50	0.00	22.99	-63.46
44	45	52.50	0.00	26.92	-88.42
45	1045	52.50	0.00	-26.52	-88.42
45	46	53.50	0.00	-22.59	-63.87
46	46	53.50	0.00	-22.59	-63.87
46	47	53.95	0.00	-20.82	-54.10
47	47	53.95	0.00	-20.82	-54.10
47	48	55.40	0.00	-15.13	-28.03
48	48	55.40	-1.04	-15.00	-28.03
48	49	56.85	0.01	-9.31	-10.32
49	49	56.85	0.01	-9.31	-10.32
49	50	58.30	0.01	-7.93	2.18
50	50	58.30	0.00	-7.93	2.18
50	51	59.75	0.00	-6.56	12.68
51	51	59.75	0.00	-6.56	12.68
51	52	61.20	0.00	-5.19	21.20

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-5.19	21.20
52	53	62.65	0.00	-3.82	27.74
53	53	62.65	0.00	-3.82	27.74
53	54	64.10	0.00	-2.45	32.27
54	54	64.10	0.00	-2.45	32.27
54	55	65.55	0.00	-1.08	34.83
55	55	65.55	0.00	-1.08	34.83
55	56	67.00	0.00	0.30	35.40
56	56	67.00	0.00	0.30	35.40
56	57	68.45	0.00	1.67	33.96
57	57	68.45	0.00	1.67	33.96
57	58	69.90	0.00	3.04	30.55
58	58	69.90	0.00	3.04	30.55
58	59	71.35	0.00	4.41	25.15
59	59	71.35	0.00	4.41	25.15
59	60	72.80	0.00	5.78	17.75
60	60	72.80	0.00	5.78	17.75
60	61	74.25	0.00	7.15	8.38
61	61	74.25	0.00	7.15	8.38
61	62	75.70	0.00	8.53	-2.99
62	62	75.70	-0.01	8.53	-2.99
62	63	77.15	-0.01	9.90	-16.36
63	63	77.15	-0.01	9.90	-16.36
63	64	78.60	-1.07	15.59	-34.93
64	64	78.60	0.00	15.72	-34.93
64	65	80.05	0.00	21.41	-61.85
65	65	80.05	0.00	21.41	-61.85
65	66	80.50	0.00	23.19	-71.89
66	66	80.50	0.00	23.19	-71.89
66	67	81.50	0.00	27.11	-97.04
67	1067	81.50	0.00	-28.69	-97.04
67	68	82.50	0.00	-24.77	-70.31
68	68	82.50	0.00	-24.77	-70.31
68	69	83.08	0.00	-22.51	-56.71
69	69	83.08	0.00	-22.51	-56.71
69	70	84.65	0.00	-16.32	-26.13
70	70	84.65	-1.03	-16.20	-26.13
70	71	86.23	0.03	-10.02	-5.39
71	71	86.23	0.03	-10.02	-5.39
71	72	87.80	0.03	-8.53	9.22
72	72	87.80	0.00	-8.53	9.22
72	73	89.38	0.00	-7.04	21.48
73	73	89.38	0.00	-7.04	21.48
73	74	90.95	0.00	-5.55	31.39
74	74	90.95	0.00	-5.55	31.39
74	75	92.53	0.00	-4.06	38.95
75	75	92.53	0.00	-4.06	38.95
75	76	94.10	0.00	-2.57	44.17
76	76	94.10	0.00	-2.57	44.17
76	77	95.68	0.00	-1.08	47.05
77	77	95.68	0.00	-1.08	47.05

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.41	47.57
78	78	97.25	0.00	0.41	47.57
78	79	98.83	0.00	1.90	45.75
79	79	98.83	0.00	1.90	45.75
79	80	100.40	0.00	3.39	41.58
80	80	100.40	0.00	3.39	41.58
80	81	101.98	0.00	4.88	35.07
81	81	101.98	0.00	4.88	35.07
81	82	103.55	0.00	6.37	26.20
82	82	103.55	0.00	6.37	26.20
82	83	105.13	0.00	7.86	14.99
83	83	105.13	0.00	7.86	14.99
83	84	106.70	0.00	9.35	1.44
84	84	106.70	-0.03	9.35	1.44
84	85	108.28	-0.03	10.84	-14.46
85	85	108.28	-0.03	10.84	-14.46
85	86	109.85	-1.08	17.03	-36.50
86	86	109.85	0.00	17.15	-36.50
86	87	111.43	0.00	23.33	-68.38
87	87	111.43	0.00	23.33	-68.38
87	88	112.00	0.00	25.59	-82.45
88	88	112.00	0.00	25.59	-82.45
88	89	113.00	0.00	29.52	-109.99
89	1089	113.00	0.00	-29.63	-109.99
89	90	114.00	0.00	-25.70	-82.33
90	90	114.00	0.00	-25.70	-82.33
90	91	114.58	0.00	-23.44	-68.19
91	91	114.58	0.00	-23.44	-68.19
91	92	116.15	0.00	-17.25	-36.15
92	92	116.15	-1.10	-17.13	-36.15
92	93	117.73	-0.05	-10.94	-13.93
93	93	117.73	-0.05	-10.94	-13.93
93	94	119.30	-0.05	-9.45	2.15
94	94	119.30	0.00	-9.46	2.15
94	95	120.88	0.00	-7.97	15.88
95	95	120.88	0.00	-7.97	15.88
95	96	122.45	0.00	-6.48	27.27
96	96	122.45	0.00	-6.48	27.27
96	97	124.03	0.00	-4.99	36.30
97	97	124.03	0.00	-4.99	36.30
97	98	125.60	0.00	-3.50	42.99
98	98	125.60	0.00	-3.50	42.99
98	99	127.18	0.00	-2.01	47.34
99	99	127.18	0.00	-2.01	47.34
99	100	128.75	0.00	-0.52	49.34
100	100	128.75	0.00	-0.52	49.34
100	101	130.33	0.00	0.97	48.99
101	101	130.33	0.00	0.97	48.99
101	102	131.90	0.00	2.46	46.29
102	102	131.90	0.00	2.46	46.29
102	103	133.48	0.00	3.95	41.25

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	3.95	41.25
103	104	135.05	0.00	5.44	33.87
104	104	135.05	0.00	5.44	33.87
104	105	136.63	0.00	6.93	24.13
105	105	136.63	0.00	6.93	24.13
105	106	138.20	0.00	8.42	12.05
106	106	138.20	0.05	8.43	12.05
106	107	139.78	0.05	9.92	-2.39
107	107	139.78	0.05	9.92	-2.39
107	108	141.35	-1.01	16.10	-22.95
108	108	141.35	0.00	16.21	-22.95
108	109	142.93	0.00	22.40	-53.34
109	109	142.93	0.00	22.40	-53.34
109	110	143.50	0.00	24.66	-66.88
110	110	143.50	0.00	24.66	-66.88
110	111	144.50	0.00	28.59	-93.50
111	1111	144.50	0.00	-25.03	-93.50
111	112	145.50	0.00	-21.10	-70.42
112	112	145.50	0.00	-21.10	-70.42
112	113	145.68	0.00	-20.42	-66.79
113	113	145.68	0.00	-20.42	-66.79
113	114	146.85	0.00	-15.80	-45.51
114	114	146.85	-1.11	-15.64	-45.51
114	115	148.03	-0.06	-11.03	-29.75
115	115	148.03	-0.06	-11.03	-29.75
115	116	149.20	-0.06	-9.91	-17.44
116	116	149.20	0.00	-9.92	-17.44
116	117	150.38	0.00	-8.81	-6.44
117	117	150.38	0.00	-8.81	-6.44
117	118	151.55	0.00	-7.70	3.26
118	118	151.55	0.00	-7.70	3.26
118	119	152.73	0.00	-6.59	11.65
119	119	152.73	0.00	-6.59	11.65
119	120	153.90	0.00	-5.48	18.73
120	120	153.90	0.00	-5.48	18.73
120	121	155.08	0.00	-4.37	24.51
121	121	155.08	0.00	-4.37	24.51
121	122	156.25	0.00	-3.26	28.98
122	122	156.25	0.00	-3.26	28.98
122	123	157.43	0.00	-2.14	32.15
123	123	157.43	0.00	-2.14	32.15
123	124	158.60	0.00	-1.03	34.01
124	124	158.60	0.00	-1.03	34.01
124	125	159.78	0.00	0.08	34.57
125	125	159.78	0.00	0.08	34.57
125	126	160.95	0.00	1.19	33.82
126	126	160.95	0.00	1.19	33.82
126	127	162.13	0.00	2.30	31.76
127	127	162.13	0.00	2.30	31.76
127	128	163.30	0.00	3.41	28.39
128	128	163.30	0.00	3.41	28.39

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1: 1]HBCP + [1: 1]HVOL

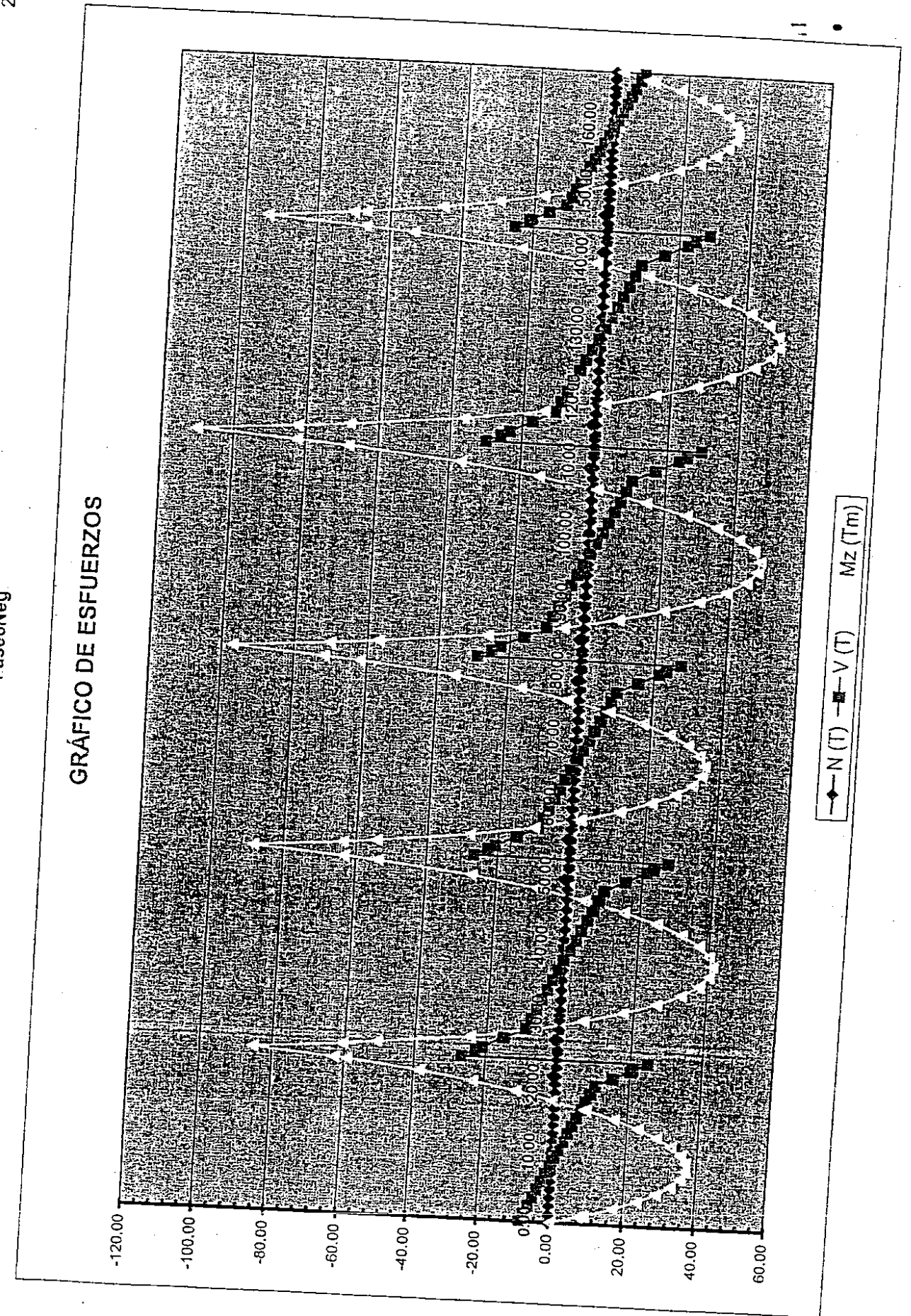
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	4.53	23.71
129	129	164.48	0.00	4.53	23.71
129	130	165.65	0.00	5.64	17.74
130	130	165.65	0.00	5.64	17.74
130	131	166.83	0.00	6.75	10.46
131	131	166.83	0.00	6.75	10.46
131	132	167.00	0.00	6.91	9.27
132	132	167.00	0.00	6.91	9.27
132	133	168.00	0.00	7.86	1.87

Programa DINTEL IDEAM S.A.
Fase6Neg

24/08/01

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-61.55	0.45
1	2	1.00	0.00	-54.51	58.47
2	2	1.00	0.00	-54.51	58.47
2	3	1.18	0.00	-53.28	67.92
3	3	1.18	0.00	-53.28	67.92
3	4	2.35	0.00	-45.00	125.66
4	4	2.35	0.00	-45.00	125.66
4	5	3.53	0.00	-36.72	173.67
5	5	3.53	0.00	-36.72	173.67
5	6	4.70	0.00	-28.45	211.96
6	6	4.70	0.00	-28.45	211.96
6	7	5.88	0.00	-20.17	240.53
7	7	5.88	0.00	-20.17	240.53
7	8	7.05	0.00	-11.90	259.36
8	8	7.05	0.00	-11.90	259.36
8	9	8.23	0.00	-3.63	268.48
9	9	8.23	0.00	-3.63	268.48
9	10	9.40	0.00	4.66	267.87
10	10	9.40	0.00	4.66	267.87
10	11	10.58	0.00	12.94	257.54
11	11	10.58	0.00	12.94	257.54
11	12	11.75	0.00	21.22	237.48
12	12	11.75	0.00	21.22	237.48
12	13	12.93	0.00	29.49	207.70
13	13	12.93	0.00	29.49	207.70
13	14	14.10	0.00	37.77	168.18
14	14	14.10	0.00	37.77	168.18
14	15	15.28	0.00	46.04	118.95
15	15	15.28	0.00	46.04	118.95
15	16	16.45	0.00	54.32	59.99
16	16	16.45	-0.56	54.32	59.99
16	17	17.63	-0.92	85.91	-12.12
17	17	17.63	-0.92	85.91	-12.12
17	18	18.80	-1.04	97.27	-119.73
18	18	18.80	-0.01	97.27	-119.73
18	19	19.98	-0.01	108.63	-240.68
19	19	19.98	-0.01	108.63	-240.68
19	20	21.15	-1.06	123.48	-377.14
20	20	21.15	0.00	123.64	-377.14
20	21	22.33	0.00	138.50	-531.16
21	21	22.33	0.00	138.50	-531.16
21	22	22.50	0.00	140.72	-555.59
22	22	22.50	0.00	140.72	-555.59
22	23	23.50	0.00	153.36	-702.63
23	1023	23.50	0.00	-153.68	-702.63
23	24	24.50	0.00	-141.04	-555.25
24	24	24.50	0.00	-141.04	-555.25
24	25	24.95	0.00	-135.33	-493.08
25	25	24.95	0.00	-135.33	-493.08
25	26	26.40	0.00	-117.00	-310.13
26	26	26.40	-1.02	-116.88	-310.13

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-98.54	-153.85
27	27	27.85	0.04	-98.54	-153.85
27	28	29.30	0.04	-84.53	-21.16
28	28	29.30	-0.74	-84.52	-21.16
28	29	30.75	-0.43	-51.33	68.93
29	29	30.75	-0.43	-51.33	68.93
29	30	32.20	-0.35	-41.11	135.95
30	30	32.20	0.00	-41.11	135.95
30	31	33.65	0.00	-30.90	188.16
31	31	33.65	0.00	-30.90	188.16
31	32	35.10	0.00	-20.69	225.56
32	32	35.10	0.00	-20.69	225.56
32	33	36.55	0.00	-10.47	248.15
33	33	36.55	0.00	-10.47	248.15
33	34	38.00	0.00	-0.26	255.93
34	34	38.00	0.00	-0.26	255.93
34	35	39.45	0.00	9.95	248.89
35	35	39.45	0.00	9.95	248.89
35	36	40.90	0.00	20.17	227.04
36	36	40.90	0.00	20.17	227.04
36	37	42.35	0.00	30.38	190.40
37	37	42.35	0.00	30.38	190.40
37	38	43.80	0.00	40.60	138.94
38	38	43.80	-0.34	40.60	138.94
38	39	45.25	-0.42	50.81	72.65
39	39	45.25	-0.42	50.81	72.65
39	40	46.70	-0.72	83.69	-13.98
40	40	46.70	-0.04	83.69	-13.98
40	41	48.15	-0.04	97.71	-145.49
41	41	48.15	-0.04	97.71	-145.49
41	42	49.60	-1.09	116.06	-300.56
42	42	49.60	0.00	116.19	-300.56
42	43	51.05	0.00	134.52	-482.32
43	43	51.05	0.00	134.52	-482.32
43	44	51.50	0.00	140.21	-544.12
44	44	51.50	0.00	140.21	-544.12
44	45	52.50	0.00	152.86	-690.66
45	1045	52.50	0.00	-150.66	-690.66
45	46	53.50	0.00	-138.01	-546.33
46	46	53.50	0.00	-138.01	-546.33
46	47	53.95	0.00	-132.32	-485.50
47	47	53.95	0.00	-132.32	-485.50
47	48	55.40	0.00	-113.99	-306.92
48	48	55.40	-1.04	-113.86	-306.92
48	49	56.85	0.01	-95.53	-155.05
49	49	56.85	0.01	-95.53	-155.05
49	50	58.30	0.01	-81.49	-26.72
50	50	58.30	-0.71	-81.49	-26.72
50	51	59.75	-0.40	-49.16	60.64
51	51	59.75	-0.40	-49.16	60.64
51	52	61.20	-0.32	-38.94	124.51

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-38.94	124.51
52	53	62.65	0.00	-28.73	173.59
53	53	62.65	0.00	-28.73	173.59
53	54	64.10	0.00	-18.51	207.82
54	54	64.10	0.00	-18.51	207.82
54	55	65.55	0.00	-8.31	227.27
55	55	65.55	0.00	-8.31	227.27
55	56	67.00	0.00	1.92	231.90
56	56	67.00	0.00	1.92	231.90
56	57	68.45	0.00	12.13	221.71
57	57	68.45	0.00	12.13	221.71
57	58	69.90	0.00	22.34	196.72
58	58	69.90	0.00	22.34	196.72
58	59	71.35	0.00	32.56	156.93
59	59	71.35	0.00	32.56	156.93
59	60	72.80	0.00	42.76	102.30
60	60	72.80	-0.36	42.76	102.30
60	61	74.25	-0.44	52.98	32.90
61	61	74.25	-0.44	52.98	32.90
61	62	75.70	-0.75	86.71	-72.13
62	62	75.70	-0.01	86.72	-72.13
62	63	77.15	-0.01	100.74	-208.04
63	63	77.15	-0.01	100.74	-208.04
63	64	78.60	-1.07	119.07	-367.50
64	64	78.60	0.00	119.20	-367.50
64	65	80.05	0.00	137.53	-553.62
65	65	80.05	0.00	137.53	-553.62
65	66	80.50	0.00	143.23	-616.80
66	66	80.50	0.00	143.23	-616.80
66	67	81.50	0.00	155.88	-766.36
67	1067	81.50	0.00	-163.29	-766.36
67	68	82.50	0.00	-150.65	-609.40
68	68	82.50	0.00	-150.65	-609.40
68	69	83.08	0.00	-143.38	-524.84
69	69	83.08	0.00	-143.38	-524.84
69	70	84.65	0.00	-123.45	-314.71
70	70	84.65	-1.03	-123.33	-314.71
70	71	86.23	0.03	-103.42	-136.06
71	71	86.23	0.03	-103.42	-136.06
71	72	87.80	0.03	-64.23	13.14
72	72	87.80	-0.49	-64.22	13.14
72	73	89.38	-0.40	-53.14	105.56
73	73	89.38	-0.40	-53.14	105.56
73	74	90.95	-0.32	-42.04	180.51
74	74	90.95	0.00	-42.04	180.51
74	75	92.53	0.00	-30.95	237.97
75	75	92.53	0.00	-30.95	237.97
75	76	94.10	0.00	-19.85	277.97
76	76	94.10	0.00	-19.85	277.97
76	77	95.68	0.00	-8.75	300.50
77	77	95.68	0.00	-8.75	300.50

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	2.34	305.56
78	78	97.25	0.00	2.34	305.56
78	79	98.83	0.00	13.43	293.14
79	79	98.83	0.00	13.43	293.14
79	80	100.40	0.00	24.53	263.25
80	80	100.40	0.00	24.53	263.25
80	81	101.98	0.00	35.62	215.89
81	81	101.98	0.00	35.62	215.89
81	82	103.55	0.00	46.71	151.05
82	82	103.55	-0.36	46.71	151.05
82	83	105.13	-0.44	57.81	68.73
83	83	105.13	-0.44	57.81	68.73
83	84	106.70	-0.75	94.52	-45.04
84	84	106.70	-0.03	94.52	-45.04
84	85	108.28	-0.03	109.74	-205.90
85	85	108.28	-0.03	109.74	-205.90
85	86	109.85	-1.08	129.67	-394.52
86	86	109.85	0.00	129.79	-394.52
86	87	111.43	0.00	149.71	-614.65
87	87	111.43	0.00	149.71	-614.65
87	88	112.00	0.00	156.98	-702.82
88	88	112.00	0.00	156.98	-702.82
88	89	113.00	0.00	169.63	-866.11
89	1089	113.00	0.00	-169.78	-866.11
89	90	114.00	0.00	-157.11	-702.65
90	90	114.00	0.00	-157.11	-702.65
90	91	114.58	0.00	-149.85	-614.40
91	91	114.58	0.00	-149.85	-614.40
91	92	116.15	0.00	-129.91	-394.09
92	92	116.15	-1.10	-129.79	-394.09
92	93	117.73	-0.05	-109.88	-205.23
93	93	117.73	-0.05	-109.88	-205.23
93	94	119.30	-0.05	-94.64	-44.14
94	94	119.30	-0.75	-94.65	-44.14
94	95	120.88	-0.44	-57.93	69.78
95	95	120.88	-0.44	-57.93	69.78
95	96	122.45	-0.36	-46.85	152.30
96	96	122.45	0.00	-46.85	152.30
96	97	124.03	0.00	-35.75	217.34
97	97	124.03	0.00	-35.75	217.34
97	98	125.60	0.00	-24.66	264.92
98	98	125.60	0.00	-24.66	264.92
98	99	127.18	0.00	-13.56	295.03
99	99	127.18	0.00	-13.56	295.03
99	100	128.75	0.00	-2.47	307.65
100	100	128.75	0.00	-2.47	307.65
100	101	130.33	0.00	8.62	302.81
101	101	130.33	0.00	8.62	302.81
101	102	131.90	0.00	19.73	280.49
102	102	131.90	0.00	19.73	280.49
102	103	133.48	0.00	30.81	240.69

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	30.81	240.69
103	104	135.05	0.00	41.92	183.43
104	104	135.05	-0.32	41.92	183.43
104	105	136.63	-0.40	53.00	108.69
105	105	136.63	-0.40	53.00	108.69
105	106	138.20	-0.49	64.09	16.48
106	106	138.20	0.05	64.11	16.48
106	107	139.78	0.05	103.29	-132.29
107	107	139.78	0.05	103.29	-132.29
107	108	141.35	-1.01	123.20	-310.72
108	108	141.35	0.00	123.31	-310.72
108	109	142.93	0.00	143.24	-520.62
109	109	142.93	0.00	143.24	-520.62
109	110	143.50	0.00	150.51	-605.09
110	110	143.50	0.00	150.51	-605.09
110	111	144.50	0.00	163.16	-761.90
111	111	144.50	0.00	-155.95	-761.90
111	112	145.50	0.00	-143.30	-612.26
112	112	145.50	0.00	-143.30	-612.26
112	113	145.68	0.00	-141.09	-587.40
113	113	145.68	0.00	-141.09	-587.40
113	114	146.85	0.00	-126.23	-430.36
114	114	146.85	-1.11	-126.07	-430.36
114	115	148.03	-0.06	-111.21	-290.86
115	115	148.03	-0.06	-111.21	-290.86
115	116	149.20	-0.06	-99.83	-166.86
116	116	149.20	-1.06	-99.84	-166.86
116	117	150.38	-0.94	-88.48	-56.23
117	117	150.38	-0.94	-88.48	-56.23
117	118	151.55	-0.58	-56.24	29.70
118	118	151.55	0.00	-56.25	29.70
118	119	152.73	0.00	-47.97	90.93
119	119	152.73	0.00	-47.97	90.93
119	120	153.90	0.00	-39.69	142.42
120	120	153.90	0.00	-39.69	142.42
120	121	155.08	0.00	-31.43	184.20
121	121	155.08	0.00	-31.43	184.20
121	122	156.25	0.00	-23.15	216.24
122	122	156.25	0.00	-23.15	216.24
122	123	157.43	0.00	-14.86	238.58
123	123	157.43	0.00	-14.86	238.58
123	124	158.60	0.00	-6.59	251.17
124	124	158.60	0.00	-6.59	251.17
124	125	159.78	0.00	1.69	254.05
125	125	159.78	0.00	1.69	254.05
125	126	160.95	0.00	9.96	247.20
126	126	160.95	0.00	9.96	247.20
126	127	162.13	0.00	18.24	230.63
127	127	162.13	0.00	18.24	230.63
127	128	163.30	0.00	26.51	204.33
128	128	163.30	0.00	26.51	204.33

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

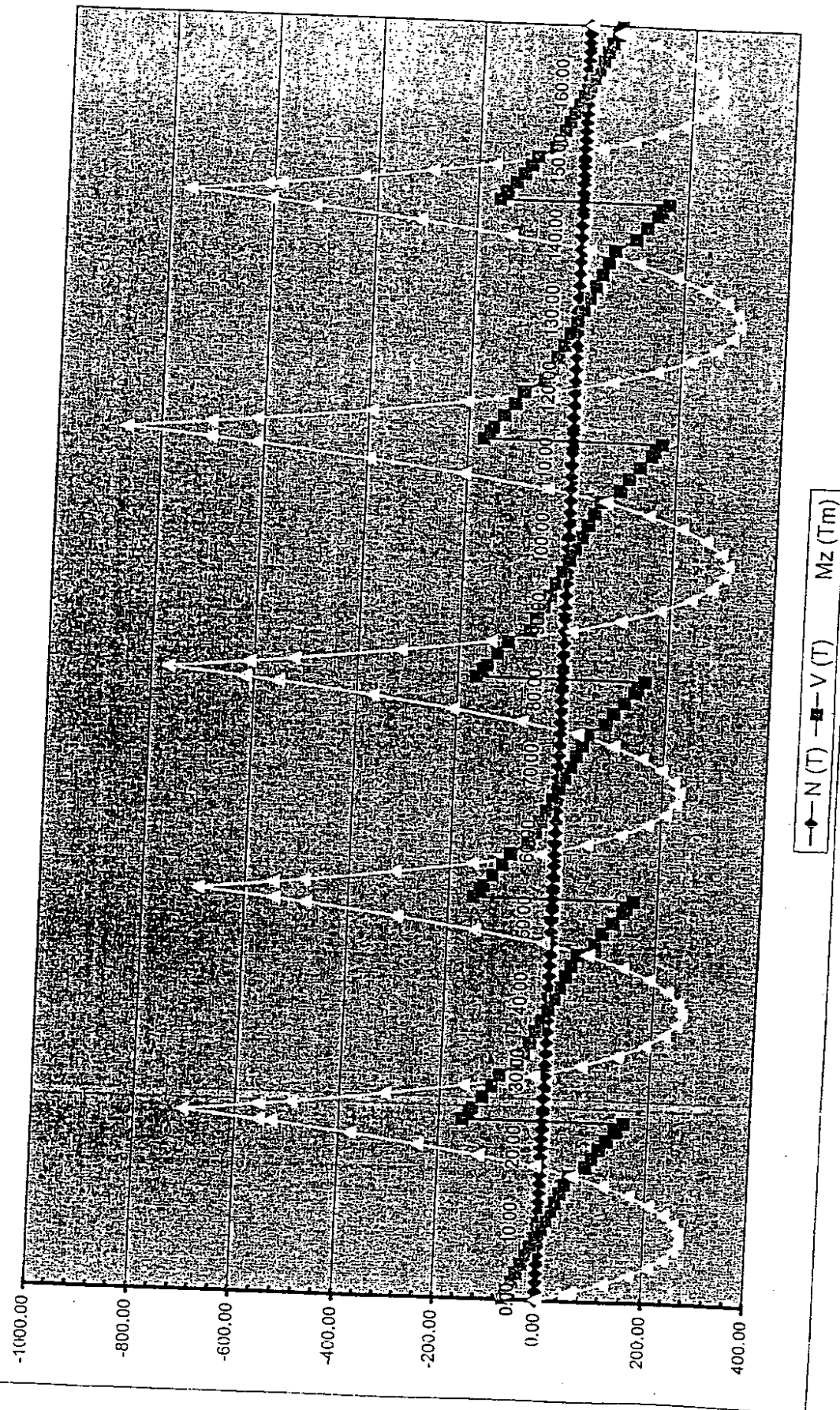
Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	34.80	168.29
129	129	164.48	0.00	34.80	168.29
129	130	165.65	0.00	43.08	122.55
130	130	165.65	0.00	43.08	122.55
130	131	166.83	0.00	51.36	67.07
131	131	166.83	0.00	51.36	67.07
131	132	167.00	0.00	52.58	57.97
132	132	167.00	0.00	52.58	57.97
132	133	168.00	0.00	59.62	1.87

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuracion

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-61.55	0.45
1	2	1.00	0.00	-23.24	27.20
2	2	1.00	0.00	-23.24	27.20
2	3	1.18	0.00	-22.01	31.16
3	3	1.18	0.00	-22.01	31.16
3	4	2.35	0.00	-13.73	52.17
4	4	2.35	0.00	-13.73	52.17
4	5	3.53	0.00	-5.45	63.40
5	5	3.53	0.00	-5.45	63.40
5	6	4.70	0.00	2.82	64.96
6	6	4.70	0.00	2.82	64.96
6	7	5.88	0.00	11.10	56.78
7	7	5.88	0.00	11.10	56.78
7	8	7.05	0.00	19.38	38.88
8	8	7.05	0.00	19.38	38.88
8	9	8.23	0.00	27.65	11.22
9	9	8.23	0.00	27.65	11.22
9	10	9.40	0.00	35.94	-26.14
10	10	9.40	0.00	35.94	-26.14
10	11	10.58	0.00	44.21	-73.21
11	11	10.58	0.00	44.21	-73.21
11	12	11.75	0.00	52.49	-130.03
12	12	11.75	0.00	52.49	-130.03
12	13	12.93	0.00	60.76	-196.55
13	13	12.93	0.00	60.76	-196.55
13	14	14.10	0.00	69.04	-272.83
14	14	14.10	0.00	69.04	-272.83
14	15	15.28	0.00	77.31	-358.80
15	15	15.28	0.00	77.31	-358.80
15	16	16.45	0.00	85.59	-454.51
16	16	16.45	-0.94	85.59	-454.51
16	17	17.63	-1.29	117.18	-563.37
17	17	17.63	-1.29	117.18	-563.37
17	18	18.80	-1.41	128.54	-707.74
18	18	18.80	-0.01	128.54	-707.74
18	19	19.98	-0.01	193.94	-894.48
19	19	19.98	-0.01	193.94	-894.48
19	20	21.15	-1.06	252.56	-1154.01
20	20	21.15	0.00	252.72	-1154.01
20	21	22.33	0.00	326.94	-1494.33
21	21	22.33	0.00	326.94	-1494.33
21	22	22.50	0.00	329.16	-1551.74
22	22	22.50	0.00	329.16	-1551.74
22	23	23.50	0.00	375.48	-1903.59
23	1023	23.50	0.00	-393.59	-1903.59
23	24	24.50	0.00	-361.55	-1529.18
24	24	24.50	0.00	-361.55	-1529.18
24	25	24.95	0.00	-337.85	-1375.07
25	25	24.95	0.00	-337.85	-1375.07
25	26	26.40	0.00	-248.46	-939.94
26	26	26.40	-1.02	-248.34	-939.94

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-180.58	-624.86
27	27	27.85	0.04	-180.58	-624.86
27	28	29.30	0.04	-128.69	-400.65
28	28	29.30	-1.17	-128.68	-400.65
28	29	30.75	-0.37	-45.73	-296.72
29	29	30.75	-0.37	-45.73	-296.72
29	30	32.20	-0.29	-35.52	-237.82
30	30	32.20	0.00	-35.52	-237.82
30	31	33.65	0.00	-25.30	-193.73
31	31	33.65	0.00	-25.30	-193.73
31	32	35.10	0.00	-15.10	-164.45
32	32	35.10	0.00	-15.10	-164.45
32	33	36.55	0.00	-4.88	-149.99
33	33	36.55	0.00	-4.88	-149.99
33	34	38.00	0.00	12.73	-158.16
34	34	38.00	0.00	12.73	-158.16
34	35	39.45	0.00	22.94	-184.06
35	35	39.45	0.00	22.94	-184.06
35	36	40.90	0.00	33.17	-224.75
36	36	40.90	0.00	33.17	-224.75
36	37	42.35	0.00	43.38	-280.26
37	37	42.35	0.00	43.38	-280.26
37	38	43.80	0.00	53.60	-350.57
38	38	43.80	-0.47	53.60	-350.57
38	39	45.25	-0.55	63.80	-435.71
39	39	45.25	-0.55	63.80	-435.71
39	40	46.70	-1.11	124.25	-549.57
40	40	46.70	-0.04	124.25	-549.57
40	41	48.15	-0.04	179.88	-767.32
41	41	48.15	-0.04	179.88	-767.32
41	42	49.60	-1.09	247.20	-1075.54
42	42	49.60	0.00	247.33	-1075.54
42	43	51.05	0.00	332.70	-1491.61
43	43	51.05	0.00	332.70	-1491.61
43	44	51.50	0.00	338.38	-1642.59
44	44	51.50	0.00	338.38	-1642.59
44	45	52.50	0.00	391.44	-2014.89
45	1045	52.50	0.00	-396.14	-2014.89
45	46	53.50	0.00	-360.25	-1637.11
46	46	53.50	0.00	-360.25	-1637.11
46	47	53.95	0.00	-337.30	-1483.93
47	47	53.95	0.00	-337.30	-1483.93
47	48	55.40	0.00	-251.61	-1059.22
48	48	55.40	-1.04	-251.48	-1059.22
48	49	56.85	0.01	-183.74	-743.31
49	49	56.85	0.01	-183.74	-743.31
49	50	58.30	0.01	-127.21	-518.81
50	50	58.30	-1.14	-127.21	-518.81
50	51	59.75	-0.37	-45.71	-418.68
51	51	59.75	-0.37	-45.71	-418.68
51	52	61.20	-0.28	-35.49	-359.80

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-35.49	-359.80
52	53	62.65	0.00	-25.29	-315.70
53	53	62.65	0.00	-25.29	-315.70
53	54	64.10	0.00	-15.07	-286.45
54	54	64.10	0.00	-15.07	-286.45
54	55	65.55	0.00	-4.86	-271.99
55	55	65.55	0.00	-4.86	-271.99
55	56	67.00	0.00	14.59	-280.86
56	56	67.00	0.00	14.59	-280.86
56	57	68.45	0.00	24.80	-309.42
57	57	68.45	0.00	24.80	-309.42
57	58	69.90	0.00	35.01	-352.79
58	58	69.90	0.00	35.01	-352.79
58	59	71.35	0.00	45.23	-410.95
59	59	71.35	0.00	45.23	-410.95
59	60	72.80	0.00	55.43	-483.95
60	60	72.80	-0.48	55.43	-483.95
60	61	74.25	-0.57	65.65	-571.74
61	61	74.25	-0.57	65.65	-571.74
61	62	75.70	-1.18	131.65	-701.57
62	62	75.70	-0.01	131.67	-701.57
62	63	77.15	-0.01	193.26	-932.30
63	63	77.15	-0.01	193.26	-932.30
63	64	78.60	-1.07	260.42	-1254.54
64	64	78.60	0.00	260.55	-1254.54
64	65	80.05	0.00	339.73	-1673.62
65	65	80.05	0.00	339.73	-1673.62
65	66	80.50	0.00	351.25	-1830.35
66	66	80.50	0.00	351.25	-1830.35
66	67	81.50	0.00	403.82	-2210.92
67	1067	81.50	0.00	-420.26	-2210.92
67	68	82.50	0.00	-386.77	-1810.01
68	68	82.50	0.00	-386.77	-1810.01
68	69	83.08	0.00	-359.87	-1598.03
69	69	83.08	0.00	-359.87	-1598.03
69	70	84.65	0.00	-264.32	-1107.39
70	70	84.65	-1.03	-264.20	-1107.39
70	71	86.23	0.03	-190.56	-742.70
71	71	86.23	0.03	-190.56	-742.70
71	72	87.80	0.03	-110.25	-486.91
72	72	87.80	-0.90	-110.24	-486.91
72	73	89.38	-0.42	-53.21	-370.85
73	73	89.38	-0.42	-53.21	-370.85
73	74	90.95	-0.33	-42.12	-295.78
74	74	90.95	0.00	-42.12	-295.78
74	75	92.53	0.00	-31.02	-238.19
75	75	92.53	0.00	-31.02	-238.19
75	76	94.10	0.00	-19.93	-198.08
76	76	94.10	0.00	-19.93	-198.08
76	77	95.68	0.00	-8.83	-175.43
77	77	95.68	0.00	-8.83	-175.43

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	10.44	-177.50
78	78	97.25	0.00	10.44	-177.50
78	79	98.83	0.00	21.54	-202.70
79	79	98.83	0.00	21.54	-202.70
79	80	100.40	0.00	32.63	-245.38
80	80	100.40	0.00	32.63	-245.38
80	81	101.98	0.00	43.73	-305.53
81	81	101.98	0.00	43.73	-305.53
81	82	103.55	0.00	54.82	-383.16
82	82	103.55	-0.42	54.82	-383.16
82	83	105.13	-0.51	65.92	-478.28
83	83	105.13	-0.51	65.92	-478.28
83	84	106.70	-1.17	141.22	-619.84
84	84	106.70	-0.03	141.22	-619.84
84	85	108.28	-0.03	201.60	-888.03
85	85	108.28	-0.03	201.60	-888.03
85	86	109.85	-1.08	274.75	-1262.74
86	86	109.85	0.00	274.87	-1262.74
86	87	111.43	0.00	366.40	-1751.98
87	87	111.43	0.00	366.40	-1751.98
87	88	112.00	0.00	392.40	-1966.47
88	88	112.00	0.00	392.40	-1966.47
88	89	113.00	0.00	429.75	-2376.61
89	1089	113.00	0.00	-425.17	-2376.61
89	90	114.00	0.00	-387.85	-1971.34
90	90	114.00	0.00	-387.85	-1971.34
90	91	114.58	0.00	-361.86	-1759.62
91	91	114.58	0.00	-361.86	-1759.62
91	92	116.15	0.00	-270.46	-1278.65
92	92	116.15	-1.10	-270.34	-1278.65
92	93	117.73	-0.05	-197.44	-911.57
93	93	117.73	-0.05	-197.44	-911.57
93	94	119.30	-0.05	-137.45	-650.57
94	94	119.30	-1.13	-137.46	-650.57
94	95	120.88	-0.60	-74.82	-501.10
95	95	120.88	-0.60	-74.82	-501.10
95	96	122.45	-0.51	-63.73	-392.00
96	96	122.45	0.00	-63.73	-392.00
96	97	124.03	0.00	-52.63	-300.37
97	97	124.03	0.00	-52.63	-300.37
97	98	125.60	0.00	-41.54	-226.20
98	98	125.60	0.00	-41.54	-226.20
98	99	127.18	0.00	-30.44	-169.51
99	99	127.18	0.00	-30.44	-169.51
99	100	128.75	0.00	-19.35	-130.30
100	100	128.75	0.00	-19.35	-130.30
100	101	130.33	0.00	-8.26	-108.56
101	101	130.33	0.00	-8.26	-108.56
101	102	131.90	0.00	10.28	-113.05
102	102	131.90	0.00	10.28	-113.05
102	103	133.48	0.00	21.37	-137.97

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	21.37	-137.97
103	104	135.05	0.00	32.47	-180.37
104	104	135.05	-0.23	32.47	-180.37
104	105	136.63	-0.31	43.56	-240.23
105	105	136.63	-0.31	43.56	-240.23
105	106	138.20	-0.85	104.66	-350.83
106	106	138.20	0.05	104.68	-350.83
106	107	139.78	0.05	197.12	-604.26
107	107	139.78	0.05	197.12	-604.26
107	108	141.35	-1.01	259.20	-965.14
108	108	141.35	0.00	259.31	-965.14
108	109	142.93	0.00	355.69	-1466.95
109	109	142.93	0.00	355.69	-1466.95
109	110	143.50	0.00	381.77	-1676.65
110	110	143.50	0.00	381.77	-1676.65
110	111	144.50	0.00	418.09	-2076.32
111	111	144.50	0.00	-380.10	-2076.32
111	112	145.50	0.00	-332.54	-1718.24
112	112	145.50	0.00	-332.54	-1718.24
112	113	145.68	0.00	-330.32	-1660.28
113	113	145.68	0.00	-330.32	-1660.28
113	114	146.85	0.00	-248.98	-1325.18
114	114	146.85	-1.11	-248.82	-1325.18
114	115	148.03	-0.06	-193.24	-1061.46
115	115	148.03	-0.06	-193.24	-1061.46
115	116	149.20	-0.06	-137.31	-871.32
116	116	149.20	-1.50	-137.31	-871.32
116	117	150.38	-1.38	-125.95	-716.66
117	117	150.38	-1.38	-125.95	-716.66
117	118	151.55	-1.01	-93.71	-586.70
118	118	151.55	0.00	-93.73	-586.70
118	119	152.73	0.00	-85.45	-481.43
119	119	152.73	0.00	-85.45	-481.43
119	120	153.90	0.00	-77.17	-385.92
120	120	153.90	0.00	-77.17	-385.92
120	121	155.08	0.00	-68.91	-300.12
121	121	155.08	0.00	-68.91	-300.12
121	122	156.25	0.00	-60.63	-224.04
122	122	156.25	0.00	-60.63	-224.04
122	123	157.43	0.00	-52.34	-157.67
123	123	157.43	0.00	-52.34	-157.67
123	124	158.60	0.00	-44.07	-101.06
124	124	158.60	0.00	-44.07	-101.06
124	125	159.78	0.00	-35.79	-54.13
125	125	159.78	0.00	-35.79	-54.13
125	126	160.95	0.00	-27.52	-16.97
126	126	160.95	0.00	-27.52	-16.97
126	127	162.13	0.00	-19.24	10.48
127	127	162.13	0.00	-19.24	10.48
127	128	163.30	0.00	-10.97	28.22
128	128	163.30	0.00	-10.97	28.22

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

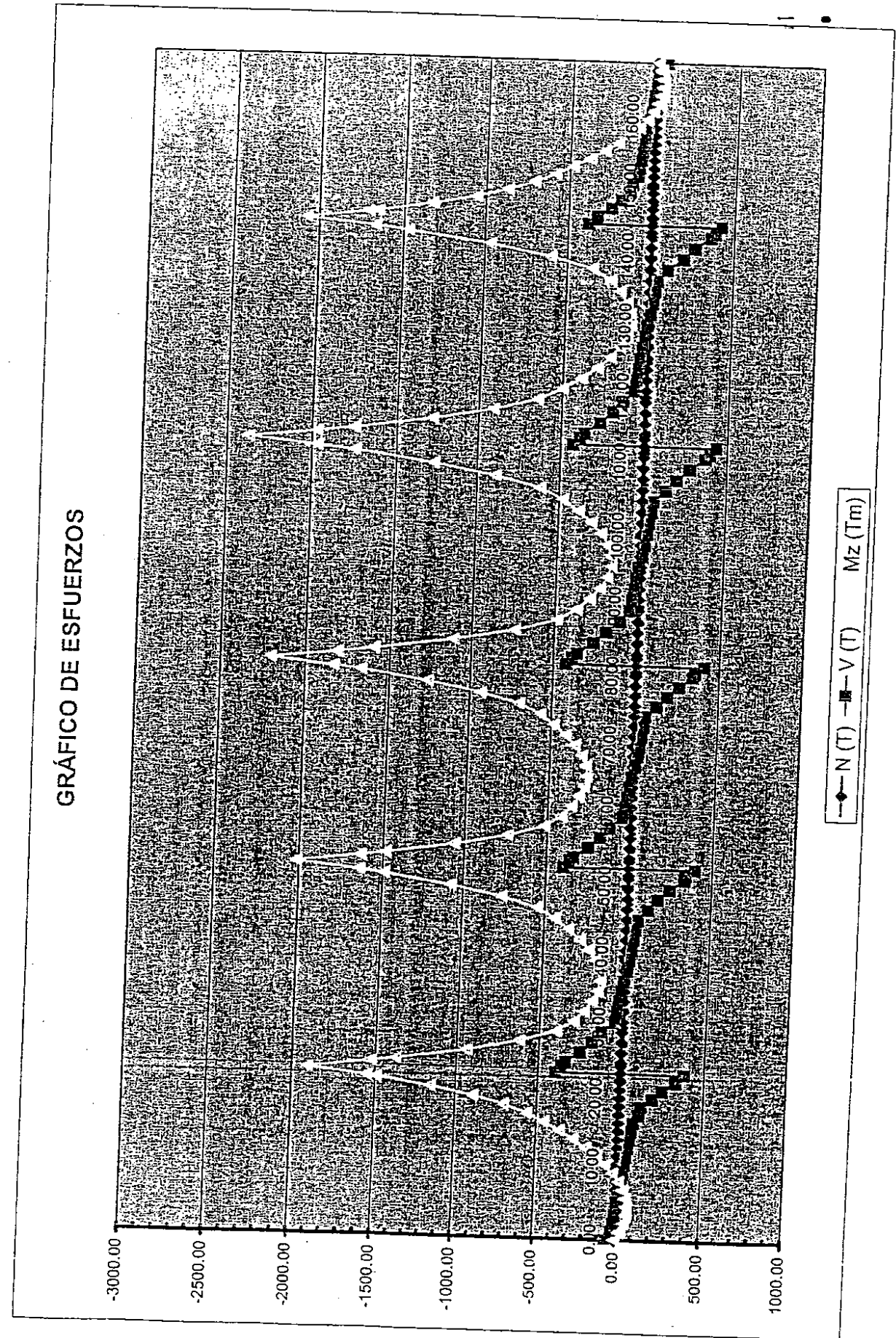
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	-2.68	36.21
129	129	164.48	0.00	-2.68	36.21
129	130	165.65	0.00	5.60	34.48
130	130	165.65	0.00	5.60	34.48
130	131	166.83	0.00	13.88	23.05
131	131	166.83	0.00	13.88	23.05
131	132	167.00	0.00	15.10	20.51
132	132	167.00	0.00	15.10	20.51
132	133	168.00	0.00	59.62	1.87

fisuracion.esv

Programa DINTEL IDEAM S.A.
INFRECneg

24/08/01

GRÁFICO DE ESFUERZOS



1ª ITERACION

BARRA	NUDO	M-	IO	PILA P-1 I M-X	Inueva	Imedia barra	Δ	Δ inicial
17			2.319927					
18	19	-894.48	2.319927	1.69203	1.90133	2.21528	-5%	-5%
19	19	-894.48	2.319927	1.69203	1.90133	2.11063	-9%	-9%
19	20	-1154.01	2.319927	1.19389	1.56923	1.73528	-25%	-25%
20	20	-1154.01	2.319927	1.19389	1.56923	1.73528	-25%	-25%
20	21	-1494.33	2.319927	0.89339	1.36890	1.46907	-37%	-37%
21	21	-1494.33	2.319927	0.89339	1.36890	1.46907	-37%	-37%
21	22	-1551.74	2.319927	0.86592	1.35059	1.35974	-41%	-41%
22	22	-1551.74	2.319927	0.86592	1.35059	1.35974	-41%	-41%
22	23	-1903.59	2.319927	0.76340	1.28224	1.31642	-43%	-43%
23	1023	-1903.59	2.319927	0.76340	1.28224	1.31642	-43%	-43%
23	24	-1529.18	2.319927	0.87671	1.35778	1.32001	-43%	-43%
24	24	-1529.18	2.319927	0.87671	1.35778	1.32001	-43%	-43%
24	25	-1375.07	2.319927	0.97013	1.42007	1.38892	-40%	-40%
25	25	-1375.07	2.319927	0.97013	1.42007	1.38892	-40%	-40%
25	26	-939.94	2.319927	1.58528	1.83017	1.62512	-30%	-30%
26	26	-939.94	2.319927	1.58528	1.83017	1.62512	-30%	-30%
26	27	-624.86	2.319927	2.31993	2.31993	2.07505	-11%	-11%
27	27	-624.86	2.319927	2.31993	2.31993	2.07505	-11%	-11%
28			2.319927				0%	0%
							2.31993	0%

BARRA	NUDO	M-	IO	PILA P-4 I M-X	Inueva	Imedia barra	Δ	Δ inicial
83			2.319927					
84	85	-888.03	2.319927	1.70718	1.91143	2.21780	-4%	-4%
85	85	-888.03	2.319927	1.70718	1.91143	2.11568	-9%	-9%
85	86	-1262.74	2.319927	1.06959	1.48637	1.69890	-27%	-27%
86	86	-1262.74	2.319927	1.06959	1.48637	1.69890	-27%	-27%
86	87	-1751.98	2.319927	0.79513	1.30340	1.39488	-40%	-40%
87	87	-1751.98	2.319927	0.79513	1.30340	1.39488	-40%	-40%
87	88	-1966.47	2.319927	0.75388	1.27589	1.28964	-44%	-44%
88	88	-1966.47	2.319927	0.75388	1.27589	1.28964	-44%	-44%
88	89	-2376.61	2.319927	0.72547	1.25695	1.26642	-45%	-45%
89	1089	-2376.61	2.319927	0.72547	1.25695	1.26642	-45%	-45%
89	90	-1971.34	2.319927	0.75321	1.27545	1.26620	-45%	-45%
90	90	-1971.34	2.319927	0.75321	1.27545	1.26620	-45%	-45%
90	91	-1759.62	2.319927	0.79321	1.30211	1.28878	-44%	-44%
91	91	-1759.62	2.319927	0.79321	1.30211	1.28878	-44%	-44%
91	92	-1278.65	2.319927	1.05140	1.47424	1.38818	-40%	-40%
92	92	-1278.65	2.319927	1.05140	1.47424	1.38818	-40%	-40%
92	93	-911.57	2.319927	1.65189	1.87457	1.67441	-28%	-28%
93	93	-911.57	2.319927	1.65189	1.87457	1.67441	-28%	-28%
94			2.319927				-10%	-10%
							2.20859	-5%

BARRA	NUDO	M-	IO	PILA P-2 I M-X	Inueva	Imedia barra	Δ	Δ inicial
39			2.319927					
40	41	-767.32	2.319927	2.319927	2.31993	2.31993	0%	0%
41	41	-767.32	2.319927	2.319927	2.31993	2.31993	0%	0%
41	42	-1075.54	2.319927	1.328771	1.65916	1.98954	-14%	-14%
42	42	-1075.54	2.319927	1.328771	1.65916	1.98954	-14%	-14%
42	43	-1491.61	2.319927	0.894687	1.36977	1.51446	-35%	-35%
43	43	-1491.61	2.319927	0.894687	1.36977	1.51446	-35%	-35%
43	44	-1642.59	2.319927	0.829414	1.32625	1.34801	-42%	-42%
44	44	-1642.59	2.319927	0.829414	1.32625	1.34801	-42%	-42%
44	45	-2014.89	2.319927	0.747264	1.27149	1.29887	-44%	-44%
45	1045	-2014.89	2.319927	0.747264	1.27149	1.29887	-44%	-44%
45	46	-1637.11	2.319927	0.831132	1.32740	1.29944	-44%	-44%
46	46	-1637.11	2.319927	0.831132	1.32740	1.29944	-44%	-44%
46	47	-1483.93	2.319927	0.898361	1.37222	1.34981	-42%	-42%
47	47	-1483.93	2.319927	0.898361	1.37222	1.34981	-42%	-42%
47	48	-1059.22	2.319927	1.357251	1.67814	1.52518	-34%	-34%
48	48	-1059.22	2.319927	1.357251	1.67814	1.52518	-34%	-34%
48	49	-743.31	2.319927	2.319927	2.31993	1.99904	-14%	-14%
49	49	-743.31	2.319927	2.319927	2.31993	1.99904	-14%	-14%
50			2.319927				0%	0%
							2.31993	0%

BARRA	NUDO	M-	IO	PILA P-5 I M-X	Inueva	Imedia barra	Δ	Δ inicial
105			2.319927					
106	107	-604.26	2.319927	2.31993	2.31993	2.31993	0%	0%
107	107	-604.26	2.319927	2.31993	2.31993	2.31993	0%	0%
107	108	-965.14	2.319927	1.52612	1.79072	2.05532	-11%	-11%
108	108	-965.14	2.319927	1.52612	1.79072	2.05532	-11%	-11%
108	109	-1466.95	2.319927	0.90649	1.37763	1.58418	-32%	-32%
109	109	-1466.95	2.319927	0.90649	1.37763	1.58418	-32%	-32%
109	110	-1676.65	2.319927	0.81874	1.31913	1.34838	-42%	-42%
110	110	-1676.65	2.319927	0.81874	1.31913	1.34838	-42%	-42%
110	111	-2076.32	2.319927	0.73888	1.26589	1.29251	-44%	-44%
111	1111	-2076.32	2.319927	0.73888	1.26589	1.29251	-44%	-44%
111	112	-1718.24	2.319927	0.80571	1.31045	1.28817	-44%	-44%
112	112	-1718.24	2.319927	0.80571	1.31045	1.28817	-44%	-44%
112	113	-1660.28	2.319927	0.82387	1.32256	1.31650	-43%	-43%
113	113	-1660.28	2.319927	0.82387	1.32256	1.31650	-43%	-43%
113	114	-1325.18	2.319927	1.00693	1.44459	1.38358	-40%	-40%
114	114	-1325.18	2.319927	1.00693	1.44459	1.38358	-40%	-40%
114	115	-1061.46	2.319927	1.35334	1.67553	1.56006	-33%	-33%
115	115	-1061.46	2.319927	1.35334	1.67553	1.56006	-33%	-33%
116			2.319927				-14%	-14%
							2.15883	-7%

BARRA	NUDO	M-	IO	PILA P-3 I M-X	Inueva	Imedia barra	Δ	Δ inicial
61			2.319927					
62	63	-932.3	2.319927	1.60322	1.84213	2.20048	-5%	-5%
63	63	-932.3	2.319927	1.60322	1.84213	2.08103	-10%	-10%
63	64	-1254.54	2.319927	1.07896	1.49262	1.66737	-28%	-28%
64	64	-1254.54	2.319927	1.07896	1.49262	1.66737	-28%	-28%
64	65	-1673.62	2.319927	0.81969	1.31977	1.40619	-39%	-39%
65	65	-1673.62	2.319927	0.81969	1.31977	1.40619	-39%	-39%
65	66	-1830.35	2.319927	0.77857	1.29235	1.30606	-44%	-44%
66	66	-1830.35	2.319927	0.77857	1.29235	1.30606	-44%	-44%
66	67	-2210.92	2.319927	0.73232	1.26152	1.27694	-45%	-45%
67	1067	-2210.92	2.319927	0.73232	1.26152	1.27694	-45%	-45%
67	68	-1810.01	2.319927	0.78278	1.29516	1.27834	-45%	-45%
68	68	-1810.01	2.319927	0.78278	1.29516	1.27834	-45%	-45%
68	69	-1598.03	2.319927	0.84377	1.33582	1.31549	-43%	-43%
69	69	-1598.03	2.319927	0.84377	1.33582	1.31549	-43%	-43%
69	70	-1101.39	2.319927	1.28366	1.62908	1.48245	-36%	-36%
70	70	-1101.39	2.319927	1.28366	1.62908	1.48245	-36%	-36%
70	71	-742.7	2.319927	2.31993	2.31993	1.97450	-15%	-15%
71	71	-742.7	2.319927	2.31993	2.31993	1.97450	-15%	-15%
72			2.319927				0%	0%
							2.31993	0%

Subanejo 3.2

INERCIAS EN PRIMERA ITERACIÓN

1	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
2	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
3	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
4	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
5	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
6	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
7	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
8	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
9	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
10	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
11	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
12	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
13	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
14	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
15	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
16	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
17	SK=3.259684	IX=1	IY=1	IZ=2.215280	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
18	SK=3.259684	IX=1	IY=1	IZ=2.110630	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
19	SK=3.259684	IX=1	IY=1	IZ=1.735280	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
20	SK=3.259684	IX=1	IY=1	IZ=1.469070	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
21	SK=3.259684	IX=1	IY=1	IZ=1.359740	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
22	SK=3.259684	IX=1	IY=1	IZ=1.316420	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
23	SK=3.259684	IX=1	IY=1	IZ=1.320010	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
24	SK=3.259684	IX=1	IY=1	IZ=1.388920	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
25	SK=3.259684	IX=1	IY=1	IZ=1.625120	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
26	SK=3.259684	IX=1	IY=1	IZ=2.075050	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
27	SK=3.259684	IX=1	IY=1	IZ=2.319927	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
28	SK=3.259684	IX=1	IY=1	IZ=2.319927	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
29	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
30	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
31	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
32	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
33	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
34	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
35	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
36	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
37	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
38	SK=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987			

2

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1;1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.03	0.45
1	2	1.00	0.00	0.03	0.42
2	2	1.00	0.00	0.03	0.42
2	3	1.18	0.00	0.03	0.42
3	3	1.18	0.00	0.03	0.42
3	4	2.35	0.00	0.03	0.39
4	4	2.35	0.00	0.03	0.39
4	5	3.53	0.00	0.03	0.35
5	5	3.53	0.00	0.03	0.35
5	6	4.70	0.00	0.03	0.32
6	6	4.70	0.00	0.03	0.32
6	7	5.88	0.00	0.03	0.29
7	7	5.88	0.00	0.03	0.29
7	8	7.05	0.00	0.03	0.26
8	8	7.05	0.00	0.03	0.26
8	9	8.23	0.00	0.03	0.22
9	9	8.23	0.00	0.03	0.22
9	10	9.40	0.00	0.03	0.19
10	10	9.40	0.00	0.03	0.19
10	11	10.58	0.00	0.03	0.16
11	11	10.58	0.00	0.03	0.16
11	12	11.75	0.00	0.03	0.13
12	12	11.75	0.00	0.03	0.13
12	13	12.93	0.00	0.03	0.09
13	13	12.93	0.00	0.03	0.09
13	14	14.10	0.00	0.03	0.06
14	14	14.10	0.00	0.03	0.06
14	15	15.28	0.00	0.03	0.03
15	15	15.28	0.00	0.03	0.03
15	16	16.45	0.00	0.03	0.00
16	16	16.45	0.00	0.03	0.00
16	17	17.63	0.00	0.03	-0.04
17	17	17.63	0.00	0.03	-0.04
17	18	18.80	0.00	0.03	-0.07
18	18	18.80	-0.01	0.03	-0.07
18	19	19.98	-0.01	0.03	-0.10
19	19	19.98	-0.01	0.03	-0.10
19	20	21.15	-1.06	3.53	-2.28
20	20	21.15	0.00	3.69	-2.28
20	21	22.33	0.00	7.19	-8.67
21	21	22.33	0.00	7.19	-8.67
21	22	22.50	0.00	7.71	-9.98
22	22	22.50	0.00	7.71	-9.98
22	23	23.50	0.00	10.69	-19.18
23	1023	23.50	0.00	-12.95	-19.18
23	24	24.50	0.00	-9.97	-7.72
24	24	24.50	0.00	-9.97	-7.72
24	25	24.95	0.00	-8.62	-3.54
25	25	24.95	0.00	-8.62	-3.54
25	26	26.40	0.00	-4.30	5.83
26	26	26.40	-1.02	-4.18	5.83

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1;1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	0.15	8.84
27	27	27.85	0.04	0.15	8.84
27	28	29.30	0.04	0.15	8.62
28	28	29.30	0.00	0.15	8.62
28	29	30.75	0.00	0.15	8.40
29	29	30.75	0.00	0.15	8.40
29	30	32.20	0.00	0.15	8.18
30	30	32.20	0.00	0.15	8.18
30	31	33.65	0.00	0.15	7.97
31	31	33.65	0.00	0.15	7.97
31	32	35.10	0.00	0.15	7.75
32	32	35.10	0.00	0.15	7.75
32	33	36.55	0.00	0.15	7.53
33	33	36.55	0.00	0.15	7.53
33	34	38.00	0.00	0.15	7.31
34	34	38.00	0.00	0.15	7.31
34	35	39.45	0.00	0.15	7.09
35	35	39.45	0.00	0.15	7.09
35	36	40.90	0.00	0.15	6.87
36	36	40.90	0.00	0.15	6.87
36	37	42.35	0.00	0.15	6.66
37	37	42.35	0.00	0.15	6.66
37	38	43.80	0.00	0.15	6.44
38	38	43.80	0.00	0.15	6.44
38	39	45.25	0.00	0.15	6.22
39	39	45.25	0.00	0.15	6.22
39	40	46.70	0.00	0.15	6.00
40	40	46.70	-0.04	0.15	6.00
40	41	48.15	-0.04	0.15	5.78
41	41	48.15	-0.04	0.15	5.78
41	42	49.60	-1.09	4.47	2.34
42	42	49.60	0.00	4.60	2.34
42	43	51.05	0.00	8.92	-7.47
43	43	51.05	0.00	8.92	-7.47
43	44	51.50	0.00	10.27	-11.78
44	44	51.50	0.00	10.27	-11.78
44	45	52.50	0.00	13.25	-23.54
45	1045	52.50	0.00	-13.05	-23.54
45	46	53.50	0.00	-10.07	-11.99
46	46	53.50	0.00	-10.07	-11.99
46	47	53.95	0.00	-8.72	-7.76
47	47	53.95	0.00	-8.72	-7.76
47	48	55.40	0.00	-4.40	1.76
48	48	55.40	-1.04	-4.27	1.76
48	49	56.85	0.01	0.05	4.91
49	49	56.85	0.01	0.05	4.91
49	50	58.30	0.01	0.05	4.84
50	50	58.30	0.00	0.05	4.84
50	51	59.75	0.00	0.05	4.76
51	51	59.75	0.00	0.05	4.76
51	52	61.20	0.00	0.05	4.69

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1;1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.05	4.69
52	53	62.65	0.00	0.05	4.62
53	53	62.65	0.00	0.05	4.62
53	54	64.10	0.00	0.05	4.54
54	54	64.10	0.00	0.05	4.54
54	55	65.55	0.00	0.05	4.47
55	55	65.55	0.00	0.05	4.47
55	56	67.00	0.00	0.05	4.40
56	56	67.00	0.00	0.05	4.40
56	57	68.45	0.00	0.05	4.32
57	57	68.45	0.00	0.05	4.32
57	58	69.90	0.00	0.05	4.25
58	58	69.90	0.00	0.05	4.25
58	59	71.35	0.00	0.05	4.18
59	59	71.35	0.00	0.05	4.18
59	60	72.80	0.00	0.05	4.10
60	60	72.80	0.00	0.05	4.10
60	61	74.25	0.00	0.05	4.03
61	61	74.25	0.00	0.05	4.03
61	62	75.70	0.00	0.05	3.96
62	62	75.70	-0.01	0.05	3.96
62	63	77.15	-0.01	0.05	3.88
63	63	77.15	-0.01	0.05	3.88
63	64	78.60	-1.07	4.37	0.58
64	64	78.60	0.00	4.50	0.58
64	65	80.05	0.00	8.82	-9.08
65	65	80.05	0.00	8.82	-9.08
65	66	80.50	0.00	10.17	-13.35
66	66	80.50	0.00	10.17	-13.35
66	67	81.50	0.00	13.15	-25.01
67	1067	81.50	0.00	-14.09	-25.01
67	68	82.50	0.00	-11.11	-12.41
68	68	82.50	0.00	-11.11	-12.41
68	69	83.08	0.00	-9.40	-6.51
69	69	83.08	0.00	-9.40	-6.51
69	70	84.65	0.00	-4.70	4.59
70	70	84.65	-1.03	-4.58	4.59
70	71	86.23	0.03	0.11	8.20
71	71	86.23	0.03	0.11	8.20
71	72	87.80	0.03	0.11	8.02
72	72	87.80	0.00	0.11	8.02
72	73	89.38	0.00	0.11	7.84
73	73	89.38	0.00	0.11	7.84
73	74	90.95	0.00	0.11	7.66
74	74	90.95	0.00	0.11	7.66
74	75	92.53	0.00	0.11	7.48
75	75	92.53	0.00	0.11	7.48
75	76	94.10	0.00	0.11	7.30
76	76	94.10	0.00	0.11	7.30
76	77	95.68	0.00	0.11	7.12
77	77	95.68	0.00	0.11	7.12

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1;1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.11	6.94
78	78	97.25	0.00	0.11	6.94
78	79	98.83	0.00	0.11	6.76
79	79	98.83	0.00	0.11	6.76
79	80	100.40	0.00	0.11	6.58
80	80	100.40	0.00	0.11	6.58
80	81	101.98	0.00	0.11	6.40
81	81	101.98	0.00	0.11	6.40
81	82	103.55	0.00	0.11	6.21
82	82	103.55	0.00	0.11	6.21
82	83	105.13	0.00	0.11	6.03
83	83	105.13	0.00	0.11	6.03
83	84	106.70	0.00	0.11	5.85
84	84	106.70	-0.03	0.11	5.85
84	85	108.28	-0.03	0.11	5.67
85	85	108.28	-0.03	0.11	5.67
85	86	109.85	-1.08	4.81	1.70
86	86	109.85	0.00	4.93	1.70
86	87	111.43	0.00	9.62	-9.76
87	87	111.43	0.00	9.62	-9.76
87	88	112.00	0.00	11.34	-15.79
88	88	112.00	0.00	11.34	-15.79
88	89	113.00	0.00	14.32	-28.61
89	1089	113.00	0.00	-14.43	-28.61
89	90	114.00	0.00	-11.44	-15.68
90	90	114.00	0.00	-11.44	-15.68
90	91	114.58	0.00	-9.73	-9.59
91	91	114.58	0.00	-9.73	-9.59
91	92	116.15	0.00	-5.03	2.03
92	92	116.15	-1.10	-4.91	2.03
92	93	117.73	-0.05	-0.21	6.17
93	93	117.73	-0.05	-0.21	6.17
93	94	119.30	0.00	-0.22	6.52
94	94	119.30	0.00	-0.22	6.52
94	95	120.88	0.00	-0.22	6.86
95	95	120.88	0.00	-0.22	6.86
95	96	122.45	0.00	-0.22	7.21
96	96	122.45	0.00	-0.22	7.21
96	97	124.03	0.00	-0.22	7.55
97	97	124.03	0.00	-0.22	7.55
97	98	125.60	0.00	-0.22	7.90
98	98	125.60	0.00	-0.22	7.90
98	99	127.18	0.00	-0.22	8.25
99	99	127.18	0.00	-0.22	8.25
99	100	128.75	0.00	-0.22	8.59
100	100	128.75	0.00	-0.22	8.59
100	101	130.33	0.00	-0.22	8.94
101	101	130.33	0.00	-0.22	8.94
101	102	131.90	0.00	-0.22	9.28
102	102	131.90	0.00	-0.22	9.28
102	103	133.48	0.00	-0.22	9.63

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1: 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-0.22	9.63
103	104	135.05	0.00	-0.22	9.98
104	104	135.05	0.00	-0.22	9.98
104	105	136.63	0.00	-0.22	10.32
105	105	136.63	0.00	-0.22	10.32
105	106	138.20	0.00	-0.22	10.67
106	106	138.20	0.05	-0.21	10.67
106	107	139.78	0.05	-0.21	11.01
107	107	139.78	0.05	-0.21	11.01
107	108	141.35	-1.01	4.48	7.57
108	108	141.35	0.00	4.59	7.57
108	109	142.93	0.00	9.29	-3.36
109	109	142.93	0.00	9.29	-3.36
109	110	143.50	0.00	11.01	-9.20
110	110	143.50	0.00	11.01	-9.20
110	111	144.50	0.00	13.99	-21.70
111	111	144.50	0.00	-10.86	-21.70
111	112	145.50	0.00	-7.88	-12.32
112	112	145.50	0.00	-7.88	-12.32
112	113	145.68	0.00	-7.36	-10.99
113	113	145.68	0.00	-7.36	-10.99
113	114	146.85	0.00	-3.85	-4.40
114	114	146.85	-1.11	-3.69	-4.40
114	115	148.03	-0.06	-0.19	-2.03
115	115	148.03	-0.06	-0.19	-2.03
115	116	149.20	-0.06	-0.19	-1.80
116	116	149.20	0.00	-0.20	-1.80
116	117	150.38	0.00	-0.20	-1.57
117	117	150.38	0.00	-0.20	-1.57
117	118	151.55	0.00	-0.20	-1.34
118	118	151.55	0.00	-0.20	-1.34
118	119	152.73	0.00	-0.20	-1.11
119	119	152.73	0.00	-0.20	-1.11
119	120	153.90	0.00	-0.20	-0.88
120	120	153.90	0.00	-0.20	-0.88
120	121	155.08	0.00	-0.20	-0.65
121	121	155.08	0.00	-0.20	-0.65
121	122	156.25	0.00	-0.20	-0.42
122	122	156.25	0.00	-0.20	-0.42
122	123	157.43	0.00	-0.20	-0.19
123	123	157.43	0.00	-0.20	-0.19
123	124	158.60	0.00	-0.20	0.04
124	124	158.60	0.00	-0.20	0.04
124	125	159.78	0.00	-0.20	0.27
125	125	159.78	0.00	-0.20	0.27
125	126	160.95	0.00	-0.20	0.50
126	126	160.95	0.00	-0.20	0.50
126	127	162.13	0.00	-0.20	0.73
127	127	162.13	0.00	-0.20	0.73
127	128	163.30	0.00	-0.20	0.96
128	128	163.30	0.00	-0.20	0.96

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

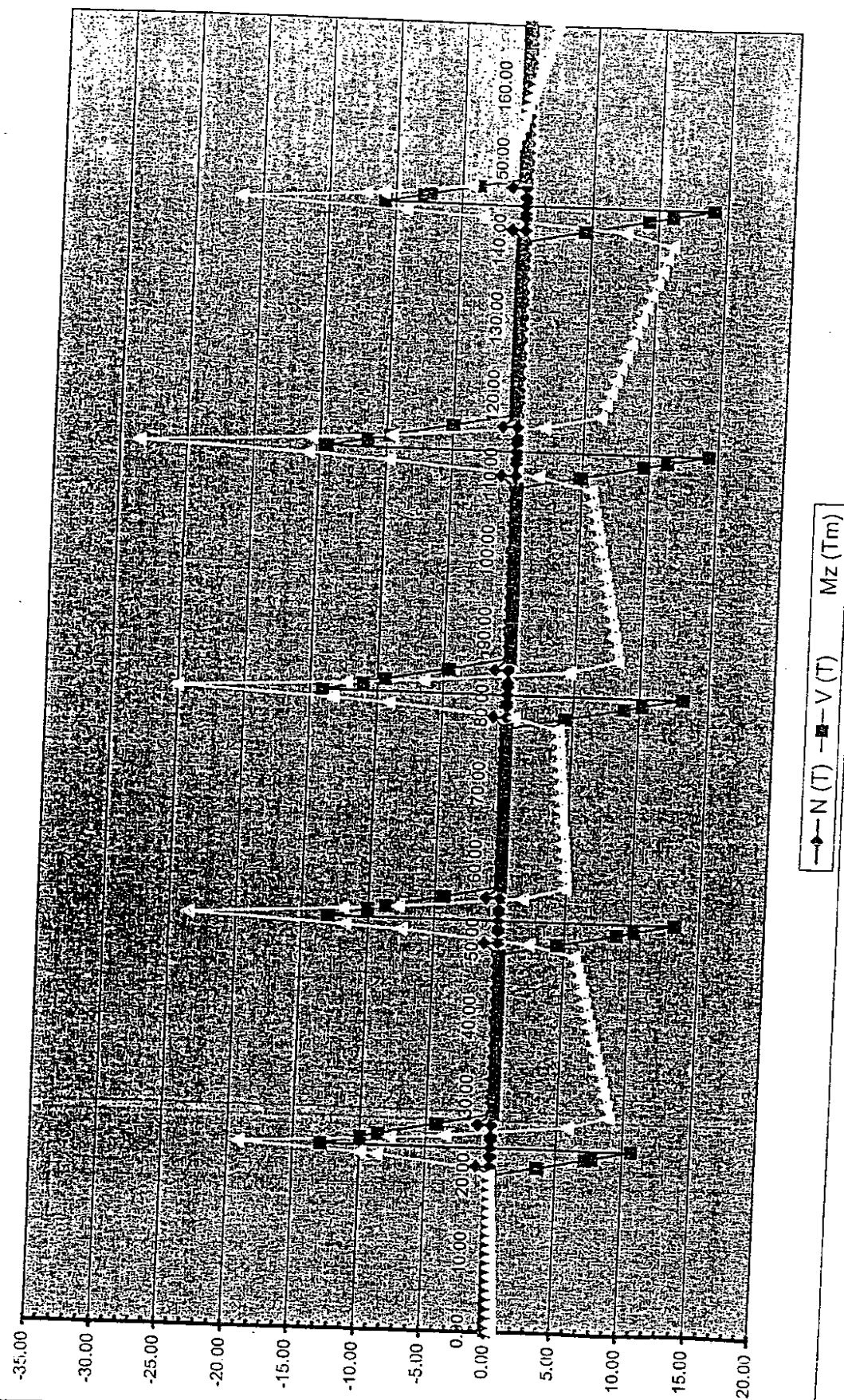
Fase 5 Fisuración

[1: 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	-0.20	1.18
129	129	164.48	0.00	-0.20	1.18
129	130	165.65	0.00	-0.20	1.41
130	130	165.65	0.00	-0.20	1.41
130	131	166.83	0.00	-0.20	1.64
131	131	166.83	0.00	-0.20	1.64
131	132	167.00	0.00	-0.20	1.68
132	132	167.00	0.00	-0.20	1.68
132	133	168.00	0.00	-0.20	1.87

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1: 1]HBCP + [1: 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-8.27	0.45
1	2	1.00	0.00	-7.32	8.24
2	2	1.00	0.00	-7.32	8.24
2	3	1.18	0.00	-7.16	9.52
3	3	1.18	0.00	-7.16	9.52
3	4	2.35	0.00	-6.04	17.27
4	4	2.35	0.00	-6.04	17.27
4	5	3.53	0.00	-4.93	23.72
5	5	3.53	0.00	-4.93	23.72
5	6	4.70	0.00	-3.82	28.87
6	6	4.70	0.00	-3.82	28.87
6	7	5.88	0.00	-2.71	32.71
7	7	5.88	0.00	-2.71	32.71
7	8	7.05	0.00	-1.60	35.24
8	8	7.05	0.00	-1.60	35.24
8	9	8.23	0.00	-0.49	36.46
9	9	8.23	0.00	-0.49	36.46
9	10	9.40	0.00	0.63	36.38
10	10	9.40	0.00	0.63	36.38
10	11	10.58	0.00	1.74	35.00
11	11	10.58	0.00	1.74	35.00
11	12	11.75	0.00	2.85	32.31
12	12	11.75	0.00	2.85	32.31
12	13	12.93	0.00	3.96	28.31
13	13	12.93	0.00	3.96	28.31
13	14	14.10	0.00	5.07	23.00
14	14	14.10	0.00	5.07	23.00
14	15	15.28	0.00	6.18	16.40
15	15	15.28	0.00	6.18	16.40
15	16	16.45	0.00	7.30	8.48
16	16	16.45	0.00	7.30	8.48
16	17	17.63	0.00	8.41	-0.75
17	17	17.63	0.00	8.41	-0.75
17	18	18.80	0.00	9.52	-11.27
18	18	18.80	-0.01	9.52	-11.27
18	19	19.98	-0.01	10.63	-23.10
19	19	19.98	-0.01	10.63	-23.10
19	20	21.15	-1.06	15.24	-38.39
20	20	21.15	0.00	15.40	-38.39
20	21	22.33	0.00	20.01	-59.20
21	21	22.33	0.00	20.01	-59.20
21	22	22.50	0.00	20.70	-62.76
22	22	22.50	0.00	20.70	-62.76
22	23	23.50	0.00	24.62	-85.43
23	1023	23.50	0.00	-26.71	-85.43
23	24	24.50	0.00	-22.79	-60.67
24	24	24.50	0.00	-22.79	-60.67
24	25	24.95	0.00	-21.01	-50.82
25	25	24.95	0.00	-21.01	-50.82
25	26	26.40	0.00	-15.32	-24.48
26	26	26.40	-1.02	-15.20	-24.48

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-9.50	-6.48
27	27	27.85	0.04	-9.50	-6.48
27	28	29.30	0.04	-8.13	6.29
28	28	29.30	0.00	-8.13	6.29
28	29	30.75	0.00	-6.76	17.08
29	29	30.75	0.00	-6.76	17.08
29	30	32.20	0.00	-5.38	25.88
30	30	32.20	0.00	-5.38	25.88
30	31	33.65	0.00	-4.01	32.70
31	31	33.65	0.00	-4.01	32.70
31	32	35.10	0.00	-2.64	37.52
32	32	35.10	0.00	-2.64	37.52
32	33	36.55	0.00	-1.27	40.35
33	33	36.55	0.00	-1.27	40.35
33	34	38.00	0.00	0.10	41.20
34	34	38.00	0.00	0.10	41.20
34	35	39.45	0.00	1.47	40.05
35	35	39.45	0.00	1.47	40.05
35	36	40.90	0.00	2.85	36.91
36	36	40.90	0.00	2.85	36.91
36	37	42.35	0.00	4.22	31.80
37	37	42.35	0.00	4.22	31.80
37	38	43.80	0.00	5.59	24.69
38	38	43.80	0.00	5.59	24.69
38	39	45.25	0.00	6.96	15.58
39	39	45.25	0.00	6.96	15.58
39	40	46.70	0.00	8.33	4.49
40	40	46.70	-0.04	8.33	4.49
40	41	48.15	-0.04	9.70	-8.59
41	41	48.15	-0.04	9.70	-8.59
41	42	49.60	-1.09	15.40	-26.88
42	42	49.60	0.00	15.53	-26.88
42	43	51.05	0.00	21.22	-53.52
43	43	51.05	0.00	21.22	-53.52
43	44	51.50	0.00	22.99	-63.46
44	44	51.50	0.00	22.99	-63.46
44	45	52.50	0.00	26.92	-88.42
45	1045	52.50	0.00	-26.52	-88.42
45	46	53.50	0.00	-22.59	-63.87
46	46	53.50	0.00	-22.59	-63.87
46	47	53.95	0.00	-20.82	-54.10
47	47	53.95	0.00	-20.82	-54.10
47	48	55.40	0.00	-15.13	-28.03
48	48	55.40	-1.04	-15.00	-28.03
48	49	56.85	0.01	-9.31	-10.32
49	49	56.85	0.01	-9.31	-10.32
49	50	58.30	0.01	-7.93	2.18
50	50	58.30	0.00	-7.93	2.18
50	51	59.75	0.00	-6.56	12.68
51	51	59.75	0.00	-6.56	12.68
51	52	61.20	0.00	-5.19	21.20

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-5.19	21.20
52	53	62.65	0.00	-3.82	27.74
53	53	62.65	0.00	-3.82	27.74
53	54	64.10	0.00	-2.45	32.27
54	54	64.10	0.00	-2.45	32.27
54	55	65.55	0.00	-1.08	34.83
55	55	65.55	0.00	-1.08	34.83
55	56	67.00	0.00	0.30	35.40
56	56	67.00	0.00	0.30	35.40
56	57	68.45	0.00	1.67	33.96
57	57	68.45	0.00	1.67	33.96
57	58	69.90	0.00	3.04	30.55
58	58	69.90	0.00	3.04	30.55
58	59	71.35	0.00	4.41	25.15
59	59	71.35	0.00	4.41	25.15
59	60	72.80	0.00	5.78	17.75
60	60	72.80	0.00	5.78	17.75
60	61	74.25	0.00	7.15	8.38
61	61	74.25	0.00	7.15	8.38
61	62	75.70	0.00	8.53	-2.99
62	62	75.70	-0.01	8.53	-2.99
62	63	77.15	-0.01	9.90	-16.36
63	63	77.15	-0.01	9.90	-16.36
63	64	78.60	-1.07	15.59	-34.93
64	64	78.60	0.00	15.72	-34.93
64	65	80.05	0.00	21.41	-61.85
65	65	80.05	0.00	21.41	-61.85
65	66	80.50	0.00	23.19	-71.89
66	66	80.50	0.00	23.19	-71.89
66	67	81.50	0.00	27.11	-97.04
67	1067	81.50	0.00	-28.69	-97.04
67	68	82.50	0.00	-24.77	-70.31
68	68	82.50	0.00	-24.77	-70.31
68	69	83.08	0.00	-22.51	-56.71
69	69	83.08	0.00	-22.51	-56.71
69	70	84.65	0.00	-16.32	-26.13
70	70	84.65	-1.03	-16.20	-26.13
70	71	86.23	0.03	-10.02	-5.39
71	71	86.23	0.03	-10.02	-5.39
71	72	87.80	0.03	-8.53	9.22
72	72	87.80	0.00	-8.53	9.22
72	73	89.38	0.00	-7.04	21.48
73	73	89.38	0.00	-7.04	21.48
73	74	90.95	0.00	-5.55	31.39
74	74	90.95	0.00	-5.55	31.39
74	75	92.53	0.00	-4.06	38.95
75	75	92.53	0.00	-4.06	38.95
75	76	94.10	0.00	-2.57	44.17
76	76	94.10	0.00	-2.57	44.17
76	77	95.68	0.00	-1.08	47.05
77	77	95.68	0.00	-1.08	47.05

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.41	47.57
78	78	97.25	0.00	0.41	47.57
78	79	98.83	0.00	1.90	45.75
79	79	98.83	0.00	1.90	45.75
79	80	100.40	0.00	3.39	41.58
80	80	100.40	0.00	3.39	41.58
80	81	101.98	0.00	4.88	35.07
81	81	101.98	0.00	4.88	35.07
81	82	103.55	0.00	6.37	26.20
82	82	103.55	0.00	6.37	26.20
82	83	105.13	0.00	7.86	14.99
83	83	105.13	0.00	7.86	14.99
83	84	106.70	0.00	9.35	1.44
84	84	106.70	-0.03	9.35	1.44
84	85	108.28	-0.03	10.84	-14.46
85	85	108.28	-0.03	10.84	-14.46
85	86	109.85	-1.08	17.03	-36.50
86	86	109.85	0.00	17.15	-36.50
86	87	111.43	0.00	23.33	-68.38
87	87	111.43	0.00	23.33	-68.38
87	88	112.00	0.00	25.59	-82.45
88	88	112.00	0.00	25.59	-82.45
88	89	113.00	0.00	29.52	-109.99
89	1089	113.00	0.00	-29.63	-109.99
89	90	114.00	0.00	-25.70	-82.33
90	90	114.00	0.00	-25.70	-82.33
90	91	114.58	0.00	-23.44	-68.19
91	91	114.58	0.00	-23.44	-68.19
91	92	116.15	0.00	-17.25	-36.15
92	92	116.15	-1.10	-17.13	-36.15
92	93	117.73	-0.05	-10.94	-13.93
93	93	117.73	-0.05	-10.94	-13.93
93	94	119.30	-0.05	-9.45	2.15
94	94	119.30	0.00	-9.46	2.15
94	95	120.88	0.00	-7.97	15.88
95	95	120.88	0.00	-7.97	15.88
95	96	122.45	0.00	-6.48	27.27
96	96	122.45	0.00	-6.48	27.27
96	97	124.03	0.00	-4.99	36.30
97	97	124.03	0.00	-4.99	36.30
97	98	125.60	0.00	-3.50	42.99
98	98	125.60	0.00	-3.50	42.99
98	99	127.18	0.00	-2.01	47.34
99	99	127.18	0.00	-2.01	47.34
99	100	128.75	0.00	-0.52	49.34
100	100	128.75	0.00	-0.52	49.34
100	101	130.33	0.00	0.97	48.99
101	101	130.33	0.00	0.97	48.99
101	102	131.90	0.00	2.46	46.29
102	102	131.90	0.00	2.46	46.29
102	103	133.48	0.00	3.95	41.25

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	3.95	41.25
103	104	135.05	0.00	5.44	33.87
104	104	135.05	0.00	5.44	33.87
104	105	136.63	0.00	6.93	24.13
105	105	136.63	0.00	6.93	24.13
105	106	138.20	0.00	8.42	12.05
106	106	138.20	0.05	8.43	12.05
106	107	139.78	0.05	9.92	-2.39
107	107	139.78	0.05	9.92	-2.39
107	108	141.35	-1.01	16.10	-22.95
108	108	141.35	0.00	16.21	-22.95
108	109	142.93	0.00	22.40	-53.34
109	109	142.93	0.00	22.40	-53.34
109	110	143.50	0.00	24.66	-66.88
110	110	143.50	0.00	24.66	-66.88
110	111	144.50	0.00	28.59	-93.50
111	1111	144.50	0.00	-25.03	-93.50
111	112	145.50	0.00	-21.10	-70.42
112	112	145.50	0.00	-21.10	-70.42
112	113	145.68	0.00	-20.42	-66.79
113	113	145.68	0.00	-20.42	-66.79
113	114	146.85	0.00	-15.80	-45.51
114	114	146.85	-1.11	-15.64	-45.51
114	115	148.03	-0.06	-11.03	-29.75
115	115	148.03	-0.06	-11.03	-29.75
115	116	149.20	-0.06	-9.91	-17.44
116	116	149.20	0.00	-9.92	-17.44
116	117	150.38	0.00	-8.81	-6.44
117	117	150.38	0.00	-8.81	-6.44
117	118	151.55	0.00	-7.70	3.26
118	118	151.55	0.00	-7.70	3.26
118	119	152.73	0.00	-6.59	11.65
119	119	152.73	0.00	-6.59	11.65
119	120	153.90	0.00	-5.48	18.73
120	120	153.90	0.00	-5.48	18.73
120	121	155.08	0.00	-4.37	24.51
121	121	155.08	0.00	-4.37	24.51
121	122	156.25	0.00	-3.26	28.98
122	122	156.25	0.00	-3.26	28.98
122	123	157.43	0.00	-2.14	32.15
123	123	157.43	0.00	-2.14	32.15
123	124	158.60	0.00	-1.03	34.01
124	124	158.60	0.00	-1.03	34.01
124	125	159.78	0.00	0.08	34.57
125	125	159.78	0.00	0.08	34.57
125	126	160.95	0.00	1.19	33.82
126	126	160.95	0.00	1.19	33.82
126	127	162.13	0.00	2.30	31.76
127	127	162.13	0.00	2.30	31.76
127	128	163.30	0.00	3.41	28.39
128	128	163.30	0.00	3.41	28.39

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1: 1]HBCP + [1: 1]HVOL

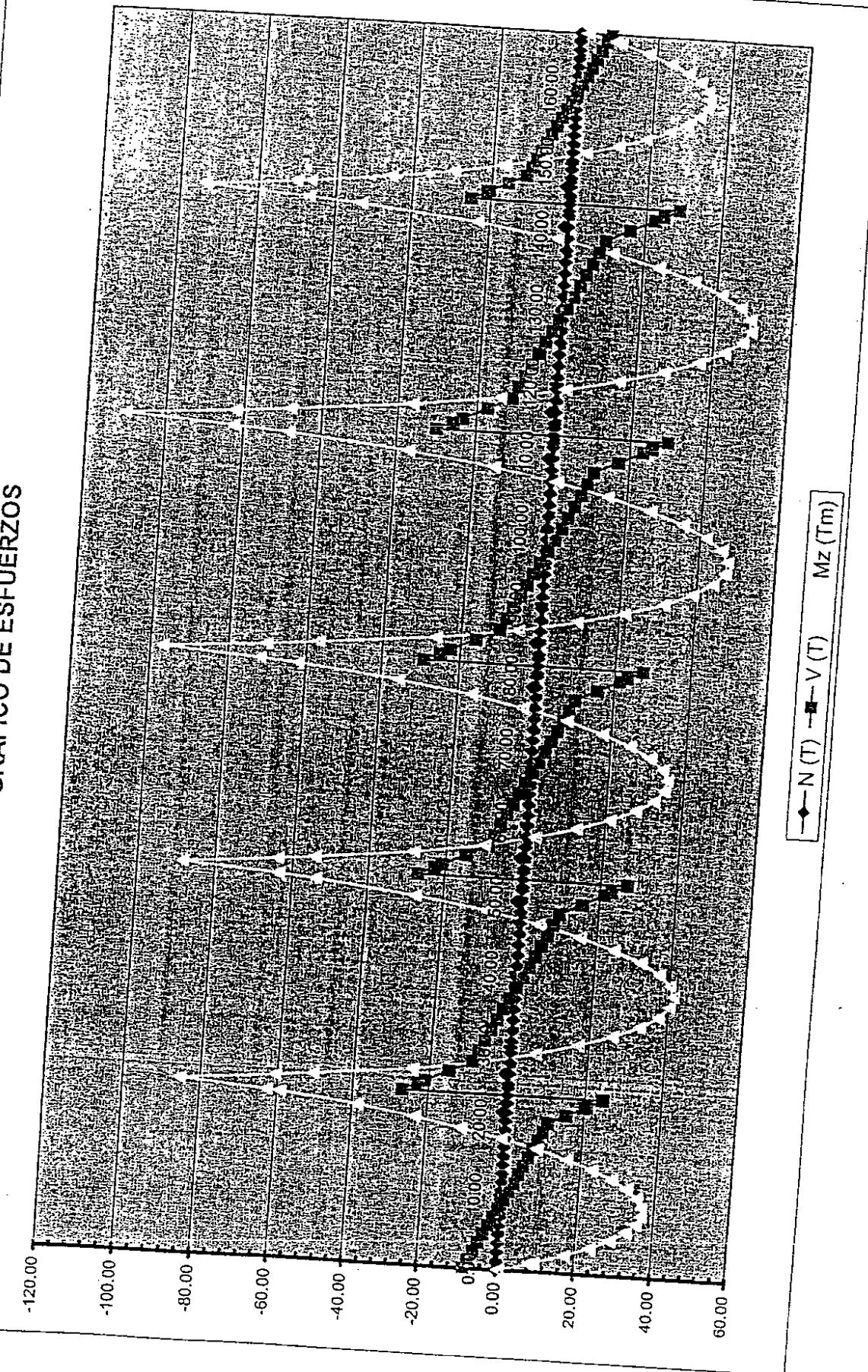
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	4.53	23.71
129	129	164.48	0.00	4.53	23.71
129	130	165.65	0.00	5.64	17.74
130	130	165.65	0.00	5.64	17.74
130	131	166.83	0.00	6.75	10.46
131	131	166.83	0.00	6.75	10.46
131	132	167.00	0.00	6.91	9.27
132	132	167.00	0.00	6.91	9.27
132	133	168.00	0.00	7.86	1.87

fisuración Iter1.xls

Programa DINTEL IDEAM S.A.
Fase6Neg

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [1; 1]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-63.54	0.45
1	2	1.00	0.00	-56.49	60.46
2	2	1.00	0.00	-56.49	60.46
2	3	1.18	0.00	-55.26	70.25
3	3	1.18	0.00	-55.26	70.25
3	4	2.35	0.00	-46.98	130.32
4	4	2.35	0.00	-46.98	130.32
4	5	3.53	0.00	-38.70	180.66
5	5	3.53	0.00	-38.70	180.66
5	6	4.70	0.00	-30.44	221.29
6	6	4.70	0.00	-30.44	221.29
6	7	5.88	0.00	-22.16	252.19
7	7	5.88	0.00	-22.16	252.19
7	8	7.05	0.00	-13.88	273.35
8	8	7.05	0.00	-13.88	273.35
8	9	8.23	0.00	-5.61	284.80
9	9	8.23	0.00	-5.61	284.80
9	10	9.40	0.00	2.68	286.52
10	10	9.40	0.00	2.68	286.52
10	11	10.58	0.00	10.96	278.53
11	11	10.58	0.00	10.96	278.53
11	12	11.75	0.00	19.23	260.80
12	12	11.75	0.00	19.23	260.80
12	13	12.93	0.00	27.51	233.34
13	13	12.93	0.00	27.51	233.34
13	14	14.10	0.00	35.78	196.16
14	14	14.10	0.00	35.78	196.16
14	15	15.28	0.00	44.06	149.26
15	15	15.28	0.00	44.06	149.26
15	16	16.45	0.00	52.34	92.64
16	16	16.45	-0.54	52.33	92.64
16	17	17.63	-0.62	60.61	26.27
17	17	17.63	-0.62	60.61	26.27
17	18	18.80	-1.00	94.42	-66.37
18	18	18.80	-0.01	94.43	-66.37
18	19	19.98	-0.01	105.78	-184.00
19	19	19.98	-0.01	105.78	-184.00
19	20	21.15	-1.06	120.64	-317.12
20	20	21.15	0.00	120.80	-317.12
20	21	22.33	0.00	135.66	-467.79
21	21	22.33	0.00	135.66	-467.79
21	22	22.50	0.00	137.87	-491.74
22	22	22.50	0.00	137.87	-491.74
22	23	23.50	0.00	150.53	-635.94
23	1023	23.50	0.00	-153.02	-635.94
23	24	24.50	0.00	-140.39	-489.22
24	24	24.50	0.00	-140.39	-489.22
24	25	24.95	0.00	-134.67	-427.34
25	25	24.95	0.00	-134.67	-427.34
25	26	26.40	0.00	-116.34	-245.36
26	26	26.40	-1.02	-116.22	-245.36

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [1; 1]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-97.87	-90.04
27	27	27.85	0.04	-97.87	-90.04
27	28	29.30	0.04	-61.08	31.06
28	28	29.30	-0.50	-61.08	31.06
28	29	30.75	-0.42	-50.86	112.22
29	29	30.75	-0.42	-50.86	112.22
29	30	32.20	-0.34	-40.65	178.57
30	30	32.20	0.00	-40.65	178.57
30	31	33.65	0.00	-30.44	230.11
31	31	33.65	0.00	-30.44	230.11
31	32	35.10	0.00	-20.23	266.84
32	32	35.10	0.00	-20.23	266.84
32	33	36.55	0.00	-10.01	288.75
33	33	36.55	0.00	-10.01	288.75
33	34	38.00	0.00	0.20	295.86
34	34	38.00	0.00	0.20	295.86
34	35	39.45	0.00	10.41	288.16
35	35	39.45	0.00	10.41	288.16
35	36	40.90	0.00	20.64	265.64
36	36	40.90	0.00	20.64	265.64
36	37	42.35	0.00	30.84	228.34
37	37	42.35	0.00	30.84	228.34
37	38	43.80	0.00	41.06	176.20
38	38	43.80	-0.34	41.06	176.20
38	39	45.25	-0.42	51.27	109.25
39	39	45.25	-0.42	51.27	109.25
39	40	46.70	-0.51	61.49	27.50
40	40	46.70	-0.04	61.49	27.50
40	41	48.15	-0.04	98.37	-95.08
41	41	48.15	-0.04	98.37	-95.08
41	42	49.60	-1.09	116.72	-251.09
42	42	49.60	0.00	116.85	-251.09
42	43	51.05	0.00	135.18	-433.80
43	43	51.05	0.00	135.18	-433.80
43	44	51.50	0.00	140.87	-495.91
44	44	51.50	0.00	140.87	-495.91
44	45	52.50	0.00	153.52	-643.10
45	1045	52.50	0.00	-151.26	-643.10
45	46	53.50	0.00	-138.61	-498.19
46	46	53.50	0.00	-138.61	-498.19
46	47	53.95	0.00	-132.91	-437.09
47	47	53.95	0.00	-132.91	-437.09
47	48	55.40	0.00	-114.58	-257.65
48	48	55.40	-1.04	-114.45	-257.65
48	49	56.85	0.01	-96.10	-104.92
49	49	56.85	0.01	-96.10	-104.92
49	50	58.30	0.01	-59.79	17.64
50	50	58.30	-0.50	-59.78	17.64
50	51	59.75	-0.42	-49.56	96.91
51	51	59.75	-0.42	-49.56	96.91
51	52	61.20	-0.32	-39.35	161.38

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuracion

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-39.36	161.38
52	53	62.65	0.00	-29.14	211.05
53	53	62.65	0.00	-29.14	211.05
53	54	64.10	0.00	-18.93	245.89
54	54	64.10	0.00	-18.93	245.89
54	55	65.55	0.00	-8.73	265.93
55	55	65.55	0.00	-8.73	265.93
55	56	67.00	0.00	1.50	271.17
56	56	67.00	0.00	1.50	271.17
56	57	68.45	0.00	11.71	261.57
57	57	68.45	0.00	11.71	261.57
57	58	69.90	0.00	21.93	237.19
58	58	69.90	0.00	21.93	237.19
58	59	71.35	0.00	32.14	198.00
59	59	71.35	0.00	32.14	198.00
59	60	72.80	0.00	42.35	143.98
60	60	72.80	-0.35	42.35	143.98
60	61	74.25	-0.44	52.56	75.17
61	61	74.25	-0.44	52.56	75.17
61	62	75.70	-0.74	86.12	-10.81
62	62	75.70	-0.01	86.13	-10.81
62	63	77.15	-0.01	100.14	-145.86
63	63	77.15	-0.01	100.14	-145.86
63	64	78.60	-1.07	118.47	-304.44
64	64	78.60	0.00	118.60	-304.44
64	65	80.05	0.00	136.95	-489.71
65	65	80.05	0.00	136.95	-489.71
65	66	80.50	0.00	142.64	-552.63
66	66	80.50	0.00	142.64	-552.63
66	67	81.50	0.00	155.29	-701.59
67	1067	81.50	0.00	-163.75	-701.59
67	68	82.50	0.00	-151.12	-544.14
68	68	82.50	0.00	-151.12	-544.14
68	69	83.08	0.00	-143.84	-459.36
69	69	83.08	0.00	-143.84	-459.36
69	70	84.65	0.00	-123.91	-248.49
70	70	84.65	-1.03	-123.79	-248.49
70	71	86.23	0.03	-103.88	-69.10
71	71	86.23	0.03	-103.88	-69.10
71	72	87.80	0.03	-64.56	60.47
72	72	87.80	-0.50	-64.56	60.47
72	73	89.38	-0.40	-53.46	153.40
73	73	89.38	-0.40	-53.46	153.40
73	74	90.95	-0.32	-42.36	228.86
74	74	90.95	0.00	-42.36	228.86
74	75	92.53	0.00	-31.27	286.84
75	75	92.53	0.00	-31.27	286.84
75	76	94.10	0.00	-20.17	327.35
76	76	94.10	0.00	-20.17	327.35
76	77	95.68	0.00	-9.09	350.39
77	77	95.68	0.00	-9.09	350.39

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuracion

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	2.02	355.95
78	78	97.25	0.00	2.02	355.95
78	79	98.83	0.00	13.10	344.05
79	79	98.83	0.00	13.10	344.05
79	80	100.40	0.00	24.20	314.66
80	80	100.40	0.00	24.20	314.66
80	81	101.98	0.00	35.30	267.82
81	81	101.98	0.00	35.30	267.82
81	82	103.55	0.00	46.38	203.48
82	82	103.55	-0.36	46.38	203.48
82	83	105.13	-0.44	57.49	121.67
83	83	105.13	-0.44	57.49	121.67
83	84	106.70	-0.52	68.57	22.40
84	84	106.70	-0.03	68.57	22.40
84	85	108.28	-0.03	109.29	-128.70
85	85	108.28	-0.03	109.29	-128.70
85	86	109.85	-1.08	129.21	-316.61
86	86	109.85	0.00	129.33	-316.61
86	87	111.43	0.00	149.25	-536.00
87	87	111.43	0.00	149.25	-536.00
87	88	112.00	0.00	156.52	-623.91
88	88	112.00	0.00	156.52	-623.91
88	89	113.00	0.00	169.17	-786.74
89	1089	113.00	0.00	-169.57	-786.74
89	90	114.00	0.00	-156.91	-623.49
90	90	114.00	0.00	-156.91	-623.49
90	91	114.58	0.00	-149.64	-535.35
91	91	114.58	0.00	-149.64	-535.35
91	92	116.15	0.00	-129.71	-315.36
92	92	116.15	-1.10	-129.59	-315.36
92	93	117.73	-0.05	-109.67	-126.83
93	93	117.73	-0.05	-109.67	-126.83
93	94	119.30	-0.05	-68.88	24.37
94	94	119.30	-0.53	-68.89	24.37
94	95	120.88	-0.44	-57.79	124.14
95	95	120.88	-0.44	-57.79	124.14
95	96	122.45	-0.36	-46.69	206.44
96	96	122.45	0.00	-46.70	206.44
96	97	124.03	0.00	-35.61	271.25
97	97	124.03	0.00	-35.61	271.25
97	98	125.60	0.00	-24.51	318.60
98	98	125.60	0.00	-24.51	318.60
98	99	127.18	0.00	-13.42	348.48
99	99	127.18	0.00	-13.42	348.48
99	100	128.75	0.00	-2.32	360.87
100	100	128.75	0.00	-2.32	360.87
100	101	130.33	0.00	8.77	355.81
101	101	130.33	0.00	8.77	355.81
101	102	131.90	0.00	19.87	333.25
102	102	131.90	0.00	19.87	333.25
102	103	133.48	0.00	30.96	293.24

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	30.96	293.24
103	104	135.05	0.00	42.06	235.75
104	104	135.05	-0.32	42.06	235.75
104	105	136.63	-0.40	53.15	160.78
105	105	136.63	-0.40	53.15	160.78
105	106	138.20	-0.50	64.24	68.34
106	106	138.20	0.05	64.25	68.34
106	107	139.78	0.05	103.49	-58.44
107	107	139.78	0.05	103.49	-58.44
107	108	141.35	-1.01	123.42	-237.19
108	108	141.35	0.00	123.53	-237.19
108	109	142.93	0.00	143.44	-447.42
109	109	142.93	0.00	143.44	-447.42
109	110	143.50	0.00	150.73	-532.01
110	110	143.50	0.00	150.73	-532.01
110	111	144.50	0.00	163.37	-689.04
111	111	144.50	0.00	-152.85	-689.04
111	112	145.50	0.00	-140.19	-542.49
112	112	145.50	0.00	-140.19	-542.49
112	113	145.68	0.00	-137.99	-518.16
113	113	145.68	0.00	-137.99	-518.16
113	114	146.85	0.00	-123.12	-364.75
114	114	146.85	-1.11	-122.96	-364.75
114	115	148.03	-0.06	-108.10	-228.93
115	115	148.03	-0.06	-108.10	-228.93
115	116	149.20	-0.06	-96.74	-108.56
116	116	149.20	-1.04	-96.74	-108.56
116	117	150.38	-0.64	-62.35	-3.03
117	117	150.38	-0.64	-62.35	-3.03
117	118	151.55	-0.54	-54.08	65.37
118	118	151.55	0.00	-54.08	65.37
118	119	152.73	0.00	-45.80	124.05
119	119	152.73	0.00	-45.80	124.05
119	120	153.90	0.00	-37.53	172.99
120	120	153.90	0.00	-37.53	172.99
120	121	155.08	0.00	-29.26	212.23
121	121	155.08	0.00	-29.26	212.23
121	122	156.25	0.00	-20.98	241.72
122	122	156.25	0.00	-20.98	241.72
122	123	157.43	0.00	-12.70	261.51
123	123	157.43	0.00	-12.70	261.51
123	124	158.60	0.00	-4.42	271.56
124	124	158.60	0.00	-4.42	271.56
124	125	159.78	0.00	3.86	271.89
125	125	159.78	0.00	3.86	271.89
125	126	160.95	0.00	12.13	262.50
126	126	160.95	0.00	12.13	262.50
126	127	162.13	0.00	20.41	243.37
127	127	162.13	0.00	20.41	243.37
127	128	163.30	0.00	28.68	214.52
128	128	163.30	0.00	28.68	214.52

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

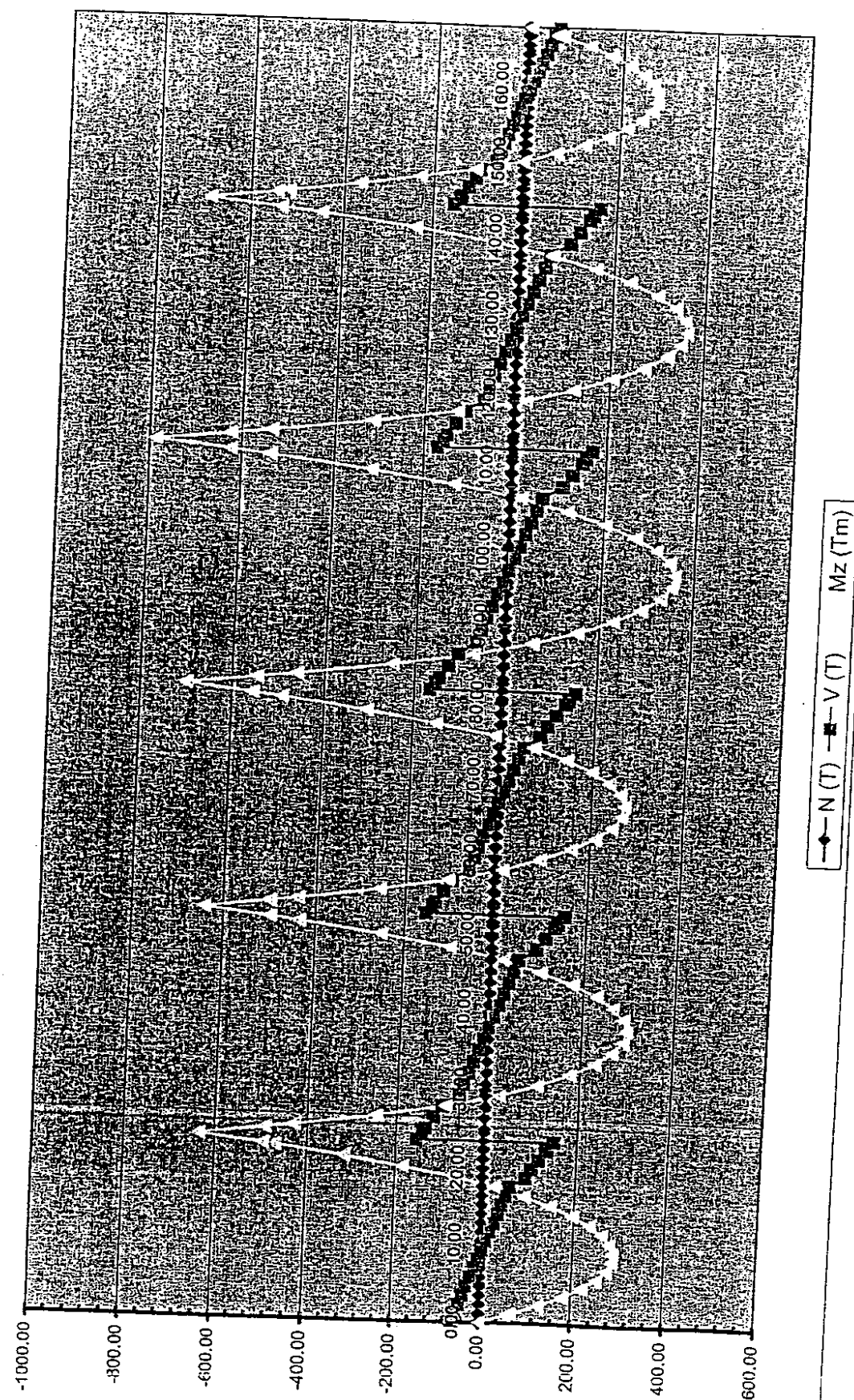
Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	36.97	175.94
129	129	164.48	0.00	36.97	175.94
129	130	165.65	0.00	45.24	127.64
130	130	165.65	0.00	45.24	127.64
130	131	166.83	0.00	53.52	69.62
131	131	166.83	0.00	53.52	69.62
131	132	167.00	0.00	54.75	60.15
132	132	167.00	0.00	54.75	60.15
132	133	168.00	0.00	61.79	1.87

GRÁFICO DE ESFUERZOS

**CÁLCULO TENSIONAL**

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-63.54	0.45
1	2	1.00	0.00	-29.19	33.16
2	2	1.00	0.00	-29.19	33.16
2	3	1.18	0.00	-27.96	38.17
3	3	1.18	0.00	-27.96	38.17
3	4	2.35	0.00	-19.67	66.17
4	4	2.35	0.00	-19.67	66.17
4	5	3.53	0.00	-11.40	84.44
5	5	3.53	0.00	-11.40	84.44
5	6	4.70	0.00	-3.14	93.01
6	6	4.70	0.00	-3.14	93.01
6	7	5.88	0.00	5.14	91.84
7	7	5.88	0.00	5.14	91.84
7	8	7.05	0.00	13.42	80.93
8	8	7.05	0.00	13.42	80.93
8	9	8.23	0.00	21.69	60.30
9	9	8.23	0.00	21.69	60.30
9	10	9.40	0.00	29.98	29.95
10	10	9.40	0.00	29.98	29.95
10	11	10.58	0.00	38.26	-10.12
11	11	10.58	0.00	38.26	-10.12
11	12	11.75	0.00	46.53	-59.91
12	12	11.75	0.00	46.53	-59.91
12	13	12.93	0.00	54.81	-119.45
13	13	12.93	0.00	54.81	-119.45
13	14	14.10	0.00	63.09	-188.70
14	14	14.10	0.00	63.09	-188.70
14	15	15.28	0.00	71.36	-267.67
15	15	15.28	0.00	71.36	-267.67
15	16	16.45	0.00	79.64	-356.36
16	16	16.45	-0.86	79.63	-356.36
16	17	17.63	-0.95	87.91	-454.80
17	17	17.63	-0.95	87.91	-454.80
17	18	18.80	-1.33	121.72	-579.50
18	18	18.80	-0.01	121.73	-579.50
18	19	19.98	-0.01	161.26	-736.64
19	19	19.98	-0.01	161.26	-736.64
19	20	21.15	-1.06	231.83	-967.31
20	20	21.15	0.00	231.99	-967.31
20	21	22.33	0.00	317.51	-1283.76
21	21	22.33	0.00	317.51	-1283.76
21	22	22.50	0.00	319.72	-1339.54
22	22	22.50	0.00	319.72	-1339.54
22	23	23.50	0.00	366.03	-1681.03
23	1023	23.50	0.00	-387.08	-1681.03
23	24	24.50	0.00	-337.80	-1313.94
24	24	24.50	0.00	-337.80	-1313.94
24	25	24.95	0.00	-331.41	-1163.27
25	25	24.95	0.00	-331.41	-1163.27
25	26	26.40	0.00	-228.35	-755.70
26	26	26.40	-1.02	-228.23	-755.70

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-156.15	-471.99
27	27	27.85	0.04	-156.15	-471.99
27	28	29.30	0.04	-56.40	-298.58
28	28	29.30	-0.45	-56.40	-298.58
28	29	30.75	-0.37	-46.18	-224.20
29	29	30.75	-0.37	-46.18	-224.20
29	30	32.20	-0.29	-35.96	-164.65
30	30	32.20	0.00	-35.97	-164.65
30	31	33.65	0.00	-25.75	-119.89
31	31	33.65	0.00	-25.75	-119.89
31	32	35.10	0.00	-15.54	-89.95
32	32	35.10	0.00	-15.54	-89.95
32	33	36.55	0.00	-5.32	-74.82
33	33	36.55	0.00	-5.32	-74.82
33	34	38.00	0.00	11.19	-82.24
34	34	38.00	0.00	11.19	-82.24
34	35	39.45	0.00	21.40	-105.87
35	35	39.45	0.00	21.40	-105.87
35	36	40.90	0.00	31.63	-144.34
36	36	40.90	0.00	31.63	-144.34
36	37	42.35	0.00	41.84	-197.59
37	37	42.35	0.00	41.84	-197.59
37	38	43.80	0.00	52.05	-265.65
38	38	43.80	-0.45	52.05	-265.65
38	39	45.25	-0.53	62.26	-348.54
39	39	45.25	-0.53	62.26	-348.54
39	40	46.70	-0.62	72.48	-446.24
40	40	46.70	-0.04	72.48	-446.24
40	41	48.15	-0.04	157.92	-616.51
41	41	48.15	-0.04	157.92	-616.51
41	42	49.60	-1.09	229.36	-894.90
42	42	49.60	0.00	229.49	-894.90
42	43	51.05	0.00	311.88	-1286.73
43	43	51.05	0.00	311.88	-1286.73
43	44	51.50	0.00	334.02	-1435.73
44	44	51.50	0.00	334.02	-1435.73
44	45	52.50	0.00	387.14	-1802.15
45	1045	52.50	0.00	-390.31	-1802.15
45	46	53.50	0.00	-337.08	-1431.77
46	46	53.50	0.00	-337.08	-1431.77
46	47	53.95	0.00	-331.38	-1281.37
47	47	53.95	0.00	-331.38	-1281.37
47	48	55.40	0.00	-232.12	-883.23
48	48	55.40	-1.04	-231.99	-883.23
48	49	56.85	0.01	-159.87	-599.60
49	49	56.85	0.01	-159.87	-599.60
49	50	58.30	0.01	-57.62	-424.57
50	50	58.30	-0.49	-57.61	-424.57
50	51	59.75	-0.41	-47.39	-348.44
51	51	59.75	-0.41	-47.39	-348.44
51	52	61.20	-0.31	-37.18	-287.12

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-37.19	-287.12
52	53	62.65	0.00	-26.97	-240.58
53	53	62.65	0.00	-26.97	-240.58
53	54	64.10	0.00	-16.76	-208.89
54	54	64.10	0.00	-16.76	-208.89
54	55	65.55	0.00	-6.56	-192.00
55	55	65.55	0.00	-6.56	-192.00
55	56	67.00	0.00	11.52	-196.73
56	56	67.00	0.00	11.52	-196.73
56	57	68.45	0.00	21.73	-220.85
57	57	68.45	0.00	21.73	-220.85
57	58	69.90	0.00	31.94	-259.75
58	58	69.90	0.00	31.94	-259.75
58	59	71.35	0.00	42.15	-313.47
59	59	71.35	0.00	42.15	-313.47
59	60	72.80	0.00	52.37	-382.03
60	60	72.80	-0.43	52.37	-382.03
60	61	74.25	-0.52	62.58	-465.35
61	61	74.25	-0.52	62.58	-465.35
61	62	75.70	-0.83	96.14	-565.86
62	62	75.70	-0.01	96.15	-565.86
62	63	77.15	-0.01	159.98	-746.10
63	63	77.15	-0.01	159.98	-746.10
63	64	78.60	-1.07	238.77	-1030.60
64	64	78.60	0.00	238.90	-1030.60
64	65	80.05	0.00	301.12	-1424.68
65	65	80.05	0.00	301.12	-1424.68
65	66	80.50	0.00	343.22	-1575.78
66	66	80.50	0.00	343.22	-1575.78
66	67	81.50	0.00	395.94	-1947.95
67	1067	81.50	0.00	-414.89	-1947.95
67	68	82.50	0.00	-381.41	-1552.53
68	68	82.50	0.00	-381.41	-1552.53
68	69	83.08	0.00	-351.00	-1345.74
69	69	83.08	0.00	-351.00	-1345.74
69	70	84.65	0.00	-244.23	-888.44
70	70	84.65	-1.03	-244.11	-888.44
70	71	86.23	0.03	-165.85	-564.56
71	71	86.23	0.03	-165.85	-564.56
71	72	87.80	0.03	-64.65	-379.88
72	72	87.80	-0.50	-64.65	-379.88
72	73	89.38	-0.40	-53.55	-286.80
73	73	89.38	-0.40	-53.55	-286.80
73	74	90.95	-0.32	-42.46	-211.20
74	74	90.95	0.00	-42.46	-211.20
74	75	92.53	0.00	-31.36	-153.07
75	75	92.53	0.00	-31.36	-153.07
75	76	94.10	0.00	-20.27	-112.42
76	76	94.10	0.00	-20.27	-112.42
76	77	95.68	0.00	-9.18	-89.22
77	77	95.68	0.00	-9.18	-89.22

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	8.84	-89.40
78	78	97.25	0.00	8.84	-89.40
78	79	98.83	0.00	19.93	-112.06
79	79	98.83	0.00	19.93	-112.06
79	80	100.40	0.00	31.03	-152.20
80	80	100.40	0.00	31.03	-152.20
80	81	101.98	0.00	42.12	-209.81
81	81	101.98	0.00	42.12	-209.81
81	82	103.55	0.00	53.21	-284.91
82	82	103.55	-0.42	53.21	-284.91
82	83	105.13	-0.50	64.31	-377.46
83	83	105.13	-0.50	64.31	-377.46
83	84	106.70	-0.58	75.40	-487.47
84	84	106.70	-0.03	75.40	-487.47
84	85	108.28	-0.03	167.29	-687.60
85	85	108.28	-0.03	167.29	-687.60
85	86	109.85	-1.08	253.01	-1017.53
86	86	109.85	0.00	253.13	-1017.53
86	87	111.43	0.00	338.64	-1474.70
87	87	111.43	0.00	338.64	-1474.70
87	88	112.00	0.00	385.40	-1683.98
88	88	112.00	0.00	385.40	-1683.98
88	89	113.00	0.00	422.85	-2086.49
89	1089	113.00	0.00	-419.32	-2086.49
89	90	114.00	0.00	-381.89	-1687.77
90	90	114.00	0.00	-381.89	-1687.77
90	91	114.58	0.00	-335.24	-1481.13
91	91	114.58	0.00	-335.24	-1481.13
91	92	116.15	0.00	-249.87	-1029.57
92	92	116.15	-1.10	-249.75	-1029.57
92	93	117.73	-0.05	-164.49	-705.29
93	93	117.73	-0.05	-164.49	-705.29
93	94	119.30	-0.05	-82.85	-505.28
94	94	119.30	-0.65	-82.86	-505.28
94	95	120.88	-0.57	-71.77	-383.50
95	95	120.88	-0.57	-71.77	-383.50
95	96	122.45	-0.48	-60.67	-279.17
96	96	122.45	0.00	-60.67	-279.17
96	97	124.03	0.00	-49.58	-192.36
97	97	124.03	0.00	-49.58	-192.36
97	98	125.60	0.00	-38.49	-122.98
98	98	125.60	0.00	-38.49	-122.98
98	99	127.18	0.00	-27.39	-71.09
99	99	127.18	0.00	-27.39	-71.09
99	100	128.75	0.00	-16.30	-36.69
100	100	128.75	0.00	-16.30	-36.69
100	101	130.33	0.00	-5.20	-19.72
101	101	130.33	0.00	-5.20	-19.72
101	102	131.90	0.00	12.12	-26.60
102	102	131.90	0.00	12.12	-26.60
102	103	133.48	0.00	23.22	-54.39

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	23.22	-54.39
103	104	135.05	0.00	34.31	-99.70
104	104	135.05	-0.26	34.31	-99.70
104	105	136.63	-0.34	45.41	-162.47
105	105	136.63	-0.34	45.41	-162.47
105	106	138.20	-0.68	84.83	-243.02
106	106	138.20	0.05	84.84	-243.02
106	107	139.78	0.05	170.26	-431.21
107	107	139.78	0.05	170.26	-431.21
107	108	141.35	-1.01	239.48	-756.19
108	108	141.35	0.00	239.59	-756.19
108	109	142.93	0.00	350.80	-1227.10
109	109	142.93	0.00	350.80	-1227.10
109	110	143.50	0.00	376.87	-1432.41
110	110	143.50	0.00	376.87	-1432.41
110	111	144.50	0.00	413.30	-1827.22
111	1111	144.50	0.00	-369.51	-1827.22
111	112	145.50	0.00	-321.98	-1481.13
112	112	145.50	0.00	-321.98	-1481.13
112	113	145.68	0.00	-306.19	-1425.51
113	113	145.68	0.00	-306.19	-1425.51
113	114	146.85	0.00	-227.85	-1112.84
114	114	146.85	-1.11	-227.69	-1112.84
114	115	148.03	-0.06	-162.07	-881.55
115	115	148.03	-0.06	-162.07	-881.55
115	116	149.20	-0.06	-129.25	-719.74
116	116	149.20	-1.42	-129.24	-719.74
116	117	150.38	-1.02	-94.86	-576.02
117	117	150.38	-1.02	-94.86	-576.02
117	118	151.55	-0.93	-86.58	-469.41
118	118	151.55	0.00	-86.58	-469.41
118	119	152.73	0.00	-78.31	-372.53
119	119	152.73	0.00	-78.31	-372.53
119	120	153.90	0.00	-70.03	-285.40
120	120	153.90	0.00	-70.03	-285.40
120	121	155.08	0.00	-61.76	-207.96
121	121	155.08	0.00	-61.76	-207.96
121	122	156.25	0.00	-53.49	-140.27
122	122	156.25	0.00	-53.49	-140.27
122	123	157.43	0.00	-45.21	-82.27
123	123	157.43	0.00	-45.21	-82.27
123	124	158.60	0.00	-36.93	-34.03
124	124	158.60	0.00	-36.93	-34.03
124	125	159.78	0.00	-28.65	4.49
125	125	159.78	0.00	-28.65	4.49
125	126	160.95	0.00	-20.38	33.30
126	126	160.95	0.00	-20.38	33.30
126	127	162.13	0.00	-12.10	52.38
127	127	162.13	0.00	-12.10	52.38
127	128	163.30	0.00	-3.82	61.71
128	128	163.30	0.00	-3.82	61.71

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

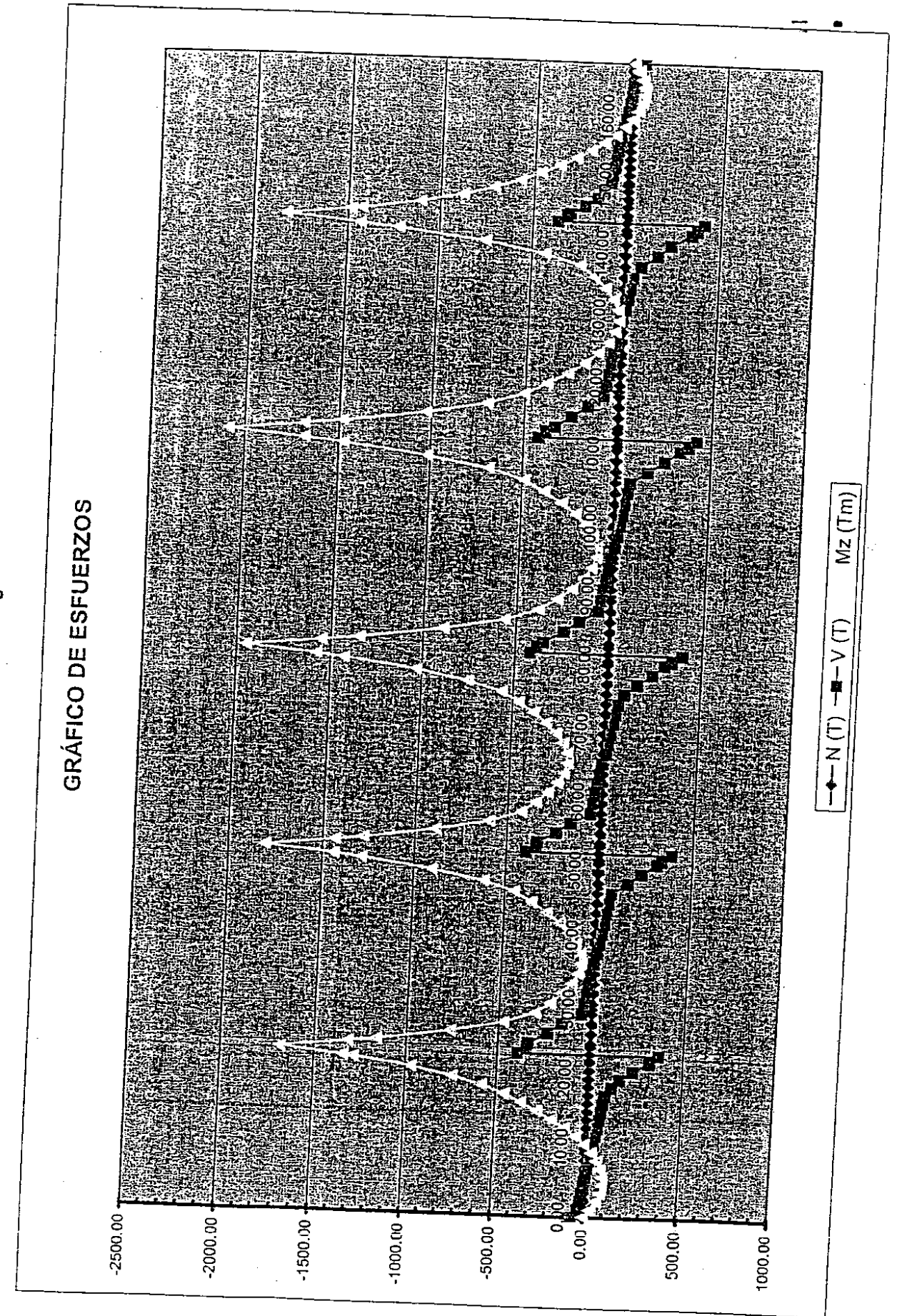
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	4.47	61.34
129	129	164.48	0.00	4.47	61.34
129	130	165.65	0.00	12.74	51.24
130	130	165.65	0.00	12.74	51.24
130	131	166.83	0.00	21.01	31.43
131	131	166.83	0.00	21.01	31.43
131	132	167.00	0.00	22.24	27.64
132	132	167.00	0.00	22.24	27.64
132	133	168.00	0.00	61.79	1.87

fisuracion Iter1.xls

Programa DINTEL IDEAM S.A.
INFRECneg

24/08/01

GRÁFICO DE ESFUERZOS



2ª ITERACION

PILA P-1								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
17			2.21528			2.14551	-3%	-8%
18	19	-736.640	2.11063	1.69203	1.83157	1.97110	-7%	-15%
19	19	-736.640	1.73528	1.69203	1.70645	1.64944	-5%	-29%
19	20	-967.310	1.73528	1.52101	1.59244	1.64944	-5%	-29%
20	20	-967.310	1.46907	1.52101	1.50370	1.34521	-8%	-42%
20	21	-1283.755	1.46907	1.04556	1.18673	1.34521	-8%	-42%
21	21	-1283.755	1.35974	1.04556	1.15029	1.13388	-17%	-51%
21	22	-1339.538	1.35974	0.99634	1.11747	1.13388	-17%	-51%
22	22	-1339.538	1.31642	0.99634	1.10303	1.04337	-21%	-55%
22	23	-1681.033	1.31642	0.81737	0.98372	1.04337	-21%	-55%
23	1023	-1681.033	1.32001	0.81737	0.98492	1.05087	-20%	-55%
23	24	-1313.938	1.32001	1.01521	1.11681	1.05087	-20%	-55%
24	24	-1313.938	1.38892	1.01521	1.13978	1.19581	-14%	-48%
24	25	-1163.273	1.38892	1.18330	1.25184	1.19581	-14%	-48%
25	25	-1163.273	1.62512	1.18330	1.33057	1.46457	-10%	-37%
25	26	-755.696	1.62512	1.58528	1.59856	1.46457	-10%	-37%
26	26	-755.696	2.07505	1.58528	1.74854	1.91179	-8%	-18%
26	27	-471.987	2.07505	2.07505	2.07505	1.91179	-8%	-18%
27	27	-471.987	2.31993	2.07505	2.15667	2.23830	-4%	-4%
28			2.31993			2.27911	-2%	-2%

PILA P-2								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
39			2.31993			2.31993	0%	0%
40	41	-616.51	2.31993	2.319927	2.31993	2.31993	0%	0%
41	41	-616.51	1.98954	2.319927	2.20980	2.00017	1%	-14%
41	42	-894.90	1.98954	1.69103902	1.79054	2.00017	1%	-14%
42	42	-894.90	1.51446	1.69103902	1.63218	1.41589	-7%	-39%
42	43	-1286.73	1.51446	1.04216746	1.19960	1.41589	-7%	-39%
43	43	-1286.73	1.34801	1.04216746	1.14411	1.10519	-18%	-52%
43	44	-1435.73	1.34801	0.92540057	1.06627	1.10519	-18%	-52%
44	44	-1435.73	1.29887	0.92540057	1.04989	1.00289	-23%	-57%
44	45	-1802.15	1.29887	0.78440266	0.95589	1.00289	-23%	-57%
45	1045	-1802.15	1.29944	0.78440266	0.95608	1.00405	-23%	-57%
45	46	-1431.77	1.29944	0.92832001	1.05203	1.00405	-23%	-57%
46	46	-1431.77	1.34981	0.92832001	1.06882	1.10881	-18%	-52%
46	47	-1281.37	1.34981	1.04829261	1.14880	1.10881	-18%	-52%
47	47	-1281.37	1.52518	1.04829261	1.20726	1.43064	-6%	-38%
47	48	-883.23	1.52518	1.7184565	1.65403	1.43064	-6%	-38%
48	48	-883.23	1.99904	1.7184565	1.81198	2.01247	1%	-13%
48	49	-599.60	1.99904	2.319927	2.21296	2.01247	1%	-13%
49	49	-599.60	2.31993	2.319927	2.31993	2.31993	0%	0%
50			2.31993			2.31993	0%	0%

PILA P-3								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
61			2.20048			2.19372	0%	-5%
62	63	-746.10	2.08103	2.04047	2.05399	2.06751	-1%	-11%
63	63	-746.10	1.66737	2.04047	1.91610	1.70501	2%	-27%
63	64	-1030.60	1.66737	1.40720	1.49393	1.70501	2%	-27%
64	64	-1030.60	1.40619	1.40720	1.40687	1.24898	-11%	-46%
64	65	-1424.68	1.40619	0.93355	1.09110	1.24898	-11%	-46%
65	65	-1424.68	1.30606	0.93355	1.05772	1.03134	-21%	-56%
65	66	-1575.78	1.30606	0.85442	1.00496	1.03134	-21%	-56%
66	66	-1575.78	1.27694	0.85442	0.99526	0.96258	-25%	-59%
66	67	-1947.95	1.27694	0.75640	0.92991	0.96258	-25%	-59%
67	1067	-1947.95	1.27834	0.75640	0.93038	0.96676	-24%	-58%
67	68	-1552.53	1.27834	0.86554	1.00314	0.96676	-24%	-58%
68	68	-1552.53	1.31549	0.86554	1.01552	1.05760	-20%	-54%
68	69	-1345.74	1.31549	0.99176	1.09967	1.05760	-20%	-54%
69	69	-1345.74	1.48245	0.99176	1.15532	1.39348	-6%	-40%
69	70	-888.44	1.48245	1.70622	1.63163	1.39348	-6%	-40%
70	70	-888.44	1.97450	1.70622	1.79565	1.88508	-5%	-19%
70	71	-564.56	1.97450	1.97450	1.97450	1.88508	-5%	-19%
71	71	-564.56	2.31993	1.97450	2.08965	2.20479	-5%	-5%
72			2.31993			2.26236	-2%	-2%

PILA P-4								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
83			2.21780			2.22816	0%	-4%
84	85	-687.60	2.11568	2.17783	2.15711	2.13640	1%	-8%
85	85	-687.60	1.69890	2.17783	2.01819	1.76891	4%	-24%
86	86	-1017.53	1.69890	1.43001	1.51964	1.76891	4%	-24%
86	86	-1017.53	1.39488	1.43001	1.41830	1.24256	-11%	-46%
87	87	-1474.70	1.39488	0.90278	1.06681	1.24256	-11%	-46%
87	88	-1474.70	1.28964	0.90278	1.03173	1.00296	-22%	-57%
88	88	-1683.98	1.28964	0.81644	0.97418	1.00296	-22%	-57%
88	89	-2086.49	1.26642	0.81644	0.96644	0.94012	-26%	-59%
89	1089	-2086.49	1.26620	0.73749	0.91380	0.94012	-26%	-59%
89	90	-1687.77	1.26620	0.81526	0.91373	0.93965	-26%	-59%
90	90	-1687.77	1.28878	0.81526	0.96557	0.93965	-26%	-59%
90	91	-1481.13	1.28878	0.89970	0.97310	1.00125	-22%	-57%
91	91	-1481.13	1.38818	0.89970	1.02939	1.00125	-22%	-57%
91	92	-1029.57	1.38818	1.40900	1.06253	1.23229	-11%	-47%
92	92	-1029.57	1.67441	1.40900	1.40206	1.23229	-11%	-47%
92	93	-705.29	1.67441	2.13629	1.49747	1.73990	4%	-25%
93	93	-705.29	2.09725	2.13629	1.98233	1.73990	4%	-25%
94			2.20859		2.12328	2.11026	1%	-9%
			0.00000			2.21510	0%	-5%

PILA P-5								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
105			2.31993			2.31993	0%	0%
106	107	-431.21	2.31993	2.31993	2.31993	2.31993	0%	0%
107	107	-431.21	2.05532	2.31993	2.23173	2.13067	4%	-8%
107	108	-756.19	2.05532	2.01676	2.02961	2.13067	4%	-8%
108	108	-756.19	1.58418	2.01676	1.87256	1.57042	-1%	-32%
108	109	-1227.10	1.58418	1.11033	1.26828	1.57042	-1%	-32%
109	109	-1227.10	1.34838	1.11033	1.18968	1.12886	-16%	-51%
109	110	-1432.41	1.34838	0.92785	1.06803	1.12886	-16%	-51%
110	110	-1432.41	1.29251	0.92785	1.04941	0.99986	-23%	-57%
110	111	-1827.22	1.29251	0.77921	0.95031	0.99986	-23%	-57%
111	1111	-1827.22	1.28817	0.77921	0.94887	0.98903	-23%	-57%
111	112	-1481.13	1.28817	0.89970	1.02919	0.98903	-23%	-57%
112	112	-1481.13	1.31650	0.89970	1.03864	1.04971	-20%	-55%
112	113	-1425.51	1.31650	0.93294	1.06079	1.04971	-20%	-55%
113	113	-1425.51	1.38358	0.93294	1.08315	1.19340	-14%	-49%
113	114	-1112.84	1.38358	1.26368	1.30365	1.19340	-14%	-49%
114	114	-1112.84	1.56006	1.26368	1.36248	1.51538	-3%	-35%
114	115	-881.55	1.56006	1.72241	1.66829	1.51538	-3%	-35%
115	115	-881.55	1.99773	1.72241	1.81418	1.90596	-5%	-18%
116			2.15883			2.11294	-2%	-9%

Subanejo 3.3

INERCIAS EN SEGUNDA ITERACIÓN

82	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
83	SX=3.259684	IX=1	IY=1	IZ=2.228160	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
84	SX=3.259684	IX=1	IY=1	IZ=2.136400	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
85	SX=3.259684	IX=1	IY=1	IZ=1.768910	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
86	SX=3.259684	IX=1	IY=1	IZ=1.242560	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
87	SX=3.259684	IX=1	IY=1	IZ=1.002960	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
88	SX=3.259684	IX=1	IY=1	IZ=0.940120	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
89	SX=3.259684	IX=1	IY=1	IZ=0.939650	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
90	SX=3.259684	IX=1	IY=1	IZ=1.001250	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
91	SX=3.259684	IX=1	IY=1	IZ=1.232290	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
92	SX=3.259684	IX=1	IY=1	IZ=1.739900	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
93	SX=3.259684	IX=1	IY=1	IZ=2.110260	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
94	SX=3.259684	IX=1	IY=1	IZ=2.215100	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
95	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
96	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
97	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
98	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
99	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
100	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
101	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
102	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
103	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
104	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
105	SX=3.259684	IX=1	IY=1	IZ=2.319927	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
106	SX=3.259684	IX=1	IY=1	IZ=2.319927	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
107	SX=3.259684	IX=1	IY=1	IZ=2.130670	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
108	SX=3.259684	IX=1	IY=1	IZ=1.570420	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
109	SX=3.259684	IX=1	IY=1	IZ=1.128860	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
110	SX=3.259684	IX=1	IY=1	IZ=0.999860	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
111	SX=3.259684	IX=1	IY=1	IZ=0.989030	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
112	SX=3.259684	IX=1	IY=1	IZ=1.049710	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
113	SX=3.259684	IX=1	IY=1	IZ=1.193400	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
114	SX=3.259684	IX=1	IY=1	IZ=1.515380	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
115	SX=3.259684	IX=1	IY=1	IZ=1.905960	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
116	SX=3.259684	IX=1	IY=1	IZ=2.112940	VY=0.872793	VPY=1.477207	VZ=7	VPZ=0.001
117	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001
118	SX=3.041284	IX=1	IY=1	IZ=2.224545	VY=0.844987	VPY=1.505013	VZ=7	VPZ=0.001

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1: 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.03	0.45
1	2	1.00	0.00	0.03	0.42
2	2	1.00	0.00	0.03	0.42
2	3	1.18	0.00	0.03	0.42
3	3	1.18	0.00	0.03	0.42
3	4	2.35	0.00	0.03	0.39
4	4	2.35	0.00	0.03	0.39
4	5	3.53	0.00	0.03	0.35
5	5	3.53	0.00	0.03	0.35
5	6	4.70	0.00	0.03	0.32
6	6	4.70	0.00	0.03	0.32
6	7	5.88	0.00	0.03	0.29
7	7	5.88	0.00	0.03	0.29
7	8	7.05	0.00	0.03	0.26
8	8	7.05	0.00	0.03	0.26
8	9	8.23	0.00	0.03	0.22
9	9	8.23	0.00	0.03	0.22
9	10	9.40	0.00	0.03	0.19
10	10	9.40	0.00	0.03	0.19
10	11	10.58	0.00	0.03	0.16
11	11	10.58	0.00	0.03	0.16
11	12	11.75	0.00	0.03	0.13
12	12	11.75	0.00	0.03	0.13
12	13	12.93	0.00	0.03	0.09
13	13	12.93	0.00	0.03	0.09
13	14	14.10	0.00	0.03	0.06
14	14	14.10	0.00	0.03	0.06
14	15	15.28	0.00	0.03	0.03
15	15	15.28	0.00	0.03	0.03
15	16	16.45	0.00	0.03	0.00
16	16	16.45	0.00	0.03	0.00
16	17	17.63	0.00	0.03	-0.04
17	17	17.63	0.00	0.03	-0.04
17	18	18.80	0.00	0.03	-0.07
18	18	18.80	-0.01	0.03	-0.07
18	19	19.98	-0.01	0.03	-0.10
19	19	19.98	-0.01	0.03	-0.10
19	20	21.15	-1.06	3.53	-2.28
20	20	21.15	0.00	3.69	-2.28
20	21	22.33	0.00	7.19	-8.67
21	21	22.33	0.00	7.19	-8.67
21	22	22.50	0.00	7.71	-9.98
22	22	22.50	0.00	7.71	-9.98
22	23	23.50	0.00	10.69	-19.18
23	1023	23.50	0.00	-12.95	-19.18
23	24	24.50	0.00	-9.97	-7.72
24	24	24.50	0.00	-9.97	-7.72
24	25	24.95	0.00	-8.62	-3.54
25	25	24.95	0.00	-8.62	-3.54
25	26	26.40	0.00	-4.30	5.83
26	26	26.40	-1.02	-4.18	5.83

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1: 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	0.15	8.84
27	27	27.85	0.04	0.15	8.84
27	28	29.30	0.04	0.15	8.62
28	28	29.30	0.00	0.15	8.62
28	29	30.75	0.00	0.15	8.40
29	29	30.75	0.00	0.15	8.40
29	30	32.20	0.00	0.15	8.18
30	30	32.20	0.00	0.15	8.18
30	31	33.65	0.00	0.15	7.97
31	31	33.65	0.00	0.15	7.97
31	32	35.10	0.00	0.15	7.75
32	32	35.10	0.00	0.15	7.75
32	33	36.55	0.00	0.15	7.53
33	33	36.55	0.00	0.15	7.53
33	34	38.00	0.00	0.15	7.31
34	34	38.00	0.00	0.15	7.31
34	35	39.45	0.00	0.15	7.09
35	35	39.45	0.00	0.15	7.09
35	36	40.90	0.00	0.15	6.87
36	36	40.90	0.00	0.15	6.87
36	37	42.35	0.00	0.15	6.66
37	37	42.35	0.00	0.15	6.66
37	38	43.80	0.00	0.15	6.44
38	38	43.80	0.00	0.15	6.44
38	39	45.25	0.00	0.15	6.22
39	39	45.25	0.00	0.15	6.22
39	40	46.70	0.00	0.15	6.00
40	40	46.70	-0.04	0.15	6.00
40	41	48.15	-0.04	0.15	5.78
41	41	48.15	-0.04	0.15	5.78
41	42	49.60	-1.09	4.47	2.34
42	42	49.60	0.00	4.60	2.34
42	43	51.05	0.00	8.92	-7.47
43	43	51.05	0.00	8.92	-7.47
43	44	51.50	0.00	10.27	-11.78
44	44	51.50	0.00	10.27	-11.78
44	45	52.50	0.00	13.25	-23.54
45	1045	52.50	0.00	-13.05	-23.54
45	46	53.50	0.00	-10.07	-11.99
46	46	53.50	0.00	-10.07	-11.99
46	47	53.95	0.00	-8.72	-7.76
47	47	53.95	0.00	-8.72	-7.76
47	48	55.40	0.00	-4.40	1.76
48	48	55.40	-1.04	-4.27	1.76
48	49	56.85	0.01	0.05	4.91
49	49	56.85	0.01	0.05	4.91
49	50	58.30	0.01	0.05	4.84
50	50	58.30	0.00	0.05	4.84
50	51	59.75	0.00	0.05	4.76
51	51	59.75	0.00	0.05	4.76
51	52	61.20	0.00	0.05	4.69

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1; 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.05	4.69
52	53	62.65	0.00	0.05	4.62
53	53	62.65	0.00	0.05	4.62
53	54	64.10	0.00	0.05	4.54
54	54	64.10	0.00	0.05	4.54
54	55	65.55	0.00	0.05	4.47
55	55	65.55	0.00	0.05	4.47
55	56	67.00	0.00	0.05	4.40
56	56	67.00	0.00	0.05	4.40
56	57	68.45	0.00	0.05	4.32
57	57	68.45	0.00	0.05	4.32
57	58	69.90	0.00	0.05	4.25
58	58	69.90	0.00	0.05	4.25
58	59	71.35	0.00	0.05	4.18
59	59	71.35	0.00	0.05	4.18
59	60	72.80	0.00	0.05	4.10
60	60	72.80	0.00	0.05	4.10
60	61	74.25	0.00	0.05	4.03
61	61	74.25	0.00	0.05	4.03
61	62	75.70	0.00	0.05	3.96
62	62	75.70	-0.01	0.05	3.96
62	63	77.15	-0.01	0.05	3.88
63	63	77.15	-0.01	0.05	3.88
63	64	78.60	-1.07	4.37	0.58
64	64	78.60	0.00	4.50	0.58
64	65	80.05	0.00	8.82	-9.08
65	65	80.05	0.00	8.82	-9.08
65	66	80.50	0.00	10.17	-13.35
66	66	80.50	0.00	10.17	-13.35
66	67	81.50	0.00	13.15	-25.01
67	1067	81.50	0.00	-14.09	-25.01
67	68	82.50	0.00	-11.11	-12.41
68	68	82.50	0.00	-11.11	-12.41
68	69	83.08	0.00	-9.40	-6.51
69	69	83.08	0.00	-9.40	-6.51
69	70	84.65	0.00	-4.70	4.59
70	70	84.65	-1.03	-4.58	4.59
70	71	86.23	0.03	0.11	8.20
71	71	86.23	0.03	0.11	8.20
71	72	87.80	0.03	0.11	8.02
72	72	87.80	0.00	0.11	8.02
72	73	89.38	0.00	0.11	7.84
73	73	89.38	0.00	0.11	7.84
73	74	90.95	0.00	0.11	7.66
74	74	90.95	0.00	0.11	7.66
74	75	92.53	0.00	0.11	7.48
75	75	92.53	0.00	0.11	7.48
75	76	94.10	0.00	0.11	7.30
76	76	94.10	0.00	0.11	7.30
76	77	95.68	0.00	0.11	7.12
77	77	95.68	0.00	0.11	7.12

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1; 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.11	6.94
78	78	97.25	0.00	0.11	6.94
78	79	98.83	0.00	0.11	6.76
79	79	98.83	0.00	0.11	6.76
79	80	100.40	0.00	0.11	6.58
80	80	100.40	0.00	0.11	6.58
80	81	101.98	0.00	0.11	6.40
81	81	101.98	0.00	0.11	6.40
81	82	103.55	0.00	0.11	6.21
82	82	103.55	0.00	0.11	6.21
82	83	105.13	0.00	0.11	6.03
83	83	105.13	0.00	0.11	6.03
83	84	106.70	0.00	0.11	5.85
84	84	106.70	-0.03	0.11	5.85
84	85	108.28	-0.03	0.11	5.67
85	85	108.28	-0.03	0.11	5.67
85	86	109.85	-1.08	4.81	1.70
86	86	109.85	0.00	4.93	1.70
86	87	111.43	0.00	9.62	-9.76
87	87	111.43	0.00	9.62	-9.76
87	88	112.00	0.00	11.34	-15.79
88	88	112.00	0.00	11.34	-15.79
88	89	113.00	0.00	14.32	-28.61
89	1089	113.00	0.00	-14.43	-28.61
89	90	114.00	0.00	-11.44	-15.68
90	90	114.00	0.00	-11.44	-15.68
90	91	114.58	0.00	-9.73	-9.59
91	91	114.58	0.00	-9.73	-9.59
91	92	116.15	0.00	-5.03	2.03
92	92	116.15	-1.10	-4.91	2.03
92	93	117.73	-0.05	-0.21	6.17
93	93	117.73	-0.05	-0.21	6.17
93	94	119.30	-0.05	-0.21	6.52
94	94	119.30	0.00	-0.22	6.52
94	95	120.88	0.00	-0.22	6.86
95	95	120.88	0.00	-0.22	6.86
95	96	122.45	0.00	-0.22	7.21
96	96	122.45	0.00	-0.22	7.21
96	97	124.03	0.00	-0.22	7.55
97	97	124.03	0.00	-0.22	7.55
97	98	125.60	0.00	-0.22	7.90
98	98	125.60	0.00	-0.22	7.90
98	99	127.18	0.00	-0.22	8.25
99	99	127.18	0.00	-0.22	8.25
99	100	128.75	0.00	-0.22	8.59
100	100	128.75	0.00	-0.22	8.59
100	101	130.33	0.00	-0.22	8.94
101	101	130.33	0.00	-0.22	8.94
101	102	131.90	0.00	-0.22	9.28
102	102	131.90	0.00	-0.22	9.28
102	103	133.48	0.00	-0.22	9.63

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1;1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-0.22	9.63
103	104	135.05	0.00	-0.22	9.98
104	104	135.05	0.00	-0.22	9.98
104	105	136.63	0.00	-0.22	10.32
105	105	136.63	0.00	-0.22	10.32
105	106	138.20	0.00	-0.22	10.67
106	106	138.20	0.05	-0.21	10.67
106	107	139.78	0.05	-0.21	11.01
107	107	139.78	0.05	-0.21	11.01
107	108	141.35	-1.01	4.48	7.57
108	108	141.35	0.00	4.59	7.57
108	109	142.93	0.00	9.29	-3.36
109	109	142.93	0.00	9.29	-3.36
109	110	143.50	0.00	11.01	-9.20
110	110	143.50	0.00	11.01	-9.20
110	111	144.50	0.00	13.99	-21.70
111	111	144.50	0.00	-10.86	-21.70
111	112	145.50	0.00	-7.88	-12.32
112	112	145.50	0.00	-7.88	-12.32
112	113	145.68	0.00	-7.36	-10.99
113	113	145.68	0.00	-7.36	-10.99
113	114	146.85	0.00	-3.85	-4.40
114	114	146.85	-1.11	-3.69	-4.40
114	115	148.03	-0.06	-0.19	-2.03
115	115	148.03	-0.06	-0.19	-2.03
115	116	149.20	-0.06	-0.19	-1.80
116	116	149.20	0.00	-0.20	-1.80
116	117	150.38	0.00	-0.20	-1.57
117	117	150.38	0.00	-0.20	-1.57
117	118	151.55	0.00	-0.20	-1.34
118	118	151.55	0.00	-0.20	-1.34
118	119	152.73	0.00	-0.20	-1.11
119	119	152.73	0.00	-0.20	-1.11
119	120	153.90	0.00	-0.20	-0.88
120	120	153.90	0.00	-0.20	-0.88
120	121	155.08	0.00	-0.20	-0.65
121	121	155.08	0.00	-0.20	-0.65
121	122	156.25	0.00	-0.20	-0.42
122	122	156.25	0.00	-0.20	-0.42
122	123	157.43	0.00	-0.20	-0.19
123	123	157.43	0.00	-0.20	-0.19
123	124	158.60	0.00	-0.20	0.04
124	124	158.60	0.00	-0.20	0.04
124	125	159.78	0.00	-0.20	0.27
125	125	159.78	0.00	-0.20	0.27
125	126	160.95	0.00	-0.20	0.50
126	126	160.95	0.00	-0.20	0.50
126	127	162.13	0.00	-0.20	0.73
127	127	162.13	0.00	-0.20	0.73
127	128	163.30	0.00	-0.20	0.96
128	128	163.30	0.00	-0.20	0.96

CÁLCULO TENSIONAL

Hipótesis de cálculo:

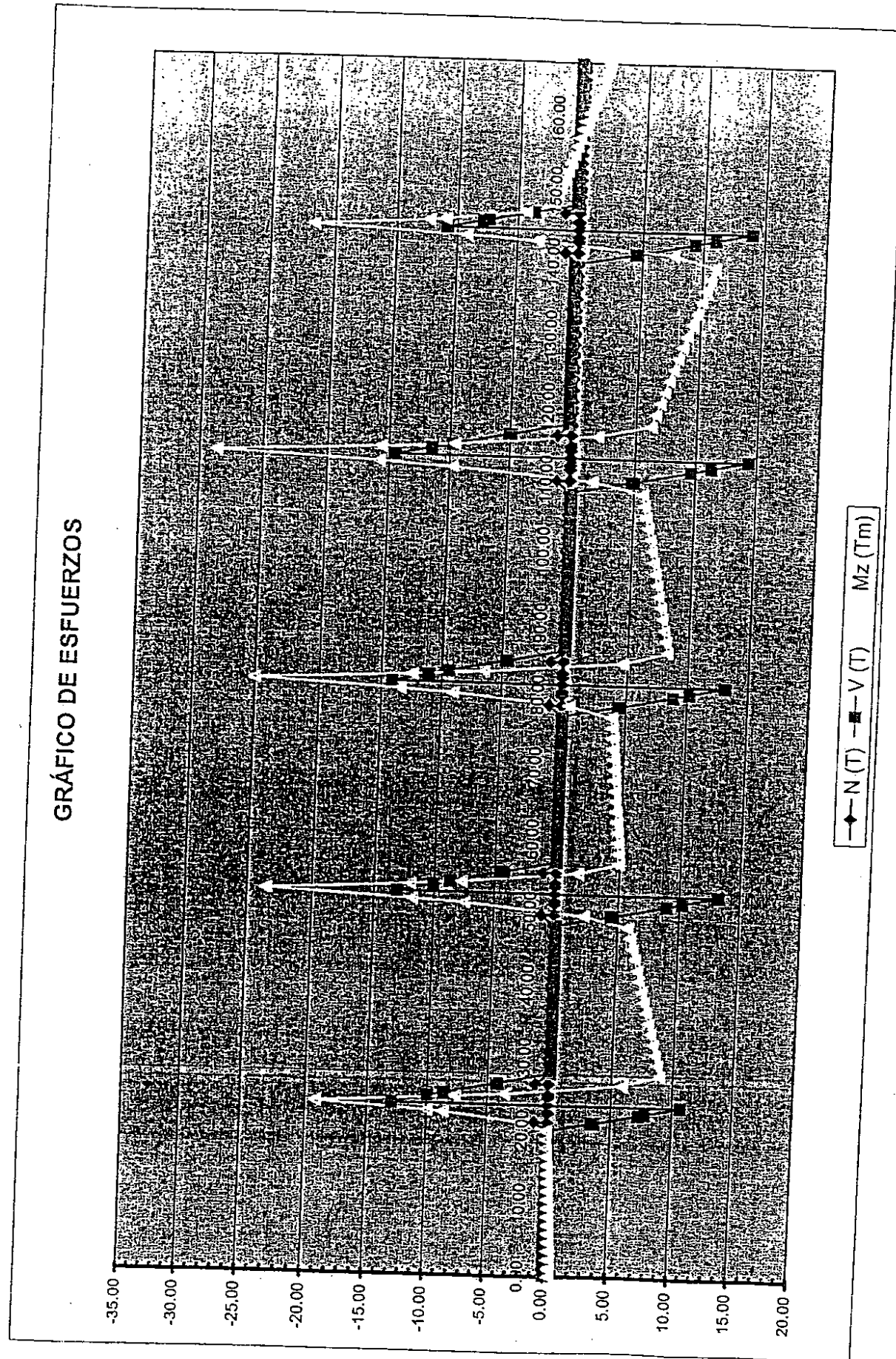
Fase5Neg

Fase 5 Fisuración

[1;1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	-0.20	1.18
129	129	164.48	0.00	-0.20	1.18
129	130	165.65	0.00	-0.20	1.41
130	130	165.65	0.00	-0.20	1.41
130	131	166.83	0.00	-0.20	1.64
131	131	166.83	0.00	-0.20	1.64
131	132	167.00	0.00	-0.20	1.68
132	132	167.00	0.00	-0.20	1.68
132	133	168.00	0.00	-0.20	1.87



CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

$$[1; 1]_{\text{HBCP}} + [1; 1]_{\text{HVÖL}}$$

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-8.27	0.45
1	2	1.00	0.00	-7.32	8.24
2	2	1.00	0.00	-7.32	8.24
2	3	1.18	0.00	-7.16	9.52
3	3	1.18	0.00	-7.16	9.52
3	4	2.35	0.00	-6.04	17.27
4	4	2.35	0.00	-6.04	17.27
4	5	3.53	0.00	-4.93	23.72
5	5	3.53	0.00	-4.93	23.72
5	6	4.70	0.00	-3.82	28.87
6	6	4.70	0.00	-3.82	28.87
6	7	5.88	0.00	-2.71	32.71
7	7	5.88	0.00	-2.71	32.71
7	8	7.05	0.00	-1.60	35.24
8	8	7.05	0.00	-1.60	35.24
8	9	8.23	0.00	-0.49	36.46
9	9	8.23	0.00	-0.49	36.46
9	10	9.40	0.00	0.63	36.38
10	10	9.40	0.00	0.63	36.38
10	11	10.58	0.00	1.74	35.00
11	11	10.58	0.00	1.74	35.00
11	12	11.75	0.00	2.85	32.31
12	12	11.75	0.00	2.85	32.31
12	13	12.93	0.00	3.96	28.31
13	13	12.93	0.00	3.96	28.31
13	14	14.10	0.00	5.07	23.00
14	14	14.10	0.00	5.07	23.00
14	15	15.28	0.00	6.18	16.40
15	15	15.28	0.00	6.18	16.40
15	16	16.45	0.00	7.30	8.48
16	16	16.45	0.00	7.30	8.48
16	17	17.63	0.00	8.41	-0.75
17	17	17.63	0.00	8.41	-0.75
17	18	18.80	0.00	9.52	-11.27
18	18	18.80	-0.01	9.52	-11.27
18	19	19.98	-0.01	10.63	-23.10
19	19	19.98	-0.01	10.63	-23.10
19	20	21.15	-1.06	15.24	-38.39
20	20	21.15	0.00	15.40	-38.39
20	21	22.33	0.00	20.01	-59.20
21	21	22.33	0.00	20.01	-59.20
21	22	22.50	0.00	20.70	-62.76
22	22	22.50	0.00	20.70	-62.76
22	23	23.50	0.00	24.62	-85.43
23	1023	23.50	0.00	-26.71	-85.43
23	24	24.50	0.00	-22.79	-60.67
24	24	24.50	0.00	-22.79	-60.67
24	25	24.95	0.00	-21.01	-50.82
25	25	24.95	0.00	-21.01	-50.82
25	26	26.40	0.00	-15.32	-24.48
26	26	26.40	-1.02	-15.20	-24.48

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-9.50	-6.48
27	27	27.85	0.04	-9.50	-6.48
27	28	29.30	0.04	-8.13	6.29
28	28	29.30	0.00	-8.13	6.29
28	29	30.75	0.00	-6.76	17.08
29	29	30.75	0.00	-6.76	17.08
29	30	32.20	0.00	-5.38	25.88
30	30	32.20	0.00	-5.38	25.88
30	31	33.65	0.00	-4.01	32.70
31	31	33.65	0.00	-4.01	32.70
31	32	35.10	0.00	-2.64	37.52
32	32	35.10	0.00	-2.64	37.52
32	33	36.55	0.00	-1.27	40.35
33	33	36.55	0.00	-1.27	40.35
33	34	38.00	0.00	0.10	41.20
34	34	38.00	0.00	0.10	41.20
34	35	39.45	0.00	1.47	40.05
35	35	39.45	0.00	1.47	40.05
35	36	40.90	0.00	2.85	36.91
36	36	40.90	0.00	2.85	36.91
36	37	42.35	0.00	4.22	31.80
37	37	42.35	0.00	4.22	31.80
37	38	43.80	0.00	5.59	24.69
38	38	43.80	0.00	5.59	24.69
38	39	45.25	0.00	6.96	15.58
39	39	45.25	0.00	6.96	15.58
39	40	46.70	0.00	8.33	4.49
40	40	46.70	-0.04	8.33	4.49
40	41	48.15	-0.04	9.70	-8.59
41	41	48.15	-0.04	9.70	-8.59
41	42	49.60	-1.09	15.40	-26.88
42	42	49.60	0.00	15.53	-26.88
42	43	51.05	0.00	21.22	-53.52
43	43	51.05	0.00	21.22	-53.52
43	44	51.50	0.00	22.99	-63.46
44	44	51.50	0.00	22.99	-63.46
44	45	52.50	0.00	26.92	-88.42
45	1045	52.50	0.00	-26.52	-88.42
45	46	53.50	0.00	-22.59	-63.87
46	46	53.50	0.00	-22.59	-63.87
46	47	53.95	0.00	-20.82	-54.10
47	47	53.95	0.00	-20.82	-54.10
47	48	55.40	0.00	-15.13	-28.03
48	48	55.40	-1.04	-15.00	-28.03
48	49	56.85	0.01	-9.31	-10.32
49	49	56.85	0.01	-9.31	-10.32
49	50	58.30	0.01	-7.93	2.18
50	50	58.30	0.00	-7.93	2.18
50	51	59.75	0.00	-6.56	12.68
51	51	59.75	0.00	-6.56	12.68
51	52	61.20	0.00	-5.19	21.20

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-5.19	21.20
52	53	62.65	0.00	-3.82	27.74
53	53	62.65	0.00	-3.82	27.74
53	54	64.10	0.00	-2.45	32.27
54	54	64.10	0.00	-2.45	32.27
54	55	65.55	0.00	-1.08	34.83
55	55	65.55	0.00	-1.08	34.83
55	56	67.00	0.00	0.30	35.40
56	56	67.00	0.00	0.30	35.40
56	57	68.45	0.00	1.67	33.96
57	57	68.45	0.00	1.67	33.96
57	58	69.90	0.00	3.04	30.55
58	58	69.90	0.00	3.04	30.55
58	59	71.35	0.00	4.41	25.15
59	59	71.35	0.00	4.41	25.15
59	60	72.80	0.00	5.78	17.75
60	60	72.80	0.00	5.78	17.75
60	61	74.25	0.00	7.15	8.38
61	61	74.25	0.00	7.15	8.38
61	62	75.70	0.00	8.53	-2.99
62	62	75.70	-0.01	8.53	-2.99
62	63	77.15	-0.01	9.90	-16.36
63	63	77.15	-0.01	9.90	-16.36
63	64	78.60	-1.07	15.59	-34.93
64	64	78.60	0.00	15.72	-34.93
64	65	80.05	0.00	21.41	-61.85
65	65	80.05	0.00	21.41	-61.85
65	66	80.50	0.00	23.19	-71.89
66	66	80.50	0.00	23.19	-71.89
66	67	81.50	0.00	27.11	-97.04
67	1067	81.50	0.00	-28.69	-97.04
67	68	82.50	0.00	-24.77	-70.31
68	68	82.50	0.00	-24.77	-70.31
68	69	83.08	0.00	-22.51	-56.71
69	69	83.08	0.00	-22.51	-56.71
69	70	84.65	0.00	-16.32	-26.13
70	70	84.65	-1.03	-16.20	-26.13
70	71	86.23	0.03	-10.02	-5.39
71	71	86.23	0.03	-10.02	-5.39
71	72	87.80	0.03	-8.53	9.22
72	72	87.80	0.00	-8.53	9.22
72	73	89.38	0.00	-7.04	21.48
73	73	89.38	0.00	-7.04	21.48
73	74	90.95	0.00	-5.55	31.39
74	74	90.95	0.00	-5.55	31.39
74	75	92.53	0.00	-4.06	38.95
75	75	92.53	0.00	-4.06	38.95
75	76	94.10	0.00	-2.57	44.17
76	76	94.10	0.00	-2.57	44.17
76	77	95.68	0.00	-1.08	47.05
77	77	95.68	0.00	-1.08	47.05

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.41	47.57
78	78	97.25	0.00	0.41	47.57
78	79	98.83	0.00	1.90	45.75
79	79	98.83	0.00	1.90	45.75
79	80	100.40	0.00	3.39	41.58
80	80	100.40	0.00	3.39	41.58
80	81	101.98	0.00	4.88	35.07
81	81	101.98	0.00	4.88	35.07
81	82	103.55	0.00	6.37	26.20
82	82	103.55	0.00	6.37	26.20
82	83	105.13	0.00	7.86	14.99
83	83	105.13	0.00	7.86	14.99
83	84	106.70	0.00	9.35	1.44
84	84	106.70	-0.03	9.35	1.44
84	85	108.28	-0.03	10.84	-14.46
85	85	108.28	-0.03	10.84	-14.46
85	86	109.85	-1.08	17.03	-36.50
86	86	109.85	0.00	17.15	-36.50
86	87	111.43	0.00	23.33	-68.38
87	87	111.43	0.00	23.33	-68.38
87	88	112.00	0.00	25.59	-82.45
88	88	112.00	0.00	25.59	-82.45
88	89	113.00	0.00	29.52	-109.99
89	1089	113.00	0.00	-29.63	-109.99
89	90	114.00	0.00	-25.70	-82.33
90	90	114.00	0.00	-25.70	-82.33
90	91	114.58	0.00	-23.44	-68.19
91	91	114.58	0.00	-23.44	-68.19
91	92	116.15	0.00	-17.25	-36.15
92	92	116.15	-1.10	-17.13	-36.15
92	93	117.73	-0.05	-10.94	-13.93
93	93	117.73	-0.05	-10.94	-13.93
93	94	119.30	-0.05	-9.45	2.15
94	94	119.30	0.00	-9.46	2.15
94	95	120.88	0.00	-7.97	15.88
95	95	120.88	0.00	-7.97	15.88
95	96	122.45	0.00	-6.48	27.27
96	96	122.45	0.00	-6.48	27.27
96	97	124.03	0.00	-4.99	36.30
97	97	124.03	0.00	-4.99	36.30
97	98	125.60	0.00	-3.50	42.99
98	98	125.60	0.00	-3.50	42.99
98	99	127.18	0.00	-2.01	47.34
99	99	127.18	0.00	-2.01	47.34
99	100	128.75	0.00	-0.52	49.34
100	100	128.75	0.00	-0.52	49.34
100	101	130.33	0.00	0.97	48.99
101	101	130.33	0.00	0.97	48.99
101	102	131.90	0.00	2.46	46.29
102	102	131.90	0.00	2.46	46.29
102	103	133.48	0.00	3.95	41.25

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	3.95	41.25
103	104	135.05	0.00	5.44	33.87
104	104	135.05	0.00	5.44	33.87
104	105	136.63	0.00	6.93	24.13
105	105	136.63	0.00	6.93	24.13
105	106	138.20	0.00	8.42	12.05
106	106	138.20	0.05	8.43	12.05
106	107	139.78	0.05	9.92	-2.39
107	107	139.78	0.05	9.92	-2.39
107	108	141.35	-1.01	16.10	-22.95
108	108	141.35	0.00	16.21	-22.95
108	109	142.93	0.00	22.40	-53.34
109	109	142.93	0.00	22.40	-53.34
109	110	143.50	0.00	24.66	-66.88
110	110	143.50	0.00	24.66	-66.88
110	111	144.50	0.00	28.59	-93.50
111	111	144.50	0.00	-25.03	-93.50
111	112	145.50	0.00	-21.10	-70.42
112	112	145.50	0.00	-21.10	-70.42
112	113	145.68	0.00	-20.42	-66.79
113	113	145.68	0.00	-20.42	-66.79
113	114	146.85	0.00	-15.80	-45.51
114	114	146.85	-1.11	-15.64	-45.51
114	115	148.03	-0.06	-11.03	-29.75
115	115	148.03	-0.06	-11.03	-29.75
115	116	149.20	-0.06	-9.91	-17.44
116	116	149.20	0.00	-9.92	-17.44
116	117	150.38	0.00	-8.81	-6.44
117	117	150.38	0.00	-8.81	-6.44
117	118	151.55	0.00	-7.70	3.26
118	118	151.55	0.00	-7.70	3.26
118	119	152.73	0.00	-6.59	11.65
119	119	152.73	0.00	-6.59	11.65
119	120	153.90	0.00	-5.48	18.73
120	120	153.90	0.00	-5.48	18.73
120	121	155.08	0.00	-4.37	24.51
121	121	155.08	0.00	-4.37	24.51
121	122	156.25	0.00	-3.26	28.98
122	122	156.25	0.00	-3.26	28.98
122	123	157.43	0.00	-2.14	32.15
123	123	157.43	0.00	-2.14	32.15
123	124	158.60	0.00	-1.03	34.01
124	124	158.60	0.00	-1.03	34.01
124	125	159.78	0.00	0.08	34.57
125	125	159.78	0.00	0.08	34.57
125	126	160.95	0.00	1.19	33.82
126	126	160.95	0.00	1.19	33.82
126	127	162.13	0.00	2.30	31.76
127	127	162.13	0.00	2.30	31.76
127	128	163.30	0.00	3.41	28.39
128	128	163.30	0.00	3.41	28.39

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

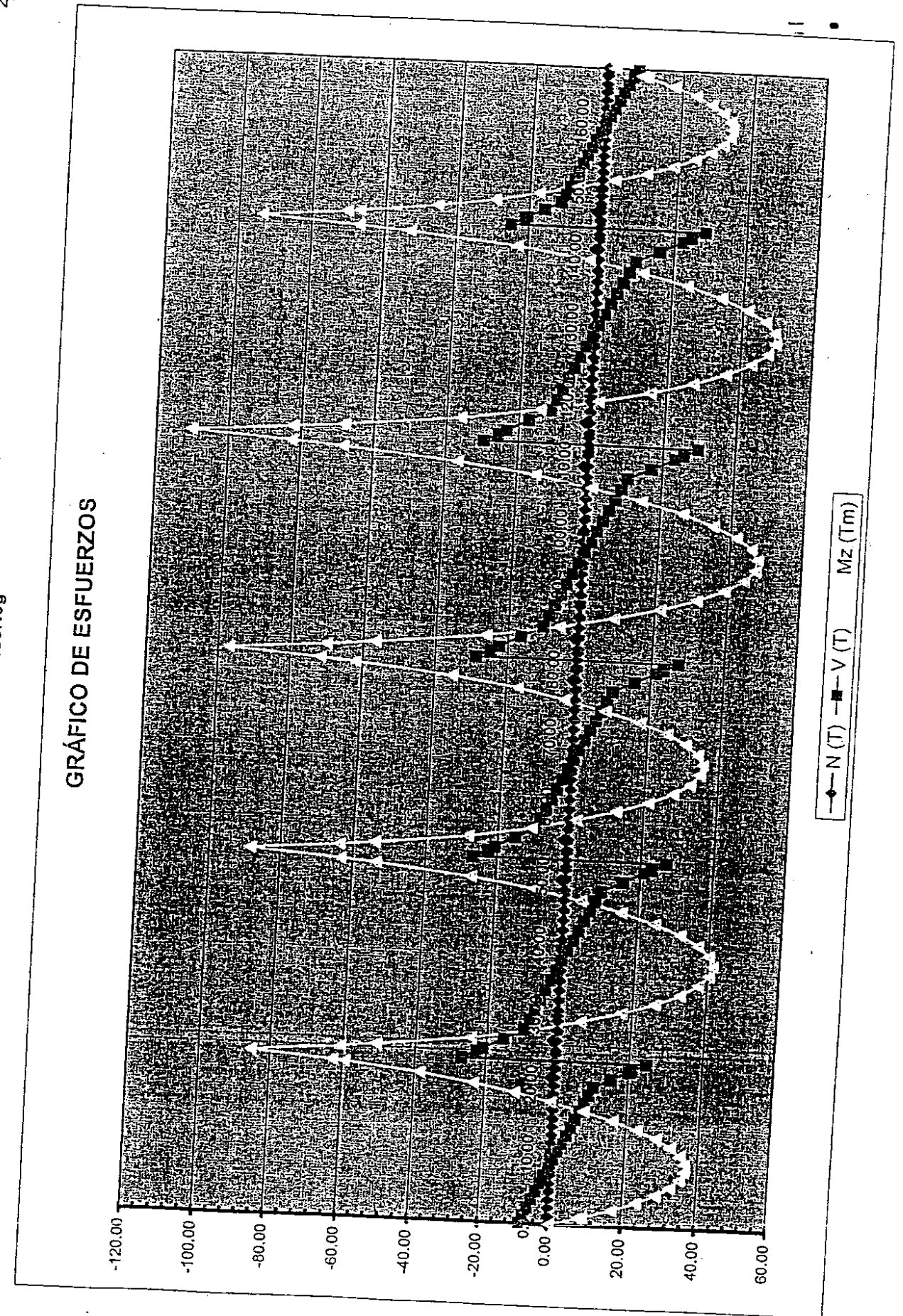
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	4.53	23.71
129	129	164.48	0.00	4.53	23.71
129	130	165.65	0.00	5.64	17.74
130	130	165.65	0.00	5.64	17.74
130	131	166.83	0.00	6.75	10.46
131	131	166.83	0.00	6.75	10.46
131	132	167.00	0.00	6.91	9.27
132	132	167.00	0.00	6.91	9.27
132	133	168.00	0.00	7.86	1.87

fisuración Iter2.xls

Programa DINTEL IDEAM S.A.
Fase6Neg

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [1; 7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-64.28	0.45
1	2	1.00	0.00	-57.23	61.20
2	2	1.00	0.00	-57.23	61.20
2	3	1.18	0.00	-56.00	71.13
3	3	1.18	0.00	-56.00	71.13
3	4	2.35	0.00	-47.72	132.06
4	4	2.35	0.00	-47.72	132.06
4	5	3.53	0.00	-39.45	183.28
5	5	3.53	0.00	-39.45	183.28
5	6	4.70	0.00	-31.18	224.78
6	6	4.70	0.00	-31.18	224.78
6	7	5.88	0.00	-22.90	256.55
7	7	5.88	0.00	-22.90	256.55
7	8	7.05	0.00	-14.63	278.60
8	8	7.05	0.00	-14.63	278.60
8	9	8.23	0.00	-6.35	290.91
9	9	8.23	0.00	-6.35	290.91
9	10	9.40	0.00	1.94	293.51
10	10	9.40	0.00	1.94	293.51
10	11	10.58	0.00	10.21	286.38
11	11	10.58	0.00	10.21	286.38
11	12	11.75	0.00	18.49	269.53
12	12	11.75	0.00	18.49	269.53
12	13	12.93	0.00	26.77	242.95
13	13	12.93	0.00	26.77	242.95
13	14	14.10	0.00	35.04	206.63
14	14	14.10	0.00	35.04	206.63
14	15	15.28	0.00	43.31	160.62
15	15	15.28	0.00	43.31	160.62
15	16	16.45	0.00	51.60	104.86
16	16	16.45	-0.53	51.59	104.86
16	17	17.63	-0.61	59.86	39.36
17	17	17.63	-0.61	59.86	39.36
17	18	18.80	-1.00	93.36	-46.39
18	18	18.80	-0.01	93.36	-46.39
18	19	19.98	-0.01	104.72	-162.77
19	19	19.98	-0.01	104.72	-162.77
19	20	21.15	-1.06	119.58	-294.64
20	20	21.15	0.00	119.74	-294.64
20	21	22.33	0.00	134.61	-444.07
21	21	22.33	0.00	134.61	-444.07
21	22	22.50	0.00	136.81	-467.82
22	22	22.50	0.00	136.81	-467.82
22	23	23.50	0.00	149.45	-610.97
23	1023	23.50	0.00	-152.84	-610.97
23	24	24.50	0.00	-140.19	-464.45
24	24	24.50	0.00	-140.19	-464.45
24	25	24.95	0.00	-134.49	-402.65
25	25	24.95	0.00	-134.49	-402.65
25	26	26.40	0.00	-116.16	-220.94
26	26	26.40	-1.02	-116.04	-220.94

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [1; 7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-97.68	-65.91
27	27	27.85	0.04	-97.68	-65.91
27	28	29.30	0.04	-60.95	47.74
28	28	29.30	-0.50	-60.95	47.74
28	29	30.75	-0.42	-50.73	128.70
29	29	30.75	-0.42	-50.73	128.70
29	30	32.20	-0.34	-40.51	194.86
30	30	32.20	0.00	-40.51	194.86
30	31	33.65	0.00	-30.31	246.21
31	31	33.65	0.00	-30.31	246.21
31	32	35.10	0.00	-20.09	282.74
32	32	35.10	0.00	-20.09	282.74
32	33	36.55	0.00	-9.88	304.46
33	33	36.55	0.00	-9.88	304.46
33	34	38.00	0.00	0.34	311.38
34	34	38.00	0.00	0.34	311.38
34	35	39.45	0.00	10.55	303.48
35	35	39.45	0.00	10.55	303.48
35	36	40.90	0.00	20.78	280.76
36	36	40.90	0.00	20.78	280.76
36	37	42.35	0.00	30.98	243.26
37	37	42.35	0.00	30.98	243.26
37	38	43.80	0.00	41.19	190.93
38	38	43.80	-0.34	41.19	190.93
38	39	45.25	-0.43	51.40	123.79
39	39	45.25	-0.43	51.40	123.79
39	40	46.70	-0.51	61.61	41.84
40	40	46.70	-0.04	61.62	41.84
40	41	48.15	-0.04	98.57	-74.86
41	41	48.15	-0.04	98.57	-74.86
41	42	49.60	-1.09	116.89	-231.15
42	42	49.60	0.00	117.02	-231.15
42	43	51.05	0.00	135.37	-414.13
43	43	51.05	0.00	135.37	-414.13
43	44	51.50	0.00	141.06	-476.32
44	44	51.50	0.00	141.06	-476.32
44	45	52.50	0.00	153.71	-623.72
45	1045	52.50	0.00	-151.47	-623.72
45	46	53.50	0.00	-138.82	-478.58
46	46	53.50	0.00	-138.82	-478.58
46	47	53.95	0.00	-133.12	-417.39
47	47	53.95	0.00	-133.12	-417.39
47	48	55.40	0.00	-114.79	-237.66
48	48	55.40	-1.04	-114.66	-237.66
48	49	56.85	0.01	-96.33	-84.60
49	49	56.85	0.01	-96.33	-84.60
49	50	58.30	0.01	-59.93	32.04
50	50	58.30	-0.50	-59.93	32.04
50	51	59.75	-0.42	-49.72	111.53
51	51	59.75	-0.42	-49.72	111.53
51	52	61.20	-0.33	-39.50	176.21

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-39.50	176.21
52	53	62.65	0.00	-29.29	226.09
53	53	62.65	0.00	-29.29	226.09
53	54	64.10	0.00	-19.07	261.15
54	54	64.10	0.00	-19.07	261.15
54	55	65.55	0.00	-8.87	281.40
55	55	65.55	0.00	-8.87	281.40
55	56	67.00	0.00	1.36	286.86
56	56	67.00	0.00	1.36	286.86
56	57	68.45	0.00	11.57	277.47
57	57	68.45	0.00	11.57	277.47
57	58	69.90	0.00	21.78	253.31
58	58	69.90	0.00	21.78	253.31
58	59	71.35	0.00	31.99	214.32
59	59	71.35	0.00	31.99	214.32
59	60	72.80	0.00	42.20	160.52
60	60	72.80	-0.35	42.20	160.52
60	61	74.25	-0.44	52.42	91.92
61	61	74.25	-0.44	52.42	91.92
61	62	75.70	-0.52	62.63	8.51
62	62	75.70	-0.01	62.63	8.51
62	63	77.15	-0.01	99.93	-121.29
63	63	77.15	-0.01	99.93	-121.29
63	64	78.60	-1.07	118.26	-279.57
64	64	78.60	0.00	118.39	-279.57
64	65	80.05	0.00	136.73	-464.53
65	65	80.05	0.00	136.73	-464.53
65	66	80.50	0.00	142.43	-527.36
66	66	80.50	0.00	142.43	-527.36
66	67	81.50	0.00	155.08	-676.12
67	1067	81.50	0.00	-164.01	-676.12
67	68	82.50	0.00	-151.36	-518.43
68	68	82.50	0.00	-151.36	-518.43
68	69	83.08	0.00	-144.10	-433.48
69	69	83.08	0.00	-144.10	-433.48
69	70	84.65	0.00	-124.16	-222.22
70	70	84.65	-1.03	-124.04	-222.22
70	71	86.23	0.03	-104.13	-42.45
71	71	86.23	0.03	-104.13	-42.45
71	72	87.80	0.03	-64.72	79.39
72	72	87.80	-0.50	-64.72	79.39
72	73	89.38	-0.40	-53.63	172.59
73	73	89.38	-0.40	-53.63	172.59
73	74	90.95	-0.32	-42.53	248.33
74	74	90.95	0.00	-42.54	248.33
74	75	92.53	0.00	-31.44	306.58
75	75	92.53	0.00	-31.44	306.58
75	76	94.10	0.00	-20.36	347.37
76	76	94.10	0.00	-20.36	347.37
76	77	95.68	0.00	-9.25	370.69
77	77	95.68	0.00	-9.25	370.69

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	1.83	376.53
78	78	97.25	0.00	1.83	376.53
78	79	98.83	0.00	12.94	364.89
79	79	98.83	0.00	12.94	364.89
79	80	100.40	0.00	24.03	335.79
80	80	100.40	0.00	24.03	335.79
80	81	101.98	0.00	35.12	289.21
81	81	101.98	0.00	35.12	289.21
81	82	103.55	0.00	46.22	225.15
82	82	103.55	-0.36	46.22	225.15
82	83	105.13	-0.44	57.31	143.62
83	83	105.13	-0.44	57.31	143.62
83	84	106.70	-0.52	68.40	44.62
84	84	106.70	-0.03	68.41	44.62
84	85	108.28	-0.03	109.04	-96.52
85	85	108.28	-0.03	109.04	-96.52
85	86	109.85	-1.08	128.95	-284.05
86	86	109.85	0.00	129.07	-284.05
86	87	111.43	0.00	149.00	-503.02
87	87	111.43	0.00	149.00	-503.02
87	88	112.00	0.00	156.26	-590.82
88	88	112.00	0.00	156.26	-590.82
88	89	113.00	0.00	168.91	-753.38
89	1089	113.00	0.00	-169.33	-753.38
89	90	114.00	0.00	-156.68	-590.35
90	90	114.00	0.00	-156.68	-590.35
90	91	114.58	0.00	-149.41	-502.37
91	91	114.58	0.00	-149.41	-502.37
91	92	116.15	0.00	-129.48	-282.76
92	92	116.15	-1.10	-129.36	-282.76
92	93	117.73	-0.05	-109.42	-94.60
93	93	117.73	-0.05	-109.42	-94.60
93	94	119.30	-0.05	-68.71	46.64
94	94	119.30	-0.53	-68.72	46.64
94	95	120.88	-0.44	-57.62	146.14
95	95	120.88	-0.44	-57.62	146.14
95	96	122.45	-0.36	-46.53	228.18
96	96	122.45	0.00	-46.53	228.18
96	97	124.03	0.00	-35.44	292.73
97	97	124.03	0.00	-35.44	292.73
97	98	125.60	0.00	-24.34	339.81
98	98	125.60	0.00	-24.34	339.81
98	99	127.18	0.00	-13.25	369.41
99	99	127.18	0.00	-13.25	369.41
99	100	128.75	0.00	-2.15	381.55
100	100	128.75	0.00	-2.15	381.55
100	101	130.33	0.00	8.94	376.22
101	101	130.33	0.00	8.94	376.22
101	102	131.90	0.00	20.03	353.40
102	102	131.90	0.00	20.03	353.40
102	103	133.48	0.00	31.13	313.11

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	31.13	313.11
103	104	135.05	0.00	42.22	255.37
104	104	135.05	-0.32	42.22	255.37
104	105	136.63	-0.40	53.32	180.14
105	105	136.63	-0.40	53.32	180.14
105	106	138.20	-0.50	64.41	87.43
106	106	138.20	0.05	64.42	87.43
106	107	139.78	0.05	103.73	-31.52
107	107	139.78	0.05	103.73	-31.52
107	108	141.35	-1.01	123.66	-210.66
108	108	141.35	0.00	123.77	-210.66
108	109	142.93	0.00	143.68	-421.25
109	109	142.93	0.00	143.68	-421.25
109	110	143.50	0.00	150.97	-505.99
110	110	143.50	0.00	150.97	-505.99
110	111	144.50	0.00	163.62	-663.26
111	111	144.50	0.00	-151.76	-663.26
111	112	145.50	0.00	-139.10	-517.80
112	112	145.50	0.00	-139.10	-517.80
112	113	145.68	0.00	-136.90	-493.67
113	113	145.68	0.00	-136.90	-493.67
113	114	146.85	0.00	-122.03	-341.55
114	114	146.85	-1.11	-121.87	-341.55
114	115	148.03	-0.06	-107.00	-207.01
115	115	148.03	-0.06	-107.00	-207.01
115	116	149.20	-0.06	-95.64	-87.94
116	116	149.20	-1.01	-95.64	-87.94
116	117	150.38	-0.63	-61.59	10.49
117	117	150.38	-0.63	-61.59	10.49
117	118	151.55	-0.54	-53.31	78.00
118	118	151.55	0.00	-53.31	78.00
118	119	152.73	0.00	-45.04	135.77
119	119	152.73	0.00	-45.04	135.77
119	120	153.90	0.00	-36.76	183.81
120	120	153.90	0.00	-36.76	183.81
120	121	155.08	0.00	-28.48	222.13
121	121	155.08	0.00	-28.48	222.13
121	122	156.25	0.00	-20.21	250.73
122	122	156.25	0.00	-20.21	250.73
122	123	157.43	0.00	-11.93	269.62
123	123	157.43	0.00	-11.93	269.62
123	124	158.60	0.00	-3.66	278.77
124	124	158.60	0.00	-3.66	278.77
124	125	159.78	0.00	4.62	278.20
125	125	159.78	0.00	4.62	278.20
125	126	160.95	0.00	12.89	267.90
126	126	160.95	0.00	12.89	267.90
126	127	162.13	0.00	21.17	247.88
127	127	162.13	0.00	21.17	247.88
127	128	163.30	0.00	29.45	218.12
128	128	163.30	0.00	29.45	218.12

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	37.74	178.64
129	129	164.48	0.00	37.74	178.64
129	130	165.65	0.00	46.01	129.44
130	130	165.65	0.00	46.01	129.44
130	131	166.83	0.00	54.29	70.52
131	131	166.83	0.00	54.29	70.52
131	132	167.00	0.00	55.52	60.92
132	132	167.00	0.00	55.52	60.92
132	133	168.00	0.00	62.56	1.87

CÁLCULO TENSIONAL

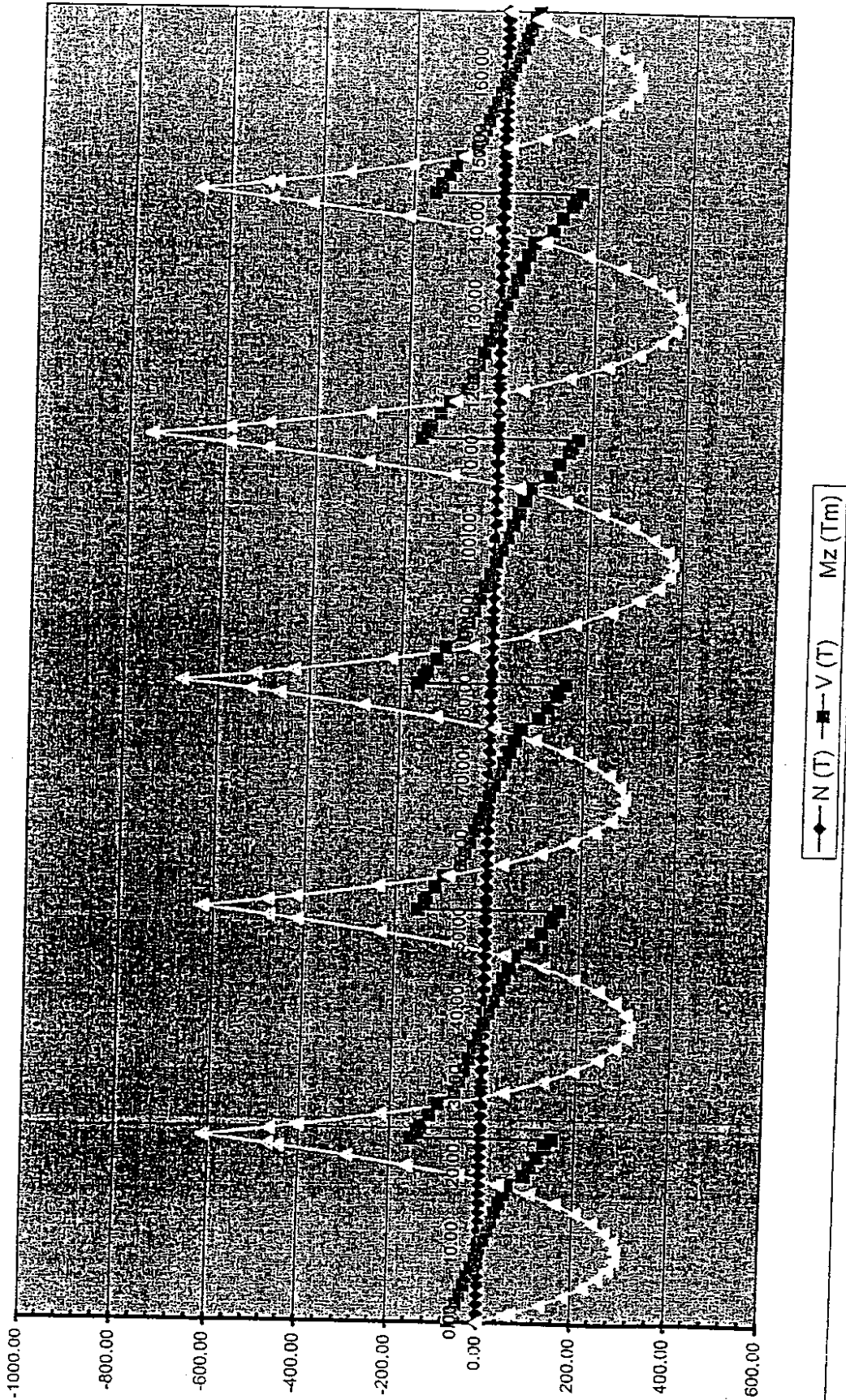
Hipótesis de cálculo:
INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-64.28	0.45
1	2	1.00	0.00	-31.31	35.27
2	2	1.00	0.00	-31.31	35.27
2	3	1.18	0.00	-30.08	40.66
3	3	1.18	0.00	-30.08	40.66
3	4	2.35	0.00	-21.80	71.14
4	4	2.35	0.00	-21.80	71.14
4	5	3.53	0.00	-13.53	91.89
5	5	3.53	0.00	-13.53	91.89
5	6	4.70	0.00	-5.26	102.92
6	6	4.70	0.00	-5.26	102.92
6	7	5.88	0.00	3.02	104.23
7	7	5.88	0.00	3.02	104.23
7	8	7.05	0.00	11.29	95.82
8	8	7.05	0.00	11.29	95.82
8	9	8.23	0.00	19.57	77.67
9	9	8.23	0.00	19.57	77.67
9	10	9.40	0.00	27.86	49.79
10	10	9.40	0.00	27.86	49.79
10	11	10.58	0.00	36.13	12.20
11	11	10.58	0.00	36.13	12.20
11	12	11.75	0.00	44.41	-35.11
12	12	11.75	0.00	44.41	-35.11
12	13	12.93	0.00	52.68	-92.15
13	13	12.93	0.00	52.68	-92.15
13	14	14.10	0.00	60.96	-158.94
14	14	14.10	0.00	60.96	-158.94
14	15	15.28	0.00	69.23	-235.41
15	15	15.28	0.00	69.23	-235.41
15	16	16.45	0.00	77.52	-321.63
16	16	16.45	-0.83	77.51	-321.63
16	17	17.63	-0.91	85.78	-417.59
17	17	17.63	-0.91	85.78	-417.59
17	18	18.80	-1.30	119.28	-533.82
18	18	18.80	-0.01	119.28	-533.82
18	19	19.98	-0.01	146.41	-683.15
19	19	19.98	-0.01	146.41	-683.15
19	20	21.15	-1.06	217.59	-900.73
20	20	21.15	0.00	217.75	-900.73
20	21	22.33	0.00	300.49	-1207.58
21	21	22.33	0.00	300.49	-1207.58
21	22	22.50	0.00	316.27	-1262.14
22	22	22.50	0.00	316.27	-1262.14
22	23	23.50	0.00	359.32	-1599.85
23	1023	23.50	0.00	-387.15	-1599.85
23	24	24.50	0.00	-335.64	-1235.12
24	24	24.50	0.00	-335.64	-1235.12
24	25	24.95	0.00	-329.27	-1085.46
25	25	24.95	0.00	-329.27	-1085.46
25	26	26.40	0.00	-226.29	-688.18
26	26	26.40	-1.02	-226.17	-688.18

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-146.51	-417.05
27	27	27.85	0.04	-146.51	-417.05
27	28	29.30	0.04	-56.51	-269.22
28	28	29.30	-0.45	-56.52	-269.22
28	29	30.75	-0.37	-46.30	-194.69
29	29	30.75	-0.37	-46.30	-194.69
29	30	32.20	-0.29	-36.09	-134.96
30	30	32.20	0.00	-36.07	-134.96
30	31	33.65	0.00	-25.87	-90.03
31	31	33.65	0.00	-25.87	-90.03
31	32	35.10	0.00	-15.65	-59.93
32	32	35.10	0.00	-15.65	-59.93
32	33	36.55	0.00	-5.44	-44.64
33	33	36.55	0.00	-5.44	-44.64
33	34	38.00	0.00	10.69	-52.05
34	34	38.00	0.00	10.69	-52.05
34	35	39.45	0.00	20.90	-74.95
35	35	39.45	0.00	20.90	-74.95
35	36	40.90	0.00	31.13	-112.69
36	36	40.90	0.00	31.13	-112.69
36	37	42.35	0.00	41.34	-165.21
37	37	42.35	0.00	41.34	-165.21
37	38	43.80	0.00	51.55	-232.56
38	38	43.80	-0.45	51.53	-232.56
38	39	45.25	-0.54	61.75	-314.72
39	39	45.25	-0.54	61.75	-314.72
39	40	46.70	-0.62	71.95	-411.70
40	40	46.70	-0.04	71.97	-411.70
40	41	48.15	-0.04	149.06	-563.87
41	41	48.15	-0.04	149.06	-563.87
41	42	49.60	-1.09	215.25	-829.30
42	42	49.60	0.00	215.38	-829.30
42	43	51.05	0.00	310.33	-1211.73
43	43	51.05	0.00	310.33	-1211.73
43	44	51.50	0.00	332.44	-1358.97
44	44	51.50	0.00	332.44	-1358.97
44	45	52.50	0.00	385.56	-1722.97
45	1045	52.50	0.00	-388.45	-1722.97
45	46	53.50	0.00	-335.21	-1355.33
46	46	53.50	0.00	-335.21	-1355.33
46	47	53.95	0.00	-313.07	-1206.61
47	47	53.95	0.00	-313.07	-1206.61
47	48	55.40	0.00	-230.37	-818.46
48	48	55.40	-1.04	-230.24	-818.46
48	49	56.85	0.01	-150.49	-548.30
49	49	56.85	0.01	-150.49	-548.30
49	50	58.30	0.01	-58.03	-396.76
50	50	58.30	-0.49	-58.03	-396.76
50	51	59.75	-0.41	-47.82	-320.03
51	51	59.75	-0.41	-47.82	-320.03
51	52	61.20	-0.32	-37.60	-258.09

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-37.60	-258.09
52	53	62.65	0.00	-27.39	-210.98
53	53	62.65	0.00	-27.39	-210.98
53	54	64.10	0.00	-17.17	-178.68
54	54	64.10	0.00	-17.17	-178.68
54	55	65.55	0.00	-6.97	-161.17
55	55	65.55	0.00	-6.97	-161.17
55	56	67.00	0.00	10.63	-164.87
56	56	67.00	0.00	10.63	-164.87
56	57	68.45	0.00	20.84	-187.70
57	57	68.45	0.00	20.84	-187.70
57	58	69.90	0.00	31.05	-225.33
58	58	69.90	0.00	31.05	-225.33
58	59	71.35	0.00	41.26	-277.74
59	59	71.35	0.00	41.26	-277.74
59	60	72.80	0.00	51.47	-344.99
60	60	72.80	-0.43	51.47	-344.99
60	61	74.25	-0.52	61.68	-427.04
61	61	74.25	-0.52	61.68	-427.04
61	62	75.70	-0.60	71.90	-523.90
62	62	75.70	-0.01	71.90	-523.90
62	63	77.15	-0.01	145.56	-683.46
63	63	77.15	-0.01	145.56	-683.46
63	64	78.60	-1.07	223.50	-951.08
64	64	78.60	0.00	223.63	-951.08
64	65	80.05	0.00	298.34	-1333.89
65	65	80.05	0.00	298.34	-1333.89
65	66	80.50	0.00	340.43	-1480.64
66	66	80.50	0.00	340.43	-1480.64
66	67	81.50	0.00	393.15	-1849.16
67	1067	81.50	0.00	-413.17	-1849.16
67	68	82.50	0.00	-379.70	-1455.59
68	68	82.50	0.00	-379.70	-1455.59
68	69	83.08	0.00	-331.41	-1251.37
69	69	83.08	0.00	-331.41	-1251.37
69	70	84.65	0.00	-242.62	-805.57
70	70	84.65	-1.03	-242.50	-805.57
70	71	86.23	0.03	-156.03	-498.25
71	71	86.23	0.03	-156.03	-498.25
71	72	87.80	0.03	-64.74	-341.84
72	72	87.80	-0.50	-64.74	-341.84
72	73	89.38	-0.40	-53.64	-248.62
73	73	89.38	-0.40	-53.64	-248.62
73	74	90.95	-0.32	-42.55	-172.87
74	74	90.95	0.00	-42.56	-172.87
74	75	92.53	0.00	-31.45	-114.60
75	75	92.53	0.00	-31.45	-114.60
75	76	94.10	0.00	-20.37	-73.78
76	76	94.10	0.00	-20.37	-73.78
76	77	95.68	0.00	-9.26	-50.45
77	77	95.68	0.00	-9.26	-50.45

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	8.25	-50.27
78	78	97.25	0.00	8.25	-50.27
78	79	98.83	0.00	19.35	-72.02
79	79	98.83	0.00	19.35	-72.02
79	80	100.40	0.00	30.45	-111.24
80	80	100.40	0.00	30.45	-111.24
80	81	101.98	0.00	41.53	-167.95
81	81	101.98	0.00	41.53	-167.95
81	82	103.55	0.00	52.64	-242.13
82	82	103.55	-0.42	52.64	-242.13
82	83	105.13	-0.50	63.72	-333.78
83	83	105.13	-0.50	63.72	-333.78
83	84	106.70	-0.58	74.81	-442.88
84	84	106.70	-0.03	74.82	-442.88
84	85	108.28	-0.03	157.81	-615.67
85	85	108.28	-0.03	157.81	-615.67
85	86	109.85	-1.08	236.70	-925.88
86	86	109.85	0.00	236.82	-925.88
86	87	111.43	0.00	318.06	-1370.32
87	87	111.43	0.00	318.06	-1370.32
87	88	112.00	0.00	363.91	-1573.95
88	88	112.00	0.00	363.91	-1573.95
88	89	113.00	0.00	420.12	-1973.11
89	1089	113.00	0.00	-416.98	-1973.11
89	90	114.00	0.00	-360.84	-1577.29
90	90	114.00	0.00	-360.84	-1577.29
90	91	114.58	0.00	-315.08	-1376.00
91	91	114.58	0.00	-315.08	-1376.00
91	92	116.15	0.00	-234.03	-936.45
92	92	116.15	-1.10	-233.91	-936.45
92	93	117.73	-0.05	-155.50	-630.96
93	93	117.73	-0.05	-155.50	-630.96
93	94	119.30	-0.05	-81.51	-455.84
94	94	119.30	-0.65	-81.52	-455.84
94	95	120.88	-0.56	-70.41	-336.18
95	95	120.88	-0.56	-70.41	-336.18
95	96	122.45	-0.48	-59.32	-233.97
96	96	122.45	0.00	-59.33	-233.97
96	97	124.03	0.00	-48.23	-149.26
97	97	124.03	0.00	-48.23	-149.26
97	98	125.60	0.00	-37.13	-82.03
98	98	125.60	0.00	-37.13	-82.03
98	99	127.18	0.00	-26.04	-32.27
99	99	127.18	0.00	-26.04	-32.27
99	100	128.75	0.00	-14.94	0.04
100	100	128.75	0.00	-14.94	0.04
100	101	130.33	0.00	-3.86	14.86
101	101	130.33	0.00	-3.86	14.86
101	102	131.90	0.00	13.05	6.45
102	102	131.90	0.00	13.05	6.45
102	103	133.48	0.00	24.15	-22.83

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	24.15	-22.83
103	104	135.05	0.00	35.23	-69.57
104	104	135.05	-0.26	35.23	-69.57
104	105	136.63	-0.34	46.34	-133.79
105	105	136.63	-0.34	46.34	-133.79
105	106	138.20	-0.43	57.42	-215.48
106	106	138.20	0.05	57.43	-215.48
106	107	139.78	0.05	159.66	-374.80
107	107	139.78	0.05	159.66	-374.80
107	108	141.35	-1.01	238.31	-685.89
108	108	141.35	0.00	238.42	-685.89
108	109	142.93	0.00	349.47	-1142.96
109	109	142.93	0.00	349.47	-1142.96
109	110	143.50	0.00	375.51	-1346.53
110	110	143.50	0.00	375.51	-1346.53
110	111	144.50	0.00	411.99	-1739.76
111	111	144.50	0.00	-365.80	-1739.76
111	112	145.50	0.00	-318.29	-1397.88
112	112	145.50	0.00	-318.29	-1397.88
112	113	145.68	0.00	-302.52	-1343.33
113	113	145.68	0.00	-302.52	-1343.33
113	114	146.85	0.00	-224.39	-1039.59
114	114	146.85	-1.11	-224.23	-1039.59
114	115	148.03	-0.06	-144.70	-821.06
115	115	148.03	-0.06	-144.70	-821.06
115	116	149.20	-0.06	-126.36	-665.31
116	116	149.20	-1.38	-126.35	-665.31
116	117	150.38	-0.99	-92.30	-530.80
117	117	150.38	-0.99	-92.30	-530.80
117	118	151.55	-0.91	-84.02	-427.20
118	118	151.55	0.00	-84.02	-427.20
118	119	152.73	0.00	-75.75	-333.34
119	119	152.73	0.00	-75.75	-333.34
119	120	153.90	0.00	-67.47	-249.22
120	120	153.90	0.00	-67.47	-249.22
120	121	155.08	0.00	-59.19	-174.80
121	121	155.08	0.00	-59.19	-174.80
121	122	156.25	0.00	-50.92	-110.13
122	122	156.25	0.00	-50.92	-110.13
122	123	157.43	0.00	-42.65	-55.15
123	123	157.43	0.00	-42.65	-55.15
123	124	158.60	0.00	-34.37	-9.91
124	124	158.60	0.00	-34.37	-9.91
124	125	159.78	0.00	-26.09	25.61
125	125	159.78	0.00	-26.09	25.61
125	126	160.95	0.00	-17.82	51.38
126	126	160.95	0.00	-17.82	51.38
126	127	162.13	0.00	-9.54	67.45
127	127	162.13	0.00	-9.54	67.45
127	128	163.30	0.00	-1.26	73.78
128	128	163.30	0.00	-1.26	73.78

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

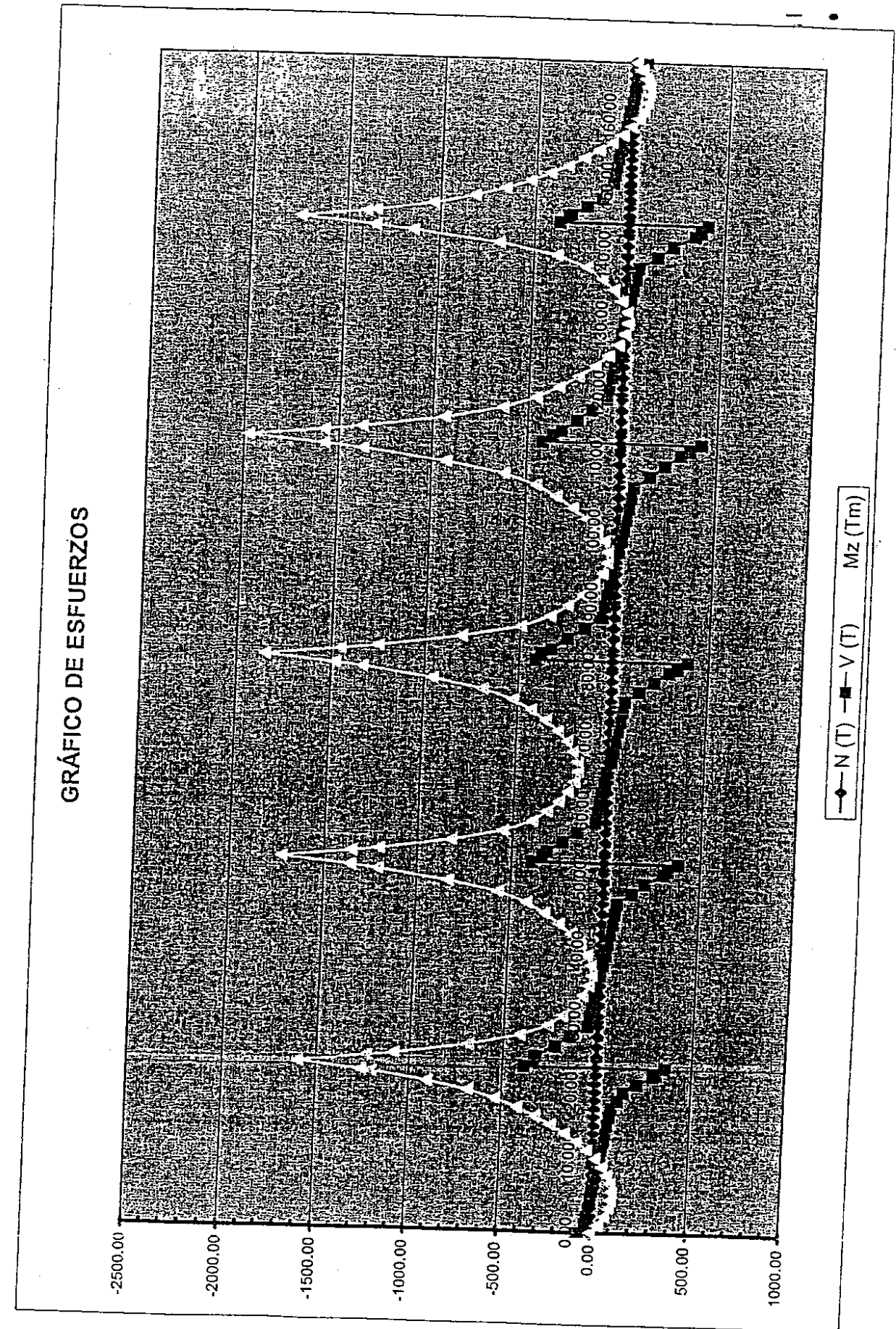
Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	7.03	70.38
129	129	164.48	0.00	7.03	70.38
129	130	165.65	0.00	15.30	57.26
130	130	165.65	0.00	15.30	57.26
130	131	166.83	0.00	23.57	34.45
131	131	166.83	0.00	23.57	34.45
131	132	167.00	0.00	24.80	30.21
132	132	167.00	0.00	24.80	30.21
132	133	168.00	0.00	62.56	1.87

Programa DINTEL IDEAM S.A.
INFRECneg

28/08/01

GRÁFICO DE ESFUERZOS

fisuracion iter2.xls

3ª ITERACION

PILA P-1								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
17			2.14551					
18	19	-683.15	1.97110	2.319927	2.20365	2.20365	3%	-5%
19	19	-683.15	1.64944	2.319927	2.09643	2.08737	6%	-10%
19	20	-900.73	1.64944	1.677367	1.66806	1.88225	14%	-19%
20	20	-900.73	1.34521	1.677367	1.56665	1.88225	14%	-19%
20	21	-1207.58	1.34521	1.132645	1.20350	1.38508	3%	-40%
21	21	-1207.58	1.13388	1.132645	1.13306	1.11227	-2%	-52%
21	22	-1262.14	1.13388	1.070276	1.09148	1.11227	-2%	-52%
22	22	-1262.14	1.04337	1.070276	1.06131	0.98552	-6%	-58%
22	23	-1599.85	1.04337	0.842899	0.90972	0.98552	-6%	-58%
23	1023	-1599.85	1.05087	0.842899	0.91222	0.99831	-5%	-57%
23	24	-1235.12	1.05087	1.101168	1.08440	0.99831	-5%	-57%
24	24	-1235.12	1.19581	1.101168	1.13272	1.20281	1%	-48%
24	25	-1085.46	1.19581	1.311457	1.27291	1.20281	1%	-48%
25	25	-1085.46	1.46457	1.311457	1.36249	1.69865	16%	-27%
25	26	-688.18	1.46457	2.319927	2.03481	1.69865	16%	-27%
26	26	-688.18	1.91179	2.319927	2.18388	2.18388	14%	-6%
26	27	-417.05	1.91179	2.319927	2.18388	2.18388	14%	-6%
27	27	-417.05	2.23830	2.319927	2.29272	2.26551	1%	-2%
28			2.27911			2.29272	1%	-1%

PILA P-2								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
39			2.31993					
40	41	-563.87	2.31993	2.319927	2.31993	2.31993	0%	0%
41	41	-563.87	2.00017	2.319927	2.21334	2.05506	3%	-11%
41	42	-829.30	2.00017	1.845084	1.89678	2.05506	3%	-11%
42	42	-829.30	1.41589	1.845084	1.70202	1.46296	3%	-37%
42	43	-1211.73	1.41589	1.127905	1.22390	1.46296	3%	-37%
43	43	-1211.73	1.10519	1.127905	1.12033	1.07170	-3%	-54%
43	44	-1358.97	1.10519	0.982005	1.02307	1.07170	-3%	-54%
44	44	-1358.97	1.00289	0.982005	0.98897	0.92971	-7%	-60%
44	45	-1722.97	1.00289	0.804222	0.87045	0.92971	-7%	-60%
45	1045	-1722.97	1.00405	0.804222	0.87083	0.93099	-7%	-60%
45	46	-1355.33	1.00405	0.984691	0.99115	0.93099	-7%	-60%
46	46	-1355.33	1.10881	0.984691	1.02606	1.07575	-3%	-54%
46	47	-1206.61	1.10881	1.133753	1.12544	1.07575	-3%	-54%
47	47	-1206.61	1.43064	1.133753	1.23272	1.47832	3%	-36%
47	48	-818.46	1.43064	1.870556	1.72392	1.47832	3%	-36%
48	48	-818.46	2.01247	1.870556	1.91786	2.06765	3%	-11%
48	49	-548.30	2.01247	2.319927	2.21744	2.06765	3%	-11%
49	49	-548.30	2.31993	2.319927	2.31993	2.31993	0%	0%
50			2.31993			2.31993	0%	0%

PILA P-3								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
61			2.19372					
62	63	-683.46	2.06751	2.31993	2.23579	2.15165	2%	-4%
63	63	-683.46	1.70501	2.31993	2.11496	1.86135	9%	-20%
63	64	-951.08	1.70501	1.55912	1.60775	1.86135	9%	-20%
64	64	-951.08	1.24898	1.55912	1.45574	1.26953	2%	-45%
64	65	-1333.89	1.24898	1.00050	1.08333	1.26953	2%	-45%
65	65	-1333.89	1.03134	1.00050	1.01078	0.97726	-5%	-58%
65	66	-1480.64	1.03134	0.89994	0.94374	0.97726	-5%	-58%
66	66	-1480.64	0.96258	0.89994	0.92082	0.87906	-9%	-62%
66	67	-1849.16	0.96258	0.77467	0.83731	0.87906	-9%	-62%
67	1067	-1849.16	0.96676	0.77467	0.83870	0.88445	-9%	-62%
67	68	-1455.59	0.96676	0.91192	0.93020	0.88445	-9%	-62%
68	68	-1455.59	1.05760	0.91192	0.96048	1.01737	-4%	-56%
69	69	-1251.37	1.05760	1.08258	1.07425	1.01737	-4%	-56%
69	69	-1251.37	1.39348	1.08258	1.18621	1.45895	5%	-37%
69	70	-805.57	1.39348	1.90080	1.73170	1.45895	5%	-37%
70	70	-805.57	1.88508	1.90080	1.89556	2.03527	8%	-12%
70	71	-498.25	1.88508	2.31993	2.17498	2.03527	8%	-12%
71	71	-498.25	2.20479	2.31993	2.28155	2.24317	2%	-3%
72			2.26236					

ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
83			2.22816					
84			2.13640					
85	85	-615.67	1.76891	2.31993	2.25875	2.19757	3%	-5%
85	86	-925.88	1.76891	1.61829	2.13626	1.90238	8%	-18%
86	86	-925.88	1.24256	1.61829	1.66850	1.90238	8%	-18%
86	87	-1370.32	1.24256	0.97364	1.49305	1.27816	3%	-45%
87	87	-1370.32	1.00296	0.97364	1.06328	1.27816	3%	-45%
87	88	-1573.95	1.00296	0.85529	0.98341	0.94396	-6%	-59%
88	88	-1573.95	0.94012	0.85529	0.90451	0.94396	-6%	-59%
88	89	-1973.11	0.94012	0.85529	0.88357	0.84946	-10%	-63%
89	1089	-1973.11	0.93965	0.75297	0.81535	0.84946	-10%	-63%
89	90	-1577.29	0.93965	0.75297	0.81520	0.84877	-10%	-63%
90	90	-1577.29	1.00125	0.85369	0.88235	0.84877	-10%	-63%
90	91	-1376.00	1.00125	0.96945	0.90288	0.94146	-6%	-59%
91	91	-1376.00	1.23229	0.96945	0.98005	0.94146	-6%	-59%
91	92	-936.45	1.23229	1.59347	1.05706	1.26507	3%	-45%
92	92	-936.45	1.73990	1.59347	1.47308	1.26507	3%	-45%
92	93	-630.96	1.73990	2.31993	1.64228	1.88443	8%	-19%
93	93	-630.96	2.11026	2.31993	2.12658	1.88443	8%	-19%
94			2.21510		2.25004	2.18015	3%	-6%
			0.00000			2.25004	2%	-3%

PILA P-5								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
105			2.31993					
106	107	-374.80	2.31993	2.31993	2.31993	2.31993	0%	0%
107	107	-374.80	2.13067	2.31993	2.25684	2.25684	0%	0%
107	108	-685.89	2.13067	2.31993	2.25684	2.25684	6%	-3%
108	108	-685.89	1.57042	2.31993	2.07009	1.70049	8%	-27%
108	109	-1142.96	1.57042	1.21112	1.33089	1.70049	8%	-27%
109	109	-1142.96	1.12886	1.21112	1.18370	1.11039	-2%	-52%
109	110	-1346.53	1.12886	0.99118	1.03707	1.11039	-2%	-52%
110	110	-1346.53	0.99986	0.99118	0.99407	0.93000	-7%	-60%
110	111	-1739.76	0.99986	0.79896	0.86593	0.93000	-7%	-60%
111	1111	-1739.76	0.98903	0.79896	0.86232	0.91377	-8%	-61%
111	112	-1397.88	0.98903	0.95332	0.96522	0.91377	-8%	-61%
112	112	-1397.88	1.04971	0.95332	0.98545	0.99886	-5%	-57%
112	113	-1343.33	1.04971	0.99354	1.01227	0.99886	-5%	-57%
113	113	-1343.33	1.19340	0.99354	1.06016	1.19281	0%	-49%
113	114	-1039.59	1.19340	1.39150	1.32547	1.19281	0%	-49%
114	114	-1039.59	1.51538	1.39150	1.43280	1.59044	5%	-31%
114	115	-821.06	1.51538	1.86443	1.74808	1.59044	5%	-31%
115	115	-821.06	1.90596	1.86443	1.87827	1.89211	-1%	-18%
116			2.11294			2.10602	0%	-9%

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1: 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.03	0.45
1	2	1.00	0.00	0.03	0.42
2	2	1.00	0.00	0.03	0.42
2	3	1.18	0.00	0.03	0.42
3	3	1.18	0.00	0.03	0.42
3	4	2.35	0.00	0.03	0.39
4	4	2.35	0.00	0.03	0.39
4	5	3.53	0.00	0.03	0.35
5	5	3.53	0.00	0.03	0.35
5	6	4.70	0.00	0.03	0.32
6	6	4.70	0.00	0.03	0.32
6	7	5.88	0.00	0.03	0.29
7	7	5.88	0.00	0.03	0.29
7	8	7.05	0.00	0.03	0.26
8	8	7.05	0.00	0.03	0.26
8	9	8.23	0.00	0.03	0.22
9	9	8.23	0.00	0.03	0.22
9	10	9.40	0.00	0.03	0.19
10	10	9.40	0.00	0.03	0.19
10	11	10.58	0.00	0.03	0.16
11	11	10.58	0.00	0.03	0.16
11	12	11.75	0.00	0.03	0.13
12	12	11.75	0.00	0.03	0.13
12	13	12.93	0.00	0.03	0.09
13	13	12.93	0.00	0.03	0.09
13	14	14.10	0.00	0.03	0.06
14	14	14.10	0.00	0.03	0.06
14	15	15.28	0.00	0.03	0.03
15	15	15.28	0.00	0.03	0.03
15	16	16.45	0.00	0.03	0.00
16	16	16.45	0.00	0.03	0.00
16	17	17.63	0.00	0.03	-0.04
17	17	17.63	0.00	0.03	-0.04
17	18	18.80	0.00	0.03	-0.07
18	18	18.80	-0.01	0.03	-0.07
18	19	19.98	-0.01	0.03	-0.10
19	19	19.98	-0.01	0.03	-0.10
19	20	21.15	-1.06	3.53	-2.28
20	20	21.15	0.00	3.69	-2.28
20	21	22.33	0.00	7.19	-8.67
21	21	22.33	0.00	7.19	-8.67
21	22	22.50	0.00	7.71	-9.98
22	22	22.50	0.00	7.71	-9.98
22	23	23.50	0.00	10.69	-19.18
23	1023	23.50	0.00	-12.95	-19.18
23	24	24.50	0.00	-9.97	-7.72
24	24	24.50	0.00	-9.97	-7.72
24	25	24.95	0.00	-8.62	-3.54
25	25	24.95	0.00	-8.62	-3.54
25	26	26.40	0.00	-4.30	5.83
26	26	26.40	-1.02	-4.18	5.83

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1: 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	0.15	8.84
27	27	27.85	0.04	0.15	8.84
27	28	29.30	0.04	0.15	8.62
28	28	29.30	0.00	0.15	8.62
28	29	30.75	0.00	0.15	8.40
29	29	30.75	0.00	0.15	8.40
29	30	32.20	0.00	0.15	8.18
30	30	32.20	0.00	0.15	8.18
30	31	33.65	0.00	0.15	7.97
31	31	33.65	0.00	0.15	7.97
31	32	35.10	0.00	0.15	7.75
32	32	35.10	0.00	0.15	7.75
32	33	36.55	0.00	0.15	7.53
33	33	36.55	0.00	0.15	7.53
33	34	38.00	0.00	0.15	7.31
34	34	38.00	0.00	0.15	7.31
34	35	39.45	0.00	0.15	7.09
35	35	39.45	0.00	0.15	7.09
35	36	40.90	0.00	0.15	6.87
36	36	40.90	0.00	0.15	6.87
36	37	42.35	0.00	0.15	6.66
37	37	42.35	0.00	0.15	6.66
37	38	43.80	0.00	0.15	6.44
38	38	43.80	0.00	0.15	6.44
38	39	45.25	0.00	0.15	6.22
39	39	45.25	0.00	0.15	6.22
39	40	46.70	0.00	0.15	6.00
40	40	46.70	-0.04	0.15	6.00
40	41	48.15	-0.04	0.15	5.78
41	41	48.15	-0.04	0.15	5.78
41	42	49.60	-1.09	4.47	2.34
42	42	49.60	0.00	4.60	2.34
42	43	51.05	0.00	8.92	-7.47
43	43	51.05	0.00	8.92	-7.47
43	44	51.50	0.00	10.27	-11.78
44	44	51.50	0.00	10.27	-11.78
44	45	52.50	0.00	13.25	-23.54
45	1045	52.50	0.00	-13.05	-23.54
45	46	53.50	0.00	-10.07	-11.99
46	46	53.50	0.00	-10.07	-11.99
46	47	53.95	0.00	-8.72	-7.76
47	47	53.95	0.00	-8.72	-7.76
47	48	55.40	0.00	-4.40	1.76
48	48	55.40	-1.04	-4.27	1.76
48	49	56.85	0.01	0.05	4.91
49	49	56.85	0.01	0.05	4.91
49	50	58.30	0.01	0.05	4.84
50	50	58.30	0.00	0.05	4.84
50	51	59.75	0.00	0.05	4.76
51	51	59.75	0.00	0.05	4.76
51	52	61.20	0.00	0.05	4.69

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1:1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.05	4.69
52	53	62.65	0.00	0.05	4.62
53	53	62.65	0.00	0.05	4.62
53	54	64.10	0.00	0.05	4.54
54	54	64.10	0.00	0.05	4.54
54	55	65.55	0.00	0.05	4.47
55	55	65.55	0.00	0.05	4.47
55	56	67.00	0.00	0.05	4.40
56	56	67.00	0.00	0.05	4.40
56	57	68.45	0.00	0.05	4.32
57	57	68.45	0.00	0.05	4.32
57	58	69.90	0.00	0.05	4.25
58	58	69.90	0.00	0.05	4.25
58	59	71.35	0.00	0.05	4.18
59	59	71.35	0.00	0.05	4.18
59	60	72.80	0.00	0.05	4.10
60	60	72.80	0.00	0.05	4.10
60	61	74.25	0.00	0.05	4.03
61	61	74.25	0.00	0.05	4.03
61	62	75.70	0.00	0.05	3.96
62	62	75.70	-0.01	0.05	3.96
62	63	77.15	-0.01	0.05	3.88
63	63	77.15	-0.01	0.05	3.88
63	64	78.60	-1.07	4.37	0.58
64	64	78.60	0.00	4.50	0.58
64	65	80.05	0.00	8.82	-9.08
65	65	80.05	0.00	8.82	-9.08
65	66	80.50	0.00	10.17	-13.35
66	66	80.50	0.00	10.17	-13.35
66	67	81.50	0.00	13.15	-25.01
67	1067	81.50	0.00	-14.09	-25.01
67	68	82.50	0.00	-11.11	-12.41
68	68	82.50	0.00	-11.11	-12.41
68	69	83.08	0.00	-9.40	-6.51
69	69	83.08	0.00	-9.40	-6.51
69	70	84.65	0.00	-4.70	4.59
70	70	84.65	-1.03	-4.58	4.59
70	71	86.23	0.03	0.11	8.20
71	71	86.23	0.03	0.11	8.20
71	72	87.80	0.03	0.11	8.02
72	72	87.80	0.00	0.11	8.02
72	73	89.38	0.00	0.11	7.84
73	73	89.38	0.00	0.11	7.84
73	74	90.95	0.00	0.11	7.66
74	74	90.95	0.00	0.11	7.66
74	75	92.53	0.00	0.11	7.48
75	75	92.53	0.00	0.11	7.48
75	76	94.10	0.00	0.11	7.30
76	76	94.10	0.00	0.11	7.30
76	77	95.68	0.00	0.11	7.12
77	77	95.68	0.00	0.11	7.12

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1:1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.11	6.94
78	78	97.25	0.00	0.11	6.94
78	79	98.83	0.00	0.11	6.76
79	79	98.83	0.00	0.11	6.76
79	80	100.40	0.00	0.11	6.58
80	80	100.40	0.00	0.11	6.58
80	81	101.98	0.00	0.11	6.40
81	81	101.98	0.00	0.11	6.40
81	82	103.55	0.00	0.11	6.21
82	82	103.55	0.00	0.11	6.21
82	83	105.13	0.00	0.11	6.03
83	83	105.13	0.00	0.11	6.03
83	84	106.70	0.00	0.11	5.85
84	84	106.70	-0.03	0.11	5.85
84	85	108.28	-0.03	0.11	5.67
85	85	108.28	-0.03	0.11	5.67
85	86	109.85	-1.08	4.81	1.70
86	86	109.85	0.00	4.93	1.70
86	87	111.43	0.00	9.62	-9.76
87	87	111.43	0.00	9.62	-9.76
87	88	112.00	0.00	11.34	-15.79
88	88	112.00	0.00	11.34	-15.79
88	89	113.00	0.00	14.32	-28.61
89	1089	113.00	0.00	-14.43	-28.61
89	90	114.00	0.00	-11.44	-15.68
90	90	114.00	0.00	-11.44	-15.68
90	91	114.58	0.00	-9.73	-9.59
91	91	114.58	0.00	-9.73	-9.59
91	92	116.15	0.00	-5.03	2.03
92	92	116.15	-1.10	-4.91	2.03
92	93	117.73	-0.05	-0.21	6.17
93	93	117.73	-0.05	-0.21	6.17
93	94	119.30	-0.05	-0.21	6.52
94	94	119.30	0.00	-0.22	6.52
94	95	120.88	0.00	-0.22	6.86
95	95	120.88	0.00	-0.22	6.86
95	96	122.45	0.00	-0.22	7.21
96	96	122.45	0.00	-0.22	7.21
96	97	124.03	0.00	-0.22	7.55
97	97	124.03	0.00	-0.22	7.55
97	98	125.60	0.00	-0.22	7.90
98	98	125.60	0.00	-0.22	7.90
98	99	127.18	0.00	-0.22	8.25
99	99	127.18	0.00	-0.22	8.25
99	100	128.75	0.00	-0.22	8.59
100	100	128.75	0.00	-0.22	8.59
100	101	130.33	0.00	-0.22	8.94
101	101	130.33	0.00	-0.22	8.94
101	102	131.90	0.00	-0.22	9.28
102	102	131.90	0.00	-0.22	9.28
102	103	133.48	0.00	-0.22	9.63

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1; 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-0.22	9.63
103	104	135.05	0.00	-0.22	9.98
104	104	135.05	0.00	-0.22	9.98
104	105	136.63	0.00	-0.22	10.32
105	105	136.63	0.00	-0.22	10.32
105	106	138.20	0.00	-0.22	10.67
106	106	138.20	0.05	-0.21	10.67
106	107	139.78	0.05	-0.21	11.01
107	107	139.78	0.05	-0.21	11.01
107	108	141.35	-1.01	4.48	7.57
108	108	141.35	0.00	4.59	7.57
108	109	142.93	0.00	9.29	-3.36
109	109	142.93	0.00	9.29	-3.36
109	110	143.50	0.00	11.01	-9.20
110	110	143.50	0.00	11.01	-9.20
110	111	144.50	0.00	13.99	-21.70
111	111	144.50	0.00	-10.86	-21.70
111	112	145.50	0.00	-7.88	-12.32
112	112	145.50	0.00	-7.88	-12.32
112	113	145.68	0.00	-7.36	-10.99
113	113	145.68	0.00	-7.36	-10.99
113	114	146.85	0.00	-3.85	-4.40
114	114	146.85	-1.11	-3.69	-4.40
114	115	148.03	-0.06	-0.19	-2.03
115	115	148.03	-0.06	-0.19	-2.03
115	116	149.20	-0.06	-0.19	-1.80
116	116	149.20	0.00	-0.20	-1.80
116	117	150.38	0.00	-0.20	-1.57
117	117	150.38	0.00	-0.20	-1.57
117	118	151.55	0.00	-0.20	-1.34
118	118	151.55	0.00	-0.20	-1.34
118	119	152.73	0.00	-0.20	-1.11
119	119	152.73	0.00	-0.20	-1.11
119	120	153.90	0.00	-0.20	-0.88
120	120	153.90	0.00	-0.20	-0.88
120	121	155.08	0.00	-0.20	-0.65
121	121	155.08	0.00	-0.20	-0.65
121	122	156.25	0.00	-0.20	-0.42
122	122	156.25	0.00	-0.20	-0.42
122	123	157.43	0.00	-0.20	-0.19
123	123	157.43	0.00	-0.20	-0.19
123	124	158.60	0.00	-0.20	0.04
124	124	158.60	0.00	-0.20	0.04
124	125	159.78	0.00	-0.20	0.27
125	125	159.78	0.00	-0.20	0.27
125	126	160.95	0.00	-0.20	0.50
126	126	160.95	0.00	-0.20	0.50
126	127	162.13	0.00	-0.20	0.73
127	127	162.13	0.00	-0.20	0.73
127	128	163.30	0.00	-0.20	0.96
128	128	163.30	0.00	-0.20	0.96

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

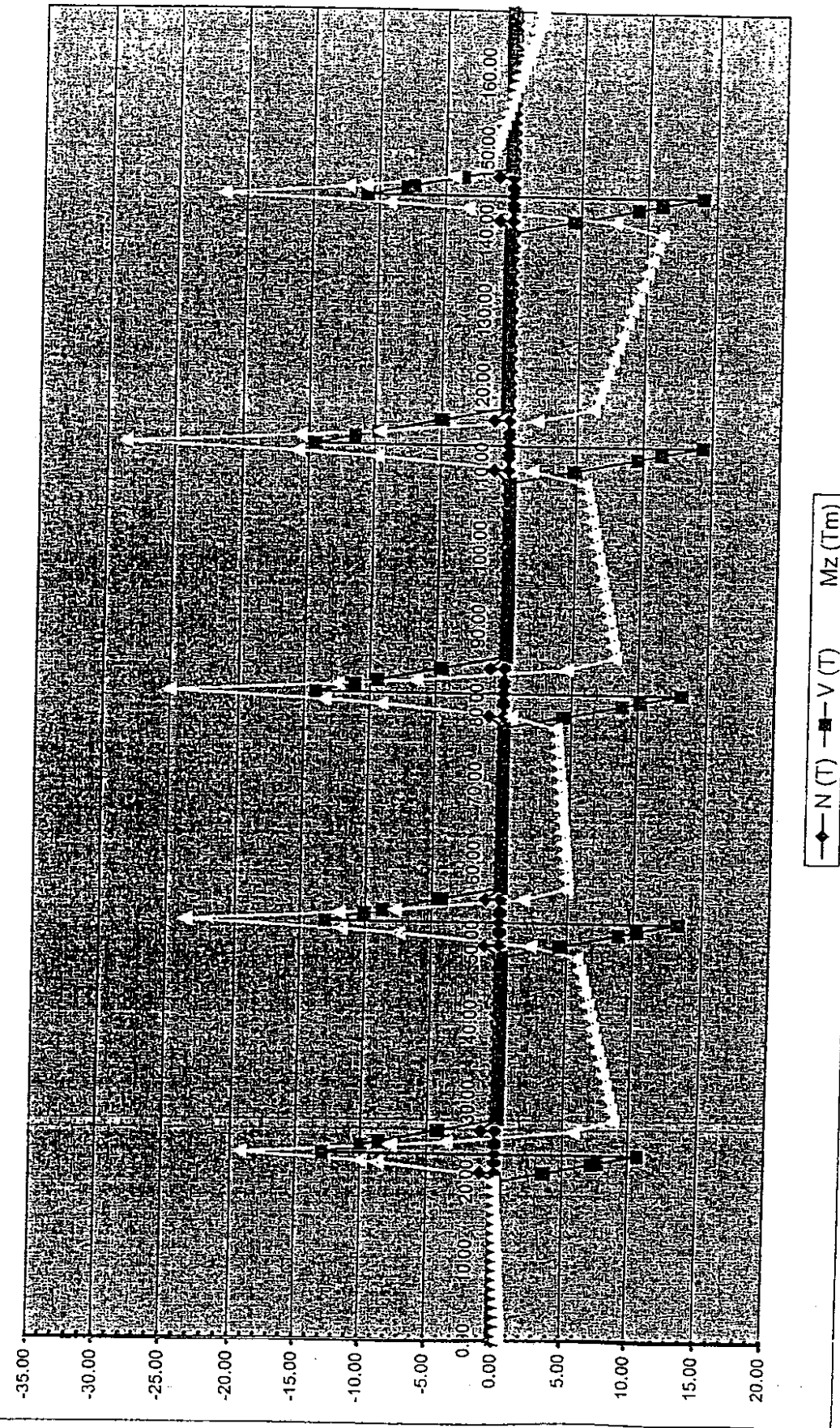
Fase 5 Fisuracion

[1; 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	-0.20	1.18
129	129	164.48	0.00	-0.20	1.18
129	130	165.65	0.00	-0.20	1.41
130	130	165.65	0.00	-0.20	1.41
130	131	166.83	0.00	-0.20	1.64
131	131	166.83	0.00	-0.20	1.64
131	132	167.00	0.00	-0.20	1.68
132	132	167.00	0.00	-0.20	1.68
132	133	168.00	0.00	-0.20	1.87

GRÁFICO DE ESFUERZOS

**CÁLCULO TENSIONAL**

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-8.27	0.45
1	2	1.00	0.00	-7.32	8.24
2	2	1.00	0.00	-7.32	8.24
2	3	1.18	0.00	-7.16	9.52
3	3	1.18	0.00	-7.16	9.52
3	4	2.35	0.00	-6.04	17.27
4	4	2.35	0.00	-6.04	17.27
4	5	3.53	0.00	-4.93	23.72
5	5	3.53	0.00	-4.93	23.72
5	6	4.70	0.00	-3.82	28.87
6	6	4.70	0.00	-3.82	28.87
6	7	5.88	0.00	-2.71	32.71
7	7	5.88	0.00	-2.71	32.71
7	8	7.05	0.00	-1.60	35.24
8	8	7.05	0.00	-1.60	35.24
8	9	8.23	0.00	-0.49	36.46
9	9	8.23	0.00	-0.49	36.46
9	10	9.40	0.00	0.63	36.38
10	10	9.40	0.00	0.63	36.38
10	11	10.58	0.00	1.74	35.00
11	11	10.58	0.00	1.74	35.00
11	12	11.75	0.00	2.85	32.31
12	12	11.75	0.00	2.85	32.31
12	13	12.93	0.00	3.96	28.31
13	13	12.93	0.00	3.96	28.31
13	14	14.10	0.00	5.07	23.00
14	14	14.10	0.00	5.07	23.00
14	15	15.28	0.00	6.18	16.40
15	15	15.28	0.00	6.18	16.40
15	16	16.45	0.00	7.30	8.48
16	16	16.45	0.00	7.30	8.48
16	17	17.63	0.00	8.41	-0.75
17	17	17.63	0.00	8.41	-0.75
17	18	18.80	0.00	9.52	-11.27
18	18	18.80	-0.01	9.52	-11.27
18	19	19.98	-0.01	10.63	-23.10
19	19	19.98	-0.01	10.63	-23.10
19	20	21.15	-1.06	15.24	-38.39
20	20	21.15	0.00	15.40	-38.39
20	21	22.33	0.00	20.01	-59.20
21	21	22.33	0.00	20.01	-59.20
21	22	22.50	0.00	20.70	-62.76
22	22	22.50	0.00	20.70	-62.76
22	23	23.50	0.00	24.62	-85.43
23	1023	23.50	0.00	-26.71	-85.43
23	24	24.50	0.00	-22.79	-60.67
24	24	24.50	0.00	-22.79	-60.67
24	25	24.95	0.00	-21.01	-50.82
25	25	24.95	0.00	-21.01	-50.82
25	26	26.40	0.00	-15.32	-24.48
26	26	26.40	-1.02	-15.20	-24.48

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1;1]HBCP + [1;1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-9.50	-6.48
27	27	27.85	0.04	-9.50	-6.48
27	28	29.30	0.04	-8.13	6.29
28	28	29.30	0.00	-8.13	6.29
28	29	30.75	0.00	-6.76	17.08
29	29	30.75	0.00	-6.76	17.08
29	30	32.20	0.00	-5.38	25.88
30	30	32.20	0.00	-5.38	25.88
30	31	33.65	0.00	-4.01	32.70
31	31	33.65	0.00	-4.01	32.70
31	32	35.10	0.00	-2.64	37.52
32	32	35.10	0.00	-2.64	37.52
32	33	36.55	0.00	-1.27	40.35
33	33	36.55	0.00	-1.27	40.35
33	34	38.00	0.00	0.10	41.20
34	34	38.00	0.00	0.10	41.20
34	35	39.45	0.00	1.47	40.05
35	35	39.45	0.00	1.47	40.05
35	36	40.90	0.00	2.85	36.91
36	36	40.90	0.00	2.85	36.91
36	37	42.35	0.00	4.22	31.80
37	37	42.35	0.00	4.22	31.80
37	38	43.80	0.00	5.59	24.69
38	38	43.80	0.00	5.59	24.69
38	39	45.25	0.00	6.96	15.58
39	39	45.25	0.00	6.96	15.58
39	40	46.70	0.00	8.33	4.49
40	40	46.70	-0.04	8.33	4.49
40	41	48.15	-0.04	9.70	-8.59
41	41	48.15	-0.04	9.70	-8.59
41	42	49.60	-1.09	15.40	-26.88
42	42	49.60	0.00	15.53	-26.88
42	43	51.05	0.00	21.22	-53.52
43	43	51.05	0.00	21.22	-53.52
43	44	51.50	0.00	22.99	-63.46
44	44	51.50	0.00	22.99	-63.46
44	45	52.50	0.00	26.92	-88.42
45	1045	52.50	0.00	-26.52	-88.42
45	46	53.50	0.00	-22.59	-63.87
46	46	53.50	0.00	-22.59	-63.87
46	47	53.95	0.00	-20.82	-54.10
47	47	53.95	0.00	-20.82	-54.10
47	48	55.40	0.00	-15.13	-28.03
48	48	55.40	-1.04	-15.00	-28.03
48	49	56.85	0.01	-9.31	-10.32
49	49	56.85	0.01	-9.31	-10.32
49	50	58.30	0.01	-7.93	2.18
50	50	58.30	0.00	-7.93	2.18
50	51	59.75	0.00	-6.56	12.68
51	51	59.75	0.00	-6.56	12.68
51	52	61.20	0.00	-5.19	21.20

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1;1]HBCP + [1;1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-5.19	21.20
52	53	62.65	0.00	-3.82	27.74
53	53	62.65	0.00	-3.82	27.74
53	54	64.10	0.00	-2.45	32.27
54	54	64.10	0.00	-2.45	32.27
54	55	65.55	0.00	-1.08	34.83
55	55	65.55	0.00	-1.08	34.83
55	56	67.00	0.00	0.30	35.40
56	56	67.00	0.00	0.30	35.40
56	57	68.45	0.00	1.67	33.96
57	57	68.45	0.00	1.67	33.96
57	58	69.90	0.00	3.04	30.55
58	58	69.90	0.00	3.04	30.55
58	59	71.35	0.00	4.41	25.15
59	59	71.35	0.00	4.41	25.15
59	60	72.80	0.00	5.78	17.75
60	60	72.80	0.00	5.78	17.75
60	61	74.25	0.00	7.15	8.38
61	61	74.25	0.00	7.15	8.38
61	62	75.70	0.00	8.53	-2.99
62	62	75.70	-0.01	8.53	-2.99
62	63	77.15	-0.01	9.90	-16.36
63	63	77.15	-0.01	9.90	-16.36
63	64	78.60	-1.07	15.59	-34.93
64	64	78.60	0.00	15.72	-34.93
64	65	80.05	0.00	21.41	-61.85
65	65	80.05	0.00	21.41	-61.85
65	66	80.50	0.00	23.19	-71.89
66	66	80.50	0.00	23.19	-71.89
66	67	81.50	0.00	27.11	-97.04
67	1067	81.50	0.00	-28.69	-97.04
67	68	82.50	0.00	-24.77	-70.31
68	68	82.50	0.00	-24.77	-70.31
68	69	83.08	0.00	-22.51	-56.71
69	69	83.08	0.00	-22.51	-56.71
69	70	84.65	0.00	-16.32	-26.13
70	70	84.65	-1.03	-16.20	-26.13
70	71	86.23	0.03	-10.02	-5.39
71	71	86.23	0.03	-10.02	-5.39
71	72	87.80	0.03	-8.53	9.22
72	72	87.80	0.00	-8.53	9.22
72	73	89.38	0.00	-7.04	21.48
73	73	89.38	0.00	-7.04	21.48
73	74	90.95	0.00	-5.55	31.39
74	74	90.95	0.00	-5.55	31.39
74	75	92.53	0.00	-4.06	38.95
75	75	92.53	0.00	-4.06	38.95
75	76	94.10	0.00	-2.57	44.17
76	76	94.10	0.00	-2.57	44.17
76	77	95.68	0.00	-1.08	47.05
77	77	95.68	0.00	-1.08	47.05

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.41	47.57
78	78	97.25	0.00	0.41	47.57
78	79	98.83	0.00	1.90	45.75
79	79	98.83	0.00	1.90	45.75
79	80	100.40	0.00	3.39	41.58
80	80	100.40	0.00	3.39	41.58
80	81	101.98	0.00	4.88	35.07
81	81	101.98	0.00	4.88	35.07
81	82	103.55	0.00	6.37	26.20
82	82	103.55	0.00	6.37	26.20
82	83	105.13	0.00	7.86	14.99
83	83	105.13	0.00	7.86	14.99
83	84	106.70	0.00	9.35	1.44
84	84	106.70	-0.03	9.35	1.44
84	85	108.28	-0.03	10.84	-14.46
85	85	108.28	-0.03	10.84	-14.46
85	86	109.85	-1.08	17.03	-36.50
86	86	109.85	0.00	17.15	-36.50
86	87	111.43	0.00	23.33	-68.38
87	87	111.43	0.00	23.33	-68.38
87	88	112.00	0.00	25.59	-82.45
88	88	112.00	0.00	25.59	-82.45
88	89	113.00	0.00	29.52	-109.99
89	1089	113.00	0.00	-29.63	-109.99
89	90	114.00	0.00	-25.70	-82.33
90	90	114.00	0.00	-25.70	-82.33
90	91	114.58	0.00	-23.44	-68.19
91	91	114.58	0.00	-23.44	-68.19
91	92	116.15	0.00	-17.25	-36.15
92	92	116.15	-1.10	-17.13	-36.15
92	93	117.73	-0.05	-10.94	-13.93
93	93	117.73	-0.05	-10.94	-13.93
93	94	119.30	-0.05	-9.45	2.15
94	94	119.30	0.00	-9.46	2.15
94	95	120.88	0.00	-7.97	15.88
95	95	120.88	0.00	-7.97	15.88
95	96	122.45	0.00	-6.48	27.27
96	96	122.45	0.00	-6.48	27.27
96	97	124.03	0.00	-4.99	36.30
97	97	124.03	0.00	-4.99	36.30
97	98	125.60	0.00	-3.50	42.99
98	98	125.60	0.00	-3.50	42.99
98	99	127.18	0.00	-2.01	47.34
99	99	127.18	0.00	-2.01	47.34
99	100	128.75	0.00	-0.52	49.34
100	100	128.75	0.00	-0.52	49.34
100	101	130.33	0.00	0.97	48.99
101	101	130.33	0.00	0.97	48.99
101	102	131.90	0.00	2.46	46.29
102	102	131.90	0.00	2.46	46.29
102	103	133.48	0.00	3.95	41.25

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	3.95	41.25
103	104	135.05	0.00	5.44	33.87
104	104	135.05	0.00	5.44	33.87
104	105	136.63	0.00	6.93	24.13
105	105	136.63	0.00	6.93	24.13
105	106	138.20	0.00	8.42	12.05
106	106	138.20	0.05	8.43	12.05
106	107	139.78	0.05	9.92	-2.39
107	107	139.78	0.05	9.92	-2.39
107	108	141.35	-1.01	16.10	-22.95
108	108	141.35	0.00	16.21	-22.95
108	109	142.93	0.00	22.40	-53.34
109	109	142.93	0.00	22.40	-53.34
109	110	143.50	0.00	24.66	-66.88
110	110	143.50	0.00	24.66	-66.88
110	111	144.50	0.00	28.59	-93.50
111	1111	144.50	0.00	-25.03	-93.50
111	112	145.50	0.00	-21.10	-70.42
112	112	145.50	0.00	-21.10	-70.42
112	113	145.68	0.00	-20.42	-66.79
113	113	145.68	0.00	-20.42	-66.79
113	114	146.85	0.00	-15.80	-45.51
114	114	146.85	-1.11	-15.64	-45.51
114	115	148.03	-0.06	-11.03	-29.75
115	115	148.03	-0.06	-11.03	-29.75
115	116	149.20	-0.06	-9.91	-17.44
116	116	149.20	0.00	-9.92	-17.44
116	117	150.38	0.00	-8.81	-6.44
117	117	150.38	0.00	-8.81	-6.44
117	118	151.55	0.00	-7.70	3.26
118	118	151.55	0.00	-7.70	3.26
118	119	152.73	0.00	-6.59	11.65
119	119	152.73	0.00	-6.59	11.65
119	120	153.90	0.00	-5.48	18.73
120	120	153.90	0.00	-5.48	18.73
120	121	155.08	0.00	-4.37	24.51
121	121	155.08	0.00	-4.37	24.51
121	122	156.25	0.00	-3.26	28.98
122	122	156.25	0.00	-3.26	28.98
122	123	157.43	0.00	-2.14	32.15
123	123	157.43	0.00	-2.14	32.15
123	124	158.60	0.00	-1.03	34.01
124	124	158.60	0.00	-1.03	34.01
124	125	159.78	0.00	0.08	34.57
125	125	159.78	0.00	0.08	34.57
125	126	160.95	0.00	1.19	33.82
126	126	160.95	0.00	1.19	33.82
126	127	162.13	0.00	2.30	31.76
127	127	162.13	0.00	2.30	31.76
127	128	163.30	0.00	3.41	28.39
128	128	163.30	0.00	3.41	28.39

