ANEJO Nº 6. ESTRUCTURAS

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   - MOVIMIENTOS PREVISTOS EN LAS ESTRUCTURAS

DOCUMENTACIÓN COMPLEMENTARIA:

- PROYECTO DE CONSTRUCCIÓN. ACTUACIONES EN ESTRUCTURAS EXISTENTES
- PROYECTO MODIFICADO Nº 2

1. Cuadro resumen

COMPARATIVA PROYECTO-EJECUCIÓN: Estructuras Accesos a Lleida.

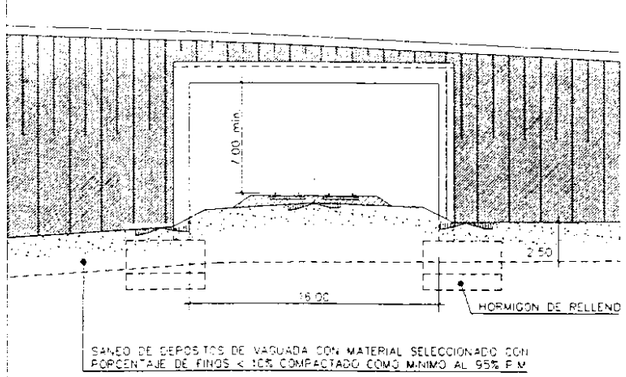
DESIGNACIÓN		LOCALIZACIÓN PROYECTO		LOCALIZACIÓN FINAL		DIMENSIONES		CONSTRUIDO		OBSERVACIONES
PROYECTO	CONSTRUIDO	EJE	PK	EJE	PK	PROYECTO	CONSTRUIDO	PROYECTO	MODIFICADO	
DRENAJE TRANSVERSAL										
ODT 1	ODT 1	2	0+100	1	0+100	Cunetas PI	Cunetas PI	X		
ODT 2	ODT 2	1	0+563	1	0+563	5x(2,50x2,00)	5x(2,50x2,00)	X		Se pasa a **marcos prefabricados.** Continuidad obra existente 2.
ODT 3	ODT 3	2	0+777	2	0+690	2,50x2,00	2,50x2,00		X	Se pasa a **marcos prefabricados.** Cambio de emplazamiento.
ODT 4	ODT 4	2	1+186	2	1+186	3x(1,30x1,50)	3x(1,30x1,50)	X		Se pasa a **marcos prefabricados.** Continuidad obra existente 3.
ODT 5	ODT 5	0	101+124	0	101+100	1,30x1,50	1,30x1,50		X	Se pasa a **marcos prefabricados.** Cambio en el emplazamiento y en el esviaje. Continuidad obra existente 4.
ODT 6	ODT 6	2	1+335	2	1+405	1,30x1,50	1,30x1,50		X	Se pasa a **marcos prefabricados.** Cambio de emplazamiento.
ODT 7	ODT 7	2	1+731	1	101+415	1,30x1,50	1,30x1,50		X	Se pasa a **marcos prefabricados.** Cambios en el canal y en el esviaje.
PASOS SUPERIORES										
PS 1.1		0	100+995			L:48,8 A:9,70		ANULADO		
PS 4.8		1	4+780			L:18,6 A:16,0		ANULADO		**Demolición del PS existente.**
PS 10.6	PS 10.6	1	10+650	1	10+650	L:19,6 A:9,7	L:19,6 A:9,7		X	Pequeña modificación en el muro armado.
PASOS INFERIORES										
PI 0.1	PI 0.1	2	0+100	2	0+100	7,50x5,00	7,50x5,00	X		
PI 0.8	PI 0.8	2	0+850	2	0+850	9,00x8,25	9,00x8,25		X	
PI 1.5		2	1+660			9,00x7,50		ANULADO		
	PI ESTACIÓN			1	7+600		8,60x3,00		X	Finalmente sólo se ejecutan las pantallas y la losa superior.
ESTRUCTURAS										
P. PEAT. 5.1	P. PEAT. 5.1	1	5+030	1	5+080	3 vanos tot:38,13	1 vano: 38,00		X	Se pasa a una pasarela de fibra de vidro con los accesos in situ.
FALSO TÚNEL		1	6+760 - 6+880			5,15x6,90		ANULADO		
SC 1.4	SC 1.4	2	1+490	2	1+490	16,00x10,00	16,00x10,00		X	Cambio de posición del eje 2 sobre la estructura (Pérgola).
MUROS										
MURO 0.0	MURO 0.0	1	0+080	1	0+080	L:15,22 H:3,00	L:15,22 H:3,00	X		
MURO 1.2		I. Ejes	1+220 - 1+320			L:100 Hmx:5,35		ANULADO		
MURO 3.0A		I. Ejes	0+080 - 0+660			L:485 Hmx:3,40		ANULADO		
MURO 3.0B		I. Ejes	0+060 - 0+300			L:180 Hmx:2,65		ANULADO		
MURO 3.7		I. Ejes	0+940 - 1+060			L:120 Hmx:3,10		ANULADO		
MURO 3.9A		I. Ejes	1+100 - 1+140			L:40 Hmx:4,20		ANULADO		
MURO 3.9B		I. Ejes	1+140 - 1+420			L:280 Hmx:5,85		ANULADO		
MURO 9.1		1	0+660 - 0+920			L:242,2 Hmx:6		ANULADO		
MURO 9.7		1	1+320 - 1+350			L:30,00 H:4,00		