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

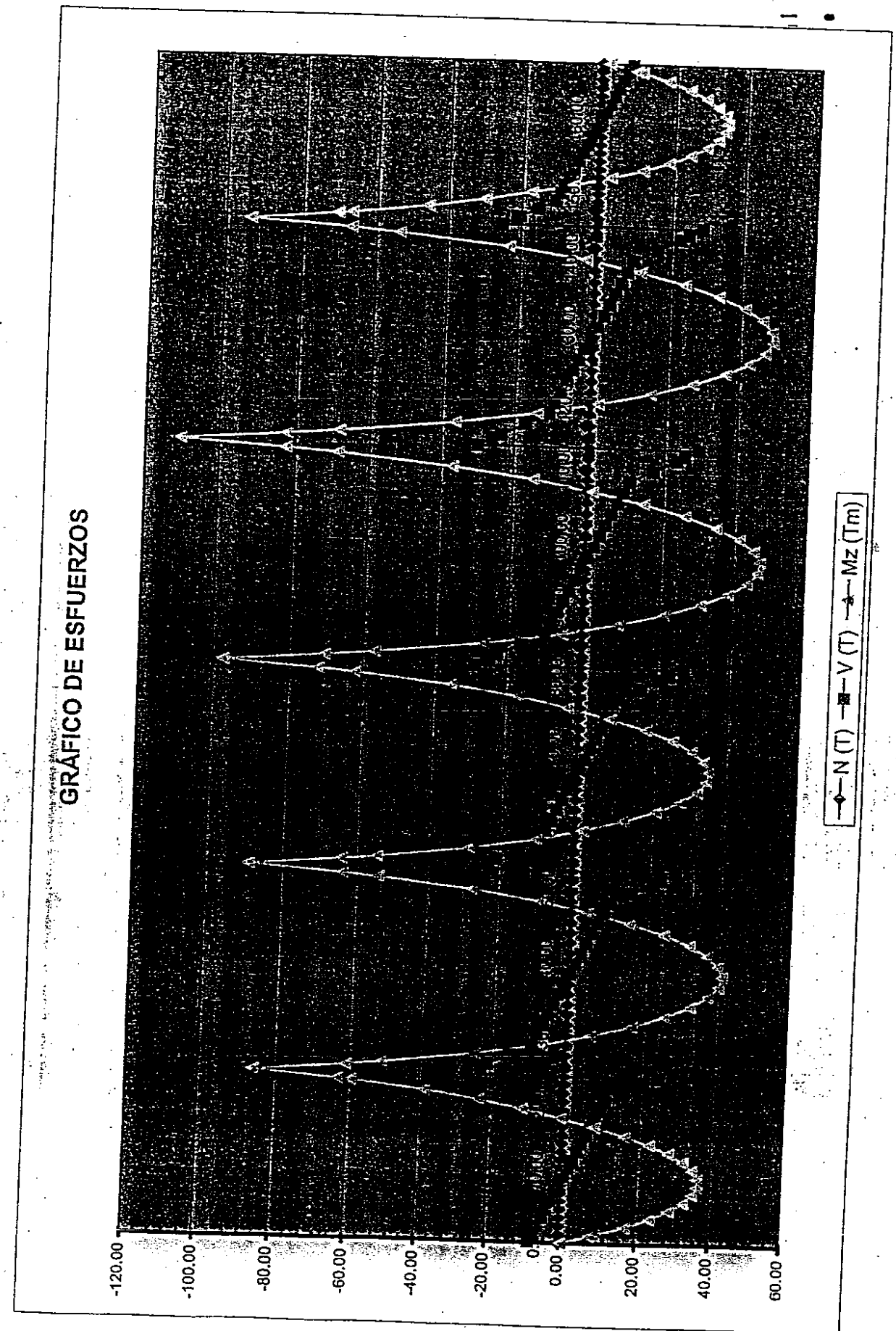
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	4.53	23.71
129	129	164.48	0.00	4.53	23.71
129	130	165.65	0.00	5.64	17.74
130	130	165.65	0.00	5.64	17.74
130	131	166.83	0.00	6.75	10.46
131	131	166.83	0.00	6.75	10.46
131	132	167.00	0.00	6.91	9.27
132	132	167.00	0.00	6.91	9.27
132	133	168.00	0.00	7.86	1.87

fisuración Iter3.xls

Programa DINTEL IDEAM S.A.
Fase6Neg

28/08/01

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [1; 1]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-64.18	0.45
1	2	1.00	0.00	-57.14	61.10
2	2	1.00	0.00	-57.14	61.10
2	3	1.18	0.00	-55.91	71.01
3	3	1.18	0.00	-55.91	71.01
3	4	2.35	0.00	-47.62	131.84
4	4	2.35	0.00	-47.62	131.84
4	5	3.53	0.00	-39.36	182.94
5	5	3.53	0.00	-39.36	182.94
5	6	4.70	0.00	-31.08	224.32
6	6	4.70	0.00	-31.08	224.32
6	7	5.88	0.00	-22.80	255.99
7	7	5.88	0.00	-22.80	255.99
7	8	7.05	0.00	-14.53	277.91
8	8	7.05	0.00	-14.53	277.91
8	9	8.23	0.00	-6.25	290.11
9	9	8.23	0.00	-6.25	290.11
9	10	9.40	0.00	2.04	292.58
10	10	9.40	0.00	2.04	292.58
10	11	10.58	0.00	10.31	285.34
11	11	10.58	0.00	10.31	285.34
11	12	11.75	0.00	18.59	268.38
12	12	11.75	0.00	18.59	268.38
12	13	12.93	0.00	26.86	241.68
13	13	12.93	0.00	26.86	241.68
13	14	14.10	0.00	35.14	205.25
14	14	14.10	0.00	35.14	205.25
14	15	15.28	0.00	43.40	159.11
15	15	15.28	0.00	43.40	159.11
15	16	16.45	0.00	51.69	103.24
16	16	16.45	-0.53	51.69	103.24
16	17	17.63	-0.61	59.96	37.63
17	17	17.63	-0.61	59.96	37.63
17	18	18.80	-1.00	93.50	-49.03
18	18	18.80	-0.01	93.50	-49.03
18	19	19.98	-0.01	104.86	-165.57
19	19	19.98	-0.01	104.86	-165.57
19	20	21.15	-1.06	119.72	-297.61
20	20	21.15	0.00	119.88	-297.61
20	21	22.33	0.00	134.75	-447.20
21	21	22.33	0.00	134.75	-447.20
21	22	22.50	0.00	136.95	-470.97
22	22	22.50	0.00	136.95	-470.97
22	23	23.50	0.00	149.60	-614.26
23	1023	23.50	0.00	-153.12	-614.26
23	24	24.50	0.00	-140.48	-467.46
24	24	24.50	0.00	-140.48	-467.46
24	25	24.95	0.00	-134.77	-405.53
25	25	24.95	0.00	-134.77	-405.53
25	26	26.40	0.00	-116.44	-223.42
26	26	26.40	-1.02	-116.32	-223.42

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [1; 1]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-97.97	-67.96
27	27	27.85	0.04	-97.97	-67.96
27	28	29.30	0.04	-61.15	46.58
28	28	29.30	-0.50	-61.15	46.58
28	29	30.75	-0.42	-50.93	127.84
29	29	30.75	-0.42	-50.93	127.84
29	30	32.20	-0.34	-40.71	194.28
30	30	32.20	0.00	-40.71	194.28
30	31	33.65	0.00	-30.49	245.92
31	31	33.65	0.00	-30.49	245.92
31	32	35.10	0.00	-20.29	282.74
32	32	35.10	0.00	-20.29	282.74
32	33	36.55	0.00	-10.08	304.74
33	33	36.55	0.00	-10.08	304.74
33	34	38.00	0.00	0.14	311.95
34	34	38.00	0.00	0.14	311.95
34	35	39.45	0.00	10.35	304.34
35	35	39.45	0.00	10.35	304.34
35	36	40.90	0.00	20.58	281.91
36	36	40.90	0.00	20.58	281.91
36	37	42.35	0.00	30.78	244.70
37	37	42.35	0.00	30.78	244.70
37	38	43.80	0.00	41.00	192.66
38	38	43.80	-0.34	40.99	192.66
38	39	45.25	-0.42	51.20	125.81
39	39	45.25	-0.42	51.20	125.81
39	40	46.70	-0.50	61.41	44.14
40	40	46.70	-0.04	61.41	44.14
40	41	48.15	-0.04	98.27	-71.14
41	41	48.15	-0.04	98.27	-71.14
41	42	49.60	-1.09	116.61	-227.03
42	42	49.60	0.00	116.74	-227.03
42	43	51.05	0.00	135.08	-409.60
43	43	51.05	0.00	135.08	-409.60
43	44	51.50	0.00	140.78	-471.66
44	44	51.50	0.00	140.78	-471.66
44	45	52.50	0.00	153.43	-618.77
45	1045	52.50	0.00	-151.45	-618.77
45	46	53.50	0.00	-138.79	-473.66
46	46	53.50	0.00	-138.79	-473.66
46	47	53.95	0.00	-133.11	-412.48
47	47	53.95	0.00	-133.11	-412.48
47	48	55.40	0.00	-114.77	-232.77
48	48	55.40	-1.04	-114.64	-232.77
48	49	56.85	0.01	-96.30	-79.78
49	49	56.85	0.01	-96.30	-79.78
49	50	58.30	0.01	-59.91	35.40
50	50	58.30	-0.50	-59.91	35.40
50	51	59.75	-0.42	-49.70	114.86
51	51	59.75	-0.42	-49.70	114.86
51	52	61.20	-0.33	-39.48	179.52

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuracion

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-39.48	179.52
52	53	62.65	0.00	-29.28	229.38
53	53	62.65	0.00	-29.28	229.38
53	54	64.10	0.00	-19.06	264.40
54	54	64.10	0.00	-19.06	264.40
54	55	65.55	0.00	-8.85	284.65
55	55	65.55	0.00	-8.85	284.65
55	56	67.00	0.00	1.37	290.06
56	56	67.00	0.00	1.37	290.06
56	57	68.45	0.00	11.59	280.66
57	57	68.45	0.00	11.59	280.66
57	58	69.90	0.00	21.80	256.46
58	58	69.90	0.00	21.80	256.46
58	59	71.35	0.00	32.01	217.46
59	59	71.35	0.00	32.01	217.46
59	60	72.80	0.00	42.22	163.62
60	60	72.80	-0.35	42.22	163.62
60	61	74.25	-0.44	52.43	95.01
61	61	74.25	-0.44	52.43	95.01
61	62	75.70	-0.52	62.65	11.57
62	62	75.70	-0.01	62.66	11.57
62	63	77.15	-0.01	99.97	-116.96
63	63	77.15	-0.01	99.97	-116.96
63	64	78.60	-1.07	118.28	-275.28
64	64	78.60	0.00	118.41	-275.28
64	65	80.05	0.00	136.75	-460.28
65	65	80.05	0.00	136.75	-460.28
65	66	80.50	0.00	142.46	-523.11
66	66	80.50	0.00	142.46	-523.11
66	67	81.50	0.00	155.10	-671.88
67	1067	81.50	0.00	-164.13	-671.88
67	68	82.50	0.00	-151.50	-514.07
68	68	82.50	0.00	-151.50	-514.07
68	69	83.08	0.00	-144.21	-429.05
69	69	83.08	0.00	-144.21	-429.05
69	70	84.65	0.00	-124.30	-217.61
70	70	84.65	-1.03	-124.18	-217.61
70	71	86.23	0.03	-104.25	-37.63
71	71	86.23	0.03	-104.25	-37.63
71	72	87.80	0.03	-64.82	82.89
72	72	87.80	-0.50	-64.82	82.89
72	73	89.38	-0.42	-53.72	176.24
73	73	89.38	-0.42	-53.72	176.24
73	74	90.95	-0.32	-42.63	252.11
74	74	90.95	0.00	-42.63	252.11
74	75	92.53	0.00	-31.53	310.49
75	75	92.53	0.00	-31.53	310.49
75	76	94.10	0.00	-20.44	351.42
76	76	94.10	0.00	-20.44	351.42
76	77	95.68	0.00	-9.34	374.89
77	77	95.68	0.00	-9.34	374.89

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuracion

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	1.75	380.86
78	78	97.25	0.00	1.75	380.86
78	79	98.83	0.00	12.85	369.36
79	79	98.83	0.00	12.85	369.36
79	80	100.40	0.00	23.94	340.39
80	80	100.40	0.00	23.94	340.39
80	81	101.98	0.00	35.03	293.96
81	81	101.98	0.00	35.03	293.96
81	82	103.55	0.00	46.12	230.03
82	82	103.55	-0.35	46.12	230.03
82	83	105.13	-0.44	57.22	148.63
83	83	105.13	-0.44	57.22	148.63
83	84	106.70	-0.52	68.32	49.78
84	84	106.70	-0.03	68.32	49.78
84	85	108.28	-0.03	108.91	-88.97
85	85	108.28	-0.03	108.91	-88.97
85	86	109.85	-1.08	128.84	-276.27
86	86	109.85	0.00	128.96	-276.27
86	87	111.43	0.00	148.86	-495.06
87	87	111.43	0.00	148.86	-495.06
87	88	112.00	0.00	156.15	-582.78
88	88	112.00	0.00	156.15	-582.78
88	89	113.00	0.00	168.80	-745.23
89	1089	113.00	0.00	-169.17	-745.23
89	90	114.00	0.00	-156.51	-582.37
90	90	114.00	0.00	-156.51	-582.37
90	91	114.58	0.00	-149.25	-494.47
91	91	114.58	0.00	-149.25	-494.47
91	92	116.15	0.00	-129.31	-275.11
92	92	116.15	-1.10	-129.19	-275.11
92	93	117.73	-0.05	-109.27	-87.20
93	93	117.73	-0.05	-109.27	-87.20
93	94	119.30	-0.05	-68.60	51.64
94	94	119.30	-0.52	-68.61	51.64
94	95	120.88	-0.44	-57.51	150.97
95	95	120.88	-0.44	-57.51	150.97
95	96	122.45	-0.36	-46.41	232.83
96	96	122.45	0.00	-46.43	232.83
96	97	124.03	0.00	-35.33	297.20
97	97	124.03	0.00	-35.33	297.20
97	98	125.60	0.00	-24.23	344.10
98	98	125.60	0.00	-24.23	344.10
98	99	127.18	0.00	-13.14	373.55
99	99	127.18	0.00	-13.14	373.55
99	100	128.75	0.00	-2.04	385.50
100	100	128.75	0.00	-2.04	385.50
100	101	130.33	0.00	9.05	379.99
101	101	130.33	0.00	9.05	379.99
101	102	131.90	0.00	20.15	357.00
102	102	131.90	0.00	20.15	357.00
102	103	133.48	0.00	31.24	316.55

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	31.24	316.55
103	104	135.05	0.00	42.34	258.62
104	104	135.05	-0.32	42.34	258.62
104	105	136.63	-0.40	53.43	183.21
105	105	136.63	-0.40	53.43	183.21
105	106	138.20	-0.50	64.51	90.33
106	106	138.20	0.05	64.53	90.33
106	107	139.78	0.05	103.89	-27.63
107	107	139.78	0.05	103.89	-27.63
107	108	141.35	-1.01	123.81	-207.00
108	108	141.35	0.00	123.92	-207.00
108	109	142.93	0.00	143.84	-417.85
109	109	142.93	0.00	143.84	-417.85
109	110	143.50	0.00	151.13	-502.67
110	110	143.50	0.00	151.13	-502.67
110	111	144.50	0.00	163.77	-660.11
111	111	144.50	0.00	-151.62	-660.11
111	112	145.50	0.00	-138.97	-514.79
112	112	145.50	0.00	-138.97	-514.79
112	113	145.68	0.00	-136.76	-490.68
113	113	145.68	0.00	-136.76	-490.68
113	114	146.85	0.00	-121.88	-338.72
114	114	146.85	-1.11	-121.72	-338.72
114	115	148.03	-0.06	-106.88	-204.33
115	115	148.03	-0.06	-106.88	-204.33
115	116	149.20	-0.06	-95.50	-85.42
116	116	149.20	-1.01	-95.51	-85.42
116	117	150.38	-0.63	-61.49	12.14
117	117	150.38	-0.63	-61.49	12.14
117	118	151.55	-0.54	-53.21	79.53
118	118	151.55	0.00	-53.22	79.53
118	119	152.73	0.00	-44.94	137.20
119	119	152.73	0.00	-44.94	137.20
119	120	153.90	0.00	-36.67	185.14
120	120	153.90	0.00	-36.67	185.14
120	121	155.08	0.00	-28.39	223.35
121	121	155.08	0.00	-28.39	223.35
121	122	156.25	0.00	-20.12	251.84
122	122	156.25	0.00	-20.12	251.84
122	123	157.43	0.00	-11.84	270.61
123	123	157.43	0.00	-11.84	270.61
123	124	158.60	0.00	-3.56	279.65
124	124	158.60	0.00	-3.56	279.65
124	125	159.78	0.00	4.71	278.97
125	125	159.78	0.00	4.71	278.97
125	126	160.95	0.00	12.99	268.56
126	126	160.95	0.00	12.99	268.56
126	127	162.13	0.00	21.27	248.43
127	127	162.13	0.00	21.27	248.43
127	128	163.30	0.00	29.55	218.57
128	128	163.30	0.00	29.55	218.57

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	37.83	178.97
129	129	164.48	0.00	37.83	178.97
129	130	165.65	0.00	46.11	129.67
130	130	165.65	0.00	46.11	129.67
130	131	166.83	0.00	54.38	70.63
131	131	166.83	0.00	54.38	70.63
131	132	167.00	0.00	55.61	61.00
132	132	167.00	0.00	55.61	61.00
132	133	168.00	0.00	62.65	1.87

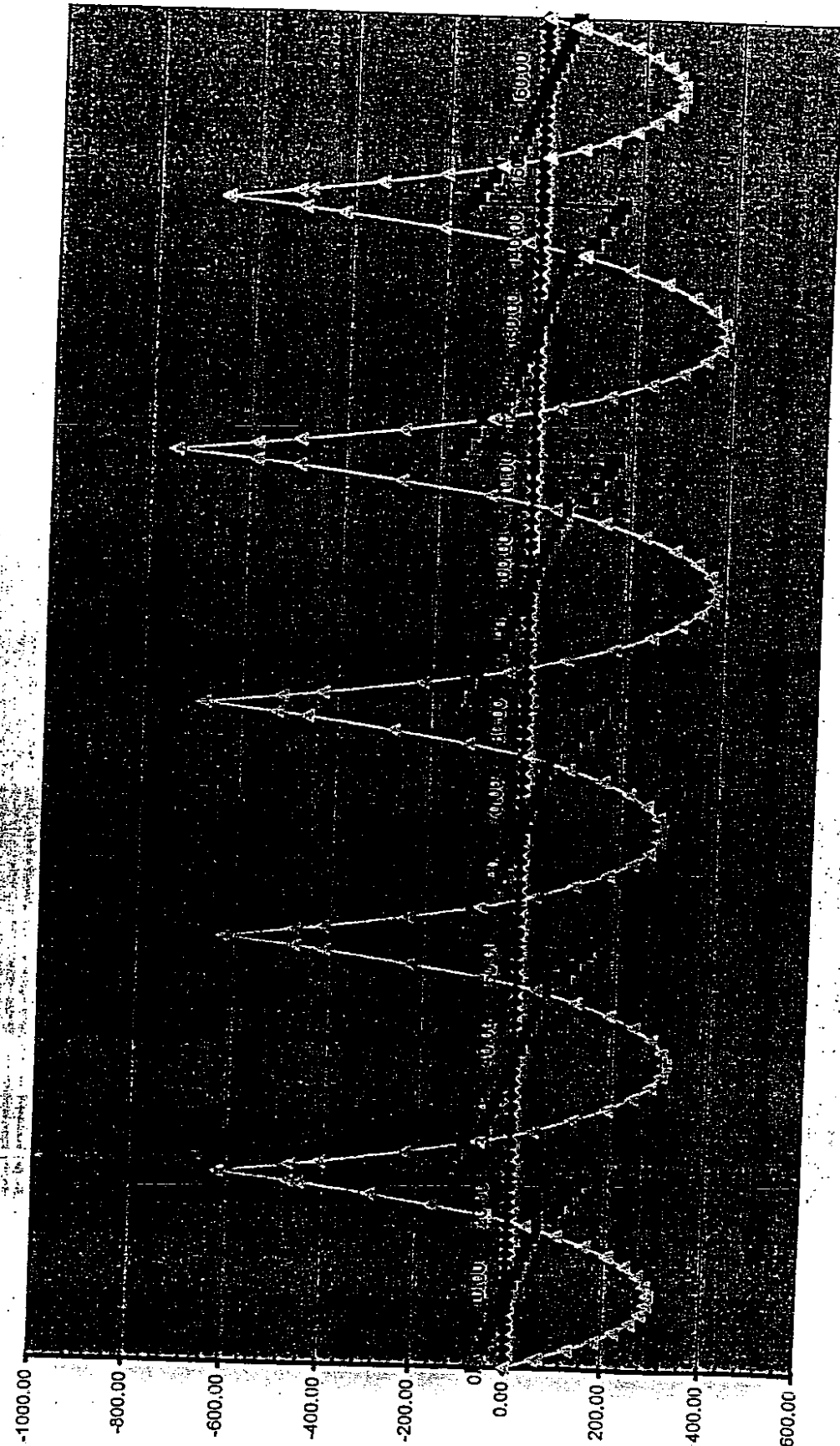
CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg*Infrecuentes Fisuracion*

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-64.18	0.45
1	2	1.00	0.00	-31.07	35.03
2	2	1.00	0.00	-31.07	35.03
2	3	1.18	0.00	-29.83	40.38
3	3	1.18	0.00	-29.83	40.38
3	4	2.35	0.00	-21.55	70.57
4	4	2.35	0.00	-21.55	70.57
4	5	3.53	0.00	-13.29	91.02
5	5	3.53	0.00	-13.29	91.02
5	6	4.70	0.00	-5.01	101.78
6	6	4.70	0.00	-5.01	101.78
6	7	5.88	0.00	3.27	102.80
7	7	5.88	0.00	3.27	102.80
7	8	7.05	0.00	11.54	94.09
8	8	7.05	0.00	11.54	94.09
8	9	8.23	0.00	19.82	75.68
9	9	8.23	0.00	19.82	75.68
9	10	9.40	0.00	28.11	47.49
10	10	9.40	0.00	28.11	47.49
10	11	10.58	0.00	36.38	9.62
11	11	10.58	0.00	36.38	9.62
11	12	11.75	0.00	44.66	-37.97
12	12	11.75	0.00	44.66	-37.97
12	13	12.93	0.00	52.93	-95.31
13	13	12.93	0.00	52.93	-95.31
13	14	14.10	0.00	61.21	-162.37
14	14	14.10	0.00	61.21	-162.37
14	15	15.28	0.00	69.47	-239.15
15	15	15.28	0.00	69.47	-239.15
15	16	16.45	0.00	77.76	-325.66
16	16	16.45	-0.83	77.76	-325.66
16	17	17.63	-0.91	86.03	-421.90
17	17	17.63	-0.91	86.03	-421.90
17	18	18.80	-1.30	119.57	-539.19
18	18	18.80	-0.01	119.57	-539.19
18	19	19.98	-0.01	146.74	-689.43
19	19	19.98	-0.01	146.74	-689.43
19	20	21.15	-1.06	217.98	-908.72
20	20	21.15	0.00	218.14	-908.72
20	21	22.33	0.00	300.85	-1216.02
21	21	22.33	0.00	300.85	-1216.02
21	22	22.50	0.00	316.64	-1270.50
22	22	22.50	0.00	316.64	-1270.50
22	23	23.50	0.00	359.68	-1608.49
23	1023	23.50	0.00	-387.69	-1608.49
23	24	24.50	0.00	-336.22	-1243.62
24	24	24.50	0.00	-336.22	-1243.62
24	25	24.95	0.00	-313.37	-1094.04
25	25	24.95	0.00	-313.37	-1094.04
25	26	26.40	0.00	-226.82	-696.13
26	26	26.40	-1.02	-226.70	-696.13

GRÁFICO DE ESFUERZOS

—◆— N (T) —■— V (T) -*- Mz (Tm)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-154.54	-422.91
27	27	27.85	0.04	-154.54	-422.91
27	28	29.30	0.04	-56.95	-271.35
28	28	29.30	-0.47	-56.95	-271.35
28	29	30.75	-0.38	-46.73	-196.21
29	29	30.75	-0.38	-46.73	-196.21
29	30	32.20	-0.30	-36.51	-135.88
30	30	32.20	0.00	-36.51	-135.88
30	31	33.65	0.00	-26.29	-90.33
31	31	33.65	0.00	-26.29	-90.33
31	32	35.10	0.00	-16.08	-59.63
32	32	35.10	0.00	-16.08	-59.63
32	33	36.55	0.00	-5.88	-43.73
33	33	36.55	0.00	-5.88	-43.73
33	34	38.00	0.00	10.26	-49.89
34	34	38.00	0.00	10.26	-49.89
34	35	39.45	0.00	20.47	-72.19
35	35	39.45	0.00	20.47	-72.19
35	36	40.90	0.00	30.70	-109.31
36	36	40.90	0.00	30.70	-109.31
36	37	42.35	0.00	40.90	-161.18
37	37	42.35	0.00	40.90	-161.18
37	38	43.80	0.00	51.11	-227.90
38	38	43.80	-0.44	51.10	-227.90
38	39	45.25	-0.52	61.32	-309.44
39	39	45.25	-0.52	61.32	-309.44
39	40	46.70	-0.60	71.53	-405.78
40	40	46.70	-0.04	71.53	-405.78
40	41	48.15	-0.04	142.11	-554.03
41	41	48.15	-0.04	142.11	-554.03
41	42	49.60	-1.09	214.59	-816.72
42	42	49.60	0.00	214.72	-816.72
42	43	51.05	0.00	309.52	-1195.98
43	43	51.05	0.00	309.52	-1195.98
43	44	51.50	0.00	331.61	-1342.53
44	44	51.50	0.00	331.61	-1342.53
44	45	52.50	0.00	384.70	-1705.32
45	1045	52.50	0.00	-388.00	-1705.32
45	46	53.50	0.00	-334.75	-1338.39
46	46	53.50	0.00	-334.75	-1338.39
46	47	53.95	0.00	-312.63	-1190.16
47	47	53.95	0.00	-312.63	-1190.16
47	48	55.40	0.00	-217.15	-804.06
48	48	55.40	-1.04	-217.02	-804.06
48	49	56.85	0.01	-150.06	-536.30
49	49	56.85	0.01	-150.06	-536.30
49	50	58.30	0.01	-57.99	-389.73
50	50	58.30	-0.49	-57.99	-389.73
50	51	59.75	-0.41	-47.78	-313.04
51	51	59.75	-0.41	-47.78	-313.04
51	52	61.20	-0.32	-37.56	-251.17

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-37.56	-251.17
52	53	62.65	0.00	-27.35	-204.09
53	53	62.65	0.00	-27.35	-204.09
53	54	64.10	0.00	-17.13	-171.84
54	54	64.10	0.00	-17.13	-171.84
54	55	65.55	0.00	-6.93	-154.38
55	55	65.55	0.00	-6.93	-154.38
55	56	67.00	0.00	10.56	-158.26
56	56	67.00	0.00	10.56	-158.26
56	57	68.45	0.00	20.78	-181.00
57	57	68.45	0.00	20.78	-181.00
57	58	69.90	0.00	30.99	-218.53
58	58	69.90	0.00	30.99	-218.53
58	59	71.35	0.00	41.21	-270.87
59	59	71.35	0.00	41.21	-270.87
59	60	72.80	0.00	51.42	-338.03
60	60	72.80	-0.43	51.42	-338.03
60	61	74.25	-0.52	61.63	-419.98
61	61	74.25	-0.52	61.63	-419.98
61	62	75.70	-0.60	71.85	-516.77
62	62	75.70	-0.01	71.85	-516.77
62	63	77.15	-0.01	145.25	-673.30
63	63	77.15	-0.01	145.25	-673.30
63	64	78.60	-1.07	223.16	-938.35
64	64	78.60	0.00	223.29	-938.35
64	65	80.05	0.00	297.94	-1318.74
65	65	80.05	0.00	297.94	-1318.74
65	66	80.50	0.00	340.01	-1464.27
66	66	80.50	0.00	340.01	-1464.27
66	67	81.50	0.00	392.73	-1832.03
67	1067	81.50	0.00	-413.00	-1832.03
67	68	82.50	0.00	-360.81	-1438.89
68	68	82.50	0.00	-360.81	-1438.89
68	69	83.08	0.00	-331.25	-1235.48
69	69	83.08	0.00	-331.25	-1235.48
69	70	84.65	0.00	-242.54	-792.04
70	70	84.65	-1.03	-242.42	-792.04
70	71	86.23	0.03	-155.91	-487.11
71	71	86.23	0.03	-155.91	-487.11
71	72	87.80	0.03	-64.86	-334.82
72	72	87.80	-0.50	-64.86	-334.82
72	73	89.38	-0.42	-53.77	-241.40
73	73	89.38	-0.42	-53.77	-241.40
73	74	90.95	-0.32	-42.68	-165.48
74	74	90.95	0.00	-42.68	-165.48
74	75	92.53	0.00	-31.58	-107.01
75	75	92.53	0.00	-31.58	-107.01
75	76	94.10	0.00	-20.49	-66.02
76	76	94.10	0.00	-20.49	-66.02
76	77	95.68	0.00	-9.39	-42.48
77	77	95.68	0.00	-9.39	-42.48

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg**Infrecuentes Fisuración**

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	8.05	-41.96
78	78	97.25	0.00	8.05	-41.96
78	79	98.83	0.00	19.14	-63.37
79	79	98.83	0.00	19.14	-63.37
79	80	100.40	0.00	30.24	-102.24
80	80	100.40	0.00	30.24	-102.24
80	81	101.98	0.00	41.33	-158.59
81	81	101.98	0.00	41.33	-158.59
81	82	103.55	0.00	52.41	-232.44
82	82	103.55	-0.41	52.41	-232.44
82	83	105.13	-0.50	63.52	-323.72
83	83	105.13	-0.50	63.52	-323.72
83	84	106.70	-0.58	74.61	-432.49
84	84	106.70	-0.03	74.61	-432.49
84	85	108.28	-0.03	151.33	-599.80
85	85	108.28	-0.03	151.33	-599.80
85	86	109.85	-1.08	236.13	-906.13
86	86	109.85	0.00	236.25	-906.13
86	87	111.43	0.00	317.42	-1347.10
87	87	111.43	0.00	317.42	-1347.10
87	88	112.00	0.00	363.25	-1549.10
88	88	112.00	0.00	363.25	-1549.10
88	89	113.00	0.00	419.42	-1947.07
89	1089	113.00	0.00	-416.32	-1947.07
89	90	114.00	0.00	-360.20	-1552.43
90	90	114.00	0.00	-360.20	-1552.43
90	91	114.58	0.00	-314.49	-1352.76
91	91	114.58	0.00	-314.49	-1352.76
91	92	116.15	0.00	-233.49	-916.73
92	92	116.15	-1.10	-233.37	-916.73
92	93	117.73	-0.05	-149.14	-615.15
93	93	117.73	-0.05	-149.14	-615.15
93	94	119.30	-0.05	-81.05	-444.85
94	94	119.30	-0.64	-81.06	-444.85
94	95	120.88	-0.56	-69.97	-325.92
95	95	120.88	-0.56	-69.97	-325.92
95	96	122.45	-0.48	-58.86	-224.49
96	96	122.45	0.00	-58.88	-224.49
96	97	124.03	0.00	-47.78	-140.53
97	97	124.03	0.00	-47.78	-140.53
97	98	125.60	0.00	-36.68	-74.03
98	98	125.60	0.00	-36.68	-74.03
98	99	127.18	0.00	-25.59	-25.00
99	99	127.18	0.00	-25.59	-25.00
99	100	128.75	0.00	-14.50	6.56
100	100	128.75	0.00	-14.50	6.56
100	101	130.33	0.00	-3.40	20.63
101	101	130.33	0.00	-3.40	20.63
101	102	131.90	0.00	13.44	11.34
102	102	131.90	0.00	13.44	11.34
102	103	133.48	0.00	24.53	-18.56

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg**Infrecuentes Fisuración**

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	24.53	-18.56
103	104	135.05	0.00	35.63	-65.93
104	104	135.05	-0.26	35.63	-65.93
104	105	136.63	-0.34	46.72	-130.79
105	105	136.63	-0.34	46.72	-130.79
105	106	138.20	-0.44	57.81	-213.11
106	106	138.20	0.05	57.83	-213.11
106	107	139.78	0.05	159.75	-367.84
107	107	139.78	0.05	159.75	-367.84
107	108	141.35	-1.01	238.39	-676.83
108	108	141.35	0.00	238.50	-676.83
108	109	142.93	0.00	331.57	-1131.52
109	109	142.93	0.00	331.57	-1131.52
109	110	143.50	0.00	375.49	-1334.17
110	110	143.50	0.00	375.49	-1334.17
110	111	144.50	0.00	411.98	-1727.20
111	1111	144.50	0.00	-365.26	-1727.20
111	112	145.50	0.00	-317.76	-1385.87
112	112	145.50	0.00	-317.76	-1385.87
112	113	145.68	0.00	-286.78	-1331.51
113	113	145.68	0.00	-286.78	-1331.51
113	114	146.85	0.00	-223.86	-1028.65
114	114	146.85	-1.11	-223.70	-1028.65
114	115	148.03	-0.06	-144.22	-811.36
115	115	148.03	-0.06	-144.22	-811.36
115	116	149.20	-0.06	-125.86	-656.27
116	116	149.20	-1.36	-125.86	-656.27
116	117	150.38	-0.98	-91.84	-523.04
117	117	150.38	-0.98	-91.84	-523.04
117	118	151.55	-0.89	-83.56	-419.96
118	118	151.55	0.00	-83.57	-419.96
118	119	152.73	0.00	-75.29	-326.63
119	119	152.73	0.00	-75.29	-326.63
119	120	153.90	0.00	-67.02	-243.01
120	120	153.90	0.00	-67.02	-243.01
120	121	155.08	0.00	-58.75	-169.11
121	121	155.08	0.00	-58.75	-169.11
121	122	156.25	0.00	-50.48	-104.95
122	122	156.25	0.00	-50.48	-104.95
122	123	157.43	0.00	-42.19	-50.50
123	123	157.43	0.00	-42.19	-50.50
123	124	158.60	0.00	-33.91	-5.77
124	124	158.60	0.00	-33.91	-5.77
124	125	159.78	0.00	-25.64	29.22
125	125	159.78	0.00	-25.64	29.22
125	126	160.95	0.00	-17.36	54.50
126	126	160.95	0.00	-17.36	54.50
126	127	162.13	0.00	-9.08	70.03
127	127	162.13	0.00	-9.08	70.03
127	128	163.30	0.00	-0.80	75.84
128	128	163.30	0.00	-0.80	75.84

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

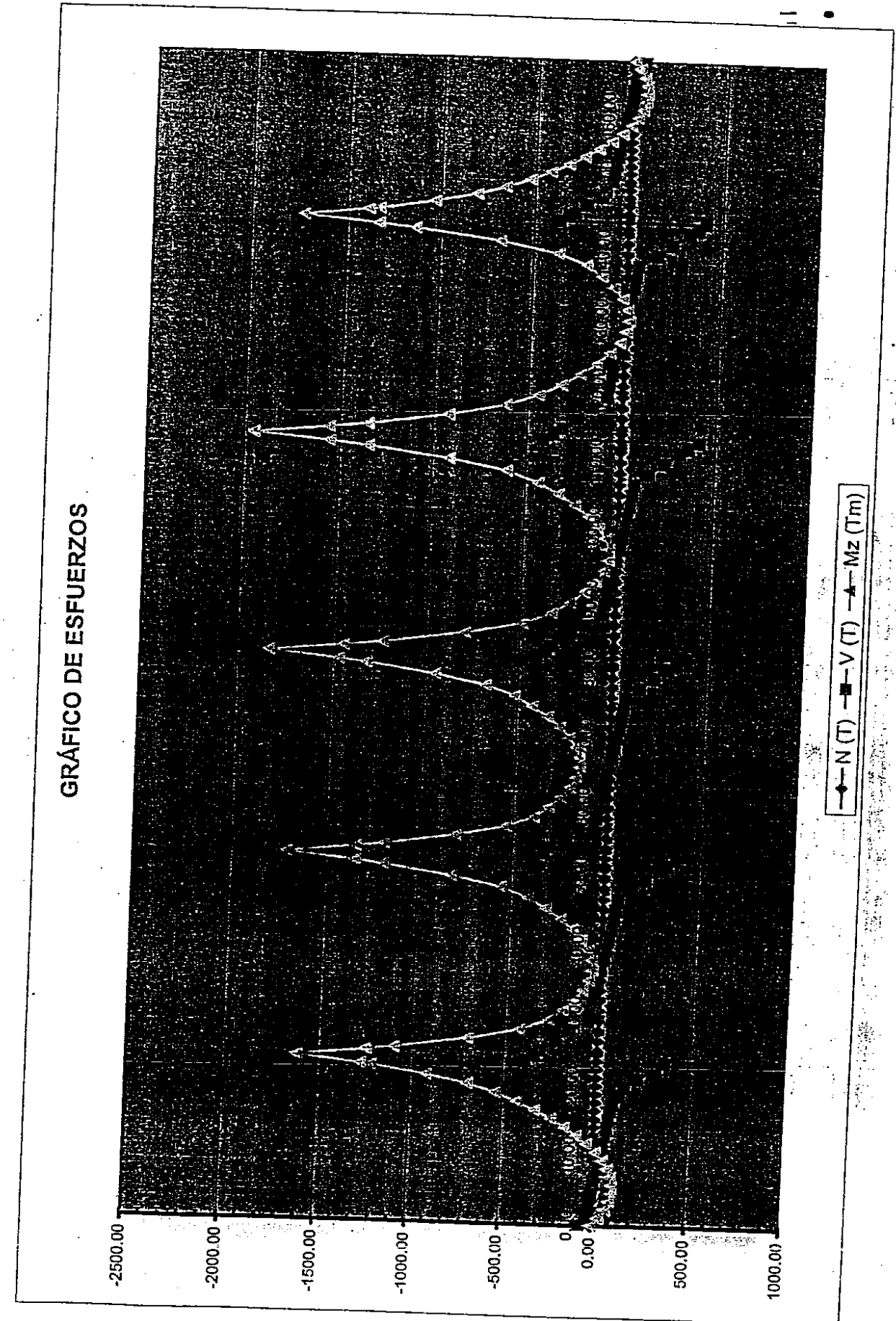
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	7.48	71.93
129	129	164.48	0.00	7.48	71.93
129	130	165.65	0.00	15.75	58.31
130	130	165.65	0.00	15.75	58.31
130	131	166.83	0.00	24.02	34.94
131	131	166.83	0.00	24.02	34.94
131	132	167.00	0.00	25.25	30.65
132	132	167.00	0.00	25.25	30.65
132	133	168.00	0.00	62.65	1.87

Programa DINTEL IDEAM S.A.
INFRECneg

28/08/01

GRÁFICO DE ESFUERZOS



fisuracion Iter3.xls

4ª ITERACION

PILA P-1								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
17			2.20365			2.24241	2%	-3%
18	19	-689.43	2.08737	2.319927	2.24241	2.16489	4%	-7%
19	19	-689.43	1.88225	2.319927	2.17403	1.95359	4%	-16%
19	20	-908.72	1.88225	1.658595	1.73315	1.95359	4%	-16%
20	20	-908.72	1.38508	1.658595	1.56742	1.38889	0%	-40%
20	21	-1216.02	1.38508	1.123002	1.21036	1.38889	0%	-40%
21	21	-1216.02	1.11227	1.123002	1.11942	1.09866	-1%	-53%
21	22	-1270.50	1.11227	1.060722	1.07790	1.09866	-1%	-53%
22	22	-1270.50	0.98552	1.060722	1.03565	0.96211	-2%	-59%
22	23	-1608.49	0.98552	0.840102	0.88857	0.96211	-2%	-59%
23	1023	-1608.49	0.99831	0.840102	0.89284	0.97662	-2%	-58%
23	24	-1243.62	0.99831	1.091443	1.06040	0.97662	-2%	-58%
24	24	-1243.62	1.20281	1.091443	1.12857	1.19691	0%	-48%
24	25	-1094.04	1.20281	1.296487	1.26526	1.19691	0%	-48%
25	25	-1094.04	1.69865	1.296487	1.43054	1.77169	4%	-24%
25	26	-696.13	1.69865	2.319927	2.11283	1.77169	4%	-24%
26	26	-696.13	2.18388	2.319927	2.27458	2.27458	4%	-2%
26	27	-422.91	2.18388	2.319927	2.27458	2.27458	4%	-2%
27	27	-422.91	2.26551	2.319927	2.30179	2.28365	1%	-2%
28			2.29272			2.30179	0%	-1%

PILA P-2								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
39			2.31993			2.31993	0%	0%
40	41	-554.03	2.31993	2.319927	2.31993	2.31993	0%	0%
41	41	-554.03	2.05506	2.319927	2.23164	2.08321	1%	-10%
41	42	-816.72	2.05506	1.874643	1.93478	2.08321	1%	-10%
42	42	-816.72	1.46296	1.874643	1.73741	1.49450	2%	-36%
42	43	-1195.98	1.46296	1.145910	1.25159	1.49450	2%	-36%
43	43	-1195.98	1.07170	1.145910	1.12117	1.07058	0%	-54%
43	44	-1342.53	1.07170	0.994130	1.01999	1.07058	0%	-54%
44	44	-1342.53	0.92971	0.994130	0.97266	0.91120	-2%	-61%
44	45	-1705.32	0.92971	0.809754	0.84974	0.91120	-2%	-61%
45	1045	-1705.32	0.93099	0.809754	0.85017	0.91264	-2%	-61%
45	46	-1338.39	0.93099	0.997183	0.97512	0.91264	-2%	-61%
46	46	-1338.39	1.07575	0.997183	1.02337	1.07516	0%	-54%
46	47	-1190.16	1.07575	1.152557	1.12695	1.07516	0%	-54%
47	47	-1190.16	1.47832	1.152557	1.26114	1.51174	2%	-35%
47	48	-804.06	1.47832	1.904353	1.76234	1.51174	2%	-35%
48	48	-804.06	2.06765	1.904353	1.95879	2.09731	1%	-10%
48	49	-536.30	2.06765	2.319927	2.23584	2.09731	1%	-10%
49	49	-536.30	2.31993	2.319927	2.31993	2.31993	0%	0%
50			2.31993			2.31993	0%	0%

PILA P-3								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
61			2.23579			2.26383	1%	-2%
62	63	-673.30	2.15165	2.31993	2.26383	2.20774	3%	-5%
63	63	-673.30	1.86135	2.31993	2.16707	1.92344	3%	-17%
63	64	-938.35	1.86135	1.58903	1.67980	1.92344	3%	-17%
64	64	-938.35	1.26953	1.58903	1.48253	1.29008	2%	-44%
64	65	-1318.74	1.26953	1.01167	1.09763	1.29008	2%	-44%
65	65	-1318.74	0.97726	1.01167	1.00020	0.96557	-1%	-58%
65	66	-1464.27	0.97726	0.90777	0.93093	0.96557	-1%	-58%
66	66	-1464.27	0.87906	0.90777	0.89820	0.85502	-3%	-63%
66	67	-1832.03	0.87906	0.77822	0.81183	0.85502	-3%	-63%
67	1067	-1832.03	0.88445	0.77822	0.81363	0.86191	-3%	-63%
67	68	-1438.89	0.88445	0.92307	0.91020	0.86191	-3%	-63%
68	68	-1438.89	1.01737	0.92307	0.95450	1.01373	0%	-56%
68	69	-1235.48	1.01737	1.10076	1.07296	1.01373	0%	-56%
69	69	-1235.48	1.45895	1.10076	1.22016	1.49743	3%	-35%
69	70	-792.04	1.45895	1.93258	1.77470	1.49743	3%	-35%
70	70	-792.04	2.03527	1.93258	1.96681	2.09593	3%	-10%
70	71	-487.11	2.03527	2.31993	2.22504	2.09593	3%	-10%
71	71	-487.11	2.24317	2.31993	2.29434	2.26875	1%	-2%
72			2.28155			2.29434	1%	-2%

PILA P-4								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
83			2.25875			2.27914	1%	-2%
84	85	-599.80	2.19757	2.31993	2.27914	2.23836	2%	-4%
85	85	-599.80	1.90238	2.31993	2.18074	1.96233	3%	-15%
85	86	-906.13	1.90238	1.66468	1.74391	1.96233	3%	-15%
86	86	-906.13	1.27816	1.66468	1.53584	1.31120	3%	-43%
86	87	-1347.10	1.27816	0.99076	1.08656	1.31120	3%	-43%
87	87	-1347.10	0.94396	0.99076	0.97516	0.93397	-1%	-60%
87	88	-1549.10	0.94396	0.86718	0.89277	0.93397	-1%	-60%
88	88	-1549.10	0.84946	0.86718	0.86127	0.82439	-3%	-64%
88	89	-1947.07	0.84946	0.75652	0.78750	0.82439	-3%	-64%
89	1089	-1947.07	0.84877	0.75652	0.78727	0.82363	-3%	-64%
89	90	-1552.43	0.84877	0.86559	0.85998	0.82363	-3%	-64%
90	90	-1552.43	0.94146	0.86559	0.89088	0.93121	-1%	-60%
90	91	-1352.76	0.94146	0.98659	0.97155	0.93121	-1%	-60%
91	91	-1352.76	1.26507	0.98659	1.07942	1.29715	3%	-44%
91	92	-916.73	1.26507	1.63978	1.51488	1.29715	3%	-44%
92	92	-916.73	1.88443	1.63978	1.72133	1.94805	3%	-16%
92	93	-615.15	1.88443	2.31993	2.17476	1.94805	3%	-16%
93	93	-615.15	2.18015	2.31993	2.27334	2.22674	2%	-4%
94			2.25004			2.27334	1%	-2%
			0.00000					

PILA P-5								
ARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
105			2.31993			2.31993	0%	0%
106	107	-367.84	2.31993	2.319927	2.31993	2.31993	0%	0%
107	107	-367.84	2.25684	2.319927	2.29890	2.29890	2%	-1%
107	108	-676.83	2.25684	2.319927	2.29890	2.29890	2%	-1%
108	108	-676.83	1.70049	2.319927	2.11345	1.74667	3%	-25%
108	109	-1131.52	1.70049	1.21959328	1.37989	1.74667	3%	-25%
109	109	-1131.52	1.11039	1.21959328	1.18319	1.11009	0%	-52%
109	110	-1334.17	1.11039	1.00029659	1.03699	1.11009	0%	-52%
110	110	-1334.17	0.93000	1.00029659	0.97686	0.91106	-2%	-61%
110	111	-1727.20	0.93000	0.80289854	0.84527	0.91106	-2%	-61%
111	1111	-1727.20	0.91377	0.80289854	0.83986	0.89295	-2%	-62%
111	112	-1385.87	0.91377	0.96217052	0.94604	0.89295	-2%	-62%
112	112	-1385.87	0.99886	0.96217052	0.97440	0.98776	-1%	-57%
112	113	-1331.51	0.99886	1.00225813	1.00112	0.98776	-1%	-57%
113	113	-1331.51	1.19281	1.00225813	1.06578	1.20189	1%	-48%
113	114	-1028.65	1.19281	1.41060216	1.33801	1.20189	1%	-48%
114	114	-1028.65	1.59044	1.41060216	1.47055	1.62942	2%	-30%
114	115	-811.36	1.59044	1.88722597	1.78830	1.62942	2%	-30%
115	115	-811.36	1.89211	1.88722597	1.88886	1.89049	0%	-19%
116			2.10602			2.10521	0%	-9%

Subanejo 3.5

INERCIAS EN CUARTA ITERACIÓN

52

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuración

[1:1]HBCP

Coef. exc:

82 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 83 SX=3.259684 IX=1 IY=1 IZ=2.279140 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 84 SX=3.259684 IX=1 IY=1 IZ=2.238360 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 85 SX=3.259684 IX=1 IY=1 IZ=1.962330 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 86 SX=3.259684 IX=1 IY=1 IZ=1.311200 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 87 SX=3.259684 IX=1 IY=1 IZ=0.933970 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 88 SX=3.259684 IX=1 IY=1 IZ=0.824390 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 89 SX=3.259684 IX=1 IY=1 IZ=0.823630 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 90 SX=3.259684 IX=1 IY=1 IZ=0.931210 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 91 SX=3.259684 IX=1 IY=1 IZ=1.297150 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 92 SX=3.259684 IX=1 IY=1 IZ=1.948050 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 93 SX=3.259684 IX=1 IY=1 IZ=2.226740 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 94 SX=3.259684 IX=1 IY=1 IZ=2.273340 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 95 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 96 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 97 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 98 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 99 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 100 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 101 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 102 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 103 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 104 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 105 SX=3.259684 IX=1 IY=1 IZ=2.319927 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 106 SX=3.259684 IX=1 IY=1 IZ=2.319927 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 107 SX=3.259684 IX=1 IY=1 IZ=2.298900 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 108 SX=3.259684 IX=1 IY=1 IZ=1.746670 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 109 SX=3.259684 IX=1 IY=1 IZ=1.110090 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 110 SX=3.259684 IX=1 IY=1 IZ=0.911060 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 111 SX=3.259684 IX=1 IY=1 IZ=0.892950 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 112 SX=3.259684 IX=1 IY=1 IZ=0.987760 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 113 SX=3.259684 IX=1 IY=1 IZ=1.201890 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 114 SX=3.259684 IX=1 IY=1 IZ=1.629420 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 115 SX=3.259684 IX=1 IY=1 IZ=1.890490 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 116 SX=3.259684 IX=1 IY=1 IZ=2.105210 VY=0.872793 VPY=1.477207 VZ=7 VPZ=0.001
 117 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 118 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 119 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 120 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 121 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 122 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 123 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 124 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 125 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 126 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 127 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 128 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 129 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 130 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 131 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001
 132 SX=3.041284 IX=1 IY=1 IZ=2.224545 VY=0.844987 VPY=1.505013 VZ=7 VPZ=0.001

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.03	0.45
1	2	1.00	0.00	0.03	0.42
2	2	1.00	0.00	0.03	0.42
2	3	1.18	0.00	0.03	0.42
3	3	1.18	0.00	0.03	0.42
3	4	2.35	0.00	0.03	0.39
4	4	2.35	0.00	0.03	0.39
4	5	3.53	0.00	0.03	0.35
5	5	3.53	0.00	0.03	0.35
5	6	4.70	0.00	0.03	0.32
6	6	4.70	0.00	0.03	0.32
6	7	5.88	0.00	0.03	0.29
7	7	5.88	0.00	0.03	0.29
7	8	7.05	0.00	0.03	0.26
8	8	7.05	0.00	0.03	0.26
8	9	8.23	0.00	0.03	0.22
9	9	8.23	0.00	0.03	0.22
9	10	9.40	0.00	0.03	0.19
10	10	9.40	0.00	0.03	0.19
10	11	10.58	0.00	0.03	0.16
11	11	10.58	0.00	0.03	0.16
11	12	11.75	0.00	0.03	0.13
12	12	11.75	0.00	0.03	0.13
12	13	12.93	0.00	0.03	0.09
13	13	12.93	0.00	0.03	0.09
13	14	14.10	0.00	0.03	0.06
14	14	14.10	0.00	0.03	0.06
14	15	15.28	0.00	0.03	0.03
15	15	15.28	0.00	0.03	0.03
15	16	16.45	0.00	0.03	0.00
16	16	16.45	0.00	0.03	0.00
16	17	17.63	0.00	0.03	-0.04
17	17	17.63	0.00	0.03	-0.04
17	18	18.80	0.00	0.03	-0.07
18	18	18.80	-0.01	0.03	-0.07
18	19	19.98	-0.01	0.03	-0.10
19	19	19.98	-0.01	0.03	-0.10
19	20	21.15	-1.06	3.53	-2.28
20	20	21.15	0.00	3.69	-2.28
20	21	22.33	0.00	7.19	-8.67
21	21	22.33	0.00	7.19	-8.67
21	22	22.50	0.00	7.71	-9.98
22	22	22.50	0.00	7.71	-9.98
22	23	23.50	0.00	10.69	-19.18
23	1023	23.50	0.00	-12.95	-19.18
23	24	24.50	0.00	-9.97	-7.72
24	24	24.50	0.00	-9.97	-7.72
24	25	24.95	0.00	-8.62	-3.54
25	25	24.95	0.00	-8.62	-3.54
25	26	26.40	0.00	-4.30	5.83
26	26	26.40	-1.02	-4.18	5.83

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1: 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	0.15	8.84
27	27	27.85	0.04	0.15	8.84
27	28	29.30	0.04	0.15	8.62
28	28	29.30	0.00	0.15	8.62
28	29	30.75	0.00	0.15	8.40
29	29	30.75	0.00	0.15	8.40
29	30	32.20	0.00	0.15	8.18
30	30	32.20	0.00	0.15	8.18
30	31	33.65	0.00	0.15	7.97
31	31	33.65	0.00	0.15	7.97
31	32	35.10	0.00	0.15	7.75
32	32	35.10	0.00	0.15	7.75
32	33	36.55	0.00	0.15	7.53
33	33	36.55	0.00	0.15	7.53
33	34	38.00	0.00	0.15	7.31
34	34	38.00	0.00	0.15	7.31
34	35	39.45	0.00	0.15	7.09
35	35	39.45	0.00	0.15	7.09
35	36	40.90	0.00	0.15	6.87
36	36	40.90	0.00	0.15	6.87
36	37	42.35	0.00	0.15	6.66
37	37	42.35	0.00	0.15	6.66
37	38	43.80	0.00	0.15	6.44
38	38	43.80	0.00	0.15	6.44
38	39	45.25	0.00	0.15	6.22
39	39	45.25	0.00	0.15	6.22
39	40	46.70	0.00	0.15	6.00
40	40	46.70	-0.04	0.15	6.00
40	41	48.15	-0.04	0.15	5.78
41	41	48.15	-0.04	0.15	5.78
41	42	49.60	-1.09	4.47	2.34
42	42	49.60	0.00	4.60	2.34
42	43	51.05	0.00	8.92	-7.47
43	43	51.05	0.00	8.92	-7.47
43	44	51.50	0.00	10.27	-11.78
44	44	51.50	0.00	10.27	-11.78
44	45	52.50	0.00	13.25	-23.54
45	1045	52.50	0.00	-13.05	-23.54
45	46	53.50	0.00	-10.07	-11.99
46	46	53.50	0.00	-10.07	-11.99
46	47	53.95	0.00	-8.72	-7.76
47	47	53.95	0.00	-8.72	-7.76
47	48	55.40	0.00	-4.40	1.76
48	48	55.40	-1.04	-4.27	1.76
48	49	56.85	0.01	0.05	4.91
49	49	56.85	0.01	0.05	4.91
49	50	58.30	0.01	0.05	4.84
50	50	58.30	0.00	0.05	4.84
50	51	59.75	0.00	0.05	4.76
51	51	59.75	0.00	0.05	4.76
51	52	61.20	0.00	0.05	4.69

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1: 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.05	4.69
52	53	62.65	0.00	0.05	4.62
53	53	62.65	0.00	0.05	4.62
53	54	64.10	0.00	0.05	4.54
54	54	64.10	0.00	0.05	4.54
54	55	65.55	0.00	0.05	4.47
55	55	65.55	0.00	0.05	4.47
55	56	67.00	0.00	0.05	4.40
56	56	67.00	0.00	0.05	4.40
56	57	68.45	0.00	0.05	4.32
57	57	68.45	0.00	0.05	4.32
57	58	69.90	0.00	0.05	4.25
58	58	69.90	0.00	0.05	4.25
58	59	71.35	0.00	0.05	4.18
59	59	71.35	0.00	0.05	4.18
59	60	72.80	0.00	0.05	4.10
60	60	72.80	0.00	0.05	4.10
60	61	74.25	0.00	0.05	4.03
61	61	74.25	0.00	0.05	4.03
61	62	75.70	0.00	0.05	3.96
62	62	75.70	-0.01	0.05	3.96
62	63	77.15	-0.01	0.05	3.88
63	63	77.15	-0.01	0.05	3.88
63	64	78.60	-1.07	4.37	0.58
64	64	78.60	0.00	4.50	0.58
64	65	80.05	0.00	8.82	-9.08
65	65	80.05	0.00	8.82	-9.08
65	66	80.50	0.00	10.17	-13.35
66	66	80.50	0.00	10.17	-13.35
66	67	81.50	0.00	13.15	-25.01
67	1067	81.50	0.00	-14.09	-25.01
67	68	82.50	0.00	-11.11	-12.41
68	68	82.50	0.00	-11.11	-12.41
68	69	83.08	0.00	-9.40	-6.51
69	69	83.08	0.00	-9.40	-6.51
69	70	84.65	0.00	-4.70	4.59
70	70	84.65	-1.03	-4.58	4.59
70	71	86.23	0.03	0.11	8.20
71	71	86.23	0.03	0.11	8.20
71	72	87.80	0.03	0.11	8.02
72	72	87.80	0.00	0.11	8.02
72	73	89.38	0.00	0.11	7.84
73	73	89.38	0.00	0.11	7.84
73	74	90.95	0.00	0.11	7.66
74	74	90.95	0.00	0.11	7.66
74	75	92.53	0.00	0.11	7.48
75	75	92.53	0.00	0.11	7.48
75	76	94.10	0.00	0.11	7.30
76	76	94.10	0.00	0.11	7.30
76	77	95.68	0.00	0.11	7.12
77	77	95.68	0.00	0.11	7.12

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1; 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.11	6.94
78	78	97.25	0.00	0.11	6.94
78	79	98.83	0.00	0.11	6.76
79	79	98.83	0.00	0.11	6.76
79	80	100.40	0.00	0.11	6.58
80	80	100.40	0.00	0.11	6.58
80	81	101.98	0.00	0.11	6.40
81	81	101.98	0.00	0.11	6.40
81	82	103.55	0.00	0.11	6.21
82	82	103.55	0.00	0.11	6.21
82	83	105.13	0.00	0.11	6.03
83	83	105.13	0.00	0.11	6.03
83	84	106.70	0.00	0.11	5.85
84	84	106.70	-0.03	0.11	5.85
84	85	108.28	-0.03	0.11	5.67
85	85	108.28	-0.03	0.11	5.67
85	86	109.85	-1.08	4.81	1.70
86	86	109.85	0.00	4.93	1.70
86	87	111.43	0.00	9.62	-9.76
87	87	111.43	0.00	9.62	-9.76
87	88	112.00	0.00	11.34	-15.79
88	88	112.00	0.00	11.34	-15.79
88	89	113.00	0.00	14.32	-28.61
89	1089	113.00	0.00	-14.43	-28.61
89	90	114.00	0.00	-11.44	-15.68
90	90	114.00	0.00	-11.44	-15.68
90	91	114.58	0.00	-9.73	-9.59
91	91	114.58	0.00	-9.73	-9.59
91	92	116.15	0.00	-5.03	2.03
92	92	116.15	-1.10	-4.91	2.03
92	93	117.73	-0.05	-0.21	6.17
93	93	117.73	-0.05	-0.21	6.17
93	94	119.30	-0.05	-0.21	6.52
94	94	119.30	0.00	-0.22	6.52
94	95	120.88	0.00	-0.22	6.86
95	95	120.88	0.00	-0.22	6.86
95	96	122.45	0.00	-0.22	7.21
96	96	122.45	0.00	-0.22	7.21
96	97	124.03	0.00	-0.22	7.55
97	97	124.03	0.00	-0.22	7.55
97	98	125.60	0.00	-0.22	7.90
98	98	125.60	0.00	-0.22	7.90
98	99	127.18	0.00	-0.22	8.25
99	99	127.18	0.00	-0.22	8.25
99	100	128.75	0.00	-0.22	8.59
100	100	128.75	0.00	-0.22	8.59
100	101	130.33	0.00	-0.22	8.94
101	101	130.33	0.00	-0.22	8.94
101	102	131.90	0.00	-0.22	9.28
102	102	131.90	0.00	-0.22	9.28
102	103	133.48	0.00	-0.22	9.63

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase5Neg

Fase 5 Fisuracion

[1; 1]HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-0.22	9.63
103	104	135.05	0.00	-0.22	9.98
104	104	135.05	0.00	-0.22	9.98
104	105	136.63	0.00	-0.22	10.32
105	105	136.63	0.00	-0.22	10.32
105	106	138.20	0.00	-0.22	10.67
106	106	138.20	0.05	-0.21	10.67
106	107	139.78	0.05	-0.21	11.01
107	107	139.78	0.05	-0.21	11.01
107	108	141.35	-1.01	4.48	7.57
108	108	141.35	0.00	4.59	7.57
108	109	142.93	0.00	9.29	-3.36
109	109	142.93	0.00	9.29	-3.36
109	110	143.50	0.00	11.01	-9.20
110	110	143.50	0.00	11.01	-9.20
110	111	144.50	0.00	13.99	-21.70
111	1111	144.50	0.00	-10.86	-21.70
111	112	145.50	0.00	-7.88	-12.32
112	112	145.50	0.00	-7.88	-12.32
112	113	145.68	0.00	-7.36	-10.99
113	113	145.68	0.00	-7.36	-10.99
113	114	146.85	0.00	-3.85	-4.40
114	114	146.85	-1.11	-3.69	-4.40
114	115	148.03	-0.06	-0.19	-2.03
115	115	148.03	-0.06	-0.19	-2.03
115	116	149.20	-0.06	-0.19	-1.80
116	116	149.20	0.00	-0.20	-1.80
116	117	150.38	0.00	-0.20	-1.57
117	117	150.38	0.00	-0.20	-1.57
117	118	151.55	0.00	-0.20	-1.34
118	118	151.55	0.00	-0.20	-1.34
118	119	152.73	0.00	-0.20	-1.11
119	119	152.73	0.00	-0.20	-1.11
119	120	153.90	0.00	-0.20	-0.88
120	120	153.90	0.00	-0.20	-0.88
120	121	155.08	0.00	-0.20	-0.65
121	121	155.08	0.00	-0.20	-0.65
121	122	156.25	0.00	-0.20	-0.42
122	122	156.25	0.00	-0.20	-0.42
122	123	157.43	0.00	-0.20	-0.19
123	123	157.43	0.00	-0.20	-0.19
123	124	158.60	0.00	-0.20	0.04
124	124	158.60	0.00	-0.20	0.04
124	125	159.78	0.00	-0.20	0.27
125	125	159.78	0.00	-0.20	0.27
125	126	160.95	0.00	-0.20	0.50
126	126	160.95	0.00	-0.20	0.50
126	127	162.13	0.00	-0.20	0.73
127	127	162.13	0.00	-0.20	0.73
127	128	163.30	0.00	-0.20	0.96
128	128	163.30	0.00	-0.20	0.96

CÁLCULO TENSIONAL

Hipótesis de cálculo:
Fase5Neg

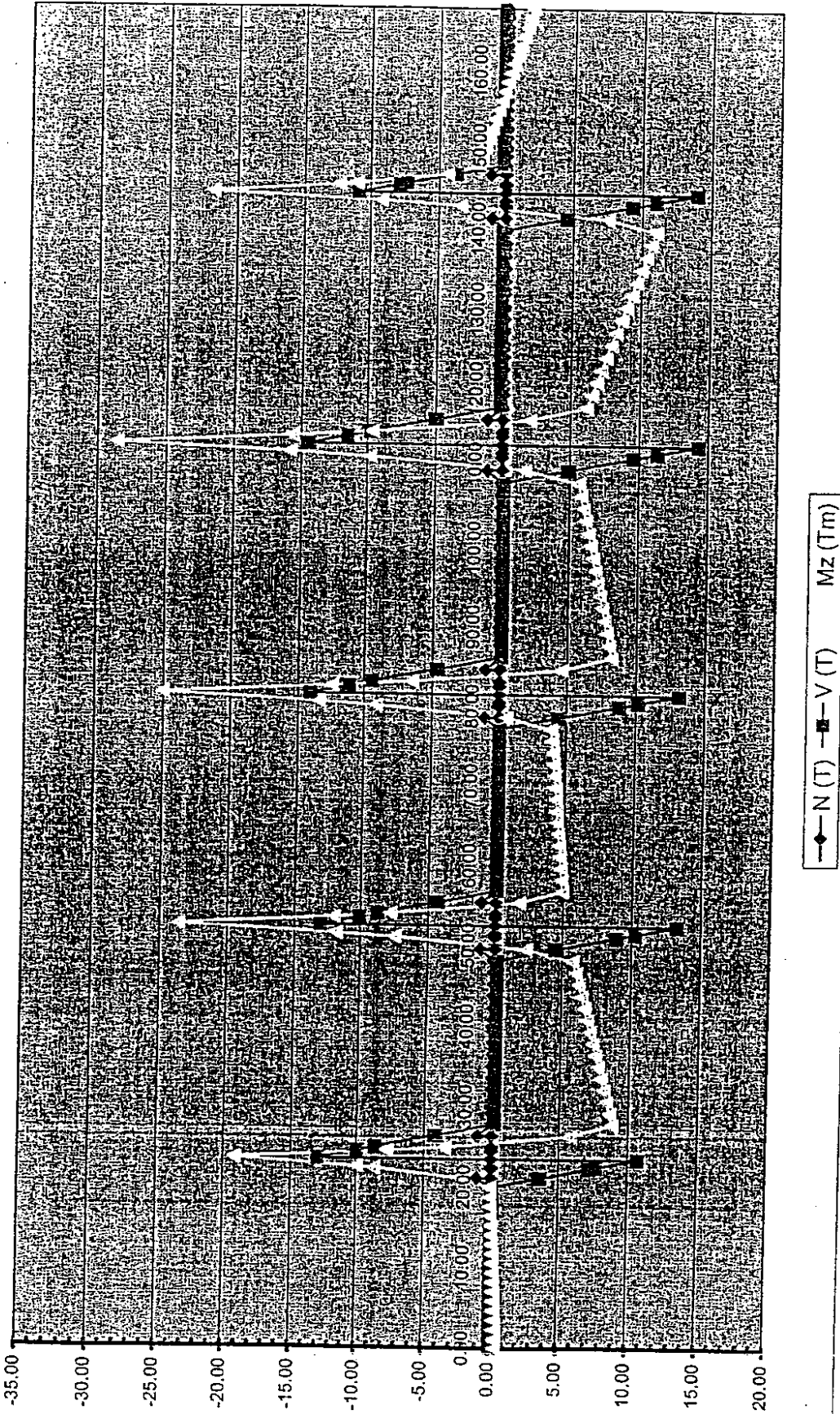
Fase 5 Fisuración

[1; 1]HBCP
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	-0.20	1.18
129	129	164.48	0.00	-0.20	1.18
129	130	165.65	0.00	-0.20	1.41
130	130	165.65	0.00	-0.20	1.41
130	131	166.83	0.00	-0.20	1.64
131	131	166.83	0.00	-0.20	1.64
131	132	167.00	0.00	-0.20	1.68
132	132	167.00	0.00	-0.20	1.68
132	133	168.00	0.00	-0.20	1.87

Programa DINTEL IDEAM S.A.
Fase5Neg

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-8.27	0.45
1	2	1.00	0.00	-7.32	8.24
2	2	1.00	0.00	-7.32	8.24
2	3	1.18	0.00	-7.16	9.52
3	3	1.18	0.00	-7.16	9.52
3	4	2.35	0.00	-6.04	17.27
4	4	2.35	0.00	-6.04	17.27
4	5	3.53	0.00	-4.93	23.72
5	5	3.53	0.00	-4.93	23.72
5	6	4.70	0.00	-3.82	28.87
6	6	4.70	0.00	-3.82	28.87
6	7	5.88	0.00	-2.71	32.71
7	7	5.88	0.00	-2.71	32.71
7	8	7.05	0.00	-1.60	35.24
8	8	7.05	0.00	-1.60	35.24
8	9	8.23	0.00	-0.49	36.46
9	9	8.23	0.00	-0.49	36.46
9	10	9.40	0.00	0.63	36.38
10	10	9.40	0.00	0.63	36.38
10	11	10.58	0.00	1.74	35.00
11	11	10.58	0.00	1.74	35.00
11	12	11.75	0.00	2.85	32.31
12	12	11.75	0.00	2.85	32.31
12	13	12.93	0.00	3.96	28.31
13	13	12.93	0.00	3.96	28.31
13	14	14.10	0.00	5.07	23.00
14	14	14.10	0.00	5.07	23.00
14	15	15.28	0.00	6.18	16.40
15	15	15.28	0.00	6.18	16.40
15	16	16.45	0.00	7.30	8.48
16	16	16.45	0.00	7.30	8.48
16	17	17.63	0.00	8.41	-0.75
17	17	17.63	0.00	8.41	-0.75
17	18	18.80	0.00	9.52	-11.27
18	18	18.80	-0.01	9.52	-11.27
18	19	19.98	-0.01	10.63	-23.10
19	19	19.98	-0.01	10.63	-23.10
19	20	21.15	-1.06	15.24	-38.39
20	20	21.15	0.00	15.40	-38.39
20	21	22.33	0.00	20.01	-59.20
21	21	22.33	0.00	20.01	-59.20
21	22	22.50	0.00	20.70	-62.76
22	22	22.50	0.00	20.70	-62.76
22	23	23.50	0.00	24.62	-85.43
23	1023	23.50	0.00	-26.71	-85.43
23	24	24.50	0.00	-22.79	-60.67
24	24	24.50	0.00	-22.79	-60.67
24	25	24.95	0.00	-21.01	-50.82
25	25	24.95	0.00	-21.01	-50.82
25	26	26.40	0.00	-15.32	-24.48
26	26	26.40	-1.02	-15.20	-24.48

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-9.50	-6.48
27	27	27.85	0.04	-9.50	-6.48
27	28	29.30	0.04	-8.13	6.29
28	28	29.30	0.00	-8.13	6.29
28	29	30.75	0.00	-6.76	17.08
29	29	30.75	0.00	-6.76	17.08
29	30	32.20	0.00	-5.38	25.88
30	30	32.20	0.00	-5.38	25.88
30	31	33.65	0.00	-4.01	32.70
31	31	33.65	0.00	-4.01	32.70
31	32	35.10	0.00	-2.64	37.52
32	32	35.10	0.00	-2.64	37.52
32	33	36.55	0.00	-1.27	40.35
33	33	36.55	0.00	-1.27	40.35
33	34	38.00	0.00	0.10	41.20
34	34	38.00	0.00	0.10	41.20
34	35	39.45	0.00	1.47	40.05
35	35	39.45	0.00	1.47	40.05
35	36	40.90	0.00	2.85	36.91
36	36	40.90	0.00	2.85	36.91
36	37	42.35	0.00	4.22	31.80
37	37	42.35	0.00	4.22	31.80
37	38	43.80	0.00	5.59	24.69
38	38	43.80	0.00	5.59	24.69
38	39	45.25	0.00	6.96	15.58
39	39	45.25	0.00	6.96	15.58
39	40	46.70	0.00	8.33	4.49
40	40	46.70	-0.04	8.33	4.49
40	41	48.15	-0.04	9.70	-8.59
41	41	48.15	-0.04	9.70	-8.59
41	42	49.60	-1.09	15.40	-26.88
42	42	49.60	0.00	15.53	-26.88
42	43	51.05	0.00	21.22	-53.52
43	43	51.05	0.00	21.22	-53.52
43	44	51.50	0.00	22.99	-63.46
44	44	51.50	0.00	22.99	-63.46
44	45	52.50	0.00	26.92	-88.42
45	1045	52.50	0.00	-26.52	-88.42
45	46	53.50	0.00	-22.59	-63.87
46	46	53.50	0.00	-22.59	-63.87
46	47	53.95	0.00	-20.82	-54.10
47	47	53.95	0.00	-20.82	-54.10
47	48	55.40	0.00	-15.13	-28.03
48	48	55.40	-1.04	-15.00	-28.03
48	49	56.85	0.01	-9.31	-10.32
49	49	56.85	0.01	-9.31	-10.32
49	50	58.30	0.01	-7.93	2.18
50	50	58.30	0.00	-7.93	2.18
50	51	59.75	0.00	-6.56	12.68
51	51	59.75	0.00	-6.56	12.68
51	52	61.20	0.00	-5.19	21.20

Fase6Neg

Fase6Neg

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-5.19	21.20
52	53	62.65	0.00	-3.82	27.74
53	53	62.65	0.00	-3.82	27.74
53	54	64.10	0.00	-2.45	32.27
54	54	64.10	0.00	-2.45	32.27
54	55	65.55	0.00	-1.08	34.83
55	55	65.55	0.00	-1.08	34.83
55	56	67.00	0.00	0.30	35.40
56	56	67.00	0.00	0.30	35.40
56	57	68.45	0.00	1.67	33.96
57	57	68.45	0.00	1.67	33.96
57	58	69.90	0.00	3.04	30.55
58	58	69.90	0.00	3.04	30.55
58	59	71.35	0.00	4.41	25.15
59	59	71.35	0.00	4.41	25.15
59	60	72.80	0.00	5.78	17.75
60	60	72.80	0.00	5.78	17.75
60	61	74.25	0.00	7.15	8.38
61	61	74.25	0.00	7.15	8.38
61	62	75.70	0.00	8.53	-2.99
62	62	75.70	-0.01	8.53	-2.99
62	63	77.15	-0.01	9.90	-16.36
63	63	77.15	-0.01	9.90	-16.36
63	64	78.60	-1.07	15.59	-34.93
64	64	78.60	0.00	15.72	-34.93
64	65	80.05	0.00	21.41	-61.85
65	65	80.05	0.00	21.41	-61.85
65	66	80.50	0.00	23.19	-71.89
66	66	80.50	0.00	23.19	-71.89
66	67	81.50	0.00	27.11	-97.04
67	1067	81.50	0.00	-28.69	-97.04
67	68	82.50	0.00	-24.77	-70.31
68	68	82.50	0.00	-24.77	-70.31
68	69	83.08	0.00	-22.51	-56.71
69	69	83.08	0.00	-22.51	-56.71
69	70	84.65	0.00	-16.32	-26.13
70	70	84.65	-1.03	-16.20	-26.13
70	71	86.23	0.03	-10.02	-5.39
71	71	86.23	0.03	-10.02	-5.39
71	72	87.80	0.03	-8.53	9.22
72	72	87.80	0.00	-8.53	9.22
72	73	89.38	0.00	-7.04	21.48
73	73	89.38	0.00	-7.04	21.48
73	74	90.95	0.00	-5.55	31.39
74	74	90.95	0.00	-5.55	31.39
74	75	92.53	0.00	-4.06	38.95
75	75	92.53	0.00	-4.06	38.95
75	76	94.10	0.00	-2.57	44.17
76	76	94.10	0.00	-2.57	44.17
76	77	95.68	0.00	-1.08	47.05
77	77	95.68	0.00	-1.08	47.05

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuración

[1; 1]HBCP + [1; 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.41	47.57
78	78	97.25	0.00	0.41	47.57
78	79	98.83	0.00	1.90	45.75
79	79	98.83	0.00	1.90	45.75
79	80	100.40	0.00	3.39	41.58
80	80	100.40	0.00	3.39	41.58
80	81	101.98	0.00	4.88	35.07
81	81	101.98	0.00	4.88	35.07
81	82	103.55	0.00	6.37	26.20
82	82	103.55	0.00	6.37	26.20
82	83	105.13	0.00	7.86	14.99
83	83	105.13	0.00	7.86	14.99
83	84	106.70	0.00	9.35	1.44
84	84	106.70	-0.03	9.35	1.44
84	85	108.28	-0.03	10.84	-14.46
85	85	108.28	-0.03	10.84	-14.46
85	86	109.85	-1.08	17.03	-36.50
86	86	109.85	0.00	17.15	-36.50
86	87	111.43	0.00	23.33	-68.38
87	87	111.43	0.00	23.33	-68.38
87	88	112.00	0.00	25.59	-82.45
88	88	112.00	0.00	25.59	-82.45
88	89	113.00	0.00	29.52	-109.99
89	1089	113.00	0.00	-29.63	-109.99
89	90	114.00	0.00	-25.70	-82.33
90	90	114.00	0.00	-25.70	-82.33
90	91	114.58	0.00	-23.44	-68.19
91	91	114.58	0.00	-23.44	-68.19
91	92	116.15	0.00	-17.25	-36.15
92	92	116.15	-1.10	-17.13	-36.15
92	93	117.73	-0.05	-10.94	-13.93
93	93	117.73	-0.05	-10.94	-13.93
93	94	119.30	-0.05	-9.45	2.15
94	94	119.30	0.00	-9.46	2.15
94	95	120.88	0.00	-7.97	15.88
95	95	120.88	0.00	-7.97	15.88
95	96	122.45	0.00	-6.48	27.27
96	96	122.45	0.00	-6.48	27.27
96	97	124.03	0.00	-4.99	36.30
97	97	124.03	0.00	-4.99	36.30
97	98	125.60	0.00	-3.50	42.99
98	98	125.60	0.00	-3.50	42.99
98	99	127.18	0.00	-2.01	47.34
99	99	127.18	0.00	-2.01	47.34
99	100	128.75	0.00	-0.52	49.34
100	100	128.75	0.00	-0.52	49.34
100	101	130.33	0.00	0.97	48.99
101	101	130.33	0.00	0.97	48.99
101	102	131.90	0.00	2.46	46.29
102	102	131.90	0.00	2.46	46.29
102	103	133.48	0.00	3.95	41.25

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

Fase 6 Fisuracion

[1: 1]HBCP + [1: 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	3.95	41.25
103	104	135.05	0.00	5.44	33.87
104	104	135.05	0.00	5.44	33.87
104	105	136.63	0.00	6.93	24.13
105	105	136.63	0.00	6.93	24.13
105	106	138.20	0.00	8.42	12.05
106	106	138.20	0.05	8.43	12.05
106	107	139.78	0.05	9.92	-2.39
107	107	139.78	0.05	9.92	-2.39
107	108	141.35	-1.01	16.10	-22.95
108	108	141.35	0.00	16.21	-22.95
108	109	142.93	0.00	22.40	-53.34
109	109	142.93	0.00	22.40	-53.34
109	110	143.50	0.00	24.66	-66.88
110	110	143.50	0.00	24.66	-66.88
110	111	144.50	0.00	28.59	-93.50
111	111	144.50	0.00	-25.03	-93.50
111	112	145.50	0.00	-21.10	-70.42
112	112	145.50	0.00	-21.10	-70.42
112	113	145.68	0.00	-20.42	-66.79
113	113	145.68	0.00	-20.42	-66.79
113	114	146.85	0.00	-15.80	-45.51
114	114	146.85	-1.11	-15.64	-45.51
114	115	148.03	-0.06	-11.03	-29.75
115	115	148.03	-0.06	-11.03	-29.75
115	116	149.20	-0.06	-9.91	-17.44
116	116	149.20	0.00	-9.92	-17.44
116	117	150.38	0.00	-8.81	-6.44
117	117	150.38	0.00	-8.81	-6.44
117	118	151.55	0.00	-7.70	3.26
118	118	151.55	0.00	-7.70	3.26
118	119	152.73	0.00	-6.59	11.65
119	119	152.73	0.00	-6.59	11.65
119	120	153.90	0.00	-5.48	18.73
120	120	153.90	0.00	-5.48	18.73
120	121	155.08	0.00	-4.37	24.51
121	121	155.08	0.00	-4.37	24.51
121	122	156.25	0.00	-3.26	28.98
122	122	156.25	0.00	-3.26	28.98
122	123	157.43	0.00	-2.14	32.15
123	123	157.43	0.00	-2.14	32.15
123	124	158.60	0.00	-1.03	34.01
124	124	158.60	0.00	-1.03	34.01
124	125	159.78	0.00	0.08	34.57
125	125	159.78	0.00	0.08	34.57
125	126	160.95	0.00	1.19	33.82
126	126	160.95	0.00	1.19	33.82
126	127	162.13	0.00	2.30	31.76
127	127	162.13	0.00	2.30	31.76
127	128	163.30	0.00	3.41	28.39
128	128	163.30	0.00	3.41	28.39

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Fase6Neg

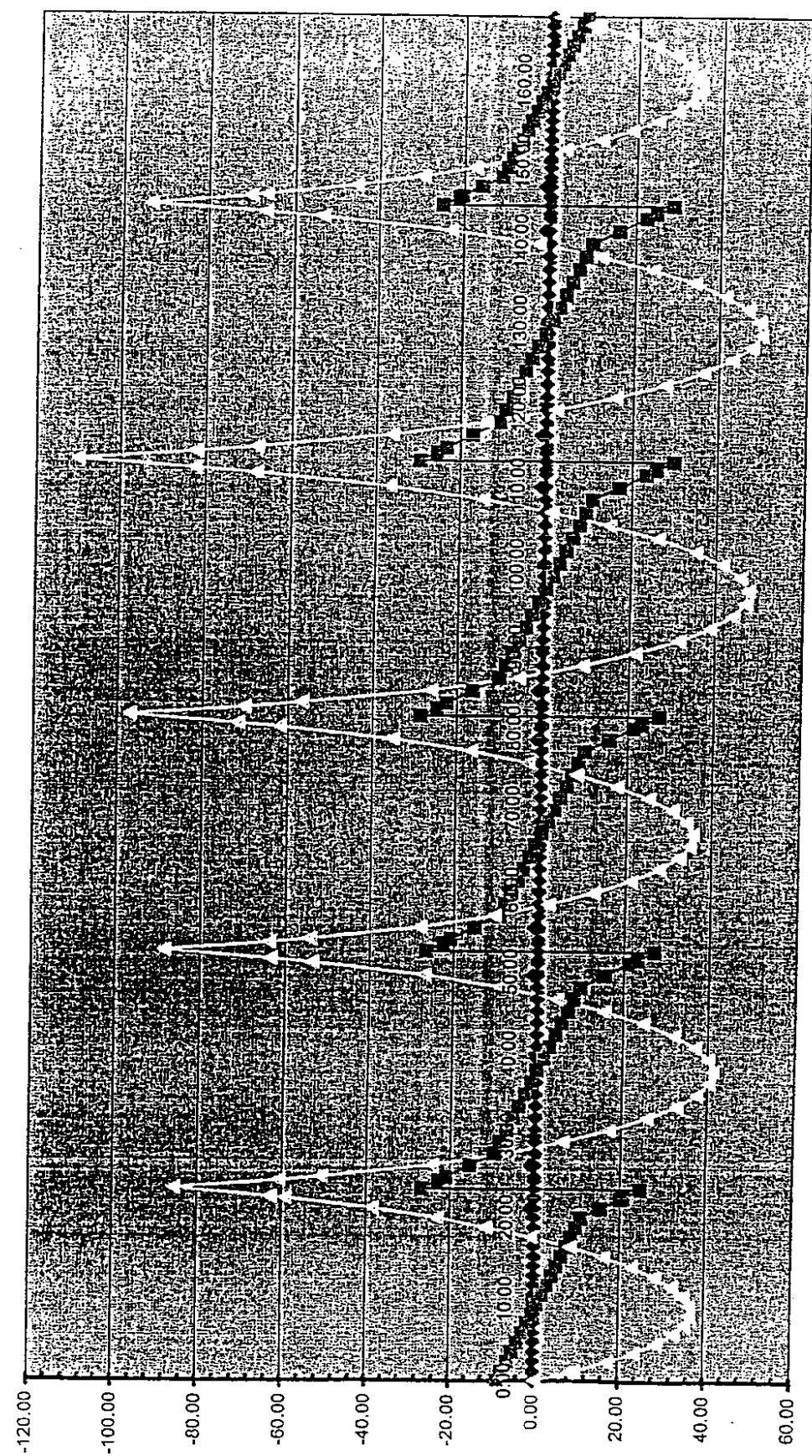
Fase 6 Fisuracion

[1: 1]HBCP + [1: 1]HVOL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	4.53	23.71
129	129	164.48	0.00	4.53	23.71
129	130	165.65	0.00	5.64	17.74
130	130	165.65	0.00	5.64	17.74
130	131	166.83	0.00	6.75	10.46
131	131	166.83	0.00	6.75	10.46
131	132	167.00	0.00	6.91	9.27
132	132	167.00	0.00	6.91	9.27
132	133	168.00	0.00	7.86	1.87

GRÁFICO DE ESFUERZOS



—◆— N (T) —■— V (T) —▲— Mz (Tm)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-64.20	0.45
1	2	1.00	0.00	-57.15	61.12
2	2	1.00	0.00	-57.15	61.12
2	3	1.18	0.00	-55.92	71.03
3	3	1.18	0.00	-55.92	71.03
3	4	2.35	0.00	-47.63	131.86
4	4	2.35	0.00	-47.63	131.86
4	5	3.53	0.00	-39.36	182.98
5	5	3.53	0.00	-39.36	182.98
5	6	4.70	0.00	-31.09	224.39
6	6	4.70	0.00	-31.09	224.39
6	7	5.88	0.00	-22.81	256.05
7	7	5.88	0.00	-22.81	256.05
7	8	7.05	0.00	-14.54	278.00
8	8	7.05	0.00	-14.54	278.00
8	9	8.23	0.00	-6.27	290.21
9	9	8.23	0.00	-6.27	290.21
9	10	9.40	0.00	2.02	292.71
10	10	9.40	0.00	2.02	292.71
10	11	10.58	0.00	10.29	285.48
11	11	10.58	0.00	10.29	285.48
11	12	11.75	0.00	18.57	268.52
12	12	11.75	0.00	18.57	268.52
12	13	12.93	0.00	26.85	241.85
13	13	12.93	0.00	26.85	241.85
13	14	14.10	0.00	35.13	205.43
14	14	14.10	0.00	35.13	205.43
14	15	15.28	0.00	43.40	159.31
15	15	15.28	0.00	43.40	159.31
15	16	16.45	0.00	51.68	103.45
16	16	16.45	-0.53	51.68	103.45
16	17	17.63	-0.61	59.96	37.86
17	17	17.63	-0.61	59.96	37.86
17	18	18.80	-1.00	93.48	-48.69
18	18	18.80	-0.01	93.50	-48.69
18	19	19.98	-0.01	104.85	-165.20
19	19	19.98	-0.01	104.85	-165.20
19	20	21.15	-1.06	119.70	-297.22
20	20	21.15	0.00	119.86	-297.22
20	21	22.33	0.00	134.72	-446.80
21	21	22.33	0.00	134.72	-446.80
21	22	22.50	0.00	136.93	-470.57
22	22	22.50	0.00	136.93	-470.57
22	23	23.50	0.00	149.57	-613.83
23	1023	23.50	0.00	-153.10	-613.83
23	24	24.50	0.00	-140.47	-467.04
24	24	24.50	0.00	-140.47	-467.04
24	25	24.95	0.00	-134.77	-405.11
25	25	24.95	0.00	-134.77	-405.11
25	26	26.40	0.00	-116.43	-223.00
26	26	26.40	-1.02	-116.31	-223.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-97.97	-67.57
27	27	27.85	0.04	-97.97	-67.57
27	28	29.30	0.04	-61.15	46.86
28	28	29.30	-0.50	-61.14	46.86
28	29	30.75	-0.42	-50.93	128.10
29	29	30.75	-0.42	-50.93	128.10
29	30	32.20	-0.34	-40.71	194.53
30	30	32.20	0.00	-40.71	194.53
30	31	33.65	0.00	-30.49	246.17
31	31	33.65	0.00	-30.49	246.17
31	32	35.10	0.00	-20.29	282.98
32	32	35.10	0.00	-20.29	282.98
32	33	36.55	0.00	-10.07	304.98
33	33	36.55	0.00	-10.07	304.98
33	34	38.00	0.00	0.14	312.18
34	34	38.00	0.00	0.14	312.18
34	35	39.45	0.00	10.36	304.56
35	35	39.45	0.00	10.36	304.56
35	36	40.90	0.00	20.58	282.13
36	36	40.90	0.00	20.58	282.13
36	37	42.35	0.00	30.79	244.90
37	37	42.35	0.00	30.79	244.90
37	38	43.80	0.00	41.00	192.86
38	38	43.80	-0.34	41.00	192.86
38	39	45.25	-0.42	51.21	126.00
39	39	45.25	-0.42	51.21	126.00
39	40	46.70	-0.51	61.43	44.34
40	40	46.70	-0.04	61.43	44.34
40	41	48.15	-0.04	98.28	-70.89
41	41	48.15	-0.04	98.28	-70.89
41	42	49.60	-1.09	116.64	-226.77
42	42	49.60	0.00	116.77	-226.77
42	43	51.05	0.00	135.10	-409.37
43	43	51.05	0.00	135.10	-409.37
43	44	51.50	0.00	140.79	-471.43
44	44	51.50	0.00	140.79	-471.43
44	45	52.50	0.00	153.43	-618.55
45	1045	52.50	0.00	-151.47	-618.55
45	46	53.50	0.00	-138.82	-473.41
46	46	53.50	0.00	-138.82	-473.41
46	47	53.95	0.00	-133.12	-412.22
47	47	53.95	0.00	-133.12	-412.22
47	48	55.40	0.00	-114.79	-232.48
48	48	55.40	-1.04	-114.66	-232.48
48	49	56.85	0.01	-96.33	-79.44
49	49	56.85	0.01	-96.33	-79.44
49	50	58.30	0.01	-59.93	35.67
50	50	58.30	-0.50	-59.93	35.67
50	51	59.75	-0.42	-49.72	115.15
51	51	59.75	-0.42	-49.72	115.15
51	52	61.20	-0.33	-39.50	179.84

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-39.50	179.84
52	53	62.65	0.00	-29.29	229.72
53	53	62.65	0.00	-29.29	229.72
53	54	64.10	0.00	-19.07	264.77
54	54	64.10	0.00	-19.07	264.77
54	55	65.55	0.00	-8.87	285.03
55	55	65.55	0.00	-8.87	285.03
55	56	67.00	0.00	1.36	290.48
56	56	67.00	0.00	1.36	290.48
56	57	68.45	0.00	11.57	281.10
57	57	68.45	0.00	11.57	281.10
57	58	69.90	0.00	21.77	256.94
58	58	69.90	0.00	21.77	256.94
58	59	71.35	0.00	31.99	217.95
59	59	71.35	0.00	31.99	217.95
59	60	72.80	0.00	42.20	164.15
60	60	72.80	-0.35	42.20	164.15
60	61	74.25	-0.44	52.42	95.56
61	61	74.25	-0.44	52.42	95.56
61	62	75.70	-0.52	62.63	12.15
62	62	75.70	-0.01	62.63	12.15
62	63	77.15	-0.01	99.93	-116.10
63	63	77.15	-0.01	99.93	-116.10
63	64	78.60	-1.07	118.26	-274.36
64	64	78.60	0.00	118.39	-274.36
64	65	80.05	0.00	136.73	-459.33
65	65	80.05	0.00	136.73	-459.33
65	66	80.50	0.00	142.43	-522.15
66	66	80.50	0.00	142.43	-522.15
66	67	81.50	0.00	155.08	-670.91
67	1067	81.50	0.00	-164.14	-670.91
67	68	82.50	0.00	-151.50	-513.08
68	68	82.50	0.00	-151.50	-513.08
68	69	83.08	0.00	-144.23	-428.06
69	69	83.08	0.00	-144.23	-428.06
69	70	84.65	0.00	-124.30	-216.59
70	70	84.65	-1.03	-124.18	-216.59
70	71	86.23	0.03	-104.27	-36.61
71	71	86.23	0.03	-104.27	-36.61
71	72	87.80	0.03	-64.82	83.62
72	72	87.80	-0.50	-64.82	83.62
72	73	89.38	-0.42	-53.73	176.97
73	73	89.38	-0.42	-53.73	176.97
73	74	90.95	-0.32	-42.63	252.85
74	74	90.95	0.00	-42.63	252.85
74	75	92.53	0.00	-31.54	311.25
75	75	92.53	0.00	-31.54	311.25
75	76	94.10	0.00	-20.44	352.19
76	76	94.10	0.00	-20.44	352.19
76	77	95.68	0.00	-9.35	375.65
77	77	95.68	0.00	-9.35	375.65

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg**Permanentes Fisuración**

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	1.74	381.64
78	78	97.25	0.00	1.74	381.64
78	79	98.83	0.00	12.84	370.15
79	79	98.83	0.00	12.84	370.15
79	80	100.40	0.00	23.93	341.19
80	80	100.40	0.00	23.93	341.19
80	81	101.98	0.00	35.03	294.76
81	81	101.98	0.00	35.03	294.76
81	82	103.55	0.00	46.12	230.85
82	82	103.55	-0.35	46.12	230.85
82	83	105.13	-0.44	57.21	149.47
83	83	105.13	-0.44	57.21	149.47
83	84	106.70	-0.52	68.31	50.62
84	84	106.70	-0.03	68.31	50.62
84	85	108.28	-0.03	108.90	-87.75
85	85	108.28	-0.03	108.90	-87.75
85	86	109.85	-1.08	128.82	-275.06
86	86	109.85	0.00	128.94	-275.06
86	87	111.43	0.00	148.86	-493.82
87	87	111.43	0.00	148.86	-493.82
87	88	112.00	0.00	156.13	-581.53
88	88	112.00	0.00	156.13	-581.53
88	89	113.00	0.00	168.80	-743.97
89	1089	113.00	0.00	-169.17	-743.97
89	90	114.00	0.00	-156.50	-581.13
90	90	114.00	0.00	-156.50	-581.13
90	91	114.58	0.00	-149.23	-493.23
91	91	114.58	0.00	-149.23	-493.23
91	92	116.15	0.00	-129.30	-273.88
92	92	116.15	-1.10	-129.18	-273.88
92	93	117.73	-0.05	-109.26	-86.00
93	93	117.73	-0.05	-109.26	-86.00
93	94	119.30	-0.05	-68.59	52.46
94	94	119.30	-0.52	-68.60	52.46
94	95	120.88	-0.44	-57.50	151.77
95	95	120.88	-0.44	-57.50	151.77
95	96	122.45	-0.36	-46.41	233.63
96	96	122.45	0.00	-46.41	233.63
96	97	124.03	0.00	-35.32	297.98
97	97	124.03	0.00	-35.32	297.98
97	98	125.60	0.00	-24.22	344.87
98	98	125.60	0.00	-24.22	344.87
98	99	127.18	0.00	-13.13	374.29
99	99	127.18	0.00	-13.13	374.29
99	100	128.75	0.00	-2.03	386.25
100	100	128.75	0.00	-2.03	386.25
100	101	130.33	0.00	9.06	380.72
101	101	130.33	0.00	9.06	380.72
101	102	131.90	0.00	20.15	357.72
102	102	131.90	0.00	20.15	357.72
102	103	133.48	0.00	31.25	317.25

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg**Permanentes Fisuración**

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	31.25	317.25
103	104	135.05	0.00	42.34	259.30
104	104	135.05	-0.32	42.34	259.30
104	105	136.63	-0.40	53.44	183.87
105	105	136.63	-0.40	53.44	183.87
105	106	138.20	-0.50	64.53	90.98
106	106	138.20	0.05	64.54	90.98
106	107	139.78	0.05	103.91	-26.71
107	107	139.78	0.05	103.91	-26.71
107	108	141.35	-1.01	123.82	-206.11
108	108	141.35	0.00	123.93	-206.11
108	109	142.93	0.00	143.86	-416.98
109	109	142.93	0.00	143.86	-416.98
109	110	143.50	0.00	151.13	-501.81
110	110	143.50	0.00	151.13	-501.81
110	111	144.50	0.00	163.78	-659.26
111	1111	144.50	0.00	-151.58	-659.26
111	112	145.50	0.00	-138.93	-513.98
112	112	145.50	0.00	-138.93	-513.98
112	113	145.68	0.00	-136.72	-489.88
113	113	145.68	0.00	-136.72	-489.88
113	114	146.85	0.00	-121.86	-337.96
114	114	146.85	-1.11	-121.70	-337.96
114	115	148.03	-0.06	-106.84	-203.60
115	115	148.03	-0.06	-106.84	-203.60
115	116	149.20	-0.06	-95.47	-84.74
116	116	149.20	-1.01	-95.48	-84.74
116	117	150.38	-0.63	-61.47	12.59
117	117	150.38	-0.63	-61.47	12.59
117	118	151.55	-0.54	-53.19	79.95
118	118	151.55	0.00	-53.19	79.95
118	119	152.73	0.00	-44.92	137.58
119	119	152.73	0.00	-44.92	137.58
119	120	153.90	0.00	-36.64	185.49
120	120	153.90	0.00	-36.64	185.49
120	121	155.08	0.00	-28.37	223.68
121	121	155.08	0.00	-28.37	223.68
121	122	156.25	0.00	-20.09	252.14
122	122	156.25	0.00	-20.09	252.14
122	123	157.43	0.00	-11.81	270.88
123	123	157.43	0.00	-11.81	270.88
123	124	158.60	0.00	-3.53	279.89
124	124	158.60	0.00	-3.53	279.89
124	125	159.78	0.00	4.74	279.19
125	125	159.78	0.00	4.74	279.19
125	126	160.95	0.00	13.02	268.74
126	126	160.95	0.00	13.02	268.74
126	127	162.13	0.00	21.29	248.58
127	127	162.13	0.00	21.29	248.58
127	128	163.30	0.00	29.57	218.68
128	128	163.30	0.00	29.57	218.68

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PERMneg

Permanentes Fisuración

[1; 1]HBCP + [1; 1]HVOL + [1; 1]CMRESTO + [.7; 1.3]CMBAL

Coef. exc:

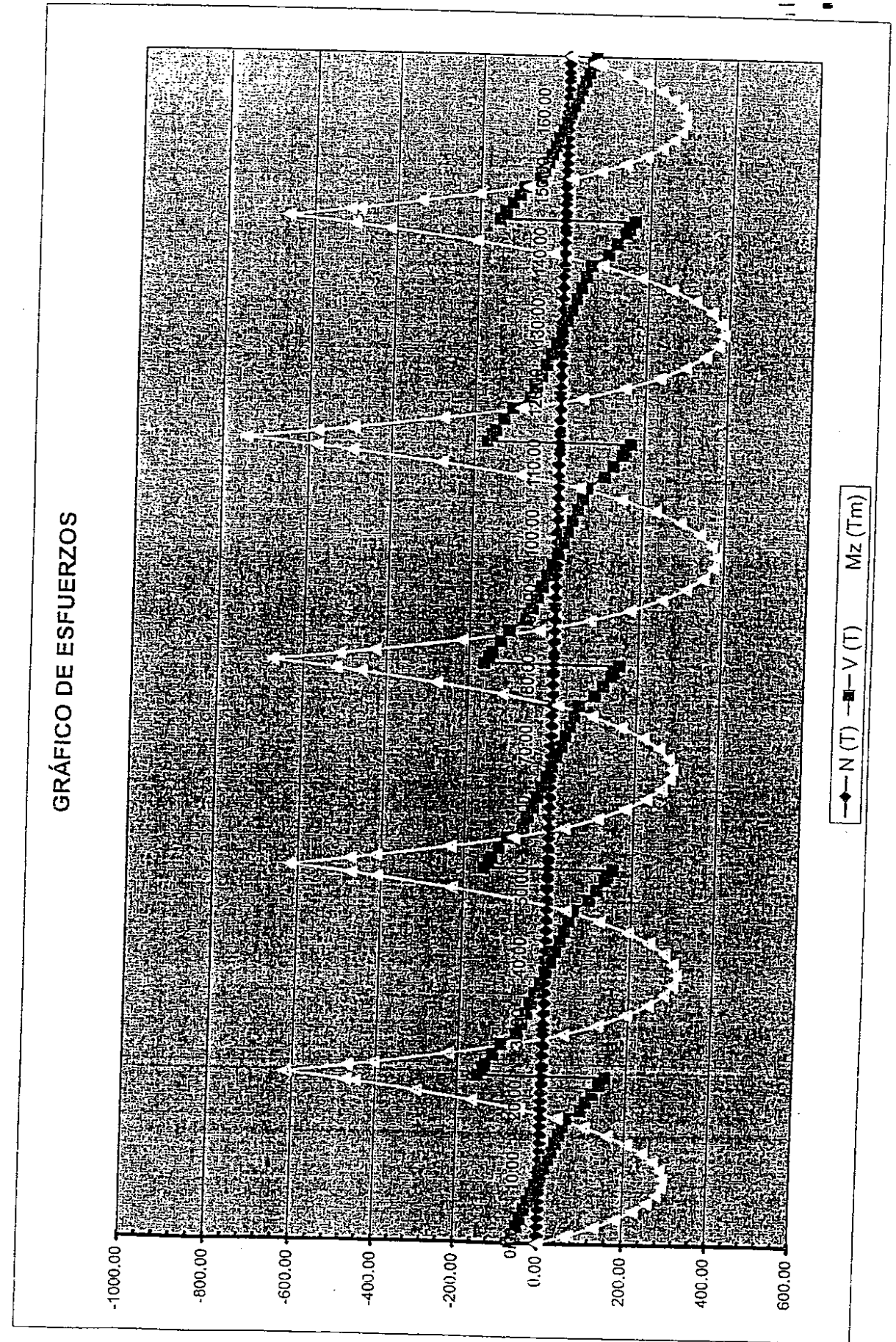
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	37.85	179.06
129	129	164.48	0.00	37.85	179.06
129	130	165.65	0.00	46.13	129.72
130	130	165.65	0.00	46.13	129.72
130	131	166.83	0.00	54.41	70.66
131	131	166.83	0.00	54.41	70.66
131	132	167.00	0.00	55.63	61.03
132	132	167.00	0.00	55.63	61.03
132	133	168.00	0.00	62.68	1.87

fisuración Iter4.xls

Programa DINTEL IDEAM S.A.
PERMneg

28/08/01

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-64.20	0.45
1	2	1.00	0.00	-31.09	35.06
2	2	1.00	0.00	-31.09	35.06
2	3	1.18	0.00	-29.86	40.41
3	3	1.18	0.00	-29.86	40.41
3	4	2.35	0.00	-21.58	70.63
4	4	2.35	0.00	-21.58	70.63
4	5	3.53	0.00	-13.30	91.12
5	5	3.53	0.00	-13.30	91.12
5	6	4.70	0.00	-5.03	101.89
6	6	4.70	0.00	-5.03	101.89
6	7	5.88	0.00	3.25	102.94
7	7	5.88	0.00	3.25	102.94
7	8	7.05	0.00	11.52	94.27
8	8	7.05	0.00	11.52	94.27
8	9	8.23	0.00	19.79	75.85
9	9	8.23	0.00	19.79	75.85
9	10	9.40	0.00	28.08	47.73
10	10	9.40	0.00	28.08	47.73
10	11	10.58	0.00	36.35	9.89
11	11	10.58	0.00	36.35	9.89
11	12	11.75	0.00	44.63	-37.70
12	12	11.75	0.00	44.63	-37.70
12	13	12.93	0.00	52.91	-94.99
13	13	12.93	0.00	52.91	-94.99
13	14	14.10	0.00	61.18	-162.04
14	14	14.10	0.00	61.18	-162.04
14	15	15.28	0.00	69.45	-238.79
15	15	15.28	0.00	69.45	-238.79
15	16	16.45	0.00	77.74	-325.26
16	16	16.45	-0.83	77.74	-325.26
16	17	17.63	-0.91	86.02	-421.47
17	17	17.63	-0.91	86.02	-421.47
17	18	18.80	-1.30	119.54	-538.66
18	18	18.80	-0.01	119.56	-538.66
18	19	19.98	-0.01	146.71	-688.91
19	19	19.98	-0.01	146.71	-688.91
19	20	21.15	-1.06	217.95	-908.12
20	20	21.15	0.00	218.11	-908.12
20	21	22.33	0.00	300.80	-1214.99
21	21	22.33	0.00	300.80	-1214.99
21	22	22.50	0.00	316.59	-1269.38
22	22	22.50	0.00	316.59	-1269.38
22	23	23.50	0.00	359.64	-1607.24
23	1023	23.50	0.00	-387.64	-1607.24
23	24	24.50	0.00	-336.15	-1242.56
24	24	24.50	0.00	-336.15	-1242.56
24	25	24.95	0.00	-313.32	-1093.17
25	25	24.95	0.00	-313.32	-1093.17
25	26	26.40	0.00	-226.79	-695.58
26	26	26.40	-1.02	-226.67	-695.58

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.04	-154.51	-422.37
27	27	27.85	0.04	-154.51	-422.37
27	28	29.30	0.04	-56.95	-270.65
28	28	29.30	-0.47	-56.94	-270.65
28	29	30.75	-0.38	-46.73	-195.53
29	29	30.75	-0.38	-46.73	-195.53
29	30	32.20	-0.30	-36.51	-135.20
30	30	32.20	0.00	-36.51	-135.20
30	31	33.65	0.00	-26.29	-89.69
31	31	33.65	0.00	-26.29	-89.69
31	32	35.10	0.00	-16.08	-58.97
32	32	35.10	0.00	-16.08	-58.97
32	33	36.55	0.00	-5.87	-43.09
33	33	36.55	0.00	-5.87	-43.09
33	34	38.00	0.00	10.26	-49.25
34	34	38.00	0.00	10.26	-49.25
34	35	39.45	0.00	20.48	-71.54
35	35	39.45	0.00	20.48	-71.54
35	36	40.90	0.00	30.70	-108.65
36	36	40.90	0.00	30.70	-108.65
36	37	42.35	0.00	40.90	-160.55
37	37	42.35	0.00	40.90	-160.55
37	38	43.80	0.00	51.12	-227.27
38	38	43.80	-0.44	51.12	-227.27
38	39	45.25	-0.52	61.33	-308.79
39	39	45.25	-0.52	61.33	-308.79
39	40	46.70	-0.61	71.55	-405.12
40	40	46.70	-0.04	71.55	-405.12
40	41	48.15	-0.04	142.13	-553.04
41	41	48.15	-0.04	142.13	-553.04
41	42	49.60	-1.09	214.60	-815.58
42	42	49.60	0.00	214.73	-815.58
42	43	51.05	0.00	309.51	-1194.57
43	43	51.05	0.00	309.51	-1194.57
43	44	51.50	0.00	331.59	-1341.02
44	44	51.50	0.00	331.59	-1341.02
44	45	52.50	0.00	384.67	-1703.68
45	1045	52.50	0.00	-387.99	-1703.68
45	46	53.50	0.00	-334.74	-1336.85
46	46	53.50	0.00	-334.74	-1336.85
46	47	53.95	0.00	-312.60	-1188.68
47	47	53.95	0.00	-312.60	-1188.68
47	48	55.40	0.00	-217.15	-802.86
48	48	55.40	-1.04	-217.02	-802.86
48	49	56.85	0.01	-150.07	-535.25
49	49	56.85	0.01	-150.07	-535.25
49	50	58.30	0.01	-58.03	-389.33
50	50	58.30	-0.50	-58.03	-389.33
50	51	59.75	-0.42	-47.82	-312.59
51	51	59.75	-0.42	-47.82	-312.59
51	52	61.20	-0.33	-37.61	-250.65

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuracion

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-37.61	-250.65
52	53	62.65	0.00	-27.40	-203.51
53	53	62.65	0.00	-27.40	-203.51
53	54	64.10	0.00	-17.18	-171.20
54	54	64.10	0.00	-17.18	-171.20
54	55	65.55	0.00	-6.97	-153.68
55	55	65.55	0.00	-6.97	-153.68
55	56	67.00	0.00	10.52	-157.48
56	56	67.00	0.00	10.52	-157.48
56	57	68.45	0.00	20.72	-180.15
57	57	68.45	0.00	20.72	-180.15
57	58	69.90	0.00	30.92	-217.59
58	58	69.90	0.00	30.92	-217.59
58	59	71.35	0.00	41.14	-269.86
59	59	71.35	0.00	41.14	-269.86
59	60	72.80	0.00	51.35	-336.95
60	60	72.80	-0.42	51.35	-336.95
60	61	74.25	-0.51	61.57	-418.81
61	61	74.25	-0.51	61.57	-418.81
61	62	75.70	-0.59	71.79	-515.52
62	62	75.70	-0.01	71.79	-515.52
62	63	77.15	-0.01	145.14	-671.52
63	63	77.15	-0.01	145.14	-671.52
63	64	78.60	-1.07	223.06	-936.11
64	64	78.60	0.00	223.19	-936.11
64	65	80.05	0.00	297.83	-1315.82
65	65	80.05	0.00	297.83	-1315.82
65	66	80.50	0.00	339.88	-1460.98
66	66	80.50	0.00	339.88	-1460.98
66	67	81.50	0.00	392.61	-1828.47
67	1067	81.50	0.00	-412.94	-1828.47
67	68	82.50	0.00	-360.75	-1435.55
68	68	82.50	0.00	-360.75	-1435.55
68	69	83.08	0.00	-331.20	-1232.31
69	69	83.08	0.00	-331.20	-1232.31
69	70	84.65	0.00	-228.62	-789.49
70	70	84.65	-1.03	-228.50	-789.49
70	71	86.23	0.03	-155.87	-484.81
71	71	86.23	0.03	-155.87	-484.81
71	72	87.80	0.03	-64.87	-333.23
72	72	87.80	-0.50	-64.87	-333.23
72	73	89.38	-0.42	-53.78	-239.82
73	73	89.38	-0.42	-53.78	-239.82
73	74	90.95	-0.32	-42.68	-163.88
74	74	90.95	0.00	-42.68	-163.88
74	75	92.53	0.00	-31.59	-105.39
75	75	92.53	0.00	-31.59	-105.39
75	76	94.10	0.00	-20.49	-64.38
76	76	94.10	0.00	-20.49	-64.38
76	77	95.68	0.00	-9.40	-40.86
77	77	95.68	0.00	-9.40	-40.86

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuracion

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	8.01	-40.30
78	78	97.25	0.00	8.01	-40.30
78	79	98.83	0.00	19.11	-61.66
79	79	98.83	0.00	19.11	-61.66
79	80	100.40	0.00	30.20	-100.52
80	80	100.40	0.00	30.20	-100.52
80	81	101.98	0.00	41.30	-156.81
81	81	101.98	0.00	41.30	-156.81
81	82	103.55	0.00	52.39	-230.61
82	82	103.55	-0.41	52.39	-230.61
82	83	105.13	-0.50	63.48	-321.87
83	83	105.13	-0.50	63.48	-321.87
83	84	106.70	-0.58	74.58	-430.60
84	84	106.70	-0.03	74.58	-430.60
84	85	108.28	-0.03	151.26	-597.19
85	85	108.28	-0.03	151.26	-597.19
85	86	109.85	-1.08	236.06	-903.13
86	86	109.85	0.00	236.18	-903.13
86	87	111.43	0.00	317.33	-1343.43
87	87	111.43	0.00	317.33	-1343.43
87	88	112.00	0.00	363.14	-1545.04
88	88	112.00	0.00	363.14	-1545.04
88	89	113.00	0.00	419.34	-1942.74
89	1089	113.00	0.00	-416.21	-1942.74
89	90	114.00	0.00	-360.06	-1548.39
90	90	114.00	0.00	-360.06	-1548.39
90	91	114.58	0.00	-314.37	-1349.19
91	91	114.58	0.00	-314.37	-1349.19
91	92	116.15	0.00	-233.41	-913.92
92	92	116.15	-1.10	-233.29	-913.92
92	93	117.73	-0.05	-149.06	-612.79
93	93	117.73	-0.05	-149.06	-612.79
93	94	119.30	-0.05	-81.02	-443.05
94	94	119.30	-0.64	-81.03	-443.05
94	95	120.88	-0.56	-69.93	-324.16
95	95	120.88	-0.56	-69.93	-324.16
95	96	122.45	-0.48	-58.84	-222.74
96	96	122.45	0.00	-58.84	-222.74
96	97	124.03	0.00	-47.75	-138.81
97	97	124.03	0.00	-47.75	-138.81
97	98	125.60	0.00	-36.65	-72.35
98	98	125.60	0.00	-36.65	-72.35
98	99	127.18	0.00	-25.56	-23.36
99	99	127.18	0.00	-25.56	-23.36
99	100	128.75	0.00	-14.46	8.17
100	100	128.75	0.00	-14.46	8.17
100	101	130.33	0.00	-3.37	22.22
101	101	130.33	0.00	-3.37	22.22
101	102	131.90	0.00	13.45	13.00
102	102	131.90	0.00	13.45	13.00
102	103	133.48	0.00	24.54	-16.92

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	24.54	-16.92
103	104	135.05	0.00	35.64	-64.30
104	104	135.05	-0.26	35.64	-64.30
104	105	136.63	-0.34	46.73	-129.16
105	105	136.63	-0.34	46.73	-129.16
105	106	138.20	-0.44	57.82	-211.48
106	106	138.20	0.05	57.83	-211.48
106	107	139.78	0.05	159.72	-365.44
107	107	139.78	0.05	159.72	-365.44
107	108	141.35	-1.01	238.34	-674.34
108	108	141.35	0.00	238.45	-674.34
108	109	142.93	0.00	331.55	-1128.80
109	109	142.93	0.00	331.55	-1128.80
109	110	143.50	0.00	375.45	-1331.28
110	110	143.50	0.00	375.45	-1331.28
110	111	144.50	0.00	411.93	-1724.27
111	111	144.50	0.00	-365.12	-1724.27
111	112	145.50	0.00	-317.64	-1383.16
112	112	145.50	0.00	-317.64	-1383.16
112	113	145.68	0.00	-286.67	-1329.05
113	113	145.68	0.00	-286.67	-1329.05
113	114	146.85	0.00	-223.80	-1026.79
114	114	146.85	-1.11	-223.64	-1026.79
114	115	148.03	-0.06	-144.16	-810.16
115	115	148.03	-0.06	-144.16	-810.16
115	116	149.20	-0.06	-125.80	-655.21
116	116	149.20	-1.36	-125.81	-655.21
116	117	150.38	-0.98	-91.80	-522.22
117	117	150.38	-0.98	-91.80	-522.22
117	118	151.55	-0.89	-83.52	-419.20
118	118	151.55	0.00	-83.53	-419.20
118	119	152.73	0.00	-75.25	-325.91
119	119	152.73	0.00	-75.25	-325.91
119	120	153.90	0.00	-66.97	-242.36
120	120	153.90	0.00	-66.97	-242.36
120	121	155.08	0.00	-58.70	-168.51
121	121	155.08	0.00	-58.70	-168.51
121	122	156.25	0.00	-50.42	-104.40
122	122	156.25	0.00	-50.42	-104.40
122	123	157.43	0.00	-42.15	-49.99
123	123	157.43	0.00	-42.15	-49.99
123	124	158.60	0.00	-33.87	-5.34
124	124	158.60	0.00	-33.87	-5.34
124	125	159.78	0.00	-25.60	29.61
125	125	159.78	0.00	-25.60	29.61
125	126	160.95	0.00	-17.32	54.81
126	126	160.95	0.00	-17.32	54.81
126	127	162.13	0.00	-9.04	70.31
127	127	162.13	0.00	-9.04	70.31
127	128	163.30	0.00	-0.77	76.07
128	128	163.30	0.00	-0.77	76.07

CÁLCULO TENSIONAL

Hipótesis de cálculo:

INFRECneg

Infrecuentes Fisuración

Coef. exc:

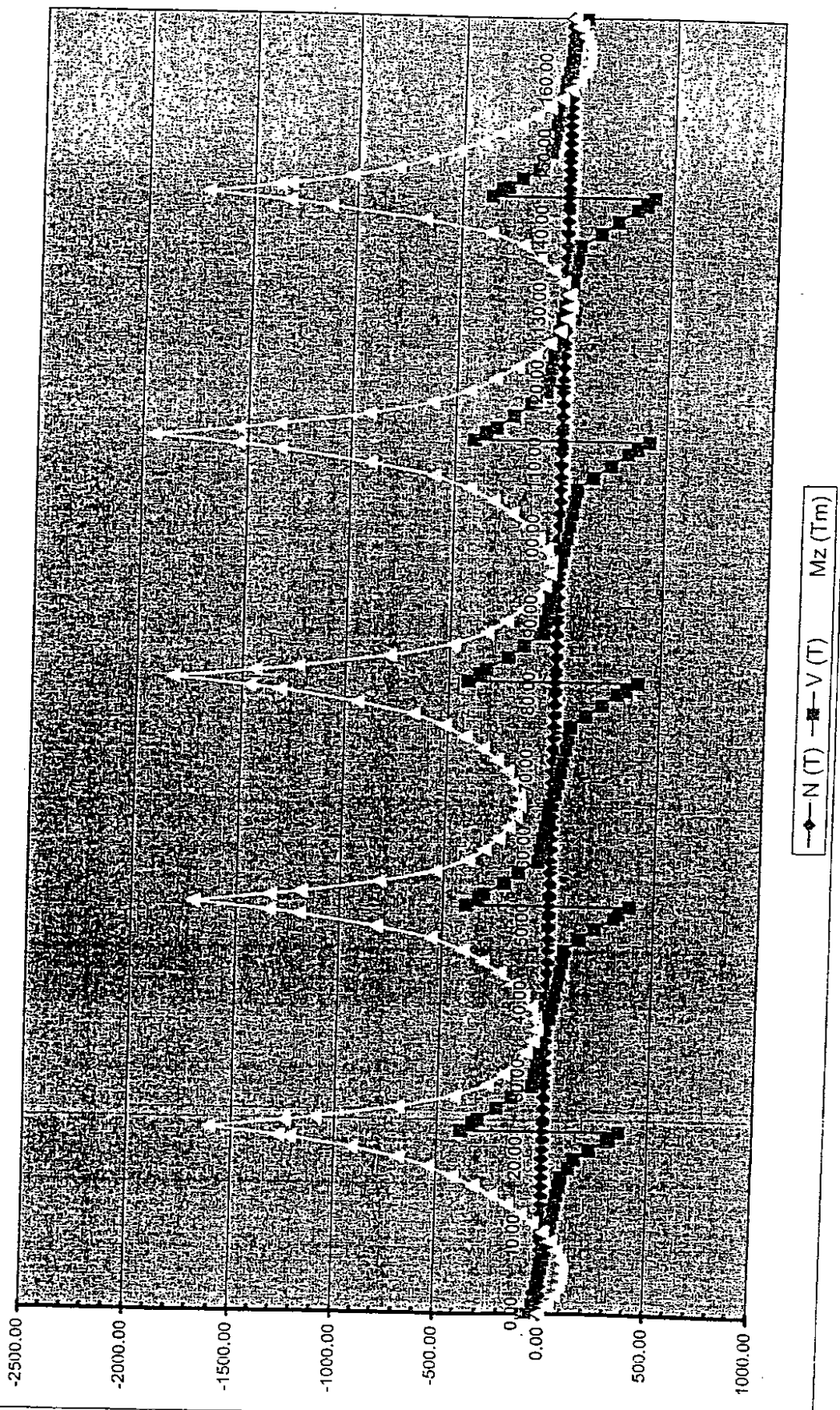
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	7.52	72.10
129	129	164.48	0.00	7.52	72.10
129	130	165.65	0.00	15.80	58.41
130	130	165.65	0.00	15.80	58.41
130	131	166.83	0.00	24.07	35.01
131	131	166.83	0.00	24.07	35.01
131	132	167.00	0.00	25.30	30.69
132	132	167.00	0.00	25.30	30.69
132	133	168.00	0.00	62.68	1.87

Programa DINTEL IDEAM S.A.
INFRECneg

08/01

tsurf-...on Iter4.xls

GRÁFICO DE ESFUERZOS



ARRA		NUDO		M-	IO	PILA P-1		Inueva	Imedia barra	Δ	Δ inicial
						I M-X					
17					2.24241						
18		19		-688.91	2.16489	2.319927		2.26825	2.26825	1%	-2%
19		19		-688.91	1.95359	2.319927		2.19781	2.21657	2%	-4%
19		20		-908.12	1.95359	1.660009		1.75787	1.97784	1%	-15%
20		20		-908.12	1.38889	1.660009		1.56964	1.39102	1%	-15%
20		21		-1214.99	1.38889	1.124173		1.21241	1.39102	0%	-40%
21		21		-1214.99	1.09866	1.124173		1.11567	1.09495	0%	-40%
21		22		-1269.38	1.09866	1.061998		1.07422	1.09495	0%	-53%
22		22		-1269.38	0.96211	1.061998		1.02870	0.95487	0%	-53%
22		23		-1607.24	0.96211	0.840493		0.88103	0.95487	-1%	-59%
23		1023		-1607.24	0.97662	0.840493		0.88587	0.96992	-1%	-59%
23		24		-1242.56	0.97662	1.092656		1.05398	0.96992	-1%	-58%
24		24		-1242.56	1.19691	1.092656		1.12741	1.18434	-1%	-49%
24		25		-1093.17	1.19691	1.263443		1.24127	1.18434	-1%	-49%
25		25		-1093.17	1.77169	1.263443		1.43286	1.78502	1%	-23%
25		26		-695.58	1.77169	2.319927		2.13718	1.78502	1%	-23%
26		26		-695.58	2.27458	2.319927		2.30481	2.30481	1%	-1%
26		27		-422.37	2.27458	2.319927		2.30481	2.30481	1%	-1%
27		27		-422.37	2.28365	2.319927		2.30783	2.29574	1%	-1%
28					2.30179				2.30783	0%	-1%

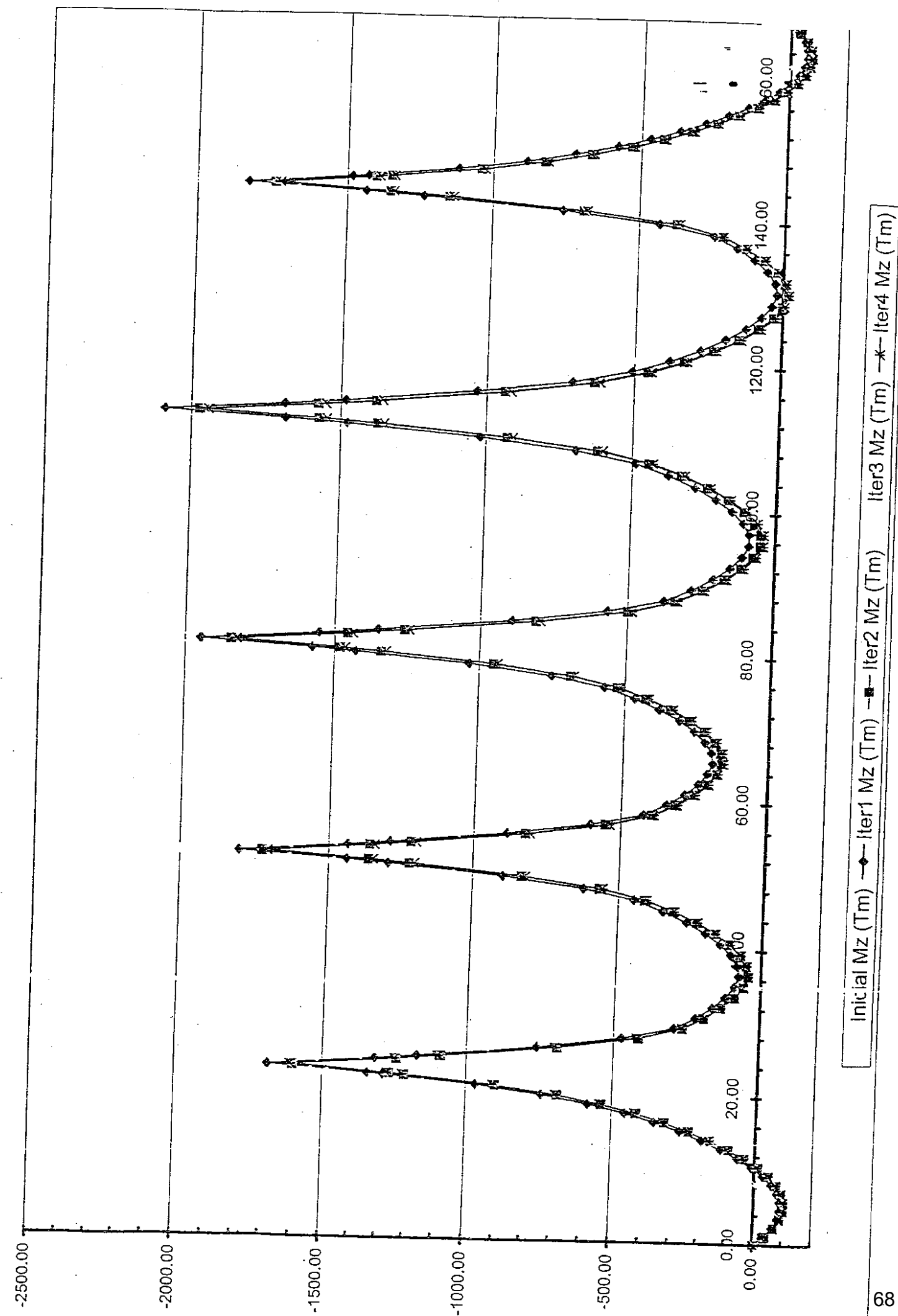
ARRA		NUDO		M-	IO	PILA P-2		Inueva	Imedia barra	Δ	Δ inicial
						I M-X					
39					2.31993						
40		41		-553.04	2.31993	2.319927		2.31993	2.31993	0%	0%
41		41		-553.04	2.08321	2.319927		2.24102	2.09348	0%	0%
41		42		-815.58	2.08321	1.877315		1.94595	2.09348	0%	-10%
42		42		-815.58	1.49450	1.877315		1.74971	1.50645	1%	-35%
42		43		-1194.57	1.49450	1.147525		1.26318	1.50645	1%	-35%
43		43		-1194.57	1.07058	1.147525		1.12188	1.07112	0%	-54%
43		44		-1341.02	1.07058	0.995247		1.02036	1.07112	0%	-54%
44		44		-1341.02	0.91120	0.995247		0.96723	0.90557	-1%	-61%
44		45		-1703.68	0.91120	0.810270		0.84391	0.90557	-1%	-61%
45		1045		-1703.68	0.91264	0.810270		0.84439	0.90708	-1%	-61%
45		46		-1336.85	0.91264	0.998317		0.96976	0.90708	-1%	-61%
46		46		-1336.85	1.07516	0.998317		1.02393	1.07591	0%	-54%
46		47		-1188.68	1.07516	1.154254		1.12789	1.07591	0%	-54%
47		47		-1188.68	1.51174	1.154254		1.27342	1.52439	1%	-34%
47		48		-802.86	1.51174	1.907168		1.77536	1.52439	1%	-34%
48		48		-802.86	2.09731	1.907168		1.97055	2.10814	1%	-9%
48		49		-535.25	2.09731	2.319927		2.24572	2.10814	1%	-9%
49		49		-535.25	2.31993	2.319927		2.31993	2.31993	0%	0%
50					2.31993				2.31993	0%	0%

ARRA		NUDO		M-	IO	PILA P-3		Inueva	Imedia barra	Δ	Δ inicial
						I M-X					
61					2.26383						
62		63		-671.52	2.20774	2.319927		2.28253	2.28253	1%	-2%
63		63		-671.52	1.92344	2.319927		2.18776	2.24514	2%	-3%
63		64		-936.11	1.92344	1.594273		1.70399	1.94588	1%	-16%
64		64		-936.11	1.29008	1.594273		1.49287	1.29939	1%	-16%
64		65		-1315.82	1.29008	1.013830		1.10591	1.29939	1%	-44%
65		65		-1315.82	0.96557	1.013830		0.99774	0.96291	0%	-58%
65		66		-1460.98	0.96557	0.909342		0.92808	0.96291	0%	-58%
66		66		-1460.98	0.85502	0.909342		0.89123	0.84777	-1%	-63%
66		67		-1828.47	0.85502	0.778955		0.80431	0.84777	-1%	-63%
67		1067		-1828.47	0.86191	0.778955		0.80661	0.85547	-1%	-63%
67		68		-1435.55	0.86191	0.925535		0.90433	0.85547	-1%	-63%
68		68		-1435.55	1.01373	0.925535		0.95493	1.01455	0%	-56%
68		69		-1232.31	1.01373	1.104379		1.07416	1.01455	0%	-56%
69		69		-1232.31	1.49743	1.104379		1.23540	1.51346	1%	-35%
69		70		-789.49	1.49743	1.938576		1.79153	1.51346	1%	-35%
70		70		-789.49	2.09593	1.938576		1.99103	2.11814	1%	-9%
70		71		-484.81	2.09593	2.319927		2.24526	2.11814	1%	-9%
71		71		-484.81	2.26875	2.319927		2.30287	2.28581	1%	-1%
72					2.29434						

PILA P-4								
BARRA	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
83			2.27914			2.29274	1%	-1%
84	85	-597.19	2.23636	2.319927	2.29274	2.26555	1%	-2%
85	85	-597.19	1.96233	2.319927	2.20073	1.98466	1%	-14%
85	86	-903.13	1.96233	1.671716	1.76859	1.98466	1%	-14%
86	86	-903.13	1.31120	1.671716	1.55154	1.32546	1%	-43%
86	87	-1343.43	1.31120	0.993466	1.09938	1.32546	1%	-43%
87	87	-1343.43	0.93397	0.993466	0.97363	0.93219	0%	-60%
87	88	-1545.04	0.93397	0.869123	0.89074	0.93219	0%	-60%
88	88	-1545.04	0.82439	0.869123	0.85421	0.81687	-1%	-65%
88	89	-1942.74	0.82439	0.757114	0.77954	0.81687	-1%	-65%
89	1089	-1942.74	0.82363	0.757114	0.77928	0.81609	-1%	-65%
89	90	-1548.39	0.82363	0.867520	0.85289	0.81609	-1%	-65%
90	90	-1548.39	0.93121	0.867520	0.88875	0.92932	0%	-60%
90	91	-1349.19	0.93121	0.989222	0.96989	0.92932	0%	-60%
91	91	-1349.19	1.29715	0.989222	1.09186	1.31092	1%	-43%
91	92	-913.92	1.29715	1.646382	1.52997	1.31092	1%	-43%
92	92	-913.92	1.94805	1.646382	1.74694	1.97145	1%	-15%
92	93	-612.79	1.94805	2.319927	2.19597	1.97145	1%	-15%
93	93	-612.79	2.22674	2.319927	2.28887	2.25780	1%	-3%
94			2.27334			2.28887	1%	-1%
			0.00000					

PILA P-5								
	NUDO	M-	IO	I M-X	Inueva	Imedia barra	Δ	Δ inicial
105			2.31993			2.31993	0%	0%
106	107	-365.44	2.31993	2.319927	2.31993	2.31993	0%	0%
107	107	-365.44	2.29890	2.319927	2.31292	2.31292	1%	0%
107	108	-674.34	2.29890	2.319927	2.31292	2.31292	1%	0%
108	108	-674.34	1.74667	2.319927	2.12884	1.76748	1%	-24%
108	109	-1128.80	1.74667	1.235830	1.40611	1.76748	1%	-24%
109	109	-1128.80	1.11009	1.235830	1.19392	1.11612	1%	-52%
109	110	-1331.28	1.11009	1.002428	1.03832	1.11612	1%	-52%
110	110	-1331.28	0.91106	1.002428	0.97197	0.90467	-1%	-61%
110	111	-1724.27	0.91106	0.800526	0.83737	0.90467	-1%	-61%
111	1111	-1724.27	0.89295	0.800526	0.83133	0.88588	-1%	-62%
111	112	-1383.16	0.89295	0.964166	0.94043	0.88588	-1%	-62%
112	112	-1383.16	0.98776	0.964166	0.97203	0.98533	0%	-58%
112	113	-1329.05	0.98776	1.004073	0.99864	0.98533	0%	-58%
113	113	-1329.05	1.20189	1.004073	1.07001	1.20660	0%	-48%
113	114	-1026.79	1.20189	1.413843	1.34319	1.20660	0%	-48%
114	114	-1026.79	1.62942	1.413843	1.48570	1.64443	1%	-29%
114	115	-810.16	1.62942	1.890038	1.80317	1.64443	1%	-29%
115	115	-810.16	1.89049	1.890038	1.89019	1.89034	0%	-19%
116			2.10521			2.10513	0%	-9%

GRÁFICO DE ESFUERZOS



Subanejo 4

ESFUERZOS EN ESTADOS DE PRETENSADO

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.To

Pretensado Total (t=0)

$$[1; 1] \text{fase1.FAM1.TOT} + [1; 1] \text{fase1.FAM2.TOT} + [1; 1] \text{fase1.FAM3.TOT} + [1; 1] \text{fase1.FAM4.TOT} + [1; 1] \text{fase1.FAM5.TOT}$$

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	-501.48	0.00	-171.87
2	3	1.18	-501.48	0.00	-171.87
3	3	1.18	-501.48	0.00	-171.87
3	4	2.35	-501.48	0.00	-171.87
4	4	2.35	-923.44	0.00	-435.17
4	5	3.53	-923.44	0.00	-435.17
5	5	3.53	-923.44	0.00	-435.17
5	6	4.70	-923.44	0.00	-435.17
6	6	4.70	-923.44	0.00	-435.17
6	7	5.88	-923.44	0.00	-435.17
7	7	5.88	-923.44	0.00	-435.17
7	8	7.05	-923.44	0.00	-435.17
8	8	7.05	-923.44	0.00	-435.17
8	9	8.23	-923.44	0.00	-435.17
9	9	8.23	-923.44	0.00	-435.17
9	10	9.40	-923.44	0.00	-435.17
10	10	9.40	-923.44	0.00	-435.17
10	11	10.58	-923.44	0.00	-435.17
11	11	10.58	-923.44	0.00	-435.17
11	12	11.75	-923.44	0.00	-435.18
12	12	11.75	-923.44	0.00	-435.18
12	13	12.93	-923.44	0.00	-435.18
13	13	12.93	-923.44	0.00	-435.18
13	14	14.10	-923.44	0.00	-435.18
14	14	14.10	-923.44	0.00	-435.18
14	15	15.28	-923.44	0.00	-435.18
15	15	15.28	-923.44	0.00	-435.18
15	16	16.45	-923.44	0.00	-435.18
16	16	16.45	-923.18	21.82	-435.18
16	17	17.63	-923.18	21.82	-461.03
17	17	17.63	-923.18	21.82	-461.03
17	18	18.80	-923.18	21.82	-486.88
18	18	18.80	-923.44	0.00	-486.88
18	19	19.98	-923.44	0.00	-486.88
19	19	19.98	-923.44	0.00	-486.88
19	20	21.15	-923.44	0.00	-486.88
20	20	21.15	-501.48	0.00	-199.95
20	21	22.33	-501.48	0.00	-199.95
21	21	22.33	-501.48	0.00	-199.95
21	22	22.50	-501.48	0.00	-199.95
22	22	22.50	0.00	0.00	0.00
22	23	23.50	0.00	0.00	0.00
23	1023	23.50	0.00	0.00	0.00
23	24	24.50	0.00	0.00	0.00
24	24	24.50	-539.84	0.00	-226.80
24	25	24.95	-539.84	0.00	-226.80
25	25	24.95	-539.84	0.00	-226.80
25	26	26.40	-539.84	0.00	-226.80
26	26	26.40	-1000.16	0.00	-539.82

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.To

Pretensado Total (t=0)

$$[1; 1] \text{fase1.FAM1.TOT} + [1; 1] \text{fase1.FAM2.TOT} + [1; 1] \text{fase1.FAM3.TOT} + [1; 1] \text{fase1.FAM4.TOT} + [1; 1] \text{fase1.FAM5.TOT}$$

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-1000.16	0.00	-539.82
27	27	27.85	-1000.16	0.00	-539.82
27	28	29.30	-1000.16	0.00	-539.82
28	28	29.30	-1383.51	-26.49	-789.88
28	29	30.75	-1383.51	-26.49	-751.14
29	29	30.75	-1383.51	-26.49	-751.14
29	30	32.20	-1383.51	-26.49	-712.40
30	30	32.20	-1383.76	0.00	-712.40
30	31	33.65	-1383.76	0.00	-712.40
31	31	33.65	-1383.76	0.00	-712.40
31	32	35.10	-1383.76	0.00	-712.40
32	32	35.10	-1383.76	0.00	-712.40
32	33	36.55	-1383.76	0.00	-712.40
33	33	36.55	-1383.76	0.00	-712.40
33	34	38.00	-1383.76	0.00	-712.40
34	34	38.00	-1383.76	0.00	-712.40
34	35	39.45	-1383.76	0.00	-712.40
35	35	39.45	-1383.76	0.00	-712.40
35	36	40.90	-1383.76	0.00	-712.40
36	36	40.90	-1383.76	0.00	-712.40
36	37	42.35	-1383.76	0.00	-712.40
37	37	42.35	-1383.76	0.00	-712.40
37	38	43.80	-1383.76	0.00	-712.40
38	38	43.80	-1383.51	26.49	-712.40
38	39	45.25	-1383.51	26.49	-751.14
39	39	45.25	-1383.51	26.49	-751.14
39	40	46.70	-1383.51	26.49	-789.88
40	40	46.70	-1000.16	0.00	-539.82
40	41	48.15	-1000.16	0.00	-539.82
41	41	48.15	-1000.16	0.00	-539.82
41	42	49.60	-1000.16	0.00	-539.82
42	42	49.60	-539.84	0.00	-226.80
42	43	51.05	-539.84	0.00	-226.80
43	43	51.05	-539.84	0.00	-226.80
43	44	51.50	-539.84	0.00	-226.80
44	44	51.50	0.00	0.00	0.00
44	45	52.50	0.00	0.00	0.00
45	1045	52.50	0.00	0.00	0.00
45	46	53.50	0.00	0.00	0.00
46	46	53.50	-539.84	0.00	-226.80
46	47	53.95	-539.84	0.00	-226.80
47	47	53.95	-539.84	0.00	-226.80
47	48	55.40	-539.84	0.00	-226.80
48	48	55.40	-1000.16	0.00	-539.82
48	49	56.85	-1000.16	0.00	-539.82
49	49	56.85	-1000.16	0.00	-539.82
49	50	58.30	-1000.16	0.00	-539.82
50	50	58.30	-1383.51	-26.49	-789.88
50	51	59.75	-1383.51	-26.49	-751.14
51	51	59.75	-1383.51	-26.49	-751.14
51	52	61.20	-1383.51	-26.49	-712.40

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.To

Pretensado Total (t=0)

$$\{1; 1\} \text{fase1.FAM1.TOT} + \{1; 1\} \text{fase1.FAM2.TOT} + \{1; 1\} \text{fase1.FAM3.TOT} + \{1; 1\} \text{fase1.FAM4.TOT} +$$

Coef. exc-

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	-1383.76	0.00	-712.40
52	53	62.65	-1383.76	0.00	-712.40
53	53	62.65	-1383.76	0.00	-712.40
53	54	64.10	-1383.76	0.00	-712.40
54	54	64.10	-1383.76	0.00	-712.40
54	55	65.55	-1383.76	0.00	-712.40
55	55	65.55	-1383.76	0.00	-712.40
55	56	67.00	-1383.76	0.00	-712.40
56	56	67.00	-1383.76	0.00	-712.40
56	57	68.45	-1383.76	0.00	-712.40
57	57	68.45	-1383.76	0.00	-712.40
57	58	69.90	-1383.76	0.00	-712.40
58	58	69.90	-1383.76	0.00	-712.40
58	59	71.35	-1383.76	0.00	-712.40
59	59	71.35	-1383.76	0.00	-712.40
59	60	72.80	-1383.76	0.00	-712.40
60	60	72.80	-1383.51	26.49	-712.40
60	61	74.25	-1383.51	26.49	-751.14
61	61	74.25	-1383.51	26.49	-751.14
61	62	75.70	-1383.51	26.49	-789.88
62	62	75.70	-1000.16	0.00	-539.82
62	63	77.15	-1000.16	0.00	-539.82
63	63	77.15	-1000.16	0.00	-539.82
63	64	78.60	-1000.16	0.00	-539.82
64	64	78.60	-539.84	0.00	-226.80
64	65	80.05	-539.84	0.00	-226.80
65	65	80.05	-539.84	0.00	-226.80
65	66	80.50	-539.84	0.00	-226.80
66	66	80.50	0.00	0.00	0.00
66	67	81.50	0.00	0.00	0.00
67	1067	81.50	0.00	0.00	0.00
67	68	82.50	0.00	0.00	0.00
68	68	82.50	-616.56	0.00	-280.50
68	69	83.08	-616.56	0.00	-280.50
69	69	83.08	-616.56	0.00	-280.50
69	70	84.65	-616.56	0.00	-280.50
70	70	84.65	-1153.60	0.00	-645.69
70	71	86.23	-1153.60	0.00	-645.69
71	71	86.23	-1153.60	0.00	-645.69
71	72	87.80	-1153.60	0.00	-645.69
72	72	87.80	-1690.38	-29.80	-995.79
72	73	89.38	-1690.38	-29.80	-948.46
73	73	89.38	-1690.38	-29.80	-948.46
73	74	90.95	-1690.38	-29.80	-901.13
74	74	90.95	-1690.64	0.00	-901.13
74	75	92.53	-1690.64	0.00	-901.13
75	75	92.53	-1690.64	0.00	-901.13
75	76	94.10	-1690.64	0.00	-901.13
76	76	94.10	-1690.64	0.00	-901.13
76	77	95.68	-1690.64	0.00	-901.13
77	77	95.68	-1690.64	0.00	-901.13

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.To

Pretensado Total (t=0)

$$\{1;1\}[\text{fase1.FAM1.TOT} + \{1;1\}[\text{fase1.FAM2.TOT} + \{1;1\}[\text{fase1.FAM3.TOT} + \{1;1\}[\text{fase1.FAM4.TOT} + \{1;1\}[\text{fase1.FAM5.TOT}]]]]]$$

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	-1690.64	0.00	-901.13
78	78	97.25	-1690.64	0.00	-901.13
78	79	98.83	-1690.64	0.00	-901.13
79	79	98.83	-1690.64	0.00	-901.13
79	80	100.40	-1690.64	0.00	-901.13
80	80	100.40	-1690.64	0.00	-901.13
80	81	101.98	-1690.64	0.00	-901.13
81	81	101.98	-1690.64	0.00	-901.13
81	82	103.55	-1690.64	0.00	-901.13
82	82	103.55	-1690.38	29.80	-901.13
82	83	105.13	-1690.38	29.80	-948.46
83	83	105.13	-1690.38	29.80	-948.46
83	84	106.70	-1690.38	29.80	-995.79
84	84	106.70	-1153.60	0.00	-645.69
84	85	108.28	-1153.60	0.00	-645.69
85	85	108.28	-1153.60	0.00	-645.69
85	86	109.85	-1153.60	0.00	-645.69
86	86	109.85	-616.56	0.00	-280.50
86	87	111.43	-616.56	0.00	-280.50
87	87	111.43	-616.56	0.00	-280.50
87	88	112.00	-616.56	0.00	-280.50
88	88	112.00	0.00	0.00	0.00
88	89	113.00	0.00	0.00	0.00
89	1089	113.00	0.00	0.00	0.00
89	90	114.00	0.00	0.00	0.00
90	90	114.00	-616.56	0.00	-280.50
90	91	114.58	-616.56	0.00	-280.50
91	91	114.58	-616.56	0.00	-280.50
91	92	116.15	-616.56	0.00	-280.50
92	92	116.15	-1153.60	0.00	-645.69
92	93	117.73	-1153.60	0.00	-645.69
93	93	117.73	-1153.60	0.00	-645.69
93	94	119.30	-1153.60	0.00	-645.69
94	94	119.30	-1690.38	-29.80	-995.79
94	95	120.88	-1690.38	-29.80	-948.46
95	95	120.88	-1690.38	-29.80	-948.46
95	96	122.45	-1690.38	-29.80	-901.13
96	96	122.45	-1690.64	0.00	-901.13
96	97	124.03	-1690.64	0.00	-901.13
97	97	124.03	-1690.64	0.00	-901.13
97	98	125.60	-1690.64	0.00	-901.13
98	98	125.60	-1690.64	0.00	-901.13
98	99	127.18	-1690.64	0.00	-901.13
99	99	127.18	-1690.64	0.00	-901.13
99	100	128.75	-1690.64	0.00	-901.13
100	100	128.75	-1690.64	0.00	-901.13
100	101	130.33	-1690.64	0.00	-901.13
101	101	130.33	-1690.64	0.00	-901.13
101	102	131.90	-1690.64	0.00	-901.13
102	102	131.90	-1690.64	0.00	-901.13
102	103	133.48	-1690.64	0.00	-901.13

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.To

Pretensado Total (t=0)

$$\text{Coef_exc: } [1; 1] \text{fase1.FAM1.TOT} + [1; 1] \text{fase1.FAM2.TOT} + [1; 1] \text{fase1.FAM3.TOT} + [1; 1] \text{fase1.FAM4.TOT} +$$

Coef - exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	-1690.64	0.00	-901.13
103	104	135.05	-1690.64	0.00	-901.13
104	104	135.05	-1690.38	29.80	-901.13
104	105	136.63	-1690.38	29.80	-948.46
105	105	136.63	-1690.38	29.80	-948.46
105	106	138.20	-1690.38	29.80	-995.79
106	106	138.20	-1153.60	0.00	-645.69
106	107	139.78	-1153.60	0.00	-645.69
107	107	139.78	-1153.60	0.00	-645.69
107	108	141.35	-1153.60	0.00	-645.69
108	108	141.35	-616.56	0.00	-280.50
108	109	142.93	-616.56	0.00	-280.50
109	109	142.93	-616.56	0.00	-280.50
109	110	143.50	-616.56	0.00	-280.50
110	110	143.50	0.00	0.00	0.00
110	111	144.50	0.00	0.00	0.00
111	111	144.50	0.00	0.00	0.00
111	112	145.50	0.00	0.00	0.00
112	112	145.50	-501.48	0.00	-199.95
112	113	145.68	-501.48	0.00	-199.95
113	113	145.68	-501.48	0.00	-199.95
113	114	146.85	-501.48	0.00	-199.95
114	114	146.85	-923.44	0.00	-486.88
114	115	148.03	-923.44	0.00	-486.88
115	115	148.03	-923.44	0.00	-486.88
115	116	149.20	-923.44	0.00	-486.88
116	116	149.20	-923.18	-21.82	-486.88
116	117	150.38	-923.18	-21.82	-461.03
117	117	150.38	-923.18	-21.82	-461.03
117	118	151.55	-923.18	-21.82	-435.18
118	118	151.55	-923.44	0.00	-435.18
118	119	152.73	-923.44	0.00	-435.18
119	119	152.73	-923.44	0.00	-435.18
119	120	153.90	-923.44	0.00	-435.18
120	120	153.90	-923.44	0.00	-435.18
120	121	155.08	-923.44	0.00	-435.18
121	121	155.08	-923.44	0.00	-435.18
121	122	156.25	-923.44	0.00	-435.18
122	122	156.25	-923.44	0.00	-435.18
122	123	157.43	-923.44	0.00	-435.17
123	123	157.43	-923.44	0.00	-435.17
123	124	158.60	-923.44	0.00	-435.17
124	124	158.60	-923.44	0.00	-435.17
124	125	159.78	-923.44	0.00	-435.17
125	125	159.78	-923.44	0.00	-435.17
125	126	160.95	-923.44	0.00	-435.17
126	126	160.95	-923.44	0.00	-435.17
126	127	162.13	-923.44	0.00	-435.17
127	127	162.13	-923.44	0.00	-435.17
127	128	163.30	-923.44	0.00	-435.17
128	128	163.30	-923.44	0.00	-435.17

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.To

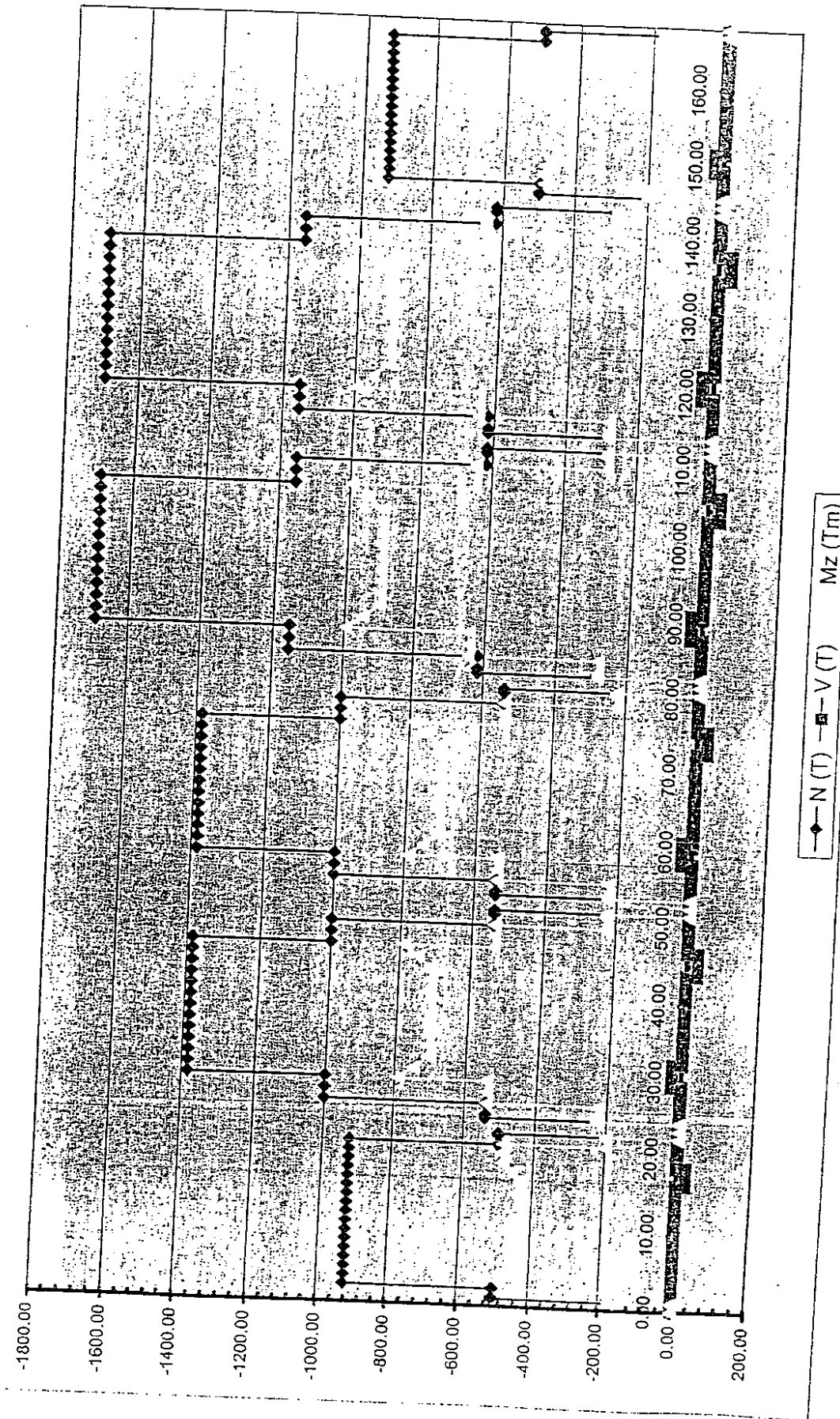
Pretensado Total (t=0)

Coef. exc:

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	-923.44	0.00	-435.17
129	129	164.48	-923.44	0.00	-435.17
129	130	165.65	-923.44	0.00	-435.17
130	130	165.65	-501.48	0.00	-171.87
130	131	166.83	-501.48	0.00	-171.87
131	131	166.83	-501.48	0.00	-171.87
131	132	167.00	-501.48	0.00	-171.87
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.Tinf

Pretensado Total ($t=INF$)

$$\{1; 1\}f_{ase1.FAM1.TOT} + \{1; 1\}f_{ase1.FAM2.TOT} + \{1; 1\}f_{ase1.FAM3.TOT} + \{1; 1\}f_{ase1.FAM4.TOT} +$$

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	-501.48	0.00	-171.87
2	3	1.18	-501.48	0.00	-171.87
3	3	1.18	-501.48	0.00	-171.87
3	4	2.35	-501.48	0.00	-171.87
4	4	2.35	-923.44	0.00	-435.17
4	5	3.53	-923.44	0.00	-435.17
5	5	3.53	-923.44	0.00	-435.17
5	6	4.70	-923.44	0.00	-435.17
6	6	4.70	-923.44	0.00	-435.17
6	7	5.88	-923.44	0.00	-435.17
7	7	5.88	-923.44	0.00	-435.17
7	8	7.05	-923.44	0.00	-435.17
8	8	7.05	-923.44	0.00	-435.17
8	9	8.23	-923.44	0.00	-435.17
9	9	8.23	-923.44	0.00	-435.17
9	10	9.40	-923.44	0.00	-435.17
10	10	9.40	-923.44	0.00	-435.17
10	11	10.58	-923.44	0.00	-435.17
11	11	10.58	-923.44	0.00	-435.17
11	12	11.75	-923.44	0.00	-435.18
12	12	11.75	-923.44	0.00	-435.18
12	13	12.93	-923.44	0.00	-435.18
13	13	12.93	-923.44	0.00	-435.18
13	14	14.10	-923.44	0.00	-435.18
14	14	14.10	-923.44	0.00	-435.18
14	15	15.28	-923.44	0.00	-435.18
15	15	15.28	-923.44	0.00	-435.18
15	16	16.45	-923.44	0.00	-435.18
16	16	16.45	-923.18	21.82	-435.18
16	17	17.63	-923.18	21.82	-461.03
17	17	17.63	-923.18	21.82	-461.03
17	18	18.80	-923.18	21.82	-486.88
18	18	18.80	-923.44	0.00	-486.88
18	19	19.98	-923.44	0.00	-486.88
19	19	19.98	-923.44	0.00	-486.88
19	20	21.15	-923.44	0.00	-486.88
20	20	21.15	-501.48	0.00	-199.95
20	21	22.33	-501.48	0.00	-199.95
21	21	22.33	-501.48	0.00	-199.95
21	22	22.50	-501.48	0.00	-199.95
22	22	22.50	0.00	0.00	0.00
22	23	23.50	0.00	0.00	0.00
23	1023	23.50	0.00	0.00	0.00
23	24	24.50	0.00	0.00	0.00
24	24	24.50	-539.84	0.00	-226.80
24	25	24.95	-539.84	0.00	-226.80
25	25	24.95	-539.84	0.00	-226.80
25	26	26.40	-539.84	0.00	-226.80
26	26	26.40	-1000.16	0.00	-539.82

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.Tinf

Pretensado Total ($t=INF$)

$$\text{Coef. exc: } [1; 1] \text{fase1.FAM1.TOT} + [1; 1] \text{fase1.FAM2.TOT} + [1; 1] \text{fase1.FAM3.TOT} + [1; 1] \text{fase1.FAM4.TOT} +$$

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-1000.16	0.00	-539.82
27	27	27.85	-1000.16	0.00	-539.82
27	28	29.30	-1000.16	0.00	-539.82
28	28	29.30	-1383.51	-26.49	-789.88
28	29	30.75	-1383.51	-26.49	-751.14
29	29	30.75	-1383.51	-26.49	-751.14
29	30	32.20	-1383.51	-26.49	-712.40
30	30	32.20	-1383.76	0.00	-712.40
30	31	33.65	-1383.76	0.00	-712.40
31	31	33.65	-1383.76	0.00	-712.40
31	32	35.10	-1383.76	0.00	-712.40
32	32	35.10	-1383.76	0.00	-712.40
32	33	36.55	-1383.76	0.00	-712.40
33	33	36.55	-1383.76	0.00	-712.40
33	34	38.00	-1383.76	0.00	-712.40
34	34	38.00	-1383.76	0.00	-712.40
34	35	39.45	-1383.76	0.00	-712.40
35	35	39.45	-1383.76	0.00	-712.40
35	36	40.90	-1383.76	0.00	-712.40
36	36	40.90	-1383.76	0.00	-712.40
36	37	42.35	-1383.76	0.00	-712.40
37	37	42.35	-1383.76	0.00	-712.40
37	38	43.80	-1383.76	0.00	-712.40
38	38	43.80	-1383.51	26.49	-712.40
38	39	45.25	-1383.51	26.49	-751.14
39	39	45.25	-1383.51	26.49	-751.14
39	40	46.70	-1383.51	26.49	-789.88
40	40	46.70	-1000.16	0.00	-539.82
40	41	48.15	-1000.16	0.00	-539.82
41	41	48.15	-1000.16	0.00	-539.82
41	42	49.60	-1000.16	0.00	-539.82
42	42	49.60	-539.84	0.00	-226.80
42	43	51.05	-539.84	0.00	-226.80
43	43	51.05	-539.84	0.00	-226.80
43	44	51.50	-539.84	0.00	-226.80
44	44	51.50	0.00	0.00	0.00
44	45	52.50	0.00	0.00	0.00
45	1045	52.50	0.00	0.00	0.00
45	46	53.50	0.00	0.00	0.00
46	46	53.50	-539.84	0.00	-226.80
46	47	53.95	-539.84	0.00	-226.80
47	47	53.95	-539.84	0.00	-226.80
47	48	55.40	-539.84	0.00	-226.80
48	48	55.40	-1000.16	0.00	-539.82
48	49	56.85	-1000.16	0.00	-539.82
49	49	56.85	-1000.16	0.00	-539.82
49	50	58.30	-1000.16	0.00	-539.82
50	50	58.30	-1383.51	-26.49	-789.88
50	51	59.75	-1383.51	-26.49	-751.14
51	51	59.75	-1383.51	-26.49	-751.14
51	52	61.20	-1383.51	-26.49	-712.40

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.Tinf

Pretensado Total ($t=INF$)

$$[1; 1] \text{fase1.FAM1.TOT} + [1; 1] \text{fase1.FAM2.TOT} + [1; 1] \text{fase1.FAM3.TOT} + [1; 1] \text{fase1.FAM4.TOT} + \text{Coef. exc:}$$

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	-1383.76		
52	53	62.65	-1383.76	0.00	-712.40
53	53	62.65	-1383.76	0.00	-712.40
53	54	64.10	-1383.76	0.00	-712.40
54	54	64.10	-1383.76	0.00	-712.40
54	55	65.55	-1383.76	0.00	-712.40
55	55	65.55	-1383.76	0.00	-712.40
55	56	67.00	-1383.76	0.00	-712.40
56	56	67.00	-1383.76	0.00	-712.40
56	57	68.45	-1383.76	0.00	-712.40
57	57	68.45	-1383.76	0.00	-712.40
57	58	69.90	-1383.76	0.00	-712.40
58	58	69.90	-1383.76	0.00	-712.40
58	59	71.35	-1383.76	0.00	-712.40
59	59	71.35	-1383.76	0.00	-712.40
59	60	72.80	-1383.76	0.00	-712.40
60	60	72.80	-1383.51	26.49	-712.40
60	61	74.25	-1383.51	26.49	-751.14
61	61	74.25	-1383.51	26.49	-751.14
61	62	75.70	-1383.51	26.49	-789.88
62	62	75.70	-1000.16	0.00	-539.82
62	63	77.15	-1000.16	0.00	-539.82
63	63	77.15	-1000.16	0.00	-539.82
63	64	78.60	-1000.16	0.00	-539.82
64	64	78.60	-539.84	0.00	-226.80
64	65	80.05	-539.84	0.00	-226.80
65	65	80.05	-539.84	0.00	-226.80
65	66	80.50	-539.84	0.00	-226.80
66	66	80.50	0.00	0.00	0.00
66	67	81.50	0.00	0.00	0.00
67	1067	81.50	0.00	0.00	0.00
67	68	82.50	0.00	0.00	0.00
68	68	82.50	-616.56	0.00	-280.50
68	69	83.08	-616.56	0.00	-280.50
69	69	83.08	-616.56	0.00	-280.50
69	70	84.65	-616.56	0.00	-280.50
70	70	84.65	-1153.60	0.00	-645.69
70	71	86.23	-1153.60	0.00	-645.69
71	71	86.23	-1153.60	0.00	-645.69
71	72	87.80	-1153.60	0.00	-645.69
72	72	87.80	-1690.38	-29.80	-995.79
72	73	89.38	-1690.38	-29.80	-948.46
73	73	89.38	-1690.38	-29.80	-948.46
73	74	90.95	-1690.38	-29.80	-901.13
74	74	90.95	-1690.64	0.00	-901.13
74	75	92.53	-1690.64	0.00	-901.13
75	75	92.53	-1690.64	0.00	-901.13
75	76	94.10	-1690.64	0.00	-901.13
76	76	94.10	-1690.64	0.00	-901.13
76	77	95.68	-1690.64	0.00	-901.13
77	77	95.68	-1690.64	0.00	-901.13

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase1.FAM1.TOT + [1; 1]fase1.FAM2.TOT + [1; 1]fase1.FAM3.TOT + [1; 1]fase1.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	-1690.64	0.00	-901.13
78	78	97.25	-1690.64	0.00	-901.13
78	79	98.83	-1690.64	0.00	-901.13
79	79	98.83	-1690.64	0.00	-901.13
79	80	100.40	-1690.64	0.00	-901.13
80	80	100.40	-1690.64	0.00	-901.13
80	81	101.98	-1690.64	0.00	-901.13
81	81	101.98	-1690.64	0.00	-901.13
81	82	103.55	-1690.64	0.00	-901.13
82	82	103.55	-1690.38	29.80	-901.13
82	83	105.13	-1690.38	29.80	-948.46
83	83	105.13	-1690.38	29.80	-948.46
83	84	106.70	-1690.38	29.80	-995.79
84	84	106.70	-1153.60	0.00	-645.69
84	85	108.28	-1153.60	0.00	-645.69
85	85	108.28	-1153.60	0.00	-645.69
85	86	109.85	-1153.60	0.00	-645.69
86	86	109.85	-616.56	0.00	-280.50
86	87	111.43	-616.56	0.00	-280.50
87	87	111.43	-616.56	0.00	-280.50
87	88	112.00	-616.56	0.00	-280.50
88	88	112.00	0.00	0.00	0.00
88	89	113.00	0.00	0.00	0.00
89	1089	113.00	0.00	0.00	0.00
89	90	114.00	0.00	0.00	0.00
90	90	114.00	-616.56	0.00	-280.50
90	91	114.58	-616.56	0.00	-280.50
91	91	114.58	-616.56	0.00	-280.50
91	92	116.15	-616.56	0.00	-280.50
92	92	116.15	-1153.60	0.00	-645.69
92	93	117.73	-1153.60	0.00	-645.69
93	93	117.73	-1153.60	0.00	-645.69
93	94	119.30	-1153.60	0.00	-645.69
94	94	119.30	-1690.38	-29.80	-995.79
94	95	120.88	-1690.38	-29.80	-948.46
95	95	120.88	-1690.38	-29.80	-948.46
95	96	122.45	-1690.38	-29.80	-901.13
96	96	122.45	-1690.64	0.00	-901.13
96	97	124.03	-1690.64	0.00	-901.13
97	97	124.03	-1690.64	0.00	-901.13
97	98	125.60	-1690.64	0.00	-901.13
98	98	125.60	-1690.64	0.00	-901.13
98	99	127.18	-1690.64	0.00	-901.13
99	99	127.18	-1690.64	0.00	-901.13
99	100	128.75	-1690.64	0.00	-901.13
100	100	128.75	-1690.64	0.00	-901.13
100	101	130.33	-1690.64	0.00	-901.13
101	101	130.33	-1690.64	0.00	-901.13
101	102	131.90	-1690.64	0.00	-901.13
102	102	131.90	-1690.64	0.00	-901.13
102	103	133.48	-1690.64	0.00	-901.13

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase1.FAM1.TOT + [1; 1]fase1.FAM2.TOT + [1; 1]fase1.FAM3.TOT + [1; 1]fase1.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	-1690.64	0.00	-901.13
103	104	135.05	-1690.64	0.00	-901.13
104	104	135.05	-1690.38	29.80	-901.13
104	105	136.63	-1690.38	29.80	-948.46
105	105	136.63	-1690.38	29.80	-948.46
105	106	138.20	-1690.38	29.80	-995.79
106	106	138.20	-1153.60	0.00	-645.69
106	107	139.78	-1153.60	0.00	-645.69
107	107	139.78	-1153.60	0.00	-645.69
107	108	141.35	-1153.60	0.00	-645.69
108	108	141.35	-616.56	0.00	-280.50
108	109	142.93	-616.56	0.00	-280.50
109	109	142.93	-616.56	0.00	-280.50
109	110	143.50	-616.56	0.00	-280.50
110	110	143.50	0.00	0.00	0.00
110	111	144.50	0.00	0.00	0.00
111	1111	144.50	0.00	0.00	0.00
111	112	145.50	0.00	0.00	0.00
112	112	145.50	-501.48	0.00	-199.95
112	113	145.68	-501.48	0.00	-199.95
113	113	145.68	-501.48	0.00	-199.95
113	114	146.85	-501.48	0.00	-199.95
114	114	146.85	-923.44	0.00	-486.88
114	115	148.03	-923.44	0.00	-486.88
115	115	148.03	-923.44	0.00	-486.88
115	116	149.20	-923.44	0.00	-486.88
116	116	149.20	-923.18	-21.82	-486.88
116	117	150.38	-923.18	-21.82	-461.03
117	117	150.38	-923.18	-21.82	-461.03
117	118	151.55	-923.18	-21.82	-435.18
118	118	151.55	-923.44	0.00	-435.18
118	119	152.73	-923.44	0.00	-435.18
119	119	152.73	-923.44	0.00	-435.18
119	120	153.90	-923.44	0.00	-435.18
120	120	153.90	-923.44	0.00	-435.18
120	121	155.08	-923.44	0.00	-435.18
121	121	155.08	-923.44	0.00	-435.18
121	122	156.25	-923.44	0.00	-435.18
122	122	156.25	-923.44	0.00	-435.18
122	123	157.43	-923.44	0.00	-435.17
123	123	157.43	-923.44	0.00	-435.17
123	124	158.60	-923.44	0.00	-435.17
124	124	158.60	-923.44	0.00	-435.17
124	125	159.78	-923.44	0.00	-435.17
125	125	159.78	-923.44	0.00	-435.17
125	126	160.95	-923.44	0.00	-435.17
126	126	160.95	-923.44	0.00	-435.17
126	127	162.13	-923.44	0.00	-435.17
127	127	162.13	-923.44	0.00	-435.17
127	128	163.30	-923.44	0.00	-435.17
128	128	163.30	-923.44	0.00	-435.17

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.TOT.Tinf

Pretensado Total (t=INF)

$$\text{Coef exc: } [1; 1]\text{fase1.FAM1.TOT} + [1; 1]\text{fase1.FAM2.TOT} + [1; 1]\text{fase1.FAM3.TOT} + [1; 1]\text{fase1.FAM4.TOT} +$$

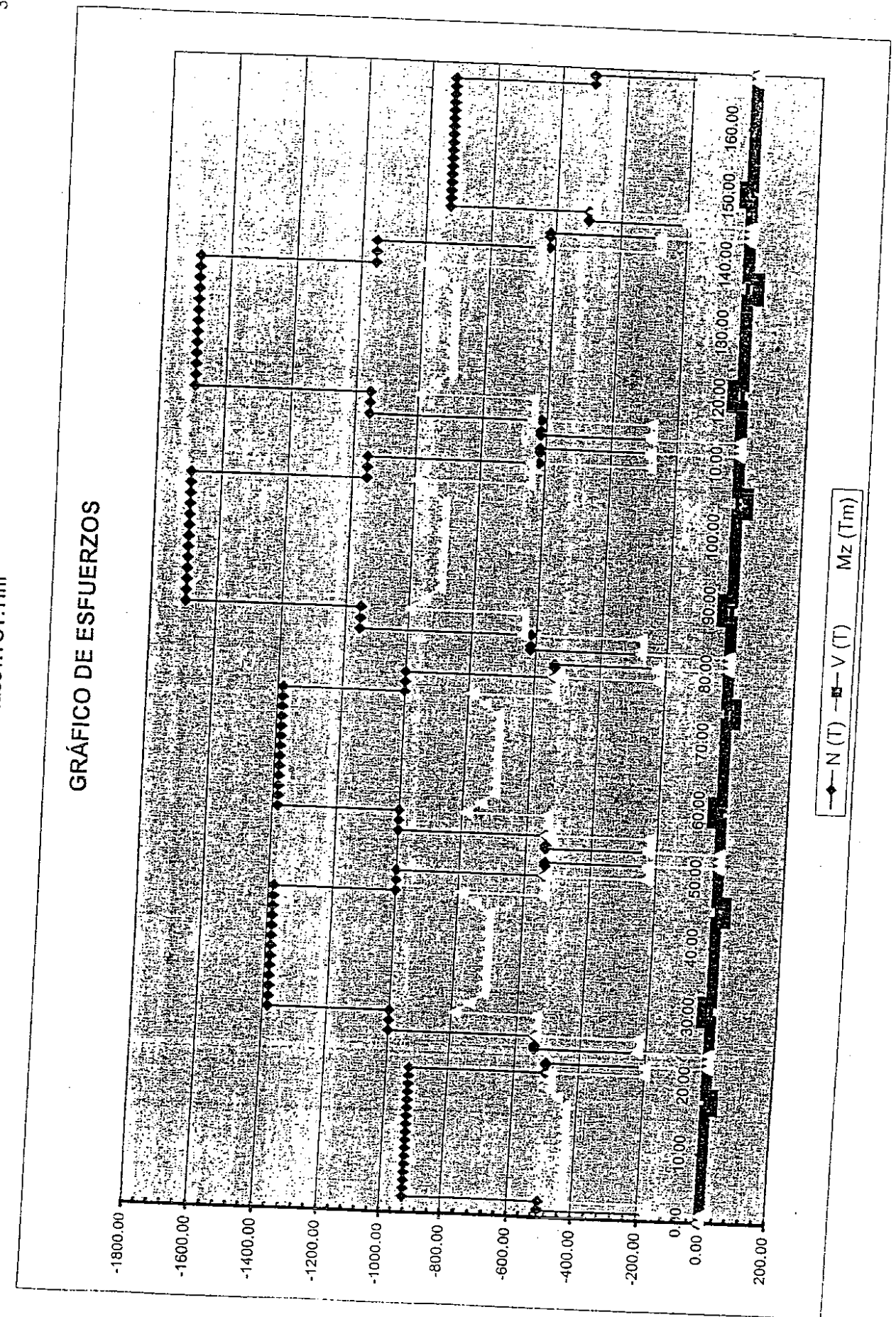
Coef exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	-923.44	0.00	-435.17
129	129	164.48	-923.44	0.00	-435.17
129	130	165.65	-923.44	0.00	-435.17
130	130	165.65	-501.48	0.00	-171.87
130	131	166.83	-501.48	0.00	-171.87
131	131	166.83	-501.48	0.00	-171.87
131	132	167.00	-501.48	0.00	-171.87
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00

Programa DINTEL IDEAM S.A.
fase1.TOT.Tinf

30/08/01

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	0.00	0.00	0.00
2	3	1.18	0.00	0.00	0.00
3	3	1.18	0.00	0.00	0.00
3	4	2.35	0.00	0.00	0.00
4	4	2.35	0.00	0.00	0.00
4	5	3.53	0.00	0.00	0.00
5	5	3.53	0.00	0.00	0.00
5	6	4.70	0.00	0.00	0.00
6	6	4.70	0.00	0.00	0.00
6	7	5.88	0.00	0.00	0.00
7	7	5.88	0.00	0.00	0.00
7	8	7.05	0.00	0.00	0.00
8	8	7.05	0.00	0.00	0.00
8	9	8.23	0.00	0.00	0.00
9	9	8.23	0.00	0.00	0.00
9	10	9.40	0.00	0.00	0.00
10	10	9.40	0.00	0.00	-0.01
10	11	10.58	0.00	0.00	-0.01
11	11	10.58	0.00	0.00	-0.01
11	12	11.75	0.00	0.00	-0.01
12	12	11.75	0.00	0.00	-0.01
12	13	12.93	0.00	0.00	-0.01
13	13	12.93	0.00	0.00	-0.01
13	14	14.10	0.00	0.00	-0.01
14	14	14.10	0.00	0.00	-0.01
14	15	15.28	0.00	0.00	-0.01
15	15	15.28	0.00	0.00	-0.01
15	16	16.45	0.00	0.00	-0.01
16	16	16.45	0.00	0.00	-0.13
16	17	17.63	0.00	0.00	-0.13
17	17	17.63	0.00	0.00	-0.13
17	18	18.80	0.00	0.00	-0.13
18	18	18.80	0.00	0.00	0.00
18	19	19.98	0.00	0.00	0.00
19	19	19.98	0.00	0.00	0.00
19	20	21.15	0.00	0.00	0.00
20	20	21.15	0.00	0.00	0.00
20	21	22.33	0.00	0.00	0.00
21	21	22.33	0.00	0.00	0.00
21	22	22.50	0.00	0.00	0.00
22	22	22.50	0.00	0.00	0.00
22	23	23.50	0.00	0.00	0.00
23	1023	23.50	0.00	0.00	0.00
23	24	24.50	0.00	0.00	0.00
24	24	24.50	0.00	0.00	0.00
24	25	24.95	0.00	0.00	0.00
25	25	24.95	0.00	0.00	0.00
25	26	26.40	0.00	0.00	0.00
26	26	26.40	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	0.00	0.00
27	27	27.85	0.00	0.00	0.00
27	28	29.30	0.00	0.00	0.00
28	28	29.30	0.00	0.00	-0.10
28	29	30.75	0.00	0.00	-0.10
29	29	30.75	0.00	0.00	-0.10
29	30	32.20	0.00	0.00	-0.10
30	30	32.20	0.00	0.00	0.03
30	31	33.65	0.00	0.00	0.03
31	31	33.65	0.00	0.00	0.03
31	32	35.10	0.00	0.00	0.03
32	32	35.10	0.00	0.00	0.03
32	33	36.55	0.00	0.00	0.03
33	33	36.55	0.00	0.00	0.03
33	34	38.00	0.00	0.00	0.03
34	34	38.00	0.00	0.00	0.03
34	35	39.45	0.00	0.00	0.03
35	35	39.45	0.00	0.00	0.03
35	36	40.90	0.00	0.00	0.03
36	36	40.90	0.00	0.00	0.03
36	37	42.35	0.00	0.00	0.03
37	37	42.35	0.00	0.00	0.03
37	38	43.80	0.00	0.00	0.03
38	38	43.80	0.00	0.00	-0.10
38	39	45.25	0.00	0.00	-0.10
39	39	45.25	0.00	0.00	-0.10
39	40	46.70	0.00	0.00	-0.10
40	40	46.70	0.00	0.00	0.00
40	41	48.15	0.00	0.00	0.00
41	41	48.15	0.00	0.00	0.00
41	42	49.60	0.00	0.00	0.00
42	42	49.60	0.00	0.00	0.00
42	43	51.05	0.00	0.00	0.00
43	43	51.05	0.00	0.00	0.00
43	44	51.50	0.00	0.00	0.00
44	44	51.50	0.00	0.00	0.00
44	45	52.50	0.00	0.00	0.00
45	1045	52.50	0.00	0.00	0.00
45	46	53.50	0.00	0.00	0.00
46	46	53.50	0.00	0.00	0.00
46	47	53.95	0.00	0.00	0.00
47	47	53.95	0.00	0.00	0.00
47	48	55.40	0.00	0.00	0.00
48	48	55.40	0.00	0.00	0.00
48	49	56.85	0.00	0.00	0.00
49	49	56.85	0.00	0.00	0.00
49	50	58.30	0.00	0.00	0.00
50	50	58.30	0.00	0.00	-0.10
50	51	59.75	0.00	0.00	-0.10
51	51	59.75	0.00	0.00	-0.10
51	52	61.20	0.00	0.00	-0.10

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.00	0.03
52	53	62.65	0.00	0.00	0.03
53	53	62.65	0.00	0.00	0.03
53	54	64.10	0.00	0.00	0.03
54	54	64.10	0.00	0.00	0.03
54	55	65.55	0.00	0.00	0.03
55	55	65.55	0.00	0.00	0.03
55	56	67.00	0.00	0.00	0.03
56	56	67.00	0.00	0.00	0.03
56	57	68.45	0.00	0.00	0.03
57	57	68.45	0.00	0.00	0.03
57	58	69.90	0.00	0.00	0.03
58	58	69.90	0.00	0.00	0.03
58	59	71.35	0.00	0.00	0.03
59	59	71.35	0.00	0.00	0.03
59	60	72.80	0.00	0.00	0.03
60	60	72.80	0.00	0.00	-0.10
60	61	74.25	0.00	0.00	-0.10
61	61	74.25	0.00	0.00	-0.10
61	62	75.70	0.00	0.00	-0.10
62	62	75.70	0.00	0.00	0.00
62	63	77.15	0.00	0.00	0.00
63	63	77.15	0.00	0.00	0.00
63	64	78.60	0.00	0.00	0.00
64	64	78.60	0.00	0.00	0.00
64	65	80.05	0.00	0.00	0.00
65	65	80.05	0.00	0.00	0.00
65	66	80.50	0.00	0.00	0.00
66	66	80.50	0.00	0.00	0.00
66	67	81.50	0.00	0.00	0.00
67	1067	81.50	0.00	0.00	0.00
67	68	82.50	0.00	0.00	0.00
68	68	82.50	0.00	0.00	0.00
68	69	83.08	0.00	0.00	0.00
69	69	83.08	0.00	0.00	0.00
69	70	84.65	0.00	0.00	0.00
70	70	84.65	0.00	0.00	0.00
70	71	86.23	0.00	0.00	0.00
71	71	86.23	0.00	0.00	0.00
71	72	87.80	0.00	0.00	0.00
72	72	87.80	0.00	0.00	-0.10
72	73	89.38	0.00	0.00	-0.10
73	73	89.38	0.00	0.00	-0.10
73	74	90.95	0.00	0.00	-0.10
74	74	90.95	0.00	0.00	0.04
74	75	92.53	0.00	0.00	0.04
75	75	92.53	0.00	0.00	0.04
75	76	94.10	0.00	0.00	0.04
76	76	94.10	0.00	0.00	0.04
76	77	95.68	0.00	0.00	0.04
77	77	95.68	0.00	0.00	0.04

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.00	0.04
78	78	97.25	0.00	0.00	0.04
78	79	98.83	0.00	0.00	0.04
79	79	98.83	0.00	0.00	0.04
79	80	100.40	0.00	0.00	0.04
80	80	100.40	0.00	0.00	0.04
80	81	101.98	0.00	0.00	0.04
81	81	101.98	0.00	0.00	0.04
81	82	103.55	0.00	0.00	0.04
82	82	103.55	0.00	0.00	-0.10
82	83	105.13	0.00	0.00	-0.10
83	83	105.13	0.00	0.00	-0.10
83	84	106.70	0.00	0.00	-0.10
84	84	106.70	0.00	0.00	0.00
84	85	108.28	0.00	0.00	0.00
85	85	108.28	0.00	0.00	0.00
85	86	109.85	0.00	0.00	0.00
86	86	109.85	0.00	0.00	0.00
86	87	111.43	0.00	0.00	0.00
87	87	111.43	0.00	0.00	0.00
87	88	112.00	0.00	0.00	0.00
88	88	112.00	0.00	0.00	0.00
88	89	113.00	0.00	0.00	0.00
89	1089	113.00	0.00	0.00	0.00
89	90	114.00	0.00	0.00	0.00
90	90	114.00	0.00	0.00	0.00
90	91	114.58	0.00	0.00	0.00
91	91	114.58	0.00	0.00	0.00
91	92	116.15	0.00	0.00	0.00
92	92	116.15	0.00	0.00	0.00
92	93	117.73	0.00	0.00	0.00
93	93	117.73	0.00	0.00	0.00
93	94	119.30	0.00	0.00	0.00
94	94	119.30	0.00	0.00	-0.10
94	95	120.88	0.00	0.00	-0.10
95	95	120.88	0.00	0.00	-0.10
95	96	122.45	0.00	0.00	-0.10
96	96	122.45	0.00	0.00	0.04
96	97	124.03	0.00	0.00	0.04
97	97	124.03	0.00	0.00	0.04
97	98	125.60	0.00	0.00	0.04
98	98	125.60	0.00	0.00	0.04
98	99	127.18	0.00	0.00	0.04
99	99	127.18	0.00	0.00	0.04
99	100	128.75	0.00	0.00	0.04
100	100	128.75	0.00	0.00	0.04
100	101	130.33	0.00	0.00	0.04
101	101	130.33	0.00	0.00	0.04
101	102	131.90	0.00	0.00	0.04
102	102	131.90	0.00	0.00	0.04
102	103	133.48	0.00	0.00	0.04

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.To

Prefensado Hiperestático (t=0)

[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	0.00	0.04
103	104	135.05	0.00	0.00	0.04
104	104	135.05	0.00	0.00	-0.10
104	105	136.63	0.00	0.00	-0.10
105	105	136.63	0.00	0.00	-0.10
105	106	138.20	0.00	0.00	0.00
106	106	138.20	0.00	0.00	0.00
106	107	139.78	0.00	0.00	0.00
107	107	139.78	0.00	0.00	0.00
107	108	141.35	0.00	0.00	0.00
108	108	141.35	0.00	0.00	0.00
108	109	142.93	0.00	0.00	0.00
109	109	142.93	0.00	0.00	0.00
109	110	143.50	0.00	0.00	0.00
110	110	143.50	0.00	0.00	0.00
110	111	144.50	0.00	0.00	0.00
111	111	144.50	0.00	0.00	0.00
111	112	145.50	0.00	0.00	0.00
112	112	145.50	0.00	0.00	0.00
112	113	145.68	0.00	0.00	0.00
113	113	145.68	0.00	0.00	0.00
113	114	146.85	0.00	0.00	0.00
114	114	146.85	0.00	0.00	0.00
114	115	148.03	0.00	0.00	0.00
115	115	148.03	0.00	0.00	0.00
115	116	149.20	0.00	0.00	0.00
116	116	149.20	0.00	0.00	-0.13
116	117	150.38	0.00	0.00	-0.13
117	117	150.38	0.00	0.00	-0.13
117	118	151.55	0.00	0.00	-0.13
118	118	151.55	0.00	0.00	-0.01
118	119	152.73	0.00	0.00	-0.01
119	119	152.73	0.00	0.00	-0.01
119	120	153.90	0.00	0.00	-0.01
120	120	153.90	0.00	0.00	-0.01
120	121	155.08	0.00	0.00	-0.01
121	121	155.08	0.00	0.00	-0.01
121	122	156.25	0.00	0.00	-0.01
122	122	156.25	0.00	0.00	-0.01
122	123	157.43	0.00	0.00	-0.01
123	123	157.43	0.00	0.00	-0.01
123	124	158.60	0.00	0.00	-0.01
124	124	158.60	0.00	0.00	0.00
124	125	159.78	0.00	0.00	0.00
125	125	159.78	0.00	0.00	0.00
125	126	160.95	0.00	0.00	0.00
126	126	160.95	0.00	0.00	0.00
126	127	162.13	0.00	0.00	0.00
127	127	162.13	0.00	0.00	0.00
127	128	163.30	0.00	0.00	0.00
128	128	163.30	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.To

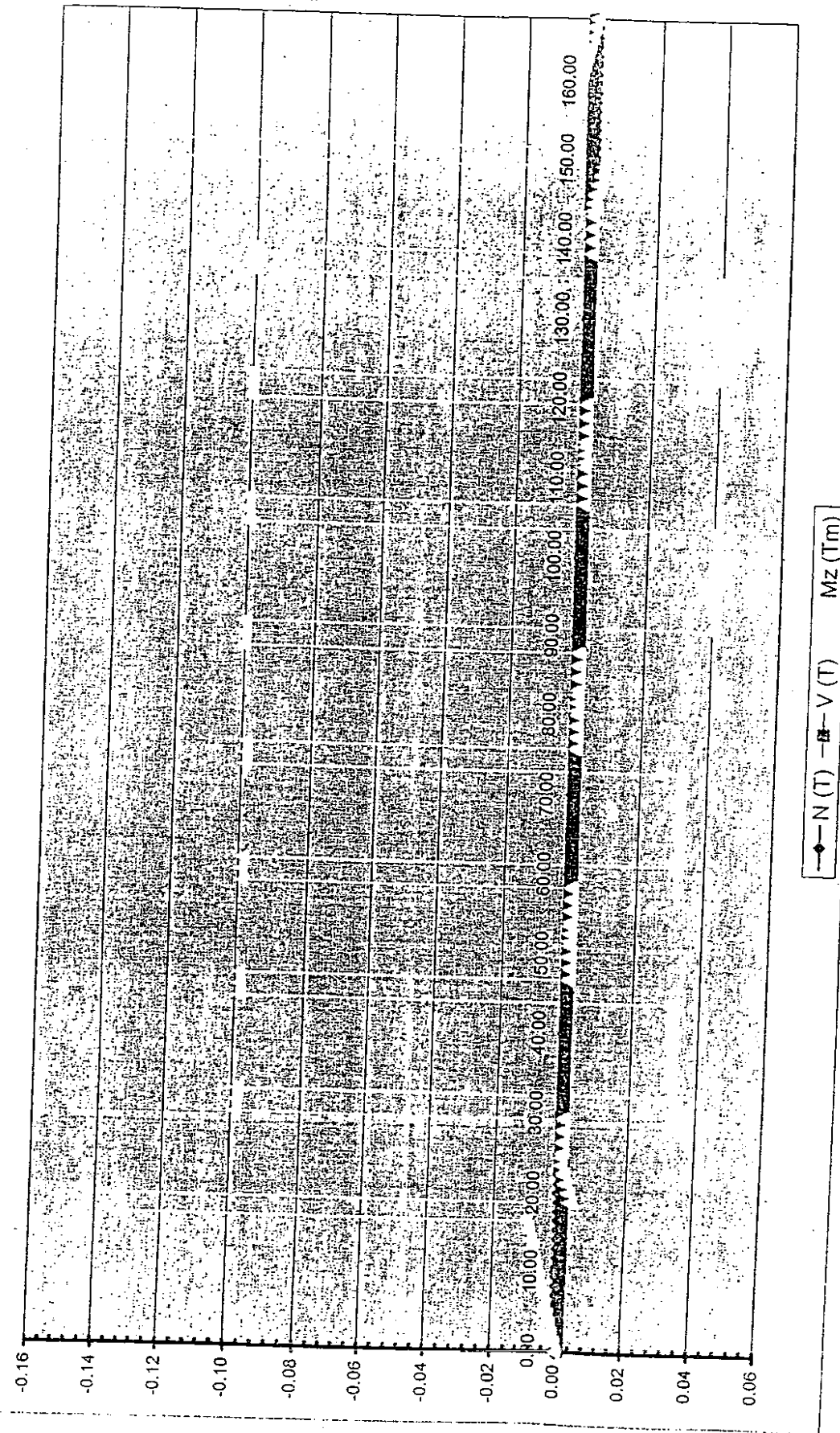
Prefensado Hiperestático (t=0)

[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	0.00	0.00
129	129	164.48	0.00	0.00	0.00
129	130	165.65	0.00	0.00	0.00
130	130	165.65	0.00	0.00	0.00
130	131	166.83	0.00	0.00	0.00
131	131	166.83	0.00	0.00	0.00
131	132	167.00	0.00	0.00	0.00
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.Tinf

Pretensado Hiperestático ($t=INF$)

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	0.00	0.00	0.00
2	3	1.18	0.00	0.00	0.00
3	3	1.18	0.00	0.00	0.00
3	4	2.35	0.00	0.00	0.00
4	4	2.35	0.00	0.00	0.00
4	5	3.53	0.00	0.00	0.00
5	5	3.53	0.00	0.00	0.00
5	6	4.70	0.00	0.00	0.00
6	6	4.70	0.00	0.00	0.00
6	7	5.88	0.00	0.00	0.00
7	7	5.88	0.00	0.00	0.00
7	8	7.05	0.00	0.00	0.00
8	8	7.05	0.00	0.00	0.00
8	9	8.23	0.00	0.00	0.00
9	9	8.23	0.00	0.00	0.00
9	10	9.40	0.00	0.00	-0.01
10	10	9.40	0.00	0.00	-0.01
10	11	10.58	0.00	0.00	-0.01
11	11	10.58	0.00	0.00	-0.01
11	12	11.75	0.00	0.00	-0.01
12	12	11.75	0.00	0.00	-0.01
12	13	12.93	0.00	0.00	-0.01
13	13	12.93	0.00	0.00	-0.01
13	14	14.10	0.00	0.00	-0.01
14	14	14.10	0.00	0.00	-0.01
14	15	15.28	0.00	0.00	-0.01
15	15	15.28	0.00	0.00	-0.01
15	16	16.45	0.00	0.00	-0.01
16	16	16.45	0.00	0.00	-0.13
16	17	17.63	0.00	0.00	-0.13
17	17	17.63	0.00	0.00	-0.13
17	18	18.80	0.00	0.00	-0.13
18	18	18.80	0.00	0.00	0.00
18	19	19.98	0.00	0.00	0.00
19	19	19.98	0.00	0.00	0.00
19	20	21.15	0.00	0.00	0.00
20	20	21.15	0.00	0.00	0.00
20	21	22.33	0.00	0.00	0.00
21	21	22.33	0.00	0.00	0.00
21	22	22.50	0.00	0.00	0.00
22	22	22.50	0.00	0.00	0.00
22	23	23.50	0.00	0.00	0.00
23	1023	23.50	0.00	0.00	0.00
23	24	24.50	0.00	0.00	0.00
24	24	24.50	0.00	0.00	0.00
24	25	24.95	0.00	0.00	0.00
25	25	24.95	0.00	0.00	0.00
25	26	26.40	0.00	0.00	0.00
26	26	26.40	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	0.00	0.00
27	27	27.85	0.00	0.00	0.00
27	28	29.30	0.00	0.00	0.00
28	28	29.30	0.00	0.00	-0.10
28	29	30.75	0.00	0.00	-0.10
29	29	30.75	0.00	0.00	-0.10
29	30	32.20	0.00	0.00	-0.10
30	30	32.20	0.00	0.00	0.03
30	31	33.65	0.00	0.00	0.03
31	31	33.65	0.00	0.00	0.03
31	32	35.10	0.00	0.00	0.03
32	32	35.10	0.00	0.00	0.03
32	33	36.55	0.00	0.00	0.03
33	33	36.55	0.00	0.00	0.03
33	34	38.00	0.00	0.00	0.03
34	34	38.00	0.00	0.00	0.03
34	35	39.45	0.00	0.00	0.03
35	35	39.45	0.00	0.00	0.03
35	36	40.90	0.00	0.00	0.03
36	36	40.90	0.00	0.00	0.03
36	37	42.35	0.00	0.00	0.03
37	37	42.35	0.00	0.00	0.03
37	38	43.80	0.00	0.00	0.03
38	38	43.80	0.00	0.00	-0.10
38	39	45.25	0.00	0.00	-0.10
39	39	45.25	0.00	0.00	-0.10
39	40	46.70	0.00	0.00	-0.10
40	40	46.70	0.00	0.00	0.00
40	41	48.15	0.00	0.00	0.00
41	41	48.15	0.00	0.00	0.00
41	42	49.60	0.00	0.00	0.00
42	42	49.60	0.00	0.00	0.00
42	43	51.05	0.00	0.00	0.00
43	43	51.05	0.00	0.00	0.00
43	44	51.50	0.00	0.00	0.00
44	44	51.50	0.00	0.00	0.00
44	45	52.50	0.00	0.00	0.00
45	1045	52.50	0.00	0.00	0.00
45	46	53.50	0.00	0.00	0.00
46	46	53.50	0.00	0.00	0.00
46	47	53.95	0.00	0.00	0.00
47	47	53.95	0.00	0.00	0.00
47	48	55.40	0.00	0.00	0.00
48	48	55.40	0.00	0.00	0.00
48	49	56.85	0.00	0.00	0.00
49	49	56.85	0.00	0.00	0.00
49	50	58.30	0.00	0.00	0.00
50	50	58.30	0.00	0.00	-0.10
50	51	59.75	0.00	0.00	-0.10
51	51	59.75	0.00	0.00	-0.10
51	52	61.20	0.00	0.00	-0.10

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.00	0.03
52	53	62.65	0.00	0.00	0.03
53	53	62.65	0.00	0.00	0.03
53	54	64.10	0.00	0.00	0.03
54	54	64.10	0.00	0.00	0.03
54	55	65.55	0.00	0.00	0.03
55	55	65.55	0.00	0.00	0.03
55	56	67.00	0.00	0.00	0.03
56	56	67.00	0.00	0.00	0.03
56	57	68.45	0.00	0.00	0.03
57	57	68.45	0.00	0.00	0.03
57	58	69.90	0.00	0.00	0.03
58	58	69.90	0.00	0.00	0.03
58	59	71.35	0.00	0.00	0.03
59	59	71.35	0.00	0.00	0.03
59	60	72.80	0.00	0.00	0.03
60	60	72.80	0.00	0.00	-0.10
60	61	74.25	0.00	0.00	-0.10
61	61	74.25	0.00	0.00	-0.10
61	62	75.70	0.00	0.00	-0.10
62	62	75.70	0.00	0.00	0.00
62	63	77.15	0.00	0.00	0.00
63	63	77.15	0.00	0.00	0.00
63	64	78.60	0.00	0.00	0.00
64	64	78.60	0.00	0.00	0.00
64	65	80.05	0.00	0.00	0.00
65	65	80.05	0.00	0.00	0.00
65	66	80.50	0.00	0.00	0.00
66	66	80.50	0.00	0.00	0.00
66	67	81.50	0.00	0.00	0.00
67	1067	81.50	0.00	0.00	0.00
67	68	82.50	0.00	0.00	0.00
68	68	82.50	0.00	0.00	0.00
68	69	83.08	0.00	0.00	0.00
69	69	83.08	0.00	0.00	0.00
69	70	84.65	0.00	0.00	0.00
70	70	84.65	0.00	0.00	0.00
70	71	86.23	0.00	0.00	0.00
71	71	86.23	0.00	0.00	0.00
71	72	87.80	0.00	0.00	0.00
72	72	87.80	0.00	0.00	-0.10
72	73	89.38	0.00	0.00	-0.10
73	73	89.38	0.00	0.00	-0.10
73	74	90.95	0.00	0.00	-0.10
74	74	90.95	0.00	0.00	0.04
74	75	92.53	0.00	0.00	0.04
75	75	92.53	0.00	0.00	0.04
75	76	94.10	0.00	0.00	0.04
76	76	94.10	0.00	0.00	0.04
76	77	95.68	0.00	0.00	0.04
77	77	95.68	0.00	0.00	0.04

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.00	0.04
78	78	97.25	0.00	0.00	0.04
78	79	98.83	0.00	0.00	0.04
79	79	98.83	0.00	0.00	0.04
79	80	100.40	0.00	0.00	0.04
80	80	100.40	0.00	0.00	0.04
80	81	101.98	0.00	0.00	0.04
81	81	101.98	0.00	0.00	0.04
81	82	103.55	0.00	0.00	0.04
82	82	103.55	0.00	0.00	-0.10
82	83	105.13	0.00	0.00	-0.10
83	83	105.13	0.00	0.00	-0.10
83	84	106.70	0.00	0.00	-0.10
84	84	106.70	0.00	0.00	0.00
84	85	108.28	0.00	0.00	0.00
85	85	108.28	0.00	0.00	0.00
85	86	109.85	0.00	0.00	0.00
86	86	109.85	0.00	0.00	0.00
86	87	111.43	0.00	0.00	0.00
87	87	111.43	0.00	0.00	0.00
87	88	112.00	0.00	0.00	0.00
88	88	112.00	0.00	0.00	0.00
88	89	113.00	0.00	0.00	0.00
89	1089	113.00	0.00	0.00	0.00
89	90	114.00	0.00	0.00	0.00
90	90	114.00	0.00	0.00	0.00
90	91	114.58	0.00	0.00	0.00
91	91	114.58	0.00	0.00	0.00
91	92	116.15	0.00	0.00	0.00
92	92	116.15	0.00	0.00	0.00
92	93	117.73	0.00	0.00	0.00
93	93	117.73	0.00	0.00	0.00
93	94	119.30	0.00	0.00	0.00
94	94	119.30	0.00	0.00	-0.10
94	95	120.88	0.00	0.00	-0.10
95	95	120.88	0.00	0.00	-0.10
95	96	122.45	0.00	0.00	-0.10
96	96	122.45	0.00	0.00	0.04
96	97	124.03	0.00	0.00	0.04
97	97	124.03	0.00	0.00	0.04
97	98	125.60	0.00	0.00	0.04
98	98	125.60	0.00	0.00	0.04
98	99	127.18	0.00	0.00	0.04
99	99	127.18	0.00	0.00	0.04
99	100	128.75	0.00	0.00	0.04
100	100	128.75	0.00	0.00	0.04
100	101	130.33	0.00	0.00	0.04
101	101	130.33	0.00	0.00	0.04
101	102	131.90	0.00	0.00	0.04
102	102	131.90	0.00	0.00	0.04
102	103	133.48	0.00	0.00	0.04

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	0.00	0.04
103	104	135.05	0.00	0.00	0.04
104	104	135.05	0.00	0.00	-0.10
104	105	136.63	0.00	0.00	-0.10
105	105	136.63	0.00	0.00	-0.10
105	106	138.20	0.00	0.00	-0.10
106	106	138.20	0.00	0.00	0.00
106	107	139.78	0.00	0.00	0.00
107	107	139.78	0.00	0.00	0.00
107	108	141.35	0.00	0.00	0.00
108	108	141.35	0.00	0.00	0.00
108	109	142.93	0.00	0.00	0.00
109	109	142.93	0.00	0.00	0.00
109	110	143.50	0.00	0.00	0.00
110	110	143.50	0.00	0.00	0.00
110	111	144.50	0.00	0.00	0.00
111	1111	144.50	0.00	0.00	0.00
111	112	145.50	0.00	0.00	0.00
112	112	145.50	0.00	0.00	0.00
112	113	145.68	0.00	0.00	0.00
113	113	145.68	0.00	0.00	0.00
113	114	146.85	0.00	0.00	0.00
114	114	146.85	0.00	0.00	0.00
114	115	148.03	0.00	0.00	0.00
115	115	148.03	0.00	0.00	0.00
115	116	149.20	0.00	0.00	0.00
116	116	149.20	0.00	0.00	-0.13
116	117	150.38	0.00	0.00	-0.13
117	117	150.38	0.00	0.00	-0.13
117	118	151.55	0.00	0.00	-0.13
118	118	151.55	0.00	0.00	-0.01
118	119	152.73	0.00	0.00	-0.01
119	119	152.73	0.00	0.00	-0.01
119	120	153.90	0.00	0.00	-0.01
120	120	153.90	0.00	0.00	-0.01
120	121	155.08	0.00	0.00	-0.01
121	121	155.08	0.00	0.00	-0.01
121	122	156.25	0.00	0.00	-0.01
122	122	156.25	0.00	0.00	-0.01
122	123	157.43	0.00	0.00	-0.01
123	123	157.43	0.00	0.00	-0.01
123	124	158.60	0.00	0.00	-0.01
124	124	158.60	0.00	0.00	-0.01
124	125	159.78	0.00	0.00	0.00
125	125	159.78	0.00	0.00	0.00
125	126	160.95	0.00	0.00	0.00
126	126	160.95	0.00	0.00	0.00
126	127	162.13	0.00	0.00	0.00
127	127	162.13	0.00	0.00	0.00
127	128	163.30	0.00	0.00	0.00
128	128	163.30	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.HIP.Tinf

Pretensado Hiperestático (t=INF)

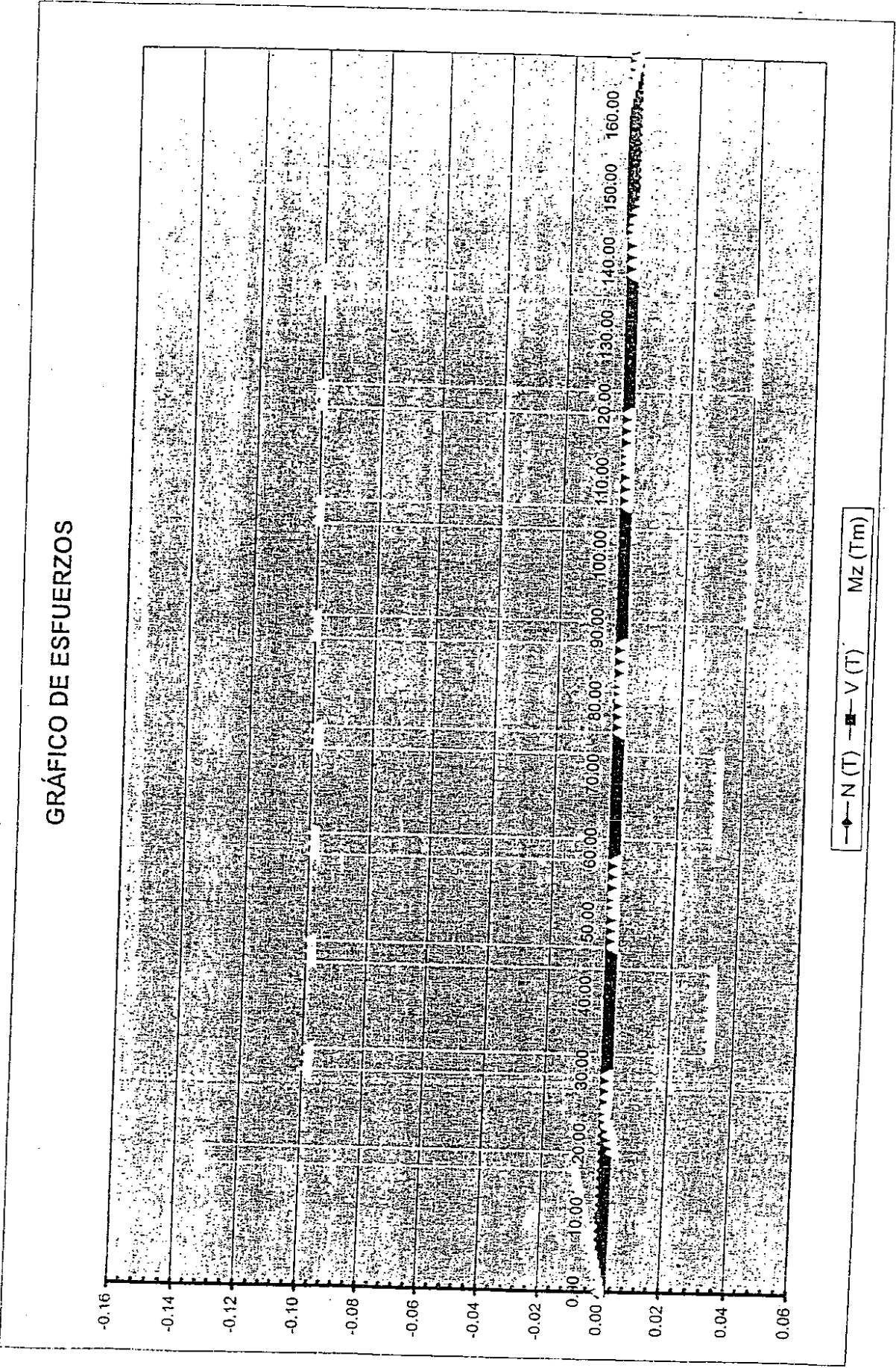
[1; 1]fase1.FAM1.TOT + [-1;-1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.TOT + [-1;-1]fase1.FAM2.ISO + [1
Coef exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	0.00	0.00
129	129	164.48	0.00	0.00	0.00
129	130	165.65	0.00	0.00	0.00
130	130	165.65	0.00	0.00	0.00
130	131	166.83	0.00	0.00	0.00
131	131	166.83	0.00	0.00	0.00
131	132	167.00	0.00	0.00	0.00
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00

Programa DINTEL IDEAM S.A.
fase1.HIP.Tinf

30/08/01

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.ISO + [1; 1]fase1.FAM3.ISO + [1; 1]fase1.FAM4.ISO + [1; 1]

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	-1383.76	0.00	-712.43
52	53	62.65	-1383.76	0.00	-712.43
53	53	62.65	-1383.76	0.00	-712.43
53	54	64.10	-1383.76	0.00	-712.43
54	54	64.10	-1383.76	0.00	-712.43
54	55	65.55	-1383.76	0.00	-712.43
55	55	65.55	-1383.76	0.00	-712.43
55	56	67.00	-1383.76	0.00	-712.43
56	56	67.00	-1383.76	0.00	-712.43
56	57	68.45	-1383.76	0.00	-712.43
57	57	68.45	-1383.76	0.00	-712.43
57	58	69.90	-1383.76	0.00	-712.43
58	58	69.90	-1383.76	0.00	-712.43
58	59	71.35	-1383.76	0.00	-712.43
59	59	71.35	-1383.76	0.00	-712.43
59	60	72.80	-1383.76	0.00	-712.43
60	60	72.80	-1383.51	26.49	-712.30
60	61	74.25	-1383.51	26.49	-751.04
61	61	74.25	-1383.51	26.49	-751.04
61	62	75.70	-1383.51	26.49	-789.78
62	62	75.70	-1000.16	0.00	-539.82
62	63	77.15	-1000.16	0.00	-539.82
63	63	77.15	-1000.16	0.00	-539.82
63	64	78.60	-1000.16	0.00	-539.82
64	64	78.60	-539.84	0.00	-226.80
64	65	80.05	-539.84	0.00	-226.80
65	65	80.05	-539.84	0.00	-226.80
65	66	80.50	-539.84	0.00	-226.80
66	66	80.50	0.00	0.00	0.00
66	67	81.50	0.00	0.00	0.00
67	1067	81.50	0.00	0.00	0.00
67	68	82.50	0.00	0.00	0.00
68	68	82.50	-616.56	0.00	-280.50
68	69	83.08	-616.56	0.00	-280.50
69	69	83.08	-616.56	0.00	-280.50
69	70	84.65	-616.56	0.00	-280.50
70	70	84.65	-1153.60	0.00	-645.69
70	71	86.23	-1153.60	0.00	-645.69
71	71	86.23	-1153.60	0.00	-645.69
71	72	87.80	-1153.60	0.00	-645.69
72	72	87.80	-1690.38	-29.80	-995.69
72	73	89.38	-1690.38	-29.80	-948.36
73	73	89.38	-1690.38	-29.80	-948.36
73	74	90.95	-1690.38	-29.80	-901.03
74	74	90.95	-1690.64	0.00	-901.17
74	75	92.53	-1690.64	0.00	-901.17
75	75	92.53	-1690.64	0.00	-901.17
75	76	94.10	-1690.64	0.00	-901.17
76	76	94.10	-1690.64	0.00	-901.17
76	77	95.68	-1690.64	0.00	-901.17
77	77	95.68	-1690.64	0.00	-901.17

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.ISO + [1; 1]fase1.FAM3.ISO + [1; 1]fase1.FAM4.ISO + [1; 1]

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	-1690.64	0.00	-901.17
78	78	97.25	-1690.64	0.00	-901.17
78	79	98.83	-1690.64	0.00	-901.17
79	79	98.83	-1690.64	0.00	-901.17
79	80	100.40	-1690.64	0.00	-901.17
80	80	100.40	-1690.64	0.00	-901.17
80	81	101.98	-1690.64	0.00	-901.17
81	81	101.98	-1690.64	0.00	-901.17
81	82	103.55	-1690.64	0.00	-901.17
82	82	103.55	-1690.38	29.80	-901.03
82	83	105.13	-1690.38	29.80	-948.36
83	83	105.13	-1690.38	29.80	-948.36
83	84	106.70	-1690.38	29.80	-995.69
84	84	106.70	-1153.60	0.00	-645.69
84	85	108.28	-1153.60	0.00	-645.69
85	85	108.28	-1153.60	0.00	-645.69
85	86	109.85	-1153.60	0.00	-645.69
86	86	109.85	-616.56	0.00	-280.50
86	87	111.43	-616.56	0.00	-280.50
87	87	111.43	-616.56	0.00	-280.50
87	88	112.00	-616.56	0.00	-280.50
88	88	112.00	0.00	0.00	0.00
88	89	113.00	0.00	0.00	0.00
89	1089	113.00	0.00	0.00	0.00
89	90	114.00	0.00	0.00	0.00
90	90	114.00	-616.56	0.00	-280.50
90	91	114.58	-616.56	0.00	-280.50
91	91	114.58	-616.56	0.00	-280.50
91	92	116.15	-616.56	0.00	-280.50
92	92	116.15	-1153.60	0.00	-645.69
92	93	117.73	-1153.60	0.00	-645.69
93	93	117.73	-1153.60	0.00	-645.69
93	94	119.30	-1153.60	0.00	-645.69
94	94	119.30	-1690.38	-29.80	-995.69
94	95	120.88	-1690.38	-29.80	-948.36
95	95	120.88	-1690.38	-29.80	-948.36
95	96	122.45	-1690.38	-29.80	-901.03
96	96	122.45	-1690.64	0.00	-901.17
96	97	124.03	-1690.64	0.00	-901.17
97	97	124.03	-1690.64	0.00	-901.17
97	98	125.60	-1690.64	0.00	-901.17
98	98	125.60	-1690.64	0.00	-901.17
98	99	127.18	-1690.64	0.00	-901.17
99	99	127.18	-1690.64	0.00	-901.17
99	100	128.75	-1690.64	0.00	-901.17
100	100	128.75	-1690.64	0.00	-901.17
100	101	130.33	-1690.64	0.00	-901.17
101	101	130.33	-1690.64	0.00	-901.17
101	102	131.90	-1690.64	0.00	-901.17
102	102	131.90	-1690.64	0.00	-901.17
102	103	133.48	-1690.64	0.00	-901.17

fase1.ISO.To

Pretensado Isostático ($t=0$)

[1; 1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.ISO + [1; 1]fase1.FAM3.ISO + [1; 1]fase1.FAM4.ISO + { 1;
Coef. exc:

Coef ext:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	-1690.64	0.00	-901.17
103	104	135.05	-1690.64	0.00	-901.17
104	104	135.05	-1690.38	29.80	-901.03
104	105	136.63	-1690.38	29.80	-948.36
105	105	136.63	-1690.38	29.80	-948.36
105	106	138.20	-1690.38	29.80	-995.69
106	106	138.20	-1153.60	0.00	-645.69
106	107	139.78	-1153.60	0.00	-645.69
107	107	139.78	-1153.60	0.00	-645.69
107	108	141.35	-1153.60	0.00	-645.69
108	108	141.35	-616.56	0.00	-280.50
108	109	142.93	-616.56	0.00	-280.50
109	109	142.93	-616.56	0.00	-280.50
109	110	143.50	-616.56	0.00	-280.50
110	110	143.50	0.00	0.00	0.00
110	111	144.50	0.00	0.00	0.00
111	111	144.50	0.00	0.00	0.00
111	112	145.50	0.00	0.00	0.00
112	112	145.50	-501.48	0.00	-199.95
112	113	145.68	-501.48	0.00	-199.95
113	113	145.68	-501.48	0.00	-199.95
113	114	146.85	-501.48	0.00	-199.95
114	114	146.85	-923.44	0.00	-486.88
114	115	148.03	-923.44	0.00	-486.88
115	115	148.03	-923.44	0.00	-486.88
115	116	149.20	-923.44	0.00	-486.88
116	116	149.20	-923.18	-21.82	-486.75
116	117	150.38	-923.18	-21.82	-460.90
117	117	150.38	-923.18	-21.82	-460.90
117	118	151.55	-923.18	-21.82	-435.05
118	118	151.55	-923.44	0.00	-435.17
118	119	152.73	-923.44	0.00	-435.17
119	119	152.73	-923.44	0.00	-435.17
119	120	153.90	-923.44	0.00	-435.17
120	120	153.90	-923.44	0.00	-435.17
120	121	155.08	-923.44	0.00	-435.17
121	121	155.08	-923.44	0.00	-435.17
121	122	156.25	-923.44	0.00	-435.17
122	122	156.25	-923.44	0.00	-435.17
122	123	157.43	-923.44	0.00	-435.17
123	123	157.43	-923.44	0.00	-435.17
123	124	158.60	-923.44	0.00	-435.17
124	124	158.60	-923.44	0.00	-435.17
124	125	159.78	-923.44	0.00	-435.17
125	125	159.78	-923.44	0.00	-435.17
125	126	160.95	-923.44	0.00	-435.17
126	126	160.95	-923.44	0.00	-435.17
126	127	162.13	-923.44	0.00	-435.17
127	127	162.13	-923.44	0.00	-435.17
127	128	163.30	-923.44	0.00	-435.17
128	128	163.30	-923.44	0.00	-435.17

fase1.ISO.To

Pretensado Isostático ($t=0$)

$$[1; 1]_{\text{fase1.FAM1.ISO}} + [1; 1]_{\text{fase1.FAM2.ISO}} + [1; 1]_{\text{fase1.FAM3.ISO}} + [1; 1]_{\text{fase1.FAM4.ISO}} + [1; 1]_{\text{fase1.FAM5.ISO}}$$

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	-923.44	0.00	-435.17
129	129	164.48	-923.44	0.00	-435.17
129	130	165.65	-923.44	0.00	-435.17
130	130	165.65	-501.48	0.00	-171.87
130	131	166.83	-501.48	0.00	-171.87
131	131	166.83	-501.48	0.00	-171.87
131	132	167.00	-501.48	0.00	-171.87
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00

CÁLCULO TENSIONAL

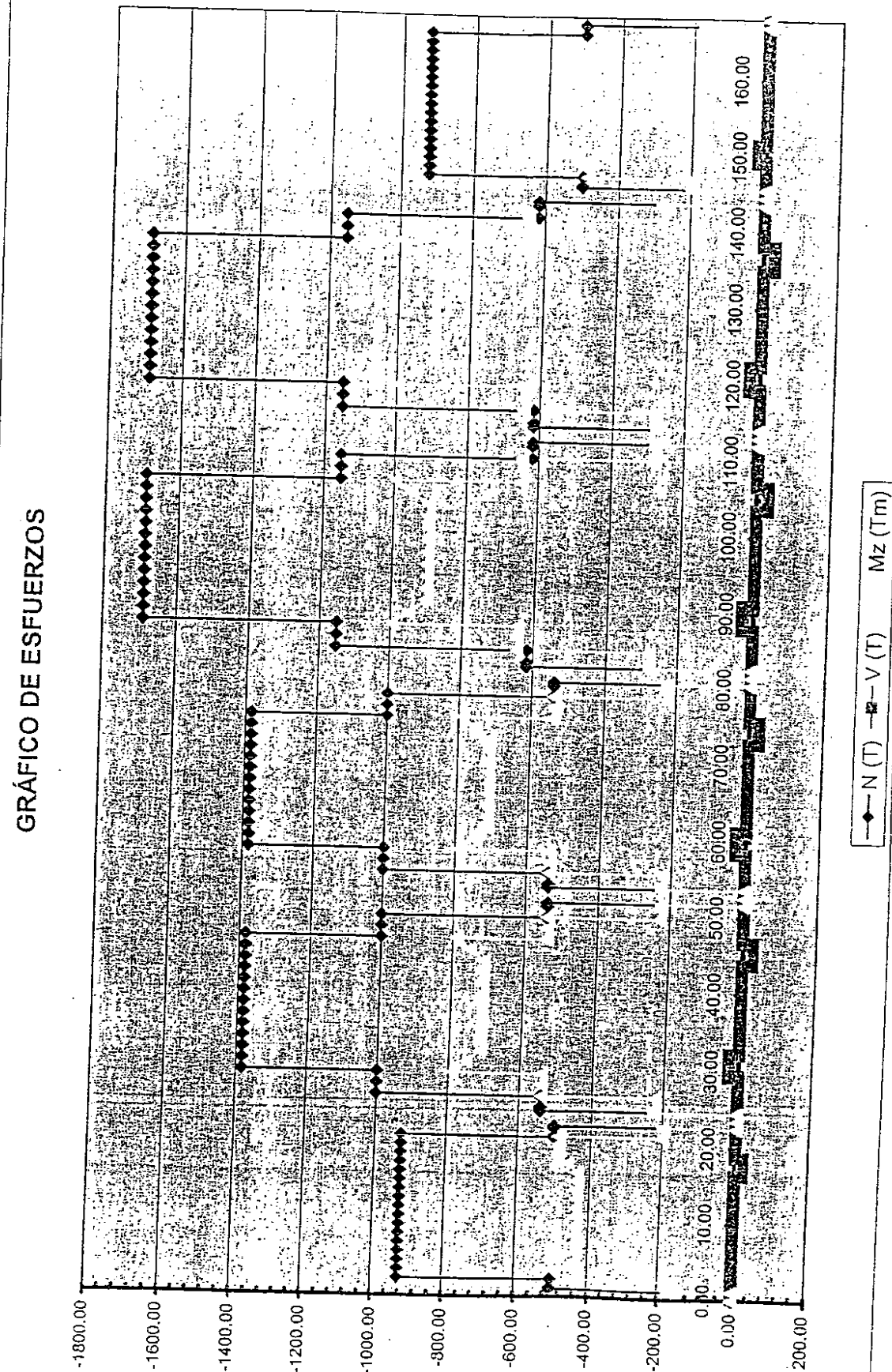
Hipótesis de cálculo:

fase1.ISO.Tinf

Pretensado Isostático ($t=INF$)

$$[1; 1]_{\text{fase1.FAM1.ISO}} + [1; 1]_{\text{fase1.FAM2.ISO}} + [1; 1]_{\text{fase1.FAM3.ISO}} + [1; 1]_{\text{fase1.FAM4.ISO}} + [1; \text{Coef. exc}]$$

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	-501.48	0.00	-171.87
2	3	1.18	-501.48	0.00	-171.87
3	3	1.18	-501.48	0.00	-171.87
3	4	2.35	-501.48	0.00	-171.87
4	4	2.35	-923.44	0.00	-435.17
4	5	3.53	-923.44	0.00	-435.17
5	5	3.53	-923.44	0.00	-435.17
5	6	4.70	-923.44	0.00	-435.17
6	6	4.70	-923.44	0.00	-435.17
6	7	5.88	-923.44	0.00	-435.17
7	7	5.88	-923.44	0.00	-435.17
7	8	7.05	-923.44	0.00	-435.17
8	8	7.05	-923.44	0.00	-435.17
8	9	8.23	-923.44	0.00	-435.17
9	9	8.23	-923.44	0.00	-435.17
9	10	9.40	-923.44	0.00	-435.17
10	10	9.40	-923.44	0.00	-435.17
10	11	10.58	-923.44	0.00	-435.17
11	11	10.58	-923.44	0.00	-435.17
11	12	11.75	-923.44	0.00	-435.17
12	12	11.75	-923.44	0.00	-435.17
12	13	12.93	-923.44	0.00	-435.17
13	13	12.93	-923.44	0.00	-435.17
13	14	14.10	-923.44	0.00	-435.17
14	14	14.10	-923.44	0.00	-435.17
14	15	15.28	-923.44	0.00	-435.17
15	15	15.28	-923.44	0.00	-435.17
15	16	16.45	-923.44	0.00	-435.17
16	16	16.45	-923.18	21.82	-435.05
16	17	17.63	-923.18	21.82	-460.90
17	17	17.63	-923.18	21.82	-460.90
17	18	18.80	-923.18	21.82	-486.75
18	18	18.80	-923.44	0.00	-486.88
18	19	19.98	-923.44	0.00	-486.88
19	19	19.98	-923.44	0.00	-486.88
19	20	21.15	-923.44	0.00	-486.88
20	20	21.15	-501.48	0.00	-199.95
20	21	22.33	-501.48	0.00	-199.95
21	21	22.33	-501.48	0.00	-199.95
21	22	22.50	-501.48	0.00	-199.95
22	22	22.50	0.00	0.00	0.00
22	23	23.50	0.00	0.00	0.00
23	1023	23.50	0.00	0.00	0.00
23	24	24.50	0.00	0.00	0.00
24	24	24.50	-539.84	0.00	-226.80
24	25	24.95	-539.84	0.00	-226.80
25	25	24.95	-539.84	0.00	-226.80
25	26	26.40	-539.84	0.00	-226.80
26	26	26.40	-1000.16	0.00	-539.82



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.ISO + [1; 1]fase1.FAM3.ISO + [1; 1]fase1.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-1000.16	0.00	-539.82
27	27	27.85	-1000.16	0.00	-539.82
27	28	29.30	-1000.16	0.00	-539.82
28	28	29.30	-1383.51	-26.49	-789.78
28	29	30.75	-1383.51	-26.49	-751.04
29	29	30.75	-1383.51	-26.49	-751.04
29	30	32.20	-1383.51	-26.49	-712.30
30	30	32.20	-1383.76	0.00	-712.43
30	31	33.65	-1383.76	0.00	-712.43
31	31	33.65	-1383.76	0.00	-712.43
31	32	35.10	-1383.76	0.00	-712.43
32	32	35.10	-1383.76	0.00	-712.43
32	33	36.55	-1383.76	0.00	-712.43
33	33	36.55	-1383.76	0.00	-712.43
33	34	38.00	-1383.76	0.00	-712.43
34	34	38.00	-1383.76	0.00	-712.43
34	35	39.45	-1383.76	0.00	-712.43
35	35	39.45	-1383.76	0.00	-712.43
35	36	40.90	-1383.76	0.00	-712.43
36	36	40.90	-1383.76	0.00	-712.43
36	37	42.35	-1383.76	0.00	-712.43
37	37	42.35	-1383.76	0.00	-712.43
37	38	43.80	-1383.76	0.00	-712.43
38	38	43.80	-1383.51	26.49	-712.30
38	39	45.25	-1383.51	26.49	-751.04
39	39	45.25	-1383.51	26.49	-751.04
39	40	46.70	-1383.51	26.49	-789.78
40	40	46.70	-1000.16	0.00	-539.82
40	41	48.15	-1000.16	0.00	-539.82
41	41	48.15	-1000.16	0.00	-539.82
41	42	49.60	-1000.16	0.00	-539.82
42	42	49.60	-539.84	0.00	-226.80
42	43	51.05	-539.84	0.00	-226.80
43	43	51.05	-539.84	0.00	-226.80
43	44	51.50	-539.84	0.00	-226.80
44	44	51.50	0.00	0.00	0.00
44	45	52.50	0.00	0.00	0.00
45	1045	52.50	0.00	0.00	0.00
45	46	53.50	0.00	0.00	0.00
46	46	53.50	-539.84	0.00	-226.80
46	47	53.95	-539.84	0.00	-226.80
47	47	53.95	-539.84	0.00	-226.80
47	48	55.40	-539.84	0.00	-226.80
48	48	55.40	-1000.16	0.00	-539.82
48	49	56.85	-1000.16	0.00	-539.82
49	49	56.85	-1000.16	0.00	-539.82
49	50	58.30	-1000.16	0.00	-539.82
50	50	58.30	-1383.51	-26.49	-789.78
50	51	59.75	-1383.51	-26.49	-751.04
51	51	59.75	-1383.51	-26.49	-751.04
51	52	61.20	-1383.51	-26.49	-712.30

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.ISO + [1; 1]fase1.FAM3.ISO + [1; 1]fase1.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	-1383.76	0.00	-712.43
52	53	62.65	-1383.76	0.00	-712.43
53	53	62.65	-1383.76	0.00	-712.43
53	54	64.10	-1383.76	0.00	-712.43
54	54	64.10	-1383.76	0.00	-712.43
54	55	65.55	-1383.76	0.00	-712.43
55	55	65.55	-1383.76	0.00	-712.43
55	56	67.00	-1383.76	0.00	-712.43
56	56	67.00	-1383.76	0.00	-712.43
56	57	68.45	-1383.76	0.00	-712.43
57	57	68.45	-1383.76	0.00	-712.43
57	58	69.90	-1383.76	0.00	-712.43
58	58	69.90	-1383.76	0.00	-712.43
58	59	71.35	-1383.76	0.00	-712.43
59	59	71.35	-1383.76	0.00	-712.43
59	60	72.80	-1383.76	0.00	-712.43
60	60	72.80	-1383.51	26.49	-712.30
60	61	74.25	-1383.51	26.49	-751.04
61	61	74.25	-1383.51	26.49	-751.04
61	62	75.70	-1383.51	26.49	-789.78
62	62	75.70	-1000.16	0.00	-539.82
62	63	77.15	-1000.16	0.00	-539.82
63	63	77.15	-1000.16	0.00	-539.82
63	64	78.60	-1000.16	0.00	-539.82
64	64	78.60	-539.84	0.00	-226.80
64	65	80.05	-539.84	0.00	-226.80
65	65	80.05	-539.84	0.00	-226.80
65	66	80.50	-539.84	0.00	-226.80
66	66	80.50	0.00	0.00	0.00
66	67	81.50	0.00	0.00	0.00
67	1067	81.50	0.00	0.00	0.00
67	68	82.50	0.00	0.00	0.00
68	68	82.50	-616.56	0.00	-280.50
68	69	83.08	-616.56	0.00	-280.50
69	69	83.08	-616.56	0.00	-280.50
69	70	84.65	-616.56	0.00	-280.50
70	70	84.65	-1153.60	0.00	-645.69
70	71	86.23	-1153.60	0.00	-645.69
71	71	86.23	-1153.60	0.00	-645.69
71	72	87.80	-1153.60	0.00	-645.69
72	72	87.80	-1690.38	-29.80	-995.69
72	73	89.38	-1690.38	-29.80	-948.36
73	73	89.38	-1690.38	-29.80	-948.36
73	74	90.95	-1690.38	-29.80	-901.03
74	74	90.95	-1690.64	0.00	-901.17
74	75	92.53	-1690.64	0.00	-901.17
75	75	92.53	-1690.64	0.00	-901.17
75	76	94.10	-1690.64	0.00	-901.17
76	76	94.10	-1690.64	0.00	-901.17
76	77	95.68	-1690.64	0.00	-901.17
77	77	95.68	-1690.64	0.00	-901.17

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.ISO + [1; 1]fase1.FAM3.ISO + [1; 1]fase1.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	-1690.64	0.00	-901.17
78	78	97.25	-1690.64	0.00	-901.17
78	79	98.83	-1690.64	0.00	-901.17
79	79	98.83	-1690.64	0.00	-901.17
79	80	100.40	-1690.64	0.00	-901.17
80	80	100.40	-1690.64	0.00	-901.17
80	81	101.98	-1690.64	0.00	-901.17
81	81	101.98	-1690.64	0.00	-901.17
81	82	103.55	-1690.64	0.00	-901.17
82	82	103.55	-1690.38	29.80	-901.03
82	83	105.13	-1690.38	29.80	-948.36
83	83	105.13	-1690.38	29.80	-948.36
83	84	106.70	-1690.38	29.80	-995.69
84	84	106.70	-1153.60	0.00	-645.69
84	85	108.28	-1153.60	0.00	-645.69
85	85	108.28	-1153.60	0.00	-645.69
85	86	109.85	-1153.60	0.00	-645.69
86	86	109.85	-616.56	0.00	-280.50
86	87	111.43	-616.56	0.00	-280.50
87	87	111.43	-616.56	0.00	-280.50
87	88	112.00	-616.56	0.00	-280.50
88	88	112.00	0.00	0.00	0.00
88	89	113.00	0.00	0.00	0.00
89	1089	113.00	0.00	0.00	0.00
89	90	114.00	0.00	0.00	0.00
90	90	114.00	-616.56	0.00	-280.50
90	91	114.58	-616.56	0.00	-280.50
91	91	114.58	-616.56	0.00	-280.50
91	92	116.15	-616.56	0.00	-280.50
92	92	116.15	-1153.60	0.00	-645.69
92	93	117.73	-1153.60	0.00	-645.69
93	93	117.73	-1153.60	0.00	-645.69
93	94	119.30	-1153.60	0.00	-645.69
94	94	119.30	-1690.38	-29.80	-995.69
94	95	120.88	-1690.38	-29.80	-948.36
95	95	120.88	-1690.38	-29.80	-948.36
95	96	122.45	-1690.38	-29.80	-901.03
96	96	122.45	-1690.64	0.00	-901.17
96	97	124.03	-1690.64	0.00	-901.17
97	97	124.03	-1690.64	0.00	-901.17
97	98	125.60	-1690.64	0.00	-901.17
98	98	125.60	-1690.64	0.00	-901.17
98	99	127.18	-1690.64	0.00	-901.17
99	99	127.18	-1690.64	0.00	-901.17
99	100	128.75	-1690.64	0.00	-901.17
100	100	128.75	-1690.64	0.00	-901.17
100	101	130.33	-1690.64	0.00	-901.17
101	101	130.33	-1690.64	0.00	-901.17
101	102	131.90	-1690.64	0.00	-901.17
102	102	131.90	-1690.64	0.00	-901.17
102	103	133.48	-1690.64	0.00	-901.17

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase1.FAM1.ISO + [1; 1]fase1.FAM2.ISO + [1; 1]fase1.FAM3.ISO + [1; 1]fase1.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	-1690.64	0.00	-901.17
103	104	135.05	-1690.64	0.00	-901.17
104	104	135.05	-1690.38	29.80	-901.03
104	105	136.63	-1690.38	29.80	-948.36
105	105	136.63	-1690.38	29.80	-948.36
105	106	138.20	-1690.38	29.80	-995.69
106	106	138.20	-1153.60	0.00	-645.69
106	107	139.78	-1153.60	0.00	-645.69
107	107	139.78	-1153.60	0.00	-645.69
107	108	141.35	-1153.60	0.00	-645.69
108	108	141.35	-616.56	0.00	-280.50
108	109	142.93	-616.56	0.00	-280.50
109	109	142.93	-616.56	0.00	-280.50
109	110	143.50	-616.56	0.00	-280.50
110	110	143.50	0.00	0.00	0.00
110	111	144.50	0.00	0.00	0.00
111	1111	144.50	0.00	0.00	0.00
111	112	145.50	0.00	0.00	0.00
112	112	145.50	-501.48	0.00	-199.95
112	113	145.68	-501.48	0.00	-199.95
113	113	145.68	-501.48	0.00	-199.95
113	114	146.85	-501.48	0.00	-199.95
114	114	146.85	-923.44	0.00	-486.88
114	115	148.03	-923.44	0.00	-486.88
115	115	148.03	-923.44	0.00	-486.88
115	116	149.20	-923.44	0.00	-486.88
116	116	149.20	-923.18	-21.82	-486.75
116	117	150.38	-923.18	-21.82	-460.90
117	117	150.38	-923.18	-21.82	-460.90
117	118	151.55	-923.18	-21.82	-435.05
118	118	151.55	-923.44	0.00	-435.17
118	119	152.73	-923.44	0.00	-435.17
119	119	152.73	-923.44	0.00	-435.17
119	120	153.90	-923.44	0.00	-435.17
120	120	153.90	-923.44	0.00	-435.17
120	121	155.08	-923.44	0.00	-435.17
121	121	155.08	-923.44	0.00	-435.17
121	122	156.25	-923.44	0.00	-435.17
122	122	156.25	-923.44	0.00	-435.17
122	123	157.43	-923.44	0.00	-435.17
123	123	157.43	-923.44	0.00	-435.17
123	124	158.60	-923.44	0.00	-435.17
124	124	158.60	-923.44	0.00	-435.17
124	125	159.78	-923.44	0.00	-435.17
125	125	159.78	-923.44	0.00	-435.17
125	126	160.95	-923.44	0.00	-435.17
126	126	160.95	-923.44	0.00	-435.17
126	127	162.13	-923.44	0.00	-435.17
127	127	162.13	-923.44	0.00	-435.17
127	128	163.30	-923.44	0.00	-435.17
128	128	163.30	-923.44	0.00	-435.17

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.Tinf

Pretensado Isostático ($t=INF$)

Coef. exc:

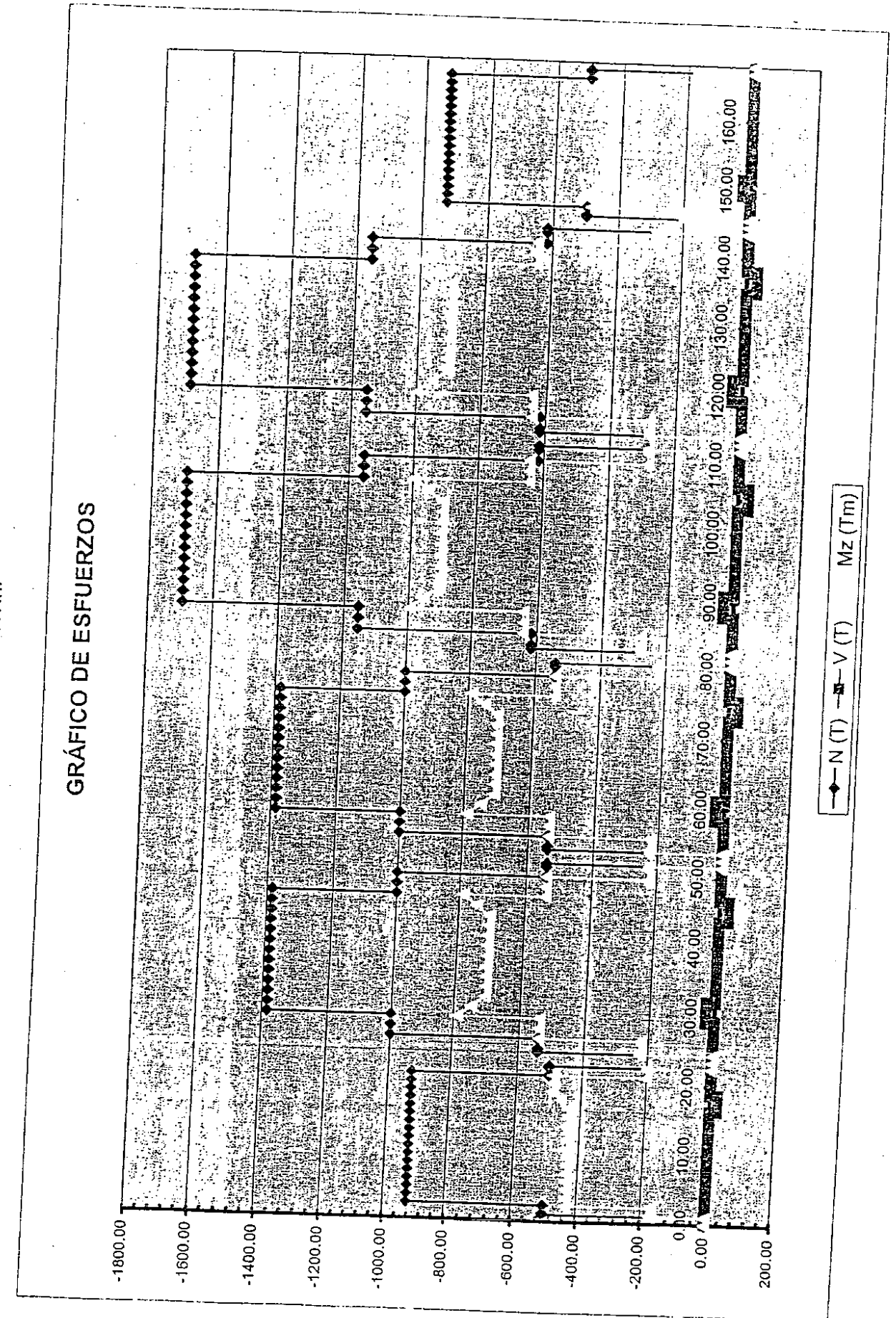
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	-923.44	0.00	-435.17
129	129	164.48	-923.44	0.00	-435.17
129	130	165.65	-923.44	0.00	-435.17
130	130	165.65	-501.48	0.00	-171.87
130	131	166.83	-501.48	0.00	-171.87
131	131	166.83	-501.48	0.00	-171.87
131	132	167.00	-501.48	0.00	-171.87
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00

Programa DINTEL IDEAM S.A.
fase1.ISO.Tinf

30/08/01

pret f1.xls



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.TOT.To

Pretensado Total (t=0)

[1; 1]fase8.FAM1.TOT + [1; 1]fase8.FAM2.TOT + [1; 1]fase8.FAM3.TOT + [1; 1]fase8.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-54.41	0.00
1	2	1.00	0.00	-54.41	54.41
2	2	1.00	-501.48	-54.41	-524.16
2	3	1.18	-501.48	-54.41	-514.64
3	3	1.18	-501.48	-54.41	-514.64
3	4	2.35	-501.48	-54.41	-450.71
4	4	2.35	-923.44	-54.41	-1056.22
4	5	3.53	-923.44	-54.41	-992.29
5	5	3.53	-923.44	-54.41	-992.29
5	6	4.70	-923.44	-54.41	-928.36
6	6	4.70	-923.44	-54.41	-928.36
6	7	5.88	-923.44	-54.41	-864.43
7	7	5.88	-923.44	-54.41	-864.43
7	8	7.05	-923.44	-54.41	-800.50
8	8	7.05	-923.44	-54.41	-800.50
8	9	8.23	-923.44	-54.41	-736.57
9	9	8.23	-923.44	-54.41	-736.57
9	10	9.40	-923.44	-54.41	-672.64
10	10	9.40	-923.44	-54.41	-672.64
10	11	10.58	-923.44	-54.41	-608.71
11	11	10.58	-923.44	-54.41	-608.71
11	12	11.75	-923.44	-54.41	-544.78
12	12	11.75	-923.44	-54.41	-544.78
12	13	12.93	-923.44	-54.41	-480.85
13	13	12.93	-923.44	-54.41	-480.85
13	14	14.10	-923.44	-54.41	-416.92
14	14	14.10	-923.44	-54.41	-416.92
14	15	15.28	-923.44	-54.41	-352.99
15	15	15.28	-923.44	-54.41	-352.99
15	16	16.45	-923.44	-54.41	-289.06
16	16	16.45	-922.73	-65.33	-289.06
16	17	17.63	-922.73	-65.33	-212.21
17	17	17.63	-922.73	-65.33	-212.21
17	18	18.80	-922.73	-65.33	-135.35
18	18	18.80	-923.44	-54.41	-135.35
18	19	19.98	-923.44	-54.41	-71.42
19	19	19.98	-923.44	-54.41	-71.42
19	20	21.15	-923.44	-54.41	-7.49
20	20	21.15	-501.48	-54.41	586.21
20	21	22.33	-501.48	-54.41	650.14
21	21	22.33	-501.48	-54.41	650.14
21	22	22.50	-501.48	-54.41	659.66
22	22	22.50	0.00	-54.41	1224.18
22	23	23.50	0.00	-54.41	1278.59
23	1023	23.50	0.00	1.93	1278.59
23	24	24.50	0.00	1.93	1276.66
24	24	24.50	-539.84	1.93	657.39
24	25	24.95	-539.84	1.93	656.52
25	25	24.95	-539.84	1.93	656.52
25	26	26.40	-539.84	1.93	653.72
26	26	26.40	-1000.16	1.93	6.04

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.TOT.To

Pretensado Total (t=0)

[1; 1]fase8.FAM1.TOT + [1; 1]fase8.FAM2.TOT + [1; 1]fase8.FAM3.TOT + [1; 1]fase8.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-1000.16	1.93	3.24
27	27	27.85	-1000.16	1.93	3.24
27	28	29.30	-1000.16	1.93	0.43
28	28	29.30	-1383.68	15.20	-528.53
28	29	30.75	-1383.68	15.20	-550.70
29	29	30.75	-1383.68	15.20	-550.70
29	30	32.20	-1383.68	15.20	-572.88
30	30	32.20	-1383.76	1.93	-572.88
30	31	33.65	-1383.76	1.93	-575.69
31	31	33.65	-1383.76	1.93	-575.69
31	32	35.10	-1383.76	1.93	-578.49
32	32	35.10	-1383.76	1.93	-578.49
32	33	36.55	-1383.76	1.93	-581.30
33	33	36.55	-1383.76	1.93	-581.30
33	34	38.00	-1383.76	1.93	-584.10
34	34	38.00	-1383.76	1.93	-584.10
34	35	39.45	-1383.76	1.93	-586.91
35	35	39.45	-1383.76	1.93	-586.91
35	36	40.90	-1383.76	1.93	-589.71
36	36	40.90	-1383.76	1.93	-589.71
36	37	42.35	-1383.76	1.93	-592.52
37	37	42.35	-1383.76	1.93	-592.52
37	38	43.80	-1383.76	1.93	-595.32
38	38	43.80	-1383.72	-11.33	-595.32
38	39	45.25	-1383.72	-11.33	-578.76
39	39	45.25	-1383.72	-11.33	-578.76
39	40	46.70	-1383.72	-11.33	-562.19
40	40	46.70	-1000.16	1.93	-33.23
40	41	48.15	-1000.16	1.93	-36.03
41	41	48.15	-1000.16	1.93	-36.03
41	42	49.60	-1000.16	1.93	-38.84
42	42	49.60	-539.84	1.93	608.83
42	43	51.05	-539.84	1.93	606.03
43	43	51.05	-539.84	1.93	606.03
43	44	51.50	-539.84	1.93	605.15
44	44	51.50	0.00	1.93	1224.42
44	45	52.50	0.00	1.93	1222.48
45	1045	52.50	0.00	-5.30	1222.48
45	46	53.50	0.00	-5.30	1227.79
46	46	53.50	-539.84	-5.30	608.52
46	47	53.95	-539.84	-5.30	610.91
47	47	53.95	-539.84	-5.30	610.91
47	48	55.40	-539.84	-5.30	618.60
48	48	55.40	-1000.16	-5.30	-29.07
48	49	56.85	-1000.16	-5.30	-21.38
49	49	56.85	-1000.16	-5.30	-21.38
49	50	58.30	-1000.16	-5.30	-13.69
50	50	58.30	-1383.75	7.96	-542.65
50	51	59.75	-1383.75	7.96	-554.33
51	51	59.75	-1383.75	7.96	-554.33
51	52	61.20	-1383.75	7.96	-566.01

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.TOT.To

Pretensado Total (t=0)

[1; 1]fase8.FAM1.TOT + [1; 1]fase8.FAM2.TOT + [1; 1]fase8.FAM3.TOT + [1; 1]fase8.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	-1383.76	-5.30	-566.01
52	53	62.65	-1383.76	-5.30	-558.32
53	53	62.65	-1383.76	-5.30	-558.32
53	54	64.10	-1383.76	-5.30	-550.63
54	54	64.10	-1383.76	-5.30	-550.63
54	55	65.55	-1383.76	-5.30	-542.94
55	55	65.55	-1383.76	-5.30	-542.94
55	56	67.00	-1383.76	-5.30	-535.25
56	56	67.00	-1383.76	-5.30	-535.25
56	57	68.45	-1383.76	-5.30	-527.56
57	57	68.45	-1383.76	-5.30	-527.56
57	58	69.90	-1383.76	-5.30	-519.87
58	58	69.90	-1383.76	-5.30	-519.87
58	59	71.35	-1383.76	-5.30	-512.18
59	59	71.35	-1383.76	-5.30	-512.18
59	60	72.80	-1383.76	-5.30	-504.49
60	60	72.80	-1383.65	-18.57	-504.49
60	61	74.25	-1383.65	-18.57	-477.43
61	61	74.25	-1383.65	-18.57	-477.43
61	62	75.70	-1383.65	-18.57	-450.36
62	62	75.70	-1000.16	-5.30	78.60
62	63	77.15	-1000.16	-5.30	86.29
63	63	77.15	-1000.16	-5.30	86.29
63	64	78.60	-1000.16	-5.30	93.98
64	64	78.60	-539.84	-5.30	741.65
64	65	80.05	-539.84	-5.30	749.34
65	65	80.05	-539.84	-5.30	749.34
65	66	80.50	-539.84	-5.30	751.72
66	66	80.50	0.00	-5.30	1370.99
66	67	81.50	0.00	-5.30	1376.29
67	1067	81.50	0.00	-5.32	1376.29
67	68	82.50	0.00	-5.32	1381.61
68	68	82.50	-616.56	-5.32	652.87
68	69	83.08	-616.56	-5.32	655.93
69	69	83.08	-616.56	-5.32	655.93
69	70	84.65	-616.56	-5.32	664.31
70	70	84.65	-1153.60	-5.32	-91.30
70	71	86.23	-1153.60	-5.32	-82.92
71	71	86.23	-1153.60	-5.32	-82.92
71	72	87.80	-1153.60	-5.32	-74.54
72	72	87.80	-1690.62	9.60	-815.09
72	73	89.38	-1690.62	9.60	-830.38
73	73	89.38	-1690.62	9.60	-830.38
73	74	90.95	-1690.62	9.60	-845.66
74	74	90.95	-1690.64	-5.32	-845.66
74	75	92.53	-1690.64	-5.32	-837.28
75	75	92.53	-1690.64	-5.32	-837.28
75	76	94.10	-1690.64	-5.32	-828.90
76	76	94.10	-1690.64	-5.32	-828.90
76	77	95.68	-1690.64	-5.32	-820.52
77	77	95.68	-1690.64	-5.32	-820.52

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.TOT.To

Pretensado Total (t=0)

[1; 1]fase8.FAM1.TOT + [1; 1]fase8.FAM2.TOT + [1; 1]fase8.FAM3.TOT + [1; 1]fase8.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	-1690.64	-5.32	-812.14
78	78	97.25	-1690.64	-5.32	-812.14
78	79	98.83	-1690.64	-5.32	-803.76
79	79	98.83	-1690.64	-5.32	-803.76
79	80	100.40	-1690.64	-5.32	-795.37
80	80	100.40	-1690.64	-5.32	-795.37
80	81	101.98	-1690.64	-5.32	-786.99
81	81	101.98	-1690.64	-5.32	-786.99
81	82	103.55	-1690.64	-5.32	-778.61
82	82	103.55	-1690.53	-20.24	-778.61
82	83	105.13	-1690.53	-20.24	-746.56
83	83	105.13	-1690.53	-20.24	-746.56
83	84	106.70	-1690.53	-20.24	-714.51
84	84	106.70	-1153.60	-5.32	26.04
84	85	108.28	-1153.60	-5.32	34.42
85	85	108.28	-1153.60	-5.32	34.42
85	86	109.85	-1153.60	-5.32	42.80
86	86	109.85	-616.56	-5.32	798.41
86	87	111.43	-616.56	-5.32	806.80
87	87	111.43	-616.56	-5.32	806.80
87	88	112.00	-616.56	-5.32	809.86
88	88	112.00	0.00	-5.32	1538.60
88	89	113.00	0.00	-5.32	1543.92
89	1089	113.00	0.00	4.56	1543.92
89	90	114.00	0.00	4.56	1539.36
90	90	114.00	-616.56	4.56	810.62
90	91	114.58	-616.56	4.56	807.99
91	91	114.58	-616.56	4.56	807.99
91	92	116.15	-616.56	4.56	800.81
92	92	116.15	-1153.60	4.56	45.19
92	93	117.73	-1153.60	4.56	38.01
93	93	117.73	-1153.60	4.56	38.01
93	94	119.30	-1153.60	4.56	30.82
94	94	119.30	-1690.53	19.48	-709.73
94	95	120.88	-1690.53	19.48	-740.58
95	95	120.88	-1690.53	19.48	-740.58
95	96	122.45	-1690.53	19.48	-771.43
96	96	122.45	-1690.64	4.56	-771.43
96	97	124.03	-1690.64	4.56	-778.62
97	97	124.03	-1690.64	4.56	-778.62
97	98	125.60	-1690.64	4.56	-785.80
98	98	125.60	-1690.64	4.56	-785.80
98	99	127.18	-1690.64	4.56	-792.99
99	99	127.18	-1690.64	4.56	-792.99
99	100	128.75	-1690.64	4.56	-800.17
100	100	128.75	-1690.64	4.56	-800.17
100	101	130.33	-1690.64	4.56	-807.36
101	101	130.33	-1690.64	4.56	-807.36
101	102	131.90	-1690.64	4.56	-814.54
102	102	131.90	-1690.64	4.56	-814.54
102	103	133.48	-1690.64	4.56	-821.73

CÁLCULO TENSIONAL

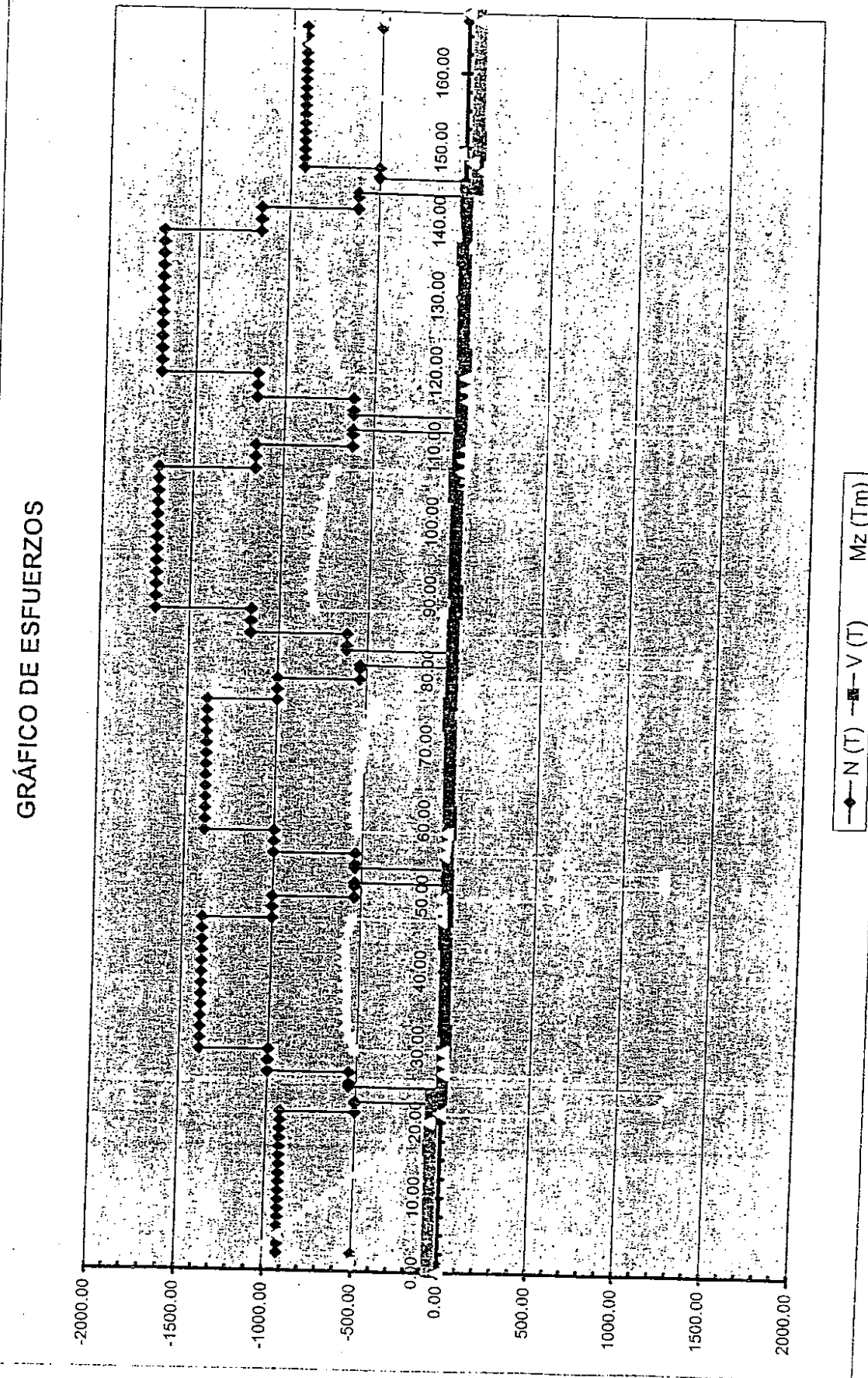
Hipótesis de cálculo:

fase8.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase8.FAM1.TOT + [1; 1]fase8.FAM2.TOT + [1; 1]fase8.FAM3.TOT + [1; 1]fase8.FAM4.TOT + [
Coef. exp:

Coef. exc:



Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-54.41	0.00
1	2	1.00	0.00	-54.41	54.41
2	2	1.00	-501.48	-54.41	-524.16
2	3	1.18	-501.48	-54.41	-514.64
3	3	1.18	-501.48	-54.41	-514.64
3	4	2.35	-501.48	-54.41	-450.71
4	4	2.35	-923.44	-54.41	-1056.22
4	5	3.53	-923.44	-54.41	-992.29
5	5	3.53	-923.44	-54.41	-992.29
5	6	4.70	-923.44	-54.41	-928.36
6	6	4.70	-923.44	-54.41	-928.36
6	7	5.88	-923.44	-54.41	-864.43
7	7	5.88	-923.44	-54.41	-864.43
7	8	7.05	-923.44	-54.41	-800.50
8	8	7.05	-923.44	-54.41	-800.50
8	9	8.23	-923.44	-54.41	-736.57
9	9	8.23	-923.44	-54.41	-736.57
9	10	9.40	-923.44	-54.41	-672.64
10	10	9.40	-923.44	-54.41	-672.64
10	11	10.58	-923.44	-54.41	-608.71
11	11	10.58	-923.44	-54.41	-608.71
11	12	11.75	-923.44	-54.41	-544.78
12	12	11.75	-923.44	-54.41	-544.78
12	13	12.93	-923.44	-54.41	-480.85
13	13	12.93	-923.44	-54.41	-480.85
13	14	14.10	-923.44	-54.41	-416.92
14	14	14.10	-923.44	-54.41	-416.92
14	15	15.28	-923.44	-54.41	-352.99
15	15	15.28	-923.44	-54.41	-352.99
15	16	16.45	-923.44	-54.41	-289.06
16	16	16.45	-922.73	-65.33	-289.06
16	17	17.63	-922.73	-65.33	-212.21
17	17	17.63	-922.73	-65.33	-212.21
17	18	18.80	-922.73	-65.33	-135.35
18	18	18.80	-923.44	-54.41	-135.35
18	19	19.98	-923.44	-54.41	-71.42
19	19	19.98	-923.44	-54.41	-71.42
19	20	21.15	-923.44	-54.41	-7.49
20	20	21.15	-501.48	-54.41	586.21
20	21	22.33	-501.48	-54.41	650.14
21	21	22.33	-501.48	-54.41	650.14
21	22	22.50	-501.48	-54.41	659.66
22	22	22.50	0.00	-54.41	1224.18
22	23	23.50	0.00	-54.41	1276.59
23	1023	23.50	0.00	1.93	1278.59
23	24	24.50	0.00	1.93	1276.66
24	24	24.50	-539.84	1.93	657.39
24	25	24.95	-539.84	1.93	656.52
25	25	24.95	-539.84	1.93	656.52
25	26	26.40	-539.84	1.93	653.72
26	26	26.40	-1000.16	1.93	6.04

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase8.FAM1.TOT + [1; 1]fase8.FAM2.TOT + [1; 1]fase8.FAM3.TOT + [1; 1]fase8.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-1000.16	1.93	3.24
27	27	27.85	-1000.16	1.93	3.24
27	28	29.30	-1000.16	1.93	0.43
28	28	29.30	-1383.68	15.20	-528.53
28	29	30.75	-1383.68	15.20	-550.70
29	29	30.75	-1383.68	15.20	-550.70
29	30	32.20	-1383.68	15.20	-572.88
30	30	32.20	-1383.76	1.93	-572.88
30	31	33.65	-1383.76	1.93	-575.69
31	31	33.65	-1383.76	1.93	-575.69
31	32	35.10	-1383.76	1.93	-578.49
32	32	35.10	-1383.76	1.93	-578.49
32	33	36.55	-1383.76	1.93	-581.30
33	33	36.55	-1383.76	1.93	-581.30
33	34	38.00	-1383.76	1.93	-584.10
34	34	38.00	-1383.76	1.93	-584.10
34	35	39.45	-1383.76	1.93	-586.91
35	35	39.45	-1383.76	1.93	-586.91
35	36	40.90	-1383.76	1.93	-589.71
36	36	40.90	-1383.76	1.93	-589.71
36	37	42.35	-1383.76	1.93	-592.52
37	37	42.35	-1383.76	1.93	-592.52
37	38	43.80	-1383.76	1.93	-595.32
38	38	43.80	-1383.72	-11.33	-595.32
38	39	45.25	-1383.72	-11.33	-578.76
39	39	45.25	-1383.72	-11.33	-578.76
39	40	46.70	-1383.72	-11.33	-562.19
40	40	46.70	-1000.16	1.93	-33.23
40	41	48.15	-1000.16	1.93	-36.03
41	41	48.15	-1000.16	1.93	-36.03
41	42	49.60	-1000.16	1.93	-38.84
42	42	49.60	-539.84	1.93	608.83
42	43	51.05	-539.84	1.93	606.03
43	43	51.05	-539.84	1.93	606.03
43	44	51.50	-539.84	1.93	605.15
44	44	51.50	0.00	1.93	1224.42
44	45	52.50	0.00	1.93	1222.48
45	1045	52.50	0.00	-5.30	1222.48
45	46	53.50	0.00	-5.30	1227.79
46	46	53.50	-539.84	-5.30	608.52
46	47	53.95	-539.84	-5.30	610.91
47	47	53.95	-539.84	-5.30	610.91
47	48	55.40	-539.84	-5.30	618.60
48	48	55.40	-1000.16	-5.30	-29.07
48	49	56.85	-1000.16	-5.30	-21.38
49	49	56.85	-1000.16	-5.30	-21.38
49	50	58.30	-1000.16	-5.30	-13.69
50	50	58.30	-1383.75	7.96	-542.65
50	51	59.75	-1383.75	7.96	-554.33
51	51	59.75	-1383.75	7.96	-554.33
51	52	61.20	-1383.75	7.96	-566.01

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase8.FAM1.TOT + [1; 1]fase8.FAM2.TOT + [1; 1]fase8.FAM3.TOT + [1; 1]fase8.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	-1383.76	-5.30	-566.01
52	53	62.65	-1383.76	-5.30	-558.32
53	53	62.65	-1383.76	-5.30	-558.32
53	54	64.10	-1383.76	-5.30	-550.63
54	54	64.10	-1383.76	-5.30	-550.63
54	55	65.55	-1383.76	-5.30	-542.94
55	55	65.55	-1383.76	-5.30	-542.94
55	56	67.00	-1383.76	-5.30	-535.25
56	56	67.00	-1383.76	-5.30	-535.25
56	57	68.45	-1383.76	-5.30	-527.56
57	57	68.45	-1383.76	-5.30	-527.56
57	58	69.90	-1383.76	-5.30	-519.87
58	58	69.90	-1383.76	-5.30	-519.87
58	59	71.35	-1383.76	-5.30	-512.18
59	59	71.35	-1383.76	-5.30	-512.18
59	60	72.80	-1383.76	-5.30	-504.49
60	60	72.80	-1383.65	-18.57	-504.49
60	61	74.25	-1383.65	-18.57	-477.43
61	61	74.25	-1383.65	-18.57	-477.43
61	62	75.70	-1383.65	-18.57	-450.36
62	62	75.70	-1000.16	-5.30	78.60
62	63	77.15	-1000.16	-5.30	86.29
63	63	77.15	-1000.16	-5.30	86.29
63	64	78.60	-1000.16	-5.30	93.98
64	64	78.60	-539.84	-5.30	741.65
64	65	80.05	-539.84	-5.30	749.34
65	65	80.05	-539.84	-5.30	749.34
65	66	80.50	-539.84	-5.30	751.72
66	66	80.50	0.00	-5.30	1370.99
66	67	81.50	0.00	-5.30	1376.29
67	1067	81.50	0.00	-5.32	1376.29
67	68	82.50	0.00	-5.32	1381.61
68	68	82.50	-616.56	-5.32	652.87
68	69	83.08	-616.56	-5.32	655.93
69	69	83.08	-616.56	-5.32	655.93
69	70	84.65	-616.56	-5.32	664.31
70	70	84.65	-1153.60	-5.32	-91.30
70	71	86.23	-1153.60	-5.32	-82.92
71	71	86.23	-1153.60	-5.32	-82.92
71	72	87.80	-1153.60	-5.32	-74.54
72	72	87.80	-1690.62	9.60	-815.09
72	73	89.38	-1690.62	9.60	-830.38
73	73	89.38	-1690.62	9.60	-830.38
73	74	90.95	-1690.62	9.60	-845.66
74	74	90.95	-1690.64	-5.32	-845.66
74	75	92.53	-1690.64	-5.32	-837.28
75	75	92.53	-1690.64	-5.32	-837.28
75	76	94.10	-1690.64	-5.32	-828.90
76	76	94.10	-1690.64	-5.32	-828.90
76	77	95.68	-1690.64	-5.32	-820.52
77	77	95.68	-1690.64	-5.32	-820.52

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.TOT.Tinf

Pretensado Total ($t=INF$)

$$\{1; 1\} \text{fase8.FAM1.TOT} + \{1; 1\} \text{fase8.FAM2.TOT} + \{1; 1\} \text{fase8.FAM3.TOT} + \{1; 1\} \text{fase8.FAM4.TOT} +$$

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	-1690.64	-5.32	-812.14
78	78	97.25	-1690.64	-5.32	-812.14
78	79	98.83	-1690.64	-5.32	-803.76
79	79	98.83	-1690.64	-5.32	-803.76
79	80	100.40	-1690.64	-5.32	-795.37
80	80	100.40	-1690.64	-5.32	-795.37
80	81	101.98	-1690.64	-5.32	-786.99
81	81	101.98	-1690.64	-5.32	-786.99
81	82	103.55	-1690.64	-5.32	-778.61
82	82	103.55	-1690.53	-20.24	-778.61
82	83	105.13	-1690.53	-20.24	-746.56
83	83	105.13	-1690.53	-20.24	-746.56
83	84	106.70	-1690.53	-20.24	-714.51
84	84	106.70	-1153.60	-5.32	26.04
84	85	108.28	-1153.60	-5.32	34.42
85	85	108.28	-1153.60	-5.32	34.42
85	86	109.85	-1153.60	-5.32	42.80
86	86	109.85	-616.56	-5.32	798.41
86	87	111.43	-616.56	-5.32	806.80
87	87	111.43	-616.56	-5.32	806.80
87	88	112.00	-616.56	-5.32	809.86
88	88	112.00	0.00	-5.32	1538.60
88	89	113.00	0.00	-5.32	1543.92
89	1089	113.00	0.00	4.56	1543.92
89	90	114.00	0.00	4.56	1539.36
90	90	114.00	-616.56	4.56	810.62
90	91	114.58	-616.56	4.56	807.99
91	91	114.58	-616.56	4.56	807.99
91	92	116.15	-616.56	4.56	800.81
92	92	116.15	-1153.60	4.56	45.19
92	93	117.73	-1153.60	4.56	38.01
93	93	117.73	-1153.60	4.56	38.01
93	94	119.30	-1153.60	4.56	30.82
94	94	119.30	-1690.53	19.48	-709.73
94	95	120.88	-1690.53	19.48	-740.58
95	95	120.88	-1690.53	19.48	-740.58
95	96	122.45	-1690.53	19.48	-771.43
96	96	122.45	-1690.64	4.56	-771.43
96	97	124.03	-1690.64	4.56	-778.62
97	97	124.03	-1690.64	4.56	-778.62
97	98	125.60	-1690.64	4.56	-785.80
98	98	125.60	-1690.64	4.56	-785.80
98	99	127.18	-1690.64	4.56	-792.99
99	99	127.18	-1690.64	4.56	-792.99
99	100	128.75	-1690.64	4.56	-800.17
100	100	128.75	-1690.64	4.56	-800.17
100	101	130.33	-1690.64	4.56	-807.36
101	101	130.33	-1690.64	4.56	-807.36
101	102	131.90	-1690.64	4.56	-814.54
102	102	131.90	-1690.64	4.56	-814.54
102	103	133.48	-1690.64	4.56	-821.73

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.TOT.Tinf

- Pretensado Total ($t=INF$)

$$[1; 1] \text{fase8.FAM1.TOT} + [1; 1] \text{fase8.FAM2.TOT} + [1; 1] \text{fase8.FAM3.TOT} + [1; 1] \text{fase8.FAM4.TOT} +$$

Coef. exc:

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	-1690.64	4.56	-821.73
103	104	135.05	-1690.64	4.56	-828.91
104	104	135.05	-1690.61	-10.36	-828.91
104	105	136.63	-1690.61	-10.36	-812.43
105	105	136.63	-1690.61	-10.36	-812.43
105	106	138.20	-1690.61	-10.36	-795.95
106	106	138.20	-1153.60	4.56	-55.40
106	107	139.78	-1153.60	4.56	-62.58
107	107	139.78	-1153.60	4.56	-62.58
107	108	141.35	-1153.60	4.56	-69.77
108	108	141.35	-616.56	4.56	685.85
108	109	142.93	-616.56	4.56	678.66
109	109	142.93	-616.56	4.56	678.66
109	110	143.50	-616.56	4.56	676.04
110	110	143.50	0.00	4.56	1404.78
110	111	144.50	0.00	4.56	1400.22
111	111	144.50	0.00	59.58	1400.22
111	112	145.50	0.00	59.58	1340.63
112	112	145.50	-501.48	59.58	776.11
112	113	145.68	-501.48	59.58	765.68
113	113	145.68	-501.48	59.58	765.68
113	114	146.85	-501.48	59.58	695.67
114	114	146.85	-923.44	59.58	101.98
114	115	148.03	-923.44	59.58	31.96
115	115	148.03	-923.44	59.58	31.96
115	116	149.20	-923.44	59.58	-38.05
116	116	149.20	-922.67	70.51	-38.05
116	117	150.38	-922.67	70.51	-120.99
117	117	150.38	-922.67	70.51	-120.99
117	118	151.55	-922.67	70.51	-203.92
118	118	151.55	-923.44	59.58	-203.92
118	119	152.73	-923.44	59.58	-273.93
119	119	152.73	-923.44	59.58	-273.93
119	120	153.90	-923.44	59.58	-343.95
120	120	153.90	-923.44	59.58	-343.95
120	121	155.08	-923.44	59.58	-413.96
121	121	155.08	-923.44	59.58	-413.96
121	122	156.25	-923.44	59.58	-483.97
122	122	156.25	-923.44	59.58	-483.97
122	123	157.43	-923.44	59.58	-553.98
123	123	157.43	-923.44	59.58	-553.98
123	124	158.60	-923.44	59.58	-623.99
124	124	158.60	-923.44	59.58	-623.99
124	125	159.78	-923.44	59.58	-694.00
125	125	159.78	-923.44	59.58	-694.00
125	126	160.95	-923.44	59.58	-764.01
126	126	160.95	-923.44	59.58	-764.01
126	127	162.13	-923.44	59.58	-834.02
127	127	162.13	-923.44	59.58	-834.02
127	128	163.30	-923.44	59.58	-904.03
128	128	163.30	-923.44	59.58	-904.03

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.TOT.Tinf

Pretensado Total (t=INF)

$$[1; 1]_{\text{fase8.FAM1.TOT}} + [1; 1]_{\text{fase8.FAM2.TOT}} + [1; 1]_{\text{fase8.FAM3.TOT}} + [1; 1]_{\text{fase8.FAM4.TOT}} + [$$

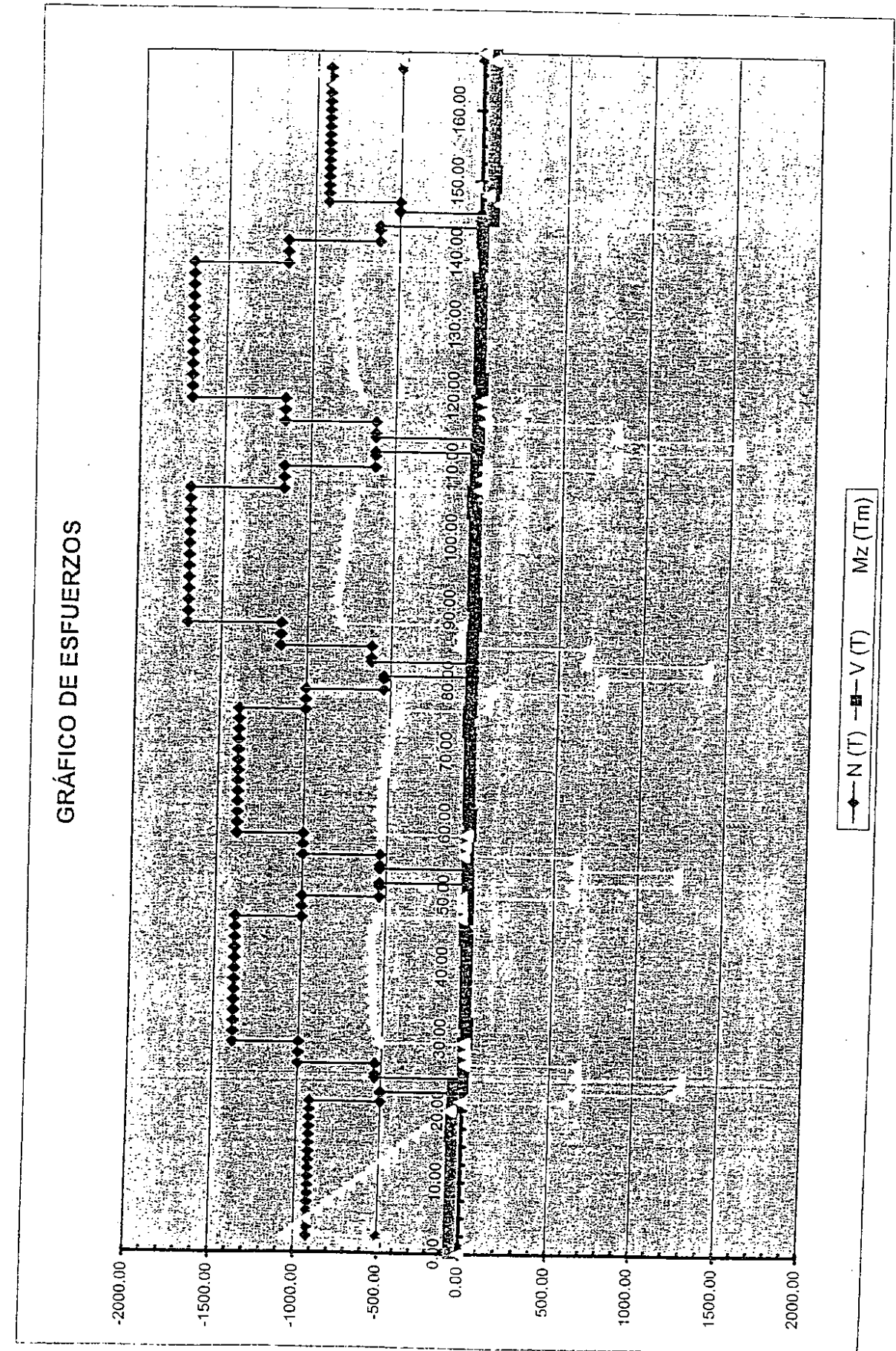
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	-923.44	59.58	-974.04
129	129	164.48	-923.44	59.58	-974.04
129	130	165.65	-923.44	59.58	-1044.06
130	130	165.65	-501.48	59.58	-438.54
130	131	166.83	-501.48	59.58	-508.55
131	131	166.83	-501.48	59.58	-508.55
131	132	167.00	-501.48	59.58	-518.99
132	132	167.00	0.00	59.58	59.58
132	133	168.00	0.00	59.58	0.00

pret f8 fisurada.xls

Programa DINTEL IDEAM S.A.
fase8.TOT.Tinf

30/08/01



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1

Coef exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-54.41	0.00
1	2	1.00	0.00	-54.41	54.41
2	2	1.00	0.00	-54.41	54.41
2	3	1.18	0.00	-54.41	63.93
3	3	1.18	0.00	-54.41	63.93
3	4	2.35	0.00	-54.41	127.86
4	4	2.35	0.00	-54.41	127.86
4	5	3.53	0.00	-54.41	191.79
5	5	3.53	0.00	-54.41	191.79
5	6	4.70	0.00	-54.41	255.72
6	6	4.70	0.00	-54.41	255.72
6	7	5.88	0.00	-54.41	319.65
7	7	5.88	0.00	-54.41	319.65
7	8	7.05	0.00	-54.41	383.58
8	8	7.05	0.00	-54.41	383.58
8	9	8.23	0.00	-54.41	447.51
9	9	8.23	0.00	-54.41	447.51
9	10	9.40	0.00	-54.41	511.44
10	10	9.40	0.00	-54.41	511.44
10	11	10.58	0.00	-54.41	575.37
11	11	10.58	0.00	-54.41	575.37
11	12	11.75	0.00	-54.41	639.30
12	12	11.75	0.00	-54.41	639.30
12	13	12.93	0.00	-54.41	703.23
13	13	12.93	0.00	-54.41	703.23
13	14	14.10	0.00	-54.41	767.16
14	14	14.10	0.00	-54.41	767.16
14	15	15.28	0.00	-54.41	831.08
15	15	15.28	0.00	-54.41	831.08
15	16	16.45	0.00	-54.41	895.01
16	16	16.45	0.64	-54.40	894.93
16	17	17.63	0.64	-54.40	958.86
17	17	17.63	0.64	-54.40	958.86
17	18	18.80	0.64	-54.40	1022.79
18	18	18.80	0.00	-54.41	1022.87
18	19	19.98	0.00	-54.41	1086.80
19	19	19.98	0.00	-54.41	1086.80
19	20	21.15	0.00	-54.41	1150.73
20	20	21.15	0.00	-54.41	1150.73
20	21	22.33	0.00	-54.41	1214.66
21	21	22.33	0.00	-54.41	1214.66
21	22	22.50	0.00	-54.41	1224.18
22	22	22.50	0.00	-54.41	1224.18
22	23	23.50	0.00	-54.41	1278.59
23	1023	23.50	0.00	1.93	1278.59
23	24	24.50	0.00	1.93	1276.66
24	24	24.50	0.00	1.93	1276.66
24	25	24.95	0.00	1.93	1275.78
25	25	24.95	0.00	1.93	1275.78
25	26	26.40	0.00	1.93	1272.98
26	26	26.40	0.00	1.93	1272.98

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1

Coef exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	1.93	1270.17
27	27	27.85	0.00	1.93	1270.17
27	28	29.30	0.00	1.93	1267.37
28	28	29.30	0.02	1.93	1267.31
28	29	30.75	0.02	1.93	1264.51
29	29	30.75	0.02	1.93	1264.51
29	30	32.20	0.02	1.93	1261.70
30	30	32.20	0.00	1.93	1261.78
30	31	33.65	0.00	1.93	1258.98
31	31	33.65	0.00	1.93	1258.98
31	32	35.10	0.00	1.93	1256.17
32	32	35.10	0.00	1.93	1256.17
32	33	36.55	0.00	1.93	1253.37
33	33	36.55	0.00	1.93	1253.37
33	34	38.00	0.00	1.93	1250.56
34	34	38.00	0.00	1.93	1250.56
34	35	39.45	0.00	1.93	1247.76
35	35	39.45	0.00	1.93	1247.76
35	36	40.90	0.00	1.93	1244.95
36	36	40.90	0.00	1.93	1244.95
36	37	42.35	0.00	1.93	1242.15
37	37	42.35	0.00	1.93	1242.15
37	38	43.80	0.00	1.93	1239.34
38	38	43.80	-0.02	1.93	1239.26
38	39	45.25	-0.02	1.93	1236.45
39	39	45.25	-0.02	1.93	1236.45
39	40	46.70	-0.02	1.93	1233.65
40	40	46.70	0.00	1.93	1233.71
40	41	48.15	0.00	1.93	1230.90
41	41	48.15	0.00	1.93	1230.90
41	42	49.60	0.00	1.93	1228.09
42	42	49.60	0.00	1.93	1228.09
42	43	51.05	0.00	1.93	1225.29
43	43	51.05	0.00	1.93	1225.29
43	44	51.50	0.00	1.93	1224.42
44	44	51.50	0.00	1.93	1224.42
44	45	52.50	0.00	1.93	1222.48
45	1045	52.50	0.00	-5.30	1222.48
45	46	53.50	0.00	-5.30	1227.79
46	46	53.50	0.00	-5.30	1227.79
46	47	53.95	0.00	-5.30	1230.17
47	47	53.95	0.00	-5.30	1230.17
47	48	55.40	0.00	-5.30	1237.87
48	48	55.40	0.00	-5.30	1237.87
48	49	56.85	0.00	-5.30	1245.56
49	49	56.85	0.00	-5.30	1245.56
49	50	58.30	0.00	-5.30	1253.25
50	50	58.30	-0.05	-5.30	1253.19
50	51	59.75	-0.05	-5.30	1260.88
51	51	59.75	-0.05	-5.30	1260.88
51	52	61.20	-0.05	-5.30	1268.57

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-5.30	1268.65
52	53	62.65	0.00	-5.30	1276.34
53	53	62.65	0.00	-5.30	1276.34
53	54	64.10	0.00	-5.30	1284.03
54	54	64.10	0.00	-5.30	1284.03
54	55	65.55	0.00	-5.30	1291.72
55	55	65.55	0.00	-5.30	1291.72
55	56	67.00	0.00	-5.30	1299.41
56	56	67.00	0.00	-5.30	1299.41
56	57	68.45	0.00	-5.30	1307.11
57	57	68.45	0.00	-5.30	1307.11
57	58	69.90	0.00	-5.30	1314.80
58	58	69.90	0.00	-5.30	1314.80
58	59	71.35	0.00	-5.30	1322.49
59	59	71.35	0.00	-5.30	1322.49
59	60	72.80	0.00	-5.30	1330.18
60	60	72.80	0.05	-5.30	1330.09
60	61	74.25	0.05	-5.30	1337.78
61	61	74.25	0.05	-5.30	1337.78
61	62	75.70	0.05	-5.30	1345.47
62	62	75.70	0.00	-5.30	1345.53
62	63	77.15	0.00	-5.30	1353.22
63	63	77.15	0.00	-5.30	1353.22
63	64	78.60	0.00	-5.30	1360.91
64	64	78.60	0.00	-5.30	1360.91
64	65	80.05	0.00	-5.30	1368.60
65	65	80.05	0.00	-5.30	1368.60
65	66	80.50	0.00	-5.30	1370.99
66	66	80.50	0.00	-5.30	1370.99
66	67	81.50	0.00	-5.30	1376.29
67	1067	81.50	0.00	-5.32	1376.29
67	68	82.50	0.00	-5.32	1381.61
68	68	82.50	0.00	-5.32	1381.61
68	69	83.08	0.00	-5.32	1384.67
69	69	83.08	0.00	-5.32	1384.67
69	70	84.65	0.00	-5.32	1393.06
70	70	84.65	0.00	-5.32	1393.06
70	71	86.23	0.00	-5.32	1401.44
71	71	86.23	0.00	-5.32	1401.44
71	72	87.80	0.00	-5.32	1409.82
72	72	87.80	-0.05	-5.32	1409.76
72	73	89.38	-0.05	-5.32	1418.14
73	73	89.38	-0.05	-5.32	1418.14
73	74	90.95	-0.05	-5.32	1426.52
74	74	90.95	0.00	-5.32	1426.61
74	75	92.53	0.00	-5.32	1434.99
75	75	92.53	0.00	-5.32	1434.99
75	76	94.10	0.00	-5.32	1443.37
76	76	94.10	0.00	-5.32	1443.37
76	77	95.68	0.00	-5.32	1451.76
77	77	95.68	0.00	-5.32	1451.76

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	-5.32	1460.14
78	78	97.25	0.00	-5.32	1460.14
78	79	98.83	0.00	-5.32	1468.52
79	79	98.83	0.00	-5.32	1468.52
79	80	100.40	0.00	-5.32	1476.90
80	80	100.40	0.00	-5.32	1476.90
80	81	101.98	0.00	-5.32	1485.28
81	81	101.98	0.00	-5.32	1485.28
81	82	103.55	0.00	-5.32	1493.66
82	82	103.55	0.05	-5.32	1493.57
82	83	105.13	0.05	-5.32	1501.96
83	83	105.13	0.05	-5.32	1501.96
83	84	106.70	0.05	-5.32	1510.34
84	84	106.70	0.00	-5.32	1510.40
84	85	108.28	0.00	-5.32	1518.78
85	85	108.28	0.00	-5.32	1518.78
85	86	109.85	0.00	-5.32	1527.16
86	86	109.85	0.00	-5.32	1527.16
86	87	111.43	0.00	-5.32	1535.54
87	87	111.43	0.00	-5.32	1535.54
87	88	112.00	0.00	-5.32	1538.60
88	88	112.00	0.00	-5.32	1538.60
88	89	113.00	0.00	-5.32	1543.92
89	1089	113.00	0.00	4.56	1543.92
89	90	114.00	0.00	4.56	1539.36
90	90	114.00	0.00	4.56	1539.36
90	91	114.58	0.00	4.56	1536.74
91	91	114.58	0.00	4.56	1536.74
91	92	116.15	0.00	4.56	1529.55
92	92	116.15	0.00	4.56	1529.55
92	93	117.73	0.00	4.56	1522.37
93	93	117.73	0.00	4.56	1522.37
93	94	119.30	0.00	4.56	1515.18
94	94	119.30	0.04	4.56	1515.12
94	95	120.88	0.04	4.56	1507.94
95	95	120.88	0.04	4.56	1507.94
95	96	122.45	0.04	4.56	1500.75
96	96	122.45	0.00	4.56	1500.84
96	97	124.03	0.00	4.56	1493.66
97	97	124.03	0.00	4.56	1493.66
97	98	125.60	0.00	4.56	1486.47
98	98	125.60	0.00	4.56	1486.47
98	99	127.18	0.00	4.56	1479.29
99	99	127.18	0.00	4.56	1479.29
99	100	128.75	0.00	4.56	1472.10
100	100	128.75	0.00	4.56	1472.10
100	101	130.33	0.00	4.56	1464.92
101	101	130.33	0.00	4.56	1464.92
101	102	131.90	0.00	4.56	1457.73
102	102	131.90	0.00	4.56	1457.73
102	103	133.48	0.00	4.56	1450.55

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	4.56	1450.55
103	104	135.05	0.00	4.56	1443.36
104	104	135.05	-0.04	4.56	1443.27
104	105	136.63	-0.04	4.56	1436.09
105	105	136.63	-0.04	4.56	1436.09
105	106	138.20	-0.04	4.56	1428.90
106	106	138.20	0.00	4.56	1428.96
106	107	139.78	0.00	4.56	1421.77
107	107	139.78	0.00	4.56	1421.77
107	108	141.35	0.00	4.56	1414.59
108	108	141.35	0.00	4.56	1414.59
108	109	142.93	0.00	4.56	1407.40
109	109	142.93	0.00	4.56	1407.40
109	110	143.50	0.00	4.56	1404.78
110	110	143.50	0.00	4.56	1404.78
110	111	144.50	0.00	4.56	1400.22
111	111	144.50	0.00	59.58	1400.22
111	112	145.50	0.00	59.58	1340.63
112	112	145.50	0.00	59.58	1340.63
112	113	145.68	0.00	59.58	1330.21
113	113	145.68	0.00	59.58	1330.21
113	114	146.85	0.00	59.58	1260.20
114	114	146.85	0.00	59.58	1260.20
114	115	148.03	0.00	59.58	1190.19
115	115	148.03	0.00	59.58	1190.19
115	116	149.20	0.00	59.58	1120.18
116	116	149.20	0.71	59.58	1120.09
116	117	150.38	0.71	59.58	1050.08
117	117	150.38	0.71	59.58	1050.08
117	118	151.55	0.71	59.58	980.07
118	118	151.55	0.00	59.58	980.15
118	119	152.73	0.00	59.58	910.14
119	119	152.73	0.00	59.58	910.14
119	120	153.90	0.00	59.58	840.13
120	120	153.90	0.00	59.58	840.13
120	121	155.08	0.00	59.58	770.12
121	121	155.08	0.00	59.58	770.12
121	122	156.25	0.00	59.58	700.11
122	122	156.25	0.00	59.58	700.11
122	123	157.43	0.00	59.58	630.10
123	123	157.43	0.00	59.58	630.10
123	124	158.60	0.00	59.58	560.09
124	124	158.60	0.00	59.58	560.09
124	125	159.78	0.00	59.58	490.08
125	125	159.78	0.00	59.58	490.08
125	126	160.95	0.00	59.58	420.07
126	126	160.95	0.00	59.58	420.07
126	127	162.13	0.00	59.58	350.06
127	127	162.13	0.00	59.58	350.06
127	128	163.30	0.00	59.58	280.04
128	128	163.30	0.00	59.58	280.04

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.To

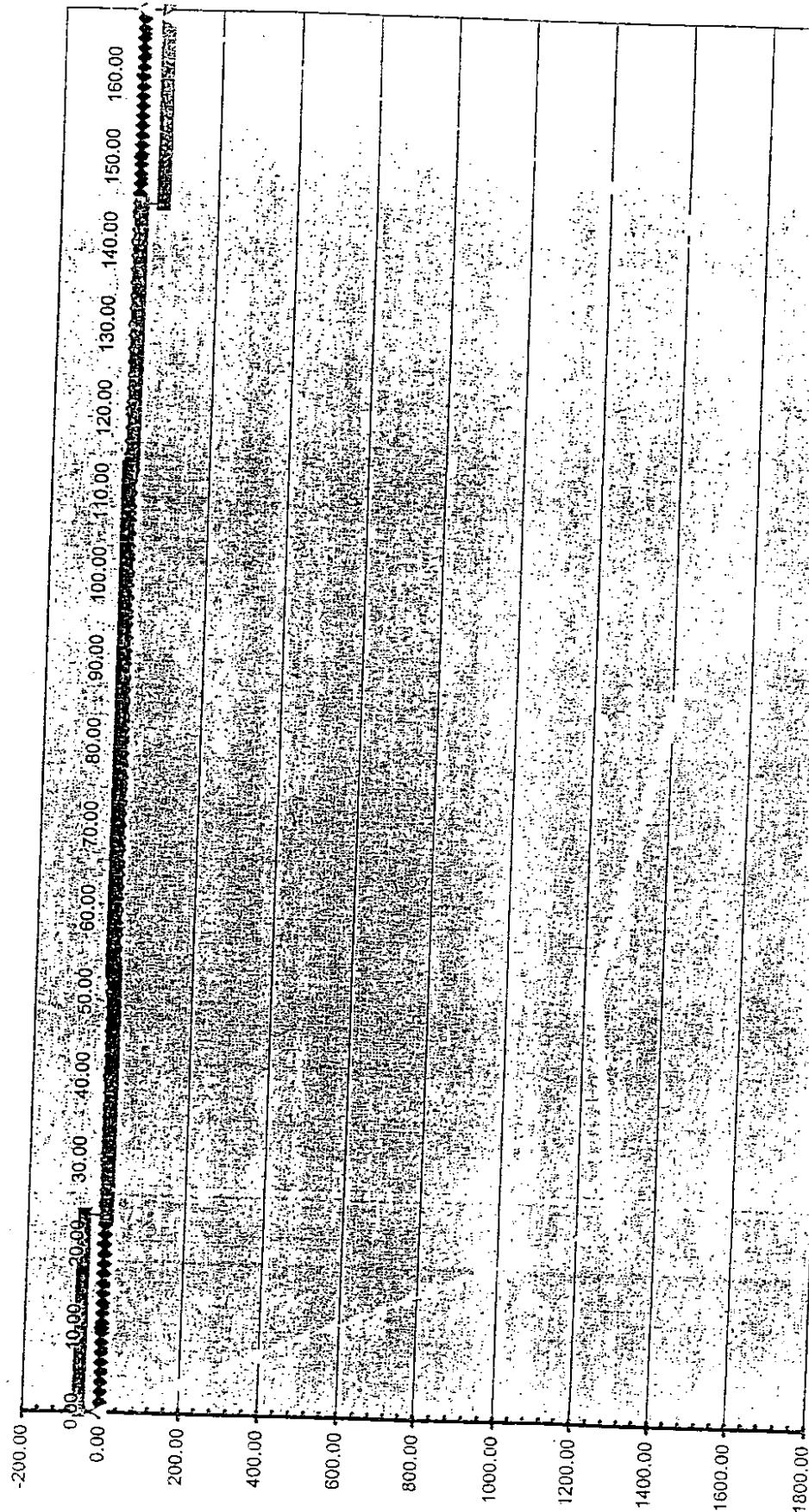
Pretensado Hiperestático (t=0)

[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	59.58	210.03
129	129	164.48	0.00	59.58	210.03
129	130	165.65	0.00	59.58	140.02
130	130	165.65	0.00	59.58	140.02
130	131	166.83	0.00	59.58	70.01
131	131	166.83	0.00	59.58	70.01
131	132	167.00	0.00	59.58	59.58
132	132	167.00	0.00	59.58	59.58
132	133	168.00	0.00	59.58	0.00

GRÁFICO DE ESFUERZOS



— N (T) - - V (T) ... Mz (Tm)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-54.41	0.00
1	2	1.00	0.00	-54.41	54.41
2	2	1.00	0.00	-54.41	54.41
2	3	1.18	0.00	-54.41	63.93
3	3	1.18	0.00	-54.41	63.93
3	4	2.35	0.00	-54.41	127.86
4	4	2.35	0.00	-54.41	127.86
4	5	3.53	0.00	-54.41	191.79
5	5	3.53	0.00	-54.41	191.79
5	6	4.70	0.00	-54.41	255.72
6	6	4.70	0.00	-54.41	255.72
6	7	5.88	0.00	-54.41	319.65
7	7	5.88	0.00	-54.41	319.65
7	8	7.05	0.00	-54.41	383.58
8	8	7.05	0.00	-54.41	383.58
8	9	8.23	0.00	-54.41	447.51
9	9	8.23	0.00	-54.41	447.51
9	10	9.40	0.00	-54.41	511.44
10	10	9.40	0.00	-54.41	511.44
10	11	10.58	0.00	-54.41	575.37
11	11	10.58	0.00	-54.41	575.37
11	12	11.75	0.00	-54.41	639.30
12	12	11.75	0.00	-54.41	639.30
12	13	12.93	0.00	-54.41	703.23
13	13	12.93	0.00	-54.41	703.23
13	14	14.10	0.00	-54.41	767.16
14	14	14.10	0.00	-54.41	767.16
14	15	15.28	0.00	-54.41	831.08
15	15	15.28	0.00	-54.41	831.08
15	16	16.45	0.00	-54.41	895.01
16	16	16.45	0.64	-54.40	894.93
16	17	17.63	0.64	-54.40	958.86
17	17	17.63	0.64	-54.40	958.86
17	18	18.80	0.64	-54.40	1022.79
18	18	18.80	0.00	-54.41	1022.87
18	19	19.98	0.00	-54.41	1086.80
19	19	19.98	0.00	-54.41	1086.80
19	20	21.15	0.00	-54.41	1150.73
20	20	21.15	0.00	-54.41	1150.73
20	21	22.33	0.00	-54.41	1214.66
21	21	22.33	0.00	-54.41	1214.66
21	22	22.50	0.00	-54.41	1224.18
22	22	22.50	0.00	-54.41	1224.18
22	23	23.50	0.00	-54.41	1278.59
23	1023	23.50	0.00	1.93	1278.59
23	24	24.50	0.00	1.93	1276.66
24	24	24.50	0.00	1.93	1276.66
24	25	24.95	0.00	1.93	1275.78
25	25	24.95	0.00	1.93	1275.78
25	26	26.40	0.00	1.93	1272.98
26	26	26.40	0.00	1.93	1272.98

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.Tinf

Pretensado Hiperestático (t=INF)[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	1.93	1270.17
27	27	27.85	0.00	1.93	1270.17
27	28	29.30	0.00	1.93	1267.37
28	28	29.30	0.02	1.93	1267.31
28	29	30.75	0.02	1.93	1264.51
29	29	30.75	0.02	1.93	1264.51
29	30	32.20	0.02	1.93	1261.70
30	30	32.20	0.00	1.93	1261.78
30	31	33.65	0.00	1.93	1258.98
31	31	33.65	0.00	1.93	1258.98
31	32	35.10	0.00	1.93	1256.17
32	32	35.10	0.00	1.93	1256.17
32	33	36.55	0.00	1.93	1253.37
33	33	36.55	0.00	1.93	1253.37
33	34	38.00	0.00	1.93	1250.56
34	34	38.00	0.00	1.93	1250.56
34	35	39.45	0.00	1.93	1247.76
35	35	39.45	0.00	1.93	1247.76
35	36	40.90	0.00	1.93	1244.95
36	36	40.90	0.00	1.93	1244.95
36	37	42.35	0.00	1.93	1242.15
37	37	42.35	0.00	1.93	1242.15
37	38	43.80	0.00	1.93	1239.34
38	38	43.80	-0.02	1.93	1239.26
38	39	45.25	-0.02	1.93	1236.45
39	39	45.25	-0.02	1.93	1236.45
39	40	46.70	-0.02	1.93	1233.65
40	40	46.70	0.00	1.93	1233.71
40	41	48.15	0.00	1.93	1230.90
41	41	48.15	0.00	1.93	1230.90
41	42	49.60	0.00	1.93	1228.09
42	42	49.60	0.00	1.93	1228.09
42	43	51.05	0.00	1.93	1225.29
43	43	51.05	0.00	1.93	1225.29
43	44	51.50	0.00	1.93	1224.42
44	44	51.50	0.00	1.93	1224.42
44	45	52.50	0.00	1.93	1222.48
45	1045	52.50	0.00	-5.30	1222.48
45	46	53.50	0.00	-5.30	1227.79
46	46	53.50	0.00	-5.30	1227.79
46	47	53.95	0.00	-5.30	1230.17
47	47	53.95	0.00	-5.30	1230.17
47	48	55.40	0.00	-5.30	1237.87
48	48	55.40	0.00	-5.30	1237.87
48	49	56.85	0.00	-5.30	1245.56
49	49	56.85	0.00	-5.30	1245.56
49	50	58.30	0.00	-5.30	1253.25
50	50	58.30	-0.05	-5.30	1253.19
50	51	59.75	-0.05	-5.30	1260.88
51	51	59.75	-0.05	-5.30	1260.88
51	52	61.20	-0.05	-5.30	1268.57

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.Tinf

Pretensado Hiperestático (t=INF)[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-5.30	1268.65
52	53	62.65	0.00	-5.30	1276.34
53	53	62.65	0.00	-5.30	1276.34
53	54	64.10	0.00	-5.30	1284.03
54	54	64.10	0.00	-5.30	1284.03
54	55	65.55	0.00	-5.30	1291.72
55	55	65.55	0.00	-5.30	1291.72
55	56	67.00	0.00	-5.30	1299.41
56	56	67.00	0.00	-5.30	1299.41
56	57	68.45	0.00	-5.30	1307.11
57	57	68.45	0.00	-5.30	1307.11
57	58	69.90	0.00	-5.30	1314.80
58	58	69.90	0.00	-5.30	1314.80
58	59	71.35	0.00	-5.30	1322.49
59	59	71.35	0.00	-5.30	1322.49
59	60	72.80	0.00	-5.30	1330.18
60	60	72.80	0.05	-5.30	1330.09
60	61	74.25	0.05	-5.30	1337.78
61	61	74.25	0.05	-5.30	1337.78
61	62	75.70	0.05	-5.30	1345.47
62	62	75.70	0.00	-5.30	1345.53
62	63	77.15	0.00	-5.30	1353.22
63	63	77.15	0.00	-5.30	1353.22
63	64	78.60	0.00	-5.30	1360.91
64	64	78.60	0.00	-5.30	1360.91
64	65	80.05	0.00	-5.30	1368.60
65	65	80.05	0.00	-5.30	1368.60
65	66	80.50	0.00	-5.30	1370.99
66	66	80.50	0.00	-5.30	1370.99
66	67	81.50	0.00	-5.30	1376.29
67	1067	81.50	0.00	-5.32	1376.29
67	68	82.50	0.00	-5.32	1381.61
68	68	82.50	0.00	-5.32	1381.61
68	69	83.08	0.00	-5.32	1384.67
69	69	83.08	0.00	-5.32	1384.67
69	70	84.65	0.00	-5.32	1393.06
70	70	84.65	0.00	-5.32	1393.06
70	71	86.23	0.00	-5.32	1401.44
71	71	86.23	0.00	-5.32	1401.44
71	72	87.80	0.00	-5.32	1409.82
72	72	87.80	-0.05	-5.32	1409.76
72	73	89.38	-0.05	-5.32	1418.14
73	73	89.38	-0.05	-5.32	1418.14
73	74	90.95	-0.05	-5.32	1426.52
74	74	90.95	0.00	-5.32	1426.61
74	75	92.53	0.00	-5.32	1434.99
75	75	92.53	0.00	-5.32	1434.99
75	76	94.10	0.00	-5.32	1443.37
76	76	94.10	0.00	-5.32	1443.37
76	77	95.68	0.00	-5.32	1451.76
77	77	95.68	0.00	-5.32	1451.76

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	-5.32	1460.14
78	78	97.25	0.00	-5.32	1460.14
78	79	98.83	0.00	-5.32	1468.52
79	79	98.83	0.00	-5.32	1468.52
79	80	100.40	0.00	-5.32	1476.90
80	80	100.40	0.00	-5.32	1476.90
80	81	101.98	0.00	-5.32	1485.28
81	81	101.98	0.00	-5.32	1485.28
81	82	103.55	0.00	-5.32	1493.66
82	82	103.55	0.05	-5.32	1493.57
82	83	105.13	0.05	-5.32	1501.96
83	83	105.13	0.05	-5.32	1501.96
83	84	106.70	0.05	-5.32	1510.34
84	84	106.70	0.00	-5.32	1510.40
84	85	108.28	0.00	-5.32	1518.78
85	85	108.28	0.00	-5.32	1518.78
85	86	109.85	0.00	-5.32	1527.16
86	86	109.85	0.00	-5.32	1527.16
86	87	111.43	0.00	-5.32	1535.54
87	87	111.43	0.00	-5.32	1535.54
87	88	112.00	0.00	-5.32	1538.60
88	88	112.00	0.00	-5.32	1538.60
88	89	113.00	0.00	-5.32	1543.92
89	1089	113.00	0.00	4.56	1543.92
89	90	114.00	0.00	4.56	1539.36
90	90	114.00	0.00	4.56	1539.36
90	91	114.58	0.00	4.56	1536.74
91	91	114.58	0.00	4.56	1536.74
91	92	116.15	0.00	4.56	1529.55
92	92	116.15	0.00	4.56	1529.55
92	93	117.73	0.00	4.56	1522.37
93	93	117.73	0.00	4.56	1522.37
93	94	119.30	0.00	4.56	1515.18
94	94	119.30	0.04	4.56	1515.12
94	95	120.88	0.04	4.56	1507.94
95	95	120.88	0.04	4.56	1507.94
95	96	122.45	0.04	4.56	1500.75
96	96	122.45	0.00	4.56	1500.84
96	97	124.03	0.00	4.56	1493.66
97	97	124.03	0.00	4.56	1493.66
97	98	125.60	0.00	4.56	1486.47
98	98	125.60	0.00	4.56	1486.47
98	99	127.18	0.00	4.56	1479.29
99	99	127.18	0.00	4.56	1479.29
99	100	128.75	0.00	4.56	1472.10
100	100	128.75	0.00	4.56	1472.10
100	101	130.33	0.00	4.56	1464.92
101	101	130.33	0.00	4.56	1464.92
101	102	131.90	0.00	4.56	1457.73
102	102	131.90	0.00	4.56	1457.73
102	103	133.48	0.00	4.56	1450.55

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	4.56	1450.55
103	104	135.05	0.00	4.56	1443.36
104	104	135.05	-0.04	4.56	1443.27
104	105	136.63	-0.04	4.56	1436.09
105	105	136.63	-0.04	4.56	1436.09
105	106	138.20	-0.04	4.56	1428.90
106	106	138.20	0.00	4.56	1428.96
106	107	139.78	0.00	4.56	1421.77
107	107	139.78	0.00	4.56	1421.77
107	108	141.35	0.00	4.56	1414.59
108	108	141.35	0.00	4.56	1414.59
108	109	142.93	0.00	4.56	1407.40
109	109	142.93	0.00	4.56	1407.40
109	110	143.50	0.00	4.56	1404.78
110	110	143.50	0.00	4.56	1404.78
110	111	144.50	0.00	4.56	1400.22
111	1111	144.50	0.00	59.58	1400.22
111	112	145.50	0.00	59.58	1340.63
112	112	145.50	0.00	59.58	1340.63
112	113	145.68	0.00	59.58	1330.21
113	113	145.68	0.00	59.58	1330.21
113	114	146.85	0.00	59.58	1260.20
114	114	146.85	0.00	59.58	1260.20
114	115	148.03	0.00	59.58	1190.19
115	115	148.03	0.00	59.58	1190.19
115	116	149.20	0.00	59.58	1120.18
116	116	149.20	0.71	59.58	1120.09
116	117	150.38	0.71	59.58	1050.08
117	117	150.38	0.71	59.58	1050.08
117	118	151.55	0.71	59.58	980.07
118	118	151.55	0.00	59.58	980.15
118	119	152.73	0.00	59.58	910.14
119	119	152.73	0.00	59.58	910.14
119	120	153.90	0.00	59.58	840.13
120	120	153.90	0.00	59.58	840.13
120	121	155.08	0.00	59.58	770.12
121	121	155.08	0.00	59.58	770.12
121	122	156.25	0.00	59.58	700.11
122	122	156.25	0.00	59.58	700.11
122	123	157.43	0.00	59.58	630.10
123	123	157.43	0.00	59.58	630.10
123	124	158.60	0.00	59.58	560.09
124	124	158.60	0.00	59.58	560.09
124	125	159.78	0.00	59.58	490.08
125	125	159.78	0.00	59.58	490.08
125	126	160.95	0.00	59.58	420.07
126	126	160.95	0.00	59.58	420.07
126	127	162.13	0.00	59.58	350.06
127	127	162.13	0.00	59.58	350.06
127	128	163.30	0.00	59.58	280.04
128	128	163.30	0.00	59.58	280.04

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase8.FAM1.TOT + [-1;-1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.TOT + [-1;-1]fase8.FAM2.ISO + [1

Coef. exc:

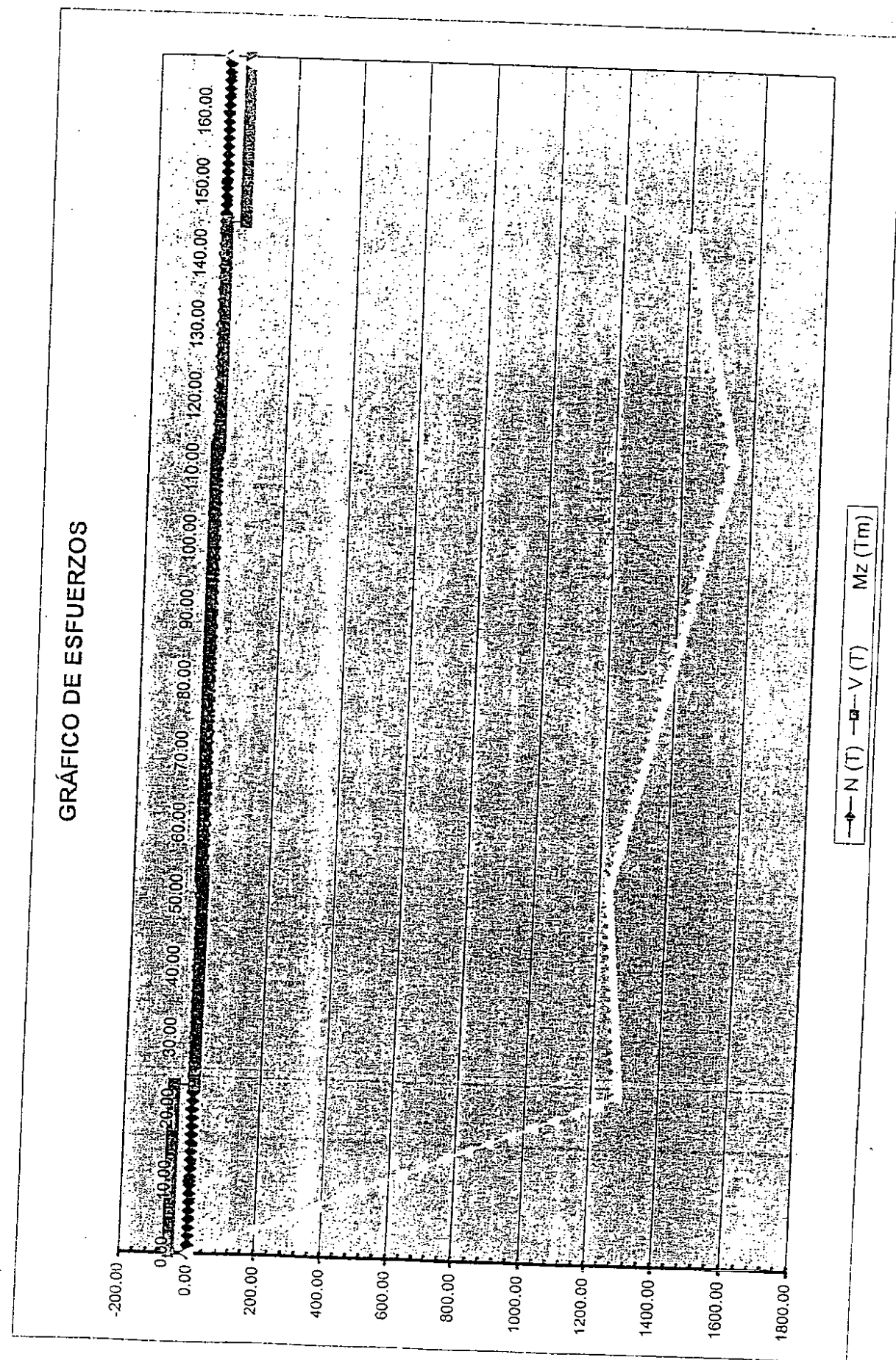
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	59.58	210.03
129	129	164.48	0.00	59.58	210.03
129	130	165.65	0.00	59.58	140.02
130	130	165.65	0.00	59.58	140.02
130	131	166.83	0.00	59.58	70.01
131	131	166.83	0.00	59.58	70.01
131	132	167.00	0.00	59.58	59.58
132	132	167.00	0.00	59.58	59.58
132	133	168.00	0.00	59.58	0.00

pret f8 fisurada.xls

Programa DINTEL IDEAM S.A.
fase8.HIP.Tinf

30/08/01

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.ISO + [1; 1]fase8.FAM3.ISO + [1; 1]fase8.FAM4.ISO + [1; 1]

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	-501.48	0.00	-578.57
2	3	1.18	-501.48	0.00	-578.57
3	3	1.18	-501.48	0.00	-578.57
3	4	2.35	-501.48	0.00	-578.57
4	4	2.35	-923.44	0.00	-1184.08
4	5	3.53	-923.44	0.00	-1184.08
5	5	3.53	-923.44	0.00	-1184.08
5	6	4.70	-923.44	0.00	-1184.08
6	6	4.70	-923.44	0.00	-1184.08
6	7	5.88	-923.44	0.00	-1184.08
7	7	5.88	-923.44	0.00	-1184.08
7	8	7.05	-923.44	0.00	-1184.08
8	8	7.05	-923.44	0.00	-1184.08
8	9	8.23	-923.44	0.00	-1184.08
9	9	8.23	-923.44	0.00	-1184.08
9	10	9.40	-923.44	0.00	-1184.08
10	10	9.40	-923.44	0.00	-1184.08
10	11	10.58	-923.44	0.00	-1184.08
11	11	10.58	-923.44	0.00	-1184.08
11	12	11.75	-923.44	0.00	-1184.08
12	12	11.75	-923.44	0.00	-1184.08
12	13	12.93	-923.44	0.00	-1184.08
13	13	12.93	-923.44	0.00	-1184.08
13	14	14.10	-923.44	0.00	-1184.08
14	14	14.10	-923.44	0.00	-1184.08
14	15	15.28	-923.44	0.00	-1184.08
15	15	15.28	-923.44	0.00	-1184.08
15	16	16.45	-923.44	0.00	-1184.08
16	16	16.45	-923.38	-10.93	-1184.00
16	17	17.63	-923.38	-10.93	-1171.07
17	17	17.63	-923.38	-10.93	-1171.07
17	18	18.80	-923.38	-10.93	-1158.14
18	18	18.80	-923.44	0.00	-1158.22
18	19	19.98	-923.44	0.00	-1158.22
19	19	19.98	-923.44	0.00	-1158.22
19	20	21.15	-923.44	0.00	-1158.22
20	20	21.15	-501.48	0.00	-564.52
20	21	22.33	-501.48	0.00	-564.52
21	21	22.33	-501.48	0.00	-564.52
21	22	22.50	-501.48	0.00	-564.52
22	22	22.50	0.00	0.00	0.00
22	23	23.50	0.00	0.00	0.00
23	1023	23.50	0.00	0.00	0.00
23	24	24.50	0.00	0.00	0.00
24	24	24.50	-539.84	0.00	-619.26
24	25	24.95	-539.84	0.00	-619.26
25	25	24.95	-539.84	0.00	-619.26
25	26	26.40	-539.84	0.00	-619.26
26	26	26.40	-1000.16	0.00	-1266.93

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.ISO + [1; 1]fase8.FAM3.ISO + [1; 1]fase8.FAM4.ISO + [1; 1]

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-1000.16	0.00	-1266.93
27	27	27.85	-1000.16	0.00	-1266.93
27	28	29.30	-1000.16	0.00	-1266.93
28	28	29.30	-1383.70	13.27	-1795.84
28	29	30.75	-1383.70	13.27	-1815.21
29	29	30.75	-1383.70	13.27	-1815.21
29	30	32.20	-1383.70	13.27	-1834.58
30	30	32.20	-1383.76	0.00	-1834.66
30	31	33.65	-1383.76	0.00	-1834.66
31	31	33.65	-1383.76	0.00	-1834.66
31	32	35.10	-1383.76	0.00	-1834.66
32	32	35.10	-1383.76	0.00	-1834.66
32	33	36.55	-1383.76	0.00	-1834.66
33	33	36.55	-1383.76	0.00	-1834.66
33	34	38.00	-1383.76	0.00	-1834.66
34	34	38.00	-1383.76	0.00	-1834.66
34	35	39.45	-1383.76	0.00	-1834.66
35	35	39.45	-1383.76	0.00	-1834.66
35	36	40.90	-1383.76	0.00	-1834.66
36	36	40.90	-1383.76	0.00	-1834.66
36	37	42.35	-1383.76	0.00	-1834.66
37	37	42.35	-1383.76	0.00	-1834.66
37	38	43.80	-1383.76	0.00	-1834.66
38	38	43.80	-1383.70	-13.27	-1834.58
38	39	45.25	-1383.70	-13.27	-1815.21
39	39	45.25	-1383.70	-13.27	-1815.21
39	40	46.70	-1383.70	-13.27	-1795.84
40	40	46.70	-1000.16	0.00	-1266.93
40	41	48.15	-1000.16	0.00	-1266.93
41	41	48.15	-1000.16	0.00	-1266.93
41	42	49.60	-1000.16	0.00	-1266.93
42	42	49.60	-539.84	0.00	-619.26
42	43	51.05	-539.84	0.00	-619.26
43	43	51.05	-539.84	0.00	-619.26
43	44	51.50	-539.84	0.00	-619.26
44	44	51.50	0.00	0.00	0.00
44	45	52.50	0.00	0.00	0.00
45	1045	52.50	0.00	0.00	0.00
45	46	53.50	0.00	0.00	0.00
46	46	53.50	-539.84	0.00	-619.26
46	47	53.95	-539.84	0.00	-619.26
47	47	53.95	-539.84	0.00	-619.26
47	48	55.40	-539.84	0.00	-619.26
48	48	55.40	-1000.16	0.00	-1266.93
48	49	56.85	-1000.16	0.00	-1266.93
49	49	56.85	-1000.16	0.00	-1266.93
49	50	58.30	-1000.16	0.00	-1266.93
50	50	58.30	-1383.70	13.27	-1795.84
50	51	59.75	-1383.70	13.27	-1815.21
51	51	59.75	-1383.70	13.27	-1815.21
51	52	61.20	-1383.70	13.27	-1834.58

Coef exc:

[1; 1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.ISO + [1; 1]fase8.FAM3.ISO + [1; 1]fase8.FAM4.ISO + [1; 1]

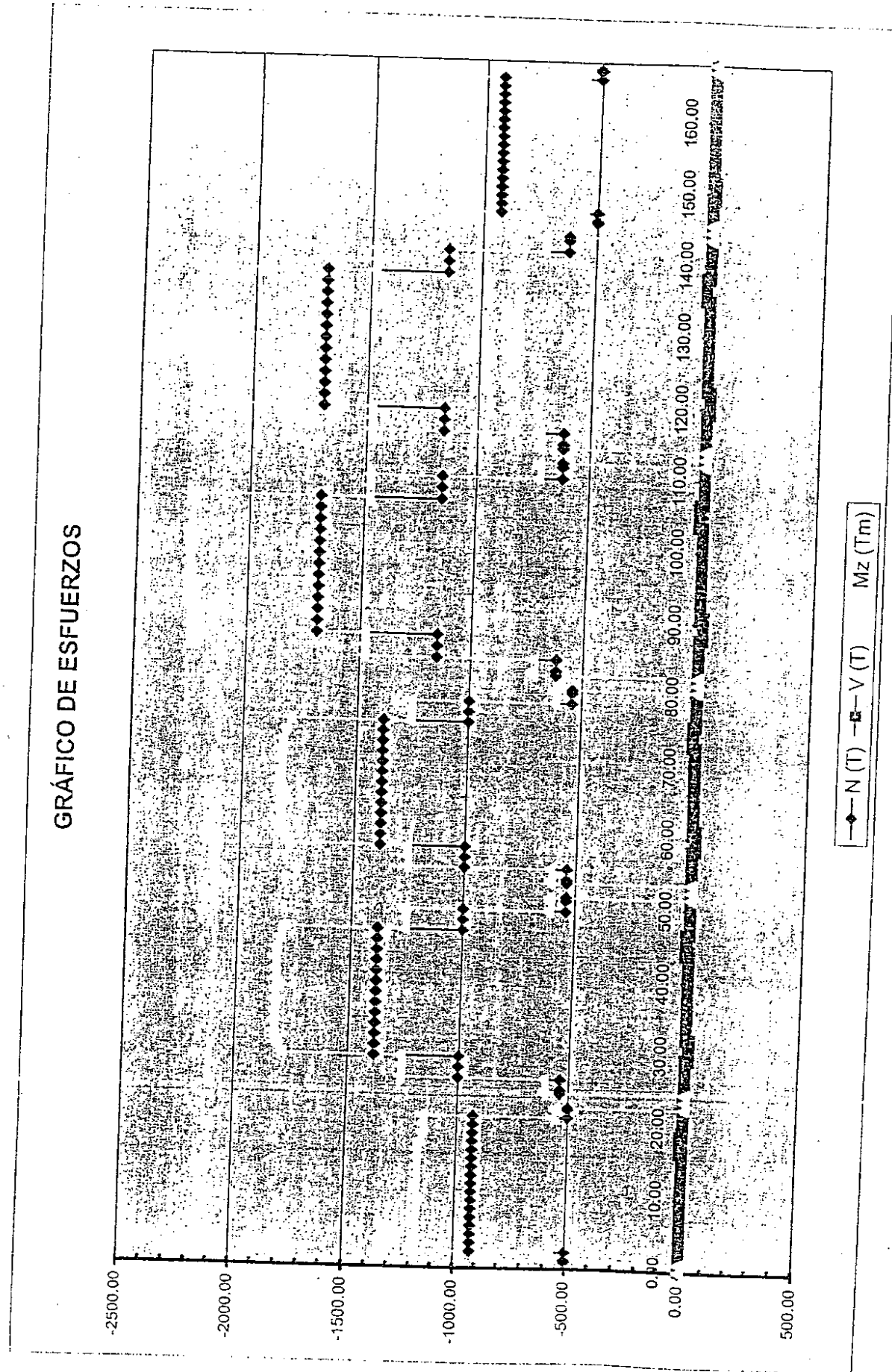
106

Coef. ext:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	-1690.64	0.00	-2272.27
103	104	135.05	-1690.64	0.00	-2272.27
104	104	135.05	-1690.57	-14.92	-2272.19
104	105	136.63	-1690.57	-14.92	-2248.52
105	105	136.63	-1690.57	-14.92	-2248.52
105	106	138.20	-1690.57	-14.92	-2224.85
106	106	138.20	-1153.60	0.00	-1484.36
106	107	139.78	-1153.60	0.00	-1484.36
107	107	139.78	-1153.60	0.00	-1484.36
107	108	141.35	-1153.60	0.00	-1484.36
108	108	141.35	-616.56	0.00	-728.74
108	109	142.93	-616.56	0.00	-728.74
109	109	142.93	-616.56	0.00	-728.74
109	110	143.50	-616.56	0.00	-728.74
110	110	143.50	0.00	0.00	0.00
110	111	144.50	0.00	0.00	0.00
111	1111	144.50	0.00	0.00	0.00
111	112	145.50	0.00	0.00	0.00
112	112	145.50	-501.48	0.00	-564.52
112	113	145.68	-501.48	0.00	-564.52
113	113	145.68	-501.48	0.00	-564.52
113	114	146.85	-501.48	0.00	-564.52
114	114	146.85	-923.44	0.00	-1158.22
114	115	148.03	-923.44	0.00	-1158.22
115	115	148.03	-923.44	0.00	-1158.22
115	116	149.20	-923.44	0.00	-1158.22
116	116	149.20	-923.38	10.93	-1158.14
116	117	150.38	-923.38	10.93	-1171.07
117	117	150.38	-923.38	10.93	-1171.07
117	118	151.55	-923.38	10.93	-1184.00
118	118	151.55	-923.44	0.00	-1184.08
118	119	152.73	-923.44	0.00	-1184.08
119	119	152.73	-923.44	0.00	-1184.08
119	120	153.90	-923.44	0.00	-1184.08
120	120	153.90	-923.44	0.00	-1184.08
120	121	155.08	-923.44	0.00	-1184.08
121	121	155.08	-923.44	0.00	-1184.08
121	122	156.25	-923.44	0.00	-1184.08
122	122	156.25	-923.44	0.00	-1184.08
122	123	157.43	-923.44	0.00	-1184.08
123	123	157.43	-923.44	0.00	-1184.08
123	124	158.60	-923.44	0.00	-1184.08
124	124	158.60	-923.44	0.00	-1184.08
124	125	159.78	-923.44	0.00	-1184.08
125	125	159.78	-923.44	0.00	-1184.08
125	126	160.95	-923.44	0.00	-1184.08
126	126	160.95	-923.44	0.00	-1184.08
126	127	162.13	-923.44	0.00	-1184.08
127	127	162.13	-923.44	0.00	-1184.08
127	128	163.30	-923.44	0.00	-1184.08
128	128	163.30	-923.44	0.00	-1184.08

$$[1; 1]_{\text{fase8.FAM1.ISO}} + [1; 1]_{\text{fase8.FAM2.ISO}} + [1; 1]_{\text{fase8.FAM3.ISO}} + [1; 1]_{\text{fase8.FAM4.ISO}} + [1; \text{Coef. exc}]$$

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	-923.44	0.00	-1184.08
129	129	164.48	-923.44	0.00	-1184.08
129	130	165.65	-923.44	0.00	-1184.08
130	130	165.65	-501.48	0.00	-578.57
130	131	166.83	-501.48	0.00	-578.57
131	131	166.83	-501.48	0.00	-578.57
131	132	167.00	-501.48	0.00	-578.57
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.ISO.Tinf

Pretensado Isostático ($t=INF$)

$$[1; 1]_{\text{fase8.FAM1.ISO}} + [1; 1]_{\text{fase8.FAM2.ISO}} + [1; 1]_{\text{fase8.FAM3.ISO}} + [1; 1]_{\text{fase8.FAM4.ISO}} + \{1; \text{Coef. exc.}\}$$

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	-501.48	0.00	-578.57
2	3	1.18	-501.48	0.00	-578.57
3	3	1.18	-501.48	0.00	-578.57
3	4	2.35	-501.48	0.00	-578.57
4	4	2.35	-923.44	0.00	-1184.08
4	5	3.53	-923.44	0.00	-1184.08
5	5	3.53	-923.44	0.00	-1184.08
5	6	4.70	-923.44	0.00	-1184.08
6	6	4.70	-923.44	0.00	-1184.08
6	7	5.88	-923.44	0.00	-1184.08
7	7	5.88	-923.44	0.00	-1184.08
7	8	7.05	-923.44	0.00	-1184.08
8	8	7.05	-923.44	0.00	-1184.08
8	9	8.23	-923.44	0.00	-1184.08
9	9	8.23	-923.44	0.00	-1184.08
9	10	9.40	-923.44	0.00	-1184.08
10	10	9.40	-923.44	0.00	-1184.08
10	11	10.58	-923.44	0.00	-1184.08
11	11	10.58	-923.44	0.00	-1184.08
11	12	11.75	-923.44	0.00	-1184.08
12	12	11.75	-923.44	0.00	-1184.08
12	13	12.93	-923.44	0.00	-1184.08
13	13	12.93	-923.44	0.00	-1184.08
13	14	14.10	-923.44	0.00	-1184.08
14	14	14.10	-923.44	0.00	-1184.08
14	15	15.28	-923.44	0.00	-1184.08
15	15	15.28	-923.44	0.00	-1184.08
15	16	16.45	-923.44	0.00	-1184.08
16	16	16.45	-923.38	-10.93	-1184.00
16	17	17.63	-923.38	-10.93	-1171.07
17	17	17.63	-923.38	-10.93	-1171.07
17	18	18.80	-923.38	-10.93	-1158.14
18	18	18.80	-923.44	0.00	-1158.22
18	19	19.98	-923.44	0.00	-1158.22
19	19	19.98	-923.44	0.00	-1158.22
19	20	21.15	-923.44	0.00	-1158.22
20	20	21.15	-501.48	0.00	-564.52
20	21	22.33	-501.48	0.00	-564.52
21	21	22.33	-501.48	0.00	-564.52
21	22	22.50	-501.48	0.00	-564.52
22	22	22.50	0.00	0.00	0.00
22	23	23.50	0.00	0.00	0.00
23	1023	23.50	0.00	0.00	0.00
23	24	24.50	0.00	0.00	0.00
24	24	24.50	-539.84	0.00	-619.26
24	25	24.95	-539.84	0.00	-619.26
25	25	24.95	-539.84	0.00	-619.26
25	26	26.40	-539.84	0.00	-619.26
26	26	26.40	-1000.16	0.00	-1266.93

CÁLCULO TENSIONAL

Hipótesis de cálculo:

*fase8.ISO.Tinf**Pretensado Isostático (t=INF)*

[1; 1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.ISO + [1; 1]fase8.FAM3.ISO + [1; 1]fase8.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-1000.16	0.00	-1266.93
27	27	27.85	-1000.16	0.00	-1266.93
27	28	29.30	-1000.16	0.00	-1266.93
28	28	29.30	-1383.70	13.27	-1795.84
28	29	30.75	-1383.70	13.27	-1815.21
29	29	30.75	-1383.70	13.27	-1815.21
29	30	32.20	-1383.70	13.27	-1834.58
30	30	32.20	-1383.76	0.00	-1834.66
30	31	33.65	-1383.76	0.00	-1834.66
31	31	33.65	-1383.76	0.00	-1834.66
31	32	35.10	-1383.76	0.00	-1834.66
32	32	35.10	-1383.76	0.00	-1834.66
32	33	36.55	-1383.76	0.00	-1834.66
33	33	36.55	-1383.76	0.00	-1834.66
33	34	38.00	-1383.76	0.00	-1834.66
34	34	38.00	-1383.76	0.00	-1834.66
34	35	39.45	-1383.76	0.00	-1834.66
35	35	39.45	-1383.76	0.00	-1834.66
35	36	40.90	-1383.76	0.00	-1834.66
36	36	40.90	-1383.76	0.00	-1834.66
36	37	42.35	-1383.76	0.00	-1834.66
37	37	42.35	-1383.76	0.00	-1834.66
37	38	43.80	-1383.76	0.00	-1834.66
38	38	43.80	-1383.70	-13.27	-1834.58
38	39	45.25	-1383.70	-13.27	-1815.21
39	39	45.25	-1383.70	-13.27	-1815.21
39	40	46.70	-1383.70	-13.27	-1795.84
40	40	46.70	-1000.16	0.00	-1266.93
40	41	48.15	-1000.16	0.00	-1266.93
41	41	48.15	-1000.16	0.00	-1266.93
41	42	49.60	-1000.16	0.00	-1266.93
42	42	49.60	-539.84	0.00	-619.26
42	43	51.05	-539.84	0.00	-619.26
43	43	51.05	-539.84	0.00	-619.26
43	44	51.50	-539.84	0.00	-619.26
44	44	51.50	0.00	0.00	0.00
44	45	52.50	0.00	0.00	0.00
45	1045	52.50	0.00	0.00	0.00
45	46	53.50	0.00	0.00	0.00
46	46	53.50	-539.84	0.00	-619.26
46	47	53.95	-539.84	0.00	-619.26
47	47	53.95	-539.84	0.00	-619.26
47	48	55.40	-539.84	0.00	-619.26
48	48	55.40	-1000.16	0.00	-1266.93
48	49	56.85	-1000.16	0.00	-1266.93
49	49	56.85	-1000.16	0.00	-1266.93
49	50	58.30	-1000.16	0.00	-1266.93
50	50	58.30	-1383.70	13.27	-1795.84
50	51	59.75	-1383.70	13.27	-1815.21
51	51	59.75	-1383.70	13.27	-1815.21
51	52	61.20	-1383.70	13.27	-1834.58

CÁLCULO TENSIONAL

Hipótesis de cálculo:

*fase8.ISO.Tinf**Pretensado Isostático (t=INF)*

[1; 1]fase8.FAM1.ISO + [1; 1]fase8.FAM2.ISO + [1; 1]fase8.FAM3.ISO + [1; 1]fase8.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	-1383.76	0.00	-1834.66
52	53	62.65	-1383.76	0.00	-1834.66
53	53	62.65	-1383.76	0.00	-1834.66
53	54	64.10	-1383.76	0.00	-1834.66
54	54	64.10	-1383.76	0.00	-1834.66
54	55	65.55	-1383.76	0.00	-1834.66
55	55	65.55	-1383.76	0.00	-1834.66
55	56	67.00	-1383.76	0.00	-1834.66
56	56	67.00	-1383.76	0.00	-1834.66
56	57	68.45	-1383.76	0.00	-1834.66
57	57	68.45	-1383.76	0.00	-1834.66
57	58	69.90	-1383.76	0.00	-1834.66
58	58	69.90	-1383.76	0.00	-1834.66
58	59	71.35	-1383.76	0.00	-1834.66
59	59	71.35	-1383.76	0.00	-1834.66
59	60	72.80	-1383.76	0.00	-1834.66
60	60	72.80	-1383.70	-13.27	-1834.58
60	61	74.25	-1383.70	-13.27	-1815.21
61	61	74.25	-1383.70	-13.27	-1815.21
61	62	75.70	-1383.70	-13.27	-1795.84
62	62	75.70	-1000.16	0.00	-1266.93
62	63	77.15	-1000.16	0.00	-1266.93
63	63	77.15	-1000.16	0.00	-1266.93
63	64	78.60	-1000.16	0.00	-1266.93
64	64	78.60	-539.84	0.00	-619.26
64	65	80.05	-539.84	0.00	-619.26
65	65	80.05	-539.84	0.00	-619.26
65	66	80.50	-539.84	0.00	-619.26
66	66	80.50	0.00	0.00	0.00
66	67	81.50	0.00	0.00	0.00
67	1067	81.50	0.00	0.00	0.00
67	68	82.50	0.00	0.00	0.00
68	68	82.50	-616.56	0.00	-728.74
68	69	83.08	-616.56	0.00	-728.74
69	69	83.08	-616.56	0.00	-728.74
69	70	84.65	-616.56	0.00	-728.74
70	70	84.65	-1153.60	0.00	-1484.36
70	71	86.23	-1153.60	0.00	-1484.36
71	71	86.23	-1153.60	0.00	-1484.36
71	72	87.80	-1153.60	0.00	-1484.36
72	72	87.80	-1690.57	14.92	-2224.85
72	73	89.38	-1690.57	14.92	-2248.52
73	73	89.38	-1690.57	14.92	-2248.52
73	74	90.95	-1690.57	14.92	-2272.19
74	74	90.95	-1690.64	0.00	-2272.27
74	75	92.53	-1690.64	0.00	-2272.27
75	75	92.53	-1690.64	0.00	-2272.27
75	76	94.10	-1690.64	0.00	-2272.27
76	76	94.10	-1690.64	0.00	-2272.27
76	77	95.68	-1690.64	0.00	-2272.27
77	77	95.68	-1690.64	0.00	-2272.27

Coef. exc.

Coef. exc:

110

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase8.ISO.Tinf

Pretensado Isostático ($t=INF$)

Coef. exc:

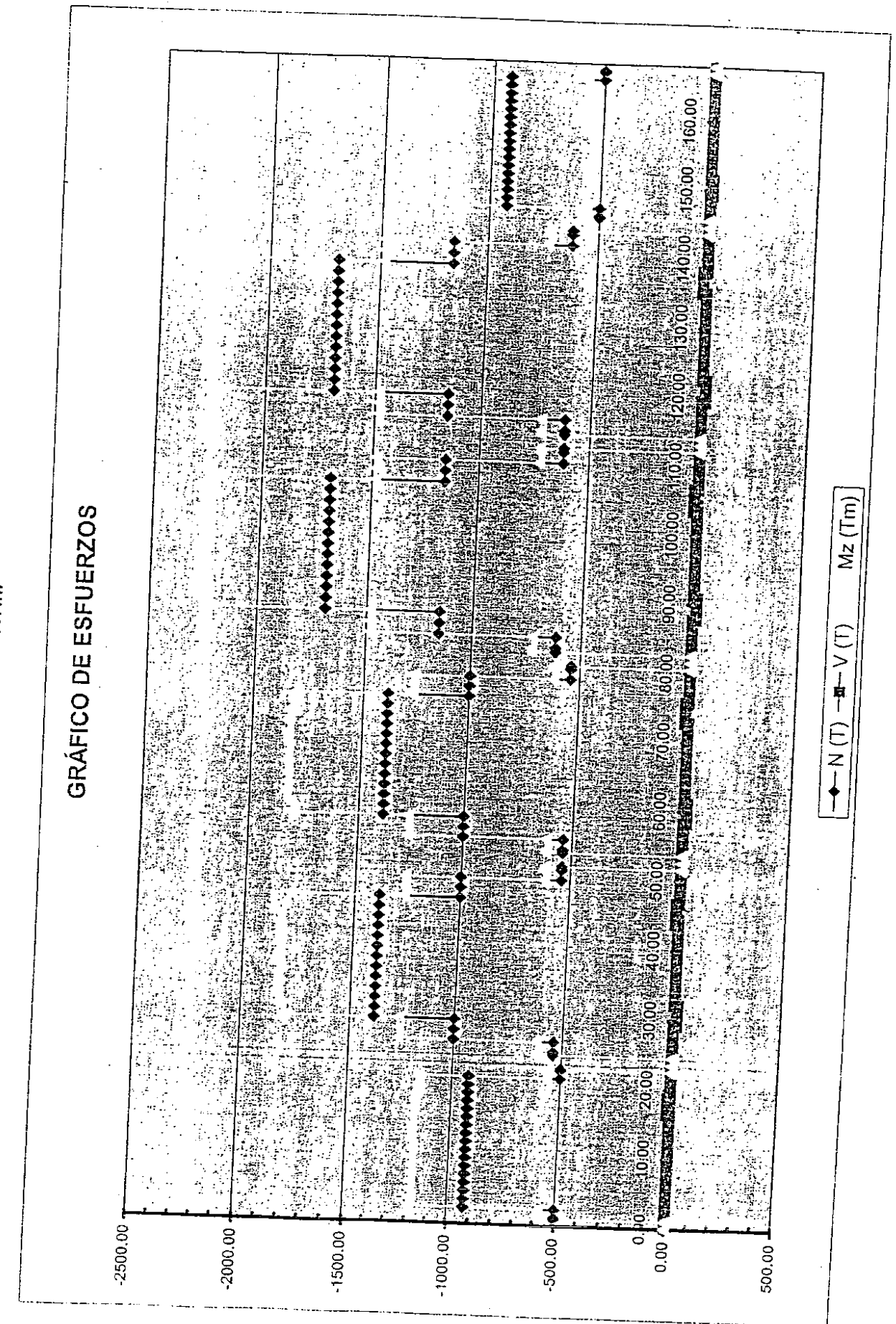
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	-923.44	0.00	-1184.08
129	129	164.48	-923.44	0.00	-1184.08
129	130	165.65	-923.44	0.00	-1184.08
130	130	165.65	-501.48	0.00	-578.57
130	131	166.83	-501.48	0.00	-578.57
131	131	166.83	-501.48	0.00	-578.57
131	132	167.00	-501.48	0.00	-578.57
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00

pret f8 fisurada.xls

Programa DINTEL IDEAM S.A.
fase8.ISO.Tinf

30/08/01



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.TOT.To

Pretensado Total (t=0)

[1; 1]fase4.FAM1.TOT + [1; 1]fase4.FAM2.TOT + [1; 1]fase4.FAM3.TOT + [1; 1]fase4.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	2.67	0.00
1	2	1.00	0.00	2.67	-2.67
2	2	1.00	0.00	2.67	-2.67
2	3	1.18	0.00	2.67	-3.14
3	3	1.18	0.00	2.67	-3.14
3	4	2.35	0.00	2.67	-6.27
4	4	2.35	0.00	2.67	-6.27
4	5	3.53	0.00	2.67	-9.41
5	5	3.53	0.00	2.67	-9.41
5	6	4.70	0.00	2.67	-12.55
6	6	4.70	0.00	2.67	-12.55
6	7	5.88	0.00	2.67	-15.68
7	7	5.88	0.00	2.67	-15.68
7	8	7.05	0.00	2.67	-18.82
8	8	7.05	0.00	2.67	-18.82
8	9	8.23	0.00	2.67	-21.95
9	9	8.23	0.00	2.67	-21.95
9	10	9.40	0.00	2.67	-25.09
10	10	9.40	0.00	2.67	-25.09
10	11	10.58	0.00	2.67	-28.23
11	11	10.58	0.00	2.67	-28.23
11	12	11.75	0.00	2.67	-31.36
12	12	11.75	0.00	2.67	-31.36
12	13	12.93	0.00	2.67	-34.50
13	13	12.93	0.00	2.67	-34.50
13	14	14.10	0.00	2.67	-37.64
14	14	14.10	0.00	2.67	-37.64
14	15	15.28	0.00	2.67	-40.77
15	15	15.28	0.00	2.67	-40.77
15	16	16.45	0.00	2.67	-43.91
16	16	16.45	-0.03	2.67	-43.91
16	17	17.63	-0.03	2.67	-47.05
17	17	17.63	-0.03	2.67	-47.05
17	18	18.80	-0.03	2.67	-50.18
18	18	18.80	-0.69	2.58	-50.18
18	19	19.98	-0.69	2.58	-53.32
19	19	19.98	-0.69	2.58	-53.32
19	20	21.15	-0.69	2.58	-56.45
20	20	21.15	0.00	2.67	-56.45
20	21	22.33	0.00	2.67	-59.59
21	21	22.33	0.00	2.67	-59.59
21	22	22.50	0.00	2.67	-60.06
22	22	22.50	-728.78	2.67	326.93
22	23	23.50	-728.78	2.67	324.26
23	1023	23.50	-728.78	-0.58	324.26
23	24	24.50	-728.78	-0.58	324.83
24	24	24.50	0.00	-0.58	-62.15
24	25	24.95	0.00	-0.58	-61.89
25	25	24.95	0.00	-0.58	-61.89
25	26	26.40	0.00	-0.58	-61.05
26	26	26.40	-0.12	-0.56	-61.05

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.TOT.To

Pretensado Total (t=0)

[1; 1]fase4.FAM1.TOT + [1; 1]fase4.FAM2.TOT + [1; 1]fase4.FAM3.TOT + [1; 1]fase4.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-0.12	-0.56	-60.21
27	27	27.85	-0.12	-0.56	-60.21
27	28	29.30	-0.12	-0.56	-59.38
28	28	29.30	0.00	-0.58	-59.38
28	29	30.75	0.00	-0.58	-58.54
29	29	30.75	0.00	-0.58	-58.54
29	30	32.20	0.00	-0.58	-57.70
30	30	32.20	0.00	-0.58	-57.70
30	31	33.65	0.00	-0.58	-56.86
31	31	33.65	0.00	-0.58	-56.86
31	32	35.10	0.00	-0.58	-56.02
32	32	35.10	0.00	-0.58	-56.02
32	33	36.55	0.00	-0.58	-55.19
33	33	36.55	0.00	-0.58	-55.19
33	34	38.00	0.00	-0.58	-54.35
34	34	38.00	0.00	-0.58	-54.35
34	35	39.45	0.00	-0.58	-53.51
35	35	39.45	0.00	-0.58	-53.51
35	36	40.90	0.00	-0.58	-52.67
36	36	40.90	0.00	-0.58	-52.67
36	37	42.35	0.00	-0.58	-51.84
37	37	42.35	0.00	-0.58	-51.84
37	38	43.80	0.00	-0.58	-51.00
38	38	43.80	0.00	-0.58	-51.00
38	39	45.25	0.00	-0.58	-50.16
39	39	45.25	0.00	-0.58	-50.16
39	40	46.70	0.00	-0.58	-49.32
40	40	46.70	0.12	-0.56	-49.32
40	41	48.15	0.12	-0.56	-48.48
41	41	48.15	0.12	-0.56	-48.48
41	42	49.60	0.12	-0.56	-47.65
42	42	49.60	0.00	-0.58	-47.65
42	43	51.05	0.00	-0.58	-46.81
43	43	51.05	0.00	-0.58	-46.81
43	44	51.50	0.00	-0.58	-46.55
44	44	51.50	-728.78	-0.58	340.43
44	45	52.50	-728.78	-0.58	341.01
45	1045	52.50	-728.78	0.05	341.01
45	46	53.50	-728.78	0.05	340.96
46	46	53.50	0.00	0.05	-46.02
46	47	53.95	0.00	0.05	-46.04
47	47	53.95	0.00	0.05	-46.04
47	48	55.40	0.00	0.05	-46.12
48	48	55.40	0.01	0.05	-46.12
48	49	56.85	0.01	0.05	-46.19
49	49	56.85	0.01	0.05	-46.19
49	50	58.30	0.01	0.05	-46.26
50	50	58.30	0.00	0.05	-46.26
50	51	59.75	0.00	0.05	-46.33
51	51	59.75	0.00	0.05	-46.33
51	52	61.20	0.00	0.05	-46.41

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.TOT.To

Pretensado Total (t=0)

[1; 1]fase4.FAM1.TOT + [1; 1]fase4.FAM2.TOT + [1; 1]fase4.FAM3.TOT + [1; 1]fase4.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.05	-46.41
52	53	62.65	0.00	0.05	-46.48
53	53	62.65	0.00	0.05	-46.48
53	54	64.10	0.00	0.05	-46.55
54	54	64.10	0.00	0.05	-46.55
54	55	65.55	0.00	0.05	-46.62
55	55	65.55	0.00	0.05	-46.62
55	56	67.00	0.00	0.05	-46.70
56	56	67.00	0.00	0.05	-46.70
56	57	68.45	0.00	0.05	-46.77
57	57	68.45	0.00	0.05	-46.77
57	58	69.90	0.00	0.05	-46.84
58	58	69.90	0.00	0.05	-46.84
58	59	71.35	0.00	0.05	-46.91
59	59	71.35	0.00	0.05	-46.91
59	60	72.80	0.00	0.05	-46.99
60	60	72.80	0.00	0.05	-46.99
60	61	74.25	0.00	0.05	-47.06
61	61	74.25	0.00	0.05	-47.06
61	62	75.70	0.00	0.05	-47.13
62	62	75.70	-0.01	0.05	-47.13
62	63	77.15	-0.01	0.05	-47.20
63	63	77.15	-0.01	0.05	-47.20
63	64	78.60	-0.01	0.05	-47.28
64	64	78.60	0.00	0.05	-47.28
64	65	80.05	0.00	0.05	-47.35
65	65	80.05	0.00	0.05	-47.35
65	66	80.50	0.00	0.05	-47.37
66	66	80.50	-728.78	0.05	339.61
66	67	81.50	-728.78	0.05	339.56
67	1067	81.50	-728.78	-0.20	339.56
67	68	82.50	-728.78	-0.20	339.76
68	68	82.50	0.00	-0.20	-47.23
68	69	83.08	0.00	-0.20	-47.11
69	69	83.08	0.00	-0.20	-47.11
69	70	84.65	0.00	-0.20	-46.81
70	70	84.65	-0.04	-0.19	-46.81
70	71	86.23	-0.04	-0.19	-46.50
71	71	86.23	-0.04	-0.19	-46.50
71	72	87.80	-0.04	-0.19	-46.19
72	72	87.80	0.00	-0.20	-46.19
72	73	89.38	0.00	-0.20	-45.88
73	73	89.38	0.00	-0.20	-45.88
73	74	90.95	0.00	-0.20	-45.58
74	74	90.95	0.00	-0.20	-45.58
74	75	92.53	0.00	-0.20	-45.27
75	75	92.53	0.00	-0.20	-45.27
75	76	94.10	0.00	-0.20	-44.96
76	76	94.10	0.00	-0.20	-44.96
76	77	95.68	0.00	-0.20	-44.65
77	77	95.68	0.00	-0.20	-44.65

CÁLCULO TENSIONAL

Hipótesis de cálculo:

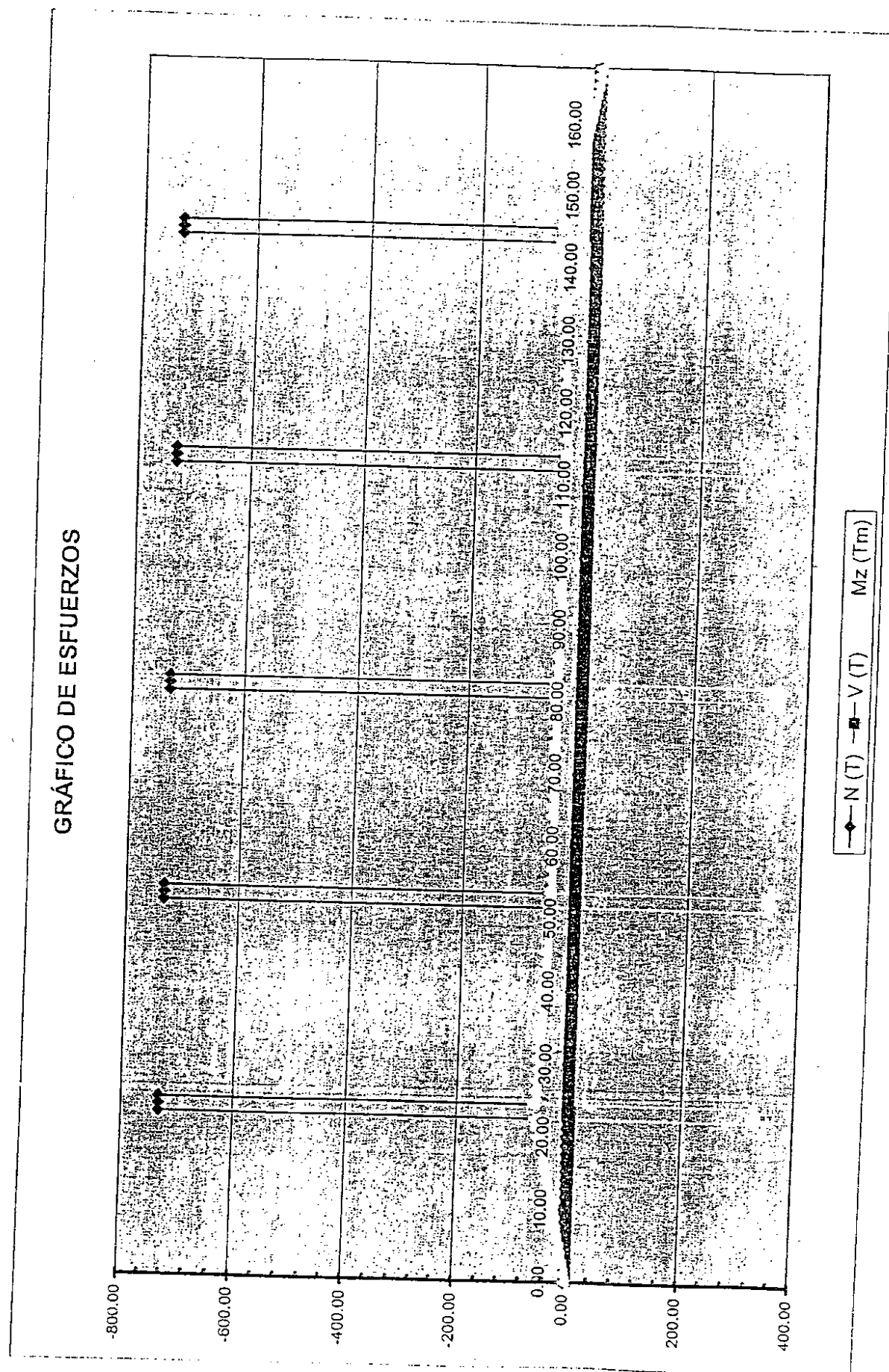
fase4.TOT.To

Pretensado Total (t=0)

[1; 1]fase4.FAM1.TOT + [1; 1]fase4.FAM2.TOT + [1; 1]fase4.FAM3.TOT + [1; 1]fase4.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	-0.20	-44.35
78	78	97.25	0.00	-0.20	-44.35
78	79	98.83	0.00	-0.20	-44.04
79	79	98.83	0.00	-0.20	-44.04
79	80	100.40	0.00	-0.20	-43.73
80	80	100.40	0.00	-0.20	-43.73
80	81	101.98	0.00	-0.20	-43.43
81	81	101.98	0.00	-0.20	-43.43
81	82	103.55	0.00	-0.20	-43.12
82	82	103.55	0.00	-0.20	-43.12
82	83	105.13	0.00	-0.20	-42.81
83	83	105.13	0.00	-0.20	-42.81
83	84	106.70	0.00	-0.20	-42.50
84	84	106.70	0.04	-0.19	-42.50
84	85	108.28	0.04	-0.19	-42.20
85	85	108.28	0.04	-0.19	-42.20
85	86	109.85	0.04	-0.19	-41.89
86	86	109.85	0.00	-0.20	-41.89
86	87	111.43	0.00	-0.20	-41.58
87	87	111.43	0.00	-0.20	-41.58
87	88	112.00	0.00	-0.20	-41.47
88	88	112.00	-728.78	-0.20	345.51
88	89	113.00	-728.78	-0.20	345.71
89	1089	113.00	-728.78	0.60	345.71
89	90	114.00	-728.78	0.60	345.11
90	90	114.00	0.00	0.60	-41.87
90	91	114.58	0.00	0.60	-42.22
91	91	114.58	0.00	0.60	-42.22
91	92	116.15	0.00	0.60	-43.16
92	92	116.15	0.12	0.59	-43.16
92	93	117.73	0.12	0.59	-44.10
93	93	117.73	0.12	0.59	-44.10
93	94	119.30	0.12	0.59	-45.04
94	94	119.30	0.00	0.60	-45.04
94	95	120.88	0.00	0.60	-45.99
95	95	120.88	0.00	0.60	-45.99
95	96	122.45	0.00	0.60	-46.93
96	96	122.45	0.00	0.60	-46.93
96	97	124.03	0.00	0.60	-47.87
97	97	124.03	0.00	0.60	-47.87
97	98	125.60	0.00	0.60	-48.82
98	98	125.60	0.00	0.60	-48.82
98	99	127.18	0.00	0.60	-49.76
99	99	127.18	0.00	0.60	-49.76
99	100	128.75	0.00	0.60	-50.70
100	100	128.75	0.00	0.60	-50.70
100	101	130.33	0.00	0.60	-51.64
101	101	130.33	0.00	0.60	-51.64
101	102	131.90	0.00	0.60	-52.59
102	102	131.90	0.00	0.60	-52.59
102	103	133.48	0.00	0.60	-53.53



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.TOT.Tinf

Pretensado Total ($t=INF$)

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	2.67	0.00
1	2	1.00	0.00	2.67	-2.67
2	2	1.00	0.00	2.67	-2.67
2	3	1.18	0.00	2.67	-3.14
3	3	1.18	0.00	2.67	-3.14
3	4	2.35	0.00	2.67	-6.27
4	4	2.35	0.00	2.67	-6.27
4	5	3.53	0.00	2.67	-9.41
5	5	3.53	0.00	2.67	-9.41
5	6	4.70	0.00	2.67	-12.55
6	6	4.70	0.00	2.67	-12.55
6	7	5.88	0.00	2.67	-15.68
7	7	5.88	0.00	2.67	-15.68
7	8	7.05	0.00	2.67	-18.82
8	8	7.05	0.00	2.67	-18.82
8	9	8.23	0.00	2.67	-21.95
9	9	8.23	0.00	2.67	-21.95
9	10	9.40	0.00	2.67	-25.09
10	10	9.40	0.00	2.67	-25.09
10	11	10.58	0.00	2.67	-28.23
11	11	10.58	0.00	2.67	-28.23
11	12	11.75	0.00	2.67	-31.36
12	12	11.75	0.00	2.67	-31.36
12	13	12.93	0.00	2.67	-34.50
13	13	12.93	0.00	2.67	-34.50
13	14	14.10	0.00	2.67	-37.64
14	14	14.10	0.00	2.67	-37.64
14	15	15.28	0.00	2.67	-40.77
15	15	15.28	0.00	2.67	-40.77
15	16	16.45	0.00	2.67	-43.91
16	16	16.45	-0.03	2.67	-43.91
16	17	17.63	-0.03	2.67	-47.05
17	17	17.63	-0.03	2.67	-47.05
17	18	18.80	-0.03	2.67	-50.18
18	18	18.80	-0.69	2.58	-50.18
18	19	19.98	-0.69	2.58	-53.32
19	19	19.98	-0.69	2.58	-53.32
19	20	21.15	-0.69	2.58	-56.45
20	20	21.15	0.00	2.67	-56.45
20	21	22.33	0.00	2.67	-59.59
21	21	22.33	0.00	2.67	-59.59
21	22	22.50	0.00	2.67	-60.06
22	22	22.50	-728.78	2.67	326.93
22	23	23.50	-728.78	2.67	324.26
23	1023	23.50	-728.78	-0.58	324.26
23	24	24.50	-728.78	-0.58	324.83
24	24	24.50	0.00	-0.58	-62.15
24	25	24.95	0.00	-0.58	-61.89
25	25	24.95	0.00	-0.58	-61.89
25	26	26.40	0.00	-0.58	-61.05
26	26	26.40	-0.12	-0.56	-61.05

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase4.FAM1.TOT + [1; 1]fase4.FAM2.TOT + [1; 1]fase4.FAM3.TOT + [1; 1]fase4.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-0.12	-0.56	-60.21
27	27	27.85	-0.12	-0.56	-60.21
27	28	29.30	-0.12	-0.56	-59.38
28	28	29.30	0.00	-0.58	-59.38
28	29	30.75	0.00	-0.58	-58.54
29	29	30.75	0.00	-0.58	-58.54
29	30	32.20	0.00	-0.58	-57.70
30	30	32.20	0.00	-0.58	-57.70
30	31	33.65	0.00	-0.58	-56.86
31	31	33.65	0.00	-0.58	-56.86
31	32	35.10	0.00	-0.58	-56.02
32	32	35.10	0.00	-0.58	-56.02
32	33	36.55	0.00	-0.58	-55.19
33	33	36.55	0.00	-0.58	-55.19
33	34	38.00	0.00	-0.58	-54.35
34	34	38.00	0.00	-0.58	-54.35
34	35	39.45	0.00	-0.58	-53.51
35	35	39.45	0.00	-0.58	-53.51
35	36	40.90	0.00	-0.58	-52.67
36	36	40.90	0.00	-0.58	-52.67
36	37	42.35	0.00	-0.58	-51.84
37	37	42.35	0.00	-0.58	-51.84
37	38	43.80	0.00	-0.58	-51.00
38	38	43.80	0.00	-0.58	-51.00
38	39	45.25	0.00	-0.58	-50.16
39	39	45.25	0.00	-0.58	-50.16
39	40	46.70	0.00	-0.58	-49.32
40	40	46.70	0.12	-0.56	-49.32
40	41	48.15	0.12	-0.56	-48.48
41	41	48.15	0.12	-0.56	-48.48
41	42	49.60	0.12	-0.56	-47.65
42	42	49.60	0.00	-0.58	-47.65
42	43	51.05	0.00	-0.58	-46.81
43	43	51.05	0.00	-0.58	-46.81
43	44	51.50	0.00	-0.58	-46.55
44	44	51.50	-728.78	-0.58	340.43
44	45	52.50	-728.78	-0.58	341.01
45	1045	52.50	-728.78	0.05	341.01
45	46	53.50	-728.78	0.05	340.96
46	46	53.50	0.00	0.05	-46.02
46	47	53.95	0.00	0.05	-46.04
47	47	53.95	0.00	0.05	-46.04
47	48	55.40	0.00	0.05	-46.12
48	48	55.40	0.01	0.05	-46.12
48	49	56.85	0.01	0.05	-46.19
49	49	56.85	0.01	0.05	-46.19
49	50	58.30	0.01	0.05	-46.26
50	50	58.30	0.00	0.05	-46.26
50	51	59.75	0.00	0.05	-46.33
51	51	59.75	0.00	0.05	-46.33
51	52	61.20	0.00	0.05	-46.41

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase4.FAM1.TOT + [1; 1]fase4.FAM2.TOT + [1; 1]fase4.FAM3.TOT + [1; 1]fase4.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.05	-46.41
52	53	62.65	0.00	0.05	-46.48
53	53	62.65	0.00	0.05	-46.48
53	54	64.10	0.00	0.05	-46.55
54	54	64.10	0.00	0.05	-46.55
54	55	65.55	0.00	0.05	-46.62
55	55	65.55	0.00	0.05	-46.62
55	56	67.00	0.00	0.05	-46.70
56	56	67.00	0.00	0.05	-46.70
56	57	68.45	0.00	0.05	-46.77
57	57	68.45	0.00	0.05	-46.77
57	58	69.90	0.00	0.05	-46.84
58	58	69.90	0.00	0.05	-46.84
58	59	71.35	0.00	0.05	-46.91
59	59	71.35	0.00	0.05	-46.91
59	60	72.80	0.00	0.05	-46.99
60	60	72.80	0.00	0.05	-46.99
60	61	74.25	0.00	0.05	-47.06
61	61	74.25	0.00	0.05	-47.06
61	62	75.70	0.00	0.05	-47.13
62	62	75.70	-0.01	0.05	-47.13
62	63	77.15	-0.01	0.05	-47.20
63	63	77.15	-0.01	0.05	-47.20
63	64	78.60	-0.01	0.05	-47.28
64	64	78.60	0.00	0.05	-47.28
64	65	80.05	0.00	0.05	-47.35
65	65	80.05	0.00	0.05	-47.35
65	66	80.50	0.00	0.05	-47.37
66	66	80.50	-728.78	0.05	339.61
66	67	81.50	-728.78	0.05	339.56
67	1067	81.50	-728.78	-0.20	339.56
67	68	82.50	-728.78	-0.20	339.76
68	68	82.50	0.00	-0.20	-47.23
68	69	83.08	0.00	-0.20	-47.11
69	69	83.08	0.00	-0.20	-47.11
69	70	84.65	0.00	-0.20	-46.81
70	70	84.65	-0.04	-0.19	-46.81
70	71	86.23	-0.04	-0.19	-46.50
71	71	86.23	-0.04	-0.19	-46.50
71	72	87.80	-0.04	-0.19	-46.19
72	72	87.80	0.00	-0.20	-46.19
72	73	89.38	0.00	-0.20	-45.88
73	73	89.38	0.00	-0.20	-45.88
73	74	90.95	0.00	-0.20	-45.58
74	74	90.95	0.00	-0.20	-45.58
74	75	92.53	0.00	-0.20	-45.27
75	75	92.53	0.00	-0.20	-45.27
75	76	94.10	0.00	-0.20	-44.96
76	76	94.10	0.00	-0.20	-44.96
76	77	95.68	0.00	-0.20	-44.65
77	77	95.68	0.00	-0.20	-44.65

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase4.FAM1.TOT + [1; 1]fase4.FAM2.TOT + [1; 1]fase4.FAM3.TOT + [1; 1]fase4.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	-0.20	-44.35
78	78	97.25	0.00	-0.20	-44.35
78	79	98.83	0.00	-0.20	-44.04
79	79	98.83	0.00	-0.20	-44.04
79	80	100.40	0.00	-0.20	-43.73
80	80	100.40	0.00	-0.20	-43.73
80	81	101.98	0.00	-0.20	-43.43
81	81	101.98	0.00	-0.20	-43.43
81	82	103.55	0.00	-0.20	-43.12
82	82	103.55	0.00	-0.20	-43.12
82	83	105.13	0.00	-0.20	-42.81
83	83	105.13	0.00	-0.20	-42.81
83	84	106.70	0.00	-0.20	-42.50
84	84	106.70	0.04	-0.19	-42.50
84	85	108.28	0.04	-0.19	-42.20
85	85	108.28	0.04	-0.19	-42.20
85	86	109.85	0.04	-0.19	-41.89
86	86	109.85	0.00	-0.20	-41.89
86	87	111.43	0.00	-0.20	-41.58
87	87	111.43	0.00	-0.20	-41.58
87	88	112.00	0.00	-0.20	-41.47
88	88	112.00	-728.78	-0.20	345.51
88	89	113.00	-728.78	-0.20	345.71
89	1089	113.00	-728.78	0.60	345.71
89	90	114.00	-728.78	0.60	345.11
90	90	114.00	0.00	0.60	-41.87
90	91	114.58	0.00	0.60	-42.22
91	91	114.58	0.00	0.60	-42.22
91	92	116.15	0.00	0.60	-43.16
92	92	116.15	0.12	0.59	-43.16
92	93	117.73	0.12	0.59	-44.10
93	93	117.73	0.12	0.59	-44.10
93	94	119.30	0.12	0.59	-45.04
94	94	119.30	0.00	0.60	-45.04
94	95	120.88	0.00	0.60	-45.99
95	95	120.88	0.00	0.60	-45.99
95	96	122.45	0.00	0.60	-46.93
96	96	122.45	0.00	0.60	-46.93
96	97	124.03	0.00	0.60	-47.87
97	97	124.03	0.00	0.60	-47.87
97	98	125.60	0.00	0.60	-48.82
98	98	125.60	0.00	0.60	-48.82
98	99	127.18	0.00	0.60	-49.76
99	99	127.18	0.00	0.60	-49.76
99	100	128.75	0.00	0.60	-50.70
100	100	128.75	0.00	0.60	-50.70
100	101	130.33	0.00	0.60	-51.64
101	101	130.33	0.00	0.60	-51.64
101	102	131.90	0.00	0.60	-52.59
102	102	131.90	0.00	0.60	-52.59
102	103	133.48	0.00	0.60	-53.53

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase4.FAM1.TOT + [1; 1]fase4.FAM2.TOT + [1; 1]fase4.FAM3.TOT + [1; 1]fase4.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	0.60	-53.53
103	104	135.05	0.00	0.60	-54.47
104	104	135.05	0.00	0.60	-54.47
104	105	136.63	0.00	0.60	-55.41
105	105	136.63	0.00	0.60	-55.41
105	106	138.20	0.00	0.60	-56.36
106	106	138.20	-0.12	0.59	-56.36
106	107	139.78	-0.12	0.59	-57.30
107	107	139.78	-0.12	0.59	-57.30
107	108	141.35	-0.12	0.59	-58.24
108	108	141.35	0.00	0.60	-58.24
108	109	142.93	0.00	0.60	-59.18
109	109	142.93	0.00	0.60	-59.18
109	110	143.50	0.00	0.60	-59.53
110	110	143.50	-728.78	0.60	327.45
110	111	144.50	-728.78	0.60	326.86
111	1111	144.50	-728.78	-2.56	326.86
111	112	145.50	-728.78	-2.56	329.41
112	112	145.50	0.00	-2.56	-57.57
112	113	145.68	0.00	-2.56	-57.12
113	113	145.68	0.00	-2.56	-57.12
113	114	146.85	0.00	-2.56	-54.11
114	114	146.85	-0.66	-2.47	-54.11
114	115	148.03	-0.66	-2.47	-51.11
115	115	148.03	-0.66	-2.47	-51.11
115	116	149.20	-0.66	-2.47	-48.10
116	116	149.20	-0.03	-2.56	-48.10
116	117	150.38	-0.03	-2.56	-45.10
117	117	150.38	-0.03	-2.56	-45.10
117	118	151.55	-0.03	-2.56	-42.09
118	118	151.55	0.00	-2.56	-42.09
118	119	152.73	0.00	-2.56	-39.08
119	119	152.73	0.00	-2.56	-39.08
119	120	153.90	0.00	-2.56	-36.08
120	120	153.90	0.00	-2.56	-36.08
120	121	155.08	0.00	-2.56	-33.07
121	121	155.08	0.00	-2.56	-33.07
121	122	156.25	0.00	-2.56	-30.06
122	122	156.25	0.00	-2.56	-30.06
122	123	157.43	0.00	-2.56	-27.06
123	123	157.43	0.00	-2.56	-27.06
123	124	158.60	0.00	-2.56	-24.05
124	124	158.60	0.00	-2.56	-24.05
124	125	159.78	0.00	-2.56	-21.04
125	125	159.78	0.00	-2.56	-21.04
125	126	160.95	0.00	-2.56	-18.04
126	126	160.95	0.00	-2.56	-18.04
126	127	162.13	0.00	-2.56	-15.03
127	127	162.13	0.00	-2.56	-15.03
127	128	163.30	0.00	-2.56	-12.03
128	128	163.30	0.00	-2.56	-12.03

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase4.FAM1.TOT + [1; 1]fase4.FAM2.TOT + [1; 1]fase4.FAM3.TOT + [1; 1]fase4.FAM4.TOT + [

Coef. exc:

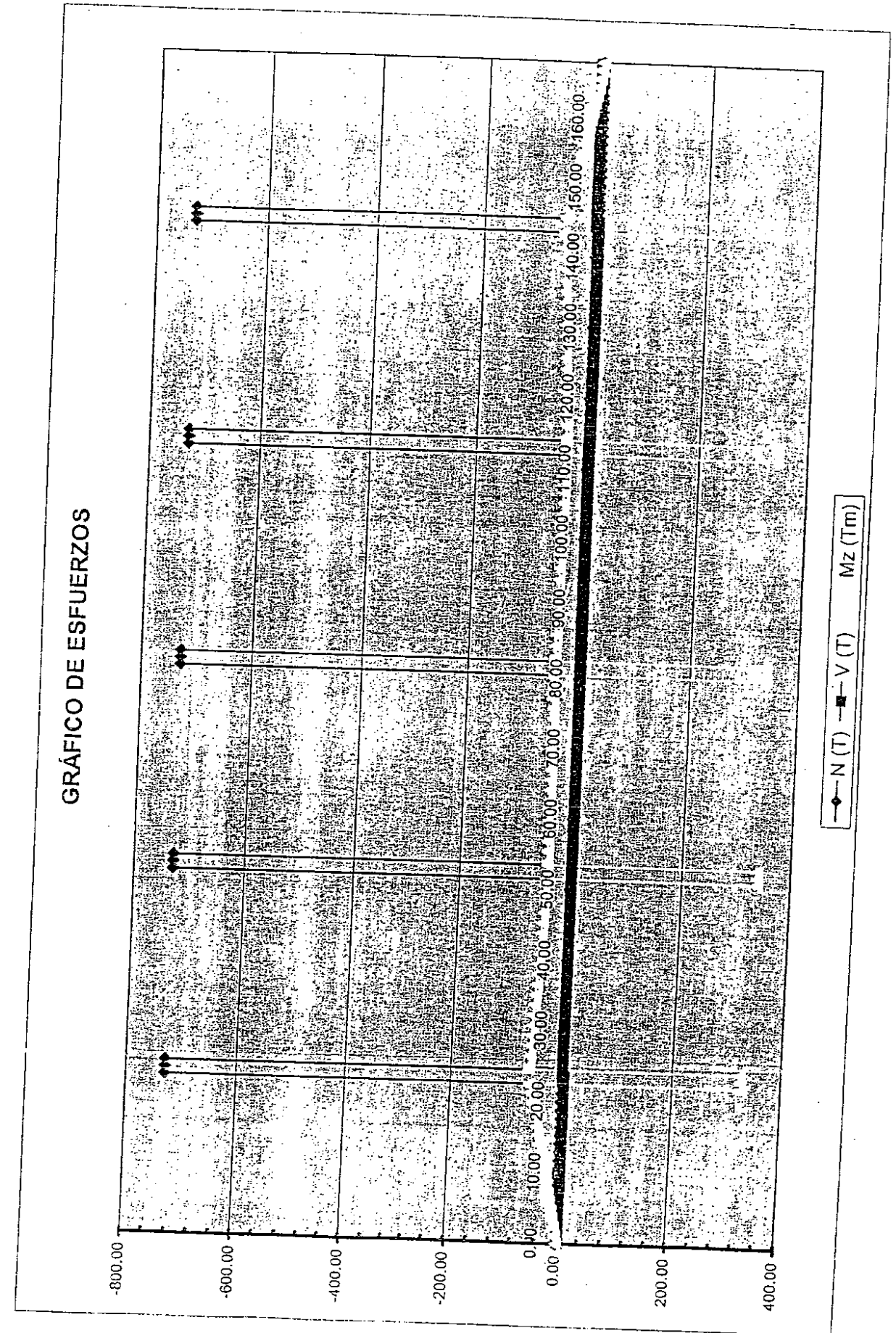
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	-2.56	-9.02
129	129	164.48	0.00	-2.56	-9.02
129	130	165.65	0.00	-2.56	-6.01
130	130	165.65	0.00	-2.56	-6.01
130	131	166.83	0.00	-2.56	-3.01
131	131	166.83	0.00	-2.56	-3.01
131	132	167.00	0.00	-2.56	-2.56
132	132	167.00	0.00	-2.56	-2.56
132	133	168.00	0.00	-2.56	0.00

pret f4.xls

Programa DINTEL IDEAM S.A.
fase4.TOT.Tinf

30/08/01

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	2.67	0.00
1	2	1.00	0.00	2.67	-2.67
2	2	1.00	0.00	2.67	-2.67
2	3	1.18	0.00	2.67	-3.14
3	3	1.18	0.00	2.67	-3.14
3	4	2.35	0.00	2.67	-6.27
4	4	2.35	0.00	2.67	-6.27
4	5	3.53	0.00	2.67	-9.41
5	5	3.53	0.00	2.67	-9.41
5	6	4.70	0.00	2.67	-12.55
6	6	4.70	0.00	2.67	-12.55
6	7	5.88	0.00	2.67	-15.68
7	7	5.88	0.00	2.67	-15.68
7	8	7.05	0.00	2.67	-18.82
8	8	7.05	0.00	2.67	-18.82
8	9	8.23	0.00	2.67	-21.95
9	9	8.23	0.00	2.67	-21.95
9	10	9.40	0.00	2.67	-25.09
10	10	9.40	0.00	2.67	-25.09
10	11	10.58	0.00	2.67	-28.23
11	11	10.58	0.00	2.67	-28.23
11	12	11.75	0.00	2.67	-31.36
12	12	11.75	0.00	2.67	-31.36
12	13	12.93	0.00	2.67	-34.50
13	13	12.93	0.00	2.67	-34.50
13	14	14.10	0.00	2.67	-37.64
14	14	14.10	0.00	2.67	-37.64
14	15	15.28	0.00	2.67	-40.77
15	15	15.28	0.00	2.67	-40.77
15	16	16.45	0.00	2.67	-43.91
16	16	16.45	-0.03	2.67	-43.91
16	17	17.63	-0.03	2.67	-47.05
17	17	17.63	-0.03	2.67	-47.05
17	18	18.80	-0.03	2.67	-50.18
18	18	18.80	-0.69	2.58	-50.18
18	19	19.98	-0.69	2.58	-53.32
19	19	19.98	-0.69	2.58	-53.32
19	20	21.15	-0.69	2.58	-56.45
20	20	21.15	0.00	2.67	-56.45
20	21	22.33	0.00	2.67	-59.59
21	21	22.33	0.00	2.67	-59.59
21	22	22.50	0.00	2.67	-60.06
22	22	22.50	0.00	2.67	-60.06
22	23	23.50	0.00	2.67	-62.73
23	1023	23.50	0.00	-0.58	-62.73
23	24	24.50	0.00	-0.58	-62.15
24	24	24.50	0.00	-0.58	-62.15
24	25	24.95	0.00	-0.58	-61.89
25	25	24.95	0.00	-0.58	-61.89
25	26	26.40	0.00	-0.58	-61.05
26	26	26.40	-0.12	-0.56	-61.05

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-0.12	-0.56	-60.21
27	27	27.85	-0.12	-0.56	-60.21
27	28	29.30	-0.12	-0.56	-59.38
28	28	29.30	0.00	-0.58	-59.38
28	29	30.75	0.00	-0.58	-58.54
29	29	30.75	0.00	-0.58	-58.54
29	30	32.20	0.00	-0.58	-57.70
30	30	32.20	0.00	-0.58	-57.70
30	31	33.65	0.00	-0.58	-56.86
31	31	33.65	0.00	-0.58	-56.86
31	32	35.10	0.00	-0.58	-56.02
32	32	35.10	0.00	-0.58	-56.02
32	33	36.55	0.00	-0.58	-55.19
33	33	36.55	0.00	-0.58	-55.19
33	34	38.00	0.00	-0.58	-54.35
34	34	38.00	0.00	-0.58	-54.35
34	35	39.45	0.00	-0.58	-53.51
35	35	39.45	0.00	-0.58	-53.51
35	36	40.90	0.00	-0.58	-52.67
36	36	40.90	0.00	-0.58	-52.67
36	37	42.35	0.00	-0.58	-51.84
37	37	42.35	0.00	-0.58	-51.84
37	38	43.80	0.00	-0.58	-51.00
38	38	43.80	0.00	-0.58	-51.00
38	39	45.25	0.00	-0.58	-50.16
39	39	45.25	0.00	-0.58	-50.16
39	40	46.70	0.00	-0.58	-49.32
40	40	46.70	0.12	-0.56	-49.32
40	41	48.15	0.12	-0.56	-48.48
41	41	48.15	0.12	-0.56	-48.48
41	42	49.60	0.12	-0.56	-47.65
42	42	49.60	0.00	-0.58	-47.65
42	43	51.05	0.00	-0.58	-46.81
43	43	51.05	0.00	-0.58	-46.81
43	44	51.50	0.00	-0.58	-46.55
44	44	51.50	0.00	-0.58	-46.55
44	45	52.50	0.00	-0.58	-45.97
45	1045	52.50	0.00	0.05	-45.97
45	46	53.50	0.00	0.05	-46.02
46	46	53.50	0.00	0.05	-46.02
46	47	53.95	0.00	0.05	-46.04
47	47	53.95	0.00	0.05	-46.04
47	48	55.40	0.00	0.05	-46.12
48	48	55.40	0.01	0.05	-46.12
48	49	56.85	0.01	0.05	-46.19
49	49	56.85	0.01	0.05	-46.19
49	50	58.30	0.01	0.05	-46.26
50	50	58.30	0.00	0.05	-46.26
50	51	59.75	0.00	0.05	-46.33
51	51	59.75	0.00	0.05	-46.33
51	52	61.20	0.00	0.05	-46.41

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.05	-46.41
52	53	62.65	0.00	0.05	-46.48
53	53	62.65	0.00	0.05	-46.48
53	54	64.10	0.00	0.05	-46.55
54	54	64.10	0.00	0.05	-46.55
54	55	65.55	0.00	0.05	-46.62
55	55	65.55	0.00	0.05	-46.62
55	56	67.00	0.00	0.05	-46.70
56	56	67.00	0.00	0.05	-46.70
56	57	68.45	0.00	0.05	-46.77
57	57	68.45	0.00	0.05	-46.77
57	58	69.90	0.00	0.05	-46.84
58	58	69.90	0.00	0.05	-46.84
58	59	71.35	0.00	0.05	-46.91
59	59	71.35	0.00	0.05	-46.91
59	60	72.80	0.00	0.05	-46.99
60	60	72.80	0.00	0.05	-46.99
60	61	74.25	0.00	0.05	-47.06
61	61	74.25	0.00	0.05	-47.06
61	62	75.70	0.00	0.05	-47.13
62	62	75.70	-0.01	0.05	-47.13
62	63	77.15	-0.01	0.05	-47.20
63	63	77.15	-0.01	0.05	-47.20
63	64	78.60	-0.01	0.05	-47.28
64	64	78.60	0.00	0.05	-47.28
64	65	80.05	0.00	0.05	-47.35
65	65	80.05	0.00	0.05	-47.35
65	66	80.50	0.00	0.05	-47.37
66	66	80.50	0.00	0.05	-47.37
66	67	81.50	0.00	0.05	-47.42
67	1067	81.50	0.00	-0.20	-47.42
67	68	82.50	0.00	-0.20	-47.23
68	68	82.50	0.00	-0.20	-47.23
68	69	83.08	0.00	-0.20	-47.11
69	69	83.08	0.00	-0.20	-47.11
69	70	84.65	0.00	-0.20	-46.81
70	70	84.65	-0.04	-0.19	-46.81
70	71	86.23	-0.04	-0.19	-46.50
71	71	86.23	-0.04	-0.19	-46.50
71	72	87.80	-0.04	-0.19	-46.19
72	72	87.80	0.00	-0.20	-46.19
72	73	89.38	0.00	-0.20	-45.88
73	73	89.38	0.00	-0.20	-45.88
73	74	90.95	0.00	-0.20	-45.58
74	74	90.95	0.00	-0.20	-45.58
74	75	92.53	0.00	-0.20	-45.27
75	75	92.53	0.00	-0.20	-45.27
75	76	94.10	0.00	-0.20	-44.96
76	76	94.10	0.00	-0.20	-44.96
76	77	95.68	0.00	-0.20	-44.65
77	77	95.68	0.00	-0.20	-44.65

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	-0.20	-44.35
78	78	97.25	0.00	-0.20	-44.35
78	79	98.83	0.00	-0.20	-44.04
79	79	98.83	0.00	-0.20	-44.04
79	80	100.40	0.00	-0.20	-43.73
80	80	100.40	0.00	-0.20	-43.73
80	81	101.98	0.00	-0.20	-43.43
81	81	101.98	0.00	-0.20	-43.43
81	82	103.55	0.00	-0.20	-43.12
82	82	103.55	0.00	-0.20	-43.12
82	83	105.13	0.00	-0.20	-42.81
83	83	105.13	0.00	-0.20	-42.81
83	84	106.70	0.00	-0.20	-42.50
84	84	106.70	0.04	-0.19	-42.50
84	85	108.28	0.04	-0.19	-42.20
85	85	108.28	0.04	-0.19	-42.20
85	86	109.85	0.04	-0.19	-41.89
86	86	109.85	0.00	-0.20	-41.89
86	87	111.43	0.00	-0.20	-41.58
87	87	111.43	0.00	-0.20	-41.58
87	88	112.00	0.00	-0.20	-41.47
88	88	112.00	0.00	-0.20	-41.47
88	89	113.00	0.00	-0.20	-41.27
89	1089	113.00	0.00	0.60	-41.27
89	90	114.00	0.00	0.60	-41.87
90	90	114.00	0.00	0.60	-41.87
90	91	114.58	0.00	0.60	-42.22
91	91	114.58	0.00	0.60	-42.22
91	92	116.15	0.00	0.60	-43.16
92	92	116.15	0.12	0.59	-43.16
92	93	117.73	0.12	0.59	-44.10
93	93	117.73	0.12	0.59	-44.10
93	94	119.30	0.12	0.59	-45.04
94	94	119.30	0.00	0.60	-45.04
94	95	120.88	0.00	0.60	-45.99
95	95	120.88	0.00	0.60	-45.99
95	96	122.45	0.00	0.60	-46.93
96	96	122.45	0.00	0.60	-46.93
96	97	124.03	0.00	0.60	-47.87
97	97	124.03	0.00	0.60	-47.87
97	98	125.60	0.00	0.60	-48.82
98	98	125.60	0.00	0.60	-48.82
98	99	127.18	0.00	0.60	-49.76
99	99	127.18	0.00	0.60	-49.76
99	100	128.75	0.00	0.60	-50.70
100	100	128.75	0.00	0.60	-50.70
100	101	130.33	0.00	0.60	-51.64
101	101	130.33	0.00	0.60	-51.64
101	102	131.90	0.00	0.60	-52.59
102	102	131.90	0.00	0.60	-52.59
102	103	133.48	0.00	0.60	-53.53

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	0.60	-53.53
103	104	135.05	0.00	0.60	-54.47
104	104	135.05	0.00	0.60	-54.47
104	105	136.63	0.00	0.60	-55.41
105	105	136.63	0.00	0.60	-55.41
105	106	138.20	0.00	0.60	-56.36
106	106	138.20	-0.12	0.59	-56.36
106	107	139.78	-0.12	0.59	-57.30
107	107	139.78	-0.12	0.59	-57.30
107	108	141.35	-0.12	0.59	-58.24
108	108	141.35	0.00	0.60	-58.24
108	109	142.93	0.00	0.60	-59.18
109	109	142.93	0.00	0.60	-59.18
109	110	143.50	0.00	0.60	-59.53
110	110	143.50	0.00	0.60	-59.53
110	111	144.50	0.00	0.60	-60.13
111	111	144.50	0.00	-2.56	-60.13
111	112	145.50	0.00	-2.56	-57.57
112	112	145.50	0.00	-2.56	-57.57
112	113	145.68	0.00	-2.56	-57.12
113	113	145.68	0.00	-2.56	-57.12
113	114	146.85	0.00	-2.56	-54.11
114	114	146.85	-0.66	-2.47	-54.11
114	115	148.03	-0.66	-2.47	-51.11
115	115	148.03	-0.66	-2.47	-51.11
115	116	149.20	-0.66	-2.47	-48.10
116	116	149.20	-0.03	-2.56	-48.10
116	117	150.38	-0.03	-2.56	-45.10
117	117	150.38	-0.03	-2.56	-45.10
117	118	151.55	-0.03	-2.56	-42.09
118	118	151.55	0.00	-2.56	-42.09
118	119	152.73	0.00	-2.56	-39.08
119	119	152.73	0.00	-2.56	-39.08
119	120	153.90	0.00	-2.56	-36.08
120	120	153.90	0.00	-2.56	-36.08
120	121	155.08	0.00	-2.56	-33.07
121	121	155.08	0.00	-2.56	-33.07
121	122	156.25	0.00	-2.56	-30.06
122	122	156.25	0.00	-2.56	-30.06
122	123	157.43	0.00	-2.56	-27.06
123	123	157.43	0.00	-2.56	-27.06
123	124	158.60	0.00	-2.56	-24.05
124	124	158.60	0.00	-2.56	-24.05
124	125	159.78	0.00	-2.56	-21.04
125	125	159.78	0.00	-2.56	-21.04
125	126	160.95	0.00	-2.56	-18.04
126	126	160.95	0.00	-2.56	-18.04
126	127	162.13	0.00	-2.56	-15.03
127	127	162.13	0.00	-2.56	-15.03
127	128	163.30	0.00	-2.56	-12.03
128	128	163.30	0.00	-2.56	-12.03

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To

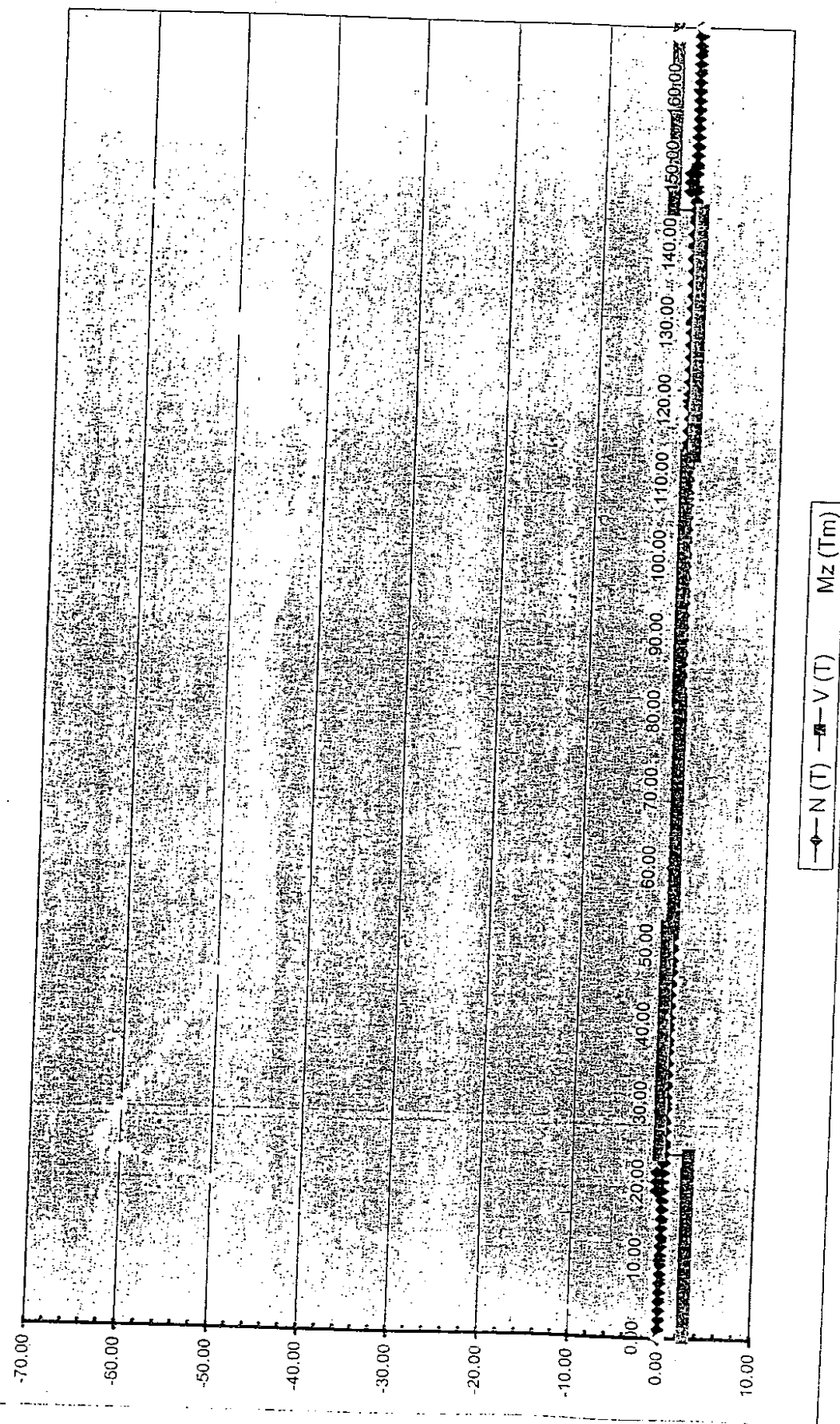
Pretensado Hiperestático (t=0)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	-2.56	-9.02
129	129	164.48	0.00	-2.56	-9.02
129	130	165.65	0.00	-2.56	-6.01
130	130	165.65	0.00	-2.56	-6.01
130	131	166.83	0.00	-2.56	-3.01
131	131	166.83	0.00	-2.56	-3.01
131	132	167.00	0.00	-2.56	-2.56
132	132	167.00	0.00	-2.56	-2.56
132	133	168.00	0.00	-2.56	0.00

GRÁFICO DE ESFUERZOS

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	2.67	0.00
1	2	1.00	0.00	2.67	-2.67
2	2	1.00	0.00	2.67	-2.67
2	3	1.18	0.00	2.67	-3.14
3	3	1.18	0.00	2.67	-3.14
3	4	2.35	0.00	2.67	-6.27
4	4	2.35	0.00	2.67	-6.27
4	5	3.53	0.00	2.67	-9.41
5	5	3.53	0.00	2.67	-9.41
5	6	4.70	0.00	2.67	-12.55
6	6	4.70	0.00	2.67	-12.55
6	7	5.88	0.00	2.67	-15.68
7	7	5.88	0.00	2.67	-15.68
7	8	7.05	0.00	2.67	-18.82
8	8	7.05	0.00	2.67	-18.82
8	9	8.23	0.00	2.67	-21.95
9	9	8.23	0.00	2.67	-21.95
9	10	9.40	0.00	2.67	-25.09
10	10	9.40	0.00	2.67	-25.09
10	11	10.58	0.00	2.67	-28.23
11	11	10.58	0.00	2.67	-28.23
11	12	11.75	0.00	2.67	-31.36
12	12	11.75	0.00	2.67	-31.36
12	13	12.93	0.00	2.67	-34.50
13	13	12.93	0.00	2.67	-34.50
13	14	14.10	0.00	2.67	-37.64
14	14	14.10	0.00	2.67	-37.64
14	15	15.28	0.00	2.67	-40.77
15	15	15.28	0.00	2.67	-40.77
15	16	16.45	0.00	2.67	-43.91
16	16	16.45	-0.03	2.67	-43.91
16	17	17.63	-0.03	2.67	-47.05
17	17	17.63	-0.03	2.67	-47.05
17	18	18.80	-0.03	2.67	-50.18
18	18	18.80	-0.69	2.58	-50.18
18	19	19.98	-0.69	2.58	-53.32
19	19	19.98	-0.69	2.58	-53.32
19	20	21.15	-0.69	2.58	-56.45
20	20	21.15	0.00	2.67	-56.45
20	21	22.33	0.00	2.67	-59.59
21	21	22.33	0.00	2.67	-59.59
21	22	22.50	0.00	2.67	-60.06
22	22	22.50	0.00	2.67	-60.06
22	23	23.50	0.00	2.67	-62.73
23	1023	23.50	0.00	-0.58	-62.73
23	24	24.50	0.00	-0.58	-62.15
24	24	24.50	0.00	-0.58	-62.15
24	25	24.95	0.00	-0.58	-61.89
25	25	24.95	0.00	-0.58	-61.89
25	26	26.40	0.00	-0.58	-61.05
26	26	26.40	-0.12	-0.56	-61.05

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	-0.12	-0.56	-60.21
27	27	27.85	-0.12	-0.56	-60.21
27	28	29.30	-0.12	-0.56	-59.38
28	28	29.30	0.00	-0.58	-59.38
28	29	30.75	0.00	-0.58	-58.54
29	29	30.75	0.00	-0.58	-58.54
29	30	32.20	0.00	-0.58	-57.70
30	30	32.20	0.00	-0.58	-57.70
30	31	33.65	0.00	-0.58	-56.86
31	31	33.65	0.00	-0.58	-56.86
31	32	35.10	0.00	-0.58	-56.02
32	32	35.10	0.00	-0.58	-56.02
32	33	36.55	0.00	-0.58	-55.19
33	33	36.55	0.00	-0.58	-55.19
33	34	38.00	0.00	-0.58	-54.35
34	34	38.00	0.00	-0.58	-54.35
34	35	39.45	0.00	-0.58	-53.51
35	35	39.45	0.00	-0.58	-53.51
35	36	40.90	0.00	-0.58	-52.67
36	36	40.90	0.00	-0.58	-52.67
36	37	42.35	0.00	-0.58	-51.84
37	37	42.35	0.00	-0.58	-51.84
37	38	43.80	0.00	-0.58	-51.00
38	38	43.80	0.00	-0.58	-51.00
38	39	45.25	0.00	-0.58	-50.16
39	39	45.25	0.00	-0.58	-50.16
39	40	46.70	0.00	-0.58	-49.32
40	40	46.70	0.12	-0.56	-49.32
40	41	48.15	0.12	-0.56	-48.48
41	41	48.15	0.12	-0.56	-48.48
41	42	49.60	0.12	-0.56	-47.65
42	42	49.60	0.00	-0.58	-47.65
42	43	51.05	0.00	-0.58	-46.81
43	43	51.05	0.00	-0.58	-46.81
43	44	51.50	0.00	-0.58	-46.55
44	44	51.50	0.00	-0.58	-46.55
44	45	52.50	0.00	-0.58	-45.97
45	1045	52.50	0.00	0.05	-45.97
45	46	53.50	0.00	0.05	-46.02
46	46	53.50	0.00	0.05	-46.02
46	47	53.95	0.00	0.05	-46.04
47	47	53.95	0.00	0.05	-46.04
47	48	55.40	0.00	0.05	-46.12
48	48	55.40	0.01	0.05	-46.12
48	49	56.85	0.01	0.05	-46.19
49	49	56.85	0.01	0.05	-46.19
49	50	58.30	0.01	0.05	-46.26
50	50	58.30	0.00	0.05	-46.26
50	51	59.75	0.00	0.05	-46.33
51	51	59.75	0.00	0.05	-46.33
51	52	61.20	0.00	0.05	-46.41

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.05	-46.41
52	53	62.65	0.00	0.05	-46.48
53	53	62.65	0.00	0.05	-46.48
53	54	64.10	0.00	0.05	-46.55
54	54	64.10	0.00	0.05	-46.55
54	55	65.55	0.00	0.05	-46.62
55	55	65.55	0.00	0.05	-46.62
55	56	67.00	0.00	0.05	-46.70
56	56	67.00	0.00	0.05	-46.70
56	57	68.45	0.00	0.05	-46.77
57	57	68.45	0.00	0.05	-46.77
57	58	69.90	0.00	0.05	-46.84
58	58	69.90	0.00	0.05	-46.84
58	59	71.35	0.00	0.05	-46.91
59	59	71.35	0.00	0.05	-46.91
59	60	72.80	0.00	0.05	-46.99
60	60	72.80	0.00	0.05	-46.99
60	61	74.25	0.00	0.05	-47.06
61	61	74.25	0.00	0.05	-47.06
61	62	75.70	0.00	0.05	-47.13
62	62	75.70	-0.01	0.05	-47.13
62	63	77.15	-0.01	0.05	-47.20
63	63	77.15	-0.01	0.05	-47.20
63	64	78.60	-0.01	0.05	-47.28
64	64	78.60	0.00	0.05	-47.28
64	65	80.05	0.00	0.05	-47.35
65	65	80.05	0.00	0.05	-47.35
65	66	80.50	0.00	0.05	-47.37
66	66	80.50	0.00	0.05	-47.37
66	67	81.50	0.00	0.05	-47.42
67	1067	81.50	0.00	-0.20	-47.42
67	68	82.50	0.00	-0.20	-47.23
68	68	82.50	0.00	-0.20	-47.23
68	69	83.08	0.00	-0.20	-47.11
69	69	83.08	0.00	-0.20	-47.11
69	70	84.65	0.00	-0.20	-46.81
70	70	84.65	-0.04	-0.19	-46.81
70	71	86.23	-0.04	-0.19	-46.50
71	71	86.23	-0.04	-0.19	-46.50
71	72	87.80	-0.04	-0.19	-46.19
72	72	87.80	0.00	-0.20	-46.19
72	73	89.38	0.00	-0.20	-45.88
73	73	89.38	0.00	-0.20	-45.88
73	74	90.95	0.00	-0.20	-45.58
74	74	90.95	0.00	-0.20	-45.58
74	75	92.53	0.00	-0.20	-45.27
75	75	92.53	0.00	-0.20	-45.27
75	76	94.10	0.00	-0.20	-44.96
76	76	94.10	0.00	-0.20	-44.96
76	77	95.68	0.00	-0.20	-44.65
77	77	95.68	0.00	-0.20	-44.65

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	-0.20	-44.35
78	78	97.25	0.00	-0.20	-44.35
78	79	98.83	0.00	-0.20	-44.04
79	79	98.83	0.00	-0.20	-44.04
79	80	100.40	0.00	-0.20	-43.73
80	80	100.40	0.00	-0.20	-43.73
80	81	101.98	0.00	-0.20	-43.43
81	81	101.98	0.00	-0.20	-43.43
81	82	103.55	0.00	-0.20	-43.12
82	82	103.55	0.00	-0.20	-43.12
82	83	105.13	0.00	-0.20	-42.81
83	83	105.13	0.00	-0.20	-42.81
83	84	106.70	0.00	-0.20	-42.50
84	84	106.70	0.04	-0.19	-42.50
84	85	108.28	0.04	-0.19	-42.20
85	85	108.28	0.04	-0.19	-42.20
85	86	109.85	0.04	-0.19	-41.89
86	86	109.85	0.00	-0.20	-41.89
86	87	111.43	0.00	-0.20	-41.58
87	87	111.43	0.00	-0.20	-41.58
87	88	112.00	0.00	-0.20	-41.47
88	88	112.00	0.00	-0.20	-41.47
88	89	113.00	0.00	-0.20	-41.27
89	1089	113.00	0.00	0.60	-41.27
89	90	114.00	0.00	0.60	-41.87
90	90	114.00	0.00	0.60	-41.87
90	91	114.58	0.00	0.60	-42.22
91	91	114.58	0.00	0.60	-42.22
91	92	116.15	0.00	0.60	-43.16
92	92	116.15	0.12	0.59	-43.16
92	93	117.73	0.12	0.59	-44.10
93	93	117.73	0.12	0.59	-44.10
93	94	119.30	0.12	0.59	-45.04
94	94	119.30	0.00	0.60	-45.04
94	95	120.88	0.00	0.60	-45.99
95	95	120.88	0.00	0.60	-45.99
95	96	122.45	0.00	0.60	-46.93
96	96	122.45	0.00	0.60	-46.93
96	97	124.03	0.00	0.60	-47.87
97	97	124.03	0.00	0.60	-47.87
97	98	125.60	0.00	0.60	-48.82
98	98	125.60	0.00	0.60	-48.82
98	99	127.18	0.00	0.60	-49.76
99	99	127.18	0.00	0.60	-49.76
99	100	128.75	0.00	0.60	-50.70
100	100	128.75	0.00	0.60	-50.70
100	101	130.33	0.00	0.60	-51.64
101	101	130.33	0.00	0.60	-51.64
101	102	131.90	0.00	0.60	-52.59
102	102	131.90	0.00	0.60	-52.59
102	103	133.48	0.00	0.60	-53.53

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase4.FAM1.TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	0.60	-53.53
103	104	135.05	0.00	0.60	-54.47
104	104	135.05	0.00	0.60	-54.47
104	105	136.63	0.00	0.60	-55.41
105	105	136.63	0.00	0.60	-55.41
105	106	138.20	0.00	0.60	-56.36
106	106	138.20	-0.12	0.59	-56.36
106	107	139.78	-0.12	0.59	-57.30
107	107	139.78	-0.12	0.59	-57.30
107	108	141.35	-0.12	0.59	-58.24
108	108	141.35	0.00	0.60	-58.24
108	109	142.93	0.00	0.60	-59.18
109	109	142.93	0.00	0.60	-59.18
109	110	143.50	0.00	0.60	-59.53
110	110	143.50	0.00	0.60	-59.53
110	111	144.50	0.00	0.60	-60.13
111	1111	144.50	0.00	-2.56	-60.13
111	112	145.50	0.00	-2.56	-57.57
112	112	145.50	0.00	-2.56	-57.57
112	113	145.68	0.00	-2.56	-57.12
113	113	145.68	0.00	-2.56	-57.12
113	114	146.85	0.00	-2.56	-54.11
114	114	146.85	-0.66	-2.47	-54.11
114	115	148.03	-0.66	-2.47	-51.11
115	115	148.03	-0.66	-2.47	-51.11
115	116	149.20	-0.66	-2.47	-48.10
116	116	149.20	-0.03	-2.56	-48.10
116	117	150.38	-0.03	-2.56	-45.10
117	117	150.38	-0.03	-2.56	-45.10
117	118	151.55	-0.03	-2.56	-42.09
118	118	151.55	0.00	-2.56	-42.09
118	119	152.73	0.00	-2.56	-39.08
119	119	152.73	0.00	-2.56	-39.08
119	120	153.90	0.00	-2.56	-36.08
120	120	153.90	0.00	-2.56	-36.08
120	121	155.08	0.00	-2.56	-33.07
121	121	155.08	0.00	-2.56	-33.07
121	122	156.25	0.00	-2.56	-30.06
122	122	156.25	0.00	-2.56	-30.06
122	123	157.43	0.00	-2.56	-27.06
123	123	157.43	0.00	-2.56	-27.06
123	124	158.60	0.00	-2.56	-24.05
124	124	158.60	0.00	-2.56	-24.05
124	125	159.78	0.00	-2.56	-21.04
125	125	159.78	0.00	-2.56	-21.04
125	126	160.95	0.00	-2.56	-18.04
126	126	160.95	0.00	-2.56	-18.04
126	127	162.13	0.00	-2.56	-15.03
127	127	162.13	0.00	-2.56	-15.03
127	128	163.30	0.00	-2.56	-12.03
128	128	163.30	0.00	-2.56	-12.03

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase4 FAM1 TOT + [-1;-1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.TOT + [-1;-1]fase4.FAM2.ISO + [1

Coef. exc:

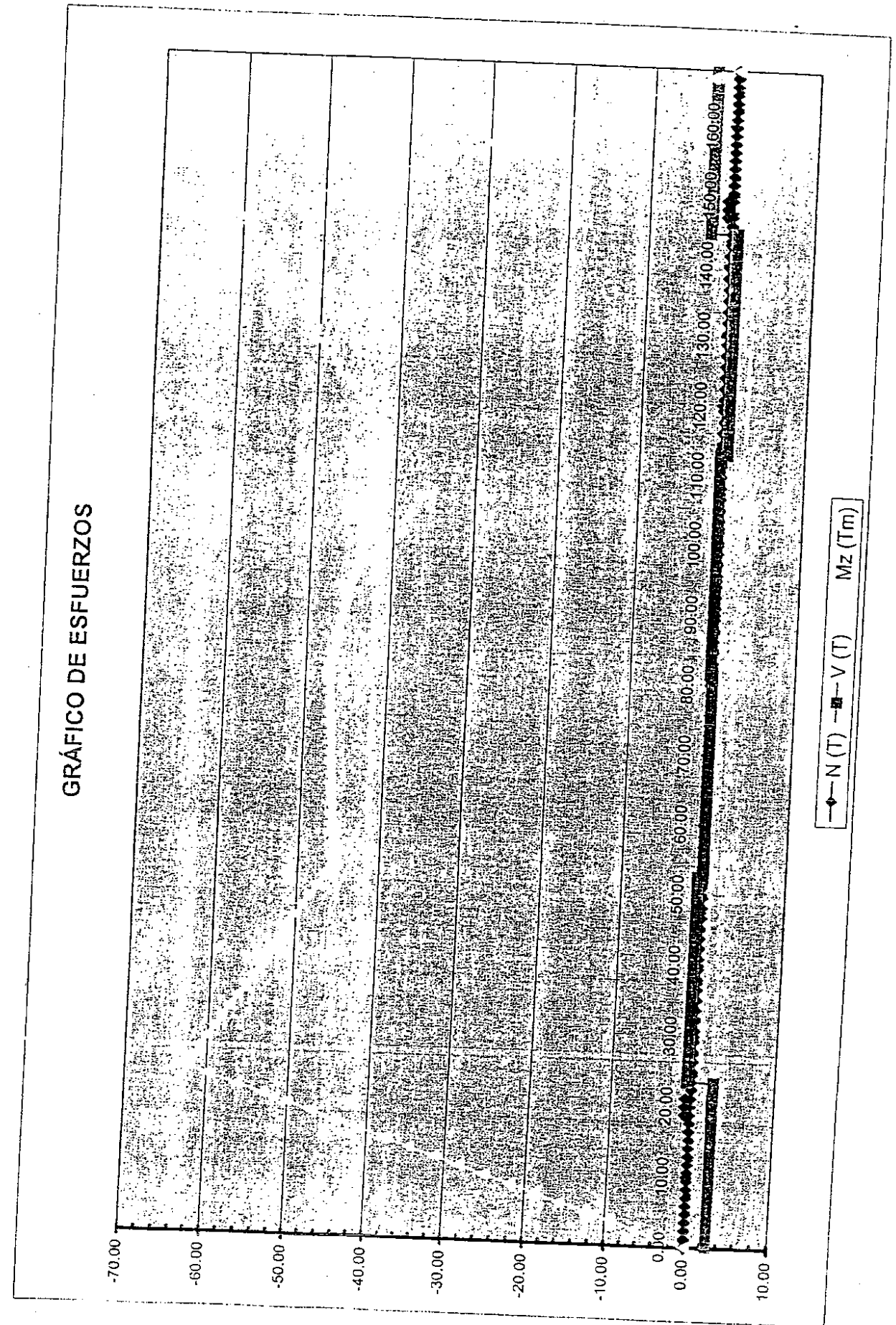
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	-2.56	-9.02
129	129	164.48	0.00	-2.56	-9.02
129	130	165.65	0.00	-2.56	-6.01
130	130	165.65	0.00	-2.56	-6.01
130	131	166.83	0.00	-2.56	-3.01
131	131	166.83	0.00	-2.56	-3.01
131	132	167.00	0.00	-2.56	-2.56
132	132	167.00	0.00	-2.56	-2.56
132	133	168.00	0.00	-2.56	0.00

pret f4.xls

Programa DINTEL IDEAM S.A.
fase4.HIP.Tinf

30/08/01

GRÁFICO DE ESFUERZOS



Hipótesis de cálculo:

fase4.ISO.To

Pretensado Isostático ($t=0$)

$$\{1; 1\}f_{ase4.FAM1.ISO} + \{1; 1\}f_{ase4.FAM2.ISO} + \{1; 1\}f_{ase4.FAM3.ISO} + \{1; 1\}f_{ase4.FAM4.ISO} + \{1; 1\}f_{ase4.FAM5.ISO}$$

Coef. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	0.00	0.00	0.00
2	3	1.18	0.00	0.00	0.00
3	3	1.18	0.00	0.00	0.00
3	4	2.35	0.00	0.00	0.00
4	4	2.35	0.00	0.00	0.00
4	5	3.53	0.00	0.00	0.00
5	5	3.53	0.00	0.00	0.00
5	6	4.70	0.00	0.00	0.00
6	6	4.70	0.00	0.00	0.00
6	7	5.88	0.00	0.00	0.00
7	7	5.88	0.00	0.00	0.00
7	8	7.05	0.00	0.00	0.00
8	8	7.05	0.00	0.00	0.00
8	9	8.23	0.00	0.00	0.00
9	9	8.23	0.00	0.00	0.00
9	10	9.40	0.00	0.00	0.00
10	10	9.40	0.00	0.00	0.00
10	11	10.58	0.00	0.00	0.00
11	11	10.58	0.00	0.00	0.00
11	12	11.75	0.00	0.00	0.00
12	12	11.75	0.00	0.00	0.00
12	13	12.93	0.00	0.00	0.00
13	13	12.93	0.00	0.00	0.00
13	14	14.10	0.00	0.00	0.00
14	14	14.10	0.00	0.00	0.00
14	15	15.28	0.00	0.00	0.00
15	15	15.28	0.00	0.00	0.00
15	16	16.45	0.00	0.00	0.00
16	16	16.45	0.00	0.00	0.00
16	17	17.63	0.00	0.00	0.00
17	17	17.63	0.00	0.00	0.00
17	18	18.80	0.00	0.00	0.00
18	18	18.80	0.00	0.00	0.00
18	19	19.98	0.00	0.00	0.00
19	19	19.98	0.00	0.00	0.00
19	20	21.15	0.00	0.00	0.00
20	20	21.15	0.00	0.00	0.00
20	21	22.33	0.00	0.00	0.00
21	21	22.33	0.00	0.00	0.00
21	22	22.50	0.00	0.00	0.00
22	22	22.50	-728.78	0.00	386.98
22	23	23.50	-728.78	0.00	386.98
23	1023	23.50	-728.78	0.00	386.98
23	24	24.50	-728.78	0.00	386.98
24	24	24.50	0.00	0.00	0.00
24	25	24.95	0.00	0.00	0.00
25	25	24.95	0.00	0.00	0.00
25	26	26.40	0.00	0.00	0.00
26	26	26.40	0.00	0.00	0.00

Hipótesis de cálculo:

fase4.ISO.To

Prefensado Isostático ($t=0$)

$$[1; 1]_{\text{fase4.FAM1.ISO}} + [1; 1]_{\text{fase4.FAM2.ISO}} + [1; 1]_{\text{fase4.FAM3.ISO}} + [1; 1]_{\text{fase4.FAM4.ISO}} + [1; 1]_{\text{fase4.FAM5.ISO}}$$

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	0.00	0.00
27	27	27.85	0.00	0.00	0.00
27	28	29.30	0.00	0.00	0.00
28	28	29.30	0.00	0.00	0.00
28	29	30.75	0.00	0.00	0.00
29	29	30.75	0.00	0.00	0.00
29	30	32.20	0.00	0.00	0.00
30	30	32.20	0.00	0.00	0.00
30	31	33.65	0.00	0.00	0.00
31	31	33.65	0.00	0.00	0.00
31	32	35.10	0.00	0.00	0.00
32	32	35.10	0.00	0.00	0.00
32	33	36.55	0.00	0.00	0.00
33	33	36.55	0.00	0.00	0.00
33	34	38.00	0.00	0.00	0.00
34	34	38.00	0.00	0.00	0.00
34	35	39.45	0.00	0.00	0.00
35	35	39.45	0.00	0.00	0.00
35	36	40.90	0.00	0.00	0.00
36	36	40.90	0.00	0.00	0.00
36	37	42.35	0.00	0.00	0.00
37	37	42.35	0.00	0.00	0.00
37	38	43.80	0.00	0.00	0.00
38	38	43.80	0.00	0.00	0.00
38	39	45.25	0.00	0.00	0.00
39	39	45.25	0.00	0.00	0.00
39	40	46.70	0.00	0.00	0.00
40	40	46.70	0.00	0.00	0.00
40	41	48.15	0.00	0.00	0.00
41	41	48.15	0.00	0.00	0.00
41	42	49.60	0.00	0.00	0.00
42	42	49.60	0.00	0.00	0.00
42	43	51.05	0.00	0.00	0.00
43	43	51.05	0.00	0.00	0.00
43	44	51.50	0.00	0.00	0.00
44	44	51.50	-728.78	0.00	386.98
44	45	52.50	-728.78	0.00	386.98
45	1045	52.50	-728.78	0.00	386.98
45	46	53.50	-728.78	0.00	386.98
46	46	53.50	0.00	0.00	0.00
46	47	53.95	0.00	0.00	0.00
47	47	53.95	0.00	0.00	0.00
47	48	55.40	0.00	0.00	0.00
48	48	55.40	0.00	0.00	0.00
48	49	56.85	0.00	0.00	0.00
49	49	56.85	0.00	0.00	0.00
49	50	58.30	0.00	0.00	0.00
50	50	58.30	0.00	0.00	0.00
50	51	59.75	0.00	0.00	0.00
51	51	59.75	0.00	0.00	0.00
51	52	61.20	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To

Pretensado Isostático (t=0)

[1; 1] fase4.FAM1.ISO + [1; 1] fase4.FAM2.ISO + [1; 1] fase4.FAM3.ISO + [1; 1] fase4.FAM4.ISO + [1; 1]

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.00	0.00
52	53	62.65	0.00	0.00	0.00
53	53	62.65	0.00	0.00	0.00
53	54	64.10	0.00	0.00	0.00
54	54	64.10	0.00	0.00	0.00
54	55	65.55	0.00	0.00	0.00
55	55	65.55	0.00	0.00	0.00
55	56	67.00	0.00	0.00	0.00
56	56	67.00	0.00	0.00	0.00
56	57	68.45	0.00	0.00	0.00
57	57	68.45	0.00	0.00	0.00
57	58	69.90	0.00	0.00	0.00
58	58	69.90	0.00	0.00	0.00
58	59	71.35	0.00	0.00	0.00
59	59	71.35	0.00	0.00	0.00
59	60	72.80	0.00	0.00	0.00
60	60	72.80	0.00	0.00	0.00
60	61	74.25	0.00	0.00	0.00
61	61	74.25	0.00	0.00	0.00
61	62	75.70	0.00	0.00	0.00
62	62	75.70	0.00	0.00	0.00
62	63	77.15	0.00	0.00	0.00
63	63	77.15	0.00	0.00	0.00
63	64	78.60	0.00	0.00	0.00
64	64	78.60	0.00	0.00	0.00
64	65	80.05	0.00	0.00	0.00
65	65	80.05	0.00	0.00	0.00
65	66	80.50	0.00	0.00	0.00
66	66	80.50	-728.78	0.00	386.98
66	67	81.50	-728.78	0.00	386.98
67	1067	81.50	-728.78	0.00	386.98
67	68	82.50	-728.78	0.00	386.98
68	68	82.50	0.00	0.00	0.00
68	69	83.08	0.00	0.00	0.00
69	69	83.08	0.00	0.00	0.00
69	70	84.65	0.00	0.00	0.00
70	70	84.65	0.00	0.00	0.00
70	71	86.23	0.00	0.00	0.00
71	71	86.23	0.00	0.00	0.00
71	72	87.80	0.00	0.00	0.00
72	72	87.80	0.00	0.00	0.00
72	73	89.38	0.00	0.00	0.00
73	73	89.38	0.00	0.00	0.00
73	74	90.95	0.00	0.00	0.00
74	74	90.95	0.00	0.00	0.00
74	75	92.53	0.00	0.00	0.00
75	75	92.53	0.00	0.00	0.00
75	76	94.10	0.00	0.00	0.00
76	76	94.10	0.00	0.00	0.00
76	77	95.68	0.00	0.00	0.00
77	77	95.68	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To

Pretensado Isostático (t=0)

[1; 1] fase4.FAM1.ISO + [1; 1] fase4.FAM2.ISO + [1; 1] fase4.FAM3.ISO + [1; 1] fase4.FAM4.ISO + [1; 1]

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.00	0.00
78	78	97.25	0.00	0.00	0.00
78	79	98.83	0.00	0.00	0.00
79	79	98.83	0.00	0.00	0.00
79	80	100.40	0.00	0.00	0.00
80	80	100.40	0.00	0.00	0.00
80	81	101.98	0.00	0.00	0.00
81	81	101.98	0.00	0.00	0.00
81	82	103.55	0.00	0.00	0.00
82	82	103.55	0.00	0.00	0.00
82	83	105.13	0.00	0.00	0.00
83	83	105.13	0.00	0.00	0.00
83	84	106.70	0.00	0.00	0.00
84	84	106.70	0.00	0.00	0.00
84	85	108.28	0.00	0.00	0.00
85	85	108.28	0.00	0.00	0.00
85	86	109.85	0.00	0.00	0.00
86	86	109.85	0.00	0.00	0.00
86	87	111.43	0.00	0.00	0.00
87	87	111.43	0.00	0.00	0.00
87	88	112.00	0.00	0.00	0.00
88	88	112.00	-728.78	0.00	386.98
88	89	113.00	-728.78	0.00	386.98
89	1089	113.00	-728.78	0.00	386.98
89	90	114.00	-728.78	0.00	386.98
90	90	114.00	0.00	0.00	0.00
90	91	114.58	0.00	0.00	0.00
91	91	114.58	0.00	0.00	0.00
91	92	116.15	0.00	0.00	0.00
92	92	116.15	0.00	0.00	0.00
92	93	117.73	0.00	0.00	0.00
93	93	117.73	0.00	0.00	0.00
93	94	119.30	0.00	0.00	0.00
94	94	119.30	0.00	0.00	0.00
94	95	120.88	0.00	0.00	0.00
95	95	120.88	0.00	0.00	0.00
95	96	122.45	0.00	0.00	0.00
96	96	122.45	0.00	0.00	0.00
96	97	124.03	0.00	0.00	0.00
97	97	124.03	0.00	0.00	0.00
97	98	125.60	0.00	0.00	0.00
98	98	125.60	0.00	0.00	0.00
98	99	127.18	0.00	0.00	0.00
99	99	127.18	0.00	0.00	0.00
99	100	128.75	0.00	0.00	0.00
100	100	128.75	0.00	0.00	0.00
100	101	130.33	0.00	0.00	0.00
101	101	130.33	0.00	0.00	0.00
101	102	131.90	0.00	0.00	0.00
102	102	131.90	0.00	0.00	0.00
102	103	133.48	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.ISO + [1; 1]fase4.FAM3.ISO + [1; 1]fase4.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	0.00	0.00
103	104	135.05	0.00	0.00	0.00
104	104	135.05	0.00	0.00	0.00
104	105	136.63	0.00	0.00	0.00
105	105	136.63	0.00	0.00	0.00
105	106	138.20	0.00	0.00	0.00
106	106	138.20	0.00	0.00	0.00
106	107	139.78	0.00	0.00	0.00
107	107	139.78	0.00	0.00	0.00
107	108	141.35	0.00	0.00	0.00
108	108	141.35	0.00	0.00	0.00
108	109	142.93	0.00	0.00	0.00
109	109	142.93	0.00	0.00	0.00
109	110	143.50	0.00	0.00	0.00
110	110	143.50	-728.78	0.00	386.98
110	111	144.50	-728.78	0.00	386.98
111	111	144.50	-728.78	0.00	386.98
111	112	145.50	-728.78	0.00	386.98
112	112	145.50	0.00	0.00	0.00
112	113	145.68	0.00	0.00	0.00
113	113	145.68	0.00	0.00	0.00
113	114	146.85	0.00	0.00	0.00
114	114	146.85	0.00	0.00	0.00
114	115	148.03	0.00	0.00	0.00
115	115	148.03	0.00	0.00	0.00
115	116	149.20	0.00	0.00	0.00
116	116	149.20	0.00	0.00	0.00
116	117	150.38	0.00	0.00	0.00
117	117	150.38	0.00	0.00	0.00
117	118	151.55	0.00	0.00	0.00
118	118	151.55	0.00	0.00	0.00
118	119	152.73	0.00	0.00	0.00
119	119	152.73	0.00	0.00	0.00
119	120	153.90	0.00	0.00	0.00
120	120	153.90	0.00	0.00	0.00
120	121	155.08	0.00	0.00	0.00
121	121	155.08	0.00	0.00	0.00
121	122	156.25	0.00	0.00	0.00
122	122	156.25	0.00	0.00	0.00
122	123	157.43	0.00	0.00	0.00
123	123	157.43	0.00	0.00	0.00
123	124	158.60	0.00	0.00	0.00
124	124	158.60	0.00	0.00	0.00
124	125	159.78	0.00	0.00	0.00
125	125	159.78	0.00	0.00	0.00
125	126	160.95	0.00	0.00	0.00
126	126	160.95	0.00	0.00	0.00
126	127	162.13	0.00	0.00	0.00
127	127	162.13	0.00	0.00	0.00
127	128	163.30	0.00	0.00	0.00
128	128	163.30	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.ISO + [1; 1]fase4.FAM3.ISO + [1; 1]fase4.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	0.00	0.00
129	129	164.48	0.00	0.00	0.00
129	130	165.65	0.00	0.00	0.00
130	130	165.65	0.00	0.00	0.00
130	131	166.83	0.00	0.00	0.00
131	131	166.83	0.00	0.00	0.00
131	132	167.00	0.00	0.00	0.00
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00

CÁLCULO TENSIONAL

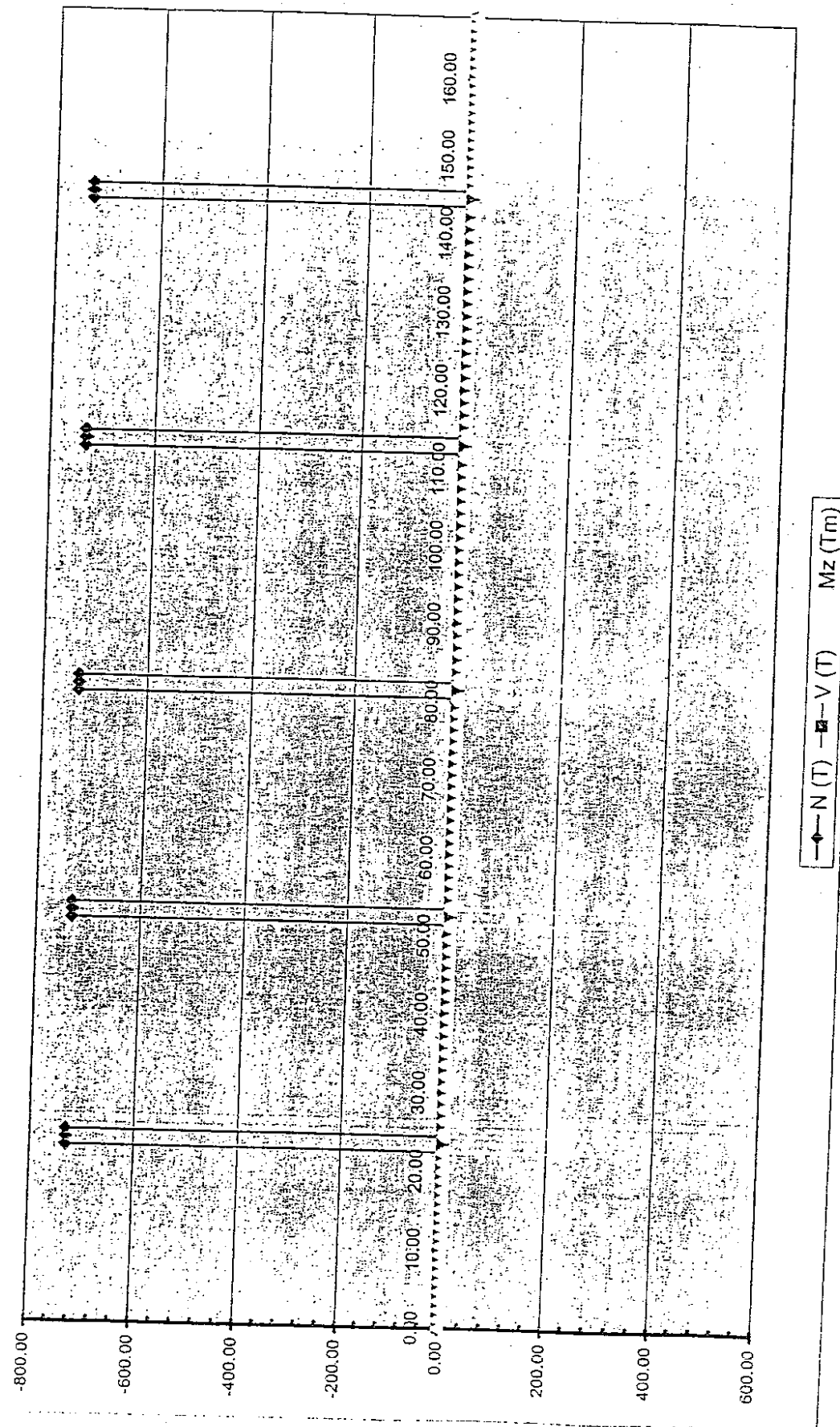
Hipótesis de cálculo:

fase4.ISO.Tinf

Pretensado Isostático ($t=INF$)

[1; 1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.ISO + [1; 1]fase4.FAM3.ISO + [1; 1]fase4.FAM4.ISO + [1;
Coef. exc:

GRÁFICO DE ESFUERZOS



Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	0.00	0.00	0.00
2	3	1.18	0.00	0.00	0.00
3	3	1.18	0.00	0.00	0.00
3	4	2.35	0.00	0.00	0.00
4	4	2.35	0.00	0.00	0.00
4	5	3.53	0.00	0.00	0.00
5	5	3.53	0.00	0.00	0.00
5	6	4.70	0.00	0.00	0.00
6	6	4.70	0.00	0.00	0.00
6	7	5.88	0.00	0.00	0.00
7	7	5.88	0.00	0.00	0.00
7	8	7.05	0.00	0.00	0.00
8	8	7.05	0.00	0.00	0.00
8	9	8.23	0.00	0.00	0.00
9	9	8.23	0.00	0.00	0.00
9	10	9.40	0.00	0.00	0.00
10	10	9.40	0.00	0.00	0.00
10	11	10.58	0.00	0.00	0.00
11	11	10.58	0.00	0.00	0.00
11	12	11.75	0.00	0.00	0.00
12	12	11.75	0.00	0.00	0.00
12	13	12.93	0.00	0.00	0.00
13	13	12.93	0.00	0.00	0.00
13	14	14.10	0.00	0.00	0.00
14	14	14.10	0.00	0.00	0.00
14	15	15.28	0.00	0.00	0.00
15	15	15.28	0.00	0.00	0.00
15	16	16.45	0.00	0.00	0.00
16	16	16.45	0.00	0.00	0.00
16	17	17.63	0.00	0.00	0.00
17	17	17.63	0.00	0.00	0.00
17	18	18.80	0.00	0.00	0.00
18	18	18.80	0.00	0.00	0.00
18	19	19.98	0.00	0.00	0.00
19	19	19.98	0.00	0.00	0.00
19	20	21.15	0.00	0.00	0.00
20	20	21.15	0.00	0.00	0.00
20	21	22.33	0.00	0.00	0.00
21	21	22.33	0.00	0.00	0.00
21	22	22.50	0.00	0.00	0.00
22	22	22.50	-728.78	0.00	386.98
22	23	23.50	-728.78	0.00	386.98
23	1023	23.50	-728.78	0.00	386.98
23	24	24.50	-728.78	0.00	386.98
24	24	24.50	0.00	0.00	0.00
24	25	24.95	0.00	0.00	0.00
25	25	24.95	0.00	0.00	0.00
25	26	26.40	0.00	0.00	0.00
26	26	26.40	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.ISO + [1; 1]fase4.FAM3.ISO + [1; 1]fase4.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	0.00	0.00
27	27	27.85	0.00	0.00	0.00
27	28	29.30	0.00	0.00	0.00
28	28	29.30	0.00	0.00	0.00
28	29	30.75	0.00	0.00	0.00
29	29	30.75	0.00	0.00	0.00
29	30	32.20	0.00	0.00	0.00
30	30	32.20	0.00	0.00	0.00
30	31	33.65	0.00	0.00	0.00
31	31	33.65	0.00	0.00	0.00
31	32	35.10	0.00	0.00	0.00
32	32	35.10	0.00	0.00	0.00
32	33	36.55	0.00	0.00	0.00
33	33	36.55	0.00	0.00	0.00
33	34	38.00	0.00	0.00	0.00
34	34	38.00	0.00	0.00	0.00
34	35	39.45	0.00	0.00	0.00
35	35	39.45	0.00	0.00	0.00
35	36	40.90	0.00	0.00	0.00
36	36	40.90	0.00	0.00	0.00
36	37	42.35	0.00	0.00	0.00
37	37	42.35	0.00	0.00	0.00
37	38	43.80	0.00	0.00	0.00
38	38	43.80	0.00	0.00	0.00
38	39	45.25	0.00	0.00	0.00
39	39	45.25	0.00	0.00	0.00
39	40	46.70	0.00	0.00	0.00
40	40	46.70	0.00	0.00	0.00
40	41	48.15	0.00	0.00	0.00
41	41	48.15	0.00	0.00	0.00
41	42	49.60	0.00	0.00	0.00
42	42	49.60	0.00	0.00	0.00
42	43	51.05	0.00	0.00	0.00
43	43	51.05	0.00	0.00	0.00
43	44	51.50	0.00	0.00	0.00
44	44	51.50	-728.78	0.00	386.98
44	45	52.50	-728.78	0.00	386.98
45	1045	52.50	-728.78	0.00	386.98
45	46	53.50	-728.78	0.00	386.98
46	46	53.50	0.00	0.00	0.00
46	47	53.95	0.00	0.00	0.00
47	47	53.95	0.00	0.00	0.00
47	48	55.40	0.00	0.00	0.00
48	48	55.40	0.00	0.00	0.00
48	49	56.85	0.00	0.00	0.00
49	49	56.85	0.00	0.00	0.00
49	50	58.30	0.00	0.00	0.00
50	50	58.30	0.00	0.00	0.00
50	51	59.75	0.00	0.00	0.00
51	51	59.75	0.00	0.00	0.00
51	52	61.20	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.ISO + [1; 1]fase4.FAM3.ISO + [1; 1]fase4.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.00	0.00
52	53	62.65	0.00	0.00	0.00
53	53	62.65	0.00	0.00	0.00
53	54	64.10	0.00	0.00	0.00
54	54	64.10	0.00	0.00	0.00
54	55	65.55	0.00	0.00	0.00
55	55	65.55	0.00	0.00	0.00
55	56	67.00	0.00	0.00	0.00
56	56	67.00	0.00	0.00	0.00
56	57	68.45	0.00	0.00	0.00
57	57	68.45	0.00	0.00	0.00
57	58	69.90	0.00	0.00	0.00
58	58	69.90	0.00	0.00	0.00
58	59	71.35	0.00	0.00	0.00
59	59	71.35	0.00	0.00	0.00
59	60	72.80	0.00	0.00	0.00
60	60	72.80	0.00	0.00	0.00
60	61	74.25	0.00	0.00	0.00
61	61	74.25	0.00	0.00	0.00
61	62	75.70	0.00	0.00	0.00
62	62	75.70	0.00	0.00	0.00
62	63	77.15	0.00	0.00	0.00
63	63	77.15	0.00	0.00	0.00
63	64	78.60	0.00	0.00	0.00
64	64	78.60	0.00	0.00	0.00
64	65	80.05	0.00	0.00	0.00
65	65	80.05	0.00	0.00	0.00
65	66	80.50	0.00	0.00	0.00
66	66	80.50	-728.78	0.00	386.98
66	67	81.50	-728.78	0.00	386.98
67	1067	81.50	-728.78	0.00	386.98
67	68	82.50	-728.78	0.00	386.98
68	68	82.50	0.00	0.00	0.00
68	69	83.08	0.00	0.00	0.00
69	69	83.08	0.00	0.00	0.00
69	70	84.65	0.00	0.00	0.00
70	70	84.65	0.00	0.00	0.00
70	71	86.23	0.00	0.00	0.00
71	71	86.23	0.00	0.00	0.00
71	72	87.80	0.00	0.00	0.00
72	72	87.80	0.00	0.00	0.00
72	73	89.38	0.00	0.00	0.00
73	73	89.38	0.00	0.00	0.00
73	74	90.95	0.00	0.00	0.00
74	74	90.95	0.00	0.00	0.00
74	75	92.53	0.00	0.00	0.00
75	75	92.53	0.00	0.00	0.00
75	76	94.10	0.00	0.00	0.00
76	76	94.10	0.00	0.00	0.00
76	77	95.68	0.00	0.00	0.00
77	77	95.68	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.Tinf

Pretensado Isostático ($t=INF$)

$$\{1; 1\} \text{fase4.FAM1.ISO} + \{1; 1\} \text{fase4.FAM2.ISO} + \{1; 1\} \text{fase4.FAM3.ISO} + \{1; 1\} \text{fase4.FAM4.ISO} + \{1;$$

Coef. exc:

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.00	0.00
78	78	97.25	0.00	0.00	0.00
78	79	98.83	0.00	0.00	0.00
79	79	98.83	0.00	0.00	0.00
79	80	100.40	0.00	0.00	0.00
80	80	100.40	0.00	0.00	0.00
80	81	101.98	0.00	0.00	0.00
81	81	101.98	0.00	0.00	0.00
81	82	103.55	0.00	0.00	0.00
82	82	103.55	0.00	0.00	0.00
82	83	105.13	0.00	0.00	0.00
83	83	105.13	0.00	0.00	0.00
83	84	106.70	0.00	0.00	0.00
84	84	106.70	0.00	0.00	0.00
84	85	108.28	0.00	0.00	0.00
85	85	108.28	0.00	0.00	0.00
85	86	109.85	0.00	0.00	0.00
86	86	109.85	0.00	0.00	0.00
86	87	111.43	0.00	0.00	0.00
87	87	111.43	0.00	0.00	0.00
87	88	112.00	0.00	0.00	0.00
88	88	112.00	-728.78	0.00	386.98
88	89	113.00	-728.78	0.00	386.98
89	1089	113.00	-728.78	0.00	386.98
89	90	114.00	-728.78	0.00	386.98
90	90	114.00	0.00	0.00	0.00
90	91	114.58	0.00	0.00	0.00
91	91	114.58	0.00	0.00	0.00
91	92	116.15	0.00	0.00	0.00
92	92	116.15	0.00	0.00	0.00
92	93	117.73	0.00	0.00	0.00
93	93	117.73	0.00	0.00	0.00
93	94	119.30	0.00	0.00	0.00
94	94	119.30	0.00	0.00	0.00
94	95	120.88	0.00	0.00	0.00
95	95	120.88	0.00	0.00	0.00
95	96	122.45	0.00	0.00	0.00
96	96	122.45	0.00	0.00	0.00
96	97	124.03	0.00	0.00	0.00
97	97	124.03	0.00	0.00	0.00
97	98	125.60	0.00	0.00	0.00
98	98	125.60	0.00	0.00	0.00
98	99	127.18	0.00	0.00	0.00
99	99	127.18	0.00	0.00	0.00
99	100	128.75	0.00	0.00	0.00
100	100	128.75	0.00	0.00	0.00
100	101	130.33	0.00	0.00	0.00
101	101	130.33	0.00	0.00	0.00
101	102	131.90	0.00	0.00	0.00
102	102	131.90	0.00	0.00	0.00
102	103	133.48	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.Tinf

Pretensado Isostático ($t=INF$)

[1; 1]fase4.FAM1.ISO + [1; 1]fase4.FAM2.ISO + [1; 1]fase4.FAM3.ISO + [1; 1]fase4.FAM4.ISO + [1;
Coef. exc:

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	0.00	0.00
103	104	135.05	0.00	0.00	0.00
104	104	135.05	0.00	0.00	0.00
104	105	136.63	0.00	0.00	0.00
105	105	136.63	0.00	0.00	0.00
105	106	138.20	0.00	0.00	0.00
106	106	138.20	0.00	0.00	0.00
106	107	139.78	0.00	0.00	0.00
107	107	139.78	0.00	0.00	0.00
107	108	141.35	0.00	0.00	0.00
108	108	141.35	0.00	0.00	0.00
108	109	142.93	0.00	0.00	0.00
109	109	142.93	0.00	0.00	0.00
109	110	143.50	0.00	0.00	0.00
110	110	143.50	-728.78	0.00	386.98
110	111	144.50	-728.78	0.00	386.98
111	111	144.50	-728.78	0.00	386.98
111	112	145.50	-728.78	0.00	386.98
112	112	145.50	0.00	0.00	0.00
112	113	145.68	0.00	0.00	0.00
113	113	145.68	0.00	0.00	0.00
113	114	146.85	0.00	0.00	0.00
114	114	146.85	0.00	0.00	0.00
114	115	148.03	0.00	0.00	0.00
115	115	148.03	0.00	0.00	0.00
115	116	149.20	0.00	0.00	0.00
116	116	149.20	0.00	0.00	0.00
116	117	150.38	0.00	0.00	0.00
117	117	150.38	0.00	0.00	0.00
117	118	151.55	0.00	0.00	0.00
118	118	151.55	0.00	0.00	0.00
118	119	152.73	0.00	0.00	0.00
119	119	152.73	0.00	0.00	0.00
119	120	153.90	0.00	0.00	0.00
120	120	153.90	0.00	0.00	0.00
120	121	155.08	0.00	0.00	0.00
121	121	155.08	0.00	0.00	0.00
121	122	156.25	0.00	0.00	0.00
122	122	156.25	0.00	0.00	0.00
122	123	157.43	0.00	0.00	0.00
123	123	157.43	0.00	0.00	0.00
123	124	158.60	0.00	0.00	0.00
124	124	158.60	0.00	0.00	0.00
124	125	159.78	0.00	0.00	0.00
125	125	159.78	0.00	0.00	0.00
125	126	160.95	0.00	0.00	0.00
126	126	160.95	0.00	0.00	0.00
126	127	162.13	0.00	0.00	0.00
127	127	162.13	0.00	0.00	0.00
127	128	163.30	0.00	0.00	0.00
128	128	163.30	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.Tinf

Pretensado Isostático ($t=INF$)

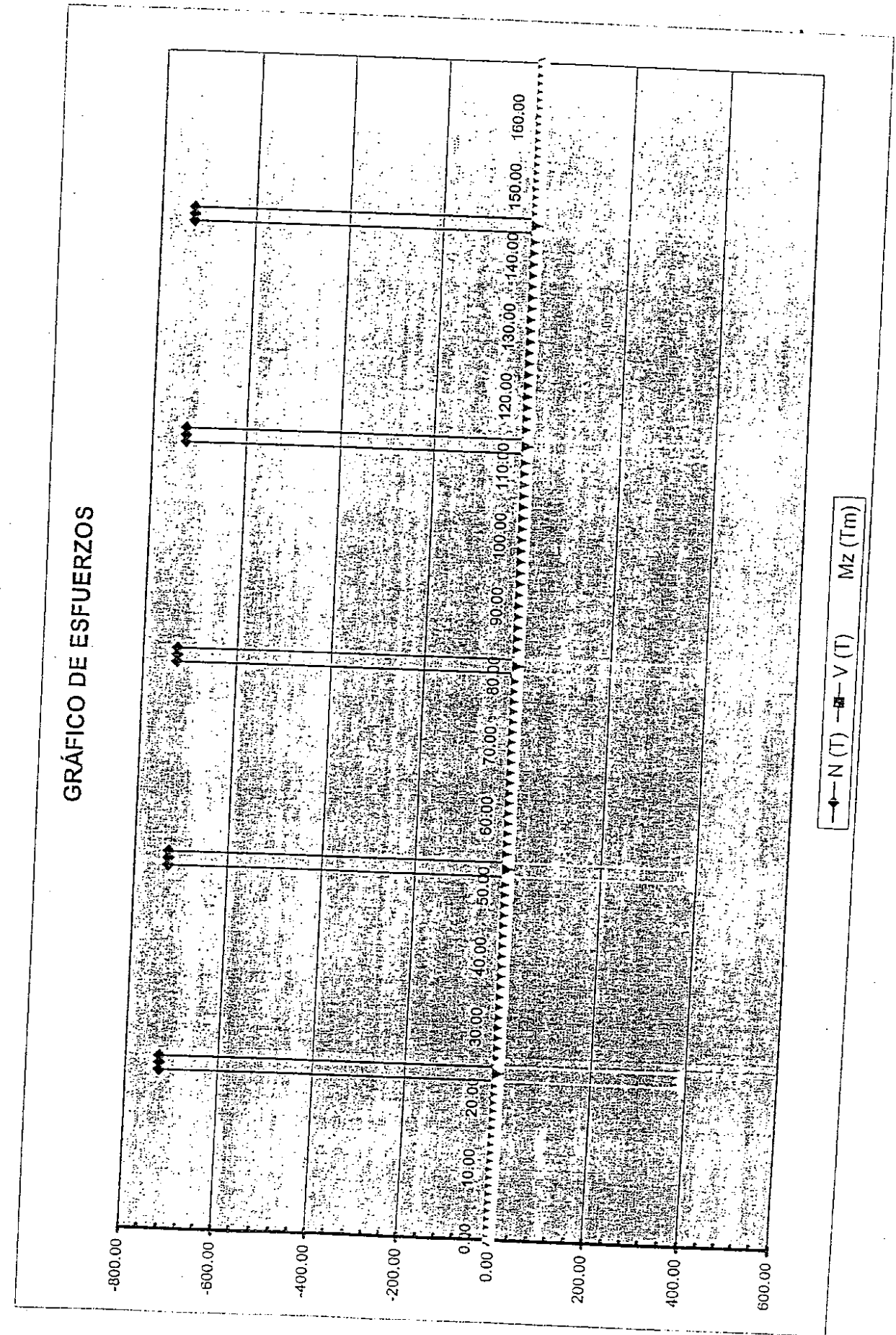
$$[1; 1]_{\text{fase4.FAM1.ISO}} + [1; 1]_{\text{fase4.FAM2.ISO}} + [1; 1]_{\text{fase4.FAM3.ISO}} + [1; 1]_{\text{fase4.FAM4.ISO}} + [1; 1]_{\text{Coef exc.}}$$

Coef exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	0.00	0.00
129	129	164.48	0.00	0.00	0.00
129	130	165.65	0.00	0.00	0.00
130	130	165.65	0.00	0.00	0.00
130	131	166.83	0.00	0.00	0.00
131	131	166.83	0.00	0.00	0.00
131	132	167.00	0.00	0.00	0.00
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00

Programa DINTEL IDEAM S.A.
fase4.ISO.Tinf

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.TOT.To

Pretensado Total (t=0)

[1; 1]fase9.FAM1.TOT + [1; 1]fase9.FAM2.TOT + [1; 1]fase9.FAM3.TOT + [1; 1]fase9.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-0.07	28.06
52	53	62.65	0.00	-0.07	28.16
53	53	62.65	0.00	-0.07	28.16
53	54	64.10	0.00	-0.07	28.27
54	54	64.10	0.00	-0.07	28.27
54	55	65.55	0.00	-0.07	28.37
55	55	65.55	0.00	-0.07	28.37
55	56	67.00	0.00	-0.07	28.48
56	56	67.00	0.00	-0.07	28.48
56	57	68.45	0.00	-0.07	28.58
57	57	68.45	0.00	-0.07	28.58
57	58	69.90	0.00	-0.07	28.69
58	58	69.90	0.00	-0.07	28.69
58	59	71.35	0.00	-0.07	28.79
59	59	71.35	0.00	-0.07	28.79
59	60	72.80	0.00	-0.07	28.90
60	60	72.80	0.00	-0.07	28.90
60	61	74.25	0.00	-0.07	29.00
61	61	74.25	0.00	-0.07	29.00
61	62	75.70	0.00	-0.07	29.11
62	62	75.70	0.00	-0.07	29.11
62	63	77.15	0.00	-0.07	29.22
63	63	77.15	0.00	-0.07	29.22
63	64	78.60	0.00	-0.07	29.32
64	64	78.60	0.00	-0.07	29.32
64	65	80.05	0.00	-0.07	29.43
65	65	80.05	0.00	-0.07	29.43
65	66	80.50	0.00	-0.07	29.46
66	66	80.50	-728.78	-0.07	-174.60
66	67	81.50	-728.78	-0.07	-174.53
67	1067	81.50	-728.78	0.10	-174.53
67	68	82.50	-728.78	0.10	-174.62
68	68	82.50	0.00	0.10	29.43
68	69	83.08	0.00	0.10	29.38
69	69	83.08	0.00	0.10	29.38
69	70	84.65	0.00	0.10	29.23
70	70	84.65	0.00	0.10	29.23
70	71	86.23	0.00	0.10	29.08
71	71	86.23	0.00	0.10	29.08
71	72	87.80	0.00	0.10	28.92
72	72	87.80	0.00	0.10	28.92
72	73	89.38	0.00	0.10	28.77
73	73	89.38	0.00	0.10	28.77
73	74	90.95	0.00	0.10	28.62
74	74	90.95	0.00	0.10	28.62
74	75	92.53	0.00	0.10	28.47
75	75	92.53	0.00	0.10	28.47
75	76	94.10	0.00	0.10	28.32
76	76	94.10	0.00	0.10	28.32
76	77	95.68	0.00	0.10	28.17
77	77	95.68	0.00	0.10	28.17

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.TOT.To

Pretensado Total (t=0)

[1; 1]fase9.FAM1.TOT + [1; 1]fase9.FAM2.TOT + [1; 1]fase9.FAM3.TOT + [1; 1]fase9.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.10	28.01
78	78	97.25	0.00	0.10	28.01
78	79	98.83	0.00	0.10	27.86
79	79	98.83	0.00	0.10	27.86
79	80	100.40	0.00	0.10	27.71
80	80	100.40	0.00	0.10	27.71
80	81	101.98	0.00	0.10	27.56
81	81	101.98	0.00	0.10	27.56
81	82	103.55	0.00	0.10	27.41
82	82	103.55	0.00	0.10	27.41
82	83	105.13	0.00	0.10	27.26
83	83	105.13	0.00	0.10	27.26
83	84	106.70	0.00	0.10	27.11
84	84	106.70	0.00	0.10	27.11
84	85	108.28	0.00	0.10	26.95
85	85	108.28	0.00	0.10	26.95
85	86	109.85	0.00	0.10	26.80
86	86	109.85	0.00	0.10	26.80
86	87	111.43	0.00	0.10	26.65
87	87	111.43	0.00	0.10	26.65
87	88	112.00	0.00	0.10	26.60
88	88	112.00	-728.78	0.10	-177.46
88	89	113.00	-728.78	0.10	-177.56
89	1089	113.00	-728.78	-0.31	-177.56
89	90	114.00	-728.78	-0.31	-177.25
90	90	114.00	0.00	-0.31	26.81
90	91	114.58	0.00	-0.31	26.99
91	91	114.58	0.00	-0.31	26.99
91	92	116.15	0.00	-0.31	27.47
92	92	116.15	0.00	-0.31	27.47
92	93	117.73	0.00	-0.31	27.96
93	93	117.73	0.00	-0.31	27.96
93	94	119.30	0.00	-0.31	28.45
94	94	119.30	0.00	-0.31	28.45
94	95	120.88	0.00	-0.31	28.94
95	95	120.88	0.00	-0.31	28.94
95	96	122.45	0.00	-0.31	29.42
96	96	122.45	0.00	-0.31	29.42
96	97	124.03	0.00	-0.31	29.91
97	97	124.03	0.00	-0.31	29.91
97	98	125.60	0.00	-0.31	30.40
98	98	125.60	0.00	-0.31	30.40
98	99	127.18	0.00	-0.31	30.88
99	99	127.18	0.00	-0.31	30.88
99	100	128.75	0.00	-0.31	31.37
100	100	128.75	0.00	-0.31	31.37
100	101	130.33	0.00	-0.31	31.86
101	101	130.33	0.00	-0.31	31.86
101	102	131.90	0.00	-0.31	32.35
102	102	131.90	0.00	-0.31	32.35
102	103	133.48	0.00	-0.31	32.83

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.TOT.To

Pretensado Total (t=0)

[1; 1]fase9.FAM1.TOT + [1; 1]fase9.FAM2.TOT + [1; 1]fase9.FAM3.TOT + [1; 1]fase9.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-0.31	32.83
103	104	135.05	0.00	-0.31	33.32
104	104	135.05	0.00	-0.31	33.32
104	105	136.63	0.00	-0.31	33.81
105	105	136.63	0.00	-0.31	33.81
105	106	138.20	0.00	-0.31	34.29
106	106	138.20	0.00	-0.31	34.29
106	107	139.78	0.00	-0.31	34.78
107	107	139.78	0.00	-0.31	34.78
107	108	141.35	0.00	-0.31	35.27
108	108	141.35	0.00	-0.31	35.27
108	109	142.93	0.00	-0.31	35.76
109	109	142.93	0.00	-0.31	35.76
109	110	143.50	0.00	-0.31	35.93
110	110	143.50	-728.78	-0.31	-168.12
110	111	144.50	-728.78	-0.31	-167.81
111	1111	144.50	-728.78	1.54	-167.81
111	112	145.50	-728.78	1.54	-169.36
112	112	145.50	0.00	1.54	34.70
112	113	145.68	0.00	1.54	34.43
113	113	145.68	0.00	1.54	34.43
113	114	146.85	0.00	1.54	32.62
114	114	146.85	0.00	1.54	32.62
114	115	148.03	0.00	1.54	30.81
115	115	148.03	0.00	1.54	30.81
115	116	149.20	0.00	1.54	29.00
116	116	149.20	0.00	1.54	29.00
116	117	150.38	0.00	1.54	27.18
117	117	150.38	0.00	1.54	27.18
117	118	151.55	0.00	1.54	25.37
118	118	151.55	0.00	1.54	25.37
118	119	152.73	0.00	1.54	23.56
119	119	152.73	0.00	1.54	23.56
119	120	153.90	0.00	1.54	21.75
120	120	153.90	0.00	1.54	21.75
120	121	155.08	0.00	1.54	19.93
121	121	155.08	0.00	1.54	19.93
121	122	156.25	0.00	1.54	18.12
122	122	156.25	0.00	1.54	18.12
122	123	157.43	0.00	1.54	16.31
123	123	157.43	0.00	1.54	16.31
123	124	158.60	0.00	1.54	14.50
124	124	158.60	0.00	1.54	14.50
124	125	159.78	0.00	1.54	12.69
125	125	159.78	0.00	1.54	12.69
125	126	160.95	0.00	1.54	10.87
126	126	160.95	0.00	1.54	10.87
126	127	162.13	0.00	1.54	9.06
127	127	162.13	0.00	1.54	9.06
127	128	163.30	0.00	1.54	7.25
128	128	163.30	0.00	1.54	7.25

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.TOT.To

Pretensado Total (t=0)

[1; 1]fase9.FAM1.TOT + [1; 1]fase9.FAM2.TOT + [1; 1]fase9.FAM3.TOT + [1; 1]fase9.FAM4.TOT + [

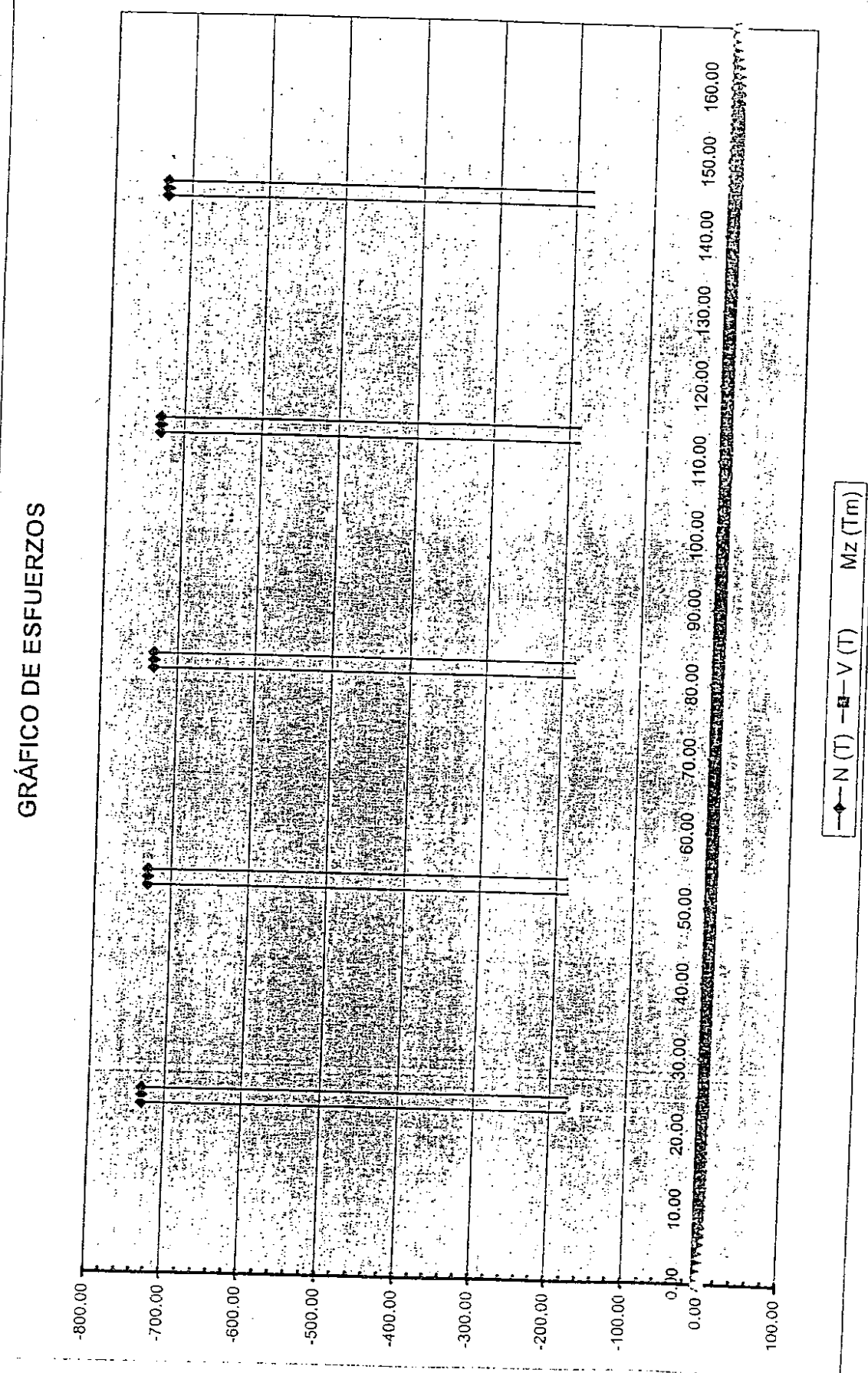
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	1.54	5.44
129	129	164.48	0.00	1.54	5.44
129	130	165.65	0.00	1.54	3.62
130	130	165.65	0.00	1.54	3.62
130	131	166.83	0.00	1.54	1.81
131	131	166.83	0.00	1.54	1.81
131	132	167.00	0.00	1.54	1.54
132	132	167.00	0.00	1.54	1.54
132	133	168.00	0.00	1.54	0.00

Hipótesis de cálculo:

fase9.TOT.Tinf

Pretensado Total (t=INF)

$$[1; 1] \text{fase9.FAM1.TOT} + [1; 1] \text{fase9.FAM2.TOT} + [1; 1] \text{fase9.FAM3.TOT} + [1; 1] \text{fase9.FAM4.TOT} + [$$


Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-1.57	0.00
1	2	1.00	0.00	-1.57	1.57
2	2	1.00	0.00	-1.57	1.57
2	3	1.18	0.00	-1.57	1.84
3	3	1.18	0.00	-1.57	1.84
3	4	2.35	0.00	-1.57	3.68
4	4	2.35	0.00	-1.57	3.68
4	5	3.53	0.00	-1.57	5.52
5	5	3.53	0.00	-1.57	5.52
5	6	4.70	0.00	-1.57	7.36
6	6	4.70	0.00	-1.57	7.36
6	7	5.88	0.00	-1.57	9.20
7	7	5.88	0.00	-1.57	9.20
7	8	7.05	0.00	-1.57	11.04
8	8	7.05	0.00	-1.57	11.04
8	9	8.23	0.00	-1.57	12.88
9	9	8.23	0.00	-1.57	12.88
9	10	9.40	0.00	-1.57	14.72
10	10	9.40	0.00	-1.57	14.72
10	11	10.58	0.00	-1.57	16.56
11	11	10.58	0.00	-1.57	16.56
11	12	11.75	0.00	-1.57	18.40
12	12	11.75	0.00	-1.57	18.40
12	13	12.93	0.00	-1.57	20.24
13	13	12.93	0.00	-1.57	20.24
13	14	14.10	0.00	-1.57	22.08
14	14	14.10	0.00	-1.57	22.08
14	15	15.28	0.00	-1.57	23.92
15	15	15.28	0.00	-1.57	23.92
15	16	16.45	0.00	-1.57	25.76
16	16	16.45	0.00	-1.57	25.76
16	17	17.63	0.00	-1.57	27.60
17	17	17.63	0.00	-1.57	27.60
17	18	18.80	0.00	-1.57	29.44
18	18	18.80	0.00	-1.57	29.44
18	19	19.98	0.00	-1.57	31.28
19	19	19.98	0.00	-1.57	31.28
19	20	21.15	0.00	-1.57	33.12
20	20	21.15	0.00	-1.57	33.12
20	21	22.33	0.00	-1.57	34.96
21	21	22.33	0.00	-1.57	34.96
21	22	22.50	0.00	-1.57	35.23
22	22	22.50	-728.78	-1.57	-168.82
22	23	23.50	-728.78	-1.57	-167.26
23	1023	23.50	-728.78	0.32	-167.26
23	24	24.50	-728.78	0.32	-167.58
24	24	24.50	0.00	0.32	36.48
24	25	24.95	0.00	0.32	36.33
25	25	24.95	0.00	0.32	36.33
25	26	26.40	0.00	0.32	35.86
26	26	26.40	0.00	0.32	35.86

Coef exc

Coef. exc:

137

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase9.FAM1.TOT + [1; 1]fase9.FAM2.TOT + [1; 1]fase9.FAM3.TOT + [1; 1]fase9.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.10	28.01
78	78	97.25	0.00	0.10	28.01
78	79	98.83	0.00	0.10	27.86
79	79	98.83	0.00	0.10	27.86
79	80	100.40	0.00	0.10	27.71
80	80	100.40	0.00	0.10	27.71
80	81	101.98	0.00	0.10	27.56
81	81	101.98	0.00	0.10	27.56
81	82	103.55	0.00	0.10	27.41
82	82	103.55	0.00	0.10	27.41
82	83	105.13	0.00	0.10	27.26
83	83	105.13	0.00	0.10	27.26
83	84	106.70	0.00	0.10	27.11
84	84	106.70	0.00	0.10	27.11
84	85	108.28	0.00	0.10	26.95
85	85	108.28	0.00	0.10	26.95
85	86	109.85	0.00	0.10	26.80
86	86	109.85	0.00	0.10	26.80
86	87	111.43	0.00	0.10	26.65
87	87	111.43	0.00	0.10	26.65
87	88	112.00	0.00	0.10	26.60
88	88	112.00	-728.78	0.10	-177.46
88	89	113.00	-728.78	0.10	-177.56
89	1089	113.00	-728.78	-0.31	-177.56
89	90	114.00	-728.78	-0.31	-177.25
90	90	114.00	0.00	-0.31	26.81
90	91	114.58	0.00	-0.31	26.99
91	91	114.58	0.00	-0.31	26.99
91	92	116.15	0.00	-0.31	27.47
92	92	116.15	0.00	-0.31	27.47
92	93	117.73	0.00	-0.31	27.96
93	93	117.73	0.00	-0.31	27.96
93	94	119.30	0.00	-0.31	28.45
94	94	119.30	0.00	-0.31	28.45
94	95	120.88	0.00	-0.31	28.94
95	95	120.88	0.00	-0.31	28.94
95	96	122.45	0.00	-0.31	29.42
96	96	122.45	0.00	-0.31	29.42
96	97	124.03	0.00	-0.31	29.91
97	97	124.03	0.00	-0.31	29.91
97	98	125.60	0.00	-0.31	30.40
98	98	125.60	0.00	-0.31	30.40
98	99	127.18	0.00	-0.31	30.88
99	99	127.18	0.00	-0.31	30.88
99	100	128.75	0.00	-0.31	31.37
100	100	128.75	0.00	-0.31	31.37
100	101	130.33	0.00	-0.31	31.86
101	101	130.33	0.00	-0.31	31.86
101	102	131.90	0.00	-0.31	32.35
102	102	131.90	0.00	-0.31	32.35
102	103	133.48	0.00	-0.31	32.83

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase9.FAM1.TOT + [1; 1]fase9.FAM2.TOT + [1; 1]fase9.FAM3.TOT + [1; 1]fase9.FAM4.TOT + [

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-0.31	32.83
103	104	135.05	0.00	-0.31	33.32
104	104	135.05	0.00	-0.31	33.32
104	105	136.63	0.00	-0.31	33.81
105	105	136.63	0.00	-0.31	33.81
105	106	138.20	0.00	-0.31	34.29
106	106	138.20	0.00	-0.31	34.29
106	107	139.78	0.00	-0.31	34.78
107	107	139.78	0.00	-0.31	34.78
107	108	141.35	0.00	-0.31	35.27
108	108	141.35	0.00	-0.31	35.27
108	109	142.93	0.00	-0.31	35.76
109	109	142.93	0.00	-0.31	35.76
109	110	143.50	0.00	-0.31	35.93
110	110	143.50	-728.78	-0.31	-168.12
110	111	144.50	-728.78	-0.31	-167.81
111	111	144.50	-728.78	1.54	-167.81
111	112	145.50	-728.78	1.54	-169.36
112	112	145.50	0.00	1.54	34.70
112	113	145.68	0.00	1.54	34.43
113	113	145.68	0.00	1.54	34.43
113	114	146.85	0.00	1.54	32.62
114	114	146.85	0.00	1.54	32.62
114	115	148.03	0.00	1.54	30.81
115	115	148.03	0.00	1.54	30.81
115	116	149.20	0.00	1.54	29.00
116	116	149.20	0.00	1.54	29.00
116	117	150.38	0.00	1.54	27.18
117	117	150.38	0.00	1.54	27.18
117	118	151.55	0.00	1.54	25.37
118	118	151.55	0.00	1.54	25.37
118	119	152.73	0.00	1.54	23.56
119	119	152.73	0.00	1.54	23.56
119	120	153.90	0.00	1.54	21.75
120	120	153.90	0.00	1.54	21.75
120	121	155.08	0.00	1.54	19.93
121	121	155.08	0.00	1.54	19.93
121	122	156.25	0.00	1.54	18.12
122	122	156.25	0.00	1.54	18.12
122	123	157.43	0.00	1.54	16.31
123	123	157.43	0.00	1.54	16.31
123	124	158.60	0.00	1.54	14.50
124	124	158.60	0.00	1.54	14.50
124	125	159.78	0.00	1.54	12.69
125	125	159.78	0.00	1.54	12.69
125	126	160.95	0.00	1.54	10.87
126	126	160.95	0.00	1.54	10.87
126	127	162.13	0.00	1.54	9.06
127	127	162.13	0.00	1.54	9.06
127	128	163.30	0.00	1.54	7.25
128	128	163.30	0.00	1.54	7.25

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.TOT.Tinf

Pretensado Total (t=INF)

[1; 1]fase9.FAM1.TOT + [1; 1]fase9.FAM2.TOT + [1; 1]fase9.FAM3.TOT + [1; 1]fase9.FAM4.TOT + [1; 1]fase9.FAM5.TOT

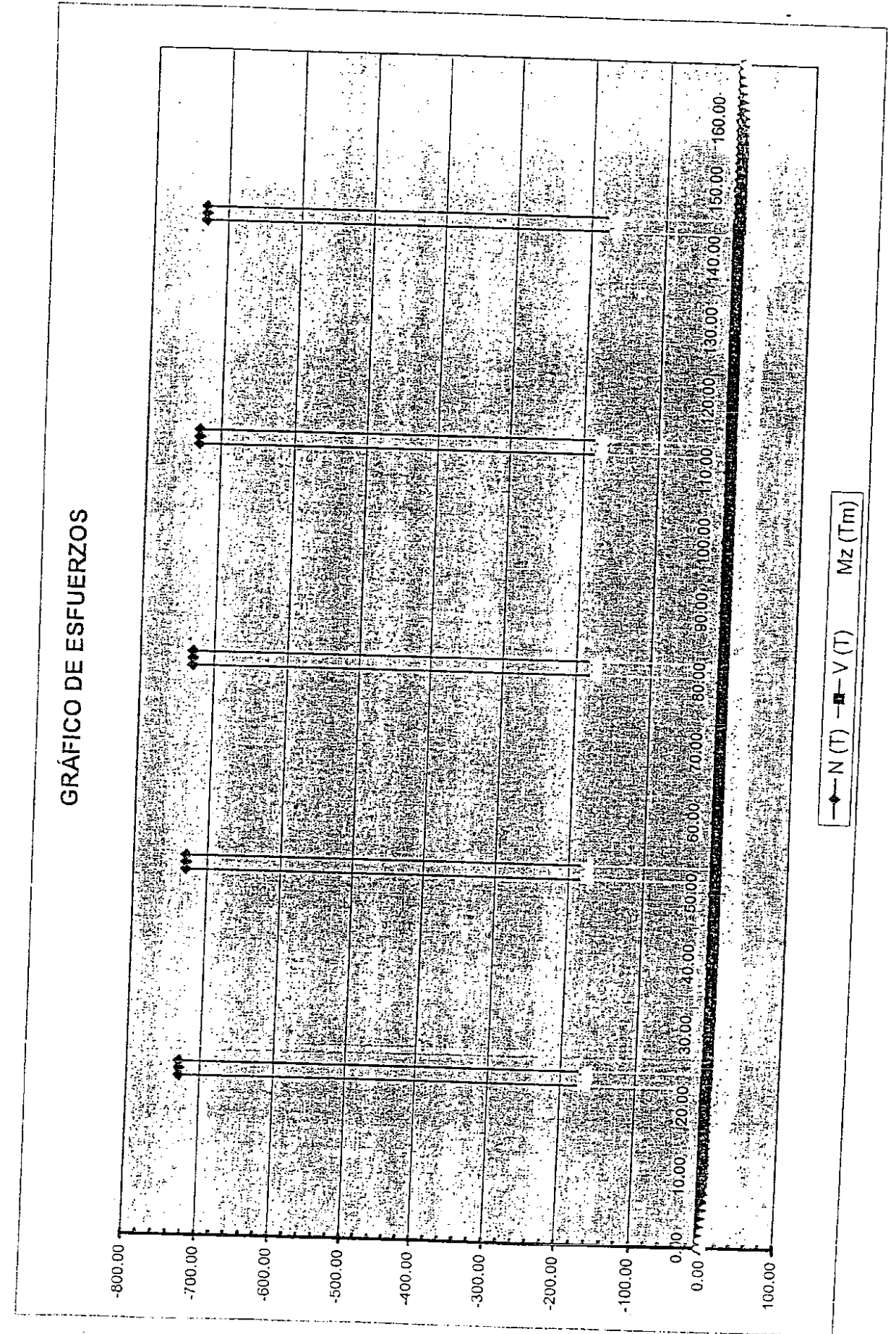
Coef exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	1.54	5.44
129	129	164.48	0.00	1.54	5.44
129	130	165.65	0.00	1.54	3.62
130	130	165.65	0.00	1.54	3.62
130	131	166.83	0.00	1.54	1.81
131	131	166.83	0.00	1.54	1.81
131	132	167.00	0.00	1.54	1.54
132	132	167.00	0.00	1.54	1.54
132	133	168.00	0.00	1.54	0.00

pret fy tisurada.xls

Programa DINTEL IDEAM S.A.
fase9.TOT.Tinf

30/08/01



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-1.57	0.00
1	2	1.00	0.00	-1.57	1.57
2	2	1.00	0.00	-1.57	1.57
2	3	1.18	0.00	-1.57	1.84
3	3	1.18	0.00	-1.57	1.84
3	4	2.35	0.00	-1.57	3.68
4	4	2.35	0.00	-1.57	3.68
4	5	3.53	0.00	-1.57	5.52
5	5	3.53	0.00	-1.57	5.52
5	6	4.70	0.00	-1.57	7.36
6	6	4.70	0.00	-1.57	7.36
6	7	5.88	0.00	-1.57	9.20
7	7	5.88	0.00	-1.57	9.20
7	8	7.05	0.00	-1.57	11.04
8	8	7.05	0.00	-1.57	11.04
8	9	8.23	0.00	-1.57	12.88
9	9	8.23	0.00	-1.57	12.88
9	10	9.40	0.00	-1.57	14.72
10	10	9.40	0.00	-1.57	14.72
10	11	10.58	0.00	-1.57	16.56
11	11	10.58	0.00	-1.57	16.56
11	12	11.75	0.00	-1.57	18.40
12	12	11.75	0.00	-1.57	18.40
12	13	12.93	0.00	-1.57	20.24
13	13	12.93	0.00	-1.57	20.24
13	14	14.10	0.00	-1.57	22.08
14	14	14.10	0.00	-1.57	22.08
14	15	15.28	0.00	-1.57	23.92
15	15	15.28	0.00	-1.57	23.92
15	16	16.45	0.00	-1.57	25.76
16	16	16.45	0.00	-1.57	25.76
16	17	17.63	0.00	-1.57	27.60
17	17	17.63	0.00	-1.57	27.60
17	18	18.80	0.00	-1.57	29.44
18	18	18.80	0.00	-1.57	29.44
18	19	19.98	0.00	-1.57	31.28
19	19	19.98	0.00	-1.57	31.28
19	20	21.15	0.00	-1.57	33.12
20	20	21.15	0.00	-1.57	33.12
20	21	22.33	0.00	-1.57	34.96
21	21	22.33	0.00	-1.57	34.96
21	22	22.50	0.00	-1.57	35.23
22	22	22.50	0.00	-1.57	35.23
22	23	23.50	0.00	-1.57	36.80
23	1023	23.50	0.00	0.32	36.80
23	24	24.50	0.00	0.32	36.48
24	24	24.50	0.00	0.32	36.48
24	25	24.95	0.00	0.32	36.33
25	25	24.95	0.00	0.32	36.33
25	26	26.40	0.00	0.32	35.86
26	26	26.40	0.00	0.32	35.86

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	0.32	35.39
27	27	27.85	0.00	0.32	35.39
27	28	29.30	0.00	0.32	34.93
28	28	29.30	0.00	0.32	34.93
28	29	30.75	0.00	0.32	34.46
29	29	30.75	0.00	0.32	34.46
29	30	32.20	0.00	0.32	33.99
30	30	32.20	0.00	0.32	33.99
30	31	33.65	0.00	0.32	33.52
31	31	33.65	0.00	0.32	33.52
31	32	35.10	0.00	0.32	33.05
32	32	35.10	0.00	0.32	33.05
32	33	36.55	0.00	0.32	32.58
33	33	36.55	0.00	0.32	32.58
33	34	38.00	0.00	0.32	32.11
34	34	38.00	0.00	0.32	32.11
34	35	39.45	0.00	0.32	31.64
35	35	39.45	0.00	0.32	31.64
35	36	40.90	0.00	0.32	31.18
36	36	40.90	0.00	0.32	31.18
36	37	42.35	0.00	0.32	30.71
37	37	42.35	0.00	0.32	30.71
37	38	43.80	0.00	0.32	30.24
38	38	43.80	0.00	0.32	30.24
38	39	45.25	0.00	0.32	29.77
39	39	45.25	0.00	0.32	29.77
39	40	46.70	0.00	0.32	29.30
40	40	46.70	0.00	0.32	29.30
40	41	48.15	0.00	0.32	28.83
41	41	48.15	0.00	0.32	28.83
41	42	49.60	0.00	0.32	28.36
42	42	49.60	0.00	0.32	28.36
42	43	51.05	0.00	0.32	27.90
43	43	51.05	0.00	0.32	27.90
43	44	51.50	0.00	0.32	27.75
44	44	51.50	0.00	0.32	27.75
44	45	52.50	0.00	0.32	27.43
45	1045	52.50	0.00	-0.07	27.43
45	46	53.50	0.00	-0.07	27.50
46	46	53.50	0.00	-0.07	27.50
46	47	53.95	0.00	-0.07	27.53
47	47	53.95	0.00	-0.07	27.53
47	48	55.40	0.00	-0.07	27.64
48	48	55.40	0.00	-0.07	27.64
48	49	56.85	0.00	-0.07	27.74
49	49	56.85	0.00	-0.07	27.74
49	50	58.30	0.00	-0.07	27.85
50	50	58.30	0.00	-0.07	27.85
50	51	59.75	0.00	-0.07	27.95
51	51	59.75	0.00	-0.07	27.95
51	52	61.20	0.00	-0.07	28.06

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-0.07	28.06
52	53	62.65	0.00	-0.07	28.16
53	53	62.65	0.00	-0.07	28.16
53	54	64.10	0.00	-0.07	28.27
54	54	64.10	0.00	-0.07	28.27
54	55	65.55	0.00	-0.07	28.37
55	55	65.55	0.00	-0.07	28.37
55	56	67.00	0.00	-0.07	28.48
56	56	67.00	0.00	-0.07	28.48
56	57	68.45	0.00	-0.07	28.58
57	57	68.45	0.00	-0.07	28.58
57	58	69.90	0.00	-0.07	28.69
58	58	69.90	0.00	-0.07	28.69
58	59	71.35	0.00	-0.07	28.79
59	59	71.35	0.00	-0.07	28.79
59	60	72.80	0.00	-0.07	28.90
60	60	72.80	0.00	-0.07	28.90
60	61	74.25	0.00	-0.07	29.00
61	61	74.25	0.00	-0.07	29.00
61	62	75.70	0.00	-0.07	29.11
62	62	75.70	0.00	-0.07	29.11
62	63	77.15	0.00	-0.07	29.22
63	63	77.15	0.00	-0.07	29.22
63	64	78.60	0.00	-0.07	29.32
64	64	78.60	0.00	-0.07	29.32
64	65	80.05	0.00	-0.07	29.43
65	65	80.05	0.00	-0.07	29.43
65	66	80.50	0.00	-0.07	29.46
66	66	80.50	0.00	-0.07	29.46
66	67	81.50	0.00	-0.07	29.53
67	1067	81.50	0.00	0.10	29.53
67	68	82.50	0.00	0.10	29.43
68	68	82.50	0.00	0.10	29.43
68	69	83.08	0.00	0.10	29.38
69	69	83.08	0.00	0.10	29.38
69	70	84.65	0.00	0.10	29.23
70	70	84.65	0.00	0.10	29.23
70	71	86.23	0.00	0.10	29.08
71	71	86.23	0.00	0.10	29.08
71	72	87.80	0.00	0.10	28.92
72	72	87.80	0.00	0.10	28.92
72	73	89.38	0.00	0.10	28.77
73	73	89.38	0.00	0.10	28.77
73	74	90.95	0.00	0.10	28.62
74	74	90.95	0.00	0.10	28.62
74	75	92.53	0.00	0.10	28.47
75	75	92.53	0.00	0.10	28.47
75	76	94.10	0.00	0.10	28.32
76	76	94.10	0.00	0.10	28.32
76	77	95.68	0.00	0.10	28.17
77	77	95.68	0.00	0.10	28.17

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.10	28.01
78	78	97.25	0.00	0.10	28.01
78	79	98.83	0.00	0.10	27.86
79	79	98.83	0.00	0.10	27.86
79	80	100.40	0.00	0.10	27.71
80	80	100.40	0.00	0.10	27.71
80	81	101.98	0.00	0.10	27.56
81	81	101.98	0.00	0.10	27.56
81	82	103.55	0.00	0.10	27.41
82	82	103.55	0.00	0.10	27.41
82	83	105.13	0.00	0.10	27.26
83	83	105.13	0.00	0.10	27.26
83	84	106.70	0.00	0.10	27.11
84	84	106.70	0.00	0.10	27.11
84	85	108.28	0.00	0.10	26.95
85	85	108.28	0.00	0.10	26.95
85	86	109.85	0.00	0.10	26.80
86	86	109.85	0.00	0.10	26.80
86	87	111.43	0.00	0.10	26.65
87	87	111.43	0.00	0.10	26.65
87	88	112.00	0.00	0.10	26.60
88	88	112.00	0.00	0.10	26.60
88	89	113.00	0.00	0.10	26.50
89	1089	113.00	0.00	-0.31	26.50
89	90	114.00	0.00	-0.31	26.81
90	90	114.00	0.00	-0.31	26.81
90	91	114.58	0.00	-0.31	26.99
91	91	114.58	0.00	-0.31	26.99
91	92	116.15	0.00	-0.31	27.47
92	92	116.15	0.00	-0.31	27.47
92	93	117.73	0.00	-0.31	27.96
93	93	117.73	0.00	-0.31	27.96
93	94	119.30	0.00	-0.31	28.45
94	94	119.30	0.00	-0.31	28.45
94	95	120.88	0.00	-0.31	28.94
95	95	120.88	0.00	-0.31	28.94
95	96	122.45	0.00	-0.31	29.42
96	96	122.45	0.00	-0.31	29.42
96	97	124.03	0.00	-0.31	29.91
97	97	124.03	0.00	-0.31	29.91
97	98	125.60	0.00	-0.31	30.40
98	98	125.60	0.00	-0.31	30.40
98	99	127.18	0.00	-0.31	30.88
99	99	127.18	0.00	-0.31	30.88
99	100	128.75	0.00	-0.31	31.37
100	100	128.75	0.00	-0.31	31.37
100	101	130.33	0.00	-0.31	31.86
101	101	130.33	0.00	-0.31	31.86
101	102	131.90	0.00	-0.31	32.35
102	102	131.90	0.00	-0.31	32.35
102	103	133.48	0.00	-0.31	32.83

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.To

Pretensado Hiperestático (t=0)

[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-0.31	32.83
103	104	135.05	0.00	-0.31	33.32
104	104	135.05	0.00	-0.31	33.32
104	105	136.63	0.00	-0.31	33.81
105	105	136.63	0.00	-0.31	33.81
105	106	138.20	0.00	-0.31	34.29
106	106	138.20	0.00	-0.31	34.29
106	107	139.78	0.00	-0.31	34.78
107	107	139.78	0.00	-0.31	34.78
107	108	141.35	0.00	-0.31	35.27
108	108	141.35	0.00	-0.31	35.27
108	109	142.93	0.00	-0.31	35.76
109	109	142.93	0.00	-0.31	35.76
109	110	143.50	0.00	-0.31	35.93
110	110	143.50	0.00	-0.31	35.93
110	111	144.50	0.00	-0.31	36.24
111	111	144.50	0.00	1.54	36.24
111	112	145.50	0.00	1.54	34.70
112	112	145.50	0.00	1.54	34.70
112	113	145.68	0.00	1.54	34.43
113	113	145.68	0.00	1.54	34.43
113	114	146.85	0.00	1.54	32.62
114	114	146.85	0.00	1.54	32.62
114	115	148.03	0.00	1.54	30.81
115	115	148.03	0.00	1.54	30.81
115	116	149.20	0.00	1.54	29.00
116	116	149.20	0.00	1.54	29.00
116	117	150.38	0.00	1.54	27.18
117	117	150.38	0.00	1.54	27.18
117	118	151.55	0.00	1.54	25.37
118	118	151.55	0.00	1.54	25.37
118	119	152.73	0.00	1.54	23.56
119	119	152.73	0.00	1.54	23.56
119	120	153.90	0.00	1.54	21.75
120	120	153.90	0.00	1.54	21.75
120	121	155.08	0.00	1.54	19.93
121	121	155.08	0.00	1.54	19.93
121	122	156.25	0.00	1.54	18.12
122	122	156.25	0.00	1.54	18.12
122	123	157.43	0.00	1.54	16.31
123	123	157.43	0.00	1.54	16.31
123	124	158.60	0.00	1.54	14.50
124	124	158.60	0.00	1.54	14.50
124	125	159.78	0.00	1.54	12.69
125	125	159.78	0.00	1.54	12.69
125	126	160.95	0.00	1.54	10.87
126	126	160.95	0.00	1.54	10.87
126	127	162.13	0.00	1.54	9.06
127	127	162.13	0.00	1.54	9.06
127	128	163.30	0.00	1.54	7.25
128	128	163.30	0.00	1.54	7.25

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.To

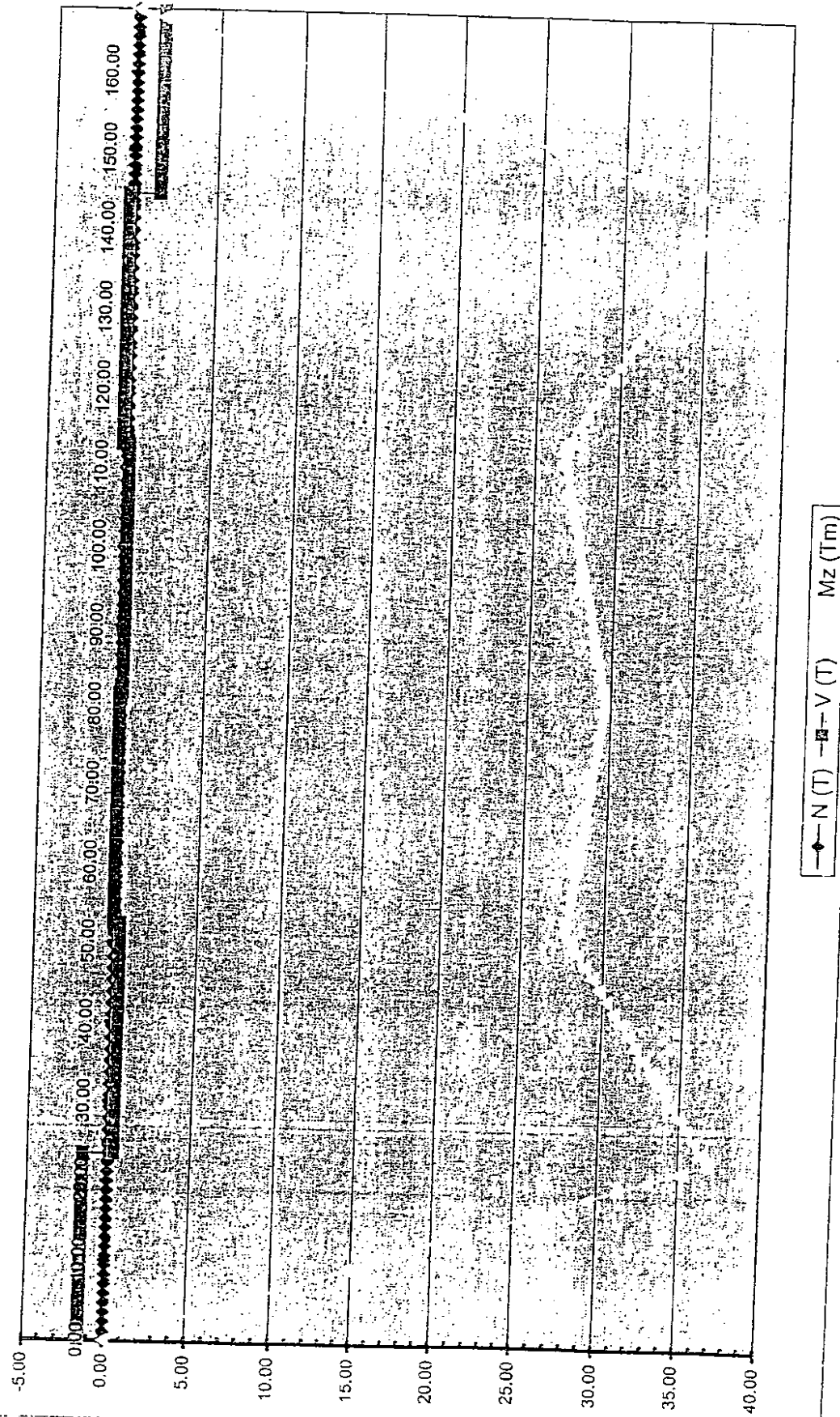
Pretensado Hiperestático (t=0)

[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	1.54	5.44
129	129	164.48	0.00	1.54	5.44
129	130	165.65	0.00	1.54	3.62
130	130	165.65	0.00	1.54	3.62
130	131	166.83	0.00	1.54	1.81
131	131	166.83	0.00	1.54	1.81
131	132	167.00	0.00	1.54	1.54
132	132	167.00	0.00	1.54	1.54
132	133	168.00	0.00	1.54	0.00

GRÁFICO DE ESFUERZOS



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1: 1]fase9.FAM1.TOT + [-1: -1]fase9.FAM1.ISO + [1: 1]fase9.FAM2.TOT + [-1: -1]fase9.FAM2.ISO + [1: 1]Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	-1.57	0.00
1	2	1.00	0.00	-1.57	1.57
2	2	1.00	0.00	-1.57	1.57
2	3	1.18	0.00	-1.57	1.84
3	3	1.18	0.00	-1.57	1.84
3	4	2.35	0.00	-1.57	3.68
4	4	2.35	0.00	-1.57	3.68
4	5	3.53	0.00	-1.57	5.52
5	5	3.53	0.00	-1.57	5.52
5	6	4.70	0.00	-1.57	7.36
6	6	4.70	0.00	-1.57	7.36
6	7	5.88	0.00	-1.57	9.20
7	7	5.88	0.00	-1.57	9.20
7	8	7.05	0.00	-1.57	11.04
8	8	7.05	0.00	-1.57	11.04
8	9	8.23	0.00	-1.57	12.88
9	9	8.23	0.00	-1.57	12.88
9	10	9.40	0.00	-1.57	14.72
10	10	9.40	0.00	-1.57	14.72
10	11	10.58	0.00	-1.57	16.56
11	11	10.58	0.00	-1.57	16.56
11	12	11.75	0.00	-1.57	18.40
12	12	11.75	0.00	-1.57	18.40
12	13	12.93	0.00	-1.57	20.24
13	13	12.93	0.00	-1.57	20.24
13	14	14.10	0.00	-1.57	22.08
14	14	14.10	0.00	-1.57	22.08
14	15	15.28	0.00	-1.57	23.92
15	15	15.28	0.00	-1.57	23.92
15	16	16.45	0.00	-1.57	25.76
16	16	16.45	0.00	-1.57	25.76
16	17	17.63	0.00	-1.57	27.60
17	17	17.63	0.00	-1.57	27.60
17	18	18.80	0.00	-1.57	29.44
18	18	18.80	0.00	-1.57	29.44
18	19	19.98	0.00	-1.57	31.28
19	19	19.98	0.00	-1.57	31.28
19	20	21.15	0.00	-1.57	33.12
20	20	21.15	0.00	-1.57	33.12
20	21	22.33	0.00	-1.57	34.96
21	21	22.33	0.00	-1.57	34.96
21	22	22.50	0.00	-1.57	35.23
22	22	22.50	0.00	-1.57	35.23
22	23	23.50	0.00	-1.57	36.80
23	1023	23.50	0.00	0.32	36.80
23	24	24.50	0.00	0.32	36.48
24	24	24.50	0.00	0.32	36.48
24	25	24.95	0.00	0.32	36.33
25	25	24.95	0.00	0.32	36.33
25	26	26.40	0.00	0.32	35.86
26	26	26.40	0.00	0.32	35.86

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	0.32	35.39
27	27	27.85	0.00	0.32	35.39
27	28	29.30	0.00	0.32	34.93
28	28	29.30	0.00	0.32	34.93
28	29	30.75	0.00	0.32	34.46
29	29	30.75	0.00	0.32	34.46
29	30	32.20	0.00	0.32	33.99
30	30	32.20	0.00	0.32	33.99
30	31	33.65	0.00	0.32	33.52
31	31	33.65	0.00	0.32	33.52
31	32	35.10	0.00	0.32	33.05
32	32	35.10	0.00	0.32	33.05
32	33	36.55	0.00	0.32	32.58
33	33	36.55	0.00	0.32	32.58
33	34	38.00	0.00	0.32	32.11
34	34	38.00	0.00	0.32	32.11
34	35	39.45	0.00	0.32	31.64
35	35	39.45	0.00	0.32	31.64
35	36	40.90	0.00	0.32	31.18
36	36	40.90	0.00	0.32	31.18
36	37	42.35	0.00	0.32	30.71
37	37	42.35	0.00	0.32	30.71
37	38	43.80	0.00	0.32	30.24
38	38	43.80	0.00	0.32	30.24
38	39	45.25	0.00	0.32	29.77
39	39	45.25	0.00	0.32	29.77
39	40	46.70	0.00	0.32	29.30
40	40	46.70	0.00	0.32	29.30
40	41	48.15	0.00	0.32	28.83
41	41	48.15	0.00	0.32	28.83
41	42	49.60	0.00	0.32	28.36
42	42	49.60	0.00	0.32	28.36
42	43	51.05	0.00	0.32	27.90
43	43	51.05	0.00	0.32	27.90
43	44	51.50	0.00	0.32	27.75
44	44	51.50	0.00	0.32	27.75
44	45	52.50	0.00	0.32	27.43
45	1045	52.50	0.00	-0.07	27.43
45	46	53.50	0.00	-0.07	27.50
46	46	53.50	0.00	-0.07	27.50
46	47	53.95	0.00	-0.07	27.53
47	47	53.95	0.00	-0.07	27.53
47	48	55.40	0.00	-0.07	27.64
48	48	55.40	0.00	-0.07	27.64
48	49	56.85	0.00	-0.07	27.74
49	49	56.85	0.00	-0.07	27.74
49	50	58.30	0.00	-0.07	27.85
50	50	58.30	0.00	-0.07	27.85
50	51	59.75	0.00	-0.07	27.95
51	51	59.75	0.00	-0.07	27.95
51	52	61.20	0.00	-0.07	28.06

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	-0.07	28.06
52	53	62.65	0.00	-0.07	28.16
53	53	62.65	0.00	-0.07	28.16
53	54	64.10	0.00	-0.07	28.27
54	54	64.10	0.00	-0.07	28.27
54	55	65.55	0.00	-0.07	28.37
55	55	65.55	0.00	-0.07	28.37
55	56	67.00	0.00	-0.07	28.48
56	56	67.00	0.00	-0.07	28.48
56	57	68.45	0.00	-0.07	28.58
57	57	68.45	0.00	-0.07	28.58
57	58	69.90	0.00	-0.07	28.69
58	58	69.90	0.00	-0.07	28.69
58	59	71.35	0.00	-0.07	28.79
59	59	71.35	0.00	-0.07	28.79
59	60	72.80	0.00	-0.07	28.90
60	60	72.80	0.00	-0.07	28.90
60	61	74.25	0.00	-0.07	29.00
61	61	74.25	0.00	-0.07	29.00
61	62	75.70	0.00	-0.07	29.11
62	62	75.70	0.00	-0.07	29.11
62	63	77.15	0.00	-0.07	29.22
63	63	77.15	0.00	-0.07	29.22
63	64	78.60	0.00	-0.07	29.32
64	64	78.60	0.00	-0.07	29.32
64	65	80.05	0.00	-0.07	29.43
65	65	80.05	0.00	-0.07	29.43
65	66	80.50	0.00	-0.07	29.46
66	66	80.50	0.00	-0.07	29.46
66	67	81.50	0.00	-0.07	29.53
67	1067	81.50	0.00	0.10	29.53
67	68	82.50	0.00	0.10	29.43
68	68	82.50	0.00	0.10	29.43
68	69	83.08	0.00	0.10	29.38
69	69	83.08	0.00	0.10	29.38
69	70	84.65	0.00	0.10	29.23
70	70	84.65	0.00	0.10	29.23
70	71	86.23	0.00	0.10	29.08
71	71	86.23	0.00	0.10	29.08
71	72	87.80	0.00	0.10	28.92
72	72	87.80	0.00	0.10	28.92
72	73	89.38	0.00	0.10	28.77
73	73	89.38	0.00	0.10	28.77
73	74	90.95	0.00	0.10	28.62
74	74	90.95	0.00	0.10	28.62
74	75	92.53	0.00	0.10	28.47
75	75	92.53	0.00	0.10	28.47
75	76	94.10	0.00	0.10	28.32
76	76	94.10	0.00	0.10	28.32
76	77	95.68	0.00	0.10	28.17
77	77	95.68	0.00	0.10	28.17

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.10	28.01
78	78	97.25	0.00	0.10	28.01
78	79	98.83	0.00	0.10	27.86
79	79	98.83	0.00	0.10	27.86
79	80	100.40	0.00	0.10	27.71
80	80	100.40	0.00	0.10	27.71
80	81	101.98	0.00	0.10	27.56
81	81	101.98	0.00	0.10	27.56
81	82	103.55	0.00	0.10	27.41
82	82	103.55	0.00	0.10	27.41
82	83	105.13	0.00	0.10	27.26
83	83	105.13	0.00	0.10	27.26
83	84	106.70	0.00	0.10	27.11
84	84	106.70	0.00	0.10	27.11
84	85	108.28	0.00	0.10	26.95
85	85	108.28	0.00	0.10	26.95
85	86	109.85	0.00	0.10	26.80
86	86	109.85	0.00	0.10	26.80
86	87	111.43	0.00	0.10	26.65
87	87	111.43	0.00	0.10	26.65
87	88	112.00	0.00	0.10	26.60
88	88	112.00	0.00	0.10	26.60
88	89	113.00	0.00	0.10	26.50
89	1089	113.00	0.00	-0.31	26.50
89	90	114.00	0.00	-0.31	26.81
90	90	114.00	0.00	-0.31	26.81
90	91	114.58	0.00	-0.31	26.99
91	91	114.58	0.00	-0.31	26.99
91	92	116.15	0.00	-0.31	27.47
92	92	116.15	0.00	-0.31	27.47
92	93	117.73	0.00	-0.31	27.96
93	93	117.73	0.00	-0.31	27.96
93	94	119.30	0.00	-0.31	28.45
94	94	119.30	0.00	-0.31	28.45
94	95	120.88	0.00	-0.31	28.94
95	95	120.88	0.00	-0.31	28.94
95	96	122.45	0.00	-0.31	29.42
96	96	122.45	0.00	-0.31	29.42
96	97	124.03	0.00	-0.31	29.91
97	97	124.03	0.00	-0.31	29.91
97	98	125.60	0.00	-0.31	30.40
98	98	125.60	0.00	-0.31	30.40
98	99	127.18	0.00	-0.31	30.88
99	99	127.18	0.00	-0.31	30.88
99	100	128.75	0.00	-0.31	31.37
100	100	128.75	0.00	-0.31	31.37
100	101	130.33	0.00	-0.31	31.86
101	101	130.33	0.00	-0.31	31.86
101	102	131.90	0.00	-0.31	32.35
102	102	131.90	0.00	-0.31	32.35
102	103	133.48	0.00	-0.31	32.83

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.Tinf

Pretensado Hiperestático (t=INF)

[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	-0.31	32.83
103	104	135.05	0.00	-0.31	33.32
104	104	135.05	0.00	-0.31	33.32
104	105	136.63	0.00	-0.31	33.81
105	105	136.63	0.00	-0.31	33.81
105	106	138.20	0.00	-0.31	34.29
106	106	138.20	0.00	-0.31	34.29
106	107	139.78	0.00	-0.31	34.78
107	107	139.78	0.00	-0.31	34.78
107	108	141.35	0.00	-0.31	35.27
108	108	141.35	0.00	-0.31	35.27
108	109	142.93	0.00	-0.31	35.76
109	109	142.93	0.00	-0.31	35.76
109	110	143.50	0.00	-0.31	35.93
110	110	143.50	0.00	-0.31	35.93
110	111	144.50	0.00	-0.31	36.24
111	1111	144.50	0.00	1.54	36.24
111	112	145.50	0.00	1.54	34.70
112	112	145.50	0.00	1.54	34.70
112	113	145.68	0.00	1.54	34.43
113	113	145.68	0.00	1.54	34.43
113	114	146.85	0.00	1.54	32.62
114	114	146.85	0.00	1.54	32.62
114	115	148.03	0.00	1.54	30.81
115	115	148.03	0.00	1.54	30.81
115	116	149.20	0.00	1.54	29.00
116	116	149.20	0.00	1.54	29.00
116	117	150.38	0.00	1.54	27.18
117	117	150.38	0.00	1.54	27.18
117	118	151.55	0.00	1.54	25.37
118	118	151.55	0.00	1.54	25.37
118	119	152.73	0.00	1.54	23.56
119	119	152.73	0.00	1.54	23.56
119	120	153.90	0.00	1.54	21.75
120	120	153.90	0.00	1.54	21.75
120	121	155.08	0.00	1.54	19.93
121	121	155.08	0.00	1.54	19.93
121	122	156.25	0.00	1.54	18.12
122	122	156.25	0.00	1.54	18.12
122	123	157.43	0.00	1.54	16.31
123	123	157.43	0.00	1.54	16.31
123	124	158.60	0.00	1.54	14.50
124	124	158.60	0.00	1.54	14.50
124	125	159.78	0.00	1.54	12.69
125	125	159.78	0.00	1.54	12.69
125	126	160.95	0.00	1.54	10.87
126	126	160.95	0.00	1.54	10.87
126	127	162.13	0.00	1.54	9.06
127	127	162.13	0.00	1.54	9.06
127	128	163.30	0.00	1.54	7.25
128	128	163.30	0.00	1.54	7.25

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.HIP.Tinf

Pretensado Hiperestático (t=INF)

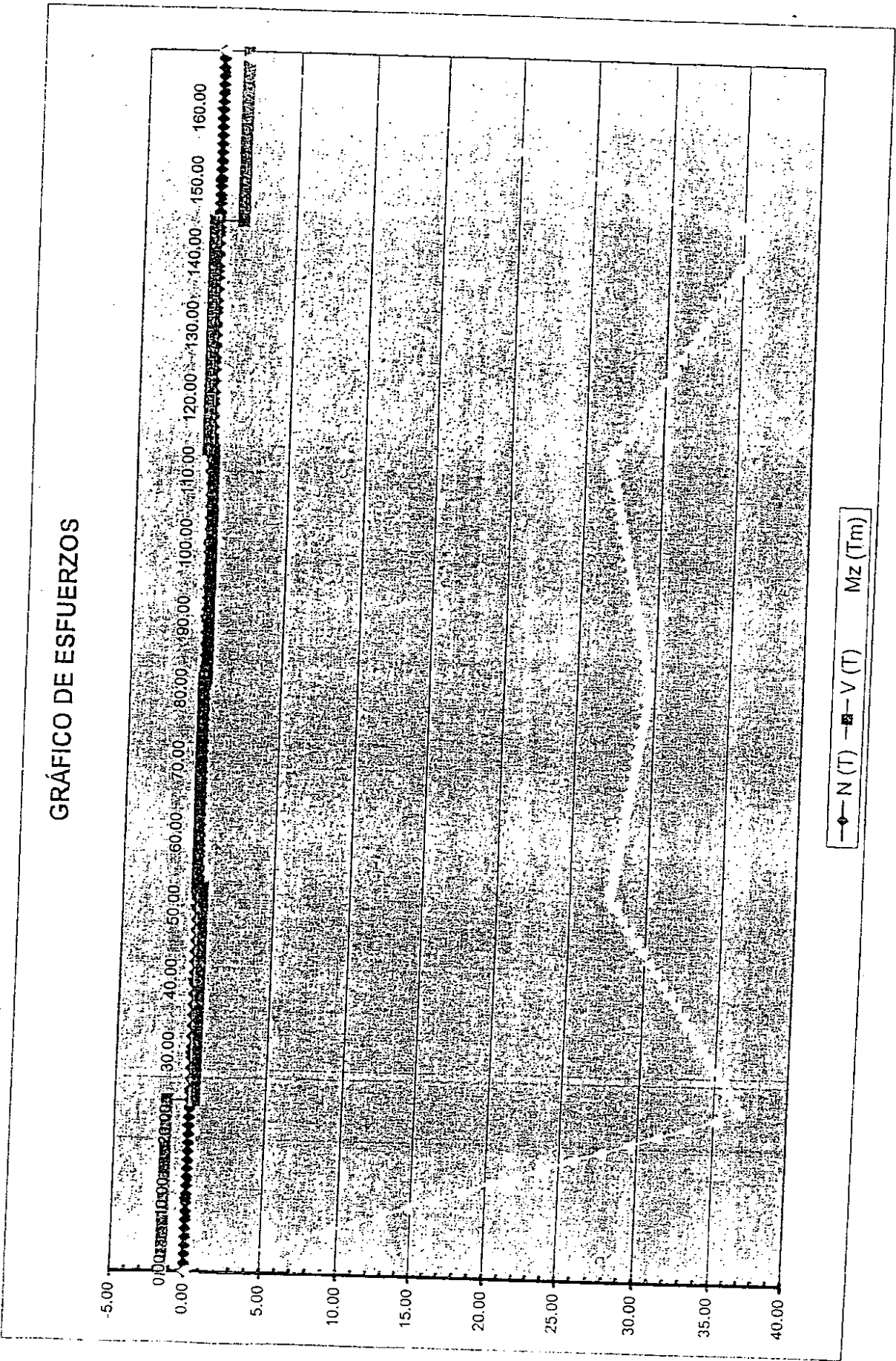
[1; 1]fase9.FAM1.TOT + [-1;-1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.TOT + [-1;-1]fase9.FAM2.ISO + [1
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	1.54	5.44
129	129	164.48	0.00	1.54	5.44
129	130	165.65	0.00	1.54	3.62
130	130	165.65	0.00	1.54	3.62
130	131	166.83	0.00	1.54	1.81
131	131	166.83	0.00	1.54	1.81
131	132	167.00	0.00	1.54	1.54
132	132	167.00	0.00	1.54	1.54
132	133	168.00	0.00	1.54	0.00

pret f9 fisurada.xls

Programa DINTEL IDEAM S.A.
fase9.HIP.Tinf

30/08/01



CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase9.FAM1 ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4 ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	0.00	0.00	0.00
2	3	1.18	0.00	0.00	0.00
3	3	1.18	0.00	0.00	0.00
3	4	2.35	0.00	0.00	0.00
4	4	2.35	0.00	0.00	0.00
4	5	3.53	0.00	0.00	0.00
5	5	3.53	0.00	0.00	0.00
5	6	4.70	0.00	0.00	0.00
6	6	4.70	0.00	0.00	0.00
6	7	5.88	0.00	0.00	0.00
7	7	5.88	0.00	0.00	0.00
7	8	7.05	0.00	0.00	0.00
8	8	7.05	0.00	0.00	0.00
8	9	8.23	0.00	0.00	0.00
9	9	8.23	0.00	0.00	0.00
9	10	9.40	0.00	0.00	0.00
10	10	9.40	0.00	0.00	0.00
10	11	10.58	0.00	0.00	0.00
11	11	10.58	0.00	0.00	0.00
11	12	11.75	0.00	0.00	0.00
12	12	11.75	0.00	0.00	0.00
12	13	12.93	0.00	0.00	0.00
13	13	12.93	0.00	0.00	0.00
13	14	14.10	0.00	0.00	0.00
14	14	14.10	0.00	0.00	0.00
14	15	15.28	0.00	0.00	0.00
15	15	15.28	0.00	0.00	0.00
15	16	16.45	0.00	0.00	0.00
16	16	16.45	0.00	0.00	0.00
16	17	17.63	0.00	0.00	0.00
17	17	17.63	0.00	0.00	0.00
17	18	18.80	0.00	0.00	0.00
18	18	18.80	0.00	0.00	0.00
18	19	19.98	0.00	0.00	0.00
19	19	19.98	0.00	0.00	0.00
19	20	21.15	0.00	0.00	0.00
20	20	21.15	0.00	0.00	0.00
20	21	22.33	0.00	0.00	0.00
21	21	22.33	0.00	0.00	0.00
21	22	22.50	0.00	0.00	0.00
22	22	22.50	-728.78	0.00	-204.06
22	23	23.50	-728.78	0.00	-204.06
23	1023	23.50	-728.78	0.00	-204.06
23	24	24.50	-728.78	0.00	-204.06
24	24	24.50	0.00	0.00	0.00
24	25	24.95	0.00	0.00	0.00
25	25	24.95	0.00	0.00	0.00
25	26	26.40	0.00	0.00	0.00
26	26	26.40	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	0.00	0.00
27	27	27.85	0.00	0.00	0.00
27	28	29.30	0.00	0.00	0.00
28	28	29.30	0.00	0.00	0.00
28	29	30.75	0.00	0.00	0.00
29	29	30.75	0.00	0.00	0.00
29	30	32.20	0.00	0.00	0.00
30	30	32.20	0.00	0.00	0.00
30	31	33.65	0.00	0.00	0.00
31	31	33.65	0.00	0.00	0.00
31	32	35.10	0.00	0.00	0.00
32	32	35.10	0.00	0.00	0.00
32	33	36.55	0.00	0.00	0.00
33	33	36.55	0.00	0.00	0.00
33	34	38.00	0.00	0.00	0.00
34	34	38.00	0.00	0.00	0.00
34	35	39.45	0.00	0.00	0.00
35	35	39.45	0.00	0.00	0.00
35	36	40.90	0.00	0.00	0.00
36	36	40.90	0.00	0.00	0.00
36	37	42.35	0.00	0.00	0.00
37	37	42.35	0.00	0.00	0.00
37	38	43.80	0.00	0.00	0.00
38	38	43.80	0.00	0.00	0.00
38	39	45.25	0.00	0.00	0.00
39	39	45.25	0.00	0.00	0.00
39	40	46.70	0.00	0.00	0.00
40	40	46.70	0.00	0.00	0.00
40	41	48.15	0.00	0.00	0.00
41	41	48.15	0.00	0.00	0.00
41	42	49.60	0.00	0.00	0.00
42	42	49.60	0.00	0.00	0.00
42	43	51.05	0.00	0.00	0.00
43	43	51.05	0.00	0.00	0.00
43	44	51.50	0.00	0.00	0.00
44	44	51.50	-728.78	0.00	-204.06
44	45	52.50	-728.78	0.00	-204.06
45	1045	52.50	-728.78	0.00	-204.06
45	46	53.50	-728.78	0.00	-204.06
46	46	53.50	0.00	0.00	0.00
46	47	53.95	0.00	0.00	0.00
47	47	53.95	0.00	0.00	0.00
47	48	55.40	0.00	0.00	0.00
48	48	55.40	0.00	0.00	0.00
48	49	56.85	0.00	0.00	0.00
49	49	56.85	0.00	0.00	0.00
49	50	58.30	0.00	0.00	0.00
50	50	58.30	0.00	0.00	0.00
50	51	59.75	0.00	0.00	0.00
51	51	59.75	0.00	0.00	0.00
51	52	61.20	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.00	0.00
52	53	62.65	0.00	0.00	0.00
53	53	62.65	0.00	0.00	0.00
53	54	64.10	0.00	0.00	0.00
54	54	64.10	0.00	0.00	0.00
54	55	65.55	0.00	0.00	0.00
55	55	65.55	0.00	0.00	0.00
55	56	67.00	0.00	0.00	0.00
56	56	67.00	0.00	0.00	0.00
56	57	68.45	0.00	0.00	0.00
57	57	68.45	0.00	0.00	0.00
57	58	69.90	0.00	0.00	0.00
58	58	69.90	0.00	0.00	0.00
58	59	71.35	0.00	0.00	0.00
59	59	71.35	0.00	0.00	0.00
59	60	72.80	0.00	0.00	0.00
60	60	72.80	0.00	0.00	0.00
60	61	74.25	0.00	0.00	0.00
61	61	74.25	0.00	0.00	0.00
61	62	75.70	0.00	0.00	0.00
62	62	75.70	0.00	0.00	0.00
62	63	77.15	0.00	0.00	0.00
63	63	77.15	0.00	0.00	0.00
63	64	78.60	0.00	0.00	0.00
64	64	78.60	0.00	0.00	0.00
64	65	80.05	0.00	0.00	0.00
65	65	80.05	0.00	0.00	0.00
65	66	80.50	0.00	0.00	0.00
66	66	80.50	-728.78	0.00	-204.06
66	67	81.50	-728.78	0.00	-204.06
67	1067	81.50	-728.78	0.00	-204.06
67	68	82.50	-728.78	0.00	-204.06
68	68	82.50	0.00	0.00	0.00
68	69	83.08	0.00	0.00	0.00
69	69	83.08	0.00	0.00	0.00
69	70	84.65	0.00	0.00	0.00
70	70	84.65	0.00	0.00	0.00
70	71	86.23	0.00	0.00	0.00
71	71	86.23	0.00	0.00	0.00
71	72	87.80	0.00	0.00	0.00
72	72	87.80	0.00	0.00	0.00
72	73	89.38	0.00	0.00	0.00
73	73	89.38	0.00	0.00	0.00
73	74	90.95	0.00	0.00	0.00
74	74	90.95	0.00	0.00	0.00
74	75	92.53	0.00	0.00	0.00
75	75	92.53	0.00	0.00	0.00
75	76	94.10	0.00	0.00	0.00
76	76	94.10	0.00	0.00	0.00
76	77	95.68	0.00	0.00	0.00
77	77	95.68	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.00	0.00
78	78	97.25	0.00	0.00	0.00
78	79	98.83	0.00	0.00	0.00
79	79	98.83	0.00	0.00	0.00
79	80	100.40	0.00	0.00	0.00
80	80	100.40	0.00	0.00	0.00
80	81	101.98	0.00	0.00	0.00
81	81	101.98	0.00	0.00	0.00
81	82	103.55	0.00	0.00	0.00
82	82	103.55	0.00	0.00	0.00
82	83	105.13	0.00	0.00	0.00
83	83	105.13	0.00	0.00	0.00
83	84	106.70	0.00	0.00	0.00
84	84	106.70	0.00	0.00	0.00
84	85	108.28	0.00	0.00	0.00
85	85	108.28	0.00	0.00	0.00
85	86	109.85	0.00	0.00	0.00
86	86	109.85	0.00	0.00	0.00
86	87	111.43	0.00	0.00	0.00
87	87	111.43	0.00	0.00	0.00
87	88	112.00	0.00	0.00	0.00
88	88	112.00	-728.78	0.00	-204.06
88	89	113.00	-728.78	0.00	-204.06
89	1089	113.00	-728.78	0.00	-204.06
89	90	114.00	-728.78	0.00	-204.06
90	90	114.00	0.00	0.00	0.00
90	91	114.58	0.00	0.00	0.00
91	91	114.58	0.00	0.00	0.00
91	92	116.15	0.00	0.00	0.00
92	92	116.15	0.00	0.00	0.00
92	93	117.73	0.00	0.00	0.00
93	93	117.73	0.00	0.00	0.00
93	94	119.30	0.00	0.00	0.00
94	94	119.30	0.00	0.00	0.00
94	95	120.88	0.00	0.00	0.00
95	95	120.88	0.00	0.00	0.00
95	96	122.45	0.00	0.00	0.00
96	96	122.45	0.00	0.00	0.00
96	97	124.03	0.00	0.00	0.00
97	97	124.03	0.00	0.00	0.00
97	98	125.60	0.00	0.00	0.00
98	98	125.60	0.00	0.00	0.00
98	99	127.18	0.00	0.00	0.00
99	99	127.18	0.00	0.00	0.00
99	100	128.75	0.00	0.00	0.00
100	100	128.75	0.00	0.00	0.00
100	101	130.33	0.00	0.00	0.00
101	101	130.33	0.00	0.00	0.00
101	102	131.90	0.00	0.00	0.00
102	102	131.90	0.00	0.00	0.00
102	103	133.48	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4.ISO + [1;

Coef. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	0.00	0.00
103	104	135.05	0.00	0.00	0.00
104	104	135.05	0.00	0.00	0.00
104	105	136.63	0.00	0.00	0.00
105	105	136.63	0.00	0.00	0.00
105	106	138.20	0.00	0.00	0.00
106	106	138.20	0.00	0.00	0.00
106	107	139.78	0.00	0.00	0.00
107	107	139.78	0.00	0.00	0.00
107	108	141.35	0.00	0.00	0.00
108	108	141.35	0.00	0.00	0.00
108	109	142.93	0.00	0.00	0.00
109	109	142.93	0.00	0.00	0.00
109	110	143.50	0.00	0.00	0.00
110	110	143.50	-728.78	0.00	-204.06
110	111	144.50	-728.78	0.00	-204.06
111	1111	144.50	-728.78	0.00	-204.06
111	112	145.50	-728.78	0.00	-204.06
112	112	145.50	0.00	0.00	0.00
112	113	145.68	0.00	0.00	0.00
113	113	145.68	0.00	0.00	0.00
113	114	146.85	0.00	0.00	0.00
114	114	146.85	0.00	0.00	0.00
114	115	148.03	0.00	0.00	0.00
115	115	148.03	0.00	0.00	0.00
115	116	149.20	0.00	0.00	0.00
116	116	149.20	0.00	0.00	0.00
116	117	150.38	0.00	0.00	0.00
117	117	150.38	0.00	0.00	0.00
117	118	151.55	0.00	0.00	0.00
118	118	151.55	0.00	0.00	0.00
118	119	152.73	0.00	0.00	0.00
119	119	152.73	0.00	0.00	0.00
119	120	153.90	0.00	0.00	0.00
120	120	153.90	0.00	0.00	0.00
120	121	155.08	0.00	0.00	0.00
121	121	155.08	0.00	0.00	0.00
121	122	156.25	0.00	0.00	0.00
122	122	156.25	0.00	0.00	0.00
122	123	157.43	0.00	0.00	0.00
123	123	157.43	0.00	0.00	0.00
123	124	158.60	0.00	0.00	0.00
124	124	158.60	0.00	0.00	0.00
124	125	159.78	0.00	0.00	0.00
125	125	159.78	0.00	0.00	0.00
125	126	160.95	0.00	0.00	0.00
126	126	160.95	0.00	0.00	0.00
126	127	162.13	0.00	0.00	0.00
127	127	162.13	0.00	0.00	0.00
127	128	163.30	0.00	0.00	0.00
128	128	163.30	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.ISO.To

Pretensado Isostático (t=0)

[1; 1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	0.00	0.00
129	129	164.48	0.00	0.00	0.00
129	130	165.65	0.00	0.00	0.00
130	130	165.65	0.00	0.00	0.00
130	131	166.83	0.00	0.00	0.00
131	131	166.83	0.00	0.00	0.00
131	132	167.00	0.00	0.00	0.00
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

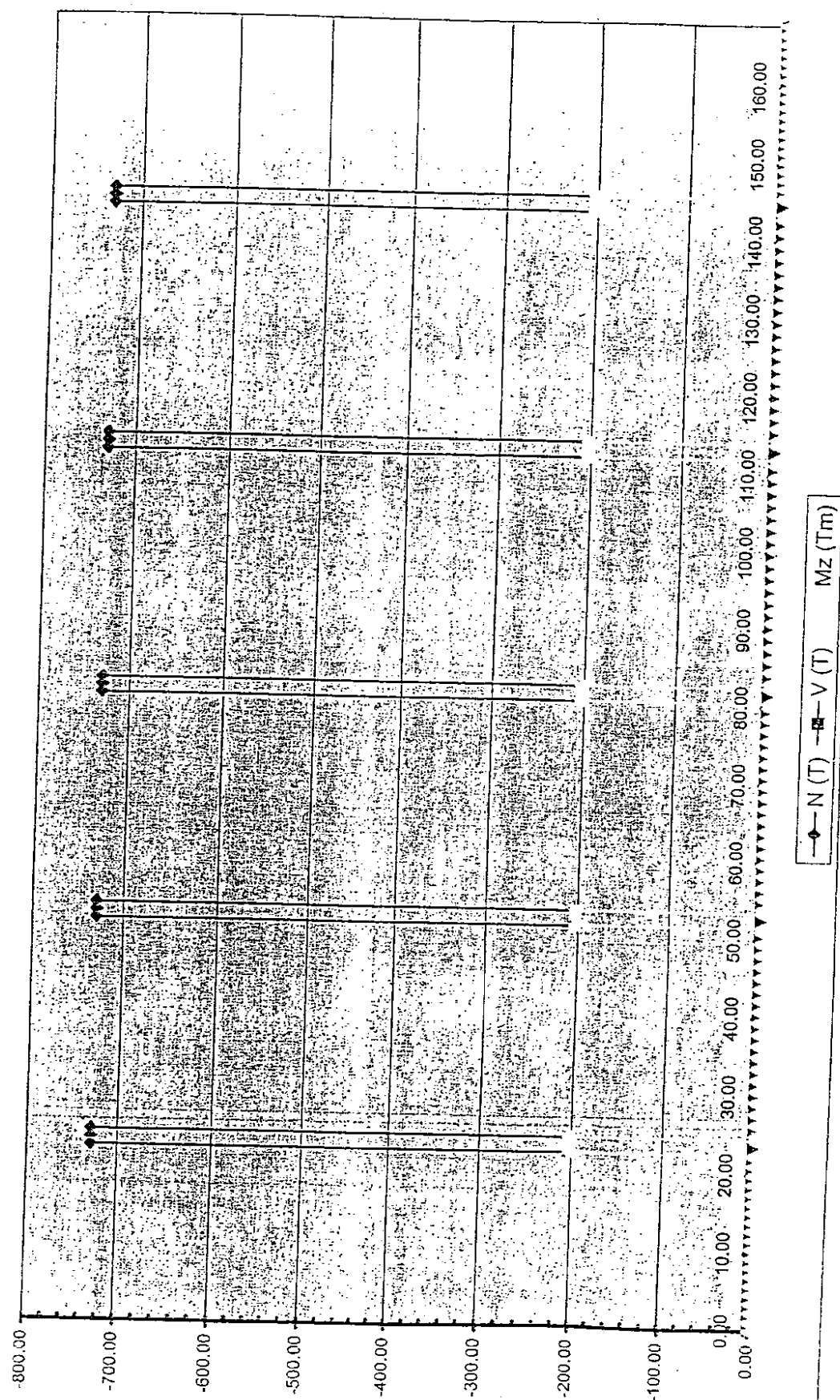
fase9.ISO.Tinf

Pretensado Isostático ($t=INF$)

$$[1; 1]_{\text{fase9.FAM1.ISO}} + [1; 1]_{\text{fase9.FAM2.ISO}} + [1; 1]_{\text{fase9.FAM3.ISO}} + [1; 1]_{\text{fase9.FAM4.ISO}} + [1; 1]_{\text{fase9.FAM5.ISO}}$$

Coef. exc:

GRÁFICO DE ESFUERZOS



Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
1	1	0.00	0.00	0.00	0.00
1	2	1.00	0.00	0.00	0.00
2	2	1.00	0.00	0.00	0.00
2	3	1.18	0.00	0.00	0.00
3	3	1.18	0.00	0.00	0.00
3	4	2.35	0.00	0.00	0.00
4	4	2.35	0.00	0.00	0.00
4	5	3.53	0.00	0.00	0.00
5	5	3.53	0.00	0.00	0.00
5	6	4.70	0.00	0.00	0.00
6	6	4.70	0.00	0.00	0.00
6	7	5.88	0.00	0.00	0.00
7	7	5.88	0.00	0.00	0.00
7	8	7.05	0.00	0.00	0.00
8	8	7.05	0.00	0.00	0.00
8	9	8.23	0.00	0.00	0.00
9	9	8.23	0.00	0.00	0.00
9	10	9.40	0.00	0.00	0.00
10	10	9.40	0.00	0.00	0.00
10	11	10.58	0.00	0.00	0.00
11	11	10.58	0.00	0.00	0.00
11	12	11.75	0.00	0.00	0.00
12	12	11.75	0.00	0.00	0.00
12	13	12.93	0.00	0.00	0.00
13	13	12.93	0.00	0.00	0.00
13	14	14.10	0.00	0.00	0.00
14	14	14.10	0.00	0.00	0.00
14	15	15.28	0.00	0.00	0.00
15	15	15.28	0.00	0.00	0.00
15	16	16.45	0.00	0.00	0.00
16	16	16.45	0.00	0.00	0.00
16	17	17.63	0.00	0.00	0.00
17	17	17.63	0.00	0.00	0.00
17	18	18.80	0.00	0.00	0.00
18	18	18.80	0.00	0.00	0.00
18	19	19.98	0.00	0.00	0.00
19	19	19.98	0.00	0.00	0.00
19	20	21.15	0.00	0.00	0.00
20	20	21.15	0.00	0.00	0.00
20	21	22.33	0.00	0.00	0.00
21	21	22.33	0.00	0.00	0.00
21	22	22.50	0.00	0.00	0.00
22	22	22.50	-728.78	0.00	-204.06
22	23	23.50	-728.78	0.00	-204.06
23	1023	23.50	-728.78	0.00	-204.06
23	24	24.50	-728.78	0.00	-204.06
24	24	24.50	0.00	0.00	0.00
24	25	24.95	0.00	0.00	0.00
25	25	24.95	0.00	0.00	0.00
25	26	26.40	0.00	0.00	0.00
26	26	26.40	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
26	27	27.85	0.00	0.00	0.00
27	27	27.85	0.00	0.00	0.00
27	28	29.30	0.00	0.00	0.00
28	28	29.30	0.00	0.00	0.00
28	29	30.75	0.00	0.00	0.00
29	29	30.75	0.00	0.00	0.00
29	30	32.20	0.00	0.00	0.00
30	30	32.20	0.00	0.00	0.00
30	31	33.65	0.00	0.00	0.00
31	31	33.65	0.00	0.00	0.00
31	32	35.10	0.00	0.00	0.00
32	32	35.10	0.00	0.00	0.00
32	33	36.55	0.00	0.00	0.00
33	33	36.55	0.00	0.00	0.00
33	34	38.00	0.00	0.00	0.00
34	34	38.00	0.00	0.00	0.00
34	35	39.45	0.00	0.00	0.00
35	35	39.45	0.00	0.00	0.00
35	36	40.90	0.00	0.00	0.00
36	36	40.90	0.00	0.00	0.00
36	37	42.35	0.00	0.00	0.00
37	37	42.35	0.00	0.00	0.00
37	38	43.80	0.00	0.00	0.00
38	38	43.80	0.00	0.00	0.00
38	39	45.25	0.00	0.00	0.00
39	39	45.25	0.00	0.00	0.00
39	40	46.70	0.00	0.00	0.00
40	40	46.70	0.00	0.00	0.00
40	41	48.15	0.00	0.00	0.00
41	41	48.15	0.00	0.00	0.00
41	42	49.60	0.00	0.00	0.00
42	42	49.60	0.00	0.00	0.00
42	43	51.05	0.00	0.00	0.00
43	43	51.05	0.00	0.00	0.00
43	44	51.50	0.00	0.00	0.00
44	44	51.50	-728.78	0.00	-204.06
44	45	52.50	-728.78	0.00	-204.06
45	1045	52.50	-728.78	0.00	-204.06
45	46	53.50	-728.78	0.00	-204.06
46	46	53.50	0.00	0.00	0.00
46	47	53.95	0.00	0.00	0.00
47	47	53.95	0.00	0.00	0.00
47	48	55.40	0.00	0.00	0.00
48	48	55.40	0.00	0.00	0.00
48	49	56.85	0.00	0.00	0.00
49	49	56.85	0.00	0.00	0.00
49	50	58.30	0.00	0.00	0.00
50	50	58.30	0.00	0.00	0.00
50	51	59.75	0.00	0.00	0.00
51	51	59.75	0.00	0.00	0.00
51	52	61.20	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
52	52	61.20	0.00	0.00	0.00
52	53	62.65	0.00	0.00	0.00
53	53	62.65	0.00	0.00	0.00
53	54	64.10	0.00	0.00	0.00
54	54	64.10	0.00	0.00	0.00
54	55	65.55	0.00	0.00	0.00
55	55	65.55	0.00	0.00	0.00
55	56	67.00	0.00	0.00	0.00
56	56	67.00	0.00	0.00	0.00
56	57	68.45	0.00	0.00	0.00
57	57	68.45	0.00	0.00	0.00
57	58	69.90	0.00	0.00	0.00
58	58	69.90	0.00	0.00	0.00
58	59	71.35	0.00	0.00	0.00
59	59	71.35	0.00	0.00	0.00
59	60	72.80	0.00	0.00	0.00
60	60	72.80	0.00	0.00	0.00
60	61	74.25	0.00	0.00	0.00
61	61	74.25	0.00	0.00	0.00
61	62	75.70	0.00	0.00	0.00
62	62	75.70	0.00	0.00	0.00
62	63	77.15	0.00	0.00	0.00
63	63	77.15	0.00	0.00	0.00
63	64	78.60	0.00	0.00	0.00
64	64	78.60	0.00	0.00	0.00
64	65	80.05	0.00	0.00	0.00
65	65	80.05	0.00	0.00	0.00
65	66	80.50	0.00	0.00	0.00
66	66	80.50	-728.78	0.00	-204.06
66	67	81.50	-728.78	0.00	-204.06
67	1067	81.50	-728.78	0.00	-204.06
67	68	82.50	-728.78	0.00	-204.06
68	68	82.50	0.00	0.00	0.00
68	69	83.08	0.00	0.00	0.00
69	69	83.08	0.00	0.00	0.00
69	70	84.65	0.00	0.00	0.00
70	70	84.65	0.00	0.00	0.00
70	71	86.23	0.00	0.00	0.00
71	71	86.23	0.00	0.00	0.00
71	72	87.80	0.00	0.00	0.00
72	72	87.80	0.00	0.00	0.00
72	73	89.38	0.00	0.00	0.00
73	73	89.38	0.00	0.00	0.00
73	74	90.95	0.00	0.00	0.00
74	74	90.95	0.00	0.00	0.00
74	75	92.53	0.00	0.00	0.00
75	75	92.53	0.00	0.00	0.00
75	76	94.10	0.00	0.00	0.00
76	76	94.10	0.00	0.00	0.00
76	77	95.68	0.00	0.00	0.00
77	77	95.68	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
77	78	97.25	0.00	0.00	0.00
78	78	97.25	0.00	0.00	0.00
78	79	98.83	0.00	0.00	0.00
79	79	98.83	0.00	0.00	0.00
79	80	100.40	0.00	0.00	0.00
80	80	100.40	0.00	0.00	0.00
80	81	101.98	0.00	0.00	0.00
81	81	101.98	0.00	0.00	0.00
81	82	103.55	0.00	0.00	0.00
82	82	103.55	0.00	0.00	0.00
82	83	105.13	0.00	0.00	0.00
83	83	105.13	0.00	0.00	0.00
83	84	106.70	0.00	0.00	0.00
84	84	106.70	0.00	0.00	0.00
84	85	108.28	0.00	0.00	0.00
85	85	108.28	0.00	0.00	0.00
85	86	109.85	0.00	0.00	0.00
86	86	109.85	0.00	0.00	0.00
86	87	111.43	0.00	0.00	0.00
87	87	111.43	0.00	0.00	0.00
87	88	112.00	0.00	0.00	0.00
88	88	112.00	-728.78	0.00	-204.06
88	89	113.00	-728.78	0.00	-204.06
89	1089	113.00	-728.78	0.00	-204.06
89	90	114.00	-728.78	0.00	-204.06
90	90	114.00	0.00	0.00	0.00
90	91	114.58	0.00	0.00	0.00
91	91	114.58	0.00	0.00	0.00
91	92	116.15	0.00	0.00	0.00
92	92	116.15	0.00	0.00	0.00
92	93	117.73	0.00	0.00	0.00
93	93	117.73	0.00	0.00	0.00
93	94	119.30	0.00	0.00	0.00
94	94	119.30	0.00	0.00	0.00
94	95	120.88	0.00	0.00	0.00
95	95	120.88	0.00	0.00	0.00
95	96	122.45	0.00	0.00	0.00
96	96	122.45	0.00	0.00	0.00
96	97	124.03	0.00	0.00	0.00
97	97	124.03	0.00	0.00	0.00
97	98	125.60	0.00	0.00	0.00
98	98	125.60	0.00	0.00	0.00
98	99	127.18	0.00	0.00	0.00
99	99	127.18	0.00	0.00	0.00
99	100	128.75	0.00	0.00	0.00
100	100	128.75	0.00	0.00	0.00
100	101	130.33	0.00	0.00	0.00
101	101	130.33	0.00	0.00	0.00
101	102	131.90	0.00	0.00	0.00
102	102	131.90	0.00	0.00	0.00
102	103	133.48	0.00	0.00	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase9.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4.ISO + [1;

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
103	103	133.48	0.00	0.00	0.00
103	104	135.05	0.00	0.00	0.00
104	104	135.05	0.00	0.00	0.00
104	105	136.63	0.00	0.00	0.00
105	105	136.63	0.00	0.00	0.00
105	106	138.20	0.00	0.00	0.00
106	106	138.20	0.00	0.00	0.00
106	107	139.78	0.00	0.00	0.00
107	107	139.78	0.00	0.00	0.00
107	108	141.35	0.00	0.00	0.00
108	108	141.35	0.00	0.00	0.00
108	109	142.93	0.00	0.00	0.00
109	109	142.93	0.00	0.00	0.00
109	110	143.50	0.00	0.00	0.00
110	110	143.50	-728.78	0.00	-204.06
110	111	144.50	-728.78	0.00	-204.06
111	1111	144.50	-728.78	0.00	-204.06
111	112	145.50	-728.78	0.00	-204.06
112	112	145.50	0.00	0.00	0.00
112	113	145.68	0.00	0.00	0.00
113	113	145.68	0.00	0.00	0.00
113	114	146.85	0.00	0.00	0.00
114	114	146.85	0.00	0.00	0.00
114	115	148.03	0.00	0.00	0.00
115	115	148.03	0.00	0.00	0.00
115	116	149.20	0.00	0.00	0.00
116	116	149.20	0.00	0.00	0.00
116	117	150.38	0.00	0.00	0.00
117	117	150.38	0.00	0.00	0.00
117	118	151.55	0.00	0.00	0.00
118	118	151.55	0.00	0.00	0.00
118	119	152.73	0.00	0.00	0.00
119	119	152.73	0.00	0.00	0.00
119	120	153.90	0.00	0.00	0.00
120	120	153.90	0.00	0.00	0.00
120	121	155.08	0.00	0.00	0.00
121	121	155.08	0.00	0.00	0.00
121	122	156.25	0.00	0.00	0.00
122	122	156.25	0.00	0.00	0.00
122	123	157.43	0.00	0.00	0.00
123	123	157.43	0.00	0.00	0.00
123	124	158.60	0.00	0.00	0.00
124	124	158.60	0.00	0.00	0.00
124	125	159.78	0.00	0.00	0.00
125	125	159.78	0.00	0.00	0.00
125	126	160.95	0.00	0.00	0.00
126	126	160.95	0.00	0.00	0.00
126	127	162.13	0.00	0.00	0.00
127	127	162.13	0.00	0.00	0.00
127	128	163.30	0.00	0.00	0.00
128	128	163.30	0.00	0.00	0.00

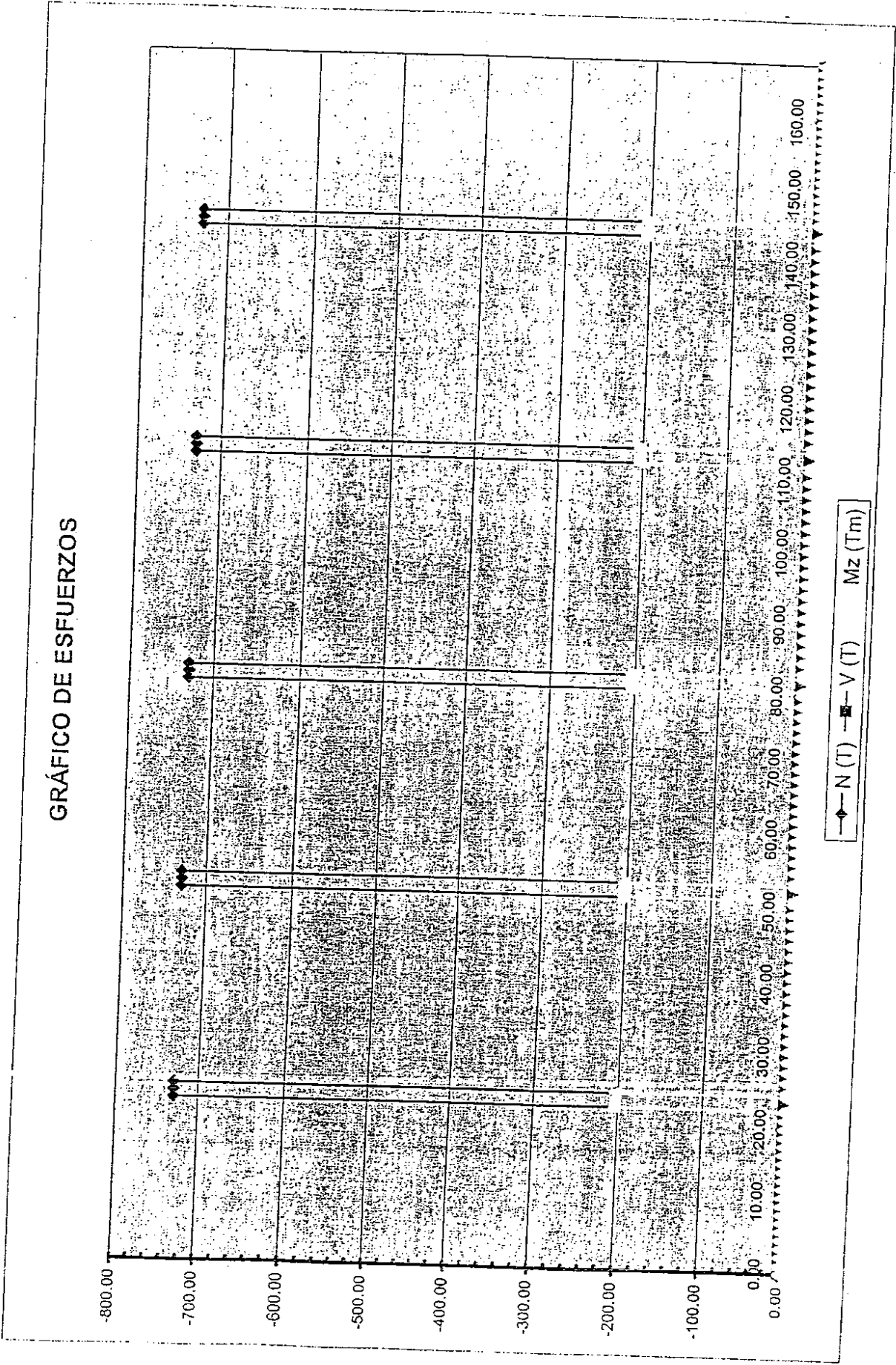
CÁLCULO TENSIONAL

Hipótesis de cálculo:
fase9.ISO.Tinf

Pretensado Isostático (t=INF)

[1; 1]fase9.FAM1.ISO + [1; 1]fase9.FAM2.ISO + [1; 1]fase9.FAM3.ISO + [1; 1]fase9.FAM4.ISO + [1; 1]
Coef exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)
128	129	164.48	0.00	0.00	0.00
129	129	164.48	0.00	0.00	0.00
129	130	165.65	0.00	0.00	0.00
130	130	165.65	0.00	0.00	0.00
130	131	166.83	0.00	0.00	0.00
131	131	166.83	0.00	0.00	0.00
131	132	167.00	0.00	0.00	0.00
132	132	167.00	0.00	0.00	0.00
132	133	168.00	0.00	0.00	0.00



FAMILIA DE 1

INT DESVIACIÓN MÓDULO DE ANCLAJE
NÚMERO DE PARÁSITA ELASTICIDAD ORIGEN
ID (rad/m) ACERO (kg/c (m)

ANCLAJE FINAL (m)

TESADO DESDE EXTREMOS

NÚMERO DE TORONES

ÁREA TORÓN (mm²)

TENSIÓN TESADO (kg/mm²)

PENETRACIÓN DE CUÑA (mm.)

0 0 1950000 1 22.5 AMBOS 4 140 142 74.73684211 0

PRETENSADO

FASE I

EN ALZADO

RECTA 1			PARABOLA			RECTA 2		
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin	Pend
1	22.5	0.4	0	22.5	0.4	0	22.5	0.4

EN PLANTA

RECTA 1			PARABOLA			RECTA 2		
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin	Pend
1	1	0	0	1	0	0	22.5	0

X (m.)	Y (m.)	Pend Y	Ycdg (m.)	Z (m.)	Pend Z	TENSIÓN (kg/mm ²)	AXIL (L)	Sección dorsal CORTANTE (L)	MOMENTO (mt.)	AXIL (L)	Sección frontal CORTANTE (L)	MOMENTO (mt.)
2	1	0.4	0.1655999905	0	0	142	0	0	0	-79.52	0	99.8771082
3	1.175	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
4	2.35	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
5	3.525	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
6	4.7	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
7	5.875	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
8	7.05	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
9	8.225	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
10	9.4	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
11	10.575	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
12	11.75	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
13	12.925	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
14	14.1	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
15	15.275	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
16	16.45	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
17	17.625	0.4	0.1627999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
18	18.8	0.4	0.1599999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
19	19.975	0.4	0.1599999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
20	21.15	0.4	0.1599999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
21	22.325	0.4	0.1599999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
22	22.5	0.4	0.1599999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082

ENTO DE TESADO 156.5641026

FAMILIA DE 2

INT DESVIACIÓN MÓDULO DE ANCLAJE
NÚMERO DE PARÁSITA ELASTICIDAD ORIGEN
ID (rad/m) ACERO (kg/c (m)

ANCLAJE FINAL (m)

TESADO DESDE EXTREMOS

NÚMERO DE TORONES

ÁREA TORÓN (mm²)

TENSIÓN TESADO (kg/mm²)

PENETRACIÓN DE CUÑA (mm.)

0 0 1950000 24.5 51.5 AMBOS 4 140 142 74.73684211 0

EN ALZADO

RECTA 1			PARABOLA			RECTA 2		
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin	Pend
1	51.5	0.4	0	51.5	0.4	0	51.5	0.4

EN PLANTA

RECTA 1			PARABOLA			RECTA 2		
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin	Pend
1	24.5	0	0	24.5	0	0	51.5	0

X (m.)	Y (m.)	Pend Y	Ycdg (m.)	Z (m.)	Pend Z	TENSIÓN (kg/mm ²)	AXIL (L)	Sección dorsal CORTANTE (L)	MOMENTO (mt.)	AXIL (L)	Sección frontal CORTANTE (L)	MOMENTO (mt.)
3	24.5	0.4	0.1599999905	0	0	142	0	0	0	-79.52	0	95.42398839
4	24.85	0.4	0.1599999905	0	0	142	-79.52	0	95.42398839	-79.52	0	95.42398839
5	26.4	0.4	0.1599999905	0	0	142	-79.52	0	95.42398839	-79.52	0	95.42398839
6	27.85	0.4	0.1599999905	0	0	142	-79.52	0	95.42398839	-79.52	0	95.42398839
7	29.3	0.4	0.1599999905	0	0	142	-79.52	0	95.42398839	-79.52	0	95.42398839
8	30.75	0.4	0.1627999905	0	0	142	-79.52	0	95.42398839	-79.52	0	95.42398839
9	32.2	0.4	0.1655999905	0	0	142	-79.5054238	-1.52249597	97.6326537	-79.5054238	-1.52249597	97.6326537
10	33.65	0.4	0.1655999905	0	0	142	-79.5054238	-1.52249597	99.85880559	-79.52	0	99.8771082
11	35.1	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
12	36.55	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
13	38	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
14	39.45	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
15	40.9	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
16	42.35	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
17	43.8	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
18	45.25	0.4	0.1655999905	0	0	142	-79.52	0	99.8771082	-79.52	0	99.8771082
19	46.7	0.4	0.1627999905	0	0	142	-79.5054238	-1.522495966	97.6326537	-79.5054238	-1.522495966	97.6326537
20	48.15	0.4	0.1599999905	0	0	142	-79.5054238	-1.522495965	95.40650182	-79.52	0	95.42398839
21	49.6	0.4	0.1599999905	0	0	142	-79.52	0	95.42398839	-79.52	0	95.42398839
22	51.05	0.4	0.1599999905	0	0	142	-79.52	0	95.42398839	-79.52	0	95.42398839
23	51.5	0.4	0.1599999905	0	0	142	-79.52	0	95.42398839	-79.52	0	95.42398839

ENTO DE TESADO 196.6153846

COEFICIENTE DE DESVIACIÓN	MÓDULO DE ANCLAJE	ANCLAJE	TESADO	NÚMERO	ÁREA	TENSIÓN	PENETRACIÓN
PARÁSITA	ELASTICIDAD	FINAL	DESDE	DE	TORÓN	TESADO	DE CUÑA
END (rad/m)	ACERO (kg/c (m))	(m)	EXTREMOS	TORONES	(mm2)	(kg/mm2)	(mm)
0	0	1950000	22.5 AMBOS	22	140	137	0
72.10526316							
EN ALZADO							
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin
1	22.5	2.3	0	22.5	2.3	0	22.5
EN PLANTA							
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin
1	0	0	1	0	0	22.5	0
Punto de Tendido							
X	Y	Pend	Ycdg	Z	Pend	TENSIÓN	AXIL
(m)	(m)		(m)	(m)		(kg/mm2)	(t)
2	1	2.3	0	1.655999905	0	0	137
3	1.175	2.3	0	1.655999905	0	0	137
4	2.35	2.3	0	1.655999905	0	0	137
5	3.525	2.3	0	1.655999905	0	0	137
6	4.7	2.3	0	1.655999905	0	0	137
7	5.875	2.3	0	1.655999905	0	0	137
8	7.05	2.3	0	1.655999905	0	0	137
9	8.225	2.3	0	1.655999905	0	0	137
10	9.4	2.3	0	1.655999905	0	0	137
11	10.575	2.3	0	1.655999905	0	0	137
12	11.75	2.3	0	1.655999905	0	0	137
13	12.925	2.3	0	1.655999905	0	0	137
14	14.1	2.3	0	1.655999905	0	0	137
15	15.275	2.3	0	1.655999905	0	0	137
16	16.45	2.3	0	1.655999905	0	0	137
17	17.625	2.3	0	1.655999905	0	0	137
18	18.8	2.3	0	1.655999905	0	0	137
19	19.975	2.3	0	1.655999905	0	0	137
20	21.15	2.3	0	1.655999905	0	0	137
21	22.325	2.3	0	1.655999905	0	0	137
22	22.5	2.3	0	1.655999905	0	0	137
Punto de Tendido							
151.0512821							

Punto de Tendido 151.0512821

COEFICIENTE DE DESVIACIÓN	MÓDULO DE ANCLAJE	ANCLAJE	TESADO	NÚMERO	ÁREA	TENSIÓN	PENETRACIÓN
PARÁSITA	ELASTICIDAD	FINAL	DESDE	DE	TORÓN	TESADO	DE CUÑA
END (rad/m)	ACERO (kg/c (m))	(m)	EXTREMOS	TORONES	(mm2)	(kg/mm2)	(mm)
0	0	1950000	21.15 AMBOS	22	140	137	0
72.10526316							
EN ALZADO							
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin
1	49.9924	2.28	0	21.14999924	2.28	0	21.14999924
EN PLANTA							
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin
1	2.35	0	0	2.35	0	0	21.15
Punto de Tendido							
X	Y	Pend	Ycdg	Z	Pend	TENSIÓN	AXIL
(m)	(m)		(m)	(m)		(kg/mm2)	(t)
4	2.35	2.28	0	1.655999905	0	0	137
5	3.525	2.28	0	1.655999905	0	0	137
6	4.7	2.28	0	1.655999905	0	0	137
7	5.875	2.28	0	1.655999905	0	0	137
8	7.05	2.28	0	1.655999905	0	0	137
9	8.225	2.28	0	1.655999905	0	0	137
10	9.4	2.28	0	1.655999905	0	0	137
11	10.575	2.28	0	1.655999905	0	0	137
12	11.75	2.28	0	1.655999905	0	0	137
13	12.925	2.28	0	1.655999905	0	0	137
14	14.1	2.28	0	1.655999905	0	0	137
15	15.275	2.28	0	1.655999905	0	0	137
16	16.45	2.28	0	1.655999905	0	0	137
17	17.625	2.28	0	1.655999905	0	0	137
18	18.8	2.28	0	1.655999905	0	0	137
19	19.975	2.28	0	1.655999905	0	0	137
20	21.15	2.28	0	1.655999905	0	0	137
Punto de Tendido							
132.0620513							

Punto de Tendido 132.0620513

COEFICIENTE DE DESVIACIÓN	MÓDULO DE ANCLAJE	ANCLAJE	TESADO	NÚMERO	ÁREA	TENSIÓN	PENETRACIÓN
PARÁSITA	ELASTICIDAD	FINAL	DESDE	DE	TORÓN	TESADO	DE CUÑA
END (rad/m)	ACERO (kg/c (m))	(m)	EXTREMOS	TORONES	(mm2)	(kg/mm2)	(mm)
0	0	1950000	24.5	51.5 AMBOS	24	140	137
72.10526316							
EN ALZADO							
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin
1	51.5	2.3	0	51.5	2.3	0	51.5
EN PLANTA							
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin
1	24.5	0	0	24.5	0	0	51.5
Punto de Tendido							
X	Y	Pend	Ycdg	Z	Pend	TENSIÓN	AXIL
(m)	(m)		(m)	(m)		(kg/mm2)	(t)
14	24.5	2.3	0	1.599999905	0	0	137
15	24.95	2.3	0	1.599999905	0	0	137
16	26.4	2.3	0	1.599999905	0	0	137
17	27.85	2.3	0	1.599999905	0	0	137
18	29.3	2.3	0	1.599999905	0	0	137
19	30.75	2.3	0	1.599999905	0	0	137
20	32.2	2.3	0	1.599999905	0	0	137
21	33.65	2.3	0	1.599999905	0	0	137
22	35.1	2.3	0	1.599999905	0	0	137
23	36.55	2.3	0	1.599999905	0	0	137
24	38	2.3	0	1.599999905	0	0	137
25	39.45	2.3	0	1.599999905	0	0	137
26	40.9	2.3	0	1.599999905	0	0	137
27	42.35	2.3	0	1.599999905	0	0	137
28	43.8	2.3	0	1.599999905	0	0	137
29	45.25	2.3	0	1.599999905	0	0	137
30	46.7	2.3	0	1.599999905	0	0	137
31	48.15	2.3	0	1.599999905	0	0	137
32	49.6	2.3	0	1.599999905	0	0	137
33	51.05	2.3	0	1.599999905	0	0	137
34	51.5	2.3	0	1.599999905	0	0	137
Punto de Tendido							
189.6923077							

Punto de Tendido 189.6923077

COEFICIENTE DE DESVIACIÓN	MÓDULO DE ANCLAJE	ANCLAJE	TESADO	NÚMERO	ÁREA	TENSIÓN	PENETRACIÓN
PARÁSITA	ELASTICIDAD	FINAL	DESDE	DE	TORÓN	TESADO	DE CUÑA
END (rad/m)	ACERO (kg/c (m))	(m)	EXTREMOS	TORONES	(mm2)	(kg/mm2)	(mm)
0	0	1950000	26.4	49.6 AMBOS	24	140	137
72.10526316							
EN ALZADO							
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin
1	49.6	2.28	0	49.6	2.28	0	49.6
EN PLANTA							
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin
1	26.4	0	0	26.4	0	0	49.6
Punto de Tendido							
X	Y	Pend	Ycdg	Z	Pend	TENSIÓN	AXIL
(m)	(m)		(m)	(m)		(kg/mm2)	(t)
16	26.4	2.28	0	1.599999905	0	0	137
17	27.85	2.28	0	1.599999905	0	0	137
18	29.3	2.28	0	1.599999905	0	0	137
19	30.75	2.28	0	1.599999905	0	0	137
20	32.2	2.28	0	1.599999905	0	0	137
21	33.65	2.28	0	1.599999905	0	0	137
22	35.1	2.28	0	1.599999905	0	0	137
23	36.55	2.28	0	1.599999905	0	0	137
24	38	2.28	0	1.599999905	0	0	137
25	39.45	2.28	0	1.599999905	0	0	137
26	40.9	2.28	0	1.599999905	0	0	137
27	42.35	2.28	0	1.599999905	0	0	137
28	43.8	2.28	0	1.599999905	0	0	137
29	45.25	2.28	0	1.599999905	0	0	137
30	46.7	2.28	0	1.599999905	0	0	137
31	48.15	2.28	0	1.599999905	0	0	137
32	49.6	2.28	0	1.599999905	0	0	137
Punto de Tendido							
162.9946718							

Punto de Tendido 162.9946718

FAMILIA DE 15																									
FICIENT DESVIACIÓN MÓDULO DE ANCLAJE AMIENTE PARÁSITA ELÁSTICA ORIGEN LA TEND (rad/m) ACTRO (kg/c (m))		ANCLAJE FINAL (m)		TESADO DESDE EXTREMOS		NÚMERO DE TORONES		ÁREA TORÓN (mm2)		TENSIÓN TESADO (kg/mm2)		PENETRACIÓN DE CUÑA (mm)													
0 0 1950000		82.5		112 AMBOS		28		140		137		0													
												72.10526316													
ADO EN ALZADO																									
X(m)		Xfin		RECTA 1 Yfin		Pend		Xfin		PARABOLA Yfin		Pend		Xfin		RECTA 2 Yfin		Pend							
1		112		2.3		0				112		2.3		0		112		2.3		0					
ADO EN PLANTA																									
X(m)		Xfin		RECTA 1 Yfin		Pend		Xfin		PARABOLA Yfin		Pend		Xfin		RECTA 2 Yfin		Pend							
1		82.5		0		0				82.5		0		0		112		0		0					
X (m)		Y (m)		Pend		Ycdg (m)		Z (m)		Pend		TENSIÓN (kg/mm2)		AXIL (t)		Sección dorsal CORTANTE (t)		MOMENTO (mt.)		AXIL (t)		Sección frontal CORTANTE (t)		MOMENTO (mt.)	
68		82.5		2.3		0		1.599999905		0		0		137		0		0		0		0		-375.928036	
69		83.075		2.3		0		1.599999905		0		0		137		-537.04		0		-375.928036		-537.04		0	
70		84.65		2.3		0		1.599999905		0		0		137		-537.04		0		-375.928036		-537.04		0	
71		86.225		2.3		0		1.599999905		0		0		137		-537.04		0		-375.928036		-537.04		0	
72		87.8		2.3		0		1.599999905		0		0		137		-537.04		0		-375.928036		-537.04		0	
73		89.375		2.3		0		1.627999905		0		0		137		-537.04		0		-375.928036		-536.956561		-9.46642485	
74		90.95		2.3		0		1.655999905		0		0		137		-536.956561		-9.46642485		-360.834848		-536.956561		-9.46642485	
75		92.525		2.3		0		1.655999905		0		0		137		-536.956561		-9.46642485		-345.800065		-537.04		0	
76		94.1		2.3		0		1.655999905		0		0		137		-537.04		0		-345.853797		-537.04		0	
77		95.675		2.3		0		1.655999905		0		0		137		-537.04		0		-345.853797		-537.04		0	
78		97.25		2.3		0		1.655999905		0		0		137		-537.04		0		-345.853797		-537.04		0	
79		98.825		2.3		0		1.655999905		0		0		137		-537.04		0		-345.853797		-537.04		0	
80		100.4		2.3		0		1.655999905		0		0		137		-537.04		0		-345.853797		-537.04		0	
81		101.975		2.3		0		1.655999905		0		0		137		-537.04		0		-345.853797		-537.04		0	
82		103.55		2.3		0		1.655999905		0		0		137		-537.04		0		-345.853797		-537.04		0	
83		105.125		2.3		0		1.655999905		0		0		137		-537.04		0		-345.853797		-537.04		0	
84		106.7		2.3		0		1.627999905		0		0		137		-536.956561		9.466424847		-360.834848		-536.956561		9.466424847	
85		108.275		2.3		0		1.599999905		0		0		137		-536.956561		9.466424847		-375.869631		-537.04		0	
86		109.85		2.3		0		1.599999905		0		0		137		-537.04		0		-375.928036		-537.04		0	
87		111.425		2.3		0		1.599999905		0		0		137		-537.04		0		-375.928036		-537.04		0	
88		112		2.3		0		1.599999905		0		0		137		-537.04		0		-375.928036		-537.04		0	

AMIENTO DE TESADO 207 2564103

2

FAMILIA DE 16

IENT DESVIACIÓN MÓDULO DE ANCLAJE
ENT- PARASITA ELASTICIDAD ORIGEN
END (rad/m) ACERO (kg/c (m))

ANCLAJE
FINAL
(m)

TESADO
DESDE
EXTREMOS

NÚMERO
DE
TORONES

ÁREA
TORÓN
(mm2)

TENSIÓN
TESADO
(kg/mm2)

PENETRACIÓN
DE CUÑA
(mm.)

0 0 1950000 84.65 109.85 AMBOS 28 140 137 0
72.10526316

EN ALZADO

Xfin RECTA 1
Yfin Pend

Xfin PARABOLA
Yfin Pend

Xfin RECTA 2
Yfin Pend

109.85 2.28 0 109.85 2.28 0 109.85 2.28 0

EN PLANTA

Xfin RECTA 1
Yfin Pend

Xfin PARABOLA
Yfin Pend

Xfin RECTA 2
Yfin Pend

84.65 0 0 84.65 0 0 109.85 0 0

X (m) Y (m) Pend. Ycdg (m) Z (m) Pend. Z TENSIÓN (kg/mm2) AXIL (t) Sección dorsal CORTANTE (t) MOMENTO (mt.) AXIL (t) Sección frontal CORTANTE (t) MOMENTO (mt.)

70 84.65 2.28 0 1.599999905 0 0 137 0 0 -537.04 0 -365.187236

71 85.225 2.28 0 1.599999905 0 0 137 -537.04 0 -365.187236 -537.04 -365.187236

72 86.8 2.28 0 1.599999905 0 0 137 -537.04 0 -365.187236 -536.956561 -365.1305

73 88.375 2.28 0 1.627999905 0 0 137 -536.956561 -9.46642485 -335.060934 -537.04 -335.112998

74 90.95 2.28 0 1.655999905 0 0 137 -537.04 0 -335.112998 -537.04 -335.112998

75 92.525 2.28 0 1.655999905 0 0 137 -537.04 0 -335.112998 -537.04 -335.112998

76 94.1 2.28 0 1.655999905 0 0 137 -537.04 0 -335.112998 -537.04 -335.112998

77 95.675 2.28 0 1.655999905 0 0 137 -537.04 0 -335.112998 -537.04 -335.112998

78 97.25 2.28 0 1.655999905 0 0 137 -537.04 0 -335.112998 -537.04 -335.112998

79 98.825 2.28 0 1.655999905 0 0 137 -537.04 0 -335.112998 -537.04 -335.112998

80 100.4 2.28 0 1.655999905 0 0 137 -537.04 0 -335.112998 -537.04 -335.112998

81 101.975 2.28 0 1.655999905 0 0 137 -537.04 0 -335.112998 -537.04 -335.112998

82 103.55 2.28 0 1.655999905 0 0 137 -537.04 0 -335.112998 -537.04 -335.112998

83 105.125 2.28 0 1.655999905 0 0 137 -537.04 0 -335.112998 -536.956561 -335.060934

84 106.7 2.28 0 1.599999905 0 0 137 -536.956561 -9.466424847 -350.095717 -536.956561 -350.095717

85 108.275 2.28 0 1.599999905 0 0 137 -537.04 0 -365.187236 -537.04 -365.187236

86 109.85 2.28 0 1.599999905 0 0 137 -537.04 0 -365.187236 -537.04 -365.187236

ENT DE TESADO 177 0461538

FAMILIA DE 17													
IDENTIFICACIÓN DE LA TEND (rad/m)	DESVIACIÓN PARÁSITA ELÁSTICA (kg/c (m))	MÓDULO DE ANCLAJE ELÁSTICO (kg/c (m))	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS	NÚMERO DE TORONES	ÁREA TORÓN (mm2)	TENSIÓN TESADO (kg/mm2)	PENETRACIÓN DE CUÑA (mm.)					
0	0	1950000	87.8	106.7 AMBOS	28	140	137	0	72.10526316				
EN ALZADO													
Xfin	Yfin	Pend		Xfin	Yfin	Pend		Xfin	RECTA 2 Yfin Pend				
1	106.7	2.252	0	106.7	2.252	0		106.7	2.252 0				
EN PLANTA													
Xfin	Yfin	Pend		Xfin	Yfin	Pend		Xfin	RECTA 2 Yfin Pend				
1	87.8	0	0	87.8	0	0		106.7	0 0				
X (m.)	Y (m.)	Pend Y	Ycdg (m.)	Z (m.)	Pend. Z	TENSIÓN (kg/mm2)	AXIL (t)	Sección dorsal CORTANTE (t)	MOMENTO (mt.)	AXIL (t)	Sección frontal CORTANTE (t)	MOMENTO (ml.)	
72	87.8	2.252	0	1.5999999905	0	0	137	0	0	0	-536.956561	-9.46642485	-350.095717
73	89.375	2.252	0	1.6279999905	0	0	137	-536.956561	-9.46642485	-335.060934	-536.956561	-9.46642485	-335.060934
74	90.95	2.252	0	1.6559999905	0	0	137	-536.956561	-9.46642485	-320.026151	-537.04	0	-320.075878
75	92.525	2.252	0	1.6859999905	0	0	137	-537.04	0	-320.075878	-537.04	0	-320.075878
76	94.1	2.252	0	1.6559999905	0	0	137	-537.04	0	-320.075878	-537.04	0	-320.075878
77	95.675	2.252	0	1.6859999905	0	0	137	-537.04	0	-320.075878	-537.04	0	-320.075878
78	97.25	2.252	0	1.6559999905	0	0	137	-537.04	0	-320.075878	-537.04	0	-320.075878
79	98.825	2.252	0	1.6859999905	0	0	137	-537.04	0	-320.075878	-537.04	0	-320.075878
80	100.4	2.252	0	1.6559999905	0	0	137	-537.04	0	-320.075878	-537.04	0	-320.075878
81	101.975	2.252	0	1.6859999905	0	0	137	-537.04	0	-320.075878	-537.04	0	-320.075878
82	103.55	2.252	0	1.6559999905	0	0	137	-537.04	0	-320.075878	-537.04	0	-320.075878
83	105.125	2.252	0	1.6279999905	0	0	137	-537.04	0	-320.075878	-536.956561	9.466424847	-320.026151
84	106.7	2.252	0	1.5999999905	0	0	137	-536.956561	9.466424847	-335.060934	-536.956561	9.466424847	-335.060934
							137	-536.956561	9.466424847	-350.095717	0	0	0

IENTO DE TESADO 132 7846154

FAMILIA DE 18												
IDENTIFICACIÓN DE LA TEND	DESVIACIÓN PARÁSITA ELÁSTICA (kg/c (m))	MÓDULO DE ANCLAJE ELÁSTICO (kg/c (m))	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS	NÚMERO DE TORONES	ÁREA TORÓN (mm2)	TENSIÓN TESADO (kg/mm2)	PENETRACIÓN DE CUÑA (mm.)				
0	0	1950000	114	143.5 AMBOS	28	140	137	0				
							72.10526316					
EN ALZADO												
Xfin	RECTA 1 Yfin	Pend		Xfin	PARABOLA Yfin	Pend		Xfin	RECTA 2 Yfin			
1	143.5	2.3	0	143.5	2.3	0		143.5	2.3			
EN PLANTA												
Xfin	RECTA 1 Yfin	Pend		Xfin	PARABOLA Yfin	Pend		Xfin	RECTA 2 Yfin			
1	114	0	0	114	0	0		143.5	0			
X (m)	Y (m)	Pend. Y	Ycdg (m)	Z (m)	Pend. Z	TENSIÓN (kg/mm2)	AXIL (t)	Sección dorsal CORTANTE (t)	MOMENTO (mt.)	AXIL (t)	Sección frontal CORTANTE (t)	MOMENTO (mt.)
80	114	2.3	0	1.599999905	0	0	137	0	0	0	-537.04	0
81	114.575	2.3	0	1.599999905	0	0	137	-537.04	0	-375.928036	-537.04	0
82	116.15	2.3	0	1.599999905	0	0	137	-537.04	0	-375.928036	-537.04	0
83	117.725	2.3	0	1.599999905	0	0	137	-537.04	0	-375.928036	-537.04	0
84	119.3	2.3	0	1.599999905	0	0	137	-537.04	0	-375.928036	-537.04	0
85	120.875	2.3	0	1.627999905	0	0	137	-536.956561	-9.46642485	-360.834848	-536.956561	-9.46642485
86	122.45	2.3	0	1.655999905	0	0	137	-536.956561	9.46642485	-345.800065	-537.04	0
87	124.025	2.3	0	1.655999905	0	0	137	-537.04	0	-345.853797	-537.04	0
88	125.6	2.3	0	1.655999905	0	0	137	-537.04	0	-345.853797	-537.04	0
89	127.175	2.3	0	1.655999905	0	0	137	-537.04	0	-345.853797	-537.04	0
90	128.75	2.3	0	1.655999905	0	0	137	-537.04	0	-345.853797	-537.04	0
91	130.325	2.3	0	1.655999905	0	0	137	-537.04	0	-345.853797	-537.04	0
92	131.9	2.3	0	1.655999905	0	0	137	-537.04	0	-345.853797	-537.04	0
93	133.475	2.3	0	1.655999905	0	0	137	-537.04	0	-345.853797	-537.04	0
94	135.05	2.3	0	1.655999905	0	0	137	-537.04	0	-345.853797	-537.04	0
95	136.625	2.3	0	1.627999905	0	0	137	-537.04	0	-345.853797	-536.956561	9.466424847
96	138.2	2.3	0	1.599999905	0	0	137	-536.956561	9.466424847	-360.834848	-536.956561	9.466424847
97	139.775	2.3	0	1.599999905	0	0	137	-537.04	0	-375.869631	-537.04	0
98	141.35	2.3	0	1.599999905	0	0	137	-537.04	0	-375.928036	-537.04	0
99	142.925	2.3	0	1.599999905	0	0	137	-537.04	0	-375.928036	-537.04	0
100	144.5	2.3	0	1.599999905	0	0	137	-537.04	0	-375.928036	-537.04	0

ENTO DE TESADO 207 2564103

FAMILIA DE 19									
EFICIENTE DESVIACIÓN	MÓDULO DE ANCLAJE	ANCLAJE	TESADO	NÚMERO	ÁREA	TENSIÓN	PENETRACIÓN		
PARÁSITA	ELASTICIDAD ORIGEN	FINAL	DESDE	DE	TORÓN	TESADO	DE CUÑA		
DE (rad/m)	ACERO (kg/c (m)	(m)	EXTREMOS	TORONES	(mm2)	(kg/mm2)	(mm)		
0	0	1950000	116.15	141.35	28	140	137	0	72.10526316
EN ALZADO									
EN PLANTA									
SECCIÓN DORSAL									
SECCIÓN FRONTAL									
92	116.15	2.28	0	1.599999905	0	0	137	0	0
93	117.725	2.28	0	1.599999905	0	0	137	-537.04	0
94	119.3	2.28	0	1.599999905	0	0	137	-537.04	0
95	120.875	2.28	0	1.627999905	0	0	137	-536.956561	-9.46642485
96	122.45	2.28	0	1.655999905	0	0	137	-536.956561	-9.46642485
97	124.025	2.28	0	1.655999905	0	0	137	-537.04	0
98	125.6	2.28	0	1.655999905	0	0	137	-537.04	0
99	127.175	2.28	0	1.655999905	0	0	137	-537.04	0
100	128.75	2.28	0	1.655999905	0	0	137	-537.04	0
101	130.325	2.28	0	1.655999905	0	0	137	-537.04	0
102	131.9	2.28	0	1.655999905	0	0	137	-537.04	0
103	133.475	2.28	0	1.655999905	0	0	137	-537.04	0
104	135.05	2.28	0	1.655999905	0	0	137	-537.04	0
105	136.625	2.28	0	1.627999905	0	0	137	-536.956561	-9.46642485
106	138.2	2.28	0	1.599999905	0	0	137	-536.956561	-9.46642485
107	139.775	2.28	0	1.599999905	0	0	137	-537.04	0
108	141.35	2.28	0	1.599999905	0	0	137	-537.04	0

GAMIENTO DE TESADO 177.0401538

FAMILIA DE 20

EFICIENTE DESVIACIÓN	MÓDULO DE ANCLAJE	ANCLAJE	TESADO	NÚMERO	ÁREA	TENSIÓN	PENETRACIÓN		
PARÁSITA	ELASTICIDAD ORIGEN	FINAL	DESDE	DE	TORÓN	TESADO	DE CUÑA		
DE (rad/m)	ACERO (kg/c (m)	(m)	EXTREMOS	TORONES	(mm2)	(kg/mm2)	(mm)		
0	0	1950000	119.3	138.2	28	140	137	0	72.10526316
EN ALZADO									
EN PLANTA									
SECCIÓN DORSAL									
SECCIÓN FRONTAL									
94	119.3	2.252	0	1.599999905	0	0	137	0	0
95	120.875	2.252	0	1.627999905	0	0	137	-536.956561	-9.46642485
96	122.45	2.252	0	1.655999905	0	0	137	-536.956561	-9.46642485
97	124.025	2.252	0	1.655999905	0	0	137	-537.04	0
98	125.6	2.252	0	1.655999905	0	0	137	-537.04	0
99	127.175	2.252	0	1.655999905	0	0	137	-537.04	0
100	128.75	2.252	0	1.655999905	0	0	137	-537.04	0
101	130.325	2.252	0	1.655999905	0	0	137	-537.04	0
102	131.9	2.252	0	1.655999905	0	0	137	-537.04	0
103	133.475	2.252	0	1.655999905	0	0	137	-537.04	0
104	135.05	2.252	0	1.655999905	0	0	137	-537.04	0
105	136.625	2.252	0	1.627999905	0	0	137	-536.956561	-9.46642485
106	138.2	2.252	0	1.599999905	0	0	137	-536.956561	-9.46642485

GAMIENTO DE TESADO 132.7846154

FAMILIA DE 21									
EFICIENTE DESVIACIÓN	MÓDULO DE ANCLAJE	ANCLAJE	TESADO	NÚMERO	ÁREA	TENSIÓN	PENETRACIÓN		
PARÁSITA	ELASTICIDAD ORIGEN	FINAL	DESDE	DE	TORÓN	TESADO	DE CUÑA		
DE (rad/m)	ACERO (kg/c (m)	(m)	EXTREMOS	TORONES	(mm2)	(kg/mm2)	(mm)		
0	0	1950000	145.5	167	22	140	137	0	72.10526316
EN ALZADO									
EN PLANTA									
SECCIÓN DORSAL									
SECCIÓN FRONTAL									
12	145.5	2.3	0	1.599999905	0	0	137	0	0
13	145.675	2.3	0	1.599999905	0	0	137	-421.96	0
14	146.85	2.3	0	1.599999905	0	0	137	-421.96	0
15	148.025	2.3	0	1.599999905	0	0	137	-421.96	0
16	149.2	2.3	0	1.599999905	0	0	137	-421.96	0
17	150.375	2.3	0	1.627999905	0	0	137	-421.96	0
18	151.55	2.3	0	1.655999905	0	0	137	-421.96	0
19	152.725	2.3	0	1.655999905	0	0	137	-421.96	0
20	153.9	2.3	0	1.655999905	0	0	137	-421.96	0
21	155.075	2.3	0	1.655999905	0	0	137	-421.96	0
22	156.25	2.3	0	1.655999905	0	0	137	-421.96	0
23	157.425	2.3	0	1.655999905	0	0	137	-421.96	0
24	158.6	2.3	0	1.655999905	0	0	137	-421.96	0
25	159.775	2.3	0	1.655999905	0	0	137	-421.96	0
26	160.95	2.3	0	1.655999905	0	0	137	-421.96	0
27	162.125	2.3	0	1.655999905	0	0	137	-421.96	0
28	163.3	2.3	0	1.655999905	0	0	137	-421.96	0
29	164.475	2.3	0	1.655999905	0	0	137	-421.96	0
30	165.65	2.3	0	1.655999905	0	0	137	-421.96	0
31	166.825	2.3	0	1.655999905	0	0	137	-421.96	0
32	167	2.3	0	1.655999905	0	0	137	-421.96	0

GAMIENTO DE TESADO 151.0512821

FAMILIA DE 22

EFICIENTE DESVIACIÓN	MÓDULO DE ANCLAJE	ANCLAJE	TESADO	NÚMERO	ÁREA	TENSIÓN	PENETRACIÓN		
PARÁSITA	ELASTICIDAD ORIGEN	FINAL	DESDE	DE	TORÓN	TESADO	DE CUÑA		
DE (rad/m)	ACERO (kg/c (m)	(m)	EXTREMOS	TORONES	(mm2)	(kg/mm2)	(mm)		
0	0	1950000	146.85	165.65	22	140	137	0	72.10526316
EN ALZADO									
EN PLANTA									
SECCIÓN DORSAL									
SECCIÓN FRONTAL									
1	146.85	2.28	0	1.599999905	0	0	137	0	0
2	148.025	2.28	0	1.599999905	0	0	137	-421.96	0
3	149.2	2.28	0	1.599999905	0	0	137	-421.96	0
4	150.375	2.28	0	1.627999905	0	0	137	-421.96	0
5	151.55	2.28	0	1.655999905	0	0	137	-421.96	0
6	152.725	2.28	0	1.655999905	0	0	137	-421.96	0
7	153.9	2.28	0	1.655999905	0	0	137	-421.96	0
8	155.075	2.28	0	1.655999905	0	0	137	-421.96	0
9	156.25	2.28	0	1.655999905	0	0	137	-421.96	0
10	157.425	2.28	0	1.655999905	0	0	137	-421.96	0
11	158.6	2.28	0	1.655999905	0	0	137	-421.96	0
12	159.775	2.28	0	1.655999905	0	0	137	-421.96	0
13	160.95	2.28	0	1.655999905	0	0	137	-421.96	0
14	162.125	2.28	0	1.655999905	0	0	137	-421.96	0
15	163.3	2.28	0	1.655999905	0	0	137	-421.96	0
16	164.475	2.28	0	1.655999905	0	0	137	-421.96	0
17	165.65	2.28	0	1.655999905	0	0	137	-421.96	0

GAMIENTO DE TESADO 132.0820513

FAMILIA DE 1									
ENT DESVIACIÓN MODULO DE ANCLAJE ELASTICIDAD ORIGEN ACERO (kg/c (m))	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS	NÚMERO DE TORONES	ÁREA TORÓN (mm2)	TENSIÓN TESADO (kg/mm2)	PENETRACIÓN DE CUÑA (mm.)			
0	0	1950000	1	22.5 AMBOS	4	140	142	0	
							74.73684211		

PRE TENSADO
FASE 8
(EJ)

EN ALZADO									
Xfin	RECTA 1 Yfin	Pend		Xfin	PARABOLA Yfin	Pend		Xfin	RECTA 2 Yfin
1	22.5	0.4	0	22.5	0.4	0		22.5	0.4

EN PLANTA									
Xfin	RECTA 1 Yfin	Pend		Xfin	PARABOLA Yfin	Pend		Xfin	RECTA 2 Yfin
1	1	0	0	1	0	0		22.5	0

X (m.)	Y (m.)	Pend. Y	Ycdg (m.)	Z (m.)	Pend. Z	TENSIÓN (kg/mm2)	AXIL (t.)	Sección dorsal		AXIL	Sección frontal	
								CORTANTE (t.)	MOMENTO (mt.)	(t.)	CORTANTE (t.)	MOMENTO (mt.)
2	1	0.4	0.844999905	0	0	142	0	0	0	-79.52	0	35.38639092
3	1.175	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
4	2.35	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
5	3.525	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
6	4.7	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
7	5.875	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
8	7.05	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
9	8.225	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
10	9.4	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
11	10.575	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
12	11.75	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
13	12.925	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
14	14.1	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
15	15.275	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
16	16.45	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
17	17.625	0.4	0.858999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
18	18.8	0.4	0.872999905	0	0	142	-79.514434	-0.94084185	36.497118	-79.514434	-0.94084185	36.497118
19	19.975	0.4	0.872999905	0	0	142	-79.514434	-0.94084185	37.61032008	-79.52	0	37.61295083
20	21.15	0.4	0.872999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083
21	22.325	0.4	0.872999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083
22	22.5	0.4	0.872999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083

IENTO DE TESADO 156.5641026

FAMILIA DE 2

ENT DESVIACIÓN MODULO DE ANCLAJE ELASTICIDAD ORIGEN ACERO (kg/c (m))	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS	NÚMERO DE TORONES	ÁREA TORÓN (mm2)	TENSIÓN TESADO (kg/mm2)	PENETRACIÓN DE CUÑA (mm.)			
0	0	1950000	24.5	51.5 AMBOS	4	140	142	0	
							74.73684211		

EN ALZADO									
Xfin	RECTA 1 Yfin	Pend		Xfin	PARABOLA Yfin	Pend		Xfin	RECTA 2 Yfin
1	51.5	0.4	0	51.5	0.4	0		51.5	0.4

EN PLANTA									
Xfin	RECTA 1 Yfin	Pend		Xfin	PARABOLA Yfin	Pend		Xfin	RECTA 2 Yfin
1	24.5	0	0	24.5	0	0		51.5	0

X (m.)	Y (m.)	Pend. Y	Ycdg (m.)	Z (m.)	Pend. Z	TENSIÓN (kg/mm2)	AXIL (t.)	Sección dorsal		AXIL	Sección frontal	
								CORTANTE (t.)	MOMENTO (mt.)	(t.)	CORTANTE (t.)	MOMENTO (mt.)
24	24.5	0.4	0.872999905	0	0	142	0	0	0	-79.52	0	37.61295083
25	24.95	0.4	0.872999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083
26	26.4	0.4	0.872999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083
27	27.85	0.4	0.872999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083
28	29.3	0.4	0.872999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083
29	30.75	0.4	0.858999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083
30	32.2	0.4	0.858999905	0	0	142	-79.5163449	0.752424651	36.49799347	-79.5163449	0.752424651	37.61122226
31	33.65	0.4	0.844999905	0	0	142	-79.5163449	0.752424651	35.38476468	-79.52	0	35.38639092
32	35.1	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
33	36.55	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
34	38	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
35	39.45	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
36	40.9	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
37	42.35	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
38	43.8	0.4	0.844999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
39	45.25	0.4	0.858999905	0	0	142	-79.52	0	35.38639092	-79.52	0	35.38639092
40	46.7	0.4	0.872999905	0	0	142	-79.5163449	-0.76242465	36.49799347	-79.5163449	-0.76242465	37.61122226
41	48.15	0.4	0.872999905	0	0	142	-79.5163449	-0.76242465	37.61122226	-79.52	0	37.61295083
42	49.6	0.4	0.872999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083
43	51.05	0.4	0.872999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083
44	51.5	0.4	0.872999905	0	0	142	-79.52	0	37.61295083	-79.52	0	37.61295083

IENTO DE TESADO 196.6153846

Table with 13 columns: DEFICIENT DESVIACIÓN, MÓDULO DE ANCLAJE, ANCLAJE, TESADO, NÚMERO DE TORONES, ÁREA, TENSIÓN, PENETRACIÓN. Includes sections: EN ALZADO, EN PLANTA, and CAMBIO DE TESADO.

Table with 13 columns: DEFICIENT DESVIACIÓN, MÓDULO DE ANCLAJE, ANCLAJE, TESADO, NÚMERO DE TORONES, ÁREA, TENSIÓN, PENETRACIÓN. Includes sections: EN ALZADO, EN PLANTA, and CAMBIO DE TESADO.

Table with 13 columns: DEFICIENT DESVIACIÓN, MÓDULO DE ANCLAJE, ANCLAJE, TESADO, NÚMERO DE TORONES, ÁREA, TENSIÓN, PENETRACIÓN. Includes sections: EN ALZADO, EN PLANTA, and CAMBIO DE TESADO.

Table with 13 columns: DEFICIENT DESVIACIÓN, MÓDULO DE ANCLAJE, ANCLAJE, TESADO, NÚMERO DE TORONES, ÁREA, TENSIÓN, PENETRACIÓN. Includes sections: EN ALZADO, EN PLANTA, and CAMBIO DE TESADO.

FAMILIA DE 7									
EFICIENTE DESVIACIÓN MÓDULO DE ANCLAJE ANCLAJE TESADO NÚMERO ÁREA Tensión PENETRACIÓN AMIENTI PARÁSITA ELASTICIDAD ORIGEN FINAL DESDE DE TORÓN TESADO DE CUÑA TEND (rad/m) ACERO (kg/c (m.) (m.) EXTREMOS TORONES (mm2) (kg/mm2) (mm.)									
0	0	1950000	1	22.5	AMBOS	22	140	137	0
72.10526316									
ZADO EN ALZADO									
MO	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend
1	1	22.5	2.3	0	22.5	2.3	0	22.5	2.3
ZADO EN PLANTA									
MO	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend
1	1	0	0	1	0	0	22.5	0	0
Sección dorsal Sección frontal									
X (m.)	Y (m.)	Pend. Y	Ycdg (m.)	Z (m.)	Pend. Z	TENSIÓN (kg/mm2)	AXIL (L)	CORTANTE (L)	MOMENTO (mL)
2	1	2.3	0	0.844999905	0	0	137	0	0
3	1.175	2.3	0	0.844999905	0	0	137	-421.96	0
4	2.35	2.3	0	0.844999905	0	0	137	-421.96	0
5	3.525	2.3	0	0.844999905	0	0	137	-421.96	0
6	4.7	2.3	0	0.844999905	0	0	137	-421.96	0
7	5.875	2.3	0	0.844999905	0	0	137	-421.96	0
8	7.05	2.3	0	0.844999905	0	0	137	-421.96	0
9	8.225	2.3	0	0.844999905	0	0	137	-421.96	0
10	9.4	2.3	0	0.844999905	0	0	137	-421.96	0
11	10.575	2.3	0	0.844999905	0	0	137	-421.96	0
12	11.75	2.3	0	0.844999905	0	0	137	-421.96	0
13	12.925	2.3	0	0.844999905	0	0	137	-421.96	0
14	14.1	2.3	0	0.844999905	0	0	137	-421.96	0
15	15.275	2.3	0	0.844999905	0	0	137	-421.96	0
16	16.45	2.3	0	0.844999905	0	0	137	-421.96	0
17	17.625	2.3	0	0.844999905	0	0	137	-421.96	0
18	18.8	2.3	0	0.844999905	0	0	137	-421.96	0
19	19.975	2.3	0	0.844999905	0	0	137	-421.96	0
20	21.15	2.3	0	0.844999905	0	0	137	-421.96	0
21	22.325	2.3	0	0.844999905	0	0	137	-421.96	0
22	22.5	2.3	0	0.844999905	0	0	137	-421.96	0
MIENTO DE TESADO 151.0512621									

FAMILIA DE 8									
EFICIENTE DESVIACIÓN MÓDULO DE ANCLAJE ANCLAJE TESADO NÚMERO ÁREA Tensión PENETRACIÓN AMIENTI PARÁSITA ELASTICIDAD ORIGEN FINAL DESDE DE TORÓN TESADO DE CUÑA TEND (rad/m) ACERO (kg/c (m.) (m.) EXTREMOS TORONES (mm2) (kg/mm2) (mm.)									
0	0	1950000	2.35	21.15	AMBOS	22	140	137	0
72.10526316									
ZADO EN ALZADO									
MO	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend
1	1	21.14999924	2.28	0	21.14999924	2.28	0	21.14999924	2.28
ZADO EN PLANTA									
MO	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend
1	1	2.35	0	0	2.35	0	0	21.15	0
Sección dorsal Sección frontal									
X (m.)	Y (m.)	Pend. Y	Ycdg (m.)	Z (m.)	Pend. Z	TENSIÓN (kg/mm2)	AXIL (L)	CORTANTE (L)	MOMENTO (mL)
4	2.35	2.28	0	0.844999905	0	0	137	0	0
5	3.525	2.28	0	0.844999905	0	0	137	-421.96	0
6	4.7	2.28	0	0.844999905	0	0	137	-421.96	0
7	5.875	2.28	0	0.844999905	0	0	137	-421.96	0
8	7.05	2.28	0	0.844999905	0	0	137	-421.96	0
9	8.225	2.28	0	0.844999905	0	0	137	-421.96	0
10	9.4	2.28	0	0.844999905	0	0	137	-421.96	0
11	10.575	2.28	0	0.844999905	0	0	137	-421.96	0
12	11.75	2.28	0	0.844999905	0	0	137	-421.96	0
13	12.925	2.28	0	0.844999905	0	0	137	-421.96	0
14	14.1	2.28	0	0.844999905	0	0	137	-421.96	0
15	15.275	2.28	0	0.844999905	0	0	137	-421.96	0
16	16.45	2.28	0	0.844999905	0	0	137	-421.96	0
17	17.625	2.28	0	0.844999905	0	0	137	-421.96	0
18	18.8	2.28	0	0.844999905	0	0	137	-421.96	0
19	19.975	2.28	0	0.844999905	0	0	137	-421.96	0
20	21.15	2.28	0	0.844999905	0	0	137	-421.96	0
MIENTO DE TESADO 132.0520513									

FAMILIA DE 9									
EFICIENTE DESVIACIÓN MÓDULO DE ANCLAJE ANCLAJE TESADO NÚMERO ÁREA Tensión PENETRACIÓN AMIENTI PARÁSITA ELASTICIDAD ORIGEN FINAL DESDE DE TORÓN TESADO DE CUÑA TEND (rad/m) ACERO (kg/c (m.) (m.) EXTREMOS TORONES (mm2) (kg/mm2) (mm.)									
0	0	1950000	24.5	51.5	AMBOS	24	140	137	0
72.10526316									
ZADO EN ALZADO									
MO	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend
1	1	51.5	2.3	0	51.5	2.3	0	51.5	2.3
ZADO EN PLANTA									
MO	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend
1	1	24.5	0	0	24.5	0	0	51.5	0
Sección dorsal Sección frontal									
X (m.)	Y (m.)	Pend. Y	Ycdg (m.)	Z (m.)	Pend. Z	TENSIÓN (kg/mm2)	AXIL (L)	CORTANTE (L)	MOMENTO (mL)
24	24.5	2.3	0	0.872999905	0	0	137	0	0
25	24.95	2.3	0	0.872999905	0	0	137	-460.32	0
26	26.4	2.3	0	0.872999905	0	0	137	-460.32	0
27	27.85	2.3	0	0.872999905	0	0	137	-460.32	0
28	29.3	2.3	0	0.872999905	0	0	137	-460.32	0
29	30.75	2.3	0	0.858999905	0	0	137	-460.32	0
30	32.2	2.3	0	0.844999905	0	0	137	-460.32	0
31	33.65	2.3	0	0.844999905	0	0	137	-460.32	0
32	35.1	2.3	0	0.844999905	0	0	137	-460.32	0
33	36.55	2.3	0	0.844999905	0	0	137	-460.32	0
34	38	2.3	0	0.844999905	0	0	137	-460.32	0
35	39.45	2.3	0	0.844999905	0	0	137	-460.32	0
36	40.9	2.3	0	0.844999905	0	0	137	-460.32	0
37	42.35	2.3	0	0.844999905	0	0	137	-460.32	0
38	43.8	2.3	0	0.844999905	0	0	137	-460.32	0
39	45.25	2.3	0	0.858999905	0	0	137	-460.32	0
40	46.7	2.3	0	0.872999905	0	0	137	-460.32	0
41	48.15	2.3	0	0.872999905	0	0	137	-460.32	0
42	49.6	2.3	0	0.872999905	0	0	137	-460.32	0
43	51.05	2.3	0	0.872999905	0	0	137	-460.32	0
44	51.5	2.3	0	0.872999905	0	0	137	-460.32	0
MIENTO DE TESADO 189.6923077									

FAMILIA DE 10									
EFICIENTE DESVIACIÓN MÓDULO DE ANCLAJE ANCLAJE TESADO NÚMERO ÁREA Tensión PENETRACIÓN AMIENTI PARÁSITA ELASTICIDAD ORIGEN FINAL DESDE DE TORÓN TESADO DE CUÑA TEND (rad/m) ACERO (kg/c (m.) (m.) EXTREMOS TORONES (mm2) (kg/mm2) (mm.)									
0	0	1950000	26.4	49.6	AMBOS	24	140	137	0
72.10526316									
ZADO EN ALZADO									
MO	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend
1	1	49.6	2.28	0	49.6	2.28	0	49.6	2.28
ZADO EN PLANTA									
MO	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend
1	1	26.4	0	0	26.4	0	0	49.6	0
Sección dorsal Sección frontal									
X (m.)	Y (m.)	Pend. Y	Ycdg (m.)	Z (m.)	Pend. Z	TENSIÓN (kg/mm2)	AXIL (L)	CORTANTE (L)	MOMENTO (mL)
26	26.4	2.28	0	0.872999905	0	0	137	0	0
27	27.85	2.28	0	0.872999905	0	0	137	-460.32	0
28	29.3	2.28	0	0.872999905	0	0	137	-460.32	0
29	30.75	2.28	0	0.858999905	0	0	137	-460.32	0
30	32.2	2.28	0	0.844999905	0	0	137	-460.32	0
31	33.65	2.28	0	0.844999905	0	0	137	-460.32	0
32	35.1	2.28	0	0.844999905	0	0	137	-460.32	0
33	36.55	2.28	0	0.844999905	0	0	137	-460.32	0
34	38	2.28	0	0.844999905	0	0	137	-460.32	0
35	39.45	2.28	0	0.844999905	0	0	137	-460.32	0
36	40.9	2.28	0	0.844999905	0	0	137	-460.32	0
37	42.35	2.28	0	0.844999905	0	0	137	-460.32	0
38	43.8	2.28	0	0.844999905	0	0	137	-460.32	0
39	45.25	2.28	0	0.858999905	0	0	137	-460.32	0
40	46.7	2.28	0	0.872999905	0	0	137	-460.32	0
41	48.15	2.28	0	0.872999905	0	0	137	-460.32	0
42	49.6	2.28	0	0.872999905	0	0	137	-460.32	0
MIENTO DE TESADO 162.9948718									

FAMILIA DE 11																
COEFICIENTE DE DESVIACIÓN	MÓDULO DE ANCLAJE	ANCLAJE	TESADO	NÚMERO	ÁREA	TENSIÓN	PENETRACIÓN									
DE LA CINTA PARÁSITA	ELASTICIDAD DE ORIGEN	FINAL	DESDE	DE	TORÓN	TESADO	DE CUNA									
DE (rad/m)	ACERO (kg/c (m.)	(m.)	EXTREMOS	TORONES	(mm2)	(kg/mm2)	(mm.)									
0	1950000	29.3	46.7 AMBOS	20	140	137	0									
72.10526316																
ADO EN ALZADO																
RECTA 1 PARABOLA RECTA 2																
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin	Pend								
1	46.7	2.252	0	46.7	2.252	0	46.7	2.252	0							
ADO EN PLANTA																
RECTA 1 PARABOLA RECTA 2																
Xfin	Yfin	Pend	Xfin	Yfin	Pend	Xfin	Yfin	Pend								
1	29.3	0	0	29.3	0	0	46.7	0	0							
X Y Pend. Ycdg Z Pend. TENSIÓN AXIL Sección dorsal CORTANTE MOMENTO AXIL Sección frontal CORTANTE MOMENTO																
(m.)	(m.)	Y	(m.)	(m.)	Z		(kg/mm2)	(L)	(L)	(mL)	(L)	(L)	(mL)	(L)	(L)	(mL)
28	29.3	2.252	0	0.872999905	0	0	137	0	0	0	-383.582368	3.677893561	-528.960121			
29	30.75	2.252	0	0.858999905	0	0	137	-383.582368	3.677893561	-534.330274	-383.582368	3.677893561	-534.330274			
30	32.2	2.252	0	0.844999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
31	33.65	2.252	0	0.844999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
32	35.1	2.252	0	0.844999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
33	36.55	2.252	0	0.844999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
34	38	2.252	0	0.844999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
35	39.45	2.252	0	0.844999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
36	40.9	2.252	0	0.844999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
37	42.35	2.252	0	0.844999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
38	43.8	2.252	0	0.844999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
39	45.25	2.252	0	0.858999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
40	46.7	2.252	0	0.872999905	0	0	137	-383.582368	3.677893561	-539.700427	-383.582368	3.677893561	-539.700427			
MOMENTO DE TESADO 122.2461538																

FAMILIA DE 12													
COEFICIENTE DE DESVIACIÓN DE LA CINTA PARÁSITA (rad/m)	MÓDULO DE ANCLAJE ELASTICIDAD DE ORIGEN ACERO (kg/c (m.)	ANCLAJE FINAL (m.)	TESADO DESDE EXTREMOS	NÚMERO DE TORONES	ÁREA TORÓN (mm2)	TENSIÓN TESADO (kg/mm2)	PENETRACIÓN DE CUNA (mm.)						
0	1950000	53.5	80.5 AMBOS	24	140	137	0	72.10526316					
ADO EN ALZADO													
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend					
1	80.5	2.3	0	80.5	2.3	0	80.5	2.3	0				
ADO EN PLANTA													
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend					
1	53.5	0	0	53.5	0	0	80.5	0	0				
X (m.)	Y (m.)	Pend. Y	Ycdg (m.)	Z (m.)	Pend. Z	TENSIÓN (kg/mm2)	AXIL (L)	Sección dorsal CORTANTE (L)	MOMENTO (mL)	AXIL (L)	Sección frontal CORTANTE (L)	MOMENTO (mL)	
46	53.5	2.3	0	0.872999905	0	0	137	0	0	0	-460.32	0	-656.876694
47	53.95	2.3	0	0.872999905	0	0	137	-460.32	0	-656.876694	-460.32	0	-656.876694
48	55.4	2.3	0	0.872999905	0	0	137	-460.32	0	-656.876694	-460.32	0	-656.876694
49	56.85	2.3	0	0.872999905	0	0	137	-460.32	0	-656.876694	-460.32	0	-656.876694
50	58.3	2.3	0	0.872999905	0	0	137	-460.32	0	-656.876694	-460.32	0	-656.876694
51	59.75	2.3	0	0.858999905	0	0	137	-460.32	0	-656.876694	-460.32	0	-656.876694
52	61.2	2.3	0	0.844999905	0	0	137	-460.32	4.413441838	-663.290655	-460.32	4.413441838	-656.846472
53	62.65	2.3	0	0.844999905	0	0	137	-460.32	4.413472273	-669.734839	-460.32	4.413472273	-663.290655
54	64.1	2.3	0	0.844999905	0	0	137	-460.32	0	-669.734839	-460.32	0	-669.734839
55	65.55	2.3	0	0.844999905	0	0	137	-460.32	0	-669.734839	-460.32	0	-669.734839
56	67	2.3	0	0.844999905	0	0	137	-460.32	0	-669.734839	-460.32	0	-669.734839
57	68.45	2.3	0	0.844999905	0	0	137	-460.32	0	-669.734839	-460.32	0	-669.734839
58	69.9	2.3	0	0.844999905	0	0	137	-460.32	0	-669.734839	-460.32	0	-669.734839
59	71.35	2.3	0	0.844999905	0	0	137	-460.32	0	-669.734839	-460.32	0	-669.734839
60	72.8	2.3	0	0.844999905	0	0	137	-460.32	0	-669.734839	-460.32	0	-669.734839
61	74.25	2.3	0	0.858999905	0	0	137	-460.32	0	-669.734839	-460.32	0	-669.734839
62	75.7	2.3	0	0.872999905	0	0	137	-460.32	-4.41350271	-663.290655	-460.32	-4.41350271	-669.734839
63	77.15	2.3	0	0.872999905	0	0	137	-460.32	-4.41347227	-663.290655	-460.32	-4.41347227	-663.290655
64	78.6	2.3	0	0.872999905	0	0	137	-460.32	0	-656.876694	-460.32	0	-656.876694
65	80.05	2.3	0	0.872999905	0	0	137	-460.32	0	-656.876694	-460.32	0	-656.876694
66	80.5	2.3	0	0.872999905	0	0	137	-460.32	0	-656.876694	-460.32	0	-656.876694
MOMENTO DE TESADO 189.6923077													

FAMILIA DE 1										13
NT DESVIACIÓN MÓDULO DE ANCLAJE		ANCLAJE	TESADO	NÚMERO	ÁREA	TENSIÓN	PENETRACIÓN			
NT PARÁSITA	ELASTICIDAD ORIGEN	FINAL	DESDE	DE	TORÓN	TESADO	DE CUNA			
ND (rad/m)	ACERO (kg/c (m.)	(m.)	EXTREMOS	TORONES	(mm2)	(kg/mm2)	(mm.)			
0	0	1950000	55.4	78.6 AMBOS	24	140	137	0		
72.10526316										
EN ALZADO										
Xfin	RECTA 1	Pend	Xfin	PARABOLA	Pend	Xfin	RECTA 2	Pend		
	Yfin			Yfin			Yfin			
1	78.6	2.28	0	78.6	2.28	0	78.6	2.28	0	
EN PLANTA										
Xfin	RECTA 1	Pend	Xfin	PARABOLA	Pend	Xfin	RECTA 2	Pend		
	Yfin			Yfin			Yfin			
1	55.4	0	0	55.4	0	0	78.6	0	0	
X	Y	Pend.	Ycdg	Z	Pend.	TENSIÓN	AXIL	Sección dorsal	Sección frontal	
(m.)	(m.)	Y	(m.)	(m.)	Z	(kg/mm2)	(L)	CORTANTE	CORTANTE	
								MOMENTO	MOMENTO	
								(mL)	(L)	
								AXIL		
								(L)		

PNF 1		FAMILIA DE 1		15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
-------	--	--------------	--	----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

CAMBIO DE TESADO										207.2564103			
NF 2													
FAMILIA DE (16													
ICIENT DESVIACIÓN MÓDULO DE ANCLAJE ELASTICIDAD ORIGEN ANCLAJE TESADO NÚMERO ÁREA TENSION PENETRACIÓN DE CUNA													
TEND (rad/m) ACERO (kg/c (m.) (m.) DESDE EXTREMOS DE TORONES (mm2) (kg/mm2) (mm.)													
0	0	1950000	84.65	109.85	AMBOS	28	140	137	0	72.10526316			
DO EN ALZADO													
DO Xfin RECTA 1 Yfin Pend Xfin PARABOLA Yfin Pend Xfin RECTA 2 Yfin Pend													
	109.85	2.28	0	109.85	2.28	0	109.85	2.28	0				
DO EN PLANTA													
DO Xfin RECTA 1 Yfin Pend Xfin PARABOLA Yfin Pend Xfin RECTA 2 Yfin Pend													
1	84.65	0	0	84.65	0	0	109.85	0	0				
X (m.) Y (m.) Pend. Y Ycdg (m.) Z (m.) Pend. Z TENSION (kg/mm2) AXIL (t.) Sección dorsal CORTANTE (t.) MOMENTO (mt.) AXIL (t.) Sección frontal CORTANTE (t.) MOMENTO (mt.)													
70	84.65	2.28	0	0.872999905	0	0	137	0	0	-537.04	0	-755.6153	0
71	86.225	2.28	0	0.872999905	0	0	137	-537.04	0	-755.6153	-537.04	0	-755.6153
72	87.8	2.28	0	0.872999905	0	0	137	-537.04	0	-755.6153	-537.019078	4.740429358	-755.585931
73	89.375	2.28	0	0.858999905	0	0	137	-537.019078	4.740429358	-763.104198	-537.019078	4.740429358	-763.104198
74	90.95	2.28	0	0.844999905	0	0	137	-537.04	0	-770.65242	-537.04	0	-770.65242
75	92.525	2.28	0	0.844999905	0	0	137	-537.04	0	-770.65242	-537.04	0	-770.65242
76	94.1	2.28	0	0.844999905	0	0	137	-537.04	0	-770.65242	-537.04	0	-770.65242
77	95.675	2.28	0	0.844999905	0	0	137	-537.04	0	-770.65242	-537.04	0	-770.65242
78	97.25	2.28	0	0.844999905	0	0	137	-537.04	0	-770.65242	-537.04	0	-770.65242
79	98.825	2.28	0	0.844999905	0	0	137	-537.04	0	-770.65242	-537.04	0	-770.65242
80	100.4	2.28	0	0.844999905	0	0	137	-537.04	0	-770.65242	-537.04	0	-770.65242
81	101.975	2.28	0	0.844999905	0	0	137	-537.04	0	-770.65242	-537.04	0	-770.65242
82	103.55	2.28	0	0.844999905	0	0	137	-537.04	0	-770.65242	-537.04	0	-770.65242
83	105.125	2.28	0	0.858999905	0	0	137	-537.04	0	-770.65242	-537.019078	-4.74042936	-770.622465
84	106.7	2.28	0	0.872999905	0	0	137	-537.019078	-4.74042936	-755.585931	-537.019078	-4.74042936	-763.104198
85	108.275	2.28	0	0.872999905	0	0	137	-537.04	0	-755.6153	-537.04	0	-755.6153
86	109.85	2.28	0	0.872999905	0	0	137	-537.04	0	-755.6153	-537.04	0	-755.6153

3	FAMILIA DE 1										17	
IDENT DESVIACIÓN MÓDULO DE ANCLAJE ELASTICIDAD ORIGEN ANCLAJE TESADO NÚMERO ÁREA Tensión PENETRACIÓN DE CUNA												
IDENT PARASITA	ACERO (kg/c (m.)		ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	
IDENT (rad/m)	ACERO (kg/c (m.)		ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	ACERO (kg/c (m.)	
0	0	1950000	87.8	106.7	AMBOS	28	140	137	0	72.10526316	0	
EN ALZADO												
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend				
1	106.7	2.252	0	106.7	2.252	0	106.7	2.252	0			
EN PLANTA												
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend				
1	87.8	0	0	87.8	0	0	106.7	0	0			
X (m.)	Y (m.)	Pend. Y	Ycdg (m.)	Z (m.)	Pend. Z	TENSION (kg/mm2)	AXIL (L)	Sección dorsal CORTANTE (L)	MOMENTO (mt.)	AXIL (L)	Sección frontal CORTANTE (L)	MOMENTO (mt.)
72	87.8	2.252	0	0.872999905	0	0	137	0	0	-537.019078	4.740429358	-740.549396
73	89.375	2.252	0	0.858999905	0	0	137	-537.019078	4.740429358	-748.067663	-537.019078	4.740429358
74	90.95	2.252	0	0.844999905	0	0	137	-537.019078	4.740429358	-755.585931	-537.019078	4.740429358
75	92.525	2.252	0	0.844999905	0	0	137	-537.04	0	-755.6153	-537.04	0
76	94.1	2.252	0	0.844999905	0	0	137	-537.04	0	-755.6153	-537.04	0
77	95.675	2.252	0	0.844999905	0	0	137	-537.04	0	-755.6153	-537.04	0
78	97.25	2.252	0	0.844999905	0	0	137	-537.04	0	-755.6153	-537.04	0
79	98.825	2.252	0	0.844999905	0	0	137	-537.04	0	-755.6153	-537.04	0
80	100.4	2.252	0	0.844999905	0	0	137	-537.04	0	-755.6153	-537.04	0
81	101.975	2.252	0	0.844999905	0	0	137	-537.04	0	-755.6153	-537.04	0
82	103.55	2.252	0	0.844999905	0	0	137	-537.04	0	-755.6153	-537.04	0
83	105.125	2.252	0	0.858999905	0	0	137	-537.04	0	-755.6153	-537.04	0
84	106.7	2.252	0	0.872999905	0	0	137	-537.019078	-4.74042936	-748.067663	-537.019078	-4.74042936
CAMBIO DE TESADO												
132.7846154												

FAMILIA DE 1										18		
DESVIACIÓN PARÁBOLA (rad/m)	MÓDULO DE ELASTICIDAD ACERO (kg/c (m.))	ANCLAJE FINAL (m.)	TESADO DESDE EXTREMOS	NÚMERO DE TORONES	ÁREA TORÓN (mm2)	TENSIÓN TESADO (kg/mm2)	PENETRACIÓN DE CUÑA (mm.)					
0	0	1950000	114	143.5	AMBOS	28	140	137	0			
72.10526316												
EN ALZADO												
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend				
1	143.5	2.3	0	143.5	2.3	0	143.5	2.3	0			
EN PLANTA												
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin	Pend				
1	114	0	0	114	0	0	143.5	0	0			
X (m.)	Y (m.)	Pend. Y	Ycdg (m.)	Z (m.)	Pend. Z	TENSIÓN (kg/mm2)	AXIL (L)	Sección dorsal CORTANTE (L)	MOMENTO (mt.)	AXIL (L)	Sección frontal CORTANTE (L)	MOMENTO (mt.)
114	2.3	0	0.872999905	0	0	137	0	0	0	-537.04	0	-766.3561
114.575	2.3	0	0.872999905	0	0	137	-537.04	0	-766.3561	-537.04	0	-766.3561
116.15	2.3	0	0.872999905	0	0	137	-537.04	0	-766.3561	-537.04	0	-766.3561
117.725	2.3	0	0.872999905	0	0	137	-537.04	0	-766.3561	-537.04	0	-766.3561
119.3	2.3	0	0.872999905	0	0	137	-537.04	0	-766.3561	-537.04	0	-766.3561
120.875	2.3	0	0.858999905	0	0	137	-537.04	0	-766.3561	-537.019078	4.740429358	-766.326313
122.45	2.3	0	0.844999905	0	0	137	-537.019078	4.740429358	-773.84458	-537.019078	4.740429358	-773.84458
124.025	2.3	0	0.844999905	0	0	137	-537.019078	4.740429358	-781.362848	-537.04	0	-781.393219
125.6	2.3	0	0.844999905	0	0	137	-537.04	0	-781.393219	-537.04	0	-781.393219
127.175	2.3	0	0.844999905	0	0	137	-537.04	0	-781.393219	-537.04	0	-781.393219
128.75	2.3	0	0.844999905	0	0	137	-537.04	0	-781.393219	-537.04	0	-781.393219
130.325	2.3	0	0.844999905	0	0	137	-537.04	0	-781.393219	-537.04	0	-781.393219
131.9	2.3	0	0.844999905	0	0	137	-537.04	0	-781.393219	-537.04	0	-781.393219
133.475	2.3	0	0.844999905	0	0	137	-537.04	0	-781.393219	-537.04	0	-781.393219
135.05	2.3	0	0.844999905	0	0	137	-537.04	0	-781.393219	-537.04	0	-781.393219
136.625	2.3	0	0.858999905	0	0	137	-537.04	0	-781.393219	-537.04	0	-781.393219
138.2	2.3	0	0.872999905	0	0	137	-537.019078	-4.740429358	-773.84458	-537.019078	-4.740429358	-773.84458
139.775	2.3	0	0.872999905	0	0	137	-537.019078	-4.740429358	-766.326313	-537.04	0	-766.3561
141.35	2.3	0	0.872999905	0	0	137	-537.04	0	-766.3561	-537.04	0	-766.3561
142.925	2.3	0	0.872999905	0	0	137	-537.04	0	-766.3561	-537.04	0	-766.3561
143.5	2.3	0	0.872999905	0	0	137	-537.04	0	-766.3561	-537.04	0	-766.3561
0 DE TESADO										207.2554103		

AMIENTO DE TESADO 177.0461538

ENTO DE TESADO 132.7846154

ENTO DE TESADO 151.0512821

11. TIPO DE TESSADO 132.0820513

FASE 4:

COSIAC

FAMILIA DE 1

DESVIACIÓN PARABOLICA	MÓDULO DE ANCLAJE ELASTICIDAD ORIGEN ACERO (N/m²)	ANCLAJE FINAL (m.)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORON (mm²)	TENSIÓN TESADO (N/mm²)	PENETRACIÓN DE CUÑA (mm.)
0	1850000	22.5	24.5 AMBOS	2	1256	72.53	0
38.1736842							

ALZADO

RECTA 1	Yfin	Pend	PARABOLA	Yfin	Pend	RECTA 2	Yfin	Pend
24.5	0.5	0	24.5	0.5	0	24.5	0.5	0

PLANTA

RECTA 1	Yfin	Pend	PARABOLA	Yfin	Pend	RECTA 2	Yfin	Pend
22.5	0	0	22.5	0	0	24.5	0	0

X (m.)	Y (m.)	Pend. Y	Ycda (m.)	Z (m.)	Pend. Z	TENSIÓN (N/mm²)	AXIL (t)	Sección dorsal CORTANTE (t)	MOMENTO (m.t)	AXIL (t)	Sección dorsal CORTANTE (t)	MOMENTO (m.t)
22.5	0.5	0	1.8550000	0	0	72.53	0	0	-182.19536	0	-182.19536	0
23.5	0.5	0	1.8550000	0	0	72.53	-182.19536	0	210.817817	0	210.817817	0
24.5	0.5	0	1.8550000	0	0	72.53	0	0	-182.19536	0	-182.19536	0
24.5	0.5	0	1.8550000	0	0	72.53	-182.19536	0	210.817817	0	210.817817	0

TO DE TESADO 8.79151515

FAMILIA DE 2

DESVIACIÓN PARABOLICA	MÓDULO DE ANCLAJE ELASTICIDAD ORIGEN ACERO (N/m²)	ANCLAJE FINAL (m.)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORON (mm²)	TENSIÓN TESADO (N/mm²)	PENETRACIÓN DE CUÑA (mm.)
0	1850000	22.5	24.5 AMBOS	2	1256	72.53	0
38.1736842							

ALZADO

RECTA 1	Yfin	Pend	PARABOLA	Yfin	Pend	RECTA 2	Yfin	Pend
24.5	0.7	0	24.5	0.7	0	24.5	0.7	0

PLANTA

RECTA 1	Yfin	Pend	PARABOLA	Yfin	Pend	RECTA 2	Yfin	Pend
22.5	0	0	22.5	0	0	24.5	0	0

X (m.)	Y (m.)	Pend. Y	Ycda (m.)	Z (m.)	Pend. Z	TENSIÓN (N/mm²)	AXIL (t)	Sección dorsal CORTANTE (t)	MOMENTO (m.t)	AXIL (t)	Sección dorsal CORTANTE (t)	MOMENTO (m.t)
22.5	0.7	0	1.8550000	0	0	72.53	0	0	-182.19536	0	-182.19536	0
23.5	0.7	0	1.8550000	0	0	72.53	-182.19536	0	174.178745	0	174.178745	0
24.5	0.7	0	1.8550000	0	0	72.53	0	0	-182.19536	0	-182.19536	0
24.5	0.7	0	1.8550000	0	0	72.53	-182.19536	0	174.178745	0	174.178745	0

TO DE TESADO 8.79151515

total: 388'98 m ton
-728'78 ton

FAMILIA DE 3

DESVIACIÓN PARABOLICA	MÓDULO DE ANCLAJE ELASTICIDAD ORIGEN ACERO (N/m²)	ANCLAJE FINAL (m.)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORON (mm²)	TENSIÓN TESADO (N/mm²)	PENETRACIÓN DE CUÑA (mm.)
0	1850000	22.5	24.5 AMBOS	2	1256	72.53	0
38.1736842							

ALZADO

RECTA 1	Yfin	Pend	PARABOLA	Yfin	Pend	RECTA 2	Yfin	Pend
24.5	1.55	0	24.5	1.55	0	24.5	1.55	0

PLANTA

RECTA 1	Yfin	Pend	PARABOLA	Yfin	Pend	RECTA 2	Yfin	Pend
22.5	0	0	22.5	0	0	24.5	0	0

X (m.)	Y (m.)	Pend. Y	Ycda (m.)	Z (m.)	Pend. Z	TENSIÓN (N/mm²)	AXIL (t)	Sección dorsal CORTANTE (t)	MOMENTO (m.t)	AXIL (t)	Sección dorsal CORTANTE (t)	MOMENTO (m.t)
22.5	1.55	0	1.8550000	0	0	72.53	0	0	-182.19536	0	-182.19536	0
23.5	1.55	0	1.8550000	0	0	72.53	-182.19536	0	19.3128908	0	19.3128908	0
24.5	1.55	0	1.8550000	0	0	72.53	0	0	-182.19536	0	-182.19536	0
24.5	1.55	0	1.8550000	0	0	72.53	-182.19536	0	19.3128908	0	19.3128908	0

TO DE TESADO 8.79151515

FAMILIA DE 4

DESVIACIÓN PARABOLICA	MÓDULO DE ANCLAJE ELASTICIDAD ORIGEN ACERO (N/m²)	ANCLAJE FINAL (m.)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORON (mm²)	TENSIÓN TESADO (N/mm²)	PENETRACIÓN DE CUÑA (mm.)
0	1850000	22.5	24.5 AMBOS	2	1256	72.53	0
38.1736842							

ALZADO

RECTA 1	Yfin	Pend	PARABOLA	Yfin	Pend	RECTA 2	Yfin	Pend
24.5	1.75	0	24.5	1.75	0	24.5	1.75	0

PLANTA

RECTA 1	Yfin	Pend	PARABOLA	Yfin	Pend	RECTA 2	Yfin	Pend
22.5	0	0	22.5	0	0	24.5	0	0

X (m.)	Y (m.)	Pend. Y	Ycda (m.)	Z (m.)	Pend. Z	TENSIÓN (N/mm²)	AXIL (t)	Sección dorsal CORTANTE (t)	MOMENTO (m.t)	AXIL (t)	Sección dorsal CORTANTE (t)	MOMENTO (m.t)
22.5	1.75	0	1.8550000	0	0	72.53	0	0	-182.19536	0	-182.19536	0
23.5	1.75	0	1.8550000	0	0	72.53	-182.19536	0	-17.126381	0	-17.126381	0
24.5	1.75	0	1.8550000	0	0	72.53	0	0	-182.19536	0	-182.19536	0
24.5	1.75	0	1.8550000	0	0	72.53	-182.19536	0	-17.126381	0	-17.126381	0

TO DE TESADO 8.79151515

FAMILIA DE 5															
DEFICIENCIA DE VARIACION		MODULO DE ANCLAJE		ANCLAJE		TESADO		NUMERO		AREA		TENSION		PENETRACION	
DE PARASITA ELASTICA ORIGIN		ELASTICA ORIGIN		FINAL		DESDE		DE		TORON		TESADO		DE CUNA	
ACERO (mm)		ACERO (mm)		(mm)		EXTREMOS		TORONES		(mm ²)		(N/mm ²)		(mm)	
0	0	1650000	51.5	53.5	53.5	53.5	53.5	2	1256	72.53	38.1736842	0			
ALZADO															
EN PLANTA															
CANTIDAD DE TESADO 8.79151515															

FAMILIA DE 6															
CIENTÍ DESVIACIÓN		MODULO DE ANCLAJE		ANCLAJE		TESADO		HUMERO		AREA		TENSION		PENETRACION	
PARASITA		ELASTICA ORIGIN		ELASTICA ORIGIN		DESDE		DE		TORON		TESADO		DE CUNA	
ACERO (mm)		ACERO (mm)		ACERO (mm)		EXTREMOS		TORONES		(mm ²)		(N/mm ²)		(mm)	
0	0	1650000	51.5	53.5	2	1256	72.53	38.1736842	0						
ALZADO															
EN PLANTA															
CANTIDAD DE TESADO 8.79151515															

FAMILIA DE 7															
7 DESVACIO		MÓDULO DE ANCLAJE		ANCLAJE		TESADO		HUMERO		AREA		TENSION		PENETRACION	
1 PARASITA		ELASTICA ORIGIN		FINAL		DESDE		DE		TORON		TESADO		DE CUNA	
(mm)		ACERO (mm)		(mm)		EXTREMOS		TORONES		(mm ²)		(N/mm ²)		(mm)	
0	1650000	51.5	53.5	AMBOS		2	1256	72.53	38.1736842	0					
4 ALZADO															
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5	1.55	0	53.5
RECTA 2															
Yin														Pend	
EN PLANTA															
RECTA 1															
Yin														Pend	
53.5	1.55	0	5												

FAMILIA DE 8													
DEFICIENCIA DE VARIACIÓN	MODULO DE ANCLAJE ELASTICA ORIGIN ACERO (mm)	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS	HUMERO DE TORONES	AREA TORON (mm2)	TENSION TESADO (N/mm2)	PENETRACION DE CUNA (mm.)						
0	1650000	51.5	53.5 AMBOS	2	1256	72.53	38.1736842	0					
ALZADO													
EN PLANTA													
CANTIDAD DE TESADO 8.79151515													

FAMILIA DE 9															
DEFICIENCIA DE VARIACIÓN		MODULO DE ANCLAJE ELASTICA ORIGIN		ANCLAJE FINAL		TESADO DESDE		NUMERO DE TORONES		AREA TORON		TENSION TESADO		PENETRACION DE CUNA	
ACERO (mm)		ACERO (mm)		(mm)		EXTREMOS		TORONES		(mm ²)		(N/mm ²)		(mm.)	
0	0	1650000	51.5	53.5	2	1256	72.53	38.1736842	0						
ALZADO															
EN PLANTA															
CANTIDAD DE TESADO 8.79151515															

FAMILIA DE 10															
DEFICIENCIA DE VARIACIÓN		MODULO DE ANCLAJE		ANCLAJE		TESADO		HUMERO		AREA		TENSION		PENETRACION	
DE PARASITA ELASTICA ORIGIN		ELASTICA ORIGIN		FINAL		DESDE		DE		TORON		TESADO		DE CUNA	
ACERO (mm)		ACERO (mm)		(mm)		EXTREMOS		TORONES		(mm ²)		(N/mm ²)		(mm.)	
1	0	1650000	80.5	62.5	AMBOS	2	1256	72.53	38.1736842	0					
ALZADO															
RECTA 1		Pond		Xlin		PARABOLA		Pond		Xlin		RECTA 2		Pond	
Ylin		Y		Y		Ylin		Y		Y		Ylin		Y	
82.5		0.7		0		82.5		0.7		0		82.5		0.7	
EN PLANTA															
RECTA 1		Pond		Xlin		PARABOLA		Pond		Xlin		RECTA 2		Pond	
Ylin		Y		Y		Ylin		Y		Y		Ylin		Y	
80.5		0		0		80.5		0		0		82.5		0	
CANTIDAD DE TESADO 8.79151515															

FAMILIA DE 11															
DEFICIENCIA DE VARIACIÓN		MODULO DE ANCLAJE		ANCLAJE		TESADO		HUMERO		AREA		TENSION		PENETRACION	
DE PARASITA ELASTICA ORIGIN		ELASTICA ORIGIN		FINAL		DESDE		DE		TORON		TESADO		DE CUNA	
ACERO (mm)		ACERO (mm)		(mm)		EXTREMOS		TORONES		(mm ²)		(N/mm ²)		(mm)	
0	1650000	80.5	82.5	AMBOS		2	1256	72.53	38.1736842	D					
ALZADO															
RECTA 1		Parab		Xlin		PARABOLA		Ylin		Parab		RECTA 2		Parab	
82.5	1.55	0	82.5	1.55	0	82.5	1.55	0	82.5	1.55	0				
EN PLANTA															
RECTA 1		Parab		Xlin		PARABOLA		Ylin		Parab		RECTA 2		Parab	
80.5	0	0	82.5	0	0	82.5	0	0	82.5	0	0				
X	Y	Parab	Y	Y	Z	Parab	TENSION	AXIL	Sección dorsal		Sección frontal				
(mm)	(mm)			(mm)	(mm)	2	(N/mm ²)	(t)	MOMENTO	(mm ²)	AXIL	CORTANTE	MOMENTO		
									(t)	(mm ²)	(t)	(mm ²)	(mm ²)		
80.5	1.55	0	1.8500999	0	0	72.53	0	0	0	0	-182.18538	0	18.2126906	0	0
81.5	1.55	0	1.8500999	0	0	72.53	-182.18538	0	0	19.2126906	0	0	0	0	0
82.5	1.55	0	1.8500999	0	0	72.53	0	0	0	0	-182.18538	0	18.2126906	0	0
82.5	1.55	0	1.8500999	0	0	72.53	-182.18538	0	0	19.2126906	0	0	18.2126906	0	0
CANTIDAD DE TESADO 8.79151515															

FAMILIA DE 12														
DEFICIENCIA DE VARIACIÓN		MODULO DE ANCLAJE	ANCLAJE	TESADO	HUMERO	AREA	TENSION	PENETRACION						
DE PARASITA ELASTICA ORIGIN		ELASTICA ORIGIN	FINAL	DESDE	DE	TORON	TESADO	DE CUNA						
ACERO (mm)		ACERO (mm)	(mm)	EXTREMOS	TORONES	(mm ²)	(N/mm ²)	(mm)						
0	0	1650000	51.5	53.5	2	1256	72.53	38.1736842	0					
ALZADO														
EN PLANTA														
CANTIDAD DE TESADO 8.79151515														

FAMILIA DE 13

DESVIACION MODULO DE ANCLAJE	ANCLAJE	TESADO	NUMERO	AREA	TENSION	PENETRACION
PARASITA ELASTICA ORIGEN ACERO (mm)	FINAL (mm)	DESDE EXTREMOS TORONES (mm)	DE TORONES (mm)	TORON (mm)	TESADO (N/mm2)	DE CUÑA (mm)
0	1450000	112	114 AMBOS	2	1256	72.53
						36.1736642

ALZADO

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
114	0.5	0	114	0.5	0	114	0.5	0		

PLANTA

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
112	0	0	112	0	0	114	0	0		

X (m)	Y (m)	Pend. Y	Yodo (m)	Z (m)	Pend. Z	TENSION (N/mm2)	AXL (L)	Sección dorsal CORTANTE MOMENTO (L)	AXL (L)	Sección frontal CORTANTE MOMENTO (mL)
88	112	0.5	0	1.6559999	0	0	72.53	0	0	0
88	110	0.5	0	1.6559999	0	0	72.53	-182.19536	0	210.617817
1089	113	0.5	0	1.6559999	0	0	72.53	0	0	0
90	114	0.5	0	1.6559999	0	0	72.53	-182.19536	0	210.617817

MENTO DE TESADO 8.79151515

FAMILIA DE 14

DESVIACION MODULO DE ANCLAJE	ANCLAJE	TESADO	NUMERO	AREA	TENSION	PENETRACION
PARASITA ELASTICA ORIGEN ACERO (mm)	FINAL (mm)	DESDE EXTREMOS TORONES (mm)	DE TORONES (mm)	TORON (mm)	TESADO (N/mm2)	DE CUÑA (mm)
0	1650000	112	114 AMBOS	2	1256	72.53
						36.1736642

ALZADO

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
114	0.7	0	114	0.7	0	114	0.7	0		

PLANTA

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
112	0	0	112	0	0	114	0	0		

X (m)	Y (m)	Pend. Y	Yodo (m)	Z (m)	Pend. Z	TENSION (N/mm2)	AXL (L)	Sección dorsal CORTANTE MOMENTO (L)	AXL (L)	Sección frontal CORTANTE MOMENTO (mL)
36	112	0.7	0	1.6559999	0	0	72.53	0	0	0
36	113	0.7	0	1.6559999	0	0	72.53	-182.19536	0	174.178745
36	113	0.7	0	1.6559999	0	0	72.53	0	0	0
36	114	0.7	0	1.6559999	0	0	72.53	-182.19536	0	174.178745

MENTO DE TESADO 8.79151515

FAMILIA DE 15

DESVIACION MODULO DE ANCLAJE	ANCLAJE	TESADO	NUMERO	AREA	TENSION	PENETRACION
PARASITA ELASTICA ORIGEN ACERO (mm)	FINAL (mm)	DESDE EXTREMOS TORONES (mm)	DE TORONES (mm)	TORON (mm)	TESADO (N/mm2)	DE CUÑA (mm)
0	1650000	112	114 AMBOS	2	1256	72.53
						36.1736642

ALZADO

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
114	1.55	0	114	1.55	0	114	1.55	0		

PLANTA

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
112	0	0	112	0	0	114	0	0		

X (m)	Y (m)	Pend. Y	Yodo (m)	Z (m)	Pend. Z	TENSION (N/mm2)	AXL (L)	Sección dorsal CORTANTE MOMENTO (L)	AXL (L)	Sección frontal CORTANTE MOMENTO (mL)
112	1.55	0	1.6559999	0	0	72.53	0	0	0	0
112	1.55	0	1.6559999	0	0	72.53	-182.19536	0	19.3126906	0
112	1.55	0	1.6559999	0	0	72.53	0	0	0	0
114	1.55	0	1.6559999	0	0	72.53	-182.19536	0	19.3126906	0

MENTO DE TESADO 8.79151515

FAMILIA DE 16

DESVIACION MODULO DE ANCLAJE	ANCLAJE	TESADO	NUMERO	AREA	TENSION	PENETRACION
PARASITA ELASTICA ORIGEN ACERO (mm)	FINAL (mm)	DESDE EXTREMOS TORONES (mm)	DE TORONES (mm)	TORON (mm)	TESADO (N/mm2)	DE CUÑA (mm)
0	1650000	112	114 AMBOS	2	1256	72.53
						36.1736642

ALZADO

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
114	1.75	0	114	1.75	0	114	1.75	0		

PLANTA

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
112	0	0	112	0	0	114	0	0		

X (m)	Y (m)	Pend. Y	Yodo (m)	Z (m)	Pend. Z	TENSION (N/mm2)	AXL (L)	Sección dorsal CORTANTE MOMENTO (L)	AXL (L)	Sección frontal CORTANTE MOMENTO (mL)
112	1.75	0	1.6559999	0	0	72.53	0	0	0	-17.126381
112	1.75	0	1.6559999	0	0	72.53	-182.19536	0	-17.126381	0
112	1.75	0	1.6559999	0	0	72.53	0	0	0	-17.126381
114	1.75	0	1.6559999	0	0	72.53	-182.19536	0	-17.126381	0

MENTO DE TESADO 8.79151515

FAMILIA DE 17

DESVIACION MODULO DE ANCLAJE	ANCLAJE	TESADO	NUMERO	AREA	TENSION	PENETRACION
PARASITA ELASTICA ORIGEN ACERO (mm)	FINAL (mm)	DESDE EXTREMOS TORONES (mm)	DE TORONES (mm)	TORON (mm)	TESADO (N/mm2)	DE CUÑA (mm)
0	1650000	143.5	143.5 AMBOS	2	1256	72.53
						36.1736642

ALZADO

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
143.5	0.5	0	143.5	0.5	0	143.5	0.5	0		

PLANTA

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
143.5	0	0	143.5	0	0	143.5	0	0		

X (m)	Y (m)	Pend. Y	Yodo (m)	Z (m)	Pend. Z	TENSION (N/mm2)	AXL (L)	Sección dorsal CORTANTE MOMENTO (L)	AXL (L)	Sección frontal CORTANTE MOMENTO (mL)
143.5	0.5	0	1.6559999	0	0	72.53	0	0	0	-182.19536
143.5	0.5	0	1.6559999	0	0	72.53	-182.19536	0	210.617817	0
143.5	0.5	0	1.6559999	0	0	72.53	0	0	0	0
143.5	0.5	0	1.6559999	0	0	72.53	-182.19536	0	210.617817	0

MENTO DE TESADO 8.79151515

FAMILIA DE 18

DESVIACION MODULO DE ANCLAJE	ANCLAJE	TESADO	NUMERO	AREA	TENSION	PENETRACION
PARASITA ELASTICA ORIGEN ACERO (mm)	FINAL (mm)	DESDE EXTREMOS TORONES (mm)	DE TORONES (mm)	TORON (mm)	TESADO (N/mm2)	DE CUÑA (mm)
0	1650000	143.5	143.5 AMBOS	2	1256	72.53
						36.1736642

ALZADO

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
143.5	0.7	0	143.5	0.7	0	143.5	0.7	0		

PLANTA

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
143.5	0	0	143.5	0	0	143.5	0	0		

X (m)	Y (m)	Pend. Y	Yodo (m)	Z (m)	Pend. Z	TENSION (N/mm2)	AXL (L)	Sección dorsal CORTANTE MOMENTO (L)	AXL (L)	Sección frontal CORTANTE MOMENTO (mL)
143.5	0.7	0	1.6559999	0	0	72.53	0	0	0	-182.19536
143.5	0.7	0	1.6559999	0	0	72.53	-182.19536	0	174.178745	0
143.5	0.7	0	1.6559999	0	0	72.53	0	0	0	0
143.5	0.7	0	1.6559999	0	0	72.53	-182.19536	0	174.178745	0

MENTO DE TESADO 8.79151515

FAMILIA DE 19

DESVIACION MODULO DE ANCLAJE	ANCLAJE	TESADO	NUMERO	AREA	TENSION	PENETRACION
PARASITA ELASTICA ORIGEN ACERO (mm)	FINAL (mm)	DESDE EXTREMOS TORONES (mm)	DE TORONES (mm)	TORON (mm)	TESADO (N/mm2)	DE CUÑA (mm)
0	1650000	143.5	143.5 AMBOS	2	1256	72.53
						36.1736642

ALZADO

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
143.5	1.55	0	143.5	1.55	0	143.5	1.55	0		

PLANTA

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
143.5	0	0	143.5	0	0	143.5	0	0		

X (m)	Y (m)	Pend. Y	Yodo (m)	Z (m)	Pend. Z	TENSION (N/mm2)	AXL (L)	Sección dorsal CORTANTE MOMENTO (L)	AXL (L)	Sección frontal CORTANTE MOMENTO (mL)
143.5	1.55	0	1.6559999	0	0	72.53	0	0	0	-182.19536
143.5	1.55	0	1.6559999	0	0	72.53	-182.19536	0	19.3126906	0
143.5	1.55	0	1.6559999	0	0	72.53	0	0	0	0
143.5	1.55	0	1.6559999	0	0	72.53	-182.19536	0	19.3126906	0

MENTO DE TESADO 8.79151515

FAMILIA DE 20

DESVIACION MODULO DE ANCLAJE	ANCLAJE	TESADO	NUMERO	AREA	TENSION	PENETRACION
PARASITA ELASTICA ORIGEN ACERO (mm)	FINAL (mm)	DESDE EXTREMOS TORONES (mm)	DE TORONES (mm)	TORON (mm)	TESADO (N/mm2)	DE CUÑA (mm)
0	1650000	143.5	143.5 AMBOS	2	1256	72.53
						36.1736642

ALZADO

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
143.5	1.75	0	143.5	1.75	0	143.5	1.75	0		

PLANTA

RECTA 1	Yfin	Pend	Xfin	PARABOLA	Yfin	Pend	Xfin	RECTA 2	Yfin	Pend
143.5	0	0	143.5	0	0	143.5	0	0		

X (m)	Y (m)	Pend. Y	Yodo (m)	Z (m)	Pend. Z	TENSION (N/mm2)	AXL (L)	Sección dorsal CORTANTE MOMENTO (L)	AXL (L)	Sección frontal CORTANTE MOMENTO (mL)
143.5	1.75	0	1.6559999	0	0	72.53	0	0	0	-182.19536
143.5	1.75	0	1.6559999	0	0	72.53	-182.19536	0	-17.126381	0
143.5	1.75	0	1.6559999	0	0	72.53	0	0	0	0
143.5	1.75	0	1.6559999	0	0	72.53	-182.19536	0	-17.126381	0

MENTO DE TESADO 8.79151515

FAMILIA DE 1

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)	MÓDULO DE ANCLAJE FINAL (mm)	ANCLAJE DESDE EXTREMOS (mm)	TESADO DE TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm²)	TENSIÓN TESADO (N/mm²)	PENETRACIÓN DE CURA (mm)
0	1650000	22.5	24.5 AMBOS	2	1256	72.53	0
38.1738842							

ALZADO

Xm	RECTA 1 Ym	Pend	Xm	PARABOLA Ym	Pend	Xm	RECTA 2 Ym	Pend
24.5	0.5	0	24.5	0.5	0	24.5	0.5	0

PLANTA

Xm	RECTA 1 Ym	Pend	Xm	PARABOLA Ym	Pend	Xm	RECTA 2 Ym	Pend
22.5	0	0	22.5	0	0	24.5	0	0

X (m)	Y (m)	Pend. Y	Ym (m)	Z (m)	Pend. Z	TENSION (N/mm²)	AXL (L)	Sección dorsal CORTANTE (L)	MOMENTO (mL)	AXL (L)	Sección frontal CORTANTE (L)	MOMENTO (mL)
22.5	0.5	0	0.8449999	0	0	72.53	0	0	-182.19536	0	0	0
22.5	0.5	0	0.8449999	0	0	72.53	-182.19536	0	0	0	0	0
22.5	0.5	0	0.8449999	0	0	72.53	0	0	0	0	0	0
24.5	0.5	0	0.8449999	0	0	72.53	-182.19536	0	0	0	0	0

NOTA DE TESADO 8.79151515

FASE 7
COSIPO - EN EI

FAMILIA DE 2

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)	MÓDULO DE ANCLAJE FINAL (mm)	ANCLAJE DESDE EXTREMOS (mm)	TESADO DE TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm²)	TENSIÓN TESADO (N/mm²)	PENETRACIÓN DE CURA (mm)
0	1650000	22.5	24.5 AMBOS	2	1256	72.53	0
38.1738842							

ALZADO

Xm	RECTA 1 Ym	Pend	Xm	PARABOLA Ym	Pend	Xm	RECTA 2 Ym	Pend
24.5	0.7	0	24.5	0.7	0	24.5	0.7	0

PLANTA

Xm	RECTA 1 Ym	Pend	Xm	PARABOLA Ym	Pend	Xm	RECTA 2 Ym	Pend
22.5	0	0	22.5	0	0	24.5	0	0

X (m)	Y (m)	Pend. Y	Ym (m)	Z (m)	Pend. Z	TENSION (N/mm²)	AXL (L)	Sección dorsal CORTANTE (L)	MOMENTO (mL)	AXL (L)	Sección frontal CORTANTE (L)	MOMENTO (mL)
22.5	0.7	0	0.8449999	0	0	72.53	0	0	-182.19536	0	0	0
22.5	0.7	0	0.8449999	0	0	72.53	-182.19536	0	0	0	0	0
22.5	0.7	0	0.8449999	0	0	72.53	0	0	0	0	0	0
24.5	0.7	0	0.8449999	0	0	72.53	-182.19536	0	0	0	0	0

NOTA DE TESADO 8.79151515

TOTAL: M: -204'052 mch
N: -728'78 ton

FAMILIA DE 3

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)	MÓDULO DE ANCLAJE FINAL (mm)	ANCLAJE DESDE EXTREMOS (mm)	TESADO DE TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm²)	TENSIÓN TESADO (N/mm²)	PENETRACIÓN DE CURA (mm)
0	1650000	22.5	24.5 AMBOS	2	1256	72.53	0
38.1738842							

ALZADO

Xm	RECTA 1 Ym	Pend	Xm	PARABOLA Ym	Pend	Xm	RECTA 2 Ym	Pend
24.5	1.55	0	24.5	1.55	0	24.5	1.55	0

PLANTA

Xm	RECTA 1 Ym	Pend	Xm	PARABOLA Ym	Pend	Xm	RECTA 2 Ym	Pend
22.5	0	0	22.5	0	0	24.5	0	0

X (m)	Y (m)	Pend. Y	Ym (m)	Z (m)	Pend. Z	TENSION (N/mm²)	AXL (L)	Sección dorsal CORTANTE (L)	MOMENTO (mL)	AXL (L)	Sección frontal CORTANTE (L)	MOMENTO (mL)
22.5	1.55	0	0.8449999	0	0	72.53	0	0	-182.19536	0	0	0
22.5	1.55	0	0.8449999	0	0	72.53	-182.19536	0	0	0	0	0
22.5	1.55	0	0.8449999	0	0	72.53	0	0	0	0	0	0
24.5	1.55	0	0.8449999	0	0	72.53	-182.19536	0	-128.44774	0	-128.44774	0

NOTA DE TESADO 8.79151515

FAMILIA DE 4

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)	MÓDULO DE ANCLAJE FINAL (mm)	ANCLAJE DESDE EXTREMOS (mm)	TESADO DE TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm²)	TENSIÓN TESADO (N/mm²)	PENETRACIÓN DE CURA (mm)
0	1650000	22.5	24.5 AMBOS	2	1256	72.53	0
38.1738842							

ALZADO

Xm	RECTA 1 Ym	Pend	Xm	PARABOLA Ym	Pend	Xm	RECTA 2 Ym	Pend
24.5	1.75	0	24.5	1.75	0	24.5	1.75	0

PLANTA

Xm	RECTA 1 Ym	Pend	Xm	PARABOLA Ym	Pend	Xm	RECTA 2 Ym	Pend
22.5	0	0	22.5	0	0	24.5	0	0

X (m)	Y (m)	Pend. Y	Ym (m)	Z (m)	Pend. Z	TENSION (N/mm²)	AXL (L)	Sección dorsal CORTANTE (L)	MOMENTO (mL)	AXL (L)	Sección frontal CORTANTE (L)	MOMENTO (mL)
22.5	1.75	0	0.8449999	0	0	72.53	0	0	-182.19536	0	0	0
22.5	1.75	0	0.8449999	0	0	72.53	-182.19536	0	0	0	0	0
22.5	1.75	0	0.8449999	0	0	72.53	0	0	0	0	0	0
24.5	1.75	0	0.8449999	0	0	72.53	-182.19536	0	-164.88882	0	-164.88882	0

NOTA DE TESADO 8.79151515

DESVIACIÓN MODULO DE ANCLAJE ELASTICA ORIGEN ACERO (mm)	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm ²)	TENSIÓN TESADO (N/mm ²)	PENETRACIÓN DE CUNA (mm)
0	1650000	51.5	53.5 AMBOS	2	1256	72.53
						38.1736842
N ALZADO						
IRAMO	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend
	53.5	0.5	0	53.5	0.5	0
RAZADO EN PLANTA						
RAMO	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend
	51.5	0	0	51.5	0	0
DO EN ALZADO						
X (m)	Y (m)	Pend	Yfin (m)	Z (m)	TENSIÓN (N/mm ²)	AXIL (L)
44	51.5	0.5	0	0	0.8449999	0
45	53.5	0.5	0	0	0.8449999	0
104.5	53.5	0.5	0	0	0.8449999	0
146	53.5	0.5	0	0	0.8449999	0
MENTO DE TESADO 8.79151515						

DESVIACIÓN MODULO DE ANCLAJE ELASTICA ORIGEN ACERO (mm)	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm ²)	TENSIÓN TESADO (N/mm ²)	PENETRACIÓN DE CUNA (mm)
0	1650000	51.5	53.5 AMBOS	2	1256	72.53
						38.1736842
ADO EN ALZADO						
D	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend
	53.5	0.7	0	53.5	0.7	0
DO EN PLANTA						
I	Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend
	51.5	0	0	51.5	0	0
MENTO DE TESADO 8.79151515						
X (m)	Y (m)	Pend	Yfin (m)	Z (m)	TENSIÓN (N/mm ²)	AXIL (L)
44	51.5	0.7	0	0	0.8449999	0
45	52.5	0.7	0	0	0.8449999	0
104.5	52.5	0.7	0	0	0.8449999	0
146	53.5	0.7	0	0	0.8449999	0
MENTO DE TESADO 8.79151515						

DESVIACIÓN MODULO DE ANCLAJE ELASTICA ORIGEN ACERO (mm)	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm ²)	TENSIÓN TESADO (N/mm ²)	PENETRACIÓN DE CUNA (mm)
0	1650000	51.5	53.5 AMBOS	2	1256	72.53
						38.1736842
EN ALZADO						
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin
	53.5	1.55	0	53.5	1.55	0
N PLANTA						
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin
	51.5	0	0	51.5	0	0
TO DE TESADO 8.79151515						
X (m)	Y (m)	Pend	Yfin (m)	Z (m)	TENSIÓN (N/mm ²)	AXIL (L)
51.5	1.55	0	0.8449999	0	0	72.53
52.5	1.55	0	0.8449999	0	0	72.53
53.5	1.55	0	0.8449999	0	0	72.53
128.44774	1.55	0	0.8449999	0	0	72.53
TO DE TESADO 8.79151515						

DESVIACIÓN MODULO DE ANCLAJE ELASTICA ORIGEN ACERO (mm)	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm ²)	TENSIÓN TESADO (N/mm ²)	PENETRACIÓN DE CUNA (mm)
0	1650000	51.5	53.5 AMBOS	2	1256	72.53
						38.1736842
ZADO						
RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin
	53.5	1.75	0	53.5	1.75	0
UNTA						
RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin	RECTA 2 Yfin
	51.5	0	0	51.5	0	0
TESADO 8.79151515						
X (m)	Y (m)	Pend	Yfin (m)	Z (m)	TENSIÓN (N/mm ²)	AXIL (L)
51.5	1.75	0	0.8449999	0	0	72.53
52.5	1.75	0	0.8449999	0	0	72.53
53.5	1.75	0	0.8449999	0	0	72.53
128.44774	1.75	0	0.8449999	0	0	72.53
TESADO 8.79151515						

DESVIACIÓN MODULO DE ANCLAJE ELASTICA ORIGEN ACERO (mm)	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm ²)	TENSIÓN TESADO (N/mm ²)	PENETRACIÓN DE CUNA (mm)
0	1650000	80.5	82.5 AMBOS	2	1256	72.53
						38.1736842
N ALZADO						
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin
	82.5	0.5	0	82.5	0.5	0
N PLANTA						
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin
	80.5	0	0	80.5	0	0
MENTO DE TESADO 8.79151515						
X (m)	Y (m)	Pend	Yfin (m)	Z (m)	TENSIÓN (N/mm ²)	AXIL (L)
80.5	0.5	0	0.8449999	0	0	72.53
81.5	0.5	0	0.8449999	0	0	72.53
82.5	0.5	0	0.8449999	0	0	72.53
MENTO DE TESADO 8.79151515						

DESVIACIÓN MODULO DE ANCLAJE ELASTICA ORIGEN ACERO (mm)	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm ²)	TENSIÓN TESADO (N/mm ²)	PENETRACIÓN DE CUNA (mm)
0	1650000	80.5	82.5 AMBOS	2	1256	72.53
						38.1736842
ALZADO						
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin
	82.5	0.7	0	82.5	0.7	0
PLANTA						
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin
	80.5	0	0	80.5	0	0
MENTO DE TESADO 8.79151515						
X (m)	Y (m)	Pend	Yfin (m)	Z (m)	TENSIÓN (N/mm ²)	AXIL (L)
80.5	0.7	0	0.8449999	0	0	72.53
81.5	0.7	0	0.8449999	0	0	72.53
82.5	0.7	0	0.8449999	0	0	72.53
MENTO DE TESADO 8.79151515						

DESVIACIÓN MODULO DE ANCLAJE ELASTICA ORIGEN ACERO (mm)	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm ²)	TENSIÓN TESADO (N/mm ²)	PENETRACIÓN DE CUNA (mm)
0	1650000	80.5	82.5 AMBOS	2	1256	72.53
						38.1736842
ALZADO						
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin
	82.5	1.55	0	82.5	1.55	0
PLANTA						
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin
	80.5	0	0	80.5	0	0
TO DE TESADO 8.79151515						
X (m)	Y (m)	Pend	Yfin (m)	Z (m)	TENSIÓN (N/mm ²)	AXIL (L)
80.5	1.55	0	0.8449999	0	0	72.53
81.5	1.55	0	0.8449999	0	0	72.53
82.5	1.55	0	0.8449999	0	0	72.53
TO DE TESADO 8.79151515						

DESVIACIÓN MODULO DE ANCLAJE ELASTICA ORIGEN ACERO (mm)	ANCLAJE FINAL (m)	TESADO DESDE EXTREMOS TORONES	NÚMERO DE TORONES	ÁREA TORÓN (mm ²)	TENSIÓN TESADO (N/mm ²)	PENETRACIÓN DE CUNA (mm)
0	1650000	80.5	82.5 AMBOS	2	1256	72.53
						38.1736842
ALZADO						
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin
	82.5	1.75	0	82.5	1.75	0
PLANTA						
Xfin	RECTA 1 Yfin	Pend	Xfin	PARABOLA Yfin	Pend	Xfin
	80.5	0	0	80.5	0	0
TO DE TESADO 8.79151515						
X (m)	Y (m)	Pend	Yfin (m)	Z (m)	TENSIÓN (N/mm ²)	AXIL (L)
80.5	1.75	0	0.8449999	0	0	72.53
81.5	1.75	0	0.8449999	0	0	72.53
82.5	1.75	0	0.8449999	0	0	72.53
TO DE TESADO 8.79151515						

FAMILIA DE 13

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)

ANCLAJE FINAL DESDE EXTREMOS

TESADO DE TORONES

NÚMERO DE TORONES

ÁREA TORÓN (mm²)

TENSIÓN TESADO (N/mm²)

PENETRACIÓN DE CURA (mm)

ALZADO

EN PLANTA

DE TESADO

FAMILIA DE 14

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)

ANCLAJE FINAL DESDE EXTREMOS

TESADO DE TORONES

NÚMERO DE TORONES

ÁREA TORÓN (mm²)

TENSIÓN TESADO (N/mm²)

PENETRACIÓN DE CURA (mm)

ALZADO

EN PLANTA

DE TESADO

FAMILIA DE 15

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)

ANCLAJE FINAL DESDE EXTREMOS

TESADO DE TORONES

NÚMERO DE TORONES

ÁREA TORÓN (mm²)

TENSIÓN TESADO (N/mm²)

PENETRACIÓN DE CURA (mm)

ALZADO

EN PLANTA

DE TESADO

FAMILIA DE 16

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)

ANCLAJE FINAL DESDE EXTREMOS

TESADO DE TORONES

NÚMERO DE TORONES

ÁREA TORÓN (mm²)

TENSIÓN TESADO (N/mm²)

PENETRACIÓN DE CURA (mm)

ALZADO

EN PLANTA

DE TESADO

FAMILIA DE 17

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)

ANCLAJE FINAL DESDE EXTREMOS

TESADO DE TORONES

NÚMERO DE TORONES

ÁREA TORÓN (mm²)

TENSIÓN TESADO (N/mm²)

PENETRACIÓN DE CURA (mm)

ALZADO

EN PLANTA

DE TESADO

FAMILIA DE 18

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)

ANCLAJE FINAL DESDE EXTREMOS

TESADO DE TORONES

NÚMERO DE TORONES

ÁREA TORÓN (mm²)

TENSIÓN TESADO (N/mm²)

PENETRACIÓN DE CURA (mm)

ALZADO

EN PLANTA

DE TESADO

FAMILIA DE 19

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)

ANCLAJE FINAL DESDE EXTREMOS

TESADO DE TORONES

NÚMERO DE TORONES

ÁREA TORÓN (mm²)

TENSIÓN TESADO (N/mm²)

PENETRACIÓN DE CURA (mm)

ALZADO

EN PLANTA

DE TESADO

FAMILIA DE 20

DESVIACIÓN PARÁMETRO ELÁSTICO ORIGEN ACERO (mm)

ANCLAJE FINAL DESDE EXTREMOS

TESADO DE TORONES

NÚMERO DE TORONES

ÁREA TORÓN (mm²)

TENSIÓN TESADO (N/mm²)

PENETRACIÓN DE CURA (mm)

ALZADO

EN PLANTA

DE TESADO

Subanejo 5

TENSIONES EN ESTADOS INDIVIDUALES

SUBANEJO 5. TENSIONES EN ESTADOS INDIVIDUALES

ÍNDICE

Subanejo 5. Tensiones en estados individuales

Subanejo 5.1. Tensiones en estados individuales de carga a tiempo 0

Subanejo 5.2. Tensiones en estados individuales de carga a tiempo infinito

Subanejo 5.1

**TENSIONES EN ESTADOS INDIVIDUALES DE
CARGA A TIEMPO 0**

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pvigas.To

isopropilovigas). Tensiones a tiempo To

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	-46.02	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-35.95	40.99	0	44.54	2	-83.82	2	0.00	2.35	0.00
2	2	1.00	0.00	-35.95	40.99	0	44.54	2	-83.82	2	0.00	2.35	0.00
2	3	1.18	0.00	-35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
3	3	1.18	0.00	-35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
3	4	2.35	0.00	-31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
4	4	2.35	0.00	-31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
4	5	3.53	0.00	-27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
5	5	3.53	0.00	-27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
5	6	4.70	0.00	-23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
6	6	4.70	0.00	-23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
6	7	5.88	0.00	-19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
7	7	5.88	0.00	-19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
7	8	7.05	0.00	-15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
8	8	7.05	0.00	-15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
8	9	8.23	0.00	-11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
9	9	8.23	0.00	-11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
9	10	9.40	0.00	-7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
10	10	9.40	0.00	-7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
11	11	10.58	0.00	-3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
11	12	11.75	0.00	0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
12	12	11.75	0.00	0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
12	13	12.93	0.00	3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
13	13	12.93	0.00	3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
13	14	14.10	0.00	7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
14	14	14.10	0.00	7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
14	15	15.28	0.00	11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
15	15	15.28	0.00	11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
15	16	16.45	0.00	15.76	197.00	0	214.08	2	-402.86	2	0.00	2.35	0.00
16	16	16.45	0.37	15.75	197.00	0	214.35	2	-402.58	2	0.00	2.35	0.00
16	17	17.63	0.47	19.69	176.18	0	191.80	2	-359.93	2	0.00	2.35	0.00
17	17	17.63	0.47	19.69	176.18	0	181.60	2	-302.16	2	0.00	2.35	0.00
17	18	18.80	0.56	23.62	150.73	0	155.47	2	-258.41	2	0.00	2.35	0.00
18	18	18.80	0.00	23.63	150.73	0	155.11	2	-258.77	2	0.00	2.35	0.00
18	19	19.98	0.00	27.56	120.66	0	124.16	2	-207.15	2	0.00	2.35	0.00
19	19	19.98	0.00	27.56	120.66	0	124.16	2	-207.15	2	0.00	2.35	0.00
19	20	21.15	0.00	31.49	85.97	0	88.47	2	-147.59	2	0.00	2.35	0.00
20	20	21.15	0.00	31.49	85.97	0	88.47	2	-147.59	2	0.00	2.35	0.00
20	21	22.33	0.00	35.42	46.65	0	48.01	2	-80.09	2	0.00	2.35	0.00
21	21	22.33	0.00	35.42	46.65	0	48.01	2	-80.09	2	0.00	2.35	0.00
21	22	22.50	0.00	36.01	40.40	0	41.57	2	-69.36	2	0.00	2.35	0.00
22	22	22.50	0.00	36.01	40.40	0	41.57	2	-69.36	2	0.00	2.35	0.00
22	23	23.50	0.00	44.80	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1023	23	23.50	0.00	-53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
24	24	24.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
24	24	24.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
25	25	24.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
25	25	24.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
25	26	26.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
26	26	26.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
26	27	27.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
27	27	27.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
27	28	29.30	0.00	-29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
28	28	29.30	0.56	-29.12	227.92	0	234.90	2	-390.93	2	0.00	2.35	0.00
28	29	30.75	0.46	-24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
29	29	30.75	0.46	-24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00
29	30	32.20	0.37	-19.41	298.29	0	324.42	2	-609.71	2	0.00	2.35	0.00
30	30	32.20	0.00	-19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
30	31	33.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
31	31	33.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
31	32	35.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
32	32	35.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
32	33	36.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
33	33	36.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
34	35	39.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
35	35	39.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
35	36	40.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
36	36	40.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
37	37	42.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
37	37	42.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
37	38	43.80	0.00	19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
38	38	43.80	0.37	19.41	298.29	0	324.42	2	-609.71	2	0.00	2.35	0.00
38	39	45.25	0.46	24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pvigas.To

isopropilovigas). Tensiones a tiempo To

Pvigas

ext:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (Um2)	Fibra y fibra	SupCajón sig (Um2)	Fibra y fibra	InfLosa sig (Um2)	Fibra y fibra	SupLosa sig (Um2)
1	1	0.00	0.00	-46.02	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-35.95	40.99	0	44.54	2	-83.82	2	0.00	2.35	0.00
2	2	1.00	0.00	-35.95	40.99	0	44.54	2	-83.82	2	0.00	2.35	0.00
2	3	1.18	0.00	-35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
3	3	1.18	0.00	-35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
3	4	2.35	0.00	-31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
4	4	2.35	0.00	-31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
4	5	3.53	0.00	-27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
5	5	3.53	0.00	-27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
5	6	4.70	0.00	-23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
6	6	4.70	0.00	-23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
6	7	5.88	0.00	-19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
7	7	5.88	0.00	-19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
7	8	7.05	0.00	-15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
8	8	7.05	0.00	-15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
8	9	8.23	0.00	-11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
9	9	8.23	0.00	-11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
9	10	9.40	0.00	-7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
10	10	9.40	0.00	-7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
10	11	10.58	0.00	-3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
11	11	10.58	0.00	-3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
11	12	11.75	0.00	0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
12	12	11.75	0.00	0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
12	13	12.93	0.00	3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
13	13	12.93	0.00	3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
13	14	14.10	0.00	7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
14	14	14.10	0.00	7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
14	15	15.28	0.00	11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
15	15	15.28	0.00	11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
15	16	16.45	0.00	15.76	197.00	0	214.08	2	-402.86	2	0.00	2.35	0.00
16	16	16.45	0.37	15.75	197.00	0	214.35	2	-402.58	2	0.00	2.35	0.00
16	17	17.63	0.47	19.69	176.18	0	191.80	2	-359.93	2	0.00	2.35	0.00
17	17	17.63	0.47	19.69	176.18	0	181.60	2	-302.16	2	0.00	2.35	0.00
17	18	18.80	0.56	23.62	150.73	0	155.47	2	-258.41	2	0.00	2.35	0.00
18	18	18.80	0.00	23.63	150.73	0	155.11	2	-258.77	2	0.00	2.35	0.00
18	19	19.98	0.00	27.56	120.66	0	124.16	2	-207.15	2	0.00	2.35	0.00
19	19	19.98	0.00	27.56	120.66	0	124.16	2	-207.15	2	0.00	2.35	0.00
19	20	21.15	0.00	31.49	85.97	0	88.47	2	-147.59	2	0.00	2.35	0.00
20	20	21.15	0.00	31.49	85.97	0	88.47	2	-147.59	2	0.00	2.35	0.00
20	21	22.33	0.00	35.42	46.65	0	48.01	2	-80.09	2	0.00	2.35	0.00
21	21	22.33	0.00	35.42	46.65	0	48.01	2	-80.09	2	0.00	2.35	0.00
21	22	22.50	0.00	36.01	40.40	0	41.57	2	-69.36	2	0.00	2.35	0.00
22	22	22.50	0.00	36.01	40.40	0	41.57	2	-69.36	2	0.00	2.35	0.00
22	23	23.50	0.00	44.80	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1023	23	23.50	0.00	-53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
24	24	24.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
24	24	24.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
24	25	24.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
25	25	24.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
25	26	26.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
26	26	26.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
26	27	27.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
27	27	27.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
27	28	29.30	0.00	-29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
28	28	29.30	0.56	-29.12	227.92	0	234.90	2	-390.93	2	0.00	2.35	0.00
28	29	30.75	0.46	-24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
29	29	30.75	0.46	-24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00
29	30	32.20	0.37	-19.41	298.29	0	324.42	2	-609.71	2	0.00	2.35	0.00
30	30	32.20	0.00	-19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
30	31	33.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
31	31	33.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
31	32	35.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
32	32	35.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
32	33	36.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
33	33	36.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
34	35	39.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
35	35	39.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
35	36	40.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
36	36	40.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
36	37	42.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
37	37	42.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
37	38	43.80	0.00	19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
38	38	43.80	0.37	19.41	298.29	0	324.42	2	-609.71	2	0.00	2.35	0.00
38	39	45.25	0.46	24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pvigas.To

sopropiovigas). Tensiones a tiempo To

Pvigas

exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	-45.02	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-35.95	40.99	0	44.54	2	-83.82	2	0.00	2.35	0.00
2	2	1.00	0.00	-35.95	40.99	0	44.54	2	-83.82	2	0.00	2.35	0.00
2	3	1.18	0.00	-35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
3	3	1.18	0.00	-35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
3	4	2.35	0.00	-31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
4	4	2.35	0.00	-31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
4	5	3.53	0.00	-27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
5	5	3.53	0.00	-27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
5	6	4.70	0.00	-23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
6	6	4.70	0.00	-23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
6	7	5.88	0.00	-19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
7	7	5.88	0.00	-19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
7	8	7.05	0.00	-15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
8	8	7.05	0.00	-15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
8	9	8.23	0.00	-11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
9	9	8.23	0.00	-11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
9	10	9.40	0.00	-7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
10	10	9.40	0.00	-7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
10	11	10.58	0.00	-3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
11	11	10.58	0.00	-3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
11	12	11.75	0.00	0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
12	12	11.75	0.00	0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
12	13	12.93	0.00	3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
13	13	12.93	0.00	3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
13	14	14.10	0.00	7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
14	14	14.10	0.00	7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
14	15	15.28	0.00	11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
15	15	15.28	0.00	11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
15	16	16.45	0.00	15.75	197.00	0	214.08	2	-402.86	2	0.00	2.35	0.00
16	16	16.45	0.37	15.75	197.00	0	214.35	2	-402.58	2	0.00	2.35	0.00
16	17	17.63	0.47	19.69	176.18	0	191.80	2	-359.93	2	0.00	2.35	0.00
17	17	17.63	0.47	19.69	176.18	0	181.60	2	-302.16	2	0.00	2.35	0.00
17	18	18.80	0.56	23.62	150.73	0	155.47	2	-258.41	2	0.00	2.35	0.00
18	18	18.80	0.00	23.63	150.73	0	155.11	2	-258.77	2	0.00	2.35	0.00
18	19	19.98	0.00	27.56	120.66	0	124.16	2	-207.15	2	0.00	2.35	0.00
19	19	19.98	0.00	27.56	120.66	0	124.16	2	-207.15	2	0.00	2.35	0.00
19	20	21.15	0.00	31.49	85.97	0	88.47	2	-147.59	2	0.00	2.35	0.00
20	20	21.15	0.00	31.49	85.97	0	88.47	2	-147.59	2	0.00	2.35	0.00
20	21	22.33	0.00	35.42	46.65	0	48.01	2	-80.09	2	0.00	2.35	0.00
21	21	22.33	0.00	35.42	46.65	0	48.01	2	-80.09	2	0.00	2.35	0.00
21	22	22.50	0.00	36.01	40.40	0	41.57	2	-69.36	2	0.00	2.35	0.00
22	22	22.50	0.00	36.01	40.40	0	41.57	2	-69.36	2	0.00	2.35	0.00
22	23	23.50	0.00	44.80	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1023	23	23.50	0.00	-53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
24	24	24.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
24	24	24.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
24	25	24.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
25	25	24.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
25	26	26.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
26	26	26.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
26	27	27.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
27	27	27.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
27	28	29.30	0.00	-29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
28	28	29.30	0.56	-29.12	227.92	0	234.90	2	-390.93	2	0.00	2.35	0.00
28	29	30.75	0.46	-24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
29	29	30.75	0.46	-24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00
29	30	32.20	0.37	-19.41	298.29	0	324.42	2	-609.71	2	0.00	2.35	0.00
30	30	32.20	0.00	-19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
30	31	33.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
31	31	33.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
31	32	35.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
32	32	35.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
32	33	36.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
33	33	36.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
34	35	39.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
35	35	39.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
35	36	40.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
36	36	40.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
36	37	42.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
37	37	42.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
37	38	43.80	0.00	19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
38	38	43.80	0.37	19.41	298.29	0	324.42	2	-609.71	2	0.00	2.35	0.00
38	39	45.25	0.46	24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pvigas.To

esopropiovigas). Tensiones a tiempo To

Pvigas

W. ETC.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
39	39	45.25	0.46	24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
39	40	46.70	0.56	29.12	227.92	0	234.90	2	-390.93	2	0.00	2.35	0.00
40	40	46.70	0.00	29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
40	41	48.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
41	41	48.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
41	42	49.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
42	42	49.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
42	43	51.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
43	43	51.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
43	44	51.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
44	44	51.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
44	45	52.50	0.00	53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	-53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
46	46	53.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
46	47	53.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
47	47	53.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
47	48	55.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
48	48	55.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
48	49	56.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
49	49	56.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
49	50	58.30	0.00	-29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
50	50	58.30	0.56	-29.12	227.92	0	234.90	2	-390.93	2	0.00	2.35	0.00
50	51	59.75	0.46	-24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
51	51	59.75	0.46	-24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00
51	52	61.20	0.37	-19.41	298.29	0	324.42	2	-609.99	2	0.00	2.35	0.00
52	52	61.20	0.00	-19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
52	53	62.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
53	53	62.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
53	54	64.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
54	54	64.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
54	55	65.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
55	55	65.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
56	57	68.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
57	57	68.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
57	58	69.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
58	58	69.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
58	59	71.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
59	59	71.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
59	60	72.80	0.00	19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
60	60	72.80	0.37	19.41	298.29	0	324.42	2	-609.99	2	0.00	2.35	0.00
60	61	74.25	0.46	24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00
61	61	74.25	0.46	24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
61	62	75.70	0.56	29.12	227.92	0	234.90	2	-390.93	2	0.00	2.35	0.00
62	62	75.70	0.00	29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
62	63	77.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
63	63	77.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
63	64	78.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
64	64	78.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
64	65	80.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
65	65	80.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
65	66	80.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
66	66	80.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
66	67	81.50	0.00	53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	1067	81.50	0.00	-53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	-49.37	53.77	0	55.33	2	-92.31	2	0.00	2.35	0.00
68	68	82.50	0.00	-49.37	53.77	0	55.33	2	-92.31	2	0.00	2.35	0.00
68	69	83.08	0.00	-47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
69	69	83.08	0.00	-47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
69	70	84.65	0.00	-42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
70	70	84.65	0.00	-42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
70	71	86.23	0.00	-36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
71	71	86.23	0.00	-36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
71	72	87.80	0.00	-31.63	268.42	0	276.22	2	-460.82	2	0.00	2.35	0.00
72	72	87.80	0.56	-31.63	268.42	0	276.22	2	-460.82	2	0.00	2.35	0.00
72	73	89.38	0.46	-26.35	314.08	0	323.50	2	-538.91	2	0.00	2.35	0.00
73	73	89.38	0.46	-26.35	314.08	0	323.50	2	-538.91	2	0.00	2.35	0.00
73	74	90.95	0.37	-21.08	351.44	0	382.18	2	-718.40	2	0.00	2.35	0.00
74	74	90.95	0.00	-21.08	351.44	0	382.18	2	-718.40	2	0.00	2.35	0.00
74	75	92.53	0.00	-15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
75	75	92.53	0.00	-15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
75	76	94.10	0.00	-10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
76	76	94.10	0.00	-10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
76	77	95.68	0.00	-5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

ipótesis de cálculo:

vigas.To

esopropiovigas). Tensiones a tiempo To

Pvigas

et. etc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
77	77	95.68	0.00	-5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	417.86	0	454.08	2	-854.50	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	417.86	0	454.08	2	-854.50	2	0.00	2.35	0.00
78	79	98.83	0.00	5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00
79	79	98.83	0.00	5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00
79	80	100.40	0.00	10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
80	80	100.40	0.00	10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
80	81	101.98	0.00	15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
81	81	101.98	0.00	15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
81	82	103.55	0.00	21.09	351.44	0	381.90	2	-718.40	2	0.00	2.35	0.00
82	82	103.55	0.37	21.08	351.44	0	382.18	2	-718.40	2	0.00	2.35	0.00
82	83	105.13	0.46	26.35	314.08	0	341.65	2	-641.94	2	0.00	2.35	0.00
83	83	105.13	0.56	31.63	268.42	0	323.50	2	-538.91	2	0.00	2.35	0.00
84	84	106.70	0.00	31.63	268.42	0	276.58	2	-460.46	2	0.00	2.35	0.00
84	85	108.28	0.00	36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pvigas.To

esopropiovigas). Tensiones a tiempo To

Pvigas

et etc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	0.46	24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
39	40	46.70	0.56	29.12	227.92	0	234.90	2	-390.93	2	0.00	2.35	0.00
40	40	46.70	0.00	29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
40	41	48.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
41	41	48.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
41	42	49.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
42	42	49.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
42	43	51.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
43	43	51.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
43	44	51.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
44	44	51.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
44	45	52.50	0.00	53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	-53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
46	46	53.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
46	47	53.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
47	47	53.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
47	48	55.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
48	48	55.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
48	49	56.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
49	49	56.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
49	50	58.30	0.00	-29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
50	50	58.30	0.56	-29.12	227.92	0	234.90	2	-390.93	2	0.00	2.35	0.00
50	51	59.75	0.46	-24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
51	51	59.75	0.46	-24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00
51	52	61.20	0.37	-19.41	298.29	0	324.42	2	-609.71	2	0.00	2.35	0.00
52	52	61.20	0.00	-19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
52	53	62.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
53	53	62.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
53	54	64.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
54	54	64.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
54	55	65.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
55	55	65.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
56	57	68.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
57	57	68.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
57	58	69.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
58	58	69.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
58	59	71.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
59	59	71.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
59	60	72.80	0.00	19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
60	60	72.80	0.37	19.41	298.29	0	324.42	2	-609.71	2	0.00	2.35	0.00
60	61	74.25	0.46	24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00
1	61	74.25	0.46	24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
51	62	75.70	0.56	29.12	227.92	0	234.90	2	-390.93	2	0.00	2.35	0.00
62	62	75.70	0.00	29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
62	63	77.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
63	63	77.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
63	64	78.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
64	64	78.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
64	65	80.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
65	65	80.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
65	66	80.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
66	66	80.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
66	67	81.50	0.00	53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	1067	81.50	0.00	-53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	-49.37	53.77	0	55.33	2	-92.31	2	0.00	2.35	0.00
68	68	82.50	0.00	-49.37	53.77	0	55.33	2	-92.31	2	0.00	2.35	0.00
68	69	83.08	0.00	-47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
69	69	83.08	0.00	-47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
69	70	84.65	0.00	-42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
70	70	84.65	0.00	-42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
70	71	86.23	0.00	-36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
71	71	86.23	0.00	-36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
71	72	87.80	0.00	-31.63	268.42	0	276.22	2	-460.82	2	0.00	2.35	0.00
72	72	87.80	0.56	-31.63	268.42	0	276.58	2	-460.82	2	0.00	2.35	0.00
72	73	89.38	0.46	-26.35	314.08	0	323.50	2	-538.91	2	0.00	2.35	0.00
73	73	89.38	0.46	-26.35	314.08	0	341.65	2	-641.94	2	0.00	2.35	0.00
73	74	90.95	0.37	-21.08	351.44	0	382.18	2	-718.40	2	0.00	2.35	0.00
74	74	90.95	0.00	-21.08	351.44	0	382.18	2	-718.40	2	0.00	2.35	0.00
74	75	92.53	0.00	-15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
75	75	92.53	0.00	-15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
75	76	94.10	0.00	-10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
76	76	94.10	0.00	-10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
76	77	95.68	0.00	-5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

ipótesis de cálculo:

vgas.To

esopropiovigas). Tensiones a tiempo To

IPvigas

et etc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
77	77	95.68	0.00	-5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	417.86	0	454.08	2	-854.50	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	417.86	0	454.08	2	-854.50	2	0.00	2.35	0.00
78	79	98.83	0.00	5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00
79	79	98.83	0.00	5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00
79	80	100.40	0.00	10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
80	80	100.40	0.00	10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
80	81	101.98	0.00	15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
81	81	101.98	0.00	15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
81	82	103.55	0.00	21.09	351.44	0	381.90	2	-718.68	2	0.00	2.35	0.00
82	82	103.55	0.37	21.08	351.44	0	382.18	2	-718.40	2	0.00	2.35	0.00
82	83	105.13	0.46	26.35	314.08	0	341.65	2	-641.94	2	0.00	2.35	0.00
83	83	105.13	0.46	26.35	314.08	0	323.50	2	-538.91	2	0.00	2.35	0.00
83	84	106.70	0.56	31.63	268.42	0	276.58	2	-460.46	2	0.00	2.35	0.00
84	84	106.70	0.00	31.63	268.42	0	276.22	2	-460.82	2	0.00	2.35	0.00
84	85	108.28	0.00	36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
85	85	108.28	0.00	36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
85	86	109.85	0.00	42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
86	86	109.85	0.00	42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
86	87	111.43	0.00	47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
87	87	111.43	0.00	47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
87	88	112.00	0.00	49.37	53.76	0	55.32	2	-92.29	2	0.00	2.35	0.00
88	88	112.00	0.00	49.37	53.76	0	55.32	2	-92.29	2	0.00	2.35	0.00
88	89	113.00	0.00	58.16	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	1089	113.00	0.00	-58.16	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	90	114.00	0.00	-49.37	53.77	0	55.33	2	-92.31	2	0.00	2.35	0.00
90	90	114.00	0.00	-49.37	53.77	0	55.33	2	-92.31	2	0.00	2.35	0.00
90	91	114.58	0.00	-47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
91	91	114.58	0.00	-47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
91	92	116.15	0.00	-42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
92	92	116.15	0.00	-42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
92	93	117.73	0.00	-36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
93	93	117.73	0.00	-36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
93	94	119.30	0.00	-31.63	268.42	0	276.22	2	-460.82	2	0.00	2.35	0.00
94	94	119.30	0.56	-31.63	268.42	0	276.58	2	-460.46	2	0.00	2.35	0.00
94	95	120.88	0.46	-26.35	314.08	0	323.50	2	-538.91	2	0.00	2.35	0.00
95	95	120.88	0.46	-26.35	314.08	0	341.65	2	-641.94	2	0.00	2.35	0.00
95	96	122.45	0.37	-21.08	351.45	0	382.19	2	-718.42	2	0.00	2.35	0.00
96	96	122.45	0.00	-21.09	351.45	0	381.91	2	-718.70	2	0.00	2.35	0.00
96	97	124.03	0.00	-15.81	380.51	0	413.49	2	-778.13	2	0.00	2.35	0.00
97	97	124.03	0.00	-15.81	380.51	0	413.49	2	-778.13	2	0.00	2.35	0.00
97	98	125.60	0.00	-10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
98	98	125.60	0.00	-10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
98	99	127.18	0.00	-5.27	413.72	0	449.58	2	-846.04	2	0.00	2.35	0.00
98	99	127.18	0.00	-5.27	413.72	0	449.58	2	-846.04	2	0.00	2.35	0.00
99	100	128.75	0.00	0.00	417.87	0	454.09	2	-854.53	2	0.00	2.35	0.00
100	100	128.75	0.00	0.00	417.87	0	454.09	2	-854.53	2	0.00	2.35	0.00
100	101	130.33	0.00	5.27	413.72	0	449.58	2	-846.04	2	0.00	2.35	0.00
101	101	130.33	0.00	5.27	413.72	0	449.58	2	-846.04	2	0.00	2.35	0.00
101	102	131.90	0.00	10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
102	102	131.90	0.00	10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
102	103	133.48	0.00	15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
103	103	133.48	0.00	15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
103	104	135.05	0.00	21.09	351.45	0	381.91	2	-718.70	2	0.00	2.35	0.00
04	104	135.05	0.37	21.08	351.45	0	382.19	2	-718.42	2	0.00	2.35	0.00
04	105	136.63	0.46	26.35	314.08	0	341.65	2	-641.94	2	0.00	2.35	0.00
05	105	136.63	0.46	26.35	314.08	0	323.50	2	-538.91	2	0.00	2.35	0.00
05	106	138.20	0.56	31.63	268.42	0	276.58	2	-460.46	2	0.00	2.35	0.00
06	106	138.20	0.00	31.63	268.42	0	276.22	2	-460.82	2	0.00	2.35	0.00
06	107	139.78	0.00	36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
07	107	139.78	0.00	36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
07	108	141.35	0.00	42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
08	108	141.35	0.00	42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
08	109	142.93	0.00	47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
09	109	142.93	0.00	47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
09	110	143.50	0.00	49.37	53.76	0	55.32	2	-92.29	2	0.00	2.35	0.00
0	110	143.50	0.00	49.37	53.76	0	55.32	2	-92.29	2	0.00	2.35	0.00
0	111	144.50	0.00	58.16	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	1111	144.50	0.00	-44.80	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	112	145.50	0.00	-36.01	40.41	0	41.58	2	-69.38	2	0.00	2.35	0.00
2	112	145.50	0.00	-36.01	40.41	0	41.58	2	-69.38	2	0.00	2.35	0.00
2	113	145.68	0.00	-35.42	46.65	0	48.01	2	-80.09	2	0.00	2.35	0.00
3	113	145.68	0.00	-35.42	46.65	0	48.01	2	-80.09	2	0.00	2.35	0.00
3	114	146.85	0.00	-31.49	85.97	0	88.47	2	-147.59	2	0.00	2.35	0.00
3	114	146.85	0.00	-31.49	85.97	0	88.47	2	-147.59	2	0.00	2.35	0.00
3	115	148.03	0.00	-27.56	120.66	0	124.16	2	-207.15	2	0.00	2.35	0.00

179

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pvigas.To

esopropiovigas). Tensiones a tiempo To

Pvigas

Cuad. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	0.46	24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
39	40	46.70	0.56	29.12	227.92	0	234.90	2	-390.93	2	0.00	2.35	0.00
40	40	46.70	0.00	29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
40	41	48.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
41	41	48.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
41	42	49.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
42	42	49.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
42	43	51.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
43	43	51.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
43	44	51.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
44	44	51.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
44	45	52.50	0.00	53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	-53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
46	46	53.50	0.00	-45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
46	47	53.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
47	47	53.95	0.00	-43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
47	48	55.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
48	48	55.40	0.00	-38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
48	49	56.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
49	49	56.85	0.00	-33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
49	50	58.30	0.00	-29.12	227.92	0	234.54	2	-391.29	2	0.00	2.35	0.00
50	50	58.30	0.56	-29.12	227.92	0	234.90	2	-391.29	2	0.00	2.35	0.00
50	51	59.75	0.46	-24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
51	51	59.75	0.46	-24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00
51	52	61.20	0.37	-19.41	298.29	0	324.42	2	-609.71	2	0.00	2.35	0.00
52	52	61.20	0.00	-19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
52	53	62.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
53	53	62.65	0.00	-14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
53	54	64.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
54	54	64.10	0.00	-9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
54	55	65.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
55	55	65.55	0.00	-4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	354.59	0	385.32	2	-725.12	2	0.00	2.35	0.00
56	57	68.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
57	57	68.45	0.00	4.85	351.07	0	381.50	2	-717.92	2	0.00	2.35	0.00
57	58	69.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
58	58	69.90	0.00	9.71	340.51	0	370.02	2	-696.33	2	0.00	2.35	0.00
58	59	71.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
59	59	71.35	0.00	14.56	322.92	0	350.91	2	-660.36	2	0.00	2.35	0.00
59	60	72.80	0.00	19.41	298.29	0	324.14	2	-609.99	2	0.00	2.35	0.00
60	60	72.80	0.37	19.41	298.29	0	324.42	2	-609.71	2	0.00	2.35	0.00
60	61	74.25	0.46	24.26	266.62	0	290.07	2	-544.88	2	0.00	2.35	0.00
61	61	74.25	0.46	24.26	266.62	0	274.66	2	-457.43	2	0.00	2.35	0.00
61	62	75.70	0.56	29.12	227.92	0	234.90	2	-391.29	2	0.00	2.35	0.00
62	62	75.70	0.00	29.12	227.92	0	234.54	2	-390.93	2	0.00	2.35	0.00
62	63	77.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
63	63	77.15	0.00	33.97	182.17	0	187.46	2	-312.75	2	0.00	2.35	0.00
63	64	78.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
64	64	78.60	0.00	38.83	129.39	0	133.15	2	-222.13	2	0.00	2.35	0.00
64	65	80.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
65	65	80.05	0.00	43.68	69.58	0	71.60	2	-119.45	2	0.00	2.35	0.00
65	66	80.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
66	66	80.50	0.00	45.19	49.58	0	51.02	2	-85.12	2	0.00	2.35	0.00
66	67	81.50	0.00	53.98	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	1067	81.50	0.00	-58.16	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	-49.37	53.77	0	55.33	2	-92.31	2	0.00	2.35	0.00
68	68	82.50	0.00	-49.37	53.77	0	55.33	2	-92.31	2	0.00	2.35	0.00
68	69	83.08	0.00	-47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
69	69	83.08	0.00	-47.45	81.60	0	83.97	2	-140.09	2	0.00	2.35	0.00
69	70	84.65	0.00	-42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
70	70	84.65	0.00	-42.17	152.17	0	156.59	2	-261.24	2	0.00	2.35	0.00
70	71	86.23	0.00	-36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
71	71	86.23	0.00	-36.90	214.45	0	220.68	2	-368.16	2	0.00	2.35	0.00
71	72	87.80	0.00	-31.63	268.42	0	276.22	2	-460.82	2	0.00	2.35	0.00
72	72	87.80	0.56	-31.63	268.42	0	276.22	2	-460.82	2	0.00	2.35	0.00
72	73	89.38	0.46	-26.35	314.08	0	323.50	2	-538.91	2	0.00	2.35	0.00
73	73	89.38	0.46	-26.35	314.08	0	323.50	2	-538.91	2	0.00	2.35	0.00
73	74	90.95	0.37	-21.08	351.44	0	382.18	2	-718.40	2	0.00	2.35	0.00
74	74	90.95	0.00	-21.08	351.44	0	382.18	2	-718.40	2	0.00	2.35	0.00
74	75	92.53	0.00	-15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
75	75	92.53	0.00	-15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
75	76	94.10	0.00	-10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
76	76	94.10	0.00	-10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
76	77	95.68	0.00	-5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

ipótesis de cálculo:

vigas.To

esopropiovigas). Tensiones a tiempo To

IPvigas

et exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
77	77	95.68	0.00	-5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	417.86	0	454.08	2	-854.50	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	417.86	0	454.08	2	-854.50	2	0.00	2.35	0.00
78	79	98.83	0.00	5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00
79	79	98.83	0.00	5.27	413.71	0	449.57	2	-846.02	2	0.00	2.35	0.00
79	80	100.40	0.00	10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
80	80	100.40	0.00	10.54	401.26	0	436.04	2	-820.56	2	0.00	2.35	0.00
80	81	101.98	0.00	15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
81	81	101.98	0.00	15.81	380.50	0	413.48	2	-778.11	2	0.00	2.35	0.00
81	82	103.55	0.00	21.09	351.44	0	382.18	2	-718.40	2	0.00	2.35	0.00
82	82	103.55	0.37	21.08	351.44	0	382.18	2	-718.40	2	0.00	2.35	0.00
82	83	105.13	0.46	26.35	314.08	0	341.65	2	-641.94	2	0.00	2.35	0.00
83	83	105.13	0.46	26.35	314.08	0	341.65	2	-641.94	2	0.00	2.35	0.00
83	84	106.70	0.56	31.63	268.42	0	276.22	2	-460.82	2	0.00	2.35	0.00
84	84	106.70	0.00	31.63	268.42	0	276.22	2	-460.82	2	0.00	2.35	0.

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pvigas.To

isopropiovigas). Tensiones a tiempo To

vigas

Coef. exc.

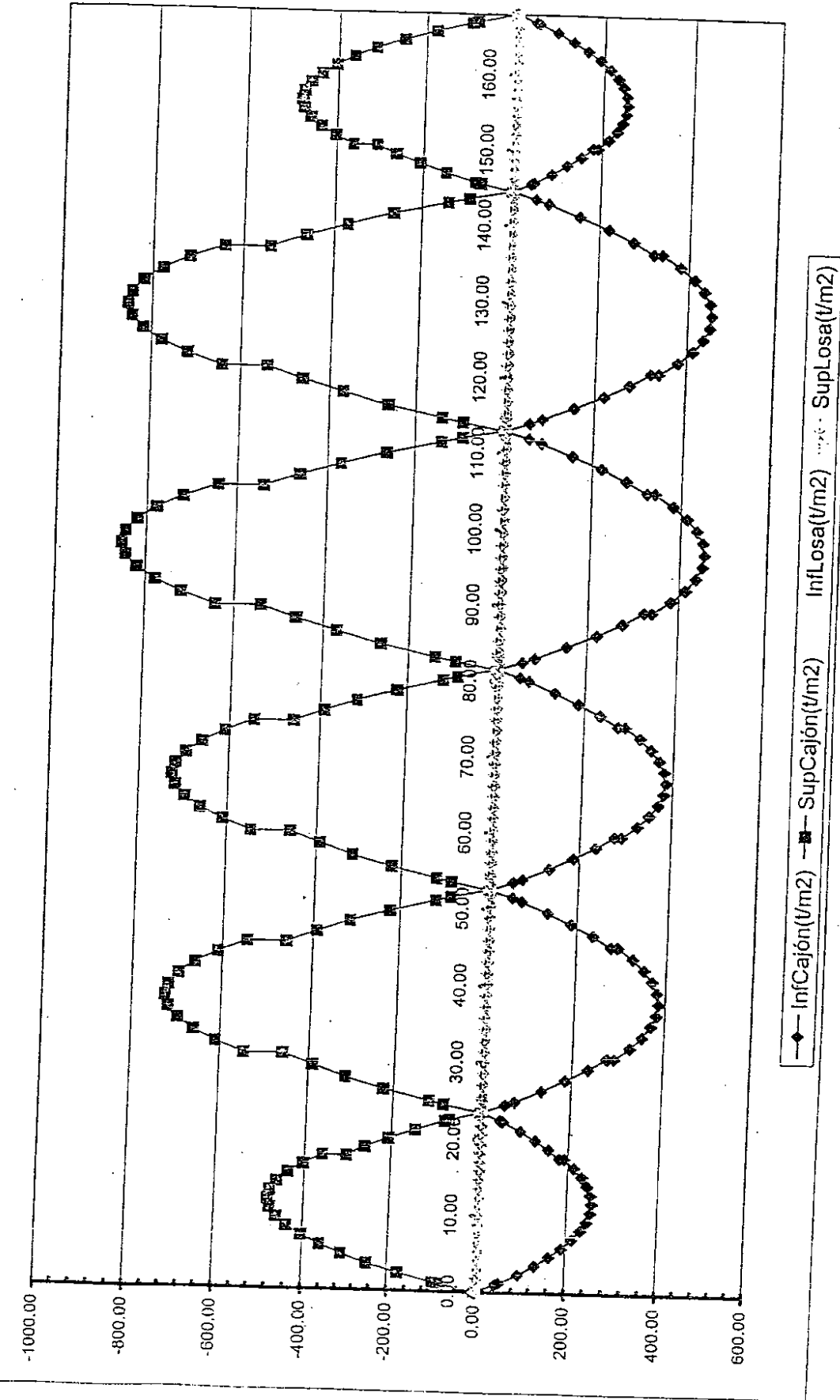
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-27.56	120.66	0	124.16	2	-207.15	2	0.00	2.35	0.00
115	116	149.20	0.00	-23.63	150.73	0	155.11	2	-258.77	2	0.00	2.35	0.00
116	116	149.20	0.56	-23.62	150.73	0	155.47	2	-258.41	2	0.00	2.35	0.00
116	117	150.38	0.47	-19.69	176.18	0	181.60	2	-302.16	2	0.00	2.35	0.00
117	117	150.38	0.47	-19.69	176.18	0	191.80	2	-359.93	2	0.00	2.35	0.00
117	118	151.55	0.37	-15.75	197.00	0	214.35	2	-402.58	2	0.00	2.35	0.00
118	118	151.55	0.00	-15.76	197.00	0	214.08	2	-402.86	2	0.00	2.35	0.00
118	119	152.73	0.00	-11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
119	119	152.73	0.00	-11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
119	120	153.90	0.00	-7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
120	120	153.90	0.00	-7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
120	121	155.08	0.00	-3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
121	121	155.08	0.00	-3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
121	122	156.25	0.00	-0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
122	122	156.25	0.00	-0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
122	123	157.43	0.00	3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
123	123	157.43	0.00	3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
123	124	158.60	0.00	7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
124	124	158.60	0.00	7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
124	125	159.78	0.00	11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
125	125	159.78	0.00	11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
125	126	160.95	0.00	15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
126	126	160.95	0.00	15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
126	127	162.13	0.00	19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
127	127	162.13	0.00	19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
127	128	163.30	0.00	23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
128	128	163.30	0.00	23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
128	129	164.48	0.00	27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
129	129	164.48	0.00	27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
129	130	165.65	0.00	31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
130	130	165.65	0.00	31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
130	131	166.83	0.00	35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
131	131	166.83	0.00	35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
131	132	167.00	0.00	35.95	40.98	0	44.53	2	-83.80	2	0.00	2.35	0.00
132	132	167.00	0.00	35.95	40.98	0	44.53	2	-83.80	2	0.00	2.35	0.00
132	133	168.00	0.00	46.02	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

hsin_10.xls

Programa DINTEL IDEAM S.A.
Pvigas.To

05/09/01

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pvigas.To

isopropiovigas). Tensiones a tiempo To

vigas

Con: exc:

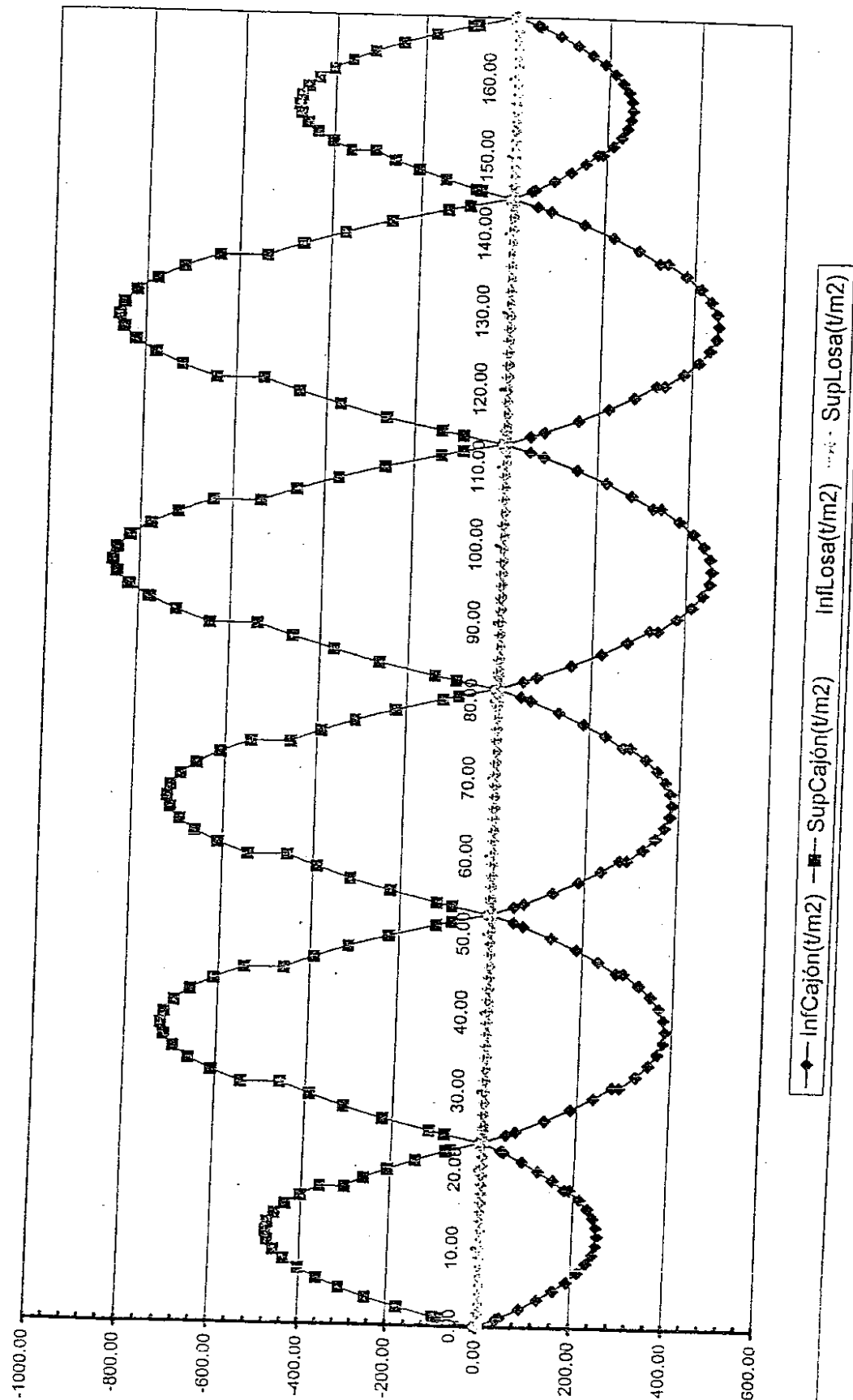
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-27.56	120.66	0	124.16	2	-207.15	2	0.00	2.35	0.00
115	116	149.20	0.00	-23.63	150.73	0	155.11	2	-258.77	2	0.00	2.35	0.00
116	116	149.20	0.56	-23.62	150.73	0	155.47	2	-258.41	2	0.00	2.35	0.00
116	117	150.38	0.47	-19.69	176.18	0	181.60	2	-302.16	2	0.00	2.35	0.00
117	117	150.38	0.47	-19.69	176.18	0	191.80	2	-359.93	2	0.00	2.35	0.00
117	118	151.55	0.37	-15.75	197.00	0	214.35	2	-402.58	2	0.00	2.35	0.00
118	118	151.55	0.00	-15.76	197.00	0	214.08	2	-402.86	2	0.00	2.35	0.00
118	119	152.73	0.00	-11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
119	119	152.73	0.00	-11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
119	120	153.90	0.00	-7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
120	120	153.90	0.00	-7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
120	121	155.08	0.00	-3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
121	121	155.08	0.00	-3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
121	122	156.25	0.00	-0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
122	122	156.25	0.00	-0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
122	123	157.43	0.00	3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
123	123	157.43	0.00	3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
123	124	158.60	0.00	7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
124	124	158.60	0.00	7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
124	125	159.78	0.00	11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
125	125	159.78	0.00	11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
125	126	160.95	0.00	15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
126	126	160.95	0.00	15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
126	127	162.13	0.00	19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
127	127	162.13	0.00	19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
127	128	163.30	0.00	23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
128	128	163.30	0.00	23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
128	129	164.48	0.00	27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
129	129	164.48	0.00	27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
129	130	165.65	0.00	31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
130	130	165.65	0.00	31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
130	131	166.83	0.00	35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
131	131	166.83	0.00	35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
131	132	167.00	0.00	35.95	40.98	0	44.53	2	-83.80	2	0.00	2.35	0.00
132	132	167.00	0.00	35.95	40.98	0	44.53	2	-83.80	2	0.00	2.35	0.00
132	133	168.00	0.00	46.02	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

hsim_t0.xls

Programa DINTEL IDEAM S.A.
Pvigas.To

05/09/01

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pvigas.To

isopropiovigas). Tensiones a tiempo To

vigas

Coei etc

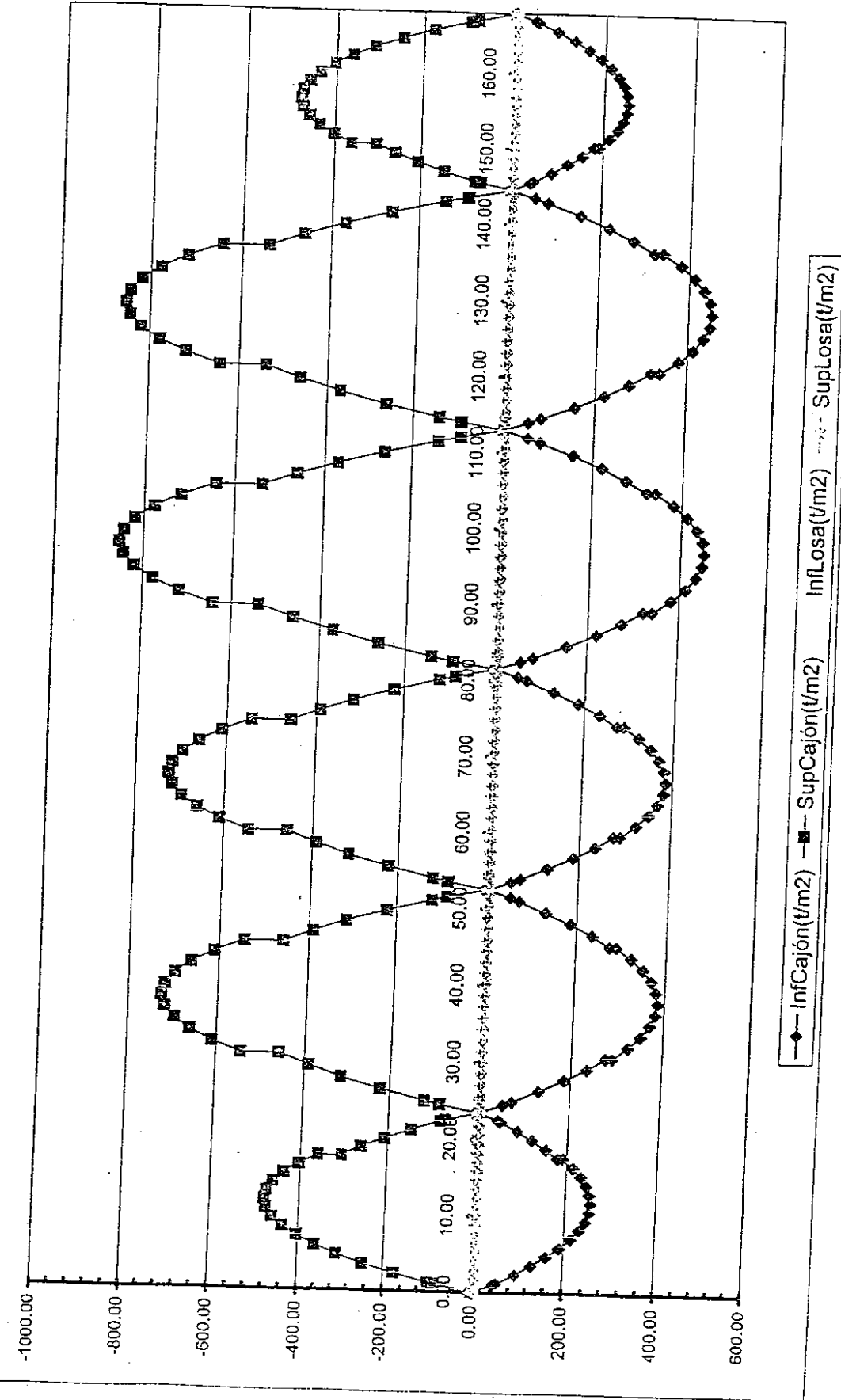
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-27.56	120.66	0	124.16	2	-207.15	2	0.00	2.35	0.00
115	116	149.20	0.00	-23.63	150.73	0	155.11	2	-258.77	2	0.00	2.35	0.00
116	116	149.20	0.56	-23.62	150.73	0	155.47	2	-258.41	2	0.00	2.35	0.00
116	117	150.38	0.47	-19.69	176.18	0	181.60	2	-302.16	2	0.00	2.35	0.00
117	117	150.38	0.47	-19.69	176.18	0	191.80	2	-359.93	2	0.00	2.35	0.00
117	118	151.55	0.37	-15.75	197.00	0	214.35	2	-402.58	2	0.00	2.35	0.00
118	118	151.55	0.00	-15.76	197.00	0	214.08	2	-402.86	2	0.00	2.35	0.00
118	119	152.73	0.00	-11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
119	119	152.73	0.00	-11.82	213.21	0	231.69	2	-436.00	2	0.00	2.35	0.00
119	120	153.90	0.00	-7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
120	120	153.90	0.00	-7.89	224.79	0	244.27	2	-459.69	2	0.00	2.35	0.00
120	121	155.08	0.00	-3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
121	121	155.08	0.00	-3.96	231.75	0	251.84	2	-473.92	2	0.00	2.35	0.00
121	122	156.25	0.00	-0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
122	122	156.25	0.00	-0.03	234.09	0	254.38	2	-478.70	2	0.00	2.35	0.00
122	123	157.43	0.00	3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
123	123	157.43	0.00	3.91	231.81	0	251.90	2	-474.04	2	0.00	2.35	0.00
123	124	158.60	0.00	7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
124	124	158.60	0.00	7.84	224.91	0	244.40	2	-459.93	2	0.00	2.35	0.00
124	125	159.78	0.00	11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
125	125	159.78	0.00	11.77	213.39	0	231.89	2	-436.37	2	0.00	2.35	0.00
125	126	160.95	0.00	15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
126	126	160.95	0.00	15.70	197.25	0	214.35	2	-403.37	2	0.00	2.35	0.00
126	127	162.13	0.00	19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
127	127	162.13	0.00	19.64	176.49	0	191.79	2	-360.91	2	0.00	2.35	0.00
127	128	163.30	0.00	23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
128	128	163.30	0.00	23.57	151.10	0	164.20	2	-308.99	2	0.00	2.35	0.00
128	129	164.48	0.00	27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
129	129	164.48	0.00	27.50	121.10	0	131.60	2	-247.64	2	0.00	2.35	0.00
129	130	165.65	0.00	31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
130	130	165.65	0.00	31.44	86.47	0	93.96	2	-176.83	2	0.00	2.35	0.00
130	131	166.83	0.00	35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
131	131	166.83	0.00	35.37	47.23	0	51.32	2	-96.58	2	0.00	2.35	0.00
131	132	167.00	0.00	35.95	40.98	0	44.53	2	-83.80	2	0.00	2.35	0.00
132	132	167.00	0.00	35.95	40.98	0	44.53	2	-83.80	2	0.00	2.35	0.00
132	133	168.00	0.00	46.02	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

hsim_t0.xls

Programa DINTEL IDEAM S.A.
Pvigas.To

05/09/01

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

Hipótesis de cálculo:
fase1.ISO.To.To

refensadoisostático(t=0)). Tensiones a tiempo To

refensadoisostático(t=0)). Tensiones a tiempo To

Coef. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
2	2	1.00	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
2	3	1.18	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
3	3	1.18	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
3	4	2.35	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
4	4	2.35	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
4	5	3.53	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
5	5	3.53	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
5	6	4.70	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
6	6	4.70	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
6	7	5.88	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
7	7	5.88	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
7	8	7.05	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
8	8	7.05	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
8	9	8.23	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
9	9	8.23	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
9	10	9.40	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
10	10	9.40	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
10	11	10.58	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
11	11	10.58	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
11	12	11.75	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
12	12	11.75	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
12	13	12.93	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
13	13	12.93	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
13	14	14.10	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
14	14	14.10	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
14	15	15.28	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
15	15	15.28	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
15	16	16.45	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
16	16	16.45	-923.18	21.82	-460.90	0	-1162.23	2	200.18	2	0.00	2.35	0.00
16	17	17.63	-923.18	21.82	-460.90	0	-1162.23	2	200.18	2	0.00	2.35	0.00
17	17	17.63	-923.18	21.82	-460.90	0	-1162.23	2	200.18	2	0.00	2.35	0.00
17	18	18.80	-923.18	21.82	-486.75	0	-1093.67	2	242.86	2	0.00	2.35	0.00
18	18	18.80	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
18	19	19.98	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
19	19	19.98	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
19	20	21.15	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
20	20	21.15	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
20	21	22.33	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
21	21	22.33	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
21	22	22.50	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
22	22	22.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
22	23	23.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	23	23.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	24	24.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
24	24	24.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
24	25	24.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
25	25	24.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
25	26	26.40	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
26	26	26.40	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
26	27	27.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
27	27	27.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
27	28	29.30	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
28	28	29.30	-1383.51	-26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
28	29	30.75	-1383.51	-26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
29	29	30.75	-1383.51	-26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
29	30	32.20	-1383.51	-26.49	-712.30	0	-1807.31	2	502.57	2	0.00	2.35	0.00
30	30	32.20	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
30	31	33.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
31	31	33.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
31	32	35.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
32	32	35.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
32	33	36.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
33	33	36.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
33	34	38.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
34	34	38.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
34	35	39.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
35	35	39.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
35	36	40.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
36	36	40.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
36	37	42.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
37	37	42.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
37	38	43.80	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
38	38	43.80	-1383.51	26.49	-712.30	0	-1807.31	2	502.57	2	0.00	2.35	0.00
38	39	45.25	-1383.51	26.49	-751.04	0	-1849.41	2	502.57	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.To.To

refensadoisostático(t=0)). Tensiones a tiempo To

refensadoisostático(t=0)). Tensiones a tiempo To

ref. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	-1383.51	26.49	-751.04	0	-1661.22	2	401.01	2			
39	40	46.70	-1383.51	26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
40	40	46.70	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
40	41	48.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
41	41	48.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
41	42	49.60	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
42	42	49.60	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
42	43	51.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
43	43	51.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
43	44	51.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
44	44	51.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
44	45	52.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
46	46	53.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
46	47	53.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
47	47	53.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
47	48	55.40	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
48	48	55.40	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
48	49	56.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
49	49	56.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
49	50	58.30	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
50	50	58.30	-1383.51	-26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
50	51	59.75	-1383.51	-26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
51	51	59.75	-1383.51	-26.49	-751.04	0	-1849.41	2	502.57	2	0.00	2.35	0.00
51	52	61.20	-1383.51	-26.49	-712.30	0	-1807.31	2	423.35	2	0.00	2.35	0.00
52	52	61.20	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
52	53	62.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
53	53	62.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
53	54	64.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
54	54	64.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
54	55	65.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
55	55	65.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
55	56	67.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
56	56	67.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
56	57	68.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
57	57	68.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
57	58	69.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
58	58	69.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
58	59	71.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
59	59	71.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
59	60	72.80	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
60	60	72.80	-1383.51	26.49	-712.30	0	-1807.31	2	423.35	2	0.00	2.35	0.00
60	61	74.25	-1383.51	26.49	-751.04	0	-1849.41	2	502.57	2	0.00	2.35	0.00
61	61	74.25	-1383.51	26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
61	62	75.70	-1383.51	26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
62	62	75.70	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
62	63	77.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
63	63	77.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
63	64	78.60	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
64	64	78.60	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
64	65	80.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
65	65	80.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
65	66	80.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
66	66	80.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
66	67	81.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	1067	81.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
68	68	82.50	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
68	69	83.08	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
69	69	83.08	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
69	70	84.65	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
70	70	84.65	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
70	71	86.23	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
71	71	86.23	-1153.50	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
71	72	87.80	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
72	72	87.80	-1690.38	-29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
72	73	89.38	-1690.38	-29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
73	73	89.38	-1690.38	-29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
73	74	90.95	-1690.38	-29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
74	74	90.95	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
74	75	92.53	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
75	75	92.53	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
75	76	94.10	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
76	76	94.10	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
76	77	95.68	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.To.To

etensadoisostático(t=0)). Tensiones a tiempo To

fase1.ISO.To

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
2	2	1.00	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
2	3	1.18	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
3	3	1.18	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
3	4	2.35	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
4	4	2.35	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
4	5	3.53	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
5	5	3.53	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
5	6	4.70	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
6	6	4.70	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
6	7	5.88	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
7	7	5.88	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
8	8	7.05	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
8	9	8.23	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
9	9	8.23	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
9	10	9.40	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
10	10	9.40	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
10	11	10.58	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
11	11	10.58	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
11	12	11.75	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
12	12	11.75	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
12	13	12.93	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
13	13	12.93	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
13	14	14.10	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
14	14	14.10	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
14	15	15.28	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
15	15	15.28	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
15	16	16.45	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
16	16	16.45	-923.18	21.82	-460.90	0	-1162.23	2	200.18	2	0.00	2.35	0.00
16	17	17.63	-923.18	21.82	-460.90	0	-1190.32	2	253.05	2	0.00	2.35	0.00
17	17	17.63	-923.18	21.82	-460.90	0	-1067.07	2	198.48	2	0.00	2.35	0.00
17	18	18.80	-923.18	21.82	-486.75	0	-1093.67	2	242.86	2	0.00	2.35	0.00
18	18	18.80	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
18	19	19.98	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
19	19	19.98	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
19	20	21.15	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
20	20	21.15	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
20	21	22.33	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
21	21	22.33	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
21	22	22.50	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
22	22	22.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
22	23	23.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	23	23.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	24	24.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
24	24	24.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
24	25	24.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
25	25	24.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
25	26	26.40	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
26	26	26.40	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
26	27	27.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
27	27	27.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
27	28	29.30	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
28	28	29.30	-1383.51	-26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
28	29	30.75	-1383.51	-26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
29	29	30.75	-1383.51	-26.49	-751.04	0	-1849.41	2	502.57	2	0.00	2.35	0.00
29	30	32.20	-1383.51	-26.49	-712.30	0	-1807.31	2	423.35	2	0.00	2.35	0.00
30	30	32.20	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
30	31	33.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
31	31	33.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
31	32	35.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
32	32	35.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
32	33	36.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
33	33	36.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
33	34	38.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
34	34	38.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
34	35	39.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
35	35	39.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
35	36	40.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
36	36	40.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
36	37	42.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
37	37	42.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
37	38	43.80	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
38	38	43.80	-1383.51	26.49	-712.30	0	-1807.31	2	423.35	2	0.00	2.35	0.00
38	39	45.25	-1383.51	26.49	-751.04	0	-1849.41	2	502.57	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

ipótesis de cálculo:

fase1.ISO.To.To

etensadoisostático(t=0)). Tensiones a tiempo To

fase1.ISO.To

el exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	-1383.51	26.49	-751.04	0	-1661.22	2	401.01	2			
39	40	46.70	-1383.51	26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
40	40	46.70	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
40	41	48.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
41	41	48.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
41	42	49.60	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
42	42	49.60	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
42	43	51.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
43	43	51.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
43	44	51.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
44	44	51.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
44	45	52.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
46	46	53.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
46	47	53.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
47	47	53.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
47	48	55.40	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
48	48	55.40	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
48	49	56.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
49	49	56.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
49	50	58.30	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
50	50	58.30	-1383.51	-26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
50	51	59.75	-1383.51	-26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
51	51	59.75	-1383.51	-26.49	-751.04	0	-1849.41	2	502.57	2	0.00	2.35	0.00
51	52	61.20	-1383.51	-26.49	-712.30	0	-1807.31	2	423.35	2	0.00	2.35	0.00
52	52	61.20	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
52	53	62.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
53	53	62.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
53	54	64.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
54	54	64.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
54	55	65.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
55	55	65.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
55	56	67.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
56	56	67.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
56	57	68.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
57	57	68.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
57	58	69.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
58	58	69.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
58	59	71.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
59	59	71.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
59	60	72.80	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
60	60	72.80	-1383.51	26.49	-712.30	0	-1807.31	2	423.35	2	0.00	2.35	0.00
60	61	74.25	-1383.51	26.49	-751.04	0	-1849.41	2	502.57	2	0.00	2.35	0.00
61	61	74.25	-1383.51	26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
61	62	75.70	-1383.51	26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
62	62	75.70	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
62	63	77.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
63	63	77.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
63	64	78.60	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
64	64	78.60	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
64	65	80.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
65	65	80.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
65	66	80.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
66	66	80.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
66	67	81.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	1067	81.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
68	68	82.50	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
68	69	83.08	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
69	69	83.08	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
69	70	84.65	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
70	70	84.65	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
70	71	86.23	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
71	71	86.23	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
71	72	87.80	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
72	72	87.80	-1690.38	-29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
72	73	89.38	-1690.38	-29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
73	73	89.38	-1690.38	-29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
73	74	90.95	-1690.38	-29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
74	74	90.95	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
74	75	92.53	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
75	75	92.53	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
75	76	94.10	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
76	76	94.10	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
76	77	95.68	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00

185

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.To.To

Refensadoisostático(t=0)). Tensiones a tiempo To

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
2	2	1.00	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
2	3	1.18	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
3	3	1.18	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
3	4	2.35	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
4	4	2.35	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
4	5	3.53	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
5	5	3.53	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
5	6	4.70	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
6	6	4.70	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
6	7	5.88	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
7	7	5.88	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
7	8	7.05	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
8	8	7.05	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
8	9	8.23	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
9	9	8.23	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
9	10	9.40	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
10	10	9.40	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
10	11	10.58	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
11	11	10.58	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
11	12	11.75	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
12	12	11.75	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
12	13	12.93	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
13	13	12.93	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
13	14	14.10	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
14	14	14.10	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
14	15	15.28	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
15	15	15.28	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
15	16	16.45	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
16	16	16.45	-923.18	21.82	-435.05	0	-1162.23	2	200.18	2	0.00	2.35	0.00
16	17	17.63	-923.18	21.82	-460.90	0	-1190.32	2	253.05	2	0.00	2.35	0.00
17	17	17.63	-923.18	21.82	-460.90	0	-1067.07	2	198.48	2	0.00	2.35	0.00
17	18	18.80	-923.18	21.82	-486.75	0	-1093.67	2	242.86	2	0.00	2.35	0.00
18	18	18.80	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
18	19	19.98	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
19	19	19.98	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
19	20	21.15	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
20	20	21.15	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
20	21	22.33	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
21	21	22.33	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
21	22	22.50	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
22	22	22.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
22	23	23.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	23	23.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	24	24.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
24	24	24.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
24	25	24.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
25	25	24.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
25	26	26.40	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
26	26	26.40	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
26	27	27.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
27	27	27.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
27	28	29.30	-1383.51	-26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
28	28	29.30	-1383.51	-26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
29	29	30.75	-1383.51	-26.49	-751.04	0	-1849.41	2	502.57	2	0.00	2.35	0.00
29	30	32.20	-1383.51	-26.49	-712.30	0	-1807.31	2	423.35	2	0.00	2.35	0.00
30	30	32.20	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
30	31	33.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
31	31	33.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
31	32	35.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
32	32	35.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
32	33	36.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
33	33	36.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
33	34	38.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
34	34	38.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
34	35	39.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
35	35	39.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
35	36	40.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
36	36	40.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
36	37	42.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
37	37	42.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
37	38	43.80	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
38	38	43.80	-1383.51	26.49	-751.04	0	-1807.31	2	423.35	2	0.00	2.35	0.00
38	39	45.25	-1383.51	26.49	-751.04	0	-1849.41	2	502.57	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

ipótesis de cálculo:

se1.ISO.To.To

Refensadoisostático(t=0)). Tensiones a tiempo To

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	-1383.51	26.49	-751.04	0	-1661.22	2	401.01	2			
39	40	46.70	-1383.51	26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
40	40	46.70	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
40	41	48.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
41	41	48.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
41	42	49.60	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
42	42	49.60	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
42	43	51.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
43	43	51.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
43	44	51.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
44	44	51.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
44	45	52.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
46	46	53.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
46	47	53.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
47	47	53.95	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
47	48	55.40	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
48	48	55.40	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
48	49	56.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
49	49	56.85	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
49	50	58.30	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
50	50	58.30	-1383.51	-26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
50	51	59.75	-1383.51	-26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
51	51	59.75	-1383.51	-26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
51	52	61.20	-1383.51	-26.49	-712.30	0	-1807.31	2	423.35	2	0.00	2.35	0.00
52	52	61.20	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
52	53	62.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
53	53	62.65	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
53	54	64.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
54	54	64.10	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
54	55	65.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
55	55	65.55	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
55	56	67.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
56	56	67.00	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
56	57	68.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
57	57	68.45	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
57	58	69.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
58	58	69.90	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
58	59	71.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
59	59	71.35	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
59	60	72.80	-1383.76	0.00	-712.43	0	-1807.64	2	423.43	2	0.00	2.35	0.00
60	60	72.80	-1383.51	26.49	-712.30	0	-1807.31	2	423.35	2	0.00	2.35	0.00
60	61	74.25	-1383.51	26.49	-751.04	0	-1849.41	2	502.57	2	0.00	2.35	0.00
61	61	74.25	-1383.51	26.49	-751.04	0	-1661.22	2	401.01	2	0.00	2.35	0.00
61	62	75.70	-1383.51	26.49	-789.78	0	-1701.09	2	467.52	2	0.00	2.35	0.00
62	62	75.70	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
62	63	77.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
63	63	77.15	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
63	64	78.60	-1000.16	0.00	-539.82	0	-1197.71	2	284.54	2	0.00	2.35	0.00
64	64	78.60	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
64	65	80.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
65	65	80.05	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
65	66	80.50	-539.84	0.00	-226.80	0	-580.03	2	42.73	2	0.00	2.35	0.00
66	66	80.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
66	67	81.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	1067	81.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
68	68	82.50	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
68	69	83.08	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
69	69	83.08	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
69	70	84.65	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
70	70	84.65	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
70	71	86.23	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
71	71	86.23	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
71	72	87.80	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
72	72	87.80	-1690.38	-29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
72	73	89.38	-1690.38	-29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
73	73	89.38	-1690.38	-29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
73	74	90.95	-1690.38	-29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
74	74	90.95	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
74	75	92.53	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
75	75	92.53	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
75	76	94.10	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
76	76	94.10	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
76	77	95.68	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.To.To

Refensado/Isotático(t=0)). Tensiones a tiempo To

el ISO To

Coe. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
77	78	97.25	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
78	78	97.25	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
78	79	98.83	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
79	79	98.83	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
79	80	100.40	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
80	80	100.40	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
80	81	101.98	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
81	81	101.98	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
81	82	103.55	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
82	82	103.55	-1690.38	29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
82	83	105.13	-1690.38	29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
83	83	105.13	-1690.38	29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
83	84	106.70	-1690.38	29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
84	84	106.70	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
84	85	108.28	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
85	85	108.28	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
85	86	109.85	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
86	86	109.85	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
86	87	111.43	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
87	87	111.43	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
88	88	112.00	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
88	88	112.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
88	89	113.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	1089	113.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	90	114.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
90	90	114.00	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
90	91	114.58	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
91	91	114.58	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
91	92	116.15	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
92	92	116.15	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
92	93	117.73	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
93	93	117.73	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
93	94	119.30	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
94	94	119.30	-1690.38	-29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
94	95	120.88	-1690.38	-29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
95	95	120.88	-1690.38	-29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
95	96	122.45	-1690.38	-29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
96	96	122.45	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
96	97	124.03	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
97	97	124.03	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
97	98	125.60	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
98	98	125.60	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
99	99	127.18	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
99	99	127.18	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
100	100	128.75	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
100	100	128.75	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
101	101	130.33	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
101	101	130.33	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
101	102	131.90	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
102	102	131.90	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
102	103	133.48	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
103	103	133.48	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
103	104	135.05	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
104	104	135.05	-1690.38	29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
104	105	136.63	-1690.38	29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
105	105	136.63	-1690.38	29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
105	106	138.20	-1690.38	29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
106	106	138.20	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
106	107	139.78	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
107	107	139.78	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
107	108	141.35	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
108	108	141.35	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
108	109	142.93	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
109	109	142.93	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
109	110	143.50	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
110	110	143.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
110	111	144.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	111	144.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	112	145.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
112	112	145.50	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
113	113	145.68	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
113	113	145.68	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
113	114	146.85	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
114	114	146.85	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
114	115	148.03	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

ipótesis de cálculo:

se1.ISO.To.To

Refensado/Isotático(t=0)). Tensiones a tiempo To

el ISO To

Coe. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
115	116	149.20	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
116	116	149.20	-923.18	-21.82	-486.75	0	-1093.67	2	242.86	2	0.00	2.35	0.00
116	117	150.38	-923.18	-21.82	-460.90	0	-1067.07	2	198.48	2	0.00	2.35	0.00
117	117	150.38	-923.18	-21.82	-460.90	0	-1190.32	2	253.05	2	0.00	2.35	0.00
117	118	151.55	-923.18	-21.82	-435.05	0	-1162.23	2	200.18	2	0.00	2.35	0.00
118	118	151.55	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
118	119	152.73	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
119	119	152.73	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
119	120	153.90	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
120	120	153.90	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
120	121	155.08	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
121	121	155.08	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
121	122	156.25	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
122	122	156.25	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
122	123	157.43	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
123	123	157.43	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
123	124	158.60	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
124	124	158.60	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
124	125	159.78	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
125	125	159.78	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
125	126	160.95	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
126	126	160.95	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
126	127	162.13	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
127	127	162.13	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
127	128	163.30	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
128	128	163.30	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
128	129	164.48	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
129	129	164.48	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
129	130	165.65	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
130	130	165.65	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
130	131	166.83	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
131	131	166.83	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
131	132	167.00	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
132	132	167.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.To.To

refensadolostático(t=0)). Tensiones a tiempo To

el.ISO.To

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
77	78	97.25	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
78	78	97.25	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
78	79	98.83	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
79	79	98.83	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
79	80	100.40	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
80	80	100.40	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
80	81	101.98	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
81	81	101.98	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
81	82	103.55	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
82	82	103.55	-1690.38	29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
82	83	105.13	-1690.38	29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
83	83	105.13	-1690.38	29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
83	84	106.70	-1690.38	29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
84	84	106.70	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
84	85	108.28	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
85	85	108.28	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
85	86	109.85	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
86	86	109.85	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
86	87	111.43	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
87	87	111.43	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
87	88	112.00	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
88	88	112.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
88	89	113.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	1089	113.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	90	114.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
90	90	114.00	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
90	91	114.58	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
91	91	114.58	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
91	92	116.15	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
92	92	116.15	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
92	93	117.73	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
93	93	117.73	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
93	94	119.30	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
94	94	119.30	-1690.38	-29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
94	95	120.88	-1690.38	-29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
95	95	120.88	-1690.38	-29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
95	96	122.45	-1690.38	-29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
96	96	122.45	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
96	97	124.03	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
97	97	124.03	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
97	98	125.60	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
98	98	125.60	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
98	99	127.18	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
99	99	127.18	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
100	100	128.75	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
100	100	128.75	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
100	101	130.33	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
101	101	130.33	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
101	102	131.90	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
102	102	131.90	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
102	103	133.48	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
103	103	133.48	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
103	104	135.05	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
104	104	135.05	-1690.38	29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
104	105	136.63	-1690.38	29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
105	105	136.63	-1690.38	29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
105	106	138.20	-1690.38	29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
106	106	138.20	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
106	107	139.78	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
107	107	139.78	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
107	108	141.35	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
108	108	141.35	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
108	109	142.93	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
109	109	142.93	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
109	110	143.50	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
110	110	143.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
110	111	144.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	111	144.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	112	145.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
112	112	145.50	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
113	113	145.68	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
113	113	145.68	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
113	114	146.85	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
114	114	146.85	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
114	115	148.03	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

ipótesis de cálculo:

se1.ISO.To.To

refensadolostático(t=0)). Tensiones a tiempo To

el.ISO.To

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2			
115	116	149.20	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
116	116	149.20	-923.18	-21.82	-486.75	0	-1093.67	2	242.86	2	0.00	2.35	0.00
116	117	150.38	-923.18	-21.82	-460.90	0	-1067.07	2	198.48	2	0.00	2.35	0.00
117	117	150.38	-923.18	-21.82	-460.90	0	-1190.32	2	253.05	2	0.00	2.35	0.00
117	118	151.55	-923.18	-21.82	-435.05	0	-1162.23	2	200.18	2	0.00	2.35	0.00
118	118	151.55	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
118	119	152.73	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
119	119	152.73	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
119	120	153.90	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
120	120	153.90	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
120	121	155.08	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
121	121	155.08	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
121	122	156.25	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
122	122	156.25	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
122	123	157.43	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
123	123	157.43	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
123	124	158.60	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
124	124	158.60	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
124	125	159.78	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
125	125	159.78	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
125	126	160.95	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
126	126	160.95	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
126	127	162.13	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
127	127	162.13	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
127	128	163.30	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
128	128	163.30	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
128	129	164.48	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
129	129	164.48	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
129	130	165.65	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
130	130	165.65	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
130	131	166.83	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
131	131	166.83	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
131	132	167.00	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
132	132	167.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase1.ISO.To.To

retensado/sostático(t=0)). Tensiones a tiempo To

se1.ISO.To

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
77	77	95.68	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
77	78	97.25	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
78	78	97.25	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
78	79	98.83	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
79	79	98.83	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
79	80	100.40	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
80	80	100.40	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
80	81	101.98	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
81	81	101.98	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
81	82	103.55	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
82	82	103.55	-1690.38	29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
82	83	105.13	-1690.38	29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
83	83	105.13	-1690.38	29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
83	84	106.70	-1690.38	29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
84	84	106.70	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
84	85	108.28	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
85	85	108.28	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
85	86	109.85	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
5	86	109.85	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
36	87	111.43	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
37	87	111.43	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
87	88	112.00	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
88	88	112.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
88	89	113.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	1089	113.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	90	114.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
90	90	114.00	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
90	91	114.58	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
91	91	114.58	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
91	92	116.15	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
92	92	116.15	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
92	93	117.73	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
93	93	117.73	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
93	94	119.30	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
94	94	119.30	-1690.38	-29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
94	95	120.88	-1690.38	-29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
95	95	120.88	-1690.38	-29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
95	96	122.45	-1690.38	-29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
96	96	122.45	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
96	97	124.03	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
97	97	124.03	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
97	98	125.60	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
98	98	125.60	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
98	99	127.18	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
99	99	127.18	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
100	100	128.75	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
100	100	128.75	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
101	101	130.33	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
101	101	130.33	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
101	102	131.90	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
102	102	131.90	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
102	103	133.48	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
103	103	133.48	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
103	104	135.05	-1690.64	0.00	-901.17	0	-2241.93	2	580.20	2	0.00	2.35	0.00
104	104	135.05	-1690.38	29.80	-901.03	0	-2241.58	2	580.11	2	0.00	2.35	0.00
104	105	136.63	-1690.38	29.80	-948.36	0	-2293.01	2	676.90	2	0.00	2.35	0.00
105	105	136.63	-1690.38	29.80	-948.36	0	-2061.32	2	542.72	2	0.00	2.35	0.00
105	106	138.20	-1690.38	29.80	-995.69	0	-2110.02	2	623.98	2	0.00	2.35	0.00
106	106	138.20	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
106	107	139.78	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
107	107	139.78	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
107	108	141.35	-1153.60	0.00	-645.69	0	-1405.18	2	367.77	2	0.00	2.35	0.00
108	108	141.35	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
108	109	142.93	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
109	109	142.93	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
109	110	143.50	-616.56	0.00	-280.50	0	-684.55	2	85.66	2	0.00	2.35	0.00
110	110	143.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
110	111	144.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	111	144.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	112	145.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
112	112	145.50	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
113	113	145.68	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
113	113	145.68	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
113	114	146.85	-501.48	0.00	-199.95	0	-527.76	2	21.27	2	0.00	2.35	0.00
114	114	146.85	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
114	115	148.03	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

ipótesis de cálculo:

se1.ISO.To.To

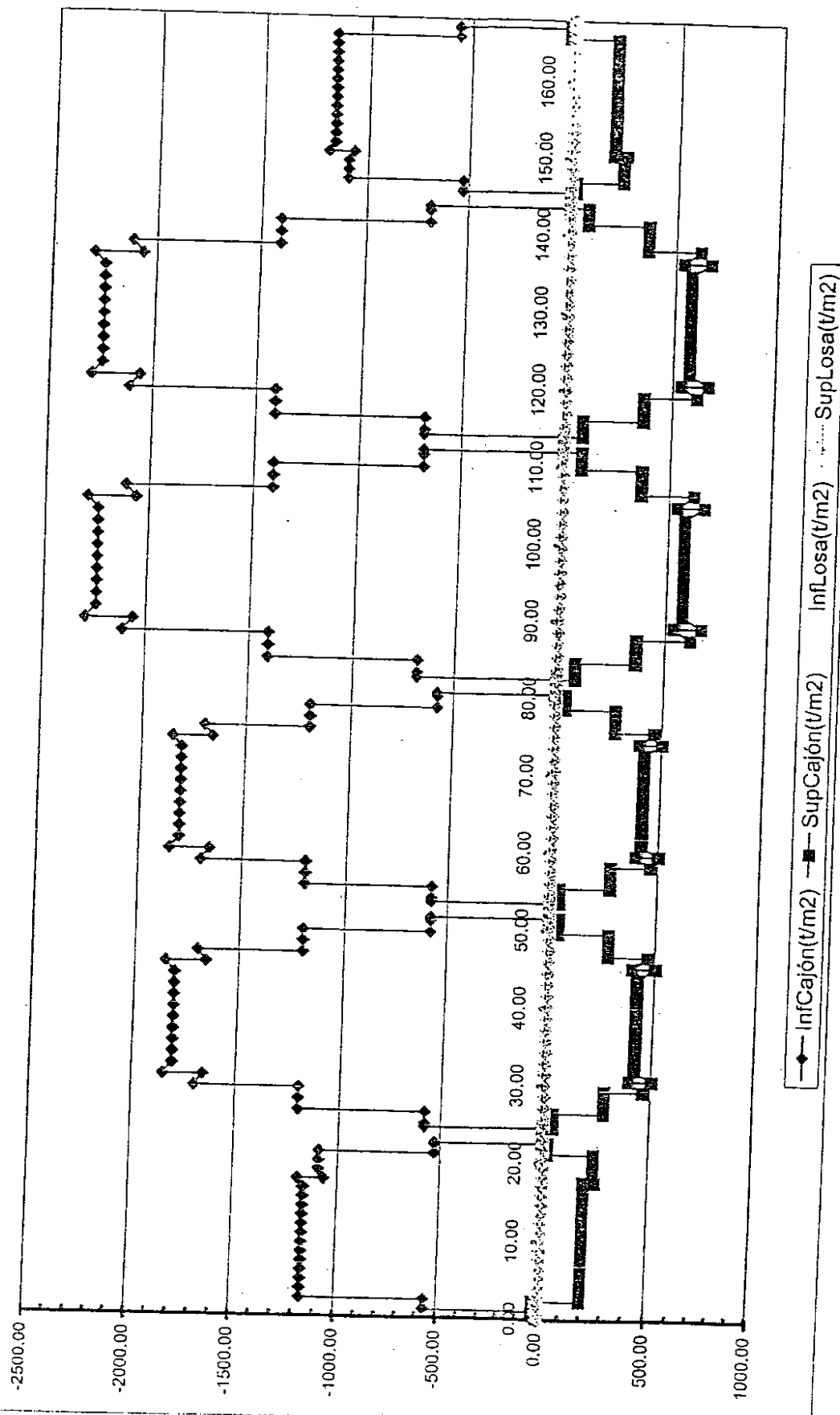
retensado/sostático(t=0)). Tensiones a tiempo To

ifase1.ISO.To

ef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2			
115	116	149.20	-923.44	0.00	-486.88	0	-1093.97	2	242.92	2	0.00	2.35	0.00
116	116	149.20	-923.18	-21.82	-486.75	0	-1093.67	2	242.86	2	0.00	2.35	0.00
116	117	150.38	-923.18	-21.82	-460.90	0	-1067.07	2	198.48	2	0.00	2.35	0.00
117	117	150.38	-923.18	-21.82	-460.90	0	-1190.32	2	253.05	2	0.00	2.35	0.00
117	118	151.55	-923.18	-21.82	-435.05	0	-1162.23	2	200.18	2	0.00	2.35	0.00
118	118	151.55	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
118	119	152.73	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
119	119	152.73	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
119	120	153.90	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
120	120	153.90	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
120	121	155.08	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
121	121	155.08	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
121	122	156.25	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
122	122	156.25	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
122	123	157.43	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
123	123	157.43	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
123	124	158.60	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
124	124	158.60	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
124	125	159.78	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
125	125	159.78	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
125	126	160.95	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
126	126	160.95	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
126	127	162.13	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
127	127	162.13	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
127	128	163.30	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
128	128	163.30	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
128	129	164.48	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
129	129	164.48	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
129	130	165.65	-923.44	0.00	-435.17	0	-1162.56	2	200.24	2	0.00	2.35	0.00
130	130	165.65	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
130	131	166.83	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
131	131	166.83	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
131	132	167.00	-501.48	0.00	-171.87	0	-561.30	2	-23.06	2	0.00	2.35	0.00
132	132	167.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

ipótesis de cálculo:

relasas.To

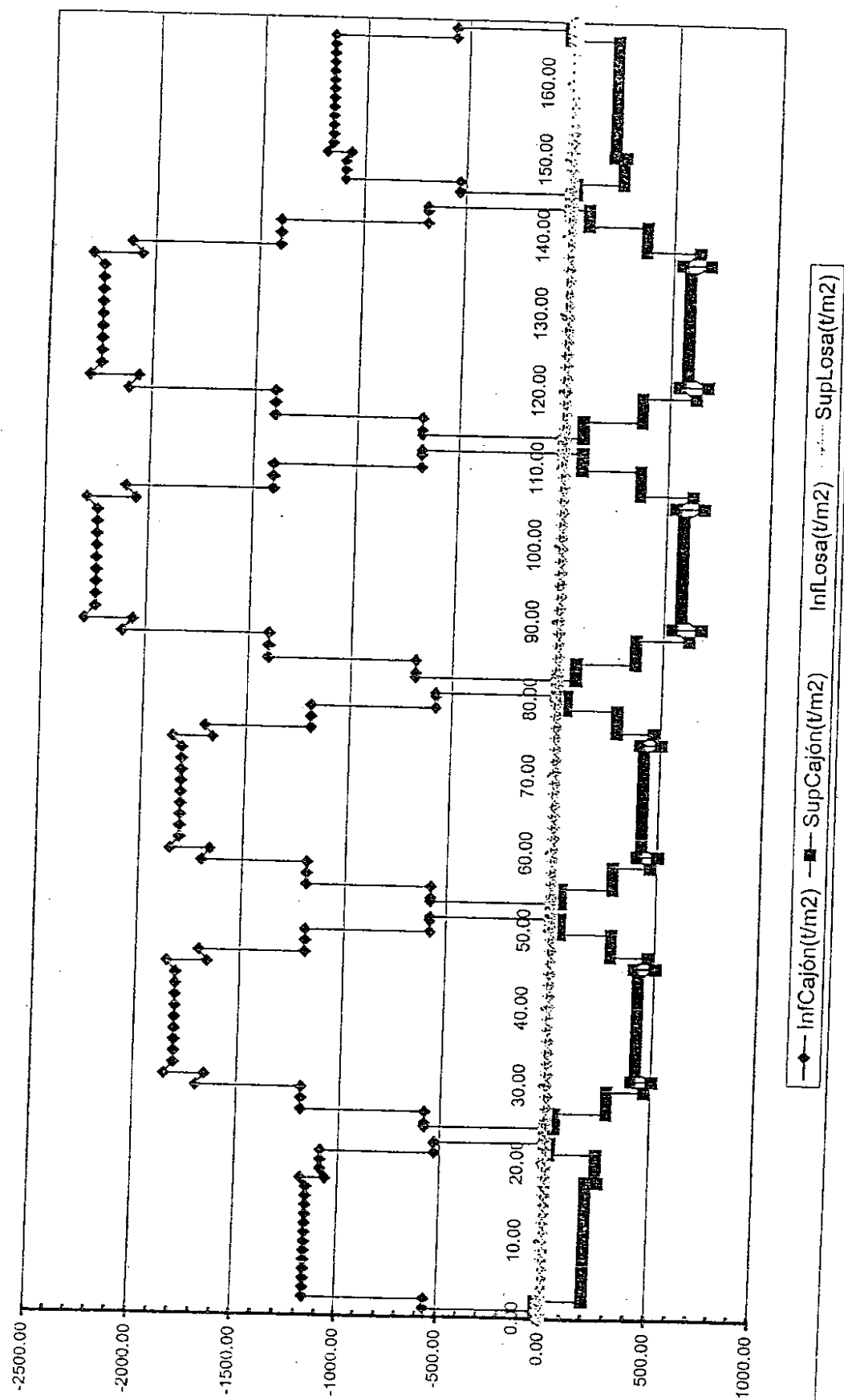
Presopropioprelasas). Tensiones a tiempo To

1) Prelasas

el. etc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (T/m2)	Fibra y fibra	SupCajón sig (T/m2)	Fibra y fibra	InfLosa sig (T/m2)	Fibra y fibra	SupLosa sig (T/m2)
1	1	0.00	0.00	-11.42	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-10.45	10.94	0	11.89	2	-22.37	2	0.00	2.35	0.00
2	2	1.00	0.00	-10.45	10.94	0	11.89	2	-22.37	2	0.00	2.35	0.00
2	3	1.18	0.00	-10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
3	3	1.18	0.00	-10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
3	4	2.35	0.00	-9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
4	4	2.35	0.00	-9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
4	5	3.53	0.00	-7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
5	5	3.53	0.00	-7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
5	6	4.70	0.00	-6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
6	6	4.70	0.00	-6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
6	7	5.88	0.00	-5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
7	7	5.88	0.00	-5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
7	8	7.05	0.00	-4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
8	8	7.05	0.00	-4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
8	9	8.23	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
9	9	8.23	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
9	10	9.40	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
10	10	9.40	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
10	11	10.58	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
11	11	10.58	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
11	12	11.75	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
12	12	11.75	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
12	13	12.93	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
13	13	12.93	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
13	14	14.10	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
14	14	14.10	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
14	15	15.28	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
15	15	15.28	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
15	16	16.45	0.00	4.57	56.37	0	61.26	2	-115.27	2	0.00	2.35	0.00
16	16	16.45	0.11	4.57	56.37	0	61.34	2	-115.19	2	0.00	2.35	0.00
16	17	17.63	0.13	5.71	50.33	0	54.79	2	-102.83	2	0.00	2.35	0.00
17	17	17.63	0.13	5.71	50.33	0	54.79	2	-102.83	2	0.00	2.35	0.00
17	18	18.80	0.16	6.85	42.95	0	44.30	2	-73.63	2	0.00	2.35	0.00
18	18	18.80	0.00	6.85	42.95	0	44.20	2	-73.74	2	0.00	2.35	0.00
18	19	19.98	0.00	8.00	34.22	0	35.21	2	-58.75	2	0.00	2.35	0.00
19	19	19.98	0.00	8.00	34.22	0	35.21	2	-58.75	2	0.00	2.35	0.00
19	20	21.15	0.00	9.14	24.16	0	24.86	2	-41.48	2	0.00	2.35	0.00
20	20	21.15	0.00	9.14	24.16	0	24.86	2	-41.48	2	0.00	2.35	0.00
20	21	22.33	0.00	10.28	12.75	0	13.12	2	-21.89	2	0.00	2.35	0.00
21	21	22.33	0.00	10.28	12.75	0	13.12	2	-21.89	2	0.00	2.35	0.00
21	22	22.50	0.00	10.45	10.94	0	11.26	2	-18.78	2	0.00	2.35	0.00
22	22	22.50	0.00	10.45	10.94	0	11.26	2	-18.78	2	0.00	2.35	0.00
22	23	23.50	0.00	11.42	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	1023	23.50	0.00	-14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	24	24.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
24	24	24.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
24	25	24.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
25	25	24.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
25	26	26.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
26	26	26.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
26	27	27.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
27	27	27.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
27	28	29.30	0.00	-8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
28	28	29.30	0.16	-8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
28	29	30.75	0.13	-7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
29	29	30.75	0.13	-7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
29	30	32.20	0.11	-5.64	85.84	0	83.36	2	-156.63	2	0.00	2.35	0.00
30	30	32.20	0.00	-5.64	85.84	0	83.36	2	-156.63	2	0.00	2.35	0.00
30	31	33.65	0.00	-4.23	92.99	0	93.28	2	-175.54	2	0.00	2.35	0.00
31	31	33.65	0.00	-4.23	92.99	0	93.28	2	-175.54	2	0.00	2.35	0.00
31	32	35.10	0.00	-2.82	98.10	0	101.05	2	-190.16	2	0.00	2.35	0.00
32	32	35.10	0.00	-2.82	98.10	0	101.05	2	-190.16	2	0.00	2.35	0.00
32	33	36.55	0.00	-1.41	101.16	0	106.60	2	-200.61	2	0.00	2.35	0.00
33	33	36.55	0.00	-1.41	101.16	0	106.60	2	-200.61	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	102.19	0	109.93	2	-206.87	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	102.19	0	109.93	2	-206.87	2	0.00	2.35	0.00
34	35	39.45	0.00	1.41	101.16	0	111.05	2	-208.97	2	0.00	2.35	0.00
35	35	39.45	0.00	1.41	101.16	0	111.05	2	-208.97	2	0.00	2.35	0.00
35	36	40.90	0.00	2.82	98.10	0	109.93	2	-206.87	2	0.00	2.35	0.00
36	36	40.90	0.00	2.82	98.10	0	109.93	2	-206.87	2	0.00	2.35	0.00
36	37	42.35	0.00	4.23	92.99	0	106.60	2	-200.61	2	0.00	2.35	0.00
37	37	42.35	0.00	4.23	92.99	0	106.60	2	-200.61	2	0.00	2.35	0.00
37	38	43.80	0.00	5.64	85.84	0	101.05	2	-190.16	2	0.00	2.35	0.00
38	38	43.80	0.11	5.64	85.84	0	93.28	2	-175.54	2	0.00	2.35	0.00
38	39	45.25	0.13	7.05	76.64	0	83.36	2	-156.63	2	0.00	2.35	0.00

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

ipótesis de cálculo:

relasas.To

resopropioprelasas). Tensiones a tiempo To

1) Prelasas

ref. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m²)	Fibra y fibra	SupCajón sig (t/m²)	Fibra y fibra	InfLosas sig (t/m²)	Fibra y fibra	SupLosas sig (t/m²)
1	1	0.00	0.00	-11.42	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-10.45	10.94	0	11.89	2	-22.37	2	0.00	2.35	0.00
2	2	1.00	0.00	-10.45	10.94	0	11.89	2	-22.37	2	0.00	2.35	0.00
2	3	1.18	0.00	-10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
3	3	1.18	0.00	-10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
3	4	2.35	0.00	-9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
4	4	2.35	0.00	-9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
4	5	3.53	0.00	-7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
5	5	3.53	0.00	-7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
5	6	4.70	0.00	-6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
6	6	4.70	0.00	-6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
6	7	5.88	0.00	-5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
7	7	5.88	0.00	-5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
7	8	7.05	0.00	-4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
8	8	7.05	0.00	-4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
8	9	8.23	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
9	9	8.23	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
9	10	9.40	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
10	10	9.40	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
10	11	10.58	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
11	11	10.58	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
11	12	11.75	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
12	12	11.75	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
12	13	12.93	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
13	13	12.93	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
13	14	14.10	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
14	14	14.10	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
14	15	15.28	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
15	15	15.28	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
15	16	16.45	0.00	4.57	56.37	0	61.26	2	-115.27	2	0.00	2.35	0.00
16	16	16.45	0.11	4.57	56.37	0	61.34	2	-115.19	2	0.00	2.35	0.00
16	17	17.63	0.13	5.71	50.33	0	54.79	2	-102.83	2	0.00	2.35	0.00
17	17	17.63	0.13	5.71	50.33	0	51.88	2	-86.32	2	0.00	2.35	0.00
17	18	18.80	0.16	6.85	42.95	0	44.30	2	-73.63	2	0.00	2.35	0.00
18	18	18.80	0.00	6.85	42.95	0	44.20	2	-73.74	2	0.00	2.35	0.00
18	19	19.98	0.00	8.00	34.22	0	35.21	2	-58.75	2	0.00	2.35	0.00
19	19	19.98	0.00	8.00	34.22	0	35.21	2	-58.75	2	0.00	2.35	0.00
19	20	21.15	0.00	9.14	24.16	0	24.86	2	-41.48	2	0.00	2.35	0.00
20	20	21.15	0.00	9.14	24.16	0	24.86	2	-41.48	2	0.00	2.35	0.00
20	21	22.33	0.00	10.28	12.75	0	13.12	2	-21.89	2	0.00	2.35	0.00
21	21	22.33	0.00	10.28	12.75	0	13.12	2	-21.89	2	0.00	2.35	0.00
21	22	22.50	0.00	10.45	10.94	0	11.26	2	-18.78	2	0.00	2.35	0.00
22	22	22.50	0.00	10.45	10.94	0	11.26	2	-18.78	2	0.00	2.35	0.00
22	23	23.50	0.00	11.42	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	1023	23.50	0.00	-14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	24	24.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
24	24	24.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
24	25	24.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
25	25	24.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
25	26	26.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
26	26	26.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
26	27	27.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
27	27	27.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
27	28	29.30	0.00	-8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
28	28	29.30	0.16	-8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
28	29	30.75	0.13	-7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
29	29	30.75	0.13	-7.05	76.64	0	83.38	2	-156.63	2	0.00	2.35	0.00
29	30	32.20	0.11	-5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
30	30	32.20	0.00	-5.64	85.84	0	93.28	2	-175.54	2	0.00	2.35	0.00
30	31	33.65	0.00	-4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
31	31	33.65	0.00	-4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
31	32	35.10	0.00	-2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
32	32	35.10	0.00	-2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
32	33	36.55	0.00	-1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
33	33	36.55	0.00	-1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	102.19	0	111.05	2	-208.97	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	102.19	0	111.05	2	-208.97	2	0.00	2.35	0.00
34	35	39.45	0.00	1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
35	35	39.45	0.00	1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
35	36	40.90	0.00	2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
36	36	40.90	0.00	2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
36	37	42.35	0.00	4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
37	37	42.35	0.00	4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
37	38	43.80	0.00	5.64	85.84	0	93.28	2	-175.54	2	0.00	2.35	0.00
38	38	43.80	0.11	5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
38	39	45.25	0.13	7.05	76.64	0	83.38	2	-156.63	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

ipótesis de cálculo:

relasas.To

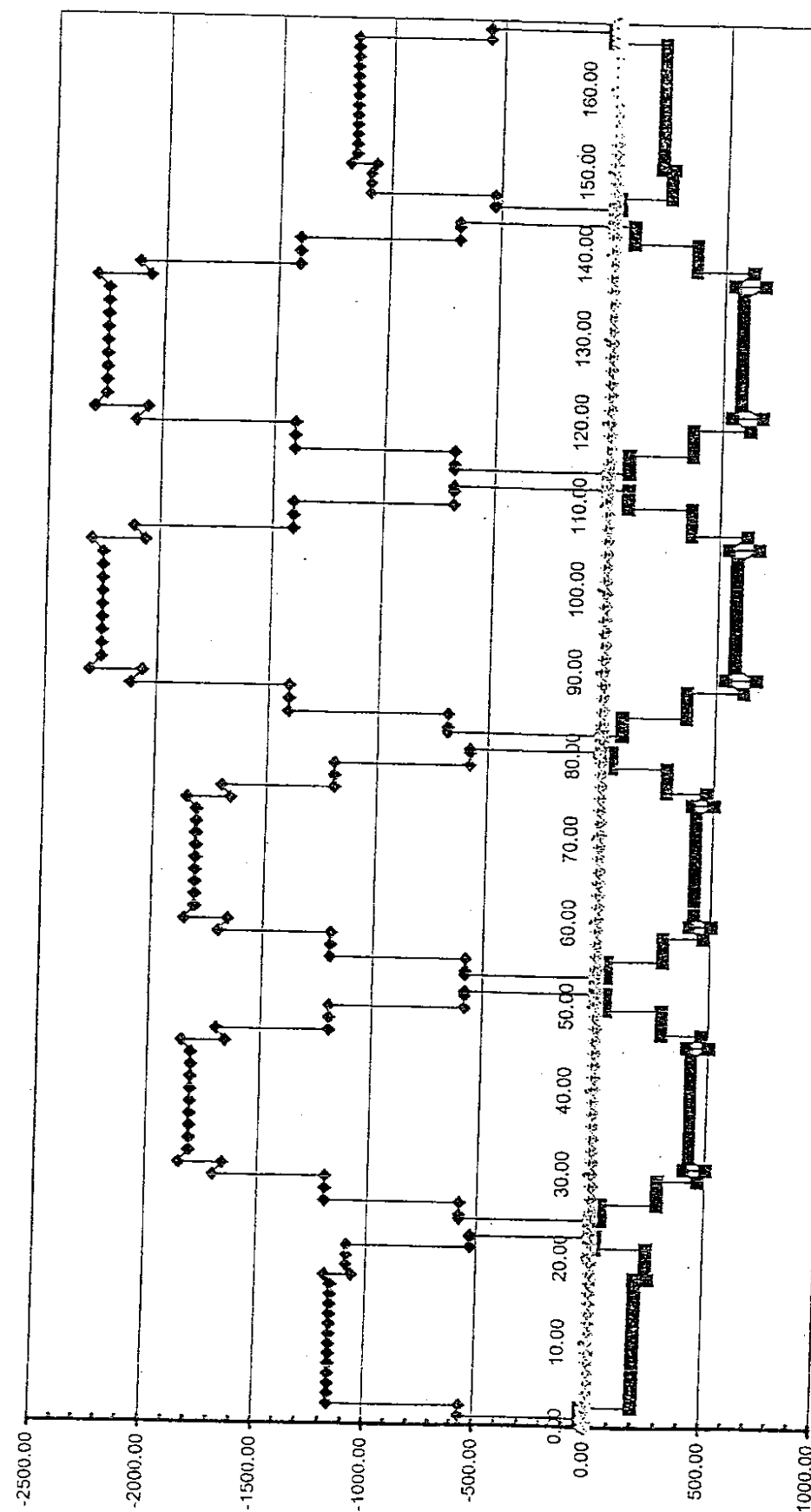
esopropioprelasas). Tensiones a tiempo To

1)Prelosas

-el. etc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosá sig (t/m2)	Fibra y fibra	SupLosá sig (t/m2)
1	1	0.00	0.00	-11.42	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-10.45	10.94	0	11.89	2	-22.37	2	0.00	2.35	0.00
2	2	1.00	0.00	-10.45	10.94	0	11.89	2	-22.37	2	0.00	2.35	0.00
2	3	1.18	0.00	-10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
3	3	1.18	0.00	-10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
3	4	2.35	0.00	-9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
4	4	2.35	0.00	-9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
4	5	3.53	0.00	-7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
5	5	3.53	0.00	-7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
5	6	4.70	0.00	-6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
6	6	4.70	0.00	-6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
6	7	5.88	0.00	-5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
7	7	5.88	0.00	-5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
7	8	7.05	0.00	-4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
8	8	7.05	0.00	-4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
8	9	8.23	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
9	9	8.23	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
9	10	9.40	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
10	10	9.40	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
10	11	10.58	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
11	11	10.58	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
11	12	11.75	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
12	12	11.75	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
12	13	12.93	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
13	13	12.93	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
13	14	14.10	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
14	14	14.10	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
14	15	15.28	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
15	15	15.28	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
15	16	16.45	0.00	4.57	56.37	0	61.26	2	-115.27	2	0.00	2.35	0.00
16	16	16.45	0.11	4.57	56.37	0	61.34	2	-115.19	2	0.00	2.35	0.00
16	17	17.63	0.13	5.71	50.33	0	54.79	2	-102.83	2	0.00	2.35	0.00
17	17	17.63	0.13	5.71	50.33	0	51.88	2	-86.32	2	0.00	2.35	0.00
17	18	18.80	0.16	6.85	42.95	0	44.30	2	-73.63	2	0.00	2.35	0.00
18	18	18.80	0.00	6.85	42.95	0	44.20	2	-73.74	2	0.00	2.35	0.00
18	19	19.98	0.00	8.00	34.22	0	35.21	2	-58.75	2	0.00	2.35	0.00
19	19	19.98	0.00	8.00	34.22	0	35.21	2	-58.75	2	0.00	2.35	0.00
19	20	21.15	0.00	9.14	24.16	0	24.86	2	-41.48	2	0.00	2.35	0.00
20	20	21.15	0.00	9.14	24.16	0	24.86	2	-41.48	2	0.00	2.35	0.00
20	21	22.33	0.00	10.28	12.75	0	13.12	2	-21.89	2	0.00	2.35	0.00
21	21	22.33	0.00	10.28	12.75	0	13.12	2	-21.89	2	0.00	2.35	0.00
21	22	22.50	0.00	10.45	10.94	0	11.26	2	-18.78	2	0.00	2.35	0.00
22	22	22.50	0.00	10.45	10.94	0	11.26	2	-18.78	2	0.00	2.35	0.00
22	23	23.50	0.00	11.42	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	1023	23.50	0.00	-14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	24	24.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
24	24	24.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
24	25	24.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
25	25	24.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
25	26	26.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
26	26	26.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
26	27	27.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
27	27	27.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
27	28	29.30	0.00	-8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
28	28	29.30	0.16	-8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
28	29	30.75	0.13	-7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
29	29	30.75	0.13	-7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
29	30	32.20	0.11	-5.64	85.84	0	83.38	2	-156.63	2	0.00	2.35	0.00
30	30	32.20	0.00	-5.64	85.84	0	83.38	2	-156.63	2	0.00	2.35	0.00
30	31	33.65	0.00	-4.23	92.99	0	93.36	2	-175.46	2	0.00	2.35	0.00
31	31	33.65	0.00	-4.23	92.99	0	93.36	2	-175.46	2	0.00	2.35	0.00
31	32	35.10	0.00	-2.82	98.10	0	101.05	2	-190.16	2	0.00	2.35	0.00
32	32	35.10	0.00	-2.82	98.10	0	101.05	2	-190.16	2	0.00	2.35	0.00
32	33	36.55	0.00	-1.41	101.16	0	106.60	2	-200.61	2	0.00	2.35	0.00
33	33	36.55	0.00	-1.41	101.16	0	106.60	2	-200.61	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	102.19	0	109.93	2	-206.87	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	102.19	0	109.93	2	-206.87	2	0.00	2.35	0.00
34	35	39.45	0.00	1.41	101.16	0	111.05	2	-208.97	2	0.00	2.35	0.00
35	35	39.45	0.00	1.41	101.16	0	111.05	2	-208.97	2	0.00	2.35	0.00
35	36	40.90	0.00	2.82	98.10	0	109.93	2	-206.87	2	0.00	2.35	0.00
36	36	40.90	0.00	2.82	98.10	0	109.93	2	-206.87	2	0.00	2.35	0.00
36	37	42.35	0.00	4.23	92.99	0	106.60	2	-200.61	2	0.00	2.35	0.00
37	37	42.35	0.00	4.23	92.99	0	106.60	2	-200.61	2	0.00	2.35	0.00
37	38	43.80	0.00	5.64	85.84	0	101.05	2	-190.16	2	0.00	2.35	0.00
38	38	43.80	0.11	5.64	85.84	0	93.28	2	-175.54	2	0.00	2.35	0.00
38	39	45.25	0.13	7.05	76.64	0	83.38	2	-156.63	2	0.00	2.35	0.00

GRÁFICO DE TENSIONES



—●— InfCajón(t/m2) —■— SupCajón(t/m2) —+— InfLosá(t/m2) —x— SupLosá(t/m2)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Prelosas.To

(Pesopropioprelasas). Tensiones a tiempo To

Prelosas

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	0.13	7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
39	40	46.70	0.16	8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
40	40	46.70	0.00	8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
40	41	48.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
41	41	48.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
41	42	49.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
42	42	49.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
42	43	51.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
43	43	51.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
43	44	51.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
44	44	51.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
44	45	52.50	0.00	14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	-14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
46	46	53.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
46	47	53.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
47	47	53.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
47	48	55.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
48	48	55.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
48	49	56.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
49	49	56.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
49	50	58.30	0.00	-8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
50	50	58.30	0.16	-8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
50	51	59.75	0.13	-7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
51	51	59.75	0.13	-7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
51	52	61.20	0.11	-5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
52	52	61.20	0.00	-5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
52	53	62.65	0.00	-4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
53	53	62.65	0.00	-4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
53	54	64.10	0.00	-2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
54	54	64.10	0.00	-2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
54	55	65.55	0.00	-1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
55	55	65.55	0.00	-1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	102.19	0	111.05	2	-208.97	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	102.19	0	111.05	2	-208.97	2	0.00	2.35	0.00
56	57	68.45	0.00	1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
57	57	68.45	0.00	1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
57	58	69.90	0.00	2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
58	58	69.90	0.00	2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
58	59	71.35	0.00	4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
59	59	71.35	0.00	4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
59	60	72.80	0.00	5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
60	60	72.80	0.11	5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
60	61	74.25	0.13	7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
61	61	74.25	0.13	7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
62	62	75.70	0.16	8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
62	62	75.70	0.00	8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
63	63	77.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
63	63	77.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
64	64	78.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
64	64	78.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
65	65	80.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
65	65	80.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
66	66	80.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
66	66	80.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
67	1067	81.50	0.00	-15.31	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	-14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
68	68	82.50	0.00	-14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
68	69	83.08	0.00	-13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
69	69	83.08	0.00	-13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
69	70	84.65	0.00	-12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
70	70	84.65	0.00	-12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
70	71	86.23	0.00	-10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
71	71	86.23	0.00	-10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
71	72	87.80	0.00	-9.19	77.16	0	79.40	2	-132.47	2	0.00	2.35	0.00
72	72	87.80	0.16	-9.19	77.16	0	79.40	2	-132.47	2	0.00	2.35	0.00
72	73	89.38	0.13	-7.65	90.42	0	93.13	2	-184.81	2	0.00	2.35	0.00
73	73	89.38	0.13	-7.65	90.42	0	93.13	2	-184.81	2	0.00	2.35	0.00
73	74	90.95	0.11	-6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
74	74	90.95	0.00	-6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
75	75	92.53	0.00	-4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
75	75	92.53	0.00	-4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
76	76	94.10	0.00	-3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
76	76	94.10	0.00	-3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
77	77	95.68	0.00	-1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Prelosas.To

(Pesopropioprelasas). Tensiones a tiempo To

Prelosas

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	-1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	120.56	0	131.01	2	-246.54	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	120.56	0	131.01	2	-246.54	2	0.00	2.35	0.00
78	79	98.83	0.00	1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
79	79	98.83	0.00	1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
80	80	100.40	0.00	3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
80	81	101.98	0.00	3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
81	81	101.98	0.00	4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
81	82	103.55	0.00	4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
82	82	103.55	0.11	6.12	101.27	0	110.05	2	-207.09	2	0.00	2.35	0.00
82	83	105.13	0.13	7.65	90.42	0	98.35	2	-184.81	2	0.00	2.35	0.00
83	83	105.13	0.13	7.65	90.42	0	98.35	2	-184.81	2	0.00	2.35	0.00
84	84	106.70	0.16	9.18	77.16	0	79.50	2	-132.36	2	0.00	2.35	0.00
84	84	106.70	0.00	9.18	77.16	0	79.50	2	-132.36	2	0.00	2.35	0.00
85	85	108.28	0.00	10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
85	85	108.28	0.00	10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
86	86	109.85	0.00	12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
86	86	109.85	0.00	12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pretoslas.To

(isopropiopretoslas). Tensiones a tiempo To

Pretoslas

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	0.13	7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
39	40	46.70	0.16	8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
40	40	46.70	0.00	8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
40	41	48.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
41	41	48.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
41	42	49.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
42	42	49.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
42	43	51.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
43	43	51.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
43	44	51.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
44	44	51.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
44	45	52.50	0.00	14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	-14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
46	46	53.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
46	47	53.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
47	47	53.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
47	48	55.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
48	48	55.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
48	49	56.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
49	49	56.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
49	50	58.30	0.00	-8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
50	50	58.30	0.16	-8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
50	51	59.75	0.13	-7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
51	51	59.75	0.13	-7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
51	52	61.20	0.11	-5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
52	52	61.20	0.00	-5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
52	53	62.65	0.00	-4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
53	53	62.65	0.00	-4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
53	54	64.10	0.00	-2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
54	54	64.10	0.00	-2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
54	55	65.55	0.00	-1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
55	55	65.55	0.00	-1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	102.19	0	111.05	2	-208.97	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	102.19	0	111.05	2	-208.97	2	0.00	2.35	0.00
56	57	68.45	0.00	1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
57	57	68.45	0.00	1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
57	58	69.90	0.00	2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
58	58	69.90	0.00	2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
58	59	71.35	0.00	4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
59	59	71.35	0.00	4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
59	60	72.80	0.00	5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
60	60	72.80	0.11	5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
60	61	74.25	0.13	7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
61	61	74.25	0.13	7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
61	62	75.70	0.16	8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
62	62	75.70	0.00	8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
62	63	77.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
63	63	77.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
63	64	78.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
64	64	78.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
64	65	80.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
65	65	80.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
65	66	80.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
66	66	80.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
66	67	81.50	0.00	14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	1067	81.50	0.00	-15.31	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	-14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
68	68	82.50	0.00	-14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
68	69	83.08	0.00	-13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
69	69	83.08	0.00	-13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
69	70	84.65	0.00	-12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
70	70	84.65	0.00	-12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
70	71	86.23	0.00	-10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
71	71	86.23	0.00	-10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
71	72	87.80	0.00	-9.19	77.16	0	79.40	2	-132.47	2	0.00	2.35	0.00
72	72	87.80	0.16	-9.19	77.16	0	79.40	2	-132.47	2	0.00	2.35	0.00
72	73	89.38	0.13	-7.65	90.42	0	93.13	2	-155.15	2	0.00	2.35	0.00
73	73	89.38	0.13	-7.65	90.42	0	93.13	2	-155.15	2	0.00	2.35	0.00
73	74	90.95	0.11	-6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
74	74	90.95	0.00	-6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
75	75	92.53	0.00	-4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
75	75	92.53	0.00	-4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
75	76	94.10	0.00	-3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
76	76	94.10	0.00	-3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
76	77	95.68	0.00	-1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Pretoslas.To

(Pesopropiopretoslas). Tensiones a tiempo To

Pretoslas

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	-1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	120.56	0	131.01	2	-246.54	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	120.56	0	131.01	2	-246.54	2	0.00	2.35	0.00
78	79	98.83	0.00	1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
79	79	98.83	0.00	1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
79	80	100.40	0.00	3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
80	80	100.40	0.00	3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
80	81	101.98	0.00	4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
81	81	101.98	0.00	4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
81	82	103.55	0.00	6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
82	82	103.55	0.11	6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
82	83	105.13	0.13	7.65	90.42	0	98.35	2	-184.81	2	0.00	2.35	0.00
83	83	105.13	0.13	7.65	90.42	0	98.35	2	-184.81	2	0.00	2.35	0.00
83	84	106.70	0.16	9.18	77.16	0	79.50	2	-132.36	2	0.00	2.35	0.00
84	84	106.70	0.00	9.18	77.16	0	79.50	2	-132.36	2	0.00	2.35	0.00
84	85	108.28	0.00	10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
85	85	108.28	0.00	10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
85	86	109.85	0.00	12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
86	86	109.85	0.00	12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
86	87	111.43	0.00	13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
87	87	111.43	0.00	13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
87	88	112.00	0.00	14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
88	88	112.00	0.00	14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
88	89	113.00	0.00	15.31	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	1089	113.00	0.00	-15.31	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	90	114.00	0.00	-14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
90	90	114.00	0.00	-14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
90	91	114.58	0.00	-13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
91	91	114.58	0.00	-13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
91	92	116.15	0.00	-12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
92	92	116.15	0.00	-12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
92	93	117.73	0.00	-10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
93	93	117.73	0.00	-10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
93	94	119.30	0.00	-9.19	77.16	0	79.50	2	-132.47	2	0.00	2.35	0.00
94	94	119.30	0.16	-9.18	77.16	0	79.50	2	-132.47	2	0.00	2.35	0.00
94	95	120.88	0.13	-7.65	90.42	0	93.13	2	-155.15	2	0.00	2.35	0.00
95	95	120.88	0.13	-7.65	90.42	0	93.13	2	-155.15	2	0.00	2.35	0.00
95	96	122.45	0.11	-6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
96	96	122.45	0.00	-6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
96	97	124.03	0.00	-4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
97	97	124.03	0.00	-4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
97	98	125.60	0.00	-3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
98	98	125.60	0.00	-3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
98	99	127.18	0.00	-1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
99	99	127.18	0.00	-1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
99	100	128.75	0.00	0.00	120.56	0	131.01	2	-246.54	2	0.00	2.35	0.00
100	100	128.75	0.00	0.00	120.56	0	131.01	2	-246.54	2	0.00	2.35	0.00
100	101	130.33	0.00	1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
101	101	130.33	0.00	1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
101	102	131.90	0.00	3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
102	102	131.90	0.00	3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
102	103	133.48	0.00	4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
103	103	133.48	0.00	4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
103	104	135.05	0.00	6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
104	104	135.05	0.11	6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
104	105	136.63	0.13	7.65	90.42	0	98.35	2	-184.81	2	0.00	2.35	0.00
105	105	136.63	0.13	7.65	90.42	0	98.35	2	-184.81	2	0.00	2.35	0.00
105	106	138.20	0.16	9.18	77.16	0	79.50	2	-132.36	2	0.00	2.35	0.00
106	106	138.20	0.00	9.18	77.16	0	79.50	2	-132.36	2	0.00	2.35	0.00
106	107	139.78	0.00	10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
107	107	139.78	0.00	10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
107	108	141.35	0.00	12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
108	108	141.35	0.00	12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
108	109	142.93	0.00	13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
109	109	142.93	0.00	13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
109	110	143.50	0.00	14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
110	110	143.50	0.00	14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
110	111	144.50	0.00	15.31	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	111	144.50	0.00	-11.42	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	112	145.50	0.00	-10.45	10.94	0	11.26	2	-18.78	2	0.00	2.35	0.00
112	112	145.50	0.00	-10.45	10.94	0	11.26	2	-18.78	2	0.00	2.35	0.00
112	113	145.68	0.00	-10.28	12.75	0	13.12	2	-21.89	2	0.00	2.35	0.00
113	113	145.68	0.00	-10.28	12.75	0	13.12	2	-21.89	2	0.00	2.35	0.00
113	114	146.85	0.00	-9.14	24.16	0	24.86	2	-41.48	2	0.00	2.35	0.00
114	114	146.85	0.00	-9.14	24.16	0	24.86	2	-41.48	2	0.00	2.35	0.00
114	115	148.03	0.00	-8.00	34.22	0	35.21	2	-58.75	2	0.00	2.35	0.00

194

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Prelosas.To

(Pesopropioprelasas). Tensiones a tiempo To

Prelosas

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	0.13	7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
39	40	46.70	0.16	8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
40	40	46.70	0.00	8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
40	41	48.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
41	41	48.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
41	42	49.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
42	42	49.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
42	43	51.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
43	43	51.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
43	44	51.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
44	44	51.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
44	45	52.50	0.00	14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	-14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
46	46	53.50	0.00	-13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
46	47	53.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
47	47	53.95	0.00	-12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
47	48	55.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
48	48	55.40	0.00	-11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
48	49	56.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
49	49	56.85	0.00	-9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
49	50	58.30	0.00	-8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
50	50	58.30	0.16	-8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
50	51	59.75	0.13	-7.05	76.64	0	78.95	2	-131.49	2	0.00	2.35	0.00
51	51	59.75	0.13	-7.05	76.64	0	83.38	2	-156.63	2	0.00	2.35	0.00
51	52	61.20	0.11	-5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
52	52	61.20	0.00	-5.64	85.84	0	93.28	2	-175.54	2	0.00	2.35	0.00
52	53	62.65	0.00	-4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
53	53	62.65	0.00	-4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
53	54	64.10	0.00	-2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
54	54	64.10	0.00	-2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
54	55	65.55	0.00	-1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
55	55	65.55	0.00	-1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	102.19	0	111.05	2	-208.97	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	102.19	0	111.05	2	-208.97	2	0.00	2.35	0.00
56	57	68.45	0.00	1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
57	57	68.45	0.00	1.41	101.16	0	109.93	2	-206.87	2	0.00	2.35	0.00
57	58	69.90	0.00	2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
58	58	69.90	0.00	2.82	98.10	0	106.60	2	-200.61	2	0.00	2.35	0.00
58	59	71.35	0.00	4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
59	59	71.35	0.00	4.23	92.99	0	101.05	2	-190.16	2	0.00	2.35	0.00
59	60	72.80	0.00	5.64	85.84	0	93.28	2	-175.54	2	0.00	2.35	0.00
60	60	72.80	0.11	5.64	85.84	0	93.36	2	-175.46	2	0.00	2.35	0.00
60	61	74.25	0.13	7.05	76.64	0	83.38	2	-156.63	2	0.00	2.35	0.00
61	61	74.25	0.13	7.05	76.64	0	83.38	2	-156.63	2	0.00	2.35	0.00
62	62	75.70	0.16	8.46	65.40	0	67.40	2	-112.18	2	0.00	2.35	0.00
62	63	77.15	0.00	8.46	65.40	0	67.30	2	-112.28	2	0.00	2.35	0.00
63	63	77.15	0.00	9.87	52.11	0	53.62	2	-89.46	2	0.00	2.35	0.00
63	64	78.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
64	64	78.60	0.00	11.28	36.79	0	37.86	2	-63.16	2	0.00	2.35	0.00
64	65	80.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
65	65	80.05	0.00	12.69	19.42	0	19.98	2	-33.34	2	0.00	2.35	0.00
65	66	80.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
66	66	80.50	0.00	13.12	13.61	0	14.01	2	-23.37	2	0.00	2.35	0.00
66	67	81.50	0.00	14.09	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	1057	81.50	0.00	-15.31	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	-14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
68	68	82.50	0.00	-14.34	14.82	0	15.25	2	-25.44	2	0.00	2.35	0.00
68	69	83.08	0.00	-13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
69	69	83.08	0.00	-13.78	22.91	0	23.58	2	-39.33	2	0.00	2.35	0.00
69	70	84.65	0.00	-12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
70	70	84.65	0.00	-12.25	43.40	0	44.66	2	-74.51	2	0.00	2.35	0.00
70	71	86.23	0.00	-10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
71	71	86.23	0.00	-10.72	61.49	0	63.28	2	-105.57	2	0.00	2.35	0.00
71	72	87.80	0.00	-9.19	77.16	0	79.40	2	-132.47	2	0.00	2.35	0.00
72	72	87.80	0.16	-9.19	77.16	0	79.50	2	-132.36	2	0.00	2.35	0.00
72	73	89.38	0.13	-7.65	90.42	0	93.13	2	-155.15	2	0.00	2.35	0.00
73	73	89.38	0.13	-7.65	90.42	0	93.13	2	-155.15	2	0.00	2.35	0.00
73	74	90.95	0.11	-6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
74	74	90.95	0.00	-6.12	101.27	0	110.13	2	-207.01	2	0.00	2.35	0.00
75	75	92.53	0.00	-4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
75	75	92.53	0.00	-4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
75	76	94.10	0.00	-3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
76	76	94.10	0.00	-3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
76	77	95.68	0.00	-1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Prelosas.To

(Pesopropioprelasas). Tensiones a tiempo To

Prelosas

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	-1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	120.56	0	131.01	2	-246.54	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	120.56	0	131.01	2	-246.54	2	0.00	2.35	0.00
78	79	98.83	0.00	1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
79	79	98.83	0.00	1.53	119.36	0	129.71	2	-244.09	2	0.00	2.35	0.00
79	80	100.40	0.00	3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
80	80	100.40	0.00	3.06	115.74	0	125.77	2	-236.68	2	0.00	2.35	0.00
80	81	101.98	0.00	4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
81	81	101.98	0.00	4.59	109.71	0	119.22	2	-224.35	2	0.00	2.35	0.00
81	82	103.55	0.00	6.12	101.27	0	110.05	2	-207.09	2	0.00	2.35	0.00
82	82	103.55	0.11	6.12	101.27	0	110.05	2	-207.09	2	0.00	2.35	0.00
82	83	105.13	0.13	7.65	90.42	0	98.35	2	-184.81	2	0.00	2.35	0.00
83	83	105.13	0.13	7.65	90.42	0	98.35	2	-184.81	2	0.00	2.35	0.00
83	84	106.70	0.16	9.18	77.16	0	93.13	2	-155.15	2	0.00	2.35	0.00
84	84	106.70	0.00	9.18	77.16	0	93.13	2	-155.15	2	0.00	2.35	0.00
84	85	108.28	0.00	10.72	61.49	0	79.50	2	-132.36	2	0.00	2.35	0.00
85	85	108.28	0.00	10.72	61.49	0	79.50	2	-132.36	2	0.00	2.35	0.00
85	86	109.85	0.00	12.25	43.40	0	63.28	2	-105.57	2	0.00	2.35	0.00
86	86	109.85	0.00	12.25	43.40	0	63.28	2	-105.57	2	0.00	2.35	0.00
86	87	111.43	0.00	13.78	22.91	0	44.66	2	-74.51	2	0.00	2.35	0.00
87	87	111.43	0.00	13.78	22.91	0	44.66	2	-74.51	2	0.00	2.35	0.00
87	88	112.00	0.00	14.34	14.82	0	23.58	2	-39.33	2	0.00	2.35	0.00
88	88	112.00	0.00	14.34	14.82	0	23.58	2	-39.33	2	0.00	2.35	0.00
88	89	113.00	0.00	15.31	0.00	0	15.25	2	-25.44	2	0.00	2.35	0.00
89	1089	113.00	0.00	-15.31	0.00	0	15.25	2	-25.44	2	0.00	2.35	0.00
89	90	114.00	0.00	-14.34	14.82	0	0.00	2	0.00	2	0.00	2.35	0.00
90	90	114.00	0.00	-14.34	14.82	0	0.00	2	0.00	2	0.00	2.35	0.00
90	91	114.58	0.00	-13.78	22.91	0	15.25	2	-25.44	2	0.00	2.35	0.00
91	91	114.58	0.00	-13.78	22.91	0	15.25	2	-25.44	2	0.00	2.35	0.00
91	92	116.15	0.00	-12.25	43.40	0	23.58	2	-39.33	2	0.00	2.35	0.00
92	92	116.15	0.00	-12.25	43.40	0	23.58	2	-39.33	2	0.00	2.35	0.00
92	93	117.73	0.00	-10.72	61.49	0	44.66	2	-74.51	2	0.00	2.35	0.00
93	93	117.73	0.00	-10.72	61.49	0	44.66	2	-74.51	2	0.00	2.35	0.00
93	94	119.30	0.00	-9.19	77.16	0	63.28	2	-105.57	2	0.00	2.35	0.00
94	94	119.30	0.16	-9.18	77.16	0	63.28	2	-105.57	2	0.00	2.35	0.00
94	95	120.88	0.13	-7.65	90.42	0	79.50	2	-132.47	2	0.00	2.35	0.00
95	95	120.88	0.13	-7.65	90.42	0	79.50	2	-132.47	2	0.00	2.35	0.00
95	96	122.45	0.11	-6.12	101.27	0	93.13	2	-155.15	2	0.00	2.35	0.00
96	96	122.45	0.00	-6.12	101.27	0	98.35	2	-184.81	2	0.00	2.35	0.00
96	97	124.03	0.00	-4.59	109.71	0	110.13	2	-207.01	2	0.00	2.35	0.00
97	97	124.03	0.00	-4.59	109.71	0	110.13	2	-207.01	2	0.00	2.35	0.00
97	98	125.60	0.00	-3.06	115.74	0	119.22	2	-224.35	2	0.00	2.35	0.00
98	98	125.60	0.00	-3.06	115.74	0	119.22	2	-224.35	2	0.00	2.35	0.00
98	99	127.18	0.00	-1.53	119.36	0	125.77	2	-236.68	2	0.00	2.35	0.00
99	99	127.18	0.00	-1.53	119.36	0	125.77	2	-236.68	2	0.00	2.35	0.00
99	100	128.75	0.00	0.00	120.56	0	129.71	2	-244.09	2	0.00	2.35	0.00
100	100	128.75	0.00	0.00	120.56	0	129.71	2	-244.09	2	0.00	2.35	0.00
100	101	130.33	0.00	1.53	119.36	0	131.01	2	-246.54	2	0.00	2.35	0.00
101	101	130.33	0.00	1.53	119.36	0	131.01	2	-246.54	2	0.00	2.35	0.00
101	102	131.90	0.00	3.06	115.74	0	129.71	2	-244.09	2	0.00	2.35	0.00
102	102	131.90	0.00	3.06	115.74	0	129.71	2	-244.09	2	0.00	2.35	0.00
102	103	133.48	0.00	4.59	109.71	0	125.77	2	-236.68	2	0.00	2.35	0.00
103	103	133.48	0.00	4.59	109.71	0	125.77	2	-236.68	2	0.00	2.35	0.00
103	104	135.05	0.00	6.12	101.27	0	119.22	2	-224.35	2	0.00	2.35	0.00
104	104	135.05	0.11	6.12	101.27	0	119.22	2	-224.35	2	0.00	2.35	0.00
104	105	136.63	0.13	7.65	90.42	0	110.05	2	-207.09	2	0.00	2.35	0.00
105	105	136.63	0.13	7.65	90.42	0	110.05	2	-207.09	2	0.00	2.35	0.00
105	106	138.20	0.16	9.18	77.16	0	98.35	2	-184.81	2	0.00	2.35	0.00
106	106	138.20	0.00	9.18	77.16	0	93.13	2	-155.15	2	0.00	2.35	0.00
106	107	139.78	0.00	10.72	61.49	0	79.50	2	-132.36	2	0.00	2.35	0.00
107	107	139.78	0.00	10.72	61.49	0	79.50	2	-132.36	2	0.00	2.35	0.00
107	108	141.35	0.00	12.25	43.40	0	63.28	2	-105.57	2	0.00	2.35	0.00
108	108	141.35	0.00	12.25	43.40	0	63.28	2	-105.57	2	0.00	2.35	0.00
108	109	142.93	0.00	13.78	22.91	0	44.66	2	-74.51	2	0.00	2.35	0.00
109	109	142.93	0.00	13.78	22.91	0	44.66	2	-74.51	2	0.00	2.35	0.00
109	110	143.50	0.00	14.34	14.82	0	23.58	2	-39.33	2	0.00	2.35	0.00
110	110	143.50	0.00	14.34	14.82	0	23.58	2	-39.33	2	0.00	2.35	0.00
110	111	144.50	0.00	15.31	0.00	0	15.25	2	-25.44	2	0.00	2.35	0.00
111	111	144.50	0.00	-11.42	0.00	0	15.25	2	-25.44	2	0.00	2.35	0.00
111	112	145.50	0.00	-10.45	10.94	0	0.00	2	0.00	2	0.00	2.35	0.00
112	112	145.50	0.00	-10.45	10.94	0	0.00	2	0.00	2	0.00	2.35	0.00
112	113	145.68	0.00	-10.28	12.75	0	11.26	2	-18.78	2	0.00	2.35	0.00
113	113	145.68	0.00	-10.28	12.75	0	11.26	2	-18.78	2	0.00	2.35	0.00
113	114	146.85	0.00	-9.14	24.16	0	13.12	2	-21.89	2	0.00	2.35	0.00
114	114	146.85	0.00	-9.14	24.16	0	13.12	2	-21.89	2	0.00	2.35	0.00
114	115	148.03	0.00	-8.00	34.22	0	24.86	2	-41.48	2	0.00	2.35	0.00
							24.86	2	-41.48	2	0.00	2.35	0.00
							35.21	2	-58.75	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:
Prelosas.To

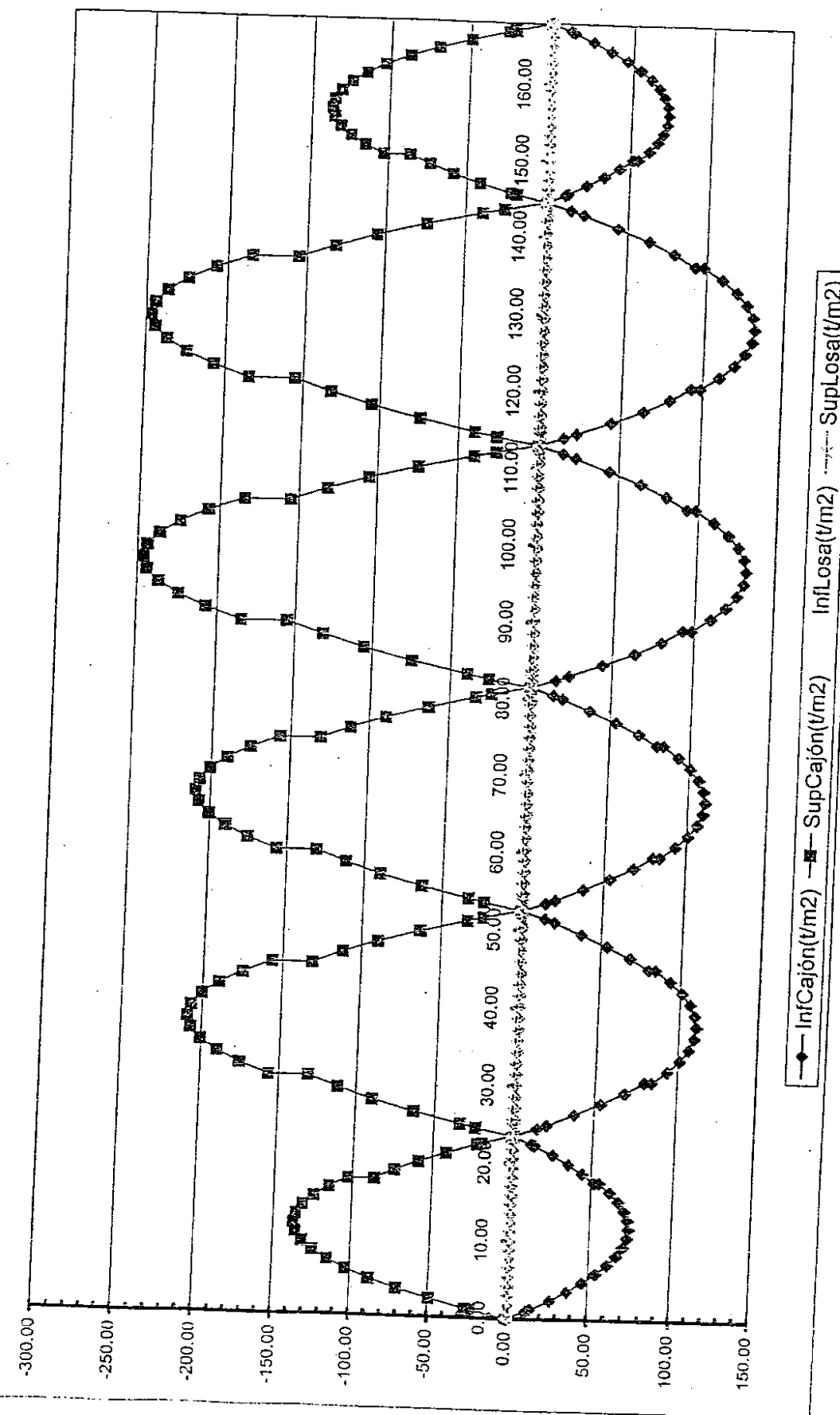
Desapropioprelasas), Tensiones a tiempo To

Prelosas
exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
115	115	148.03	0.00	-8.00	34.22	0	35.21	2	-58.75	2	0.00	2.35	0.00
115	116	149.20	0.00	-6.85	42.95	0	44.20	2	-73.74	2	0.00	2.35	0.00
116	116	149.20	0.16	-6.85	42.95	0	44.30	2	-73.63	2	0.00	2.35	0.00
116	117	150.38	0.13	-5.71	50.33	0	51.88	2	-86.32	2	0.00	2.35	0.00
117	117	150.38	0.13	-5.71	50.33	0	54.79	2	-102.83	2	0.00	2.35	0.00
117	118	151.55	0.11	-4.57	56.37	0	61.34	2	-115.19	2	0.00	2.35	0.00
118	118	151.55	0.00	-4.57	56.37	0	61.26	2	-115.27	2	0.00	2.35	0.00
118	119	152.73	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
119	119	152.73	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
119	120	153.90	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
120	120	153.90	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
120	121	155.08	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
121	121	155.08	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
121	122	156.25	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
122	122	156.25	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
122	123	157.43	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
123	123	157.43	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
123	124	158.60	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
124	124	158.60	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
124	125	159.78	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
125	125	159.78	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
125	126	160.95	0.00	4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
126	126	160.95	0.00	4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
126	127	162.13	0.00	5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
127	127	162.13	0.00	5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
127	128	163.30	0.00	6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
128	128	163.30	0.00	6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
128	129	164.48	0.00	7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
129	129	164.48	0.00	7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
129	130	165.65	0.00	9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
130	130	165.65	0.00	9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
130	131	166.83	0.00	10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
131	131	166.83	0.00	10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
131	132	167.00	0.00	10.45	10.93	0	11.88	2	-22.35	2	0.00	2.35	0.00
132	132	167.00	0.00	10.45	10.93	0	11.88	2	-22.35	2	0.00	2.35	0.00
132	133	168.00	0.00	11.42	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
Prelosas.To

GRÁFICO DE TENSIONES



hsim_10.xls

CÁLCULO TENSIONAL

Hipótesis de cálculo:

Prelosas.To

Despropio (prelosas). Tensiones a tiempo To

Prelosas
etc

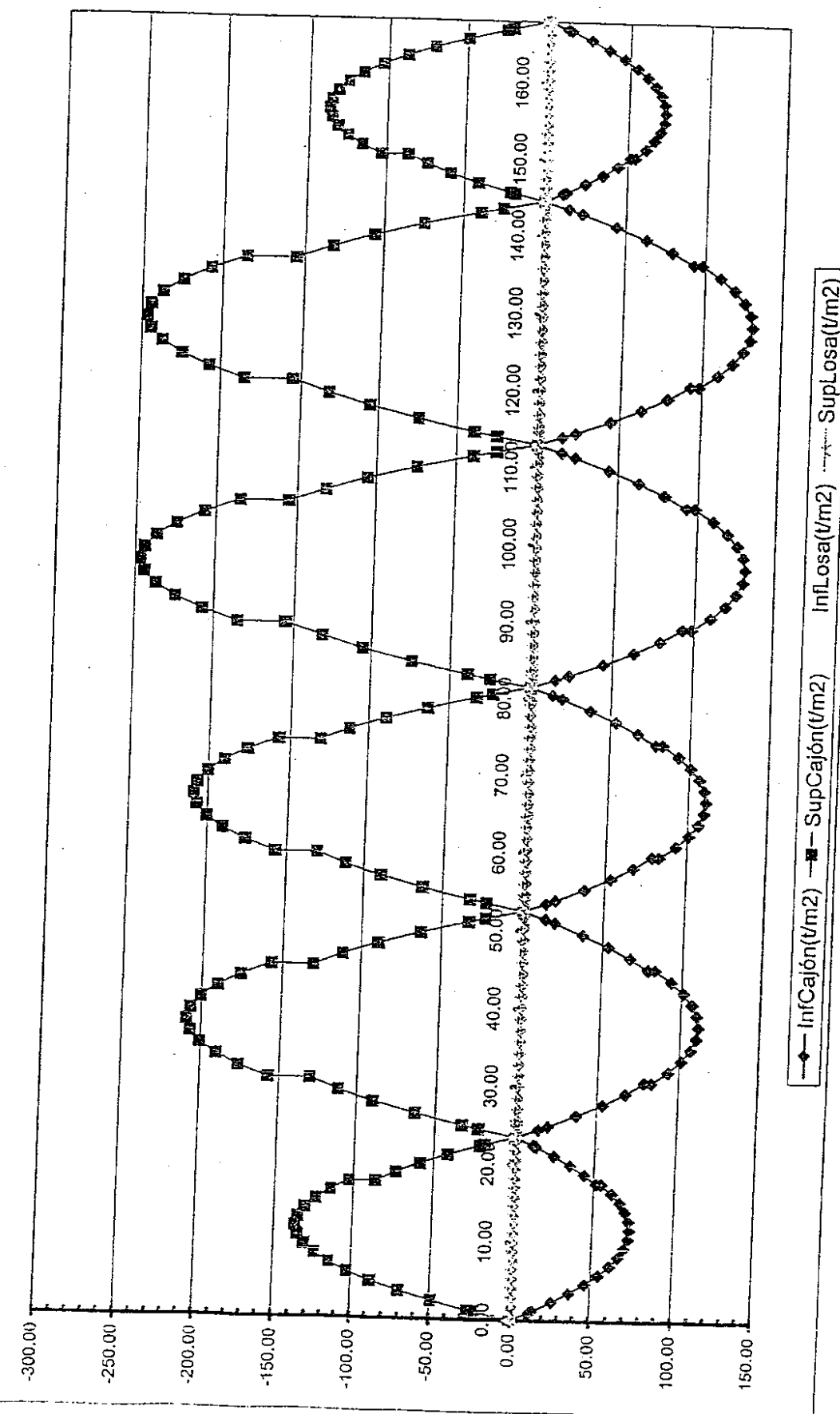
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-8.00	34.22	0	35.21	2	-58.75	2	0.00	2.35	0.00
115	116	149.20	0.00	-6.85	42.95	0	44.20	2	-73.74	2	0.00	2.35	0.00
116	116	149.20	0.16	-6.85	42.95	0	44.30	2	-73.63	2	0.00	2.35	0.00
116	117	150.38	0.13	-5.71	50.33	0	51.88	2	-86.32	2	0.00	2.35	0.00
117	117	150.38	0.13	-5.71	50.33	0	54.79	2	-102.83	2	0.00	2.35	0.00
117	118	151.55	0.11	-4.57	56.37	0	61.34	2	-115.19	2	0.00	2.35	0.00
118	118	151.55	0.00	-4.57	56.37	0	61.26	2	-115.27	2	0.00	2.35	0.00
118	119	152.73	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
119	119	152.73	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
119	120	153.90	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
120	120	153.90	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
120	121	155.08	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
121	121	155.08	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
121	122	156.25	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
122	122	156.25	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
122	123	157.43	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
123	123	157.43	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
123	124	158.60	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
124	124	158.60	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
124	125	159.78	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
125	125	159.78	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
125	126	160.95	0.00	4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
126	126	160.95	0.00	4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
126	127	162.13	0.00	5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
127	127	162.13	0.00	5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
127	128	163.30	0.00	6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
128	128	163.30	0.00	6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
128	129	164.48	0.00	7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
129	129	164.48	0.00	7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
129	130	165.65	0.00	9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
130	130	165.65	0.00	9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
130	131	166.83	0.00	10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
131	131	166.83	0.00	10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
131	132	167.00	0.00	10.45	10.93	0	11.88	2	-22.35	2	0.00	2.35	0.00
132	132	167.00	0.00	10.45	10.93	0	11.88	2	-22.35	2	0.00	2.35	0.00
132	133	168.00	0.00	11.42	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

hsim_10.xls

Programa DINTEL IDEAM S.A.
Prelosas.To

05/09/01

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

Hipótesis de cálculo:
Prelasas.To

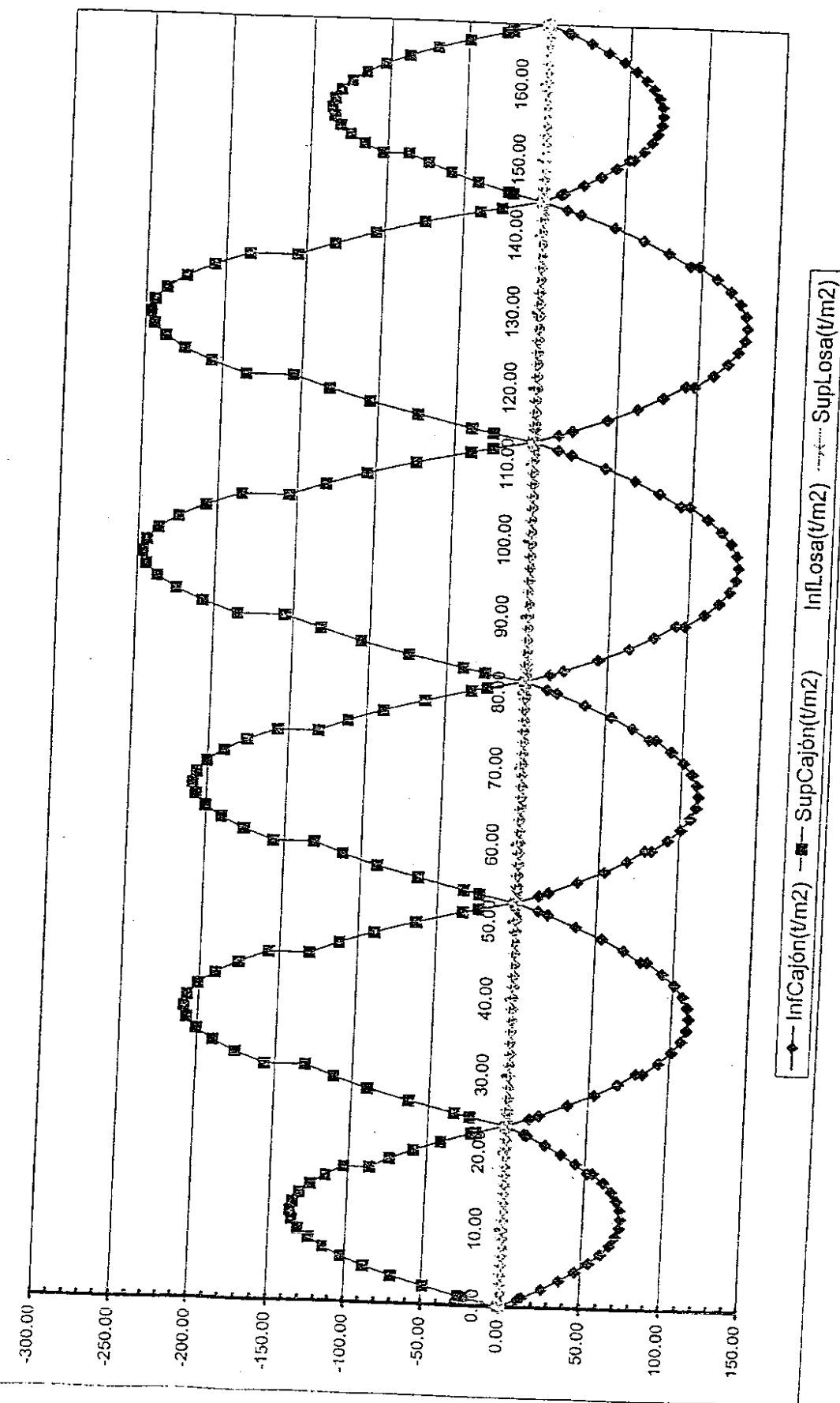
Despropio (prelases). Tensiones a tiempo To

1) Prelasas
2) etc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-8.00	34.22	0	35.21	2	-58.75	2	0.00	2.35	0.00
115	116	149.20	0.00	-6.85	42.95	0	44.20	2	-73.74	2	0.00	2.35	0.00
116	116	149.20	0.16	-6.85	42.95	0	44.30	2	-73.63	2	0.00	2.35	0.00
116	117	150.38	0.13	-5.71	50.33	0	51.88	2	-86.32	2	0.00	2.35	0.00
117	117	150.38	0.13	-5.71	50.33	0	54.79	2	-102.83	2	0.00	2.35	0.00
117	118	151.55	0.11	-4.57	56.37	0	61.34	2	-115.19	2	0.00	2.35	0.00
118	118	151.55	0.00	-4.57	56.37	0	61.26	2	-115.27	2	0.00	2.35	0.00
118	119	152.73	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
119	119	152.73	0.00	-3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
119	120	153.90	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
120	120	153.90	0.00	-2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
120	121	155.08	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
121	121	155.08	0.00	-1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
121	122	156.25	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
122	122	156.25	0.00	0.00	67.10	0	72.92	2	-137.22	2	0.00	2.35	0.00
122	123	157.43	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
123	123	157.43	0.00	1.14	66.43	0	72.19	2	-135.85	2	0.00	2.35	0.00
123	124	158.60	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
124	124	158.60	0.00	2.28	64.42	0	70.00	2	-131.74	2	0.00	2.35	0.00
124	125	159.78	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
125	125	159.78	0.00	3.43	61.06	0	66.35	2	-124.87	2	0.00	2.35	0.00
125	126	160.95	0.00	4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
126	126	160.95	0.00	4.57	56.36	0	61.25	2	-115.25	2	0.00	2.35	0.00
126	127	162.13	0.00	5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
127	127	162.13	0.00	5.71	50.32	0	54.68	2	-102.90	2	0.00	2.35	0.00
127	128	163.30	0.00	6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
128	128	163.30	0.00	6.85	42.94	0	46.66	2	-87.81	2	0.00	2.35	0.00
128	129	164.48	0.00	7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
129	129	164.48	0.00	7.99	34.22	0	37.19	2	-69.98	2	0.00	2.35	0.00
129	130	165.65	0.00	9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
130	130	165.65	0.00	9.14	24.16	0	26.25	2	-49.41	2	0.00	2.35	0.00
130	131	166.83	0.00	10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
131	131	166.83	0.00	10.28	12.75	0	13.86	2	-26.07	2	0.00	2.35	0.00
131	132	167.00	0.00	10.45	10.93	0	11.88	2	-22.35	2	0.00	2.35	0.00
132	132	167.00	0.00	10.45	10.93	0	11.88	2	-22.35	2	0.00	2.35	0.00
132	133	168.00	0.00	11.42	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
Prelasas.To

GRÁFICO DE TENSIONES



hsim_10.xls

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

HBCV

def. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	-34.25	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-31.27	32.76	0	35.60	2	-66.99	2	-0.00	2.35	0.00
2	2	1.00	0.00	-31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
2	3	1.18	0.00	-30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
3	3	1.18	0.00	-30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
3	4	2.35	0.00	-27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
4	4	2.35	0.00	-27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
4	5	3.53	0.00	-23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
5	5	3.53	0.00	-23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
5	6	4.70	0.00	-20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
6	6	4.70	0.00	-20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
6	7	5.88	0.00	-16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
7	7	5.88	0.00	-16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
7	8	7.05	0.00	-13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
8	8	7.05	0.00	-13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
8	9	8.23	0.00	-9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
9	9	8.23	0.00	-9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
9	10	9.40	0.00	-6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
10	10	9.40	0.00	-6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
10	11	10.58	0.00	-2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
11	11	10.58	0.00	-2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
11	12	11.75	0.00	0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
12	12	11.75	0.00	0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
12	13	12.93	0.00	4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
13	13	12.93	0.00	4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
13	14	14.10	0.00	7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
14	14	14.10	0.00	7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
14	15	15.28	0.00	11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
15	15	15.28	0.00	11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
15	16	16.45	0.00	14.80	159.95	0	173.81	2	-327.09	2	0.00	2.35	0.00
16	16	16.45	0.35	14.80	159.95	0	174.08	2	-326.83	2	0.00	2.35	0.00
16	17	17.63	0.43	18.30	140.50	0	153.00	2	-287.00	2	0.00	2.35	0.00
17	17	17.63	0.43	18.30	140.50	0	144.86	2	-240.93	2	0.00	2.35	0.00
17	18	18.80	0.52	21.81	116.93	0	120.66	2	-200.41	2	0.00	2.35	0.00
18	18	18.80	0.00	21.81	116.93	0	120.33	2	-200.74	2	0.00	2.35	0.00
18	19	19.98	0.00	25.32	89.24	0	91.83	2	-153.21	2	0.00	2.35	0.00
19	19	19.98	0.00	25.32	89.24	0	91.83	2	-153.21	2	0.00	2.35	0.00
19	20	21.15	0.00	25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
20	20	21.15	0.00	25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
20	21	22.33	0.00	25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
21	21	22.33	0.00	25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
21	22	22.50	0.00	25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
22	22	22.50	0.00	25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
22	23	23.50	0.00	25.32	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	23	23.50	0.00	-30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	24	24.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
24	24	24.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
24	25	24.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
25	25	24.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
25	26	26.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
26	26	26.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
26	27	27.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
27	27	27.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
27	28	29.30	0.00	-25.95	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
28	28	29.30	0.50	-25.94	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
28	29	30.75	0.41	-21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
29	29	30.75	0.41	-21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
29	30	32.20	0.33	-17.29	235.12	0	255.75	2	-480.56	2	0.00	2.35	0.00
30	30	32.20	0.00	-17.30	235.12	0	255.75	2	-480.56	2	0.00	2.35	0.00
30	31	33.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
31	31	33.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
31	32	35.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
32	32	35.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
32	33	36.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
33	33	36.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
34	35	39.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
35	35	39.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
35	36	40.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
36	36	40.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
36	37	42.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
37	37	42.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
37	38	43.80	0.00	17.30	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
38	38	43.80	0.33	17.29	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
38	39	45.25	0.41	21.62	206.91	0	225.15	2	-422.82	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

HBCV

def. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	0.41	21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
39	40	46.70	0.50	25.94	172.42	0	177.75	2	-295.69	2	0.00	2.35	0.00
40	40	46.70	0.00	25.95	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
40	41	48.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
41	41	48.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
41	42	49.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
42	42	49.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
42	43	51.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
43	43	51.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
43	44	51.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
44	44	51.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
44	45	52.50	0.00	30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	-30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
46	46	53.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
46	47	53.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
47	47	53.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
47	48	55.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
48	48	55.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
48	49	56.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
49	49	56.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
49	50	58.30	0.00	-25.94	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
50	50	58.30	0.50	-25.94	172.42	0	177.75	2	-295.69	2	0.00	2.35	0.00
50	51	59.75	0.41	-21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
51	51	59.75	0.41	-21.62	206.91	0	225.15	2	-422.82	2	0.00	2.35	0.00
51	52	61.20	0.33	-17.29	235.12	0	255.75	2	-480.56	2	0.00	2.35	0.00
52	52	61.20	0.00	-17.30	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
52	53	62.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
53	53	62.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
53	54	64.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
54	54	64.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
54	55	65.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
55	55	65.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
56	57	68.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
57	57	68.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
57	58	69.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
58	58	69.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
58	59	71.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
59	59	71.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
59	60	72.80	0.00	17.30	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
60	60	72.80	0.33	17.29	235.12	0	255.75	2	-480.56	2	0.00	2.35	0.00
60	61	74.25	0.41	21.62	206.91	0	225.15	2	-422.82	2	0.00	2.35	0.00
61	61	74.25	0.41	21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
61	62	75.70	0.50	25.94	172.42	0	177.75	2	-295.69	2	0.00	2.35	0.00
62	62	75.70	0.00	25.95	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
62	63	77.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
63	63	77.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
63	64	78.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
64	64	78.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
64	65	80.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
65	65	80.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
65	66	80.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
66	66	80.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
66	67	81.50	0.00	30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	1067	81.50	0.00	-32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
68	68	82.50	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
68	69	83.08	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
69	69	83.08	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
69	70	84.65	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
70	70	84.65	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
70	71	86.23	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
71	71	86.23	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
71	72	87.80	0.50	-28.18	203.43	0	209.34	2	-349.25	2	0.00	2.35	0.00
72	72	87.80	0.50	-28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
72	73	89.38	0.41	-23.48	244.12	0	251.47	2	-418.84	2	0.00	2.35	0.00
73	73	89.38	0.41	-23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
73	74	90.95	0.33	-18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
74	74	90.95	0.00	-18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
74	75	92.53	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
75	75	92.53	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
75	76	94.10	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
76	76	94.10	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
76	77	95.58	0.00	-4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00

CÁLCULO TENSIONALHipótesis de cálculo:
HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

HBCV
def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (T/m2)	Fibra y fibra	SupCajón sig (T/m2)	Fibra y fibra	InfLosa sig (T/m2)	Fibra y fibra	SupLosa sig (T/m2)
1	1	0.00	0.00	-34.25	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
2	2	1.00	0.00	-31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
2	3	1.18	0.00	-30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
3	3	1.18	0.00	-30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
3	4	2.35	0.00	-27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
4	4	2.35	0.00	-27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
4	5	3.53	0.00	-23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
5	5	3.53	0.00	-23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
5	6	4.70	0.00	-20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
6	6	4.70	0.00	-20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
6	7	5.88	0.00	-16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
7	7	5.88	0.00	-16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
7	8	7.05	0.00	-13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
8	8	7.05	0.00	-13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
8	9	8.23	0.00	-9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
9	9	8.23	0.00	-9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
9	10	9.40	0.00	-6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
10	10	9.40	0.00	-6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
10	11	10.58	0.00	-2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
11	11	10.58	0.00	-2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
11	12	11.75	0.00	0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
12	12	11.75	0.00	0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
12	13	12.93	0.00	4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
13	13	12.93	0.00	4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
13	14	14.10	0.00	7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
14	14	14.10	0.00	7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
14	15	15.28	0.00	11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
15	15	15.28	0.00	11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
15	16	16.45	0.00	14.80	159.95	0	173.81	2	-327.09	2	0.00	2.35	0.00
16	16	16.45	0.35	14.80	159.95	0	173.81	2	-327.09	2	0.00	2.35	0.00
16	17	17.63	0.43	18.30	140.50	0	153.00	2	-287.00	2	0.00	2.35	0.00
17	17	17.63	0.43	18.30	140.50	0	153.00	2	-287.00	2	0.00	2.35	0.00
17	18	18.80	0.52	21.81	116.93	0	144.86	2	-240.93	2	0.00	2.35	0.00
18	18	18.80	0.00	21.81	116.93	0	120.66	2	-200.41	2	0.00	2.35	0.00
18	19	19.98	0.00	25.32	89.24	0	120.33	2	-200.74	2	0.00	2.35	0.00
19	19	19.98	0.00	25.32	89.24	0	91.83	2	-153.21	2	0.00	2.35	0.00
19	20	21.15	0.00	25.32	59.49	0	91.83	2	-153.21	2	0.00	2.35	0.00
20	20	21.15	0.00	25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
20	21	22.33	0.00	25.32	29.75	0	61.22	2	-102.13	2	0.00	2.35	0.00
21	21	22.33	0.00	25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
21	22	22.50	0.00	25.32	25.32	0	30.61	2	-51.07	2	0.00	2.35	0.00
22	22	22.50	0.00	25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
22	23	23.50	0.00	25.32	0.00	0	26.06	2	-43.47	2	0.00	2.35	0.00
23	1023	23.50	0.00	-30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	24	24.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
24	24	24.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
24	25	24.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
25	25	24.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
25	26	26.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
26	26	26.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
26	27	27.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
27	27	27.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
27	28	29.30	0.00	-25.95	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
28	28	29.30	0.50	-25.94	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
28	29	30.75	0.41	-21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
29	29	30.75	0.41	-21.62	206.91	0	225.15	2	-422.82	2	0.00	2.35	0.00
29	30	32.20	0.33	-17.29	235.12	0	255.75	2	-480.56	2	0.00	2.35	0.00
30	30	32.20	0.00	-17.30	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
30	31	33.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
31	31	33.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
31	32	35.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
32	32	35.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
32	33	36.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
33	33	36.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
34	35	39.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
35	35	39.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
35	36	40.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
36	36	40.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
36	37	42.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
37	37	42.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
37	38	43.80	0.00	17.30	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
38	38	43.80	0.33	17.29	235.12	0	255.75	2	-480.56	2	0.00	2.35	0.00
38	39	45.25	0.41	21.62	206.91	0	225.15	2	-422.82	2	0.00	2.35	0.00

CÁLCULO TENSIONALHipótesis de cálculo:
HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

HBCV
def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	0.41	21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
39	40	46.70	0.50	25.94	172.42	0	177.75	2	-295.69	2	0.00	2.35	0.00
40	40	46.70	0.00	25.95	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
40	41	48.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
41	41	48.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
41	42	49.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
42	42	49.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
42	43	51.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
43	43	51.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
43	44	51.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
44	44	51.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
44	45	52.50	0.00	30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	-30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
46	46	53.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
46	47	53.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
47	47	53.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
47	48	55.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
48	48	55.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
48	49	56.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
49	49	56.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
49	50	58.30	0.00	-25.94	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
50	50	58.30	0.50	-25.94	172.42	0	177.75	2	-295.69	2	0.00	2.35	0.00
50	51	59.75	0.41	-21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
51	51	59.75	0.41	-21.62	206.91	0	225.15	2	-422.82	2	0.00	2.35	0.00
51	52	61.20	0.33	-17.29	235.12	0	255.75	2	-480.56	2	0.00	2.35	0.00
52	52	61.20	0.00	-17.30	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
52	53	62.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
53	53	62.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
53	54	64.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
54	54	64.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
54	55	65.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
55	55	65.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
56	57	68.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
57	57	68.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
57	58	69.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
58	58	69.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
58	59	71.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
59	59	71.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
59	60	72.80	0.00	17.30	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
60	60	72.80	0.33	17.29	235.12	0	255.75	2	-480.56	2	0.00	2.35	0.00
60	61	74.25	0.41	21.62	206.91	0	225.15	2	-422.82	2	0.00	2.35	0.00
61	61	74.25	0.41	21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
61	62	75.70	0.50	25.94	172.42	0	177.75	2	-295.69	2	0.00	2.35	0.00
62	62	75.70	0.00	25.95	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
62	63	77.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
63	63	77.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
63	64	78.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
64	64	78.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
64	65	80.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
65	65	80.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
65	66	80.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
66	66	80.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
66	67	81.50	0.00	30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	1067	81.50	0.00	-32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
67	68	82.50	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
68	68	82.50	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
68	69	83.08	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
69	69	83.08	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
69	70	84.65	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
70	70	84.65	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
70	71	86.23	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
71	71	86.23	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
71	72	87.80	0.00	-28.18	203.43	0	209.34	2	-349.25	2	0.00	2.35	0.00
72	72	87.80	0.50	-28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
72	73	89.38	0.41	-23.48	244.12	0	251.47	2	-418.84	2	0.00	2.35	0.00
73	73	89.38	0.41	-23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
73	74	90.95	0.33	-18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
74	74	90.95	0.00	-18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
74	75	92.53	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
75	75	92.53	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
75	76	94.10	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
76	76	94.10	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
76	77	95.68	0.00	-4.70	332.88	0	351.73	2	-680.72	2	0.00	2.35	0.00

200

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

HBCV

exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
1	1	0.00	0.00	-34.25	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
2	2	1.00	0.00	-31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
2	3	1.18	0.00	-30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
3	3	1.18	0.00	-30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
3	4	2.35	0.00	-27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
4	4	2.35	0.00	-27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
4	5	3.53	0.00	-23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
5	5	3.53	0.00	-23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
5	6	4.70	0.00	-20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
6	6	4.70	0.00	-20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
6	7	5.88	0.00	-16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
7	7	5.88	0.00	-16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
7	8	7.05	0.00	-13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
8	8	7.05	0.00	-13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
8	9	8.23	0.00	-9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
9	9	8.23	0.00	-9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
9	10	9.40	0.00	-6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
10	10	9.40	0.00	-6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
10	11	10.58	0.00	-2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
11	11	10.58	0.00	-2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
11	12	11.75	0.00	0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
12	12	11.75	0.00	0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
12	13	12.93	0.00	4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
13	13	12.93	0.00	4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
13	14	14.10	0.00	7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
14	14	14.10	0.00	7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
14	15	15.28	0.00	11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
15	15	15.28	0.00	11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
15	16	16.45	0.00	14.80	159.95	0	173.81	2	-327.09	2	0.00	2.35	0.00
16	16	16.45	0.35	14.80	159.95	0	173.81	2	-327.09	2	0.00	2.35	0.00
16	17	17.63	0.43	18.30	140.50	0	153.00	2	-287.00	2	0.00	2.35	0.00
17	17	17.63	0.43	18.30	140.50	0	153.00	2	-287.00	2	0.00	2.35	0.00
17	18	18.80	0.52	21.81	116.93	0	120.66	2	-200.41	2	0.00	2.35	0.00
18	18	18.80	0.00	21.81	116.93	0	120.66	2	-200.41	2	0.00	2.35	0.00
18	19	19.98	0.00	25.32	89.24	0	91.83	2	-153.21	2	0.00	2.35	0.00
19	19	19.98	0.00	25.32	89.24	0	91.83	2	-153.21	2	0.00	2.35	0.00
19	20	21.15	0.00	25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
20	20	21.15	0.00	25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
20	21	22.33	0.00	25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
21	21	22.33	0.00	25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
21	22	22.50	0.00	25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
22	22	22.50	0.00	25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
22	23	23.50	0.00	25.32	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	23	23.50	0.00	25.32	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
23	24	24.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
24	24	24.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
24	25	24.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
25	25	24.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
25	26	26.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
26	26	26.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
26	27	27.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
27	27	27.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
27	28	29.30	0.00	-25.95	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
28	28	29.30	0.50	-25.94	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
28	29	30.75	0.41	-21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
29	29	30.75	0.41	-21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
29	30	32.20	0.33	-17.29	235.12	0	225.15	2	-422.82	2	0.00	2.35	0.00
30	30	32.20	0.00	-17.30	235.12	0	225.15	2	-422.82	2	0.00	2.35	0.00
30	31	33.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
31	31	33.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
31	32	35.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
32	32	35.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
32	33	36.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
33	33	36.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
34	35	39.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
35	35	39.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
35	36	40.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
36	36	40.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
36	37	42.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
37	37	42.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
37	38	43.80	0.00	17.30	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
38	38	43.80	0.33	17.29	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
38	39	45.25	0.41	21.62	206.91	0	225.15	2	-422.82	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

HBCV

exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	0.41	21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
39	40	46.70	0.50	25.94	172.42	0	177.75	2	-295.69	2	0.00	2.35	0.00
40	40	46.70	0.00	25.95	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
40	41	48.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
41	41	48.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
41	42	49.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
42	42	49.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
42	43	51.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
43	43	51.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
43	44	51.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
44	44	51.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
44	45	52.50	0.00	30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	1045	52.50	0.00	-30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
45	46	53.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
46	46	53.50	0.00	-30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
46	47	53.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
47	47	53.95	0.00	-30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
47	48	55.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
48	48	55.40	0.00	-30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
48	49	56.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
49	49	56.85	0.00	-30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
49	50	58.30	0.00	-25.94	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
50	50	58.30	0.50	-25.94	172.42	0	177.75	2	-295.69	2	0.00	2.35	0.00
50	51	59.75	0.41	-21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
51	51	59.75	0.41	-21.62	206.91	0	225.15	2	-422.82	2	0.00	2.35	0.00
51	52	61.20	0.33	-17.29	235.12	0	255.75	2	-480.56	2	0.00	2.35	0.00
52	52	61.20	0.00	-17.30	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
52	53	62.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
53	53	62.65	0.00	-12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
53	54	64.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
54	54	64.10	0.00	-8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
54	55	65.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
55	55	65.55	0.00	-4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	285.28	0	310.01	2	-583.38	2	0.00	2.35	0.00
56	57	68.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
57	57	68.45	0.00	4.32	282.15	0	306.61	2	-576.98	2	0.00	2.35	0.00
57	58	69.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
58	58	69.90	0.00	8.65	272.74	0	296.38	2	-557.74	2	0.00	2.35	0.00
58	59	71.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
59	59	71.35	0.00	12.97	257.07	0	279.35	2	-525.70	2	0.00	2.35	0.00
59	60	72.80	0.00	17.30	235.12	0	255.50	2	-480.81	2	0.00	2.35	0.00
60	60	72.80	0.33	17.29	235.12	0	255.75	2	-480.56	2	0.00	2.35	0.00
60	61	74.25	0.41	21.62	206.91	0	225.15	2	-422.82	2	0.00	2.35	0.00
61	61	74.25	0.41	21.62	206.91	0	213.18	2	-354.96	2	0.00	2.35	0.00
61	62	75.70	0.50	25.94	172.42	0	177.75	2	-295.69	2	0.00	2.35	0.00
62	62	75.70	0.00	25.95	172.42	0	177.43	2	-296.01	2	0.00	2.35	0.00
62	63	77.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
63	63	77.15	0.00	30.27	131.67	0	135.49	2	-226.05	2	0.00	2.35	0.00
63	64	78.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
64	64	78.60	0.00	30.27	87.78	0	90.33	2	-150.70	2	0.00	2.35	0.00
64	65	80.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
65	65	80.05	0.00	30.27	43.89	0	45.16	2	-75.35	2	0.00	2.35	0.00
65	66	80.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
66	66	80.50	0.00	30.27	30.27	0	31.15	2	-51.97	2	0.00	2.35	0.00
66	67	81.50	0.00	30.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
7	1067	81.50	0.00	-32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
7	68	82.50	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
7	68	82.50	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
8	69	83.08	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
9	69	83.08	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
9	70	84.65	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
	70	84.65	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
	71	86.23	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
	71	86.23	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
	72	87.80	0.00	-28.18	203.43	0	209.34	2	-349.25	2	0.00	2.35	0.00
	72	87.80	0.50	-28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
	73	89.38	0.41	-23.48	244.12	0	251.47	2	-418.84	2	0.00	2.35	0.00
	73	89.38	0.41	-23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
	74	90.95	0.33	-18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
	74	90.95	0.00	-18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
	75	92.53	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
	75	92.53	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
	76	94.10	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
	76	94.10	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
	77	95.68	0.00	-4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00

201

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

HBCV

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	-4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	336.58	0	365.75	2	-688.29	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	336.58	0	365.75	2	-688.29	2	0.00	2.35	0.00
78	79	98.83	0.00	4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00
79	79	98.83	0.00	4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00
79	80	100.40	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
80	80	100.40	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
80	81	101.98	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
81	81	101.98	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
81	82	103.55	0.00	18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
82	82	103.55	0.33	18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
82	83	105.13	0.41	23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
83	83	105.13	0.41	23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
83	84	106.70	0.50	28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
84	84	106.70	0.00	28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
84	85	108.28	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
85	85	108.28	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
85	86	109.85	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
86	86	109.85	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
87	87	111.43	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
87	87	111.43	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
88	88	112.00	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
88	88	112.00	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
89	89	113.00	0.00	32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	1089	113.00	0.00	-32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	90	114.00	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
90	90	114.00	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
90	91	114.58	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
91	91	114.58	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
91	92	116.15	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
92	92	116.15	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
92	93	117.73	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
93	93	117.73	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
93	94	119.30	0.00	-28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
94	94	119.30	0.50	-28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
94	95	120.88	0.41	-23.48	244.12	0	251.47	2	-418.84	2	0.00	2.35	0.00
95	95	120.88	0.41	-23.48	244.12	0	251.47	2	-418.84	2	0.00	2.35	0.00
95	96	122.45	0.33	-18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
96	96	122.45	0.00	-18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
96	97	124.03	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
97	97	124.03	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
97	98	125.60	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
98	98	125.60	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
99	99	127.18	0.00	-4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
99	99	127.18	0.00	-4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
100	100	128.75	0.00	0.00	336.59	0	365.76	2	-688.31	2	0.00	2.35	0.00
100	100	128.75	0.00	0.00	336.59	0	365.76	2	-688.31	2	0.00	2.35	0.00
101	101	130.33	0.00	4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
101	101	130.33	0.00	4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
101	102	131.90	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
102	102	131.90	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
102	103	133.48	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
103	103	133.48	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
103	104	135.05	0.00	18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
104	104	135.05	0.33	18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
104	105	136.63	0.41	23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
105	105	136.63	0.41	23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
105	106	138.20	0.50	28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
106	106	138.20	0.00	28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
106	107	139.78	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
107	107	139.78	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
107	108	141.35	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
108	108	141.35	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
108	109	142.93	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
109	109	142.93	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
109	110	143.50	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
110	110	143.50	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
110	111	144.50	0.00	32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	111	144.50	0.00	32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	112	145.50	0.00	-25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
112	112	145.50	0.00	-25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
112	113	145.68	0.00	-25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
113	113	145.68	0.00	-25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
113	114	146.85	0.00	-25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
114	114	146.85	0.00	-25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
114	115	148.03	0.00	-25.32	89.24	0	91.83	2	-153.21	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

HBCV

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-25.32	89.24	0	91.83	2	-153.21	2			
115	116	149.20	0.00	-21.81	116.93	0	120.33	2	-200.74	2	0.00	2.35	0.00
116	116	149.20	0.52	-21.81	116.93	0	120.65	2	-200.41	2	0.00	2.35	0.00
116	117	150.38	0.43	-18.30	140.50	0	144.86	2	-240.93	2	0.00	2.35	0.00
117	117	150.38	0.43	-18.30	140.50	0	153.00	2	-287.00	2	0.00	2.35	0.00
117	118	151.55	0.35	-14.80	159.95	0	174.08	2	-326.83	2	0.00	2.35	0.00
118	118	151.55	0.00	-14.80	159.95	0	173.81	2	-327.09	2	0.00	2.35	0.00
118	119	152.73	0.00	-11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
119	119	152.73	0.00	-11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
119	120	153.90	0.00	-7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
120	120	153.90	0.00	-7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
120	121	155.08	0.00	-4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
121	121	155.08	0.00	-4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
121	122	156.25	0.00	-0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
122	122	156.25	0.00	-0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
122	123	157.43	0.00	2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
123	123	157.43	0.00	2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
123	124	158.60	0.00	6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
124	124	158.60	0.00	6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
124	125	159.78	0.00	9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
125	125	159.78	0.00	9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
125	126	160.95	0.00	13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
126	126	160.95	0.00	13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
126	127	162.13	0.00	16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
127	127	162.13	0.00	16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
127	128	163.30	0.00	20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
128	128	163.30	0.00	20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
128	129	164.48	0.00	23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
129	129	164.48	0.00	23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
129	130	165.65	0.00	27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
130	130	165.65	0.00	27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
130	131	166.83	0.00	30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
131	131	166.83	0.00	30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
131	132	167.00	0.00	31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
132	132	167.00	0.00	31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
132	133	168.00	0.00	34.25	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

BCV

ref. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
77	77	95.68	0.00	-4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	336.58	0	365.75	2	-688.29	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	336.58	0	365.75	2	-688.29	2	0.00	2.35	0.00
78	79	98.83	0.00	4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00
79	79	98.83	0.00	4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00
79	80	100.40	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
80	80	100.40	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
80	81	101.98	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
81	81	101.98	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
81	82	103.55	0.00	18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
82	82	103.55	0.33	18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
82	83	105.13	0.41	23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
83	83	105.13	0.41	23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
83	84	106.70	0.50	28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
84	84	106.70	0.00	28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
84	85	108.28	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
85	85	108.28	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
85	86	109.85	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
86	86	109.85	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
86	87	111.43	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
87	87	111.43	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
88	88	112.00	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
88	88	112.00	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
88	89	113.00	0.00	32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	1089	113.00	0.00	-32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	90	114.00	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
90	90	114.00	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
90	91	114.58	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
91	91	114.58	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
91	92	116.15	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
92	92	116.15	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
92	93	117.73	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
93	93	117.73	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
93	94	119.30	0.00	-28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
94	94	119.30	0.50	-28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
94	95	120.88	0.41	-23.48	244.12	0	251.47	2	-418.84	2	0.00	2.35	0.00
95	95	120.88	0.41	-23.48	244.12	0	251.47	2	-418.84	2	0.00	2.35	0.00
95	96	122.45	0.33	-18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
96	96	122.45	0.00	-18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
96	97	124.03	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
97	97	124.03	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
97	98	125.60	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
98	98	125.60	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
98	99	127.18	0.00	-4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
99	99	127.18	0.00	-4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
99	100	128.75	0.00	0.00	336.59	0	365.76	2	-688.31	2	0.00	2.35	0.00
100	100	128.75	0.00	0.00	336.59	0	365.76	2	-688.31	2	0.00	2.35	0.00
100	101	130.33	0.00	4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
101	101	130.33	0.00	4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
101	102	131.90	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
102	102	131.90	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
102	103	133.48	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
103	103	133.48	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
103	104	135.05	0.00	18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
104	104	135.05	0.33	18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
104	105	136.63	0.41	23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
105	105	136.63	0.41	23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
105	106	138.20	0.50	28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
106	106	138.20	0.00	28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
106	107	139.78	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
107	107	139.78	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
107	108	141.35	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
108	108	141.35	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
108	109	142.93	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
109	109	142.93	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
109	110	143.50	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
110	110	143.50	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
110	111	144.50	0.00	32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	111	144.50	0.00	32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	112	145.50	0.00	-25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
112	112	145.50	0.00	-25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
112	113	145.68	0.00	-25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
113	113	145.68	0.00	-25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
113	114	146.85	0.00	-25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
114	114	146.85	0.00	-25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
114	115	148.03	0.00	-25.32	89.24	0	91.83	2	-153.21	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

BCV

ref. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-25.32	89.24	0	91.83	2	-153.21	2	0.00	2.35	0.00
115	116	149.20	0.00	-21.81	116.93	0	120.33	2	-200.74	2	0.00	2.35	0.00
116	116	149.20	0.52	-21.81	116.93	0	120.66	2	-200.41	2	0.00	2.35	0.00
116	117	150.38	0.43	-18.30	140.50	0	144.86	2	-240.93	2	0.00	2.35	0.00
117	117	150.38	0.43	-18.30	140.50	0	153.00	2	-287.00	2	0.00	2.35	0.00
117	118	151.55	0.35	-14.80	159.95	0	174.08	2	-326.83	2	0.00	2.35	0.00
118	118	151.55	0.00	-14.80	159.95	0	173.81	2	-327.09	2	0.00	2.35	0.00
118	119	152.73	0.00	-11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
119	119	152.73	0.00	-11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
119	120	153.90	0.00	-7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
120	120	153.90	0.00	-7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
120	121	155.08	0.00	-4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
121	121	155.08	0.00	-4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
121	122	156.25	0.00	-0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
122	122	156.25	0.00	-0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
122	123	157.43	0.00	2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
123	123	157.43	0.00	2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
123	124	158.60	0.00	6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
124	124	158.60	0.00	6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
124	125	159.78	0.00	9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
125	125	159.78	0.00	9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
125	126	160.95	0.00	13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
126	126	160.95	0.00	13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
126	127	162.13	0.00	16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
127	127	162.13	0.00	16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
127	128	163.30	0.00	20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
128	128	163.30	0.00	20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
128	129	164.48	0.00	23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
129	129	164.48	0.00	23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
129	130	165.65	0.00	27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
130	130	165.65	0.00	27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
130	131	166.83	0.00	30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
131	131	166.83	0.00	30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
131	132	167.00	0.00	31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
132	132	167.00	0.00	31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
132	133	168.00	0.00	34.25	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCV.To

HormigonadoBCvanos). Tensiones a tiempo To

HBCV

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
77	77	95.68	0.00	-4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	336.58	0	365.75	2	-688.29	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	336.58	0	365.75	2	-688.29	2	0.00	2.35	0.00
78	79	98.83	0.00	4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00
79	79	98.83	0.00	4.70	332.88	0	361.73	2	-680.72	2	0.00	2.35	0.00
79	80	100.40	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
80	80	100.40	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
80	81	101.98	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
81	81	101.98	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
81	82	103.55	0.00	18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
82	82	103.55	0.33	18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
82	83	105.13	0.41	23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
83	83	105.13	0.41	23.48	244.12	0	251.47	2	-418.84	2	0.00	2.35	0.00
83	84	106.70	0.50	28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
84	84	106.70	0.00	28.18	203.43	0	209.34	2	-349.25	2	0.00	2.35	0.00
84	85	108.28	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
85	85	108.28	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
85	86	109.85	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
86	86	109.85	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
86	87	111.43	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
87	87	111.43	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
87	88	112.00	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
88	88	112.00	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
88	89	113.00	0.00	32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	1089	113.00	0.00	-32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
89	90	114.00	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
90	90	114.00	0.00	-32.88	32.88	0	33.84	2	-56.45	2	0.00	2.35	0.00
90	91	114.58	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
91	91	114.58	0.00	-32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
91	92	116.15	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
92	92	116.15	0.00	-32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
92	93	117.73	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
93	93	117.73	0.00	-32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
93	94	119.30	0.00	-28.18	203.43	0	209.34	2	-349.25	2	0.00	2.35	0.00
94	94	119.30	0.50	-28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
94	95	120.88	0.41	-23.48	244.12	0	251.47	2	-418.84	2	0.00	2.35	0.00
95	95	120.88	0.41	-23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
95	96	122.45	0.33	-18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
96	96	122.45	0.00	-18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
96	97	124.03	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
97	97	124.03	0.00	-14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
97	98	125.60	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
98	98	125.60	0.00	-9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
98	99	127.18	0.00	-4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
99	99	127.18	0.00	-4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
99	100	128.75	0.00	0.00	336.59	0	365.76	2	-688.31	2	0.00	2.35	0.00
100	100	128.75	0.00	0.00	336.59	0	365.76	2	-688.31	2	0.00	2.35	0.00
101	101	130.33	0.00	4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
101	101	130.33	0.00	4.70	332.89	0	361.74	2	-680.75	2	0.00	2.35	0.00
101	102	131.90	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
102	102	131.90	0.00	9.39	321.79	0	349.68	2	-658.05	2	0.00	2.35	0.00
102	103	133.48	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
103	103	133.48	0.00	14.09	303.30	0	329.59	2	-620.23	2	0.00	2.35	0.00
103	104	135.05	0.00	18.79	277.41	0	301.45	2	-567.29	2	0.00	2.35	0.00
104	104	135.05	0.33	18.78	277.41	0	301.70	2	-567.04	2	0.00	2.35	0.00
104	105	136.63	0.41	23.48	244.12	0	265.59	2	-498.91	2	0.00	2.35	0.00
105	105	136.63	0.41	23.48	244.12	0	251.47	2	-418.84	2	0.00	2.35	0.00
105	106	138.20	0.50	28.18	203.43	0	209.66	2	-348.92	2	0.00	2.35	0.00
106	106	138.20	0.00	28.18	203.43	0	209.34	2	-349.25	2	0.00	2.35	0.00
106	107	139.78	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
107	107	139.78	0.00	32.88	155.35	0	159.86	2	-266.70	2	0.00	2.35	0.00
107	108	141.35	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
108	108	141.35	0.00	32.88	103.57	0	106.58	2	-177.81	2	0.00	2.35	0.00
108	109	142.93	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
109	109	142.93	0.00	32.88	51.78	0	53.28	2	-88.90	2	0.00	2.35	0.00
109	110	143.50	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
110	110	143.50	0.00	32.88	32.87	0	33.82	2	-56.43	2	0.00	2.35	0.00
110	111	144.50	0.00	32.88	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	111	144.50	0.00	-25.32	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
111	112	145.50	0.00	-25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
112	112	145.50	0.00	-25.32	25.32	0	26.06	2	-43.47	2	0.00	2.35	0.00
112	113	145.68	0.00	-25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
113	113	145.68	0.00	-25.32	29.75	0	30.61	2	-51.07	2	0.00	2.35	0.00
113	114	146.85	0.00	-25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
114	114	146.85	0.00	-25.32	59.49	0	61.22	2	-102.13	2	0.00	2.35	0.00
114	115	148.03	0.00	-25.32	89.24	0	91.83	2	-153.21	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCV.To

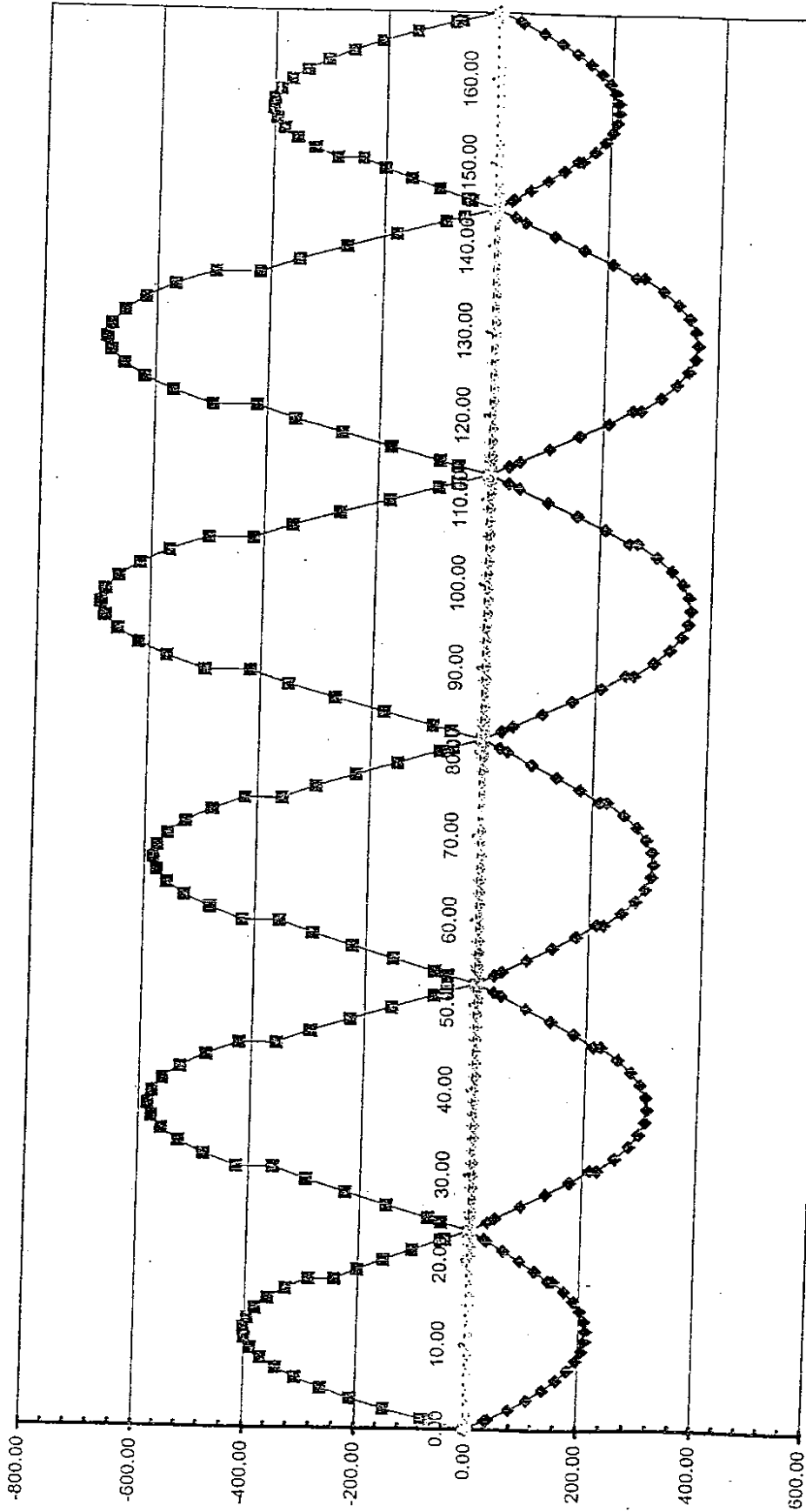
HormigonadoBCvanos). Tensiones a tiempo To

HBCV

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-25.32	89.24	0	91.83	2	-153.21	2	0.00	2.35	0.00
115	116	149.20	0.00	-21.81	116.93	0	120.33	2	-200.74	2	0.00	2.35	0.00
116	116	149.20	0.52	-21.81	116.93	0	120.66	2	-200.41	2	0.00	2.35	0.00
116	117	150.38	0.43	-18.30	140.50	0	144.86	2	-240.93	2	0.00	2.35	0.00
117	117	150.38	0.43	-18.30	140.50	0	153.00	2	-287.00	2	0.00	2.35	0.00
117	118	151.55	0.35	-14.80	159.95	0	174.08	2	-326.83	2	0.00	2.35	0.00
118	118	151.55	0.00	-14.80	159.95	0	173.81	2	-327.09	2	0.00	2.35	0.00
118	119	152.73	0.00	-11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
119	119	152.73	0.00	-11.30	175.29	0	190.48	2	-358.46	2	0.00	2.35	0.00
119	120	153.90	0.00	-7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
120	120	153.90	0.00	-7.80	186.51	0	202.68	2	-381.40	2	0.00	2.35	0.00
120	121	155.08	0.00	-4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
121	121	155.08	0.00	-4.29	193.61	0	210.39	2	-395.92	2	0.00	2.35	0.00
121	122	156.25	0.00	-0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
122	122	156.25	0.00	-0.79	196.59	0	213.63	2	-402.02	2	0.00	2.35	0.00
122	123	157.43	0.00	2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
123	123	157.43	0.00	2.72	195.46	0	212.40	2	-399.71	2	0.00	2.35	0.00
123	124	158.60	0.00	6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
124	124	158.60	0.00	6.22	190.21	0	206.70	2	-388.97	2	0.00	2.35	0.00
124	125	159.78	0.00	9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
125	125	159.78	0.00	9.72	180.84	0	196.51	2	-369.81	2	0.00	2.35	0.00
125	126	160.95	0.00	13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
126	126	160.95	0.00	13.23	167.36	0	181.87	2	-342.24	2	0.00	2.35	0.00
126	127	162.13	0.00	16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
127	127	162.13	0.00	16.73	149.76	0	162.74	2	-306.25	2	0.00	2.35	0.00
127	128	163.30	0.00	20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
128	128	163.30	0.00	20.24	128.04	0	139.14	2	-261.84	2	0.00	2.35	0.00
128	129	164.48	0.00	23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
129	129	164.48	0.00	23.74	102.21	0	111.07	2	-209.01	2	0.00	2.35	0.00
129	130	165.65	0.00	27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
130	130	165.65	0.00	27.24	72.25	0	78.51	2	-147.75	2	0.00	2.35	0.00
130	131	166.83	0.00	30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
131	131	166.83	0.00	30.75	38.19	0	41.50	2	-78.10	2	0.00	2.35	0.00
131	132	167.00	0.00	31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
132	132	167.00	0.00	31.27	32.76	0	35.60	2	-66.99	2	0.00	2.35	0.00
132	133	168.00	0.00	34.25	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

GRÁFICO DE TENSIONES



—◆— InfCajón(kg/cm²) —■— SupCajón(kg/cm²) —x— SupLosa(kg/cm²)

CÁLCULO TENSIONAL

Hipótesis de cálculo:
fase4.ISO.To.To

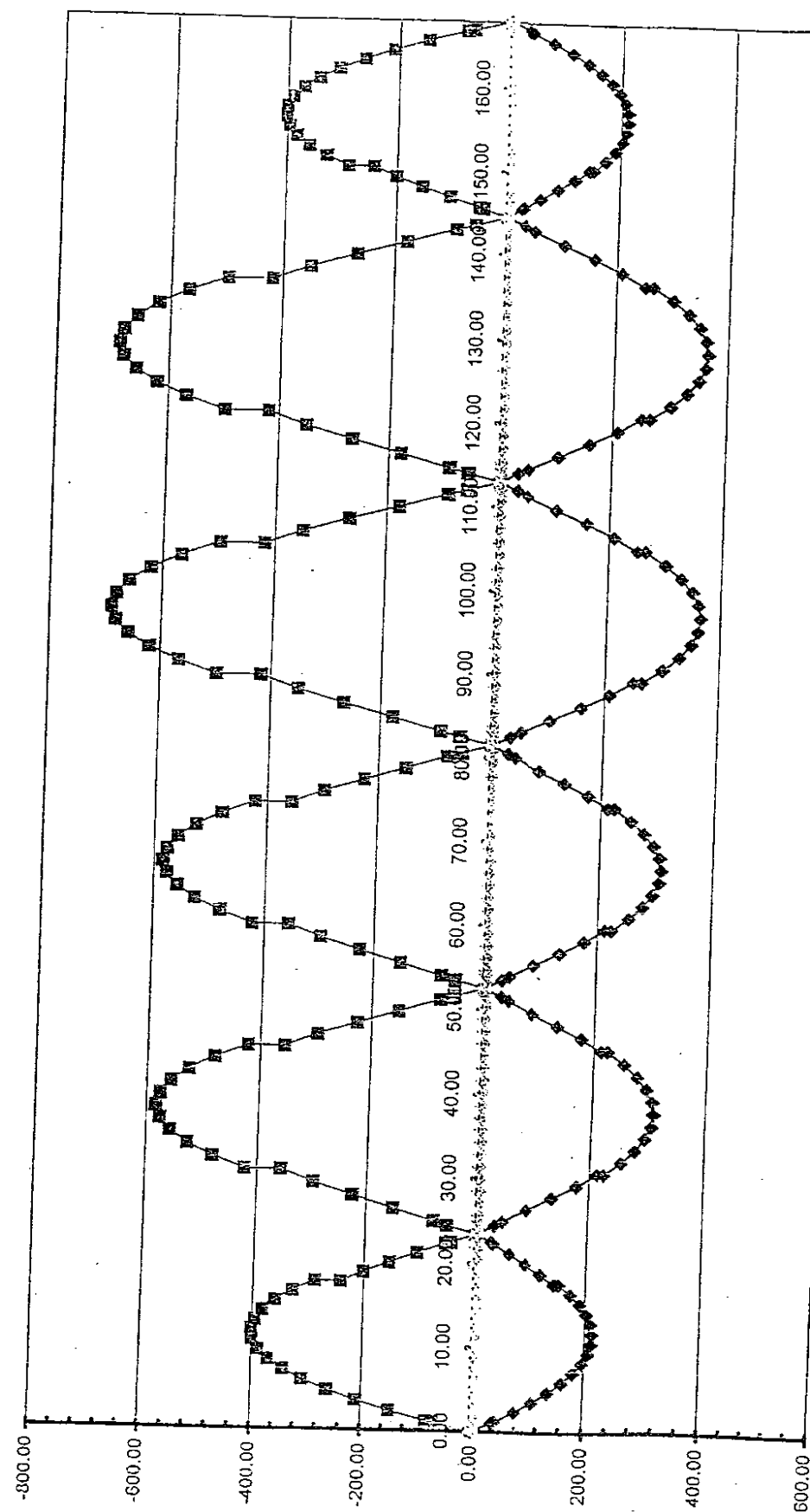
Pretensado(sostático(t=0)). Tensiones a tiempo To

1: 1/fase4.ISO.To

coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (kg/cm²)	Fibra y fibra	SupCajón sig (kg/cm²)	Fibra y fibra	InfLosa sig (kg/cm²)	Fibra y fibra	SupLosa sig (kg/cm²)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
2	2	1.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
2	3	1.18	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
3	3	1.18	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
3	4	2.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
4	4	2.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
4	5	3.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
5	5	3.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
5	6	4.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
6	6	4.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
6	7	5.88	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
7	7	5.88	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
7	8	7.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
8	8	7.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
8	9	8.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
9	9	8.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
9	10	9.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
10	10	9.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
10	11	10.58	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
11	11	10.58	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
11	12	11.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
12	12	11.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
12	13	12.93	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
13	13	12.93	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
13	14	14.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
14	14	14.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
14	15	15.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
15	15	15.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
15	16	16.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
16	16	16.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
16	17	17.63	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
17	17	17.63	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
17	18	18.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
18	18	18.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
18	19	19.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
19	19	19.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
19	20	21.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
20	20	21.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
20	21	22.33	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
21	21	22.33	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
21	22	22.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
22	22	22.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
22	23	23.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
23	1023	23.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
23	24	24.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
24	24	24.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
24	25	24.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
25	25	24.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
25	26	26.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
26	26	26.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
26	27	27.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
27	27	27.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
27	28	29.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
28	28	29.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
28	29	30.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
29	29	30.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
29	30	32.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
30	30	32.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
30	31	33.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
31	31	33.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
31	32	35.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
32	32	35.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
32	33	36.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
33	33	36.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
34	35	39.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
35	35	39.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
35	36	40.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
36	36	40.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
36	37	42.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
37	37	42.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
37	38	43.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
38	38	43.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
38	39	45.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

GRÁFICO DE TENSIONES



—■— InfCajón(t/m²) —●— SupCajón(t/m²) —▲— InfLosa(t/m²)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To.To

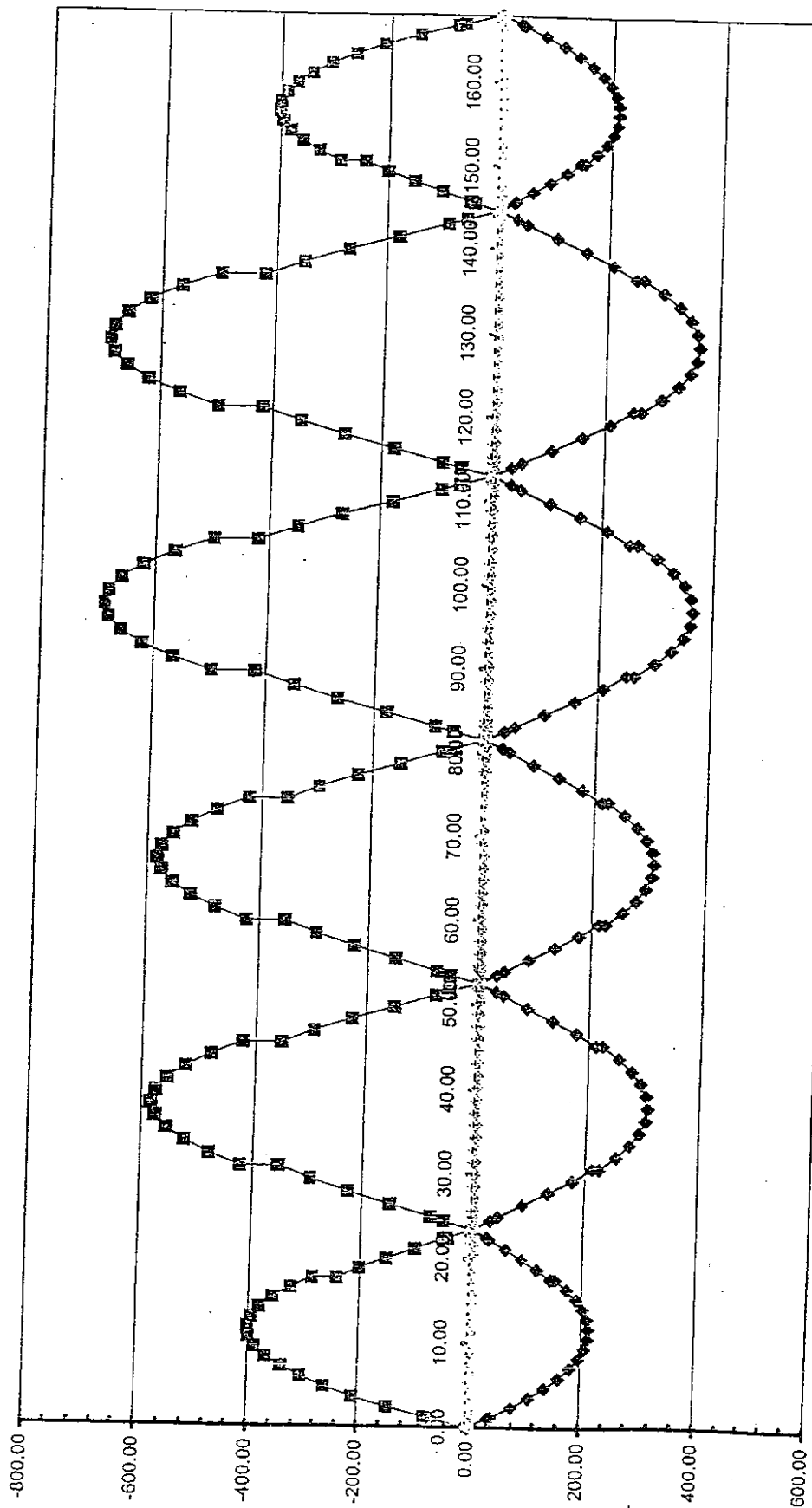
Pretensado(sostático(t=0)). Tensiones a tiempo To

1: fase4.ISO.To

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m²)	Fibra y fibra	SupCajón sig (t/m²)	Fibra y fibra	InfLosa sig (t/m²)	Fibra y fibra	SupLosa sig (t/m²)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
2	2	1.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
2	3	1.18	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
3	3	1.18	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
3	4	2.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
4	4	2.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
4	5	3.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
5	5	3.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
5	6	4.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
6	6	4.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
6	7	5.88	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
7	7	5.88	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
8	8	7.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
8	9	8.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
9	9	8.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
9	10	9.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
10	10	9.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
10	11	10.58	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
11	11	10.58	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
11	12	11.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
12	12	11.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
12	13	12.93	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
13	13	12.93	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
13	14	14.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
14	14	14.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
14	15	15.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
15	15	15.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
15	16	16.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
16	16	16.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
16	17	17.63	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
17	17	17.63	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
17	18	18.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
18	18	18.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
18	19	19.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
19	19	19.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
19	20	21.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
20	20	21.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
20	21	22.33	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
21	21	22.33	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
21	22	22.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
22	22	22.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
22	23	23.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
23	1023	23.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
23	24	24.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
24	24	24.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
24	25	24.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
25	25	24.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
25	26	26.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
26	26	26.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
26	27	27.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
27	27	27.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
27	28	29.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
28	28	29.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
28	29	30.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
29	29	30.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
29	30	32.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
30	30	32.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
30	31	33.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
31	31	33.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
31	32	35.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
32	32	35.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
32	33	36.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
33	33	36.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
34	35	39.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
35	35	39.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
35	36	40.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
36	36	40.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
36	37	42.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
37	37	42.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
37	38	43.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
38	38	43.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
38	39	45.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

GRÁFICO DE TENSIONES



—◆— InfCajón(N/m²) —■— SupCajón(N/m²) —△— SupLosa(N/m²)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To.To

Prefensado(sostático(t=0)). Tensiones a tiempo To

1: 1(fase4.ISO.To

coef. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (N/m²)	Fibra y fibra	SupCajón sig (N/m²)	Fibra y fibra	InfLosa sig (N/m²)	Fibra y fibra	SupLosa sig (N/m²)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
2	2	1.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
2	3	1.18	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
3	3	1.18	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
3	4	2.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
4	4	2.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
4	5	3.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
5	5	3.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
5	6	4.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
6	6	4.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
6	7	5.88	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
7	7	5.88	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
7	8	7.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
8	8	7.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
8	9	8.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
9	9	8.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
9	10	9.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
10	10	9.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
10	11	10.58	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
11	11	10.58	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
11	12	11.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
12	12	11.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
12	13	12.93	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
13	13	12.93	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
13	14	14.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
14	14	14.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
14	15	15.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
15	15	15.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
15	16	16.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
16	16	16.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
16	17	17.63	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
17	17	17.63	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
17	18	18.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
18	18	18.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
18	19	19.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
19	19	19.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
19	20	21.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
20	20	21.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
20	21	22.33	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
21	21	22.33	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
21	22	22.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
22	22	22.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
22	23	23.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
23	1023	23.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
23	24	24.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
24	24	24.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
24	25	24.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
25	25	24.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
25	26	26.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
26	26	26.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
26	27	27.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
27	27	27.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
27	28	29.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
28	28	29.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
28	29	30.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
29	29	30.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
29	30	32.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
30	30	32.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
30	31	33.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
31	31	33.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
31	32	35.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
32	32	35.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
32	33	36.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
33	33	36.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
33	34	38.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
34	34	38.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
34	35	39.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
35	35	39.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
35	36	40.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
36	36	40.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
36	37	42.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
37	37	42.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
37	38	43.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
38	38	43.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
38	39	45.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONALHipótesis de cálculo:
fase4.ISO.To.To

Pretensado isostático (t=0). Tensiones a tiempo To

1 fase4 ISO To

f. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
39	39	45.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
39	40	46.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
40	40	46.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
40	41	48.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
41	41	48.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
41	42	49.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
42	42	49.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
42	43	51.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
43	43	51.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
43	44	51.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
44	44	51.50	-728.78	0.00	386.98	0	0.00	2	0.00	2	0.00	2.35	0.00
44	45	52.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
45	1045	52.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
45	46	53.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
46	46	53.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
46	47	53.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
47	47	53.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
47	48	55.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
48	48	55.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
8	49	56.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
49	49	56.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
19	50	58.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
50	50	58.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
50	51	59.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
51	51	59.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
51	52	61.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
52	52	61.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
52	53	62.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
53	53	62.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
53	54	64.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
54	54	64.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
54	55	65.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
55	55	65.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
56	57	68.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
57	57	68.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
57	58	69.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
58	58	69.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
58	59	71.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
59	59	71.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
59	60	72.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
60	60	72.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
60	61	74.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
61	61	74.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
62	62	75.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
62	63	77.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
63	63	77.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
63	64	78.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
64	64	78.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
64	65	80.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
65	65	80.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
65	66	80.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
66	66	80.50	-728.78	0.00	386.98	0	0.00	2	0.00	2	0.00	2.35	0.00
66	67	81.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
67	1067	81.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
67	68	82.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
68	68	82.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
68	69	83.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
69	69	83.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
69	70	84.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
70	70	84.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
70	71	86.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
71	71	86.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
71	72	87.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
72	72	87.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
72	73	89.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
73	73	89.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
73	74	90.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
74	74	90.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
75	75	92.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
75	75	92.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
75	76	94.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
76	76	94.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
76	77	95.68	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To.To

Pretensado isostático (t=0). Tensiones a tiempo To

1 fase4 ISO To

f. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
78	79	98.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
79	79	98.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
79	80	100.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
80	80	100.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
80	81	101.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
81	81	101.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
81	82	103.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
82	82	103.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
82	83	105.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
83	83	105.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
83	84	106.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
84	84	106.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
84	85	108.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
85	85	108.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
85	86	109.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
86	86	109.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
86	87	111.43	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
87	87	111.43	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
87	88	112.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
88	88	112.00	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
88	89	113.00	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
89	1089	113.00	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
89	90	114.00	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
90	90	114.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
90	91	114.58	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
91	91	114.58	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
91	92	116.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
92	92	116.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
92	93	117.73	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
93	93	117.73	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
93	94	119.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
94	94	119.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
94	95	120.88	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
95	95	120.88	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
95	96	122.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
96	96	122.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
96	97	124.03	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
97	97	124.03	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
97	98	125.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
98	98	125.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
98	99	127.18	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
99	99	127.18	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
99	100	128.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
100	100	128.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
100	101	130.33	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
101	101	130.33	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
101	102	131.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
102	102	131.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
102	103	133.48	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
103	103	133.48	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
103	104	135.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
104	104	135.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
104	105	136.63	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
105	105	136.63	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
105	106	138.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
106	106	138.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
106	107	139.78	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
107	107	139.78	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
107	108	141.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
108	108	141.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
108	109	142.93	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
109	109	142.93	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
109	110	143.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
110	110	143.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
110	111	144.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
111	1111	144.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
111	112	145.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
112	112	145.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
112	113	145.68	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
113	113	145.68	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
113	114	146.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
114	114	146.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
114	115	148.03	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To.To

Pretensado estático (t=0). Tensiones a tiempo To

1) fase4.ISO.To

ver exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
39	40	46.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
40	40	46.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
40	41	48.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
41	41	48.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
41	42	49.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
42	42	49.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
42	43	51.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
43	43	51.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
43	44	51.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
44	44	51.50	-728.78	0.00	386.98	0	0.00	2	0.00	2	0.00	2.35	0.00
44	45	52.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
45	1045	52.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
45	46	53.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
46	46	53.50	0.00	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
46	47	53.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
47	47	53.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
47	48	55.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
48	48	55.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
18	49	56.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
49	49	56.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
49	50	58.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
50	50	58.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
50	51	59.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
51	51	59.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
51	52	61.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
52	52	61.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
52	53	62.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
53	53	62.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
53	54	64.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
54	54	64.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
54	55	65.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
55	55	65.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
56	57	68.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
57	57	68.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
57	58	69.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
58	58	69.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
58	59	71.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
59	59	71.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
59	60	72.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
60	60	72.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
60	61	74.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
61	61	74.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
62	62	75.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
62	63	77.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
63	63	77.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
63	64	78.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
64	64	78.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
64	65	80.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
65	65	80.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
65	66	80.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
66	66	80.50	-728.78	0.00	386.98	0	0.00	2	0.00	2	0.00	2.35	0.00
66	67	81.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
67	1067	81.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
67	68	82.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
68	68	82.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
68	69	83.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
69	69	83.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
69	70	84.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
70	70	84.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
70	71	86.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
71	71	86.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
71	72	87.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
72	72	87.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
72	73	89.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
73	73	89.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
73	74	90.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
74	74	90.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
75	75	92.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
75	75	92.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
75	76	94.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
76	76	94.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
76	77	95.68	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To.To

Pretensado estático (t=0). Tensiones a tiempo To

1) fase4.ISO.To

ver exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
77	77	95.68	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
78	79	98.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
79	79	98.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
79	80	100.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
80	80	100.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
80	81	101.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
81	81	101.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
81	82	103.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
82	82	103.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
82	83	105.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
83	83	105.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
83	84	106.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
84	84	106.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
84	85	108.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
85	85	108.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
85	86	109.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
86	86	109.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To.To

Pretensado estático (t=0). Tensiones a tiempo To

I fase4.ISO.To

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
39	39	45.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
39	40	46.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
40	40	45.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
40	41	48.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
41	41	48.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
41	42	49.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
42	42	49.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
42	43	51.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
43	43	51.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
43	44	51.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
44	44	51.50	-728.78	0.00	386.98	0	0.00	2	0.00	2	0.00	2.35	0.00
44	45	52.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
45	1045	52.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
45	46	53.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
46	46	53.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
46	47	53.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
47	47	53.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
47	48	55.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
48	48	55.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
48	49	56.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
9	49	56.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
49	50	58.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
50	50	58.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
50	51	59.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
51	51	59.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
51	52	61.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
52	52	61.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
52	53	62.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
53	53	62.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
53	54	64.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
54	54	64.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
54	55	65.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
55	55	65.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
55	56	67.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
56	56	67.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
56	57	68.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
57	57	68.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
57	58	69.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
58	58	69.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
58	59	71.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
59	59	71.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
59	60	72.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
60	60	72.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
60	61	74.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
61	61	74.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
61	62	75.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
62	62	75.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
62	63	77.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
63	63	77.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
63	64	78.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
64	64	78.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
64	65	80.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
65	65	80.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
65	66	80.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
66	66	80.50	-728.78	0.00	386.98	0	0.00	2	0.00	2	0.00	2.35	0.00
66	67	81.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
67	1067	81.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
67	68	82.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
68	68	82.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
68	69	83.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
69	69	83.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
69	70	84.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
70	70	84.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
70	71	86.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
71	71	86.23	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
71	72	87.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
72	72	87.80	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
72	73	89.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
73	73	89.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
73	74	90.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
74	74	90.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
74	75	92.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
75	75	92.53	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
75	76	94.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
76	76	94.10	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
76	77	95.68	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To.To

Pretensado estático (t=0). Tensiones a tiempo To

I fase4.ISO.To

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
77	78	97.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
78	78	97.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
78	79	98.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
79	79	98.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
79	80	100.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
80	80	100.40	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
80	81	101.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
81	81	101.98	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
81	82	103.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
82	82	103.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
82	83	105.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
83	83	105.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
83	84	106.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
84	84	106.70	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
84	85	108.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
85	85	108.28	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
85	86	109.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
86	86	109.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
86	87	111.43	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
87	87	111.43	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
87	88	112.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
88	88	112.00	-728.78	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
88	89	113.00	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
89	1089	113.00	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
89	90	114.00	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
90	90	114.00	0.00	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
90	91	114.58	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
91	91	114.58	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
91	92	116.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
92	92	116.15	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
92	93	117.73	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
93	93	117.73	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
93	94	119.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
94	94	119.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
94	95	120.88	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
95	95	120.88	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
95	96	122.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
96	96	122.45	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
96	97	124.03	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
97	97	124.03	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
97	98	125.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
98	98	125.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
98	99	127.18	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
99	99	127.18	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
99	100	128.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
100	100	128.75	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
100	101	130.33	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
101	101	130.33	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
101	102	131.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
102	102	131.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
102	103	133.48	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
103	103	133.48	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
103	104	135.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
104	104	135.05	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
104	105	136.63	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
105	105	136.63	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
105	106	138.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
106	106	138.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
106	107	139.78	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
107	107	139.78	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
107	108	141.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
108	108	141.35	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
108	109	142.93	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
109	109	142.93	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
109	110	143.50	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
110	110	143.50	-728.78	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
110	111	144.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
111	1111	144.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
111	112	145.50	-728.78	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
112	112	145.50	0.00	0.00	386.98	0	-69.74	2	-1132.32	2	0.00	2.35	0.00
112	113	145.68	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
113	113	145.68	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
113	114	146.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
114	114	146.85	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
114	115	148.03	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To.To

Refrendado(s) estático(t=0)). Tensiones a tiempo To

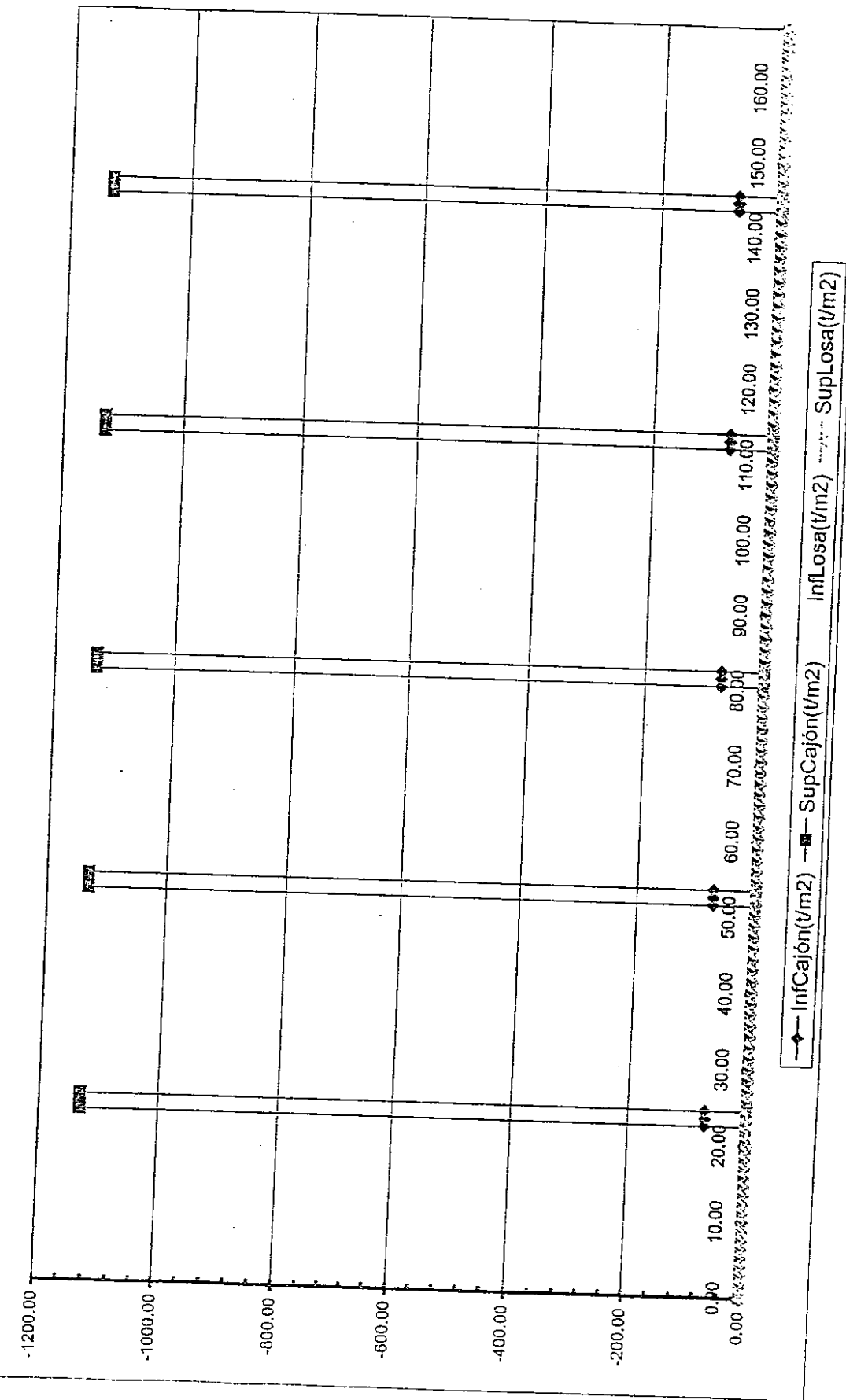
1 fase4.ISO.To

et. etc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
115	115	148.03	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
115	116	149.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
116	116	149.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
116	117	150.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
117	117	150.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
117	118	151.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
118	118	151.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
118	119	152.73	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
119	119	152.73	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
119	120	153.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
120	120	153.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
120	121	155.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
121	121	155.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
121	122	156.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
122	122	156.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
122	123	157.43	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
123	123	157.43	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
123	124	158.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
124	124	158.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
124	125	159.78	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
125	125	159.78	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
125	126	160.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
126	126	160.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
126	127	162.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
127	127	162.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
127	128	163.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
128	128	163.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
128	129	164.48	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
129	129	164.48	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
129	130	165.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
130	130	165.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
130	131	166.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
131	131	166.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
131	132	167.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
132	132	167.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
fase4.ISO.To.To

GRÁFICO DE TENSIONES



hsim_10.xls

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To.To

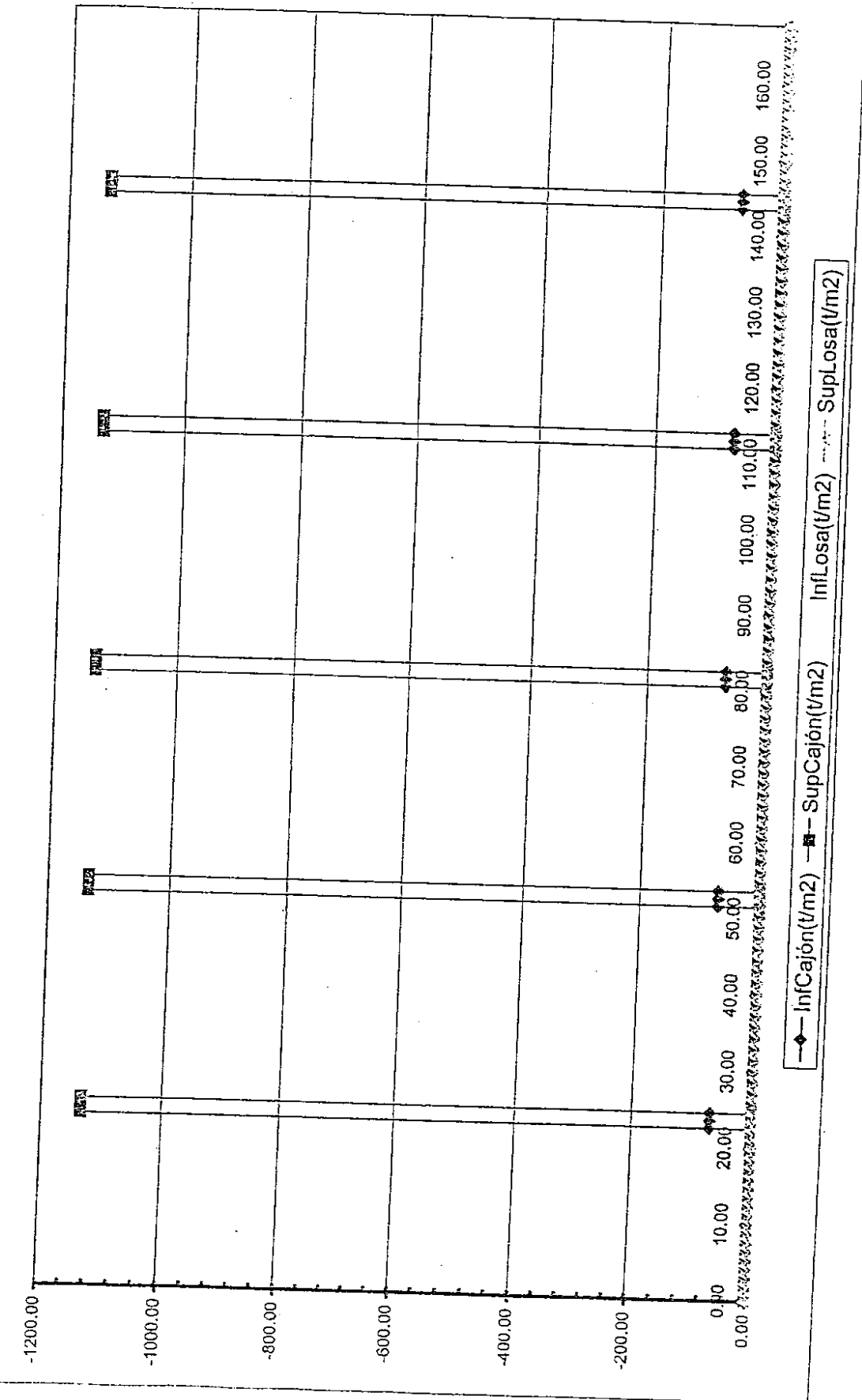
Preensado(sostático(t=0)). Tensiones a tiempo To

1) fase4.ISO.To
f etc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
115	116	149.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
116	116	149.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
116	117	150.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
117	117	150.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
117	118	151.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
118	118	151.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
118	119	152.73	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
119	119	152.73	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
119	120	153.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
120	120	153.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
120	121	155.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
121	121	155.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
121	122	156.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
122	122	156.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
122	123	157.43	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
123	123	157.43	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
123	124	158.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
124	124	158.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
124	125	159.78	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
125	125	159.78	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
125	126	160.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
126	126	160.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
126	127	162.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
127	127	162.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
127	128	163.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
128	128	163.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
128	129	164.48	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
129	129	164.48	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
129	130	165.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
130	130	165.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
130	131	166.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
131	131	166.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
131	132	167.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
132	132	167.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
fase4.ISO.To.To

GRÁFICO DE TENSIONES



hsim_t0.xls

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.ISO.To.To

Retensado isostático (t=0). Tensiones a tiempo To

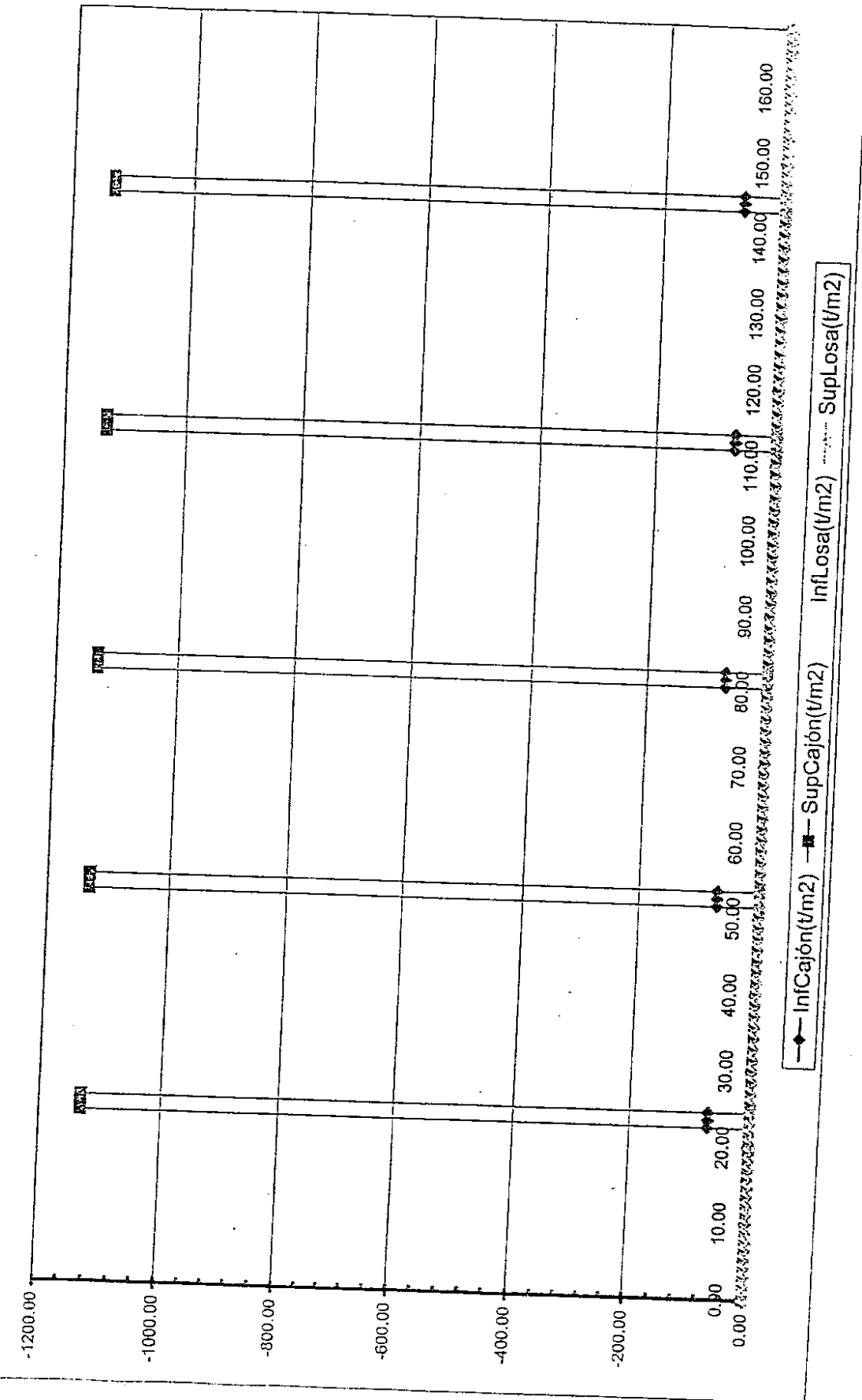
if fase4.ISO.To

if exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
115	115	148.03	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
115	116	149.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
116	116	149.20	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
116	117	150.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
117	117	150.38	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
117	118	151.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
118	118	151.55	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
118	119	152.73	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
119	119	152.73	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
119	120	153.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
120	120	153.90	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
120	121	155.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
121	121	155.08	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
121	122	156.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
122	122	156.25	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
122	123	157.43	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
123	123	157.43	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
123	124	158.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
124	124	158.60	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
24	125	159.78	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
25	125	159.78	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
125	126	160.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
16	126	160.95	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
126	127	162.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
127	127	162.13	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
127	128	163.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
128	128	163.30	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
128	129	164.48	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
129	129	164.48	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
129	130	165.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
130	130	165.65	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
130	131	166.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
131	131	166.83	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
131	132	167.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
132	132	167.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
fase4.ISO.To.To

GRÁFICO DE TENSIONES



hsim_t0.xls

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To.To

PretensadoHiperestático(t=0)). Tensiones a tiempo To

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
1	1	0.00	0.00	2.67	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	2.67	-2.67	0	-1.84	2	0.79	2	0.69	2.35	1.09
2	2	1.00	0.00	2.67	-2.67	0	-1.84	2	0.79	2	0.69	2.35	1.09
2	3	1.18	0.00	2.67	-3.14	0	-2.17	2	0.93	2	0.81	2.35	1.28
3	3	1.18	0.00	2.67	-3.14	0	-2.17	2	0.93	2	0.81	2.35	1.28
3	4	2.35	0.00	2.67	-6.27	0	-4.33	2	1.85	2	1.61	2.35	2.55
4	4	2.35	0.00	2.67	-6.27	0	-4.33	2	1.85	2	1.61	2.35	2.55
4	5	3.53	0.00	2.67	-9.41	0	-6.50	2	2.78	2	2.41	2.35	3.82
5	5	3.53	0.00	2.67	-9.41	0	-6.50	2	2.78	2	2.41	2.35	3.82
5	6	4.70	0.00	2.67	-12.55	0	-8.67	2	3.71	2	3.22	2.35	5.10
6	6	4.70	0.00	2.67	-12.55	0	-8.67	2	3.71	2	3.22	2.35	5.10
6	7	5.88	0.00	2.67	-15.68	0	-10.83	2	4.63	2	4.02	2.35	6.37
7	7	5.88	0.00	2.67	-15.68	0	-10.83	2	4.63	2	4.02	2.35	6.37
7	8	7.05	0.00	2.67	-18.82	0	-12.99	2	5.56	2	4.83	2.35	7.65
8	8	7.05	0.00	2.67	-18.82	0	-12.99	2	5.56	2	4.83	2.35	7.65
8	9	8.23	0.00	2.67	-21.95	0	-15.16	2	6.48	2	5.63	2.35	8.92
9	9	8.23	0.00	2.67	-21.95	0	-15.16	2	6.48	2	5.63	2.35	8.92
9	10	9.40	0.00	2.67	-25.09	0	-17.32	2	7.41	2	6.44	2.35	10.20
10	10	9.40	0.00	2.67	-25.09	0	-17.32	2	7.41	2	6.44	2.35	10.20
10	11	10.58	0.00	2.67	-28.23	0	-19.49	2	8.34	2	7.24	2.35	11.47
11	11	10.58	0.00	2.67	-28.23	0	-19.49	2	8.34	2	7.24	2.35	11.47
11	12	11.75	0.00	2.67	-31.36	0	-21.65	2	9.26	2	8.05	2.35	12.75
12	12	11.75	0.00	2.67	-31.36	0	-21.65	2	9.26	2	8.05	2.35	12.75
12	13	12.93	0.00	2.67	-34.50	0	-23.82	2	10.19	2	8.85	2.35	14.02
13	13	12.93	0.00	2.67	-34.50	0	-23.82	2	10.19	2	8.85	2.35	14.02
13	14	14.10	0.00	2.67	-37.64	0	-25.99	2	11.12	2	9.66	2.35	15.30
14	14	14.10	0.00	2.67	-37.64	0	-25.99	2	11.12	2	9.66	2.35	15.30
14	15	15.28	0.00	2.67	-40.77	0	-28.15	2	12.04	2	10.46	2.35	16.57
15	15	15.28	0.00	2.67	-40.77	0	-28.15	2	12.04	2	10.46	2.35	16.57
15	16	16.45	-0.03	2.67	-43.91	0	-30.32	2	12.97	2	11.27	2.35	17.85
16	16	16.45	-0.03	2.67	-43.91	0	-30.32	2	12.97	2	11.27	2.35	17.85
16	17	17.63	-0.03	2.67	-47.05	0	-32.50	2	13.89	2	12.06	2.35	19.11
17	17	17.63	-0.03	2.67	-47.05	0	-32.50	2	13.89	2	12.06	2.35	19.11
17	18	18.80	-0.03	2.67	-50.18	0	-33.60	2	14.58	2	12.93	2.35	20.38
18	18	18.80	-0.03	2.67	-50.18	0	-33.60	2	14.58	2	12.93	2.35	20.38
18	19	19.98	-0.69	2.58	-53.32	0	-35.93	2	15.35	2	13.35	2.35	21.64
19	19	19.98	-0.69	2.58	-53.32	0	-35.93	2	15.35	2	13.35	2.35	21.64
19	20	21.15	-0.69	2.58	-56.45	0	-38.09	2	16.33	2	14.35	2.35	22.90
20	20	21.15	-0.69	2.58	-56.45	0	-38.09	2	16.33	2	14.35	2.35	22.90
20	21	22.33	0.00	2.67	-59.59	0	-40.32	2	17.29	2	15.02	2.35	24.16
21	21	22.33	0.00	2.67	-59.59	0	-40.32	2	17.29	2	15.02	2.35	24.16
21	22	23.50	0.00	2.67	-62.73	0	-42.50	2	18.26	2	15.84	2.35	25.42
22	22	23.50	0.00	2.67	-62.73	0	-42.50	2	18.26	2	15.84	2.35	25.42
22	23	24.50	0.00	2.67	-65.86	0	-44.67	2	19.22	2	16.66	2.35	26.68
23	23	24.50	0.00	2.67	-65.86	0	-44.67	2	19.22	2	16.66	2.35	26.68
23	24	25.50	0.00	2.67	-68.99	0	-46.84	2	20.18	2	17.48	2.35	27.94
24	24	25.50	0.00	2.67	-68.99	0	-46.84	2	20.18	2	17.48	2.35	27.94
24	25	26.50	0.00	2.67	-72.12	0	-49.01	2	21.14	2	18.30	2.35	29.20
25	25	26.50	0.00	2.67	-72.12	0	-49.01	2	21.14	2	18.30	2.35	29.20
25	26	27.50	0.00	2.67	-75.25	0	-51.18	2	22.10	2	19.12	2.35	30.46
26	26	27.50	0.00	2.67	-75.25	0	-51.18	2	22.10	2	19.12	2.35	30.46
26	27	28.50	0.00	2.67	-78.38	0	-53.35	2	23.06	2	20.00	2.35	31.72
27	27	28.50	0.00	2.67	-78.38	0	-53.35	2	23.06	2	20.00	2.35	31.72
27	28	29.50	0.00	2.67	-81.51	0	-55.52	2	24.02	2	20.88	2.35	32.98
28	28	29.50	0.00	2.67	-81.51	0	-55.52	2	24.02	2	20.88	2.35	32.98
28	29	30.50	0.00	2.67	-84.64	0	-57.69	2	24.98	2	21.76	2.35	34.24
29	29	30.50	0.00	2.67	-84.64	0	-57.69	2	24.98	2	21.76	2.35	34.24
29	30	31.50	0.00	2.67	-87.77	0	-59.86	2	25.94	2	22.64	2.35	35.50
30	30	31.50	0.00	2.67	-87.77	0	-59.86	2	25.94	2	22.64	2.35	35.50
30	31	32.50	0.00	2.67	-90.90	0	-62.03	2	26.90	2	23.52	2.35	36.76
31	31	32.50	0.00	2.67	-90.90	0	-62.03	2	26.90	2	23.52	2.35	36.76
31	32	33.50	0.00	2.67	-94.03	0	-64.20	2	27.86	2	24.40	2.35	38.02
32	32	33.50	0.00	2.67	-94.03	0	-64.20	2	27.86	2	24.40	2.35	38.02
32	33	34.50	0.00	2.67	-97.16	0	-66.37	2	28.82	2	25.28	2.35	39.28
33	33	34.50	0.00	2.67	-97.16	0	-66.37	2	28.82	2	25.28	2.35	39.28
33	34	35.50	0.00	2.67	-100.29	0	-68.54	2	29.78	2	26.16	2.35	40.54
34	34	35.50	0.00	2.67	-100.29	0	-68.54	2	29.78	2	26.16	2.35	40.54
34	35	36.50	0.00	2.67	-103.42	0	-70.71	2	30.74	2	27.04	2.35	41.80
35	35	36.50	0.00	2.67	-103.42	0	-70.71	2	30.74	2	27.04	2.35	41.80
35	36	37.50	0.00	2.67	-106.55	0	-72.88	2	31.70	2	27.92	2.35	43.06
36	36	37.50	0.00	2.67	-106.55	0	-72.88	2	31.70	2	27.92	2.35	43.06
36	37	38.50	0.00	2.67	-109.68	0	-75.05	2	32.66	2	28.80	2.35	44.32
37	37	38.50	0.00	2.67	-109.68	0	-75.05	2	32.66	2	28.80	2.35	44.32
37	38	39.50	0.00	2.67	-112.81	0	-77.22	2	33.62	2	29.68	2.35	45.58
38	38	39.50	0.00	2.67	-112.81	0	-77.22	2	33.62	2	29.68	2.35	45.58
38	39	40.50	0.00	2.67	-115.94	0	-79.39	2	34.58	2	30.56	2.35	46.84
39	39	40.50	0.00	2.67	-115.94	0	-79.39	2	34.58	2	30.56	2.35	46.84

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To.To

PretensadoHiperestático(t=0)). Tensiones a tiempo To

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	0.00	-0.58	-50.16	0	-33.57	2	17.91	2	15.56	2.35	23.38
39	40	46.70	0.00	-0.58	-49.32	0	-33.01	2	17.61	2	15.30	2.35	22.99
40	40	46.70	0.12	-0.56	-49.32	0	-32.97	2	17.66	2	15.34	2.35	23.03
40	41	48.15	0.12	-0.56	-48.48	0	-32.41	2	17.36	2	15.07	2.35	22.64
41	41	48.15	0.12	-0.56	-48.48	0	-49.81	2	83.31	2	0.00	2.35	0.00
41	42	49.60	0.12	-0.56	-47.65	0	-48.95	2	81.88	2	0.00	2.35	0.00
42	42	49.60	0.00	-0.58	-47.65	0	-49.03	2	81.80	2	0.00	2.35	0.00
42	43	51.05	0.00	-0.58	-46.81	0	-48.17	2	80.36	2	0.00	2.35	0.00
43	43	51.05	0.00	-0.58	-46.81	0	-48.17	2	80.36	2	0.00	2.35	0.00
43	44	51.50	0.00	-0.58	-46.55	0	-47.90	2	79.92	2	0.00	2.35	0.00
44	44	51.50	0.00	-0.58	-46.55	0	-47.90	2	79.92	2	0.00	2.35	0.00
44	45	52.50	0.00	-0.58	-45.97	0	-47.31	2	78.92	2	0.00	2.35	0.00
45	1045	52.50	0.00	0.05	-45.97	0	-47.31	2	78.92	2	0.00	2.35	0.00
45	46	53.50	0.00	0.05	-46.02	0	-47.36	2	79.01	2	0.00	2.35	0.00
46	46	53.50	0.00	0.05	-46.02	0	-47.36	2	79.01	2	0.00	2.35	0.00
46	47	53.95	0.00	0.05	-46.04	0	-47.38	2	79.04	2	0.00	2.35	0.00
47	47	53.95	0.00	0.05	-46.04	0	-47.38	2	79.04	2	0.00	2.35	0.00
47	48	55.40	0.00	0.05	-46.12	0	-47.46	2	79.18	2	0.00	2.35	0.00
48	48	55.40	0.01	0.05	-46.12	0	-47.45	2	79.18	2	0.00	2.35	0.00
48	49	56.85	0.01	0.05	-46.19	0	-47.53	2	79.30	2	0.00	2.35	0.00
49	49	56.85	0.01	0.05	-46.19	0	-30.91	2	16.50	2	14.33	2.35	21.54
49	50	58.30	0.01	0.05	-46.26	0	-30.96	2	16.52	2	14.35	2.35	21.57
50	50	58.30	0.00	0.05	-46.26	0	-30.96	2	16.52	2	14.35	2.35	21.57
50	51	59.75	0.00	0.05	-46.33	0	-31.01	2	16.55	2	14.37	2.35	21.60
51	51	59.75	0.00	0.05	-46.33	0	-31.99	2	13.69	2	11.89	2.35	18.83
51	52	61.20	0.00	0.05	-46.41	0	-32.05	2	13.71	2	11.91	2.35	18.86
52	52	61.20	0.00	0.05	-46.41	0	-32.05	2	13.71	2	11.91	2.35	18.86
52	53	62.65	0.00	0.05	-46.48	0	-32.09	2	13.73	2	11.93	2.35	18.89
53	53	62.65	0.00	0.05	-46.48	0	-32.09	2	13.73	2	11.93	2.35	18.89
53	54	64.10	0.00	0.05	-46.55	0	-32.14	2	13.75	2	11.94	2.35	18.92
54	54	64.10	0.00	0.05	-46.55	0	-32.14	2	13.75	2	11.94	2.35	18.92
54	55	65.55	0.00	0.05	-46.62	0	-32.19	2	13.77	2	11.96	2.35	18.95
55	55	65.55	0.00	0.05	-46.62	0	-32.19	2	13.77	2	11.96	2.35	18.95
55	56	67.00	0.00	0.05	-46.70	0	-32.25	2	13.80	2	11.98	2.35	18.98
56	56	67.00	0.00	0.05	-46.70	0	-32.25	2	13.80	2	11.98	2.35	18.98
56	57	68.45	0.00	0.05	-46.77	0	-32.29	2	13.82	2	12.00	2.35	19.01
57	57	68.45	0.00	0.05	-46.77	0	-32.29	2	13.82	2	12.00	2.35	19.01
57	58	69.90	0.00	0.05	-46.84	0	-32.34	2	13.84	2	12.02	2.35	19.04
58	58	69.90	0.00	0.05	-46.84	0	-32.34	2	13.84	2	12.02	2.35	19.04
58	59	71.35	0.00	0.05	-46.91	0	-32.39	2	13.86	2	12.04	2.35	19.07
59	59	71.35	0.00	0.05	-46.91	0	-32.39	2	13.86	2	12.04	2.35	19.07
59	60	72.80	0.00	0.05	-46.99	0	-32.45	2	13.88	2	12.06	2.35	19.10
60	60	72.80	0.00	0.05	-46.99	0	-32.45	2	13.88	2	12.06	2.35	19.10
60	61	74.25	0.00	0.05	-47.06	0	-32.49	2	13.90	2	12.08	2.35	19.13
61	61	74.25	0.00	0.05	-47.06	0	-31.50	2	16.81	2	14.60	2.35	21.94
61	62	75.70	0.00	0.05	-47.13	0	-31.55	2	16.83	2	14.62	2.35	21.97
62	62	75.70	-0.01	0.05	-47.13	0	-31.55	2	16.83	2	14.62	2.35	21.97
62	63	77.15	-0.01	0.05	-47.20	0	-31.60	2	16.85	2	14.64	2.35	22.00
63	63	77.15	-0.01	0.05	-47.20	0	-48.58	2	81.03	2	0.00	2.35	0.00
63	64	78.60	-0.01	0.05	-47.28	0	-48.66	2	81.16	2	0.00	2.35	0.00
64	64	78.60	0.00	0.05	-47.28	0	-48.65	2	81.17	2	0.00	2.35	0.00
64	65	80.05	0.00	0.05	-47.35	0	-48.73	2	81.29	2	0.00	2.35	0.00
65	65	80.05	0.00	0.05	-47.35	0	-48.73	2	81.29	2	0.00	2.35	0.00
65	66	80.50	0.00	0.05	-47.37	0	-48.75	2	81.32	2	0.00	2.35	0.00
66	66	80.50	0.00	0.05	-47.37	0	-48.75	2	81.32	2	0.00	2.35	0.00
66	67	81.50	0.00	0.05	-47.42	0	-48.80	2	81.41	2	0.00	2.35	0.00
7	1067	81.50	0.00	-0.20	-47.42	0	-48.80	2	81.41	2	0.00	2.35	0.00
7	68	82.50	0.00	-0.20	-47.23	0	-48.60	2	81.08	2	0.00	2.35	0.00
8	68	82.50	0.00	-0.20	-47.23	0	-48.60	2	81.08	2	0.00	2.35	0.00
8	69	83.08	0.00	-0.20	-47.11	0	-48.48	2	80.88	2	0.00	2.35	0.00
9	69	83.08	0.00	-0.20	-47.11	0	-48.48	2	80.88	2	0.00	2.35	0.00
9	70	84.65	0.00	-0.20	-46.81	0	-48.17	2	80.36	2	0.00	2.35	0.00
9	70	84.65	-0.04	-0.19	-46.81	0	-48.20	2	80.36	2	0.00	2.35	0.00
9	71	86.23	-0.04	-0.19	-46.50	0	-47.88	2	79.80	2	0.00	2.35	0.00
9	71	86.23	-0.04	-0.19	-46.50	0	-47.88	2	79.80	2	0.00	2.35	0.00
9	72	87.80	-0.04	-0.19	-46.19	0	-31.14	2	16.59	2	14.41	2.35	21.67
9	72	87.80	0.00	-0.20	-46.19	0	-30.93	2	16.48	2	14.31	2.35	21.52
9	73	89.38	0.00	-0.20	-45.88	0	-30.92	2	16.50	2	14.33	2.35	21.53
9	73	89.38	0.00	-0.20	-45.88	0	-30.71	2	16.39	2	14.23	2.35	21.39
9	74	90.95	0.00	-0.20	-45.58	0	-31.58	2	13.55	2	11.77	2.35	18.65
9	74	90.95	0.00	-0.20	-45.58	0	-31.47	2	13.47	2	11.70	2.35	18.53
9	75	92.53	0.00	-0.20	-45.27	0	-31.47	2	13.47	2	11.70	2.35	18.53
9	75	92.53	0.00	-0.20	-45.27	0	-31.26	2	13.37	2	11.62	2.35	18.40
9	76	94.10	0.00	-0.20	-44.96	0	-31.26	2	13.37	2	11.62	2.35	18.40
9	76	94.10	0.00	-0.20	-44.96	0	-31.04	2	13.28	2	11.54	2.35	18.27
9	76	94.10	0.00	-0.20	-44.96	0	-31.04	2	13.28	2	11.54	2.35	18.27
9	77	95.68	0.00	-0.20	-44.65	0	-30.83	2	13.19	2	11.46	2.35	18.15

214

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To.To

(Pretensado Hiperestático(t=0)). Tensiones a tiempo To

1./fase4.HIP.To

ver exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	2.67	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	2.67	-2.67	0	-1.84	2	0.79	2	0.69	2.35	1.09
2	2	1.00	0.00	2.67	-2.67	0	-1.84	2	0.79	2	0.69	2.35	1.09
2	3	1.18	0.00	2.67	-3.14	0	-2.17	2	0.93	2	0.81	2.35	1.28
3	3	1.18	0.00	2.67	-3.14	0	-2.17	2	0.93	2	0.81	2.35	1.28
3	4	2.35	0.00	2.67	-6.27	0	-4.33	2	1.85	2	1.61	2.35	2.55
4	4	2.35	0.00	2.67	-6.27	0	-4.33	2	1.85	2	1.61	2.35	2.55
4	5	3.53	0.00	2.67	-9.41	0	-6.50	2	2.78	2	2.41	2.35	3.82
5	5	3.53	0.00	2.67	-9.41	0	-6.50	2	2.78	2	2.41	2.35	3.82
5	6	4.70	0.00	2.67	-12.55	0	-8.67	2	3.71	2	3.22	2.35	5.10
6	6	4.70	0.00	2.67	-12.55	0	-8.67	2	3.71	2	3.22	2.35	5.10
6	7	5.88	0.00	2.67	-15.68	0	-10.83	2	4.63	2	4.02	2.35	6.37
7	7	5.88	0.00	2.67	-15.68	0	-10.83	2	4.63	2	4.02	2.35	6.37
7	8	7.05	0.00	2.67	-18.82	0	-12.99	2	5.56	2	4.83	2.35	7.65
8	8	7.05	0.00	2.67	-18.82	0	-12.99	2	5.56	2	4.83	2.35	7.65
8	9	8.23	0.00	2.67	-21.95	0	-15.16	2	6.48	2	5.63	2.35	8.92
9	9	8.23	0.00	2.67	-21.95	0	-15.16	2	6.48	2	5.63	2.35	8.92
9	10	9.40	0.00	2.67	-25.09	0	-17.32	2	7.41	2	6.44	2.35	10.20
10	10	9.40	0.00	2.67	-25.09	0	-17.32	2	7.41	2	6.44	2.35	10.20
10	11	10.58	0.00	2.67	-28.23	0	-19.49	2	8.34	2	7.24	2.35	11.47
11	11	10.58	0.00	2.67	-28.23	0	-19.49	2	8.34	2	7.24	2.35	11.47
11	12	11.75	0.00	2.67	-31.36	0	-21.65	2	9.26	2	8.05	2.35	12.75
12	12	11.75	0.00	2.67	-31.36	0	-21.65	2	9.26	2	8.05	2.35	12.75
12	13	12.93	0.00	2.67	-34.50	0	-23.82	2	10.19	2	8.85	2.35	14.02
13	13	12.93	0.00	2.67	-34.50	0	-23.82	2	10.19	2	8.85	2.35	14.02
13	14	14.10	0.00	2.67	-37.64	0	-25.99	2	11.12	2	9.66	2.35	15.30
14	14	14.10	0.00	2.67	-37.64	0	-25.99	2	11.12	2	9.66	2.35	15.30
14	15	15.28	0.00	2.67	-40.77	0	-28.15	2	12.04	2	10.46	2.35	16.57
15	15	15.28	0.00	2.67	-40.77	0	-28.15	2	12.04	2	10.46	2.35	16.57
15	16	16.45	-0.03	2.67	-43.91	0	-30.32	2	12.97	2	11.27	2.35	17.85
16	16	16.45	-0.03	2.67	-43.91	0	-30.32	2	12.97	2	11.27	2.35	17.85
16	17	17.63	-0.03	2.67	-47.05	0	-32.50	2	13.89	2	12.06	2.35	19.11
17	17	17.63	-0.03	2.67	-47.05	0	-32.50	2	13.89	2	12.06	2.35	19.11
17	18	18.80	-0.03	2.67	-50.18	0	-33.60	2	14.58	2	12.93	2.35	20.38
18	18	18.80	-0.03	2.67	-50.18	0	-33.60	2	14.58	2	12.93	2.35	20.38
18	19	19.98	-0.69	2.58	-53.32	0	-35.93	2	15.35	2	13.89	2.35	21.64
19	19	19.98	-0.69	2.58	-53.32	0	-35.93	2	15.35	2	13.89	2.35	21.64
19	20	21.15	-0.69	2.58	-56.45	0	-38.06	2	16.33	2	14.81	2.35	22.90
20	20	21.15	-0.69	2.58	-56.45	0	-38.06	2	16.33	2	14.81	2.35	22.90
20	21	22.33	0.00	2.67	-59.59	0	-40.34	2	17.29	2	15.70	2.35	24.16
21	21	22.33	0.00	2.67	-59.59	0	-40.34	2	17.29	2	15.70	2.35	24.16
21	22	23.50	0.00	2.67	-62.73	0	-42.60	2	18.25	2	16.66	2.35	25.42
22	22	23.50	0.00	2.67	-62.73	0	-42.60	2	18.25	2	16.66	2.35	25.42
22	23	24.50	0.00	2.67	-65.86	0	-44.86	2	19.21	2	17.62	2.35	26.68
23	23	24.50	0.00	2.67	-65.86	0	-44.86	2	19.21	2	17.62	2.35	26.68
23	24	25.50	0.00	2.67	-69.00	0	-47.11	2	20.17	2	18.58	2.35	27.94
24	24	25.50	0.00	2.67	-69.00	0	-47.11	2	20.17	2	18.58	2.35	27.94
24	25	26.50	0.00	2.67	-72.15	0	-49.36	2	21.13	2	19.54	2.35	29.20
25	25	26.50	0.00	2.67	-72.15	0	-49.36	2	21.13	2	19.54	2.35	29.20
25	26	27.50	0.00	2.67	-75.29	0	-51.61	2	22.09	2	20.50	2.35	30.46
26	26	27.50	0.00	2.67	-75.29	0	-51.61	2	22.09	2	20.50	2.35	30.46
26	27	28.50	-0.12	2.56	-78.43	0	-53.86	2	23.05	2	21.46	2.35	31.72
27	27	28.50	-0.12	2.56	-78.43	0	-53.86	2	23.05	2	21.46	2.35	31.72
27	28	29.50	-0.12	2.56	-81.57	0	-56.11	2	24.01	2	22.42	2.35	32.98
28	28	29.50	-0.12	2.56	-81.57	0	-56.11	2	24.01	2	22.42	2.35	32.98
28	29	30.50	0.00	2.58	-84.71	0	-58.36	2	24.97	2	23.38	2.35	34.24
29	29	30.50	0.00	2.58	-84.71	0	-58.36	2	24.97	2	23.38	2.35	34.24
29	30	31.50	0.00	2.58	-87.85	0	-60.61	2	25.93	2	24.34	2.35	35.50
30	30	31.50	0.00	2.58	-87.85	0	-60.61	2	25.93	2	24.34	2.35	35.50
30	31	32.50	0.00	2.58	-90.99	0	-62.86	2	26.89	2	25.30	2.35	36.76
31	31	32.50	0.00	2.58	-90.99	0	-62.86	2	26.89	2	25.30	2.35	36.76
31	32	33.50	0.00	2.58	-94.13	0	-65.11	2	27.85	2	26.26	2.35	38.02
32	32	33.50	0.00	2.58	-94.13	0	-65.11	2	27.85	2	26.26	2.35	38.02
32	33	34.50	0.00	2.58	-97.27	0	-67.36	2	28.81	2	27.22	2.35	39.28
33	33	34.50	0.00	2.58	-97.27	0	-67.36	2	28.81	2	27.22	2.35	39.28
33	34	35.50	0.00	2.58	-100.41	0	-69.61	2	29.77	2	28.18	2.35	40.54
34	34	35.50	0.00	2.58	-100.41	0	-69.61	2	29.77	2	28.18	2.35	40.54
34	35	36.50	0.00	2.58	-103.55	0	-71.86	2	30.73	2	29.14	2.35	41.80
35	35	36.50	0.00	2.58	-103.55	0	-71.86	2	30.73	2	29.14	2.35	41.80
35	36	37.50	0.00	2.58	-106.69	0	-74.11	2	31.69	2	30.10	2.35	43.06
36	36	37.50	0.00	2.58	-106.69	0	-74.11	2	31.69	2	30.10	2.35	43.06
36	37	38.50	0.00	2.58	-109.83	0	-76.36	2	32.65	2	31.06	2.35	44.32
37	37	38.50	0.00	2.58	-109.83	0	-76.36	2	32.65	2	31.06	2.35	44.32
37	38	39.50	0.00	2.58	-112.97	0	-78.61	2	33.61	2	32.02	2.35	45.58
38	38	39.50	0.00	2.58	-112.97	0	-78.61	2	33.61	2	32.02	2.35	45.58
38	39	40.50	0.00	2.58	-116.11	0	-80.86	2	34.57	2	32.98	2.35	46.84
39	39	40.50	0.00	2.58	-116.11	0	-80.86	2	34.57	2	32.98	2.35	46.84

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To.To

(Pretensado Hiperestático(t=0)). Tensiones a tiempo To

1./fase4.HIP.To

ver exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	0.00	-0.58	-50.16	0	-33.57	2	17.91	2	15.56	2.35	23.38
39	40	46.70	0.00	-0.58	-49.32	0	-33.01	2	17.61	2	15.30	2.35	22.99
40	40	46.70	0.12	-0.56	-49.32	0	-32.97	2	17.66	2	15.34	2.35	23.03
40	41	48.15	0.12	-0.56	-48.48	0	-32.41	2	17.36	2	15.07	2.35	22.64
41	41	48.15	0.12	-0.56	-48.48	0	-32.41	2	17.36	2	15.07	2.35	22.64
41	42	49.60	0.12	-0.56	-47.65	0	-31.85	2	17.06	2	14.80	2.35	22.25
42	42	49.60	0.00	-0.58	-47.65	0	-31.85	2	17.06	2	14.80	2.35	22.25
42	43	51.05	0.00	-0.58	-46.81	0	-31.29	2	16.76	2	14.53	2.35	21.86
43	43	51.05	0.00	-0.58	-46.81	0	-31.29	2	16.76	2	14.53	2.35	21.86
43	44	51.50	0.00	-0.58	-46.55	0	-31.01	2	16.52	2	14.35	2.35	21.57
44	44	51.50	0.00	-0.58	-46.55	0	-31.01	2	16.52	2	14.35	2.35	21.57
44	45	52.50	0.00	-0.58	-45.97	0	-30.91	2	16.50	2	14.33	2.35	21.54
45	1045	52.50	0.00	0.05	-45.97	0	-30.96	2	16.52	2	14.35	2.35	21.57
45	46	53.50	0.00	0.05	-45.02	0	-30.96	2	16.52	2	14.35	2.35	21.57
46	46	53.50	0.00	0.05	-45.02	0	-30.96	2	16.52	2	14.35	2.35	21.57
46	47	53.95	0.00	0.05	-46.04	0	-31.99	2	13.69	2	11.89	2.35	18.83
47	47	53.95	0.00	0.05	-46.04	0	-31.99	2	13.69	2	11.89	2.35	18.83
47	48	55.40	0.00	0.05	-46.04	0	-32.05	2	13.71	2	11.91	2.35	18.86
47	48	55.40	0.01	0.05	-46.12	0	-32.05	2	13.71	2	11.91	2.35	18.86
48	48	55.40	0.01	0.05	-46.12	0	-32.09	2	13.73	2	11.93	2.35	18.89
48	49	56.85	0.01	0.05	-46.19	0	-32.14	2	13.75	2	11.94	2.35	18.92
49	49	56.85	0.01	0.05	-46.19	0	-32.14	2	13.75	2	11.94	2.35	18.92
49	50	58.30	0.01	0.05	-46.26	0	-32.19	2	13.77	2	11.96	2.35	18.95
50	50	58.30	0.00	0.05	-46.26	0	-32.19	2	13.77	2	11.96	2.35	18.95
50	51	59.75	0.00	0.05	-46.33	0	-32.25	2	13.80	2	11.98	2.35	18.98
51	51	59.75	0.00	0.05	-46.33	0	-32.25	2	13.80	2	11.98	2.35	18.98
51	52	61.20	0.00	0.05	-46.41	0	-32.29	2	13.82	2	12.00	2.35	19.01
52	52	61.20	0.00	0.05	-46.41	0	-32.29	2	13.82	2	12.00	2.35	19.01
52	53	62.65	0.00	0.05	-46.48	0	-32.34	2	13.84	2	12.02	2.35	19.04
53	53	62.65	0.00	0.05	-46.48	0	-32.34	2	13.84	2	12.02	2.35	19.04
53	54	64.10	0.00	0.05	-46.55	0	-32.39	2	13.86	2	12.04	2.35	19.07
54	54	64.10	0.00	0.05	-46.55	0	-32.39	2	13.86	2	12.04	2.35	19.07
54	55	65.55	0.00	0.05	-46.62	0	-32.45	2	13.88	2	12.06	2.35	19.10
55	55	65.55	0.00	0.05	-46.62	0	-32.45	2	13.88	2	12.06	2.35	19.10
55	56	67.00	0.00	0.05	-46.70	0	-32.49	2	13.90	2	12.08	2.35	19.13
56	56	67.00	0.00	0.05	-46.70	0	-32.49	2	13.90	2	12.08	2.35	19.13
56	57	68.45	0.00	0.05	-46.77	0	-31.55	2	16.81	2	14.60	2.35	21.94
57	57	68.45	0.00	0.05	-46.77	0	-31.55	2	16.81	2	14.60	2.35	21.94
57	58	69.90	0.00	0.05	-46.84	0	-31.55	2	16.83	2	14.62	2.35	21.97
58	58	69.90	0.00	0.05	-46.84	0	-31.55	2	16.83	2	14.62	2.35	21.97
58	59	71.35	0.00	0.05	-46.91	0	-31.60	2	16.85	2	14.64	2.35	22.00
59	59	71.35	0.00	0.05	-46.91	0	-31.60	2	16.85	2	14.64	2.35	22.00
59	60	72.80	0.00	0.05	-46.99	0	-48.58	2	81.03	2	0.00	2.35	0.00
60	60	72.80	0.00	0.05	-46.99	0	-48.58	2	81.03	2	0.00	2.35	0.00
60	61	74.25	0.00	0.05	-47.06	0	-48.66	2	81.16	2	0.00	2.35	0.00
61	61	74.25	0.00	0.05	-47.06	0	-48.66	2	81.16	2	0.00	2.35	0.00
61	62	75.70	0.00	0.05	-47.13	0	-48.73	2	81.29	2	0.00	2.35	0.00
62	62	75.70	-0.01	0.05	-47.13	0	-48.73	2	81.29	2	0.00	2.35	0.00
62	63	77.15	-0.01	0.05	-47.20	0	-48.75	2	81.32	2	0.00	2.35	0.00
63	63	77.15	-0.01	0.05	-47.20	0	-48.75	2	81.32	2	0.00	2.35	0.00
63	64	78.60	-0.01	0.05	-47.28	0	-48.75	2	81.32	2	0.00	2.35	0.00
64	64	78.60	0.00	0.05	-47.28	0	-48.75	2	81.32	2	0.00	2.35	0.00
64	65	80.05	0.00	0.05	-47.35	0	-48.75	2	81.32	2	0.00	2.35	0.00
65	65	80.05	0.00	0.05	-47.35	0	-48.75	2	81.32	2	0.00	2.35	0.00
65	66	80.50	0.00	0.05	-47.37	0	-48.75	2	81.32	2	0.00	2.35	0.00
66	66	80.50	0.00	0.05	-47.37	0	-48.75	2	81.32	2	0.00	2.35	0.00
66	67	81.50	0.00	0.05	-47.42	0	-48.75	2	81.32	2	0.00	2.35	0.00
67	1057	81.50	0.00	-0.20	-47.42	0	-48.80	2	81.41	2	0.00	2.35	0.00
67	68	82.50	0.00	-0.20	-47.42	0	-48.80	2	81.41	2	0.00	2.35	0.00
68	68	82.50	0.00	-0.20	-47.23	0	-48.80	2	81.41	2	0.00	2.35	0.00
68	69	83.08	0.00	-0.20	-47.23	0	-48.60	2	81.08	2	0.00	2.35	0.00
69	69	83.08	0.00	-0.20	-47.11	0	-48.60	2	81.08	2	0.00	2.35	0.00
69	70	84.65	0.00	-0.20	-47.11	0	-48.48	2	80.88	2	0.00	2.35	0.00
70	70	84.65	-0.04	-0.19	-46.81	0	-48.48	2	80.88	2	0.00	2.35	0.00
70	71	86.23	-0.04	-0.19	-46.81	0	-48.20	2	80.36	2	0.00	2.35	0.00
71	71	86.23	-0.04	-0.19	-46.50	0	-48.20	2	80.36	2	0.00	2.35	0.00
71	72	87.80	-0.04	-0.19	-46.50	0	-47.88	2	79.80	2	0.00	2.35	0.00
72	72	87.80	0.00	-0.20	-46.19	0	-31.14	2	16.59	2	14.41	2.35	21.67
72	73	89.38	0.00	-0.20	-46.19	0	-30.93	2	16.48	2	14.31	2.35	21.52
73	73	89.38	0.00	-0.20	-45.88	0	-30.92	2	16.50	2	14.33	2.35	21.53
73	74	90.95	0.00	-0.20	-45.88	0	-30.71	2	16.39	2	14.23	2.35	21.39
74	74	90.95	0.00	-0.20	-45.58	0	-31.88	2	13.55	2	11.77	2.35	18.65
74	75	92.53	0.00	-0.20	-45.58	0	-31.47	2	13.47	2	11.70	2.35	18.53
75	75	92.53	0.00	-0.20	-45.27	0	-31.47	2	13.47	2	11.70	2.35	18.53
75	76	94.10	0.00	-0.20	-45.27	0	-31.26	2	13.37	2	11.62	2.35	18.40
76	76	94.10	0.00	-0.20	-44.96	0	-31.26	2	13.37	2	11.62	2.35	18.40
76	77	95.68	0.00	-0.20	-44.96	0	-31.04	2	13.28	2	11.54	2.35	18.27
77					-44.65	0	-31.04	2	13.28	2	11.54	2.35	18.27
						0	-30.83	2	13.19	2	11.46	2.35	18.15

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To.To

(Pretensado Hiperestático(t=0)). Tensiones a tiempo To

I: fase4.HIP.To

ref. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
1	1	0.00	0.00	2.67	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	2.67	-2.67	0	-1.84	2	0.79	2	0.69	2.35	1.09
2	2	1.00	0.00	2.67	-2.67	0	-1.84	2	0.79	2	0.69	2.35	1.09
3	3	1.18	0.00	2.67	-3.14	0	-2.17	2	0.93	2	0.81	2.35	1.28
3	4	2.35	0.00	2.67	-3.14	0	-2.17	2	0.93	2	0.81	2.35	1.28
4	4	2.35	0.00	2.67	-6.27	0	-4.33	2	1.85	2	1.61	2.35	2.55
4	5	3.53	0.00	2.67	-6.27	0	-4.33	2	1.85	2	1.61	2.35	2.55
5	5	3.53	0.00	2.67	-9.41	0	-6.50	2	2.78	2	2.41	2.35	3.82
5	6	4.70	0.00	2.67	-9.41	0	-6.50	2	2.78	2	2.41	2.35	3.82
6	6	4.70	0.00	2.67	-12.55	0	-8.67	2	3.71	2	3.22	2.35	5.10
6	7	5.88	0.00	2.67	-12.55	0	-8.67	2	3.71	2	3.22	2.35	5.10
7	7	5.88	0.00	2.67	-15.68	0	-10.83	2	4.63	2	4.02	2.35	6.37
8	8	7.05	0.00	2.67	-15.68	0	-10.83	2	4.63	2	4.02	2.35	6.37
8	9	8.23	0.00	2.67	-18.82	0	-12.99	2	5.56	2	4.83	2.35	7.65
8	9	8.23	0.00	2.67	-18.82	0	-12.99	2	5.56	2	4.83	2.35	7.65
9	9	8.23	0.00	2.67	-21.95	0	-15.16	2	6.48	2	5.63	2.35	8.92
9	10	9.40	0.00	2.67	-21.95	0	-15.16	2	6.48	2	5.63	2.35	8.92
10	10	9.40	0.00	2.67	-25.09	0	-17.32	2	7.41	2	6.44	2.35	10.20
10	11	10.58	0.00	2.67	-25.09	0	-17.32	2	7.41	2	6.44	2.35	10.20
11	11	10.58	0.00	2.67	-28.23	0	-19.49	2	8.34	2	7.24	2.35	11.47
11	12	11.75	0.00	2.67	-28.23	0	-19.49	2	8.34	2	7.24	2.35	11.47
12	12	11.75	0.00	2.67	-31.36	0	-21.65	2	9.26	2	8.05	2.35	12.75
12	13	12.93	0.00	2.67	-31.36	0	-21.65	2	9.26	2	8.05	2.35	12.75
13	13	12.93	0.00	2.67	-34.50	0	-23.82	2	10.19	2	8.85	2.35	14.02
13	14	14.10	0.00	2.67	-34.50	0	-23.82	2	10.19	2	8.85	2.35	14.02
14	14	14.10	0.00	2.67	-37.64	0	-25.99	2	11.12	2	9.66	2.35	15.30
14	15	15.28	0.00	2.67	-37.64	0	-25.99	2	11.12	2	9.66	2.35	15.30
15	15	15.28	0.00	2.67	-40.77	0	-28.15	2	12.04	2	10.46	2.35	16.57
15	16	16.45	0.00	2.67	-40.77	0	-28.15	2	12.04	2	10.46	2.35	16.57
16	16	16.45	-0.03	2.67	-43.91	0	-30.32	2	12.97	2	11.27	2.35	17.85
16	17	17.63	-0.03	2.67	-43.91	0	-30.32	2	12.97	2	11.27	2.35	17.85
17	17	17.63	-0.03	2.67	-47.05	0	-32.50	2	13.89	2	12.06	2.35	19.11
17	18	18.80	-0.03	2.67	-47.05	0	-32.50	2	13.89	2	12.06	2.35	19.11
18	18	18.80	-0.69	2.58	-50.18	0	-33.60	2	16.79	2	14.58	2.35	21.93
18	19	19.98	-0.69	2.58	-50.18	0	-33.60	2	16.79	2	14.58	2.35	21.93
19	19	19.98	-0.69	2.58	-53.32	0	-35.93	2	17.68	2	15.35	2.35	23.38
19	20	21.15	-0.69	2.58	-53.32	0	-35.93	2	17.68	2	15.35	2.35	23.38
20	20	21.15	0.00	2.67	-56.45	0	-58.53	2	91.10	2	0.00	2.35	0.00
20	21	22.33	0.00	2.67	-56.45	0	-58.53	2	96.47	2	0.00	2.35	0.00
21	21	22.33	0.00	2.67	-59.59	0	-61.32	2	96.91	2	0.00	2.35	0.00
21	22	22.50	0.00	2.67	-59.59	0	-61.32	2	102.30	2	0.00	2.35	0.00
22	22	22.50	0.00	2.67	-60.06	0	-61.80	2	102.30	2	0.00	2.35	0.00
22	23	23.50	0.00	2.67	-60.06	0	-61.80	2	103.11	2	0.00	2.35	0.00
23	1023	23.50	0.00	2.67	-62.73	0	-64.55	2	103.11	2	0.00	2.35	0.00
24	24	24.50	0.00	-0.58	-62.73	0	-64.55	2	107.69	2	0.00	2.35	0.00
24	25	24.95	0.00	-0.58	-62.15	0	-63.96	2	107.69	2	0.00	2.35	0.00
25	25	24.95	0.00	-0.58	-61.89	0	-63.96	2	106.70	2	0.00	2.35	0.00
26	26	26.40	0.00	-0.58	-61.89	0	-63.96	2	106.25	2	0.00	2.35	0.00
26	27	27.85	-0.12	-0.56	-61.05	0	-62.82	2	105.25	2	0.00	2.35	0.00
27	27	27.85	-0.12	-0.56	-60.21	0	-62.82	2	104.81	2	0.00	2.35	0.00
27	28	29.30	-0.12	-0.56	-60.21	0	-62.04	2	104.73	2	0.00	2.35	0.00
28	28	29.30	0.00	-0.58	-59.38	0	-40.34	2	103.29	2	0.00	2.35	0.00
28	29	30.75	0.00	-0.58	-59.38	0	-39.79	2	21.46	2	18.64	2.35	28.03
29	29	30.75	0.00	-0.58	-58.54	0	-39.75	2	21.16	2	18.38	2.35	27.65
29	30	32.20	0.00	-0.58	-58.54	0	-40.42	2	21.21	2	18.42	2.35	27.68
30	30	32.20	0.00	-0.58	-57.70	0	-39.84	2	20.91	2	18.16	2.35	27.29
30	31	33.65	0.00	-0.58	-57.70	0	-39.84	2	17.29	2	15.02	2.35	23.79
31	31	33.65	0.00	-0.58	-56.86	0	-39.26	2	17.05	2	14.81	2.35	23.45
31	32	35.10	0.00	-0.58	-56.86	0	-39.26	2	16.80	2	14.59	2.35	23.11
32	32	35.10	0.00	-0.58	-56.02	0	-38.68	2	16.55	2	14.37	2.35	22.77
32	33	36.55	0.00	-0.58	-55.19	0	-38.11	2	16.30	2	14.16	2.35	22.43
33	33	36.55	0.00	-0.58	-54.35	0	-37.53	2	16.06	2	13.95	2.35	22.09
34	34	38.00	0.00	-0.58	-53.51	0	-36.95	2	15.81	2	13.73	2.35	21.75
34	35	39.45	0.00	-0.58	-53.51	0	-36.95	2	15.56	2	13.51	2.35	21.41
35	35	39.45	0.00	-0.58	-52.67	0	-36.37	2	15.32	2	13.30	2.35	21.07
36	36	40.90	0.00	-0.58	-51.84	0	-35.79	2	15.07	2	13.09	2.35	20.73
37	37	42.35	0.00	-0.58	-51.84	0	-35.21	2	14.82	2	12.87	2.35	20.39
37	38	43.80	0.00	-0.58	-51.00	0	-34.63	2					
38	38	43.80	0.00	-0.58	-50.16	0							
38	39	45.25	0.00	-0.58		0							

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To.To

(Pretensado Hiperestático(t=0)). Tensiones a tiempo To

I: fase4.HIP.To

ref. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
39	39	45.25	0.00	-0.58	-50.16	0	-33.57	2	17.91	2	15.56	2.35	23.38
39	40	46.70	0.00	-0.58	-49.32	0	-33.01	2	17.61	2	15.30	2.35	22.99
40	40	46.70	0.12	-0.56	-49.32	0	-32.97	2	17.66	2	15.34	2.35	23.03
40	41	48.15	0.12	-0.56	-48.48	0	-32.41	2	17.36	2	15.07	2.35	22.64
41	41	48.15	0.12	-0.56	-48.48	0	-49.81	2	83.31	2	0.00	2.35	0.00
41	42	49.60	0.12	-0.56	-47.65	0	-48.96	2	81.88	2	0.00	2.35	0.00
42	42	49.60	0.00	-0.58	-47.65	0	-49.03	2	81.80	2	0.00	2.35	0.00
42	43	51.05	0.00	-0.58	-46.81	0	-48.17	2	80.36	2	0.00	2.35	0.00
43	43	51.05	0.00	-0.58	-46.81	0	-48.17	2	80.36	2	0.00	2.35	0.00
43	44	51.50	0.00	-0.58	-46.55	0	-47.90	2	79.92	2	0.00	2.35	0.00
44	44	51.50	0.00	-0.58	-46.55	0	-47.90	2	79.92	2	0.00	2.35	0.00
44	45	52.50	0.00	-0.58	-45.97	0	-47.31	2	78.92	2	0.00	2.35	0.00
45	1045	52.50	0.00	0.05	-45.97	0	-47.31	2	78.92	2	0.00	2.35	0.00
45	46	53.50	0.00	0.05	-46.02	0	-47.36	2	79.01	2	0.00	2.35	0.00
46	46	53.50	0.00	0.05	-46.02	0	-47.36	2	79.01	2	0.00	2.35	0.00
46	47	53.95	0.00	0.05	-46.04	0	-47.38	2	79.04	2	0.00	2.35	0.00
47	47	53.95	0.00	0.05	-46.04	0	-47.38	2	79.04	2	0.00	2.35	0.00
47	48	55.40	0.00	0.05	-46.12	0	-47.46	2	79.18	2	0.00	2.35	0.00
48	48	55.40	0.01	0.05	-46.12	0	-47.45	2	79.18	2	0.00	2.35	0.00
48	49	56.85	0.01	0.05	-46.19	0	-47.53	2	79.30	2	0.00	2.35	0.00
49	49	56.85	0.01	0.05	-46.19	0	-47.53	2	79.30	2	0.00	2.35	0.00
49	50	58.30	0.01	0.05	-46.26	0	-30.91	2	15.50	2	14.33	2.35	21.54
50	50	58.30	0.00	0.05	-46.26	0	-30.96	2	16.52	2	14.35	2.35	21.57
50	51	59.75	0.00	0.05	-46.33	0	-30.96	2	16.52	2	14.35	2.35	21.57
51	51	59.75	0.00	0.05	-46.33	0	-31.01	2	16.55	2	14.37	2.35	21.60
51	52	61.20	0.00	0.05	-46.41	0	-31.99	2	13.69	2	11.89	2.35	18.83
52	52	61.20	0.00	0.05	-46.41	0	-32.05	2	13.71	2	11.91	2.35	18.86
52	53	62.65	0.00	0.05	-46.48	0	-32.05	2	13.71	2	11.91	2.35	18.86
53	53	62.65	0.00	0.05	-46.48	0	-32.09	2	13.73	2	11.93	2.35	18.89
53	54	64.10	0.00	0.05	-46.55	0	-32.14	2	13.75	2	11.94	2.35	18.92
54	54	64.10	0.00	0.05	-46.55	0	-32.14	2	13.75	2	11.94	2.35	18.95
54	55	65.55	0.00	0.05	-46.62	0	-32.19	2	13.77	2	11.96	2.35	18.98
55	55	65.55	0.00	0.05	-46.62	0	-32.19	2	13.80	2	11.98	2.35	19.01
55	56	67.00	0.00	0.05	-46.70	0	-32.25	2	13.82	2	12.00	2.35	19.04
56	56	67.00	0.00	0.05	-46.70	0	-32.25	2	13.82	2	12.00	2.35	19.07
56	57	68.45	0.00	0.05	-46.77	0	-32.29	2	13.84	2	12.02	2.35	19.10
57	57	68.45	0.00	0.05	-46.77	0	-32.29	2	13.84	2	12.02	2.35	19.13
57	58	69.90	0.00	0.05	-46.84	0	-32.34	2	13.86	2	12.04	2.35	19.17
58	58	69.90	0.00	0.05	-46.84	0	-32.34	2	13.86	2	12.04	2.35	19.20
58	59	71.35	0.00	0.05	-46.91	0	-32.39	2	13.88	2	12.06	2.35	19.24
59	59	71.35	0.00	0.05	-46.91	0	-32.39	2	13.88	2	12.06	2.35	19.27
59	60	72.80	0.00	0.05	-46.99	0	-32.45	2	13.88	2	12.08	2.35	19.31
60	60	72.80	0.00	0.05	-46.99	0	-32.45	2	13.88	2	12.08	2.35	19.34
60	61	74.25	0.00	0.05	-47.06	0	-32.49	2	13.90	2	12.10	2.35	19.37
61	61	74.25	0.00	0.05	-47.06	0	-32.49	2	13.90	2	12.10	2.35	19.40
61	62	75.70	0.00	0.05	-47.13	0	-31.55	2	16.81	2	14.60	2.35	21.94
62	62	75.70	-0.01	0.05	-47.13	0	-31.55	2	16.83	2	14.62	2.35	21.97
62	63	77.15	-0.01	0.05	-47.20	0	-31.60	2	16.85	2	14.64	2.35	22.00
63	63	77.15	-0.01	0.05	-47.20	0	-48.58	2	81.03	2	0.00	2.35	0.00
63	64	78.60	-0.01	0.05	-47.28	0	-48.66	2	81.16	2	0.00	2.35	0.00
64	64	78.60	0.00	0.05	-47.28	0	-48.65	2	81.17	2	0.00	2.35	0.00
64	65	80.05	0.00	0.05	-47.35	0	-48.73	2	81.29	2	0.00	2.35	0.00
65	65	80.05	0.00	0.05	-47.35	0	-48.73	2	81.29	2	0.00	2.35	0.00
65	66	80.50	0.00	0.05	-47.37	0	-48.75	2	81.32	2	0.00	2.35	0.00
66	66	80.50	0.00	0.05	-47.37	0	-48.75	2	81.32	2	0.00	2.35	0.00
66	67	81.50	0.00	0.05	-47.42	0	-48.80	2	81.41	2	0.00	2.35	0.00
67	1067	81.50	0.00	-0.20	-47.42	0	-48.80	2	81.41	2	0.00	2.35	0.00
67	68	82.50	0.00	-0.20	-47.23	0	-48.60	2	81.08	2	0.00	2.35	0.00
68	68	82.50	0.00	-0.20	-47.23	0	-48.60	2	81.08	2	0.00	2.35	0.00
68	69	83.08	0.00	-0.20	-47.11	0	-48.48	2	80.88	2	0.00	2.35	0.00
69	69	83.08	0.00	-0.20	-47.11	0	-48.48	2	80.88	2	0.00	2.35	0.00
69	70	84.65	0.00	-0.20	-46.81	0	-48.17	2	80.36	2	0.00	2.35	0.00
70	70	84.65	-0.04	-0.19	-46.81	0	-48.20	2	80.36	2	0.00	2.35	0.00
70	71	86.23	-0.04	-0.19	-46.50	0	-47.88	2	79.80	2	0.00	2.35	0.00
71	71	86.23	-0.04	-0.19	-46.50	0	-47.88	2	79.80	2	0.00	2.35	0.00
71	72	87.80	-0.04	-0.19	-46.19	0	-31.14	2	16.59	2	14.41	2.35	21.67
72	72	87.80	0.00	-0.20	-46.19	0	-30.93	2	16.48	2	14.31	2.35	21.52
72	73	89.38	0.00	-0.20	-45.88	0	-30.92	2	16.50	2	14.33	2.35	21.53
73	73	89.38	0.00	-0.20	-45.88	0	-30.71	2	16.39	2	14.23	2.35	21.39
73	74	90.95	0.00	-0.20	-45.58	0	-31.68	2	13.55	2	11.77	2.35	18.65
74	74	90.95	0.00	-0.20	-45.58	0	-31.47	2	13.47	2	11.70	2.35	18.53
74	75	92.53	0.00	-0.20	-45.27	0	-31.26	2	13.37	2	11.62	2.35	18.40
75	75	92.53	0.00	-0.20	-45.27	0	-31.26	2	13.37	2	11.62	2.35	18.40
75	76	94.10	0.00	-0.20	-44.96	0	-31.04	2	13.28	2	11.54	2.35	18.27
76	76	94.10	0.00	-0.20	-44.96	0	-31.04	2	13.28	2	11.54	2.35	18.27
76	77	95.68	0.00	-0.20	-44.65	0	-30.83	2	13.19	2	11.46	2.35	18.15

216

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To.To

(Pretensado Hiperestático(t=0)). Tensiones a tiempo To

fase4.HIP.To

f. exc:

fase4.HIP.To.To

05/09/01

hsim_10.xls

Programa DINTEL IDEAM S.A.
fase4.HIP.To.To

05/09/01

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To.To

(Pretensado Hiperestático(t=0)). Tensiones a tiempo To

f. exc:

f. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.63	0.00	-0.20	-44.65	0	-30.83	2	13.19	2	11.46	2.35	18.15
77	78	97.25	0.00	-0.20	-44.35	0	-30.62	2	13.10	2	11.38	2.35	18.03
78	78	97.25	0.00	-0.20	-44.35	0	-30.62	2	13.10	2	11.38	2.35	18.03
78	79	98.83	0.00	-0.20	-44.04	0	-30.41	2	13.01	2	11.30	2.35	17.90
79	79	98.83	0.00	-0.20	-44.04	0	-30.41	2	13.01	2	11.30	2.35	17.90
79	80	100.40	0.00	-0.20	-43.73	0	-30.19	2	12.92	2	11.22	2.35	17.77
80	80	100.40	0.00	-0.20	-43.73	0	-30.19	2	12.92	2	11.22	2.35	17.77
80	81	101.98	0.00	-0.20	-43.43	0	-29.99	2	12.83	2	11.14	2.35	17.65
81	81	101.98	0.00	-0.20	-43.43	0	-29.99	2	12.83	2	11.14	2.35	17.65
81	82	103.55	0.00	-0.20	-43.12	0	-29.77	2	12.74	2	11.06	2.35	17.53
82	82	103.55	0.00	-0.20	-43.12	0	-29.77	2	12.74	2	11.06	2.35	17.53
82	83	105.13	0.00	-0.20	-42.81	0	-29.56	2	12.65	2	10.98	2.35	17.40
83	83	105.13	0.00	-0.20	-42.81	0	-29.56	2	12.65	2	10.98	2.35	17.40
83	84	106.70	0.00	-0.20	-42.50	0	-28.45	2	15.18	2	13.18	2.35	19.81
84	84	106.70	0.04	-0.19	-42.50	0	-28.45	2	15.18	2	13.18	2.35	19.81
84	85	108.28	0.04	-0.19	-42.20	0	-28.23	2	15.09	2	13.20	2.35	19.83
85	85	108.28	0.04	-0.19	-42.20	0	-28.23	2	15.09	2	13.20	2.35	19.83
85	86	109.85	0.04	-0.19	-41.89	0	-43.08	2	72.47	2	0.00	2.35	0.00
86	86	109.85	0.04	-0.19	-41.89	0	-43.08	2	72.47	2	0.00	2.35	0.00
86	87	111.43	0.00	-0.20	-41.58	0	-43.11	2	71.92	2	0.00	2.35	0.00
87	87	111.43	0.00	-0.20	-41.58	0	-43.11	2	71.92	2	0.00	2.35	0.00
87	88	112.00	0.00	-0.20	-41.47	0	-42.79	2	71.38	2	0.00	2.35	0.00
88	88	112.00	0.00	-0.20	-41.47	0	-42.79	2	71.38	2	0.00	2.35	0.00
88	89	113.00	0.00	-0.20	-41.27	0	-42.67	2	71.20	2	0.00	2.35	0.00
89	89	113.00	0.00	-0.20	-41.27	0	-42.67	2	71.20	2	0.00	2.35	0.00
89	1089	113.00	0.00	0.60	-41.27	0	-42.47	2	70.85	2	0.00	2.35	0.00
89	90	114.00	0.00	0.60	-41.27	0	-42.47	2	70.85	2	0.00	2.35	0.00
90	90	114.00	0.00	0.60	-41.87	0	-43.09	2	71.88	2	0.00	2.35	0.00
90	91	114.58	0.00	0.60	-41.87	0	-43.09	2	71.88	2	0.00	2.35	0.00
91	91	114.58	0.00	0.60	-42.22	0	-43.45	2	72.48	2	0.00	2.35	0.00
91	92	116.15	0.00	0.60	-42.22	0	-43.45	2	72.48	2	0.00	2.35	0.00
92	92	116.15	0.12	0.59	-43.16	0	-44.41	2	74.10	2	0.00	2.35	0.00
92	93	117.73	0.12	0.59	-43.16	0	-44.34	2	74.17	2	0.00	2.35	0.00
93	93	117.73	0.12	0.59	-44.10	0	-45.30	2	75.79	2	0.00	2.35	0.00
93	94	119.30	0.12	0.59	-44.10	0	-29.48	2	15.79	2	13.72	2.35	20.60
94	94	119.30	0.00	0.60	-45.04	0	-30.10	2	16.13	2	14.01	2.35	21.03
94	95	120.88	0.00	0.60	-45.04	0	-30.15	2	16.09	2	13.97	2.35	21.00
95	95	120.88	0.00	0.60	-45.99	0	-30.78	2	16.42	2	14.27	2.35	21.44
95	96	122.45	0.00	0.60	-45.99	0	-31.76	2	13.59	2	11.80	2.35	18.69
96	96	122.45	0.00	0.60	-46.93	0	-32.40	2	13.86	2	12.04	2.35	19.07
96	97	124.03	0.00	0.60	-46.93	0	-32.40	2	13.86	2	12.04	2.35	19.07
97	97	124.03	0.00	0.60	-47.87	0	-33.05	2	14.14	2	12.28	2.35	19.46
97	98	125.60	0.00	0.60	-47.87	0	-33.05	2	14.14	2	12.28	2.35	19.46
98	98	125.60	0.00	0.60	-48.82	0	-33.71	2	14.42	2	12.53	2.35	19.84
98	99	127.18	0.00	0.60	-48.82	0	-33.71	2	14.42	2	12.53	2.35	19.84
98	99	127.18	0.00	0.60	-49.76	0	-34.36	2	14.70	2	12.77	2.35	20.22
99	99	127.18	0.00	0.60	-49.76	0	-34.36	2	14.70	2	12.77	2.35	20.22
100	100	128.75	0.00	0.60	-50.70	0	-35.01	2	14.98	2	13.01	2.35	20.61
100	100	128.75	0.00	0.60	-50.70	0	-35.01	2	14.98	2	13.01	2.35	20.61
101	101	130.33	0.00	0.60	-51.64	0	-35.66	2	15.26	2	13.25	2.35	20.99
101	101	130.33	0.00	0.60	-51.64	0	-35.66	2	15.26	2	13.25	2.35	20.99
102	102	131.90	0.00	0.60	-52.59	0	-36.31	2	15.54	2	13.49	2.35	21.37
102	102	131.90	0.00	0.60	-52.59	0	-36.31	2	15.54	2	13.49	2.35	21.37
103	103	133.48	0.00	0.60	-53.53	0	-36.96	2	15.81	2	13.74	2.35	21.76
103	103	133.48	0.00	0.60	-53.53	0	-36.96	2	15.81	2	13.74	2.35	21.76
103	104	135.05	0.00	0.60	-54.47	0	-37.61	2	16.09	2	13.98	2.35	22.14
104	104	135.05	0.00	0.60	-54.47	0	-37.61	2	16.09	2	13.98	2.35	22.14
104	105	136.63	0.00	0.60	-55.41	0	-38.26	2	16.37	2	14.22	2.35	22.52
105	105	136.63	0.00	0.60	-55.41	0	-38.26	2	16.37	2	14.22	2.35	22.52
105	106	138.20	0.00	0.60	-56.36	0	-37.09	2	19.79	2	17.19	2.35	25.83
106	106	138.20	-0.12	0.59	-56.36	0	-37.72	2	20.13	2	17.48	2.35	26.27
106	107	139.78	-0.12	0.59	-57.30	0	-37.77	2	20.09	2	17.44	2.35	26.24
107	107	139.78	-0.12	0.59	-57.30	0	-38.40	2	20.42	2	17.74	2.35	26.68
107	108	141.35	-0.12	0.59	-58.24	0	-59.04	2	98.29	2	0.00	2.35	0.00
108	108	141.35	0.00	0.60	-58.24	0	-60.01	2	99.91	2	0.00	2.35	0.00
108	109	142.93	0.00	0.60	-59.18	0	-59.93	2	99.99	2	0.00	2.35	0.00
109	109	142.93	0.00	0.60	-59.18	0	-60.90	2	101.60	2	0.00	2.35	0.00
109	110	143.50	0.00	0.60	-59.53	0	-60.90	2	101.60	2	0.00	2.35	0.00
110	110	143.50	0.00	0.60	-59.53	0	-61.26	2	102.20	2	0.00	2.35	0.00
110	111	144.50	0.00	0.60	-59.53	0	-61.26	2	102.20	2	0.00	2.35	0.00
111	111	144.50	0.00	0.60	-60.13	0	-61.88	2	103.23	2	0.00	2.35	0.00
111	112	145.50	0.00	-2.56	-60.13	0	-61.88	2	103.23	2	0.00	2.35	0.00
111	112	145.50	0.00	-2.56	-57.57	0	-59.24	2	98.84	2	0.00	2.35	0.00
111	113	145.68	0.00	-2.56	-57.57	0	-59.24	2	98.84	2	0.00	2.35	0.00
113	113	145.68	0.00	-2.56	-57.12	0	-58.78	2	98.06	2	0.00	2.35	0.00
113	114	146.85	0.00	-2.56	-57.12	0	-58.78	2	98.06	2	0.00	2.35	0.00
114	114	146.85	-0.66	-2.47	-54.11	0	-55.68	2	92.90	2	0.00	2.35	0.00
114	115	148.03	-0.66	-2.47	-54.11	0	-56.11	2	92.47	2	0.00	2.35	0.00
14	14	148.03	-0.66	-2.47	-51.11	0	-53.02	2	87.32	2	0.00	2.35	0.00

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	-0.66	-2.47	-51.11	0	-34.44	2	18.02	2	15.65	2.35	23.62
115	116	149.20	-0.66	-2.47	-48.10	0	-32.43	2	16.94	2	14.72	2.35	22.22
116	116	149.20	-0.03	-2.56	-48.10	0	-32.21	2	17.17	2	14.91	2.35	22.41
116	117	150.38	-0.03	-2.56	-45.10	0	-30.20	2	16.10	2	13.98	2.35	21.02
117	117	150.38	-0.03	-2.56	-45.10	0	-31.15	2	13.31	2	11.56	2.35	18.32
117	118	151.55	-0.03	-2.56	-42.09	0	-29.07	2	12.42	2	10.79	2.35	17.10
118	118	151.55	0.00	-2.56	-42.09	0	-29.06	2	12.43	2	10.80	2.35	17.11
119	119	152.73	0.00	-2.56	-39.08	0	-26.98	2	11.55	2	10.03	2.35	15.88
119	120	153.90	0.00	-2.56	-36.08	0	-26.98	2	11.55	2	10.03	2.35	15.88
120	120	153.90	0.00	-2.56	-36.08	0	-24.91	2	10.66	2	9.26	2.35	14.66
120	121	155.08	0.00	-2.56	-33.07	0	-24.91	2	10.66	2	9.26	2.35	14.66
121	121	155.08	0.00	-2.56	-33.07	0	-22.83	2	9.77	2	8.49	2.35	13.44
121	122	156.25	0.00	-2.56	-30.06	0	-22.83	2	9.77	2	8.49	2.35	13.44
122	122	156.25	0.00	-2.56	-30.06	0	-20.76	2	8.88	2	7.71	2.35	12.22
122	123	157.43	0.00	-2.56	-27.06	0	-20.76	2	8.88	2	7.71	2.35	12.22
123	123	157.43	0.00	-2.56	-27.06	0	-18.68	2	7.99	2	6.94	2.35	11.00
123	124	158.60	0.00	-2.56	-24.05	0	-18.68	2	7.99	2	6.94	2.35	11.00
124	124	158.60	0.00	-2.56	-24.05	0	-16.61	2	7.11	2	6.17	2.35	9.77
124	125	159.78	0.00	-2.56	-21.04	0	-16.61	2	7.11	2	6.17	2.35	9.77
125	125	159.78	0.00	-2.56	-21.04	0	-14.53	2	6.22	2	5.40	2.35	8.55
125	126	160.95	0.00	-2.56	-18.04	0	-14.53	2	6.22	2	5.40	2.35	8.55
126	126	160.95	0.00	-2.56	-18.04	0	-12.46	2	5.33	2	4.63	2.35	7.33
126	127	162.13	0.00	-2.56	-15.03	0	-12.46	2	5.33	2	4.63	2.35	7.33
127	127	162.13	0.00	-2.56	-15.03	0	-10.38	2	4.44	2	3.86	2.35	6.11
127	128	163.30	0.00	-2.56	-12.03	0	-10.38	2	4.44	2	3.86	2.35	6.11
128	128	163.30	0.00	-2.56	-12.03	0	-8.31	2	3.55	2	3.09	2.35	4.89
128	129	164.48	0.00	-2.56	-9.02	0	-8.31	2	3.55	2	3.09	2.35	4.89
129	129	164.48	0.00	-2.56	-9.02	0	-6.23	2	2.66	2	2.31	2.35	3.67
129	130	165.65	0.00	-2.56	-6.01	0	-6.23	2	2.66	2	2.31	2.35	3.67
130	130	165.65	0.00	-2.56	-6.01	0	-4.15	2	1.78	2	1.54	2.35	2.44
130	131	166.83	0.00	-2.56	-3.01	0	-4.15	2	1.78	2	1.54	2.35	2.44
131	131	166.83	0.00	-2.56	-3.01	0	-2.08	2	0.89	2	0.77	2.35	1.22
131	132	167.00	0.00	-2.56	-2.56	0	-2.08	2	0.89	2	0.77	2.35	1.22
132	132	167.00	0.00	-2.56	-2.56	0	-1.77	2	0.76	2	0.66	2.35	1.04
132	133	168.00	0.00	-2.56	0.00	0	-1.77	2	0.76	2	0.66	2.35	1.04
						0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONALHipótesis de cálculo:
fase4.HIP.To.To

(Pretensado Hiperestático (t=0)). Tensiones a tiempo To

1) fase4.HIP.To

d. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	-0.20	-44.65	0	-30.83	2	13.19	2	11.46	2.35	18.15
77	78	97.25	0.00	-0.20	-44.35	0	-30.62	2	13.10	2	11.38	2.35	18.03
78	79	98.83	0.00	-0.20	-44.35	0	-30.62	2	13.10	2	11.38	2.35	18.03
79	79	98.83	0.00	-0.20	-44.04	0	-30.41	2	13.01	2	11.30	2.35	17.90
79	80	100.40	0.00	-0.20	-43.73	0	-30.19	2	12.92	2	11.22	2.35	17.77
80	80	100.40	0.00	-0.20	-43.73	0	-30.19	2	12.92	2	11.22	2.35	17.77
80	81	101.98	0.00	-0.20	-43.43	0	-29.99	2	12.83	2	11.14	2.35	17.65
81	81	101.98	0.00	-0.20	-43.43	0	-29.99	2	12.83	2	11.14	2.35	17.65
81	82	103.55	0.00	-0.20	-43.43	0	-29.77	2	12.74	2	11.06	2.35	17.53
82	82	103.55	0.00	-0.20	-43.12	0	-29.77	2	12.74	2	11.06	2.35	17.53
82	83	105.13	0.00	-0.20	-42.81	0	-29.56	2	12.65	2	10.98	2.35	17.40
83	83	105.13	0.00	-0.20	-42.81	0	-28.65	2	15.29	2	13.28	2.35	19.96
83	84	106.70	0.00	-0.20	-42.50	0	-28.45	2	15.18	2	13.18	2.35	19.81
84	84	106.70	0.04	-0.19	-42.50	0	-28.23	2	15.09	2	13.20	2.35	19.83
84	85	108.28	0.04	-0.19	-42.20	0	-43.08	2	72.47	2	0.00	2.35	0.00
85	85	108.28	0.04	-0.19	-42.20	0	-43.11	2	71.94	2	0.00	2.35	0.00
85	86	109.85	0.04	-0.20	-41.89	0	-42.79	2	71.92	2	0.00	2.35	0.00
85	86	109.85	0.00	-0.20	-41.89	0	-42.79	2	71.38	2	0.00	2.35	0.00
86	87	111.43	0.00	-0.20	-41.58	0	-42.67	2	71.20	2	0.00	2.35	0.00
87	87	111.43	0.00	-0.20	-41.58	0	-42.67	2	71.20	2	0.00	2.35	0.00
87	88	112.00	0.00	-0.20	-41.47	0	-42.47	2	70.85	2	0.00	2.35	0.00
88	88	112.00	0.00	-0.20	-41.47	0	-42.47	2	70.85	2	0.00	2.35	0.00
88	89	113.00	0.00	-0.20	-41.27	0	-43.09	2	71.88	2	0.00	2.35	0.00
89	1089	113.00	0.00	0.60	-41.27	0	-43.45	2	72.48	2	0.00	2.35	0.00
89	90	114.00	0.00	0.60	-41.87	0	-43.45	2	72.48	2	0.00	2.35	0.00
90	90	114.00	0.00	0.60	-41.87	0	-44.41	2	74.10	2	0.00	2.35	0.00
90	91	114.58	0.00	0.60	-42.22	0	-44.34	2	74.17	2	0.00	2.35	0.00
91	91	114.58	0.00	0.60	-42.22	0	-45.30	2	75.79	2	0.00	2.35	0.00
91	92	116.15	0.00	0.60	-43.16	0	-30.10	2	16.13	2	13.72	2.35	20.60
92	92	116.15	0.12	0.59	-43.16	0	-30.15	2	16.09	2	14.01	2.35	21.03
92	93	117.73	0.12	0.59	-44.10	0	-30.78	2	16.42	2	13.97	2.35	21.00
93	93	117.73	0.12	0.59	-44.10	0	-31.76	2	13.59	2	14.27	2.35	21.44
93	94	119.30	0.12	0.59	-45.04	0	-32.40	2	13.86	2	12.04	2.35	18.69
94	94	119.30	0.00	0.60	-45.04	0	-33.05	2	14.14	2	12.04	2.35	19.07
94	95	120.88	0.00	0.60	-45.99	0	-33.05	2	14.14	2	12.28	2.35	19.46
95	95	120.88	0.00	0.60	-45.99	0	-33.71	2	14.42	2	12.28	2.35	19.46
95	96	122.45	0.00	0.60	-45.99	0	-33.71	2	14.42	2	12.53	2.35	19.84
96	96	122.45	0.00	0.60	-46.93	0	-34.36	2	14.70	2	12.53	2.35	19.84
96	97	124.03	0.00	0.60	-47.87	0	-34.36	2	14.70	2	12.77	2.35	20.22
97	97	124.03	0.00	0.60	-47.87	0	-35.01	2	14.98	2	13.01	2.35	20.61
97	98	125.60	0.00	0.60	-48.82	0	-35.66	2	15.26	2	13.25	2.35	20.99
98	98	125.60	0.00	0.60	-48.82	0	-35.66	2	15.26	2	13.25	2.35	20.99
98	99	127.18	0.00	0.60	-49.76	0	-36.31	2	15.54	2	13.49	2.35	21.37
99	99	127.18	0.00	0.60	-49.76	0	-36.31	2	15.54	2	13.49	2.35	21.37
100	100	128.75	0.00	0.60	-50.70	0	-36.95	2	15.81	2	13.74	2.35	21.76
100	100	128.75	0.00	0.60	-50.70	0	-36.95	2	15.81	2	13.74	2.35	21.76
101	101	130.33	0.00	0.60	-51.64	0	-37.61	2	16.09	2	13.98	2.35	22.14
101	101	130.33	0.00	0.60	-51.64	0	-37.61	2	16.09	2	13.98	2.35	22.14
102	102	131.90	0.00	0.60	-52.59	0	-38.26	2	16.37	2	14.22	2.35	22.52
102	102	131.90	0.00	0.60	-52.59	0	-37.72	2	20.13	2	17.19	2.35	25.83
103	103	133.48	0.00	0.60	-53.53	0	-37.72	2	20.09	2	17.48	2.35	26.27
103	103	133.48	0.00	0.60	-53.53	0	-38.40	2	20.42	2	17.74	2.35	26.68
103	104	135.05	0.00	0.60	-54.47	0	-59.04	2	98.29	2	0.00	2.35	0.00
104	104	135.05	0.00	0.60	-54.47	0	-60.01	2	99.91	2	0.00	2.35	0.00
104	105	136.63	0.00	0.60	-55.41	0	-59.93	2	99.99	2	0.00	2.35	0.00
105	105	136.63	0.00	0.60	-55.41	0	-60.90	2	101.60	2	0.00	2.35	0.00
105	106	138.20	0.00	0.60	-56.36	0	-61.26	2	102.20	2	0.00	2.35	0.00
106	106	138.20	-0.12	0.59	-56.36	0	-61.26	2	102.20	2	0.00	2.35	0.00
106	107	139.78	-0.12	0.59	-57.30	0	-61.88	2	103.23	2	0.00	2.35	0.00
107	107	139.78	-0.12	0.59	-57.30	0	-61.88	2	103.23	2	0.00	2.35	0.00
107	108	141.35	-0.12	0.59	-58.24	0	-59.24	2	98.84	2	0.00	2.35	0.00
108	108	141.35	0.00	0.60	-58.24	0	-58.78	2	98.06	2	0.00	2.35	0.00
108	109	142.93	0.00	0.60	-59.18	0	-58.78	2	98.06	2	0.00	2.35	0.00
109	109	142.93	0.00	0.60	-59.18	0	-55.68	2	92.90	2	0.00	2.35	0.00
109	110	143.50	0.00	0.60	-59.53	0	-56.11	2	92.47	2	0.00	2.35	0.00
110	110	143.50	0.00	0.60	-59.53	0	-53.02	2	87.32	2	0.00	2.35	0.00
110	111	144.50	0.00	0.60	-60.13	0							
111	111	144.50	0.00	-2.56	-60.13	0							
111	112	145.50	0.00	-2.56	-57.57	0							
112	112	145.50	0.00	-2.56	-57.57	0							
112	113	145.68	0.00	-2.56	-57.12	0							
113	113	145.68	0.00	-2.56	-57.12	0							
113	114	146.85	0.00	-2.56	-54.11	0							
114	114	146.85	-0.66	-2.47	-54.11	0							
114	115	148.03	-0.66	-2.47	-51.11	0							

CÁLCULO TENSIONALHipótesis de cálculo:
fase4.HIP.To.To

(Pretensado Hiperestático (t=0)). Tensiones a tiempo To

1) fase4.HIP.To

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	-0.66	-2.47	-51.11	0	-34.44	2	18.02	2	15.65	2.35	23.62
115	116	149.20	-0.66	-2.47	-48.10	0	-32.43	2	16.94	2	14.72	2.35	22.22
116	116	149.20	-0.03	-2.56	-48.10	0	-32.21	2	17.17	2	14.91	2.35	22.41
116	117	150.38	-0.03	-2.56	-45.10	0	-30.20	2	16.10	2	13.98	2.35	21.02
117	117	150.38	-0.03	-2.56	-45.10	0	-31.15	2	13.31	2	11.56	2.35	18.32
117	118	151.55	-0.03	-2.56	-42.09	0	-29.07	2	12.42	2	10.79	2.35	17.10
118	118	151.55	0.00	-2.56	-42.09	0	-29.06	2	12.43	2	10.80	2.35	17.11
118	119	152.73	0.00	-2.56	-39.08	0	-26.98	2	11.55	2	10.03	2.35	15.88
119	119	152.73	0.00	-2.56	-39.08	0	-26.98	2	11.55	2	10.03	2.35	15.88
119	120	153.90	0.00	-2.56	-36.08	0	-24.91	2	10.66	2	9.26	2.35	14.66
120	120	153.90	0.00	-2.56	-36.08	0	-24.91	2	10.66	2	9.26	2.35	14.66
120	121	155.08	0.00	-2.56	-33.07	0	-22.83	2	9.77	2	8.49	2.35	13.44
121	121	155.08	0.00	-2.56	-33.07	0	-22.83	2	9.77	2	8.49	2.35	13.44
121	122	156.25	0.00	-2.56	-30.06	0	-20.76	2	8.88	2	7.71	2.35	12.22
122	122	156.25	0.00	-2.56	-30.06	0	-20.76	2	8.88	2	7.71	2.35	12.22
122	123	157.43	0.00	-2.56	-27.06	0	-18.68	2	7.99	2	6.94	2.35	11.00
123	123	157.43	0.00	-2.56	-27.06	0	-18.68	2	7.99	2	6.94	2.35	11.00
123	124	158.60	0.00	-2.56	-24.05	0	-16.61	2	7.11	2	6.17	2.35	9.77
124	124	158.60	0.00	-2.56	-24.05	0	-16.61	2	7.11	2	6.17	2.35	9.77
124	125	159.78	0.00	-2.56	-21.04	0	-14.53	2	6.22	2	5.40	2.35	8.55
125	125	159.78	0.00	-2.56	-21.04	0	-14.53	2	6.22	2	5.40	2.35	8.55
125	126	160.95	0.00	-2.56	-18.04	0	-12.46	2	5.33	2	4.63	2.35	7.33
126	126	160.95	0.00	-2.56	-18.04	0	-12.46	2	5.33	2	4.63	2.35	7.33
126	127	162.13	0.00	-2.56	-15.03	0	-10.38	2	4.44	2	3.86	2.35	6.11
127	127	162.13	0.00	-2.56	-15.03	0	-10.38	2	4.44	2	3.86	2.35	6.11
127	128	163.30	0.00	-2.56	-12.03	0	-8.31	2	3.55	2	3.09	2.35	4.89
128	128	163.30	0.00	-2.56	-12.03	0	-8.31	2	3.55	2	3.09	2.35	4.89
128	129	164.48	0.00	-2.56	-9.02	0	-6.23	2	2.66	2	2.31	2.35	3.67
129	129	164.48	0.00	-2.56	-9.02	0	-6.23	2	2.66	2	2.31	2.35	3.67
129	130	165.65	0.00	-2.56	-6.01	0	-4.15	2	1.78	2	1.54	2.35	2.44
130	130	165.65	0.00	-2.56	-6.01	0	-4.15	2	1.78	2	1.54	2.35	2.44
130	131	166.83	0.00	-2.56	-3.01	0	-2.08	2	0.89	2	0.77	2.35	1.22
131	131	166.83	0.00	-2.56	-3.01	0	-2.08	2	0.89	2	0.77	2.35	1.22
131	132	167.00	0.00	-2.56	-2.56	0	-1.77	2	0.76	2	0.66	2.35	1.04
132	132	167.00	0.00	-2.56	-2.56	0	-1.77	2	0.76	2	0.66	2.35	1.04
132	133	168.00	0.00	-2.56	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To.To

(Pretensado Hiperestático($t=0$)). Tensiones a tiempo T_0

[1: fase4.HIP.To

Def. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
77	77	95.68	0.00	-0.20	-44.65	0	-30.83	2	13.19	2	11.46	2.35	18.15
77	78	97.25	0.00	-0.20	-44.35	0	-30.62	2	13.10	2	11.38	2.35	18.03
78	78	97.25	0.00	-0.20	-44.35	0	-30.62	2	13.10	2	11.38	2.35	18.03
79	79	98.83	0.00	-0.20	-44.04	0	-30.41	2	13.01	2	11.30	2.35	17.90
79	80	100.40	0.00	-0.20	-43.73	0	-30.19	2	12.92	2	11.30	2.35	17.90
80	80	100.40	0.00	-0.20	-43.73	0	-30.19	2	12.92	2	11.22	2.35	17.77
80	81	101.98	0.00	-0.20	-43.43	0	-29.99	2	12.83	2	11.22	2.35	17.77
81	81	101.98	0.00	-0.20	-43.43	0	-29.99	2	12.83	2	11.14	2.35	17.65
81	82	103.55	0.00	-0.20	-43.12	0	-29.77	2	12.74	2	11.06	2.35	17.53
82	82	103.55	0.00	-0.20	-43.12	0	-29.77	2	12.74	2	11.06	2.35	17.53
82	83	105.13	0.00	-0.20	-42.81	0	-29.56	2	12.65	2	10.98	2.35	17.40
83	83	105.13	0.00	-0.20	-42.81	0	-29.56	2	12.65	2	10.98	2.35	17.40
83	84	106.70	0.00	-0.20	-42.50	0	-28.43	2	15.29	2	13.28	2.35	19.96
84	84	106.70	0.04	-0.19	-42.50	0	-28.43	2	15.18	2	13.18	2.35	19.81
84	85	108.28	0.04	-0.19	-42.20	0	-28.23	2	15.09	2	13.20	2.35	19.83
85	85	108.28	0.04	-0.19	-42.20	0	-28.23	2	15.09	2	13.10	2.35	19.69
85	86	109.85	0.04	-0.19	-41.89	0	-43.08	2	72.47	2	0.00	2.35	0.00
86	86	109.85	0.00	-0.20	-41.89	0	-43.11	2	71.94	2	0.00	2.35	0.00
87	87	111.43	0.00	-0.20	-41.58	0	-42.79	2	71.92	2	0.00	2.35	0.00
87	88	112.00	0.00	-0.20	-41.58	0	-42.79	2	71.38	2	0.00	2.35	0.00
88	88	112.00	0.00	-0.20	-41.47	0	-42.67	2	71.38	2	0.00	2.35	0.00
88	89	113.00	0.00	-0.20	-41.47	0	-42.67	2	71.20	2	0.00	2.35	0.00
89	1089	113.00	0.00	0.60	-41.27	0	-42.47	2	70.85	2	0.00	2.35	0.00
89	90	114.00	0.00	0.60	-41.87	0	-43.09	2	71.88	2	0.00	2.35	0.00
90	90	114.00	0.00	0.60	-41.87	0	-43.09	2	71.88	2	0.00	2.35	0.00
90	91	114.58	0.00	0.60	-42.22	0	-43.45	2	72.48	2	0.00	2.35	0.00
91	91	114.58	0.00	0.60	-42.22	0	-43.45	2	72.48	2	0.00	2.35	0.00
91	92	116.15	0.00	0.60	-43.16	0	-44.41	2	74.10	2	0.00	2.35	0.00
92	92	116.15	0.12	0.59	-43.16	0	-44.34	2	74.17	2	0.00	2.35	0.00
92	93	117.73	0.12	0.59	-44.10	0	-45.30	2	75.79	2	0.00	2.35	0.00
93	93	117.73	0.12	0.59	-44.10	0	-45.30	2	75.79	2	0.00	2.35	0.00
93	94	119.30	0.12	0.59	-45.04	0	-30.10	2	16.13	2	13.72	2.35	20.60
94	94	119.30	0.00	0.60	-45.04	0	-30.15	2	16.09	2	14.01	2.35	21.03
94	95	120.88	0.00	0.60	-45.99	0	-30.78	2	16.42	2	13.97	2.35	21.00
95	95	120.88	0.00	0.60	-45.99	0	-31.76	2	13.59	2	14.27	2.35	21.44
95	96	122.45	0.00	0.60	-46.93	0	-32.40	2	13.86	2	11.80	2.35	18.69
96	96	122.45	0.00	0.60	-46.93	0	-32.40	2	13.86	2	12.04	2.35	19.07
96	97	124.03	0.00	0.60	-47.87	0	-33.05	2	14.14	2	12.28	2.35	19.46
97	97	124.03	0.00	0.60	-47.87	0	-33.05	2	14.14	2	12.28	2.35	19.46
97	98	125.60	0.00	0.60	-48.82	0	-33.71	2	14.42	2	12.53	2.35	19.84
98	98	125.60	0.00	0.60	-48.82	0	-33.71	2	14.42	2	12.53	2.35	19.84
98	99	127.18	0.00	0.60	-49.76	0	-34.36	2	14.70	2	12.77	2.35	20.22
99	99	127.18	0.00	0.60	-49.76	0	-34.36	2	14.70	2	12.77	2.35	20.22
100	100	128.75	0.00	0.60	-50.70	0	-35.01	2	14.98	2	13.01	2.35	20.61
100	100	128.75	0.00	0.60	-50.70	0	-35.01	2	14.98	2	13.01	2.35	20.61
101	101	130.33	0.00	0.60	-51.64	0	-35.66	2	15.26	2	13.25	2.35	20.99
101	101	130.33	0.00	0.60	-51.64	0	-35.66	2	15.26	2	13.25	2.35	20.99
102	102	131.90	0.00	0.60	-52.59	0	-36.31	2	15.54	2	13.49	2.35	21.37
102	102	131.90	0.00	0.60	-52.59	0	-36.31	2	15.54	2	13.49	2.35	21.37
103	103	133.48	0.00	0.60	-53.53	0	-36.96	2	15.81	2	13.74	2.35	21.76
103	103	133.48	0.00	0.60	-53.53	0	-36.96	2	15.81	2	13.74	2.35	21.76
103	104	135.05	0.00	0.60	-54.47	0	-37.61	2	16.09	2	13.98	2.35	22.14
104	104	135.05	0.00	0.60	-54.47	0	-37.61	2	16.09	2	13.98	2.35	22.14
104	105	136.63	0.00	0.60	-55.41	0	-38.26	2	16.37	2	14.22	2.35	22.52
105	105	136.63	0.00	0.60	-55.41	0	-38.26	2	16.37	2	14.22	2.35	22.52
105	106	138.20	0.00	0.60	-56.36	0	-37.72	2	20.13	2	17.19	2.35	25.83
106	106	138.20	-0.12	0.59	-56.36	0	-37.72	2	20.09	2	17.48	2.35	26.27
106	107	139.78	-0.12	0.59	-57.30	0	-38.40	2	20.42	2	17.74	2.35	26.68
107	107	139.78	-0.12	0.59	-57.30	0	-38.40	2	20.42	2	17.74	2.35	26.68
107	108	141.35	-0.12	0.59	-58.24	0	-60.01	2	98.29	2	0.00	2.35	0.00
108	108	141.35	0.00	0.60	-58.24	0	-59.93	2	99.91	2	0.00	2.35	0.00
108	109	142.93	0.00	0.60	-59.18	0	-60.90	2	99.99	2	0.00	2.35	0.00
109	109	142.93	0.00	0.60	-59.18	0	-60.90	2	101.60	2	0.00	2.35	0.00
109	110	143.50	0.00	0.60	-59.53	0	-61.26	2	101.60	2	0.00	2.35	0.00
110	110	143.50	0.00	0.60	-59.53	0	-61.26	2	102.20	2	0.00	2.35	0.00
110	111	144.50	0.00	0.60	-60.13	0	-61.88	2	102.20	2	0.00	2.35	0.00
111	111	144.50	0.00	-2.56	-60.13	0	-61.88	2	103.23	2	0.00	2.35	0.00
111	112	145.50	0.00	-2.56	-57.57	0	-59.24	2	98.84	2	0.00	2.35	0.00
112	112	145.50	0.00	-2.56	-57.57	0	-59.24	2	98.84	2	0.00	2.35	0.00
113	113	145.68	0.00	-2.56	-57.12	0	-58.78	2	98.06	2	0.00	2.35	0.00
113	113	145.68	0.00	-2.56	-57.12	0	-58.78	2	98.06	2	0.00	2.35	0.00
113	114	146.85	0.00	-2.56	-54.11	0	-55.68	2	92.90	2	0.00	2.35	0.00
114	114	146.85	-0.66	-2.47	-54.11	0	-56.11	2	92.47	2	0.00	2.35	0.00
114	115	148.03	-0.66	-2.47	-51.11	0	-53.02	2	87.32	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

fase4.HIP.To.To

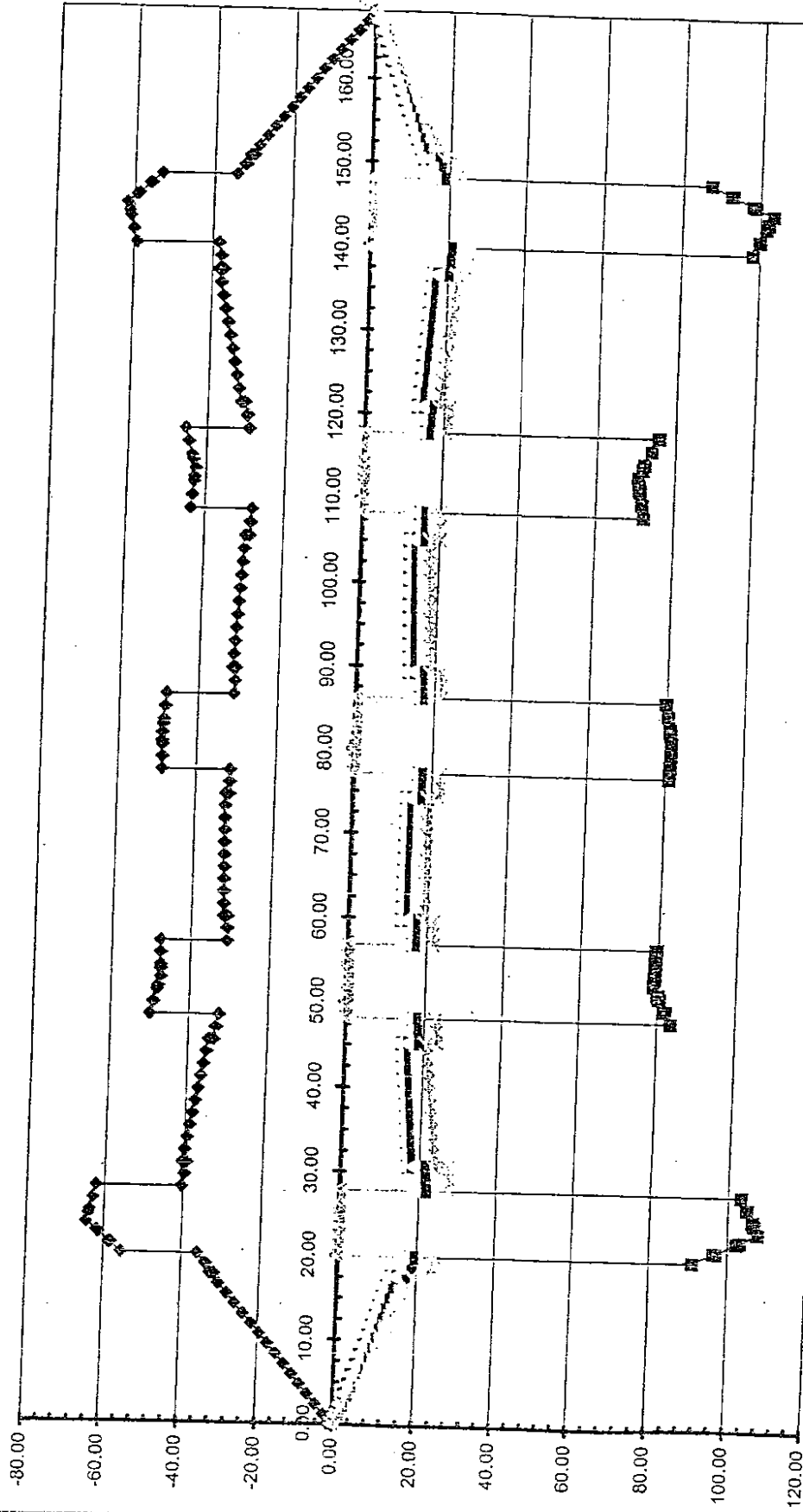
(Pretensado Hiperestático($t=0$)). Tensiones a tiempo T_0

[1: fase4.HIP.To

Def. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
115	115	148.03	-0.66	-2.47	-51.11	0	-34.44	2	18.02	2	15.65	2.35	23.62
115	116	149.20	-0.66	-2.47	-48.10	0	-32.43	2	16.94	2	14.72	2.35	22.22
116	116	149.20	-0.03	-2.56	-48.10	0	-32.21	2	17.17	2	14.91	2.35	22.41
116	117	150.38	-0.03	-2.56	-45.10	0	-30.20	2	16.10	2	13.98	2.35	21.02
117	117	150.38	-0.03	-2.56	-45.10	0	-31.15	2	13.31	2	11.56	2.35	18.32
117	118	151.55	-0.03	-2.56	-42.09	0	-29.07	2	12.42	2	10.79	2.35	17.10
118	118	151.55	0.00	-2.56	-42.09	0	-29.06	2	12.43	2	10.80	2.35	17.11
118	119	152.73	0.00	-2.56	-39.08	0	-26.98	2	11.55	2	10.03	2.35	15.88
119	119	152.73	0.00	-2.56	-39.08	0	-26.98	2	11.55	2	10.03	2.35	15.88
119	120	153.90	0.00	-2.56	-36.08	0	-24.91	2	10.66	2	9.26	2.35	14.66
120	120	153.90	0.00	-2.56	-36.08	0	-24.91	2	10.66	2	9.26	2.35	14.66
120	121	155.08	0.00	-2.56	-33.07	0	-22.83	2	9.77	2	8.49	2.35	13.44
121	121	155.08	0.00	-2.56	-33.07	0	-22.83	2	9.77	2	8.49	2.35	13.44
121	122	156.25	0.00	-2.56	-30.06	0	-20.76	2	8.88	2	7.71	2.35	12.22
122	122	156.25	0.00	-2.56	-30.06	0	-20.76	2	8.88	2	7.71	2.35	12.22
122	123	157.43	0.00	-2.56	-27.06	0	-18.68	2	7.99	2	6.94	2.35	11.00
123	123	157.43	0.00	-2.56	-27.06	0	-18.68	2	7.99	2	6.94	2.35	11.00
123	124	158.60	0.00	-2.56	-24.05	0	-16.61	2	7.11	2	6.17	2.35	9.77
124	124	158.60	0.00	-2.56	-24.05	0	-16.61	2	7.11	2	6.17	2.35	9.77
124	125	159.78	0.00	-2.56	-21.04	0	-14.53	2	6.22	2	5.40	2.35	8.55
125	125	159.78	0.00	-2.56	-21.04	0	-14.53	2	6.22	2	5.40	2.35	8.55
125	126	160.95	0.00	-2.56	-18.04	0	-12.46	2	5.33	2	4.63	2.35	7.33
126	126	160.95	0.00	-2.56	-18.04	0	-12.46	2	5.33	2	4.63	2.35	7.33
126	127	162.13	0.00	-2.56	-15.03	0	-10.38	2	4.44	2	3.86	2.35	6.11
127	127	162.13	0.00	-2.56	-15.03	0	-10.38	2	4.44	2	3.86	2.35	6.11
127	128	163.30	0.00	-2.56	-12.03	0	-8.31	2	3.55	2	3.09	2.35	4.89
128	128	163.30	0.00	-2.56	-12.03	0	-8.31	2	3.55	2	3.09	2.35	4.89
128	129	164.48	0.00	-2.56	-9.02	0	-6.23	2	2.66	2	2.31	2.35	3.67
129	129	164.48	0.00	-2.56	-9.02	0	-6.23	2	2.66	2	2.31	2.35	3.67
129	130	165.65	0.00	-2.56	-6.01	0	-4.15	2	1.78	2	1.54	2.35	2.44
130	130	165.65	0.00	-2.56	-6.01	0	-4.15	2	1.78	2	1.54	2.35	2.44
130	131	166.83	0.00	-2.56	-3.01	0	-2.08	2	0.89	2	0.77	2.35	1.22
131	131	166.83	0.00	-2.56	-3.01	0	-2.08	2	0.89	2	0.77	2.35	1.22
131	132	167.00	0.00	-2.56	-2.56	0	-1.77	2	0.76	2	0.66	2.35	1.04
132	132	167.00	0.00	-2.56	-2.56	0	-1.77	2	0.76	2	0.66	2.35	1.04
132	133	168.00	0.00	-2.56	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

GRÁFICO DE TENSIONES



—◆— InfCajón(kg/cm²) —■— SupCajón(kg/cm²)

CÁLCULO TENSIONAL

hipótesis de cálculo:
IBCP.To

HormigonadoBCP(ías). Tensiones a tiempo To

ref. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (kg/cm²)	Fibra y fibra	SupCajón sig (kg/cm²)	Fibra y fibra	InfLosa sig (kg/cm²)	Fibra y fibra	SupLosa sig (kg/cm²)
1	1	0.00	0.00	0.02	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	0.02	-0.02	0	-0.01	2	0.01	2	0.01	2.35	0.01
2	2	1.00	0.00	0.02	-0.02	0	-0.01	2	0.01	2	0.01	2.35	0.01
2	3	1.18	0.00	0.02	-0.02	0	-0.01	2	0.01	2	0.01	2.35	0.01
3	3	1.18	0.00	0.02	-0.02	0	-0.01	2	0.01	2	0.01	2.35	0.01
3	4	2.35	0.00	0.02	-0.04	0	-0.03	2	0.01	2	0.01	2.35	0.01
4	4	2.35	0.00	0.02	-0.04	0	-0.03	2	0.01	2	0.01	2.35	0.02
4	5	3.53	0.00	0.02	-0.06	0	-0.04	2	0.02	2	0.02	2.35	0.02
5	5	3.53	0.00	0.02	-0.06	0	-0.04	2	0.02	2	0.02	2.35	0.02
5	6	4.70	0.00	0.02	-0.08	0	-0.06	2	0.02	2	0.02	2.35	0.02
6	6	4.70	0.00	0.02	-0.08	0	-0.06	2	0.02	2	0.02	2.35	0.03
6	7	5.88	0.00	0.02	-0.10	0	-0.07	2	0.03	2	0.03	2.35	0.03
7	7	5.88	0.00	0.02	-0.10	0	-0.07	2	0.03	2	0.03	2.35	0.04
7	8	7.05	0.00	0.02	-0.11	0	-0.08	2	0.03	2	0.03	2.35	0.04
8	8	7.05	0.00	0.02	-0.11	0	-0.08	2	0.03	2	0.03	2.35	0.04
8	9	8.23	0.00	0.02	-0.13	0	-0.09	2	0.04	2	0.03	2.35	0.04
9	9	8.23	0.00	0.02	-0.13	0	-0.09	2	0.04	2	0.03	2.35	0.05
9	10	9.40	0.00	0.02	-0.15	0	-0.10	2	0.04	2	0.04	2.35	0.05
10	10	9.40	0.00	0.02	-0.15	0	-0.10	2	0.04	2	0.04	2.35	0.06
10	11	10.58	0.00	0.02	-0.17	0	-0.12	2	0.05	2	0.04	2.35	0.06
11	11	10.58	0.00	0.02	-0.17	0	-0.12	2	0.05	2	0.04	2.35	0.07
11	12	11.75	0.00	0.02	-0.19	0	-0.13	2	0.06	2	0.05	2.35	0.07
12	12	11.75	0.00	0.02	-0.19	0	-0.13	2	0.06	2	0.05	2.35	0.08
12	13	12.93	0.00	0.02	-0.21	0	-0.15	2	0.06	2	0.05	2.35	0.08
13	13	12.93	0.00	0.02	-0.21	0	-0.15	2	0.06	2	0.05	2.35	0.09
13	14	14.10	0.00	0.02	-0.23	0	-0.16	2	0.07	2	0.06	2.35	0.09
14	14	14.10	0.00	0.02	-0.23	0	-0.16	2	0.07	2	0.06	2.35	0.09
14	15	15.28	0.00	0.02	-0.25	0	-0.17	2	0.07	2	0.06	2.35	0.10
15	15	15.28	0.00	0.02	-0.25	0	-0.17	2	0.07	2	0.06	2.35	0.10
15	16	16.45	0.00	0.02	-0.27	0	-0.19	2	0.08	2	0.07	2.35	0.11
16	16	16.45	0.00	0.02	-0.27	0	-0.19	2	0.08	2	0.07	2.35	0.11
16	17	17.63	0.00	0.02	-0.29	0	-0.20	2	0.09	2	0.07	2.35	0.12
17	17	17.63	0.00	0.02	-0.29	0	-0.19	2	0.10	2	0.09	2.35	0.14
17	18	18.80	0.00	0.02	-0.31	0	-0.21	2	0.11	2	0.10	2.35	0.14
18	18	18.80	0.00	0.02	-0.31	0	-0.21	2	0.11	2	0.10	2.35	0.14
18	19	19.98	0.00	0.02	-0.32	0	-0.21	2	0.11	2	0.10	2.35	0.15
19	19	19.98	0.00	0.02	-0.32	0	-0.21	2	0.11	2	0.10	2.35	0.15
19	20	21.15	-0.94	3.52	-2.47	0	-0.33	2	0.55	2	0.00	2.35	0.00
20	20	21.15	0.00	3.64	-2.47	0	-3.15	2	3.64	2	0.00	2.35	0.00
20	21	22.33	0.00	7.15	-8.81	0	-2.54	2	4.24	2	0.00	2.35	0.00
21	21	22.33	0.00	7.15	-8.81	0	-9.07	2	15.12	2	0.00	2.35	0.00
21	22	22.50	0.00	7.67	-10.11	0	-9.07	2	15.12	2	0.00	2.35	0.00
22	22	22.50	0.00	7.67	-10.11	0	-10.40	2	17.36	2	0.00	2.35	0.00
22	23	23.50	0.00	10.65	-19.27	0	-10.40	2	17.36	2	0.00	2.35	0.00
23	1023	23.50	0.00	-12.92	-19.27	0	-19.83	2	33.08	2	0.00	2.35	0.00
23	24	24.50	0.00	-9.93	-7.84	0	-19.83	2	33.08	2	0.00	2.35	0.00
24	24	24.50	0.00	-9.93	-7.84	0	-8.07	2	13.46	2	0.00	2.35	0.00
24	25	24.95	0.00	-8.59	-3.68	0	-8.07	2	13.46	2	0.00	2.35	0.00
25	25	24.95	0.00	-8.59	-3.68	0	-3.79	2	6.32	2	0.00	2.35	0.00
25	26	26.40	0.00	-4.27	5.65	0	-3.79	2	6.32	2	0.00	2.35	0.00
26	26	26.40	-0.90	-4.17	5.65	0	5.81	2	-9.70	2	0.00	2.35	0.00
26	27	27.85	0.03	0.15	8.63	0	5.24	2	-10.28	2	0.00	2.35	0.00
27	27	27.85	0.03	0.15	8.63	0	8.90	2	-14.80	2	0.00	2.35	0.00
27	28	29.30	0.03	0.15	8.40	0	5.79	2	-3.07	2	-2.67	2.35	-4.01
28	28	29.30	0.00	0.16	8.40	0	5.63	2	-2.99	2	-2.60	2.35	-3.91
28	29	30.75	0.00	0.16	8.18	0	5.62	2	-3.00	2	-2.61	2.35	-3.92
29	29	30.75	0.00	0.16	8.18	0	5.48	2	-2.92	2	-2.54	2.35	-3.81
29	30	32.20	0.00	0.16	7.95	0	5.65	2	-2.42	2	-2.10	2.35	-3.32
30	30	32.20	0.00	0.16	7.95	0	5.49	2	-2.35	2	-2.04	2.35	-3.23
30	31	33.65	0.00	0.16	7.73	0	5.34	2	-2.28	2	-1.98	2.35	-3.14
31	31	33.65	0.00	0.16	7.73	0	5.34	2	-2.28	2	-1.98	2.35	-3.14
31	32	35.10	0.00	0.16	7.50	0	5.18	2	-2.22	2	-1.92	2.35	-3.05
32	32	35.10	0.00	0.16	7.50	0	5.18	2	-2.22	2	-1.92	2.35	-3.05
32	33	36.55	0.00	0.16	7.27	0	5.02	2	-2.15	2	-1.87	2.35	-2.95
33	33	36.55	0.00	0.16	7.27	0	5.02	2	-2.15	2	-1.87	2.35	-2.95
33	34	38.00	0.00	0.16	7.05	0	4.87	2	-2.08	2	-1.81	2.35	-2.87
34	34	38.00	0.00	0.16	7.05	0	4.87	2	-2.08	2	-1.81	2.35	-2.87
34	35	39.45	0.00	0.16	6.82	0	4.71	2	-2.01	2	-1.75	2.35	-2.77
35	35	39.45	0.00	0.16	6.82	0	4.71	2	-2.01	2	-1.75	2.35	-2.77
35	36	40.90	0.00	0.16	6.60	0	4.56	2	-1.95	2	-1.69	2.35	-2.68
36	36	40.90	0.00	0.16	6.60	0	4.56	2	-1.95	2	-1.69	2.35	-2.68
36	37	42.35	0.00	0.16	6.37	0	4.40	2	-1.88	2	-1.63	2.35	-2.59
37	37	42.35	0.00	0.16	6.37	0	4.40	2	-1.88	2	-1.63	2.35	-2.59
37	38	43.80	0.00	0.16	6.15	0	4.25	2	-1.82	2	-1.58	2.35	-2.50
38	38	43.80	0.00	0.16	6.15	0	4.25	2	-1.82	2	-1.58	2.35	-2.50
38	39	45.25	0.00	0.16	5.92	0	4.09	2	-1.75	2	-1.52	2.35	-2.41

CÁLCULO TENSIONAL

Hipótesis de cálculo:
HBCP.To

Hormigonado BCPilas). Tensiones a tiempo To

HBCP

Coef. etc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	0.00	0.16	5.92	0	3.96	2	-2.11	2	-1.84	2.35	-2.76
39	40	46.70	0.00	0.16	5.69	0	3.81	2	-2.03	2	-1.76	2.35	-2.65
40	40	46.70	-0.03	0.15	5.69	0	3.80	2	-2.04	2	-1.77	2.35	-2.65
40	41	48.15	-0.03	0.15	5.47	0	3.65	2	-1.96	2	-1.71	2.35	-2.66
41	41	48.15	-0.03	0.15	5.47	0	5.61	2	-9.41	2	0.00	2.35	-2.55
42	42	49.60	-0.97	4.48	2.04	0	1.48	2	-4.13	2	0.00	2.35	0.00
42	43	51.05	0.00	8.90	2.04	0	2.10	2	-3.50	2	0.00	2.35	0.00
43	43	51.05	0.00	8.90	-7.74	0	-7.96	2	13.29	2	0.00	2.35	0.00
43	44	51.50	0.00	10.25	-12.05	0	-7.96	2	13.29	2	0.00	2.35	0.00
44	44	51.50	0.00	10.25	-12.05	0	-12.40	2	20.69	2	0.00	2.35	0.00
44	45	52.50	0.00	13.23	-23.79	0	-12.40	2	20.69	2	0.00	2.35	0.00
45	1045	52.50	0.00	-13.02	-23.79	0	-24.48	2	40.84	2	0.00	2.35	0.00
45	46	53.50	0.00	-10.04	-12.25	0	-24.48	2	40.84	2	0.00	2.35	0.00
46	46	53.50	0.00	-10.04	-12.25	0	-12.61	2	21.03	2	0.00	2.35	0.00
46	47	53.95	0.00	-8.70	-8.04	0	-12.61	2	21.03	2	0.00	2.35	0.00
47	47	53.95	0.00	-8.70	-8.04	0	-8.27	2	13.80	2	0.00	2.35	0.00
47	48	55.40	0.00	-8.70	-8.04	0	-8.27	2	13.80	2	0.00	2.35	0.00
48	48	55.40	-0.92	-4.38	1.44	0	1.48	2	-2.47	2	0.00	2.35	0.00
49	49	56.85	0.01	-4.28	1.44	0	0.89	2	-3.06	2	0.00	2.35	0.00
49	49	56.85	0.01	0.05	4.58	0	4.72	2	-7.86	2	0.00	2.35	0.00
50	50	58.30	0.01	0.05	4.51	0	3.07	2	-1.63	2	-1.42	2.35	-2.13
50	50	58.30	0.00	0.05	4.51	0	3.02	2	-1.61	2	-1.40	2.35	-2.10
51	51	59.75	0.00	0.05	4.44	0	3.02	2	-1.61	2	-1.40	2.35	-2.10
51	51	59.75	0.00	0.05	4.44	0	2.97	2	-1.59	2	-1.38	2.35	-2.07
52	52	61.20	0.00	0.05	4.37	0	3.07	2	-1.31	2	-1.14	2.35	-1.80
52	52	61.20	0.00	0.05	4.37	0	3.02	2	-1.29	2	-1.12	2.35	-1.78
53	53	62.65	0.00	0.05	4.30	0	3.02	2	-1.29	2	-1.12	2.35	-1.78
53	53	62.65	0.00	0.05	4.30	0	2.97	2	-1.27	2	-1.10	2.35	-1.75
54	54	64.10	0.00	0.05	4.23	0	2.97	2	-1.27	2	-1.10	2.35	-1.75
54	54	64.10	0.00	0.05	4.23	0	2.92	2	-1.25	2	-1.09	2.35	-1.72
55	55	65.55	0.00	0.05	4.16	0	2.92	2	-1.25	2	-1.09	2.35	-1.72
55	55	65.55	0.00	0.05	4.16	0	2.87	2	-1.23	2	-1.07	2.35	-1.69
56	56	67.00	0.00	0.05	4.09	0	2.87	2	-1.23	2	-1.07	2.35	-1.69
56	56	67.00	0.00	0.05	4.09	0	2.82	2	-1.21	2	-1.05	2.35	-1.66
57	57	68.45	0.00	0.05	4.02	0	2.82	2	-1.21	2	-1.05	2.35	-1.66
57	57	68.45	0.00	0.05	4.02	0	2.78	2	-1.19	2	-1.03	2.35	-1.63
58	58	69.90	0.00	0.05	3.95	0	2.78	2	-1.19	2	-1.03	2.35	-1.63
58	58	69.90	0.00	0.05	3.95	0	2.73	2	-1.17	2	-1.01	2.35	-1.61
59	59	71.35	0.00	0.05	3.88	0	2.73	2	-1.17	2	-1.01	2.35	-1.61
59	59	71.35	0.00	0.05	3.88	0	2.68	2	-1.15	2	-1.00	2.35	-1.58
59	60	72.80	0.00	0.05	3.81	0	2.68	2	-1.15	2	-1.00	2.35	-1.58
60	60	72.80	0.00	0.05	3.81	0	2.63	2	-1.13	2	-0.98	2.35	-1.55
60	61	74.25	0.00	0.05	3.74	0	2.63	2	-1.13	2	-0.98	2.35	-1.55
61	61	74.25	0.00	0.05	3.74	0	2.58	2	-1.10	2	-0.96	2.35	-1.52
62	62	75.70	0.00	0.05	3.67	0	2.58	2	-1.10	2	-0.96	2.35	-1.52
62	62	75.70	-0.01	0.05	3.67	0	2.46	2	-1.34	2	-1.16	2.35	-1.74
63	63	77.15	-0.01	0.05	3.60	0	2.46	2	-1.31	2	-1.14	2.35	-1.71
63	63	77.15	-0.01	0.05	3.60	0	2.45	2	-1.31	2	-1.14	2.35	-1.71
64	64	78.60	-0.95	4.37	0.32	0	2.41	2	-1.29	2	-1.12	2.35	-1.68
64	64	78.60	0.00	4.47	0.32	0	3.70	2	-6.19	2	0.00	2.35	0.00
65	65	80.05	0.00	8.80	-9.30	0	-0.28	2	-1.16	2	0.00	2.35	0.00
65	65	80.05	0.00	8.80	-9.30	0	0.33	2	-0.55	2	0.00	2.35	0.00
66	66	80.50	0.00	10.14	-13.56	0	-9.57	2	15.97	2	0.00	2.35	0.00
66	66	80.50	0.00	10.14	-13.56	0	-9.57	2	15.97	2	0.00	2.35	0.00
67	1067	81.50	0.00	13.12	-25.19	0	-13.95	2	23.28	2	0.00	2.35	0.00
67	68	82.50	0.00	-14.06	-25.19	0	-13.95	2	23.28	2	0.00	2.35	0.00
68	68	82.50	0.00	-11.08	-12.62	0	-25.92	2	43.25	2	0.00	2.35	0.00
68	68	82.50	0.00	-11.08	-12.62	0	-25.92	2	43.25	2	0.00	2.35	0.00
69	69	83.08	0.00	-12.99	-12.99	0	-12.99	2	21.67	2	0.00	2.35	0.00
69	69	83.08	0.00	-9.36	-6.74	0	-12.99	2	21.67	2	0.00	2.35	0.00
69	70	84.65	0.00	-6.94	-6.94	0	-6.94	2	11.57	2	0.00	2.35	0.00
70	70	84.65	-0.91	-4.67	4.31	0	-6.94	2	11.57	2	0.00	2.35	0.00
70	71	86.23	0.02	-4.58	4.31	0	4.44	2	-7.40	2	0.00	2.35	0.00
71	71	86.23	0.02	0.12	7.89	0	3.85	2	-7.98	2	0.00	2.35	0.00
71	71	86.23	0.02	0.12	7.89	0	8.13	2	-13.53	2	0.00	2.35	0.00
72	72	87.80	0.02	0.12	7.70	0	5.29	2	-2.81	2	-2.44	2.35	-3.67
72	72	87.80	0.02	0.12	7.70	0	5.16	2	-2.74	2	-2.38	2.35	-3.58
73	73	89.38	0.00	0.12	7.51	0	5.15	2	-2.75	2	-2.39	2.35	-3.59
73	73	89.38	0.00	0.12	7.51	0	5.03	2	-2.68	2	-2.33	2.35	-3.50
74	74	90.95	0.00	0.12	7.32	0	5.19	2	-2.22	2	-1.93	2.35	-3.50
74	74	90.95	0.00	0.12	7.32	0	5.05	2	-2.16	2	-1.88	2.35	-3.05
75	75	92.53	0.00	0.12	7.13	0	5.05	2	-2.16	2	-1.88	2.35	-2.98
75	75	92.53	0.00	0.12	7.13	0	4.92	2	-2.11	2	-1.83	2.35	-2.98
76	76	94.10	0.00	0.12	6.94	0	4.92	2	-2.11	2	-1.83	2.35	-2.90
76	76	94.10	0.00	0.12	6.94	0	4.79	2	-2.05	2	-1.78	2.35	-2.90
76	77	95.68	0.00	0.12	6.75	0	4.79	2	-2.05	2	-1.78	2.35	-2.82
						0	4.66	2	-1.99	2	-1.73	2.35	-2.74

CÁLCULO TENSIONAL

Hipótesis de cálculo:
HBCP.To

Hormigonado BCPilas). Tensiones a tiempo To

HBCP

Coef. etc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
77	77	95.68	0.00	0.12	6.75	0	4.66	2	-1.99	2	-1.73	2.35	-2.74
77	78	97.25	0.00	0.12	6.55	0	4.52	2	-1.94	2	-1.68	2.35	-2.66
78	78	97.25	0.00	0.12	6.55	0	4.52	2	-1.94	2	-1.68	2.35	-2.66
78	79	98.83	0.00	0.12	6.36	0	4.39	2	-1.88	2	-1.63	2.35	-2.58
79	79	98.83	0.00	0.12	6.36	0	4.39	2	-1.88	2	-1.63	2.35	-2.58
79	80	100.40	0.00	0.12	6.17	0	4.26	2	-1.82	2	-1.58	2.35	-2.51
80	80	100.40	0.00	0.12	6.17	0	4.26	2	-1.82	2	-1.58	2.35	-2.51
80	81	101.98	0.00	0.12	5.98	0	4.13	2	-1.77	2	-1.53	2.35	-2.43
81	81	101.98	0.00	0.12	5.98	0	4.13	2	-1.77	2	-1.53	2.35	-2.43
81	82	103.55	0.00	0.12	5.79	0	4.00	2	-1.71	2	-1.49	2.35	-2.35
82	82	103.55	0.00	0.12	5.79	0	4.00	2	-1.71	2	-1.49	2.35	-2.35
82	83	105.13	0.00	0.12	5.60	0	3.87	2	-1.65	2	-1.44	2.35	-2.28
83	83	105.13	0.00	0.12	5.60	0	3.87	2	-1.65	2	-1.44	2.35	-2.28
83	84	106.70	0.00	0.12	5.41	0	3.62	2	-1.93	2	-1.68	2.35	-2.52
84	84	106.70	-0.02	0.12	5.41	0	3.62	2	-1.93	2	-1.68	2.35	-2.52
84	85	108.28	-0.02	0.12	5.22	0	3.49	2	-1.87	2	-1.63	2.35	-2.44
85	85	108.28	-0.02	0.12	5.22	0	3.49	2	-1.87	2	-1.63	2.35	-2.44
85	86	109.85	-0.96	4.82	1.26	0	0.68	2	-2.78	2	0.00	2.35	0.00
86	86	109.85	0.00	4.91	1.26	0	0.68	2	-2.78	2	0.00	2.35	0.00
86	87	111.43	0.00	9.61	-10.17	0	1.30	2	-2.16	2	0.00	2.35	0.00
87	87	111.43	0.00	9.61	-10.17	0	-10.47	2	17.46	2	0.00	2.35	0.00
87	88	112.00	0.00	11.32	-16.19	0	-10.47	2	17.46	2	0.00	2.35	0.00
88	88	112.00	0.00	11.32	-16.19	0	-16.66	2	27.79	2	0.00	2.35	0.00
88	89	113.00	0.00	11.32	-16.19	0	-16.66	2	27.79	2	0.00	2.35	0.00
89	1089	113.00	0.00	14.30	-29.00	0	-29.84	2	49.79	2	0.00	2.35	0.00
89	90	114.00	0.00	-14.42	-29.00	0	-29.84	2	49.79	2	0.00	2.35	0.00
90	90	114.00	0.00	-11.43	-16.08	0	-16.55	2	27.61	2	0.00	2.35	0.00
90	91	114.58	0.00	-11.43	-16.08	0	-16.55	2	27.61	2	0.00	2.35	0.00
91	91	114.58	0.00	-9.72	-9.99	0	-10.28	2	17.15	2	0.00	2.35	0.00
91	92	116.15	0.00	-9.72	-9.99	0	-10.28	2	17.15	2	0.00	2.35	0.00
92	92	116.15	-0.98	-5.02	1.62	0	1.67	2	-2.78	2	0.00	2.35	0.00
92	93	117.73	-0.05	-4.93	1.62	0	1.04	2	-3.41	2	0.00	2.35	0.00
93	93	117.73	-0.05	-0.23	5.76	0	5.90	2	-9.92	2	0.00	2.35	0.00
93	94	119.30	-0.05	-0.23	5.76	0	3.84	2	-2.07	2	0.00	2.35	0.00
94	94	119.30	0.00	-0.23	6.13	0	4.09	2	-2.21	2	-1.80	2.35	-2.70
94	95	120.88	0.00	-0.23	6.13	0	4.10	2	-2.19	2	-1.92	2.35	-2.87
95	95	120.88	0.00	-0.23	6.50	0	4.35	2	-2.32	2	-1.90	2.35	-2.86
95	96	122.45	0.00	-0.23	6.50	0	4.49	2	-1.92	2	-2.02	2.35	-3.03
96	96	122.45	0.00	-0.23	6.87	0	4.74	2	-2.03	2	-1.67	2.35	-2.64
96	97	124.03	0.00	-0.23	6.87	0	4.74	2	-2.03	2	-1.76	2.35	-2.79
97	97	124.03	0.00	-0.23	7.24	0	5.00	2	-2.14	2	-1.76	2.35	-2.79
97	98	125.60	0.00	-0.23	7.24	0	5.00	2	-2.14	2	-1.86	2.35	-2.94
98	98	125.60	0.00	-0.23	7.61	0	5.25	2	-2.25	2	-1.86	2.35	-2.94
98	99	127.18	0.00	-0.23	7.61	0	5.25	2	-2.25	2	-1.95	2.35	-3.09
99	99	127.18	0.00	-0.23	7.98	0	5.51	2	-2.36	2	-1.95	2.35	-3.09
99	100	128.75	0.00	-0.23	7.98	0	5.51	2	-2.36	2	-2.05	2.35	-3.24
100	100	128.75	0.00	-0.23	8.35	0	5.77	2	-2.47	2	-2.05	2.35	-3.24
100	101	130.33	0.00	-0.23	8.35	0	5.77	2	-2.47	2	-2.14	2.35	-3.39
101	101	130.33	0.00	-0.23	8.72	0	6.02	2	-2.58	2	-2.14	2.35	-3.39
101	102	131.90	0.00	-0.23	8.72	0	6.02	2	-2.58	2	-2.24	2.35	-3.54
102	102	131.90	0.00	-0.23	9.09	0	6.28	2	-2.69	2	-2.24	2.35	-3.54
102	103	133.48	0.00	-0.23	9.09	0	6.28	2	-2.69	2	-2.33	2.35	-3.69
103	103	133.48	0.00	-0.23	9.46	0	6.53	2	-2.79	2	-2.33	2.35	-3.69
103	104	135.05	0.00	-0.23	9.46	0	6.53	2	-2.79	2	-2.43	2.35	-3.84
104	104	135.05	0.00	-0.23	9.83	0	6.79	2	-2.90	2	-2.43	2.35	-3.84
104	105	136.63	0.00	-0.23	9.83	0	6.79	2	-2.90	2	-2.52	2.35	-4.00
105	105	136.63	0.00	-0.23	10.20	0	7.04	2	-3.01	2	-2.52	2.35	-4.00
105	106	138.20	0.00	-0.23	10.20	0	6.83	2	-3.64	2	-2.62	2.35	-4.15
106	106	138.20	0.05	-0.23	10.57	0	7.07	2	-3.77	2	-3.16	2.35	-4.76
106	107	139.78	0.05	-0.23	10.57	0	7.09	2	-3.76	2	-3.28	2.35	-4.93
107	107	139.78	0.05	-0.23	10.94	0	7.34	2	-3.89	2	-3.26	2.35	-4.91
107	108	141.35	-0.89	-0.23	10.94	0	11.29	2	-18.75	2	-3.38	2.35	-5.08
108	108	141.35	0.00	4.47	7.54	0	7.19	2	-13.52	2	0.00	2.35	0.00
108	109	142.93	0.00	7.54	0	7.76	2	-12.94	2	0.00	2.35	0.00	0.00
109	109	142.93	0.00	9.25	-3.34	0	-3.44	2	5.73	2	0.00	2.35	0.00
109	110	143.50	0.00	9.25	-3.34	0	-3.44	2	5.73	2	0.00	2.35	0.00
110	110	143.50	0.00	10.97	-9.15	0	-9.42	2	15.71	2	0.00	2.35	0.00
110	111	144.50	0.00	10.97	-9.15	0	-9.42	2	15.71	2	0.00	2.35	0.00
111	1111	144.50	0.00	13.95	-21.60	0	-22.23	2	37.08	2	0.00	2.35	0.00
111	112	145.50	0.00	-10.75	-21.60	0	-22.23	2	37.08	2	0.00	2.35	0.00
112	112	145.50	0.00	-7.77	-12.34	0	-12.70	2	21.19	2	0.00	2.35	0.00
112	113	145.68	0.00	-7.77	-12.34	0	-12.70	2	21.19	2	0.00	2.35	0.00
113	113	145.68	0.00	-7.25	-11.03	0	-11.35	2	18.94	2	0.00	2.35	0.00
113	114	146.85	0.00	-7.25	-11.03	0	-11.35	2	18.94	2	0.00	2.35	0.00
114	114	146.85	-0.96	-3.74	-4.58	0	-4.71	2	7.86	2	0.00	2.35	0.00
114	115	148.03	-0.03	-3.62	-4.58	0	-5.33	2	7.25	2	0.00	2.35	0.00
				-0.11	-2.31	0	-2.40	2	3.95	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:
HBCP.To

HormigonadoBCPilas). Tensiones a tiempo To

HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	0.00	0.16	5.92	0	3.96	2	-2.11	2	-1.84	2.35	-2.76
39	40	46.70	0.00	0.16	5.69	0	3.81	2	-2.03	2	-1.76	2.35	-2.65
40	40	46.70	-0.03	0.15	5.69	0	3.80	2	-2.04	2	-1.77	2.35	-2.66
40	41	48.15	-0.03	0.15	5.47	0	3.65	2	-1.96	2	-1.71	2.35	-2.56
41	41	48.15	-0.03	0.15	5.47	0	3.61	2	-1.94	2	-1.70	2.35	-2.55
41	42	49.60	-0.97	4.48	2.04	0	1.48	2	-4.13	2	0.00	2.35	0.00
42	42	49.60	0.00	4.58	2.04	0	2.10	2	-3.50	2	0.00	2.35	0.00
42	43	51.05	0.00	8.90	-7.74	0	-7.96	2	13.29	2	0.00	2.35	0.00
43	43	51.05	0.00	8.90	-7.74	0	-7.96	2	13.29	2	0.00	2.35	0.00
43	44	51.50	0.00	10.25	-12.05	0	-12.40	2	20.69	2	0.00	2.35	0.00
44	44	51.50	0.00	10.25	-12.05	0	-12.40	2	20.69	2	0.00	2.35	0.00
44	45	52.50	0.00	13.23	-23.79	0	-24.48	2	40.84	2	0.00	2.35	0.00
45	1045	52.50	0.00	-13.02	-23.79	0	-24.48	2	40.84	2	0.00	2.35	0.00
45	46	53.50	0.00	-10.04	-12.25	0	-12.61	2	21.03	2	0.00	2.35	0.00
46	46	53.50	0.00	-10.04	-12.25	0	-12.61	2	21.03	2	0.00	2.35	0.00
46	47	53.95	0.00	-8.70	-8.04	0	-8.27	2	13.80	2	0.00	2.35	0.00
47	47	53.95	0.00	-8.70	-8.04	0	-8.27	2	13.80	2	0.00	2.35	0.00
47	48	55.40	0.00	-4.38	1.44	0	1.48	2	-2.47	2	0.00	2.35	0.00
48	48	55.40	-0.92	-4.28	1.44	0	0.89	2	-3.06	2	0.00	2.35	0.00
49	49	56.85	0.01	0.05	4.58	0	4.72	2	-7.86	2	0.00	2.35	0.00
49	50	58.30	0.01	0.05	4.58	0	3.07	2	-1.63	2	-1.42	2.35	-2.13
50	50	58.30	0.00	0.05	4.51	0	3.02	2	-1.61	2	-1.40	2.35	-2.10
50	51	59.75	0.00	0.05	4.44	0	2.97	2	-1.59	2	-1.38	2.35	-2.07
51	51	59.75	0.00	0.05	4.44	0	3.07	2	-1.31	2	-1.14	2.35	-1.80
51	52	61.20	0.00	0.05	4.37	0	3.02	2	-1.29	2	-1.12	2.35	-1.78
52	52	61.20	0.00	0.05	4.37	0	3.02	2	-1.29	2	-1.12	2.35	-1.78
52	53	62.65	0.00	0.05	4.30	0	2.97	2	-1.27	2	-1.10	2.35	-1.75
53	53	62.65	0.00	0.05	4.30	0	2.97	2	-1.27	2	-1.10	2.35	-1.75
53	54	64.10	0.00	0.05	4.23	0	2.92	2	-1.25	2	-1.09	2.35	-1.72
54	54	64.10	0.00	0.05	4.23	0	2.92	2	-1.25	2	-1.09	2.35	-1.72
54	55	65.55	0.00	0.05	4.16	0	2.87	2	-1.23	2	-1.07	2.35	-1.69
55	55	65.55	0.00	0.05	4.16	0	2.87	2	-1.23	2	-1.07	2.35	-1.69
55	56	67.00	0.00	0.05	4.09	0	2.82	2	-1.21	2	-1.05	2.35	-1.66
56	56	67.00	0.00	0.05	4.09	0	2.82	2	-1.21	2	-1.05	2.35	-1.66
56	57	68.45	0.00	0.05	4.02	0	2.78	2	-1.19	2	-1.03	2.35	-1.63
57	57	68.45	0.00	0.05	4.02	0	2.78	2	-1.19	2	-1.03	2.35	-1.63
57	58	69.90	0.00	0.05	3.95	0	2.73	2	-1.17	2	-1.01	2.35	-1.61
58	58	69.90	0.00	0.05	3.95	0	2.73	2	-1.17	2	-1.01	2.35	-1.61
58	59	71.35	0.00	0.05	3.88	0	2.68	2	-1.15	2	-1.00	2.35	-1.58
59	59	71.35	0.00	0.05	3.88	0	2.68	2	-1.15	2	-1.00	2.35	-1.58
59	60	72.80	0.00	0.05	3.81	0	2.63	2	-1.13	2	-0.98	2.35	-1.55
60	60	72.80	0.00	0.05	3.81	0	2.63	2	-1.13	2	-0.98	2.35	-1.55
60	61	74.25	0.00	0.05	3.74	0	2.58	2	-1.10	2	-0.96	2.35	-1.52
61	61	74.25	0.00	0.05	3.74	0	2.58	2	-1.10	2	-0.96	2.35	-1.52
61	62	75.70	0.00	0.05	3.67	0	2.46	2	-1.31	2	-1.14	2.35	-1.71
62	62	75.70	-0.01	0.05	3.67	0	2.46	2	-1.31	2	-1.14	2.35	-1.71
62	63	77.15	-0.01	0.05	3.60	0	2.41	2	-1.29	2	-1.12	2.35	-1.68
63	63	77.15	-0.01	0.05	3.60	0	2.41	2	-1.29	2	-1.12	2.35	-1.68
63	64	78.60	-0.95	4.37	0.32	0	-0.28	2	-1.16	2	0.00	2.35	0.00
64	64	78.60	0.00	4.47	0.32	0	0.33	2	-0.55	2	0.00	2.35	0.00
64	65	80.05	0.00	8.80	-9.30	0	-9.57	2	15.97	2	0.00	2.35	0.00
65	65	80.05	0.00	8.80	-9.30	0	-9.57	2	15.97	2	0.00	2.35	0.00
65	66	80.50	0.00	10.14	-13.56	0	-13.95	2	23.28	2	0.00	2.35	0.00
66	66	80.50	0.00	10.14	-13.56	0	-13.95	2	23.28	2	0.00	2.35	0.00
66	67	81.50	0.00	13.12	-25.19	0	-25.92	2	43.25	2	0.00	2.35	0.00
67	1067	81.50	0.00	-14.06	-25.19	0	-25.92	2	43.25	2	0.00	2.35	0.00
67	68	82.50	0.00	-11.08	-12.62	0	-12.99	2	21.67	2	0.00	2.35	0.00
68	68	82.50	0.00	-11.08	-12.62	0	-12.99	2	21.67	2	0.00	2.35	0.00
68	69	83.08	0.00	-9.36	-6.74	0	-6.94	2	11.57	2	0.00	2.35	0.00
69	69	83.08	0.00	-9.36	-6.74	0	-6.94	2	11.57	2	0.00	2.35	0.00
69	70	84.65	0.00	-4.67	4.31	0	4.44	2	-7.40	2	0.00	2.35	0.00
70	70	84.65	-0.91	-4.58	4.31	0	3.85	2	-7.98	2	0.00	2.35	0.00
70	71	86.23	0.02	0.12	7.89	0	8.13	2	-13.53	2	0.00	2.35	0.00
71	71	86.23	0.02	0.12	7.89	0	5.29	2	-2.81	2	-2.44	2.35	-3.67
71	72	87.80	0.02	0.12	7.70	0	5.16	2	-2.74	2	-2.38	2.35	-3.58
72	72	87.80	0.00	0.12	7.70	0	5.15	2	-2.75	2	-2.39	2.35	-3.59
72	73	89.38	0.00	0.12	7.51	0	5.03	2	-2.68	2	-2.33	2.35	-3.50
73	73	89.38	0.00	0.12	7.51	0	5.19	2	-2.22	2	-1.93	2.35	-3.05
73	74	90.95	0.00	0.12	7.32	0	5.05	2	-2.16	2	-1.88	2.35	-2.98
74	74	90.95	0.00	0.12	7.32	0	5.05	2	-2.16	2	-1.88	2.35	-2.98
74	75	92.53	0.00	0.12	7.13	0	4.92	2	-2.11	2	-1.83	2.35	-2.90
75	75	92.53	0.00	0.12	7.13	0	4.92	2	-2.11	2	-1.83	2.35	-2.90
75	76	94.10	0.00	0.12	6.94	0	4.79	2	-2.05	2	-1.78	2.35	-2.82
76	76	94.10	0.00	0.12	6.94	0	4.79	2	-2.05	2	-1.78	2.35	-2.82
76	77	95.68	0.00	0.12	6.75	0	4.66	2	-1.99	2	-1.73	2.35	-2.74

CÁLCULO TENSIONAL

Hipótesis de cálculo:
HBCP.To

HormigonadoBCPilas). Tensiones a tiempo To

HBCP

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	0.12	6.75	0	4.66	2	-1.99	2	-1.73	2.35	-2.74
77	78	97.25	0.00	0.12	6.55	0	4.52	2	-1.94	2	-1.68	2.35	-2.66
78	78	97.25	0.00	0.12	6.55	0	4.52	2	-1.94	2	-1.68	2.35	-2.66
78	79	98.83	0.00	0.12	6.36	0	4.39	2	-1.88	2	-1.63	2.35	-2.58
79	79	98.83	0.00	0.12	6.36	0	4.39	2	-1.88	2	-1.63	2.35	-2.58
79	80	100.40	0.00	0.12	6.17	0	4.26	2	-1.82	2	-1.58	2.35	-2.51
80	80	100.40	0.00	0.12	6.17	0	4.26	2	-1.82	2	-1.58	2.35	-2.51
80	81	101.98	0.00	0.12	5.98	0	4.13	2	-1.77	2	-1.53	2.35	-2.43
81	81	101.98	0.00	0.12	5.98	0	4.13	2	-1.77	2	-1.53	2.35	-2.43
81	82	103.55	0.00	0.12	5.79	0	4.00	2	-1.71	2	-1.49	2.35	-2.35
82	82	103.55	0.00	0.12	5.79	0	4.00	2	-1.71	2	-1.49	2.35	-2.35
82	83	105.13	0.00	0.12	5.60	0	3.87	2	-1.65	2	-1.44	2.35	-2.28
83	83	105.13	0.00	0.12	5.60	0	3.75	2	-2.00	2	-1.74	2.35	-2.61
83	84	106.70	0.00	0.12	5.41	0	3.62	2	-1.93	2	-1.68	2.35	-2.52
84	84	106.70	-0.02	0.12	5.41	0	3.61	2	-1.94	2	-1.68	2.35	-2.53
84	85	108.28	-0.02	0.12	5.22	0	3.49	2	-1.87	2	-1.63	2.35	-2.44
85	85	108.28	-0.02	0.12	5.22	0	3.49	2	-1.87	2	-1.63	2.35	-2.44
85	86	109.85	-0.96	4.82	1.26	0	0.68	2	-2.78	2	0.00	2.35	0.00
86	86	109.85	0.00	4.91	1.26	0	1.30	2	-2.16	2	0.00	2.35	0.00
86	87	111.43	0.00	9.61	-10.17	0	-10.47	2	17.46	2	0.00	2.35	0.00
87	87	111.43	0.00	9.61	-10.17	0	-10.47	2	17.46	2	0.00	2.35	0.00
87	88	112.00	0.00	11.32	-16.19	0	-16.66	2	27.79	2	0.00	2.35	0.00
88	88	112.00	0.00	11.32	-16.19	0	-16.66	2	27.79	2	0.00	2.35	0.00
88	89	113.00	0.00	14.30	-29.00	0	-29.84	2	49.79	2	0.00	2.35	0.00
89	1089	113.00	0.00	-14.42	-29.00	0	-29.84	2	49.79	2	0.00	2.35	0.00
89	90	114.00	0.00	-11.43	-16.08	0	-16.55	2	27.61	2	0.00	2.35	0.00
90	90	114.00	0.00	-11.43	-16.08	0	-16.55	2	27.61	2	0.00	2.35	0.00
90	91	114.58	0.00	-9.72	-9.99	0	-10.28	2	17.15	2	0.00	2.35	0.00
91	91	114.58	0.00	-9.72	-9.99	0	-10.28	2	17.15	2	0.00	2.35	0.00
91	92	116.15	0.00	-5.02	1.62	0	1.67	2	-2.78	2	0.00	2.35	0.00
92	92	116.15	-0.98	-4.93	1.62	0	1.04	2	-3.41	2	0.00	2.35	0.00
92	93	117.73	-0.05	-0.23	5.76	0	5.90	2	-9.92	2	0.00	2.35	0.00
93	93	117.73	-0.05	-0.23	5.76	0	3.84	2	-2.07	2	-1.80	2.35	-2.70
93	94	119.30	-0.05	-0.23	6.13	0	4.09	2	-2.21	2	-1.92	2.35	-2.67
94	94	119.30	0.00	-0.23	6.13	0	4.10	2	-2.19	2	-1.90	2.35	-2.86
94	95	120.88	0.00	-0.23	6.50	0	4.35	2	-2.32	2	-2.02	2.35	-3.03
95	95	120.88	0.00	-0.23	6.50	0	4.49	2	-1.92	2	-1.67	2.35	-2.64
95	96	122.45	0.00	-0.23	6.87	0	4.74	2	-2.03	2	-1.76	2.35	-2.79
96	96	122.45	0.00	-0.23	6.87	0	4.74	2	-2.03	2	-1.76	2.35	-2.79
96	97	124.03	0.00	-0.23	7.24	0	5.00	2	-2.14	2	-1.86	2.35	-2.94
97	97	124.03	0.00	-0.23	7.24	0	5.00	2	-2.14	2	-1.86	2.35	-2.94
97	98	125.60	0.00	-0.23	7.61	0	5.25	2	-2.25	2	-1.95	2.35	-3.09
98	98	125.60	0.00	-0.23	7.61	0	5.25	2	-2.25	2	-1.95	2.35	-3.09
98	99	127.18	0.00	-0.23	7.98	0	5.51	2	-2.36	2	-2.05	2.35	-3.24
99	99	127.18	0.00	-0.23	7.98	0	5.51	2	-2.36	2	-2.05	2.35	-3.24
99	100	128.75	0.00	-0.23	8.35	0	5.77	2	-2.47	2	-2.14	2.35	-3.39
100	100	128.75	0.00	-0.23	8.35	0	5.77	2	-2.47	2	-2.14	2.35	-3.39
100	101	130.33	0.00	-0.23	8.72	0	6.02	2	-2.58	2	-2.24	2.35	-3.54
101	101	130.33	0.00	-0.23	8.72	0	6.02	2	-2.58	2	-2.24	2.35	-3.54
101	102	131.90	0.00	-0.23	9.09	0	6.28	2	-2.69	2	-2.33	2.35	-3.69
102	102	131.90	0.00	-0.23	9.09	0	6.28	2	-2.69	2	-2.33	2.35	-3.69
102	103	133.48	0.00	-0.23	9.46	0	6.53	2	-2.79	2	-2.43	2.35	-3.84
103	103	133.48	0.00	-0.23	9.46	0	6.53	2	-2.79	2	-2.43	2.35	-3.84
103	104	135.05	0.00	-0.23	9.83	0	6.79	2	-2.90	2	-2.52	2.35	-4.00
104	104	135.05	0.00	-0.23	9.83	0	6.79	2	-2.90	2	-2.52	2.35	-4.00
104	105	136.63	0.00	-0.23	10.20	0	7.04	2	-3.01	2	-2.62	2.35	-4.15
105	105	136.63	0.00	-0.23	10.20	0	7.04	2	-3.01	2	-2.62	2.35	-4.15
105	106	138.20	0.05	-0.23	10.57	0	7.07	2	-3.77	2	-3.28	2.35	-4.93
106	106	138.20	0.05	-0.23	10.57	0	7.07	2	-3.77	2	-3.28	2.35	-4.93
106	107	139.78	0.05	-0.23	10.94	0	7.34	2	-3.89	2	-3.38	2.35	-5.08
107	107	139.78	0.05	-0.23	10.94	0	7.34	2	-3.89	2	-3.38	2.35	-5.08
107	108	141.35	-0.89	4.47	7.54	0	7.19	2	-13.52	2	0.00	2.35	0.00
108	108	141.35	0.00	4.55	7.54	0	7.76	2	-12.94	2	0.00	2.35	0.00
108	109	142.93	0.00	9.25	-3.34	0	-3.44	2	5.73	2	0.00	2.35	0.00
109	109	142.93	0.00	9.25	-3.34	0	-3.44	2	5.73	2	0.00	2.35	0.00
109	110	143.50	0.00	10.97	-9.15	0	-9.42	2	15.71	2	0.00	2.35	0.00
110	110	143.50	0.00	10.97	-9.15	0	-9.42	2	15.71	2	0.00	2.35	0.00
110	111	144.50	0.00	13.95	-21.60	0	-22.23	2	37.08	2	0.00	2.35	0.00
111	111	144.50	0.00	13.95	-21.60	0	-22.23	2	37.08	2	0.00	2.35	0.00
111	112	145.50	0.00	-7.77	-12.34	0	-12.70	2	21.19	2	0.00	2.35	0.00
112	112	145.50	0.00	-7.77	-12.34	0	-12.70	2	21.19	2	0.00	2.35	0.00
112	113	145.68	0.00	-7.25	-11.03	0	-11.35	2	18.94	2	0.00	2.35	0.00
113	113	145.68	0.00	-7.25	-11.03	0	-11.35	2	18.94	2	0.00	2.35	0.00
113	114	146.85	0.00	-3.74	-4.58	0	-4.71	2	7.86	2	0.00	2.35	0.00
114	114	146.85	-0.96	-3.62	-4.58	0	-5.33	2	7.25	2	0.00	2.35	0.00
114	115	148.03	-0.03	-0.11	-2.31	0	-2.40	2	3.95	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCP.To

HormigonadoBCPilas). Tensiones a tiempo To

HBCP

Coef. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (T/m2)	Fibra y fibra	SupCajón sig (T/m2)	Fibra y fibra	InfLosa sig (T/m2)	Fibra y fibra	SupLosa sig (T/m2)
39	39	45.25	0.00	0.16	5.92	0	3.96	2	-2.11	2	-1.84	2.35	-2.76
39	40	46.70	0.00	0.16	5.69	0	3.81	2	-2.03	2	-1.76	2.35	-2.65
40	40	46.70	-0.03	0.15	5.69	0	3.80	2	-2.04	2	-1.77	2.35	-2.66
40	41	48.15	-0.03	0.15	5.47	0	3.65	2	-1.96	2	-1.71	2.35	-2.56
41	41	48.15	-0.03	0.15	5.47	0	3.61	2	-1.96	2	0.00	2.35	0.00
42	42	49.60	-0.97	4.48	2.04	0	1.48	2	-4.13	2	0.00	2.35	0.00
42	43	51.05	0.00	4.58	2.04	0	2.10	2	-3.50	2	0.00	2.35	0.00
43	43	51.05	0.00	8.90	-7.74	0	-7.96	2	13.29	2	0.00	2.35	0.00
43	44	51.50	0.00	8.90	-7.74	0	-7.96	2	13.29	2	0.00	2.35	0.00
44	44	51.50	0.00	10.25	-12.05	0	-12.40	2	20.69	2	0.00	2.35	0.00
44	45	52.50	0.00	10.25	-12.05	0	-12.40	2	20.69	2	0.00	2.35	0.00
45	1045	52.50	0.00	13.23	-23.79	0	-24.48	2	40.84	2	0.00	2.35	0.00
45	46	53.50	0.00	-13.02	-23.79	0	-24.48	2	40.84	2	0.00	2.35	0.00
46	46	53.50	0.00	-10.04	-12.25	0	-12.61	2	21.03	2	0.00	2.35	0.00
46	47	53.95	0.00	-10.04	-12.25	0	-12.61	2	21.03	2	0.00	2.35	0.00
47	47	53.95	0.00	-8.70	-8.04	0	-8.27	2	13.80	2	0.00	2.35	0.00
47	48	55.40	0.00	-8.70	-8.04	0	-8.27	2	13.80	2	0.00	2.35	0.00
48	48	55.40	-0.92	-4.38	1.44	0	1.48	2	-2.47	2	0.00	2.35	0.00
9	49	56.85	0.01	-4.28	1.44	0	0.89	2	-3.06	2	0.00	2.35	0.00
9	49	56.85	0.01	0.05	4.58	0	4.72	2	-7.86	2	0.00	2.35	0.00
3	50	58.30	0.01	0.05	4.58	0	3.07	2	-1.63	2	-1.42	2.35	-2.13
50	50	58.30	0.00	0.05	4.51	0	3.02	2	-1.61	2	-1.40	2.35	-2.10
50	51	59.75	0.00	0.05	4.44	0	3.02	2	-1.61	2	-1.40	2.35	-2.10
51	51	59.75	0.00	0.05	4.44	0	2.97	2	-1.59	2	-1.38	2.35	-2.07
51	52	61.20	0.00	0.05	4.37	0	3.07	2	-1.31	2	-1.14	2.35	-1.80
52	52	61.20	0.00	0.05	4.37	0	3.02	2	-1.29	2	-1.12	2.35	-1.78
52	53	62.65	0.00	0.05	4.30	0	3.02	2	-1.29	2	-1.12	2.35	-1.78
53	53	62.65	0.00	0.05	4.30	0	2.97	2	-1.27	2	-1.10	2.35	-1.75
53	54	64.10	0.00	0.05	4.23	0	2.97	2	-1.27	2	-1.09	2.35	-1.72
54	54	64.10	0.00	0.05	4.23	0	2.92	2	-1.25	2	-1.09	2.35	-1.72
54	55	65.55	0.00	0.05	4.16	0	2.92	2	-1.23	2	-1.07	2.35	-1.69
55	55	65.55	0.00	0.05	4.16	0	2.87	2	-1.23	2	-1.07	2.35	-1.69
56	56	67.00	0.00	0.05	4.09	0	2.87	2	-1.21	2	-1.05	2.35	-1.66
56	57	68.45	0.00	0.05	4.09	0	2.82	2	-1.21	2	-1.05	2.35	-1.66
57	57	68.45	0.00	0.05	4.02	0	2.78	2	-1.19	2	-1.03	2.35	-1.63
57	58	69.90	0.00	0.05	3.95	0	2.78	2	-1.17	2	-1.03	2.35	-1.63
58	58	69.90	0.00	0.05	3.95	0	2.73	2	-1.17	2	-1.01	2.35	-1.61
58	59	71.35	0.00	0.05	3.88	0	2.73	2	-1.17	2	-1.01	2.35	-1.61
59	59	71.35	0.00	0.05	3.88	0	2.68	2	-1.15	2	-1.00	2.35	-1.58
59	60	72.80	0.00	0.05	3.81	0	2.68	2	-1.15	2	-1.00	2.35	-1.58
60	60	72.80	0.00	0.05	3.81	0	2.63	2	-1.13	2	-0.98	2.35	-1.55
61	61	74.25	0.00	0.05	3.74	0	2.63	2	-1.13	2	-0.98	2.35	-1.55
61	62	75.70	0.00	0.05	3.67	0	2.58	2	-1.10	2	-0.96	2.35	-1.52
62	62	75.70	-0.01	0.05	3.67	0	2.50	2	-1.34	2	-1.16	2.35	-1.74
63	63	77.15	-0.01	0.05	3.67	0	2.46	2	-1.31	2	-1.14	2.35	-1.71
63	63	77.15	-0.01	0.05	3.60	0	2.45	2	-1.31	2	-1.14	2.35	-1.71
64	64	78.60	-0.95	4.37	0.32	0	2.41	2	-1.29	2	-1.12	2.35	-1.68
64	64	78.60	0.00	4.47	0.32	0	3.70	2	-6.19	2	0.00	2.35	0.00
65	65	80.05	0.00	8.80	-9.30	0	-0.28	2	-1.16	2	0.00	2.35	0.00
65	65	80.05	0.00	8.80	-9.30	0	0.33	2	-0.55	2	0.00	2.35	0.00
66	66	80.50	0.00	10.14	-13.56	0	-9.57	2	15.97	2	0.00	2.35	0.00
66	66	80.50	0.00	10.14	-13.56	0	-9.57	2	15.97	2	0.00	2.35	0.00
67	1067	81.50	0.00	13.12	-25.19	0	-13.95	2	23.28	2	0.00	2.35	0.00
67	68	82.50	0.00	13.12	-25.19	0	-13.95	2	23.28	2	0.00	2.35	0.00
68	68	82.50	0.00	-11.08	-12.62	0	-25.92	2	43.25	2	0.00	2.35	0.00
68	69	83.08	0.00	-11.08	-12.62	0	-25.92	2	43.25	2	0.00	2.35	0.00
69	69	83.08	0.00	-9.36	-6.74	0	-12.99	2	21.67	2	0.00	2.35	0.00
69	70	84.65	0.00	-9.36	-6.74	0	-12.99	2	21.67	2	0.00	2.35	0.00
70	70	84.65	-0.91	-4.58	4.31	0	-6.94	2	11.57	2	0.00	2.35	0.00
70	71	86.23	0.02	0.12	7.89	0	4.44	2	11.57	2	0.00	2.35	0.00
71	71	86.23	0.02	0.12	7.89	0	3.85	2	-7.98	2	0.00	2.35	0.00
71	72	87.80	0.02	0.12	7.70	0	8.13	2	-13.53	2	0.00	2.35	0.00
72	72	87.80	0.00	0.12	7.70	0	5.29	2	-2.81	2	-2.44	2.35	-3.67
72	73	89.38	0.00	0.12	7.51	0	5.16	2	-2.74	2	-2.38	2.35	-3.58
73	73	89.38	0.00	0.12	7.51	0	5.15	2	-2.75	2	-2.39	2.35	-3.59
73	74	90.95	0.00	0.12	7.32	0	5.03	2	-2.68	2	-2.33	2.35	-3.50
74	74	90.95	0.00	0.12	7.32	0	5.19	2	-2.22	2	-1.93	2.35	-3.05
74	75	92.53	0.00	0.12	7.13	0	5.05	2	-2.16	2	-1.88	2.35	-2.98
75	75	92.53	0.00	0.12	7.13	0	5.05	2	-2.16	2	-1.88	2.35	-2.98
75	76	94.10	0.00	0.12	6.94	0	4.92	2	-2.11	2	-1.83	2.35	-2.90
76	76	94.10	0.00	0.12	6.94	0	4.92	2	-2.11	2	-1.83	2.35	-2.90
76	77	95.68	0.00	0.12	6.75	0	4.79	2	-2.05	2	-1.78	2.35	-2.82
						0	4.66	2	-1.99	2	-1.78	2.35	-2.82
						0	4.66	2	-1.99	2	-1.73	2.35	-2.74

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCP.To

HormigonadoBCPilas). Tensiones a tiempo To

HBCP

Coef. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (T/m2)	Fibra y fibra	SupCajón sig (T/m2)	Fibra y fibra	InfLosa sig (T/m2)	Fibra y fibra	SupLosa sig (T/m2)
77	77	95.68	0.00	0.12	6.75	0	4.66	2	-1.99	2	-1.73	2.35	-2.74
77	78	97.25	0.00	0.12	6.55	0	4.52	2	-1.94	2	-1.68	2.35	-2.66
78	78	97.25	0.00	0.12	6.55	0	4.52	2	-1.94	2	-1.68	2.35	-2.66
79	79	98.83	0.00	0.12	6.36	0	4.39	2	-1.88	2	-1.63	2.35	-2.58
79	80	100.40	0.00	0.12	6.36	0	4.39	2	-1.88	2	-1.63	2.35	-2.58
80	80	100.40	0.00	0.12	6.17	0	4.26	2	-1.82	2	-1.58	2.35	-2.51
80	81	101.98	0.00	0.12	6.17	0	4.26	2	-1.82	2	-1.58	2.35	-2.51
81	81	101.98	0.00	0.12	5.98	0	4.13	2	-1.77	2	-1.53	2.35	-2.43
81	82	103.55	0.00	0.12	5.98	0	4.13	2	-1.77	2	-1.53	2.35	-2.43
82	82	103.55	0.00	0.12	5.79	0	4.00	2	-1.71	2	-1.49	2.35	-2.35
82	83	105.13	0.00	0.12	5.79	0	4.00	2	-1.71	2	-1.49	2.35	-2.35
83	83	105.13	0.00	0.12	5.60	0	3.87	2	-1.65	2	-1.44	2.35	-2.28
83	84	106.70	0.00	0.12	5.60	0	3.75	2	-2.00	2	-1.74	2.35	-2.61
84	84	106.70	-0.02	0.12	5.41	0	3.62	2	-1.93	2	-1.68	2.35	-2.52
84	85	108.28	-0.02	0.12	5.41	0	3.61	2	-1.94	2	-1.68	2.35	-2.53
85	85	108.28	-0.02	0.12	5.22	0	3.49	2	-1.87	2	-1.63	2.35	-2.44
85	86	109.85	-0.96	4.82	1.26	0	5.36	2	-8.97	2	0.00	2.35	0.00
86	86	109.85	0.00	4.91	1.26	0	0.68	2	-2.78	2	0.00	2.35	0.00
86	87	111.43	0.00	9.61	-10.17	0	1.30	2	-2.16	2	0.00	2.35	0.00
87	87	111.43	0.00	9.61	-10.17	0	-10.47	2	17.46	2	0.00	2.35	0.00
87	88	112.00	0.00	11.32	-16.19	0	-10.47	2	17.46	2	0.00	2.35	0.00
88	88	112.00	0.00	11.32	-16.19	0	-16.66	2	27.79	2	0.00	2.35	0.00
88	89	113.00	0.00	14.30	-29.00	0	-16.66	2	27.79	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCP.To

Formigado BCPilas). Tensiones a tiempo To

HBCP

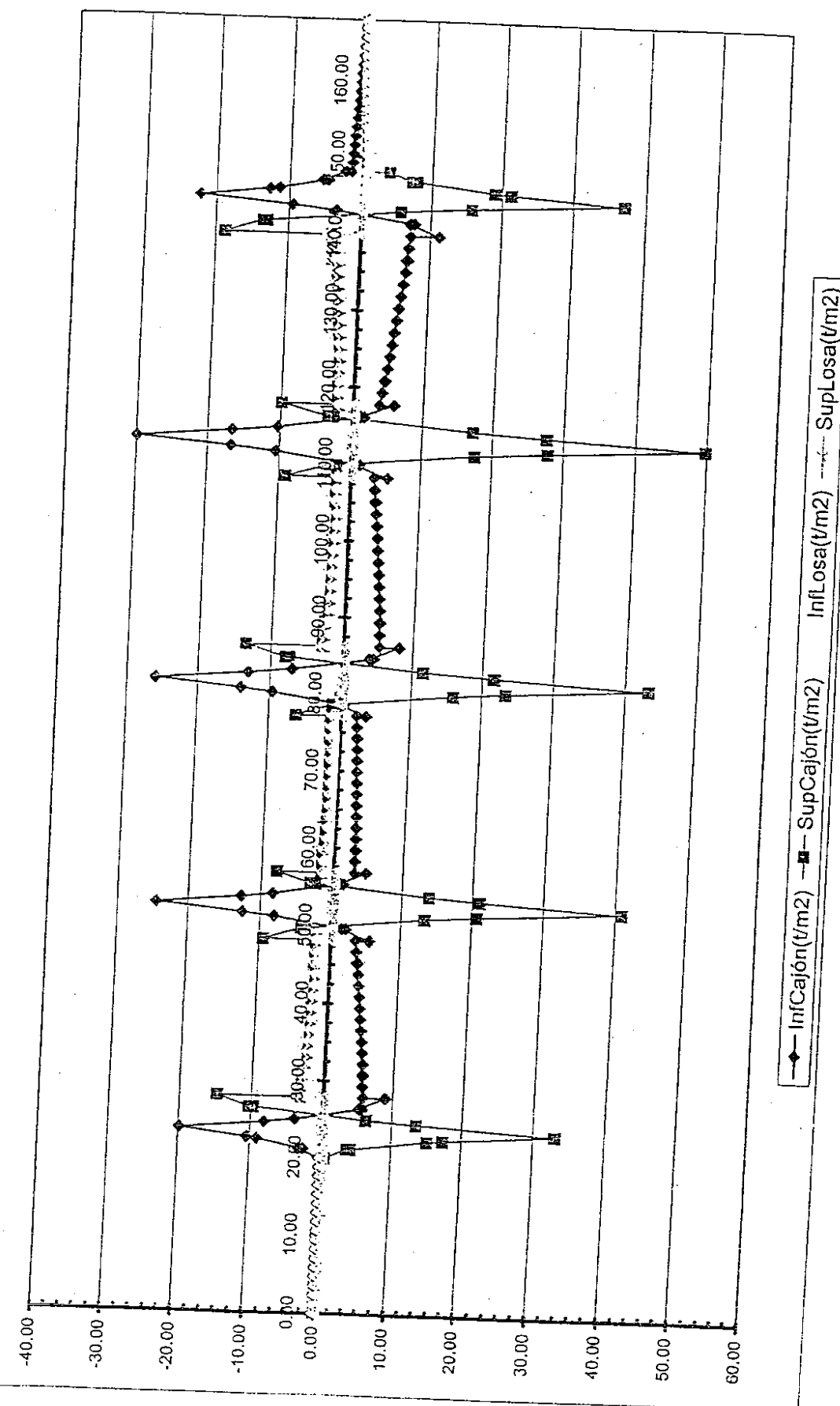
Coef. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	-0.03	-0.11	-2.31	0	-1.56	2	0.81	2	0.71	2.35	1.07
115	115	149.20	-0.03	-0.11	-2.17	0	-1.46	2	0.76	2	0.66	2.35	1.00
116	116	149.20	0.00	-0.12	-2.17	0	-1.45	2	0.77	2	0.67	2.35	1.01
116	117	150.38	0.00	-0.12	-2.04	0	-1.37	2	0.73	2	0.63	2.35	0.95
117	117	150.38	0.00	-0.12	-2.04	0	-1.41	2	0.60	2	0.52	2.35	0.83
117	118	151.55	0.00	-0.12	-1.90	0	-1.31	2	0.56	2	0.49	2.35	0.77
118	118	151.55	0.00	-0.12	-1.90	0	-1.31	2	0.56	2	0.49	2.35	0.77
118	119	152.73	0.00	-0.12	-1.77	0	-1.22	2	0.52	2	0.45	2.35	0.72
119	119	152.73	0.00	-0.12	-1.77	0	-1.22	2	0.52	2	0.45	2.35	0.72
119	120	153.90	0.00	-0.12	-1.63	0	-1.13	2	0.48	2	0.42	2.35	0.66
120	120	153.90	0.00	-0.12	-1.63	0	-1.13	2	0.48	2	0.42	2.35	0.66
120	121	155.08	0.00	-0.12	-1.49	0	-1.03	2	0.44	2	0.38	2.35	0.61
121	121	155.08	0.00	-0.12	-1.49	0	-1.03	2	0.44	2	0.38	2.35	0.61
122	122	156.25	0.00	-0.12	-1.36	0	-0.94	2	0.40	2	0.35	2.35	0.55
122	122	156.25	0.00	-0.12	-1.36	0	-0.94	2	0.40	2	0.35	2.35	0.55
122	123	157.43	0.00	-0.12	-1.22	0	-0.84	2	0.36	2	0.31	2.35	0.50
123	123	157.43	0.00	-0.12	-1.22	0	-0.84	2	0.36	2	0.31	2.35	0.50
123	124	158.60	0.00	-0.12	-1.09	0	-0.75	2	0.32	2	0.28	2.35	0.44
124	124	158.60	0.00	-0.12	-1.09	0	-0.75	2	0.32	2	0.28	2.35	0.44
124	125	159.78	0.00	-0.12	-0.95	0	-0.66	2	0.28	2	0.24	2.35	0.39
125	125	159.78	0.00	-0.12	-0.95	0	-0.66	2	0.28	2	0.24	2.35	0.39
125	126	160.95	0.00	-0.12	-0.82	0	-0.57	2	0.24	2	0.21	2.35	0.33
126	126	160.95	0.00	-0.12	-0.82	0	-0.57	2	0.24	2	0.21	2.35	0.33
126	127	162.13	0.00	-0.12	-0.68	0	-0.47	2	0.20	2	0.17	2.35	0.28
127	127	162.13	0.00	-0.12	-0.68	0	-0.47	2	0.20	2	0.17	2.35	0.28
127	128	163.30	0.00	-0.12	-0.54	0	-0.37	2	0.16	2	0.14	2.35	0.22
128	128	163.30	0.00	-0.12	-0.54	0	-0.37	2	0.16	2	0.14	2.35	0.22
128	129	164.48	0.00	-0.12	-0.41	0	-0.28	2	0.12	2	0.11	2.35	0.17
129	129	164.48	0.00	-0.12	-0.41	0	-0.28	2	0.12	2	0.11	2.35	0.17
129	130	165.65	0.00	-0.12	-0.27	0	-0.19	2	0.08	2	0.07	2.35	0.11
130	130	165.65	0.00	-0.12	-0.27	0	-0.19	2	0.08	2	0.07	2.35	0.11
130	131	166.83	0.00	-0.12	-0.14	0	-0.10	2	0.04	2	0.04	2.35	0.06
131	131	166.83	0.00	-0.12	-0.14	0	-0.10	2	0.04	2	0.04	2.35	0.06
131	132	167.00	0.00	-0.12	-0.12	0	-0.08	2	0.04	2	0.03	2.35	0.05
132	132	167.00	0.00	-0.12	-0.12	0	-0.08	2	0.04	2	0.03	2.35	0.05
132	133	168.00	0.00	-0.12	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
HBCP.To

05/09/01

GRÁFICO DE TENSIONES



hsim_t0.xls

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCP.To

HormigonadoBCPilas). Tensiones a tiempo To

HBCP

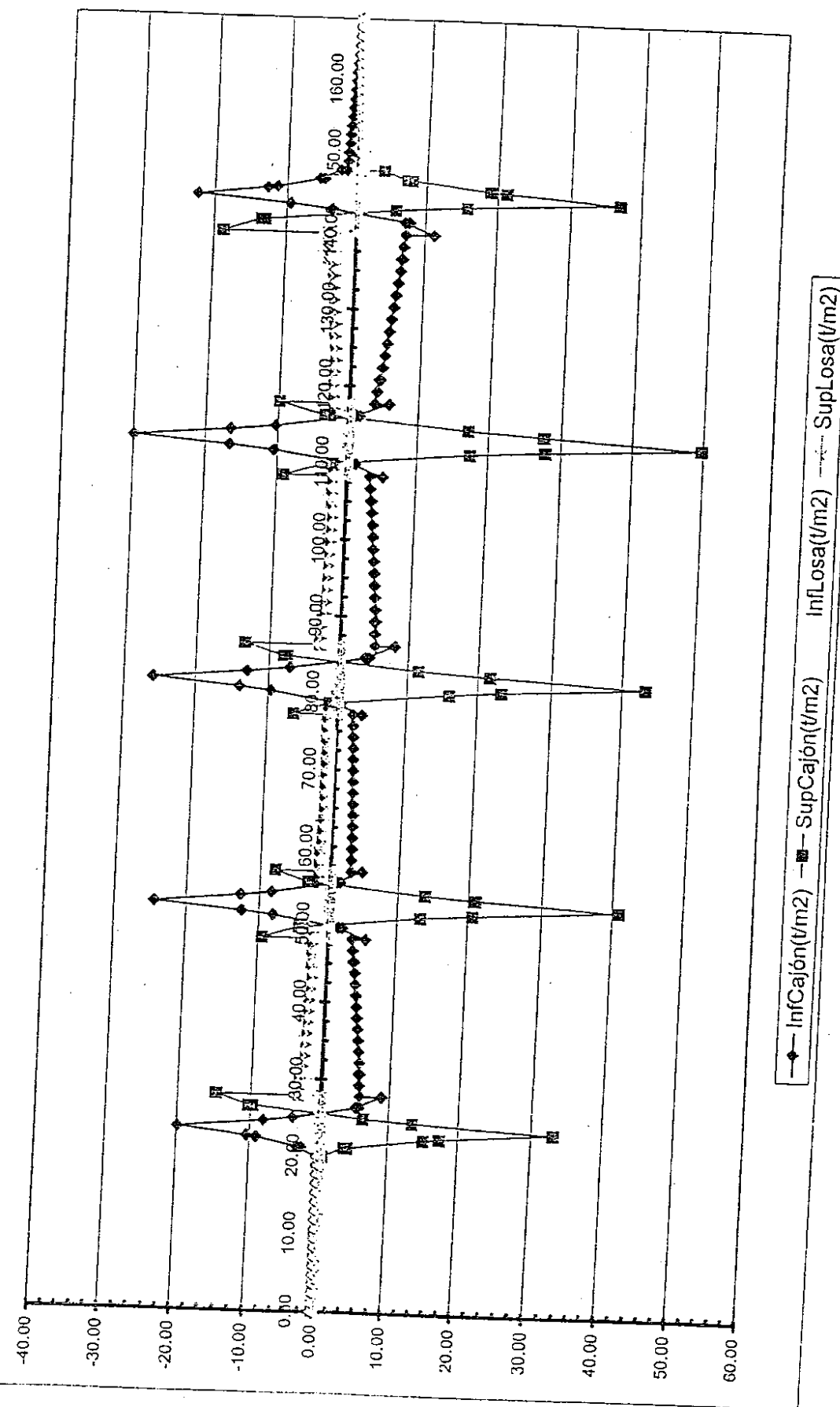
Coef. ext.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
115	115	148.03	-0.03	-0.11	-2.31	0	-1.56	2	0.81	2	0.71	2.35	1.07
115	116	149.20	-0.03	-0.11	-2.17	0	-1.46	2	0.76	2	0.65	2.35	1.00
116	116	149.20	0.00	-0.12	-2.17	0	-1.45	2	0.77	2	0.67	2.35	1.01
116	117	150.38	0.00	-0.12	-2.04	0	-1.37	2	0.73	2	0.63	2.35	0.95
117	117	150.38	0.00	-0.12	-2.04	0	-1.41	2	0.60	2	0.52	2.35	0.83
117	118	151.55	0.00	-0.12	-1.90	0	-1.31	2	0.56	2	0.49	2.35	0.77
118	118	151.55	0.00	-0.12	-1.90	0	-1.31	2	0.56	2	0.49	2.35	0.77
118	119	152.73	0.00	-0.12	-1.77	0	-1.22	2	0.52	2	0.45	2.35	0.72
119	119	152.73	0.00	-0.12	-1.77	0	-1.22	2	0.52	2	0.45	2.35	0.72
119	120	153.90	0.00	-0.12	-1.63	0	-1.13	2	0.48	2	0.42	2.35	0.66
120	120	153.90	0.00	-0.12	-1.63	0	-1.13	2	0.48	2	0.42	2.35	0.66
120	121	155.08	0.00	-0.12	-1.49	0	-1.03	2	0.44	2	0.38	2.35	0.61
121	121	155.08	0.00	-0.12	-1.49	0	-1.03	2	0.44	2	0.38	2.35	0.61
121	122	156.25	0.00	-0.12	-1.36	0	-0.94	2	0.40	2	0.35	2.35	0.55
122	122	156.25	0.00	-0.12	-1.36	0	-0.94	2	0.40	2	0.35	2.35	0.55
122	123	157.43	0.00	-0.12	-1.22	0	-0.84	2	0.36	2	0.31	2.35	0.50
123	123	157.43	0.00	-0.12	-1.22	0	-0.84	2	0.36	2	0.31	2.35	0.50
123	124	158.60	0.00	-0.12	-1.09	0	-0.75	2	0.32	2	0.28	2.35	0.44
124	124	158.60	0.00	-0.12	-1.09	0	-0.75	2	0.32	2	0.28	2.35	0.44
124	125	159.78	0.00	-0.12	-0.95	0	-0.66	2	0.28	2	0.24	2.35	0.39
125	125	159.78	0.00	-0.12	-0.95	0	-0.66	2	0.28	2	0.24	2.35	0.39
125	126	160.95	0.00	-0.12	-0.82	0	-0.57	2	0.24	2	0.21	2.35	0.33
126	126	160.95	0.00	-0.12	-0.82	0	-0.57	2	0.24	2	0.21	2.35	0.33
126	127	162.13	0.00	-0.12	-0.68	0	-0.47	2	0.20	2	0.17	2.35	0.28
127	127	162.13	0.00	-0.12	-0.68	0	-0.47	2	0.20	2	0.17	2.35	0.28
127	128	163.30	0.00	-0.12	-0.54	0	-0.37	2	0.16	2	0.14	2.35	0.22
128	128	163.30	0.00	-0.12	-0.54	0	-0.37	2	0.16	2	0.14	2.35	0.22
128	129	164.48	0.00	-0.12	-0.41	0	-0.28	2	0.12	2	0.11	2.35	0.17
129	129	164.48	0.00	-0.12	-0.41	0	-0.28	2	0.12	2	0.11	2.35	0.17
129	130	165.65	0.00	-0.12	-0.27	0	-0.19	2	0.08	2	0.07	2.35	0.11
130	130	165.65	0.00	-0.12	-0.27	0	-0.19	2	0.08	2	0.07	2.35	0.11
130	131	166.83	0.00	-0.12	-0.14	0	-0.10	2	0.04	2	0.04	2.35	0.06
131	131	166.83	0.00	-0.12	-0.14	0	-0.10	2	0.04	2	0.04	2.35	0.06
131	132	167.00	0.00	-0.12	-0.12	0	-0.08	2	0.04	2	0.03	2.35	0.05
132	132	167.00	0.00	-0.12	-0.12	0	-0.08	2	0.04	2	0.03	2.35	0.05
132	133	168.00	0.00	-0.12	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

hsim_10.xls

Programa DINTEL IDEAM S.A.
HBCP.To

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

Hipótesis de cálculo:

HBCP.To

(ArmigadoBCPilas). Tensiones a tiempo T_0

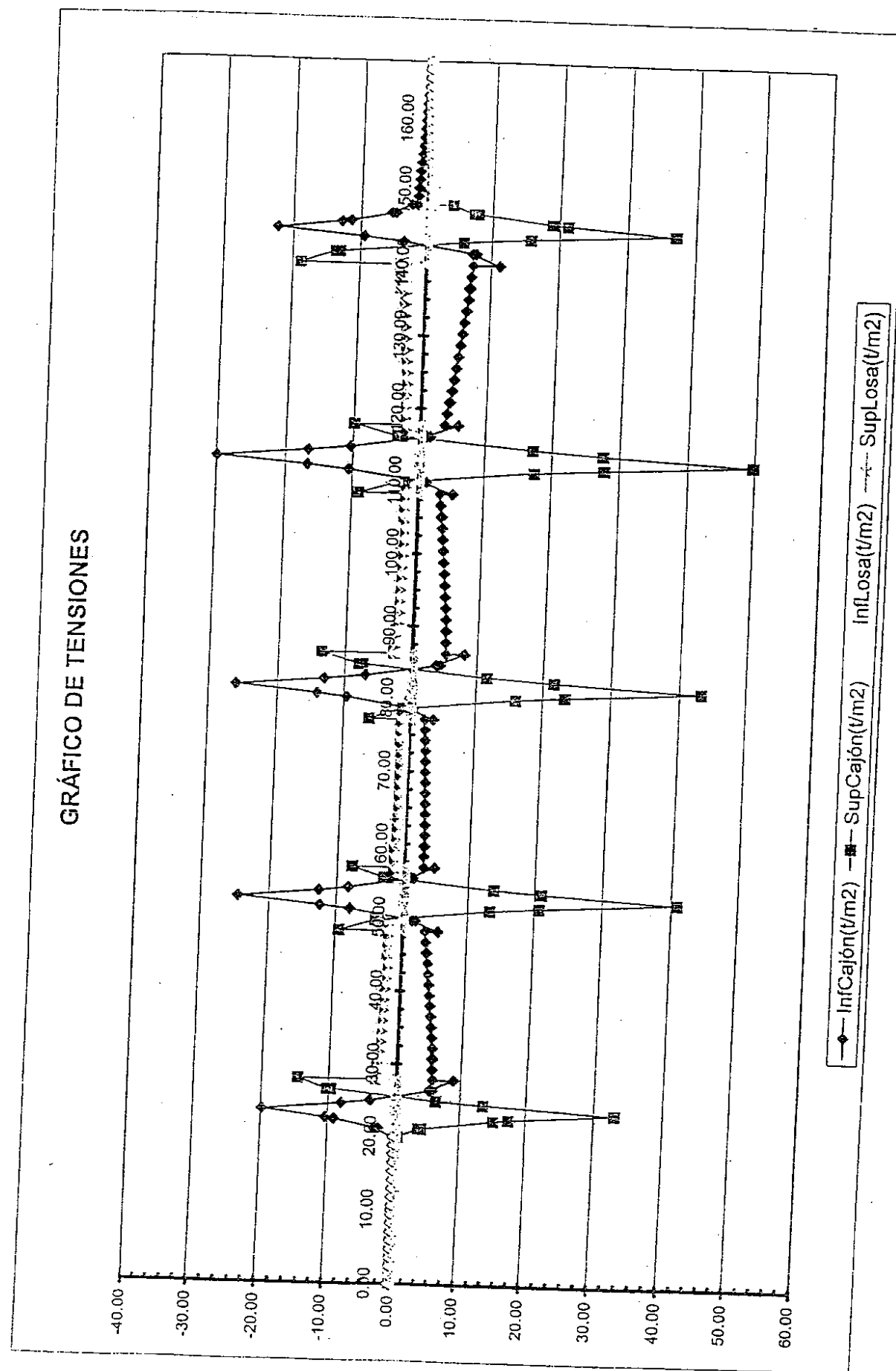
HBCP

Coef. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
115	115	148.03	-0.03	-0.11	-2.31	0	-1.56	2	0.81	2	0.71	2.35	1.07
115	116	149.20	-0.03	-0.11	-2.17	0	-1.46	2	0.76	2	0.66	2.35	1.00
116	116	149.20	0.00	-0.12	-2.17	0	-1.45	2	0.77	2	0.67	2.35	1.01
116	117	150.38	0.00	-0.12	-2.04	0	-1.37	2	0.73	2	0.63	2.35	0.95
117	117	150.38	0.00	-0.12	-2.04	0	-1.41	2	0.60	2	0.52	2.35	0.83
117	118	151.55	0.00	-0.12	-1.90	0	-1.31	2	0.56	2	0.49	2.35	0.77
118	118	151.55	0.00	-0.12	-1.90	0	-1.31	2	0.56	2	0.49	2.35	0.77
118	119	152.73	0.00	-0.12	-1.77	0	-1.22	2	0.52	2	0.45	2.35	0.72
119	119	152.73	0.00	-0.12	-1.77	0	-1.22	2	0.52	2	0.45	2.35	0.72
119	120	153.90	0.00	-0.12	-1.63	0	-1.13	2	0.48	2	0.42	2.35	0.66
120	120	153.90	0.00	-0.12	-1.63	0	-1.13	2	0.48	2	0.42	2.35	0.66
120	121	155.08	0.00	-0.12	-1.49	0	-1.03	2	0.44	2	0.38	2.35	0.61
121	121	155.08	0.00	-0.12	-1.49	0	-1.03	2	0.44	2	0.38	2.35	0.61
121	122	156.25	0.00	-0.12	-1.36	0	-0.94	2	0.40	2	0.35	2.35	0.55
122	122	156.25	0.00	-0.12	-1.36	0	-0.94	2	0.40	2	0.35	2.35	0.55
122	123	157.43	0.00	-0.12	-1.22	0	-0.84	2	0.36	2	0.31	2.35	0.50
123	123	157.43	0.00	-0.12	-1.22	0	-0.84	2	0.36	2	0.31	2.35	0.50
123	124	158.60	0.00	-0.12	-1.09	0	-0.75	2	0.32	2	0.28	2.35	0.44
124	124	158.60	0.00	-0.12	-1.09	0	-0.75	2	0.32	2	0.28	2.35	0.44
4	125	159.78	0.00	-0.12	-0.95	0	-0.66	2	0.28	2	0.24	2.35	0.39
5	125	159.78	0.00	-0.12	-0.95	0	-0.66	2	0.28	2	0.24	2.35	0.39
25	126	160.95	0.00	-0.12	-0.82	0	-0.57	2	0.24	2	0.21	2.35	0.33
126	126	160.95	0.00	-0.12	-0.82	0	-0.57	2	0.24	2	0.21	2.35	0.33
126	127	162.13	0.00	-0.12	-0.68	0	-0.47	2	0.20	2	0.17	2.35	0.28
127	127	162.13	0.00	-0.12	-0.68	0	-0.47	2	0.20	2	0.17	2.35	0.28
127	128	163.30	0.00	-0.12	-0.54	0	-0.37	2	0.16	2	0.14	2.35	0.22
128	128	163.30	0.00	-0.12	-0.54	0	-0.37	2	0.16	2	0.14	2.35	0.22
128	129	164.48	0.00	-0.12	-0.41	0	-0.28	2	0.12	2	0.11	2.35	0.17
129	129	164.48	0.00	-0.12	-0.41	0	-0.28	2	0.12	2	0.11	2.35	0.17
129	130	165.65	0.00	-0.12	-0.27	0	-0.19	2	0.08	2	0.07	2.35	0.11
130	130	165.65	0.00	-0.12	-0.27	0	-0.19	2	0.08	2	0.07	2.35	0.11
130	131	166.83	0.00	-0.12	-0.14	0	-0.10	2	0.04	2	0.04	2.35	0.06
131	131	166.83	0.00	-0.12	-0.14	0	-0.10	2	0.04	2	0.04	2.35	0.06
131	132	167.00	0.00	-0.12	-0.12	0	-0.08	2	0.04	2	0.03	2.35	0.05
132	132	167.00	0.00	-0.12	-0.12	0	-0.08	2	0.04	2	0.03	2.35	0.05
132	133	168.00	0.00	-0.12	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
HBCP.To

GRÁFICO DE TENSIONES



05/09/01

hsim_10.xls

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonado voladizo). Tensiones a tiempo To

Coef. exc

Coef. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
1	1	0.00	0.00	-8.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-7.32	7.80	0	5.39	2	-2.30	2	-2.00	2.35	-3.17
2	2	1.00	0.00	-7.32	7.80	0	5.39	2	-2.30	2	-2.00	2.35	-3.17
2	3	1.18	0.00	-7.16	9.06	0	6.26	2	-2.68	2	-2.32	2.35	-3.68
3	3	1.18	0.00	-7.16	9.06	0	6.26	2	-2.68	2	-2.32	2.35	-3.68
3	4	2.35	0.00	-6.05	16.82	0	11.61	2	-4.97	2	-4.32	2.35	-6.84
4	4	2.35	0.00	-6.05	16.82	0	11.61	2	-4.97	2	-4.32	2.35	-6.84
4	5	3.53	0.00	-4.93	23.27	0	16.07	2	-6.87	2	-5.97	2.35	-9.46
5	5	3.53	0.00	-4.93	23.27	0	16.07	2	-6.87	2	-5.97	2.35	-9.46
5	6	4.70	0.00	-3.82	28.42	0	19.62	2	-8.40	2	-7.29	2.35	-11.55
6	6	4.70	0.00	-3.82	28.42	0	19.62	2	-8.40	2	-7.29	2.35	-11.55
6	7	5.88	0.00	-2.71	32.25	0	22.27	2	-9.53	2	-8.27	2.35	-13.11
7	7	5.88	0.00	-2.71	32.25	0	22.27	2	-9.53	2	-8.27	2.35	-13.11
7	8	7.05	0.00	-1.60	34.79	0	24.02	2	-10.28	2	-8.93	2.35	-14.14
8	8	7.05	0.00	-1.60	34.79	0	24.02	2	-10.28	2	-8.93	2.35	-14.14
8	9	8.23	0.00	-0.49	36.01	0	24.86	2	-10.64	2	-9.24	2.35	-14.64
9	9	8.23	0.00	-0.49	36.01	0	24.86	2	-10.64	2	-9.24	2.35	-14.64
9	10	9.40	0.00	0.62	35.94	0	24.82	2	-10.62	2	-9.22	2.35	-14.61
10	10	9.40	0.00	0.62	35.94	0	24.82	2	-10.62	2	-9.22	2.35	-14.61
	11	10.58	0.00	1.73	34.55	0	23.86	2	-10.21	2	-8.87	2.35	-14.04
	11	10.58	0.00	1.73	34.55	0	23.86	2	-10.21	2	-8.87	2.35	-14.04
12	12	11.75	0.00	2.85	31.86	0	22.00	2	-9.41	2	-8.17	2.35	-12.95
12	12	11.75	0.00	2.85	31.86	0	22.00	2	-9.41	2	-8.17	2.35	-12.95
12	13	12.93	0.00	3.96	27.86	0	19.24	2	-8.23	2	-7.15	2.35	-11.32
13	13	12.93	0.00	3.96	27.86	0	19.24	2	-8.23	2	-7.15	2.35	-11.32
13	14	14.10	0.00	5.07	22.56	0	15.58	2	-6.66	2	-5.79	2.35	-9.17
14	14	14.10	0.00	5.07	22.56	0	15.58	2	-6.66	2	-5.79	2.35	-9.17
14	15	15.28	0.00	6.18	15.95	0	11.01	2	-4.71	2	-4.09	2.35	-6.48
15	15	15.28	0.00	6.18	15.95	0	11.01	2	-4.71	2	-4.09	2.35	-6.48
15	16	16.45	0.00	7.29	8.03	0	5.54	2	-2.37	2	-2.06	2.35	-3.26
16	16	16.45	-0.07	7.29	8.03	0	5.54	2	-2.37	2	-2.06	2.35	-3.26
16	17	17.63	-0.09	8.40	-1.19	0	-0.86	2	0.32	2	0.28	2.35	0.45
17	17	17.63	-0.09	8.40	-1.19	0	-0.86	2	0.32	2	0.28	2.35	0.45
17	18	18.80	-0.10	9.52	-11.72	0	-7.88	2	0.39	2	0.34	2.35	0.53
18	18	18.80	0.00	9.52	-11.72	0	-7.88	2	0.39	2	0.34	2.35	0.53
18	19	19.98	0.00	10.63	-23.55	0	-15.76	2	8.41	2	3.64	2.35	5.46
19	19	19.98	0.00	10.63	-23.55	0	-15.76	2	8.41	2	3.64	2.35	5.46
19	20	21.15	0.00	11.74	-36.69	0	-24.56	2	13.10	2	7.30	2.35	10.98
20	20	21.15	0.00	11.74	-36.69	0	-24.56	2	13.10	2	7.30	2.35	10.98
20	21	22.33	0.00	12.85	-51.14	0	-34.23	2	18.26	2	15.86	2.35	23.84
21	21	22.33	0.00	12.85	-51.14	0	-34.23	2	18.26	2	15.86	2.35	23.84
21	22	22.50	0.00	13.02	-53.40	0	-35.74	2	19.07	2	16.56	2.35	24.89
22	22	22.50	0.00	13.02	-53.40	0	-35.74	2	19.07	2	16.56	2.35	24.89
22	23	23.50	0.00	13.98	-66.89	0	-44.77	2	23.89	2	20.75	2.35	31.18
23	1023	23.50	0.00	-13.77	-66.89	0	-44.77	2	23.89	2	20.75	2.35	31.18
	24	24.50	0.00	-12.83	-53.59	0	-35.87	2	19.14	2	16.62	2.35	24.98
	24	24.50	0.00	-12.83	-53.59	0	-35.87	2	19.14	2	16.62	2.35	24.98
25	25	24.95	0.00	-12.40	-47.92	0	-32.07	2	17.11	2	14.86	2.35	22.34
25	25	24.95	0.00	-12.40	-47.92	0	-32.07	2	17.11	2	14.86	2.35	22.34
25	26	26.40	0.00	-11.03	-30.93	0	-20.70	2	11.05	2	9.59	2.35	14.42
26	26	26.40	0.00	-11.03	-30.93	0	-20.70	2	11.05	2	9.59	2.35	14.42
26	27	27.85	0.00	-9.66	-15.93	0	-10.66	2	5.69	2	4.94	2.35	7.43
27	27	27.85	0.00	-9.66	-15.93	0	-10.66	2	5.69	2	4.94	2.35	7.43
27	28	29.30	0.00	-8.29	-2.92	0	-1.98	2	1.04	2	0.91	2.35	1.36
28	28	29.30	-0.07	-8.29	-2.92	0	-1.98	2	1.04	2	0.91	2.35	1.36
28	29	30.75	-0.06	-6.91	8.10	0	5.40	2	-2.91	2	-2.53	2.35	-3.79
29	29	30.75	-0.06	-6.91	8.10	0	5.40	2	-2.91	2	-2.53	2.35	-3.79
29	30	32.20	-0.05	-5.54	17.13	0	11.81	2	-5.08	2	-4.41	2.35	-6.98
30	30	32.20	-0.05	-5.54	17.13	0	11.81	2	-5.08	2	-4.41	2.35	-6.98
30	31	33.65	0.00	-4.17	24.17	0	16.69	2	-7.14	2	-6.20	2.35	-9.82
31	31	33.65	0.00	-4.17	24.17	0	16.69	2	-7.14	2	-6.20	2.35	-9.82
31	32	35.10	0.00	-2.80	29.22	0	20.18	2	-8.63	2	-7.50	2.35	-11.88
32	32	35.10	0.00	-2.80	29.22	0	20.18	2	-8.63	2	-7.50	2.35	-11.88
32	33	36.55	0.00	-1.43	32.28	0	22.29	2	-9.54	2	-8.28	2.35	-13.12
33	33	36.55	0.00	-1.43	32.28	0	22.29	2	-9.54	2	-8.28	2.35	-13.12
33	34	38.00	0.00	-0.06	33.36	0	23.03	2	-9.86	2	-8.56	2.35	-13.56
34	34	38.00	0.00	-0.06	33.36	0	23.03	2	-9.86	2	-8.56	2.35	-13.56
34	35	39.45	0.00	1.32	32.44	0	22.40	2	-9.58	2	-8.32	2.35	-13.18
35	35	39.45	0.00	1.32	32.44	0	22.40	2	-9.58	2	-8.32	2.35	-13.18
35	36	40.90	0.00	2.69	29.54	0	20.40	2	-8.73	2	-7.58	2.35	-12.01
36	36	40.90	0.00	2.69	29.54	0	20.40	2	-8.73	2	-7.58	2.35	-12.01
36	37	42.35	0.00	4.06	24.65	0	17.02	2	-7.28	2	-6.32	2.35	-10.02
37	37	42.35	0.00	4.06	24.65	0	17.02	2	-7.28	2	-6.32	2.35	-10.02
37	38	43.80	0.00	5.43	17.77	0	12.27	2	-5.25	2	-4.56	2.35	-7.22
38	38	43.80	-0.05	5.43	17.77	0	12.27	2	-5.25	2	-4.56	2.35	-7.22
38	39	45.25	-0.06	6.80	8.90	0	6.12	2	-2.65	2	-2.30	2.35	-3.64

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonado voladizo). Tensiones a tiempo To

Coef. exc

Coef. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	-0.06	6.80	8.90	0	5.94	2	-3.20	2	-2.78	2.35	-4.17
39	40	46.70	-0.07	8.17	-1.96	0	-1.34	2	0.68	2	0.59	2.35	0.89
40	40	46.70	0.00	8.18	-1.96	0	-1.31	2	0.70	2	0.61	2.35	0.91
40	41	48.15	0.00	9.55	-14.81	0	-9.91	2	5.29	2	4.59	2.35	6.90
41	41	48.15	0.00	9.55	-14.81	0	-9.91	2	5.29	2	4.59	2.35	6.90
41	42	49.60	0.00	10.92	-29.65	0	-19.85	2	10.59	2	9.20	2.35	13.82
42	42	49.60	0.00	10.92	-29.65	0	-19.85	2	10.59	2	9.20	2.35	13.82
42	43	51.05	0.00	12.29	-46.47	0	-31.10	2	16.60	2	14.41	2.35	21.66
43	43	51.05	0.00	12.29	-46.47	0	-31.10	2	16.60	2	14.41	2.35	21.66
43	44	51.50	0.00	12.72	-52.10	0	-34.87	2	18.61	2	16.16	2.35	24.29
44	44	51.50	0.00	12.72	-52.10	0	-34.87	2	18.61	2	16.16	2.35	24.29
44	45	52.50	0.00	13.66	-65.29	0	-43.70	2	23.32	2	20.25	2.35	30.44
45	1045	52.50	0.00	-13.47	-65.29	0	-43.70	2	23.32	2	20.25	2.35	30.44
45	46	53.50	0.00	-12.52	-52.30	0	-35.01	2	18.68	2	16.22	2.35	24.38
46	46	53.50	0.00	-12.52	-52.30	0	-35.01	2	18.68	2	16.22	2.35	24.38
46	47	53.95	0.00	-12.09	-46.76	0	-31.30	2	16.70	2	14.50	2.35	21.80
47	47	53.95	0.00	-12.09	-46.76	0	-31.30	2	16.70	2	14.50	2.35	21.80
47	48	55.40	0.00	-10.72	-30.21	0	-20.22	2	10.79	2	9.37	2.35	14.08
48	48	55.40	0.00	-10.72	-30.21	0	-20.22	2	10.79	2	9.37	2.35	14.08
48	49	56.85	0.00	-9.35	-15.66	0	-10.48	2	5.59	2	4.86	2.35	7.30
49	49	56.85	0.00	-9.35	-15.66	0	-10.48	2	5.59	2	4.86	2.35	7.30
49	50	58.30	0.00	-7.98	-3.10	0	-2.07	2	1.11	2	0.96	2.35	1.45
50	50	58.30	-0.07	-7.98	-3.10	0	-2.10	2	1.08	2	0.94	2.35	1.42
50	51	59.75	-0.05	-6.61	7.48	0	4.99	2	-2.69	2	-2.34	2.35	-3.50
51	51	59.75	-0.05	-6.61	7.48	0	4.99	2	-2.69	2	-2.34	2.35	-3.50
51	52	61.20	-0.04	-5.24	16.07	0	11.08	2	-4.76	2	-4.14	2.35	-6.54
52	52	61.20	0.00	-5.24	16.07	0	11.10	2	-4.75	2	-4.12	2.35	-6.53
52	53	62.65	0.00	-3.86	22.67	0	15.65	2	-6.70	2	-5.82	2.35	-9.21
53	53	62.65	0.00	-3.86	22.67	0	15.65	2	-6.70	2	-5.82	2.35	-9.21
53	54	64.10	0.00	-2.49	27.27	0	18.83	2	-8.06	2	-7.00	2.35	-11.08
54	54	64.10	0.00	-2.49	27.27	0	18.83	2	-8.06	2	-7.00	2.35	-11.08
54	55	65.55	0.00	-1.12	29.89	0	20.64	2	-8.83	2	-7.67	2.35	-12.15
55	55	65.55	0.00	-1.12	29.89	0	20.64	2	-8.83	2	-7.67	2.35	-12.15
55	56	67.00	0.00	0.25	30.53	0	21.08	2	-9.02	2	-7.83	2.35	-12.41
56	56	67.00	0.00	0.25	30.53	0	21.08	2	-9.02	2	-7.83	2.35	-12.41
56	57	68.45	0.00	1.62	29.17	0	20.14	2	-8.62	2	-7.48	2.35	-11.86
57	57	68.45	0.00	1.62	29.17	0	20.14	2	-8.62	2	-7.48	2.35	-11.86
57	58	69.90	0.00	2.99	25.82	0	17.83	2	-7.63	2	-6.63	2.35	-10.49
58	58	69.90	0.00	2.99	25.82	0	17.83	2	-7.63	2	-6.63	2.35	-10.49
58	59	71.35	0.00	4.37	20.49	0	14.15	2	-6.05	2	-5.26	2.35	-8.33
59	59	71.35	0.00	4.37	20.49	0	14.15	2	-6.05	2	-5.26	2.35	-8.33
59	60	72.80	0.00	5.74	13.16	0	9.09	2	-3.89	2	-3.38	2.35	-5.35
60	60	72.80	-0.05	5.74	13.16	0	9.07	2	-3.91	2	-3.39	2.35	-5.37
60	61	74.25	-0.06	7.11	3.85	0	2.64	2	-1.16	2	-1.01	2.35	-1.58
61	61	74.25	-0.06	7.11	3.85	0	2.64	2	-1.16	2	-1.01	2.35	-1.58
61	62	75.70	-0.07	8.48	-7.46	0	-5.02	2	2.64	2	2.29	2.35	3.46
62	62	75.70	0.00	8.48	-7.46	0	-4.99	2	2.66	2	2.31	2.35	3.48
62	63	77.15	0.00	9.85	-20.75	0	-13.89	2	7.41	2	6.44	2.35	9.67
63	63	77.15	0.00	9.85	-20.75	0	-13.89	2	7.41	2	6.44	2.35	9.67
63	64	78.60	0.00	11.22	-36.03	0	-24.12	2	12.87	2	11.18	2.35	16.80
64	64	78.60	0.00	11.22	-36.03	0	-24.12	2	12.87	2	11.18	2.35	16.80
64	65	80.05	0.00	12.60	-53.30	0	-35.68	2	19.04	2	16.53	2.35	24.85
65	65	80.05	0.00	12.60	-53.30	0	-35.68	2	19.04	2	16.53	2.35	24.85
65	66	80.50	0.00	13.02	-59.06	0	-39.53	2	21.09	2	18.32	2.35	27.53
66	66	80.50	0.00	13.02	-59.06	0	-39.53	2	21.09	2	18.32	2.35	27.53
66	67	81.50	0.00	13.97	-72.56	0	-48.57	2	25.91	2	22.51	2.35	33.83
67	1067	81.50	0.00	-14.60	-72.56	0	-48.57	2	25.91	2	22.51	2.35	33.83
67	68	82.50	0.00	-13.65	-58.43	0	-39.11	2	20.87	2	18.12	2.35	27.24
68	68	82.50	0.00	-13.65	-58.43	0	-39.11	2	20.87	2	18.12	2.35	27.24
68	69	83.08	0.00	-13.11	-50.73	0	-33.96	2	18.12	2	15.74	2.35	23.65
69	69	83.08	0.00	-13.11	-50.73	0	-33.96	2	18.12	2	15.74	2.35	23.65
69	70	84.65	0.00	-11.62	-31.26	0	-20.92	2	11.16	2	9.70	2.35	14.57
70	70	84.65	0.00	-11.62	-31.26	0	-20.92	2	11.16	2	9.70	2.35	14.57
70	71	86.23	0.00	-10.13	-14.13	0	-9.46	2	5.05	2	4.38	2.35	6.59
71	71	86.23	0.00	-10.13	-14.13	0	-9.46	2	5.05	2	4.38	2.35	6.59
71	72	87.80	0.00	-8.64	0.66	0	0.42	2	-0.26	2	-0.23	2.35	-0.33
72	72	87.80	-0.07	-8.64	0.66	0	0.42	2	-0.26	2	-0.23	2.35	-0.33
72	73	89.38	-0.05	-7.15	13.09	0	8.74	2	-4.69	2	-4.08	2.35	-6.12
73	73	89.38	-0.05	-7.15	13.09	0	8.74	2	-4.69	2	-4.08	2.35	-6.12
73	74	90.95	-0.04	-5.66	23.18	0	15.99	2	-3.89	2	-3.38	2.35	-5.34
74	74	90.95	0.00	-5.66	23.18	0	16.01	2	-6.86	2	-5.96	2.35	-9.43
74	75	92.53	0.00	-4.17	30.92	0	21.35	2	-9.13	2	-7.93	2.35	-12.57
75	75	92.53	0.00	-4.17	30.92	0	21.35	2	-9.13	2	-7.93	2.35	-12.57
75	76	94.10	0.00	-2.68	36.32	0	25.08	2	-10.73	2	-9.32	2.35	-14.76
76	76	94.10	0.00	-2.68	36.32	0	25.08	2	-10.73	2	-9.32	2.35	-14.76
76	77	95.68	0.00	-1.19	39.37	0	27.18	2	-11.63	2	-10.10	2.35	-16.00

227

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonado voladizo). Tensiones a tiempo To

Vol

cc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
1	1	0.00	0.00	-8.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-7.32	7.80	0	5.39	2	-2.30	2	-2.00	2.35	-3.17
2	2	1.00	0.00	-7.32	7.80	0	5.39	2	-2.30	2	-2.00	2.35	-3.17
2	3	1.18	0.00	-7.16	9.06	0	6.25	2	-2.68	2	-2.32	2.35	-3.68
3	3	1.18	0.00	-7.16	9.06	0	6.25	2	-2.68	2	-2.32	2.35	-3.68
3	4	2.35	0.00	-6.05	16.82	0	11.61	2	-4.97	2	-4.32	2.35	-6.84
4	4	2.35	0.00	-6.05	16.82	0	11.61	2	-4.97	2	-4.32	2.35	-6.84
4	5	3.53	0.00	-4.93	23.27	0	16.07	2	-6.87	2	-5.97	2.35	-9.46
5	5	3.53	0.00	-4.93	23.27	0	16.07	2	-6.87	2	-5.97	2.35	-9.46
5	6	4.70	0.00	-3.82	28.42	0	19.62	2	-8.40	2	-7.29	2.35	-11.55
6	6	4.70	0.00	-3.82	28.42	0	19.62	2	-8.40	2	-7.29	2.35	-11.55
6	7	5.88	0.00	-2.71	32.25	0	22.27	2	-9.53	2	-8.27	2.35	-13.11
7	7	5.88	0.00	-2.71	32.25	0	22.27	2	-9.53	2	-8.27	2.35	-13.11
7	8	7.05	0.00	-1.60	34.79	0	24.02	2	-10.28	2	-8.93	2.35	-14.14
8	8	7.05	0.00	-1.60	34.79	0	24.02	2	-10.28	2	-8.93	2.35	-14.14
8	9	8.23	0.00	-0.49	36.01	0	24.86	2	-10.64	2	-9.24	2.35	-14.64
9	9	8.23	0.00	-0.49	36.01	0	24.86	2	-10.64	2	-9.24	2.35	-14.64
9	10	9.40	0.00	0.62	35.94	0	24.82	2	-10.62	2	-9.22	2.35	-14.61
10	10	9.40	0.00	0.62	35.94	0	24.82	2	-10.62	2	-9.22	2.35	-14.61
10	11	10.58	0.00	1.73	34.55	0	23.86	2	-10.21	2	-8.87	2.35	-14.04
11	11	10.58	0.00	1.73	34.55	0	23.86	2	-10.21	2	-8.87	2.35	-14.04
11	12	11.75	0.00	2.85	31.86	0	22.00	2	-9.41	2	-8.17	2.35	-12.95
12	12	11.75	0.00	2.85	31.86	0	22.00	2	-9.41	2	-8.17	2.35	-12.95
12	13	12.93	0.00	3.96	27.86	0	19.24	2	-8.23	2	-7.15	2.35	-11.32
13	13	12.93	0.00	3.96	27.86	0	19.24	2	-8.23	2	-7.15	2.35	-11.32
13	14	14.10	0.00	5.07	22.56	0	15.58	2	-6.66	2	-5.79	2.35	-9.17
14	14	14.10	0.00	5.07	22.56	0	15.58	2	-6.66	2	-5.79	2.35	-9.17
14	15	15.28	0.00	6.18	15.95	0	11.01	2	-4.71	2	-4.09	2.35	-6.48
15	15	15.28	0.00	6.18	15.95	0	11.01	2	-4.71	2	-4.09	2.35	-6.48
15	16	16.45	0.00	7.29	8.03	0	5.54	2	-2.37	2	-2.06	2.35	-3.26
16	16	16.45	-0.07	7.29	8.03	0	5.54	2	-2.37	2	-2.06	2.35	-3.26
16	17	17.63	-0.09	8.40	-1.19	0	-0.86	2	0.32	2	0.28	2.35	0.45
17	17	17.63	-0.09	8.40	-1.19	0	-0.86	2	0.32	2	0.28	2.35	0.45
17	18	18.80	-0.10	9.52	-11.72	0	-7.88	2	4.15	2	3.60	2.35	5.43
18	18	18.80	0.00	9.52	-11.72	0	-7.88	2	4.15	2	3.60	2.35	5.43
18	19	19.98	0.00	10.63	-23.55	0	-15.76	2	8.41	2	7.30	2.35	10.98
19	19	19.98	0.00	10.63	-23.55	0	-15.76	2	8.41	2	7.30	2.35	10.98
19	20	21.15	0.00	11.74	-36.69	0	-24.56	2	13.10	2	11.38	2.35	17.10
20	20	21.15	0.00	11.74	-36.69	0	-24.56	2	13.10	2	11.38	2.35	17.10
20	21	22.33	0.00	12.85	-51.14	0	-34.23	2	18.26	2	15.86	2.35	23.84
21	21	22.33	0.00	12.85	-51.14	0	-34.23	2	18.26	2	15.86	2.35	23.84
21	22	22.50	0.00	13.02	-53.40	0	-35.74	2	19.07	2	16.56	2.35	24.89
22	22	22.50	0.00	13.02	-53.40	0	-35.74	2	19.07	2	16.56	2.35	24.89
22	23	23.50	0.00	13.96	-66.89	0	-44.77	2	23.89	2	20.75	2.35	31.18
23	1023	23.50	0.00	13.96	-66.89	0	-44.77	2	23.89	2	20.75	2.35	31.18
23	24	24.50	0.00	-12.83	-53.59	0	-35.87	2	19.14	2	16.62	2.35	24.98
24	24	24.50	0.00	-12.83	-53.59	0	-35.87	2	19.14	2	16.62	2.35	24.98
24	25	24.95	0.00	-12.40	-47.92	0	-32.07	2	17.11	2	14.86	2.35	22.34
25	25	24.95	0.00	-12.40	-47.92	0	-32.07	2	17.11	2	14.86	2.35	22.34
25	26	26.40	0.00	-11.03	-30.93	0	-20.70	2	11.05	2	9.59	2.35	14.42
26	26	26.40	0.00	-11.03	-30.93	0	-20.70	2	11.05	2	9.59	2.35	14.42
26	27	27.85	0.00	-9.66	-15.93	0	-10.66	2	5.69	2	4.94	2.35	7.43
27	27	27.85	0.00	-9.66	-15.93	0	-10.66	2	5.69	2	4.94	2.35	7.43
27	28	29.30	0.00	-8.29	-2.92	0	-1.95	2	1.04	2	0.91	2.35	1.36
28	28	29.30	-0.07	-8.29	-2.92	0	-1.95	2	1.04	2	0.91	2.35	1.36
28	29	30.75	-0.06	-6.91	8.10	0	5.40	2	-2.91	2	-2.53	2.35	-3.79
29	29	30.75	-0.06	-6.91	8.10	0	5.40	2	-2.91	2	-2.53	2.35	-3.79
29	30	32.20	-0.05	-5.54	17.13	0	11.81	2	-2.42	2	-2.10	2.35	-3.31
30	30	32.20	-0.05	-5.54	17.13	0	11.81	2	-2.42	2	-2.10	2.35	-3.31
30	31	33.65	0.00	-4.17	24.17	0	16.69	2	-7.14	2	-6.20	2.35	-9.82
31	31	33.65	0.00	-4.17	24.17	0	16.69	2	-7.14	2	-6.20	2.35	-9.82
31	32	35.10	0.00	-2.80	29.22	0	20.18	2	-8.63	2	-7.50	2.35	-11.88
32	32	35.10	0.00	-2.80	29.22	0	20.18	2	-8.63	2	-7.50	2.35	-11.88
32	33	36.55	0.00	-1.43	32.28	0	22.29	2	-9.54	2	-8.28	2.35	-13.12
33	33	36.55	0.00	-1.43	32.28	0	22.29	2	-9.54	2	-8.28	2.35	-13.12
33	34	38.00	0.00	-0.06	33.36	0	23.03	2	-9.86	2	-8.56	2.35	-13.56
34	34	38.00	0.00	-0.06	33.36	0	23.03	2	-9.86	2	-8.56	2.35	-13.56
34	35	39.45	0.00	1.32	32.44	0	22.40	2	-9.58	2	-8.32	2.35	-13.18
35	35	39.45	0.00	1.32	32.44	0	22.40	2	-9.58	2	-8.32	2.35	-13.18
35	36	40.90	0.00	2.69	29.54	0	20.40	2	-8.73	2	-7.58	2.35	-12.01
36	36	40.90	0.00	2.69	29.54	0	20.40	2	-8.73	2	-7.58	2.35	-12.01
36	37	42.35	0.00	4.06	24.65	0	17.02	2	-7.28	2	-6.32	2.35	-10.02
37	37	42.35	0.00	4.06	24.65	0	17.02	2	-7.28	2	-6.32	2.35	-10.02
37	38	43.80	0.00	5.43	17.77	0	12.25	2	-5.25	2	-4.56	2.35	-7.22
38	38	43.80	-0.05	5.43	17.77	0	12.25	2	-5.25	2	-4.56	2.35	-7.22
38	39	45.25	-0.06	6.80	8.90	0	6.12	2	-2.65	2	-2.30	2.35	-3.64

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonado voladizo). Tensiones a tiempo To

Vol

cc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	-0.06	6.80	8.90	0	5.94	2	-3.20	2	-2.78	2.35	-4.17
39	40	46.70	-0.07	8.17	-1.96	0	-1.34	2	0.68	2	0.59	2.35	0.89
40	40	46.70	0.00	8.18	-1.96	0	-1.31	2	0.70	2	0.61	2.35	0.91
40	41	48.15	0.00	9.55	-14.81	0	-9.91	2	5.29	2	4.59	2.35	6.90
41	41	48.15	0.00	9.55	-14.81	0	-9.91	2	5.29	2	4.59	2.35	6.90
41	42	49.60	0.00	10.92	-29.65	0	-19.85	2	10.59	2	9.20	2.35	13.82
42	42	49.60	0.00	10.92	-29.65	0	-19.85	2	10.59	2	9.20	2.35	13.82
42	43	51.05	0.00	12.29	-46.47	0	-31.10	2	16.60	2	14.41	2.35	21.66
43	43	51.05	0.00	12.29	-46.47	0	-31.10	2	16.60	2	14.41	2.35	21.66
43	44	51.50	0.00	12.72	-52.10	0	-34.87	2	18.61	2	16.16	2.35	24.29
44	44	51.50	0.00	12.72	-52.10	0	-34.87	2	18.61	2	16.16	2.35	24.29
44	45	52.50	0.00	13.66	-65.29	0	-43.70	2	23.32	2	20.25	2.35	30.44
45	1045	52.50	0.00	-13.47	-65.29	0	-43.70	2	23.32	2	20.25	2.35	30.44
45	46	53.50	0.00	-12.52	-52.30	0	-35.01	2	18.68	2	16.22	2.35	24.38
46	46	53.50	0.00	-12.52	-52.30	0	-35.01	2	18.68	2	16.22	2.35	24.38
46	47	53.95	0.00	-12.09	-46.76	0	-31.30	2	16.70	2	14.50	2.35	21.80
47	47	53.95	0.00	-12.09	-46.76	0	-31.30	2	16.70	2	14.50	2.35	21.80
47	48	55.40	0.00	-10.72	-30.21	0	-20.22	2	10.79	2	9.37	2.35	14.08
48	48	55.40	0.00	-10.72	-30.21	0	-20.22	2	10.79	2	9.37	2.35	14.08
48	49	56.85	0.00	-9.35	-15.66	0	-10.48	2	5.59	2	4.86	2.35	7.30
49	49	56.85	0.00	-9.35	-15.66	0	-10.48	2	5.59	2	4.86	2.35	7.30
49	50	58.30	0.00	-7.98	-3.10	0	-2.07	2	1.11	2	0.94	2.35	1.45
50	50	58.30	-0.07	-7.98	-3.10	0	-2.07	2	1.11	2	0.94	2.35	1.45
50	51	59.75	-0.05	-6.61	7.48	0	4.99	2	-2.69	2	-2.34	2.35	-3.50
51	51	59.75	-0.05	-6.61	7.48	0	4.99	2	-2.69	2	-2.34	2.35	-3.50
51	52	61.20	-0.04	-5.24	16.07	0	11.08	2	-2.23	2	-1.94	2.35	-3.06
52	52	61.20	0.00	-5.24	16.07	0	11.08	2	-2.23	2	-1.94	2.35	-3.06
52	53	62.65	0.00	-3.86	22.67	0	15.65	2	-4.75	2	-4.12	2.35	-6.53
53	53	62.65	0.00	-3.86	22.67	0	15.65	2	-4.75	2	-4.12	2.35	-6.53
53	54	64.10	0.00	-2.49	27.27	0	18.83	2	-8.06	2	-7.00	2.35	-11.08
54	54	64.10	0.00	-2.49	27.27	0	18.83	2	-8.06	2	-7.00	2.35	-11.08
54	55	65.55	0.00	-1.12	29.89	0	20.64	2	-8.83	2	-7.67	2.35	-12.15
55	55	65.55	0.00	-1.12	29.89	0	20.64	2	-8.83	2	-7.67	2.35	-12.15
55	56	67.00	0.00	0.25	30.53	0	21.08	2	-9.02	2	-7.83	2.35	-12.41
56	56	67.00	0.00	0.25	30.53	0	21.08	2	-9.02	2	-7.83	2.35	-12.41
56	57	68.45	0.00	1.62	29.17	0	20.14	2	-8.62	2	-7.48	2.35	-11.86
57	57	68.45	0.00	1.62	29.17	0	20.14	2	-8.62	2	-7.48	2.35	-11.86
57	58	69.90	0.00	2.99	25.82	0	17.83	2	-7.63	2	-6.63	2.35	-10.49
58	58	69.90	0.00	2.99	25.82	0	17.83	2	-7.63	2	-6.63	2.35	-10.49
58	59	71.35	0.00	4.37	20.49	0	14.15	2	-6.05	2	-5.26	2.35	-8.33
59	59	71.35	0.00	4.37	20.49	0	14.15	2	-6.05	2	-5.26	2.35	-8.33
59	60	72.80	0.00	5.74	13.16	0	9.07	2	-3.91	2	-3.39	2.35	-5.37
60	60	72.80	-0.05	5.74	13.16	0	9.07	2	-3.91	2	-3.39	2.35	-5.37
60	61	74.25	-0.06	7.11	3.85	0	2.56	2	-1.40	2	-1.21	2.35	-1.81
61	61	74.25	-0.06	7.11	3.85	0	2.56	2	-1.40	2	-1.21	2.35	-1.81
61	62	75.70	-0.07	8.48	-7.46	0	-5.02	2	2.64	2	2.29	2.35	3.46
62	62	75.70	0.00	8.48	-7.46	0	-5.02	2	2.64	2	2.29	2.35	3.46
62	63	77.15	0.00	9.85	-20.75	0	-13.89	2	7.41	2	6.44	2.35	9.67
63	63	77.15	0.00	9.85	-20.75	0	-13.89	2	7.41	2	6.44	2.35	9.67
63	64	78.60	0.00	11.22	-36.03	0	-24.12	2	12.87	2	11.18	2.35	16.80
64	64	78.60	0.00	11.22	-36.03	0	-24.12	2	12.87	2	11.18	2.35	16.80
64	65	80.05	0.00	12.60	-53.30	0	-35.68	2	19.04	2	16.53	2.35	24.85
65	65	80.05	0.00	12.60	-53.30	0	-35.68	2	19.04	2	16.53	2.35	24.85
65	66	80.50	0.00	13.02	-59.06	0	-39.53	2	21.09	2	18.32	2.35	27.53
66	66	80.50	0.00	13.02	-59.06	0	-39.53	2	21.09	2	18.32	2.35	27.53
66	67	81.50	0.00	13.97	-72.56	0	-48.57	2	25.91	2	22.51	2.35	33.83
67	1067	81.50	0.00	-14.60	-72.56	0	-48.57	2	25.91	2	22.51	2.35	33.83
67	68	82.50	0.00	-13.65	-58.43	0	-39.11	2	20.87	2	18.12	2.35	27.24
68	68	82.50	0.00	-13.65	-58.43	0	-39.11	2	20.87	2	18.12	2.35	27.24
68	69	83.08	0.00	-13.11	-50.73	0	-33.96	2	18.12	2	15.74	2.35	23.65
69	69	83.08	0.00	-13.11	-50.73	0	-33.96	2	18.12	2	15.74	2.35	23.65
69	70	84.65	0.00	-11.62	-31.26	0	-20.92	2	11.16	2	9.70	2.35	14.57
70	70	84.65	0.00	-11.62	-31.26	0	-20.92	2	11.16	2	9.70	2.35	14.57
70	71	86.23	0.00	-10.13	-14.13	0	-9.46	2	5.05	2	4.38	2.35	6.59
71	71	86.23	0.00	-10.13	-14.13	0	-9.46	2	5.05	2	4.38	2.35	6.59
71	72	87.80	0.00	-8.64	0.66	0	0.42	2	-0.26	2	-0.23	2.35	-0.31
72	72	87.80	-0.07	-8.64	0.66	0	0.42	2	-0.26	2	-0.23	2.35	-0.31
72	73	89.38	-0.05	-7.15	13.09	0	8.74	2	-4.69	2	-4.08	2.35	-6.12
73	73	89.38	-0.05	-7.15	13.09	0	8.74	2	-4.69	2	-4.08	2.35	-6.12
73	74	90.95	-0.04	-5.66	23.18	0	15.99	2	-6.86	2	-5.95	2.35	-9.43
74	74	90.95	0.00	-5.66	23.18	0	15.99	2	-6.86	2	-5.95	2.35	-9.43
74	75	92.53	0.00	-4.17	30.92	0	21.35	2	-9.13	2	-7.93	2.35	-12.57
75	75	92.53	0.00	-4.17	30.92	0	21.35	2	-9.13	2	-7.93	2.35	-12.57
75	76	94.10	0.00	-2.68	36.32	0	25.08	2	-10.73	2	-9.32	2.35	-14.76
76	76	94.10	0.00	-2.68	36.32	0	25.08	2	-10.73	2	-9.32	2.35	-14.76
76	77	95.68	0.00	-1.19	39.37	0	27.18	2	-11.63	2	-10.10	2.35	-16.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonado voladizo). Tensiones a tiempo To

HVOL

HVOL

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
1	1	0.00	0.00	-8.27	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-7.32	7.80	0	5.39	2	-2.30	2	-2.00	2.35	-3.17
2	2	1.00	0.00	-7.32	7.80	0	5.39	2	-2.30	2	-2.00	2.35	-3.17
2	3	1.18	0.00	-7.16	9.06	0	6.26	2	-2.68	2	-2.32	2.35	-3.68
3	3	1.18	0.00	-7.16	9.06	0	6.26	2	-2.68	2	-2.32	2.35	-3.68
3	4	2.35	0.00	-6.05	16.82	0	11.61	2	-4.97	2	-4.32	2.35	-6.84
4	4	2.35	0.00	-6.05	16.82	0	11.61	2	-4.97	2	-4.32	2.35	-6.84
4	5	3.53	0.00	-4.93	23.27	0	16.07	2	-6.87	2	-5.97	2.35	-9.46
5	5	3.53	0.00	-4.93	23.27	0	16.07	2	-6.87	2	-5.97	2.35	-9.46
5	6	4.70	0.00	-3.82	28.42	0	19.62	2	-8.40	2	-7.29	2.35	-11.55
6	6	4.70	0.00	-3.82	28.42	0	19.62	2	-8.40	2	-7.29	2.35	-11.55
6	7	5.88	0.00	-2.71	32.25	0	22.27	2	-9.53	2	-8.27	2.35	-13.11
7	7	5.88	0.00	-2.71	32.25	0	22.27	2	-9.53	2	-8.27	2.35	-13.11
7	8	7.05	0.00	-1.60	34.79	0	24.02	2	-10.28	2	-8.93	2.35	-14.14
8	8	7.05	0.00	-1.60	34.79	0	24.02	2	-10.28	2	-8.93	2.35	-14.14
8	9	8.23	0.00	-0.49	36.01	0	24.86	2	-10.64	2	-9.24	2.35	-14.64
9	9	8.23	0.00	-0.49	36.01	0	24.86	2	-10.64	2	-9.24	2.35	-14.64
9	10	9.40	0.00	0.62	35.94	0	24.82	2	-10.62	2	-9.22	2.35	-14.61
10	10	9.40	0.00	0.62	35.94	0	24.82	2	-10.62	2	-9.22	2.35	-14.61
10	11	10.58	0.00	1.73	34.55	0	23.86	2	-10.21	2	-8.87	2.35	-14.04
11	11	10.58	0.00	1.73	34.55	0	23.86	2	-10.21	2	-8.87	2.35	-14.04
11	12	11.75	0.00	2.85	31.86	0	22.00	2	-9.41	2	-8.17	2.35	-12.95
12	12	11.75	0.00	2.85	31.86	0	22.00	2	-9.41	2	-8.17	2.35	-12.95
12	13	12.93	0.00	3.96	27.86	0	19.24	2	-8.23	2	-7.15	2.35	-11.32
13	13	12.93	0.00	3.96	27.86	0	19.24	2	-8.23	2	-7.15	2.35	-11.32
13	14	14.10	0.00	5.07	22.56	0	15.58	2	-6.66	2	-5.79	2.35	-9.17
14	14	14.10	0.00	5.07	22.56	0	15.58	2	-6.66	2	-5.79	2.35	-9.17
14	15	15.28	0.00	6.18	15.95	0	11.01	2	-4.71	2	-4.09	2.35	-6.48
15	15	15.28	0.00	6.18	15.95	0	11.01	2	-4.71	2	-4.09	2.35	-6.48
15	16	16.45	0.00	7.29	8.03	0	5.54	2	-2.37	2	-2.06	2.35	-3.26
16	16	16.45	-0.07	7.29	8.03	0	5.52	2	-2.40	2	-2.08	2.35	-3.29
16	17	17.63	-0.09	8.40	-1.19	0	-0.86	2	0.32	2	0.28	2.35	0.45
17	17	17.63	-0.09	8.40	-1.19	0	-0.83	2	0.39	2	0.34	2.35	0.53
17	18	18.80	-0.10	9.52	-11.72	0	-7.88	2	4.15	2	3.60	2.35	5.43
18	18	18.80	0.00	9.52	-11.72	0	-7.84	2	4.19	2	3.64	2.35	5.46
18	19	19.98	0.00	10.63	-23.55	0	-15.76	2	8.41	2	7.30	2.35	10.98
19	19	19.98	0.00	10.63	-23.55	0	-15.76	2	8.41	2	7.30	2.35	10.98
19	20	21.15	0.00	11.74	-36.69	0	-24.56	2	13.10	2	11.38	2.35	17.10
20	20	21.15	0.00	11.74	-36.69	0	-24.56	2	13.10	2	11.38	2.35	17.10
20	21	22.33	0.00	12.85	-51.14	0	-34.23	2	18.26	2	15.86	2.35	23.84
21	21	22.33	0.00	12.85	-51.14	0	-34.23	2	18.26	2	15.86	2.35	23.84
21	22	22.50	0.00	13.02	-53.40	0	-35.74	2	19.07	2	16.56	2.35	24.89
22	22	22.50	0.00	13.02	-53.40	0	-35.74	2	19.07	2	16.56	2.35	24.89
22	23	23.50	0.00	13.96	-66.89	0	-44.77	2	23.89	2	20.75	2.35	31.18
23	1023	23.50	0.00	-13.77	-66.89	0	-44.77	2	23.89	2	20.75	2.35	31.18
23	24	24.50	0.00	-12.83	-53.59	0	-35.87	2	19.14	2	16.62	2.35	24.98
24	24	24.50	0.00	-12.83	-53.59	0	-35.87	2	19.14	2	16.62	2.35	24.98
24	25	24.95	0.00	-12.40	-47.92	0	-32.07	2	17.11	2	14.86	2.35	22.34
25	25	24.95	0.00	-12.40	-47.92	0	-32.07	2	17.11	2	14.86	2.35	22.34
25	26	26.40	0.00	-11.03	-30.93	0	-20.70	2	11.05	2	9.59	2.35	14.42
26	26	26.40	0.00	-11.03	-30.93	0	-20.70	2	11.05	2	9.59	2.35	14.42
26	27	27.85	0.00	-9.66	-15.93	0	-10.66	2	5.69	2	4.94	2.35	7.43
27	27	27.85	0.00	-9.66	-15.93	0	-10.66	2	5.69	2	4.94	2.35	7.43
27	28	29.30	0.00	-8.29	-2.92	0	-1.95	2	1.04	2	0.91	2.35	1.36
28	28	29.30	-0.07	-8.29	-2.92	0	-1.98	2	1.02	2	0.88	2.35	1.34
28	29	30.75	-0.06	-6.91	8.10	0	5.40	2	-2.91	2	-2.53	2.35	-3.79
29	29	30.75	-0.06	-6.91	8.10	0	5.40	2	-2.91	2	-2.53	2.35	-3.79
29	30	32.20	-0.05	-5.54	17.13	0	11.81	2	-2.42	2	-2.10	2.35	-3.31
30	30	32.20	0.00	-5.54	17.13	0	11.83	2	-5.08	2	-4.41	2.35	-6.98
30	31	33.65	0.00	-4.17	24.17	0	16.69	2	-7.14	2	-6.20	2.35	-9.82
31	31	33.65	0.00	-4.17	24.17	0	16.69	2	-7.14	2	-6.20	2.35	-9.82
31	32	35.10	0.00	-2.80	29.22	0	20.18	2	-8.63	2	-7.50	2.35	-11.88
32	32	35.10	0.00	-2.80	29.22	0	20.18	2	-8.63	2	-7.50	2.35	-11.88
32	33	36.55	0.00	-1.43	32.28	0	22.29	2	-9.54	2	-8.28	2.35	-13.12
33	33	36.55	0.00	-1.43	32.28	0	22.29	2	-9.54	2	-8.28	2.35	-13.12
33	34	38.00	0.00	-0.06	33.36	0	23.03	2	-9.86	2	-8.56	2.35	-13.56
34	34	38.00	0.00	-0.06	33.36	0	23.03	2	-9.86	2	-8.56	2.35	-13.56
34	35	39.45	0.00	1.32	32.44	0	22.40	2	-9.58	2	-8.32	2.35	-13.18
35	35	39.45	0.00	1.32	32.44	0	22.40	2	-9.58	2	-8.32	2.35	-13.18
35	36	40.90	0.00	2.69	29.54	0	20.40	2	-8.73	2	-7.58	2.35	-12.01
36	36	40.90	0.00	2.69	29.54	0	20.40	2	-8.73	2	-7.58	2.35	-12.01
36	37	42.35	0.00	4.06	24.65	0	17.02	2	-7.28	2	-6.32	2.35	-10.02
37	37	42.35	0.00	4.06	24.65	0	17.02	2	-7.28	2	-6.32	2.35	-10.02
37	38	43.80	0.00	5.43	17.77	0	12.27	2	-5.25	2	-4.56	2.35	-7.22
38	38	43.80	-0.05	5.43	17.77	0	12.25	2	-5.27	2	-4.58	2.35	-7.24
38	39	45.25	-0.06	6.80	8.90	0	6.12	2	-2.65	2	-2.30	2.35	-3.64

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonado voladizo). Tensiones a tiempo To

HVOL

del exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
39	39	45.25	-0.06	6.80	8.90	0	5.94	2	-3.20	2	-2.78	2.35	-4.17
39	40	46.70	-0.07	8.17	-1.96	0	-1.34	2	0.68	2	0.59	2.35	0.89
40	40	46.70	0.00	8.18	-1.96	0	-1.31	2	0.70	2	0.61	2.35	0.91
40	41	48.15	0.00	9.55	-14.81	0	-9.91	2	5.29	2	4.59	2.35	6.90
41	41	48.15	0.00	9.55	-14.81	0	-9.91	2	5.29	2	4.59	2.35	6.90
41	42	49.60	0.00	10.92	-29.65	0	-19.85	2	10.59	2	9.20	2.35	13.82
42	42	49.60	0.00	10.92	-29.65	0	-19.85	2	10.59	2	9.20	2.35	13.82
42	43	51.05	0.00	12.29	-46.47	0	-31.10	2	16.60	2	14.41	2.35	21.66
43	43	51.05	0.00	12.29	-46.47	0	-31.10	2	16.60	2	14.41	2.35	21.66
43	44	51.50	0.00	12.72	-52.10	0	-34.87	2	18.61	2	16.16	2.35	24.29
44	44	51.50	0.00	12.72	-52.10	0	-34.87	2	18.61	2	16.16	2.35	24.29
44	45	52.50	0.00	13.66	-65.29	0	-43.70	2	23.32	2	20.25	2.35	30.44
45	1045	52.50	0.00	-13.47	-65.29	0	-43.70	2	23.32	2	20.25	2.35	30.44
45	46	53.50	0.00	-12.52	-52.30	0	-35.01	2	18.68	2	16.22	2.35	24.38
46	46	53.50	0.00	-12.52	-52.30	0	-35.01	2	18.68	2	16.22	2.35	24.38
46	47	53.95	0.00	-12.09	-46.76	0	-31.30	2	16.70	2	14.50	2.35	21.80
47	47	53.95	0.00	-12.09	-46.76	0	-31.30	2	16.70	2	14.50	2.35	21.80
47	48	55.40	0.00	-10.72	-30.21	0	-20.22	2	10.79	2	9.37	2.35	14.08
48	48	55.40	0.00	-10.72	-30.21	0	-20.22	2	10.79	2	9.37	2.35	14.08
48	49	56.85	0.00	-9.35	-15.66	0	-10.48	2	5.59	2	4.86	2.35	7.30
49	49	56.85	0.00	-9.35	-15.66	0	-10.48	2	5.59	2	4.86	2.35	7.30
49	50	58.30	-0.07	-7.98	-3.10	0	-2.07	2	1.11	2	0.96	2.35	1.45
50	50	58.30	-0.07	-7.98	-3.10	0	-2.07	2	1.11	2	0.96	2.35	1.45
50	51	59.75	-0.05	-6.61	7.48	0	4.99	2	-2.69	2	-2.34	2.35	-3.50
51	51	59.75	-0.05	-6.61	7.48	0	4.99	2	-2.69	2	-2.34	2.35	-3.50
51	52	61.20	-0.04	-5.24	16.07	0	11.08	2	-2.23	2	-1.94	2.35	-3.06
52	52	61.20	-0.04	-5.24	16.07	0	11.08	2	-2.23	2	-1.94	2.35	-3.06
52	53	62.65	0.00	-3.86	22.67	0	15.65	2	-4.76	2	-4.12	2.35	-6.54
53	53	62.65	0.00	-3.86	22.67	0	15.65	2	-4.76	2	-4.12	2.35	-6.54
53	54	64.10	0.00	-2.49	27.27	0	18.83	2	-6.70	2	-5.82	2.35	-9.21
54	54	64.10	0.00	-2.49	27.27	0	18.83	2	-6.70	2	-5.82	2.35	-9.21
54	55	65.55	0.00	-1.12	29.89	0	20.64	2	-8.06	2	-7.00	2.35	-11.08
55	55	65.55	0.00	-1.12	29.89	0	20.64	2	-8.06	2	-7.00	2.35	-11.08
55	56	67.00	0.00	0.25	30.53	0	21.08	2	-9.02	2	-7.67	2.35	-12.15
56	56	67.00	0.00	0.25	30.53	0	21.08	2	-9.02	2	-7.67	2.35	-12.15
56	57	68.45	0.00	1.62	29.17	0	20.14	2	-8.62	2	-7.48	2.35	-11.86
57	57	68.45	0.00	1.62	29.17	0	20.14	2	-8.62	2	-7.48	2.35	-11.86
57	58	69.90	0.00	2.99	25.82	0	17.83	2	-7.63	2	-6.63	2.35	-10.49
58	58	69.90	0.00	2.99	25.82	0	17.83	2	-7.63	2	-6.63	2.35	-10.49
58	59	71.35	0.00	4.37	20.49	0	14.15	2	-6.05	2	-5.26	2.35	-8.33
59	59	71.35	0.00	4.37	20.49	0	14.15	2	-6.05	2	-5.26	2.35	-8.33
59	60	72.80	-0.05	5.74	13.16	0	9.09	2	-3.89	2	-3.38	2.35	-5.35
60	60	72.80	-0.05	5.74	13.16	0	9.09	2	-3.89	2	-3.38	2.35	-5.35
60	61	74.25	-0.06	7.11	3.85	0	2.64	2	-1.16	2	-1.01	2.35	-1.58
61	61	74.25	-0.06	7.11	3.85	0	2.64	2	-1.16	2	-1.01	2.35	-1.58
61	62	75.70	-0.07	8.48	-7.46	0	-5.02	2	2.64	2	2.29	2.35	3.46
62	62	75.70	-0.07	8.48	-7.46	0	-5.02	2	2.64	2	2.29	2.35	3.46
62	63	77.15	0.00	9.85	-20.75	0	-13.89	2	7.41	2	6.44	2.35	9.67
63	63	77.15	0.00	9.85	-20.75	0	-13.89	2	7.41	2	6.44	2.35	9.67
63	64	78.60	0.00	11.22	-36.03	0	-24.12	2	12.87	2	11.18	2.35	16.80
64	64	78.60	0.00	11.22	-36.03	0	-24.12	2	12.87	2	11.18	2.35	16.80
64	65	80.05	0.00	12.60	-53.30	0	-35.68	2	19.04	2	16.53	2.35	24.85
65	65	80.05	0.00	12.60	-53.30	0	-35.68	2	19.04	2	16.53	2.35	24.85
65	66	80.50	0.00	13.02	-59.06	0	-39.53	2	21.09	2	18.32	2.35	27.53
66	66	80.50	0.00	13.02	-59.06	0	-39.53	2	21.09	2	18.32	2.35	27.53
66	67	81.50	0.00	13.97	-72.56	0	-48.57	2	25.91	2	22.51	2.35	33.83
67	1067	81.50	0.00	-14.60	-72.56	0	-48.57	2	25.91	2	22.51	2.35	33.83
67	68	82.50	0.00	-13.65	-58.43	0	-39.11	2	20.87	2	18.12	2.35	27.24
68	68	82.50	0.00	-13.65	-58.43	0	-39.11	2	20.87	2	18.12	2.35	27.24
68	69	83.08	0.00	-13.11	-50.73	0	-33.96	2	18.12	2	15.74	2.35	23.65
69	69	83.08	0.00	-13.11	-50.73	0	-33.96	2	18.12	2	15.74	2.35	23.65
69	70	84.65	0.00	-11.62	-31.26	0	-20.92	2	11.16	2	9.70	2.35	14.57
70	70	84.65	0.00	-11.62	-31.26	0	-20.92	2	11.16	2	9.70	2.35	14.57
70	71	86.23	0.00	-10.13	-14.13	0	-9.46	2	5.05	2	4.38	2.35	6.59
71	71	86.23	0.00	-10.13	-14.13	0	-9.46	2	5.05	2	4.38	2.35	6.59
71	72	87.80	0.00	-8.64	0.66	0	0.42	2	-0.26	2	-0.23	2.35	-0.33
72	72	87.80	0.00	-8.64	0.66	0	0.42	2	-0.26	2	-0.23	2.35	-0.33
72	73	89.38	-0.05	-7.15	13.09	0	8.74	2	-4.69	2	-4.08	2.35	-6.12
73	73	89.38	-0.05	-7.15	13.09	0	8.74	2	-4.69	2	-4.08	2.35	-6.12
73	74	90.95	-0.04	-5.66	23.18	0	15.99	2	-6.86	2	-5.96	2.35	-9.43
74	74	90.95	-0.04	-5.66	23.18	0	15.99	2	-6.86	2	-5.96	2.35	-9.43
74	75	92.53	0.00	-4.17	30.92	0	21.35	2	-9.13	2	-7.93	2.35	-12.57
75	75	92.53	0.00	-4.17	30.92	0	21.35	2	-9.13	2	-7.93	2.35	-12.57
75	76	94.10	0.00	-2.68	36.32	0	25.08	2	-10.73	2	-9.32	2.35	-14.76
76	76	94.10	0.00	-2.68	36.32	0	25.08	2	-10.73	2	-9.32	2.35	-14.76
76	77	95.68	0.00	-1.19	39.37	0	27.18	2	-11.63	2	-10.10	2.35	-16.00

229

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonado voladizos). Tensiones a tiempo To

1. HVOL

Def. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	-1.19	39.37	0	27.18	2	-11.63	2	-10.10	2.35	-16.00
77	78	97.25	0.00	0.30	40.07	0	27.67	2	-11.84	2	-10.28	2.35	-16.29
78	78	97.25	0.00	0.30	40.07	0	27.67	2	-11.84	2	-10.28	2.35	-16.29
78	79	98.83	0.00	1.79	38.43	0	26.54	2	-11.35	2	-9.86	2.35	-15.62
79	79	98.83	0.00	1.79	38.43	0	26.54	2	-11.35	2	-9.86	2.35	-15.62
79	80	100.40	0.00	3.28	34.44	0	23.78	2	-10.17	2	-8.84	2.35	-14.00
80	80	100.40	0.00	3.28	34.44	0	23.78	2	-10.17	2	-8.84	2.35	-14.00
80	81	101.98	0.00	4.77	28.10	0	19.40	2	-8.30	2	-7.21	2.35	-11.42
81	81	101.98	0.00	4.77	28.10	0	19.40	2	-8.30	2	-7.21	2.35	-11.42
81	82	103.55	0.00	6.26	19.42	0	13.41	2	-5.74	2	-4.98	2.35	-7.89
82	82	103.55	-0.05	6.26	19.42	0	13.39	2	-5.76	2	-5.00	2.35	-7.91
82	83	105.13	-0.06	7.75	8.39	0	5.77	2	-2.50	2	-2.17	2.35	-3.43
83	83	105.13	-0.06	7.75	8.39	0	5.59	2	-3.02	2	-2.62	2.35	-3.93
83	84	106.70	-0.07	9.24	-4.99	0	-3.36	2	1.76	2	1.53	2.35	2.30
84	84	106.70	0.00	9.24	-4.99	0	-3.34	2	1.78	2	1.55	2.35	2.33
84	85	108.28	0.00	10.73	-20.71	0	-13.86	2	7.40	2	6.42	2.35	9.65
85	85	108.28	0.00	10.73	-20.71	0	-13.86	2	7.40	2	6.42	2.35	9.65
85	86	109.85	0.00	12.22	-38.78	0	-25.96	2	13.85	2	12.03	2.35	18.08
86	86	109.85	0.00	12.22	-38.78	0	-25.96	2	13.85	2	12.03	2.35	18.08
86	87	111.43	0.00	13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
87	87	111.43	0.00	13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
87	88	112.00	0.00	14.25	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
88	88	112.00	0.00	14.25	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
88	89	113.00	0.00	15.20	-81.97	0	-54.87	2	29.27	2	25.43	2.35	38.21
89	1089	113.00	0.00	-15.20	-81.97	0	-54.87	2	29.27	2	25.43	2.35	38.21
89	90	114.00	0.00	-14.26	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
90	90	114.00	0.00	-14.26	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
90	91	114.58	0.00	-13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
91	91	114.58	0.00	-13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
91	92	116.15	0.00	-12.22	-38.77	0	-25.95	2	13.85	2	12.03	2.35	18.07
92	92	116.15	0.00	-12.22	-38.77	0	-25.95	2	13.85	2	12.03	2.35	18.07
92	93	117.73	0.00	-10.73	-20.70	0	-13.86	2	7.39	2	6.42	2.35	9.65
93	93	117.73	0.00	-10.73	-20.70	0	-13.86	2	7.39	2	6.42	2.35	9.65
93	94	119.30	0.00	-9.24	-4.97	0	-3.33	2	1.77	2	1.54	2.35	2.32
94	94	119.30	-0.07	-9.24	-4.97	0	-3.35	2	1.75	2	1.52	2.35	2.30
94	95	120.88	-0.06	-7.75	8.41	0	5.61	2	-3.02	2	-2.63	2.35	-3.94
95	95	120.88	-0.06	-7.75	8.41	0	5.78	2	-2.51	2	-2.18	2.35	-3.44
95	96	122.45	-0.05	-6.26	19.45	0	13.41	2	-5.77	2	-5.01	2.35	-7.92
96	96	122.45	0.00	-6.26	19.45	0	13.43	2	-5.75	2	-4.99	2.35	-7.91
96	97	124.03	0.00	-4.77	28.14	0	19.43	2	-8.31	2	-7.22	2.35	-11.44
97	97	124.03	0.00	-4.77	28.14	0	19.43	2	-8.31	2	-7.22	2.35	-11.44
97	98	125.60	0.00	-3.28	34.48	0	23.81	2	-10.19	2	-8.85	2.35	-14.01
98	98	125.60	0.00	-3.28	34.48	0	23.81	2	-10.19	2	-8.85	2.35	-14.01
98	99	127.18	0.00	-1.79	38.48	0	26.57	2	-11.37	2	-9.87	2.35	-15.64
99	99	127.18	0.00	-1.79	38.48	0	26.57	2	-11.37	2	-9.87	2.35	-15.64
100	128.75	0.00	-0.30	40.13	0	27.71	2	-11.86	2	-10.30	2.35	-16.31	-16.31
101	101	130.33	0.00	-0.30	40.13	0	27.71	2	-11.86	2	-10.30	2.35	-16.31
101	101	130.33	0.00	1.19	39.43	0	27.23	2	-11.65	2	-10.12	2.35	-16.03
101	102	131.90	0.00	2.68	36.39	0	25.13	2	-10.75	2	-9.34	2.35	-14.79
102	102	131.90	0.00	2.68	36.39	0	25.13	2	-10.75	2	-9.34	2.35	-14.79
102	103	133.48	0.00	4.17	31.00	0	21.40	2	-9.16	2	-7.95	2.35	-12.60
103	103	133.48	0.00	4.17	31.00	0	21.40	2	-9.16	2	-7.95	2.35	-12.60
103	104	135.05	0.00	5.66	23.26	0	16.06	2	-6.87	2	-5.97	2.35	-9.45
104	104	135.05	-0.04	5.66	23.26	0	16.05	2	-6.89	2	-5.98	2.35	-9.47
104	105	136.63	-0.05	7.15	13.17	0	9.07	2	-3.91	2	-3.40	2.35	-5.37
105	105	136.63	-0.05	7.15	13.17	0	8.80	2	-4.72	2	-4.10	2.35	-6.16
105	106	138.20	-0.07	8.64	0.74	0	0.47	2	-0.29	2	-0.25	2.35	-0.37
106	106	138.20	0.00	8.64	0.74	0	0.50	2	-0.26	2	-0.23	2.35	-0.34
106	107	139.78	0.00	10.13	-14.03	0	-9.39	2	5.01	2	4.35	2.35	6.54
107	107	139.78	0.00	10.13	-14.03	0	-9.39	2	5.01	2	4.35	2.35	6.54
107	108	141.35	0.00	11.62	-31.16	0	-20.86	2	11.13	2	9.67	2.35	14.53
108	108	141.35	0.00	11.62	-31.16	0	-20.86	2	11.13	2	9.67	2.35	14.53
108	109	142.93	0.00	13.11	-50.63	0	-33.89	2	18.08	2	15.70	2.35	23.60
109	109	142.93	0.00	13.11	-50.63	0	-33.89	2	18.08	2	15.70	2.35	23.60
109	110	143.50	0.00	13.65	-58.32	0	-39.04	2	20.83	2	18.09	2.35	27.19
110	110	143.50	0.00	13.65	-58.32	0	-39.04	2	20.83	2	18.09	2.35	27.19
110	111	144.50	0.00	14.60	-72.45	0	-48.49	2	25.87	2	22.47	2.35	33.78
111	111	144.50	0.00	-14.20	-72.45	0	-48.49	2	25.87	2	22.47	2.35	33.78
111	112	145.50	0.00	-13.25	-58.72	0	-39.30	2	20.97	2	18.21	2.35	27.38
112	112	145.50	0.00	-13.25	-58.72	0	-39.30	2	20.97	2	18.21	2.35	27.38
112	113	145.68	0.00	-13.09	-56.42	0	-37.76	2	20.15	2	17.50	2.35	26.30
113	113	145.68	0.00	-13.09	-56.42	0	-37.76	2	20.15	2	17.50	2.35	26.30
113	114	146.85	0.00	-11.98	-41.69	0	-27.90	2	14.89	2	12.93	2.35	19.44
114	114	146.85	0.00	-11.98	-41.69	0	-27.90	2	14.89	2	12.93	2.35	19.44
114	115	148.03	0.00	-10.86	-28.27	0	-18.92	2	10.10	2	8.77	2.35	13.18

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonado voladizos). Tensiones a tiempo To

1. HVOL

Def. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-10.86	-28.27	0	-18.92	2	10.10	2	8.77	2.35	13.18
115	116	149.20	0.00	-9.75	-16.16	0	-10.82	2	5.77	2	5.01	2.35	7.53
116	116	149.20	-0.10	-9.75	-16.16	0	-10.85	2	5.74	2	4.98	2.35	7.50
116	117	150.38	-0.09	-8.64	-5.36	0	-3.62	2	1.88	2	1.63	2.35	2.47
117	117	150.38	-0.09	-8.64	-5.36	0	-3.74	2	1.55	2	1.35	2.35	2.15
117	118	151.55	-0.08	-7.53	4.14	0	2.83	2	-1.25	2	-1.09	2.35	-1.71
118	118	151.55	0.00	-7.53	4.14	0	2.86	2	-1.22	2	-1.06	2.35	-1.68
118	119	152.73	0.00	-6.42	12.34	0	8.52	2	-3.65	2	-3.17	2.35	-5.02
119	119	152.73	0.00	-6.42	12.34	0	8.52	2	-3.65	2	-3.17	2.35	-5.02
119	120	153.90	0.00	-5.31	19.22	0	13.27	2	-5.68	2	-4.93	2.35	-7.81
120	120	153.90	0.00	-5.31	19.22	0	13.27	2	-5.68	2	-4.93	2.35	-7.81
120	121	155.08	0.00	-4.19	24.81	0	17.13	2	-7.33	2	-6.37	2.35	-10.08
121	121	155.08	0.00	-4.19	24.81	0	17.13	2	-7.33	2	-6.37	2.35	-10.08
121	122	156.25	0.00	-3.08	29.08	0	20.08	2	-8.59	2	-7.46	2.35	-11.82
122	122	156.25	0.00	-3.08	29.08	0	20.08	2	-8.59	2	-7.46	2.35	-11.82
122	123	157.43	0.00	-1.97	32.05	0	22.13	2	-9.47	2	-8.22	2.35	-13.03
123	123	157.43	0.00	-1.97	32.05	0	22.13	2	-9.47	2	-8.22	2.35	-13.03
123	124	158.60	0.00	-0.86	33.71	0	23.28	2	-9.96	2	-8.65	2.35	-13.70
124	124	158.60	0.00	-0.86	33.71	0	23.28	2	-9.96	2	-8.65	2.35	-13.70
124	125	159.78	0.00	0.25	34.07	0	23.52	2	-10.07	2	-8.74	2.35	-13.85
125	125	159.78	0.00	0.25	34.07	0	23.52	2	-10.07	2	-8.74	2.35	-13.85
125	126	160.95	0.00	1.36	33.12	0	22.87	2	-9.78	2	-8.50	2.35	-13.46
126	126	160.95	0.00	1.36	33.12	0	22.87	2	-9.78	2	-8.50	2.35	-13.46
126	127	162.13	0.00	2.47	30.87	0	21.32	2	-9.12	2	-7.92	2.35	-12.55
127	127	162.13	0.00	2.47	30.87	0	21.32	2	-9.12	2	-7.92	2.35	-12.55
127	128	163.30	0.00	3.59	27.31	0	18.86	2	-8.07	2	-7.01	2.35	-11.10
128	128	163.30	0.00	3.59	27.31	0	18.86	2	-8.07	2	-7.01	2.35	-11.10
128	129	164.48	0.00	4.70	22.44	0	15.49	2	-6.63	2	-5.76	2.35	-9.12
129	129	164.48	0.00	4.70	22.44	0	15.49	2	-6.63	2	-5.76	2.35	-9.12
129	130	165.65	0.00	5.81	16.26	0	11.23	2	-4.80	2	-4.17	2.35	-6.61
130	130	165.65	0.00	5.81	16.26	0	11.23	2	-4.80	2	-4.17	2.35	-6.61
130	131	166.83	0.00	6.92	8.79	0	6.07	2	-2.60	2	-2.26	2.35	-3.57
131	131	166.83	0.00	6.92	8.79	0	6.07	2	-2.60	2	-2.26	2.35	-3.57
131	132	167.00	0.00	7.09	7.56	0	5.22	2	-2.23	2	-1.94	2.35	-3.07
132	132	167.00	0.00	7.09	7.56	0	5.22	2	-2.23	2	-1.94	2.35	-3.07
132	133	168.00	0.00	8.03	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonadovoladizos). Tensiones a tiempo To

1. HVOL

exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
77	77	95.68	0.00	-1.19	39.37	0	27.18	2	-11.63	2	-10.10	2.35	-16.00
77	78	97.25	0.00	0.30	40.07	0	27.67	2	-11.84	2	-10.28	2.35	-16.29
78	78	97.25	0.00	0.30	40.07	0	27.67	2	-11.84	2	-10.28	2.35	-16.29
78	79	98.83	0.00	1.79	38.43	0	26.54	2	-11.35	2	-9.86	2.35	-15.62
79	79	98.83	0.00	1.79	38.43	0	26.54	2	-11.35	2	-9.86	2.35	-15.62
79	80	100.40	0.00	3.28	34.44	0	23.78	2	-10.17	2	-8.84	2.35	-14.00
80	80	100.40	0.00	3.28	34.44	0	23.78	2	-10.17	2	-8.84	2.35	-14.00
80	81	101.98	0.00	4.77	28.10	0	19.40	2	-8.30	2	-7.21	2.35	-11.42
81	81	101.98	0.00	4.77	28.10	0	19.40	2	-8.30	2	-7.21	2.35	-11.42
81	82	103.55	0.00	6.26	19.42	0	13.41	2	-5.74	2	-4.98	2.35	-7.89
82	82	103.55	-0.05	6.26	19.42	0	13.39	2	-5.76	2	-5.00	2.35	-7.91
82	83	105.13	-0.06	7.75	8.39	0	5.77	2	-2.50	2	-2.17	2.35	-3.43
83	83	105.13	-0.06	7.75	8.39	0	5.59	2	-3.02	2	-2.62	2.35	-3.93
83	84	106.70	-0.07	9.24	-4.99	0	-3.36	2	1.76	2	1.53	2.35	2.30
84	84	106.70	0.00	9.24	-4.99	0	-3.34	2	1.78	2	1.55	2.35	2.33
84	85	108.28	0.00	10.73	-20.71	0	-13.86	2	7.40	2	6.42	2.35	9.65
85	85	108.28	0.00	10.73	-20.71	0	-13.86	2	7.40	2	6.42	2.35	9.65
85	86	109.85	0.00	12.22	-38.78	0	-25.96	2	13.85	2	12.03	2.35	18.08
86	86	109.85	0.00	12.22	-38.78	0	-25.96	2	13.85	2	12.03	2.35	18.08
86	87	111.43	0.00	13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
87	87	111.43	0.00	13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
87	88	112.00	0.00	14.25	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
88	88	112.00	0.00	14.25	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
88	89	113.00	0.00	15.20	-81.97	0	-54.87	2	29.27	2	25.43	2.35	38.21
89	1089	113.00	0.00	-15.20	-81.97	0	-54.87	2	29.27	2	25.43	2.35	38.21
89	90	114.00	0.00	-14.26	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
90	90	114.00	0.00	-14.26	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
90	91	114.58	0.00	-13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
91	91	114.58	0.00	-13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
91	92	116.15	0.00	-12.22	-38.77	0	-25.95	2	13.85	2	12.03	2.35	18.07
92	92	116.15	0.00	-12.22	-38.77	0	-25.95	2	13.85	2	12.03	2.35	18.07
92	93	117.73	0.00	-10.73	-20.70	0	-13.86	2	7.39	2	6.42	2.35	9.65
93	93	117.73	0.00	-10.73	-20.70	0	-13.86	2	7.39	2	6.42	2.35	9.65
93	94	119.30	0.00	-9.24	-4.97	0	-3.33	2	1.77	2	1.54	2.35	2.32
94	94	119.30	-0.07	-9.24	-4.97	0	-3.35	2	1.75	2	1.52	2.35	2.30
94	95	120.88	-0.06	-7.75	8.41	0	5.61	2	-3.02	2	-2.63	2.35	-3.94
95	95	120.88	-0.06	-7.75	8.41	0	5.78	2	-2.51	2	-2.18	2.35	-3.44
95	96	122.45	-0.05	-6.26	19.45	0	13.41	2	-5.77	2	-5.01	2.35	-7.92
96	96	122.45	0.00	-6.26	19.45	0	13.43	2	-5.75	2	-4.99	2.35	-7.91
96	97	124.03	0.00	-4.77	28.14	0	19.43	2	-8.31	2	-7.22	2.35	-11.44
97	97	124.03	0.00	-4.77	28.14	0	19.43	2	-8.31	2	-7.22	2.35	-11.44
97	98	125.60	0.00	-3.28	34.48	0	23.81	2	-10.19	2	-8.85	2.35	-14.01
98	98	125.60	0.00	-3.28	34.48	0	23.81	2	-10.19	2	-8.85	2.35	-14.01
98	99	127.18	0.00	-1.79	38.48	0	26.57	2	-11.37	2	-9.87	2.35	-15.64
99	99	127.18	0.00	-1.79	38.48	0	26.57	2	-11.37	2	-9.87	2.35	-15.64
100	100	128.75	0.00	-0.30	40.13	0	27.71	2	-11.86	2	-10.30	2.35	-16.31
101	101	130.33	0.00	-0.30	40.13	0	27.71	2	-11.86	2	-10.30	2.35	-16.31
101	101	130.33	0.00	1.19	39.43	0	27.23	2	-11.65	2	-10.12	2.35	-16.03
101	102	131.90	0.00	2.68	36.39	0	25.13	2	-10.75	2	-9.34	2.35	-14.79
102	102	131.90	0.00	2.68	36.39	0	25.13	2	-10.75	2	-9.34	2.35	-14.79
102	103	133.48	0.00	4.17	31.00	0	21.40	2	-9.16	2	-7.95	2.35	-12.60
103	103	133.48	0.00	4.17	31.00	0	21.40	2	-9.16	2	-7.95	2.35	-12.60
103	104	135.05	0.00	5.66	23.26	0	16.06	2	-6.87	2	-5.97	2.35	-9.45
104	104	135.05	-0.04	5.66	23.26	0	16.05	2	-6.89	2	-5.98	2.35	-9.47
104	105	136.63	-0.05	7.15	13.17	0	9.07	2	-3.91	2	-3.40	2.35	-5.37
105	105	136.63	-0.05	7.15	13.17	0	8.80	2	-4.72	2	-4.10	2.35	-6.16
105	106	138.20	-0.07	8.64	0.74	0	0.47	2	-0.29	2	-0.25	2.35	-0.37
106	106	138.20	0.00	8.64	0.74	0	0.50	2	-0.26	2	-0.23	2.35	-0.34
106	107	139.78	0.00	10.13	-14.03	0	-9.39	2	5.01	2	4.35	2.35	6.54
107	107	139.78	0.00	10.13	-14.03	0	-9.39	2	5.01	2	4.35	2.35	6.54
107	108	141.35	0.00	11.62	-31.16	0	-20.86	2	11.13	2	9.67	2.35	14.53
108	108	141.35	0.00	11.62	-31.16	0	-20.86	2	11.13	2	9.67	2.35	14.53
108	109	142.93	0.00	13.11	-50.63	0	-33.89	2	18.08	2	15.70	2.35	23.60
109	109	142.93	0.00	13.11	-50.63	0	-33.89	2	18.08	2	15.70	2.35	23.60
109	110	143.50	0.00	13.65	-58.32	0	-39.04	2	20.83	2	18.09	2.35	27.19
110	110	143.50	0.00	13.65	-58.32	0	-39.04	2	20.83	2	18.09	2.35	27.19
110	111	144.50	0.00	14.60	-72.45	0	-48.49	2	25.87	2	22.47	2.35	33.78
111	111	144.50	0.00	-14.20	-72.45	0	-48.49	2	25.87	2	22.47	2.35	33.78
111	112	145.50	0.00	-13.25	-58.72	0	-39.30	2	20.97	2	18.21	2.35	27.38
112	112	145.50	0.00	-13.25	-58.72	0	-39.30	2	20.97	2	18.21	2.35	27.38
112	113	145.68	0.00	-13.09	-56.42	0	-37.76	2	20.15	2	17.50	2.35	26.30
113	113	145.68	0.00	-13.09	-56.42	0	-37.76	2	20.15	2	17.50	2.35	26.30
113	114	146.85	0.00	-11.98	-41.69	0	-27.90	2	14.89	2	12.93	2.35	19.44
114	114	146.85	0.00	-11.98	-41.69	0	-27.90	2	14.89	2	12.93	2.35	19.44
114	115	148.03	0.00	-10.86	-28.27	0	-18.92	2	10.10	2	8.77	2.35	13.18

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonadovoladizos). Tensiones a tiempo To

1. HVOL

exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
115	115	148.03	0.00	-10.86	-28.27	0	-18.92	2	10.10	2	8.77	2.35	13.18
115	116	149.20	0.00	-9.75	-16.16	0	-10.82	2	5.77	2	5.01	2.35	7.53
116	116	149.20	-0.10	-9.75	-16.16	0	-10.85	2	5.74	2	4.98	2.35	7.50
116	117	150.38	-0.09	-8.64	-5.36	0	-3.62	2	1.88	2	1.63	2.35	2.47
117	117	150.38	-0.09	-8.64	-5.36	0	-3.74	2	1.55	2	1.35	2.35	2.15
117	118	151.55	-0.08	-7.53	4.14	0	2.83	2	-1.25	2	-1.09	2.35	-1.71
118	118	151.55	0.00	-7.53	4.14	0	2.86	2	-1.22	2	-1.06	2.35	-1.68
118	119	152.73	0.00	-6.42	12.34	0	8.52	2	-3.65	2	-3.17	2.35	-5.02
119	119	152.73	0.00	-6.42	12.34	0	8.52	2	-3.65	2	-3.17	2.35	-5.02
119	120	153.90	0.00	-5.31	19.22	0	13.27	2	-5.68	2	-4.93	2.35	-7.81
120	120	153.90	0.00	-5.31	19.22	0	13.27	2	-5.68	2	-4.93	2.35	-7.81
120	121	155.08	0.00	-4.19	24.81	0	17.13	2	-7.33	2	-6.37	2.35	-10.08
121	121	155.08	0.00	-4.19	24.81	0	17.13	2	-7.33	2	-6.37	2.35	-10.08
121	122	156.25	0.00	-3.08	29.08	0	20.08	2	-8.59	2	-7.46	2.35	-11.82
122	122	156.25	0.00	-3.08	29.08	0	20.08	2	-8.59	2	-7.46	2.35	-11.82
122	123	157.43	0.00	-1.97	32.05	0	22.13	2	-9.47	2	-8.22	2.35	-13.03
123	123	157.43	0.00	-1.97	32.05	0	22.13	2	-9.47	2	-8.22	2.35	-13.03
123	124	158.60	0.00	-0.86	33.71	0	23.28	2	-9.96	2	-8.65	2.35	-13.70
124	124	158.60	0.00	-0.86	33.71	0	23.28	2	-9.96	2	-8.65	2.35	-13.70
124	125	159.78	0.00	0.25	34.07	0	23.52	2	-10.07	2	-8.74	2.35	-13.85
125	125	159.78	0.00	0.25	34.07	0	23.52	2	-10.07	2	-8.74	2.35	-13.85
125	126	160.95	0.00	1.36	33.12	0	22.87	2	-9.78	2	-8.50	2.35	-13.46
126	126	160.95	0.00	1.36	33.12	0	22.87	2	-9.78	2	-8.50	2.35	-13.46
126	127	162.13	0.00	2.47	30.87	0	21.32	2	-9.12	2	-7.92	2.35	-12.55
127	127	162.13	0.00	2.47	30.87	0	21.32	2	-9.12	2	-7.92	2.35	-12.55
127	128	163.30	0.00	3.59	27.31	0	18.86	2	-8.07	2	-7.01	2.35	-11.10
128	128	163.30	0.00	3.59	27.31	0	18.86	2	-8.07	2	-7.01	2.35	-11.10
128	129	164.48	0.00	4.70	22.44	0	15.49	2	-6.63	2	-5.76	2.35	-9.12
129	129	164.48	0.00	4.70	22.44	0	15.49	2	-6.63	2	-5.76	2.35	-9.12
129	130	165.65	0.00	5.81	16.26	0	11.23	2	-4.80	2	-4.17	2.35	-6.61
130	130	165.65	0.00	5.81	16.26	0	11.23	2	-4.80	2	-4.17	2.35	-6.61
130	131	166.83	0.00	6.92	8.79	0	6.07	2	-2.60	2	-2.26	2.35	-3.57
131	131	166.83	0.00	6.92	8.79	0	6.07	2	-2.60	2	-2.26	2.35	-3.57
131	132	167.00	0.00	7.09	7.56	0	5.22	2	-2.23	2	-1.94	2.35	-3.07
132	132	167.00	0.00	7.09	7.56	0	5.22	2	-2.23	2	-1.94	2.35	-3.07
132	133	168.00	0.00	8.03	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

(Hormigonado voladizos). Tensiones a tiempo To

HVOL

y exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	-1.19	39.37	0	27.18	2	-11.63	2	-10.10	2.35	-16.00
77	78	97.25	0.00	0.30	40.07	0	27.67	2	-11.84	2	-10.28	2.35	-16.29
78	78	97.25	0.00	0.30	40.07	0	27.67	2	-11.84	2	-10.28	2.35	-16.29
78	79	98.83	0.00	1.79	38.43	0	26.54	2	-11.35	2	-9.86	2.35	-15.62
79	79	98.83	0.00	1.79	38.43	0	26.54	2	-11.35	2	-9.86	2.35	-15.62
79	80	100.40	0.00	3.28	34.44	0	23.78	2	-10.17	2	-8.84	2.35	-14.00
80	80	100.40	0.00	3.28	34.44	0	23.78	2	-10.17	2	-8.84	2.35	-14.00
80	81	101.98	0.00	4.77	28.10	0	19.40	2	-8.30	2	-7.21	2.35	-11.42
81	81	101.98	0.00	4.77	28.10	0	19.40	2	-8.30	2	-7.21	2.35	-11.42
81	82	103.55	0.00	6.26	19.42	0	13.41	2	-5.74	2	-4.98	2.35	-7.89
82	82	103.55	-0.05	6.26	19.42	0	13.39	2	-5.76	2	-5.00	2.35	-7.91
82	83	105.13	-0.06	7.75	8.39	0	5.77	2	-2.50	2	-2.17	2.35	-3.43
83	83	105.13	-0.06	7.75	8.39	0	5.59	2	-3.02	2	-2.62	2.35	-3.93
83	84	106.70	-0.07	9.24	-4.99	0	-3.36	2	1.76	2	1.53	2.35	2.30
84	84	106.70	0.00	9.24	-4.99	0	-3.34	2	1.78	2	1.55	2.35	2.33
84	85	108.28	0.00	10.73	-20.71	0	-13.86	2	7.40	2	6.42	2.35	9.65
85	85	108.28	0.00	10.73	-20.71	0	-13.86	2	7.40	2	6.42	2.35	9.65
85	86	109.85	0.00	12.22	-38.78	0	-25.96	2	13.85	2	12.03	2.35	18.08
86	86	109.85	0.00	12.22	-38.78	0	-25.96	2	13.85	2	12.03	2.35	18.08
86	87	111.43	0.00	13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
87	87	111.43	0.00	13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
87	88	112.00	0.00	14.25	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
88	88	112.00	0.00	14.25	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
88	89	113.00	0.00	15.20	-81.97	0	-54.87	2	29.27	2	25.43	2.35	38.21
89	1089	113.00	0.00	-15.20	-81.97	0	-54.87	2	29.27	2	25.43	2.35	38.21
89	90	114.00	0.00	-14.26	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
90	90	114.00	0.00	-14.26	-67.24	0	-45.01	2	24.01	2	20.86	2.35	31.35
90	91	114.58	0.00	-13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
91	91	114.58	0.00	-13.71	-59.20	0	-39.62	2	21.14	2	18.36	2.35	27.60
91	92	116.15	0.00	-12.22	-38.77	0	-25.95	2	13.85	2	12.03	2.35	18.07
92	92	116.15	0.00	-12.22	-38.77	0	-25.95	2	13.85	2	12.03	2.35	18.07
92	93	117.73	0.00	-10.73	-20.70	0	-13.86	2	7.39	2	6.42	2.35	9.65
93	93	117.73	0.00	-10.73	-20.70	0	-13.86	2	7.39	2	6.42	2.35	9.65
93	94	119.30	0.00	-9.24	-4.97	0	-3.33	2	1.77	2	1.54	2.35	2.32
94	94	119.30	-0.07	-9.24	-4.97	0	-3.35	2	1.75	2	1.52	2.35	2.30
94	95	120.88	-0.06	-7.75	8.41	0	5.61	2	-3.02	2	-2.63	2.35	-3.94
95	95	120.88	-0.06	-7.75	8.41	0	5.78	2	-2.51	2	-2.18	2.35	-3.44
95	96	122.45	-0.05	-6.26	19.45	0	13.41	2	-5.77	2	-5.01	2.35	-7.92
96	96	122.45	0.00	-6.26	19.45	0	13.43	2	-5.75	2	-4.99	2.35	-7.91
96	97	124.03	0.00	-4.77	28.14	0	19.43	2	-8.31	2	-7.22	2.35	-11.44
97	97	124.03	0.00	-4.77	28.14	0	19.43	2	-8.31	2	-7.22	2.35	-11.44
97	98	125.60	0.00	-3.28	34.48	0	23.81	2	-10.19	2	-8.85	2.35	-14.01
98	98	125.60	0.00	-3.28	34.48	0	23.81	2	-10.19	2	-8.85	2.35	-14.01
98	99	127.18	0.00	-1.79	38.48	0	26.57	2	-11.37	2	-9.87	2.35	-15.64
99	99	127.18	0.00	-1.79	38.48	0	26.57	2	-11.37	2	-9.87	2.35	-15.64
100	100	128.75	0.00	-0.30	40.13	0	27.71	2	-11.86	2	-10.30	2.35	-16.31
101	101	130.33	0.00	-0.30	40.13	0	27.71	2	-11.86	2	-10.30	2.35	-16.31
101	101	130.33	0.00	1.19	39.43	0	27.23	2	-11.65	2	-10.12	2.35	-16.03
101	102	131.90	0.00	1.19	39.43	0	27.23	2	-11.65	2	-10.12	2.35	-16.03
102	102	131.90	0.00	2.68	36.39	0	25.13	2	-10.75	2	-9.34	2.35	-14.79
102	103	133.48	0.00	2.68	36.39	0	25.13	2	-10.75	2	-9.34	2.35	-14.79
103	103	133.48	0.00	4.17	31.00	0	21.40	2	-9.16	2	-7.95	2.35	-12.60
103	104	135.05	0.00	4.17	31.00	0	21.40	2	-9.16	2	-7.95	2.35	-12.60
104	104	135.05	-0.04	5.66	23.26	0	16.05	2	-6.87	2	-5.97	2.35	-9.45
104	105	136.63	-0.05	5.66	23.26	0	16.05	2	-6.89	2	-5.98	2.35	-9.47
105	105	136.63	-0.05	7.15	13.17	0	9.07	2	-3.91	2	-3.40	2.35	-5.37
105	106	138.20	-0.07	7.15	13.17	0	8.80	2	-4.72	2	-4.10	2.35	-6.16
106	106	138.20	0.00	8.64	0.74	0	0.47	2	-0.29	2	-0.25	2.35	-0.37
106	107	139.78	0.00	8.64	0.74	0	0.50	2	-0.26	2	-0.23	2.35	-0.34
107	107	139.78	0.00	10.13	-14.03	0	-9.39	2	5.01	2	4.35	2.35	6.54
107	108	141.35	0.00	10.13	-14.03	0	-9.39	2	5.01	2	4.35	2.35	6.54
108	108	141.35	0.00	11.62	-31.16	0	-20.86	2	11.13	2	9.67	2.35	14.53
108	109	142.93	0.00	11.62	-31.16	0	-20.86	2	11.13	2	9.67	2.35	14.53
109	109	142.93	0.00	13.11	-50.63	0	-33.89	2	18.08	2	15.70	2.35	23.60
109	110	143.50	0.00	13.11	-50.63	0	-33.89	2	18.08	2	15.70	2.35	23.60
110	110	143.50	0.00	13.65	-58.32	0	-39.04	2	20.83	2	18.09	2.35	27.19
110	111	144.50	0.00	13.65	-58.32	0	-39.04	2	20.83	2	18.09	2.35	27.19
111	111	144.50	0.00	14.60	-72.45	0	-48.49	2	25.87	2	22.47	2.35	33.78
111	112	145.50	0.00	-14.20	-72.45	0	-48.49	2	25.87	2	22.47	2.35	33.78
112	112	145.50	0.00	-13.25	-58.72	0	-39.30	2	20.97	2	18.21	2.35	27.38
113	113	145.68	0.00	-13.25	-58.72	0	-39.30	2	20.97	2	18.21	2.35	27.38
113	113	145.68	0.00	-13.09	-56.42	0	-37.76	2	20.15	2	17.50	2.35	26.30
113	114	146.85	0.00	-13.09	-56.42	0	-37.76	2	20.15	2	17.50	2.35	26.30
114	114	146.85	0.00	-11.98	-41.69	0	-27.90	2	14.89	2	12.93	2.35	19.44
114	115	148.03	0.00	-11.98	-41.69	0	-27.90	2	14.89	2	12.93	2.35	19.44
114	115	148.03	0.00	-10.86	-28.27	0	-18.92	2	10.10	2	8.77	2.35	13.18

CÁLCULO TENSIONAL

Hipótesis de cálculo:

HVOL.To

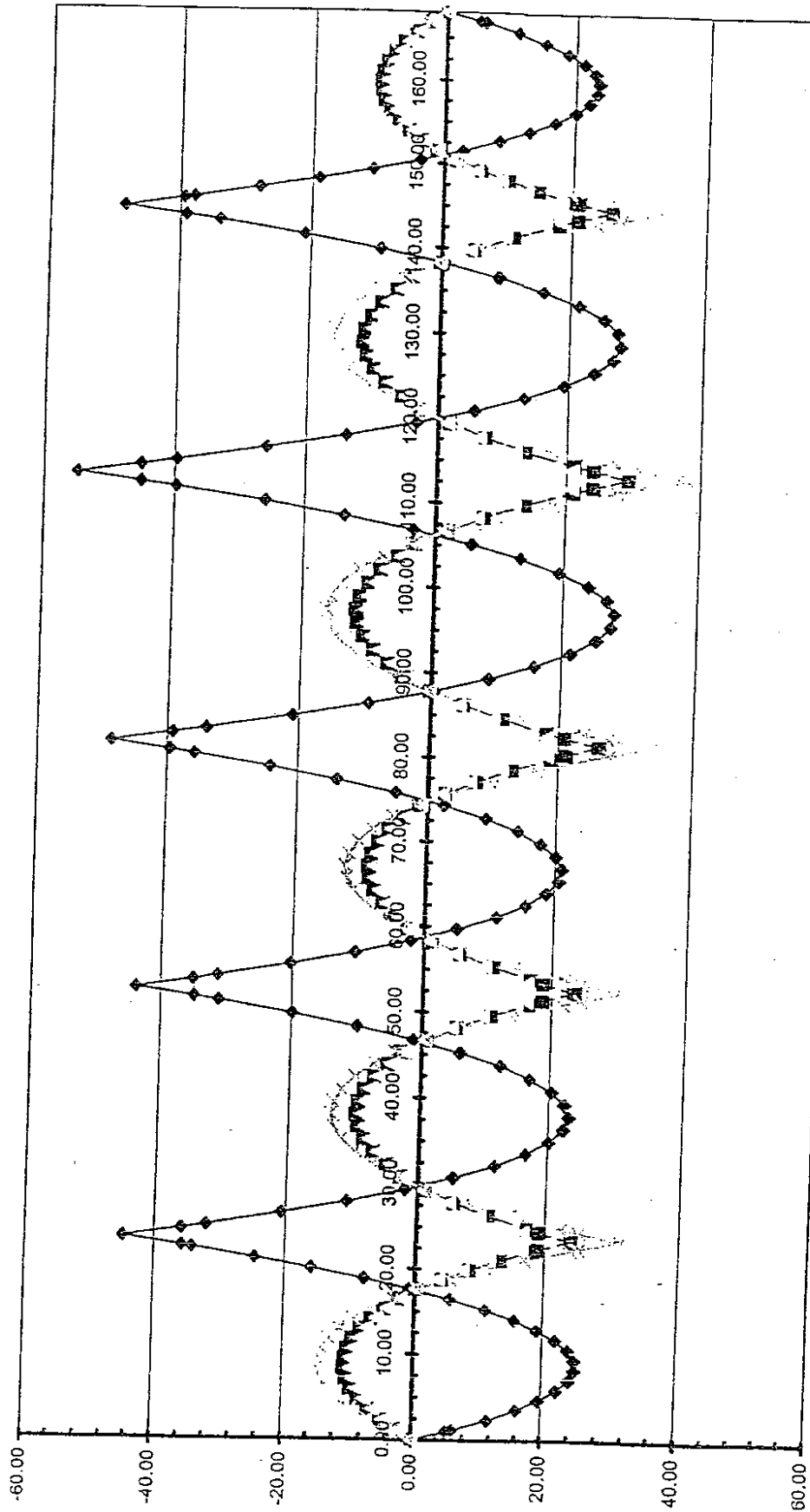
(Hormigonado voladizos). Tensiones a tiempo To

HVOL

y exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-10.86	-28.27	0	-18.92	2	10.10	2	8.77	2.35	13.18
115	116	149.20	0.00	-9.75	-16.16	0	-10.82	2	5.77	2	5.01	2.35	7.53
116	116	149.20	-0.10	-9.75	-16.16	0	-10.85	2	5.74	2	4.98	2.35	7.50
116	117	150.38	-0.09	-8.64	-5.36	0	-3.62	2	1.88	2	1.63	2.35	2.47
117	117	150.38	-0.09	-8.64	-5.36	0	-3.74	2	1.55	2	1.35	2.35	2.15
117	118	151.55	-0.08	-7.53	4.14	0	2.83	2	-1.25	2	-1.09	2.35	-1.71
118	118	151.55	0.00	-7.53	4.14	0	2.86	2	-1.22	2	-1.06	2.35	-1.68
118	119	152.73	0.00	-6.42	12.34	0	8.52	2	-3.65	2	-3.17	2.35	-5.02
119	119	152.73	0.00	-6.42	12.34	0	8.52	2	-3.65	2	-3.17	2.35	-5.02
119	120	153.90	0.00	-5.31	19.22	0	13.27	2	-5.68	2	-4.93	2.35	-7.81
120	120	153.90	0.00	-5.31	19.22	0	13.27	2	-5.68	2	-4.93	2.35	-7.81
120	121	155.08	0.00	-4.19	24.81	0	17.13	2	-7.33	2	-6.37	2.35	-10.08
121	121	155.08	0.00	-4.19	24.81	0	17.13	2	-7.33	2	-6.37	2.35	-10.08
121	122	156.25	0.00	-3.08	29.08	0	20.08	2	-8.59	2	-7.46	2.35	-11.82
122	122	156.25	0.00	-3.08	29.08	0	20.08	2	-8.59	2	-7.46	2.35	-11.82
122	123	157.43	0.00	-1.97	32.05	0	22.13	2	-9.47	2	-8.22	2.35	-13.03
123	123	157.43	0.00	-1.97	32.05	0	22.13	2	-9.47	2	-8.22	2.35	-13.03
123	124	158.60	0.00	-0.86	33.71	0	23.28	2	-9.96	2	-8.65	2.35	-13.70
124	124	158.60	0.00	-0.86	33.71	0	23.28	2	-9.96	2	-8.65	2.35	-13.70
124	125	159.78	0.00	0.25	34.07	0	23.52	2	-10.07	2	-8.74	2.35	-13.85
125	125	159.78	0.00	0.25	34.07	0	23.52	2	-10.07	2	-8.74	2.35	-13.85
125	126	160.95	0.00	1.36	33.12	0	22.87	2	-9.78	2	-8.50	2.35	-13.46
126	126	160.95	0.00	1.36	33.12	0	22.87	2	-9.78	2	-8.50	2.35	-13.46
126	127	162.13	0.00	2.47	30.87	0	21.32	2	-9.12	2	-7.92	2.35	-12.55
127	127	162.13	0.00	2.47	30.87	0	21.32	2	-9.12	2	-7.92	2.35	-12.55
127	128	163.30	0.00	3.59	27.31	0	18.86	2	-8.07	2	-7.01	2.35	-11.10
128	128	163.30	0.00	3.59	27.31	0	18.86	2	-8.07	2	-7.01	2.35	-11.10
128	129	164.48	0.00	4.70	22.44	0	15.49	2	-6.63	2	-5.76	2.35	-9.12
129	129	164.48	0.00	4.70	22.44	0	15.49	2	-6.63	2	-5.76	2.35	-9.12
129	130	165.65	0.00	5.81	16.26	0	11.23	2	-4.80	2	-4.17	2.35	-6.61
130	130	165.65	0.00	5.81	16.26	0	11.23	2	-4.80	2	-4.17	2.35	-6.61
130	131	166.83	0.00	6.92	8.79	0	6.07	2	-2.60	2	-2.26	2.35	-3.57
131	131	166.83	0.00	6.92	8.79	0	6.07	2	-2.60	2	-2.26	2.35	-3.57
131	132	167.00	0.00	7.09	7.56	0	5.22	2	-2.23	2	-1.94	2.35	-3.07
132	132	167.00	0.00	7.09	7.56	0	5.22	2	-2.23	2	-1.94	2.35	-3.07
132	133	168.00	0.00	8.03	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

GRÁFICO DE TENSIONES



—●— InfCajón(kg/cm²) —■— SupCajón(kg/cm²) —▲— InfLosa(kg/cm²) —◆— SupLosa(kg/cm²)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

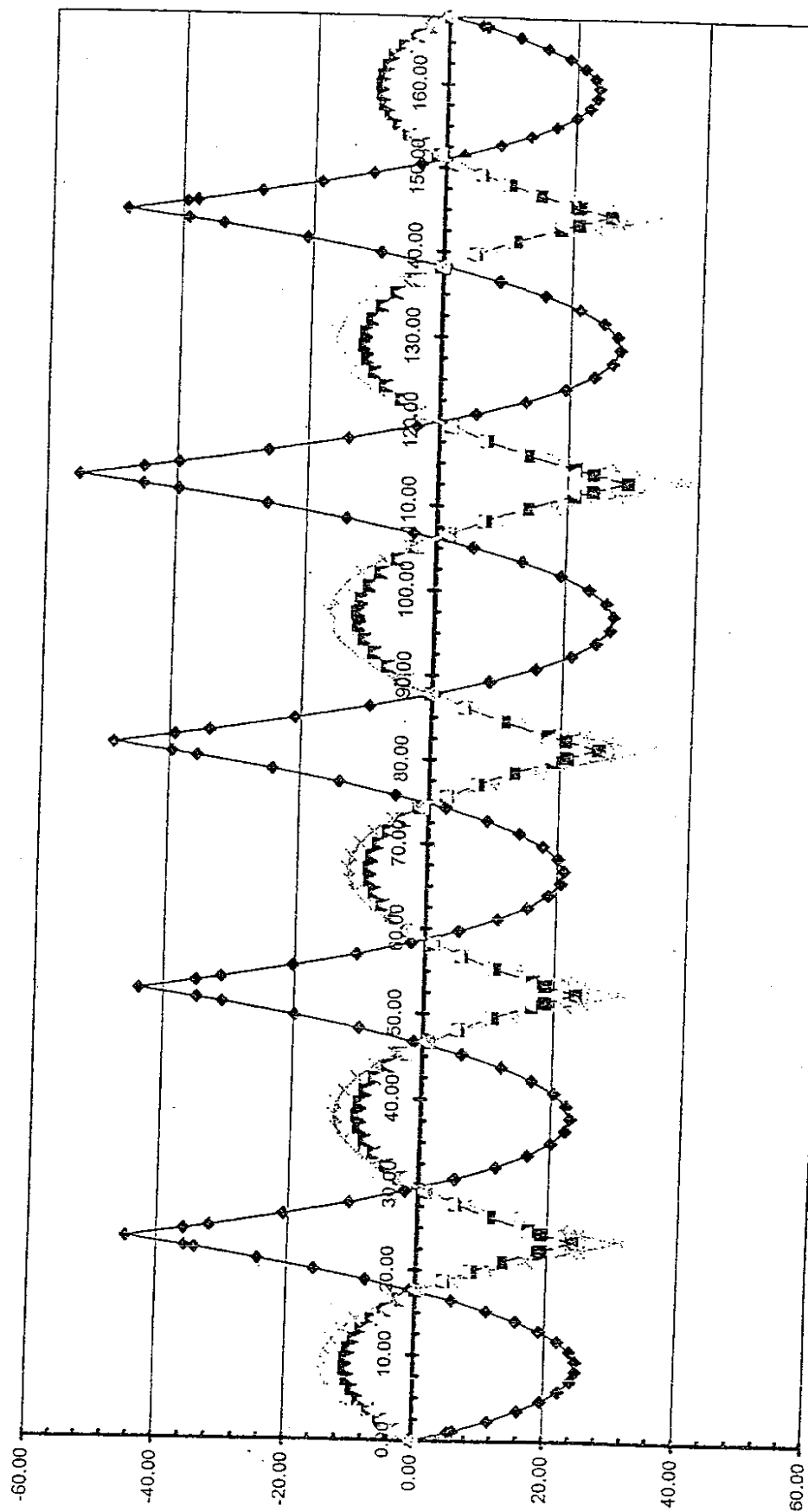
CMBAL.To

Carga Muerta(Balasto). Tensiones a tiempo To

1: CMBAL
ref. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	-40.10	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-35.73	37.91	0	25.65	2	-8.44	2	-7.33	2.35	-12.51
2	2	1.00	0.00	-35.73	37.91	0	25.65	2	-8.44	2	-7.33	2.35	-12.51
2	3	1.18	0.00	-34.96	44.10	0	29.84	2	-9.81	2	-8.52	2.35	-14.55
3	3	1.18	0.00	-34.96	44.10	0	29.84	2	-9.81	2	-8.52	2.35	-14.55
3	4	2.35	0.00	-29.82	82.16	0	55.59	2	-18.28	2	-15.88	2.35	-27.11
4	4	2.35	0.00	-29.82	82.16	0	55.59	2	-18.28	2	-15.88	2.35	-27.11
5	5	3.53	0.00	-24.69	114.19	0	77.26	2	-25.41	2	-22.07	2.35	-37.67
5	6	4.70	0.00	-24.69	114.19	0	77.26	2	-25.41	2	-22.07	2.35	-37.67
6	6	4.70	0.00	-19.55	140.18	0	94.84	2	-31.19	2	-27.09	2.35	-46.25
6	7	5.88	0.00	-14.41	160.13	0	108.34	2	-35.63	2	-30.95	2.35	-52.83
7	7	5.88	0.00	-14.41	160.13	0	108.34	2	-35.63	2	-30.95	2.35	-52.83
8	8	7.05	0.00	-9.28	174.05	0	117.75	2	-38.73	2	-33.64	2.35	-57.42
8	9	8.23	0.00	-9.28	174.05	0	117.75	2	-38.73	2	-33.64	2.35	-57.42
9	9	8.23	0.00	-4.14	181.93	0	123.08	2	-40.48	2	-35.16	2.35	-60.02
9	10	9.40	0.00	-4.14	181.93	0	123.08	2	-40.48	2	-35.16	2.35	-60.02
10	10	9.40	0.00	1.00	183.78	0	124.34	2	-40.89	2	-35.52	2.35	-60.63
10	11	10.58	0.00	1.00	183.78	0	124.34	2	-40.89	2	-35.52	2.35	-60.63
11	11	10.58	0.00	6.13	179.59	0	121.50	2	-39.96	2	-34.71	2.35	-59.25
11	12	11.75	0.00	6.13	179.59	0	121.50	2	-39.96	2	-34.71	2.35	-59.25
12	12	11.75	0.00	11.27	169.36	0	114.58	2	-37.68	2	-32.73	2.35	-55.87
12	13	12.93	0.00	11.27	169.36	0	114.58	2	-37.68	2	-32.73	2.35	-55.87
13	13	12.93	0.00	16.41	153.10	0	103.58	2	-34.07	2	-29.59	2.35	-50.51
13	14	14.10	0.00	16.41	153.10	0	103.58	2	-34.07	2	-29.59	2.35	-50.51
14	14	14.10	0.00	21.55	130.80	0	88.49	2	-29.10	2	-25.28	2.35	-43.15
14	15	15.28	0.00	21.55	130.80	0	88.49	2	-29.10	2	-25.28	2.35	-43.15
15	15	15.28	0.00	26.68	102.46	0	69.32	2	-22.80	2	-19.80	2.35	-33.80
15	16	16.45	0.00	26.68	102.46	0	69.32	2	-22.80	2	-19.80	2.35	-33.80
16	16	16.45	-0.38	31.82	68.09	0	46.07	2	-15.15	2	-13.16	2.35	-22.46
16	17	17.63	-0.44	31.82	68.09	0	45.94	2	-15.28	2	-13.27	2.35	-22.57
17	17	17.63	-0.44	36.96	27.69	0	18.59	2	-6.31	2	-5.48	2.35	-9.26
17	18	18.80	-0.50	36.96	27.69	0	18.15	2	-8.98	2	-7.80	2.35	-11.92
18	18	18.80	0.00	42.09	-18.76	0	-12.39	2	5.84	2	5.07	2.35	8.00
18	19	19.98	0.00	42.10	-18.76	0	-12.39	2	5.84	2	5.07	2.35	8.00
19	19	19.98	0.00	47.23	-71.24	0	-47.03	2	22.76	2	19.77	2.35	30.37
19	20	21.15	0.00	47.23	-71.24	0	-47.03	2	22.76	2	19.77	2.35	30.37
20	20	21.15	0.00	52.37	-129.75	0	-85.66	2	41.45	2	36.00	2.35	55.32
20	21	22.33	0.00	52.37	-129.75	0	-85.66	2	41.45	2	36.00	2.35	55.32
21	21	22.33	0.00	57.51	-194.31	0	-128.29	2	62.07	2	53.91	2.35	82.85
21	22	22.50	0.00	57.51	-194.31	0	-128.29	2	62.07	2	53.91	2.35	82.85
22	22	22.50	0.00	58.27	-204.44	0	-134.98	2	65.31	2	56.72	2.35	87.17
22	23	23.50	0.00	58.27	-204.44	0	-134.98	2	65.31	2	56.72	2.35	87.17
23	1023	23.50	0.00	62.64	-264.89	0	-174.89	2	84.62	2	73.50	2.35	112.94
23	24	24.50	0.00	-63.36	-264.89	0	-174.89	2	84.62	2	73.50	2.35	112.94
24	24	24.50	0.00	-58.99	-203.72	0	-134.50	2	65.08	2	56.52	2.35	86.86
24	25	24.95	0.00	-58.99	-203.72	0	-134.50	2	65.08	2	56.52	2.35	86.86
25	25	24.95	0.00	-57.03	-177.61	0	-117.26	2	56.74	2	49.28	2.35	75.73
25	26	26.40	0.00	-57.03	-177.61	0	-117.26	2	56.74	2	49.28	2.35	75.73
26	26	26.40	0.00	-50.69	-99.52	0	-65.71	2	31.79	2	27.61	2.35	42.43
26	27	27.85	0.00	-50.69	-99.52	0	-65.71	2	31.79	2	27.61	2.35	42.43
27	27	27.85	0.00	-44.35	-30.62	0	-20.22	2	9.78	2	8.50	2.35	13.06
27	28	29.30	0.00	-44.35	-30.62	0	-20.22	2	9.78	2	8.50	2.35	13.06
28	28	29.30	-0.36	-38.01	29.08	0	19.20	2	-9.29	2	-8.07	2.35	-12.40
28	29	30.75	-0.30	-38.01	29.08	0	19.09	2	-9.40	2	-8.16	2.35	-12.49
29	29	30.75	-0.30	-31.67	79.60	0	52.46	2	-25.52	2	-22.17	2.35	-34.02
29	30	32.20	-0.24	-31.67	79.60	0	53.75	2	-17.81	2	-15.47	2.35	-26.35
30	30	32.20	0.00	-25.33	120.92	0	81.73	2	-26.99	2	-23.44	2.35	-39.96
30	31	33.65	0.00	-25.33	120.92	0	81.73	2	-26.99	2	-23.44	2.35	-39.96
31	31	33.65	0.00	-18.99	153.05	0	103.55	2	-34.06	2	-29.58	2.35	-50.49
31	32	35.10	0.00	-18.99	153.05	0	103.55	2	-34.06	2	-29.58	2.35	-50.49
32	32	35.10	0.00	-12.65	175.99	0	119.07	2	-39.16	2	-34.01	2.35	-58.06
32	33	36.55	0.00	-12.65	175.99	0	119.07	2	-39.16	2	-34.01	2.35	-58.06
33	33	36.55	0.00	-6.31	189.73	0	128.36	2	-42.22	2	-36.67	2.35	-62.59
33	34	38.00	0.00	-6.31	189.73	0	128.36	2	-42.22	2	-36.67	2.35	-62.59
34	34	38.00	0.00	0.03	194.28	0	131.44	2	-43.23	2	-37.55	2.35	-64.09
34	35	39.45	0.00	0.03	194.28	0	131.44	2	-43.23	2	-37.55	2.35	-64.09
35	35	39.45	0.00	6.37	189.64	0	128.30	2	-42.20	2	-36.65	2.35	-62.56
35	36	40.90	0.00	6.37	189.64	0	128.30	2	-42.20	2	-36.65	2.35	-62.56
36	36	40.90	0.00	12.71	175.81	0	118.94	2	-39.12	2	-33.98	2.35	-58.00
36	37	42.35	0.00	12.71	175.81	0	118.94	2	-39.12	2	-33.98	2.35	-58.00
37	37	42.35	0.00	19.05	152.79	0	103.37	2	-34.00	2	-29.53	2.35	-50.41
37	38	43.80	0.00	19.05	152.79	0	103.37	2	-34.00	2	-29.53	2.35	-50.41
38	38	43.80	-0.24	25.39	120.57	0	81.57	2	-26.83	2	-23.30	2.35	-39.85
38	39	45.25	-0.30	25.39	120.57	0	81.49	2	-26.91	2	-23.37	2.35	-39.85
				31.73	79.17	0	53.46	2	-17.71	2	-15.39	2.35	-26.20

GRÁFICO DE TENSIONES



—●— InfCajón(t/m2) —■— SupCajón(t/m2) —○— InfLosa(t/m2) —□— SupLosa(t/m2)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMBAL.To

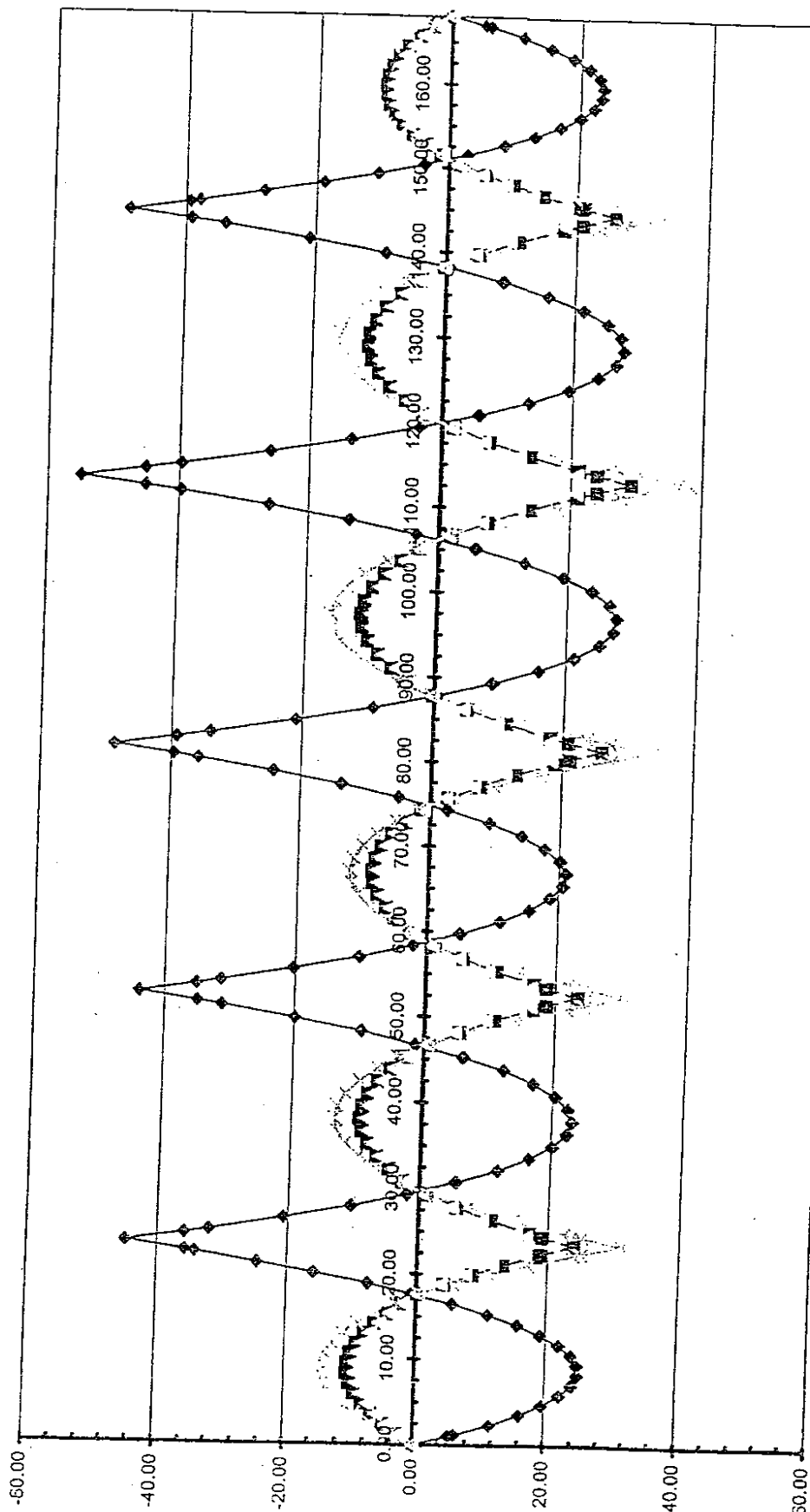
Carga Muerta(Balasto). Tensiones a tiempo To

1.1)CMBAL

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	-40.10	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-35.73	37.91	0	25.65	2	-8.44	2	-7.33	2.35	-12.51
2	2	1.00	0.00	-35.73	37.91	0	25.65	2	-8.44	2	-7.33	2.35	-12.51
2	3	1.18	0.00	-34.96	44.10	0	29.84	2	-9.81	2	-8.52	2.35	-14.55
3	3	1.18	0.00	-34.96	44.10	0	29.84	2	-9.81	2	-8.52	2.35	-14.55
3	4	2.35	0.00	-29.82	82.16	0	55.59	2	-18.28	2	-15.88	2.35	-27.11
4	4	2.35	0.00	-29.82	82.16	0	55.59	2	-18.28	2	-15.88	2.35	-27.11
4	5	3.53	0.00	-24.69	114.19	0	77.26	2	-25.41	2	-22.07	2.35	-37.67
5	5	3.53	0.00	-24.69	114.19	0	77.26	2	-25.41	2	-22.07	2.35	-37.67
5	6	4.70	0.00	-19.55	140.18	0	94.84	2	-31.19	2	-27.09	2.35	-46.25
6	6	4.70	0.00	-19.55	140.18	0	94.84	2	-31.19	2	-27.09	2.35	-46.25
6	7	5.88	0.00	-14.41	160.13	0	108.34	2	-35.63	2	-30.95	2.35	-52.83
7	7	5.88	0.00	-14.41	160.13	0	108.34	2	-35.63	2	-30.95	2.35	-52.83
7	8	7.05	0.00	-9.28	174.05	0	117.75	2	-38.73	2	-33.64	2.35	-57.42
8	8	7.05	0.00	-9.28	174.05	0	117.75	2	-38.73	2	-33.64	2.35	-57.42
8	9	8.23	0.00	-4.14	181.93	0	123.08	2	-40.48	2	-35.16	2.35	-60.02
9	9	8.23	0.00	-4.14	181.93	0	123.08	2	-40.48	2	-35.16	2.35	-60.02
9	10	9.40	0.00	1.00	183.78	0	124.34	2	-40.89	2	-35.52	2.35	-60.63
10	10	9.40	0.00	1.00	183.78	0	124.34	2	-40.89	2	-35.52	2.35	-60.63
10	11	10.58	0.00	6.13	179.59	0	121.50	2	-39.96	2	-34.71	2.35	-59.25
11	11	10.58	0.00	6.13	179.59	0	121.50	2	-39.96	2	-34.71	2.35	-59.25
11	12	11.75	0.00	11.27	169.36	0	114.58	2	-37.68	2	-32.73	2.35	-55.87
12	12	11.75	0.00	11.27	169.36	0	114.58	2	-37.68	2	-32.73	2.35	-55.87
12	13	12.93	0.00	16.41	153.10	0	103.58	2	-34.07	2	-29.59	2.35	-50.51
13	13	12.93	0.00	16.41	153.10	0	103.58	2	-34.07	2	-29.59	2.35	-50.51
13	14	14.10	0.00	21.55	130.80	0	88.49	2	-29.10	2	-25.28	2.35	-43.15
14	14	14.10	0.00	21.55	130.80	0	88.49	2	-29.10	2	-25.28	2.35	-43.15
14	15	15.28	0.00	26.68	102.46	0	69.32	2	-22.80	2	-19.80	2.35	-33.80
15	15	15.28	0.00	26.68	102.46	0	69.32	2	-22.80	2	-19.80	2.35	-33.80
15	16	16.45	-0.38	31.82	68.09	0	46.07	2	-15.15	2	-13.16	2.35	-22.46
16	16	16.45	-0.38	31.82	68.09	0	46.07	2	-15.15	2	-13.16	2.35	-22.46
16	17	17.63	-0.44	36.96	27.69	0	18.59	2	-6.31	2	-5.48	2.35	-9.26
17	17	17.63	-0.44	36.96	27.69	0	18.59	2	-6.31	2	-5.48	2.35	-9.26
17	18	18.80	-0.50	42.09	-18.76	0	-12.54	2	5.84	2	5.07	2.35	8.00
18	18	18.80	-0.50	42.09	-18.76	0	-12.54	2	5.84	2	5.07	2.35	8.00
18	19	19.98	0.00	47.23	-71.24	0	-47.03	2	22.76	2	19.77	2.35	30.37
19	19	19.98	0.00	47.23	-71.24	0	-47.03	2	22.76	2	19.77	2.35	30.37
19	20	21.15	0.00	52.37	-129.75	0	-85.66	2	41.45	2	36.00	2.35	55.32
20	20	21.15	0.00	52.37	-129.75	0	-85.66	2	41.45	2	36.00	2.35	55.32
20	21	22.33	0.00	57.51	-194.31	0	-128.29	2	62.07	2	53.91	2.35	82.85
21	21	22.33	0.00	57.51	-194.31	0	-128.29	2	62.07	2	53.91	2.35	82.85
21	22	22.50	0.00	58.27	-204.44	0	-134.98	2	65.31	2	56.72	2.35	87.17
22	22	22.50	0.00	58.27	-204.44	0	-134.98	2	65.31	2	56.72	2.35	87.17
22	23	23.50	0.00	62.64	-264.89	0	-174.89	2	84.62	2	73.50	2.35	112.94
23	1023	23.50	0.00	-63.36	-264.89	0	-174.89	2	84.62	2	73.50	2.35	112.94
23	24	24.50	0.00	-58.99	-203.72	0	-134.50	2	65.08	2	56.52	2.35	86.86
24	24	24.50	0.00	-58.99	-203.72	0	-134.50	2	65.08	2	56.52	2.35	86.86
24	25	24.95	0.00	-57.03	-177.61	0	-117.26	2	56.74	2	49.28	2.35	75.73
25	25	24.95	0.00	-57.03	-177.61	0	-117.26	2	56.74	2	49.28	2.35	75.73
25	26	26.40	0.00	-50.69	-99.52	0	-65.71	2	31.79	2	27.61	2.35	42.43
26	26	26.40	0.00	-50.69	-99.52	0	-65.71	2	31.79	2	27.61	2.35	42.43
26	27	27.85	0.00	-44.35	-30.62	0	-20.22	2	9.78	2	8.50	2.35	13.06
27	27	27.85	0.00	-44.35	-30.62	0	-20.22	2	9.78	2	8.50	2.35	13.06
27	28	29.30	-0.36	-38.01	29.08	0	19.20	2	-9.29	2	-8.07	2.35	-12.40
28	28	29.30	-0.36	-38.01	29.08	0	19.20	2	-9.29	2	-8.07	2.35	-12.40
28	29	30.75	-0.30	-31.67	79.60	0	52.46	2	-25.52	2	-22.17	2.35	-34.02
29	29	30.75	-0.30	-31.67	79.60	0	52.46	2	-25.52	2	-22.17	2.35	-34.02
29	30	32.20	-0.24	-25.33	120.92	0	81.73	2	-17.81	2	-15.47	2.35	-26.35
30	30	32.20	-0.24	-25.33	120.92	0	81.73	2	-17.81	2	-15.47	2.35	-26.35
30	31	33.65	0.00	-18.99	153.05	0	103.55	2	-26.99	2	-23.37	2.35	-39.96
31	31	33.65	0.00	-18.99	153.05	0	103.55	2	-26.99	2	-23.37	2.35	-39.96
31	32	35.10	0.00	-12.65	175.99	0	119.07	2	-34.06	2	-29.58	2.35	-50.49
32	32	35.10	0.00	-12.65	175.99	0	119.07	2	-34.06	2	-29.58	2.35	-50.49
32	33	36.55	0.00	-6.31	189.73	0	128.36	2	-39.16	2	-34.01	2.35	-58.06
33	33	36.55	0.00	-6.31	189.73	0	128.36	2	-39.16	2	-34.01	2.35	-58.06
33	34	38.00	0.00	0.03	194.28	0	131.44	2	-42.22	2	-36.67	2.35	-62.59
34	34	38.00	0.00	0.03	194.28	0	131.44	2	-42.22	2	-36.67	2.35	-62.59
34	35	39.45	0.00	6.37	189.64	0	128.30	2	-43.23	2	-37.55	2.35	-64.09
35	35	39.45	0.00	6.37	189.64	0	128.30	2	-43.23	2	-37.55	2.35	-64.09
35	36	40.90	0.00	12.71	175.81	0	118.94	2	-42.20	2	-36.65	2.35	-62.56
36	36	40.90	0.00	12.71	175.81	0	118.94	2	-42.20	2	-36.65	2.35	-62.56
36	37	42.35	0.00	19.05	152.79	0	103.37	2	-39.12	2	-33.98	2.35	-58.00
37	37	42.35	0.00	19.05	152.79	0	103.37	2	-39.12	2	-33.98	2.35	-58.00
37	38	43.80	0.00	25.39	120.57	0	81.57	2	-34.00	2	-29.53	2.35	-50.41
38	38	43.80	0.00	25.39	120.57	0	81.57	2	-34.00	2	-29.53	2.35	-50.41
38	39	45.25	-0.30	31.73	79.17	0	53.46	2	-26.83	2	-23.30	2.35	-39.78
						0		2	-26.91	2	-23.37	2.35	-39.85
						0		2	-17.71	2	-15.39	2.35	-28.20

GRÁFICO DE TENSIONES



—●— InfCajón(kg/cm²) —■— SupCajón(kg/cm²) —...△— InfLosa(kg/cm²) —-·-·- SupLosa(kg/cm²)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMBAL.To

Carga Muerta(Balasto). Tensiones a tiempo To

1. CMBAL

Def. etc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	-40.10	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-35.73	37.91	0	25.65	2	-8.44	2	-7.33	2.35	-12.51
2	2	1.00	0.00	-35.73	37.91	0	25.65	2	-8.44	2	-7.33	2.35	-12.51
2	3	1.18	0.00	-34.96	44.10	0	29.84	2	-9.81	2	-8.52	2.35	-14.55
3	3	1.18	0.00	-34.96	44.10	0	29.84	2	-9.81	2	-8.52	2.35	-14.55
3	4	2.35	0.00	-29.82	82.16	0	55.59	2	-18.28	2	-15.88	2.35	-27.11
4	4	2.35	0.00	-29.82	82.16	0	55.59	2	-18.28	2	-15.88	2.35	-27.11
4	5	3.53	0.00	-24.69	114.19	0	77.26	2	-25.41	2	-22.07	2.35	-37.67
5	5	3.53	0.00	-24.69	114.19	0	77.26	2	-25.41	2	-22.07	2.35	-37.67
5	6	4.70	0.00	-19.55	140.18	0	94.84	2	-31.19	2	-27.09	2.35	-46.25
6	6	4.70	0.00	-19.55	140.18	0	94.84	2	-31.19	2	-27.09	2.35	-46.25
6	7	5.88	0.00	-14.41	160.13	0	108.34	2	-35.63	2	-30.95	2.35	-52.83
7	7	5.88	0.00	-14.41	160.13	0	108.34	2	-35.63	2	-30.95	2.35	-52.83
7	8	7.05	0.00	-9.28	174.05	0	117.75	2	-38.73	2	-33.64	2.35	-57.42
8	8	7.05	0.00	-9.28	174.05	0	117.75	2	-38.73	2	-33.64	2.35	-57.42
8	9	8.23	0.00	-4.14	181.93	0	123.08	2	-40.48	2	-35.16	2.35	-60.02
9	9	8.23	0.00	-4.14	181.93	0	123.08	2	-40.48	2	-35.16	2.35	-60.02
9	10	9.40	0.00	1.00	183.78	0	124.34	2	-40.89	2	-35.52	2.35	-60.63
10	10	9.40	0.00	1.00	183.78	0	124.34	2	-40.89	2	-35.52	2.35	-60.63
10	11	10.58	0.00	6.13	179.59	0	121.50	2	-39.96	2	-34.71	2.35	-59.25
11	11	10.58	0.00	6.13	179.59	0	121.50	2	-39.96	2	-34.71	2.35	-59.25
11	12	11.75	0.00	11.27	169.36	0	114.58	2	-37.68	2	-32.73	2.35	-55.87
12	12	11.75	0.00	11.27	169.36	0	114.58	2	-37.68	2	-32.73	2.35	-55.87
12	13	12.93	0.00	16.41	153.10	0	103.58	2	-34.07	2	-29.59	2.35	-50.51
13	13	12.93	0.00	16.41	153.10	0	103.58	2	-34.07	2	-29.59	2.35	-50.51
13	14	14.10	0.00	21.55	130.80	0	88.49	2	-29.10	2	-25.28	2.35	-43.15
14	14	14.10	0.00	21.55	130.80	0	88.49	2	-29.10	2	-25.28	2.35	-43.15
14	15	15.28	0.00	26.68	102.46	0	69.32	2	-22.80	2	-19.80	2.35	-33.80
15	15	15.28	0.00	26.68	102.46	0	69.32	2	-22.80	2	-19.80	2.35	-33.80
15	16	16.45	0.00	31.82	68.09	0	46.07	2	-15.15	2	-13.16	2.35	-22.46
16	16	16.45	-0.38	31.82	68.09	0	46.07	2	-15.15	2	-13.16	2.35	-22.46
16	17	17.63	-0.44	36.96	27.69	0	18.59	2	-6.31	2	-5.48	2.35	-9.26
17	17	17.63	-0.44	36.96	27.69	0	18.59	2	-6.31	2	-5.48	2.35	-9.26
17	18	18.80	-0.50	42.09	-18.76	0	-12.54	2	-8.98	2	-7.80	2.35	-11.92
18	18	18.80	0.00	42.10	-18.76	0	-12.39	2	5.84	2	5.07	2.35	7.87
18	19	19.98	0.00	47.23	-71.24	0	-47.03	2	5.99	2	5.21	2.35	8.00
19	19	19.98	0.00	47.23	-71.24	0	-47.03	2	22.76	2	19.77	2.35	30.37
19	20	21.15	0.00	52.37	-129.75	0	-47.03	2	22.76	2	19.77	2.35	30.37
20	20	21.15	0.00	52.37	-129.75	0	-47.03	2	41.45	2	36.00	2.35	55.32
20	21	22.33	0.00	57.51	-194.31	0	-85.66	2	41.45	2	36.00	2.35	55.32
21	21	22.33	0.00	57.51	-194.31	0	-85.66	2	62.07	2	53.91	2.35	82.85
21	22	22.50	0.00	58.27	-204.44	0	-128.29	2	62.07	2	53.91	2.35	82.85
22	22	22.50	0.00	58.27	-204.44	0	-128.29	2	65.31	2	56.72	2.35	87.17
22	23	23.50	0.00	62.64	-264.89	0	-134.98	2	65.31	2	56.72	2.35	87.17
23	1023	23.50	0.00	-63.36	-264.89	0	-174.89	2	84.62	2	73.50	2.35	112.94
23	24	24.50	0.00	-58.99	-203.72	0	-174.89	2	84.62	2	73.50	2.35	112.94
24	24	24.50	0.00	-58.99	-203.72	0	-174.89	2	65.08	2	56.52	2.35	86.86
24	25	24.95	0.00	-57.03	-177.61	0	-134.50	2	65.08	2	56.52	2.35	86.86
25	25	24.95	0.00	-57.03	-177.61	0	-134.50	2	56.74	2	49.28	2.35	75.73
25	26	26.40	0.00	-50.69	-99.52	0	-117.26	2	56.74	2	49.28	2.35	75.73
26	26	26.40	0.00	-50.69	-99.52	0	-117.26	2	31.79	2	27.61	2.35	42.43
26	27	27.85	0.00	-44.35	-30.62	0	-65.71	2	31.79	2	27.61	2.35	42.43
27	27	27.85	0.00	-44.35	-30.62	0	-65.71	2	9.78	2	8.50	2.35	13.06
27	28	29.30	0.00	-38.01	29.08	0	-20.22	2	9.78	2	8.50	2.35	13.06
28	28	29.30	-0.36	-38.01	29.08	0	-20.22	2	19.09	2	-9.29	2	-12.40
28	29	30.75	-0.30	-31.67	79.60	0	19.09	2	52.46	2	-8.16	2.35	-12.49
29	29	30.75	-0.30	-31.67	79.60	0	52.46	2	-25.52	2	-22.17	2.35	-34.02
29	30	32.20	-0.24	-25.33	120.92	0	-17.81	2	53.75	2	-15.47	2.35	-26.35
30	30	32.20	0.00	-25.33	120.92	0	81.73	2	-17.81	2	-23.44	2.35	-39.96
30	31	33.65	0.00	-18.99	153.05	0	-26.99	2	81.73	2	-23.37	2.35	-39.96
31	31	33.65	0.00	-18.99	153.05	0	-26.99	2	-34.06	2	-29.58	2.35	-50.49
31	32	35.10	0.00	-12.65	175.99	0	103.55	2	-34.06	2	-29.58	2.35	-50.49
32	32	35.10	0.00	-12.65	175.99	0	103.55	2	-39.16	2	-34.01	2.35	-58.06
32	33	36.55	0.00	-6.31	189.73	0	-39.16	2	-39.16	2	-34.01	2.35	-58.06
33	33	36.55	0.00	-6.31	189.73	0	-42.22	2	-42.22	2	-36.67	2.35	-62.59
33	34	38.00	0.00	0.03	194.28	0	-42.22	2	-42.22	2	-36.67	2.35	-62.59
34	34	38.00	0.00	0.03	194.28	0	-43.23	2	-43.23	2	-37.55	2.35	-64.09
34	35	39.45	0.00	6.37	189.64	0	-43.23	2	-43.23	2	-37.55	2.35	-64.09
35	35	39.45	0.00	6.37	189.64	0	-42.20	2	-42.20	2	-36.65	2.35	-62.56
35	36	40.90	0.00	12.71	175.81	0	-42.20	2	-42.20	2	-36.65	2.35	-62.56
36	36	40.90	0.00	12.71	175.81	0	-39.12	2	-39.12	2	-33.98	2.35	-58.00
36	37	42.35	0.00	19.05	152.79	0	-39.12	2	-39.12	2	-33.98	2.35	-58.00
37	37	42.35	0.00	19.05	152.79	0	-34.00	2	-34.00	2	-29.53	2.35	-50.41
37	38	43.80	0.00	25.39	120.57	0	-34.00	2	-34.00	2	-29.53	2.35	-50.41
38	38	43.80	-0.24	25.39	120.57	0	-26.83	2	-26.83	2	-23.30	2.35	-39.78
38	39	45.25	-0.30	31.73	79.17	0	-26.83	2	-26.83	2	-23.30	2.35	-39.78
						0	53.46	2	-17.71	2	-15.39	2.35	-26.20

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMBAL.To

(Carga Muerta Balasto). Tensiones a tiempo To

1: CMBAL

ver: etc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	-0.30	31.73	79.17	0	52.18	2	-25.38	2	-22.05	2.35	-33.88
39	40	46.70	-0.37	38.07	28.57	0	18.75	2	-9.24	2	-8.03	2.35	-12.28
40	40	46.70	0.00	38.07	28.57	0	18.86	2	-9.13	2	-7.93	2.35	-12.18
40	41	48.15	0.00	44.41	-31.23	0	-20.62	2	9.98	2	8.66	2.35	13.32
41	41	48.15	0.00	44.41	-31.23	0	-20.62	2	9.98	2	8.66	2.35	13.32
41	42	49.60	0.00	50.75	-100.21	0	-66.16	2	32.01	2	27.80	2.35	42.73
42	42	49.60	0.00	50.75	-100.21	0	-66.16	2	32.01	2	27.80	2.35	42.73
42	43	51.05	0.00	57.09	-178.39	0	-117.78	2	56.99	2	49.50	2.35	76.06
43	43	51.05	0.00	57.09	-178.39	0	-117.78	2	56.99	2	49.50	2.35	76.06
43	44	51.50	0.00	59.05	-204.52	0	-135.03	2	65.33	2	56.75	2.35	87.20
44	44	51.50	0.00	59.05	-204.52	0	-135.03	2	65.33	2	56.75	2.35	87.20
44	45	52.50	0.00	63.42	-265.76	0	-175.46	2	84.90	2	73.74	2.35	113.31
45	1045	52.50	0.00	-62.64	-265.76	0	-175.46	2	84.90	2	73.74	2.35	113.31
45	46	53.50	0.00	-58.27	-205.31	0	-135.55	2	65.59	2	56.96	2.35	87.54
46	46	53.50	0.00	-58.27	-205.31	0	-135.55	2	65.59	2	56.96	2.35	87.54
46	47	53.95	0.00	-56.30	-179.53	0	-118.53	2	57.35	2	49.81	2.35	76.54
47	47	53.95	0.00	-56.30	-179.53	0	-118.53	2	57.35	2	49.81	2.35	76.54
47	48	55.40	0.00	-49.96	-102.49	0	-67.67	2	32.74	2	28.44	2.35	43.70
48	48	55.40	0.00	-49.96	-102.49	0	-67.67	2	32.74	2	28.44	2.35	43.70
48	49	56.85	0.00	-43.62	-34.65	0	-22.88	2	11.07	2	9.61	2.35	14.77
49	49	56.85	0.00	-43.62	-34.65	0	-22.88	2	11.07	2	9.61	2.35	14.77
19	50	58.30	-0.36	-37.28	24.01	0	15.85	2	-7.67	2	-6.66	2.35	-10.24
50	50	58.30	-0.36	-37.28	24.01	0	15.85	2	-7.67	2	-6.66	2.35	-10.24
50	51	59.75	-0.30	-30.94	73.47	0	48.42	2	-23.56	2	-20.46	2.35	-31.40
51	51	59.75	-0.30	-30.94	73.47	0	48.42	2	-23.56	2	-20.46	2.35	-31.40
51	52	61.20	-0.24	-24.60	113.74	0	76.87	2	-25.39	2	-22.05	2.35	-37.59
52	52	61.20	-0.24	-24.60	113.74	0	76.87	2	-25.39	2	-22.05	2.35	-37.59
52	53	62.65	0.00	-18.26	144.81	0	97.97	2	-32.22	2	-27.99	2.35	-47.77
53	53	62.65	0.00	-18.26	144.81	0	97.97	2	-32.22	2	-27.99	2.35	-47.77
53	54	64.10	0.00	-11.92	166.70	0	112.78	2	-37.09	2	-32.22	2.35	-55.00
54	54	64.10	0.00	-11.92	166.70	0	112.78	2	-37.09	2	-32.22	2.35	-55.00
54	55	65.55	0.00	-5.58	179.39	0	121.37	2	-39.92	2	-34.67	2.35	-59.18
55	55	65.55	0.00	-5.58	179.39	0	121.37	2	-39.92	2	-34.67	2.35	-59.18
55	56	67.00	0.00	0.76	182.89	0	123.73	2	-40.70	2	-35.34	2.35	-60.34
56	56	67.00	0.00	0.76	182.89	0	123.73	2	-40.70	2	-35.34	2.35	-60.34
56	57	68.45	0.00	7.10	177.19	0	119.88	2	-39.43	2	-34.24	2.35	-58.46
57	57	68.45	0.00	7.10	177.19	0	119.88	2	-39.43	2	-34.24	2.35	-58.46
57	58	69.90	0.00	13.43	162.31	0	109.81	2	-36.12	2	-31.37	2.35	-53.55
58	58	69.90	0.00	13.43	162.31	0	109.81	2	-36.12	2	-31.37	2.35	-53.55
58	59	71.35	0.00	19.77	138.23	0	93.52	2	-30.76	2	-26.71	2.35	-45.60
59	59	71.35	0.00	19.77	138.23	0	93.52	2	-30.76	2	-26.71	2.35	-45.60
59	60	72.80	-0.25	26.11	104.96	0	70.93	2	-23.35	2	-20.28	2.35	-34.63
60	60	72.80	-0.25	26.11	104.96	0	70.93	2	-23.35	2	-20.28	2.35	-34.63
60	61	74.25	-0.31	32.45	62.50	0	42.18	2	-14.01	2	-12.17	2.35	-20.71
61	61	74.25	-0.31	32.45	62.50	0	42.18	2	-14.01	2	-12.17	2.35	-20.71
61	62	75.70	-0.37	38.79	10.85	0	7.05	2	-3.58	2	-3.11	2.35	-4.72
62	62	75.70	-0.37	38.79	10.85	0	7.05	2	-3.58	2	-3.11	2.35	-4.72
62	63	77.15	0.00	45.13	-50.00	0	-33.01	2	15.97	2	13.87	2.35	21.32
63	63	77.15	0.00	45.13	-50.00	0	-33.01	2	15.97	2	13.87	2.35	21.32
63	64	78.60	0.00	51.47	-120.03	0	-79.25	2	38.34	2	33.30	2.35	51.18
64	64	78.60	0.00	51.47	-120.03	0	-79.25	2	38.34	2	33.30	2.35	51.18
64	65	80.05	0.00	57.81	-199.26	0	-131.56	2	63.65	2	55.29	2.35	84.96
65	65	80.05	0.00	57.81	-199.26	0	-131.56	2	63.65	2	55.29	2.35	84.96
65	66	80.50	0.00	59.78	-225.72	0	-149.03	2	72.11	2	62.63	2.35	96.24
66	66	80.50	0.00	59.78	-225.72	0	-149.03	2	72.11	2	62.63	2.35	96.24
66	67	81.50	0.00	64.15	-287.69	0	-189.94	2	91.90	2	79.82	2.35	122.66
67	1057	81.50	0.00	-67.90	-287.69	0	-189.94	2	91.90	2	79.82	2.35	122.66
67	68	82.50	0.00	-63.53	-221.97	0	-146.55	2	70.91	2	61.59	2.35	94.64
68	68	82.50	0.00	-63.53	-221.97	0	-146.55	2	70.91	2	61.59	2.35	94.64
68	69	83.08	0.00	-61.02	-186.16	0	-122.91	2	59.47	2	51.65	2.35	79.37
69	69	83.08	0.00	-61.02	-186.16	0	-122.91	2	59.47	2	51.65	2.35	79.37
69	70	84.65	0.00	-54.13	-95.48	0	-63.04	2	30.50	2	26.49	2.35	40.71
70	70	84.65	0.00	-54.13	-95.48	0	-63.04	2	30.50	2	26.49	2.35	40.71
70	71	86.23	0.00	-47.25	-15.65	0	-10.33	2	5.00	2	4.34	2.35	6.67
71	71	86.23	0.00	-47.25	-15.65	0	-10.33	2	5.00	2	4.34	2.35	6.67
71	72	87.80	0.00	-40.36	53.34	0	35.22	2	-17.04	2	-14.80	2.35	-22.74
72	72	87.80	0.00	-40.36	53.34	0	35.22	2	-17.04	2	-14.80	2.35	-22.74
72	73	89.38	-0.30	-33.47	111.48	0	73.51	2	-35.70	2	-31.01	2.35	-47.61
73	73	89.38	-0.30	-33.47	111.48	0	73.51	2	-35.70	2	-31.01	2.35	-47.61
73	74	90.95	-0.23	-26.59	158.78	0	107.35	2	-35.41	2	-30.75	2.35	-52.45
74	74	90.95	-0.23	-26.59	158.78	0	107.35	2	-35.41	2	-30.75	2.35	-52.45
74	75	92.53	0.00	-19.70	195.23	0	132.08	2	-43.44	2	-37.73	2.35	-64.41
75	75	92.53	0.00	-19.70	195.23	0	132.08	2	-43.44	2	-37.73	2.35	-64.41
75	76	94.10	0.00	-12.82	220.84	0	149.41	2	-49.14	2	-42.68	2.35	-72.86
76	76	94.10	0.00	-12.82	220.84	0	149.41	2	-49.14	2	-42.68	2.35	-72.86
76	77	95.68	0.00	-5.93	235.60	0	159.39	2	-52.42	2	-45.53	2.35	-77.73

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMBAL.To

(Carga Muerta Balasto). Tensiones a tiempo To

1: CMBAL

ver: etc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
77	77	95.68	0.00	-5.93	235.60	0	159.39	2	-52.42	2	-45.53	2.35	-77.73
77	78	97.25	0.00	0.96	239.51	0	162.04	2	-53.29	2	-46.29	2.35	-79.02
78	78	97.25	0.00	0.96	239.51	0	162.04	2	-53.29	2	-46.29	2.35	-79.02
78	79	98.83	0.00	7.84	232.59	0	157.36	2	-51.75	2	-44.95	2.35	-76.73
79	79	98.83	0.00	7.84	232.59	0	157.36	2	-51.75	2	-44.95	2.35	-76.73
79	80	100.40	0.00	14.73	214.81	0	145.33	2	-47.80	2	-41.51	2.35	-70.87
80	80	100.40	0.00	14.73	214.81	0	145.33	2	-47.80	2	-41.51	2.35	-70.87
80	81	101.98	0.00	21.61	186.19	0	125.97	2	-41.43	2	-35.98	2.35	-61.43
81	81	101.98	0.00	21.61	186.19	0	125.97	2	-41.43	2	-35.98	2.35	-61.43
81	82	103.55	0.00	28.50	146.73	0	99.27	2	-32.65	2	-28.36	2.35	-48.41
82	82	103.55	-0.25	28.50	146.73	0	99.27	2	-32.65	2	-28.36	2.35	-48.41
82	83	105.13	-0.31	35.38	96.42	0	65.13	2	-21.56	2	-18.72	2.35	-31.90
83	83	105.13	-0.31	35.38	96.42	0	65.13	2	-21.56	2	-18.72	2.35	-31.90
83	84	106.70	-0.37	42.27	35.26	0	23.17	2	-11.38	2	-9.88	2.35	-15.13
84	84	106.70	-0.37	42.27	35.26	0	23.17	2	-11.38	2	-9.88	2.35	-15.13
84	85	108.28	0.00	49.16	-36.74	0	-24.26	2	11.74	2	10.19	2.35	15.66
85	85	108.28	0.00	49.16	-36.74	0	-24.26	2	11.74	2	10.19	2.35	15.66
85	86	109.85	0.00	56.04	-119.59	0	-78.96	2	38.20	2	33.18	2.35	50.99
86	86	109.85	0.00	56.04	-119.59	0	-78.96	2	38.20	2	33.18	2.35	50.99
86	87	111.43	0.00	62.93	-213.28	0	-140.81	2	68.13	2	59.18	2.35	90.93
87	87	111.43	0.00	62.93	-213.28	0	-140.81	2	68.13	2	59.18	2.35	90.93
87	88	112.00	0.00	65.44	-250.19	0	-165.18	2	79.92	2	69.42	2.35	106.67
88	88	112.00	0.00	65.44	-250.19	0	-165.18	2	79.92	2	69.42	2.35	106.67
88	89	113.00	0.00	69.82	-317.82	0	-209.83	2	101.53	2	88.18	2.35	135.51
89	1089	113.00	0.00	-69.95	-317.82	0	-209.83	2	101.53	2	88.18	2.35	135.51
89	90	114.00	0.00	-65.57	-250.05	0	-165.09	2	79.88	2	69.38	2.35	106.61
90	90	114.00	0.00	-65.57	-250.05	0	-165.09	2	79.88	2	69.38	2.35	106.61
90	91	114.58	0.00	-63.06	-213.08	0	-140.68	2	68.07	2	59.12	2.35	90.85
91	91	114.58	0.00	-63.06	-213.08	0	-140.68	2	68.07	2	59.12	2.35	90.85
91	92	116.15	0.00	-56.17	-119.18	0	-78.69	2	38.07	2	33.07	2.35	50.81
92	92	116.15	0.00	-56.17	-119.18	0	-78.69	2	38.07	2	33.07	2.35	50.81
92	93	117.73	0.00	-49.29	-36.13	0	-23.85	2	11.54	2	10.02	2.35	15.40
93	93	117.73	0.00	-49.29	-36.13	0	-23.85	2	11.54	2	10.02	2.35	15.40
93	94	119.30	0.00	-42.40	36.07	0	23.81	2	-11.52	2	-10.01	2.35	-15.38
94	94	119.30	-0.37	-42.40	36.07	0	23.81	2	-11.52	2	-10.01	2.35	-15.38
94	95	120.88	-0.31	-35.51	97.43	0	64.23	2	-31.22	2	-27.12	2.35	-41.62
95	95	120.88	-0.31	-35.51	97.43	0	64.23	2	-31.22	2	-27.12	2.35	-41.62
95	96	122.45	-0.25	-28.63	147.95	0	100.01	2	-33.00	2	-28.66	2.35	-48.88
96	96	122.45	0.00	-28.63	147.95	0	100.01	2	-33.00	2	-28.66	2.35	-48.88
96	97	124.03	0.00	-21.74	187.62	0	126.93	2	-41.75	2	-36.26	2.35	-61.90
97	97	124.03	0.00	-21.74	187.62	0	126.93	2	-41.75	2	-36.26	2.35	-61.90
97	98	125.60	0.00	-14.86	216.44	0	146.43	2	-48.16	2	-41.83	2.35	-71.41
98	98	125.60	0.00	-14.86	216.44	0	146.43	2	-48.16	2	-41.83	2.35	-71.41
98	99	127.18	0.00	-7.97	234.42	0	158.60	2	-52.16	2	-45.30	2.35	-77.34
99	99	127.18	0.00	-7.97	234.42	0	158.60	2	-52.16	2	-45.30	2.35	-77.34
99	100	128.75	0.00	-1.09	241.55	0	163.42	2	-53.75	2	-46.68	2.35	-79.69
100	100	128.75	0.00	-1.09	241.55	0	163.42	2	-53.75	2	-46.68	2.35	-79.69
100	101	130.33	0.00	5.80	237.84	0	160.91	2	-52.92	2	-45.96	2.35	-78.47
101	101	130.33	0.00	5.80	237.84	0	160.91	2	-52.92	2	-45.96	2.35	-78.47
101	102	131.90	0.00	12.69	223.28	0	151.06	2	-49.68	2	-43.15	2.35	-73.66
102	102	131.90	0.00	12.69	223.28	0	151.06	2	-49.68	2	-43.15	2.35	-73.66
102	103	133.48	0.00	19.57	197.88	0	133.88	2	-44.03	2	-38.24	2.35	-65.28
103	103	133.48	0.00	19.57	197.88	0	133.88	2	-44.03	2	-38.24	2.35	-65.28
103	104	135.05	0.00	26.46	161.63	0	109.35	2	-35.96	2	-31.24	2.35	-53.32
104	104	135.05	-0.23	26.46	161.63	0	109.35	2	-35.96	2	-31.24	2.35	-53.32
104	105	136.63	-0.29	33.34	114.53	0	77.39	2	-25.58	2	-22.22	2.35	-37.87
105	105	136.63	-0.29	33.34	114.53	0	77.39	2	-25.58	2	-22.22	2.35	-37.87
105	106	138.20	-0.36	40.23	56.59	0	37.25	2	-18.19	2	-15.80	2.35	-24.22
106	106	138.20	0.00	40.23	56.59	0	37.25	2	-18.19	2	-15.80	2.35	-24.22
106	107	139.78	0.00	47.12	-12.19	0	-8.05	2	3.89	2	3.38	2.35	5.20
107	107	139.78	0.00	47.12	-12.19	0	-8.05	2	3.89	2	3.38	2.35	5.20
107	108	141.35	0.00	54.00	-91.82	0	-60.62	2	29.33	2	25.48	2.35	39.15
108	108	141.35	0.00	54.00	-91.82	0	-60.62	2	29.33	2	25.48	2.35	39.15
108	109	142.93	0.00	60.89	-182.30	0	-120.36	2	58.24	2	50.58	2.35	77.73
109	109	142.93	0.00	60.89	-182.30	0	-120.36	2	58.24	2	50.58	2.35	77.73
109	110	143.50	0.00	63.40	-218.04	0	-143.96	2	69.65	2	60.50	2.35	92.96
110	110	143.50	0.00	63.40	-218.04	0	-143.96	2	69.65	2	60.50	2.35	92.96
110	111	144.50	0.00	67.77	-283.62	0	-187.25	2	90.60	2	78.69	2.35	120.92
111	111	144.50	0.00	67.77	-283.62	0	-187.25	2	90.60	2	78.69	2.35	120.92
111	112	145.50	0.00	-59.07	-222.36	0	-146.81	2	71.03	2	61.69	2.35	94.81
112	112	145.50	0.00	-59.07	-222.36	0	-146.81	2	71.03	2	61.69	2.35	94.81
112	113	145.68	0.00	-58.30	-212.10	0	-140.03	2	67.76	2	58.85	2.35	90.43
113	113	145.68	0.00	-58.30	-212.10	0	-140.03	2	67.76	2	58.85	2.35	90.43
113	114	146.85	0.00	-53.17	-146.61	0	-96.80	2	46.84	2	40.68	2.35	62.51
114	114	146.85	0.00	-53.17	-146.61	0	-96.80	2	46.84	2	40.68	2.35	62.51
114	115	148.03	0.00	-48.03	-87.15	0	-57.54	2	27.84	2	24.18	2.35	37.16

(Carga Muerta Baia sto). Tensiones a tiempo T_0

def exc

Carga Muerta Balasto). Tensiones a tiempo T_0

of the

237

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMBAL To

(Carga Muerta Balasto). Tensiones a tiempo To

1: CMBAL

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
39	39	45.25	-0.30	31.73	79.17	0	52.18	2	-25.38	2	-22.05	2.35	-33.83
39	40	46.70	-0.37	38.07	28.57	0	18.75	2	-9.24	2	-8.03	2.35	-12.28
40	40	46.70	0.00	38.07	28.57	0	18.86	2	-9.13	2	-7.93	2.35	-12.16
40	41	48.15	0.00	44.41	-31.23	0	-20.62	2	9.98	2	8.66	2.35	13.32
41	41	48.15	0.00	44.41	-31.23	0	-20.62	2	9.98	2	8.66	2.35	13.32
41	42	49.60	0.00	50.75	-100.21	0	-66.16	2	32.01	2	27.80	2.35	42.73
42	42	49.60	0.00	50.75	-100.21	0	-66.16	2	32.01	2	27.80	2.35	42.73
42	43	51.05	0.00	57.09	-178.39	0	-117.78	2	56.99	2	49.50	2.35	76.06
43	43	51.05	0.00	57.09	-178.39	0	-117.78	2	56.99	2	49.50	2.35	76.06
43	44	51.50	0.00	59.05	-204.52	0	-135.03	2	65.33	2	56.75	2.35	87.20
44	44	51.50	0.00	59.05	-204.52	0	-135.03	2	65.33	2	56.75	2.35	87.20
44	45	52.50	0.00	63.42	-265.76	0	-175.46	2	84.90	2	73.74	2.35	113.31
45	45	52.50	0.00	63.42	-265.76	0	-175.46	2	84.90	2	73.74	2.35	113.31
45	46	53.50	0.00	-58.27	-205.31	0	-135.55	2	65.59	2	56.96	2.35	87.54
46	46	53.50	0.00	-58.27	-205.31	0	-135.55	2	65.59	2	56.96	2.35	87.54
46	47	53.95	0.00	-56.30	-179.53	0	-118.53	2	57.35	2	49.81	2.35	76.54
47	47	53.95	0.00	-56.30	-179.53	0	-118.53	2	57.35	2	49.81	2.35	76.54
47	48	55.40	0.00	-49.96	-102.49	0	-67.67	2	32.74	2	28.44	2.35	43.70
48	48	55.40	0.00	-49.96	-102.49	0	-67.67	2	32.74	2	28.44	2.35	43.70
48	49	56.85	0.00	-43.62	-34.65	0	-22.88	2	11.07	2	9.61	2.35	14.77
49	49	56.85	0.00	-43.62	-34.65	0	-22.88	2	11.07	2	9.61	2.35	14.77
49	50	58.30	0.00	-37.28	24.01	0	15.85	2	-7.67	2	-6.66	2.35	-10.24
50	50	58.30	-0.36	-37.28	24.01	0	15.74	2	-7.78	2	-6.76	2.35	-10.33
50	51	59.75	-0.30	-30.94	73.47	0	48.42	2	-23.56	2	-20.46	2.35	-31.40
51	51	59.75	-0.30	-30.94	73.47	0	48.42	2	-23.56	2	-20.46	2.35	-31.40
51	52	61.20	-0.24	-24.60	113.74	0	49.61	2	-16.45	2	-14.28	2.35	-24.32
52	52	61.20	0.00	-24.60	113.74	0	76.87	2	-25.39	2	-22.05	2.35	-37.59
52	53	62.65	0.00	-18.26	144.81	0	76.95	2	-25.31	2	-21.98	2.35	-37.52
53	53	62.65	0.00	-18.26	144.81	0	97.97	2	-32.22	2	-27.99	2.35	-47.77
53	54	64.10	0.00	-11.92	166.70	0	97.97	2	-32.22	2	-27.99	2.35	-47.77
54	54	64.10	0.00	-11.92	166.70	0	112.78	2	-37.09	2	-32.22	2.35	-55.00
54	55	65.55	0.00	-5.58	179.39	0	121.37	2	-39.92	2	-34.67	2.35	-59.18
55	55	65.55	0.00	-5.58	179.39	0	121.37	2	-39.92	2	-34.67	2.35	-59.18
55	56	67.00	0.00	0.76	182.89	0	123.73	2	-40.70	2	-35.34	2.35	-60.34
56	56	67.00	0.00	0.76	182.89	0	123.73	2	-40.70	2	-35.34	2.35	-60.34
56	57	68.45	0.00	7.10	177.19	0	119.88	2	-39.43	2	-34.24	2.35	-58.46
57	57	68.45	0.00	7.10	177.19	0	119.88	2	-39.43	2	-34.24	2.35	-58.46
57	58	69.90	0.00	13.43	162.31	0	109.81	2	-36.12	2	-31.37	2.35	-53.55
58	58	69.90	0.00	13.43	162.31	0	109.81	2	-36.12	2	-31.37	2.35	-53.55
58	59	71.35	0.00	19.77	138.23	0	93.52	2	-30.76	2	-26.71	2.35	-45.60
59	59	71.35	0.00	19.77	138.23	0	93.52	2	-30.76	2	-26.71	2.35	-45.60
59	60	72.80	0.00	26.11	104.96	0	71.01	2	-23.35	2	-20.28	2.35	-34.63
60	60	72.80	-0.25	26.11	104.96	0	70.93	2	-23.44	2	-20.36	2.35	-34.70
60	61	74.25	-0.31	32.45	62.50	0	42.18	2	-14.01	2	-12.17	2.35	-20.71
61	61	74.25	-0.31	32.45	62.50	0	41.17	2	-20.06	2	-17.42	2.35	-26.73
61	62	75.70	-0.37	38.79	10.85	0	7.05	2	-3.58	2	-3.11	2.35	-4.72
62	62	75.70	0.00	38.79	10.85	0	7.16	2	-3.47	2	-3.01	2.35	-4.63
62	63	77.15	0.00	45.13	-50.00	0	-33.01	2	15.97	2	13.87	2.35	21.32
63	63	77.15	0.00	45.13	-50.00	0	-33.01	2	15.97	2	13.87	2.35	21.32
63	64	78.60	0.00	51.47	-120.03	0	-79.25	2	38.34	2	33.30	2.35	51.18
64	64	78.60	0.00	51.47	-120.03	0	-79.25	2	38.34	2	33.30	2.35	51.18
64	65	80.05	0.00	57.81	-199.26	0	-131.56	2	63.65	2	55.29	2.35	84.96
65	65	80.05	0.00	57.81	-199.26	0	-131.56	2	63.65	2	55.29	2.35	84.96
65	66	80.50	0.00	59.78	-225.72	0	-149.03	2	72.11	2	62.63	2.35	96.24
66	66	80.50	0.00	59.78	-225.72	0	-149.03	2	72.11	2	62.63	2.35	96.24
66	67	81.50	0.00	64.15	-287.69	0	-189.94	2	91.90	2	79.82	2.35	122.66
67	67	81.50	0.00	64.15	-287.69	0	-189.94	2	91.90	2	79.82	2.35	122.66
67	68	82.50	0.00	-63.53	-221.97	0	-146.55	2	70.91	2	61.59	2.35	94.64
68	68	82.50	0.00	-63.53	-221.97	0	-146.55	2	70.91	2	61.59	2.35	94.64
68	69	83.08	0.00	-61.02	-186.16	0	-122.91	2	59.47	2	51.65	2.35	79.37
69	69	83.08	0.00	-61.02	-186.16	0	-122.91	2	59.47	2	51.65	2.35	79.37
69	70	84.65	0.00	-54.13	-95.48	0	-63.04	2	30.50	2	26.49	2.35	40.71
70	70	84.65	0.00	-54.13	-95.48	0	-63.04	2	30.50	2	26.49	2.35	40.71
70	71	86.23	0.00	-47.25	-15.65	0	-10.33	2	5.00	2	4.34	2.35	6.67
71	71	86.23	0.00	-47.25	-15.65	0	-10.33	2	5.00	2	4.34	2.35	6.67
71	72	87.80	0.00	-40.36	53.34	0	35.11	2	-17.04	2	-14.80	2.35	-22.74
72	72	87.80	-0.36	-40.36	53.34	0	35.11	2	-17.04	2	-14.80	2.35	-22.74
72	73	89.38	-0.30	-33.47	111.48	0	73.51	2	-35.70	2	-31.01	2.35	-47.61
73	73	89.38	-0.30	-33.47	111.48	0	73.51	2	-35.70	2	-31.01	2.35	-47.61
73	74	90.95	-0.23	-26.59	158.78	0	107.35	2	-35.41	2	-30.75	2.35	-52.45
74	74	90.95	0.00	-26.59	158.78	0	107.35	2	-35.41	2	-30.75	2.35	-52.45
74	75	92.53	0.00	-19.70	195.23	0	132.08	2	-43.44	2	-37.73	2.35	-64.41
75	75	92.53	0.00	-19.70	195.23	0	132.08	2	-43.44	2	-37.73	2.35	-64.41
75	76	94.10	0.00	-12.82	220.84	0	149.41	2	-49.14	2	-42.68	2.35	-72.86
76	76	94.10	0.00	-12.82	220.84	0	149.41	2	-49.14	2	-42.68	2.35	-72.86
76	77	95.68	0.00	-5.93	235.60	0	159.39	2	-52.42	2	-45.53	2.35	-77.73

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMBAL To

(Carga Muerta Balasto). Tensiones a tiempo To

1: CMBAL

Def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
77	77	95.68	0.00	-5.93	235.60	0	159.39	2	-52.42	2	-45.53	2.35	-77.73
77	78	97.25	0.00	0.96	239.51	0	162.04	2	-53.29	2	-46.29	2.35	-79.02
78	78	97.25	0.00	0.96	239.51	0	162.04	2	-53.29	2	-46.29	2.35	-79.02
78	79	98.83	0.00	7.84	232.59	0	157.36	2	-51.75	2	-44.95	2.35	-76.73
79	79	98.83	0.00	7.84	232.59	0	157.36	2	-51.75	2	-44.95	2.35	-76.73
79	80	100.40	0.00	14.73	214.81	0	145.33	2	-47.80	2	-41.51	2.35	-70.87
80	80	100.40	0.00	14.73	214.81	0	145.33	2	-47.80	2	-41.51	2.35	-70.87
80	81	101.98	0.00	21.61	186.19	0	125.97	2	-41.43	2	-35.98	2.35	-61.43
81	81	101.98	0.00	21.61	186.19	0	125.97	2	-41.43	2	-35.98	2.35	-61.43
81	82	103.55	0.00	28.50	146.73	0	99.27	2	-32.65	2	-28.36	2.35	-48.41
82	82	103.55	-0.25	28.50	146.73	0	99.27	2	-32.65	2	-28.36	2.35	-48.41
82	83	105.13	-0.31	35.38	96.42	0	65.13	2	-21.56	2	-18.72	2.35	-31.90
83	83	105.13	-0.31	35.38	96.42	0	65.13	2	-21.56	2	-18.72	2.35	-31.90
83	84	106.70	-0.37	42.27	35.26	0	23.17	2	-11.38	2	-9.88	2.35	-15.13
84	84	106.70	0.00	42.27	35.26	0	23.17	2	-11.38	2	-9.88	2.35	-15.13
84	85	108.28	0.00	49.16	-36.74	0	-24.26	2	11.74	2	10.19	2.35	15.66
85	85	108.28	0.00	49.16	-36.74	0	-24.26	2	11.74	2	10.19	2.35	15.66
85	86	109.85	0.00	56.04	-119.59	0	-78.96	2	38.20	2	33.18	2.35	50.99
86	86	109.85	0.00	56.04	-119.59	0	-78.96	2	38.20	2	33.18	2.35	50.99
86	87	111.43	0.00	62.93	-213.28	0	-140.81	2	68.13	2	59.18	2.35	90.93
87	87	111.43	0.00	62.93	-213.28	0	-140.81	2	68.13	2	59.18	2.35	90.93
87	88	112.00	0.00	65.44	-250.19	0	-165.18	2	79.92	2	69.42	2.35	106.67
88	88	112.00	0.00	65.44	-250.19	0	-165.18	2	79.92	2	69.42	2.35	106.67
88	89	113.00	0.00	69.82	-317.82	0	-209.83	2	101.53	2	88.18	2.35	135.51
89	1089	113.00	0.00	-69.95	-317.82	0	-209.83	2	101.53	2	88.18	2.35	135.51
89	90	114.00	0.00	-65.57	-250.05	0	-165.09	2	79.88	2	69.38	2.35	106.61
90	90	114.00	0.00	-65.57	-250.05	0	-165.09	2	79.88	2	69.38	2.35	106.61
90	91	114.58	0.00	-63.06	-213.08	0	-140.68	2	68.07	2	59.12	2.35	90.85
91	91	114.58	0.00	-63.06	-213.08	0	-140.68	2	68.07	2	59.12	2.35	90.85
91	92	116.15	0.00	-56.17	-119.18	0	-78.69	2	38.07	2	33.07	2.35	50.81
92	92	116.15	0.00	-56.17	-119.18	0	-78.69	2	38.07	2	33.07	2.35	50.81
92	93	117.73	0.00	-49.29	-36.13	0	-23.85	2	11.54	2	10.02	2.35	15.40
93	93	117.73	0.00	-49.29	-36.13	0	-23.85	2	11.54	2	10.02	2.35	15.40
93	94	119.30	0.00	-42.40	36.07	0	23.81	2	-11.52	2	-10.01	2.35	-15.38
94	94	119.30	-0.37	-42.40	36.07	0	23.81	2	-11.52	2	-10.01	2.35	-15.38
94	95	120.88	-0.31	-35.51	97.43	0	64.23	2	-31.22	2	-27.12	2.35	-41.62
95	95	120.88	-0.31	-35.51	97.43	0	64.23	2	-31.22	2	-27.12	2.35	-41.62
95	96	122.45	-0.25	-28.63	147.95	0	100.01	2	-33.00	2	-28.66	2.35	-32.23
96	96	122.45	0.00	-28.63	147.95	0	100.01	2	-33.00	2	-28.66	2.35	-32.23
96	97	124.03	0.00	-21.74	187.62	0	126.93	2	-41.75	2	-36.26	2.35	-61.90
97	97	124.03	0.00	-21.74	187.62	0	126.93	2	-41.75	2	-36.26	2.35	-61.90
97	98	125.60	0.00	-14.86	216.44	0	146.43	2	-48.16	2	-41.83	2.35	-71.41
98	98	125.60	0.00	-14.86	216.44	0	146.43	2	-48.16	2	-41.83	2.35	-71.41
98	99	127.18	0.00	-7.97	234.42	0	158.60	2	-52.16	2	-45.30	2.35	-77.34
99	99	127.18	0.00	-7.97	234.42	0	158.60	2	-52.16	2	-45.30	2.35	-77.34
99	100	128.75	0.00	-1.09	241.55	0	163.42	2	-53.75	2	-46.68	2.35	-79.69
100	100	128.75	0.00	-1.09	241.55	0	163.42	2	-53.75	2	-46.68	2.35	-79.69
100	101	130.33	0.00	5.80	237.84	0	160.91	2	-52.92	2	-45.96	2.35	-78.47
101	101	130.33	0.00	5.80	237.84	0	160.91	2	-52.92	2	-45.96	2.35	-78.47
101	102	131.90	0.00	12.69	223.28	0	151.06	2	-49.68	2	-43.15	2.35	-73.66
102	102	131.90	0.00	12.69	223.28	0	151.06	2	-49.68	2	-43.15	2.35	-73.66
102	103	133.48	0.00	19.57	197.88	0	133.88	2	-44.03	2	-38.24	2.35	-65.28
103	103	133.48	0.00	19.57	197.88	0	133.88	2	-44.03	2	-38.24	2.35	-65.28
103	104	135.05	0.00	26.46	161.63	0	109.35	2	-35.96	2	-31.24	2.35	-53.32
104	104	135.05	-0.23	26.46	161.63	0	109.35	2	-35.96	2	-31.24	2.35	-53.32
104	105	136.63	-0.29	33.34	114.53	0	77.39	2	-25.58	2	-22.22	2.35	-37.87
105	105	136.63	-0.29	33.34	114.53	0	77.39	2	-25.58	2	-22.22	2.35	-37.87
105	106	138.20	-0.36	40.23	56.59	0	37.25	2	-18.19	2	-15.80	2.35	-24.22
106	106	138.20	0.00	40.23	56.59	0	37.25	2	-18.19	2	-15.80	2.35	-24.22
106	107	139.78	0.00	47.12	-12.19	0	-8.05	2	3.89	2	3.38	2.35	5.20
107	107	139.78	0.00	47.12	-12.19	0	-8.05	2	3.89	2	3.38	2.35	5.20
107	108	141.35	0.00	54.00	-91.82	0	-60.62	2	29.33	2	25.48	2.35	39.15
108	108	141.35	0.00	54.00	-91.82	0	-60.62	2	29.33	2	25.48	2.35	39.15
108	109	142.93	0.00	60.89	-182.30	0	-120.36	2	58.24	2	50.58	2.35	77.73
109	109	142.93	0.00	60.89	-182.30	0	-120.36	2	58.24	2	50.58	2.35	77.73
109	110	143.50	0.00	63.40	-218.04	0	-143.96	2	69.65	2	60.50	2.35	92.96
110	110	143.50	0.00	63.40	-218.04	0	-143.96	2	69.65	2	60.50	2.35	92.96
110	111	144.50	0.00	67.77	-283.62	0	-187.25	2	90.60	2	78.69	2.35	120.92
111	111	144.50	0.00	67.77	-283.62	0	-187.25	2	90.60	2	78.69	2.35	120.92
111	112	145.50	0.00	-59.07	-222.36	0	-146.81	2	71.03	2	61.69	2.35	94.81
112	112	145.50	0.00	-59.07	-222.36	0	-146.81	2	71.03	2	61.69	2.35	94.81
112	113	145.68	0.00	-58.30	-212.10	0	-140.03	2	67.76	2	58.85	2.35	90.43
113	113	145.68	0.00	-58.30	-212.10	0	-140.03	2	67.76	2	58.85	2.35	90.43
113	114	146.85	0.00	-53.17	-146.61	0	-96.80	2	46.84	2	40.68	2.35	62.51
114	114	146.85	0.00	-53.17	-146.61	0	-96.80	2	46.84	2	40.68	2.35	62.51
114	115	148.03	0.00	-48.03	-87.15	0	-57.54	2	27.84	2	24.18	2.35	37.16

238

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMBAL.To

(Carga Muerta Balasto). Tensiones a tiempo To

1. CMBAL

def. etc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	-0.30	31.73	79.17	0	52.18	2	-25.38	2	-22.05	2.35	-33.85
39	40	46.70	-0.37	38.07	28.57	0	18.75	2	-9.24	2	-8.03	2.35	-12.28
40	40	46.70	0.00	38.07	28.57	0	18.86	2	-9.13	2	-7.93	2.35	-12.18
40	41	48.15	0.00	44.41	-31.23	0	-20.62	2	9.98	2	8.66	2.35	13.32
41	41	48.15	0.00	44.41	-31.23	0	-20.62	2	9.98	2	8.66	2.35	13.32
41	42	49.60	0.00	50.75	-100.21	0	-66.16	2	32.01	2	27.80	2.35	42.73
42	42	49.60	0.00	50.75	-100.21	0	-66.16	2	32.01	2	27.80	2.35	42.73
42	43	51.05	0.00	57.09	-178.39	0	-117.78	2	56.99	2	49.50	2.35	76.06
43	43	51.05	0.00	57.09	-178.39	0	-117.78	2	56.99	2	49.50	2.35	76.06
43	44	51.50	0.00	59.05	-204.52	0	-135.03	2	65.33	2	56.75	2.35	87.20
44	44	51.50	0.00	59.05	-204.52	0	-135.03	2	65.33	2	56.75	2.35	87.20
44	45	52.50	0.00	63.42	-265.76	0	-175.46	2	84.90	2	73.74	2.35	113.31
45	1045	52.50	0.00	-62.64	-265.76	0	-175.46	2	84.90	2	73.74	2.35	113.31
45	46	53.50	0.00	-58.27	-205.31	0	-135.55	2	65.59	2	56.96	2.35	87.54
46	46	53.50	0.00	-58.27	-205.31	0	-135.55	2	65.59	2	56.96	2.35	87.54
46	47	53.95	0.00	-56.30	-179.53	0	-118.53	2	57.35	2	49.81	2.35	76.54
47	47	53.95	0.00	-56.30	-179.53	0	-118.53	2	57.35	2	49.81	2.35	76.54
47	48	55.40	0.00	-49.96	-102.49	0	-67.67	2	32.74	2	28.44	2.35	43.70
48	48	55.40	0.00	-49.96	-102.49	0	-67.67	2	32.74	2	28.44	2.35	43.70
48	49	56.85	0.00	-43.62	-34.65	0	-22.88	2	11.07	2	9.61	2.35	14.77
49	49	56.85	0.00	-43.62	-34.65	0	-22.88	2	11.07	2	9.61	2.35	14.77
49	50	58.30	0.00	-37.28	24.01	0	15.85	2	-7.67	2	-6.66	2.35	-10.24
50	50	58.30	-0.36	-37.28	24.01	0	15.85	2	-7.67	2	-6.66	2.35	-10.24
50	51	59.75	-0.30	-30.94	73.47	0	48.42	2	-23.56	2	-20.46	2.35	-31.40
51	51	59.75	-0.30	-30.94	73.47	0	48.42	2	-23.56	2	-20.46	2.35	-31.40
51	52	61.20	-0.24	-24.60	113.74	0	76.87	2	-25.39	2	-22.05	2.35	-37.59
52	52	61.20	0.00	-24.60	113.74	0	76.87	2	-25.39	2	-22.05	2.35	-37.59
52	53	62.65	0.00	-18.26	144.81	0	97.97	2	-32.22	2	-27.99	2.35	-47.77
53	53	62.65	0.00	-18.26	144.81	0	97.97	2	-32.22	2	-27.99	2.35	-47.77
53	54	64.10	0.00	-11.92	166.70	0	112.78	2	-37.09	2	-32.22	2.35	-55.00
54	54	64.10	0.00	-11.92	166.70	0	112.78	2	-37.09	2	-32.22	2.35	-55.00
54	55	65.55	0.00	-5.58	179.39	0	121.37	2	-39.92	2	-34.67	2.35	-59.18
55	55	65.55	0.00	-5.58	179.39	0	121.37	2	-39.92	2	-34.67	2.35	-59.18
55	56	67.00	0.00	0.76	182.89	0	123.73	2	-40.70	2	-35.34	2.35	-60.34
56	56	67.00	0.00	0.76	182.89	0	123.73	2	-40.70	2	-35.34	2.35	-60.34
56	57	68.45	0.00	7.10	177.19	0	119.88	2	-39.43	2	-34.24	2.35	-58.46
57	57	68.45	0.00	7.10	177.19	0	119.88	2	-39.43	2	-34.24	2.35	-58.46
57	58	69.90	0.00	13.43	162.31	0	109.81	2	-36.12	2	-31.37	2.35	-53.55
58	58	69.90	0.00	13.43	162.31	0	109.81	2	-36.12	2	-31.37	2.35	-53.55
58	59	71.35	0.00	19.77	138.23	0	93.52	2	-30.76	2	-26.71	2.35	-45.60
59	59	71.35	0.00	19.77	138.23	0	93.52	2	-30.76	2	-26.71	2.35	-45.60
59	60	72.80	0.00	26.11	104.96	0	71.01	2	-23.35	2	-20.28	2.35	-34.63
60	60	72.80	-0.25	26.11	104.96	0	71.01	2	-23.35	2	-20.28	2.35	-34.63
60	61	74.25	-0.31	32.45	62.50	0	70.93	2	-23.44	2	-20.36	2.35	-34.70
61	61	74.25	-0.31	32.45	62.50	0	70.93	2	-23.44	2	-20.36	2.35	-34.70
61	62	75.70	-0.37	38.79	10.85	0	41.17	2	-20.06	2	-17.42	2.35	-20.71
62	62	75.70	0.00	38.79	10.85	0	41.17	2	-20.06	2	-17.42	2.35	-20.71
62	63	77.15	0.00	45.13	-50.00	0	7.05	2	-3.58	2	-3.11	2.35	-4.72
63	63	77.15	0.00	45.13	-50.00	0	7.05	2	-3.58	2	-3.11	2.35	-4.72
63	64	78.60	0.00	51.47	-120.03	0	-33.01	2	15.97	2	-3.01	2.35	-4.63
64	64	78.60	0.00	51.47	-120.03	0	-33.01	2	15.97	2	-3.01	2.35	-4.63
64	65	80.05	0.00	57.81	-199.26	0	-79.25	2	38.34	2	13.87	2.35	21.32
65	65	80.05	0.00	57.81	-199.26	0	-79.25	2	38.34	2	13.87	2.35	21.32
65	66	80.50	0.00	59.78	-225.72	0	-131.56	2	63.65	2	55.29	2.35	84.96
66	66	80.50	0.00	59.78	-225.72	0	-131.56	2	63.65	2	55.29	2.35	84.96
66	67	81.50	0.00	64.15	-287.69	0	-149.03	2	72.11	2	62.63	2.35	96.24
67	1067	81.50	0.00	64.15	-287.69	0	-149.03	2	72.11	2	62.63	2.35	96.24
67	68	82.50	0.00	-63.53	-221.97	0	-189.94	2	91.90	2	79.82	2.35	122.66
68	68	82.50	0.00	-63.53	-221.97	0	-189.94	2	91.90	2	79.82	2.35	122.66
68	69	83.08	0.00	-61.02	-186.16	0	-146.55	2	70.91	2	61.59	2.35	94.64
69	69	83.08	0.00	-61.02	-186.16	0	-146.55	2	70.91	2	61.59	2.35	94.64
69	70	84.65	0.00	-54.13	-95.48	0	-122.91	2	59.47	2	51.65	2.35	79.37
70	70	84.65	0.00	-54.13	-95.48	0	-122.91	2	59.47	2	51.65	2.35	79.37
70	71	86.23	0.00	-47.25	-15.65	0	-63.04	2	30.50	2	26.49	2.35	40.71
71	71	86.23	0.00	-47.25	-15.65	0	-63.04	2	30.50	2	26.49	2.35	40.71
71	72	87.80	0.00	-40.36	53.34	0	-10.33	2	5.00	2	4.34	2.35	6.67
72	72	87.80	-0.36	-40.36	53.34	0	-10.33	2	5.00	2	4.34	2.35	6.67
72	73	89.38	-0.30	-33.47	111.48	0	35.22	2	-17.04	2	-14.80	2.35	-22.74
73	73	89.38	-0.30	-33.47	111.48	0	35.22	2	-17.04	2	-14.80	2.35	-22.74
73	74	90.95	-0.23	-26.59	158.78	0	73.51	2	-35.70	2	-31.01	2.35	-47.61
74	74	90.95	0.00	-26.59	158.78	0	73.51	2	-35.70	2	-31.01	2.35	-47.61
74	75	92.53	0.00	-19.70	195.23	0	75.32	2	-24.90	2	-21.63	2.35	-36.86
75	75	92.53	0.00	-19.70	195.23	0	75.32	2	-24.90	2	-21.63	2.35	-36.86
75	76	94.10	0.00	-12.82	220.84	0	-35.41	2	-35.33	2	-30.75	2.35	-52.45
76	76	94.10	0.00	-12.82	220.84	0	-35.41	2	-35.33	2	-30.75	2.35	-52.45
76	77	95.68	0.00	-5.93	235.60	0	-43.44	2	-43.44	2	-37.73	2.35	-64.41
						0	-43.44	2	-43.44	2	-37.73	2.35	-64.41
						0	149.41	2	-49.14	2	-42.68	2.35	-72.86
						0	149.41	2	-49.14	2	-42.68	2.35	-72.86
						0	159.39	2	-52.42	2	-45.53	2.35	-77.73

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMBAL.To

(Carga Muerta Balasto). Tensiones a tiempo To

1. CMBAL

def. etc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	-5.93	235.60	0	159.39	2	-52.42	2	-45.53	2.35	-77.73
77	78	97.25	0.00	0.96	239.51	0	162.04	2	-53.29	2	-46.29	2.35	-79.02
78	78	97.25	0.00	0.96	239.51	0	162.04	2	-53.29	2	-46.29	2.35	-79.02
78	79	98.83	0.00	7.84	232.59	0	157.36	2	-51.75	2	-44.95	2.35	-76.73
79	79	98.83	0.00	7.84	232.59	0	157.36	2	-51.75	2	-44.95	2.35	-76.73
79	80	100.40	0.00	14.73	214.81	0	145.33	2	-47.80	2	-41.51	2.35	-70.87
80	80	100.40	0.00	14.73	214.81	0	145.33	2	-47.80	2	-41.51	2.35	-70.87
80	81	101.98	0.00	21.61	186.19	0	125.97	2	-41.43	2	-35.98	2.35	-61.43
81	81	101.98	0.00	21.61	186.19	0	125.97	2	-41.43	2	-35.98	2.35	-61.43
81	82	103.55	0.00	28.50	146.73	0	99.27	2	-32.65	2	-28.36	2.35	-48.41
82	82	103.55	-0.25	28.50	146.73	0	99.27	2	-32.65	2	-28.36	2.35	-48.41
82	83	105.13	-0.31	35.38	96.42	0	65.13	2	-21.56	2	-18.72	2.35	-31.90
83	83	105.13	-0.31	35.38	96.42	0	65.13	2	-21.56	2	-18.72	2.35	-31.90
83	84	106.70	-0.37	42.27	35.26	0	23.17	2	-11.38	2	-9.88	2.35	-15.13
84	84	106.70	0.00	42.27	35.26	0	23.17	2	-11.38	2	-9.88	2.35	-15.13
84	85	108.28	0.00	49.16	-36.74	0	-24.26	2	11.74	2	10.19	2.35	15.66
85	85	108.28	0.00	49.16	-36.74	0	-24.26	2	11.74	2	10.19	2.35	15.66
85	86	109.85	0.00	56.04	-119.59	0	-78.96	2	38.20	2	33.18	2.35	50.99
86	86	109.85	0.00	56.04	-119.59	0	-78.96	2	38.20	2	33.18	2.35	50.99
86	87	111.43	0.00	62.93	-213.28	0	-140.81	2	68.13	2	59.18	2.35	90.93
87	87	111.43	0.00	62.93	-213.28	0	-140.81	2	68.13	2	59.18	2.35	90.93
87	88	112.00	0.00	65.44	-250.19	0	-165.18	2	79.92	2	69.42	2.35	106.67
88	88	112.00	0.00	65.44	-250.19	0	-165.18	2	79.92	2	69.42	2.35	106.67
88	89	113.00	0.00	69.82	-317.82	0	-209.83	2	101.53	2	88.18	2.35	135.51
89	1089	113.00	0.00	-69.95	-317.82	0	-209.83	2	101.53	2	88.18	2.35	135.51
89	90	114.00	0.00	-65.57	-250.05	0	-165.09	2	79.88	2	69.38	2.35	106.61
90	90	114.00	0.00	-65.57	-250.05	0	-165.09	2	79.88	2	69.38	2.35	106.61
90	91	114.58	0.00	-63.06	-213.08	0	-140.68	2	68.07	2	59.12	2.35	90.85
91	91	114.58	0.00	-63.06	-213.08	0	-140.68	2	68.07	2	59.12	2.35	90.85
91	92	116.15	0.00	-56.17	-119.18	0	-78.69	2	38.07	2	33.07	2.35	50.81
92	92	116.15	0.00	-56.17	-119.18	0	-78.69	2	38.07	2	33.07	2.35	50.81
92	93	117.73	0.00	-49.29	-36.13	0	-23.85	2	11.54	2	10.02	2.35	15.40
93	93	117.73	0.00	-49.29	-36.13	0	-23.85	2	11.54	2	10.02	2.35	15.40
93	94	119.30	0.00	-42.40	36.07	0	23.81	2	-11.52	2	-10.01	2.35	-15.38
94	94	119.30	-0.37	-42.40	36.07	0	23.81	2	-11.52	2	-10.01	2.35	-15.38
94	95	120.88	-0.31	-35.51	97.43	0	64.23	2	-31.22	2	-27.12	2.35	-41.62
95	95	120.88	-0.31	-35.51	97.43	0	64.23	2	-31.22	2	-27.12	2.35	-41.62
95	96	122.45	-0.25	-28.63	147.95	0	100.01	2	-33.00	2	-28.66	2.35	-48.88
96	96	122.45	0.00	-28.63	147.95	0	100.01	2	-33.00	2	-28.66	2.35	-48.88
96	97	124.03	0.00	-21.74	187.62	0	126.93	2	-41.75	2	-36.26	2.35	-61.90
97	97	124.03	0.00	-21.74	187.62	0	126.93	2	-41.75	2	-36.26	2.35	-61.90
97	98	125.60	0.00	-14.86	216.44	0	146.43	2	-48.16	2	-41.83	2.35	-71.41
98	98	125.60	0.00	-14.86	216.44	0	146.43	2	-48.16	2	-41.83	2.35	-71.41
98	99	127.18	0.00	-7.97	234.42	0	158.60	2	-52.16	2	-45.30	2.35	-77.34
99	99	127.18	0.00	-7.97	234.42	0	158.60	2	-52.16	2	-45.30	2.35	-77.34
99	100	128.75	0.00	-1.09	241.55	0	163.42	2	-53.75	2	-46.68	2.35	-79.69
100	100	128.75	0.00	-1.09	241.55	0	163.42	2	-53.75	2	-46.68	2.35	-79.69
100	101	130.33	0.00	5.80	237.84	0	160.91	2	-52.92	2	-45.96	2.35	-78.47
101	101	130.33	0.00	5.80	237.84	0	160.91	2	-52.92	2	-45.96	2.35	-78.47
101	102	131.90	0.00	12.69	223.28	0	151.06	2	-49.68	2	-43.15	2.35	-73.66
102	102	131.90	0.00	12.69	223.28	0	151.06	2	-49.68	2	-43.15	2.35	-73.66
102	103	133.48	0.00	19.57	197.88	0	133.88	2	-44.03	2	-38.24	2.35	-65.28
103	103	133.48	0.00	19.57	197.88	0	133.88	2	-44.03	2	-38.24	2.35	-65.28
103	104	135.05	0.00	26.46	161.63	0	109.35	2	-35.96	2	-31.24	2.35	-53.32
104	104	135.05	-0.23	26.46	161.63	0	109.35	2	-35.96	2	-31.24	2.35	-53.32
104	105	136.63	-0.29	33.34	114.53	0	77.39	2	-25.58	2	-22.22	2.35	-37.87
105	105	136.63	-0.29	33.34	114.53	0	77.39	2	-25.58	2	-22.22	2.35	-37.87
105	106	138.20	-0.36	40.23	56.59	0	37.25	2	-18.19	2	-15.80	2.35	-24.22
106	106	138.20	0.00	40.23	56.59	0	37.25	2	-18.19	2	-15.80	2.35	-24.22
106	107	139.78	0.00	47.12	-12.19	0	-8.05	2	3.89	2	3.38	2.35	5.20
107	107	139.78	0.00	47.12	-12.19	0	-8.05	2	3.89	2	3.38	2.35	5.20
107	108	141.35	0.00	54.00	-91.82	0	-60.62	2	29.33	2	25.48	2.35	39.15
108	108	141.35	0.00	54.00	-91.82	0	-60.62	2	29.33	2	25.48	2.35	39.15
108	109	142.93	0.00	60.89	-182.30	0	-120.36	2	58.24	2	50.58	2.35	77.73
109	109	142.93	0.00	60.89	-182.30	0	-120.36	2	58.24	2	50.58	2.35	77.73
109	110	143.50	0.00	63.40	-218.04	0	-143.96	2	69.65	2	60.50	2.35	92.96
110	110	143.50	0.00	63.40	-218.04	0	-143.96	2	69.65	2	60.50	2.35	92.96
110	111	144.50	0.00	67.77	-283.62	0	-187.25	2	90.60	2	78.69	2.35	120.92
111	111	144.50	0.00	-63.44	-283.62	0	-187.25	2	90.60	2	78.69	2.35	120.92
111	112	145.50	0.00	-59.07	-222.36	0	-146.81	2	71.03	2	61.69	2.35	94.81
112	112	145.50	0.00	-59.07	-222.36	0	-146.81	2	71.03	2	61.69	2.35	94.81
112	113	145.68	0.00	-58.30	-212.10	0	-140.03	2	67.76	2	58.85	2.35	90.43
113	113	145.68	0.00	-58.30	-212.10	0	-140.03	2	67.76	2	58.85	2.35	90.43
113	114	146.85	0.00	-53.17	-146.61	0	-96.80	2	46.84	2	40.68	2.35	62.51
114	114	146.85	0.00	-53.17	-146.61	0	-96.80	2	46.84	2	40.68	2.35	62.51
114	115	148.03	0.00	-48.03	-87.15	0	-57.54	2	27.84	2	24.18	2.35	37.16

239

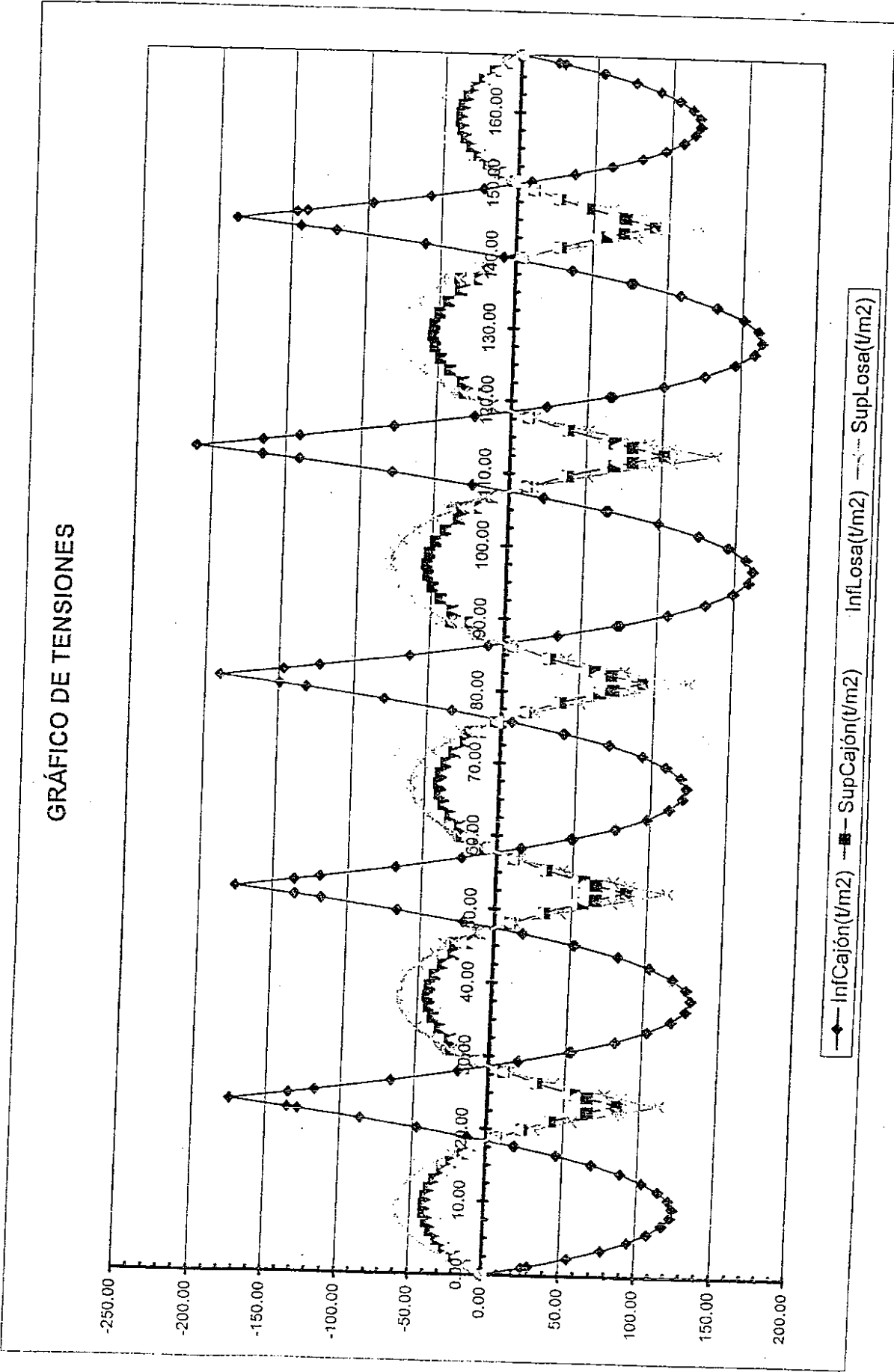
CÁLCULO TENSIONAL

Hipótesis de cálculo:
CMBAL.To
Carga Muerta Balasto). Tensiones a tiempo To
CMBAL
Coef. etc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-48.03	-87.15	0	-57.54	2	27.84	2	24.18	2.35	37.16
115	116	149.20	0.00	-42.89	-33.74	0	-22.28	2	10.78	2	9.36	2.35	14.39
116	116	149.20	-0.51	-42.89	-33.74	0	-22.43	2	10.62	2	9.23	2.35	14.25
116	117	150.38	-0.45	-37.75	13.64	0	8.87	2	-4.50	2	-3.90	2.35	-5.94
117	117	150.38	-0.45	-37.75	13.64	0	9.08	2	-3.18	2	-2.76	2.35	-4.63
117	118	151.55	-0.39	-32.61	54.99	0	37.08	2	-12.36	2	-10.74	2.35	-18.25
118	118	151.55	0.00	-32.62	54.99	0	37.20	2	-12.24	2	-10.63	2.35	-18.14
118	119	152.73	0.00	-27.48	90.29	0	61.09	2	-20.09	2	-17.45	2.35	-29.79
119	119	152.73	0.00	-27.48	90.29	0	61.09	2	-20.09	2	-17.45	2.35	-29.79
119	120	153.90	0.00	-22.34	119.56	0	80.89	2	-26.60	2	-23.11	2.35	-39.44
120	120	153.90	0.00	-22.34	119.56	0	80.89	2	-26.60	2	-23.11	2.35	-39.44
120	121	155.08	0.00	-17.21	142.80	0	96.61	2	-31.77	2	-27.60	2.35	-47.11
121	121	155.08	0.00	-17.21	142.80	0	96.61	2	-31.77	2	-27.60	2.35	-47.11
121	122	156.25	0.00	-12.07	160.00	0	108.25	2	-35.60	2	-30.92	2.35	-52.79
122	122	156.25	0.00	-12.07	160.00	0	108.25	2	-35.60	2	-30.92	2.35	-52.79
122	123	157.43	0.00	-6.93	171.16	0	115.80	2	-38.09	2	-33.08	2.35	-56.47
123	123	157.43	0.00	-6.93	171.16	0	115.80	2	-38.09	2	-33.08	2.35	-56.47
123	124	158.60	0.00	-1.79	176.29	0	119.27	2	-39.23	2	-34.07	2.35	-58.16
124	124	158.60	0.00	-1.79	176.29	0	119.27	2	-39.23	2	-34.07	2.35	-58.16
124	125	159.78	0.00	3.34	175.38	0	118.65	2	-39.02	2	-33.89	2.35	-57.86
125	125	159.78	0.00	3.34	175.38	0	118.65	2	-39.02	2	-33.89	2.35	-57.86
125	126	160.95	0.00	8.48	168.43	0	113.95	2	-37.48	2	-32.55	2.35	-55.57
126	126	160.95	0.00	8.48	168.43	0	113.95	2	-37.48	2	-32.55	2.35	-55.57
126	127	162.13	0.00	13.62	155.45	0	105.17	2	-34.59	2	-30.04	2.35	-51.28
127	127	162.13	0.00	13.62	155.45	0	105.17	2	-34.59	2	-30.04	2.35	-51.28
127	128	163.30	0.00	18.75	136.43	0	92.30	2	-30.36	2	-26.37	2.35	-45.01
128	128	163.30	0.00	18.75	136.43	0	92.30	2	-30.36	2	-26.37	2.35	-45.01
128	129	164.48	0.00	23.89	111.38	0	75.35	2	-24.78	2	-21.53	2.35	-36.75
129	129	164.48	0.00	23.89	111.38	0	75.35	2	-24.78	2	-21.53	2.35	-36.75
129	130	165.65	0.00	29.03	80.29	0	54.32	2	-17.87	2	-15.52	2.35	-26.49
130	130	165.65	0.00	29.03	80.29	0	54.32	2	-17.87	2	-15.52	2.35	-26.49
130	131	166.83	0.00	34.17	43.16	0	29.20	2	-9.60	2	-8.34	2.35	-14.24
131	131	166.83	0.00	34.17	43.16	0	29.20	2	-9.60	2	-8.34	2.35	-14.24
131	132	167.00	0.00	34.93	37.11	0	25.11	2	-8.26	2	-7.17	2.35	-12.24
132	132	167.00	0.00	34.93	37.11	0	25.11	2	-8.26	2	-7.17	2.35	-12.24
132	133	168.00	0.00	39.30	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
CMBAL.To05/09/01

GRÁFICO DE TENSIONES



CÁLCULO TENSIONALHipótesis de cálculo:
CMBAL.To

Carga Muerta Balasto). Tensiones a tiempo To

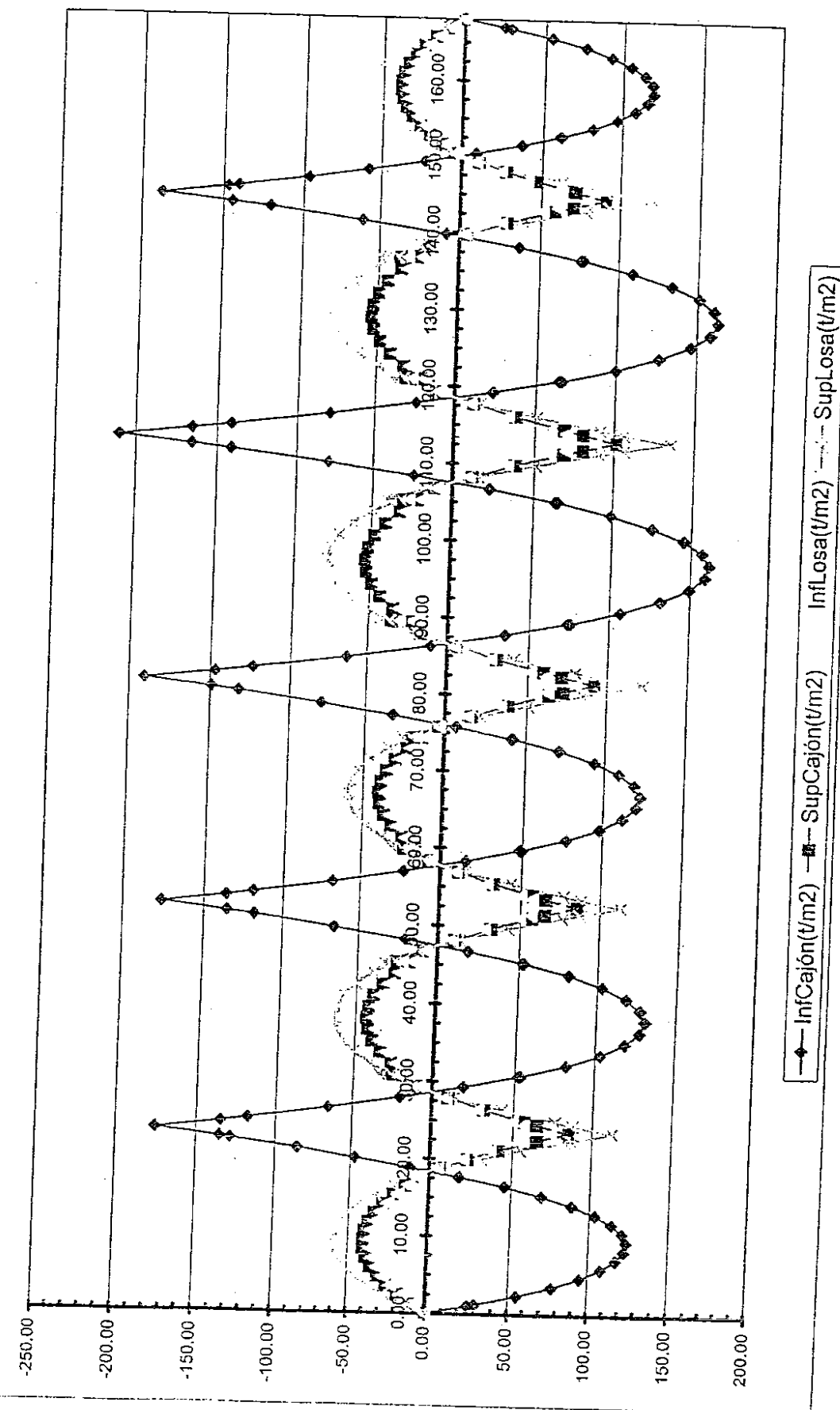
CMBAL

Coef. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-48.03	-87.15	0	-57.54	2	27.84	2	24.18	2.35	37.16
115	116	149.20	0.00	-42.89	-33.74	0	-22.28	2	10.78	2	9.36	2.35	14.39
116	116	149.20	-0.51	-42.89	-33.74	0	-22.43	2	10.62	2	9.23	2.35	14.25
116	117	150.38	-0.45	-37.75	13.64	0	8.87	2	-4.50	2	-3.90	2.35	-5.94
117	117	150.38	-0.45	-37.75	13.64	0	9.08	2	-3.18	2	-2.76	2.35	-4.63
117	118	151.55	-0.39	-32.61	54.99	0	37.08	2	-12.36	2	-10.74	2.35	-18.25
118	118	151.55	0.00	-32.62	54.99	0	37.20	2	-12.24	2	-10.63	2.35	-18.14
118	119	152.73	0.00	-27.48	90.29	0	61.09	2	-20.09	2	-17.45	2.35	-29.79
119	119	152.73	0.00	-27.48	90.29	0	61.09	2	-20.09	2	-17.45	2.35	-29.79
119	120	153.90	0.00	-22.34	119.56	0	80.89	2	-26.60	2	-23.11	2.35	-39.44
120	120	153.90	0.00	-22.34	119.56	0	80.89	2	-26.60	2	-23.11	2.35	-39.44
120	121	155.08	0.00	-17.21	142.80	0	96.61	2	-31.77	2	-27.60	2.35	-47.11
121	121	155.08	0.00	-17.21	142.80	0	96.61	2	-31.77	2	-27.60	2.35	-47.11
121	122	156.25	0.00	-12.07	160.00	0	108.25	2	-35.60	2	-30.92	2.35	-52.79
122	122	156.25	0.00	-12.07	160.00	0	108.25	2	-35.60	2	-30.92	2.35	-52.79
122	123	157.43	0.00	-6.93	171.16	0	115.80	2	-38.09	2	-33.08	2.35	-55.47
123	123	157.43	0.00	-6.93	171.16	0	115.80	2	-38.09	2	-33.08	2.35	-55.47
123	124	158.60	0.00	-1.79	176.29	0	119.27	2	-39.23	2	-34.07	2.35	-58.16
124	124	158.60	0.00	-1.79	176.29	0	119.27	2	-39.23	2	-34.07	2.35	-58.16
124	125	159.78	0.00	3.34	175.38	0	118.65	2	-39.02	2	-33.89	2.35	-57.86
125	125	159.78	0.00	3.34	175.38	0	118.65	2	-39.02	2	-33.89	2.35	-57.86
125	126	160.95	0.00	8.48	168.43	0	113.95	2	-37.48	2	-32.55	2.35	-55.57
126	126	160.95	0.00	8.48	168.43	0	113.95	2	-37.48	2	-32.55	2.35	-55.57
126	127	162.13	0.00	13.62	155.45	0	105.17	2	-34.59	2	-30.04	2.35	-51.28
127	127	162.13	0.00	13.62	155.45	0	105.17	2	-34.59	2	-30.04	2.35	-51.28
127	128	163.30	0.00	18.75	136.43	0	92.30	2	-30.36	2	-26.37	2.35	-45.01
128	128	163.30	0.00	18.75	136.43	0	92.30	2	-30.36	2	-26.37	2.35	-45.01
128	129	164.48	0.00	23.89	111.38	0	75.35	2	-24.78	2	-21.53	2.35	-36.75
129	129	164.48	0.00	23.89	111.38	0	75.35	2	-24.78	2	-21.53	2.35	-36.75
129	130	165.65	0.00	29.03	80.29	0	54.32	2	-17.87	2	-15.52	2.35	-26.49
130	130	165.65	0.00	29.03	80.29	0	54.32	2	-17.87	2	-15.52	2.35	-26.49
130	131	166.83	0.00	34.17	43.16	0	29.20	2	-9.60	2	-8.34	2.35	-14.24
131	131	166.83	0.00	34.17	43.16	0	29.20	2	-9.60	2	-8.34	2.35	-14.24
131	132	167.00	0.00	34.93	37.11	0	25.11	2	-8.26	2	-7.17	2.35	-12.24
132	132	167.00	0.00	34.93	37.11	0	25.11	2	-8.26	2	-7.17	2.35	-12.24
132	133	168.00	0.00	39.30	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
CMBAL.To

05/09/01

GRÁFICO DE TENSIONES

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMBAL.To

Carga Muerta (Balasto). Tensiones a tiempo To

CMBAL

Coef. exc.

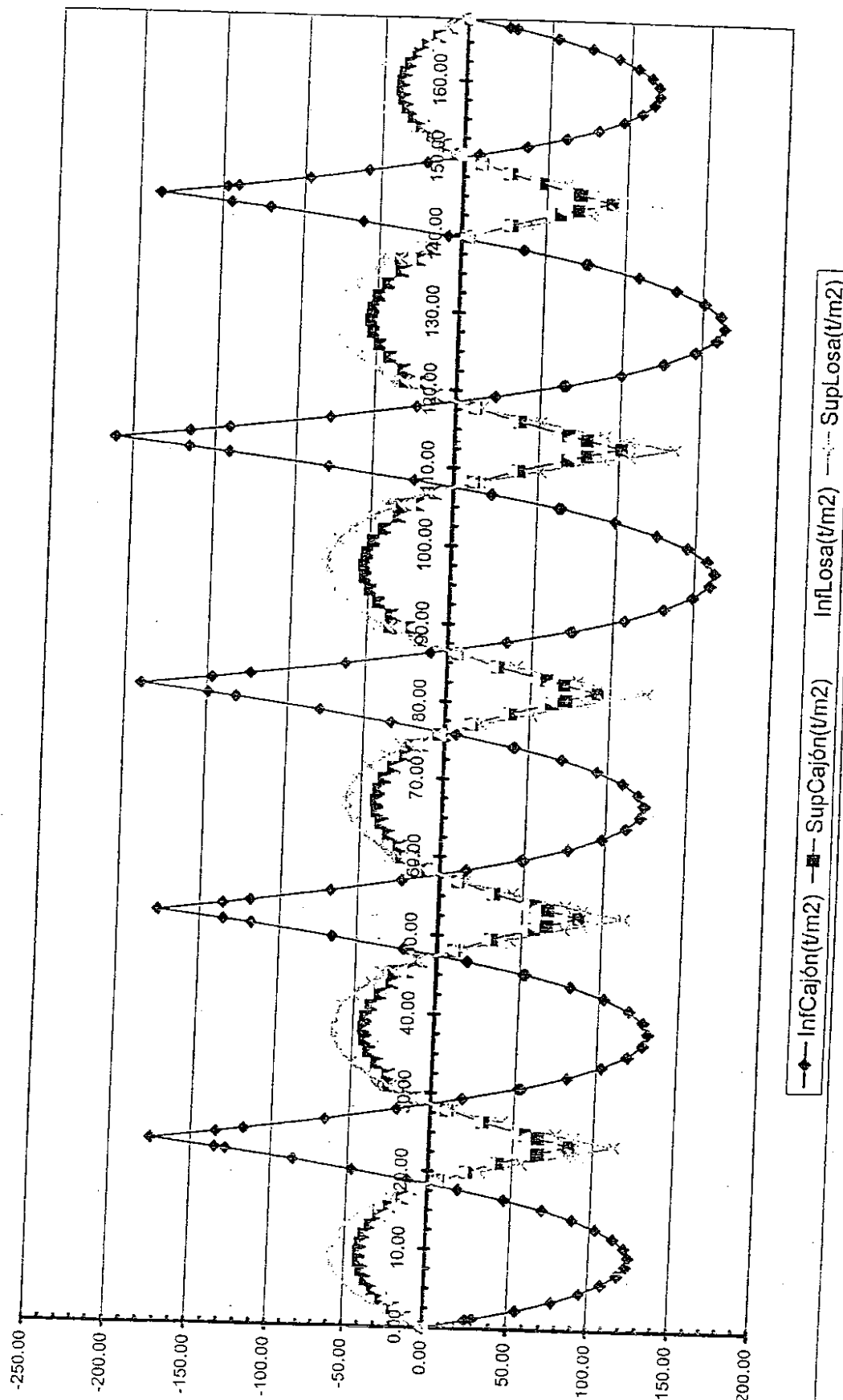
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-48.03	-87.15	0	-57.54	2	27.84	2	24.18	2.35	37.16
115	116	149.20	0.00	-42.89	-33.74	0	-22.28	2	10.78	2	9.36	2.35	14.39
116	116	149.20	-0.51	-42.89	-33.74	0	-22.43	2	10.62	2	9.23	2.35	14.25
116	117	150.38	-0.45	-37.75	13.64	0	8.87	2	-4.50	2	-3.90	2.35	-5.94
117	117	150.38	-0.45	-37.75	13.64	0	9.08	2	-3.18	2	-2.76	2.35	-4.63
117	118	151.55	-0.39	-32.61	54.99	0	37.08	2	-12.36	2	-10.74	2.35	-18.25
118	118	151.55	0.00	-32.62	54.99	0	37.20	2	-12.24	2	-10.63	2.35	-18.14
118	119	152.73	0.00	-27.48	90.29	0	61.09	2	-20.09	2	-17.45	2.35	-29.79
119	119	152.73	0.00	-27.48	90.29	0	61.09	2	-20.09	2	-17.45	2.35	-29.79
119	120	153.90	0.00	-22.34	119.56	0	80.89	2	-26.60	2	-23.11	2.35	-39.44
120	120	153.90	0.00	-22.34	119.56	0	80.89	2	-26.60	2	-23.11	2.35	-39.44
120	121	155.08	0.00	-17.21	142.80	0	96.61	2	-31.77	2	-27.60	2.35	-47.11
121	121	155.08	0.00	-17.21	142.80	0	96.61	2	-31.77	2	-27.60	2.35	-47.11
121	122	156.25	0.00	-12.07	160.00	0	108.25	2	-35.60	2	-30.92	2.35	-52.79
122	122	156.25	0.00	-12.07	160.00	0	108.25	2	-35.60	2	-30.92	2.35	-52.79
122	123	157.43	0.00	-6.93	171.16	0	115.80	2	-38.09	2	-33.08	2.35	-56.47
123	123	157.43	0.00	-6.93	171.16	0	115.80	2	-38.09	2	-33.08	2.35	-56.47
123	124	158.60	0.00	-1.79	176.29	0	119.27	2	-39.23	2	-34.07	2.35	-58.16
124	124	158.60	0.00	-1.79	176.29	0	119.27	2	-39.23	2	-34.07	2.35	-58.16
124	125	159.78	0.00	3.34	175.38	0	118.65	2	-39.02	2	-33.89	2.35	-57.86
125	125	159.78	0.00	3.34	175.38	0	118.65	2	-39.02	2	-33.89	2.35	-57.86
125	126	160.95	0.00	8.48	168.43	0	113.95	2	-37.48	2	-32.55	2.35	-55.57
126	126	160.95	0.00	8.48	168.43	0	113.95	2	-37.48	2	-32.55	2.35	-55.57
126	127	162.13	0.00	13.62	155.45	0	105.17	2	-34.59	2	-30.04	2.35	-51.28
127	127	162.13	0.00	13.62	155.45	0	105.17	2	-34.59	2	-30.04	2.35	-51.28
127	128	163.30	0.00	18.75	136.43	0	92.30	2	-30.36	2	-26.37	2.35	-45.01
128	128	163.30	0.00	18.75	136.43	0	92.30	2	-30.36	2	-26.37	2.35	-45.01
128	129	164.48	0.00	23.89	111.38	0	75.35	2	-24.78	2	-21.53	2.35	-36.75
129	129	164.48	0.00	23.89	111.38	0	75.35	2	-24.78	2	-21.53	2.35	-36.75
129	130	165.65	0.00	29.03	80.29	0	54.32	2	-17.87	2	-15.52	2.35	-26.49
130	130	165.65	0.00	29.03	80.29	0	54.32	2	-17.87	2	-15.52	2.35	-26.49
130	131	166.83	0.00	34.17	43.16	0	29.20	2	-9.60	2	-8.34	2.35	-14.24
131	131	166.83	0.00	34.17	43.16	0	29.20	2	-9.60	2	-8.34	2.35	-14.24
131	132	167.00	0.00	34.93	37.11	0	25.11	2	-8.26	2	-7.17	2.35	-12.24
132	132	167.00	0.00	34.93	37.11	0	25.11	2	-8.26	2	-7.17	2.35	-12.24
132	133	168.00	0.00	39.30	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

hsim_10.xls

Programa DINTEL IDEAM S.A.
CMBAL.To

05/09/01

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

Hipótesis de cálculo:
CMRESTO.To
(RestoCargaMuerta). Tensiones a tiempo To
CMRESTO

Def. etc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
1	1	0.00	0.00	-27.86	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-24.82	26.34	0	17.82	2	-5.86	2	-5.09	2.35	-8.69
2	2	1.00	0.00	-24.82	26.34	0	17.82	2	-5.86	2	-5.09	2.35	-8.69
2	3	1.18	0.00	-24.29	30.64	0	20.73	2	-6.82	2	-5.92	2.35	-10.11
3	3	1.18	0.00	-24.29	30.64	0	20.73	2	-6.82	2	-5.92	2.35	-10.11
3	4	2.35	0.00	-20.72	57.08	0	38.62	2	-12.70	2	-11.03	2.35	-18.83
4	4	2.35	0.00	-20.72	57.08	0	38.62	2	-12.70	2	-11.03	2.35	-18.83
5	5	3.53	0.00	-17.15	79.33	0	53.67	2	-17.65	2	-15.33	2.35	-26.17
5	5	3.53	0.00	-17.15	79.33	0	53.67	2	-17.65	2	-15.33	2.35	-26.17
6	6	4.70	0.00	-13.58	97.39	0	65.89	2	-21.67	2	-18.82	2.35	-32.13
6	6	4.70	0.00	-13.58	97.39	0	65.89	2	-21.67	2	-18.82	2.35	-32.13
7	7	5.88	0.00	-10.01	111.25	0	75.27	2	-24.75	2	-21.50	2.35	-36.70
7	8	7.05	0.00	-6.44	120.92	0	81.81	2	-26.91	2	-23.37	2.35	-39.89
8	8	7.05	0.00	-6.44	120.92	0	81.81	2	-26.91	2	-23.37	2.35	-39.89
9	9	8.23	0.00	-2.88	126.40	0	85.52	2	-28.13	2	-24.43	2.35	-41.70
9	9	8.23	0.00	-2.88	126.40	0	85.52	2	-28.13	2	-24.43	2.35	-41.70
10	10	9.40	0.00	0.69	127.68	0	86.38	2	-28.41	2	-24.68	2.35	-42.12
10	10	9.40	0.00	0.69	127.68	0	86.38	2	-28.41	2	-24.68	2.35	-42.12
11	11	10.58	0.00	4.26	124.77	0	84.41	2	-27.76	2	-24.11	2.35	-41.16
11	11	10.58	0.00	4.26	124.77	0	84.41	2	-27.76	2	-24.11	2.35	-41.16
12	12	11.75	0.00	7.83	117.66	0	79.60	2	-26.18	2	-22.74	2.35	-38.82
12	12	11.75	0.00	7.83	117.66	0	79.60	2	-26.18	2	-22.74	2.35	-38.82
13	13	12.93	0.00	11.40	106.37	0	71.96	2	-23.67	2	-20.56	2.35	-35.09
13	13	12.93	0.00	11.40	106.37	0	71.96	2	-23.67	2	-20.56	2.35	-35.09
14	14	14.10	0.00	14.97	90.87	0	61.48	2	-20.22	2	-17.56	2.35	-29.98
14	14	14.10	0.00	14.97	90.87	0	61.48	2	-20.22	2	-17.56	2.35	-29.98
15	15	15.28	0.00	18.54	71.19	0	48.16	2	-15.84	2	-13.76	2.35	-23.49
15	15	15.28	0.00	18.54	71.19	0	48.16	2	-15.84	2	-13.76	2.35	-23.49
16	16	16.45	-0.26	22.11	47.31	0	32.01	2	-10.53	2	-9.14	2.35	-15.61
16	16	16.45	-0.26	22.11	47.31	0	32.01	2	-10.53	2	-9.14	2.35	-15.61
17	17	17.63	-0.30	25.68	19.23	0	12.91	2	-4.38	2	-3.80	2.35	-6.43
17	17	17.63	-0.30	25.68	19.23	0	12.91	2	-4.38	2	-3.80	2.35	-6.43
18	18	18.80	-0.35	29.24	-13.03	0	-8.71	2	4.06	2	3.52	2.35	5.46
18	18	18.80	-0.35	29.24	-13.03	0	-8.71	2	4.06	2	3.52	2.35	5.46
19	19	19.98	0.00	32.82	-49.49	0	-32.67	2	15.81	2	13.73	2.35	21.10
19	19	19.98	0.00	32.82	-49.49	0	-32.67	2	15.81	2	13.73	2.35	21.10
20	20	21.15	0.00	36.38	-90.15	0	-59.52	2	28.80	2	25.01	2.35	38.44
20	20	21.15	0.00	36.38	-90.15	0	-59.52	2	28.80	2	25.01	2.35	38.44
21	21	22.33	0.00	39.95	-135.00	0	-89.13	2	43.13	2	37.46	2.35	57.56
21	21	22.33	0.00	39.95	-135.00	0	-89.13	2	43.13	2	37.46	2.35	57.56
22	22	22.50	0.00	40.48	-142.04	0	-93.78	2	45.38	2	39.41	2.35	60.56
22	22	22.50	0.00	40.48	-142.04	0	-93.78	2	45.38	2	39.41	2.35	60.56
23	23	23.50	0.00	43.52	-184.04	0	-121.51	2	58.79	2	51.06	2.35	78.47
23	23	23.50	0.00	43.52	-184.04	0	-121.51	2	58.79	2	51.06	2.35	78.47
24	24	24.50	0.00	-40.99	-141.53	0	-93.44	2	45.21	2	39.27	2.35	60.34
24	24	24.50	0.00	-40.99	-141.53	0	-93.44	2	45.21	2	39.27	2.35	60.34
25	25	24.95	0.00	-39.62	-123.40	0	-81.47	2	39.42	2	34.24	2.35	52.61
25	25	24.95	0.00	-39.62	-123.40	0	-81.47	2	39.42	2	34.24	2.35	52.61
26	26	26.40	0.00	-35.21	-69.14	0	-45.65	2	22.09	2	19.18	2.35	29.48
26	26	26.40	0.00	-35.21	-69.14	0	-45.65	2	22.09	2	19.18	2.35	29.48
27	27	27.85	0.00	-30.81	-21.28	0	-14.05	2	6.80	2	5.90	2.35	9.07
27	27	27.85	0.00	-30.81	-21.28	0	-14.05	2	6.80	2	5.90	2.35	9.07
28	28	29.30	-0.25	-26.40	20.21	0	13.34	2	-6.46	2	-5.61	2.35	-8.62
28	28	29.30	-0.25	-26.40	20.21	0	13.34	2	-6.46	2	-5.61	2.35	-8.62
29	29	30.75	-0.21	-22.00	55.30	0	36.45	2	-17.73	2	-15.40	2.35	-23.63
29	29	30.75	-0.21	-22.00	55.30	0	36.45	2	-17.73	2	-15.40	2.35	-23.63
30	30	32.20	-0.17	-17.60	84.01	0	56.78	2	-18.75	2	-16.28	2.35	-27.76
30	30	32.20	-0.17	-17.60	84.01	0	56.78	2	-18.75	2	-16.28	2.35	-27.76
31	31	33.65	0.00	-13.19	106.33	0	71.94	2	-23.66	2	-20.55	2.35	-35.08
31	31	33.65	0.00	-13.19	106.33	0	71.94	2	-23.66	2	-20.55	2.35	-35.08
32	32	35.10	0.00	-8.79	122.27	0	82.72	2	-27.21	2	-23.63	2.35	-40.34
32	32	35.10	0.00	-8.79	122.27	0	82.72	2	-27.21	2	-23.63	2.35	-40.34
33	33	36.55	0.00	-4.38	131.82	0	89.18	2	-29.33	2	-25.48	2.35	-43.49
33	33	36.55	0.00	-4.38	131.82	0	89.18	2	-29.33	2	-25.48	2.35	-43.49
34	34	38.00	0.00	0.02	134.98	0	91.32	2	-30.03	2	-26.09	2.35	-44.53
34	34	38.00	0.00	0.02	134.98	0	91.32	2	-30.03	2	-26.09	2.35	-44.53
35	35	39.45	0.00	4.43	131.76	0	89.14	2	-29.32	2	-25.46	2.35	-43.47
35	35	39.45	0.00	4.43	131.76	0	89.14	2	-29.32	2	-25.46	2.35	-43.47
36	36	40.90	0.00	8.83	122.15	0	82.64	2	-27.18	2	-23.61	2.35	-40.30
36	36	40.90	0.00	8.83	122.15	0	82.64	2	-27.18	2	-23.61	2.35	-40.30
37	37	42.35	0.00	13.23	106.15	0	71.82	2	-23.62	2	-20.51	2.35	-35.02
37	37	42.35	0.00	13.23	106.15	0	71.82	2	-23.62	2	-20.51	2.35	-35.02
38	38	43.80	0.00	17.64	83.77	0	56.67	2	-18.64	2	-16.19	2.35	-27.64
38	38	43.80	0.00	17.64	83.77	0	56.67	2	-18.64	2	-16.19	2.35	-27.64
39	39	45.25	-0.21	22.04	55.00	0	37.14	2	-12.31	2	-10.69	2.35	-18.20

CÁLCULO TENSIONAL

Hipótesis de cálculo:
CMRESTO.To
(RestoCargaMuerta). Tensiones a tiempo To
CMRESTO

Def. etc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
39	39	45.25	-0.21	22.04	55.00	0	36.25	2	-17.63	2	-15.32	2.35	-23.51
39	40	46.70	-0.25	26.45	19.85	0	13.03	2	-6.42	2	-5.57	2.35	-8.53
40	40	46.70	0.00	26.45	19.85	0	13.11	2	-6.34	2	-5.51	2.35	-8.46
40	41	48.15	0.00	30.85	-21.70	0	-14.33	2	6.93	2	6.02	2.35	9.25
41	41	48.15	0.00	30.85	-21.70	0	-14.33	2	6.93	2	6.02	2.35	9.25
41	42	49.60	0.00	35.26	-69.62	0	-45.97	2	22.24	2	19.32	2.35	29.68
42	42	49.60	0.00	35.26	-69.62	0	-45.97	2	22.24	2	19.32	2.35	29.68
42	43	51.05	0.00	39.66	-123.94	0	-81.83	2	39.59	2	34.39	2.35	52.84
43	43	51.05	0.00	39.66	-123.94	0	-81.83	2	39.59	2	34.39	2.35	52.84
43	44	51.50	0.00	41.03	-142.09	0	-93.81	2	45.39	2	39.42	2.35	60.58
44	44	51.50	0.00	41.03	-142.09	0	-93.81	2	45.39	2	39.42	2.35	60.58
44	45	52.50	0.00	44.06	-184.64	0	-121.91	2	58.98	2	51.23	2.35	78.72
45	1045	52.50	0.00	-43.52	-184.64	0	-121.91	2	58.98	2	51.23	2.35	78.72
45	46	53.50	0.00	-40.48	-142.64	0	-94.18	2	45.57	2	39.58	2.35	60.82
46	46	53.50	0.00	-40.48	-142.64	0	-94.18	2	45.57	2	39.58	2.35	60.82
46	47	53.95	0.00	-39.11	-124.73	0	-82.35	2	39.85	2	34.61	2.35	53.18
47	47	53.95	0.00	-39.11	-124.73	0	-82.35	2	39.85	2	34.61	2.35	53.18
47	48	55.40	0.00	-34.71	-71.21	0	-47.02	2	22.75	2	19.76	2.35	30.36
48	48	55.40	0.00	-34.71	-71.21	0	-47.02	2	22.75	2	19.76	2.35	30.36
48	49	56.85	0.00	-30.31	-24.07	0	-15.89	2	7.69	2	6.68	2.35	10.26
49	49	56.85	0.00	-30.31	-24.07	0	-15.89	2	7.69	2	6.68	2.35	10.26
49	50	58.30	0.00	-25.90	16.68	0	11.01	2	-5.33	2	-4.63	2.35	-7.11
50	50	58.30	-0.25	-25.90	16.68	0	11.01	2	-5.33	2	-4.69	2.35	-7.18
50	51	59.75	-0.21	-21.50	51.04	0	33.63	2	-16.37	2	-14.22	2.35	-21.82
51	51	59.75	-0.21	-21.50	51.04	0	33.63	2	-16.37	2	-14.22	2.35	-21.82
51	52	61.20	-0.16	-17.09	79.02	0	53.41	2	-17.64	2	-15.32	2.35	-26.12
52	52	61.20	0.00	-17.09	79.02	0	53.41	2	-17.64	2	-15.32	2.35	-26.12
52	53	62.65	0.00	-12.69	100.61	0	68.07	2	-22.39	2	-19.44	2.35	-33.19
53	53	62.65	0.00	-12.69	100.61	0	68.07	2	-22.39	2	-19.44	2.35	-33.19
53	54	64.10	0.00	-8.28	115.81	0	78.35	2	-25.77	2	-22.38	2.35	-38.21
54	54	64.10	0.00	-8.28	115.81	0	78.35	2	-25.77	2	-22.38	2.35	-38.21
54	55	65.55	0.00	-3.88	124.63	0	84.32	2	-27.73	2	-24.09	2.35	-41.12
55	55	65.55	0.00	-3.88	124.63	0	84.32	2	-27.73	2	-24.09	2.35	-41.12
55	56	67.00	0.00	0.53	127.06	0	85.96	2	-28.27	2	-24.56	2.35	-41.92
56	56	67.00	0.00	0.53	127.06	0	85.96	2	-28.27	2	-24.56	2.35	-41.92
56	57	68.45	0.00	4.93	123.11	0	83.29	2	-27.39	2	-23.79	2.35	-40.62
57	57	68.45	0.00	4.93	123.11	0	83.29	2	-27.39	2	-23.79	2.35	-40.62
57	58	69.90	0.00	9.33	112.77	0	76.29	2	-25.09	2	-21.79	2.35	-37.20
58	58	69.90	0.00	9.33	112.77	0	76.29	2	-25.09	2	-21.79	2.35	-37.20
58	59	71.35	0.00	13.74	96.04	0	64.98	2	-21.37	2	-18.56	2.35	-31.68
59	59	71.35	0.00	13.74	96.04	0	64.98	2	-21.37	2	-18.56	2.35	-31.68
59	60	72.80	0.00	18.14	72.93	0	49.34	2	-16.23	2	-14.09	2.35	-24.06
60	60	72.80	-0.17	18.14	72.93	0	49.34	2	-16.23	2	-14.09	2.35	-24.06
60	61	74.25	-0.22	22.55	43.43	0	29.31	2	-9.74	2	-8.46	2.35	-14.39
61	61	74.25	-0.22	22.55	43.43	0	29.31	2	-9.74	2	-8.46	2.35	-14.39
61	62	75.70	-0.26	26.95	7.54	0	4.90	2	-2.49	2	-2.16	2.35	-3.28
62	62	75.70	0.00	26.95	7.54	0	4.90	2	-2.49	2	-2.16	2.35	-3.28
62	63	77.15	0.00	31.36	-34.74	0	-22.94	2	11.10	2	9.64	2.35	14.81
63	63	77.15	0.00	31.36	-34.74	0	-22.94	2	11.10	2	9.64	2.35	14.81
63	64	78.60	0.00	35.76	-83.39	0	-55.06	2	26.64	2	23.14	2.35	35.55
64	64	78.60	0.00	35.76	-83.39	0	-55.06	2	26.64	2	23.14	2.35	35.55
64	65	80.05	0.00	40.17	-138.44	0	-91.40	2	44.23	2	38.41	2.35	59.03
65	65	80.05	0.00	40.17	-138.44	0	-91.40	2	44.23	2	38.41	2.35	59.03
65	66	80.50	0.00	41.53	-156.82	0	-103.54	2	50.10	2	43.51	2.35	66.86
66	66	80.50	0.00	41.53	-156.82	0	-103.54	2	50.10	2	43.51	2.35	66.86
66	67	81.50	0.00	44.57	-199.87	0	-131.96	2	63.85	2	55.45	2.35	85.22
67	1067	81.50	0.00	-47.18	-199.87	0	-131.96	2	63.85	2	55.45	2.35	85.22
67	68	82.50	0.00	-44.14	-154.21	0	-101.81	2	49.26	2	42.79	2.35	65.75
68	68	82.50	0.00	-44.14	-154.21	0	-101.81	2	49.26	2	42.79	2.35	65.75
68	69	83.08	0.00	-42.39	-129.34	0	-85.39	2	41.32	2	35.89	2.35	55.15
69	69	83.08	0.00	-42.39	-129.34	0	-85.39	2	41.32	2	35.89	2.35	55.15
69	70	84.65	0.00	-37.61	-66.34	0	-43.80	2	21.19	2	18.41	2.35	28.28
70	70	84.65	0.00	-37.61	-66.34	0	-43.80	2	21.19	2	18.41	2.35	28.28
70	71	86.23	0.00	-32.82	-10.87	0	-7.18	2	3.47	2	3.02	2.35	4.63
71	71	86.23	0.00	-32.82	-10.87	0	-7.18	2	3.47	2	3.02	2.35	4.63
71	72	87.80	0.00	-28.04	37.06	0	24.47	2	-11.84	2	-10.28	2.35	-15.80
72	72	87.80	-0.25	-28.04	37.06	0	24.47	2	-11.84	2	-10.28	2.35	-15.80
72	73	89.38	-0.21	-23.26	77.45	0	51.07	2	-24.81	2	-21.54	2.35	-33.08
73	73	89.38	-0.21	-23.26	77.45	0	51.07	2	-24.81	2	-21.54	2.35	-33.08
73	74	90.95	-0.16	-18.47	110.31	0	74.58	2	-17.30	2	-15.03	2.35	-25.61
74	74	90.95	0.00	-18.47	110.31	0	74.58	2	-17.30	2	-15.03	2.35	-25.61
74	75	92.53	0.00	-13.69	135.64	0	91.77	2	-30.18	2	-26.21	2.35	-44.75
75	75	92.53	0.00	-13.69	135.64	0	91.77	2	-30.18	2	-26.21	2.35	-44.75
75	76	94.10	0.00	-8.90	153.43	0	103.80	2	-34.14	2	-29.65	2.35	-50.62
76	76	94.10	0.00	-8.90	153.43	0	103.80	2	-34.14	2	-29.65	2.35	-50.62
76	77	95.68	0.00	-4.12	163.68	0	110.74	2	-36.42	2	-31.63	2.35	-54.00

243

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMRESTO.To

(RestoCargaMuerta). Tensiones a tiempo To

CMRESTO

Unit: kN

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
1	1	0.00	0.00	-27.86	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-24.82	26.34	0	17.82	2	-5.86	2	-5.09	2.35	-8.69
2	2	1.00	0.00	-24.82	26.34	0	17.82	2	-5.86	2	-5.09	2.35	-8.69
2	3	1.18	0.00	-24.29	30.64	0	20.73	2	-6.82	2	-5.92	2.35	-10.11
3	3	1.18	0.00	-24.29	30.64	0	20.73	2	-6.82	2	-5.92	2.35	-10.11
3	4	2.35	0.00	-20.72	57.08	0	38.62	2	-12.70	2	-11.03	2.35	-18.83
4	4	2.35	0.00	-20.72	57.08	0	38.62	2	-12.70	2	-11.03	2.35	-18.83
4	5	3.53	0.00	-17.15	79.33	0	53.67	2	-17.65	2	-15.33	2.35	-26.17
5	5	3.53	0.00	-17.15	79.33	0	53.67	2	-17.65	2	-15.33	2.35	-26.17
5	6	4.70	0.00	-13.58	97.39	0	65.89	2	-21.67	2	-18.82	2.35	-32.13
6	6	4.70	0.00	-13.58	97.39	0	65.89	2	-21.67	2	-18.82	2.35	-32.13
6	7	5.88	0.00	-10.01	111.25	0	75.27	2	-24.75	2	-21.50	2.35	-36.70
7	7	5.88	0.00	-10.01	111.25	0	75.27	2	-24.75	2	-21.50	2.35	-36.70
7	8	7.05	0.00	-6.44	120.92	0	81.81	2	-26.91	2	-23.37	2.35	-39.89
8	8	7.05	0.00	-6.44	120.92	0	81.81	2	-26.91	2	-23.37	2.35	-39.89
8	9	8.23	0.00	-2.88	126.40	0	85.52	2	-28.13	2	-24.43	2.35	-41.70
9	9	8.23	0.00	-2.88	126.40	0	85.52	2	-28.13	2	-24.43	2.35	-41.70
9	10	9.40	0.00	0.69	127.68	0	86.38	2	-28.41	2	-24.68	2.35	-42.12
10	10	9.40	0.00	0.69	127.68	0	86.38	2	-28.41	2	-24.68	2.35	-42.12
10	11	10.58	0.00	4.26	124.77	0	84.41	2	-27.76	2	-24.11	2.35	-41.16
11	11	10.58	0.00	4.26	124.77	0	84.41	2	-27.76	2	-24.11	2.35	-41.16
11	12	11.75	0.00	7.83	117.66	0	79.60	2	-26.18	2	-22.74	2.35	-38.82
12	12	11.75	0.00	7.83	117.66	0	79.60	2	-26.18	2	-22.74	2.35	-38.82
12	13	12.93	0.00	11.40	106.37	0	71.96	2	-23.67	2	-20.56	2.35	-35.09
13	13	12.93	0.00	11.40	106.37	0	71.96	2	-23.67	2	-20.56	2.35	-35.09
13	14	14.10	0.00	14.97	90.87	0	61.48	2	-20.22	2	-17.56	2.35	-29.98
14	14	14.10	0.00	14.97	90.87	0	61.48	2	-20.22	2	-17.56	2.35	-29.98
14	15	15.28	0.00	18.54	71.19	0	48.16	2	-15.84	2	-13.76	2.35	-23.49
15	15	15.28	0.00	18.54	71.19	0	48.16	2	-15.84	2	-13.76	2.35	-23.49
15	16	16.45	0.00	22.11	47.31	0	32.01	2	-10.53	2	-9.14	2.35	-15.61
16	16	16.45	-0.26	22.11	47.31	0	31.92	2	-10.61	2	-9.22	2.35	-15.68
16	17	17.63	-0.30	25.68	19.23	0	12.91	2	-4.38	2	-3.80	2.35	-6.43
17	17	17.63	-0.30	25.68	19.23	0	12.60	2	-6.24	2	-5.42	2.35	-8.28
17	18	18.80	-0.35	29.24	-13.03	0	-8.71	2	4.06	2	3.52	2.35	5.46
18	18	18.80	0.00	29.25	-13.03	0	-8.60	2	4.16	2	3.62	2.35	5.56
18	19	19.98	0.00	32.82	-49.49	0	-32.67	2	15.81	2	13.73	2.35	21.10
19	19	19.98	0.00	32.82	-49.49	0	-32.67	2	15.81	2	13.73	2.35	21.10
19	20	21.15	0.00	36.38	-90.15	0	-59.52	2	28.80	2	25.01	2.35	38.44
20	20	21.15	0.00	36.38	-90.15	0	-59.52	2	28.80	2	25.01	2.35	38.44
20	21	22.33	0.00	39.95	-135.00	0	-89.13	2	43.13	2	37.46	2.35	57.56
21	21	22.33	0.00	39.95	-135.00	0	-89.13	2	43.13	2	37.46	2.35	57.56
21	22	22.50	0.00	40.48	-142.04	0	-93.78	2	45.38	2	39.41	2.35	60.56
22	22	22.50	0.00	40.48	-142.04	0	-93.78	2	45.38	2	39.41	2.35	60.56
22	23	23.50	0.00	43.52	-184.04	0	-121.51	2	58.79	2	51.06	2.35	78.47
1023	23	23.50	0.00	44.02	-184.04	0	-121.51	2	58.79	2	51.06	2.35	78.47
24	24	24.50	0.00	40.99	-141.53	0	-93.44	2	45.21	2	39.27	2.35	60.34
24	25	24.50	0.00	40.99	-141.53	0	-93.44	2	45.21	2	39.27	2.35	60.34
24	26	24.95	0.00	39.62	-123.40	0	-81.47	2	39.42	2	34.24	2.35	52.61
25	25	24.95	0.00	39.62	-123.40	0	-81.47	2	39.42	2	34.24	2.35	52.61
25	26	26.40	0.00	35.21	-69.14	0	-45.65	2	22.09	2	19.18	2.35	29.48
26	26	26.40	0.00	35.21	-69.14	0	-45.65	2	22.09	2	19.18	2.35	29.48
26	27	27.85	0.00	30.81	-21.28	0	-14.05	2	6.80	2	5.90	2.35	9.07
27	27	27.85	0.00	30.81	-21.28	0	-14.05	2	6.80	2	5.90	2.35	9.07
27	28	29.30	0.00	26.41	20.21	0	13.34	2	-6.46	2	-5.61	2.35	-8.62
28	28	29.30	-0.25	26.40	20.21	0	13.27	2	-6.53	2	-5.67	2.35	-8.68
28	29	30.75	-0.21	22.00	55.30	0	36.45	2	-17.73	2	-15.40	2.35	-23.63
29	29	30.75	-0.21	22.00	55.30	0	37.34	2	-12.37	2	-10.75	2.35	-18.30
29	30	32.20	-0.17	17.60	84.01	0	56.78	2	-18.75	2	-16.28	2.35	-27.76
30	30	32.20	0.00	17.60	84.01	0	56.78	2	-18.75	2	-16.28	2.35	-27.76
30	31	33.65	0.00	-13.19	106.33	0	71.94	2	-23.66	2	-20.55	2.35	-35.08
31	31	33.65	0.00	-13.19	106.33	0	71.94	2	-23.66	2	-20.55	2.35	-35.08
31	32	35.10	0.00	-8.79	122.27	0	82.72	2	-27.21	2	-23.63	2.35	-40.34
32	32	35.10	0.00	-8.79	122.27	0	82.72	2	-27.21	2	-23.63	2.35	-40.34
32	33	36.55	0.00	-4.38	131.82	0	89.18	2	-29.33	2	-25.48	2.35	-43.49
33	33	36.55	0.00	-4.38	131.82	0	89.18	2	-29.33	2	-25.48	2.35	-43.49
33	34	38.00	0.00	0.02	134.98	0	91.32	2	-30.03	2	-26.09	2.35	-44.53
34	34	38.00	0.00	0.02	134.98	0	91.32	2	-30.03	2	-26.09	2.35	-44.53
34	35	39.45	0.00	4.43	131.76	0	89.14	2	-29.32	2	-25.46	2.35	-43.47
35	35	39.45	0.00	4.43	131.76	0	89.14	2	-29.32	2	-25.46	2.35	-43.47
35	36	40.90	0.00	8.83	122.15	0	82.64	2	-27.18	2	-23.61	2.35	-40.30
36	36	40.90	0.00	8.83	122.15	0	82.64	2	-27.18	2	-23.61	2.35	-40.30
36	37	42.35	0.00	13.23	106.15	0	71.82	2	-23.62	2	-20.51	2.35	-35.02
37	37	42.35	0.00	13.23	106.15	0	71.82	2	-23.62	2	-20.51	2.35	-35.02
37	38	43.80	0.00	17.64	83.77	0	56.67	2	-18.64	2	-16.19	2.35	-27.64
38	38	43.80	-0.17	17.64	83.77	0	56.62	2	-18.70	2	-16.24	2.35	-27.69
38	39	45.25	-0.21	22.04	55.00	0	37.14	2	-12.31	2	-10.69	2.35	-18.20

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMRESTO.To

(RestoCargaMuerta). Tensiones a tiempo To

1. (CMRESTO

Unit: kN

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	-0.21	22.04	55.00	0	36.25	2	-17.63	2	-15.32	2.35	-23.51
39	40	46.70	-0.25	26.45	19.85	0	13.03	2	-6.42	2	-5.57	2.35	-8.53
40	40	46.70	0.00	26.45	19.85	0	13.11	2	-6.34	2	-5.51	2.35	-8.46
40	41	48.15	0.00	30.85	-21.70	0	-14.33	2	6.93	2	6.02	2.35	9.25
41	41	48.15	0.00	30.85	-21.70	0	-14.33	2	6.93	2	6.02	2.35	9.25
41	42	49.60	0.00	35.26	-69.62	0	-45.97	2	22.24	2	19.32	2.35	29.68
42	42	49.60	0.00	35.26	-69.62	0	-45.97	2	22.24	2	19.32	2.35	29.68
42	43	51.05	0.00	39.66	-123.94	0	-81.83	2	39.59	2	34.39	2.35	52.84
43	43	51.05	0.00	39.66	-123.94	0	-81.83	2	39.59	2	34.39	2.35	52.84
43	44	51.50	0.00	41.03	-142.09	0	-93.81	2	45.39	2	39.42	2.35	60.58
44	44	51.50	0.00	41.03	-142.09	0	-93.81	2	45.39	2	39.42	2.35	60.58
44	45	52.50	0.00	44.06	-184.64	0	-121.91	2	58.98	2	51.23	2.35	78.72
45	1045	52.50	0.00	43.52	-184.64	0	-121.91	2	58.98	2	51.23	2.35	78.72
45	46	53.50	0.00	-40.48	-142.64	0	-94.18	2	45.57	2	39.58	2.35	60.82
46	46	53.50	0.00	-40.48	-142.64	0	-94.18	2	45.57	2	39.58	2.35	60.82
46	47	53.95	0.00	-39.11	-124.73	0	-82.35	2	39.85	2	34.61	2.35	53.18
47	47	53.95	0.00	-39.11	-124.73	0	-82.35	2	39.85	2	34.61	2.35	53.18
47	48	55.40	0.00	-34.71	-71.21	0	-47.02	2	22.75	2	19.76	2.35	30.36
48	48	55.40	0.00	-34.71	-71.21	0	-47.02	2	22.75	2	19.76	2.35	30.36
48	49	56.85	0.00	-30.31	-24.07	0	-15.89	2	7.69	2	6.68	2.35	10.26
49	49	56.85	0.00	-30.31	-24.07	0	-15.89	2	7.69	2	6.68	2.35	10.26
49	50	58.30	0.00	-25.90	16.68	0	11.01	2	-5.33	2	-4.63	2.35	-7.11
50	50	58.30	-0.25	-25.90	16.68	0	10.94	2	-5.41	2	-4.69	2.35	-7.18
50	51	59.75	-0.21	-21.50	51.04	0	33.63	2	-16.37	2	-14.22	2.35	-21.82
51	51	59.75	-0.21	-21.50	51.04	0	34.46	2	-11.43	2	-9.92	2.35	-16.90
51	52	61.20	-0.16	-17.09	79.02	0	53.41	2	-17.64	2	-15.32	2.35	-26.12
52	52	61.20	0.00	-17.09	79.02	0	53.46	2	-22.39	2	-19.44	2.35	-33.19
52	53	62.65	0.00	-12.69	100.61	0	68.07	2	-22.39	2	-19.44	2.35	-33.19
53	53	62.65	0.00	-12.69	100.61	0	68.07	2	-22.39	2	-19.44	2.35	-33.19
53	54	64.10	0.00	-8.28	115.81	0	78.35	2	-25.77	2	-22.38	2.35	-38.21
54	54	64.10	0.00	-8.28	115.81	0	78.35	2	-25.77	2	-22.38	2.35	-38.21
54	55	65.55	0.00	-3.88	124.63	0	84.32	2	-27.73	2	-24.09	2.35	-41.12
55	55	65.55	0.00	-3.88	124.63	0	84.32	2	-27.73	2	-24.09	2.35	-41.12
55	56	67.00	0.00	0.53	127.06	0	85.96	2	-28.27	2	-24.56	2.35	-41.92
56	56	67.00	0.00	0.53	127.06	0	85.96	2	-28.27	2	-24.56	2.35	-41.92
56	57	68.45	0.00	4.93	123.11	0	83.29	2	-27.39	2	-23.79	2.35	-40.62
57	57	68.45	0.00	4.93	123.11	0	83.29	2	-27.39	2	-23.79	2.35	-40.62
57	58	69.90	0.00	9.33	112.77	0	76.29	2	-25.09	2	-21.79	2.35	-37.20
58	58	69.90	0.00	9.33	112.77	0	76.29	2	-25.09	2	-21.79	2.35	-37.20
58	59	71.35	0.00	13.74	96.04	0	64.98	2	-21.37	2	-18.56	2.35	-31.68
59	59	71.35	0.00	13.74	96.04	0	64.98	2	-21.37	2	-18.56	2.35	-31.68
59	60	72.80	0.00	18.14	72.93	0	49.34	2	-16.23	2	-14.09	2.35	-24.06
60	60	72.80	-0.17	18.14	72.93	0	49.34	2	-16.23	2	-14.09	2.35	-24.06
60	61	74.25	-0.22	22.55	43.43	0	29.31	2	-9.74	2	-8.46	2.35	-14.39
61	61	74.25	-0.22	22.55	43.43	0	28.61	2	-13.94	2	-12.11	2.35	-18.58
61	62	75.70	-0.26	26.95	7.54	0	4.90	2	-2.49	2	-2.16	2.35	-3.28
62	62	75.70	0.00	26.95	7.54	0	4.98	2	-2.41	2	-2.09	2.35	-3.21
62	63	77.15	0.00	31.36	-34.74	0	-22.94	2	11.10	2	9.64	2.35	14.81
63	63	77.15	0.00	31.36	-34.74	0	-22.94	2	11.10	2	9.64	2.35	14.81
63	64	78.60	0.00	35.76	-83.39	0	-55.06	2	26.64	2	23.14	2.35	35.55
64	64	78.60	0.00	35.76	-83.39	0	-55.06	2	26.64	2	23.14	2.35	35.55
64	65	80.05	0.00	40.17	-138.44	0	-91.40	2	44.23	2	38.41	2.35	59.03
65	65	80.05	0.00	40.17	-138.44	0	-91.40	2	44.23	2	38.41	2.35	59.03
65	66	80.50	0.00	41.53	-156.82	0	-103.54	2	50.10	2	43.51	2.35	66.86
66	66	80.50	0.00	41.53	-156.82	0	-103.54	2	50.10	2	43.51	2.35	66.86
66	67	81.50	0.00	44.57	-199.87	0	-131.96	2	63.85	2	55.45	2.35	85.22
67	1067	81.50	0.00	44.57	-199.87	0	-131.96	2	63.85	2	55.45	2.35	85.22
67	68	82.50	0.00	-44.14	-154.21	0	-101.81	2	49.26	2	42.79	2.35	65.75
68	68	82.50	0.00	-44.14	-154.21	0	-101.81	2	49.26	2	42.79	2.35	65.75
68	69	83.08	0.00	-42.39	-129.34	0	-85.39	2	41.32	2	35.89	2.35	55.15
69	69	83.08	0.00	-42.39	-129.34	0	-85.39	2	41.32	2	35.89	2.35	55.15
69	70	84.65	0.00	-37.61	-66.34	0	-43.80	2	21.19	2	18.41	2.35	28.28
70	70	84.65	0.00	-37.61	-66.34	0	-43.80	2	21.19	2	18.41	2.35	28.28
70	71	86.23	0.00	-32.82	-10.87	0	-7.18	2	3.47	2	3.02	2.35	4.63
71	71	86.23	0.00	-32.82	-10.87	0	-7.18	2	3.47	2	3.02	2.35	4.63
71	72	87.80	0.00	-28.04	37.06	0	24.47	2	-11.84	2	-10.28	2.35	-15.80
72	72	87.80	-0.25	-28.04	37.06	0	24.39	2	-11.92	2	-10.35	2.35	-15.87
72	73	89.38	-0.21	-23.26	77.45	0	51.07	2	-24.81	2	-21.54	2.35	-33.08
73	73	89.38	-0.21	-23.26	77.45	0	52.33	2	-17.30	2	-15.03	2.35	-25.61
73	74	90.95	-0.16	-18.47	110.31	0	74.58	2	-24.60	2	-21.36	2.35	-36.44
74	74	90.95	0.00	-18.47	110.31	0	74.63	2	-24.55	2	-21.32	2.35	-36.39
74	75	92.53	0.00	-13.69	135.64	0	91.77	2	-30.18	2	-26.21	2.35	-44.75
75	75	92.53	0.00	-13.69	135.64	0	91.77	2	-30.18	2	-26.21	2.35	-44.75
75	76	94.10	0.00	-8.90	153.43	0	103.80	2	-34.14	2	-29.65	2.35	-50.62
76	76	94.10	0.00	-8.90	153.43	0	103.80	2	-34.14	2	-29.65	2.35	-50.62
76	77	95.68	0.00	-4.12	163.68	0	110.74	2	-36.42	2	-31.63	2.35	-54.00

244

CÁLCULO TENSIONAL

Hipótesis de cálculo:
CMRESTO.To

(RestoCargaMuerta). Tensiones a tiempo To

CMRESTO

Coef. ext:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (T/m2)	Fibra y fibra	SupCajón sig (T/m2)	Fibra y fibra	InfLosa sig (T/m2)	Fibra y fibra	SupLosa sig (T/m2)
1	1	0.00	0.00	-27.86	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-24.82	26.34	0	17.82	2	-5.86	2	-5.09	2.35	-8.69
2	2	1.00	0.00	-24.82	26.34	0	17.82	2	-5.86	2	-5.09	2.35	-8.69
2	3	1.18	0.00	-24.29	30.64	0	20.73	2	-6.82	2	-5.92	2.35	-10.11
3	3	1.18	0.00	-24.29	30.64	0	20.73	2	-6.82	2	-5.92	2.35	-10.11
3	4	2.35	0.00	-20.72	57.08	0	38.62	2	-12.70	2	-11.03	2.35	-18.83
4	4	2.35	0.00	-20.72	57.08	0	38.62	2	-12.70	2	-11.03	2.35	-18.83
4	5	3.53	0.00	-17.15	79.33	0	53.67	2	-17.65	2	-15.33	2.35	-26.17
5	5	3.53	0.00	-17.15	79.33	0	53.67	2	-17.65	2	-15.33	2.35	-26.17
5	6	4.70	0.00	-13.58	97.39	0	65.89	2	-21.67	2	-18.82	2.35	-32.13
6	6	4.70	0.00	-13.58	97.39	0	65.89	2	-21.67	2	-18.82	2.35	-32.13
6	7	5.88	0.00	-10.01	111.25	0	75.27	2	-24.75	2	-21.50	2.35	-36.70
7	7	5.88	0.00	-10.01	111.25	0	75.27	2	-24.75	2	-21.50	2.35	-36.70
7	8	7.05	0.00	-6.44	120.92	0	81.81	2	-26.91	2	-23.37	2.35	-39.89
8	8	7.05	0.00	-6.44	120.92	0	81.81	2	-26.91	2	-23.37	2.35	-39.89
8	9	8.23	0.00	-2.88	126.40	0	85.52	2	-28.13	2	-24.43	2.35	-41.70
9	9	8.23	0.00	-2.88	126.40	0	85.52	2	-28.13	2	-24.43	2.35	-41.70
9	10	9.40	0.00	0.69	127.68	0	86.38	2	-28.41	2	-24.68	2.35	-42.12
10	10	9.40	0.00	0.69	127.68	0	86.38	2	-28.41	2	-24.68	2.35	-42.12
10	11	10.58	0.00	4.26	124.77	0	84.41	2	-27.76	2	-24.11	2.35	-41.16
11	11	10.58	0.00	4.26	124.77	0	84.41	2	-27.76	2	-24.11	2.35	-41.16
11	12	11.75	0.00	7.83	117.66	0	79.60	2	-26.18	2	-22.74	2.35	-38.82
12	12	11.75	0.00	7.83	117.66	0	79.60	2	-26.18	2	-22.74	2.35	-38.82
12	13	12.93	0.00	11.40	106.37	0	71.96	2	-23.67	2	-20.56	2.35	-35.09
13	13	12.93	0.00	11.40	106.37	0	71.96	2	-23.67	2	-20.56	2.35	-35.09
13	14	14.10	0.00	14.97	90.87	0	61.48	2	-20.22	2	-17.56	2.35	-29.98
14	14	14.10	0.00	14.97	90.87	0	61.48	2	-20.22	2	-17.56	2.35	-29.98
14	15	15.28	0.00	18.54	71.19	0	48.16	2	-15.84	2	-13.76	2.35	-23.49
15	15	15.28	0.00	18.54	71.19	0	48.16	2	-15.84	2	-13.76	2.35	-23.49
15	16	16.45	0.00	22.11	47.31	0	32.01	2	-10.53	2	-9.14	2.35	-15.61
16	16	16.45	-0.26	22.11	47.31	0	32.01	2	-10.53	2	-9.14	2.35	-15.61
16	17	17.63	-0.30	25.68	19.23	0	12.91	2	-4.38	2	-3.80	2.35	-6.43
17	17	17.63	-0.30	25.68	19.23	0	12.91	2	-4.38	2	-3.80	2.35	-6.43
17	18	18.80	-0.35	29.24	-13.03	0	-8.71	2	4.06	2	3.52	2.35	5.46
18	18	18.80	0.00	29.25	-13.03	0	-8.60	2	4.16	2	3.62	2.35	5.56
18	19	19.98	0.00	32.82	-49.49	0	-32.67	2	15.81	2	13.73	2.35	21.10
19	19	19.98	0.00	32.82	-49.49	0	-32.67	2	15.81	2	13.73	2.35	21.10
19	20	21.15	0.00	36.38	-90.15	0	-59.52	2	28.80	2	25.01	2.35	38.44
20	20	21.15	0.00	36.38	-90.15	0	-59.52	2	28.80	2	25.01	2.35	38.44
20	21	22.33	0.00	39.95	-135.00	0	-89.13	2	43.13	2	37.46	2.35	57.56
21	21	22.33	0.00	39.95	-135.00	0	-89.13	2	43.13	2	37.46	2.35	57.56
21	22	22.50	0.00	40.48	-142.04	0	-93.78	2	45.38	2	39.41	2.35	60.56
22	22	22.50	0.00	40.48	-142.04	0	-93.78	2	45.38	2	39.41	2.35	60.56
22	23	23.50	0.00	43.52	-184.04	0	-121.51	2	58.79	2	51.06	2.35	78.47
23	23	23.50	0.00	43.52	-184.04	0	-121.51	2	58.79	2	51.06	2.35	78.47
23	24	24.50	0.00	40.99	-141.53	0	-93.44	2	45.21	2	39.27	2.35	60.34
24	24	24.50	0.00	40.99	-141.53	0	-93.44	2	45.21	2	39.27	2.35	60.34
24	25	24.95	0.00	-39.62	-123.40	0	-81.47	2	39.42	2	34.24	2.35	52.61
25	25	24.95	0.00	-39.62	-123.40	0	-81.47	2	39.42	2	34.24	2.35	52.61
25	26	26.40	0.00	-35.21	-69.14	0	-45.65	2	22.09	2	19.18	2.35	29.48
26	26	26.40	0.00	-35.21	-69.14	0	-45.65	2	22.09	2	19.18	2.35	29.48
26	27	27.85	0.00	-30.81	-21.28	0	-14.05	2	6.80	2	5.90	2.35	9.07
27	27	27.85	0.00	-30.81	-21.28	0	-14.05	2	6.80	2	5.90	2.35	9.07
27	28	29.30	0.00	-26.41	20.21	0	13.34	2	-6.46	2	-5.61	2.35	-8.62
28	28	29.30	-0.25	-26.40	20.21	0	13.27	2	-6.53	2	-5.67	2.35	-8.68
28	29	30.75	-0.21	-22.00	55.30	0	36.45	2	-17.73	2	-15.40	2.35	-23.63
29	29	30.75	-0.21	-22.00	55.30	0	37.34	2	-12.37	2	-10.75	2.35	-18.30
29	30	32.20	-0.17	-17.60	84.01	0	56.78	2	-18.75	2	-16.28	2.35	-27.76
30	30	32.20	0.00	-17.60	84.01	0	56.84	2	-18.69	2	-16.24	2.35	-27.72
30	31	33.65	0.00	-13.19	106.33	0	71.94	2	-23.66	2	-20.55	2.35	-35.08
31	31	33.65	0.00	-13.19	106.33	0	71.94	2	-23.66	2	-20.55	2.35	-35.08
31	32	35.10	0.00	-8.79	122.27	0	82.72	2	-27.21	2	-23.63	2.35	-40.34
32	32	35.10	0.00	-8.79	122.27	0	82.72	2	-27.21	2	-23.63	2.35	-40.34
32	33	36.55	0.00	-4.38	131.82	0	89.18	2	-29.33	2	-25.48	2.35	-43.49
33	33	36.55	0.00	-4.38	131.82	0	89.18	2	-29.33	2	-25.48	2.35	-43.49
33	34	38.00	0.00	0.02	134.98	0	91.32	2	-30.03	2	-26.09	2.35	-44.53
34	34	38.00	0.00	0.02	134.98	0	91.32	2	-30.03	2	-26.09	2.35	-44.53
34	35	39.45	0.00	4.43	131.76	0	89.14	2	-29.32	2	-25.46	2.35	-43.47
35	35	39.45	0.00	4.43	131.76	0	89.14	2	-29.32	2	-25.46	2.35	-43.47
35	36	40.90	0.00	8.83	122.15	0	82.64	2	-27.18	2	-23.61	2.35	-40.30
36	36	40.90	0.00	8.83	122.15	0	82.64	2	-27.18	2	-23.61	2.35	-40.30
36	37	42.35	0.00	13.23	106.15	0	71.82	2	-23.62	2	-20.51	2.35	-35.02
37	37	42.35	0.00	13.23	106.15	0	71.82	2	-23.62	2	-20.51	2.35	-35.02
37	38	43.80	0.00	17.64	83.77	0	56.62	2	-18.70	2	-16.19	2.35	-27.64
38	38	43.80	-0.17	17.64	83.77	0	56.62	2	-18.70	2	-16.19	2.35	-27.64
38	39	45.25	-0.21	22.04	55.00	0	37.14	2	-12.31	2	-10.69	2.35	-18.20

CÁLCULO TENSIONAL

Hipótesis de cálculo:
CMRESTO.To

(RestoCargaMuerta). Tensiones a tiempo To

CMRESTO

Coef. ext:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
39	39	45.25	-0.21	22.04	55.00	0	36.25	2	-17.63	2	-15.32	2.35	-23.51
39	40	46.70	-0.25	26.45	19.85	0	13.03	2	-6.42	2	-5.57	2.35	-8.53
40	40	46.70	0.00	26.45	19.85	0	13.11	2	-6.34	2	-5.51	2.35	-8.46
40	41	48.15	0.00	30.85	-21.70	0	-14.33	2	6.93	2	6.02	2.35	9.25
41	41	48.15	0.00	30.85	-21.70	0	-14.33	2	6.93	2	6.02	2.35	9.25
41	42	49.60	0.00	35.26	-69.62	0	-45.97	2	22.24	2	19.32	2.35	29.68
42	42	49.60	0.00	35.26	-69.62	0	-45.97	2	22.24	2	19.32	2.35	29.68
42	43	51.05	0.00	39.66	-123.94	0	-81.83	2	39.59	2	34.39	2.35	52.84
43	43	51.05	0.00	39.66	-123.94	0	-81.83	2	39.59	2	34.39	2.35	52.84
43	44	51.50	0.00	41.03	-142.09	0	-93.81	2	45.39	2	39.42	2.35	60.58
44	44	51.50	0.00	41.03	-142.09	0	-93.81	2	45.39	2	39.42	2.35	60.58
44	45	52.50	0.00	44.06	-184.64	0	-121.91	2	58.98	2	51.23	2.35	78.72
45	1045	52.50	0.00	-43.52	-184.64	0	-121.91	2	58.98	2	51.23	2.35	78.72
45	46	53.50	0.00	-40.48	-142.64	0	-94.18	2	45.57	2	39.58	2.35	60.82
46	46	53.50	0.00	-40.48	-142.64	0	-94.18	2	45.57	2	39.58	2.35	60.82
46	47	53.95	0.00	-39.11	-124.73	0	-82.35	2	39.85	2	34.61	2.35	53.18
47	47	53.95	0.00	-39.11	-124.73	0	-82.35	2	39.85	2	34.61	2.35	53.18
47	48	55.40	0.00	-34.71	-71.21	0	-47.02	2	22.75	2	19.76	2.35	30.36
48	48	55.40	0.00	-34.71	-71.21	0	-47.02	2	22.75	2	19.76	2.35	30.36
48	49	56.85	0.00	-30.31	-24.07	0	-15.89	2	7.69	2	6.68	2.35	10.26
49	49	56.85	0.00	-30.31	-24.07	0	-15.89	2	7.69	2	6.68	2.35	10.26
49	50	58.30	-0.25	-25.90	16.68	0	11.01	2	-5.33	2	-4.63	2.35	-7.11
50	50	58.30	-0.25	-25.90	16.68	0	11.01	2	-5.33	2	-4.63	2.35	-7.11
50	51	59.75	-0.21	-21.50	51.04	0	33.63	2	-16.37	2	-14.22	2.35	-21.82
51	51	59.75	-0.21	-21.50	51.04	0	33.63	2	-16.37	2	-14.22	2.35	-21.82
51	52	61.20	-0.16	-17.09	79.02	0	53.41	2	-17.64	2	-15.32	2.35	-26.12
52	52	61.20	0.00	-17.09	79.02	0	53.41	2	-17.64	2	-15.32	2.35	-26.12
52	53	62.65	0.00	-12.69	100.61	0	68.07	2	-22.39	2	-19.44	2.35	-33.19
53	53	62.65	0.00	-12.69	100.61	0	68.07	2	-22.39	2	-19.44	2.35	-33.19
53	54	64.10	0.00	-8.28	115.81	0	78.35	2	-25.77	2	-22.38	2.35	-38.21
54	54	64.10	0.00	-8.28	115.81	0	78.35	2	-25.77	2	-22.38	2.35	-38.21
54	55	65.55	0.00	-3.88	124.63	0	84.32	2	-27.73	2	-24.09	2.35	-41.12
55	55	65.55	0.00	-3.88	124.63	0	84.32	2	-27.73	2	-24.09	2.35	-41.12
55	56	67.00	0.00	0.53	127.06	0	85.96	2	-28.27	2	-24.56	2.35	-41.92
56	56	67.00	0.00	0.53	127.06	0	85.96	2	-28.27	2	-24.56	2.35	-41.92
56	57	68.45	0.00	4.93	123.11	0	83.29	2	-27.39	2	-23.79	2.35	-40.62
57	57	68.45	0.00	4.93	123.11	0	83.29	2	-27.39	2	-23.79	2.35	-40.62
57	58	69.90	0.00	9.33	112.77	0	76.29	2	-25.09	2	-21.79	2.35	-37.20
58	58	69.90	0.00	9.33	112.77	0	76.29	2	-25.09	2	-21.79	2.35	-37.20
58	59	71.35	0.00	13.74	96.04	0	64.98	2	-21.37	2	-18.56	2.35	-31.68
59	59	71.35	0.00	13.74	96.04	0	64.98	2	-21.37	2	-18.56	2.35	-31.68
59	60	72.80	-0.17	18.14	72.93	0	49.34	2	-16.23	2	-14.14	2.35	-24.11
60	60	72.80	-0.17	18.14	72.93	0	49.34	2	-16.23	2	-14.14	2.35	-24.11
60	61	74.25	-0.22	22.55	43.43	0	29.31	2	-9.74	2	-8.46	2.35	-14.39
61	61	74.25	-0.22	22.55	43.43	0	29.31	2	-9.74	2	-8.46	2.35	-14.39
61	62	75.70	-0.26	26.95	7.54	0	4.90	2	-2.49	2	-2.16	2.35	-3.28
62	62	75.70	0.00	26.95	7.54	0	4.90	2	-2.49	2	-2.16	2.35	-3.28
62	63	77.15	0.00	31.36	-34.74	0	-22.94	2	11.10	2	9.64	2.35	14.81
63	63	77.15	0.00	31.36	-34.74	0	-22.94	2	11.10	2	9.64	2.35	14.81
63	64	78.60	0.00	35.76	-83.39	0	-55.06	2	26.64	2	23.14	2.35	35.55
64	64	78.60	0.00	35.76	-83.39	0	-55.06	2	26.64	2	23.14	2.35	35.55
64	65	80.05	0.00	40.17	-138.44	0	-91.40	2	44.23	2	38.41	2.35	59.03
65	65	80.05	0.00	40.17	-138.44	0	-91.40	2	44.23	2	38.41	2.35	59.03
65	66	80.50	0.00	41.53	-156.82	0	-103.54	2	50.10	2	43.51	2.35	66.86
66	66	80.50	0.00	41.53	-156.82	0	-103.54	2	50.10	2	43.51	2.35	66.86
66	67	81.50	0.00	44.57	-199.87	0	-131.96	2	63.85	2	55.45	2.35	85.22
67	1067	81.50	0.00	-47.18	-199.87	0	-131.96	2	63.85	2	55.45	2.35	85.22
67	68	82.50	0.00	-44.14	-154.21	0	-101.81	2	49.26	2	42.79	2.35	65.75
68	68	82.50	0.00	-44.14	-154.21	0	-101.81	2	49.26	2	42.79	2.35	65.75
68	69	83.08	0.00	-42.39	-129.34	0	-85.39	2	41.32	2	35.89	2.35	55.15
69	69	83.08	0.00	-42.39	-129.34	0	-85.39	2	41.32	2	35.89	2.35	55.15
69	70	84.65	0.00	-37.61	-66.34	0	-43.80	2	21.19	2	18.41	2.35	28.28
70	70	84.65	0.00	-37.61	-66.34	0	-43.80	2	21.19	2	18.41	2.35	28.28
70	71	86.23	0.00	-32.82	-10.87	0	-7.18	2	3.47	2	3.02	2.35	4.63
71	71	86.23	0.00	-32.82	-10.87	0	-7.18	2	3.47	2	3.02	2.35	4.63
71	72	87.80	-0.25	-28.04	37.06	0	24.47	2	-11.84	2	-10.28	2.35	-15.80
72	72	87.80	-0.25	-28.04	37.06	0	24.47	2	-11.84	2	-10.28	2.35	-15.80
72	73	89.38	-0.21	-23.26	77.45	0	51.07	2	-24.81	2	-21.54	2.35	-33.08
73	73	89.38	-0.21	-23.26	77.45	0	51.07	2	-24.81	2	-21.54	2.35	-33.08
73	74	90.95	-0.16	-18.47	110.31	0	74.58	2	-24.60	2	-21.36	2.35	-36.44
74	74	90.95	-0.16	-18.47	110.31	0	74.58	2	-24.60	2	-21.36	2.35	-36.44
74	75	92.53	0.00	-13.69	135.64	0	91.77	2	-30.18	2	-26.21	2.35	-44.75
75	75	92.53	0.00	-13.69	135.64	0	91.77	2	-30.18	2	-26.21	2.35	-44.75
75	76	94.10	0.00	-8.90	153.43	0	103.80	2	-34.14	2	-29.65	2.35	-50.62
76	76	94.10	0.00	-8.90	153.43	0	103.80	2	-34.14	2	-29.65	2.35	-50.62
76	77	95.68	0.00	-4.12	163.68	0	110.74	2	-36.42	2	-31.63	2.35	-54.00

245

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMRESTO.To

RestoCargaMuerta). Tensiones a tiempo To

CMRESTO

def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
77	77	95.68	0.00	-4.12	163.66	0	110.74	2	-36.42	2	-31.63	2.35	-54.00
77	78	97.25	0.00	0.66	166.41	0	112.58	2	-37.03	2	-32.16	2.35	-54.90
78	78	97.25	0.00	0.66	166.41	0	112.58	2	-37.03	2	-32.16	2.35	-54.90
78	79	98.83	0.00	5.45	161.59	0	109.32	2	-35.96	2	-31.23	2.35	-53.31
79	79	98.83	0.00	5.45	161.59	0	109.32	2	-35.96	2	-31.23	2.35	-53.31
79	80	100.40	0.00	10.23	149.24	0	100.97	2	-33.21	2	-28.84	2.35	-49.24
80	80	100.40	0.00	10.23	149.24	0	100.97	2	-33.21	2	-28.84	2.35	-49.24
80	81	101.98	0.00	15.02	129.36	0	87.52	2	-28.78	2	-25.00	2.35	-42.68
81	81	101.98	0.00	15.02	129.36	0	87.52	2	-28.78	2	-25.00	2.35	-42.68
81	82	103.55	0.00	19.80	101.94	0	68.91	2	-22.68	2	-19.70	2.35	-33.63
82	82	103.55	-0.17	19.80	101.94	0	68.91	2	-22.68	2	-19.70	2.35	-33.63
82	83	105.13	-0.22	24.58	66.99	0	45.25	2	-14.98	2	-13.01	2.35	-22.16
83	83	105.13	-0.22	24.58	66.99	0	45.25	2	-14.98	2	-13.01	2.35	-22.16
83	84	106.70	-0.26	29.37	24.50	0	16.10	2	-7.91	2	-6.87	2.35	-10.52
84	84	106.70	0.00	29.37	24.50	0	16.10	2	-7.91	2	-6.87	2.35	-10.52
84	85	108.28	0.00	34.15	-25.53	0	-16.86	2	8.16	2	7.08	2.35	10.88
85	85	108.28	0.00	34.15	-25.53	0	-16.86	2	8.16	2	7.08	2.35	10.88
85	86	109.85	0.00	38.94	-83.09	0	-54.86	2	26.54	2	23.05	2.35	35.43
86	86	109.85	0.00	38.94	-83.09	0	-54.86	2	26.54	2	23.05	2.35	35.43
86	87	111.43	0.00	43.72	-148.18	0	-97.83	2	47.34	2	41.11	2.35	63.18
87	87	111.43	0.00	43.72	-148.18	0	-97.83	2	47.34	2	41.11	2.35	63.18
87	88	112.00	0.00	45.47	-173.83	0	-114.77	2	55.53	2	48.23	2.35	74.11
88	88	112.00	0.00	45.47	-173.83	0	-114.77	2	55.53	2	48.23	2.35	74.11
88	89	113.00	0.00	48.51	-220.81	0	-145.79	2	70.54	2	61.26	2.35	94.14
89	1089	113.00	0.00	48.51	-220.81	0	-145.79	2	70.54	2	61.26	2.35	94.14
89	90	114.00	0.00	45.56	-173.73	0	-114.70	2	55.50	2	48.20	2.35	74.07
90	90	114.00	0.00	45.56	-173.73	0	-114.70	2	55.50	2	48.20	2.35	74.07
90	91	114.58	0.00	43.81	-148.04	0	-97.74	2	47.29	2	41.07	2.35	63.12
91	91	114.58	0.00	43.81	-148.04	0	-97.74	2	47.29	2	41.07	2.35	63.12
91	92	116.15	0.00	39.03	-82.80	0	-54.67	2	26.45	2	22.97	2.35	35.30
92	92	116.15	0.00	39.03	-82.80	0	-54.67	2	26.45	2	22.97	2.35	35.30
92	93	117.73	0.00	34.24	-25.10	0	-16.57	2	8.02	2	6.96	2.35	10.70
93	93	117.73	0.00	34.24	-25.10	0	-16.57	2	8.02	2	6.96	2.35	10.70
93	94	119.30	0.00	29.46	25.06	0	16.55	2	-8.01	2	-6.95	2.35	-10.68
94	94	119.30	-0.26	29.46	25.06	0	16.47	2	-8.09	2	-7.02	2.35	-10.75
94	95	120.88	-0.22	24.67	67.69	0	44.62	2	-21.69	2	-18.84	2.35	-28.92
95	95	120.88	-0.22	24.67	67.69	0	44.62	2	-21.69	2	-18.84	2.35	-28.92
95	96	122.45	-0.18	19.89	102.79	0	69.48	2	-22.93	2	-19.92	2.35	-33.96
96	96	122.45	0.00	19.89	102.79	0	69.48	2	-22.93	2	-19.92	2.35	-33.96
96	97	124.03	0.00	-15.11	130.35	0	88.19	2	-29.00	2	-25.19	2.35	-43.00
97	97	124.03	0.00	-15.11	130.35	0	88.19	2	-29.00	2	-25.19	2.35	-43.00
97	98	125.60	0.00	-10.32	150.37	0	101.73	2	-33.46	2	-29.06	2.35	-49.61
98	98	125.60	0.00	-10.32	150.37	0	101.73	2	-33.46	2	-29.06	2.35	-49.61
98	99	127.18	0.00	-5.54	162.86	0	110.18	2	-36.24	2	-31.47	2.35	-53.73
99	99	127.18	0.00	-5.54	162.86	0	110.18	2	-36.24	2	-31.47	2.35	-53.73
99	100	128.75	0.00	-0.75	167.82	0	113.54	2	-37.34	2	-32.43	2.35	-55.37
100	100	128.75	0.00	-0.75	167.82	0	113.54	2	-37.34	2	-32.43	2.35	-55.37
100	101	130.33	0.00	4.03	165.24	0	111.79	2	-36.77	2	-31.93	2.35	-54.51
101	101	130.33	0.00	4.03	165.24	0	111.79	2	-36.77	2	-31.93	2.35	-54.51
101	102	131.90	0.00	8.81	155.13	0	104.95	2	-34.52	2	-29.98	2.35	-51.18
102	102	131.90	0.00	8.81	155.13	0	104.95	2	-34.52	2	-29.98	2.35	-51.18
102	103	133.48	0.00	13.60	137.48	0	93.01	2	-30.59	2	-26.57	2.35	-45.36
103	103	133.48	0.00	13.60	137.48	0	93.01	2	-30.59	2	-26.57	2.35	-45.36
103	104	135.05	0.00	18.38	112.29	0	75.97	2	-24.99	2	-21.70	2.35	-37.09
104	104	135.05	-0.16	18.38	112.29	0	75.97	2	-24.99	2	-21.70	2.35	-37.09
104	105	136.63	-0.20	23.17	79.57	0	53.77	2	-17.77	2	-15.43	2.35	-26.31
105	105	136.63	-0.20	23.17	79.57	0	53.77	2	-17.77	2	-15.43	2.35	-26.31
105	106	138.20	-0.25	27.95	39.32	0	25.88	2	-12.64	2	-10.98	2.35	-16.83
106	106	138.20	0.00	27.95	39.32	0	25.88	2	-12.64	2	-10.98	2.35	-16.83
106	107	139.78	0.00	32.73	-8.47	0	-5.59	2	2.71	2	2.35	2.35	3.61
107	107	139.78	0.00	32.73	-8.47	0	-5.59	2	2.71	2	2.35	2.35	3.61
107	108	141.35	0.00	37.52	-63.79	0	-42.12	2	20.38	2	17.70	2.35	27.20
108	108	141.35	0.00	37.52	-63.79	0	-42.12	2	20.38	2	17.70	2.35	27.20
108	109	142.93	0.00	42.30	-126.65	0	-83.62	2	40.46	2	35.14	2.35	54.00
109	109	142.93	0.00	42.30	-126.65	0	-83.62	2	40.46	2	35.14	2.35	54.00
109	110	143.50	0.00	44.05	-151.48	0	-100.01	2	48.39	2	42.03	2.35	64.59
110	110	143.50	0.00	44.05	-151.48	0	-100.01	2	48.39	2	42.03	2.35	64.59
110	111	144.50	0.00	47.09	-197.05	0	-130.10	2	62.95	2	54.67	2.35	84.01
111	111	144.50	0.00	47.09	-197.05	0	-130.10	2	62.95	2	54.67	2.35	84.01
111	112	145.50	0.00	41.04	-154.49	0	-102.00	2	49.35	2	42.86	2.35	65.87
112	112	145.50	0.00	41.04	-154.49	0	-102.00	2	49.35	2	42.86	2.35	65.87
112	113	145.68	0.00	40.51	-147.36	0	-97.29	2	47.07	2	40.89	2.35	62.83
113	113	145.68	0.00	40.51	-147.36	0	-97.29	2	47.07	2	40.89	2.35	62.83
113	114	146.85	0.00	36.94	-101.86	0	-67.25	2	32.54	2	28.26	2.35	43.43
114	114	146.85	0.00	36.94	-101.86	0	-67.25	2	32.54	2	28.26	2.35	43.43
114	115	148.03	0.00	-33.37	-60.55	0	-39.98	2	19.34	2	16.80	2.35	25.82

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMRESTO.To

RestoCargaMuerta). Tensiones a tiempo To

CMRESTO

def. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
115	115	148.03	0.00	-33.37	-60.55	0	-39.98	2	19.34	2	16.80	2.35	25.82
115	116	149.20	0.00	-29.80	-23.44	0	-15.48	2	7.49	2	6.50	2.35	9.99
116	116	149.20	-0.35	-29.80	-23.44	0	-15.58	2	7.38	2	6.41	2.35	9.90
116	117	150.38	-0.31	-26.23	9.48	0	6.16	2	-3.12	2	-2.71	2.35	-4.12
117	117	150.38	-0.31	-26.23	9.48	0	6.31	2	-2.21	2	-1.92	2.35	-3.22
117	118	151.55	-0.27	-22.66	38.20	0	25.76	2	-8.59	2	-7.46	2.35	-12.68
118	118	151.55	0.00	-22.66	38.20	0	25.84	2	-8.50	2	-7.38	2.35	-12.60
118	119	152.73	0.00	-19.09	62.73	0	42.44	2	-13.96	2	-12.12	2.35	-20.70
119	119	152.73	0.00	-19.09	62.73	0	42.44	2	-13.96	2	-12.12	2.35	-20.70
119	120	153.90	0.00	-15.52	83.07	0	56.20	2	-18.48	2	-16.05	2.35	-27.41
120	120	153.90	0.00	-15.52	83.07	0	56.20	2	-18.48	2	-16.05	2.35	-27.41
120	121	155.08	0.00	-11.95	99.21	0	67.12	2	-22.08	2	-19.17	2.35	-32.73
121	121	155.08	0.00	-11.95	99.21	0	67.12	2	-22.08	2	-19.17	2.35	-32.73
121	122	156.25	0.00	-8.38	111.16	0	75.21	2	-24.73	2	-21.48	2.35	-36.67
122	122	156.25	0.00	-8.38	111.16	0	75.21	2	-24.73	2	-21.48	2.35	-36.67
122	123	157.43	0.00	-4.82	118.92	0	80.46	2	-26.46	2	-22.98	2.35	-39.23
123	123	157.43	0.00	-4.82	118.92	0	80.46	2	-26.46	2	-22.98	2.35	-39.23
123	124	158.60	0.00	-1.25	122.48	0	82.86	2	-27.25	2	-23.67	2.35	-40.41
124	124	158.60	0.00	-1.25	122.48	0	82.86	2	-27.25	2	-23.67	2.35	-40.41
124	125	159.78	0.00	2.32	121.85	0	82.44	2	-27.11	2	-23.55	2.35	-40.20
125	125	159.78	0.00	2.32	121.85	0	82.44	2	-27.11	2	-23.55	2.35	-40.20
125	126	160.95	0.00	5.89	117.02	0	79.17	2	-26.04	2	-22.62	2.35	-38.61
126	126	160.95	0.00	5.89	117.02	0	79.17	2	-26.04	2	-22.62	2.35	-38.61
126	127	162.13	0.00	9.46	108.00	0	73.07	2	-24.03	2	-20.87	2.35	-35.63
127	127	162.13	0.00	9.46	108.00	0	73.07	2	-24.03	2	-20.87	2.35	-35.63
127	128	163.30	0.00	13.03	94.79	0	64.13	2	-21.09	2	-18.32	2.35	-31.27
128	128	163.30	0.00	13.03	94.79	0	64.13	2	-21.09	2	-18.32	2.35	-31.27
128	129	164.48	0.00	16.60	77.38	0	52.35	2	-17.22	2	-14.95	2.35	-25.53
129	129	164.48	0.00	16.60	77.38	0	52.35	2	-17.22	2	-14.95	2.35	-25.53
129	130	165.65	0.00	20.17	55.78	0	37.74	2	-12.41	2	-10.78	2.35	-18.40
130	130	165.65	0.00	20.17	55.78	0	37.74	2	-12.41	2	-10.78	2.35	-18.40
130	131	166.83	0.00	23.74	29.99	0	20.29	2	-6.67	2	-5.80	2.35	-9.89
131	131	166.83	0.00	23.74	29.99	0	20.29	2	-6.67	2	-5.80	2.35	-9.89
131	132	167.00	0.00	24.27	25.78	0	17.44	2	-5.74	2	-4.98	2.35	-8.51
132	132	167.00	0.00	24.27	25.78	0	17.44	2	-5.74	2	-4.98	2.35	-8.51
132	133	168.00	0.00	27.31	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMRESTO.To

RestoCargaMuerta). Tensiones a tiempo To

CMRESTO

Cof. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
77	77	95.68	0.00	-4.12	163.68	0	110.74	2	-36.42	2	-31.63	2.35	-54.00
77	78	97.25	0.00	0.66	166.41	0	112.58	2	-37.03	2	-32.16	2.35	-54.90
78	78	97.25	0.00	0.66	166.41	0	112.58	2	-37.03	2	-32.16	2.35	-54.90
78	79	98.83	0.00	5.45	161.59	0	109.32	2	-35.96	2	-31.23	2.35	-53.31
79	79	98.83	0.00	5.45	161.59	0	109.32	2	-35.96	2	-31.23	2.35	-53.31
79	80	100.40	0.00	10.23	149.24	0	100.97	2	-33.21	2	-28.84	2.35	-49.24
80	80	100.40	0.00	10.23	149.24	0	100.97	2	-33.21	2	-28.84	2.35	-49.24
80	81	101.98	0.00	15.02	129.36	0	87.52	2	-28.78	2	-25.00	2.35	-42.68
81	81	101.98	0.00	15.02	129.36	0	87.52	2	-28.78	2	-25.00	2.35	-42.68
81	82	103.55	0.00	19.80	101.94	0	68.91	2	-22.68	2	-19.70	2.35	-33.63
82	82	103.55	-0.17	19.80	101.94	0	68.91	2	-22.68	2	-19.70	2.35	-33.63
82	83	105.13	-0.22	24.58	66.99	0	45.25	2	-14.98	2	-13.01	2.35	-22.16
83	83	105.13	-0.22	24.58	66.99	0	45.25	2	-14.98	2	-13.01	2.35	-22.16
83	84	106.70	-0.26	29.37	24.50	0	16.10	2	-7.91	2	-6.87	2.35	-10.52
84	84	106.70	0.00	29.37	24.50	0	16.10	2	-7.91	2	-6.87	2.35	-10.52
84	85	108.28	0.00	34.15	-25.53	0	-16.86	2	8.16	2	7.08	2.35	10.88
85	85	108.28	0.00	34.15	-25.53	0	-16.86	2	8.16	2	7.08	2.35	10.88
85	86	109.85	0.00	38.94	-83.09	0	-54.86	2	26.54	2	23.05	2.35	35.43
86	86	109.85	0.00	38.94	-83.09	0	-54.86	2	26.54	2	23.05	2.35	35.43
87	87	111.43	0.00	43.72	-148.18	0	-97.83	2	47.34	2	41.11	2.35	63.18
87	88	112.00	0.00	45.47	-173.83	0	-114.77	2	55.53	2	48.23	2.35	74.11
88	88	112.00	0.00	45.47	-173.83	0	-114.77	2	55.53	2	48.23	2.35	74.11
88	89	113.00	0.00	48.51	-220.81	0	-145.79	2	70.54	2	61.26	2.35	94.14
89	1089	113.00	0.00	-48.60	-220.81	0	-145.79	2	70.54	2	61.26	2.35	94.14
89	90	114.00	0.00	-45.56	-173.73	0	-114.70	2	55.50	2	48.20	2.35	74.07
90	90	114.00	0.00	-45.56	-173.73	0	-114.70	2	55.50	2	48.20	2.35	74.07
90	91	114.58	0.00	-43.81	-148.04	0	-97.74	2	47.29	2	41.07	2.35	63.12
91	91	114.58	0.00	-43.81	-148.04	0	-97.74	2	47.29	2	41.07	2.35	63.12
91	92	116.15	0.00	-39.03	-82.80	0	-54.67	2	26.45	2	22.97	2.35	35.30
92	92	116.15	0.00	-39.03	-82.80	0	-54.67	2	26.45	2	22.97	2.35	35.30
92	93	117.73	0.00	-34.24	-25.10	0	-16.57	2	8.02	2	6.96	2.35	10.70
93	93	117.73	0.00	-34.24	-25.10	0	-16.57	2	8.02	2	6.96	2.35	10.70
93	94	119.30	0.00	-29.46	25.06	0	16.55	2	-8.01	2	-6.95	2.35	-10.68
94	94	119.30	-0.26	-29.46	25.06	0	16.47	2	-8.09	2	-7.02	2.35	-10.75
94	95	120.88	-0.22	-24.67	67.69	0	44.62	2	-21.69	2	-18.84	2.35	-28.92
95	95	120.88	-0.22	-24.67	67.69	0	44.62	2	-21.69	2	-18.84	2.35	-28.92
95	96	122.45	-0.18	-19.89	102.79	0	69.48	2	-22.93	2	-19.92	2.35	-33.96
96	96	122.45	0.00	-19.89	102.79	0	69.48	2	-22.93	2	-19.92	2.35	-33.96
96	97	124.03	0.00	-15.11	130.35	0	88.19	2	-29.00	2	-25.19	2.35	-43.00
97	97	124.03	0.00	-15.11	130.35	0	88.19	2	-29.00	2	-25.19	2.35	-43.00
97	98	125.50	0.00	-10.32	150.37	0	101.73	2	-33.46	2	-29.06	2.35	-49.61
98	98	125.50	0.00	-10.32	150.37	0	101.73	2	-33.46	2	-29.06	2.35	-49.61
98	99	127.18	0.00	-5.54	162.86	0	110.18	2	-36.24	2	-31.47	2.35	-53.73
99	99	127.18	0.00	-5.54	162.86	0	110.18	2	-36.24	2	-31.47	2.35	-53.73
100	100	128.75	0.00	-0.75	167.82	0	113.54	2	-37.34	2	-32.43	2.35	-55.37
100	101	130.33	0.00	4.03	165.24	0	111.79	2	-36.77	2	-31.93	2.35	-54.51
101	101	130.33	0.00	4.03	165.24	0	111.79	2	-36.77	2	-31.93	2.35	-54.51
101	102	131.90	0.00	8.81	155.13	0	104.95	2	-34.52	2	-29.98	2.35	-51.18
102	102	131.90	0.00	8.81	155.13	0	104.95	2	-34.52	2	-29.98	2.35	-51.18
102	103	133.48	0.00	13.60	137.48	0	93.01	2	-30.59	2	-26.57	2.35	-45.36
103	103	133.48	0.00	13.60	137.48	0	93.01	2	-30.59	2	-26.57	2.35	-45.36
103	104	135.05	0.00	18.38	112.29	0	75.97	2	-24.99	2	-21.70	2.35	-37.05
104	104	135.05	-0.16	18.38	112.29	0	75.92	2	-25.04	2	-21.75	2.35	-37.09
104	105	136.63	-0.20	23.17	79.57	0	53.77	2	-17.77	2	-15.43	2.35	-26.31
105	105	136.63	-0.20	23.17	79.57	0	53.77	2	-17.77	2	-15.43	2.35	-26.31
105	106	138.20	-0.25	27.95	39.32	0	25.88	2	-12.64	2	-10.98	2.35	-16.83
106	106	138.20	0.00	27.95	39.32	0	25.88	2	-12.64	2	-10.98	2.35	-16.83
106	107	139.78	0.00	32.73	-8.47	0	-5.59	2	2.71	2	2.35	2.35	3.61
107	107	139.78	0.00	32.73	-8.47	0	-5.59	2	2.71	2	2.35	2.35	3.61
107	108	141.35	0.00	37.52	-63.79	0	-42.12	2	20.38	2	17.70	2.35	27.20
108	108	141.35	0.00	37.52	-63.79	0	-42.12	2	20.38	2	17.70	2.35	27.20
108	109	142.93	0.00	42.30	-126.65	0	-83.62	2	40.46	2	35.14	2.35	54.00
109	109	142.93	0.00	42.30	-126.65	0	-83.62	2	40.46	2	35.14	2.35	54.00
109	110	143.50	0.00	44.05	-151.48	0	-100.01	2	48.39	2	42.03	2.35	64.59
110	110	143.50	0.00	44.05	-151.48	0	-100.01	2	48.39	2	42.03	2.35	64.59
110	111	144.50	0.00	47.09	-197.05	0	-130.10	2	62.95	2	54.67	2.35	84.01
111	111	144.50	0.00	47.09	-197.05	0	-130.10	2	62.95	2	54.67	2.35	84.01
111	112	145.50	0.00	-41.04	-154.49	0	-102.00	2	49.35	2	42.86	2.35	65.87
112	112	145.50	0.00	-41.04	-154.49	0	-102.00	2	49.35	2	42.86	2.35	65.87
112	113	145.68	0.00	-40.51	-147.36	0	-97.29	2	47.07	2	40.89	2.35	62.83
113	113	145.68	0.00	-40.51	-147.36	0	-97.29	2	47.07	2	40.89	2.35	62.83
113	114	146.85	0.00	-36.94	-101.86	0	-67.25	2	32.54	2	28.26	2.35	43.43
114	114	146.85	0.00	-36.94	-101.86	0	-67.25	2	32.54	2	28.26	2.35	43.43
114	115	148.03	0.00	-33.37	-60.55	0	-39.98	2	19.34	2	16.80	2.35	25.82

CÁLCULO TENSIONAL

Hipótesis de cálculo:

CMRESTO.To

RestoCargaMuerta). Tensiones a tiempo To

CMRESTO

Cof. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
115	115	148.03	0.00	-33.37	-60.55	0	-39.98	2	19.34	2	16.80	2.35	25.82
115	116	149.20	0.00	-29.80	-23.44	0	-15.48	2	7.49	2	6.50	2.35	9.99
116	116	149.20	-0.35	-29.80	-23.44	0	-15.58	2	7.38	2	6.41	2.35	9.90
116	117	150.38	-0.31	-26.23	9.48	0	6.16	2	-3.12	2	-2.71	2.35	-4.12
117	117	150.38	-0.31	-26.23	9.48	0	6.31	2	-2.21	2	-1.92	2.35	-3.22
117	118	151.55	-0.27	-22.66	38.20	0	25.76	2	-8.59	2	-7.46	2.35	-12.68
118	118	151.55	0.00	-22.66	38.20	0	25.84	2	-8.50	2	-7.38	2.35	-12.60
118	119	152.73	0.00	-19.09	62.73	0	42.44	2	-13.96	2	-12.12	2.35	-20.70
119	119	152.73	0.00	-19.09	62.73	0	42.44	2	-13.96	2	-12.12	2.35	-20.70
119	120	153.90	0.00	-15.52	83.07	0	56.20	2	-18.48	2	-16.05	2.35	-27.41
120	120	153.90	0.00	-15.52	83.07	0	56.20	2	-18.48	2	-16.05	2.35	-27.41
120	121	155.08	0.00	-11.95	99.21	0	67.12	2	-22.08	2	-19.17	2.35	-32.73
121	121	155.08	0.00	-11.95	99.21	0	67.12	2	-22.08	2	-19.17	2.35	-32.73
121	122	156.25	0.00	-8.38	111.16	0	75.21	2	-24.73	2	-21.48	2.35	-36.67
122	122	156.25	0.00	-8.38	111.16	0	75.21	2	-24.73	2	-21.48	2.35	-36.67
122	123	157.43	0.00	-4.82	118.92	0	80.46	2	-26.46	2	-22.98	2.35	-39.23
123	123	157.43	0.00	-4.82	118.92	0	80.46	2	-26.46	2	-22.98	2.35	-39.23
123	124	158.60	0.00	-1.25	122.48	0	82.86	2	-27.25	2	-23.67	2.35	-40.41
124	124	158.60	0.00	-1.25	122.48	0	82.86	2	-27.25	2	-23.67	2.35	-40.41
124	125	159.78	0.00	2.32	121.85	0	82.44	2	-27.11	2	-23.55	2.35	-40.20
125	125	159.78	0.00	2.32	121.85	0	82.44	2	-27.11	2	-23.55	2.35	-40.20
125	126	160.95	0.00	5.89	117.02	0	79.17	2	-26.04	2	-22.62	2.35	-38.61
126	126	160.95	0.00	5.89	117.02	0	79.17	2	-26.04	2	-22.62	2.35	-38.61
126	127	162.13	0.00	9.46	108.00	0	73.07	2	-24.03	2	-20.87	2.35	-35.63
127	127	162.13	0.00	9.46	108.00	0	73.07	2	-24.03	2	-20.87	2.35	-35.63
127	128	163.30	0.00	13.03	94.79	0	64.13	2	-21.09	2	-18.32	2.35	-31.27
128	128	163.30	0.00	13.03	94.79	0	64.13	2	-21.09	2	-18.32	2.35	-31.27
128	129	164.48	0.00	16.60	77.38	0	52.35	2	-17.22	2	-14.95	2.35	-25.53
129	129	164.48	0.00	16.60	77.38	0	52.35	2	-17.22	2	-14.95	2.35	-25.53
129	130	165.65	0.00	20.17	55.78	0	37.74	2	-12.41	2	-10.78	2.35	-18.40
130	130	165.65	0.00	20.17	55.78	0	37.74	2	-12.41	2	-10.78	2.35	-18.40
130	131	166.83	0.00	23.74	29.99	0	20.29	2	-6.67	2	-5.80	2.35	-9.89
131	131	166.83	0.00	23.74	29.99	0	20.29	2	-6.67	2	-5.80	2.35	-9.89
131	132	167.00	0.00	24.27	25.78	0	17.44	2	-5.74	2	-4.98	2.35	-8.51
132	132	167.00	0.00	24.27	25.78	0	17.44	2	-5.74	2	-4.98	2.35	-8.51
132	133	168.00	0.00	27.31	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONALHipótesis de cálculo:
CMRESTO.To

sioCargaMuerta). Tensiones a tiempo To

CMRESTO

def. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
77	77	95.68	0.00	-4.12	163.68	0	110.74	2	-36.42	2	-31.63	2.35	-54.00
77	78	97.25	0.00	0.66	166.41	0	112.58	2	-37.03	2	-32.16	2.35	-54.90
78	78	97.25	0.00	0.66	166.41	0	112.58	2	-37.03	2	-32.16	2.35	-54.90
78	79	98.83	0.00	5.45	161.59	0	109.32	2	-35.96	2	-31.23	2.35	-53.31
79	79	98.83	0.00	5.45	161.59	0	109.32	2	-35.96	2	-31.23	2.35	-53.31
80	80	100.40	0.00	10.23	149.24	0	100.97	2	-33.21	2	-28.84	2.35	-49.24
80	80	100.40	0.00	10.23	149.24	0	100.97	2	-33.21	2	-28.84	2.35	-49.24
80	81	101.98	0.00	15.02	129.36	0	87.52	2	-28.78	2	-25.00	2.35	-42.68
81	81	101.98	0.00	15.02	129.36	0	87.52	2	-28.78	2	-25.00	2.35	-42.68
81	82	103.55	0.00	19.80	101.94	0	68.97	2	-22.68	2	-19.70	2.35	-33.63
82	82	103.55	-0.17	19.80	101.94	0	68.97	2	-22.68	2	-19.70	2.35	-33.63
82	83	105.13	-0.22	24.58	66.99	0	45.25	2	-14.98	2	-13.01	2.35	-22.16
83	83	105.13	-0.22	24.58	66.99	0	45.25	2	-14.98	2	-13.01	2.35	-22.16
83	84	106.70	-0.26	29.37	24.50	0	16.10	2	-7.91	2	-6.87	2.35	-10.52
84	84	106.70	0.00	29.37	24.50	0	16.10	2	-7.91	2	-6.87	2.35	-10.52
84	85	108.28	0.00	34.15	-25.53	0	-16.86	2	8.16	2	7.08	2.35	10.88
85	85	108.28	0.00	34.15	-25.53	0	-16.86	2	8.16	2	7.08	2.35	10.88
85	86	109.85	0.00	38.94	-83.09	0	-54.86	2	26.54	2	23.05	2.35	35.43
86	86	109.85	0.00	38.94	-83.09	0	-54.86	2	26.54	2	23.05	2.35	35.43
86	87	111.43	0.00	43.72	-148.18	0	-97.83	2	47.34	2	41.11	2.35	63.18
87	87	111.43	0.00	43.72	-148.18	0	-97.83	2	47.34	2	41.11	2.35	63.18
87	88	112.00	0.00	45.47	-173.83	0	-114.77	2	55.53	2	48.23	2.35	74.11
88	88	112.00	0.00	45.47	-173.83	0	-114.77	2	55.53	2	48.23	2.35	74.11
88	89	113.00	0.00	48.51	-220.81	0	-145.79	2	70.54	2	61.26	2.35	94.14
89	1089	113.00	0.00	-48.60	-220.81	0	-145.79	2	70.54	2	61.26	2.35	94.14
89	90	114.00	0.00	-45.56	-173.73	0	-114.70	2	55.50	2	48.20	2.35	74.07
90	90	114.00	0.00	-45.56	-173.73	0	-114.70	2	55.50	2	48.20	2.35	74.07
90	91	114.58	0.00	-43.81	-148.04	0	-97.74	2	47.29	2	41.07	2.35	63.12
91	91	114.58	0.00	-43.81	-148.04	0	-97.74	2	47.29	2	41.07	2.35	63.12
91	92	116.15	0.00	-39.03	-82.80	0	-54.67	2	26.45	2	22.97	2.35	35.30
92	92	116.15	0.00	-39.03	-82.80	0	-54.67	2	26.45	2	22.97	2.35	35.30
92	93	117.73	0.00	-34.24	-25.10	0	-16.57	2	8.02	2	6.96	2.35	10.70
93	93	117.73	0.00	-34.24	-25.10	0	-16.57	2	8.02	2	6.96	2.35	10.70
93	94	119.30	0.00	-29.46	25.06	0	16.55	2	-8.01	2	-8.95	2.35	-10.68
94	94	119.30	-0.26	-29.46	25.06	0	16.55	2	-8.01	2	-8.95	2.35	-10.68
94	95	120.88	-0.22	-24.67	67.69	0	44.62	2	-21.69	2	-18.84	2.35	-28.92
95	95	120.88	-0.22	-24.67	67.69	0	44.62	2	-21.69	2	-18.84	2.35	-28.92
95	96	122.45	-0.18	-19.89	102.79	0	69.48	2	-22.93	2	-19.92	2.35	-33.96
96	96	122.45	0.00	-19.89	102.79	0	69.48	2	-22.93	2	-19.92	2.35	-33.96
96	97	124.03	0.00	-15.11	130.35	0	88.19	2	-29.00	2	-25.19	2.35	-43.00
97	97	124.03	0.00	-15.11	130.35	0	88.19	2	-29.00	2	-25.19	2.35	-43.00
97	98	125.60	0.00	-10.32	150.37	0	101.73	2	-33.46	2	-29.06	2.35	-49.61
98	98	125.60	0.00	-10.32	150.37	0	101.73	2	-33.46	2	-29.06	2.35	-49.61
98	99	127.18	0.00	-5.54	162.86	0	110.18	2	-36.24	2	-31.47	2.35	-53.73
99	99	127.18	0.00	-5.54	162.86	0	110.18	2	-36.24	2	-31.47	2.35	-53.73
99	100	128.75	0.00	-0.75	167.82	0	113.54	2	-37.34	2	-32.43	2.35	-55.37
100	100	128.75	0.00	-0.75	167.82	0	113.54	2	-37.34	2	-32.43	2.35	-55.37
100	101	130.33	0.00	4.03	165.24	0	111.79	2	-36.77	2	-31.93	2.35	-54.51
101	101	130.33	0.00	4.03	165.24	0	111.79	2	-36.77	2	-31.93	2.35	-54.51
101	102	131.90	0.00	8.81	155.13	0	104.95	2	-34.52	2	-29.98	2.35	-51.18
102	102	131.90	0.00	8.81	155.13	0	104.95	2	-34.52	2	-29.98	2.35	-51.18
102	103	133.48	0.00	13.60	137.48	0	93.01	2	-30.59	2	-26.57	2.35	-45.36
103	103	133.48	0.00	13.60	137.48	0	93.01	2	-30.59	2	-26.57	2.35	-45.36
103	104	135.05	0.00	18.38	112.29	0	75.97	2	-24.99	2	-21.70	2.35	-37.05
104	104	135.05	-0.16	18.38	112.29	0	75.97	2	-24.99	2	-21.70	2.35	-37.05
104	105	136.63	-0.20	23.17	79.57	0	53.77	2	-17.77	2	-15.43	2.35	-26.31
105	105	136.63	-0.20	23.17	79.57	0	53.77	2	-17.77	2	-15.43	2.35	-26.31
105	106	138.20	-0.25	27.95	39.32	0	25.88	2	-12.64	2	-10.98	2.35	-16.83
106	106	138.20	0.00	27.95	39.32	0	25.88	2	-12.64	2	-10.98	2.35	-16.83
106	107	139.78	0.00	32.73	-8.47	0	-5.59	2	2.71	2	2.35	2.35	3.61
107	107	139.78	0.00	32.73	-8.47	0	-5.59	2	2.71	2	2.35	2.35	3.61
107	108	141.35	0.00	37.52	-63.79	0	-42.12	2	20.38	2	17.70	2.35	27.20
108	108	141.35	0.00	37.52	-63.79	0	-42.12	2	20.38	2	17.70	2.35	27.20
108	109	142.93	0.00	42.30	-126.65	0	-83.62	2	40.46	2	35.14	2.35	54.00
109	109	142.93	0.00	42.30	-126.65	0	-83.62	2	40.46	2	35.14	2.35	54.00
109	110	143.50	0.00	44.05	-151.48	0	-100.01	2	48.39	2	42.03	2.35	64.59
110	110	143.50	0.00	44.05	-151.48	0	-100.01	2	48.39	2	42.03	2.35	64.59
110	111	144.50	0.00	47.09	-197.05	0	-130.10	2	62.95	2	54.67	2.35	84.01
111	111	144.50	0.00	47.09	-197.05	0	-130.10	2	62.95	2	54.67	2.35	84.01
111	112	145.50	0.00	-41.04	-154.49	0	-102.00	2	49.35	2	42.86	2.35	65.87
112	112	145.50	0.00	-41.04	-154.49	0	-102.00	2	49.35	2	42.86	2.35	65.87
112	113	145.68	0.00	-40.51	-147.36	0	-97.29	2	47.07	2	40.89	2.35	62.83
113	113	145.68	0.00	-40.51	-147.36	0	-97.29	2	47.07	2	40.89	2.35	62.83
113	114	146.85	0.00	-36.94	-101.86	0	-67.25	2	32.54	2	28.26	2.35	43.43
114	114	146.85	0.00	-36.94	-101.86	0	-67.25	2	32.54	2	28.26	2.35	43.43
114	115	148.03	0.00	-33.37	-60.55	0	-39.98	2	19.34	2	16.80	2.35	25.82

CÁLCULO TENSIONALHipótesis de cálculo:
CMRESTO.To

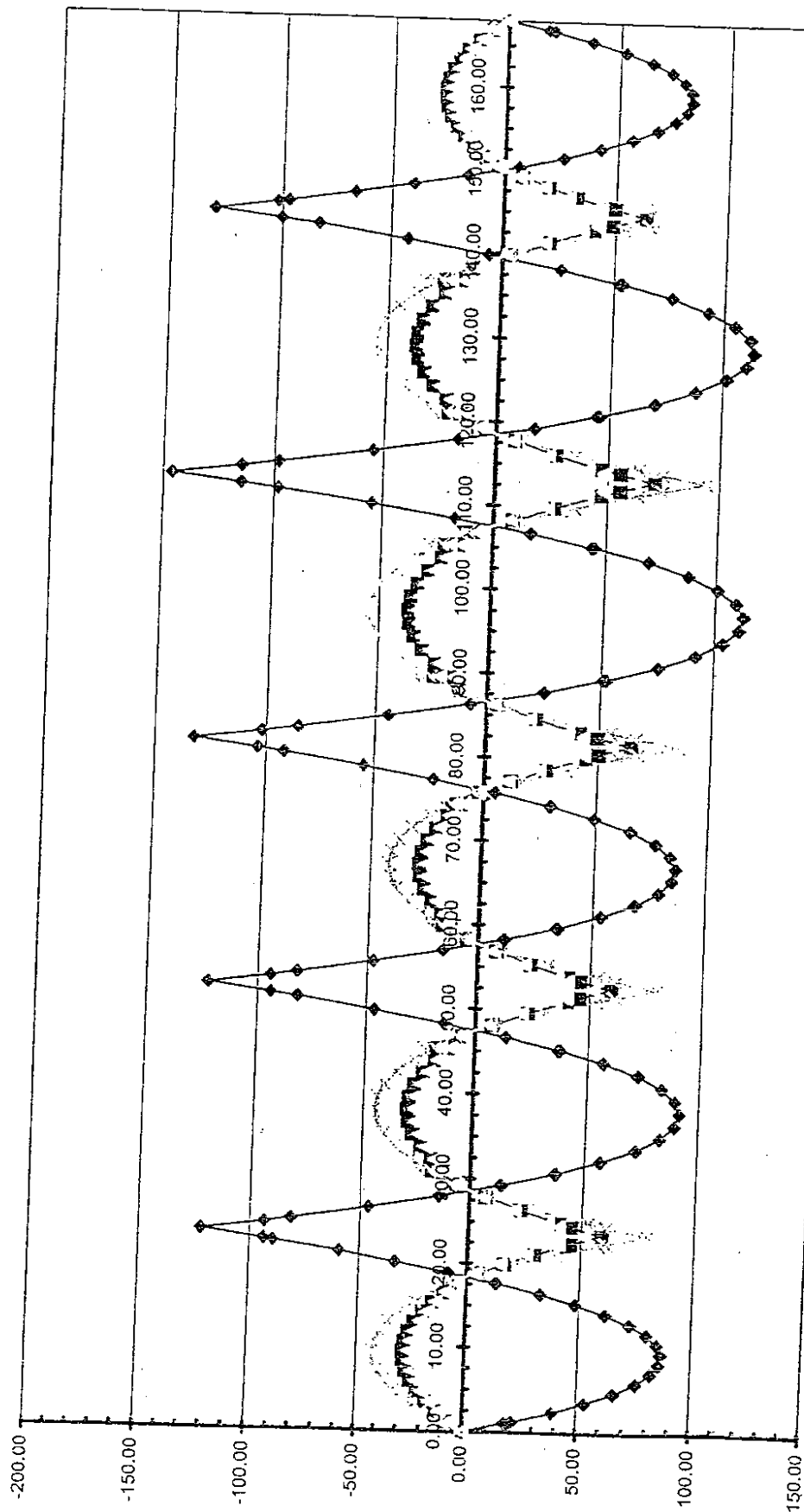
RestoCargaMuerta). Tensiones a tiempo To

CMRESTO

def. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
115	115	148.03	0.00	-33.37	-60.55	0	-39.98	2	19.34	2	16.80	2.35	25.82
115	116	149.20	0.00	-29.80	-23.44	0	-15.48	2	7.49	2	6.50	2.35	9.99
116	116	149.20	-0.35	-29.80	-23.44	0	-15.48	2	7.38	2	6.41	2.35	9.90
116	117	150.38	-0.31	-26.23	9.48	0	6.16	2	-3.12	2	-2.71	2.35	-4.12
117	117	150.38	-0.31	-26.23	9.48	0	6.31	2	-2.21	2	-1.92	2.35	-3.22
117	118	151.55	-0.27	-22.66	38.20	0	25.76	2	-8.59	2	-7.46	2.35	-12.68
118	118	151.55	0.00	-22.66	38.20	0	25.84	2	-8.50	2	-7.38	2.35	-12.60
118	119	152.73	0.00	-19.09	62.73	0	42.44	2	-13.96	2	-12.12	2.35	-20.70
119	119	152.73	0.00	-19.09	62.73	0	42.44	2	-13.96	2	-12.12	2.35	-20.70
119	120	153.90	0.00	-15.52	83.07	0	56.20	2	-18.48	2	-16.05	2.35	-27.41
120	120	153.90	0.00	-15.52	83.07	0	56.20	2	-18.48	2	-16.05	2.35	-27.41
120	121	155.08	0.00	-11.95	99.21	0	67.12	2	-22.08	2	-19.17	2.35	-32.73
121	121	155.08	0.00	-11.95	99.21	0	67.12	2	-22.08	2	-19.17	2.35	-32.73
121	122	156.25	0.00	-8.38	111.16	0	75.21	2	-24.73	2	-21.48	2.35	-36.67
122	122	156.25	0.00	-8.38	111.16	0	75.21	2	-24.73	2	-21.48	2.35	-36.67
122	123	157.43	0.00	-4.82	118.92	0	80.46	2	-26.46	2	-22.98	2.35	-39.23
123	123	157.43	0.00	-4.82	118.92	0	80.46	2	-26.46	2	-22.98	2.35	-39.23
123	124	158.60	0.00	-1.25	122.48	0	82.86	2	-27.25	2	-23.67	2.35	-40.41
124	124	158.60	0.00	-1.25	122.48	0	82.86	2	-27.25	2	-23.67	2.35	-40.41
124	125	159.78	0.00	2.32	121.85	0	82.44	2	-27.11	2	-23.55	2.35	-40.20
125	125	159.78	0.00	2.32	121.85	0	82.44	2	-27.11	2	-23.55	2.35	-40.20
125	126	160.95	0.00	5.89	117.02	0	79.17	2	-26.04	2	-22.62	2.35	-38.61
126	126	160.95	0.00	5.89	117.02	0	79.17	2	-26.04	2	-22.62	2.35	-38.61
126	127	162.13	0.00	9.46	108.00	0	73.07	2	-24.03	2	-20.87	2.35	-35.63
127	127	162.13	0.00	9.46	108.00	0	73.07	2	-24.03	2	-20.87	2.35	-35.63
127	128	163.30	0.00	13.03	94.79	0	64.13	2	-21.09	2	-18.32	2.35	-31.27
128	128	163.30	0.00	13.03	94.79	0	64.13	2	-21.09	2	-18.32	2.35	-31.27
128	129	164.48	0.00	16.60	77.38	0	52.35	2	-17.22	2	-14.95	2.35	-25.53
129	129	164.48	0.00	16.60	77.38	0	52.35	2	-17.22	2	-14.95	2.35	-25.53
129	130	165.65	0.00	20.17	55.78	0	37.74	2	-12.41	2	-10.78	2.35	-18.40
130	130	165.65	0.00	20.17	55.78	0	37.74	2	-12.41	2	-10.78	2.35	-18.40
130	131	166.83	0.00	23.74	29.99	0	20.29	2	-6.67	2	-5.80	2.35	-9.89
131	131	166.83	0.00	23.74	29.99	0	20.29	2	-6.67	2	-5.80	2.35	-9.89
131	132	167.00	0.00	24.27	25.78	0	17.44	2	-5.74	2	-4.98	2.35	-8.51
132	132	167.00	0.00	24.27	25.78	0	17.44	2	-5.74	2	-4.98	2.35	-8.51
132	133	168.00	0.00	27.31	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

GRÁFICO DE TENSIONES



—◆— InfCajón(kg/cm²) —■— SupCajón(kg/cm²) —▲— InfLosa(kg/cm²) —x— SupLosa(kg/cm²)

CÁLCULO TENSIONAL

Hipótesis de cálculo:

GRAD.To

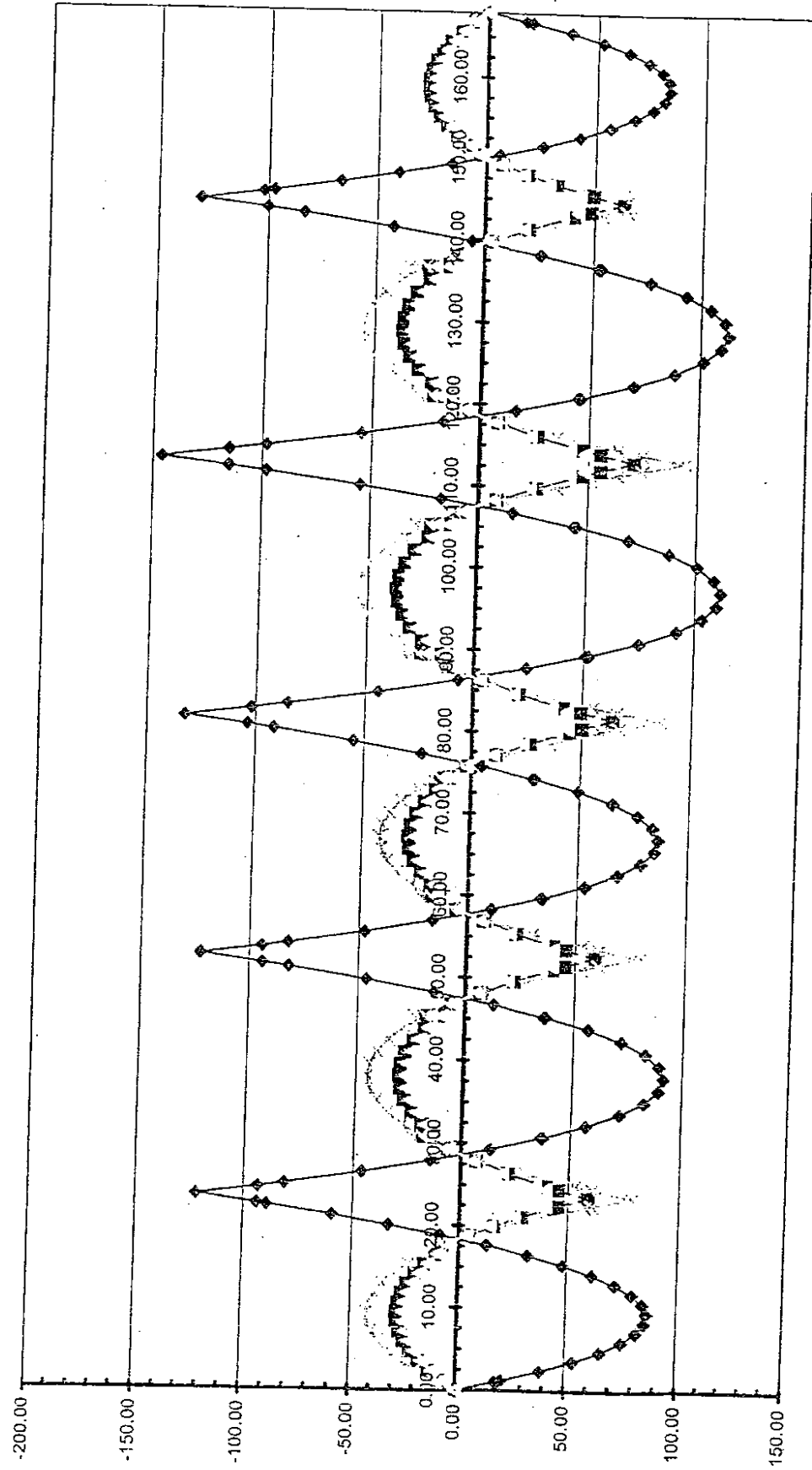
(Gradiente térmico). Tensiones a tiempo To

1: 11GRAD

coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	-9.19	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
2	2	1.00	0.00	-9.19	9.19	0	6.22	2	-2.04	2	-1.78	2.35	-3.03
2	3	1.18	0.00	-9.19	9.19	0	6.22	2	-2.04	2	-1.78	2.35	-3.03
3	3	1.18	0.00	-9.19	10.80	0	7.31	2	-2.40	2	-2.09	2.35	-3.56
3	4	2.35	0.00	-9.19	10.80	0	7.31	2	-2.40	2	-2.09	2.35	-3.56
4	4	2.35	0.00	-9.19	21.59	0	14.61	2	-4.80	2	-4.17	2.35	-7.12
4	5	3.53	0.00	-9.19	21.59	0	14.61	2	-4.80	2	-4.17	2.35	-7.12
5	5	3.53	0.00	-9.19	32.39	0	21.91	2	-7.21	2	-6.25	2.35	-10.69
5	6	4.70	0.00	-9.19	32.39	0	21.91	2	-7.21	2	-6.25	2.35	-10.69
6	6	4.70	0.00	-9.19	43.18	0	29.21	2	-9.61	2	-8.34	2.35	-14.25
6	7	5.88	0.00	-9.19	43.18	0	29.21	2	-9.61	2	-8.34	2.35	-14.25
7	7	5.88	0.00	-9.19	53.98	0	36.52	2	-12.01	2	-10.43	2.35	-17.81
7	8	7.05	0.00	-9.19	53.98	0	36.52	2	-12.01	2	-10.43	2.35	-17.81
8	8	7.05	0.00	-9.19	64.78	0	43.83	2	-14.41	2	-12.52	2.35	-21.37
8	9	8.23	0.00	-9.19	64.78	0	43.83	2	-14.41	2	-12.52	2.35	-21.37
9	9	8.23	0.00	-9.19	75.57	0	51.13	2	-16.82	2	-14.60	2.35	-24.93
9	10	9.40	0.00	-9.19	75.57	0	51.13	2	-16.82	2	-14.60	2.35	-24.93
10	10	9.40	0.00	-9.19	86.37	0	58.43	2	-19.22	2	-16.69	2.35	-28.49
10	11	10.58	0.00	-9.19	86.37	0	58.43	2	-19.22	2	-16.69	2.35	-28.49
11	11	10.58	0.00	-9.19	97.17	0	65.74	2	-21.62	2	-18.78	2.35	-32.06
11	12	11.75	0.00	-9.19	97.17	0	65.74	2	-21.62	2	-18.78	2.35	-32.06
12	12	11.75	0.00	-9.19	107.96	0	73.04	2	-24.02	2	-20.86	2.35	-35.62
12	13	12.93	0.00	-9.19	107.96	0	73.04	2	-24.02	2	-20.86	2.35	-35.62
13	13	12.93	0.00	-9.19	118.76	0	80.35	2	-26.43	2	-22.95	2.35	-39.18
13	14	14.10	0.00	-9.19	118.76	0	80.35	2	-26.43	2	-22.95	2.35	-39.18
14	14	14.10	0.00	-9.19	129.55	0	87.65	2	-28.83	2	-25.04	2.35	-42.74
14	15	15.28	0.00	-9.19	129.55	0	87.65	2	-28.83	2	-25.04	2.35	-42.74
15	15	15.28	0.00	-9.19	140.35	0	94.95	2	-31.23	2	-27.12	2.35	-46.30
15	16	16.45	0.00	-9.19	140.35	0	94.95	2	-31.23	2	-27.12	2.35	-46.30
16	16	16.45	0.11	-9.19	151.15	0	102.26	2	-33.63	2	-29.21	2.35	-49.87
16	17	17.63	0.11	-9.19	151.15	0	102.26	2	-33.63	2	-29.21	2.35	-49.87
17	17	17.63	0.11	-9.19	161.94	0	109.60	2	-36.00	2	-31.26	2.35	-53.39
17	18	18.80	0.11	-9.19	161.94	0	109.60	2	-36.00	2	-31.26	2.35	-53.39
18	18	18.80	0.00	-9.19	172.74	0	114.05	2	-38.40	2	-33.60	2.35	-56.91
18	19	19.98	0.00	-9.19	172.74	0	114.05	2	-38.40	2	-33.60	2.35	-56.91
19	19	19.98	0.00	-9.19	183.53	0	121.17	2	-40.80	2	-36.00	2.35	-60.43
19	20	21.15	0.00	-9.19	183.53	0	121.17	2	-40.80	2	-36.00	2.35	-60.43
20	20	21.15	0.00	-9.19	194.33	0	128.30	2	-43.20	2	-38.40	2.35	-63.95
20	21	22.33	0.00	-9.19	194.33	0	128.30	2	-43.20	2	-38.40	2.35	-63.95
21	21	22.33	0.00	-9.19	205.13	0	135.43	2	-45.60	2	-40.80	2.35	-67.47
21	22	22.50	0.00	-9.19	205.13	0	135.43	2	-45.60	2	-40.80	2.35	-67.47
22	22	22.50	0.00	-9.19	206.73	0	136.49	2	-46.08	2	-41.28	2.35	-70.99
22	23	23.50	0.00	-9.19	206.73	0	136.49	2	-46.08	2	-41.28	2.35	-70.99
23	1023	23.50	0.00	-9.19	215.92	0	142.56	2	-48.48	2	-43.68	2.35	-74.51
23	24	24.50	0.00	1.60	215.92	0	142.56	2	-48.48	2	-43.68	2.35	-74.51
23	24	24.50	0.00	1.60	214.32	0	141.50	2	-47.90	2	-43.10	2.35	-73.93
24	24	24.50	0.00	1.60	214.32	0	141.50	2	-47.90	2	-43.10	2.35	-73.93
24	25	24.95	0.00	1.60	213.60	0	141.03	2	-47.32	2	-42.52	2.35	-73.35
25	25	24.95	0.00	1.60	213.60	0	141.03	2	-47.32	2	-42.52	2.35	-73.35
25	26	26.40	0.00	1.60	211.28	0	139.49	2	-45.74	2	-40.94	2.35	-71.77
26	26	26.40	0.00	1.60	211.28	0	139.49	2	-45.74	2	-40.94	2.35	-71.77
26	27	27.85	0.00	1.60	208.96	0	137.96	2	-44.16	2	-39.36	2.35	-70.19
27	27	27.85	0.00	1.60	208.96	0	137.96	2	-44.16	2	-39.36	2.35	-70.19
27	28	29.30	0.00	1.60	206.64	0	136.43	2	-42.58	2	-37.78	2.35	-68.61
28	28	29.30	0.02	1.60	206.64	0	136.43	2	-42.58	2	-37.78	2.35	-68.61
28	29	30.75	0.02	1.60	204.32	0	134.90	2	-41.00	2	-36.20	2.35	-67.03
29	29	30.75	0.02	1.60	204.32	0	134.90	2	-41.00	2	-36.20	2.35	-67.03
29	30	32.20	0.02	1.60	201.99	0	133.37	2	-39.42	2	-34.62	2.35	-65.45
30	30	32.20	0.00	1.60	201.99	0	133.37	2	-39.42	2	-34.62	2.35	-65.45
30	31	33.65	0.00	1.60	199.67	0	131.84	2	-37.84	2	-33.04	2.35	-63.87
31	31	33.65	0.00	1.60	199.67	0	131.84	2	-37.84	2	-33.04	2.35	-63.87
31	32	35.10	0.00	1.60	197.35	0	130.31	2	-36.26	2	-31.46	2.35	-62.29
32	32	35.10	0.00	1.60	197.35	0	130.31	2	-36.26	2	-31.46	2.35	-62.29
32	33	36.55	0.00	1.60	195.03	0	128.78	2	-34.68	2	-29.88	2.35	-60.71
33	33	36.55	0.00	1.60	195.03	0	128.78	2	-34.68	2	-29.88	2.35	-60.71
33	34	38.00	0.00	1.60	192.71	0	127.25	2	-33.10	2	-28.30	2.35	-59.13
34	34	38.00	0.00	1.60	192.71	0	127.25	2	-33.10	2	-28.30	2.35	-59.13
34	35	39.45	0.00	1.60	190.39	0	125.72	2	-31.52	2	-26.72	2.35	-57.55
35	35	39.45	0.00	1.60	190.39	0	125.72	2	-31.52	2	-26.72	2.35	-57.55
35	36	40.90	0.00	1.60	188.07	0	124.19	2	-30.94	2	-26.14	2.35	-56.97
36	36	40.90	0.00	1.60	188.07	0	124.19	2	-30.94	2	-26.14	2.35	-56.97
36	37	42.35	0.00	1.60	185.74	0	122.66	2	-29.36	2	-24.56	2.35	-55.39
37	37	42.35	0.00	1.60	185.74	0	122.66	2	-29.36	2	-24.56	2.35	-55.39
37	38	43.80	0.00	1.60	183.42	0	121.13	2	-27.78	2	-22.98	2.35	-53.81
38	38	43.80	-0.02	1.60	183.42	0	121.13	2	-27.78	2	-22.98	2.35	-53.81
38	39	45.25	-0.02	1.60	181.10	0	119.60	2	-26.20	2	-21.40	2.35	-52.23

GRÁFICO DE TENSIONES



—●— InfCajón(kg/cm²) —■— SupCajón(kg/cm²) —▲— InfLosa(kg/cm²) —◆— SupLosa(kg/cm²)

CÁLCULO TENSIONAL

Hipótesis de cálculo:
GRAD.To

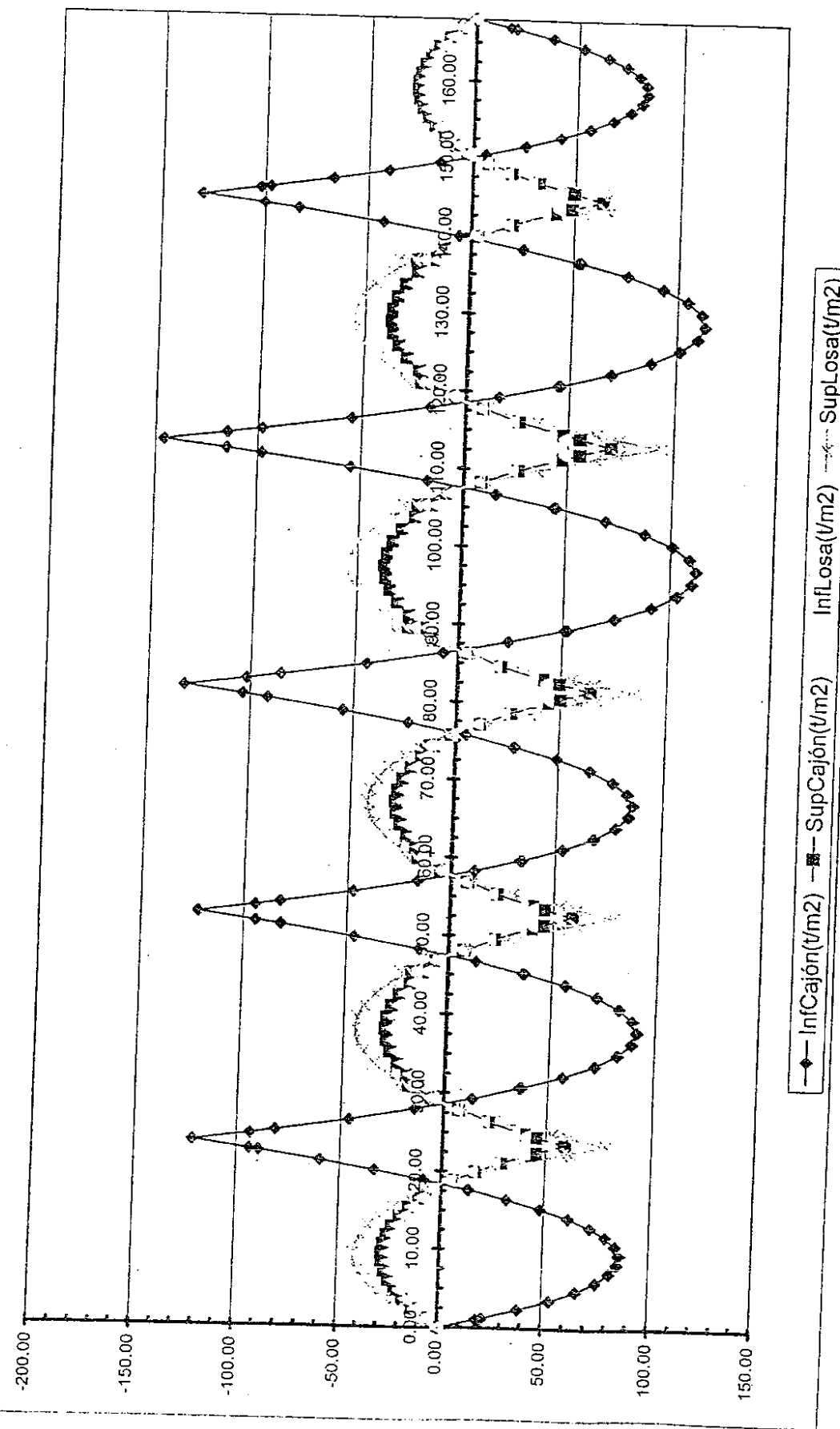
(Gradiente térmico). Tensiones a tiempo To

t: 1)GRAD

Inf, etc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	-9.19	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-9.19	9.19	0	6.22	2	-2.04	2	-1.78	2.35	-3.03
2	2	1.00	0.00	-9.19	9.19	0	6.22	2	-2.04	2	-1.78	2.35	-3.03
2	3	1.18	0.00	-9.19	10.80	0	7.31	2	-2.40	2	-2.09	2.35	-3.56
3	3	1.18	0.00	-9.19	10.80	0	7.31	2	-2.40	2	-2.09	2.35	-3.56
3	4	2.35	0.00	-9.19	21.59	0	14.61	2	-4.80	2	-4.17	2.35	-7.12
4	4	2.35	0.00	-9.19	21.59	0	14.61	2	-4.80	2	-4.17	2.35	-7.12
4	5	3.53	0.00	-9.19	32.39	0	21.91	2	-7.21	2	-6.26	2.35	-10.69
5	5	3.53	0.00	-9.19	32.39	0	21.91	2	-7.21	2	-6.26	2.35	-10.69
5	6	4.70	0.00	-9.19	43.18	0	29.21	2	-9.61	2	-8.34	2.35	-14.25
6	6	4.70	0.00	-9.19	43.18	0	29.21	2	-9.61	2	-8.34	2.35	-14.25
6	7	5.88	0.00	-9.19	53.98	0	36.52	2	-12.01	2	-10.43	2.35	-17.81
7	7	5.88	0.00	-9.19	53.98	0	36.52	2	-12.01	2	-10.43	2.35	-17.81
7	8	7.05	0.00	-9.19	64.78	0	43.83	2	-14.41	2	-12.52	2.35	-21.37
8	8	7.05	0.00	-9.19	64.78	0	43.83	2	-14.41	2	-12.52	2.35	-21.37
8	9	8.23	0.00	-9.19	75.57	0	51.13	2	-16.82	2	-14.60	2.35	-24.93
9	9	8.23	0.00	-9.19	75.57	0	51.13	2	-16.82	2	-14.60	2.35	-24.93
9	10	9.40	0.00	-9.19	86.37	0	58.43	2	-19.22	2	-16.69	2.35	-28.49
10	10	9.40	0.00	-9.19	86.37	0	58.43	2	-19.22	2	-16.69	2.35	-28.49
10	11	10.58	0.00	-9.19	97.17	0	65.74	2	-21.62	2	-18.78	2.35	-32.06
11	11	10.58	0.00	-9.19	97.17	0	65.74	2	-21.62	2	-18.78	2.35	-32.06
11	12	11.75	0.00	-9.19	107.96	0	73.04	2	-24.02	2	-20.86	2.35	-35.62
12	12	11.75	0.00	-9.19	107.96	0	73.04	2	-24.02	2	-20.86	2.35	-35.62
12	13	12.93	0.00	-9.19	118.76	0	80.35	2	-26.43	2	-22.95	2.35	-39.18
13	13	12.93	0.00	-9.19	118.76	0	80.35	2	-26.43	2	-22.95	2.35	-39.18
13	14	14.10	0.00	-9.19	129.55	0	87.65	2	-28.83	2	-25.04	2.35	-42.74
14	14	14.10	0.00	-9.19	129.55	0	87.65	2	-28.83	2	-25.04	2.35	-42.74
14	15	15.28	0.00	-9.19	140.35	0	94.95	2	-31.23	2	-27.12	2.35	-46.30
15	15	15.28	0.00	-9.19	140.35	0	94.95	2	-31.23	2	-27.12	2.35	-46.30
15	16	16.45	0.00	-9.19	151.15	0	102.26	2	-33.63	2	-29.21	2.35	-49.87
16	16	16.45	0.11	-9.19	151.15	0	102.30	2	-33.60	2	-29.18	2.35	-49.83
16	17	17.63	0.11	-9.19	161.94	0	109.60	2	-36.00	2	-31.26	2.35	-53.39
17	17	17.63	0.11	-9.19	161.94	0	109.60	2	-36.00	2	-31.26	2.35	-53.39
17	18	18.80	0.11	-9.19	172.74	0	114.08	2	-55.15	2	-47.90	2.35	-73.62
18	18	18.80	0.00	-9.19	172.74	0	114.05	2	-55.18	2	-47.93	2.35	-73.65
18	19	19.98	0.00	-9.19	183.53	0	121.17	2	-58.63	2	-50.92	2.35	-78.25
19	19	19.98	0.00	-9.19	183.53	0	121.17	2	-58.63	2	-50.92	2.35	-78.25
19	20	21.15	0.00	-9.19	194.33	0	128.30	2	-62.08	2	-53.92	2.35	-82.85
20	20	21.15	0.00	-9.19	194.33	0	128.30	2	-62.08	2	-53.92	2.35	-82.85
20	21	22.33	0.00	-9.19	205.13	0	135.43	2	-65.53	2	-56.91	2.35	-87.46
21	21	22.33	0.00	-9.19	205.13	0	135.43	2	-65.53	2	-56.91	2.35	-87.46
21	22	22.50	0.00	-9.19	206.73	0	136.49	2	-66.04	2	-57.36	2.35	-88.14
22	22	22.50	0.00	-9.19	206.73	0	136.49	2	-66.04	2	-57.36	2.35	-88.14
22	23	23.50	0.00	-9.19	215.92	0	142.56	2	-68.98	2	-59.91	2.35	-92.06
23	1023	23.50	0.00	1.60	215.92	0	142.56	2	-68.98	2	-59.91	2.35	-92.06
23	24	24.50	0.00	1.60	214.32	0	141.50	2	-68.47	2	-59.46	2.35	-91.38
24	24	24.50	0.00	1.60	214.32	0	141.50	2	-68.47	2	-59.46	2.35	-91.38
24	25	24.95	0.00	1.60	213.60	0	141.03	2	-68.24	2	-59.26	2.35	-91.07
25	25	24.95	0.00	1.60	213.60	0	141.03	2	-68.24	2	-59.26	2.35	-91.07
25	26	26.40	0.00	1.60	211.28	0	139.49	2	-67.49	2	-58.62	2.35	-90.08
26	26	26.40	0.00	1.60	211.28	0	139.49	2	-67.49	2	-58.62	2.35	-90.08
26	27	27.85	0.00	1.60	208.96	0	137.96	2	-66.75	2	-57.98	2.35	-89.09
27	27	27.85	0.00	1.60	208.96	0	137.96	2	-66.75	2	-57.98	2.35	-89.09
27	28	29.30	0.02	1.60	206.64	0	136.43	2	-66.01	2	-57.33	2.35	-88.10
28	28	29.30	0.02	1.60	206.64	0	136.44	2	-66.01	2	-57.33	2.35	-88.10
28	29	30.75	0.02	1.60	204.32	0	134.90	2	-65.26	2	-56.68	2.35	-87.11
29	29	30.75	0.02	1.60	204.32	0	138.24	2	-45.46	2	-39.48	2.35	-67.40
29	30	32.20	0.02	1.60	201.99	0	136.66	2	-44.94	2	-39.03	2.35	-66.63
30	30	32.20	0.00	1.60	201.99	0	136.66	2	-44.95	2	-39.04	2.35	-66.64
30	31	33.65	0.00	1.60	199.67	0	135.09	2	-44.43	2	-38.59	2.35	-65.87
31	31	33.65	0.00	1.60	199.67	0	135.09	2	-44.43	2	-38.59	2.35	-65.87
31	32	35.10	0.00	1.60	197.35	0	133.52	2	-43.91	2	-38.14	2.35	-65.11
32	32	35.10	0.00	1.60	197.35	0	133.52	2	-43.91	2	-38.14	2.35	-65.11
32	33	36.55	0.00	1.60	195.03	0	131.95	2	-43.40	2	-37.69	2.35	-64.34
33	33	36.55	0.00	1.60	195.03	0	131.95	2	-43.40	2	-37.69	2.35	-64.34
33	34	38.00	0.00	1.60	192.71	0	130.38	2	-42.88	2	-37.24	2.35	-63.58
34	34	38.00	0.00	1.60	192.71	0	130.38	2	-42.88	2	-37.24	2.35	-63.58
34	35	39.45	0.00	1.60	190.39	0	128.81	2	-42.36	2	-36.79	2.35	-62.81
35	35	39.45	0.00	1.60	190.39	0	128.81	2	-42.36	2	-36.79	2.35	-62.81
35	36	40.90	0.00	1.60	188.07	0	127.24	2	-41.85	2	-36.35	2.35	-62.05
36	36	40.90	0.00	1.60	188.07	0	127.24	2	-41.85	2	-36.35	2.35	-62.05
36	37	42.35	0.00	1.60	185.74	0	125.66	2	-41.33	2	-35.90	2.35	-61.28
37	37	42.35	0.00	1.60	185.74	0	125.66	2	-41.33	2	-35.90	2.35	-61.28
37	38	43.80	0.00	1.60	183.42	0	124.09	2	-40.81	2	-35.45	2.35	-60.51
38	38	43.80	-0.02	1.60	183.42	0	124.09	2	-40.82	2	-35.45	2.35	-60.52
38	39	45.25	-0.02	1.60	181.10	0	122.52	2	-40.30	2	-35.00	2.35	-59.75

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

Hipótesis de cálculo:
GRAD.To
(Gradiente térmico), Tensiones a tiempo To
I. IGRAD
Def. ext:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
1	1	0.00	0.00	-9.19	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-9.19	9.19	0	6.22	2	-2.04	2	-1.78	2.35	-3.03
2	2	1.00	0.00	-9.19	9.19	0	6.22	2	-2.04	2	-1.78	2.35	-3.03
2	3	1.18	0.00	-9.19	10.80	0	7.31	2	-2.40	2	-2.09	2.35	-3.56
3	3	1.18	0.00	-9.19	10.80	0	7.31	2	-2.40	2	-2.09	2.35	-3.56
3	4	2.35	0.00	-9.19	21.59	0	14.61	2	-4.80	2	-4.17	2.35	-7.12
4	4	2.35	0.00	-9.19	21.59	0	14.61	2	-4.80	2	-4.17	2.35	-7.12
4	5	3.53	0.00	-9.19	32.39	0	21.91	2	-7.21	2	-6.26	2.35	-10.69
5	5	3.53	0.00	-9.19	32.39	0	21.91	2	-7.21	2	-6.26	2.35	-10.69
5	6	4.70	0.00	-9.19	43.18	0	29.21	2	-9.61	2	-8.34	2.35	-14.25
6	6	4.70	0.00	-9.19	43.18	0	29.21	2	-9.61	2	-8.34	2.35	-14.25
6	7	5.88	0.00	-9.19	53.98	0	36.52	2	-12.01	2	-10.43	2.35	-17.81
7	7	5.88	0.00	-9.19	53.98	0	36.52	2	-12.01	2	-10.43	2.35	-17.81
7	8	7.05	0.00	-9.19	64.78	0	43.83	2	-14.41	2	-12.52	2.35	-21.37
8	8	7.05	0.00	-9.19	64.78	0	43.83	2	-14.41	2	-12.52	2.35	-21.37
8	9	8.23	0.00	-9.19	75.57	0	51.13	2	-16.82	2	-14.60	2.35	-24.93
9	9	8.23	0.00	-9.19	75.57	0	51.13	2	-16.82	2	-14.60	2.35	-24.93
9	10	9.40	0.00	-9.19	86.37	0	58.43	2	-19.22	2	-16.69	2.35	-28.49
10	10	9.40	0.00	-9.19	86.37	0	58.43	2	-19.22	2	-16.69	2.35	-28.49
10	11	10.58	0.00	-9.19	97.17	0	65.74	2	-21.62	2	-18.78	2.35	-32.06
11	11	10.58	0.00	-9.19	97.17	0	65.74	2	-21.62	2	-18.78	2.35	-32.06
11	12	11.75	0.00	-9.19	107.96	0	73.04	2	-24.02	2	-20.86	2.35	-35.62
12	12	11.75	0.00	-9.19	107.96	0	73.04	2	-24.02	2	-20.86	2.35	-35.62
12	13	12.93	0.00	-9.19	118.76	0	80.35	2	-26.43	2	-22.95	2.35	-39.18
13	13	12.93	0.00	-9.19	118.76	0	80.35	2	-26.43	2	-22.95	2.35	-39.18
13	14	14.10	0.00	-9.19	129.55	0	87.65	2	-28.83	2	-25.04	2.35	-42.74
14	14	14.10	0.00	-9.19	129.55	0	87.65	2	-28.83	2	-25.04	2.35	-42.74
14	15	15.28	0.00	-9.19	140.35	0	94.95	2	-31.23	2	-27.12	2.35	-46.30
15	15	15.28	0.00	-9.19	140.35	0	94.95	2	-31.23	2	-27.12	2.35	-46.30
15	16	16.45	0.00	-9.19	151.15	0	102.26	2	-33.63	2	-29.21	2.35	-49.87
16	16	16.45	0.11	-9.19	151.15	0	102.26	2	-33.63	2	-29.21	2.35	-49.87
16	17	17.63	0.11	-9.19	161.94	0	109.60	2	-36.00	2	-31.26	2.35	-53.39
17	17	17.63	0.11	-9.19	161.94	0	109.60	2	-36.00	2	-31.26	2.35	-53.39
17	18	18.80	0.11	-9.19	172.74	0	114.08	2	-51.70	2	-44.90	2.35	-69.02
18	18	18.80	0.00	-9.19	172.74	0	114.08	2	-51.70	2	-44.90	2.35	-69.02
18	19	19.98	0.00	-9.19	183.53	0	121.17	2	-58.63	2	-50.92	2.35	-78.25
19	19	19.98	0.00	-9.19	183.53	0	121.17	2	-58.63	2	-50.92	2.35	-78.25
19	20	21.15	0.00	-9.19	194.33	0	128.30	2	-62.08	2	-53.92	2.35	-82.85
20	20	21.15	0.00	-9.19	194.33	0	128.30	2	-62.08	2	-53.92	2.35	-82.85
20	21	22.33	0.00	-9.19	205.13	0	135.43	2	-65.53	2	-56.91	2.35	-87.46
21	21	22.33	0.00	-9.19	205.13	0	135.43	2	-65.53	2	-56.91	2.35	-87.46
21	22	22.50	0.00	-9.19	206.73	0	136.49	2	-66.04	2	-57.36	2.35	-88.14
22	22	22.50	0.00	-9.19	206.73	0	136.49	2	-66.04	2	-57.36	2.35	-88.14
22	23	23.50	0.00	-9.19	215.92	0	142.56	2	-68.98	2	-59.91	2.35	-92.06
23	23	23.50	0.00	-9.19	215.92	0	142.56	2	-68.98	2	-59.91	2.35	-92.06
23	24	24.50	0.00	-9.19	214.32	0	141.50	2	-68.47	2	-59.46	2.35	-91.38
24	24	24.50	0.00	-9.19	214.32	0	141.50	2	-68.47	2	-59.46	2.35	-91.38
24	25	24.95	0.00	-9.19	213.60	0	141.03	2	-68.24	2	-59.26	2.35	-91.07
25	25	24.95	0.00	-9.19	213.60	0	141.03	2	-68.24	2	-59.26	2.35	-91.07
25	26	26.40	0.00	-9.19	211.28	0	139.49	2	-67.49	2	-58.62	2.35	-90.08
26	26	26.40	0.00	-9.19	211.28	0	139.49	2	-67.49	2	-58.62	2.35	-90.08
26	27	27.85	0.00	-9.19	208.96	0	137.96	2	-66.75	2	-57.98	2.35	-89.09
27	27	27.85	0.00	-9.19	208.96	0	137.96	2	-66.75	2	-57.98	2.35	-89.09
27	28	29.30	0.00	-9.19	206.64	0	136.43	2	-66.01	2	-57.33	2.35	-88.10
28	28	29.30	0.02	-9.19	206.64	0	136.43	2	-66.01	2	-57.33	2.35	-88.10
28	29	30.75	0.02	-9.19	204.32	0	134.90	2	-65.26	2	-56.68	2.35	-87.11
29	29	30.75	0.02	-9.19	204.32	0	134.90	2	-65.26	2	-56.68	2.35	-87.11
29	30	32.20	0.02	-9.19	201.99	0	136.66	2	-44.94	2	-39.03	2.35	-66.63
30	30	32.20	0.00	-9.19	201.99	0	136.66	2	-44.94	2	-39.03	2.35	-66.63
30	31	33.65	0.00	-9.19	199.67	0	135.09	2	-44.43	2	-38.59	2.35	-65.87
31	31	33.65	0.00	-9.19	199.67	0	135.09	2	-44.43	2	-38.59	2.35	-65.87
31	32	35.10	0.00	-9.19	197.35	0	133.52	2	-43.91	2	-38.14	2.35	-65.11
32	32	35.10	0.00	-9.19	197.35	0	133.52	2	-43.91	2	-38.14	2.35	-65.11
32	33	36.55	0.00	-9.19	195.03	0	131.95	2	-43.40	2	-37.69	2.35	-64.34
33	33	36.55	0.00	-9.19	195.03	0	131.95	2	-43.40	2	-37.69	2.35	-64.34
33	34	38.00	0.00	-9.19	192.71	0	130.38	2	-42.88	2	-37.24	2.35	-63.58
34	34	38.00	0.00	-9.19	192.71	0	130.38	2	-42.88	2	-37.24	2.35	-63.58
34	35	39.45	0.00	-9.19	190.39	0	128.81	2	-42.36	2	-36.79	2.35	-62.81
35	35	39.45	0.00	-9.19	190.39	0	128.81	2	-42.36	2	-36.79	2.35	-62.81
35	36	40.90	0.00	-9.19	188.07	0	127.24	2	-41.85	2	-36.35	2.35	-62.05
36	36	40.90	0.00	-9.19	188.07	0	127.24	2	-41.85	2	-36.35	2.35	-62.05
36	37	42.35	0.00	-9.19	185.74	0	125.66	2	-41.33	2	-35.90	2.35	-61.28
37	37	42.35	0.00	-9.19	185.74	0	125.66	2	-41.33	2	-35.90	2.35	-61.28
37	38	43.80	0.00	-9.19	183.42	0	124.09	2	-40.81	2	-35.45	2.35	-60.51
38	38	43.80	-0.02	-9.19	183.42	0	124.09	2	-40.81	2	-35.45	2.35	-60.51
38	39	45.25	-0.02	-9.19	181.10	0	122.52	2	-40.30	2	-35.00	2.35	-59.75

CÁLCULO TENSIONAL

Hipótesis de cálculo:

GRAD.To

(Gradiente térmico). Tensiones a tiempo To

IGRAD

Def. etc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (T/m2)	y fibra	sig (T/m2)	y fibra	sig (T/m2)	y fibra	sig (T/m2)
39	39	45.25	-0.02	1.60	181.10	0	119.56	2	-57.86	2	-50.25	2.35	-77.22
39	40	46.70	-0.02	1.60	178.78	0	118.03	2	-57.12	2	-49.61	2.35	-76.23
40	40	46.70	0.00	1.60	178.78	0	118.04	2	-57.11	2	-49.60	2.35	-76.22
40	41	48.15	0.00	1.60	176.46	0	116.50	2	-56.37	2	-48.96	2.35	-75.24
41	41	48.15	0.00	1.60	176.46	0	116.50	2	-56.37	2	-48.96	2.35	-75.24
41	42	49.60	0.00	1.60	174.14	0	114.97	2	-55.63	2	-48.32	2.35	-74.25
42	42	49.60	0.00	1.60	174.14	0	114.97	2	-55.63	2	-48.32	2.35	-74.25
42	43	51.05	0.00	1.60	171.82	0	113.44	2	-54.89	2	-47.67	2.35	-73.26
43	43	51.05	0.00	1.60	171.82	0	113.44	2	-54.89	2	-47.67	2.35	-73.26
43	44	51.50	0.00	1.60	171.10	0	112.97	2	-54.66	2	-47.47	2.35	-72.95
44	44	51.50	0.00	1.60	171.10	0	112.97	2	-54.66	2	-47.47	2.35	-72.95
44	45	52.50	0.00	1.60	169.50	0	111.91	2	-54.15	2	-47.03	2.35	-72.27
45	1045	52.50	0.00	-0.19	169.50	0	111.91	2	-54.15	2	-47.03	2.35	-72.27
45	46	53.50	0.00	-0.19	169.68	0	112.03	2	-54.20	2	-47.08	2.35	-72.34
46	46	53.50	0.00	-0.19	169.68	0	112.03	2	-54.20	2	-47.08	2.35	-72.34
46	47	53.95	0.00	-0.19	169.77	0	112.09	2	-54.23	2	-47.10	2.35	-72.38
47	47	53.95	0.00	-0.19	169.77	0	112.09	2	-54.23	2	-47.10	2.35	-72.38
47	48	55.40	0.00	-0.19	170.03	0	112.26	2	-54.32	2	-47.18	2.35	-72.49
48	48	55.40	0.00	-0.19	170.03	0	112.26	2	-54.32	2	-47.18	2.35	-72.49
48	49	56.85	0.00	-0.19	170.30	0	112.44	2	-54.40	2	-47.25	2.35	-72.61
49	49	56.85	0.00	-0.19	170.30	0	112.44	2	-54.40	2	-47.25	2.35	-72.61
49	50	58.30	0.00	-0.19	170.57	0	112.62	2	-54.49	2	-47.33	2.35	-72.72
50	50	58.30	0.00	-0.19	170.57	0	112.62	2	-54.49	2	-47.33	2.35	-72.72
50	51	59.75	0.00	-0.19	170.84	0	112.79	2	-54.58	2	-47.40	2.35	-72.84
51	51	59.75	0.00	-0.19	170.84	0	112.79	2	-54.58	2	-47.40	2.35	-72.84
51	52	61.20	0.00	-0.19	171.11	0	115.76	2	-38.07	2	-33.07	2.35	-56.45
52	52	61.20	0.00	-0.19	171.11	0	115.76	2	-38.07	2	-33.07	2.35	-56.45
52	53	62.65	0.00	-0.19	171.38	0	115.95	2	-38.13	2	-33.12	2.35	-56.54
53	53	62.65	0.00	-0.19	171.38	0	115.95	2	-38.13	2	-33.12	2.35	-56.54
53	54	64.10	0.00	-0.19	171.65	0	116.13	2	-38.19	2	-33.17	2.35	-56.63
54	54	64.10	0.00	-0.19	171.65	0	116.13	2	-38.19	2	-33.17	2.35	-56.63
54	55	65.55	0.00	-0.19	171.92	0	116.31	2	-38.25	2	-33.22	2.35	-56.72
55	55	65.55	0.00	-0.19	171.92	0	116.31	2	-38.25	2	-33.22	2.35	-56.72
55	56	67.00	0.00	-0.19	172.19	0	116.49	2	-38.31	2	-33.28	2.35	-56.81
56	56	67.00	0.00	-0.19	172.19	0	116.49	2	-38.31	2	-33.28	2.35	-56.81
56	57	68.45	0.00	-0.19	172.46	0	116.68	2	-38.37	2	-33.33	2.35	-56.90
57	57	68.45	0.00	-0.19	172.46	0	116.68	2	-38.37	2	-33.33	2.35	-56.90
57	58	69.90	0.00	-0.19	172.73	0	116.86	2	-38.43	2	-33.38	2.35	-56.99
58	58	69.90	0.00	-0.19	172.73	0	116.86	2	-38.43	2	-33.38	2.35	-56.99
58	59	71.35	0.00	-0.19	173.00	0	117.04	2	-38.49	2	-33.43	2.35	-57.07
59	59	71.35	0.00	-0.19	173.00	0	117.04	2	-38.49	2	-33.43	2.35	-57.07
59	60	72.80	0.00	-0.19	173.27	0	117.23	2	-38.55	2	-33.49	2.35	-57.16
60	60	72.80	0.00	-0.19	173.27	0	117.23	2	-38.55	2	-33.49	2.35	-57.16
60	61	74.25	0.00	-0.19	173.54	0	117.41	2	-38.61	2	-33.54	2.35	-57.25
61	61	74.25	0.00	-0.19	173.54	0	117.41	2	-38.61	2	-33.54	2.35	-57.25
61	62	75.70	0.00	-0.19	173.81	0	114.75	2	-55.44	2	-48.15	2.35	-73.99
62	62	75.70	0.00	-0.19	173.81	0	114.75	2	-55.44	2	-48.15	2.35	-73.99
62	63	77.15	0.00	-0.19	174.08	0	114.93	2	-55.52	2	-48.22	2.35	-74.11
63	63	77.15	0.00	-0.19	174.08	0	114.93	2	-55.52	2	-48.22	2.35	-74.11
63	64	78.60	0.00	-0.19	174.35	0	115.11	2	-55.70	2	-48.37	2.35	-74.34
64	64	78.60	0.00	-0.19	174.35	0	115.11	2	-55.70	2	-48.37	2.35	-74.34
64	65	80.05	0.00	-0.19	174.62	0	115.29	2	-55.78	2	-48.45	2.35	-74.45
65	65	80.05	0.00	-0.19	174.62	0	115.29	2	-55.78	2	-48.45	2.35	-74.45
65	66	80.50	0.00	-0.19	174.70	0	115.34	2	-55.81	2	-48.47	2.35	-74.49
66	66	80.50	0.00	-0.19	174.70	0	115.34	2	-55.81	2	-48.47	2.35	-74.49
66	67	81.50	0.00	-0.19	174.89	0	115.47	2	-55.87	2	-48.52	2.35	-74.57
67	1067	81.50	0.00	0.45	174.89	0	115.47	2	-55.87	2	-48.52	2.35	-74.57
67	68	82.50	0.00	0.45	174.44	0	115.17	2	-55.73	2	-48.40	2.35	-74.37
68	68	82.50	0.00	0.45	174.44	0	115.17	2	-55.73	2	-48.40	2.35	-74.37
68	69	83.08	0.00	0.45	174.17	0	114.99	2	-55.64	2	-48.32	2.35	-74.26
69	69	83.08	0.00	0.45	174.17	0	114.99	2	-55.64	2	-48.32	2.35	-74.26
69	70	84.65	0.00	0.45	173.46	0	114.52	2	-55.41	2	-48.13	2.35	-73.96
70	70	84.65	0.00	0.45	173.46	0	114.52	2	-55.41	2	-48.13	2.35	-73.96
70	71	86.23	0.00	0.45	172.75	0	114.05	2	-55.19	2	-47.93	2.35	-73.65
71	71	86.23	0.00	0.45	172.75	0	114.05	2	-55.19	2	-47.93	2.35	-73.65
71	72	87.80	0.00	0.45	172.03	0	113.58	2	-54.96	2	-47.73	2.35	-73.35
72	72	87.80	0.00	0.45	172.03	0	113.58	2	-54.96	2	-47.73	2.35	-73.35
72	73	89.38	0.00	0.45	171.32	0	113.11	2	-54.73	2	-47.53	2.35	-73.04
73	73	89.38	0.00	0.45	171.32	0	113.11	2	-54.73	2	-47.53	2.35	-73.04
73	74	90.95	0.00	0.45	170.61	0	115.91	2	-38.12	2	-33.11	2.35	-56.52
74	74	90.95	0.00	0.45	170.61	0	115.91	2	-38.12	2	-33.11	2.35	-56.52
74	75	92.53	0.00	0.45	169.89	0	115.43	2	-37.96	2	-32.97	2.35	-56.29
75	75	92.53	0.00	0.45	169.89	0	115.43	2	-37.96	2	-32.97	2.35	-56.29
75	76	94.10	0.00	0.45	169.18	0	114.94	2	-37.80	2	-32.83	2.35	-56.05
76	76	94.10	0.00	0.45	169.18	0	114.94	2	-37.80	2	-32.83	2.35	-56.05
76	77	95.68	0.00	0.45	168.46	0	114.46	2	-37.64	2	-32.70	2.35	-55.81
77	77	95.68	0.00	0.45	168.46	0	114.46	2	-37.64	2	-32.70	2.35	-55.81
77	78	97.25	0.00	0.45	167.75	0	113.97	2	-37.48	2	-32.56	2.35	-55.58
78	78	97.25	0.00	0.45	167.75	0	113.97	2	-37.48	2	-32.56	2.35	-55.58
78	79	98.83	0.00	0.45	167.04	0	113.49	2	-37.33	2	-32.42	2.35	-55.34
79	79	98.83	0.00	0.45	167.04	0	113.49	2	-37.33	2	-32.42	2.35	-55.34
79	80	100.40	0.00	0.45	166.32	0	113.01	2	-37.17	2	-32.28	2.35	-55.11
80	80	100.40	0.00	0.45	166.32	0	113.01	2	-37.17	2	-32.28	2.35	-55.11
80	81	101.98	0.00	0.45	165.61	0	112.52	2	-37.01	2	-32.14	2.35	-54.87
81	81	101.98	0.00	0.45	165.61	0	112.52	2	-37.01	2	-32.14	2.35	-54.87
81	82	103.55	0.00	0.45	164.89	0	112.04	2	-36.85	2	-32.01	2.35	-54.64
82	82	103.55	0.00	0.45	164.89	0	112.04	2	-36.85	2	-32.01	2.35	-54.64
82	83	105.13	0.00	0.45	164.18	0	111.56	2	-36.69	2	-31.87	2.35	-54.40
83	83	105.13	0.00	0.45	164.18	0	111.56	2	-36.69	2	-31.87	2.35	-54.40
83	84	106.70	0.00	0.45	163.47	0	111.08	2	-36.53	2	-31.73	2.35	-54.16
84	84	106.70	0.00	0.45	163.47	0	111.08	2	-36.53	2	-31.73	2.35	-54.16
84	85	108.28	0.00	0.45	162.75	0	108.40	2	-52.45	2	-45.55	2.35	-70.00
85	85	108.28	0.00	0.45	162.75	0	108.40	2	-52.45	2	-45.55	2.35	-70.00
85	86	109.85	0.00	0.45	162.04	0	107.93	2	-52.22	2	-45.36	2.35	-69.70
86	86	109.85	0.00	0.45	162.04	0</							

CÁLCULO TENSIONAL

Hipótesis de cálculo:
GRAD.To

Gradiente térmico). Tensiones a tiempo To

I: IGRAD

coef. etc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
39	39	45.25	-0.02	1.60	181.10	0	119.56	2	-57.86	2	-50.25	2.35	-77.22
39	40	46.70	-0.02	1.60	178.78	0	118.03	2	-57.12	2	-49.61	2.35	-76.23
40	40	46.70	0.00	1.60	178.78	0	118.04	2	-57.11	2	-49.60	2.35	-76.22
40	41	48.15	0.00	1.60	176.46	0	116.50	2	-56.37	2	-48.96	2.35	-75.24
41	41	48.15	0.00	1.60	176.46	0	116.50	2	-56.37	2	-48.96	2.35	-75.24
41	42	49.60	0.00	1.60	174.14	0	114.97	2	-55.63	2	-48.32	2.35	-74.25
42	42	49.60	0.00	1.60	174.14	0	114.97	2	-55.63	2	-48.32	2.35	-74.25
42	43	51.05	0.00	1.60	171.82	0	113.44	2	-54.89	2	-47.67	2.35	-73.26
43	43	51.05	0.00	1.60	171.82	0	113.44	2	-54.89	2	-47.67	2.35	-73.26
43	44	51.50	0.00	1.60	171.10	0	112.97	2	-54.66	2	-47.47	2.35	-72.95
44	44	51.50	0.00	1.60	171.10	0	112.97	2	-54.66	2	-47.47	2.35	-72.95
44	45	52.50	0.00	1.60	169.50	0	111.91	2	-54.15	2	-47.03	2.35	-72.27
45	1045	52.50	0.00	-0.19	169.50	0	111.91	2	-54.15	2	-47.03	2.35	-72.27
45	46	53.50	0.00	-0.19	169.68	0	112.03	2	-54.20	2	-47.08	2.35	-72.34
46	46	53.50	0.00	-0.19	169.68	0	112.03	2	-54.20	2	-47.08	2.35	-72.34
46	47	53.95	0.00	-0.19	169.77	0	112.09	2	-54.23	2	-47.10	2.35	-72.38
47	47	53.95	0.00	-0.19	169.77	0	112.09	2	-54.23	2	-47.10	2.35	-72.38
47	48	55.40	0.00	-0.19	170.03	0	112.26	2	-54.32	2	-47.18	2.35	-72.49
48	48	55.40	0.00	-0.19	170.03	0	112.26	2	-54.32	2	-47.18	2.35	-72.49
48	49	56.85	0.00	-0.19	170.30	0	112.44	2	-54.40	2	-47.25	2.35	-72.61
49	49	56.85	0.00	-0.19	170.30	0	112.44	2	-54.40	2	-47.25	2.35	-72.61
49	50	58.30	0.00	-0.19	170.57	0	112.62	2	-54.49	2	-47.33	2.35	-72.72
50	50	58.30	0.00	-0.19	170.57	0	112.62	2	-54.49	2	-47.33	2.35	-72.72
50	51	59.75	0.00	-0.19	170.84	0	112.79	2	-54.58	2	-47.40	2.35	-72.84
51	51	59.75	0.00	-0.19	170.84	0	112.79	2	-54.58	2	-47.40	2.35	-72.84
51	52	61.20	0.00	-0.19	171.11	0	115.58	2	-38.01	2	-33.02	2.35	-56.36
52	52	61.20	0.00	-0.19	171.11	0	115.58	2	-38.01	2	-33.02	2.35	-56.36
52	53	62.65	0.00	-0.19	171.38	0	115.76	2	-38.07	2	-33.07	2.35	-56.45
53	53	62.65	0.00	-0.19	171.38	0	115.76	2	-38.07	2	-33.07	2.35	-56.45
53	54	64.10	0.00	-0.19	171.65	0	115.95	2	-38.13	2	-33.12	2.35	-56.54
54	54	64.10	0.00	-0.19	171.65	0	115.95	2	-38.13	2	-33.12	2.35	-56.54
54	55	65.55	0.00	-0.19	171.92	0	116.13	2	-38.19	2	-33.17	2.35	-56.63
55	55	65.55	0.00	-0.19	171.92	0	116.13	2	-38.19	2	-33.17	2.35	-56.63
55	56	67.00	0.00	-0.19	172.19	0	116.31	2	-38.25	2	-33.22	2.35	-56.72
56	56	67.00	0.00	-0.19	172.19	0	116.31	2	-38.25	2	-33.22	2.35	-56.72
56	57	68.45	0.00	-0.19	172.46	0	116.49	2	-38.31	2	-33.28	2.35	-56.81
57	57	68.45	0.00	-0.19	172.46	0	116.49	2	-38.31	2	-33.28	2.35	-56.81
57	58	69.90	0.00	-0.19	172.73	0	116.68	2	-38.37	2	-33.33	2.35	-56.90
58	58	69.90	0.00	-0.19	172.73	0	116.68	2	-38.37	2	-33.33	2.35	-56.90
58	59	71.35	0.00	-0.19	173.00	0	116.86	2	-38.43	2	-33.38	2.35	-56.99
59	59	71.35	0.00	-0.19	173.00	0	116.86	2	-38.43	2	-33.38	2.35	-56.99
59	60	72.80	0.00	-0.19	173.27	0	117.04	2	-38.49	2	-33.43	2.35	-57.07
60	60	72.80	0.00	-0.19	173.27	0	117.04	2	-38.49	2	-33.43	2.35	-57.07
60	61	74.25	0.00	-0.19	173.54	0	117.23	2	-38.55	2	-33.49	2.35	-57.16
61	61	74.25	0.00	-0.19	173.54	0	117.23	2	-38.55	2	-33.49	2.35	-57.16
61	62	75.70	0.00	-0.19	173.81	0	117.41	2	-38.61	2	-33.54	2.35	-57.25
62	62	75.70	0.00	-0.19	173.81	0	117.41	2	-38.61	2	-33.54	2.35	-57.25
62	63	77.15	0.00	-0.19	174.08	0	114.58	2	-55.44	2	-48.15	2.35	-73.99
63	63	77.15	0.00	-0.19	174.08	0	114.58	2	-55.44	2	-48.15	2.35	-73.99
63	64	78.60	0.00	-0.19	174.35	0	114.75	2	-55.52	2	-48.22	2.35	-74.11
64	64	78.60	0.00	-0.19	174.35	0	114.75	2	-55.52	2	-48.22	2.35	-74.11
64	65	80.05	0.00	-0.19	174.62	0	114.93	2	-55.61	2	-48.30	2.35	-74.22
65	65	80.05	0.00	-0.19	174.62	0	114.93	2	-55.61	2	-48.30	2.35	-74.22
65	66	80.50	0.00	-0.19	174.89	0	115.11	2	-55.70	2	-48.37	2.35	-74.34
66	66	80.50	0.00	-0.19	174.89	0	115.11	2	-55.70	2	-48.37	2.35	-74.34
66	67	81.50	0.00	-0.19	175.18	0	115.29	2	-55.78	2	-48.45	2.35	-74.45
67	1067	81.50	0.00	-0.19	175.18	0	115.29	2	-55.78	2	-48.45	2.35	-74.45
67	68	82.50	0.00	0.45	174.89	0	115.34	2	-55.81	2	-48.47	2.35	-74.49
68	68	82.50	0.00	0.45	174.89	0	115.34	2	-55.81	2	-48.47	2.35	-74.49
68	69	83.08	0.00	0.45	174.44	0	115.47	2	-55.87	2	-48.52	2.35	-74.57
69	69	83.08	0.00	0.45	174.44	0	115.47	2	-55.87	2	-48.52	2.35	-74.57
69	70	84.65	0.00	0.45	174.17	0	115.73	2	-55.93	2	-48.60	2.35	-74.65
70	70	84.65	0.00	0.45	174.17	0	115.73	2	-55.93	2	-48.60	2.35	-74.65
70	71	86.23	0.00	0.45	173.46	0	115.99	2	-56.04	2	-48.73	2.35	-74.76
71	71	86.23	0.00	0.45	173.46	0	115.99	2	-56.04	2	-48.73	2.35	-74.76
71	72	87.80	0.00	0.45	172.75	0	114.52	2	-55.41	2	-48.13	2.35	-73.96
72	72	87.80	0.00	0.45	172.75	0	114.52	2	-55.41	2	-48.13	2.35	-73.96
72	73	89.38	0.00	0.45	172.03	0	114.05	2	-55.19	2	-47.93	2.35	-73.65
73	73	89.38	0.00	0.45	172.03	0	114.05	2	-55.19	2	-47.93	2.35	-73.65
73	74	90.95	0.00	0.45	171.32	0	113.58	2	-54.96	2	-47.73	2.35	-73.35
74	74	90.95	0.00	0.45	171.32	0	113.58	2	-54.96	2	-47.73	2.35	-73.35
74	75	92.53	0.00	0.45	170.61	0	113.11	2	-54.73	2	-47.53	2.35	-73.04
75	75	92.53	0.00	0.45	170.61	0	113.11	2	-54.73	2	-47.53	2.35	-73.04
75	76	94.10	0.00	0.45	170.61	0	115.91	2	-38.12	2	-33.11	2.35	-56.52
76	76	94.10	0.00	0.45	170.61	0	115.91	2	-38.12	2	-33.11	2.35	-56.52
76	77	95.68	0.00	0.45	170.61	0	115.43	2	-37.96	2	-32.97	2.35	-56.29
77	77	95.68	0.00	0.45	169.89	0	115.43	2	-37.96	2	-32.97	2.35	-56.29
77	78	97.25	0.00	0.45	169.89	0	114.94	2	-37.80	2	-32.83	2.35	-56.05
78	78	97.25	0.00	0.45	169.89	0	114.94	2	-37.80	2	-32.83	2.35	-56.05
78	79	98.83	0.00	0.45	169.18	0	114.46	2	-37.64	2	-32.70	2.35	-55.81
79	79	98.83	0.00	0.45	169.18	0	114.46	2	-37.64	2	-32.70	2.35	-55.81
80	80	100.40	0.00	0.45	168.46	0	114.46	2	-37.64	2	-32.70	2.35	-55.81
81	81	101.98	0.00	0.45	167.75	0	113.97	2	-37.48	2	-32.56	2.35	-55.58
82	82	103.55	0.00	0.45	167.04	0	113.97	2	-37.48	2	-32.56	2.35	-55.58
83	83	105.13	0.00	0.45	166.32	0	113.01	2	-37.17	2	-32.28	2.35	-55.11
84	84	106.70	0.00	0.45	165.61	0	112.52	2	-37.01	2	-32.14	2.35	-54.87
85	85	108.28	0.00	0.45	164.89	0	112.04	2	-36.85	2	-32.01	2.35	-54.64
86	86	109.85	0.00	0.45	164.18	0	111.56	2	-36.69	2	-31.87	2.35	-54.40
87	87	111.43	0.00	0.45	163.47	0	111.08	2	-36.53	2	-31.73	2.35	-54.16
88	88	112.00	0.00	0.45	162.75	0	108.40	2	-52.45	2	-45.55	2.35	-70.00
89	1089	113.00	0.00	0.45	162.04	0	107.93	2	-52.22	2	-45.36	2.35	-69.70
90	90	114.00	0.00	0.45	161.32	0	107.45	2	-51.99	2	-45.16	2.35	-69.39
91	91	114.58	0.00	0.45	160.61	0	107.02	2	-51.78	2	-44.96	2.35	-69.09
92	92	116.15	0.00	0.45	160.61	0	106.51	2	-51.53	2	-44.76	2.35	-68.78
93	93	117.73	0.00	0.45	160.61	0	106.34	2	-51.45	2	-44.69	2.35	-68.67

CÁLCULO TENSIONAL

Hipótesis de cálculo:
GRAD.To

Gradiente térmico). Tensiones a tiempo To

1. IGRAD

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	-0.02	1.60	181.10	0	119.56	2	-57.86	2	-50.25	2.35	-77.22
39	40	46.70	-0.02	1.60	178.78	0	118.03	2	-57.12	2	-49.61	2.35	-76.23
40	40	46.70	0.00	1.60	178.78	0	118.04	2	-57.11	2	-49.60	2.35	-76.22
40	41	48.15	0.00	1.60	176.46	0	116.50	2	-56.37	2	-48.96	2.35	-75.24
41	41	48.15	0.00	1.60	176.46	0	116.50	2	-56.37	2	-48.96	2.35	-75.24
41	42	49.60	0.00	1.60	174.14	0	114.97	2	-55.63	2	-48.32	2.35	-74.25
42	42	49.60	0.00	1.60	174.14	0	114.97	2	-55.63	2	-48.32	2.35	-74.25
42	43	51.05	0.00	1.60	171.82	0	113.44	2	-54.89	2	-47.67	2.35	-73.26
43	43	51.05	0.00	1.60	171.82	0	113.44	2	-54.89	2	-47.67	2.35	-73.26
43	44	51.50	0.00	1.60	171.10	0	112.97	2	-54.66	2	-47.47	2.35	-72.95
44	44	51.50	0.00	1.60	171.10	0	112.97	2	-54.66	2	-47.47	2.35	-72.95
44	45	52.50	0.00	1.60	169.50	0	111.91	2	-54.15	2	-47.03	2.35	-72.27
45	1045	52.50	0.00	-0.19	169.50	0	111.91	2	-54.15	2	-47.03	2.35	-72.27
45	46	53.50	0.00	-0.19	169.68	0	112.03	2	-54.20	2	-47.08	2.35	-72.34
46	46	53.50	0.00	-0.19	169.68	0	112.03	2	-54.20	2	-47.08	2.35	-72.34
46	47	53.95	0.00	-0.19	169.77	0	112.09	2	-54.23	2	-47.10	2.35	-72.38
47	47	53.95	0.00	-0.19	169.77	0	112.09	2	-54.23	2	-47.10	2.35	-72.38
47	48	55.40	0.00	-0.19	170.03	0	112.26	2	-54.32	2	-47.18	2.35	-72.49
48	48	55.40	0.00	-0.19	170.03	0	112.26	2	-54.32	2	-47.18	2.35	-72.49
48	49	56.85	0.00	-0.19	170.30	0	112.44	2	-54.40	2	-47.25	2.35	-72.61
49	49	56.85	0.00	-0.19	170.30	0	112.44	2	-54.40	2	-47.25	2.35	-72.61
49	50	58.30	0.00	-0.19	170.57	0	112.62	2	-54.49	2	-47.33	2.35	-72.72
50	50	58.30	0.00	-0.19	170.57	0	112.62	2	-54.49	2	-47.33	2.35	-72.72
50	51	59.75	0.00	-0.19	170.84	0	112.79	2	-54.58	2	-47.40	2.35	-72.84
51	51	59.75	0.00	-0.19	170.84	0	112.79	2	-54.58	2	-47.40	2.35	-72.84
51	52	61.20	0.00	-0.19	171.11	0	115.76	2	-38.01	2	-33.02	2.35	-56.36
52	52	61.20	0.00	-0.19	171.11	0	115.76	2	-38.07	2	-33.07	2.35	-56.45
52	53	62.65	0.00	-0.19	171.38	0	115.95	2	-38.13	2	-33.12	2.35	-56.54
53	53	62.65	0.00	-0.19	171.38	0	115.95	2	-38.13	2	-33.12	2.35	-56.54
53	54	64.10	0.00	-0.19	171.65	0	116.13	2	-38.19	2	-33.17	2.35	-56.63
54	54	64.10	0.00	-0.19	171.65	0	116.13	2	-38.19	2	-33.17	2.35	-56.63
54	55	65.55	0.00	-0.19	171.92	0	116.31	2	-38.25	2	-33.22	2.35	-56.72
55	55	65.55	0.00	-0.19	171.92	0	116.31	2	-38.25	2	-33.22	2.35	-56.72
55	56	67.00	0.00	-0.19	172.19	0	116.49	2	-38.31	2	-33.28	2.35	-56.81
56	56	67.00	0.00	-0.19	172.19	0	116.49	2	-38.31	2	-33.28	2.35	-56.81
56	57	68.45	0.00	-0.19	172.46	0	116.68	2	-38.37	2	-33.33	2.35	-56.90
57	57	68.45	0.00	-0.19	172.46	0	116.68	2	-38.37	2	-33.33	2.35	-56.90
57	58	69.90	0.00	-0.19	172.73	0	116.86	2	-38.43	2	-33.38	2.35	-56.99
58	58	69.90	0.00	-0.19	172.73	0	116.86	2	-38.43	2	-33.38	2.35	-56.99
58	59	71.35	0.00	-0.19	173.00	0	117.04	2	-38.49	2	-33.43	2.35	-57.07
59	59	71.35	0.00	-0.19	173.00	0	117.04	2	-38.49	2	-33.43	2.35	-57.07
59	60	72.80	0.00	-0.19	173.27	0	117.23	2	-38.55	2	-33.49	2.35	-57.16
60	60	72.80	0.00	-0.19	173.27	0	117.23	2	-38.55	2	-33.49	2.35	-57.16
60	61	74.25	0.00	-0.19	173.54	0	117.41	2	-38.61	2	-33.54	2.35	-57.25
61	61	74.25	0.00	-0.19	173.54	0	117.41	2	-38.61	2	-33.54	2.35	-57.25
62	62	75.70	0.00	-0.19	173.81	0	114.75	2	-55.44	2	-48.15	2.35	-73.99
62	63	77.15	0.00	-0.19	174.08	0	114.93	2	-55.52	2	-48.22	2.35	-74.11
63	63	77.15	0.00	-0.19	174.08	0	114.93	2	-55.52	2	-48.22	2.35	-74.11
63	64	78.60	0.00	-0.19	174.35	0	115.11	2	-55.61	2	-48.30	2.35	-74.22
64	64	78.60	0.00	-0.19	174.35	0	115.11	2	-55.61	2	-48.30	2.35	-74.22
64	65	80.05	0.00	-0.19	174.62	0	115.29	2	-55.70	2	-48.37	2.35	-74.34
65	65	80.05	0.00	-0.19	174.62	0	115.29	2	-55.70	2	-48.37	2.35	-74.34
65	66	80.50	0.00	-0.19	174.70	0	115.34	2	-55.78	2	-48.45	2.35	-74.45
66	66	80.50	0.00	-0.19	174.70	0	115.34	2	-55.78	2	-48.45	2.35	-74.45
66	67	81.50	0.00	-0.19	174.89	0	115.47	2	-55.81	2	-48.47	2.35	-74.49
67	1067	81.50	0.00	0.45	174.89	0	115.47	2	-55.87	2	-48.52	2.35	-74.57
67	68	82.50	0.00	0.45	174.44	0	115.17	2	-55.87	2	-48.52	2.35	-74.57
68	68	82.50	0.00	0.45	174.44	0	115.17	2	-55.87	2	-48.52	2.35	-74.57
68	69	83.08	0.00	0.45	174.17	0	114.99	2	-55.73	2	-48.40	2.35	-74.37
69	69	83.08	0.00	0.45	174.17	0	114.99	2	-55.73	2	-48.40	2.35	-74.37
69	70	84.65	0.00	0.45	173.46	0	114.52	2	-55.64	2	-48.32	2.35	-74.26
70	70	84.65	0.00	0.45	173.46	0	114.52	2	-55.64	2	-48.32	2.35	-74.26
70	71	86.23	0.00	0.45	172.75	0	114.05	2	-55.41	2	-48.13	2.35	-73.96
71	71	86.23	0.00	0.45	172.75	0	114.05	2	-55.41	2	-48.13	2.35	-73.96
71	72	87.80	0.00	0.45	172.03	0	113.58	2	-55.19	2	-47.93	2.35	-73.65
72	72	87.80	0.00	0.45	172.03	0	113.58	2	-55.19	2	-47.93	2.35	-73.65
72	73	89.38	0.00	0.45	171.32	0	113.11	2	-54.96	2	-47.73	2.35	-73.35
73	73	89.38	0.00	0.45	171.32	0	113.11	2	-54.96	2	-47.73	2.35	-73.35
73	74	90.95	0.00	0.45	170.61	0	115.91	2	-38.12	2	-33.11	2.35	-56.52
74	74	90.95	0.00	0.45	170.61	0	115.91	2	-38.12	2	-33.11	2.35	-56.52
74	75	92.53	0.00	0.45	169.89	0	115.43	2	-37.96	2	-32.97	2.35	-56.29
75	75	92.53	0.00	0.45	169.89	0	115.43	2	-37.96	2	-32.97	2.35	-56.29
75	76	94.10	0.00	0.45	169.18	0	114.94	2	-37.80	2	-32.83	2.35	-56.05
76	76	94.10	0.00	0.45	169.18	0	114.94	2	-37.80	2	-32.83	2.35	-56.05
76	77	95.68	0.00	0.45	168.46	0	114.46	2	-37.64	2	-32.70	2.35	-55.81
77	77	95.68	0.00	0.45	168.46	0	113.97	2	-37.48	2	-32.56	2.35	-55.58

CÁLCULO TENSIONAL

Hipótesis de cálculo:
GRAD.To

Gradiente térmico). Tensiones a tiempo To

1. IGRAD

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	0.45	168.46	0	113.97	2	-37.48	2	-32.56	2.35	-55.58
77	78	97.25	0.00	0.45	167.75	0	113.49	2	-37.33	2	-32.42	2.35	-55.34
78	78	97.25	0.00	0.45	167.75	0	113.49	2	-37.33	2	-32.42	2.35	-55.34
78	79	98.83	0.00	0.45	167.04	0	113.01	2	-37.17	2	-32.28	2.35	-55.11
79	79	98.83	0.00	0.45	167.04	0	113.01	2	-37.17	2	-32.28	2.35	-55.11
79	80	100.40	0.00	0.45	166.32	0	112.52	2	-37.01	2	-32.14	2.35	-54.87
80	80	100.40	0.00	0.45	166.32	0	112.52	2	-37.01	2	-32.14	2.35	-54.87
80	81	101.98	0.00	0.45	165.61	0	112.04	2	-36.85	2	-32.01	2.35	-54.64
81	81	101.98	0.00	0.45	165.61	0	112.04	2	-36.85	2	-32.01	2.35	-54.64
81	82	103.55	0.00	0.45	164.89	0	111.56	2	-36.69	2	-31.87	2.35	-54.40
82	82	103.55	0.00	0.45	164.89	0	111.56	2	-36.69	2	-31.87	2.35	-54.40
82	83	105.13	0.00	0.45	164.18	0	111.08	2	-36.53	2	-31.73	2.35	-54.16
83	83	105.13	0.00	0.45	164.18	0	111.08	2	-36.53	2	-31.73	2.35	-54.16
83	84	106.70	0.00	0.45	163.47	0	107.93	2	-52.22	2	-45.36	2.35	-69.70
84	84	106.70	0.00	0.45	163.47	0	107.93	2	-52.22	2	-45.36	2.35	-69.70
84	85	108.28	0.00	0.45	162.75	0	107.45	2	-51.99	2	-45.16	2.35	-69.39
85	85	108.28	0.00	0.45	162.75	0	107.45	2	-51.99	2	-45.16	2.35	-69.39
85	86	109.85	0.00	0.45	162.04	0	106.98	2	-51.76	2	-44.96	2.35	-69.09
86	86	109.85	0.00	0.45	162.04	0	106.98	2	-51.76	2	-44.96	2.35	-69.09
86	87	111.43	0.00	0.45	161.32	0	106.51	2	-51.53	2	-44.76	2.35	-68.78
87	87	111.43	0.00	0.45	161.32	0	106.51	2	-51.53	2	-44.76	2.35	-68.78
87	88	112.00	0.00	0.45	161.06	0	106.34	2	-51.45	2	-44.69	2.35	-68.67
88	88	112.00	0.00	0.45	161.06	0	106.34	2	-51.45	2	-44.69	2.35	-68.67
88	89	113.00	0.00	0.45	160.61	0	106.04	2	-51.31	2	-44.56	2.35	-68.48
89	1089	113.00	0.00	-1.47	160.61	0	106.04	2	-51.31	2	-44.56	2.35	-68.48
89	90	114.00	0.00	-1.47	162.09	0	107.02	2	-51.78	2	-44.97	2.35	-69.11
90	90	114.00	0.00	-1.47	162.09	0	107.02	2	-51.78	2	-44.97	2.35	-69.11
90	91	114.58	0.00	-1.47	162.93	0	107.57	2	-52.05	2	-45.21	2.35	-69.47
91	91	114.58	0.00	-1.47	162.93	0	107.57	2	-52.05	2	-45.21	2.35	-69.47
91	92	116.15	0.00	-1.47	165.25	0	109.10	2	-52.79	2	-45.85	2.35	-70.46
92	92	116.15	0.00	-1.47	165.25	0	109.10	2	-52.79	2	-45.85	2.35	-70.46
92	93	117.73	0.00	-1.47	167.58	0	110.64	2	-53.53	2	-46.50	2.35	-71.45
93	93	117.73	0.00	-1.47	167.58	0	110.64	2	-53.53	2	-46.50	2.35	-71.45
93	94	119.30	0.00	-1.47	169.90	0	112.17	2	-54.28	2	-47.14	2.35	-72.44
94	94	119.30	-0.01	-1.47	169.90	0	112.17	2	-54.28	2	-47.14	2.35	-72.44
94	95	120.88	-0.01	-1.47	172.22	0	113.70	2	-55.02	2	-47.79	2.35	-73.43
95	95	120.88	-0.01	-1.47	172.22	0	113.70	2	-55.02	2	-47.79	2.35	-73.43
95	96	122.45	-0.01	-1.47	174.54	0	118.08	2	-38.84	2	-33.73	2.35	-57.59
96	96	122.45	0.00	-1.47	174.54	0	118.08	2	-38.84	2	-33.73	2.35	-57.59
96	97	124.03	0.00	-1.47	176.86	0	119.65	2	-39.35	2	-34.18	2.35	-58.35
97	97	124.03	0.00	-1.47	176.86	0	119.65	2	-39.35	2	-34.18	2.35	-58.35
97	98	125.60	0.00	-1.47	179.18	0	121.22	2	-39.87	2	-34.63	2.35	-59.11
98	98	125.60	0.00	-1.47	179.18	0	121.22	2	-39.87	2	-34.63	2.35	-59.11
98	99	127.18	0.00	-1.47	181.51	0	122.80	2	-40.39	2	-35.08	2.35	-59.88
99	99	127.18	0.00	-1.47	181.51	0	122.80	2	-40.39	2	-35.08	2.35	-59.88
99	100	128.75	0.00	-1.47	183.83	0	124.37	2	-40.90	2	-35.53	2.35	-60.65
100	100	128.75	0.00	-1.47	183.83	0	124.37	2	-40.90	2	-35.53	2.35	-60.65
100	101	130.33	0.00	-1.47	186.15	0	125.94	2	-41.42	2	-35.97	2.35	-61.41
101	101	130.33	0.00	-1.47	186.15	0	125.94	2	-41.42	2	-35.97	2.35	-61.41
101	102	131.90	0.00	-1.47	188.47	0	127.51	2	-41.94	2	-36.42	2.35	-62.18
102	102	131.90	0.00	-1.47	188.47	0	127.51	2	-41.94	2	-36.42	2.35	-62.18
102	103	133.48	0.00	-1.47	190.79	0	129.08	2	-42.45	2	-36.87	2.35	-62.94
103	103	133.48	0.00	-1.47	190.79	0	129.08	2	-42.45	2	-36.87	2.35	-62.94
103	104	135.05	0.00	-1.47	193.12	0	130.66	2	-42.97	2	-37.32	2.35	-63.71
104	104	135.05	0.01	-1.47	193.12	0	130.66	2	-42.97	2	-37.32	2.35	-63.71
104	105	136.63	0.01	-1.47	195.44	0	132.23	2	-43.48	2	-37.77	2.35	-64.47
105	105	136.63	0.01	-1.47	195.44	0	132.23	2	-43.48	2	-37.77	2.35	-64.47
105	106	138.20	0.01	-1.47	197.76	0	130.57	2	-63.17	2	-54.22	2.35	-83.33
106	106	138.20	0.00	-1.47	197.76	0	130.57	2	-63.17	2	-54.22	2.35	-83.33
106	107	139.78	0.00	-1.47	200.08	0	132.10	2	-63.92	2	-55.51	2.35	-85.31
107	107	139.78	0.00	-1.47	200.08	0	132.10	2	-63.92	2	-55.51	2.35	-85.31
107	108	141.35	0.00	-1.47	202.40	0	133.63	2	-64.66	2	-56.16	2.35	-86.30
108	108	141.35	0.00	-1.47	202.40	0	133.63	2	-64.66	2	-56.16	2.35	-86.30
108	109	142.93	0.00	-1.47	204.72	0	135.16	2	-65.40	2	-56.80	2.35	-87.28
109	109	142.93	0.00	-1.47	204.72	0	135.16	2	-65.40	2	-56.80	2.35	-87.28
109	110	143.50	0.00	-1.47	205.57	0	135.72	2	-65.67	2	-57.04	2.35	-87.65
110	110	143.50	0.00	-1.47	205.57	0	135.72	2	-65.67	2	-57.04	2.35	-87.65
110	111	144.50	0.00	-1.47	207.05	0	136.70	2	-66.14	2	-57.45	2.35	-88.28
111	111	144.50	0.00	8.81	207.05	0	136.70	2	-66.14	2	-57.45	2.35	-88.28
111	112	145.50	0.00	8.81	198.23	0	130.88	2	-63.33	2	-55.00	2.35	-84.52
112	112	145.50	0.00	8.81	198.23	0	130.88	2	-63.33	2	-55.00	2.35	-84.52
112	113	145.68	0.00	8.81	196.69	0	129.86	2	-62.83	2	-54.57	2.35	-83.86
113	113	145.68	0.00	8.81	196.69	0	129.86	2	-62.83	2	-54.57	2.35	-83.86
113	114	146.85	0.00	8.81	186.34	0	123.03	2	-59.53	2	-51.70	2.35	-79.45
114	114	146.85	0.00	8.81	186.34	0	123.03	2	-59.53	2	-51.70	2.35	-79.45
114	115	148.03	0.00	8.81	175.99	0	116.19	2	-56.22	2	-48.83	2.35	-75.04

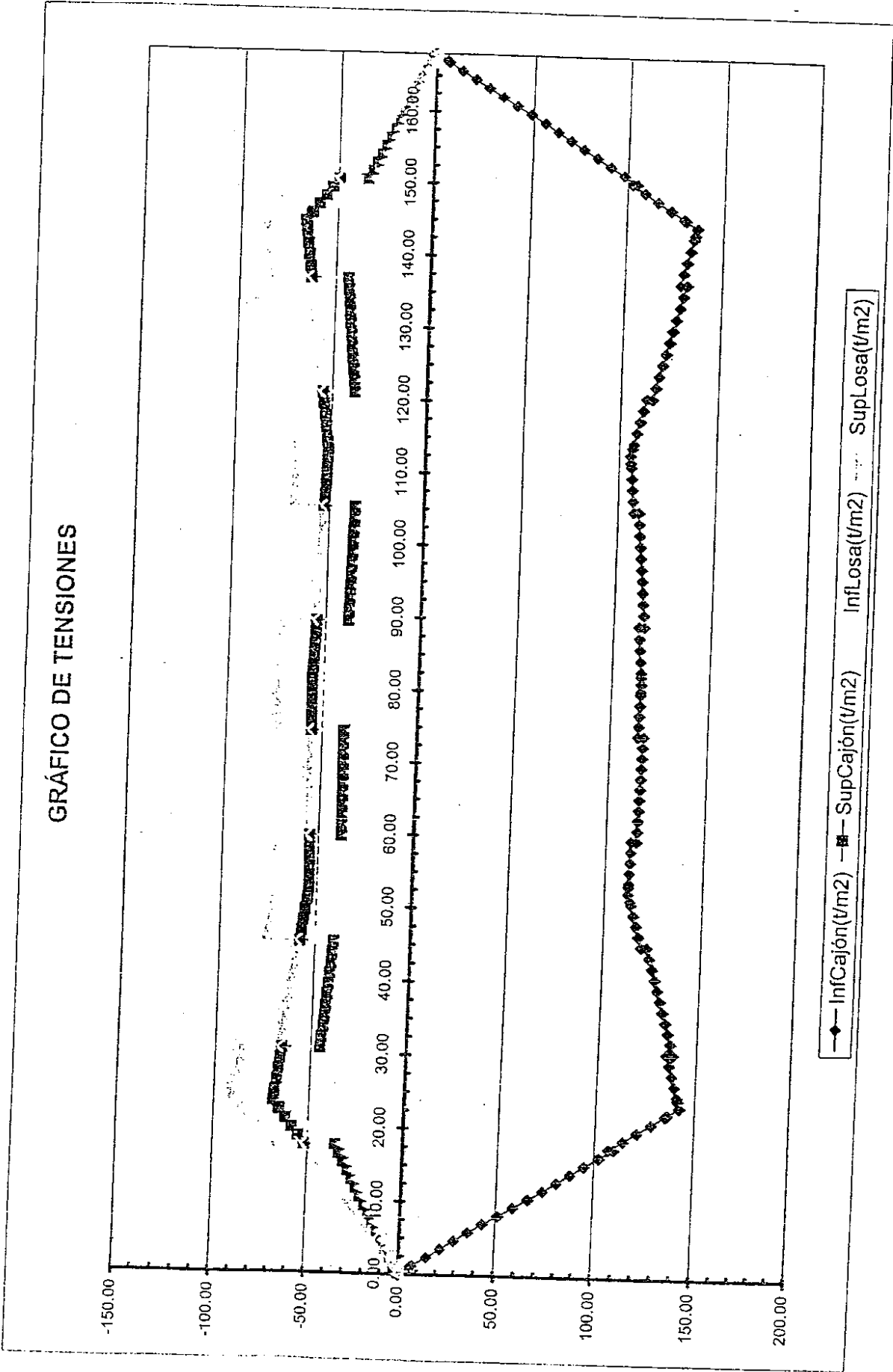
CÁLCULO TENSIONAL

Hipótesis de cálculo:
GRAD.To
Gradiente térmico). Tensiones a tiempo To
RAD
Coef. esc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
115	115	148.03	0.00	8.81	175.99	0	116.19	2	-56.22	2	-48.83	2.35	-75.04
115	116	149.20	0.00	8.81	165.64	0	109.36	2	-52.91	2	-45.96	2.35	-70.62
116	116	149.20	0.10	8.81	165.64	0	109.39	2	-52.88	2	-45.93	2.35	-70.60
116	117	150.38	0.10	8.81	155.28	0	102.55	2	-49.57	2	-43.06	2.35	-66.18
117	117	150.38	0.10	8.81	155.28	0	105.09	2	-34.52	2	-29.98	2.35	-51.20
117	118	151.55	0.10	8.81	144.93	0	98.09	2	-32.22	2	-27.98	2.35	-47.79
118	118	151.55	0.00	8.81	144.93	0	98.05	2	-32.25	2	-28.01	2.35	-47.81
118	119	152.73	0.00	8.81	134.58	0	91.05	2	-29.95	2	-26.01	2.35	-44.40
119	119	152.73	0.00	8.81	134.58	0	91.05	2	-29.95	2	-26.01	2.35	-44.40
119	120	153.90	0.00	8.81	124.23	0	84.05	2	-27.64	2	-24.01	2.35	-40.98
120	120	153.90	0.00	8.81	124.23	0	84.05	2	-27.64	2	-24.01	2.35	-40.98
120	121	155.08	0.00	8.81	113.88	0	77.05	2	-25.34	2	-22.01	2.35	-37.57
121	121	155.08	0.00	8.81	113.88	0	77.05	2	-25.34	2	-22.01	2.35	-37.57
121	122	156.25	0.00	8.81	103.52	0	70.04	2	-23.03	2	-20.01	2.35	-34.15
122	122	156.25	0.00	8.81	103.52	0	70.04	2	-23.03	2	-20.01	2.35	-34.15
122	123	157.43	0.00	8.81	93.17	0	63.03	2	-20.73	2	-18.01	2.35	-30.74
123	123	157.43	0.00	8.81	93.17	0	63.03	2	-20.73	2	-18.01	2.35	-30.74
123	124	158.60	0.00	8.81	82.82	0	56.03	2	-18.43	2	-16.01	2.35	-27.32
124	124	158.60	0.00	8.81	82.82	0	56.03	2	-18.43	2	-16.01	2.35	-27.32
125	125	159.78	0.00	8.81	72.47	0	49.03	2	-16.13	2	-14.01	2.35	-23.91
125	125	159.78	0.00	8.81	72.47	0	49.03	2	-16.13	2	-14.01	2.35	-23.91
126	126	160.95	0.00	8.81	62.11	0	42.02	2	-13.82	2	-12.00	2.35	-20.49
126	126	160.95	0.00	8.81	62.11	0	42.02	2	-13.82	2	-12.00	2.35	-20.49
126	127	162.13	0.00	8.81	51.76	0	35.02	2	-11.52	2	-10.00	2.35	-17.08
127	127	162.13	0.00	8.81	51.76	0	35.02	2	-11.52	2	-10.00	2.35	-17.08
127	128	163.30	0.00	8.81	41.41	0	28.02	2	-9.21	2	-8.00	2.35	-13.66
128	128	163.30	0.00	8.81	41.41	0	28.02	2	-9.21	2	-8.00	2.35	-13.66
128	129	164.48	0.00	8.81	31.06	0	21.01	2	-6.91	2	-6.00	2.35	-10.25
129	129	164.48	0.00	8.81	31.06	0	21.01	2	-6.91	2	-6.00	2.35	-10.25
129	130	165.65	0.00	8.81	20.70	0	14.00	2	-4.61	2	-4.00	2.35	-6.83
130	130	165.65	0.00	8.81	20.70	0	14.00	2	-4.61	2	-4.00	2.35	-6.83
130	131	166.83	0.00	8.81	10.35	0	7.00	2	-2.30	2	-2.00	2.35	-3.41
131	131	166.83	0.00	8.81	10.35	0	7.00	2	-2.30	2	-2.00	2.35	-3.41
131	132	167.00	0.00	8.81	8.81	0	5.96	2	-1.96	2	-1.70	2.35	-2.91
132	132	167.00	0.00	8.81	8.81	0	5.96	2	-1.96	2	-1.70	2.35	-2.91
132	133	168.00	0.00	8.81	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
GRAD.To
05/09/01

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

Hipótesis de cálculo:
GRAD.To

Gradiente térmico). Tensiones a tiempo To

GRAD

Coef. exc

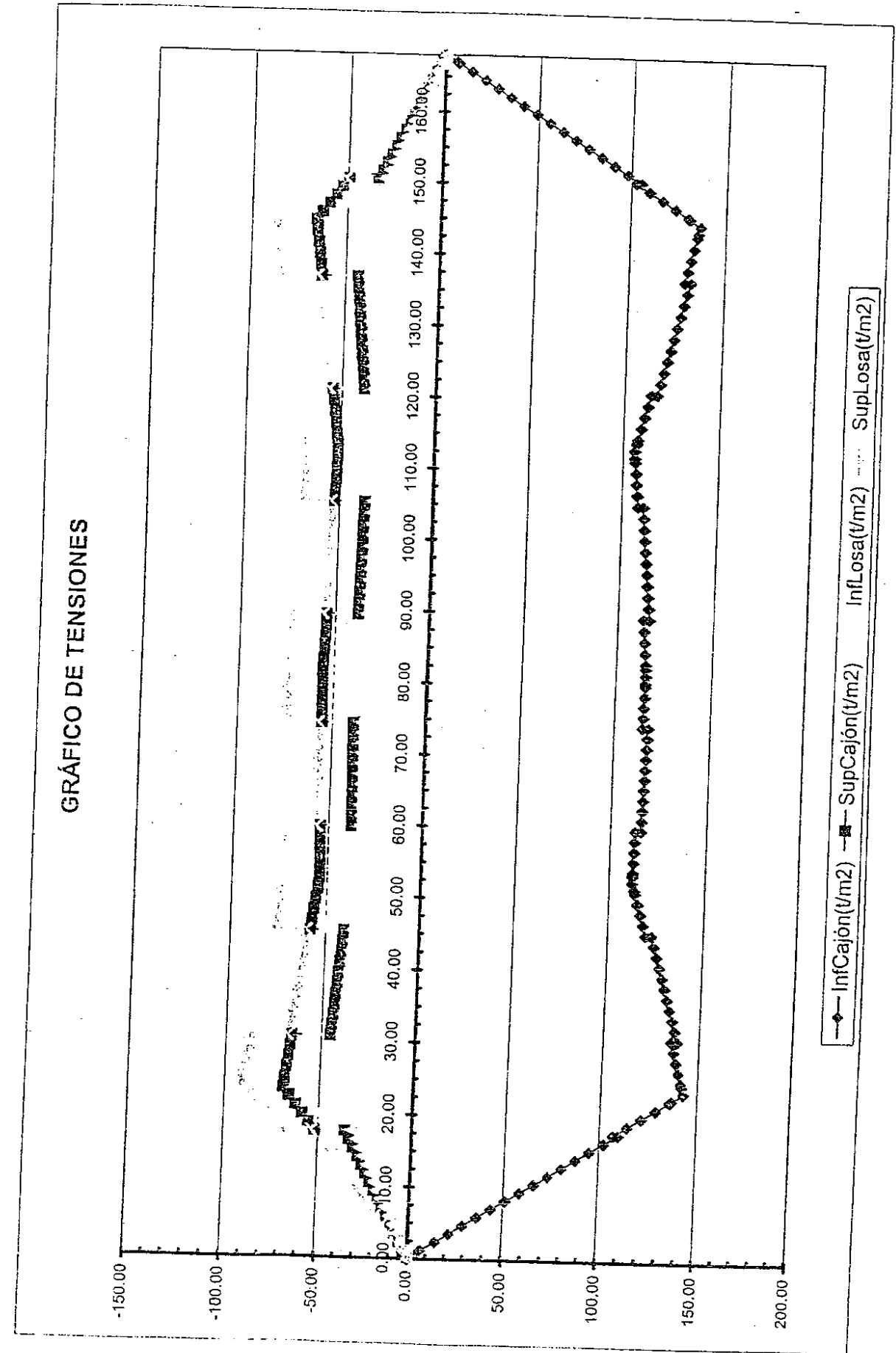
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	8.81	175.99	0	116.19	2	-56.22	2	-48.83	2.35	-75.04
115	116	149.20	0.00	8.81	165.64	0	109.36	2	-52.91	2	-45.96	2.35	-70.62
116	116	149.20	0.10	8.81	165.64	0	109.39	2	-52.88	2	-45.93	2.35	-70.60
116	117	150.38	0.10	8.81	155.28	0	102.55	2	-49.57	2	-43.06	2.35	-66.18
117	117	150.38	0.10	8.81	155.28	0	105.09	2	-34.52	2	-29.98	2.35	-51.20
117	118	151.55	0.10	8.81	144.93	0	98.09	2	-32.22	2	-27.98	2.35	-47.79
118	118	151.55	0.00	8.81	144.93	0	98.05	2	-32.25	2	-28.01	2.35	-47.81
118	119	152.73	0.00	8.81	134.58	0	91.05	2	-29.95	2	-26.01	2.35	-44.40
119	119	152.73	0.00	8.81	134.58	0	91.05	2	-29.95	2	-26.01	2.35	-44.40
119	120	153.90	0.00	8.81	124.23	0	84.05	2	-27.64	2	-24.01	2.35	-40.98
120	120	153.90	0.00	8.81	124.23	0	84.05	2	-27.64	2	-24.01	2.35	-40.98
120	121	155.08	0.00	8.81	113.88	0	77.05	2	-25.34	2	-22.01	2.35	-37.57
121	121	155.08	0.00	8.81	113.88	0	77.05	2	-25.34	2	-22.01	2.35	-37.57
121	122	156.25	0.00	8.81	103.52	0	70.04	2	-23.03	2	-20.01	2.35	-34.15
122	122	156.25	0.00	8.81	103.52	0	70.04	2	-23.03	2	-20.01	2.35	-34.15
122	123	157.43	0.00	8.81	93.17	0	63.03	2	-20.73	2	-18.01	2.35	-30.74
123	123	157.43	0.00	8.81	93.17	0	63.03	2	-20.73	2	-18.01	2.35	-30.74
23	124	158.60	0.00	8.81	82.82	0	56.03	2	-18.43	2	-16.01	2.35	-27.32
124	124	158.60	0.00	8.81	82.82	0	56.03	2	-18.43	2	-16.01	2.35	-27.32
4	125	159.78	0.00	8.81	72.47	0	49.03	2	-16.13	2	-14.01	2.35	-23.91
25	125	159.78	0.00	8.81	72.47	0	49.03	2	-16.13	2	-14.01	2.35	-23.91
25	126	160.95	0.00	8.81	62.11	0	42.02	2	-13.82	2	-12.00	2.35	-20.49
126	126	160.95	0.00	8.81	62.11	0	42.02	2	-13.82	2	-12.00	2.35	-20.49
126	127	162.13	0.00	8.81	51.76	0	35.02	2	-11.52	2	-10.00	2.35	-17.08
127	127	162.13	0.00	8.81	51.76	0	35.02	2	-11.52	2	-10.00	2.35	-17.08
127	128	163.30	0.00	8.81	41.41	0	28.02	2	-9.21	2	-8.00	2.35	-13.66
128	128	163.30	0.00	8.81	41.41	0	28.02	2	-9.21	2	-8.00	2.35	-13.66
128	129	164.48	0.00	8.81	31.06	0	21.01	2	-6.91	2	-6.00	2.35	-10.25
129	129	164.48	0.00	8.81	31.06	0	21.01	2	-6.91	2	-6.00	2.35	-10.25
129	130	165.65	0.00	8.81	20.70	0	14.00	2	-4.61	2	-4.00	2.35	-6.83
130	130	165.65	0.00	8.81	20.70	0	14.00	2	-4.61	2	-4.00	2.35	-6.83
130	131	166.83	0.00	8.81	10.35	0	7.00	2	-2.30	2	-2.00	2.35	-3.41
131	131	166.83	0.00	8.81	10.35	0	7.00	2	-2.30	2	-2.00	2.35	-3.41
131	132	167.00	0.00	8.81	8.81	0	5.96	2	-1.96	2	-1.70	2.35	-2.91
132	132	167.00	0.00	8.81	8.81	0	5.96	2	-1.96	2	-1.70	2.35	-2.91
132	133	168.00	0.00	8.81	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

hsim_t0.xls

Programa DINTEL IDEAM S.A.
GRAD.To

05/09/01

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

Hipótesis de cálculo:

GRAD.To

Gradiente térmico). Tensiones a tiempo To

RAD

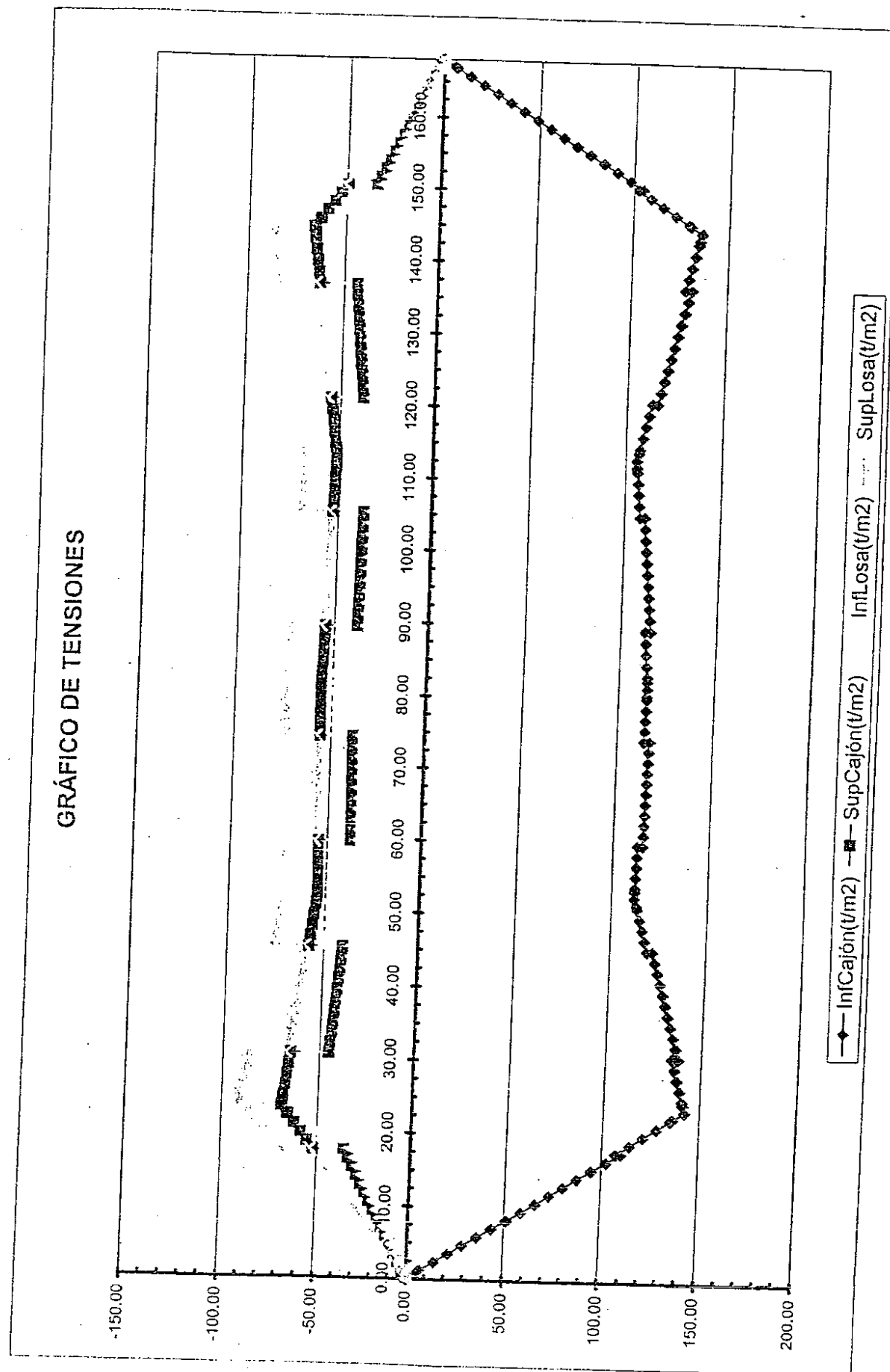
Coef. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	8.81	175.99	0	116.19	2	-56.22	2	-48.83	2.35	-75.04
115	116	149.20	0.00	8.81	165.64	0	109.36	2	-52.91	2	-45.96	2.35	-70.62
116	116	149.20	0.10	8.81	165.64	0	109.39	2	-52.88	2	-45.93	2.35	-70.60
116	117	150.38	0.10	8.81	155.28	0	102.55	2	-49.57	2	-43.06	2.35	-66.18
117	117	150.38	0.10	8.81	155.28	0	105.09	2	-34.52	2	-29.98	2.35	-51.20
117	118	151.55	0.10	8.81	144.93	0	98.09	2	-32.22	2	-27.98	2.35	-47.79
118	118	151.55	0.00	8.81	144.93	0	98.05	2	-32.25	2	-28.01	2.35	-47.81
118	119	152.73	0.00	8.81	134.58	0	91.05	2	-29.95	2	-26.01	2.35	-44.40
119	119	152.73	0.00	8.81	134.58	0	91.05	2	-29.95	2	-26.01	2.35	-44.40
119	120	153.90	0.00	8.81	124.23	0	84.05	2	-27.64	2	-24.01	2.35	-40.98
120	120	153.90	0.00	8.81	124.23	0	84.05	2	-27.64	2	-24.01	2.35	-40.98
120	121	155.08	0.00	8.81	113.88	0	77.05	2	-25.34	2	-22.01	2.35	-37.57
121	121	155.08	0.00	8.81	113.88	0	77.05	2	-25.34	2	-22.01	2.35	-37.57
121	122	156.25	0.00	8.81	103.52	0	70.04	2	-23.03	2	-20.01	2.35	-34.15
122	122	156.25	0.00	8.81	103.52	0	70.04	2	-23.03	2	-20.01	2.35	-34.15
122	123	157.43	0.00	8.81	93.17	0	63.03	2	-20.73	2	-18.01	2.35	-30.74
123	123	157.43	0.00	8.81	93.17	0	63.03	2	-20.73	2	-18.01	2.35	-30.74
123	124	158.60	0.00	8.81	82.82	0	56.03	2	-18.43	2	-16.01	2.35	-27.32
124	124	158.60	0.00	8.81	82.82	0	56.03	2	-18.43	2	-16.01	2.35	-27.32
125	125	159.78	0.00	8.81	72.47	0	49.03	2	-16.13	2	-14.01	2.35	-23.91
125	125	159.78	0.00	8.81	72.47	0	49.03	2	-16.13	2	-14.01	2.35	-23.91
125	126	160.95	0.00	8.81	62.11	0	42.02	2	-13.82	2	-12.00	2.35	-20.49
126	126	160.95	0.00	8.81	62.11	0	42.02	2	-13.82	2	-12.00	2.35	-20.49
126	127	162.13	0.00	8.81	51.76	0	35.02	2	-11.52	2	-10.00	2.35	-17.08
127	127	162.13	0.00	8.81	51.76	0	35.02	2	-11.52	2	-10.00	2.35	-17.08
127	128	163.30	0.00	8.81	41.41	0	28.02	2	-9.21	2	-8.00	2.35	-13.66
128	128	163.30	0.00	8.81	41.41	0	28.02	2	-9.21	2	-8.00	2.35	-13.66
128	129	164.48	0.00	8.81	31.06	0	21.01	2	-6.91	2	-6.00	2.35	-10.25
129	129	164.48	0.00	8.81	31.06	0	21.01	2	-6.91	2	-6.00	2.35	-10.25
129	130	165.65	0.00	8.81	20.70	0	14.00	2	-4.61	2	-4.00	2.35	-6.83
130	130	165.65	0.00	8.81	20.70	0	14.00	2	-4.61	2	-4.00	2.35	-6.83
130	131	166.83	0.00	8.81	10.35	0	7.00	2	-2.30	2	-2.00	2.35	-3.41
131	131	166.83	0.00	8.81	10.35	0	7.00	2	-2.30	2	-2.00	2.35	-3.41
131	132	167.00	0.00	8.81	8.81	0	5.96	2	-1.96	2	-1.70	2.35	-2.91
132	132	167.00	0.00	8.81	8.81	0	5.96	2	-1.96	2	-1.70	2.35	-2.91
132	133	168.00	0.00	8.81	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
GRAD.To

05/09/01

GRÁFICO DE TENSIONES



hsim_10.xls

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ+.To

Involvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To

IPF75B.MZ+

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (Um2)	y fibra	sig (Um2)	y fibra	sig (Um2)	y fibra	sig (Um2)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-119.65	124.65	0	84.33	2	-27.74	2	-24.09	2.35	-41.12
2	2	1.00	0.00	-119.65	124.65	0	84.33	2	-27.74	2	-24.09	2.35	-41.12
2	3	1.18	0.00	-117.52	144.99	0	98.09	2	-32.26	2	-28.02	2.35	-47.83
3	3	1.18	0.00	-117.52	144.99	0	98.09	2	-32.26	2	-28.02	2.35	-47.83
3	4	2.35	0.00	-103.81	271.57	0	183.73	2	-60.43	2	-52.48	2.35	-89.59
4	4	2.35	0.00	-103.81	271.57	0	183.73	2	-60.43	2	-52.48	2.35	-89.59
4	5	3.53	0.00	-90.16	379.93	0	257.04	2	-84.54	2	-73.42	2.35	-125.34
5	5	3.53	0.00	-90.16	379.93	0	257.04	2	-84.54	2	-73.42	2.35	-125.34
5	6	4.70	0.00	-76.33	473.90	0	320.62	2	-105.45	2	-91.59	2.35	-156.34
6	6	4.70	0.00	-76.33	473.90	0	320.62	2	-105.45	2	-91.59	2.35	-156.34
6	7	5.88	0.00	-62.36	552.49	0	373.79	2	-122.94	2	-106.77	2.35	-182.27
7	7	5.88	0.00	-62.36	552.49	0	373.79	2	-122.94	2	-106.77	2.35	-182.27
7	8	7.05	0.00	-41.81	613.77	0	415.25	2	-136.57	2	-118.62	2.35	-202.49
8	8	7.05	0.00	-41.81	613.77	0	415.25	2	-136.57	2	-118.62	2.35	-202.49
8	9	8.23	0.00	-28.16	657.98	0	445.16	2	-146.41	2	-127.16	2.35	-217.07
9	9	8.23	0.00	-28.16	657.98	0	445.16	2	-146.41	2	-127.16	2.35	-217.07
10	10	9.40	0.00	-14.33	686.93	0	464.74	2	-152.85	2	-132.75	2.35	-226.62
10	10	9.40	0.00	-14.33	686.93	0	464.74	2	-152.85	2	-132.75	2.35	-226.62
11	11	10.58	0.00	-7.36	700.26	0	473.76	2	-155.82	2	-135.33	2.35	-231.02
11	11	10.58	0.00	-7.36	700.26	0	473.76	2	-155.82	2	-135.33	2.35	-231.02
12	12	11.75	0.00	12.69	695.12	0	470.28	2	-154.67	2	-134.34	2.35	-229.33
12	12	11.75	0.00	12.69	695.12	0	470.28	2	-154.67	2	-134.34	2.35	-229.33
12	13	12.93	0.00	20.92	675.29	0	456.87	2	-150.26	2	-130.51	2.35	-222.78
13	13	12.93	0.00	20.92	675.29	0	456.87	2	-150.26	2	-130.51	2.35	-222.78
13	14	14.10	0.00	40.17	639.07	0	432.36	2	-142.20	2	-123.51	2.35	-210.83
14	14	14.10	0.00	40.17	639.07	0	432.36	2	-142.20	2	-123.51	2.35	-210.83
14	15	15.28	0.00	47.94	588.26	0	397.99	2	-130.89	2	-113.69	2.35	-194.07
15	15	15.28	0.00	47.94	588.26	0	397.99	2	-130.89	2	-113.69	2.35	-194.07
15	16	16.45	0.00	61.59	520.16	0	351.91	2	-115.74	2	-100.53	2.35	-171.61
16	16	16.45	-0.73	61.59	520.16	0	351.91	2	-115.74	2	-100.53	2.35	-171.61
16	17	17.63	-0.89	75.41	435.34	0	294.24	2	-97.16	2	-84.39	2.35	-143.88
17	17	17.63	-0.89	75.41	435.34	0	294.24	2	-97.16	2	-84.39	2.35	-143.88
17	18	18.80	-1.05	89.39	333.45	0	219.83	2	-106.84	2	-92.80	2.35	-142.45
18	18	18.80	0.00	89.39	333.45	0	219.83	2	-106.84	2	-92.80	2.35	-142.45
18	19	19.98	0.00	97.38	218.44	0	144.22	2	-69.78	2	-60.61	2.35	-93.13
19	19	19.98	0.00	97.38	218.44	0	144.22	2	-69.78	2	-60.61	2.35	-93.13
19	20	21.15	0.00	43.85	142.74	0	94.24	2	-45.60	2	-39.60	2.35	-60.86
20	20	21.15	0.00	43.85	142.74	0	94.24	2	-45.60	2	-39.60	2.35	-60.86
20	21	22.33	0.00	17.27	111.42	0	73.56	2	-35.59	2	-30.91	2.35	-47.51
21	21	22.33	0.00	17.27	111.42	0	73.56	2	-35.59	2	-30.91	2.35	-47.51
21	22	22.50	0.00	8.24	109.50	0	72.30	2	-34.98	2	-30.38	2.35	-46.69
22	22	22.50	0.00	8.24	109.50	0	72.30	2	-34.98	2	-30.38	2.35	-46.69
23	23	23.50	0.00	-4.57	107.51	0	70.98	2	-34.34	2	-29.83	2.35	-45.84
1023	23	23.50	0.00	19.77	107.51	0	70.98	2	-34.34	2	-29.83	2.35	-45.84
24	24	24.50	0.00	1.79	93.28	0	61.59	2	-29.80	2	-25.88	2.35	-39.77
24	24	24.50	0.00	1.79	93.28	0	61.59	2	-29.80	2	-25.88	2.35	-39.77
24	25	24.95	0.00	-6.79	91.82	0	60.62	2	-29.33	2	-25.48	2.35	-39.15
25	25	24.95	0.00	-6.79	91.82	0	60.62	2	-29.33	2	-25.48	2.35	-39.15
25	26	26.40	0.00	-27.38	113.40	0	74.87	2	-36.23	2	-31.46	2.35	-48.35
26	26	26.40	0.00	-27.38	113.40	0	74.87	2	-36.23	2	-31.46	2.35	-48.35
26	27	27.85	0.00	-72.68	199.83	0	131.93	2	-63.84	2	-55.44	2.35	-85.20
27	27	27.85	0.00	-72.68	199.83	0	131.93	2	-63.84	2	-55.44	2.35	-85.20
27	28	29.30	0.00	-104.70	333.01	0	219.86	2	-106.38	2	-92.40	2.35	-141.98
28	28	29.30	-1.01	-104.70	333.01	0	219.86	2	-106.38	2	-92.40	2.35	-141.98
28	29	30.75	-0.83	-87.46	476.74	0	314.50	2	-152.55	2	-132.50	2.35	-203.48
29	29	30.75	-0.83	-87.46	476.74	0	314.50	2	-152.55	2	-132.50	2.35	-203.48
29	30	32.20	-0.67	-70.00	596.14	0	403.10	2	-132.87	2	-115.40	2.35	-196.86
30	30	32.20	0.00	-70.00	596.14	0	403.10	2	-132.87	2	-115.40	2.35	-196.86
30	31	33.65	0.00	-53.70	689.17	0	466.26	2	-153.35	2	-133.19	2.35	-227.36
31	31	33.65	0.00	-53.70	689.17	0	466.26	2	-153.35	2	-133.19	2.35	-227.36
31	32	35.10	0.00	-42.90	759.12	0	513.58	2	-168.91	2	-146.71	2.35	-250.44
32	32	35.10	0.00	-42.90	759.12	0	513.58	2	-168.91	2	-146.71	2.35	-250.44
32	33	36.55	0.00	-19.00	804.61	0	544.36	2	-179.04	2	-155.50	2.35	-265.45
33	33	36.55	0.00	-19.00	804.61	0	544.36	2	-179.04	2	-155.50	2.35	-265.45
33	34	38.00	0.00	-8.20	823.00	0	556.80	2	-183.13	2	-159.05	2.35	-271.51
34	34	38.00	0.00	-8.20	823.00	0	556.80	2	-183.13	2	-159.05	2.35	-271.51
34	35	39.45	0.00	8.10	820.42	0	555.05	2	-182.55	2	-158.55	2.35	-270.66
35	35	39.45	0.00	8.10	820.42	0	555.05	2	-182.55	2	-158.55	2.35	-270.66
35	36	40.90	0.00	32.00	790.69	0	534.94	2	-175.94	2	-152.81	2.35	-260.86
36	36	40.90	0.00	32.00	790.69	0	534.94	2	-175.94	2	-152.81	2.35	-260.86
36	37	42.35	0.00	42.80	736.59	0	498.34	2	-163.90	2	-142.35	2.35	-243.01
37	37	42.35	0.00	42.80	736.59	0	498.34	2	-163.90	2	-142.35	2.35	-243.01
37	38	43.80	0.00	59.10	659.34	0	446.08	2	-146.71	2	-127.42	2.35	-217.52
38	38	43.80	-0.56	59.10	659.34	0	446.08	2	-146.71	2	-127.42	2.35	-217.52
38	39	45.25	-0.73	76.57	555.71	0	375.72	2	-123.89	2	-107.60	2.35	-183.54

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ+.To

Involvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To

IPF75B.MZ+

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (Um2)	y fibra	sig (Um2)	y fibra	sig (Um2)	y fibra	sig (Um2)
39	39	45.25	-0.73	76.57	555.71	0	366.67	2	-177.75	2	-154.38	2.35	-237.13
39	40	46.70	-0.91	93.80	427.79	0	282.16	2	-136.94	2	-118.94	2.35	-182.64
40	40	46.70	0.00	93.80	427.79	0	282.44	2	-136.66	2	-118.69	2.35	-182.39
40	41	48.15	0.00	83.29	290.23	0	191.62	2	-92.71	2	-80.53	2.35	-123.74
41	41	48.15	0.00	83.29	290.23	0	191.62	2	-92.71	2	-80.53	2.35	-123.74
41	42	49.60	0.00	40.15	198.38	0	130.98	2	-53.37	2	-55.04	2.35	-84.58
42	42	49.60	0.00	40.15	198.38	0	130.98	2	-53.37	2	-55.04	2.35	-84.58
42	43	51.05	0.00	9.83	167.93	0	110.87	2	-53.65	2	-46.59	2.35	-71.60
43	43	51.05	0.00	9.83	167.93	0	110.87	2	-53.65	2	-46.59	2.35	-71.60
43	44	51.50	0.00	1.29	167.20	0	110.39	2	-53.41	2	-46.39	2.35	-71.29
44	44	51.50	0.00	1.29	167.20	0	110.39	2	-53.41	2	-46.39	2.35	-71.29
44	45	52.50	0.00	-16.64	177.80	0	117.39	2	-56.80	2	-49.33	2.35	-75.81
45	1045	52.50	0.00	25.12	177.80	0	117.39	2	-56.80	2	-49.33	2.35	-75.81
45	46	53.50	0.00	7.15	158.58	0	104.70	2	-50.66	2	-44.00	2.35	-67.61
46	46	53.50	0.00	7.15	158.58	0	104.70	2	-50.66	2	-44.00	2.35	-67.61
46	47	53.95	0.00	-1.42	155.30	0	102.53	2	-49.61	2	-43.09	2.35	-66.21
47	47	53.95	0.00	-1.42	155.30	0	102.53	2	-49.61	2	-43.09	2.35	-66.21
47	48	55.40	0.00	-34.98	174.04	0	114.91	2	-55.60	2	-48.29	2.35	-74.20
48	48	55.40	0.00	-34.98	174.04	0	114.91	2	-55.60	2	-48.29	2.35	-74.20
48	49	56.85	0.00	-73.81	262.20	0	173.11	2	-83.76	2	-72.75	2.35	-111.79
49	49	56.85	0.00	-73.81	262.20	0	173.11	2	-83.76	2	-72.75	2.35	-111.79
49	50	58.30	0.00	-101.75	398.91	0	263.37	2	-127.43	2	-110.68	2.35	-170.08
50	50	58.30	-0.98	-101.74	398.91	0	263.07	2	-127.73	2	-110.94	2.35	-170.34
50	51	59.75	-0.81	-84.49	538.32	0	355.17	2	-172.22	2	-149.58	2.35	-229.73
51	51	59.75	-0.81	-84.49	538.32	0	363.93	2	-120.05	2	-104.27	2.35	-177.83
51	52	61.20	-0.64	-67.04	653.52	0	441.93	2	-145.63	2	-126.48	2.35	-215.78
52	52	61.20	0.00	-67.04	653.52	0	442.14	2	-145.42	2	-126.30	2.35	-215.60
52	53	62.65	0.00	-50.74	742.24	0	502.16	2	-165.16	2	-143.44	2.35	-244.87
53	53	62.65	0.00	-50.74	742.24	0	502.16	2	-165.16	2	-143.44	2.35	-244.87
53	54	64.10	0.00	-39.95	807.91	0	546.59	2	-179.77	2	-156.14	2.35	-266.54
54	54	64.10	0.00	-39.95	807.91	0	546.59	2	-179.77	2	-156.14	2.35	-266.54
54	55	65.55	0.00	-16.05	849.14	0	574.48	2	-188.94	2	-164.10	2.35	-280.14
55	55	65.55	0.00	-16.05	849.14	0	574.48	2	-188.94	2	-164.10	2.35	-280.14
55	56	67.00	0.00	-5.25	863.23	0	584.02	2	-192.08	2	-166.83	2.35	-284.79
56	56	67.00	0.00	-5.25	863.23	0	584.02	2	-192.08	2	-166.83	2.35	-284.79
56	57	68.45	0.00	11.05	856.42	0	579.41	2	-190.56	2	-165.51	2.35	-282.54
57	57	68.45	0.00	11.05	856.42	0	579.41	2	-190.56	2	-165.51	2.35	-282.54
57	58	69.90	0.00	34.95	822.40	0	556.39	2	-182.99	2	-158.94	2.35	-271.32
58	58	69.90	0.00	34.95	822.40	0	556.39	2	-182.99	2	-158.94	2.35	-271.32
58	59	71.35	0.00	45.75	764.03	0	516.90	2	-170.01	2	-147.66	2.35	-252.06
59	59	71.35	0.00	45.75	764.03	0	516.90	2	-170.01	2	-147.66	2.35	-252.06
59	60	72.80	0.00	62.05	682.53	0	461.76	2	-151.87	2	-131.90	2.35	-225.17
60	60	72.80	-0.59	62.05	682.53	0	461.76	2	-152.06	2	-132.07	2.35	-225.34
60	61	74.25	-0.77	79.51	574.58	0	388.48	2	-128.10	2	-111.26	2.35	-189.78
61	61	74.25	-0.77	79.51	574.58	0	379.12	2	-183.79	2	-159.63	2.35	-245.18
61	62	75.70	-0.93	96.75	442.43	0	291.82	2	-141.62	2	-123.00	2.35	-188.88
62	62	75.70	0.00	96.75	442.43	0	292.11	2	-141.34	2	-122.75	2.35	-188.63
62	63	77.15	0.00	84.38	297.81	0	196.62	2	-95.14	2	-82.63	2.35	-126.97
63	63	77.15	0.00	84.38	297.81	0	196.62	2	-95.14	2	-82.63	2.35	-126.97
63	64	78.60	0.00	36.92	198.73	0	131.21	2	-63.48	2	-55.14	2.35	-84.73
64	64	78.60	0.00	36.92	198.73	0	131.21	2	-63.48	2	-55.14	2.35	-84.73
64	65	80.05	0.00	6.65	168.70	0	111.38	2	-53.89	2	-46.81	2.35	-71.93
65	65	80.05	0.00	6.65	168.70	0	111.38	2	-53.89	2	-46.81	2.35	-71.93
65	66	80.50	0.00	-1.88	168.90	0	111.51	2	-53.96	2	-46.86	2.35	-72.01
66	66	80.50	0.00	-1.88	168.90	0	111.51	2	-53.96	2	-46.86	2.35	-72.01
66	67	81.50	0.00	-19.81	182.32	0	120.37	2	-58.24	2	-50.59	2.35	-77.73
67	1067	81.50	0.00	21.88	182.32	0	120.37	2	-58.24	2	-50.59	2.35	-77.73
67	68	82.50	0.00	1.49	165.51	0	109.27	2	-52.87	2	-45.92	2.35	-70.57
68	68	82.50	0.00	1.49	165.51	0	109.27	2	-52.87	2	-45.92	2.35	-70.57
68	69	83.08	0.00	-9.32	164.44	0	108.57	2	-52.53	2	-45.62	2.35	-70.11
69	69	83.08	0.00	-9.32	164.44	0	108.57	2	-52.53	2	-45.62	2.35	-70.11
69	70	84.65	0.00	-42.62	196.52	0	129.75	2	-62.78	2	-54.53	2.35	-83.79
70	70	84.65	0.00	-42.62	196.52	0	129.75	2	-62.78	2	-54.53	2.35	-83.79
70	71	86.23	0.00	-91.93	306.52	0	202.37	2	-97.92	2	-85.05	2.35	-130.69
71	71	86.23	0.00	-91.93	306.52	0	202.37	2	-97.92	2	-85.05	2.35	-130.69
71	72	87.80	0.00	-114.29	472.13	0	311.71	2	-150.82	2	-130.99	2.35	-201.30
72	72	87.80	-1.00	-114.28	472.13	0	311.41	2	-151.13	2	-131.26	2.35	-201.56
72	73	89.38	-0.85	-95.69	631.32	0	416.56	2	-201.94	2	-175.39	2.35	-269.40
73	73	89.38	-0.85	-95.69	631.32	0	426.84	2	-140.76	2	-122.25	2.35	-208.52
73	74	90.95	-0.63	-70.67	764.23	0	516.83	2	-170.26	2	-147.87	2.35	-252.31
74	74	90.95	0.00	-70.68	764.23	0	517.04	2	-170.05	2	-147.69	2.35	-252.13
74	75	92.53	0.00	-52.04	866.62	0	586.31	2	-192.83	2	-167.48	2.35	-285.91
75	75	92.53	0.00	-52.04	866.62	0	586.31	2	-192.83	2	-167.48	2.35	-285.91
75	76	94.10	0.00	-40.56	938.91	0	635.22	2	-208.92	2	-181.45	2.35	-309.75
76	76	94.10	0.00	-40.56	938.91	0	635.22	2	-208.92	2	-181.45	2.35	-309.75
76	77	95.68	0.00	-22.05	983.50	0	665.39	2	-218.84	2	-190.07	2.35	-324.47

CÁLCULO TENSIONAL

Hipótesis de cálculo:
IPF75B.ENV_TREN_GENERICO.MZ+.To
Involvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-119.65	124.65	0	84.33	2	-27.74	2	-24.09	2.35	-41.12
2	2	1.00	0.00	-119.65	124.65	0	84.33	2	-27.74	2	-24.09	2.35	-41.12
2	3	1.18	0.00	-117.52	144.99	0	98.09	2	-32.26	2	-28.02	2.35	-47.83
3	3	1.18	0.00	-117.52	144.99	0	98.09	2	-32.26	2	-28.02	2.35	-47.83
3	4	2.35	0.00	-103.81	271.57	0	183.73	2	-60.43	2	-52.48	2.35	-89.59
4	4	2.35	0.00	-103.81	271.57	0	183.73	2	-60.43	2	-52.48	2.35	-89.59
4	5	3.53	0.00	-90.16	379.93	0	257.04	2	-84.54	2	-73.42	2.35	-125.34
5	5	3.53	0.00	-90.16	379.93	0	257.04	2	-84.54	2	-73.42	2.35	-125.34
5	6	4.70	0.00	-76.33	473.90	0	320.62	2	-105.45	2	-91.59	2.35	-156.34
6	6	4.70	0.00	-76.33	473.90	0	320.62	2	-105.45	2	-91.59	2.35	-156.34
6	7	5.88	0.00	-62.36	552.49	0	373.79	2	-122.94	2	-106.77	2.35	-182.27
7	7	5.88	0.00	-62.36	552.49	0	373.79	2	-122.94	2	-106.77	2.35	-182.27
7	8	7.05	0.00	-41.81	613.77	0	415.25	2	-136.57	2	-118.62	2.35	-202.49
8	8	7.05	0.00	-41.81	613.77	0	415.25	2	-136.57	2	-118.62	2.35	-202.49
8	9	8.23	0.00	-28.16	657.98	0	445.16	2	-146.41	2	-127.16	2.35	-217.07
9	9	8.23	0.00	-28.16	657.98	0	445.16	2	-146.41	2	-127.16	2.35	-217.07
9	10	9.40	0.00	-14.33	686.93	0	464.74	2	-152.85	2	-132.75	2.35	-226.62
10	10	9.40	0.00	-14.33	686.93	0	464.74	2	-152.85	2	-132.75	2.35	-226.62
10	11	10.58	0.00	-7.36	700.26	0	473.76	2	-155.82	2	-135.33	2.35	-231.02
11	11	10.58	0.00	-7.36	700.26	0	473.76	2	-155.82	2	-135.33	2.35	-231.02
11	12	11.75	0.00	12.69	695.12	0	470.28	2	-154.67	2	-134.34	2.35	-229.33
12	12	11.75	0.00	12.69	695.12	0	470.28	2	-154.67	2	-134.34	2.35	-229.33
12	13	12.93	0.00	20.92	675.29	0	456.87	2	-150.26	2	-130.51	2.35	-222.78
13	13	12.93	0.00	20.92	675.29	0	456.87	2	-150.26	2	-130.51	2.35	-222.78
13	14	14.10	0.00	40.17	639.07	0	432.36	2	-142.20	2	-123.51	2.35	-210.83
14	14	14.10	0.00	40.17	639.07	0	432.36	2	-142.20	2	-123.51	2.35	-210.83
14	15	15.28	0.00	47.94	588.26	0	397.99	2	-130.89	2	-113.69	2.35	-194.07
15	15	15.28	0.00	47.94	588.26	0	397.99	2	-130.89	2	-113.69	2.35	-194.07
15	16	16.45	0.00	61.59	520.16	0	351.91	2	-115.74	2	-100.53	2.35	-171.61
16	16	16.45	-0.73	61.59	520.16	0	351.91	2	-115.74	2	-100.53	2.35	-171.61
16	17	17.63	-0.89	75.41	435.34	0	294.24	2	-97.16	2	-84.39	2.35	-143.88
17	17	17.63	-0.89	75.41	435.34	0	294.24	2	-97.16	2	-84.39	2.35	-143.88
17	18	18.80	-1.05	89.39	333.45	0	219.83	2	-106.84	2	-92.80	2.35	-142.45
18	18	18.80	0.00	89.39	333.45	0	219.83	2	-106.84	2	-92.80	2.35	-142.45
18	19	19.98	0.00	97.38	218.44	0	144.22	2	-69.78	2	-60.61	2.35	-93.13
19	19	19.98	0.00	97.38	218.44	0	144.22	2	-69.78	2	-60.61	2.35	-93.13
19	20	21.15	0.00	43.85	142.74	0	94.24	2	-45.60	2	-39.60	2.35	-60.86
20	20	21.15	0.00	43.85	142.74	0	94.24	2	-45.60	2	-39.60	2.35	-60.86
20	21	22.33	0.00	17.27	111.42	0	73.56	2	-35.59	2	-30.91	2.35	-47.51
21	21	22.33	0.00	17.27	111.42	0	73.56	2	-35.59	2	-30.91	2.35	-47.51
21	22	22.50	0.00	8.24	109.50	0	72.30	2	-34.98	2	-30.38	2.35	-46.69
22	22	22.50	0.00	8.24	109.50	0	72.30	2	-34.98	2	-30.38	2.35	-46.69
22	23	23.50	0.00	-4.57	107.51	0	70.98	2	-34.34	2	-29.83	2.35	-45.84
23	23	23.50	0.00	-4.57	107.51	0	70.98	2	-34.34	2	-29.83	2.35	-45.84
23	24	24.50	0.00	19.77	93.28	0	61.59	2	-29.80	2	-25.88	2.35	-39.77
24	24	24.50	0.00	19.77	93.28	0	61.59	2	-29.80	2	-25.88	2.35	-39.77
24	25	24.95	0.00	-6.79	91.82	0	60.62	2	-29.33	2	-25.48	2.35	-39.15
25	25	24.95	0.00	-6.79	91.82	0	60.62	2	-29.33	2	-25.48	2.35	-39.15
25	26	26.40	0.00	-27.38	113.40	0	74.87	2	-36.23	2	-31.46	2.35	-48.35
26	26	26.40	0.00	-27.38	113.40	0	74.87	2	-36.23	2	-31.46	2.35	-48.35
26	27	27.85	0.00	-72.68	199.83	0	131.93	2	-63.84	2	-55.44	2.35	-85.20
27	27	27.85	0.00	-72.68	199.83	0	131.93	2	-63.84	2	-55.44	2.35	-85.20
27	28	29.30	0.00	-104.70	333.01	0	219.86	2	-106.38	2	-92.40	2.35	-141.98
28	28	29.30	-1.01	-104.70	333.01	0	219.86	2	-106.38	2	-92.40	2.35	-141.98
28	29	30.75	-0.83	-87.46	476.74	0	314.50	2	-152.55	2	-132.50	2.35	-203.48
29	29	30.75	-0.83	-87.46	476.74	0	314.50	2	-152.55	2	-132.50	2.35	-203.48
29	30	32.20	-0.67	-70.00	596.14	0	403.10	2	-132.87	2	-115.40	2.35	-196.86
30	30	32.20	0.00	-70.00	596.14	0	403.10	2	-132.87	2	-115.40	2.35	-196.86
30	31	33.65	0.00	-53.70	689.17	0	466.26	2	-153.35	2	-133.19	2.35	-227.36
31	31	33.65	0.00	-53.70	689.17	0	466.26	2	-153.35	2	-133.19	2.35	-227.36
31	32	35.10	0.00	-42.90	759.12	0	513.58	2	-168.91	2	-146.71	2.35	-250.44
32	32	35.10	0.00	-42.90	759.12	0	513.58	2	-168.91	2	-146.71	2.35	-250.44
32	33	36.55	0.00	-19.00	804.61	0	544.36	2	-179.04	2	-155.50	2.35	-265.45
33	33	36.55	0.00	-19.00	804.61	0	544.36	2	-179.04	2	-155.50	2.35	-265.45
33	34	38.00	0.00	-8.20	823.00	0	556.80	2	-183.13	2	-159.05	2.35	-271.51
34	34	38.00	0.00	-8.20	823.00	0	556.80	2	-183.13	2	-159.05	2.35	-271.51
34	35	39.45	0.00	8.10	820.42	0	555.05	2	-182.55	2	-158.55	2.35	-270.66
35	35	39.45	0.00	8.10	820.42	0	555.05	2	-182.55	2	-158.55	2.35	-270.66
35	36	40.90	0.00	32.00	790.69	0	534.94	2	-175.94	2	-152.81	2.35	-260.86
36	36	40.90	0.00	32.00	790.69	0	534.94	2	-175.94	2	-152.81	2.35	-260.86
36	37	42.35	0.00	42.80	736.59	0	498.34	2	-163.90	2	-142.35	2.35	-243.01
37	37	42.35	0.00	42.80	736.59	0	498.34	2	-163.90	2	-142.35	2.35	-243.01
37	38	43.80	0.00	59.10	659.34	0	446.08	2	-146.71	2	-127.42	2.35	-217.52
38	38	43.80	-0.56	59.10	659.34	0	446.08	2	-146.71	2	-127.42	2.35	-217.52
38	39	45.25	-0.73	76.57	555.71	0	375.72	2	-123.89	2	-107.60	2.35	-183.54

CÁLCULO TENSIONAL

ipótesis de cálculo:
IPF75B.ENV_TREN_GENERICO.MZ+.To
Involvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
39	39	45.25	-0.73	76.57	555.71	0	366.67	2	-177.75	2	-154.38	2.35	-237.13
39	40	46.70	-0.91	93.80	427.79	0	282.16	2	-136.94	2	-118.94	2.35	-182.64
40	40	46.70	0.00	93.80	427.79	0	282.44	2	-136.66	2	-118.69	2.35	-182.39
40	41	48.15	0.00	83.29	290.23	0	191.62	2	-92.71	2	-80.53	2.35	-123.74
41	41	48.15	0.00	83.29	290.23	0	191.62	2	-92.71	2	-80.53	2.35	-123.74
41	42	49.60	0.00	40.15	198.38	0	130.98	2	-63.37	2	-55.04	2.35	-84.58
42	42	49.60	0.00	40.15	198.38	0	130.98	2	-63.37	2	-55.04	2.35	-84.58
42	43	51.05	0.00	9.83	167.93	0	110.87	2	-53.65	2	-46.59	2.35	-71.60
43	43	51.05	0.00	9.83	167.93	0	110.87	2	-53.65	2	-46.59	2.35	-71.60
43	44	51.50	0.00	1.29	167.20	0	110.39	2	-53.41	2	-46.39	2.35	-71.29
44	44	51.50	0.00	1.29	167.20	0	110.39	2	-53.41	2	-46.39	2.35	-71.29
44	45	52.50	0.00	-16.64	177.80	0	117.39	2	-56.80	2	-49.33	2.35	-75.81
45	1045	52.50	0.00	25.12	177.80	0	117.39	2	-56.80	2	-49.33	2.35	-75.81
45	46	53.50	0.00	7.15	158.58	0	104.70	2	-50.66	2	-44.00	2.35	-67.61
46	46	53.50	0.00	7.15	158.58	0	104.70	2	-50.66	2	-44.00	2.35	-67.

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ+.To

Involvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To

IPF75B.MZ+

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-119.65	124.65	0	84.33	2	-27.74	2	-24.09	2.35	-41.12
2	2	1.00	0.00	-119.65	124.65	0	84.33	2	-27.74	2	-24.09	2.35	-41.12
2	3	1.18	0.00	-117.52	144.99	0	98.09	2	-32.26	2	-28.02	2.35	-47.83
3	3	1.18	0.00	-117.52	144.99	0	98.09	2	-32.26	2	-28.02	2.35	-47.83
3	4	2.35	0.00	-103.81	271.57	0	183.73	2	-60.43	2	-52.48	2.35	-89.59
4	4	2.35	0.00	-103.81	271.57	0	183.73	2	-60.43	2	-52.48	2.35	-89.59
4	5	3.53	0.00	-90.16	379.93	0	257.04	2	-84.54	2	-73.42	2.35	-125.34
5	5	3.53	0.00	-90.16	379.93	0	257.04	2	-84.54	2	-73.42	2.35	-125.34
5	6	4.70	0.00	-76.33	473.90	0	320.62	2	-105.45	2	-91.59	2.35	-156.34
6	6	4.70	0.00	-76.33	473.90	0	320.62	2	-105.45	2	-91.59	2.35	-156.34
6	7	5.88	0.00	-62.36	552.49	0	373.79	2	-122.94	2	-106.77	2.35	-182.27
7	7	5.88	0.00	-62.36	552.49	0	373.79	2	-122.94	2	-106.77	2.35	-182.27
7	8	7.05	0.00	-41.81	613.77	0	415.25	2	-136.57	2	-118.62	2.35	-202.49
8	8	7.05	0.00	-41.81	613.77	0	415.25	2	-136.57	2	-118.62	2.35	-202.49
8	9	8.23	0.00	-28.16	657.98	0	445.16	2	-146.41	2	-127.16	2.35	-217.07
9	9	8.23	0.00	-28.16	657.98	0	445.16	2	-146.41	2	-127.16	2.35	-217.07
9	10	9.40	0.00	-14.33	686.93	0	464.74	2	-152.85	2	-132.75	2.35	-226.62
10	10	9.40	0.00	-14.33	686.93	0	464.74	2	-152.85	2	-132.75	2.35	-226.62
10	11	10.58	0.00	-7.36	700.26	0	473.76	2	-155.82	2	-135.33	2.35	-231.02
11	11	10.58	0.00	-7.36	700.26	0	473.76	2	-155.82	2	-135.33	2.35	-231.02
11	12	11.75	0.00	12.69	695.12	0	470.28	2	-154.67	2	-134.34	2.35	-229.33
12	12	11.75	0.00	12.69	695.12	0	470.28	2	-154.67	2	-134.34	2.35	-229.33
12	13	12.93	0.00	20.92	675.29	0	456.87	2	-150.26	2	-130.51	2.35	-222.78
13	13	12.93	0.00	20.92	675.29	0	456.87	2	-150.26	2	-130.51	2.35	-222.78
13	14	14.10	0.00	40.17	639.07	0	432.36	2	-142.20	2	-123.51	2.35	-210.83
14	14	14.10	0.00	40.17	639.07	0	432.36	2	-142.20	2	-123.51	2.35	-210.83
14	15	15.28	0.00	47.94	588.26	0	397.99	2	-130.89	2	-113.69	2.35	-194.07
15	15	15.28	0.00	47.94	588.26	0	397.99	2	-130.89	2	-113.69	2.35	-194.07
15	16	16.45	0.00	61.59	520.16	0	351.91	2	-115.74	2	-100.53	2.35	-171.61
16	16	16.45	-0.73	61.59	520.16	0	351.91	2	-115.74	2	-100.53	2.35	-171.61
16	17	17.63	-0.89	75.41	435.34	0	294.24	2	-97.16	2	-84.39	2.35	-143.88
17	17	17.63	-0.89	75.41	435.34	0	294.24	2	-97.16	2	-84.39	2.35	-143.88
17	18	18.80	-1.05	89.39	333.45	0	219.83	2	-106.84	2	-92.80	2.35	-142.45
18	18	18.80	0.00	89.39	333.45	0	219.83	2	-106.84	2	-92.80	2.35	-142.45
18	19	19.98	0.00	97.38	218.44	0	144.22	2	-69.78	2	-60.61	2.35	-93.13
19	19	19.98	0.00	97.38	218.44	0	144.22	2	-69.78	2	-60.61	2.35	-93.13
19	20	21.15	0.00	43.85	142.74	0	94.24	2	-45.60	2	-39.60	2.35	-60.86
20	20	21.15	0.00	43.85	142.74	0	94.24	2	-45.60	2	-39.60	2.35	-60.86
20	21	22.33	0.00	17.27	111.42	0	73.56	2	-35.59	2	-30.91	2.35	-47.51
21	21	22.33	0.00	17.27	111.42	0	73.56	2	-35.59	2	-30.91	2.35	-47.51
21	22	22.50	0.00	8.24	109.50	0	72.30	2	-34.98	2	-30.38	2.35	-46.69
22	22	22.50	0.00	8.24	109.50	0	72.30	2	-34.98	2	-30.38	2.35	-46.69
22	23	23.50	0.00	-4.57	107.51	0	70.98	2	-34.34	2	-29.83	2.35	-45.84
23	23	23.50	0.00	-4.57	107.51	0	70.98	2	-34.34	2	-29.83	2.35	-45.84
23	24	24.50	0.00	1.79	93.28	0	61.59	2	-29.80	2	-25.88	2.35	-39.77
24	24	24.50	0.00	1.79	93.28	0	61.59	2	-29.80	2	-25.88	2.35	-39.77
24	25	24.95	0.00	-6.79	91.82	0	60.62	2	-29.33	2	-25.48	2.35	-39.15
25	25	24.95	0.00	-6.79	91.82	0	60.62	2	-29.33	2	-25.48	2.35	-39.15
25	26	26.40	0.00	-27.38	113.40	0	74.87	2	-36.23	2	-31.46	2.35	-48.35
26	26	26.40	0.00	-27.38	113.40	0	74.87	2	-36.23	2	-31.46	2.35	-48.35
26	27	27.85	0.00	-72.68	199.83	0	131.93	2	-63.84	2	-55.44	2.35	-85.20
27	27	27.85	0.00	-72.68	199.83	0	131.93	2	-63.84	2	-55.44	2.35	-85.20
27	28	29.30	0.00	-104.70	333.01	0	219.86	2	-106.38	2	-92.40	2.35	-141.98
28	28	29.30	-1.01	-104.70	333.01	0	219.86	2	-106.38	2	-92.40	2.35	-141.98
28	29	30.75	-0.83	-87.46	476.74	0	314.50	2	-152.55	2	-132.50	2.35	-203.48
29	29	30.75	-0.83	-87.46	476.74	0	314.50	2	-152.55	2	-132.50	2.35	-203.48
29	30	32.20	-0.67	-70.00	596.14	0	403.10	2	-132.87	2	-115.40	2.35	-196.86
30	30	32.20	0.00	-70.00	596.14	0	403.10	2	-132.87	2	-115.40	2.35	-196.86
30	31	33.65	0.00	-53.70	689.17	0	466.26	2	-153.35	2	-133.19	2.35	-227.36
31	31	33.65	0.00	-53.70	689.17	0	466.26	2	-153.35	2	-133.19	2.35	-227.36
31	32	35.10	0.00	-42.90	759.12	0	513.58	2	-168.91	2	-146.71	2.35	-250.44
32	32	35.10	0.00	-42.90	759.12	0	513.58	2	-168.91	2	-146.71	2.35	-250.44
32	33	36.55	0.00	-19.00	804.61	0	544.36	2	-179.04	2	-155.50	2.35	-265.45
33	33	36.55	0.00	-19.00	804.61	0	544.36	2	-179.04	2	-155.50	2.35	-265.45
33	34	38.00	0.00	-8.20	823.00	0	556.80	2	-183.13	2	-159.05	2.35	-271.51
34	34	38.00	0.00	-8.20	823.00	0	556.80	2	-183.13	2	-159.05	2.35	-271.51
34	35	39.45	0.00	8.10	820.42	0	555.05	2	-182.55	2	-158.55	2.35	-270.66
35	35	39.45	0.00	8.10	820.42	0	555.05	2	-182.55	2	-158.55	2.35	-270.66
35	36	40.90	0.00	32.00	790.69	0	534.94	2	-175.94	2	-152.81	2.35	-260.86
36	36	40.90	0.00	32.00	790.69	0	534.94	2	-175.94	2	-152.81	2.35	-260.86
36	37	42.35	0.00	42.80	736.59	0	498.34	2	-163.90	2	-142.35	2.35	-243.01
37	37	42.35	0.00	42.80	736.59	0	498.34	2	-163.90	2	-142.35	2.35	-243.01
37	38	43.80	0.00	59.10	659.34	0	446.08	2	-146.71	2	-127.42	2.35	-217.52
38	38	43.80	-0.56	59.10	659.34	0	446.08	2	-146.71	2	-127.42	2.35	-217.52
38	39	45.25	-0.73	76.57	555.71	0	375.72	2	-123.89	2	-107.60	2.35	-183.54

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ+.To

Involvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To

IPF75B.MZ+

al exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	-0.73	76.57	555.71	0	366.67	2	-177.75	2	-154.38	2.35	-237.13
39	40	46.70	-0.91	93.80	427.79	0	282.16	2	-136.94	2	-118.94	2.35	-182.64
40	40	46.70	0.00	93.80	427.79	0	282.44	2	-136.66	2	-118.69	2.35	-182.39
40	41	48.15	0.00	83.29	290.23	0	191.62	2	-92.71	2	-80.53	2.35	-123.74
41	41	48.15	0.00	83.29	290.23	0	191.62	2	-92.71	2	-80.53	2.35	-123.74
41	42	49.60	0.00	40.15	198.38	0	130.98	2	-63.37	2	-55.04	2.35	-84.58
42	42	49.60	0.00	40.15	198.38	0	130.98	2	-63.37	2	-55.04	2.35	-84.58
42	43	51.05	0.00	9.83	167.93	0	110.67	2	-53.65	2	-46.59	2.35	-71.60
43	43	51.05	0.00	9.83	167.93	0	110.67	2	-53.65	2	-46.59	2.35	-71.60
43	44	51.50	0.00	1.29	167.20	0	110.39	2	-53.41	2	-46.39	2.35	-71.29
44	44	51.50	0.00	1.29	167.20	0	110.39	2	-53.41	2	-46.39	2.35	-71.29
44	45	52.50	0.00	-16.64	177.80	0	117.39	2	-56.80	2	-49.33	2.35	-75.81
45	1045	52.50	0.00	25.12	177.80	0	117.39	2	-56.80	2	-49.33	2.35	-75.81
45	46	53.50	0.00	7.15	158.58	0	104.70	2	-50.66	2	-44.00	2.35	-67.61
46	46	53.50	0.00	7.15	158.58	0	104.70	2	-50.66	2	-44.00	2.35	-67.61
46	47	53.95	0.00	-1.42	155.30	0	102.53	2	-49.61	2	-43.09	2.35	-66.21
47	47	53.95	0.00	-1.42	155.30	0	102.53	2	-49.61	2	-43.09	2.35	-66.21
47	48	55.40	0.00	-34.98	174.04	0	114.91	2	-55.60	2	-48.29	2.35	-74.20
48	48	55.40	0.00	-34.98	174.04	0	114.91	2	-55.60	2	-48.29	2.35	-74.20
48	49	56.85	0.00	-73.81	262.20	0	173.11	2	-83.76	2	-72.75	2.35	-111.79
49	49	56.85	0.00	-73.81	262.20	0	173.11	2	-83.76	2	-72.75	2.35	-111.79
49	50	58.30	0.00	-101.75	398.91	0	263.37	2	-127.43	2	-110.68	2.35	-170.08
50	50	58.30	-0.98	-101.74	398.91	0	263.07	2	-127.73	2	-110.94	2.35	-170.34
50	51	59.75	-0.81	-84.49	538.32	0	355.17	2	-172.22	2	-149.58	2.35	-229.73
51	51	59.75	-0.81	-84.49	538.32	0	363.93	2	-120.05	2	-104.27	2.35	-177.83
51	52	61.20	-0.64	-67.04	653.52	0	441.93	2	-145.63	2	-126.48	2.35	-215.78
52	52	61.20	0.00	-67.04	653.52	0	442.14	2	-145.42	2	-126.30	2.35	-215.60
52	53	62.65	0.00	-50.74	742.24	0	502.16	2	-165.16	2	-143.44	2.35	-244.87
53	53	62.65	0.00	-50.74	742.24	0	502.16	2	-165.16	2	-143.44	2.35	-244.87
53	54	64.10	0.00	-39.95	807.91	0	546.59	2	-179.77	2	-156.14	2.35	-266.54
54	54	64.10	0.00	-39.95	807.91	0	546.59	2	-179.77	2	-156.14	2.35	-266.54
54	55	65.55	0.00	-16.05	849.14	0	574.48	2	-188.94	2	-164.10	2.35	-280.14
55	55	65.55	0.00	-16.05	849.14	0	574.48	2	-188.94	2	-164.10	2.35	-280.14
55	56	67.00	0.00	-5.25	863.23	0	584.02	2	-192.08	2	-166.83	2.35	-284.79
56	56	67.00	0.00	-5.25	863.23	0	584.02	2	-192.08	2	-166.83	2.35	-284.79
56	57	68.45	0.00	11.05	856.42	0	579.41	2	-190.56	2	-165.51	2.35	-282.54
57	57	68.45	0.00	11.05	856.42	0	579.41	2	-190.56	2	-165.51	2.35	-282.54
57	58	69.90	0.00	34.95	822.40	0	556.39	2	-182.99	2	-158.94	2.35	-271.32
58	58	69.90	0.00	34.95	822.40	0	556.39	2	-182.99	2	-158.94	2.35	-271.32
58	59	71.35	0.00	45.75	764.03	0	516.90	2	-170.01	2	-147.66	2.35	-252.06
59	59	71.35	0.00	45.75	764.03	0	516.90	2	-170.01	2	-147.66	2.35	-252.06
59	60	72.80	0.00	62.05	682.53	0	461.76	2	-151.87	2	-131.90	2.35	-225.17
60	60	72.80	-0.59	62.05	682.53	0	461.76	2	-152.06	2	-132.07	2.35	-225.34
60	61	74.25	-0.77	79.51	574.58	0	388.48	2	-128.10	2	-111.26	2.35	-189.78
61	61	74.25	-0.77	79.51	574.58	0	379.12	2	-183.79	2	-159.63	2.35	-245.18
61	62	75.70	-0.93	96.75	442.43	0	291.82	2	-141.62	2	-123.00	2.35	-188.88
62	62	75.70	0.00	96.75	442.43	0	292.11	2	-141.34	2	-122.75	2.35	-188.63
62	63	77.15	0.00	84.38	297.81	0	196.62	2	-95.14	2	-82.63	2.35	-126.97
63	63	77.15	0.00	84.38	297.81	0	196.62	2	-95.14	2	-82.63	2.35	-126.97
63	64	78.60	0.00	36.92	198.73	0	131.21	2	-63.48	2	-55.14	2.35	-84.73
64	64	78.60	0.00	36.92	198.73	0	131.21	2	-63.48	2	-55.14	2.35	-84.73
64	65	80.05	0.00	6.65	168.70	0	111.38	2	-53.89	2	-46.81	2.35	-71.93
65	65	80.05	0.00	6.65	168.70	0	111.38	2	-53.89	2	-46.81	2.35	-71.93
65	66	80.50	0.00	-1.88	168.90	0	111.51	2	-53.96	2	-46.86	2.35	-72.01
66	66	80.50	0.00	-1.88	168.90	0	111.51	2	-53.96	2	-46.86	2.35	-72.01
66	67	81.50	0.00	-19.81	182.32	0	120.37	2	-58.24	2	-50.59	2.35	-77.73
67	1067	81.50	0.00	21.88	182.32	0	120.37	2	-58.24	2	-50.59	2.35	-77.73
67	68	82.50	0.00	1.49	165.51	0	109.27	2	-52.87	2	-45.92	2.35	-70.57
68	68	82.50	0.00	1.49	165.51	0	109.27	2	-52.87	2	-45.92	2.35	-70.57
68	69	83.08	0.00	-9.32	164.44	0	108.57	2	-52.53	2	-45.62	2.35	-70.11
69	69	83.08	0.00	-9.32	164.44	0	108.57	2	-52.53	2	-45.62	2.35	-70.11
69	70	84.65	0.00	-42.62	196.52	0	129.75	2	-52.78	2	-54.53	2.35	-83.79
70	70	84.65	0.00	-42.62	196.52	0	129.75	2	-52.78	2	-54.53	2.35	-83.79
70	71	86.23	0.00	-91.93	306.52	0	202.37	2	-97.92	2	-85.05	2.35	-130.69
71	71	86.23	0.00	-91.93	306.52	0	202.37	2	-97.92	2	-85.05	2.35	-130.69
71	72	87.80	0.00	-114.28	472.13	0	311.71	2	-150.82	2	-130.99	2.35	-201.30
72	72	87.80	-1.00	-114.28	472.13	0	311.41	2	-151.13	2	-131.26	2.35	-201.56
72	73	89.38	-0.85	-95.69	631.32	0	416.56	2	-201.94	2	-175.39	2.35	-269.40
73	73	89.38	-0.85	-95.69	631.32	0	426.84	2	-140.76	2	-122.25	2.35	-208.52
73	74	90.95	-0.63	-70.67	764.23	0	516.83	2	-170.26	2	-147.87	2.35	-252.31
74	74	90.95	0.00	-70.68	764.23	0	517.04	2	-170.05	2	-147.69	2.35	-252.13
74	75	92.53	0.00	-52.04	866.62	0	586.31	2	-192.83	2	-167.48	2.35	-285.91
75	75	92.53	0.00	-52.04	866.62	0	586.31	2	-192.83	2	-167.48	2.35	-285.91
75	76	94.10	0.00	-40.56	938.91	0	635.22	2	-208.92	2	-181.45	2.35	-309.75
76	76	94.10	0.00	-40.56	938.91	0	635.22	2	-208.92	2	-181.45	2.35	-309.75
76	77	95.68	0.00	-22.05	983.50	0	665.39	2	-218.84	2	-190.07	2.35	-324.47

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ+.To

Envolvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To

IPF75B.MZ+

Cof. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
77	77	95.68	0.00	-22.05	983.50	0	655.39	2	-218.84	2	-190.07	2.35	-324.47
77	78	97.25	0.00	-3.07	996.63	0	674.27	2	-221.76	2	-192.61	2.35	-328.80
78	78	97.25	0.00	-3.07	996.63	0	674.27	2	-221.76	2	-192.61	2.35	-328.80
78	79	98.83	0.00	21.69	984.07	0	665.77	2	-218.97	2	-190.18	2.35	-324.65
79	79	98.83	0.00	21.69	984.07	0	665.77	2	-218.97	2	-190.18	2.35	-324.65
79	80	100.40	0.00	40.20	940.05	0	635.99	2	-209.17	2	-181.67	2.35	-310.13
80	80	100.40	0.00	40.20	940.05	0	635.99	2	-209.17	2	-181.67	2.35	-310.13
80	81	101.98	0.00	51.68	868.33	0	587.47	2	-193.21	2	-167.81	2.35	-286.47
81	81	101.98	0.00	51.68	868.33	0	587.47	2	-193.21	2	-167.81	2.35	-286.47
81	82	103.55	0.00	70.32	766.51	0	518.58	2	-170.56	2	-148.13	2.35	-252.88
82	82	103.55	-0.62	70.32	766.51	0	518.58	2	-170.56	2	-148.13	2.35	-252.88
82	83	105.13	-0.85	95.34	634.13	0	428.74	2	-141.38	2	-122.79	2.35	-209.45
83	83	105.13	-0.85	95.34	634.13	0	428.74	2	-141.38	2	-122.79	2.35	-209.45
83	84	106.70	-1.00	113.93	475.54	0	313.66	2	-152.22	2	-132.21	2.35	-203.02
84	84	106.70	0.00	113.93	475.54	0	313.66	2	-152.22	2	-132.21	2.35	-203.02
84	85	108.28	0.00	103.88	300.23	0	198.22	2	-95.91	2	-83.30	2.35	-128.01
85	85	108.28	0.00	103.88	300.23	0	198.22	2	-95.91	2	-83.30	2.35	-128.01
85	86	109.85	0.00	45.31	171.64	0	113.32	2	-54.83	2	-47.62	2.35	-73.18
86	86	109.85	0.00	45.31	171.64	0	113.32	2	-54.83	2	-47.62	2.35	-73.18
86	87	111.43	0.00	12.36	129.72	0	85.65	2	-41.44	2	-35.99	2.35	-55.31
87	87	111.43	0.00	12.36	129.72	0	85.65	2	-41.44	2	-35.99	2.35	-55.31
87	88	112.00	0.00	1.99	128.53	0	84.86	2	-41.06	2	-35.66	2.35	-54.80
88	88	112.00	0.00	1.99	128.53	0	84.86	2	-41.06	2	-35.66	2.35	-54.80
88	89	113.00	0.00	-18.36	141.37	0	93.34	2	-45.16	2	-39.22	2.35	-60.27
89	1089	113.00	0.00	13.49	141.37	0	93.34	2	-45.16	2	-39.22	2.35	-60.27
89	90	114.00	0.00	-6.84	133.43	0	88.09	2	-42.62	2	-37.02	2.35	-56.89
90	90	114.00	0.00	-6.84	133.43	0	88.09	2	-42.62	2	-37.02	2.35	-56.89
90	91	114.58	0.00	-15.24	137.42	0	90.73	2	-43.90	2	-38.13	2.35	-58.59
91	91	114.58	0.00	-15.24	137.42	0	90.73	2	-43.90	2	-38.13	2.35	-58.59
91	92	116.15	0.00	-48.03	184.15	0	121.58	2	-58.83	2	-51.09	2.35	-78.51
92	92	116.15	0.00	-48.03	184.15	0	121.58	2	-58.83	2	-51.09	2.35	-78.51
92	93	117.73	0.00	-106.11	315.07	0	208.02	2	-100.65	2	-87.42	2.35	-134.33
93	93	117.73	0.00	-106.11	315.07	0	208.02	2	-100.65	2	-87.42	2.35	-134.33
93	94	119.30	0.00	-109.24	488.23	0	322.34	2	-155.97	2	-135.46	2.35	-208.16
94	94	119.30	-0.96	-109.24	488.23	0	322.05	2	-156.26	2	-135.72	2.35	-208.42
94	95	120.88	-0.81	-90.66	639.47	0	421.95	2	-204.53	2	-177.64	2.35	-272.86
95	95	120.88	-0.81	-90.66	639.47	0	421.95	2	-204.53	2	-177.64	2.35	-272.86
95	96	122.45	-0.57	-65.63	764.46	0	517.01	2	-170.29	2	-147.90	2.35	-252.36
96	96	122.45	0.00	-65.63	764.46	0	517.01	2	-170.29	2	-147.90	2.35	-252.36
96	97	124.03	0.00	-47.00	858.89	0	581.08	2	-191.11	2	-165.99	2.35	-283.36
97	97	124.03	0.00	-47.00	858.89	0	581.08	2	-191.11	2	-165.99	2.35	-283.36
97	98	125.60	0.00	-35.51	923.26	0	624.63	2	-205.44	2	-178.43	2.35	-304.59
98	98	125.60	0.00	-35.51	923.26	0	624.63	2	-205.44	2	-178.43	2.35	-304.59
98	99	127.18	0.00	-17.01	959.89	0	649.41	2	-213.59	2	-185.51	2.35	-316.68
99	99	127.18	0.00	-17.01	959.89	0	649.41	2	-213.59	2	-185.51	2.35	-316.68
100	100	128.75	0.00	1.97	965.09	0	652.93	2	-214.74	2	-186.51	2.35	-318.39
100	100	128.75	0.00	1.97	965.09	0	652.93	2	-214.74	2	-186.51	2.35	-318.39
100	101	130.33	0.00	26.73	944.57	0	639.05	2	-210.18	2	-182.55	2.35	-311.62
101	101	130.33	0.00	26.73	944.57	0	639.05	2	-210.18	2	-182.55	2.35	-311.62
101	102	131.90	0.00	45.25	892.60	0	603.89	2	-198.61	2	-172.50	2.35	-294.48
102	102	131.90	0.00	45.25	892.60	0	603.89	2	-198.61	2	-172.50	2.35	-294.48
102	103	133.48	0.00	56.71	812.96	0	550.01	2	-180.89	2	-157.11	2.35	-268.20
103	103	133.48	0.00	56.71	812.96	0	550.01	2	-180.89	2	-157.11	2.35	-268.20
103	104	135.05	0.00	75.37	703.17	0	475.73	2	-156.46	2	-135.89	2.35	-231.98
104	104	135.05	-0.67	75.37	703.17	0	475.51	2	-156.68	2	-136.08	2.35	-232.17
104	105	136.63	-0.88	100.37	562.94	0	380.57	2	-125.55	2	-109.04	2.35	-185.97
105	105	136.63	-0.88	100.37	562.94	0	371.40	2	-180.10	2	-156.43	2.35	-240.25
105	106	138.20	-1.06	118.97	396.35	0	261.36	2	-126.94	2	-110.25	2.35	-169.27
106	106	138.20	0.00	118.97	396.35	0	261.68	2	-126.62	2	-109.97	2.35	-168.99
106	107	139.78	0.00	87.90	235.70	0	155.62	2	-75.30	2	-65.40	2.35	-100.49
107	107	139.78	0.00	87.90	235.70	0	155.62	2	-75.30	2	-65.40	2.35	-100.49
107	108	141.35	0.00	31.26	130.68	0	86.28	2	-41.75	2	-36.26	2.35	-55.72
108	108	141.35	0.00	31.26	130.68	0	86.28	2	-41.75	2	-36.26	2.35	-55.72
108	109	142.93	0.00	8.83	102.56	0	67.71	2	-32.76	2	-28.46	2.35	-43.73
109	109	142.93	0.00	8.83	102.56	0	67.71	2	-32.76	2	-28.46	2.35	-43.73
109	110	143.50	0.00	-14.54	103.53	0	68.35	2	-33.07	2	-28.72	2.35	-44.14
110	110	143.50	0.00	-14.54	103.53	0	68.35	2	-33.07	2	-28.72	2.35	-44.14
110	111	144.50	0.00	-20.03	118.78	0	78.42	2	-37.94	2	-32.96	2.35	-50.64
111	111	144.50	0.00	5.05	118.78	0	78.42	2	-37.94	2	-32.96	2.35	-50.64
111	112	145.50	0.00	-7.75	120.44	0	79.52	2	-38.47	2	-33.42	2.35	-51.35
112	112	145.50	0.00	-7.75	120.44	0	79.52	2	-38.47	2	-33.42	2.35	-51.35
112	113	145.68	0.00	-16.78	122.50	0	80.88	2	-39.13	2	-33.99	2.35	-52.23
113	113	145.68	0.00	-16.78	122.50	0	80.88	2	-39.13	2	-33.99	2.35	-52.23
113	114	146.85	0.00	-43.23	155.89	0	102.92	2	-49.80	2	-43.25	2.35	-66.47
114	114	146.85	0.00	-43.23	155.89	0	102.92	2	-49.80	2	-43.25	2.35	-66.47
114	115	148.03	0.00	-103.28	238.61	0	157.54	2	-76.22	2	-66.20	2.35	-101.73

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ+.To

Envolvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To

IPF75B.MZ+

Cof. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
115	115	148.03	0.00	-103.28	238.61	0	157.54	2	-76.22	2	-66.20	2.35	-101.73
115	116	149.20	0.00	-88.27	354.43	0	234.01	2	-113.22	2	-98.34	2.35	-151.11
116	116	149.20	-1.04	-88.27	354.43	0	233.69	2	-113.54	2	-98.62	2.35	-151.39
116	117	150.38	-0.88	-74.31	454.99	0	300.13	2	-145.62	2	-126.47	2.35	-194.22
117	117	150.38	-0.88	-74.31	454.99	0	307.53	2	-101.53	2	-88.18	2.35	-150.36
117	118	151.55	-0.71	-60.47	538.48	0	364.07	2	-120.05	2	-104.27	2.35	-177.85
118	118	151.55	0.00	-60.47	538.48	0	364.31	2	-119.82	2	-104.07	2.35	-177.65
118	119	152.73	0.00	-46.82	605.30	0	409.51	2	-134.69	2	-116.98	2.35	-199.69
119	119	152.73	0.00	-46.82	605.30	0	409.51	2	-134.69	2	-116.98	2.35	-199.69
119	120	153.90	0.00	-39.06	654.79	0	443.00	2	-145.70	2	-126.54	2.35	-216.02
120	120	153.90	0.00	-39.06	654.79	0	443.00	2	-145.70	2	-126.54	2.35	-216.02
120	121	155.08	0.00	-19.81	689.70	0	466.62	2	-153.47	2	-133.29	2.35	-227.54
121	121	155.08	0.00	-19.81	689.70	0	466.62	2	-153.47	2	-133.29	2.35	-227.54
121	122	156.25	0.00	-11.57	708.22	0	479.15	2	-157.59	2	-136.87	2.35	-233.65
122	122	156.25	0.00	-11.57	708.22	0	479.15	2	-157.59	2	-136.87	2.35	-233.65
122	123	157.43	0.00	8.48	712.05	0	481.74	2	-158.44	2	-137.61	2.35	-234.91
123	123	157.43	0.00	8.48	712.05	0	481.74	2	-158.44	2	-137.61	2.35	-234.91
123	124	158.60	0.00	15.44	697.41	0	471.83	2	-155.18	2	-134.78	2.35	-230.08
124	124	158.60	0.00	15.44	697.41	0	471.83	2	-155.18	2	-134.78	2.35	-230.08
124	125	159.78	0.00	29.28	667.14	0	451.35	2	-148.45	2	-128.93	2.35	-220.10
125	125	159.78	0.00	29.28	667.14	0	451.35	2	-148.45	2	-128.93	2.35	-220.10
125	126	160.95	0.00	42.93	621.64	0	420.57	2	-138.32	2	-120.14	2.35	-205.08
126	126	160.95	0.00	42.93	621.64	0	420.57	2	-138.32	2	-120.14	2.35	-205.08
126	127	162.13	0.00	63.48	559.05	0	378.22	2	-124.40	2	-108.04	2.35	-184.44
127	127	162.13	0.00	63.48	559.05	0	378.22	2	-124.40	2	-108.04	2.35	-184.44
127	128	163.30	0.00	77.44	479.13	0	324.15	2	-106.61	2	-92.60	2.35	-158.07
128	128	163.30	0.00	77.44	479.13	0	324.15	2	-106.61	2	-92.60	2.35	-158.07
128	129	164.48	0.00	91.28	383.87	0	259.71	2	-85.42	2	-74.19	2.35	-126.64
129	129	164.48	0.00	91.28	383.87	0	259.71	2	-85.42	2	-74.19	2.35	-126.64
129	130	165.65	0.00	104.93	274.18	0	185.50	2	-61.01	2	-52.99	2.35	-90.45
130	130	165.65	0.00	104.93	274.18	0	185.50	2	-61.01	2	-52.99	2.35	-90.45
130	131	166.83	0.00	118.63	146.29	0	98.97	2	-32.55	2	-28.27	2.35	-48.26
131	131	166.83	0.00	118.63	146.29	0	98.97	2	-32.55	2	-28.27	2.35	-48.26
131	132	167.00	0.00	120.76	125.74	0	85.07	2	-27.98	2	-24.30	2.35	-41.48
132	132	167.00	0.00	120.76	125.74	0	85.07	2	-27.98	2	-24.30	2.35	-41.48
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ+.To

Involvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To

IPF75B.MZ+

Coef. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
77	77	95.68	0.00	-22.05	983.50	0	665.39	2	-218.84	2	-190.07	2.35	-324.47
77	78	97.25	0.00	-3.07	996.63	0	674.27	2	-221.76	2	-192.61	2.35	-328.80
78	78	97.25	0.00	-3.07	996.63	0	674.27	2	-221.76	2	-192.61	2.35	-328.80
78	79	98.83	0.00	21.69	984.07	0	665.77	2	-218.97	2	-190.18	2.35	-324.65
79	79	98.83	0.00	21.69	984.07	0	665.77	2	-218.97	2	-190.18	2.35	-324.65
79	80	100.40	0.00	40.20	940.05	0	635.99	2	-209.17	2	-181.67	2.35	-310.13
80	80	100.40	0.00	40.20	940.05	0	635.99	2	-209.17	2	-181.67	2.35	-310.13
80	81	101.98	0.00	51.68	868.33	0	587.47	2	-193.21	2	-167.81	2.35	-286.47
81	81	101.98	0.00	51.68	868.33	0	587.47	2	-193.21	2	-167.81	2.35	-286.47
81	82	103.55	0.00	70.32	766.51	0	518.58	2	-170.56	2	-148.13	2.35	-252.88
82	82	103.55	-0.62	70.32	766.51	0	518.58	2	-170.56	2	-148.13	2.35	-252.88
82	83	105.13	-0.85	95.34	634.13	0	428.74	2	-141.38	2	-122.79	2.35	-209.45
83	83	105.13	-0.85	95.34	634.13	0	428.74	2	-141.38	2	-122.79	2.35	-209.45
83	84	106.70	-1.00	113.93	475.54	0	313.66	2	-152.22	2	-132.21	2.35	-203.02
84	84	106.70	0.00	113.93	475.54	0	313.66	2	-152.22	2	-132.21	2.35	-203.02
84	85	108.28	0.00	103.88	300.23	0	198.22	2	-95.91	2	-83.30	2.35	-128.01
85	85	108.28	0.00	103.88	300.23	0	198.22	2	-95.91	2	-83.30	2.35	-128.01
85	86	109.85	0.00	45.31	171.64	0	113.32	2	-54.83	2	-47.62	2.35	-73.18
86	86	109.85	0.00	45.31	171.64	0	113.32	2	-54.83	2	-47.62	2.35	-73.18
86	87	111.43	0.00	12.36	129.72	0	85.65	2	-41.44	2	-35.99	2.35	-55.31
87	87	111.43	0.00	12.36	129.72	0	85.65	2	-41.44	2	-35.99	2.35	-55.31
87	88	112.00	0.00	1.99	128.53	0	84.86	2	-41.06	2	-35.66	2.35	-54.80
88	88	112.00	0.00	1.99	128.53	0	84.86	2	-41.06	2	-35.66	2.35	-54.80
88	89	113.00	0.00	-18.36	141.37	0	93.34	2	-45.16	2	-39.22	2.35	-60.27
89	1089	113.00	0.00	13.49	141.37	0	93.34	2	-45.16	2	-39.22	2.35	-60.27
89	90	114.00	0.00	-6.84	133.43	0	88.09	2	-42.62	2	-37.02	2.35	-56.89
90	90	114.00	0.00	-6.84	133.43	0	88.09	2	-42.62	2	-37.02	2.35	-56.89
90	91	114.58	0.00	-15.24	137.42	0	90.73	2	-43.90	2	-38.13	2.35	-58.59
91	91	114.58	0.00	-15.24	137.42	0	90.73	2	-43.90	2	-38.13	2.35	-58.59
91	92	116.15	0.00	-48.03	184.15	0	121.58	2	-58.83	2	-51.09	2.35	-78.51
92	92	116.15	0.00	-48.03	184.15	0	121.58	2	-58.83	2	-51.09	2.35	-78.51
92	93	117.73	0.00	-106.11	315.07	0	208.02	2	-100.65	2	-87.42	2.35	-134.33
93	93	117.73	0.00	-106.11	315.07	0	208.02	2	-100.65	2	-87.42	2.35	-134.33
93	94	119.30	0.00	-109.24	488.23	0	322.34	2	-155.97	2	-135.46	2.35	-208.16
94	94	119.30	-0.96	-109.24	488.23	0	322.34	2	-155.97	2	-135.46	2.35	-208.16
94	95	120.88	-0.81	-90.66	639.47	0	421.95	2	-204.53	2	-177.64	2.35	-272.86
95	95	120.88	-0.81	-90.66	639.47	0	421.95	2	-204.53	2	-177.64	2.35	-272.86
95	96	122.45	-0.57	-65.63	764.46	0	517.01	2	-170.29	2	-147.90	2.35	-252.36
96	96	122.45	0.00	-65.63	764.46	0	517.01	2	-170.29	2	-147.90	2.35	-252.36
96	97	124.03	0.00	-47.00	858.89	0	581.08	2	-191.11	2	-165.99	2.35	-283.36
97	97	124.03	0.00	-47.00	858.89	0	581.08	2	-191.11	2	-165.99	2.35	-283.36
97	98	125.60	0.00	-35.51	923.26	0	624.63	2	-205.44	2	-178.43	2.35	-304.59
98	98	125.60	0.00	-35.51	923.26	0	624.63	2	-205.44	2	-178.43	2.35	-304.59
98	99	127.18	0.00	-17.01	959.89	0	649.41	2	-213.59	2	-185.51	2.35	-316.68
99	99	127.18	0.00	-17.01	959.89	0	649.41	2	-213.59	2	-185.51	2.35	-316.68
99	100	128.75	0.00	1.97	965.09	0	652.93	2	-214.74	2	-186.51	2.35	-318.39
100	100	128.75	0.00	1.97	965.09	0	652.93	2	-214.74	2	-186.51	2.35	-318.39
100	101	130.33	0.00	26.73	944.57	0	639.05	2	-210.18	2	-182.55	2.35	-311.62
101	101	130.33	0.00	26.73	944.57	0	639.05	2	-210.18	2	-182.55	2.35	-311.62
101	102	131.90	0.00	45.25	892.60	0	603.89	2	-198.61	2	-172.50	2.35	-294.48
102	102	131.90	0.00	45.25	892.60	0	603.89	2	-198.61	2	-172.50	2.35	-294.48
102	103	133.48	0.00	56.71	812.96	0	550.01	2	-180.89	2	-157.11	2.35	-268.20
103	103	133.48	0.00	56.71	812.96	0	550.01	2	-180.89	2	-157.11	2.35	-268.20
103	104	135.05	0.00	75.37	703.17	0	475.73	2	-156.46	2	-135.89	2.35	-231.98
104	104	135.05	-0.67	75.37	703.17	0	475.73	2	-156.46	2	-135.89	2.35	-231.98
104	105	136.63	-0.88	100.37	562.94	0	380.57	2	-125.55	2	-109.04	2.35	-185.97
105	105	136.63	-0.88	100.37	562.94	0	380.57	2	-125.55	2	-109.04	2.35	-185.97
105	106	138.20	-1.06	118.97	396.35	0	261.36	2	-126.94	2	-110.25	2.35	-169.27
106	106	138.20	0.00	118.97	396.35	0	261.36	2	-126.94	2	-110.25	2.35	-169.27
106	107	139.78	0.00	87.90	235.70	0	155.62	2	-75.30	2	-65.40	2.35	-100.49
107	107	139.78	0.00	87.90	235.70	0	155.62	2	-75.30	2	-65.40	2.35	-100.49
107	108	141.35	0.00	31.26	130.68	0	86.28	2	-41.75	2	-35.26	2.35	-55.72
108	108	141.35	0.00	31.26	130.68	0	86.28	2	-41.75	2	-35.26	2.35	-55.72
108	109	142.93	0.00	8.83	102.56	0	67.71	2	-32.76	2	-28.46	2.35	-43.73
109	109	142.93	0.00	8.83	102.56	0	67.71	2	-32.76	2	-28.46	2.35	-43.73
109	110	143.50	0.00	-14.54	103.53	0	68.35	2	-33.07	2	-28.72	2.35	-44.14
110	110	143.50	0.00	-14.54	103.53	0	68.35	2	-33.07	2	-28.72	2.35	-44.14
110	111	144.50	0.00	-20.03	118.78	0	78.42	2	-37.94	2	-32.96	2.35	-50.64
111	111	144.50	0.00	-20.03	118.78	0	78.42	2	-37.94	2	-32.96	2.35	-50.64
111	112	145.50	0.00	-7.75	120.44	0	79.52	2	-38.47	2	-33.42	2.35	-51.35
112	112	145.50	0.00	-7.75	120.44	0	79.52	2	-38.47	2	-33.42	2.35	-51.35
112	113	145.68	0.00	-16.78	122.50	0	80.88	2	-39.13	2	-33.99	2.35	-52.23
113	113	145.68	0.00	-16.78	122.50	0	80.88	2	-39.13	2	-33.99	2.35	-52.23
113	114	146.85	0.00	-43.23	155.89	0	102.92	2	-49.80	2	-43.25	2.35	-66.47
114	114	146.85	0.00	-43.23	155.89	0	102.92	2	-49.80	2	-43.25	2.35	-66.47
114	115	148.03	0.00	-103.28	238.61	0	157.54	2	-76.22	2	-66.20	2.35	-101.73

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ+.To

Involvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To

IPF75B.MZ+

Coef. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
115	115	148.03	0.00	-103.28	238.61	0	157.54	2	-76.22	2	-66.20	2.35	-101.73
115	116	149.20	0.00	-88.27	354.43	0	234.01	2	-113.22	2	-98.34	2.35	-151.11
116	116	149.20	-1.04	-88.27	354.43	0	233.69	2	-113.54	2	-98.62	2.35	-151.39
116	117	150.38	-0.88	-74.31	454.99	0	300.13	2	-145.62	2	-126.47	2.35	-194.22
117	117	150.38	-0.88	-74.31	454.99	0	307.53	2	-101.53	2	-88.18	2.35	-150.36
117	118	151.55	-0.71	-60.47	538.48	0	364.07	2	-120.05	2	-104.27	2.35	-177.85
118	118	151.55	0.00	-60.47	538.48	0	364.31	2	-119.82	2	-104.07	2.35	-177.65
118	119	152.73	0.00	-46.82	605.30	0	409.51	2	-134.69	2	-116.98	2.35	-199.69
119	119	152.73	0.00	-46.82	605.30	0	409.51	2	-134.69	2	-116.98	2.35	-199.69
119	120	153.90	0.00	-39.06	654.79	0	443.00	2	-145.70	2	-126.54	2.35	-216.02
120	120	153.90	0.00	-39.06	654.79	0	443.00	2	-145.70	2	-126.54	2.35	-216.02
120	121	155.08	0.00	-19.81	689.70	0	466.62	2	-153.47	2	-133.29	2.35	-227.54
121	121	155.08	0.00	-19.81	689.70	0	466.62	2	-153.47	2	-133.29	2.35	-227.54
121	122	156.25	0.00	-11.57	708.22	0	479.15	2	-157.59	2	-136.87	2.35	-233.65
122	122	156.25	0.00	-11.57	708.22	0	479.15	2	-157.59	2	-136.87	2.35	-233.65
122	123	157.43	0.00	8.48	712.05	0	481.74	2	-158.44	2	-137.61	2.35	-234.91
123	123	157.43	0.00	8.48	712.05	0	481.74	2	-158.44	2	-137.61	2.35	-234.91
123	124	158.60	0.00	15.44	697.41	0	471.83	2	-155.18	2	-134.78	2.35	-230.08
124	124	158.60	0.00	15.44	697.41	0	471.83	2	-155.18	2	-134.78	2.35	-230.08
124	125	159.78	0.00	29.28	667.14	0	451.35	2	-148.45	2	-128.93	2.35	-220.10
125	125	159.78	0.00	29.28	667.14	0	451.35	2	-148.45	2	-128.93	2.35	-220.10
125	126	160.95	0.00	42.93	621.64	0	420.57	2	-138.32	2	-120.14	2.35	-205.08
126	126	160.95	0.00	42.93	621.64	0	420.57	2	-138.32	2	-120.14	2.35	-205.08
126	127	162.13	0.00	63.48	559.05	0	378.22	2	-124.40	2	-108.04	2.35	-184.44
127	127	162.13	0.00	63.48	559.05	0	378.22	2	-124.40	2	-108.04	2.35	-184.44
127	128	163.30	0.00	77.44	479.13	0	324.15	2	-106.61	2	-92.60	2.35	-158.07
128	128	163.30	0.00	77.44	479.13	0	324.15	2	-106.61	2	-92.60	2.35	-158.07
128	129	164.48	0.00	91.28	383.87	0	259.71	2	-85.42	2	-74.19	2.35	-126.64
129	129	164.48	0.00	91.28	383.87	0	259.71	2	-85.42	2	-74.19	2.35	-126.64
129	130	165.65	0.00	104.93	274.18	0	185.50	2	-61.01	2	-52.99	2.35	-90.45
130	130	165.65	0.00	104.93	274.18	0	185.50	2	-61.01	2	-52.99	2.35	-90.45
130	131	166.83	0.00	118.63	146.29	0	98.97	2	-32.55	2	-28.27	2.35	-48.26
131	131	166.83	0.00	118.63	146.29	0	98.97	2	-32.55	2	-28.27	2.35	-48.26
131	132	167.00	0.00	120.76	125.74	0	85.07	2	-27.98	2	-24.30	2.35	-41.48
132	132	167.00	0.00	120.76	125.74	0	85.07	2	-27.98	2	-24.30	2.35	-41.48
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ+.To

Involvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To

IPF75B.MZ+

Conf. etc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
77	77	95.68	0.00	-22.05	983.50	0	665.39	2	-218.84	2	-190.07	2.35	-324.47
77	78	97.25	0.00	-3.07	996.63	0	674.27	2	-221.76	2	-192.61	2.35	-328.80
78	78	97.25	0.00	-3.07	996.63	0	674.27	2	-221.76	2	-192.61	2.35	-328.80
78	79	98.83	0.00	21.69	984.07	0	665.77	2	-218.97	2	-190.18	2.35	-324.65
79	79	98.83	0.00	21.69	984.07	0	665.77	2	-218.97	2	-190.18	2.35	-324.65
79	80	100.40	0.00	40.20	940.05	0	635.99	2	-209.17	2	-181.67	2.35	-310.13
80	80	100.40	0.00	40.20	940.05	0	635.99	2	-209.17	2	-181.67	2.35	-310.13
80	81	101.98	0.00	51.68	868.33	0	587.47	2	-193.21	2	-167.81	2.35	-286.47
81	81	101.98	0.00	51.68	868.33	0	587.47	2	-193.21	2	-167.81	2.35	-286.47
81	82	103.55	0.00	70.32	766.51	0	518.58	2	-170.56	2	-148.13	2.35	-252.88
82	82	103.55	-0.62	70.32	766.51	0	518.58	2	-170.56	2	-148.13	2.35	-252.88
82	83	105.13	-0.85	95.34	634.13	0	428.74	2	-141.38	2	-122.79	2.35	-209.45
83	83	105.13	-0.85	95.34	634.13	0	428.74	2	-141.38	2	-122.79	2.35	-209.45
83	84	106.70	-1.00	113.93	475.54	0	313.66	2	-152.22	2	-132.21	2.35	-203.02
84	84	106.70	0.00	113.93	475.54	0	313.66	2	-152.22	2	-132.21	2.35	-203.02
84	85	108.28	0.00	103.88	300.23	0	198.22	2	-95.91	2	-83.30	2.35	-128.01
85	85	108.28	0.00	103.88	300.23	0	198.22	2	-95.91	2	-83.30	2.35	-128.01
85	86	109.85	0.00	45.31	171.64	0	113.32	2	-54.83	2	-47.62	2.35	-73.18
86	86	109.85	0.00	45.31	171.64	0	113.32	2	-54.83	2	-47.62	2.35	-73.18
86	87	111.43	0.00	12.36	129.72	0	85.65	2	-41.44	2	-35.99	2.35	-55.31
87	87	111.43	0.00	12.36	129.72	0	85.65	2	-41.44	2	-35.99	2.35	-55.31
87	88	112.00	0.00	1.99	128.53	0	84.86	2	-41.06	2	-35.66	2.35	-54.80
88	88	112.00	0.00	1.99	128.53	0	84.86	2	-41.06	2	-35.66	2.35	-54.80
88	89	113.00	0.00	-18.36	141.37	0	93.34	2	-45.16	2	-39.22	2.35	-60.27
89	1089	113.00	0.00	13.49	141.37	0	93.34	2	-45.16	2	-39.22	2.35	-60.27
89	90	114.00	0.00	-6.84	133.43	0	88.09	2	-42.62	2	-37.02	2.35	-56.89
90	90	114.00	0.00	-6.84	133.43	0	88.09	2	-42.62	2	-37.02	2.35	-56.89
90	91	114.58	0.00	-15.24	137.42	0	90.73	2	-43.90	2	-38.13	2.35	-58.59
91	91	114.58	0.00	-15.24	137.42	0	90.73	2	-43.90	2	-38.13	2.35	-58.59
91	92	116.15	0.00	-48.03	184.15	0	121.58	2	-58.83	2	-51.09	2.35	-78.51
92	92	116.15	0.00	-48.03	184.15	0	121.58	2	-58.83	2	-51.09	2.35	-78.51
92	93	117.73	0.00	-106.11	315.07	0	208.02	2	-100.65	2	-87.42	2.35	-134.33
93	93	117.73	0.00	-106.11	315.07	0	208.02	2	-100.65	2	-87.42	2.35	-134.33
93	94	119.30	0.00	-109.24	488.23	0	322.34	2	-155.97	2	-135.46	2.35	-208.16
94	94	119.30	-0.96	-109.24	488.23	0	322.05	2	-156.26	2	-135.72	2.35	-208.42
94	95	120.88	-0.81	-90.66	639.47	0	421.95	2	-204.53	2	-177.64	2.35	-272.86
95	95	120.88	-0.81	-90.66	639.47	0	421.95	2	-204.53	2	-177.64	2.35	-272.86
95	96	122.45	-0.57	-65.63	764.46	0	517.01	2	-170.29	2	-147.90	2.35	-252.36
96	96	122.45	0.00	-65.63	764.46	0	517.01	2	-170.29	2	-147.90	2.35	-252.36
96	97	124.03	0.00	-47.00	858.89	0	581.08	2	-191.11	2	-165.99	2.35	-283.36
97	97	124.03	0.00	-47.00	858.89	0	581.08	2	-191.11	2	-165.99	2.35	-283.36
97	98	125.60	0.00	-35.51	923.26	0	624.63	2	-205.44	2	-178.43	2.35	-304.59
98	98	125.60	0.00	-35.51	923.26	0	624.63	2	-205.44	2	-178.43	2.35	-304.59
98	99	127.18	0.00	-17.01	959.89	0	649.41	2	-213.59	2	-185.51	2.35	-316.68
99	99	127.18	0.00	-17.01	959.89	0	649.41	2	-213.59	2	-185.51	2.35	-316.68
99	100	128.75	0.00	1.97	965.09	0	652.93	2	-214.74	2	-186.51	2.35	-318.39
100	100	128.75	0.00	1.97	965.09	0	652.93	2	-214.74	2	-186.51	2.35	-318.39
100	101	130.33	0.00	26.73	944.57	0	639.05	2	-210.18	2	-182.55	2.35	-311.62
101	101	130.33	0.00	26.73	944.57	0	639.05	2	-210.18	2	-182.55	2.35	-311.62
101	102	131.90	0.00	45.25	892.60	0	603.89	2	-198.61	2	-172.50	2.35	-294.48
102	102	131.90	0.00	45.25	892.60	0	603.89	2	-198.61	2	-172.50	2.35	-294.48
102	103	133.48	0.00	56.71	812.96	0	550.01	2	-180.89	2	-157.11	2.35	-268.20
103	103	133.48	0.00	56.71	812.96	0	550.01	2	-180.89	2	-157.11	2.35	-268.20
103	104	135.05	0.00	75.37	703.17	0	475.73	2	-156.46	2	-135.89	2.35	-231.98
104	104	135.05	-0.67	75.37	703.17	0	475.73	2	-156.46	2	-135.89	2.35	-231.98
104	105	136.63	-0.88	100.37	562.94	0	380.57	2	-125.55	2	-109.04	2.35	-185.97
105	105	136.63	-0.88	100.37	562.94	0	380.57	2	-125.55	2	-109.04	2.35	-185.97
105	106	138.20	-1.06	118.97	396.35	0	261.36	2	-126.94	2	-110.25	2.35	-169.27
106	106	138.20	0.00	118.97	396.35	0	261.36	2	-126.94	2	-110.25	2.35	-169.27
106	107	139.78	0.00	87.90	235.70	0	155.62	2	-75.30	2	-65.40	2.35	-100.49
107	107	139.78	0.00	87.90	235.70	0	155.62	2	-75.30	2	-65.40	2.35	-100.49
107	108	141.35	0.00	31.26	130.68	0	86.28	2	-41.75	2	-36.26	2.35	-55.72
108	108	141.35	0.00	31.26	130.68	0	86.28	2	-41.75	2	-36.26	2.35	-55.72
108	109	142.93	0.00	8.83	102.56	0	67.71	2	-32.76	2	-28.46	2.35	-43.73
109	109	142.93	0.00	8.83	102.56	0	67.71	2	-32.76	2	-28.46	2.35	-43.73
109	110	143.50	0.00	-14.54	103.53	0	68.35	2	-33.07	2	-28.72	2.35	-44.14
110	110	143.50	0.00	-14.54	103.53	0	68.35	2	-33.07	2	-28.72	2.35	-44.14
110	111	144.50	0.00	-20.03	118.78	0	78.42	2	-37.94	2	-32.96	2.35	-50.64
111	111	144.50	0.00	-20.03	118.78	0	78.42	2	-37.94	2	-32.96	2.35	-50.64
111	112	145.50	0.00	-7.75	120.44	0	79.52	2	-38.47	2	-33.42	2.35	-51.35
112	112	145.50	0.00	-7.75	120.44	0	79.52	2	-38.47	2	-33.42	2.35	-51.35
112	113	145.68	0.00	-16.78	122.50	0	80.88	2	-39.13	2	-33.99	2.35	-52.23
113	113	145.68	0.00	-16.78	122.50	0	80.88	2	-39.13	2	-33.99	2.35	-52.23
113	114	146.85	0.00	-43.23	155.89	0	102.92	2	-49.80	2	-43.25	2.35	-66.47
114	114	146.85	0.00	-43.23	155.89	0	102.92	2	-49.80	2	-43.25	2.35	-66.47
114	115	148.03	0.00	-103.28	238.61	0	157.54	2	-76.22	2	-66.20	2.35	-101.73

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ+.To

Involvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To

IPF75B.MZ+

Conf. etc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
115	115	148.03	0.00	-103.28	238.61	0	157.54	2	-76.22	2	-66.20	2.35	-101.73
115	116	149.20	0.00	-88.27	354.43	0	234.01	2	-113.22	2	-98.34	2.35	-151.11
116	116	149.20	-1.04	-88.27	354.43	0	233.69	2	-113.54	2	-98.62	2.35	-151.39
116	117	150.38	-0.88	-74.31	454.99	0	300.13	2	-145.62	2	-126.47	2.35	-194.22
117	117	150.38	-0.88	-74.31	454.99	0	307.53	2	-101.53	2	-88.18	2.35	-150.36
117	118	151.55	-0.71	-60.47	538.48	0	364.07	2	-120.05	2	-104.27	2.35	-177.85
118	118	151.55	0.00	-60.47	538.48	0	364.31	2	-119.82	2	-104.07	2.35	-177.65
118	119	152.73	0.00	-46.82	605.30	0	409.51	2	-134.69	2	-116.98	2.35	-199.69
119	119	152.73	0.00	-46.82	605.30	0	409.51	2	-134.69	2	-116.98	2.35	-199.69
119	120	153.90	0.00	-39.06	654.79	0	443.00	2	-145.70	2	-126.54	2.35	-216.02
120	120	153.90	0.00	-39.06	654.79	0	443.00	2	-145.70	2	-126.54	2.35	-216.02
120	121	155.08	0.00	-19.81	689.70	0	466.62	2	-153.47	2	-133.29	2.35	-227.54
121	121	155.08	0.00	-19.81	689.70	0	466.62	2	-153.47	2	-133.29	2.35	-227.54
121	122	156.25	0.00	-11.57	708.22	0	479.15	2	-157.59	2	-136.87	2.35	-233.65
122	122	156.25	0.00	-11.57	708.22	0	479.15	2	-157.59	2	-136.87	2.35	-233.65
122	123	157.43	0.00	8.48	712.05	0	481.74	2	-158.44	2	-137.61	2.35	-234.91
123	123	157.43	0.00	8.48	712.05	0	481.74	2	-158.44	2	-137.61	2.35	-234.91
123	124	158.60	0.00	15.44	697.41	0	471.83	2	-155.18	2	-134.78	2.35	-230.08
124	124	158.60	0.00	15.44	697.41	0	471.83	2	-155.18	2	-134.78	2.35	-230.08
124	125	159.78	0.00	29.28	667.14	0	451.35	2	-148.45	2	-128.93	2.35	-220.10
125	125	159.78	0.00	29.28	667.14	0	451.35	2	-148.45	2	-128.93	2.35	-220.10
125	126	160.95	0.00	42.93	621.64	0	420.57	2	-138.32	2	-120.14	2.35	-205.08
126	126	160.95	0.00	42.93	621.64	0	420.57	2	-138.32	2	-120.14	2.35	-205.08
126	127	162.13	0.00	63.48	559.05	0	378.22	2	-124.40	2	-108.04	2.35	-184.44
127	127	162.13	0.00	63.48	559.05	0	378.22	2	-124.40	2	-108.04	2.35	-184.44
127	128	163.30	0.00	77.44	479.13	0	324.15	2	-106.61	2	-92.60	2.35	-158.07
128	128	163.30	0.00	77.44	479.13	0	324.15	2	-106.61	2	-92.60	2.35	-158.07
128	129	164.48	0.00	91.28	383.87	0	259.71	2	-85.42	2	-74.19	2.35	-126.64
129	129	164.48	0.00	91.28	383.87	0	259.71	2	-85.42	2	-74.19	2.35	-126.64
129	130	165.65	0.00	104.93	274.18	0	185.50	2	-61.01	2	-52.99	2.35	-90.45
130	130	165.65	0.00	104.93	274.18	0	185.50	2	-61.01	2	-52.99	2.35	-90.45
130	131	166.83	0.00	118.53	146.29	0	98.97	2	-32.55	2	-28.27	2.35	-48.26
131	131	166.83	0.00	118.53	146.29	0	98.97	2	-32.55	2	-28.27	2.35	-48.26
131	132	167.00	0.00	120.76	125.74	0	85.07	2	-27.98	2	-24.30	2.35	-41.48
132	132	167.00	0.00	120.76	125.74	0	85.07	2	-27.98	2	-24.30	2.35	-41.48
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

hipótesis de cálculo:

PF75B.ENV_TREN_GENERICO.MZ+.To

Envolvente de tren de cargas plano genérico.MZ+). Tensiones a tiempo To

1. IJPF75B.MZ-

ref. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	20.81	-20.81	0	-14.08	2	4.63	2	4.02	2.35	5.87
2	2	1.00	0.00	20.81	-20.81	0	-14.08	2	4.63	2	4.02	2.35	6.87
2	3	1.18	0.00	20.81	-24.45	0	-16.54	2	5.44	2	4.73	2.35	8.07
3	3	1.18	0.00	20.81	-24.45	0	-16.54	2	5.44	2	4.73	2.35	8.07
3	4	2.35	0.00	20.81	-48.90	0	-33.08	2	10.88	2	9.45	2.35	16.13
4	4	2.35	0.00	20.81	-48.90	0	-33.08	2	10.88	2	9.45	2.35	16.13
4	5	3.53	0.00	20.81	-73.36	0	-49.63	2	16.32	2	14.18	2.35	24.20
5	5	3.53	0.00	20.81	-73.36	0	-49.63	2	16.32	2	14.18	2.35	24.20
5	6	4.70	0.00	20.81	-97.82	0	-66.18	2	21.77	2	18.90	2.35	32.27
6	6	4.70	0.00	20.81	-97.82	0	-66.18	2	21.77	2	18.90	2.35	32.27
6	7	5.88	0.00	20.81	-122.27	0	-82.72	2	27.21	2	23.63	2.35	40.34
7	7	5.88	0.00	20.81	-122.27	0	-82.72	2	27.21	2	23.63	2.35	40.34
7	8	7.05	0.00	20.81	-146.72	0	-99.26	2	32.65	2	28.35	2.35	48.40
8	8	7.05	0.00	20.81	-146.72	0	-99.26	2	32.65	2	28.35	2.35	48.40
8	9	8.23	0.00	20.81	-171.18	0	-115.81	2	38.09	2	33.08	2.35	56.47
9	9	8.23	0.00	20.81	-171.18	0	-115.81	2	38.09	2	33.08	2.35	56.47
9	10	9.40	0.00	20.81	-195.63	0	-132.35	2	43.53	2	37.81	2.35	64.54
10	10	9.40	0.00	20.81	-195.63	0	-132.35	2	43.53	2	37.81	2.35	64.54
10	11	10.58	0.00	20.81	-220.08	0	-148.89	2	48.97	2	42.53	2.35	72.61
11	11	10.58	0.00	20.81	-220.08	0	-148.89	2	48.97	2	42.53	2.35	72.61
11	12	11.75	0.00	20.81	-244.54	0	-165.44	2	54.41	2	47.26	2.35	80.68
12	12	11.75	0.00	20.81	-244.54	0	-165.44	2	54.41	2	47.26	2.35	80.68
12	13	12.93	0.00	20.81	-268.99	0	-181.98	2	59.85	2	51.98	2.35	88.74
13	13	12.93	0.00	20.81	-268.99	0	-181.98	2	59.85	2	51.98	2.35	88.74
13	14	14.10	0.00	20.81	-293.45	0	-198.53	2	65.30	2	56.71	2.35	96.81
14	14	14.10	0.00	20.81	-293.45	0	-198.53	2	65.30	2	56.71	2.35	96.81
14	15	15.28	0.00	20.81	-317.91	0	-215.08	2	70.74	2	61.44	2.35	104.88
15	15	15.28	0.00	20.81	-317.91	0	-215.08	2	70.74	2	61.44	2.35	104.88
15	16	16.45	0.00	20.81	-342.36	0	-231.62	2	76.18	2	66.16	2.35	112.95
16	16	16.45	-0.24	20.81	-342.36	0	-231.62	2	76.18	2	66.16	2.35	112.95
16	17	17.63	-0.24	20.81	-366.81	0	-248.24	2	81.54	2	70.82	2.35	120.95
17	17	17.63	-0.24	20.81	-366.81	0	-248.24	2	81.54	2	70.82	2.35	120.95
17	18	18.80	-0.24	20.81	-391.28	0	-258.41	2	86.98	2	75.46	2.35	129.02
18	18	18.80	0.00	20.81	-391.28	0	-258.41	2	86.98	2	75.46	2.35	129.02
18	19	19.98	0.00	33.38	-418.21	0	-276.12	2	92.42	2	80.90	2.35	137.09
19	19	19.98	0.00	33.38	-418.21	0	-276.12	2	92.42	2	80.90	2.35	137.09
19	20	21.15	0.00	78.22	-487.65	0	-321.96	2	97.86	2	86.34	2.35	145.16
20	20	21.15	0.00	78.22	-487.65	0	-321.96	2	97.86	2	86.34	2.35	145.16
20	21	22.33	0.00	132.64	-613.02	0	-404.73	2	103.30	2	91.78	2.35	153.23
21	21	22.33	0.00	132.64	-613.02	0	-404.73	2	103.30	2	91.78	2.35	153.23
21	22	22.50	0.00	143.44	-637.47	0	-420.88	2	108.74	2	97.22	2.35	161.30
22	22	22.50	0.00	143.44	-637.47	0	-420.88	2	108.74	2	97.22	2.35	161.30
22	23	23.50	0.00	167.66	-792.81	0	-523.44	2	114.18	2	102.66	2.35	169.37
23	1023	23.50	0.00	-187.27	-792.81	0	-523.44	2	114.18	2	102.66	2.35	169.37
23	24	24.50	0.00	-156.28	-618.87	0	-408.60	2	119.62	2	108.10	2.35	177.44
24	24	24.50	0.00	-156.28	-618.87	0	-408.60	2	119.62	2	108.10	2.35	177.44
24	25	24.95	0.00	-142.64	-549.01	0	-362.47	2	125.06	2	113.54	2.35	185.51
25	25	24.95	0.00	-142.64	-549.01	0	-362.47	2	125.06	2	113.54	2.35	185.51
25	26	26.40	0.00	-87.83	-377.10	0	-248.97	2	130.50	2	118.98	2.35	193.58
26	26	26.40	0.00	-87.83	-377.10	0	-248.97	2	130.50	2	118.98	2.35	193.58
26	27	27.85	0.00	-45.03	-283.35	0	-187.08	2	135.94	2	124.42	2.35	201.65
27	27	27.85	0.00	-45.03	-283.35	0	-187.08	2	135.94	2	124.42	2.35	201.65
27	28	29.30	0.00	3.28	-253.60	0	-167.43	2	141.38	2	129.86	2.35	209.72
28	28	29.30	0.03	3.28	-253.60	0	-167.43	2	141.38	2	129.86	2.35	209.72
28	29	30.75	0.03	3.28	-258.38	0	-170.58	2	146.82	2	135.30	2.35	217.79
29	29	30.75	0.03	3.28	-258.38	0	-170.58	2	146.82	2	135.30	2.35	217.79
29	30	32.20	0.03	3.28	-263.14	0	-178.03	2	152.26	2	140.74	2.35	225.86
30	30	32.20	0.00	3.28	-263.14	0	-178.03	2	152.26	2	140.74	2.35	225.86
30	31	33.65	0.00	3.28	-267.92	0	-181.26	2	157.70	2	146.18	2.35	233.93
31	31	33.65	0.00	3.28	-267.92	0	-181.26	2	157.70	2	146.18	2.35	233.93
31	32	35.10	0.00	3.28	-272.68	0	-184.48	2	163.14	2	151.62	2.35	242.00
32	32	35.10	0.00	3.28	-272.68	0	-184.48	2	163.14	2	151.62	2.35	242.00
32	33	36.55	0.00	3.28	-277.46	0	-187.72	2	168.58	2	157.06	2.35	250.07
33	33	36.55	0.00	3.28	-277.46	0	-187.72	2	168.58	2	157.06	2.35	250.07
33	34	38.00	0.00	8.13	-288.17	0	-194.96	2	174.02	2	162.50	2.35	258.14
34	34	38.00	0.00	8.13	-288.17	0	-194.96	2	174.02	2	162.50	2.35	258.14
34	35	39.45	0.00	8.13	-299.96	0	-202.94	2	179.46	2	167.94	2.35	266.21
35	35	39.45	0.00	8.13	-299.96	0	-202.94	2	179.46	2	167.94	2.35	266.21
35	36	40.90	0.00	8.13	-311.75	0	-210.91	2	184.90	2	173.38	2.35	274.28
36	36	40.90	0.00	8.13	-311.75	0	-210.91	2	184.90	2	173.38	2.35	274.28
36	37	42.35	0.00	8.13	-323.54	0	-218.89	2	190.34	2	178.82	2.35	282.35
37	37	42.35	0.00	8.13	-323.54	0	-218.89	2	190.34	2	178.82	2.35	282.35
37	38	43.80	0.00	8.13	-335.33	0	-226.87	2	195.78	2	184.26	2.35	290.42
38	38	43.80	-0.08	8.13	-335.33	0	-226.87	2	195.78	2	184.26	2.35	290.42
38	39	45.25	-0.08	8.13	-347.11	0	-234.86	2	201.22	2	189.70	2.35	298.49

GRÁFICO DE TENSIONES

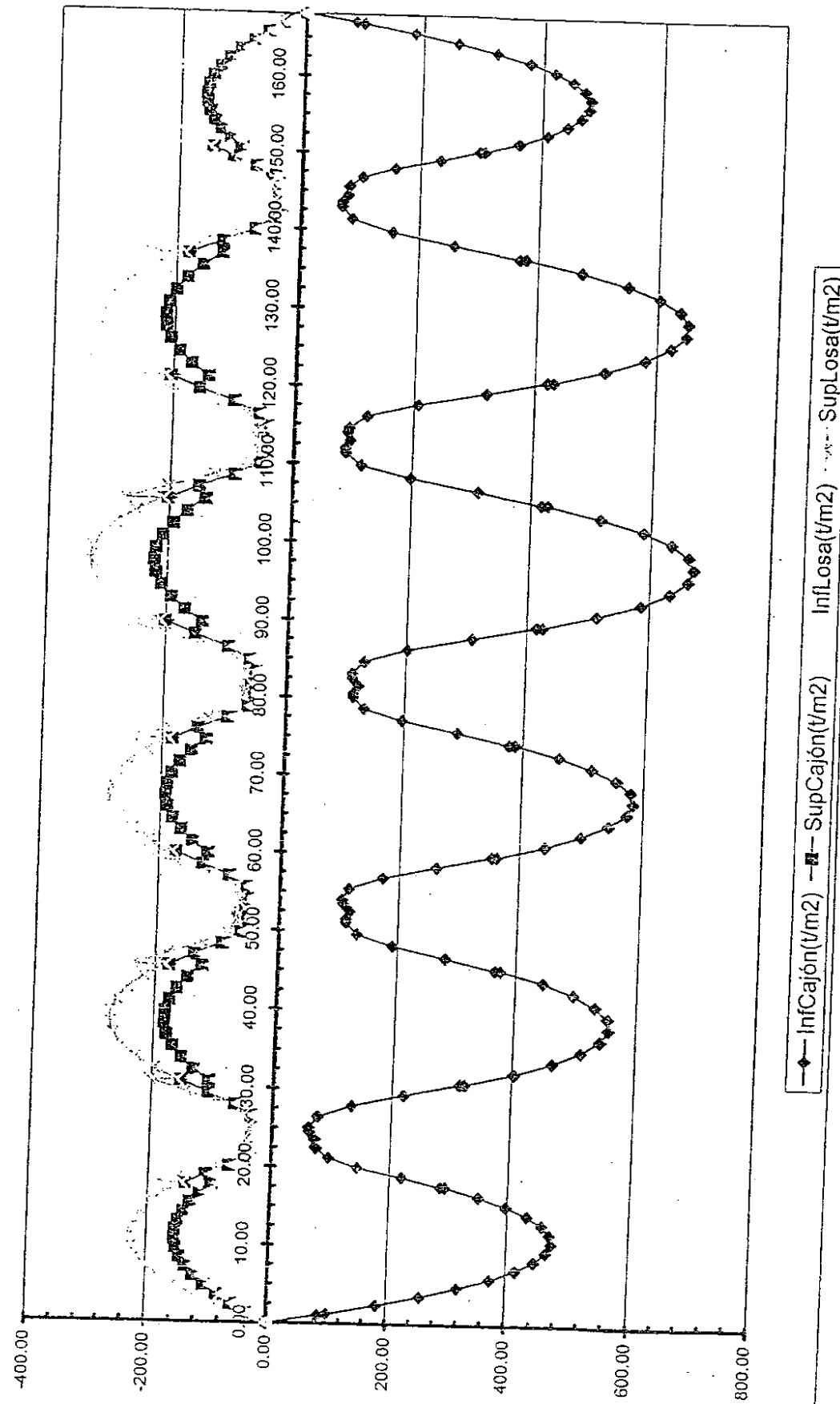
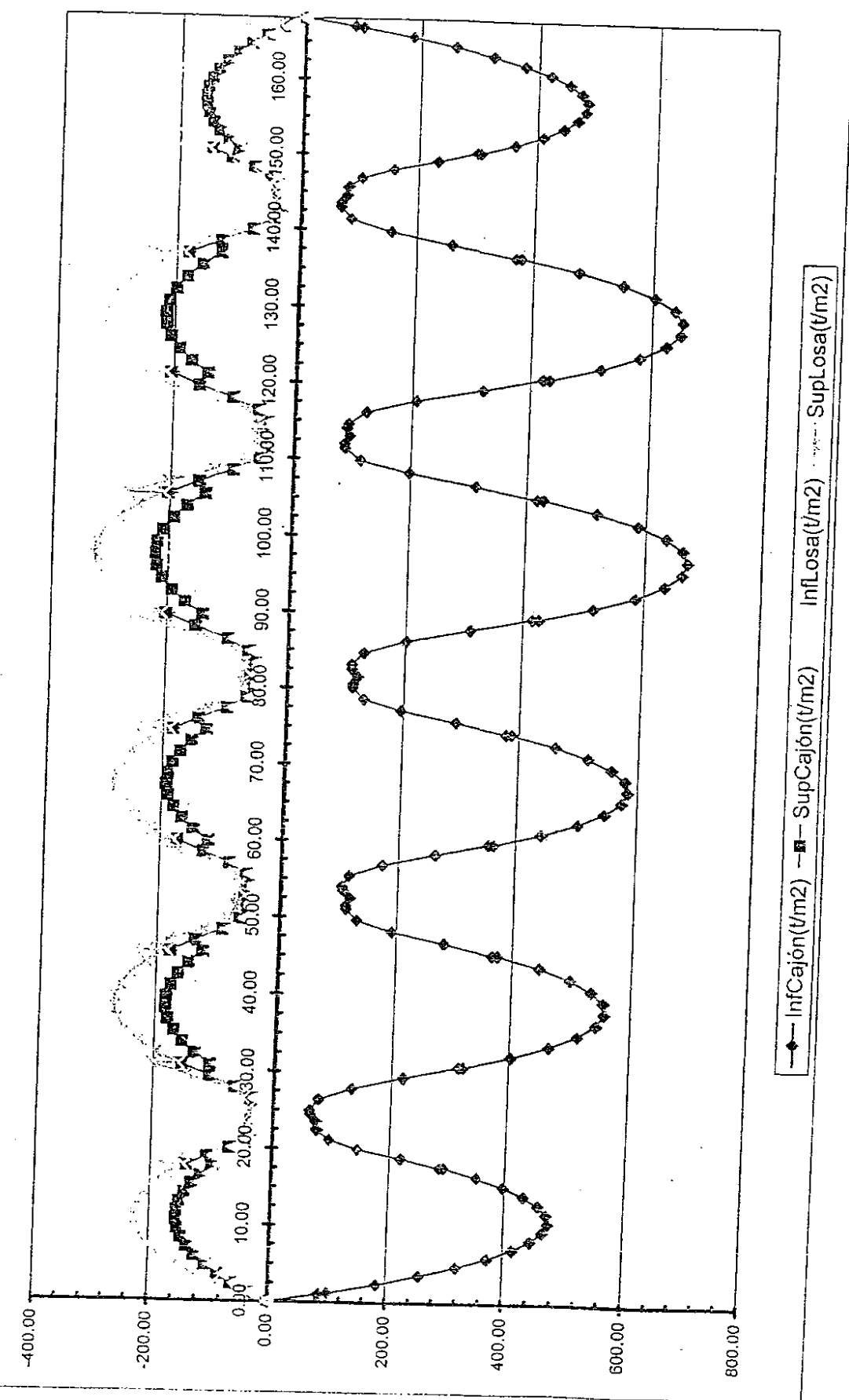


GRÁFICO DE TENSIONES

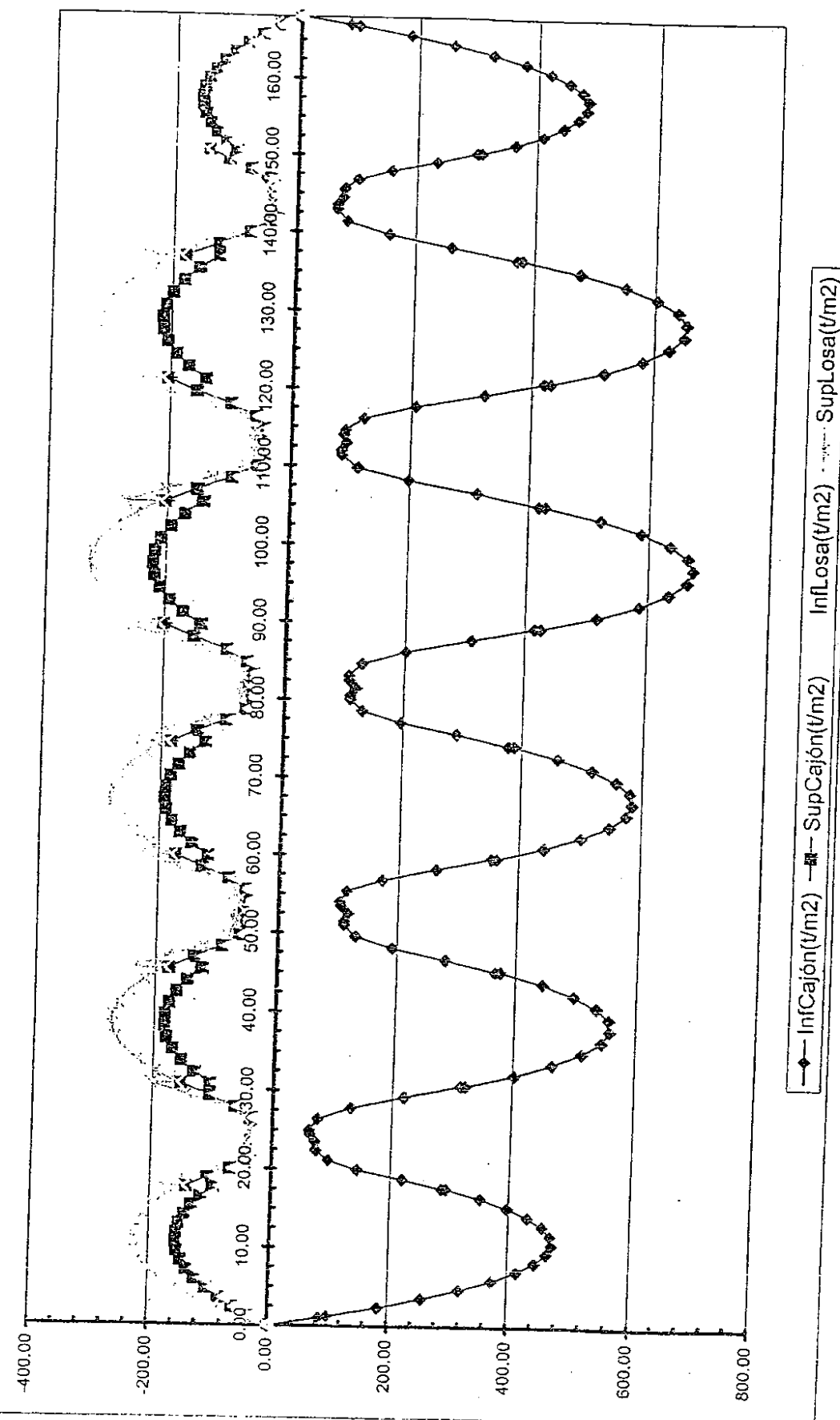


CÁLCULO TENSIONAL

hipótesis de cálculo:
IPF75B.ENV_TREN_GENERICO.MZ+.To
Envolvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To
1. IPF75B.MZ+.
ref. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra		Fibra		Fibra		Fibra	
						y fibra	sig (t/m²)	y fibra	sig (t/m²)	y fibra	sig (t/m²)	y fibra	sig (t/m²)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	20.81	-20.81	0	-14.08	2	4.63	2	4.02	2.35	6.87
2	2	1.00	0.00	20.81	-20.81	0	-14.08	2	4.63	2	4.02	2.35	6.87
2	3	1.18	0.00	20.81	-24.45	0	-16.54	2	5.44	2	4.73	2.35	8.07
3	3	1.18	0.00	20.81	-24.45	0	-16.54	2	5.44	2	4.73	2.35	8.07
3	4	2.35	0.00	20.81	-48.90	0	-33.08	2	10.88	2	9.45	2.35	16.13
4	4	2.35	0.00	20.81	-48.90	0	-33.08	2	10.88	2	9.45	2.35	16.13
4	5	3.53	0.00	20.81	-73.36	0	-49.63	2	16.32	2	14.18	2.35	24.20
5	5	3.53	0.00	20.81	-73.36	0	-49.63	2	16.32	2	14.18	2.35	24.20
5	6	4.70	0.00	20.81	-97.82	0	-66.18	2	21.77	2	18.90	2.35	32.27
6	6	4.70	0.00	20.81	-97.82	0	-66.18	2	21.77	2	18.90	2.35	32.27
6	7	5.88	0.00	20.81	-122.27	0	-82.72	2	27.21	2	23.63	2.35	40.34
7	7	5.88	0.00	20.81	-122.27	0	-82.72	2	27.21	2	23.63	2.35	40.34
7	8	7.05	0.00	20.81	-146.72	0	-99.26	2	32.65	2	28.35	2.35	48.40
8	8	7.05	0.00	20.81	-146.72	0	-99.26	2	32.65	2	28.35	2.35	48.40
8	9	8.23	0.00	20.81	-171.18	0	-115.81	2	38.09	2	33.08	2.35	56.47
9	9	8.23	0.00	20.81	-171.18	0	-115.81	2	38.09	2	33.08	2.35	56.47
9	10	9.40	0.00	20.81	-195.63	0	-132.35	2	43.53	2	37.81	2.35	64.54
10	10	9.40	0.00	20.81	-195.63	0	-132.35	2	43.53	2	37.81	2.35	64.54
10	11	10.58	0.00	20.81	-220.08	0	-148.89	2	48.97	2	42.53	2.35	72.61
11	11	10.58	0.00	20.81	-220.08	0	-148.89	2	48.97	2	42.53	2.35	72.61
11	12	11.75	0.00	20.81	-244.54	0	-165.44	2	54.41	2	47.26	2.35	80.68
12	12	11.75	0.00	20.81	-244.54	0	-165.44	2	54.41	2	47.26	2.35	80.68
12	13	12.93	0.00	20.81	-268.99	0	-181.98	2	59.85	2	51.98	2.35	88.74
13	13	12.93	0.00	20.81	-268.99	0	-181.98	2	59.85	2	51.98	2.35	88.74
13	14	14.10	0.00	20.81	-293.45	0	-198.53	2	65.30	2	56.71	2.35	96.81
14	14	14.10	0.00	20.81	-293.45	0	-198.53	2	65.30	2	56.71	2.35	96.81
14	15	15.28	0.00	20.81	-317.91	0	-215.08	2	70.74	2	61.44	2.35	104.88
15	15	15.28	0.00	20.81	-317.91	0	-215.08	2	70.74	2	61.44	2.35	104.88
15	16	16.45	-0.24	20.81	-342.36	0	-231.62	2	76.18	2	66.16	2.35	112.95
16	16	16.45	-0.24	20.81	-342.36	0	-231.62	2	76.18	2	66.16	2.35	112.95
16	17	17.63	-0.24	20.81	-366.81	0	-248.24	2	81.54	2	70.82	2.35	120.95
17	17	17.63	-0.24	20.81	-366.81	0	-248.24	2	81.54	2	70.82	2.35	120.95
17	18	18.80	-0.24	20.81	-391.28	0	-258.41	2	117.11	2	101.71	2.35	156.33
18	18	18.80	0.00	20.81	-391.28	0	-258.41	2	124.92	2	108.50	2.35	166.76
18	19	19.98	0.00	33.38	-418.21	0	-276.12	2	125.00	2	108.56	2.35	166.83
19	19	19.98	0.00	33.38	-418.21	0	-276.12	2	133.60	2	116.03	2.35	178.31
19	20	21.15	0.00	78.22	-487.65	0	-321.96	2	133.60	2	116.03	2.35	178.31
20	20	21.15	0.00	78.22	-487.65	0	-321.96	2	155.78	2	135.30	2.35	207.91
20	21	22.33	0.00	132.64	-613.02	0	-404.73	2	155.78	2	135.30	2.35	207.91
21	21	22.33	0.00	132.64	-613.02	0	-404.73	2	195.83	2	170.09	2.35	261.37
21	22	22.50	0.00	143.44	-637.47	0	-420.88	2	195.83	2	170.09	2.35	261.37
22	22	22.50	0.00	143.44	-637.47	0	-420.88	2	203.64	2	176.87	2.35	271.79
22	23	23.50	0.00	167.66	-792.81	0	-523.44	2	203.64	2	176.87	2.35	271.79
23	1023	23.50	0.00	-187.27	-792.81	0	-523.44	2	253.27	2	219.97	2.35	338.02
23	24	24.50	0.00	-156.28	-618.87	0	-408.60	2	253.27	2	219.97	2.35	338.02
24	24	24.50	0.00	-156.28	-618.87	0	-408.60	2	197.70	2	171.71	2.35	263.86
24	25	24.95	0.00	-142.64	-549.01	0	-362.47	2	197.70	2	171.71	2.35	263.86
25	25	24.95	0.00	-142.64	-549.01	0	-362.47	2	175.38	2	152.33	2.35	234.08
25	26	26.40	0.00	-87.83	-377.10	0	-248.97	2	175.38	2	152.33	2.35	234.08
26	26	26.40	0.00	-87.83	-377.10	0	-248.97	2	120.47	2	104.63	2.35	160.78
26	27	27.85	0.00	-45.03	-283.35	0	-187.08	2	120.47	2	104.63	2.35	160.78
27	27	27.85	0.00	-45.03	-283.35	0	-187.08	2	90.52	2	78.62	2.35	120.81
27	28	29.30	0.00	3.28	-253.60	0	-167.43	2	90.52	2	78.62	2.35	120.81
28	28	29.30	0.03	3.28	-253.60	0	-167.43	2	81.01	2	70.36	2.35	108.12
28	29	30.75	0.03	3.28	-258.38	0	-170.58	2	81.02	2	70.37	2.35	108.13
29	29	30.75	0.03	3.28	-258.38	0	-170.58	2	82.55	2	71.70	2.35	110.17
29	30	32.20	0.03	3.28	-263.14	0	-178.02	2	57.50	2	49.94	2.35	85.25
30	30	32.20	0.00	3.28	-263.14	0	-178.02	2	58.55	2	50.85	2.35	86.81
30	31	33.65	0.00	3.28	-267.92	0	-181.26	2	58.55	2	50.85	2.35	86.81
31	31	33.65	0.00	3.28	-267.92	0	-181.26	2	59.62	2	51.78	2.35	88.39
31	32	35.10	0.00	3.28	-272.68	0	-184.48	2	59.62	2	51.78	2.35	88.39
32	32	35.10	0.00	3.28	-272.68	0	-184.48	2	60.67	2	52.70	2.35	89.96
32	33	36.55	0.00	3.28	-277.46	0	-187.72	2	60.67	2	52.70	2.35	89.96
33	33	36.55	0.00	3.28	-277.46	0	-187.72	2	61.74	2	53.62	2.35	91.54
33	34	38.00	0.00	8.13	-288.17	0	-194.95	2	61.74	2	53.62	2.35	91.54
34	34	38.00	0.00	8.13	-288.17	0	-194.95	2	64.12	2	55.69	2.35	95.07
34	35	39.45	0.00	8.13	-299.96	0	-202.94	2	64.12	2	55.69	2.35	95.07
35	35	39.45	0.00	8.13	-299.96	0	-202.94	2	66.74	2	57.97	2.35	98.96
35	36	40.90	0.00	8.13	-311.75	0	-210.91	2	66.74	2	57.97	2.35	98.96
36	36	40.90	0.00	8.13	-311.75	0	-210.91	2	69.37	2	60.25	2.35	102.85
36	37	42.35	0.00	8.13	-323.54	0	-218.89	2	69.37	2	60.25	2.35	102.85
37	37	42.35	0.00	8.13	-323.54	0	-218.89	2	71.99	2	62.53	2.35	106.74
37	38	43.80	0.00	8.13	-335.33	0	-226.87	2	71.99	2	62.53	2.35	106.74
38	38	43.80	-0.08	8.13	-335.33	0	-226.87	2	74.61	2	64.81	2.35	110.63
38	39	45.25	-0.08	8.13	-347.11	0	-234.85	2	74.59	2	64.78	2.35	110.61
								2	77.21	2	67.06	2.35	114.49

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

hipótesis de cálculo:
PF75B.ENV_TREN_GENERICO.MZ+.To
Envolvente de tren de cargas plano genérico.MZ+. Tensiones a tiempo To
L. IPF75B.MZ.
ref. etc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	20.81	-20.81	0	-14.08	2	4.63	2	4.02	2.35	6.87
2	2	1.00	0.00	20.81	-20.81	0	-14.08	2	4.63	2	4.02	2.35	6.87
2	3	1.18	0.00	20.81	-24.45	0	-16.54	2	5.44	2	4.73	2.35	8.07
3	3	1.18	0.00	20.81	-24.45	0	-16.54	2	5.44	2	4.73	2.35	8.07
3	4	2.35	0.00	20.81	-48.90	0	-33.08	2	10.88	2	9.45	2.35	16.13
4	4	2.35	0.00	20.81	-48.90	0	-33.08	2	10.88	2	9.45	2.35	16.13
4	5	3.53	0.00	20.81	-73.36	0	-49.63	2	16.32	2	14.18	2.35	24.20
5	5	3.53	0.00	20.81	-73.36	0	-49.63	2	16.32	2	14.18	2.35	24.20
5	6	4.70	0.00	20.81	-97.82	0	-66.18	2	21.77	2	18.90	2.35	32.27
6	6	4.70	0.00	20.81	-97.82	0	-66.18	2	21.77	2	18.90	2.35	32.27
6	7	5.88	0.00	20.81	-122.27	0	-82.72	2	27.21	2	23.63	2.35	40.34
7	7	5.88	0.00	20.81	-122.27	0	-82.72	2	27.21	2	23.63	2.35	40.34
7	8	7.05	0.00	20.81	-146.72	0	-99.26	2	32.65	2	28.35	2.35	48.40
8	8	7.05	0.00	20.81	-146.72	0	-99.26	2	32.65	2	28.35	2.35	48.40
8	9	8.23	0.00	20.81	-171.18	0	-115.81	2	38.09	2	33.08	2.35	56.47
9	9	8.23	0.00	20.81	-171.18	0	-115.81	2	38.09	2	33.08	2.35	56.47
9	10	9.40	0.00	20.81	-195.63	0	-132.35	2	43.53	2	37.81	2.35	64.54
10	10	9.40	0.00	20.81	-195.63	0	-132.35	2	43.53	2	37.81	2.35	64.54
10	11	10.58	0.00	20.81	-220.08	0	-148.89	2	48.97	2	42.53	2.35	72.61
11	11	10.58	0.00	20.81	-220.08	0	-148.89	2	48.97	2	42.53	2.35	72.61
11	12	11.75	0.00	20.81	-244.54	0	-165.44	2	54.41	2	47.26	2.35	80.68
12	12	11.75	0.00	20.81	-244.54	0	-165.44	2	54.41	2	47.26	2.35	80.68
12	13	12.93	0.00	20.81	-268.99	0	-181.98	2	59.85	2	51.98	2.35	88.74
13	13	12.93	0.00	20.81	-268.99	0	-181.98	2	59.85	2	51.98	2.35	88.74
13	14	14.10	0.00	20.81	-293.45	0	-198.53	2	65.30	2	56.71	2.35	96.81
14	14	14.10	0.00	20.81	-293.45	0	-198.53	2	65.30	2	56.71	2.35	96.81
14	15	15.28	0.00	20.81	-317.91	0	-215.08	2	70.74	2	61.44	2.35	104.88
15	15	15.28	0.00	20.81	-317.91	0	-215.08	2	70.74	2	61.44	2.35	104.88
15	16	16.45	0.00	20.81	-342.36	0	-231.62	2	76.18	2	66.16	2.35	112.95
16	16	16.45	-0.24	20.81	-342.36	0	-231.70	2	76.10	2	66.10	2.35	112.88
16	17	17.63	-0.24	20.81	-366.81	0	-248.24	2	81.54	2	70.82	2.35	120.95
17	17	17.63	-0.24	20.81	-366.81	0	-248.24	2	81.54	2	70.82	2.35	120.95
17	18	18.80	-0.24	20.81	-391.28	0	-258.41	2	117.11	2	101.71	2.35	156.33
18	18	18.80	0.00	20.81	-391.28	0	-258.41	2	124.92	2	108.50	2.35	166.76
18	19	19.98	0.00	33.38	-418.21	0	-276.12	2	133.60	2	116.03	2.35	178.31
19	19	19.98	0.00	33.38	-418.21	0	-276.12	2	133.60	2	116.03	2.35	178.31
19	20	21.15	0.00	78.22	-487.65	0	-321.96	2	155.78	2	135.30	2.35	207.91
20	20	21.15	0.00	78.22	-487.65	0	-321.96	2	155.78	2	135.30	2.35	207.91
20	21	22.33	0.00	132.64	-613.02	0	-404.73	2	195.83	2	170.09	2.35	261.37
21	21	22.33	0.00	132.64	-613.02	0	-404.73	2	195.83	2	170.09	2.35	261.37
21	22	22.50	0.00	143.44	-637.47	0	-420.88	2	203.64	2	176.87	2.35	271.79
22	22	22.50	0.00	143.44	-637.47	0	-420.88	2	203.64	2	176.87	2.35	271.79
22	23	23.50	0.00	167.66	-792.81	0	-523.44	2	253.27	2	219.97	2.35	338.02
23	1023	23.50	0.00	167.66	-792.81	0	-523.44	2	253.27	2	219.97	2.35	338.02
23	24	24.50	0.00	-156.28	-618.87	0	-408.60	2	197.70	2	171.71	2.35	263.86
24	24	24.50	0.00	-156.28	-618.87	0	-408.60	2	197.70	2	171.71	2.35	263.86
24	25	24.95	0.00	-142.64	-549.01	0	-362.47	2	175.38	2	152.33	2.35	234.08
25	25	24.95	0.00	-142.64	-549.01	0	-362.47	2	175.38	2	152.33	2.35	234.08
25	26	26.40	0.00	-87.83	-377.10	0	-248.97	2	120.47	2	104.63	2.35	160.78
26	26	26.40	0.00	-87.83	-377.10	0	-248.97	2	120.47	2	104.63	2.35	160.78
26	27	27.85	0.00	-45.03	-283.35	0	-187.08	2	90.52	2	78.62	2.35	120.81
27	27	27.85	0.00	-45.03	-283.35	0	-187.08	2	90.52	2	78.62	2.35	120.81
27	28	29.30	0.00	3.28	-253.60	0	-167.43	2	81.01	2	70.36	2.35	108.12
28	28	29.30	0.03	3.28	-253.60	0	-167.43	2	81.02	2	70.37	2.35	108.13
28	29	30.75	0.03	3.28	-258.38	0	-170.58	2	82.55	2	71.70	2.35	110.17
29	29	30.75	0.03	3.28	-258.38	0	-174.80	2	57.50	2	49.94	2.35	85.25
29	30	32.20	0.03	3.28	-263.14	0	-178.02	2	58.56	2	50.86	2.35	86.82
30	30	32.20	0.00	3.28	-263.14	0	-178.03	2	58.55	2	50.85	2.35	86.81
30	31	33.65	0.00	3.28	-267.92	0	-181.26	2	59.62	2	51.78	2.35	88.39
31	31	33.65	0.00	3.28	-267.92	0	-181.26	2	59.62	2	51.78	2.35	88.39
31	32	35.10	0.00	3.28	-272.68	0	-184.48	2	60.67	2	52.70	2.35	89.96
32	32	35.10	0.00	3.28	-272.68	0	-184.48	2	60.67	2	52.70	2.35	89.96
32	33	36.55	0.00	3.28	-277.46	0	-187.72	2	61.74	2	53.62	2.35	91.54
33	33	36.55	0.00	3.28	-277.46	0	-187.72	2	61.74	2	53.62	2.35	91.54
33	34	38.00	0.00	8.13	-288.17	0	-194.96	2	64.12	2	55.69	2.35	95.07
34	34	38.00	0.00	8.13	-288.17	0	-194.96	2	64.12	2	55.69	2.35	95.07
34	35	39.45	0.00	8.13	-299.96	0	-202.94	2	66.74	2	57.97	2.35	98.96
35	35	39.45	0.00	8.13	-299.96	0	-202.94	2	66.74	2	57.97	2.35	98.96
35	36	40.90	0.00	8.13	-311.75	0	-210.91	2	69.37	2	60.25	2.35	102.85
36	36	40.90	0.00	8.13	-311.75	0	-210.91	2	69.37	2	60.25	2.35	102.85
36	37	42.35	0.00	8.13	-323.54	0	-218.89	2	71.99	2	62.53	2.35	106.74
37	37	42.35	0.00	8.13	-323.54	0	-218.89	2	71.99	2	62.53	2.35	106.74
37	38	43.80	0.00	8.13	-335.33	0	-226.87	2	74.61	2	64.81	2.35	110.63
38	38	43.80	-0.08	8.13	-335.33	0	-226.89	2	74.59	2	64.78	2.35	110.61
38	39	45.25	-0.08	8.13	-347.11	0	-234.86	2	77.21	2	67.06	2.35	114.49

CÁLCULO TENSIONAL

Hipótesis de cálculo:
IPF75B.ENV_TREN_GENERICO.MZ-To
Invente de tren de cargas plano genérico.MZ-). Tensiones a tiempo To

Def. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)	y fibra	sig (U/m2)
39	39	45.25	-0.08	8.13	-347.11	0	-229.20	2	110.86	2	96.29	2.35	147.97
39	40	46.70	-0.08	8.13	-358.90	0	-236.98	2	114.63	2	99.56	2.35	153.00
40	40	46.70	0.00	8.13	-358.90	0	-236.96	2	114.65	2	99.58	2.35	153.02
40	41	48.15	0.00	34.95	-385.02	0	-254.20	2	123.00	2	106.83	2.35	164.16
41	41	48.15	0.00	34.95	-385.02	0	-254.20	2	123.00	2	106.83	2.35	164.16
41	42	49.60	0.00	77.99	-469.95	0	-310.28	2	150.13	2	130.39	2.35	200.37
42	42	49.60	0.00	77.99	-469.95	0	-310.28	2	150.13	2	130.39	2.35	200.37
42	43	51.05	0.00	139.27	-626.40	0	-413.57	2	200.11	2	173.80	2.35	267.07
43	43	51.05	0.00	139.27	-626.40	0	-413.57	2	200.11	2	173.80	2.35	267.07
43	44	51.50	0.00	152.31	-693.77	0	-458.05	2	221.63	2	192.49	2.35	295.80
44	44	51.50	0.00	152.31	-693.77	0	-458.05	2	221.63	2	192.49	2.35	295.80
44	45	52.50	0.00	184.60	-865.83	0	-571.65	2	276.59	2	240.23	2.35	369.16
45	1045	52.50	0.00	-188.79	-865.83	0	-571.65	2	276.59	2	240.23	2.35	369.16
45	46	53.50	0.00	-155.38	-688.86	0	-454.81	2	220.06	2	191.13	2.35	293.70
46	46	53.50	0.00	-155.38	-688.86	0	-454.81	2	220.06	2	191.13	2.35	293.70
46	47	53.95	0.00	-143.30	-619.43	0	-408.97	2	197.88	2	171.86	2.35	264.10
7	47	53.95	0.00	-143.30	-619.43	0	-408.97	2	197.88	2	171.86	2.35	264.10
47	48	55.40	0.00	-81.48	-455.26	0	-300.58	2	145.43	2	126.31	2.35	194.10
48	48	55.40	0.00	-81.48	-455.26	0	-300.58	2	145.43	2	126.31	2.35	194.10
49	49	56.85	0.00	-42.82	-364.03	0	-240.34	2	116.29	2	101.00	2.35	155.21
49	49	56.85	0.00	-42.82	-364.03	0	-240.34	2	116.29	2	101.00	2.35	155.21
49	50	58.30	0.00	1.43	-339.41	0	-224.09	2	108.43	2	94.17	2.35	144.71
50	50	58.30	0.00	1.43	-339.41	0	-224.09	2	108.43	2	94.17	2.35	144.71
50	51	59.75	0.00	1.43	-341.48	0	-225.46	2	109.09	2	94.75	2.35	145.59
51	51	59.75	0.00	1.43	-341.48	0	-231.03	2	75.98	2	65.99	2.35	112.66
51	52	61.20	0.00	1.43	-343.55	0	-232.43	2	76.44	2	66.39	2.35	113.34
52	52	61.20	0.00	1.43	-343.55	0	-232.43	2	76.44	2	66.39	2.35	113.34
52	53	62.65	0.00	1.43	-345.62	0	-233.83	2	76.90	2	66.79	2.35	114.02
53	53	62.65	0.00	1.43	-345.62	0	-233.83	2	76.90	2	66.79	2.35	114.02
53	54	64.10	0.00	1.43	-347.68	0	-235.22	2	77.36	2	67.19	2.35	114.70
54	54	64.10	0.00	1.43	-347.68	0	-235.22	2	77.36	2	67.19	2.35	114.70
54	55	65.55	0.00	1.43	-349.75	0	-236.62	2	77.82	2	67.59	2.35	115.39
55	55	65.55	0.00	1.43	-349.75	0	-236.62	2	77.82	2	67.59	2.35	115.39
55	56	67.00	0.00	7.38	-357.15	0	-241.63	2	79.47	2	69.02	2.35	117.83
56	56	67.00	0.00	7.38	-357.15	0	-241.63	2	79.47	2	69.02	2.35	117.83
56	57	68.45	0.00	7.38	-367.86	0	-248.88	2	81.85	2	71.09	2.35	121.36
57	57	68.45	0.00	7.38	-367.86	0	-248.88	2	81.85	2	71.09	2.35	121.36
57	58	69.90	0.00	7.38	-378.56	0	-256.11	2	84.23	2	73.16	2.35	124.89
58	58	69.90	0.00	7.38	-378.56	0	-256.11	2	84.23	2	73.16	2.35	124.89
58	59	71.35	0.00	7.38	-389.27	0	-263.36	2	86.62	2	75.23	2.35	128.42
59	59	71.35	0.00	7.38	-389.27	0	-263.36	2	86.62	2	75.23	2.35	128.42
60	60	72.80	0.00	7.38	-399.98	0	-270.61	2	89.00	2	77.30	2.35	131.96
60	60	72.80	-0.06	7.38	-399.98	0	-270.63	2	88.98	2	77.28	2.35	131.94
61	61	74.25	-0.06	7.38	-410.68	0	-277.86	2	91.36	2	79.35	2.35	135.47
61	61	74.25	-0.06	7.38	-410.68	0	-277.86	2	91.36	2	79.35	2.35	135.47
62	62	75.70	-0.06	7.38	-421.39	0	-278.23	2	134.60	2	116.90	2.35	179.65
62	62	75.70	0.00	7.38	-421.39	0	-278.21	2	134.61	2	116.92	2.35	179.66
62	63	77.15	0.00	36.05	-443.61	0	-292.88	2	141.71	2	123.08	2.35	189.14
63	63	77.15	0.00	36.05	-443.61	0	-292.88	2	141.71	2	123.08	2.35	189.14
63	64	78.60	0.00	83.44	-528.31	0	-348.81	2	168.77	2	146.58	2.35	225.25
64	64	78.60	0.00	83.44	-528.31	0	-348.81	2	168.77	2	146.58	2.35	225.25
64	65	80.05	0.00	128.21	-683.31	0	-451.14	2	218.29	2	189.59	2.35	291.34
65	65	80.05	0.00	128.21	-683.31	0	-451.14	2	218.29	2	189.59	2.35	291.34
65	66	80.50	0.00	157.60	-748.95	0	-494.48	2	239.25	2	207.80	2.35	319.32
66	66	80.50	0.00	157.60	-748.95	0	-494.48	2	239.25	2	207.80	2.35	319.32
66	67	81.50	0.00	189.60	-923.49	0	-609.72	2	295.01	2	256.23	2.35	393.74
67	1067	81.50	0.00	-198.57	-923.49	0	-609.72	2	295.01	2	256.23	2.35	393.74
67	68	82.50	0.00	-167.09	-735.84	0	-485.82	2	235.07	2	204.16	2.35	313.73
68	68	82.50	0.00	-167.09	-735.84	0	-485.82	2	235.07	2	204.16	2.35	313.73
68	69	83.08	0.00	-149.27	-641.45	0	-423.51	2	204.91	2	177.97	2.35	273.49
69	69	83.08	0.00	-149.27	-641.45	0	-423.51	2	204.91	2	177.97	2.35	273.49
69	70	84.65	0.00	-83.03	-457.18	0	-301.84	2	146.05	2	126.85	2.35	194.92
70	70	84.65	0.00	-83.03	-457.18	0	-301.84	2	146.05	2	126.85	2.35	194.92
70	71	86.23	0.00	-41.11	-357.91	0	-236.30	2	114.34	2	99.30	2.35	152.60
71	71	86.23	0.00	-41.11	-357.91	0	-236.30	2	114.34	2	99.30	2.35	152.60
71	72	87.80	0.00	-0.11	-332.87	0	-219.77	2	106.34	2	92.36	2.35	141.92
72	72	87.80	0.00	-0.11	-332.87	0	-219.77	2	106.34	2	92.36	2.35	141.92
72	73	89.38	0.00	-0.11	-332.71	0	-219.67	2	106.29	2	92.31	2.35	141.85
73	73	89.38	0.00	-0.11	-332.71	0	-225.09	2	74.03	2	64.30	2.35	109.76
73	74	90.95	0.00	-0.11	-332.55	0	-224.99	2	74.00	2	64.27	2.35	109.71
74	74	90.95	0.00	-0.11	-332.55	0	-224.99	2	74.00	2	64.27	2.35	109.71
74	75	92.53	0.00	-0.11	-332.37	0	-224.86	2	73.96	2	64.23	2.35	109.65
75	75	92.53	0.00	-0.11	-332.37	0	-224.86	2	73.96	2	64.23	2.35	109.65
75	76	94.10	0.00	-0.11	-332.21	0	-224.76	2	73.92	2	64.20	2.35	109.60
76	76	94.10	0.00	-0.11	-332.21	0	-224.76	2	73.92	2	64.20	2.35	109.60
76	77	95.68	0.00	-0.11	-332.05	0	-224.65	2	73.88	2	64.17	2.35	109.55

CÁLCULO TENSIONAL

Hipótesis de cálculo:
PF75B.ENV_TREN_GENERICO.MZ-To
Envolve de tren de cargas plano genérico.MZ-). Tensiones a tiempo To

Def. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
77	77	95.68	0.00	-0.11	-332.05	0	-224.65	2	73.88	2	64.17	2.35	109.55
77	78	97.25	0.00	5.07	-336.39	0	-227.58	2	74.85	2	65.01	2.35	110.98
78	78	97.25	0.00	5.07	-336.39	0	-227.58	2	74.85	2	65.01	2.35	110.98
78	79	98.83	0.00	5.07	-344.38	0	-232.99	2	76.63	2	66.55	2.35	113.61
79	79	98.83	0.00	5.07	-344.38	0	-232.99	2	76.63	2	66.55	2.35	113.61
79	80	100.40	0.00	5.07	-352.38	0	-238.40	2	78.41	2	68.10	2.35	116.25
80	80	100.40	0.00	5.07	-352.38	0	-238.40	2	78.41	2	68.10	2.35	116.25
80	81	101.98	0.00	5.07	-360.36	0	-243.80	2	80.18	2	69.64	2.35	118.89
81	81	101.98	0.00	5.07	-360.36	0	-243.80	2	80.18	2	69.64	2.35	118.89
81	82	103.55	0.00	5.07	-368.36	0	-249.21	2	81.96	2	71.19	2.35	121.53
82	82	103.55	-0.05	5.07	-368.36	0	-249.21	2	81.96	2	71.19	2.35	121.53
82	83	105.13	-0.05	5.07	-376.35	0	-254.64	2	83.73	2	72.72	2.35	124.15
83	83	105.13	-0.05	5.07	-376.35	0	-254.64	2	83.73	2	72.72	2.35	124.15
83	84	106.70	-0.05	5.07	-384.34	0	-253.77	2	120.21	2	104.41	2.35	160.45
84	84	106.70	0.00	5.07	-384.34	0	-253.77	2	122.76	2	106.62	2.35	163.85
84	85	108.28	0.00	33.77	-406.91	0	-268.65	2	122.78	2	106.64	2.35	163.87
85	85	108.28	0.00	33.77	-406.91	0	-268.65	2	129.99	2	112.90	2.35	173.49
85	86	109.85	0.00	85.36	-501.39	0	-268.65	2	129.99	2	112.90	2.35	173.49
86	86	109.85	0.00	85.36	-501.39	0	-331.03	2	160.17	2	139.11	2.35	213.77
86	87	111.43	0.00	134.06	-577.69	0	-331.03	2	160.17	2	139.11	2.35	213.77
87	87	111.43	0.00	134.06	-577.69	0	-447.43	2	216.49	2	188.03	2.35	288.94
87	88	112.00	0.00	165.21	-768.54	0	-447.43	2	216.49	2	188.03	2.35	288.94
88	88	112.00	0.00	165.21	-768.54	0	-507.41	2	245.51	2	213.24	2.35	327.67
88	89	113.00	0.00	199.96	-956.30	0	-507.41	2	245.51	2	213.24	2.35	327.67
89	1089	113.00	0.00	-197.18	-956.30	0	-631.38	2	305.49	2	265.33	2.35	407.73
89	90	114.00	0.00	-162.47	-771.53	0	-631.38	2	305.49	2	265.33	2.35	407.73
90	90	114.00	0.00	-162.47	-771.53	0	-509.39	2	246.47	2	214.06	2.35	328.95
90	91	114.58	0.00	-131.41	-682.76	0	-509.39	2	246.47	2	214.06	2.35	328.95
91	91	114.58	0.00	-131.41	-682.76	0	-450.78	2	218.11	2	189.44	2.35	291.10
91	92	116.15	0.00	-82.88	-510.92	0	-450.78	2	218.11	2	189.44	2.35	291.10
92	92	116.15	0.00	-82.88	-510.92	0	-337.33	2	163.22	2	141.76	2.35	217.84
92	93	117.73	0.00	-31.74	-420.73	0	-337.33	2	163.22	2	141.76	2.35	217.84
93	93	117.73	0.00	-31.74	-420.73	0	-277.78	2	134.40	2	116.73	2.35	179.38
93	94	119.30	0.00	-9.97	-395.71	0	-277.78	2	134.40	2	116.73	2.35	179.38
94	94	119.30	-0.10	-9.97	-395.71	0	-261.26	2	126.41	2	109.79	2.35	168.71
94	95	120.88	-0.10	-9.97	-380.01	0	-261.26	2	126.38	2	109.77	2.35	168.69
95	95	120.88	-0.10	-9.97	-380.01	0	-250.93	2	121.36	2	105.41	2.35	161.99
95	96	122.45	-0.10	-9.97	-364.31	0	-257.13	2	84.52	2	73.41	2.35	125.34
96	96	122.45	0.00	-9.97	-364.31	0	-246.51	2	81.03	2	70.38	2.35	120.16
96	97	124.03	0.00	-9.97	-348.61	0	-246.47	2	81.06	2	70.41	2.35	120.19
97	97	124.03	0.00	-9.97	-348.61	0	-235.85	2	77.57	2	67.37	2.35	115.01
97	98	125.60	0.00	-9.97	-332.91	0	-235.85	2	77.57	2	67.37	2.35	115.01
98	98	125.60	0.00	-9.97	-332.91	0	-225.23	2	74.08	2	64.34	2.35	109.83
98	99	127.18	0.00	-9.97	-317.21	0	-225.23	2	74.08	2	64.34	2.35	109.83
99	99	127.18	0.00	-9.97	-317.21	0	-214.61	2	70.58	2	61.30	2.35	104.65
99	100	128.75	0.00	-9.97	-301.51	0	-214.61	2	70.58	2	61.30	2.35	104.65
100	100	128.75	0.00	-9.97	-301.51	0	-203.99	2	67.09	2	58.27	2.35	99.47
100	101	130.33	0.00	-9.97	-285.80	0	-203.99	2	67.09	2	58.27	2.35	99.47
101	101	130.33	0.00	-9.97	-285.80	0	-193.36	2	63.59	2	55.23	2.35	94.29
101	102	131.90	0.00	-5.28	-274.85	0	-193.36	2	63.59	2	55.23	2.35	94.29
102	102	131.90	0.00	-5.28	-274.85	0	-185.95	2	61.16	2	53.12	2.35	90.68
102	103	133.48	0.00	-5.28	-266.54	0	-185.95	2	61.16	2	53.12	2.35	90.68
103	103	133.48	0.00	-5.28	-266.54	0	-180.33	2	59.31	2	51.51	2.35	87.83
103	104	135.05	0.00	-5.28	-258.22	0	-180.33	2	59.31	2	51.51	2.35	87.83
104	104	135.05	0.05	-5.28	-258.22	0	-174.70	2	57.45	2	49.90	2.35	85.19
104	105	136.63	0.05	-5.28	-249.90	0	-174.68	2	57.47	2	49.92	2.35	85.20
105	105	136.63	0.05	-5.28	-249.90	0	-169.05	2	55.62	2	48.31	2.35	82.46
105	106	138.20	0.05	-5.28	-241.58	0	-164.98	2	79.85	2	69.35	2.35	106.56
106	106	138.20	0.00	-5.28	-241.58	0	-159.48	2	77.19	2	67.04	2.35	103.01
106	107	139.78	0.00	44.44	-270.51	0	-159.50	2	77.17	2	67.03	2.35	103.00
107	107	139.78	0.00	44.44	-270.51	0	-178.60	2	86.42	2	75.05	2.35	115.33
107	108	141.35	0.00	91.12	-373.57	0	-178.60	2	86.42	2	75.05	2.35	115.33
108	108	141.35	0.00	91.12	-373.57	0	-246.64	2	119.34	2	103.65	2.35	159.28
108	109	142.93	0.00	149.93	-567.88	0	-246.64	2	119.34	2	103.65	2.35	159.28
109	109	142.93	0.00	149.93	-567.88	0	-374.93	2	181.41	2	157.56	2.35	242.12
109	110	143.50	0.00	179.05	-661.82	0	-374.93	2	181.41	2	157.56	2.35	242.12
110	110	143.50	0.00	179.05	-661.82	0	-436.95	2	211.42	2	183.63	2.35	282.17
110	111	144.50	0.00	198.11	-849.90	0	-436.95	2	211.42	2	183.63	2.35	282.17
111	1111	144.50	0.00	-170.44	-849.90	0	-561.13	2	271.50	2	235.81	2.35	362.36
111	112	145.50	0.00	-142.59	-693.62	0	-561.13	2	271.50	2	235.81	2.35	362.36
112	112	145.50	0.00	-142.59	-693.62	0	-457.95	2	221.58	2	192.45	2.35	295.73
112	113	145.68	0.00	-119.35	-669.67	0	-457.95	2	221.58	2	192.45	2.35	295.73
113	113	145.68	0.00	-119.35	-669.67	0	-442.14	2	213.93	2	185.80	2.35	285.52
113	114	146.85	0.00	-81.17	-549.99	0	-442.14	2	213.93	2	185.80	2.35	285.52
114	114	146.85	0.00	-81.17	-549.99	0	-363.12	2	175.70	2	152.60	2.35	234.49
114	115	148.03	0.00	-29.78	-484.45	0	-363.12	2	175.70	2	152.60	2.35	234.49
						0	-319.85	2	154.76	2	134.41	2.35	206.55

267

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ-To

Envolvente de tren de cargas plano genérico.MZ-). Tensiones a tiempo To

Coef. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (U/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
39	39	45.25	-0.08	8.13	-347.11	0	-229.20	2	110.86	2	96.29	2.35	147.97
39	40	46.70	-0.08	8.13	-358.90	0	-236.98	2	114.63	2	99.56	2.35	153.00
40	40	46.70	0.00	8.13	-358.90	0	-236.98	2	114.65	2	99.58	2.35	153.02
40	41	48.15	0.00	34.95	-385.02	0	-254.20	2	123.00	2	106.83	2.35	164.16
41	41	48.15	0.00	34.95	-385.02	0	-254.20	2	123.00	2	106.83	2.35	164.16
41	42	49.60	0.00	77.99	-469.95	0	-310.28	2	150.13	2	130.39	2.35	200.37
42	42	49.60	0.00	77.99	-469.95	0	-310.28	2	150.13	2	130.39	2.35	200.37
42	43	51.05	0.00	139.27	-626.40	0	-413.57	2	200.11	2	173.80	2.35	267.07
43	43	51.05	0.00	139.27	-626.40	0	-413.57	2	200.11	2	173.80	2.35	267.07
43	44	51.50	0.00	152.31	-693.77	0	-458.05	2	221.63	2	192.49	2.35	295.80
44	44	51.50	0.00	152.31	-693.77	0	-458.05	2	221.63	2	192.49	2.35	295.80
44	45	52.50	0.00	184.60	-865.83	0	-571.65	2	276.59	2	240.23	2.35	369.16
45	1045	52.50	0.00	-188.79	-865.83	0	-571.65	2	276.59	2	240.23	2.35	369.16
45	46	53.50	0.00	-156.38	-688.86	0	-454.81	2	220.06	2	191.13	2.35	293.70
46	46	53.50	0.00	-156.38	-688.86	0	-454.81	2	220.06	2	191.13	2.35	293.70
46	47	53.95	0.00	-143.30	-619.43	0	-408.97	2	197.88	2	171.86	2.35	264.10
47	47	53.95	0.00	-143.30	-619.43	0	-408.97	2	197.88	2	171.86	2.35	264.10
47	48	55.40	0.00	-81.48	-455.26	0	-300.58	2	145.43	2	126.31	2.35	194.10
48	48	55.40	0.00	-81.48	-455.26	0	-300.58	2	145.43	2	126.31	2.35	194.10
49	49	56.85	0.00	-42.82	-364.03	0	-240.34	2	116.29	2	101.00	2.35	155.21
49	49	56.85	0.00	-42.82	-364.03	0	-240.34	2	116.29	2	101.00	2.35	155.21
49	50	58.30	0.00	1.43	-339.41	0	-224.09	2	108.43	2	94.17	2.35	144.71
50	50	58.30	0.00	1.43	-339.41	0	-224.09	2	108.43	2	94.17	2.35	144.71
50	51	59.75	0.00	1.43	-341.48	0	-225.46	2	109.09	2	94.75	2.35	145.59
51	51	59.75	0.00	1.43	-341.48	0	-225.46	2	109.09	2	94.75	2.35	145.59
51	52	61.20	0.00	1.43	-343.55	0	-232.43	2	76.44	2	66.39	2.35	113.34
52	52	61.20	0.00	1.43	-343.55	0	-232.43	2	76.44	2	66.39	2.35	113.34
52	53	62.65	0.00	1.43	-345.62	0	-233.83	2	76.90	2	66.79	2.35	114.02
53	53	62.65	0.00	1.43	-345.62	0	-233.83	2	76.90	2	66.79	2.35	114.02
53	54	64.10	0.00	1.43	-347.68	0	-235.22	2	77.36	2	67.19	2.35	114.70
54	54	64.10	0.00	1.43	-347.68	0	-235.22	2	77.36	2	67.19	2.35	114.70
54	55	65.55	0.00	1.43	-349.75	0	-236.62	2	77.82	2	67.59	2.35	115.39
55	55	65.55	0.00	1.43	-349.75	0	-236.62	2	77.82	2	67.59	2.35	115.39
55	56	67.00	0.00	7.38	-357.15	0	-241.63	2	79.47	2	69.02	2.35	117.83
56	56	67.00	0.00	7.38	-357.15	0	-241.63	2	79.47	2	69.02	2.35	117.83
56	57	68.45	0.00	7.38	-367.86	0	-248.88	2	81.85	2	71.09	2.35	121.36
57	57	68.45	0.00	7.38	-367.86	0	-248.88	2	81.85	2	71.09	2.35	121.36
57	58	69.90	0.00	7.38	-378.56	0	-256.11	2	84.23	2	73.16	2.35	124.89
58	58	69.90	0.00	7.38	-378.56	0	-256.11	2	84.23	2	73.16	2.35	124.89
58	59	71.35	0.00	7.38	-389.27	0	-263.36	2	86.62	2	75.23	2.35	128.42
59	59	71.35	0.00	7.38	-389.27	0	-263.36	2	86.62	2	75.23	2.35	128.42
59	60	72.80	0.00	7.38	-399.98	0	-270.61	2	89.00	2	77.30	2.35	131.96
60	60	72.80	0.00	7.38	-399.98	0	-270.61	2	89.00	2	77.30	2.35	131.96
60	61	74.25	-0.06	7.38	-410.68	0	-277.86	2	91.36	2	79.35	2.35	135.47
61	61	74.25	-0.06	7.38	-410.68	0	-277.86	2	91.36	2	79.35	2.35	135.47
62	62	75.70	-0.06	7.38	-421.39	0	-278.23	2	131.17	2	113.93	2.35	175.08
62	62	75.70	-0.06	7.38	-421.39	0	-278.23	2	131.17	2	113.93	2.35	175.08
62	63	77.15	0.00	36.05	-443.61	0	-292.88	2	141.71	2	123.08	2.35	189.14
63	63	77.15	0.00	36.05	-443.61	0	-292.88	2	141.71	2	123.08	2.35	189.14
63	64	78.60	0.00	83.44	-528.31	0	-348.81	2	168.77	2	146.58	2.35	225.25
64	64	78.60	0.00	83.44	-528.31	0	-348.81	2	168.77	2	146.58	2.35	225.25
64	65	80.05	0.00	128.21	-683.31	0	-451.14	2	218.29	2	189.59	2.35	291.34
65	65	80.05	0.00	128.21	-683.31	0	-451.14	2	218.29	2	189.59	2.35	291.34
65	66	80.50	0.00	157.60	-748.95	0	-494.48	2	239.25	2	207.80	2.35	319.32
66	66	80.50	0.00	157.60	-748.95	0	-494.48	2	239.25	2	207.80	2.35	319.32
66	67	81.50	0.00	189.60	-923.49	0	-609.72	2	295.01	2	256.23	2.35	393.74
67	1067	81.50	0.00	-198.57	-923.49	0	-609.72	2	295.01	2	256.23	2.35	393.74
67	68	82.50	0.00	-167.09	-735.84	0	-485.82	2	235.07	2	204.16	2.35	313.73
68	68	82.50	0.00	-167.09	-735.84	0	-485.82	2	235.07	2	204.16	2.35	313.73
68	69	83.08	0.00	-149.27	-641.45	0	-423.51	2	204.91	2	177.97	2.35	273.49
69	69	83.08	0.00	-149.27	-641.45	0	-423.51	2	204.91	2	177.97	2.35	273.49
69	70	84.65	0.00	-83.03	-457.18	0	-301.84	2	146.05	2	126.85	2.35	194.92
70	70	84.65	0.00	-83.03	-457.18	0	-301.84	2	146.05	2	126.85	2.35	194.92
70	71	86.23	0.00	-41.11	-357.91	0	-236.30	2	114.34	2	99.30	2.35	152.60
71	71	86.23	0.00	-41.11	-357.91	0	-236.30	2	114.34	2	99.30	2.35	152.60
71	72	87.80	0.00	-0.11	-332.87	0	-219.77	2	106.34	2	92.36	2.35	141.92
72	72	87.80	0.00	-0.11	-332.87	0	-219.77	2	106.34	2	92.36	2.35	141.92
72	73	89.38	0.00	-0.11	-332.71	0	-219.67	2	106.29	2	92.31	2.35	141.85
73	73	89.38	0.00	-0.11	-332.71	0	-219.67	2	106.29	2	92.31	2.35	141.85
73	74	90.95	0.00	-0.11	-332.55	0	-224.99	2	74.03	2	64.30	2.35	109.76
74	74	90.95	0.00	-0.11	-332.55	0	-224.99	2	74.03	2	64.30	2.35	109.76
74	75	92.53	0.00	-0.11	-332.37	0	-224.86	2	73.96	2	64.23	2.35	109.65
75	75	92.53	0.00	-0.11	-332.37	0	-224.86	2	73.96	2	64.23	2.35	109.65
75	76	94.10	0.00	-0.11	-332.21	0	-224.76	2	73.92	2	64.20	2.35	109.60
76	76	94.10	0.00	-0.11	-332.21	0	-224.76	2	73.92	2	64.20	2.35	109.60
76	77	95.68	0.00	-0.11	-332.05	0	-224.65	2	73.88	2	64.17	2.35	109.55

CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ-To

Envolvente de tren de cargas plano genérico.MZ-). Tensiones a tiempo To

Coef. exc.

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (U/m2)	Fibra y fibra	InfLosa sig (U/m2)	Fibra y fibra	SupLosa sig (U/m2)
77	77	95.68	0.00	-0.11	-332.05	0	-224.65	2	73.88	2	64.17	2.35	109.55
77	78	97.25	0.00	5.07	-336.39	0	-227.58	2	74.85	2	65.01	2.35	110.98
78	78	97.25	0.00	5.07	-336.39	0	-227.58	2	74.85	2	65.01	2.35	110.98
78	79	98.83	0.00	5.07	-344.38	0	-232.99	2	76.63	2	66.55	2.35	113.61
79	79	98.83	0.00	5.07	-344.38	0	-232.99	2	76.63	2	66.55	2.35	113.61
79	80	100.40	0.00	5.07	-352.38	0	-238.40	2	78.41	2	68.10	2.35	116.25
80	80	100.40	0.00	5.07	-352.38	0	-238.40	2	78.41	2	68.10	2.35	116.25
80	81	101.98	0.00	5.07	-360.36	0	-243.80	2	80.18	2	69.64	2.35	118.89
81	81	101.98	0.00	5.07	-360.36	0	-243.80	2	80.18	2	69.64	2.35	118.89
81	82	103.55	0.00	5.07	-368.36	0	-249.21	2	81.96	2	71.19	2.35	121.53
82	82	103.55	-0.05	5.07	-368.36	0	-249.23	2	81.95	2	71.17	2.35	121.51
82	83	105.13	-0.05	5.07	-376.35	0	-254.64	2	83.73	2	72.72	2.35	124.15
83	83	105.13	-0.05	5.07	-376.35	0	-254.64	2	83.73	2	72.72	2.35	124.15
83	84	106.70	-0.05	5.07	-384.34	0	-253.77	2	120.21	2	104.41	2.35	160.45
84	84	106.70	0.00	5.07	-384.34	0	-253.77	2	122.76	2	106.62	2.35	163.85
84	85	108.28	0.00	33.77	-406.91	0	-268.65	2	122.78	2	106.64	2.35	163.87
85	85	108.28	0.00	33.77	-406.91	0	-268.65	2	129.99	2	112.90	2.35	173.49
85	86	109.85	0.00	85.36	-501.39	0	-331.03	2	129.99	2	112.90	2.35	173.49
86	86	109.85	0.00	85.36	-501.39	0	-331.03	2	160.17	2	139.11	2.35	213.77
86	87	111.43	0.00	134.06	-677.69	0	-447.43	2	160.17	2	139.11	2.35	213.77
87	87	111.43	0.00	134.06	-677.69	0	-447.43	2	216.49	2	188.03	2.35	288.94
87	88	112.00	0.00	165.21	-768.54	0	-507.41	2	216.49	2	188.03	2.35	288.94
88	88	112.00	0.00	165.21	-768.54	0	-507.41	2	245.51	2	213.24	2.35	327.67
88	89	113.00	0.00	199.96	-956.30	0	-631.38	2	245.51	2	213.24	2.35	327.67
89	1089	113.00	0.00	-197.18	-956.30	0	-631.38	2	305.49	2	265.33	2.35	407.73
89	90	114.00	0.00	-162.47	-771.53	0	-509.39	2	305.49	2	265.33	2.35	407.73
90	90	114.00	0.00	-162.47	-771.53	0	-509.39	2	246.47	2	214.06	2.35	328.95
90	91	114.58	0.00	-131.41	-682.76	0	-450.78	2	246.47	2	214.06	2.35	328.95
91	91	114.58	0.00	-131.41	-682.76	0	-450.78	2	218.11	2	189.44	2.35	291.10
91	92	116.15	0.00	-82.88	-510.92	0	-337.33	2	218.11	2	189.44	2.35	291.10
92	92	116.15	0.00	-82.88	-510.92	0	-337.33	2	163.22	2	141.76	2.35	217.84
92	93	117.73	0.00	-31.74	-420.73	0	-277.78	2	163.22	2	141.76	2.35	217.84
93	93	117.73	0.00	-31.74	-420.73	0	-277.78	2	134.40	2	116.73	2.35	179.38
93	94	119.30	0.00	-9.97	-395.71	0	-261.26	2	134.40	2	116.73	2.35	179.38
94	94	119.30	-0.10	-9.97	-395.71	0	-261.26	2	126.41	2	109.79	2.35	168.71
94	95	120.88	-0.10	-9.97	-380.01	0	-250.93	2	126.38	2	109.77	2.35	168.69
95	95	120.88	-0.10	-9.97	-380.01	0	-257.13	2	121.36	2	105.41	2.35	161.99
95	96	122.45	-0.10	-9.97	-364.31	0	-246.51	2	84.52	2	73.41	2.35	125.34
96	96	122.45	0.00	-9.97	-364.31	0	-246.51	2	81.03	2	70.38	2.35	120.16
96	97	124.03	0.00	-9.97	-348.61	0	-235.85	2	81.06	2	70.41	2.35	120.19
97	97	124.03	0.00	-9.97	-348.61	0	-235.85	2	77.57	2	67.37	2.35	115.01
97	98	125.60	0.00	-9.97	-332.91	0	-225.23	2	77.57	2	67.37	2.35	115.01
98	98	125.60	0.00	-9.97	-332.91	0	-225.23	2	74.08	2	64.34	2.35	109.83
98	99	127.18	0.00	-9.97	-317.21	0	-214.61	2	74.08	2	64.34	2.35	109.83
99	99	127.18	0.00	-9.97	-317.21	0	-214.61	2	70.58	2	61.30	2.35	104.65
99	100	128.75	0.00	-9.97	-301.51	0	-203.99	2	70.58	2	61.30	2.35	104.65
100	100	128.75	0.00	-9.97	-301.51	0	-203.99	2	67.09	2	58.27	2.35	99.47
100	101	130.33	0.00	-9.97	-285.80	0	-193.36	2	67.09	2	58.27	2.35	99.47
101	101	130.33	0.00	-9.97	-285.80	0	-193.36	2	63.59	2	55.23	2.35	94.29
101	102	131.90	0.00	-5.28	-274.85	0	-185.95	2	63.59	2	55.23	2.35	94.29
102	102	131.90	0.00	-5.28	-274.85	0	-185.95	2	61.16	2	53.12	2.35	90.68
102	103	133.48	0.00	-5.28	-266.54	0	-180.33	2	61.16	2	53.12	2.35	90.68
103	103	133.48	0.00	-5.28	-266.54	0	-180.33	2	59.31	2	51.51	2.35	87.93
103	104	135.05	0.00	-5.28	-258.22	0	-174.70	2	59.31	2	51.51	2.35	87.93
104	104	135.05	0.05	-5.28	-258.22	0	-174.68	2	57.46	2	49.90	2.35	85.19
104	105	136.63	0.05	-5.28	-249.90	0	-169.05	2	57.47	2	49.82	2.35	85.20
105	105	136.63	0.05	-5.28	-249.90	0	-169.05	2	55.62	2	48.31	2.35	82.46
105	106	138.20	0.05	-5.28	-241.58	0	-159.48	2	79.85	2	69.35	2.35	106.56
106	106	138.20	0.00	-5.28	-241.58	0	-159.48	2	77.19	2	67.04	2.35	103.01
106	107	139.78	0.00	44.44	-270.51	0	-178.60	2	77.17	2	67.03	2.35	103.00
107	107	139.78	0.00	44.44	-270.51	0	-178.60	2	86.42	2	75.05	2.35	115.33
107	108	141.35	0.00	91.12	-373.57	0	-246.64	2	86.42	2	75.05	2.35	115.33
108	108	141.35	0.00	91.12	-373.57	0	-246.64	2	119.34	2	103.65	2.35	159.28
108	109	142.93	0.00	149.93	-567.88	0	-374.93	2	119.34	2	103.65	2.35	159.28
109	109	142.93	0.00	149.93	-567.88	0	-374.93	2	181.41	2	157.56	2.35	242.12
109	110	143.50	0.00	179.05	-661.82	0	-436.95	2	181.41	2	157.56	2.35	242.12
110	110	143.50	0.00	179.05	-661.82	0	-436.95	2	211.42	2	183.63	2.35	282.17
110	111	144.50	0.00	198.11	-849.90	0	-561.13	2	211.42	2	183.63	2.35	282.17
111	111	144.50	0.00	-170.44	-849.90	0	-561.13	2	271.50	2	235.81	2.35	362.36
111	112	145.50	0.00	-142.59	-693.62	0	-457.95	2	271.50	2	235.81	2.35	362.36
112	112	145.50	0.00	-142.59	-693.62	0	-457.95	2	221.58	2	192.45	2.35	295.73
112	113	145.68	0.00	-119.35	-669.67	0	-442.14	2	221.58	2	192.45	2.35	295.73
113	113	145.68	0.00	-119.35	-669.67	0	-442.14	2	213.93	2	185.80	2.35	285.52
113	114	146.85	0.00	-81.17	-549.99	0	-363.12	2	213.93	2	185.80	2.35	285.52
114	114	146.85	0.00	-81.17	-549.99	0	-363.12	2	175.70	2	152.60	2.35	234.49
114	115	148.03	0.00	-29.78	-484.45	0	-319.85	2	175.70	2	152.60	2.35	234.49
									154.76	2	134.41	2.35	206.55

268

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PF75B.ENV_TREN_GENERICO.MZ-To

Envolvente de tren de cargas plano genérico.MZ-). Tensiones a tiempo To

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	-0.08	8.13	-347.11	0	-229.20	2	110.86	2	96.29	2.35	147.97
39	40	46.70	-0.08	8.13	-358.90	0	-236.98	2	114.63	2	99.56	2.35	153.00
40	40	46.70	0.00	8.13	-358.90	0	-236.96	2	114.65	2	99.58	2.35	153.02
40	41	48.15	0.00	34.95	-385.02	0	-254.20	2	123.00	2	106.83	2.35	164.16
41	41	48.15	0.00	34.95	-385.02	0	-254.20	2	123.00	2	106.83	2.35	164.16
41	42	49.60	0.00	77.99	-469.95	0	-310.28	2	150.13	2	130.39	2.35	200.37
42	42	49.60	0.00	77.99	-469.95	0	-310.28	2	150.13	2	130.39	2.35	200.37
42	43	51.05	0.00	139.27	-626.40	0	-413.57	2	200.11	2	173.80	2.35	267.07
43	43	51.05	0.00	139.27	-626.40	0	-413.57	2	200.11	2	173.80	2.35	267.07
43	44	51.50	0.00	152.31	-693.77	0	-458.05	2	221.63	2	192.49	2.35	295.80
44	44	51.50	0.00	152.31	-693.77	0	-458.05	2	221.63	2	192.49	2.35	295.80
44	45	52.50	0.00	184.60	-865.83	0	-571.65	2	276.59	2	240.23	2.35	369.16
45	1045	52.50	0.00	-188.79	-865.83	0	-571.65	2	276.59	2	240.23	2.35	369.16
45	46	53.50	0.00	-156.38	-688.86	0	-454.81	2	220.06	2	191.13	2.35	293.70
46	46	53.50	0.00	-156.38	-688.86	0	-454.81	2	220.06	2	191.13	2.35	293.70
46	47	53.95	0.00	-143.30	-619.43	0	-408.97	2	197.88	2	171.86	2.35	264.10
47	47	53.95	0.00	-143.30	-619.43	0	-408.97	2	197.88	2	171.86	2.35	264.10
47	48	55.40	0.00	-81.48	-455.26	0	-300.58	2	145.43	2	126.31	2.35	194.10
48	48	55.40	0.00	-81.48	-455.26	0	-300.58	2	145.43	2	126.31	2.35	194.10
48	49	56.85	0.00	-42.82	-364.03	0	-240.34	2	116.29	2	101.00	2.35	155.21
49	49	56.85	0.00	-42.82	-364.03	0	-240.34	2	116.29	2	101.00	2.35	155.21
49	50	58.30	0.00	1.43	-339.41	0	-224.09	2	108.43	2	94.17	2.35	144.71
50	50	58.30	0.00	1.43	-339.41	0	-224.09	2	108.43	2	94.17	2.35	144.71
50	51	59.75	0.00	1.43	-341.48	0	-225.46	2	109.09	2	94.75	2.35	145.59
51	51	59.75	0.00	1.43	-341.48	0	-225.46	2	109.09	2	94.75	2.35	145.59
51	52	61.20	0.00	1.43	-343.55	0	-232.43	2	76.44	2	66.39	2.35	113.34
52	52	61.20	0.00	1.43	-343.55	0	-232.43	2	76.44	2	66.39	2.35	113.34
52	53	62.65	0.00	1.43	-345.62	0	-233.83	2	76.90	2	66.79	2.35	114.02
53	53	62.65	0.00	1.43	-345.62	0	-233.83	2	76.90	2	66.79	2.35	114.02
53	54	64.10	0.00	1.43	-347.68	0	-235.22	2	77.36	2	67.19	2.35	114.70
54	54	64.10	0.00	1.43	-347.68	0	-235.22	2	77.36	2	67.19	2.35	114.70
54	55	65.55	0.00	1.43	-349.75	0	-236.62	2	77.82	2	67.59	2.35	115.39
55	55	65.55	0.00	1.43	-349.75	0	-236.62	2	77.82	2	67.59	2.35	115.39
55	56	67.00	0.00	7.38	-357.15	0	-241.63	2	79.47	2	69.02	2.35	117.83
56	56	67.00	0.00	7.38	-357.15	0	-241.63	2	79.47	2	69.02	2.35	117.83
56	57	68.45	0.00	7.38	-367.86	0	-248.88	2	81.85	2	71.09	2.35	121.36
57	57	68.45	0.00	7.38	-367.86	0	-248.88	2	81.85	2	71.09	2.35	121.36
57	58	69.90	0.00	7.38	-378.56	0	-256.11	2	84.23	2	73.16	2.35	124.89
58	58	69.90	0.00	7.38	-378.56	0	-256.11	2	84.23	2	73.16	2.35	124.89
58	59	71.35	0.00	7.38	-389.27	0	-263.36	2	86.62	2	75.23	2.35	128.42
59	59	71.35	0.00	7.38	-389.27	0	-263.36	2	86.62	2	75.23	2.35	128.42
59	60	72.80	0.00	7.38	-399.98	0	-270.61	2	88.98	2	77.30	2.35	131.96
60	60	72.80	-0.06	7.38	-399.98	0	-270.61	2	88.98	2	77.30	2.35	131.96
60	61	74.25	-0.06	7.38	-410.68	0	-271.16	2	91.36	2	79.35	2.35	135.47
61	61	74.25	-0.06	7.38	-410.68	0	-271.16	2	91.36	2	79.35	2.35	135.47
62	62	75.70	0.00	7.38	-421.39	0	-278.23	2	131.17	2	113.93	2.35	175.08
62	63	77.15	0.00	36.05	-443.61	0	-292.88	2	134.60	2	116.90	2.35	179.65
63	63	77.15	0.00	36.05	-443.61	0	-292.88	2	134.60	2	116.90	2.35	179.65
63	64	78.60	0.00	83.44	-528.31	0	-348.81	2	168.77	2	146.58	2.35	225.25
64	64	78.60	0.00	83.44	-528.31	0	-348.81	2	168.77	2	146.58	2.35	225.25
64	65	80.05	0.00	128.21	-683.31	0	-451.14	2	218.29	2	189.59	2.35	291.34
65	65	80.05	0.00	128.21	-683.31	0	-451.14	2	218.29	2	189.59	2.35	291.34
65	66	80.50	0.00	157.60	-748.95	0	-494.48	2	239.25	2	207.80	2.35	319.32
66	66	80.50	0.00	157.60	-748.95	0	-494.48	2	239.25	2	207.80	2.35	319.32
66	67	81.50	0.00	189.60	-923.49	0	-609.72	2	295.01	2	256.23	2.35	393.74
67	1067	81.50	0.00	-198.57	-923.49	0	-609.72	2	295.01	2	256.23	2.35	393.74
67	68	82.50	0.00	-167.09	-735.84	0	-485.82	2	235.07	2	204.16	2.35	313.73
68	68	82.50	0.00	-167.09	-735.84	0	-485.82	2	235.07	2	204.16	2.35	313.73
68	69	83.08	0.00	-149.27	-641.45	0	-423.51	2	204.91	2	177.97	2.35	273.49
69	69	83.08	0.00	-149.27	-641.45	0	-423.51	2	204.91	2	177.97	2.35	273.49
69	70	84.65	0.00	-83.03	-457.18	0	-301.84	2	146.05	2	126.85	2.35	194.92
70	70	84.65	0.00	-83.03	-457.18	0	-301.84	2	146.05	2	126.85	2.35	194.92
70	71	86.23	0.00	-41.11	-357.91	0	-236.30	2	114.34	2	99.30	2.35	152.60
71	71	86.23	0.00	-41.11	-357.91	0	-236.30	2	114.34	2	99.30	2.35	152.60
71	72	87.80	0.00	-0.11	-332.87	0	-219.77	2	106.34	2	92.36	2.35	141.92
72	72	87.80	0.00	-0.11	-332.87	0	-219.77	2	106.34	2	92.36	2.35	141.92
72	73	89.38	0.00	-0.11	-332.71	0	-219.67	2	106.29	2	92.31	2.35	141.85
73	73	89.38	0.00	-0.11	-332.71	0	-219.67	2	106.29	2	92.31	2.35	141.85
73	74	90.95	0.00	-0.11	-332.55	0	-224.99	2	74.00	2	64.27	2.35	109.71
74	74	90.95	0.00	-0.11	-332.55	0	-224.99	2	74.00	2	64.27	2.35	109.71
74	75	92.53	0.00	-0.11	-332.37	0	-224.86	2	73.96	2	64.23	2.35	109.65
75	75	92.53	0.00	-0.11	-332.37	0	-224.86	2	73.96	2	64.23	2.35	109.65
75	76	94.10	0.00	-0.11	-332.21	0	-224.76	2	73.92	2	64.20	2.35	109.60
76	76	94.10	0.00	-0.11	-332.21	0	-224.76	2	73.92	2	64.20	2.35	109.60
76	77	95.68	0.00	-0.11	-332.05	0	-224.65	2	73.88	2	64.17	2.35	109.55

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PF75B.ENV_TREN_GENERICO.MZ-To

Envolvente de tren de cargas plano genérico.MZ-). Tensiones a tiempo To

Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	-0.11	-332.05	0	-224.65	2	73.88	2	64.17	2.35	109.55
77	78	97.25	0.00	5.07	-336.39	0	-227.58	2	74.85	2	65.01	2.35	110.98
78	78	97.25	0.00	5.07	-336.39	0	-227.58	2	74.85	2	65.01	2.35	110.98
78	79	98.83	0.00	5.07	-344.38	0	-232.99	2	76.63	2	66.55	2.35	113.61
79	79	98.83	0.00	5.07	-344.38	0	-232.99	2	76.63	2	66.55	2.35	113.61
79	80	100.40	0.00	5.07	-352.38	0	-238.40	2	78.41	2	68.10	2.35	116.25
80	80	100.40	0.00	5.07	-352.38	0	-238.40	2	78.41	2	68.10	2.35	116.25
80	81	101.98	0.00	5.07	-360.36	0	-243.80	2	80.18	2	69.64	2.35	118.89
81	81	101.98	0.00	5.07	-360.36	0	-243.80	2	80.18	2	69.64	2.35	118.89
81	82	103.55	0.00	5.07	-368.36	0	-249.21	2	81.96	2	71.19	2.35	121.53
82	82	103.55	-0.05	5.07	-368.36	0	-249.21	2	81.96	2	71.19	2.35	121.53
82	83	105.13	-0.05	5.07	-376.35	0	-254.64	2	83.73	2	72.72	2.35	124.15
83	83	105.13	-0.05	5.07	-376.35	0	-254.64	2	83.73	2	72.72	2.35	124.15
83	84	106.70	0.00	5.07	-384.34	0	-253.77	2	120.21	2	104.41	2.35	160.45
84	84	106.70	0.00	5.07	-384.34	0	-253.77	2	120.21	2	104.41	2.35	160.45
84	85	108.28	0.00	33.77	-406.91	0	-268.65	2	129.99	2	112.90	2.35	173.49
85	85	108.28	0.00	33.77	-406.91	0	-268.65	2	129.99	2	112.90	2.35	173.49
85	86	109.85	0.00	85.36	-501.39	0	-331.03	2	160.17	2	139.11	2.35	213.77
86	86	109.85	0.00	85.36	-501.39	0	-331.03	2	160.17	2	139.11	2.35	213.77
86	87	111.43	0.00	134.06	-677.69	0	-447.43	2	216.49	2	188.03	2.35	288.94
87	87	111.43	0.00	134.06	-677.69	0	-447.43	2	216.49	2	188.03	2.35	288.94
87	88	112.00	0.00	165.21	-768.54	0	-507.41	2	245.51	2	213.24	2.35	327.67
88	88	112.00	0.00	165.21	-768.54	0	-507.41	2	245.51	2	213.24	2.35	327.67
88	89	113.00	0.00	199.96	-956.30	0	-631.38	2	305.49	2	265.33	2.35	407.73
89	1089	113.00	0.00	-197.18	-956.30	0	-631.38	2	305.49	2	265.33	2.35	407.73
89	90	114.00	0.00	-162.47	-771.53	0	-509.39	2	246.47	2	214.06	2.35	328.95
90	90	114.00	0.00	-162.47	-771.53	0	-509.39	2	246.47	2	214.06	2.35	328.95
90	91	114.58	0.00	-131.41	-682.76	0	-450.78	2	218.11	2	189.44	2.35	291.10
91	91	114.58	0.00	-131.41	-682.76	0	-450.78	2	218.11	2	189.44	2.35	291.10
91	92	116.15	0.00	-82.88	-510.92	0	-337.33	2	163.22	2	141.76	2.35	217.84
92	92	116.15	0.00	-82.88	-510.92	0	-337.33	2	163.22	2	141.76	2.35	217.84
92	93	117.73	0.00	-31.74	-420.73	0	-277.78	2	134.40	2	116.73	2.35	179.38
93	93	117.73	0.00	-31.74	-420.73	0	-277.78	2	134.40	2	116.73	2.35	179.38
93	94	119.30	0.00	-9.97	-395.71	0	-261.26	2	126.41	2	109.79	2.35	168.69
94	94	119.30	-0.10	-9.97	-395.71	0	-261.26	2	126.41	2	109.79	2.35	168.69
94	95	120.88	-0.10	-9.97	-380.01	0	-250.93	2	121.36	2	105.41	2.35	161.99
95	95	120.88	-0.10	-9.97	-380.01	0	-250.93	2	121.36	2	105.41	2.35	161.99
95	96	122.45	0.00	-9.97	-364.31	0	-246.51	2	81.03	2	70.38	2.35	120.16
96	96	122.45	0.00	-9.97	-364.31	0	-246.51	2	81.03	2	70.38	2.35	120.16
96	97	124.03	0.00	-9.97	-348.61	0	-235.85	2	77.57	2	67.37	2.35	115.01
97	97	124.03	0.00	-9.97	-348.61	0	-235.85	2	77.57	2	67.37	2.35	115.01
97	98	125.60	0.00	-9.97	-332.91	0	-225.23	2	74.08	2	64.34	2.35	109.83
98	98	125.60	0.00	-9.97	-332.91	0	-225.23	2	74.08	2	64.34	2.35	109.83
98	99	127.18	0.00	-9.97	-317.21	0	-214.61	2	70.58	2	61.30	2.35	104.65
99	99	127.18	0.00	-9.97	-317.21	0	-214.61	2	70.58	2	61.30	2.35	104.65
99	100	128.75	0.00	-9.97	-301.51	0	-203.99	2	67.09	2	58.27	2.35	99.47
100	100	128.75	0.00	-9.97	-301.51	0	-203.99	2	67.09	2	58.27	2.35	99.47
100	101	130.33	0.00	-9.97	-285.80	0	-193.36	2	63.59	2	55.23	2.35	94.29
101	101	130.33	0.00	-9.97	-285.80	0	-193.36	2	63.59	2	55.23	2.35	94.29
101	102	131.90	0.00	-5.28	-274.85	0	-185.95	2	61.16	2	53.12	2.35	90.68
102	102	131.90	0.00	-5.28	-274.85	0	-185.95	2	61.16	2	53.12	2.35	90.68
102	103	133.48	0.00	-5.28	-266.54	0	-180.33	2	59.31	2	51.51	2.35	87.93
103	103	133.48	0.00	-5.28	-266.54	0	-180.33	2	59.31	2	51.51	2.35	87.93
103	104	135.05	0.00	-5.28	-258.22	0	-174.70	2	57.46	2	49.90	2.35	85.19
104	104	135.05	0.05	-5.28	-258.22	0	-174.70	2	57.46	2	49.90	2.35	85.19
104	105	136.63	0.05	-5.28	-249.90	0	-169.05	2	55.62	2	48.31	2.35	82.46
105	105	136.63	0.05	-5.28	-249.90	0	-169.05	2	55.62	2	48.31	2.35	82.46
105	106	138.20	0.05	-5.28	-241.58	0	-159.48	2	77.19	2	67.04	2.35	103.01
106	106	138.20	0.00	-5.28	-241.58	0	-159.48	2	77.19	2	67.04	2.35	103.01
106	107	139.78	0.00	44.44	-270.51	0	-178.60	2	86.42	2	75.05	2.35	115.33
107	107	139.78	0.00	44.44	-270.51	0	-178.60	2	86.42	2	75.05	2.35	115.33
107	108	141.35	0.00	91.12	-373.57	0	-246.64	2	119.34	2	103.65	2.35	159.28
108	108	141.35	0.00	91.12	-373.57	0	-246.64	2	119.34	2	103.65	2.35	159.28
108	109	142.93	0.00	149.93	-557.88	0	-374.93	2	181.41	2	157.56	2.35	242.12
109	109	142.93	0.00	149.93	-557.88	0	-374.93	2	181.41	2	157.56	2.35	242.12
109	110	143.50	0.00	179.05	-661.82	0	-436.95	2	211.42	2	183.63	2.35	282.17
110	110	143.50	0.00	179.05	-661.82	0	-436.95	2	211.42	2	183.63	2.35	282.17
110	111	144.50	0.00	198.11	-849.90	0	-561.13	2	271.50	2	235.81	2.35	362.36
111	111	144.50	0.00	198.11	-849.90	0	-561.13	2	271.50	2	235.81	2.35	362.36
111	112	145.50	0.00	-142.59	-693.62	0	-457.95	2	221.58	2	192.45	2.35	295.73
112	112	145.50	0.00	-142.59	-693.62	0	-457.95	2	221.58	2	192.45	2.35	295.73
112	113	145.68	0.00	-119.35	-669.67	0	-442.14	2	213.93	2	185.80	2.35	285.52
113	113	145.68	0.00	-119.35	-669.67	0	-442.14	2	213.93	2	185.80	2.35	285.52
113	114	146.85	0.00	-81.17	-549.99	0	-363.12	2	175.70	2	152.60	2.35	234.49
114	114	146.85	0.00	-81.17	-549.99	0	-363.12	2	175.70	2	152.60	2.35	234.49
114	115	148.03	0.00	-29.78	-484.45	0	-319.85	2	154.76	2	134.41	2.35	206.55

269

CÁLCULO TENSIONAL

Hipótesis de cálculo:
IPF75B.ENV_TREN_GENERICO.MZ-.To
Solvente de tren de cargas plano genérico.MZ-. Tensiones a tiempo To
F75B.MZ.
Coef. ex:

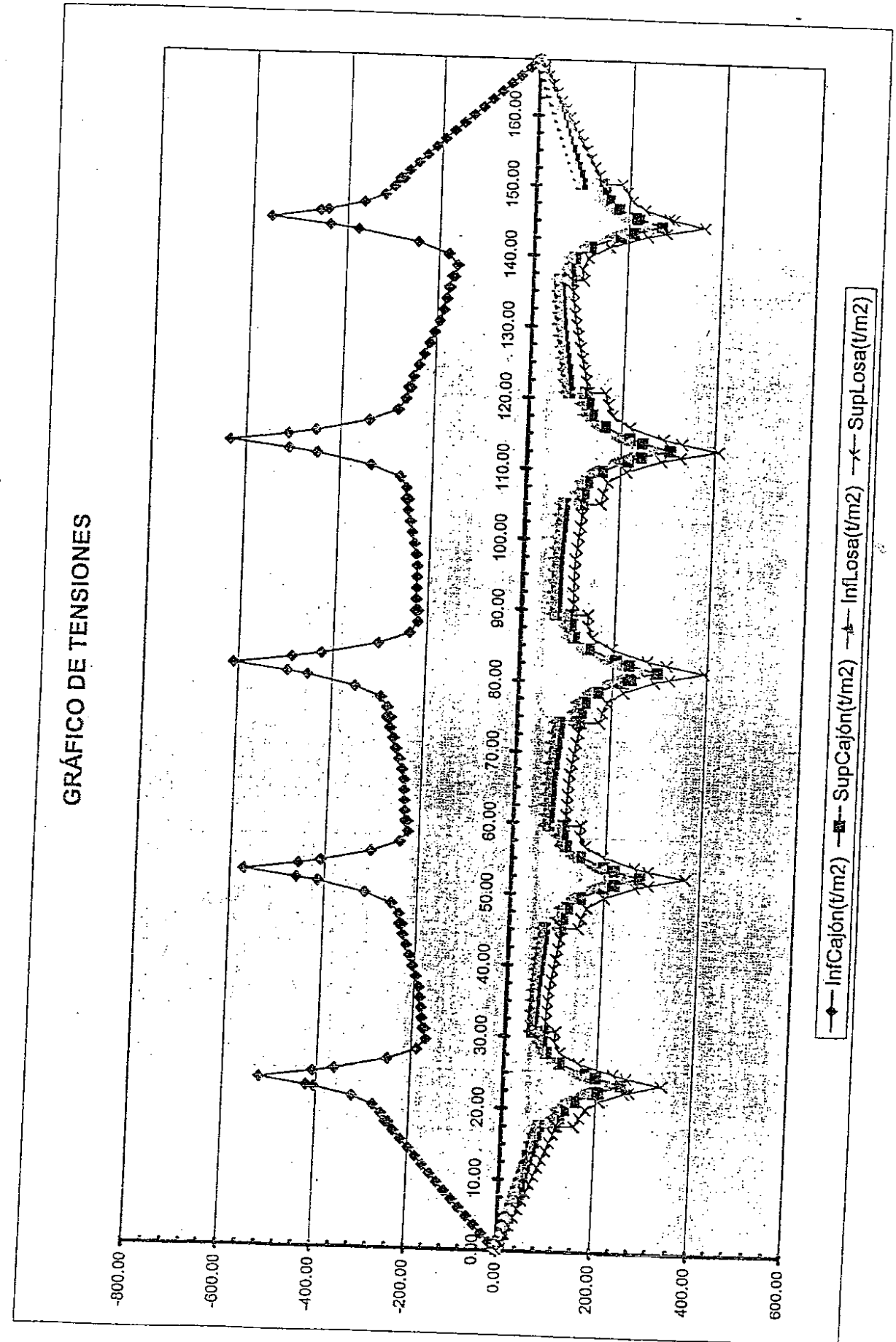
Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra		Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
115	115	148.03	0.00	-29.78	-484.45	0	-319.85	2	154.76	2	134.41	2.35	206.55
115	116	149.20	0.00	-24.23	-455.62	0	-300.81	2	145.55	2	126.41	2.35	194.26
116	116	149.20	-0.28	-24.23	-455.62	0	-300.90	2	145.46	2	126.34	2.35	194.18
116	117	150.38	-0.28	-24.23	-427.14	0	-282.10	2	136.37	2	118.44	2.35	182.04
117	117	150.38	-0.28	-24.23	-427.14	0	-289.07	2	94.95	2	82.47	2.35	140.84
117	118	151.55	-0.28	-24.23	-398.66	0	-269.81	2	88.61	2	76.96	2.35	131.44
118	118	151.55	0.00	-24.23	-398.66	0	-269.71	2	88.71	2	77.04	2.35	131.52
118	119	152.73	0.00	-24.23	-370.18	0	-250.44	2	82.37	2	71.54	2.35	122.13
119	119	152.73	0.00	-24.23	-370.18	0	-250.44	2	82.37	2	71.54	2.35	122.13
119	120	153.90	0.00	-24.23	-341.72	0	-231.19	2	76.04	2	66.04	2.35	112.74
120	120	153.90	0.00	-24.23	-341.72	0	-231.19	2	76.04	2	66.04	2.35	112.74
120	121	155.08	0.00	-24.23	-313.23	0	-211.92	2	69.70	2	60.53	2.35	103.34
121	121	155.08	0.00	-24.23	-313.23	0	-211.92	2	69.70	2	60.53	2.35	103.34
121	122	156.25	0.00	-24.23	-284.76	0	-192.65	2	63.36	2	55.03	2.35	93.94
122	122	156.25	0.00	-24.23	-284.76	0	-192.65	2	63.36	2	55.03	2.35	93.94
122	123	157.43	0.00	-24.23	-256.28	0	-173.39	2	57.03	2	49.53	2.35	84.55
123	123	157.43	0.00	-24.23	-256.28	0	-173.39	2	57.03	2	49.53	2.35	84.55
124	124	158.60	0.00	-24.23	-227.81	0	-154.12	2	50.69	2	44.03	2.35	75.16
124	125	159.78	0.00	-24.23	-227.81	0	-154.12	2	50.69	2	44.03	2.35	75.16
125	125	159.78	0.00	-24.23	-199.33	0	-134.86	2	44.35	2	38.52	2.35	65.76
125	126	160.95	0.00	-24.23	-199.33	0	-134.86	2	44.35	2	38.52	2.35	65.76
126	126	160.95	0.00	-24.23	-170.86	0	-115.60	2	38.02	2	33.02	2.35	56.37
126	127	162.13	0.00	-24.23	-142.38	0	-96.33	2	31.68	2	27.52	2.35	46.97
127	127	162.13	0.00	-24.23	-142.38	0	-96.33	2	31.68	2	27.52	2.35	46.97
127	128	163.30	0.00	-24.23	-113.90	0	-77.06	2	25.34	2	22.01	2.35	37.58
128	128	163.30	0.00	-24.23	-113.90	0	-77.06	2	25.34	2	22.01	2.35	37.58
128	129	164.48	0.00	-24.23	-85.42	0	-57.79	2	19.01	2	16.51	2.35	28.18
129	129	164.48	0.00	-24.23	-85.42	0	-57.79	2	19.01	2	16.51	2.35	28.18
129	130	165.65	0.00	-24.23	-56.96	0	-38.54	2	12.67	2	11.01	2.35	18.79
130	130	165.65	0.00	-24.23	-56.96	0	-38.54	2	12.67	2	11.01	2.35	18.79
130	131	166.83	0.00	-24.23	-28.47	0	-19.26	2	6.33	2	5.50	2.35	9.39
131	131	166.83	0.00	-24.23	-28.47	0	-19.26	2	6.33	2	5.50	2.35	9.39
131	132	167.00	0.00	-24.23	-24.23	0	-16.39	2	5.39	2	4.68	2.35	7.99
132	132	167.00	0.00	-24.23	-24.23	0	-16.39	2	5.39	2	4.68	2.35	7.99
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

hsim_t0.xls

Programa DINTEL IDEAM S.A.
IPF75B.ENV_TREN_GENERICO.MZ-.To

05/09/01

GRÁFICO DE TENSIONES



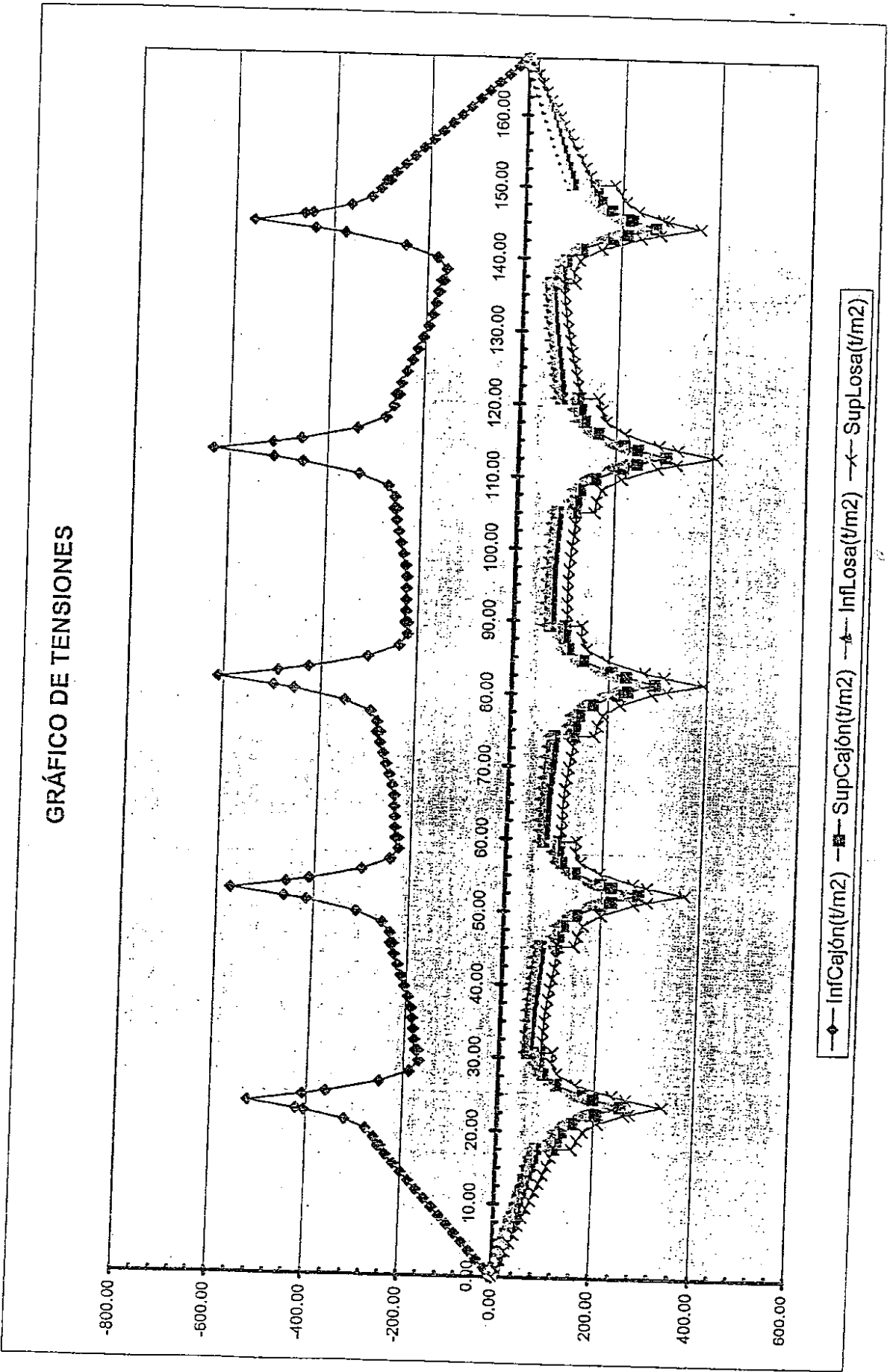
CÁLCULO TENSIONAL

Hipótesis de cálculo:
IPF75B.ENV_TREN_GENERICO.MZ-To
Solvente de tren de cargas plano genérico.MZ-). Tensiones a tiempo To
IPF75B.MZ-
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-29.78	-484.45	0	-319.85	2	154.76	2	134.41	2.35	206.55
115	116	149.20	0.00	-24.23	-455.62	0	-300.81	2	145.55	2	126.41	2.35	194.26
116	116	149.20	-0.28	-24.23	-455.62	0	-300.90	2	145.46	2	126.34	2.35	194.18
116	117	150.38	-0.28	-24.23	-427.14	0	-282.10	2	136.37	2	118.44	2.35	182.04
117	117	150.38	-0.28	-24.23	-427.14	0	-289.07	2	94.95	2	82.47	2.35	140.84
117	118	151.55	-0.28	-24.23	-398.66	0	-269.81	2	88.61	2	76.96	2.35	131.44
118	118	151.55	0.00	-24.23	-398.66	0	-269.71	2	88.71	2	77.04	2.35	131.52
118	119	152.73	0.00	-24.23	-370.18	0	-250.44	2	82.37	2	71.54	2.35	122.13
119	119	152.73	0.00	-24.23	-370.18	0	-250.44	2	82.37	2	71.54	2.35	122.13
119	120	153.90	0.00	-24.23	-341.72	0	-231.19	2	76.04	2	66.04	2.35	112.74
120	120	153.90	0.00	-24.23	-341.72	0	-231.19	2	76.04	2	66.04	2.35	112.74
120	121	155.08	0.00	-24.23	-313.23	0	-211.92	2	69.70	2	60.53	2.35	103.34
121	121	155.08	0.00	-24.23	-313.23	0	-211.92	2	69.70	2	60.53	2.35	103.34
121	122	156.25	0.00	-24.23	-284.76	0	-192.65	2	63.36	2	55.03	2.35	93.94
122	122	156.25	0.00	-24.23	-284.76	0	-192.65	2	63.36	2	55.03	2.35	93.94
122	123	157.43	0.00	-24.23	-256.28	0	-173.39	2	57.03	2	49.53	2.35	84.55
123	123	157.43	0.00	-24.23	-256.28	0	-173.39	2	57.03	2	49.53	2.35	84.55
123	124	158.60	0.00	-24.23	-227.81	0	-154.12	2	50.69	2	44.03	2.35	75.16
124	124	158.60	0.00	-24.23	-227.81	0	-154.12	2	50.69	2	44.03	2.35	75.16
124	125	159.78	0.00	-24.23	-199.33	0	-134.86	2	44.35	2	38.52	2.35	65.76
125	125	159.78	0.00	-24.23	-199.33	0	-134.86	2	44.35	2	38.52	2.35	65.76
125	126	160.95	0.00	-24.23	-170.86	0	-115.60	2	38.02	2	33.02	2.35	56.37
126	126	160.95	0.00	-24.23	-170.86	0	-115.60	2	38.02	2	33.02	2.35	56.37
126	127	162.13	0.00	-24.23	-142.38	0	-96.33	2	31.68	2	27.52	2.35	46.97
127	127	162.13	0.00	-24.23	-142.38	0	-96.33	2	31.68	2	27.52	2.35	46.97
127	128	163.30	0.00	-24.23	-113.90	0	-77.06	2	25.34	2	22.01	2.35	37.58
128	128	163.30	0.00	-24.23	-113.90	0	-77.06	2	25.34	2	22.01	2.35	37.58
128	129	164.48	0.00	-24.23	-85.42	0	-57.79	2	19.01	2	16.51	2.35	28.18
129	129	164.48	0.00	-24.23	-85.42	0	-57.79	2	19.01	2	16.51	2.35	28.18
129	130	165.65	0.00	-24.23	-56.96	0	-38.54	2	12.67	2	11.01	2.35	18.79
130	130	165.65	0.00	-24.23	-56.96	0	-38.54	2	12.67	2	11.01	2.35	18.79
130	131	166.83	0.00	-24.23	-28.47	0	-19.26	2	6.33	2	5.50	2.35	9.39
131	131	166.83	0.00	-24.23	-28.47	0	-19.26	2	6.33	2	5.50	2.35	9.39
131	132	167.00	0.00	-24.23	-24.23	0	-16.39	2	5.39	2	4.68	2.35	7.99
132	132	167.00	0.00	-24.23	-24.23	0	-16.39	2	5.39	2	4.68	2.35	7.99
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
IPF75B.ENV_TREN_GENERICO.MZ-To

GRÁFICO DE TENSIONES



CÁLCULO TENSIONAL

Hipótesis de cálculo:

IPF75B.ENV_TREN_GENERICO.MZ-To

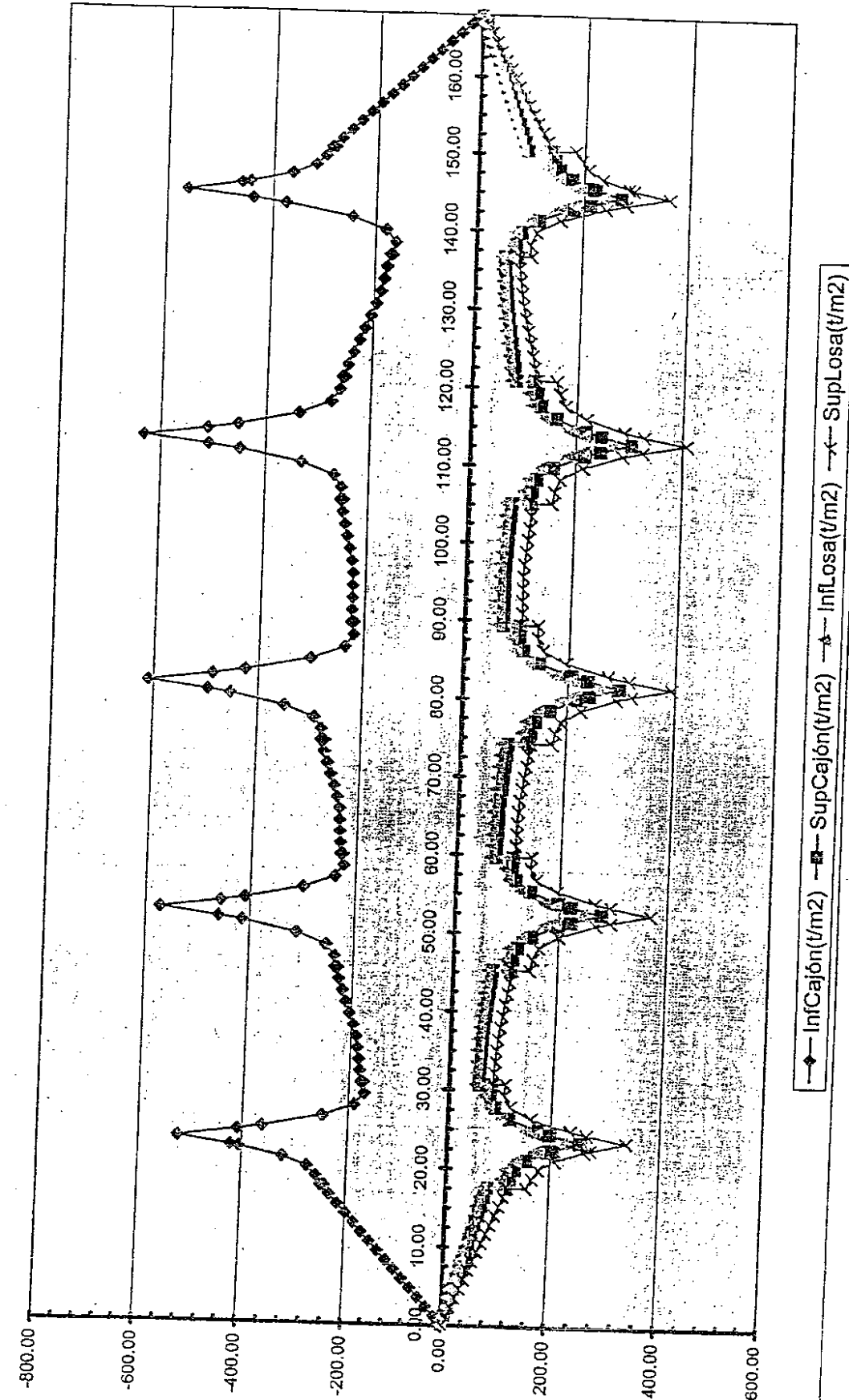
olvente de tren de cargas plano genérico.MZ-). Tensiones a tiempo To

Coef. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-29.78	-484.45	0	-319.85	2	154.76	2	134.41	2.35	206.55
115	116	149.20	0.00	-24.23	-455.62	0	-300.81	2	145.55	2	126.41	2.35	194.26
116	116	149.20	-0.28	-24.23	-455.62	0	-300.90	2	145.46	2	126.34	2.35	194.18
116	117	150.38	-0.28	-24.23	-427.14	0	-282.10	2	136.37	2	118.44	2.35	182.04
117	117	150.38	-0.28	-24.23	-427.14	0	-289.07	2	94.95	2	82.47	2.35	140.84
117	118	151.55	-0.28	-24.23	-398.66	0	-269.81	2	88.61	2	76.96	2.35	131.44
118	118	151.55	0.00	-24.23	-398.66	0	-269.71	2	88.71	2	77.04	2.35	131.52
118	119	152.73	0.00	-24.23	-370.18	0	-250.44	2	82.37	2	71.54	2.35	122.13
119	119	152.73	0.00	-24.23	-370.18	0	-250.44	2	82.37	2	71.54	2.35	122.13
119	120	153.90	0.00	-24.23	-341.72	0	-231.19	2	76.04	2	66.04	2.35	112.74
120	120	153.90	0.00	-24.23	-341.72	0	-231.19	2	76.04	2	66.04	2.35	112.74
120	121	155.08	0.00	-24.23	-313.23	0	-211.92	2	69.70	2	60.53	2.35	103.34
121	121	155.08	0.00	-24.23	-313.23	0	-211.92	2	69.70	2	60.53	2.35	103.34
121	122	156.25	0.00	-24.23	-284.76	0	-192.65	2	63.36	2	55.03	2.35	93.94
122	122	156.25	0.00	-24.23	-284.76	0	-192.65	2	63.36	2	55.03	2.35	93.94
122	123	157.43	0.00	-24.23	-256.28	0	-173.39	2	57.03	2	49.53	2.35	84.55
123	123	157.43	0.00	-24.23	-256.28	0	-173.39	2	57.03	2	49.53	2.35	84.55
123	124	158.60	0.00	-24.23	-227.81	0	-154.12	2	50.69	2	44.03	2.35	75.16
124	124	158.60	0.00	-24.23	-227.81	0	-154.12	2	50.69	2	44.03	2.35	75.16
124	125	159.78	0.00	-24.23	-199.33	0	-134.86	2	44.35	2	38.52	2.35	65.76
125	125	159.78	0.00	-24.23	-199.33	0	-134.86	2	44.35	2	38.52	2.35	65.76
125	126	160.95	0.00	-24.23	-170.86	0	-115.60	2	38.02	2	33.02	2.35	56.37
126	126	160.95	0.00	-24.23	-170.86	0	-115.60	2	38.02	2	33.02	2.35	56.37
126	127	162.13	0.00	-24.23	-142.38	0	-96.33	2	31.68	2	27.52	2.35	46.97
127	127	162.13	0.00	-24.23	-142.38	0	-96.33	2	31.68	2	27.52	2.35	46.97
127	128	163.30	0.00	-24.23	-113.90	0	-77.06	2	25.34	2	22.01	2.35	37.58
128	128	163.30	0.00	-24.23	-113.90	0	-77.06	2	25.34	2	22.01	2.35	37.58
128	129	164.48	0.00	-24.23	-85.42	0	-57.79	2	19.01	2	16.51	2.35	28.18
129	129	164.48	0.00	-24.23	-85.42	0	-57.79	2	19.01	2	16.51	2.35	28.18
129	130	165.65	0.00	-24.23	-56.96	0	-38.54	2	12.67	2	11.01	2.35	18.79
130	130	165.65	0.00	-24.23	-56.96	0	-38.54	2	12.67	2	11.01	2.35	18.79
130	131	166.83	0.00	-24.23	-28.47	0	-19.26	2	6.33	2	5.50	2.35	9.39
131	131	166.83	0.00	-24.23	-28.47	0	-19.26	2	6.33	2	5.50	2.35	9.39
131	132	167.00	0.00	-24.23	-24.23	0	-16.39	2	5.39	2	4.68	2.35	7.99
132	132	167.00	0.00	-24.23	-24.23	0	-16.39	2	5.39	2	4.68	2.35	7.99
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

Programa DINTEL IDEAM S.A.
IPF75B.ENV_TREN_GENERICO.MZ-To

GRÁFICO DE TENSIONES



05/09/01

hsim_t0.xls

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PASEO.ENV_TREN_GENERICO.MZ+.To

Involvementadetréndecargasplanogenérico.MZ+). Tensiones a tiempo To

1) PASEO.ENV_TREN_GENERICO.MZ+

ref. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	-7.47	7.85	0	5.31	2	-1.75	2	-1.52	2.35	-2.59
2	2	1.00	0.00	-7.47	7.85	0	5.31	2	-1.75	2	-1.52	2.35	-2.59
2	3	1.18	0.00	-7.34	9.14	0	6.18	2	-2.03	2	-1.77	2.35	-3.02
3	3	1.18	0.00	-7.34	9.14	0	6.18	2	-2.03	2	-1.77	2.35	-3.02
3	4	2.35	0.00	-6.46	17.25	0	11.67	2	-3.84	2	-3.33	2.35	-5.69
4	4	2.35	0.00	-6.46	17.25	0	11.67	2	-3.84	2	-3.33	2.35	-5.69
4	5	3.53	0.00	-5.58	24.32	0	16.45	2	-5.41	2	-4.70	2.35	-8.02
5	5	3.53	0.00	-5.58	24.32	0	16.45	2	-5.41	2	-4.70	2.35	-8.02
5	6	4.70	0.00	-4.70	30.35	0	20.53	2	-6.75	2	-5.87	2.35	-10.01
6	6	4.70	0.00	-4.70	30.35	0	20.53	2	-6.75	2	-5.87	2.35	-10.01
6	7	5.88	0.00	-3.81	35.35	0	23.92	2	-7.87	2	-6.83	2.35	-11.66
7	7	5.88	0.00	-3.81	35.35	0	23.92	2	-7.87	2	-6.83	2.35	-11.66
7	8	7.05	0.00	-2.93	39.32	0	26.60	2	-8.75	2	-7.60	2.35	-12.97
8	8	7.05	0.00	-2.93	39.32	0	26.60	2	-8.75	2	-7.60	2.35	-12.97
8	9	8.23	0.00	-2.05	42.25	0	28.58	2	-9.40	2	-8.17	2.35	-13.94
9	9	8.23	0.00	-2.05	42.25	0	28.58	2	-9.40	2	-8.17	2.35	-13.94
9	10	9.40	0.00	-1.17	44.14	0	29.86	2	-9.82	2	-8.53	2.35	-14.56
10	10	9.40	0.00	-1.17	44.14	0	29.86	2	-9.82	2	-8.53	2.35	-14.56
10	11	10.58	0.00	-0.29	45.00	0	30.44	2	-10.01	2	-8.70	2.35	-14.85
11	11	10.58	0.00	-0.29	45.00	0	30.44	2	-10.01	2	-8.70	2.35	-14.85
11	12	11.75	0.00	0.59	44.82	0	30.32	2	-9.97	2	-8.66	2.35	-14.79
12	12	11.75	0.00	0.59	44.82	0	30.32	2	-9.97	2	-8.66	2.35	-14.79
12	13	12.93	0.00	1.47	43.61	0	29.50	2	-9.70	2	-8.43	2.35	-14.39
13	13	12.93	0.00	1.47	43.61	0	29.50	2	-9.70	2	-8.43	2.35	-14.39
13	14	14.10	0.00	2.35	41.36	0	27.98	2	-9.20	2	-7.99	2.35	-13.65
14	14	14.10	0.00	2.35	41.36	0	27.98	2	-9.20	2	-7.99	2.35	-13.65
14	15	15.28	0.00	3.24	38.07	0	25.76	2	-8.47	2	-7.36	2.35	-12.56
15	15	15.28	0.00	3.24	38.07	0	25.76	2	-8.47	2	-7.36	2.35	-12.56
15	16	16.45	0.00	4.12	33.75	0	22.83	2	-7.51	2	-6.52	2.35	-11.13
16	16	16.45	0.00	4.12	33.75	0	22.83	2	-7.51	2	-6.52	2.35	-11.13
16	17	17.63	-0.06	5.00	28.40	0	19.19	2	-6.34	2	-5.51	2.35	-9.39
17	17	17.63	-0.06	5.00	28.40	0	19.19	2	-6.34	2	-5.51	2.35	-9.39
17	18	18.80	-0.07	5.88	22.01	0	14.51	2	-7.05	2	-6.13	2.35	-9.40
18	18	18.80	0.00	5.88	22.01	0	14.51	2	-7.05	2	-6.13	2.35	-9.40
18	19	19.98	0.00	5.82	14.77	0	9.75	2	-4.72	2	-4.10	2.35	-6.30
19	19	19.98	0.00	5.82	14.77	0	9.75	2	-4.72	2	-4.10	2.35	-6.30
19	20	21.15	0.00	3.34	9.68	0	6.39	2	-3.09	2	-2.69	2.35	-4.13
20	20	21.15	0.00	3.34	9.68	0	6.39	2	-3.09	2	-2.69	2.35	-4.13
20	21	22.33	0.00	1.34	7.28	0	4.81	2	-2.33	2	-2.02	2.35	-3.10
21	21	22.33	0.00	1.34	7.28	0	4.81	2	-2.33	2	-2.02	2.35	-3.10
21	22	22.50	0.00	0.67	7.12	0	4.70	2	-2.27	2	-1.98	2.35	-3.04
22	22	22.50	0.00	0.67	7.12	0	4.70	2	-2.27	2	-1.98	2.35	-3.04
22	23	23.50	0.00	-0.29	6.93	0	4.58	2	-2.21	2	-1.92	2.35	-2.95
23	23	23.50	0.00	-0.29	6.93	0	4.58	2	-2.21	2	-1.92	2.35	-2.95
23	24	24.50	0.00	-0.07	6.07	0	4.01	2	-1.94	2	-1.68	2.35	-2.59
24	24	24.50	0.00	-0.07	6.07	0	4.01	2	-1.94	2	-1.68	2.35	-2.59
24	25	24.95	0.00	-0.72	6.05	0	3.99	2	-1.93	2	-1.68	2.35	-2.58
25	25	24.95	0.00	-0.72	6.05	0	3.99	2	-1.93	2	-1.68	2.35	-2.58
25	26	26.40	0.00	-2.26	7.97	0	5.26	2	-2.55	2	-2.21	2.35	-3.40
26	26	26.40	0.00	-2.26	7.97	0	5.26	2	-2.55	2	-2.21	2.35	-3.40
26	27	27.85	0.00	-4.38	12.99	0	8.58	2	-4.15	2	-3.60	2.35	-5.54
27	27	27.85	0.00	-4.38	12.99	0	8.58	2	-4.15	2	-3.60	2.35	-5.54
27	28	29.30	0.00	-6.92	21.22	0	14.01	2	-6.78	2	-5.89	2.35	-9.05
28	28	29.30	-0.07	-6.92	21.22	0	13.99	2	-6.80	2	-5.91	2.35	-9.07
28	29	30.75	-0.06	-5.83	30.47	0	20.10	2	-9.75	2	-8.47	2.35	-13.01
29	29	30.75	-0.06	-5.83	30.47	0	20.59	2	-8.80	2	-7.91	2.35	-10.07
29	30	32.20	-0.05	-4.75	38.14	0	25.79	2	-8.50	2	-7.39	2.35	-12.60
30	30	32.20	0.00	-4.75	38.14	0	25.80	2	-8.49	2	-7.37	2.35	-12.58
30	31	33.65	0.00	-3.66	44.23	0	29.92	2	-9.84	2	-8.55	2.35	-14.59
31	31	33.65	0.00	-3.66	44.23	0	29.92	2	-9.84	2	-8.55	2.35	-14.59
31	32	35.10	0.00	-2.57	48.75	0	32.98	2	-10.85	2	-9.42	2.35	-16.08
32	32	35.10	0.00	-2.57	48.75	0	32.98	2	-10.85	2	-9.42	2.35	-16.08
32	33	36.55	0.00	-1.48	51.69	0	34.97	2	-11.50	2	-9.99	2.35	-17.05
33	33	36.55	0.00	-1.48	51.69	0	34.97	2	-11.50	2	-9.99	2.35	-17.05
33	34	38.00	0.00	-0.40	53.05	0	35.89	2	-11.80	2	-10.25	2.35	-17.50
34	34	38.00	0.00	-0.40	53.05	0	35.89	2	-11.80	2	-10.25	2.35	-17.50
34	35	39.45	0.00	0.69	52.83	0	35.74	2	-11.76	2	-10.21	2.35	-17.43
35	35	39.45	0.00	0.69	52.83	0	35.74	2	-11.76	2	-10.21	2.35	-17.43
35	36	40.90	0.00	1.78	51.04	0	34.53	2	-11.36	2	-9.86	2.35	-16.84
36	36	40.90	0.00	1.78	51.04	0	34.53	2	-11.36	2	-9.86	2.35	-16.84
36	37	42.35	0.00	2.87	47.67	0	32.25	2	-10.61	2	-9.21	2.35	-15.73
37	37	42.35	0.00	2.87	47.67	0	32.25	2	-10.61	2	-9.21	2.35	-15.73
37	38	43.80	0.00	3.95	42.73	0	28.91	2	-9.51	2	-8.26	2.35	-14.10
38	38	43.80	-0.04	3.95	42.73	0	28.90	2	-9.52	2	-8.27	2.35	-14.11
38	39	45.25	-0.05	5.04	36.21	0	24.48	2	-8.07	2	-7.01	2.35	-11.96

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PASEO.ENV_TREN_GENERICO.MZ+.To

Involvementadetréndecargasplanogenérico.MZ+). Tensiones a tiempo To

1) PASEO.ENV_TREN_GENERICO.MZ+

ref. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra	InfCajón	Fibra	SupCajón	Fibra	InfLosa	Fibra	SupLosa
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
39	39	45.25	-0.05	5.04	36.21	0	23.89	2	-11.58	2	-10.06	2.35	-15.45
39	40	46.70	-0.06	6.13	28.11	0	18.54	2	-9.00	2	-7.82	2.35	-12.00
40	40	46.70	0.00	6.13	28.11	0	18.56	2	-8.98	2	-7.80	2.35	-11.98
40	41	48.15	0.00	5.21	19.51	0	12.88	2	-6.23	2	-5.41	2.35	-8.32
41	41	48.15	0.00	5.21	19.51	0	12.88	2	-6.23	2	-5.41	2.35	-8.32
41	42	49.60	0.00	3.07	13.74	0	9.07	2	-4.39	2	-3.81	2.35	-5.86
42	42	49.60	0.00	3.07	13.74	0	9.07	2	-4.39	2	-3.81	2.35	-5.86
42	43	51.05	0.00	0.79	11.38	0	7.51	2	-3.64	2	-3.16	2.35	-4.85
43	43	51.05	0.00	0.79	11.38	0	7.51	2	-3.64	2	-3.16	2.35	-4.85
43	44	51.50	0.00	0.15	11.30	0	7.46	2	-3.61	2	-3.14	2.35	-4.82
44	44	51.50	0.00	0.15	11.30	0	7.46	2	-3.61	2	-3.14	2.35	-4.82
44	45	52.50	0.00	-1.19	12.04	0	7.95	2	-3.85	2	-3.34	2.35	-5.13
45	45	52.50	0.00	1.64	12.04	0	7.95	2	-3.85	2	-3.34	2.35	-5.13
45	46	53.50	0.00	0.29	10.84	0	7.16	2	-3.46	2	-3.01	2.35	-4.62
46	46	53.50	0.00	0.29	10.84	0	7.16	2	-3.46	2	-3.01	2.35	-4.62
46	47	53.95	0.00	-0.36	10.71	0	7.07	2	-3.42	2	-2.97	2.35	-4.

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PASEO.ENV_TREN_GENERICO.MZ+.To

Involvemento de tendecargas planogenérico.MZ+). Tensiones a tiempo To

J.ENV_TREN_GENERICO.MZ+

ref. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	-1.18	63.23	0	42.78	2	-14.07	2	-12.22	2.35	-20.86
77	78	97.25	0.00	0.00	64.16	0	43.41	2	-14.28	2	-12.40	2.35	-21.17
78	78	97.25	0.00	0.00	64.16	0	43.41	2	-14.28	2	-12.40	2.35	-21.17
78	79	98.83	0.00	1.18	63.24	0	42.78	2	-14.07	2	-12.22	2.35	-20.86
79	79	98.83	0.00	1.18	63.24	0	42.78	2	-14.07	2	-12.22	2.35	-20.86
79	80	100.40	0.00	2.36	60.45	0	40.90	2	-13.45	2	-11.68	2.35	-19.94
80	80	100.40	0.00	2.36	60.45	0	40.90	2	-13.45	2	-11.68	2.35	-19.94
80	81	101.98	0.00	3.54	55.81	0	37.76	2	-12.42	2	-10.79	2.35	-18.41
81	81	101.98	0.00	3.54	55.81	0	37.76	2	-12.42	2	-10.79	2.35	-18.41
81	82	103.55	0.00	4.72	49.30	0	33.35	2	-10.97	2	-9.53	2.35	-16.26
82	82	103.55	-0.04	4.72	49.30	0	33.35	2	-10.97	2	-9.53	2.35	-16.26
82	83	105.13	-0.05	5.90	40.93	0	27.67	2	-9.12	2	-7.92	2.35	-13.52
83	83	105.13	-0.05	5.90	40.93	0	27.67	2	-9.12	2	-7.92	2.35	-13.52
83	84	106.70	-0.06	7.08	30.70	0	20.25	2	-9.83	2	-8.53	2.35	-13.11
84	84	106.70	-0.06	7.08	30.70	0	20.25	2	-9.83	2	-8.53	2.35	-13.11
84	85	108.28	0.00	6.11	19.71	0	13.01	2	-6.30	2	-5.47	2.35	-8.40
85	85	108.28	0.00	6.11	19.71	0	13.01	2	-6.30	2	-5.47	2.35	-8.40
85	86	109.85	0.00	3.43	12.25	0	8.09	2	-3.91	2	-3.40	2.35	-5.22
86	86	109.85	0.00	3.43	12.25	0	8.09	2	-3.91	2	-3.40	2.35	-5.22
86	87	111.43	0.00	0.95	9.06	0	5.98	2	-2.89	2	-2.51	2.35	-3.86
87	87	111.43	0.00	0.95	9.06	0	5.98	2	-2.89	2	-2.51	2.35	-3.86
87	88	112.00	0.00	0.32	8.87	0	5.86	2	-2.83	2	-2.46	2.35	-3.78
88	88	112.00	0.00	0.32	8.87	0	5.86	2	-2.83	2	-2.46	2.35	-3.78
88	89	113.00	0.00	-1.20	9.66	0	6.38	2	-3.09	2	-2.68	2.35	-4.12
89	1089	113.00	0.00	0.97	9.66	0	6.38	2	-3.09	2	-2.68	2.35	-4.12
89	90	114.00	0.00	-0.55	9.10	0	6.01	2	-2.91	2	-2.52	2.35	-3.88
90	90	114.00	0.00	-0.55	9.10	0	6.01	2	-2.91	2	-2.52	2.35	-3.88
90	91	114.58	0.00	-1.18	9.42	0	6.22	2	-3.01	2	-2.61	2.35	-4.02
91	91	114.58	0.00	-1.18	9.42	0	6.22	2	-3.01	2	-2.61	2.35	-4.02
91	92	116.15	0.00	-3.64	12.99	0	8.58	2	-4.15	2	-3.60	2.35	-5.54
92	92	116.15	0.00	-3.64	12.99	0	8.58	2	-4.15	2	-3.60	2.35	-5.54
92	93	117.73	0.00	-6.29	20.81	0	13.74	2	-6.65	2	-5.77	2.35	-8.87
93	93	117.73	0.00	-6.29	20.81	0	13.74	2	-6.65	2	-5.77	2.35	-8.87
93	94	119.30	0.00	-6.74	31.66	0	20.90	2	-10.11	2	-8.78	2.35	-13.50
94	94	119.30	-0.05	-6.74	31.66	0	20.90	2	-10.11	2	-8.78	2.35	-13.50
94	95	120.88	-0.05	-5.56	41.36	0	27.29	2	-13.23	2	-11.49	2.35	-17.65
95	95	120.88	-0.05	-5.56	41.36	0	27.29	2	-13.23	2	-11.49	2.35	-17.65
95	96	122.45	-0.04	-4.38	49.19	0	33.27	2	-10.96	2	-9.52	2.35	-16.24
96	96	122.45	0.00	-4.38	49.19	0	33.27	2	-10.96	2	-9.52	2.35	-16.24
96	97	124.03	0.00	-3.20	55.16	0	37.32	2	-12.27	2	-10.66	2.35	-18.20
97	97	124.03	0.00	-3.20	55.16	0	37.32	2	-12.27	2	-10.66	2.35	-18.20
97	98	125.60	0.00	-2.02	59.27	0	40.10	2	-13.19	2	-11.45	2.35	-19.55
98	98	125.60	0.00	-2.02	59.27	0	40.10	2	-13.19	2	-11.45	2.35	-19.55
98	99	127.18	0.00	-0.84	61.52	0	41.62	2	-13.69	2	-11.89	2.35	-20.30
99	99	127.18	0.00	-0.84	61.52	0	41.62	2	-13.69	2	-11.89	2.35	-20.30
100	100	128.75	0.00	0.34	61.91	0	41.89	2	-13.78	2	-11.96	2.35	-20.42
100	101	130.33	0.00	1.52	60.44	0	40.89	2	-13.45	2	-11.68	2.35	-19.94
101	101	130.33	0.00	1.52	60.44	0	40.89	2	-13.45	2	-11.68	2.35	-19.94
101	102	131.90	0.00	2.71	57.11	0	38.64	2	-12.71	2	-11.04	2.35	-18.84
102	102	131.90	0.00	2.71	57.11	0	38.64	2	-12.71	2	-11.04	2.35	-18.84
102	103	133.48	0.00	3.89	51.91	0	35.12	2	-11.55	2	-10.03	2.35	-17.13
103	103	133.48	0.00	3.89	51.91	0	35.12	2	-11.55	2	-10.03	2.35	-17.13
103	104	135.05	0.00	5.07	44.86	0	30.35	2	-9.98	2	-8.67	2.35	-14.80
104	104	135.05	-0.04	5.07	44.86	0	30.35	2	-9.98	2	-8.67	2.35	-14.80
104	105	136.63	-0.05	6.25	35.95	0	24.31	2	-8.02	2	-6.96	2.35	-11.87
105	105	136.63	-0.05	6.25	35.95	0	24.31	2	-8.02	2	-6.96	2.35	-11.87
105	106	138.20	-0.07	7.43	25.18	0	16.60	2	-8.07	2	-7.00	2.35	-10.75
106	106	138.20	0.00	7.43	25.18	0	16.60	2	-8.07	2	-7.00	2.35	-10.75
106	107	139.78	0.00	4.88	15.34	0	10.13	2	-4.90	2	-4.26	2.35	-6.54
107	107	139.78	0.00	4.88	15.34	0	10.13	2	-4.90	2	-4.26	2.35	-6.54
107	108	141.35	0.00	2.56	9.20	0	6.07	2	-2.94	2	-2.55	2.35	-3.92
108	108	141.35	0.00	2.56	9.20	0	6.07	2	-2.94	2	-2.55	2.35	-3.92
108	109	142.93	0.00	0.88	6.74	0	4.45	2	-2.15	2	-1.87	2.35	-2.87
109	109	142.93	0.00	0.88	6.74	0	4.45	2	-2.15	2	-1.87	2.35	-2.87
109	110	143.50	0.00	-0.87	6.69	0	4.42	2	-2.14	2	-1.86	2.35	-2.85
110	110	143.50	0.00	-0.87	6.69	0	4.42	2	-2.14	2	-1.86	2.35	-2.85
110	111	144.50	0.00	-1.28	7.62	0	5.03	2	-2.43	2	-2.11	2.35	-3.25
111	111	144.50	0.00	-1.28	7.62	0	5.03	2	-2.43	2	-2.11	2.35	-3.25
111	112	145.50	0.00	-0.64	7.79	0	5.14	2	-2.49	2	-2.16	2.35	-3.32
112	112	145.50	0.00	-0.64	7.79	0	5.14	2	-2.49	2	-2.16	2.35	-3.32
112	113	145.68	0.00	-1.31	7.96	0	5.26	2	-2.54	2	-2.21	2.35	-3.39
113	113	145.68	0.00	-1.31	7.96	0	5.26	2	-2.54	2	-2.21	2.35	-3.39
113	114	146.85	0.00	-3.30	10.53	0	6.95	2	-3.36	2	-2.92	2.35	-4.49
114	114	146.85	0.00	-3.30	10.53	0	6.95	2	-3.36	2	-2.92	2.35	-4.49
114	115	148.03	0.00	-6.27	16.12	0	10.64	2	-5.15	2	-4.47	2.35	-6.87

CÁLCULO TENSIONAL

Hipótesis de cálculo:

PASEO.ENV_TREN_GENERICO.MZ+.To

Involvemento de tendecargas planogenérico.MZ+). Tensiones a tiempo To

J.ENV_TREN_GENERICO.MZ+

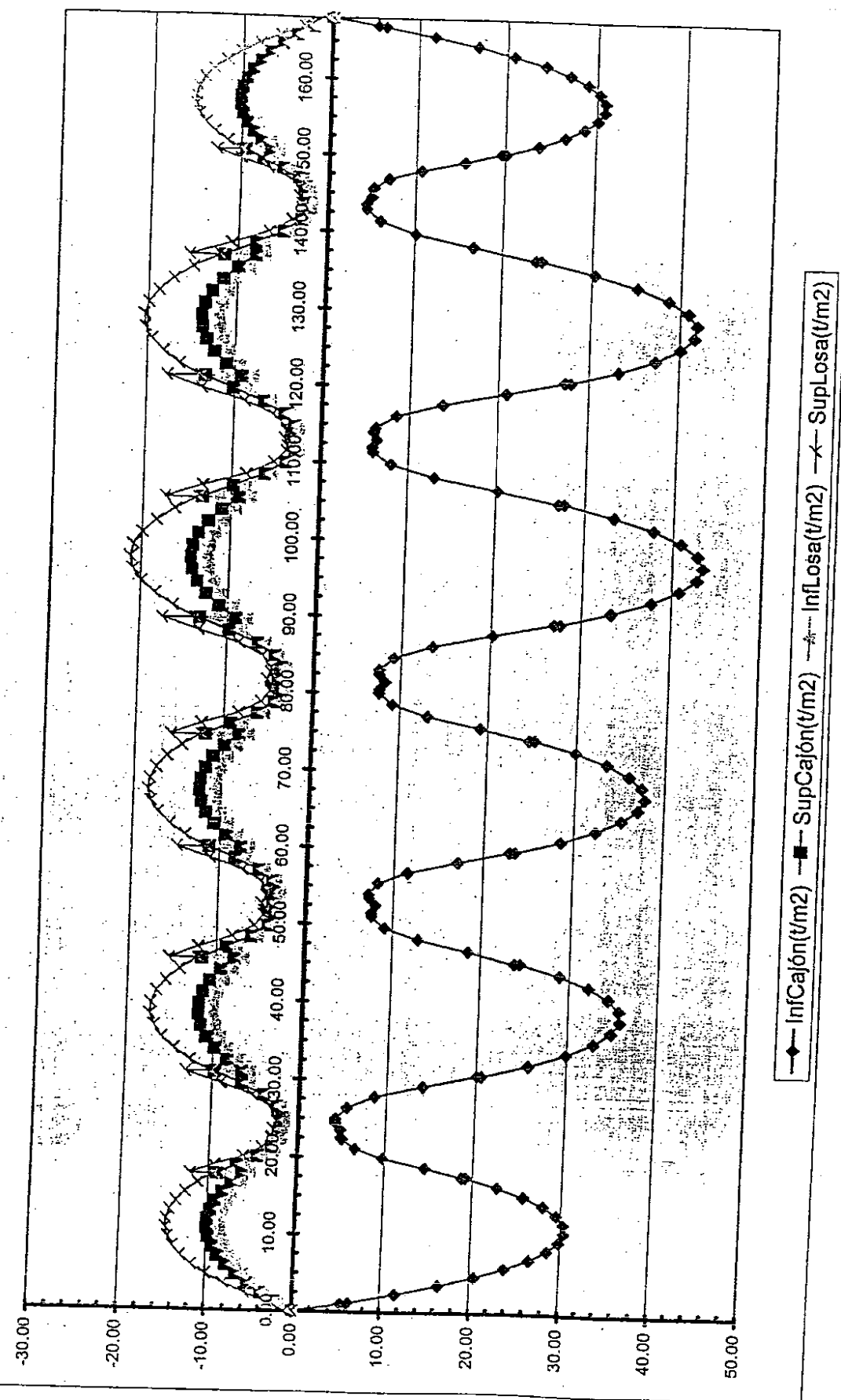
ref. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
115	115	148.03	0.00	-6.27	16.12	0	10.64	2	-5.15	2	-4.47	2.35	-6.87
115	116	149.20	0.00	-5.80	23.43	0	15.47	2	-7.48	2	-6.50	2.35	-9.99
116	116	149.20	-0.07	-5.80	23.43	0	15.45	2	-7.51	2	-6.52	2.35	-10.01
116	117	150.38	-0.06	-4.92	29.73	0	19.61	2	-9.52	2	-8.26	2.35	-12.69
117	117	150.38	-0.06	-4.92	29.73	0	20.09	2	-6.63	2	-5.76	2.35	-9.83
117	118	151.55	-0.05	-4.04	35.00	0	23.66	2	-7.80	2	-6.78	2.35	-11.56
118	118	151.55	0.00	-4.04	35.00	0	23.68	2	-7.79	2	-6.76	2.35	-11.55
118	119	152.73	0.00	-3.16	39.23	0	26.54	2	-8.73	2	-7.58	2.35	-12.94
119	119	152.73	0.00	-3.16	39.23	0	26.54	2	-8.73	2	-7.58	2.35	-12.94
119	120	153.90	0.00	-2.28	42.42	0	28.70	2	-9.44	2	-8.20	2.35	-13.99
120	120	153.90	0.00	-2.28	42.42	0	28.70	2	-9.44	2	-8.20	2.35	-13.99
120	121	155.08	0.00	-1.40	44.58	0	30.16	2	-9.92	2	-8.62	2.35	-14.71
121	121	155.08	0.00	-1.40	44.58	0	30.16	2	-9.92	2	-8.62	2.35	-14.71
121	122	156.25	0.00	-0.52	45.71	0	30.93	2	-10.17	2	-8.83	2.35	-15.08
122	122	156.25	0.00	-0.52	45.71	0	30.93	2	-10.17	2	-8.83	2.35	-15.08
122	123	157.43	0.00	0.36	45.80	0	30.99	2	-10.19	2	-8.85	2.35	-15.11
123	123	157.43	0.00	0.36	45.80	0	30.99	2	-10.19	2	-8.85	2.35	-15.11
123	124	158.60	0.00	1.25	44.85	0	30.34	2	-9.98	2	-8.67	2.35	-14.80
124	124	158.60	0.00	1.25	44.85	0	30.34	2	-9.98	2	-8.67	2.35	-14.80
124	125	159.78	0.00	2.13	42.87	0	29.00	2	-9.54	2	-8.28	2.35	-14.14
125	125	159.78	0.00	2.13	42.87	0	29.00	2	-9.54	2	-8.28	2.35	-14.14
125	126	160.95	0.00	3.01	39.85	0	26.96	2	-8.87	2	-7.70	2.35	-13.15
126	126	160.95	0.00	3.01	39.85	0	26.96	2	-8.87	2	-7.70	2.35	-13.15
126	127	162.13	0.00	3.89	35.80	0	24.22	2	-7.97	2	-6.92	2.35	-11.81
127	127	162.13	0.00	3.89	35.80	0	24.22	2	-7.97	2	-6.92	2.35	-11.81
127	128	163.30	0.00	4.77	30.71	0	20.78	2	-6.83	2	-5.93	2.35	-10.13
128	128	163.30	0.00	4.77	30.71	0	20.78	2	-6.83	2	-5.93	2.35	-10.13
128	129	164.48	0.00	5.65	24.58	0	16.63	2	-5.47	2	-4.75	2.35	-8.11
129	129	164.48	0.00	5.65	24.58	0	16.63	2	-5.47	2	-4.75	2.35	-8.11
129	130	165.65	0.00	6.53	17.43	0	11.79	2	-3.88	2	-3.37	2.35	-5.75
130	130	165.65	0.00	6.53	17.43	0	11.79	2	-3.88	2	-3.37	2.35	-5.75
130	131	166.83	0.00	7.42	9.23	0	6.24	2	-2.05	2	-1.78	2.35	-3.05
131	131	166.83	0.00	7.42	9.23	0	6.24	2	-2.05	2	-1.78	2.35	-3.05
131	132	167.00	0.00	7.55	7.92	0	5.36	2	-1.76	2	-1.53	2.35	-2.61
132	132	167.00	0.00	7.55	7.92	0	5.36	2	-1.76	2	-1.53	2.35	-2.61
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00

CÁLCULO TENSIONAL

hipótesis de cálculo:
ASEO.ENV_TREN_GENERICO.MZ-To
Envolvente de tendecargas planogenérico.MZ-). Tensiones a tiempo To
ASEO.ENV_TREN_GENERICO.MZ-
ref. exc

GRÁFICO DE TENSIONES



Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
1	1	0.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00
1	2	1.00	0.00	1.34	-1.34	0	-0.91	2	0.30	2	0.26	2.35	0.44
2	2	1.00	0.00	1.34	-1.34	0	-0.91	2	0.30	2	0.26	2.35	0.44
3	3	1.18	0.00	1.34	-1.58	0	-1.07	2	0.35	2	0.31	2.35	0.52
3	4	2.35	0.00	1.34	-3.15	0	-1.07	2	0.35	2	0.31	2.35	0.52
4	4	2.35	0.00	1.34	-3.15	0	-2.13	2	0.70	2	0.61	2.35	1.04
4	5	3.53	0.00	1.34	-4.73	0	-2.13	2	0.70	2	0.61	2.35	1.04
5	5	3.53	0.00	1.34	-4.73	0	-3.20	2	1.05	2	0.91	2.35	1.56
5	6	4.70	0.00	1.34	-6.31	0	-3.20	2	1.05	2	0.91	2.35	1.56
6	6	4.70	0.00	1.34	-6.31	0	-4.27	2	1.40	2	1.22	2.35	2.08
6	7	5.88	0.00	1.34	-7.88	0	-4.27	2	1.40	2	1.22	2.35	2.08
7	7	5.88	0.00	1.34	-7.88	0	-5.33	2	1.75	2	1.52	2.35	2.60
8	8	7.05	0.00	1.34	-9.46	0	-5.33	2	1.75	2	1.52	2.35	2.60
8	8	7.05	0.00	1.34	-9.46	0	-6.40	2	2.10	2	1.83	2.35	3.12
8	9	8.23	0.00	1.34	-11.04	0	-6.40	2	2.10	2	1.83	2.35	3.12
9	9	8.23	0.00	1.34	-11.04	0	-7.47	2	2.46	2	2.13	2.35	3.64
9	10	9.40	0.00	1.34	-12.61	0	-7.47	2	2.46	2	2.13	2.35	3.64
10	10	9.40	0.00	1.34	-12.61	0	-8.53	2	2.81	2	2.44	2.35	4.16
10	11	10.58	0.00	1.34	-14.19	0	-8.53	2	2.81	2	2.44	2.35	4.16
11	11	10.58	0.00	1.34	-14.19	0	-9.60	2	3.16	2	2.74	2.35	4.68
11	12	11.75	0.00	1.34	-15.77	0	-9.60	2	3.16	2	2.74	2.35	4.68
12	12	11.75	0.00	1.34	-15.77	0	-10.67	2	3.51	2	3.05	2.35	5.20
12	13	12.93	0.00	1.34	-17.34	0	-10.67	2	3.51	2	3.05	2.35	5.20
13	13	12.93	0.00	1.34	-17.34	0	-11.73	2	3.86	2	3.35	2.35	5.72
13	14	14.10	0.00	1.34	-18.92	0	-11.73	2	3.86	2	3.35	2.35	5.72
14	14	14.10	0.00	1.34	-18.92	0	-12.80	2	4.21	2	3.66	2.35	6.24
14	15	15.28	0.00	1.34	-20.50	0	-12.80	2	4.21	2	3.66	2.35	6.24
15	15	15.28	0.00	1.34	-20.50	0	-13.87	2	4.56	2	3.96	2.35	6.76
15	16	16.45	0.00	1.34	-22.07	0	-13.87	2	4.56	2	3.96	2.35	6.76
16	16	16.45	-0.02	1.34	-22.07	0	-14.93	2	4.91	2	4.27	2.35	7.28
16	17	17.63	-0.02	1.34	-23.65	0	-14.93	2	4.90	2	4.26	2.35	7.28
17	17	17.63	-0.02	1.34	-23.65	0	-16.01	2	5.25	2	4.56	2.35	7.80
17	18	18.80	-0.02	1.34	-25.23	0	-16.01	2	5.25	2	4.56	2.35	7.80
18	18	18.80	0.00	1.34	-25.23	0	-16.66	2	5.60	2	4.91	2.35	8.32
18	19	19.98	0.00	2.28	-26.99	0	-16.66	2	5.60	2	4.91	2.35	8.32
19	19	19.98	0.00	2.28	-26.99	0	-17.82	2	6.25	2	5.26	2.35	8.84
19	20	21.15	0.00	5.65	-31.94	0	-17.82	2	6.25	2	5.26	2.35	8.84
20	20	21.15	0.00	5.65	-31.94	0	-21.09	2	10.20	2	8.86	2.35	13.62
20	21	22.33	0.00	8.52	-40.61	0	-21.09	2	10.20	2	8.86	2.35	13.62
21	21	22.33	0.00	8.52	-40.61	0	-26.81	2	12.97	2	11.27	2.35	17.31
21	22	22.50	0.00	9.33	-42.19	0	-26.81	2	12.97	2	11.27	2.35	17.31
22	22	22.50	0.00	9.33	-42.19	0	-27.86	2	13.48	2	11.71	2.35	17.99
22	23	23.50	0.00	11.04	-52.37	0	-27.86	2	13.48	2	11.71	2.35	17.99
23	1023	23.50	0.00	-12.14	-52.37	0	-34.58	2	16.73	2	14.53	2.35	22.33
23	24	24.50	0.00	-10.05	-41.01	0	-34.58	2	16.73	2	14.53	2.35	22.33
24	24	24.50	0.00	-10.05	-41.01	0	-27.08	2	13.10	2	11.38	2.35	17.49
24	25	24.95	0.00	-9.06	-36.52	0	-27.08	2	13.10	2	11.38	2.35	17.49
25	25	24.95	0.00	-9.06	-36.52	0	-24.11	2	11.67	2	10.13	2.35	15.57
25	26	26.40	0.00	-6.43	-25.05	0	-24.11	2	11.67	2	10.13	2.35	15.57
26	26	26.40	0.00	-6.43	-25.05	0	-16.54	2	8.00	2	6.95	2.35	10.68
26	27	27.85	0.00	-3.22	-18.24	0	-16.54	2	8.00	2	6.95	2.35	10.68
27	27	27.85	0.00	-3.22	-18.24	0	-12.04	2	5.83	2	5.06	2.35	7.78
27	28	29.30	0.00	0.40	-16.23	0	-12.04	2	5.83	2	5.06	2.35	7.78
28	28	29.30	0.00	0.40	-16.23	0	-10.72	2	5.18	2	4.50	2.35	6.92
28	29	30.75	0.00	0.40	-16.81	0	-10.72	2	5.18	2	4.50	2.35	6.92
29	29	30.75	0.00	0.40	-16.81	0	-11.10	2	5.37	2	4.66	2.35	7.17
29	30	32.20	0.00	0.40	-17.40	0	-11.37	2	3.74	2	3.25	2.35	5.55
30	30	32.20	0.00	0.40	-17.40	0	-11.77	2	3.87	2	3.36	2.35	5.74
30	31	33.65	0.00	0.40	-17.98	0	-11.77	2	3.87	2	3.36	2.35	5.74
31	31	33.65	0.00	0.40	-17.98	0	-12.16	2	4.00	2	3.47	2.35	5.93
31	32	35.10	0.00	0.40	-18.56	0	-12.16	2	4.00	2	3.47	2.35	5.93
32	32	35.10	0.00	0.40	-18.56	0	-12.56	2	4.13	2	3.59	2.35	6.12
32	33	36.55	0.00	0.40	-19.14	0	-12.56	2	4.13	2	3.59	2.35	6.12
33	33	36.55	0.00	0.40	-19.14	0	-12.95	2	4.26	2	3.70	2.35	6.31
33	34	38.00	0.00	0.40	-19.72	0	-12.95	2	4.26	2	3.70	2.35	6.31
34	34	38.00	0.00	0.40	-19.72	0	-13.34	2	4.39	2	3.81	2.35	6.51
34	35	39.45	0.00	0.40	-20.30	0	-13.34	2	4.39	2	3.81	2.35	6.51
35	35	39.45	0.00	0.40	-20.30	0	-13.73	2	4.52	2	3.92	2.35	6.70
35	36	40.90	0.00	0.40	-20.88	0	-13.73	2	4.52	2	3.92	2.35	6.70
36	36	40.90	0.00	0.40	-20.88	0	-14.13	2	4.65	2	4.04	2.35	6.89
36	37	42.35	0.00	0.40	-21.46	0	-14.13	2	4.65	2	4.04	2.35	6.89
37	37	42.35	0.00	0.40	-21.46	0	-14.52	2	4.78	2	4.15	2.35	7.08
37	38	43.80	0.00	0.40	-22.05	0	-14.52	2	4.78	2	4.15	2.35	7.08
38	38	43.80	0.00	0.40	-22.05	0	-14.92	2	4.91	2	4.26	2.35	7.27
38	39	45.25	0.00	0.40	-22.63	0	-14.92	2	4.91	2	4.26	2.35	7.27
						0	-15.31	2	5.04	2	4.37	2.35	7.47

CÁLCULO TENSIONAL

ipótesis de cálculo:

PASEO.ENV_TREN_GENERICO.MZ-To

ntedetrendecargasplanogenérico.MZ-). Tensiones a tiempo To

PASEO.ENV_TREN_GENERICO.MZ-

el. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
39	39	45.25	0.00	0.40	-22.63	0	-14.94	2	7.23	2	6.28	2.35	9.65
39	40	46.70	0.00	0.40	-23.21	0	-15.32	2	7.41	2	6.44	2.35	9.90
40	40	46.70	0.00	0.40	-23.21	0	-15.32	2	7.41	2	6.44	2.35	9.90
40	41	48.15	0.00	2.41	-24.86	0	-16.41	2	7.94	2	6.90	2.35	10.60
41	41	48.15	0.00	2.41	-24.86	0	-16.41	2	7.94	2	6.90	2.35	10.60
41	42	49.60	0.00	5.64	-30.93	0	-20.42	2	9.88	2	8.58	2.35	13.19
42	42	49.60	0.00	5.64	-30.93	0	-20.42	2	9.88	2	8.58	2.35	13.19
42	43	51.05	0.00	9.00	-41.98	0	-27.72	2	13.41	2	11.65	2.35	17.90
43	43	51.05	0.00	9.00	-41.98	0	-27.72	2	13.41	2	11.65	2.35	17.90
43	44	51.50	0.00	9.98	-46.38	0	-30.62	2	14.82	2	12.87	2.35	19.77
44	44	51.50	0.00	9.98	-46.38	0	-30.62	2	14.82	2	12.87	2.35	19.77
44	45	52.50	0.00	12.07	-57.63	0	-38.05	2	18.41	2	15.99	2.35	24.57
45	1045	52.50	0.00	-12.38	-57.63	0	-38.05	2	18.41	2	15.99	2.35	24.57
45	46	53.50	0.00	-10.28	-46.06	0	-30.41	2	14.71	2	12.78	2.35	19.64
46	46	53.50	0.00	-10.28	-46.06	0	-30.41	2	14.71	2	12.78	2.35	19.64
46	47	53.95	0.00	-9.30	-41.51	0	-27.41	2	13.26	2	11.52	2.35	17.70
47	47	53.95	0.00	-9.30	-41.51	0	-27.41	2	13.26	2	11.52	2.35	17.70
47	48	55.40	0.00	-5.91	-29.94	0	-19.77	2	9.56	2	8.31	2.35	12.77
48	48	55.40	0.00	-5.91	-29.94	0	-19.77	2	9.56	2	8.31	2.35	12.77
48	49	56.85	0.00	-3.01	-23.39	0	-15.44	2	7.47	2	6.49	2.35	9.97
49	49	56.85	0.00	-3.01	-23.39	0	-15.44	2	7.47	2	6.49	2.35	9.97
49	50	58.30	0.00	0.30	-21.83	0	-14.41	2	6.97	2	6.06	2.35	9.31
50	50	58.30	0.00	0.30	-21.83	0	-14.41	2	6.97	2	6.06	2.35	9.31
50	51	59.75	0.00	0.30	-22.27	0	-14.70	2	7.11	2	6.18	2.35	9.50
51	51	59.75	0.00	0.30	-22.27	0	-15.07	2	4.96	2	4.30	2.35	7.35
51	52	61.20	0.00	0.30	-22.71	0	-15.36	2	5.05	2	4.39	2.35	7.49
52	52	61.20	0.00	0.30	-22.71	0	-15.36	2	5.05	2	4.39	2.35	7.49
52	53	62.65	0.00	0.30	-23.15	0	-15.66	2	5.15	2	4.47	2.35	7.64
53	53	62.65	0.00	0.30	-23.15	0	-15.66	2	5.15	2	4.47	2.35	7.64
53	54	64.10	0.00	0.30	-23.60	0	-15.97	2	5.25	2	4.56	2.35	7.79
54	54	64.10	0.00	0.30	-23.60	0	-15.97	2	5.25	2	4.56	2.35	7.79
54	55	65.55	0.00	0.30	-24.04	0	-16.26	2	5.35	2	4.65	2.35	7.93
55	55	65.55	0.00	0.30	-24.04	0	-16.26	2	5.35	2	4.65	2.35	7.93
55	56	67.00	0.00	0.30	-24.48	0	-16.56	2	5.45	2	4.73	2.35	8.08
56	56	67.00	0.00	0.30	-24.48	0	-16.56	2	5.45	2	4.73	2.35	8.08
56	57	68.45	0.00	0.30	-24.92	0	-16.86	2	5.54	2	4.82	2.35	8.22
57	57	68.45	0.00	0.30	-24.92	0	-16.86	2	5.54	2	4.82	2.35	8.22
57	58	69.90	0.00	0.30	-25.37	0	-17.16	2	5.65	2	4.90	2.35	8.37
58	58	69.90	0.00	0.30	-25.37	0	-17.16	2	5.65	2	4.90	2.35	8.37
58	59	71.35	0.00	0.30	-25.81	0	-17.46	2	5.74	2	4.99	2.35	8.51
59	59	71.35	0.00	0.30	-25.81	0	-17.46	2	5.74	2	4.99	2.35	8.51
59	60	72.80	0.00	0.30	-26.25	0	-17.76	2	5.84	2	5.07	2.35	8.66
60	60	72.80	0.00	0.30	-26.25	0	-17.76	2	5.84	2	5.07	2.35	8.66
60	61	74.25	0.00	0.30	-26.69	0	-18.06	2	5.94	2	5.16	2.35	8.81
61	61	74.25	0.00	0.30	-26.69	0	-18.06	2	5.94	2	5.16	2.35	8.81
61	62	75.70	0.00	0.30	-27.14	0	-17.92	2	8.67	2	7.41	2.35	11.38
62	62	75.70	0.00	0.30	-27.14	0	-17.92	2	8.67	2	7.41	2.35	11.38
62	63	77.15	0.00	2.46	-28.44	0	-18.78	2	9.09	2	7.89	2.35	12.13
63	63	77.15	0.00	2.46	-28.44	0	-18.78	2	9.09	2	7.89	2.35	12.13
63	64	78.60	0.00	6.01	-34.43	0	-22.73	2	11.00	2	9.55	2.35	14.68
64	64	78.60	0.00	6.01	-34.43	0	-22.73	2	11.00	2	9.55	2.35	14.68
64	65	80.05	0.00	9.37	-45.70	0	-30.17	2	14.60	2	12.68	2.35	19.48
65	65	80.05	0.00	9.37	-45.70	0	-30.17	2	14.60	2	12.68	2.35	19.48
65	66	80.50	0.00	10.34	-50.23	0	-33.16	2	16.05	2	13.94	2.35	21.42
66	66	80.50	0.00	10.34	-50.23	0	-33.16	2	16.05	2	13.94	2.35	21.42
66	67	81.50	0.00	12.44	-61.81	0	-40.81	2	19.75	2	17.15	2.35	26.35
67	1067	81.50	0.00	-13.08	-61.81	0	-40.81	2	19.75	2	17.15	2.35	26.35
67	68	82.50	0.00	-10.80	-49.49	0	-32.67	2	15.81	2	13.73	2.35	21.10
68	68	82.50	0.00	-10.80	-49.49	0	-32.67	2	15.81	2	13.73	2.35	21.10
68	69	83.08	0.00	-9.73	-43.36	0	-28.63	2	13.85	2	12.03	2.35	18.49
69	69	83.08	0.00	-9.73	-43.36	0	-28.63	2	13.85	2	12.03	2.35	18.49
69	70	84.65	0.00	-6.05	-30.27	0	-19.99	2	9.67	2	8.40	2.35	12.91
70	70	84.65	0.00	-6.05	-30.27	0	-19.99	2	9.67	2	8.40	2.35	12.91
70	71	86.23	0.00	-2.91	-23.10	0	-15.25	2	7.38	2	6.41	2.35	9.85
71	71	86.23	0.00	-2.91	-23.10	0	-15.25	2	7.38	2	6.41	2.35	9.85
71	72	87.80	0.00	0.17	-21.50	0	-14.19	2	6.87	2	5.97	2.35	9.17
72	72	87.80	0.00	0.17	-21.50	0	-14.19	2	6.87	2	5.97	2.35	9.17
72	73	89.38	0.00	0.17	-21.76	0	-14.37	2	6.95	2	6.04	2.35	9.28
73	73	89.38	0.00	0.17	-21.76	0	-14.37	2	6.95	2	6.04	2.35	9.28
73	74	90.95	0.00	0.17	-22.02	0	-14.90	2	4.90	2	4.26	2.35	7.18
74	74	90.95	0.00	0.17	-22.02	0	-14.90	2	4.90	2	4.26	2.35	7.18
74	75	92.53	0.00	0.17	-22.29	0	-15.08	2	4.96	2	4.31	2.35	7.35
75	75	92.53	0.00	0.17	-22.29	0	-15.08	2	4.96	2	4.31	2.35	7.35
75	76	94.10	0.00	0.17	-22.55	0	-15.25	2	5.02	2	4.36	2.35	7.44
76	76	94.10	0.00	0.17	-22.55	0	-15.25	2	5.02	2	4.36	2.35	7.44
76	77	95.68	0.00	0.17	-22.81	0	-15.43	2	5.08	2	4.41	2.35	7.53

CÁLCULO TENSIONAL

ipótesis de cálculo:

PASEO.ENV_TREN_GENERICO.MZ-To

Envolventedetrendecargasplanogenérico.MZ-). Tensiones a tiempo To

PASEO.ENV_TREN_GENERICO.MZ-

el. exc

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra y fibra	InfCajón sig (t/m2)	Fibra y fibra	SupCajón sig (t/m2)	Fibra y fibra	InfLosa sig (t/m2)	Fibra y fibra	SupLosa sig (t/m2)
77	77	95.68	0.00	0.17	-22.81	0	-15.43	2	5.08	2	4.41	2.35	
77	78	97.25	0.00	0.17	-23.08	0	-15.61	2	5.14	2	4.46	2.35	7.53
78	78	97.25	0.00	0.17	-23.08	0	-15.61	2	5.14	2	4.46	2.35	7.61
78	79	98.83	0.00	0.17	-23.34	0	-15.79	2	5.19	2	4.51	2.35	7.61
79	79	98.83	0.00	0.17	-23.34	0	-15.79	2	5.19	2	4.51	2.35	7.70
79	80	100.40	0.00	0.17	-23.60	0	-15.97	2	5.25	2	4.56	2.35	7.70
80	80	100.40	0.00	0.17	-23.60	0	-15.97	2	5.25	2	4.56	2.35	7.79
80	81	101.98	0.00	0.17	-23.87	0	-16.15	2	5.31	2	4.56	2.35	7.79
81	81	101.98	0.00	0.17	-23.87	0	-16.15	2	5.31	2	4.61	2.35	7.87
81	82	103.55	0.00	0.17	-24.13	0	-16.33	2	5.37	2	4.61	2.35	7.87
82	82	103.55	0.00	0.17	-24.13	0	-16.33	2	5.37	2	4.66	2.35	7.96
82	83	105.13	0.00	0.17	-24.39	0	-16.50	2	5.43	2	4.66	2.35	7.96
83	83	105.13	0.00	0.17	-24.39	0	-16.50	2	5.43	2	4.71	2.35	8.05
83	84	106.70	0.00	0.17	-24.66	0	-16.10	2	7.79	2	6.77	2.35	10.40
84	84	106.70	0.00	0.17	-24.66	0	-16.28	2	7.88	2	6.84	2.35	10.51
84	85	108.28	0.00	2.32	-26.01	0	-16.28	2	7.88	2	6.84	2.35	10.51
85	85	108.28	0.00	2.32	-26.01	0	-17.17	2	8.31	2	7.22	2.35	11.09
85	86	109.85	0.00	6.19	-32.76	0	-17.17	2	8.31	2	7.22	2.35	11.09
86	86	109.85	0.00	6.19	-32.76	0	-21.63	2	10.47	2	9.09	2.35	13.97
86	87	111.43	0.00	6.19	-32.76	0	-21.63	2	10.47	2	9.09	2.35	13.97
87	87	111.43	0.00	9.84	-45.65	0	-30.14	2	14.58	2	12.67	2.35	19.46
87	88	112.00	0.00	9.84	-45.65	0	-30.14	2	14.58	2	12.67	2.35	19.46
88	88	112.00	0.00	10.90	-51.79	0	-34.19	2	16.54	2	14.37	2.35	22.08
88	89	113.00	0.00	10.90	-51.79	0	-34.19	2	16.54	2	14.37	2.35	22.08
89	1089	113.00	0.00	13.18	-64.18	0	-42.37	2	20.50	2	17.81	2.35	27.36
89	90	114.00	0.00	-12.97	-64.18	0	-42.37	2	20.50	2	17.81	2.35	27.36
90	90	114.00	0.00	-10.70	-52.00	0	-34.33	2	16.61	2	14.43	2.35	22.17
90	91	114.58	0.00	-10.70	-52.00	0	-34.33	2	16.61	2	14.43	2.35	22.17
91	91	114.58	0.00	-9.64	-45.97	0	-30.35	2	14.69	2	12.75	2.35	19.60
91	92	116.15	0.00	-9.64	-45.97	0	-30.35	2	14.69	2	12.75	2.35	19.60
92	92	116.15	0.00	-6.00	-33.43	0	-22.07	2	10.68	2	9.28	2.35	14.25
92	93	117.73	0.00	-6.00	-33.43	0	-22.07	2	10.68	2	9.28	2.35	14.25
93	93	117.73	0.00	-2.16	-27.01	0	-17.83	2	8.63	2	7.49	2.35	11.52
93	94	119.30	0.00	-2.16	-27.01	0	-17.83	2	8.63	2	7.49	2.35	11.52
94	94	119.30	0.00	-0.53	-25.48	0	-16.82	2	8.14	2	7.07	2.35	10.86
94	95	120.88	0.00	-0.53	-25.48	0	-16.82	2	8.14	2	7.07	2.35	10.86
95	95	120.88	0.00	-0.53	-24.64	0	-16.27	2	7.87	2	6.84	2.35	10.51
95	96	122.45	0.00	-0.53	-23.81	0	-16.67	2	5.48	2	4.76	2.35	8.13
96	96	122.45	0.00	-0.53	-23.81	0	-16.11	2	5.30	2	4.60	2.35	7.86
96	97	124.03	0.00	-0.53	-22.97	0	-16.11	2	5.30	2	4.60	2.35	7.86
97	97	124.03	0.00	-0.53	-22.97	0	-15.54	2	5.11	2	4.44	2.35	7.58
97	98	125.60	0.00	-0.53	-22.14	0	-15.54	2	5.11	2	4.44	2.35	7.58
98	98	125.60	0.00	-0.53	-22.14	0	-14.98	2	4.93	2	4.28	2.35	7.30
98	99	127.18	0.00	-0.53	-21.31	0	-14.98	2	4.93	2	4.28	2.35	7.30
99	99	127.18	0.00	-0.53	-21.31	0	-14.42	2	4.74	2	4.12	2.35	7.03
99	100	128.75	0.00	-0.53	-20.47	0	-14.42	2	4.74	2	4.12	2.35	7.03
100	100	128.75	0.00	-0.53	-20.47	0	-13.85	2	4.55	2	3.96	2.35	6.75
100	101	130.33	0.00	-0.53	-19.64	0	-13.85	2	4.55	2	3.96	2.35	6.75
101	101	130.33	0.00	-0.53	-19.64	0	-13.29	2	4.37	2	3.80	2.35	6.48
101	102	131.90	0.00	-0.53	-18.80	0	-13.29	2	4.37	2	3.80	2.35	6.48
102	102	131.90	0.00	-0.53	-18.80	0	-12.72	2	4.18	2	3.63	2.35	6.20
102	103	133.48	0.00	-0.53	-17.97	0	-12.72	2	4.18	2	3.63	2.35	6.20
103	103	133.48	0.00	-0.53	-17.97	0	-12.16	2	4.00	2	3.47	2.35	5.93
103	104	135.05	0.00	-0.53	-17.14	0	-12.16	2	4.00	2	3.47	2.35	5.93
104	104	135.05	0.00	-0.53	-17.14	0	-11.60	2	3.81	2	3.31	2.35	5.65
104	105	136.63	0.00	-0.53	-16.30	0	-11.60	2	3.81	2	3.31	2.35	5.65
105	105	136.63	0.00	-0.53	-16.30	0	-11.03	2	3.63	2	3.15	2.35	5.38
105	106	138.20	0.00	-0.53	-15.47	0	-10.76	2	5.21	2	4.52	2.35	6.95
106	106	138.20	0.00	-0.53	-15.47	0	-10.21	2	4.94	2	4.29	2.35	6.60
106	107	139.78	0.00	3.20	-17.43	0	-10.21	2	4.94	2	4.29	2.35	6.60
107	107	139.78	0.00	3.20	-17.43	0	-11.51	2	5.57	2	4.84	2.35	7.43
107	108	141.35	0.00	6.70	-24.95	0	-11.51	2	5.57	2	4.84	2.35	7.43
108	108	141.35	0.00	6.70	-24.95	0	-16.47	2	7.97	2	6.92	2.35	10.64
108	109	142.93	0.00	9.56	-38.01	0	-16.47	2	7.97	2	6.92	2.35	10.64
109	109	142.93	0.00	9.56	-38.01	0	-25.10	2	12.14	2	10.55	2.35	16.21
109	110	143.50	0.00	11.75	-44.09	0	-25.10	2	12.14	2	10.55	2.35	16.21
110	110	143.50	0.00	11.75	-44.09	0	-29.11	2	14.08	2	12.23	2.35	18.80
110	111	144.50	0.00	12.91	-56.27	0	-29.11	2	14.08	2	12.23	2.35	18.80
111	1111	144.50	0.00	-11.21	-56.27	0	-37.15	2	17.98	2	15.61	2.35	23.99
111	112	145.50	0.00	-9.50	-45.94	0	-37.15	2	17.98	2	15.61	2.35	23.99
112	112	145.50	0.00	-9.50	-45.94	0	-30.33	2	14.68	2	12.75	2.35	19.59
112	113	145.68	0.00	-8.69	-44.34	0	-30.33	2	14.68	2	12.75	2.35	19.59
113	113	145.68	0.00	-8.69	-44.34	0	-29.27	2	14.16	2	12.30	2.35	18.90
113	114	146.85	0.00	-5.82	-35.68	0	-29.27	2	14.16	2	12.30	2.35	18.90
114	114	146.85	0.00	-5.82	-35.68	0	-23.56	2	11.40	2	9.80	2.35	15.21
114	115	148.03	0.00	-1.97	-31.07	0	-23.56	2	11.40	2	9.80	2.35	15.21
						0	-20.51	2	9.93	2	8.62	2.35	13.25

CÁLCULO TENSIONAL
Hipótesis de cálculo:
PASEO.ENV_TREN_GENERICO.MZ.To
(ventedetrendecargasplanogenérico.MZ-). Tensiones a tiempo To
PASEO.ENV_TREN_GENERICO.MZ-
Coef. exc:

Barra	Nudo	X	N (T)	Vy (T)	Mz (Tm)	Fibra		InfCajón		Fibra		SupCajón		Fibra		InfLosa		Fibra		SupLosa	
						y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)	y fibra	sig (t/m2)
115	115	148.03	0.00	-1.97	-31.07	0	-20.51	2	9.93	2	8.62	2.35	13.25								
115	116	149.20	0.00	-1.55	-29.22	0	-19.29	2	9.33	2	8.11	2.35	12.46								
116	116	149.20	-0.02	-1.55	-29.22	0	-19.30	2	9.33	2	8.10	2.35	12.45								
116	117	150.38	-0.02	-1.55	-27.39	0	-18.09	2	8.74	2	7.59	2.35	11.67								
117	117	150.38	-0.02	-1.55	-27.39	0	-18.54	2	6.09	2	5.29	2.35	9.03								
117	118	151.55	-0.02	-1.55	-25.57	0	-17.31	2	5.68	2	4.94	2.35	8.43								
118	118	151.55	0.00	-1.55	-25.57	0	-17.30	2	5.69	2	4.94	2.35	8.44								
118	119	152.73	0.00	-1.55	-23.74	0	-16.06	2	5.28	2	4.59	2.35	7.83								
119	119	152.73	0.00	-1.55	-23.74	0	-16.06	2	5.28	2	4.59	2.35	7.83								
119	120	153.90	0.00	-1.55	-21.91	0	-14.82	2	4.88	2	4.23	2.35	7.23								
120	120	153.90	0.00	-1.55	-21.91	0	-14.82	2	4.88	2	4.23	2.35	7.23								
120	121	155.08	0.00	-1.55	-20.09	0	-13.59	2	4.47	2	3.88	2.35	6.63								
121	121	155.08	0.00	-1.55	-20.09	0	-13.59	2	4.47	2	3.88	2.35	6.63								
121	122	156.25	0.00	-1.55	-18.26	0	-12.35	2	4.06	2	3.53	2.35	6.02								
122	122	156.25	0.00	-1.55	-18.26	0	-12.35	2	4.06	2	3.53	2.35	6.02								
122	123	157.43	0.00	-1.55	-16.43	0	-11.12	2	3.66	2	3.18	2.35	5.42								
123	123	157.43	0.00	-1.55	-16.43	0	-11.12	2	3.66	2	3.18	2.35	5.42								
123	124	158.60	0.00	-1.55	-14.61	0	-9.88	2	3.25	2	2.82	2.35	4.82								
124	124	158.60	0.00	-1.55	-14.61	0	-9.88	2	3.25	2	2.82	2.35	4.82								
124	125	159.78	0.00	-1.55	-12.78	0	-8.65	2	2.84	2	2.47	2.35	4.22								
125	125	159.78	0.00	-1.55	-12.78	0	-8.65	2	2.84	2	2.47	2.35	4.22								
125	126	160.95	0.00	-1.55	-10.96	0	-7.41	2	2.44	2	2.12	2.35	3.62								
126	126	160.95	0.00	-1.55	-10.96	0	-7.41	2	2.44	2	2.12	2.35	3.62								
126	127	162.13	0.00	-1.55	-9.13	0	-6.18	2	2.03	2	1.76	2.35	3.01								
127	127	162.13	0.00	-1.55	-9.13	0	-6.18	2	2.03	2	1.76	2.35	3.01								
127	128	163.30	0.00	-1.55	-7.30	0	-4.94	2	1.62	2	1.41	2.35	2.41								
128	128	163.30	0.00	-1.55	-7.30	0	-4.94	2	1.62	2	1.41	2.35	2.41								
128	129	164.48	0.00	-1.55	-5.48	0	-3.71	2	1.22	2	1.06	2.35	1.81								
129	129	164.48	0.00	-1.55	-5.48	0	-3.71	2	1.22	2	1.06	2.35	1.81								
129	130	165.65	0.00	-1.55	-3.65	0	-2.47	2	0.81	2	0.71	2.35	1.20								
130	130	165.65	0.00	-1.55	-3.65	0	-2.47	2	0.81	2	0.71	2.35	1.20								
130	131	166.83	0.00	-1.55	-1.83	0	-1.24	2	0.41	2	0.35	2.35	0.60								
131	131	166.83	0.00	-1.55	-1.83	0	-1.24	2	0.41	2	0.35	2.35	0.60								
131	132	167.00	0.00	-1.55	-1.55	0	-1.05	2	0.34	2	0.30	2.35	0.51								
132	132	167.00	0.00	-1.55	-1.55	0	-1.05	2	0.34	2	0.30	2.35	0.51								
132	133	168.00	0.00	0.00	0.00	0	0.00	2	0.00	2	0.00	2.35	0.00								

Programa DINTEL IDEAM S.A.
PASEO.ENV_TREN_GENERICO.MZ.To

GRÁFICO DE TENSIONES

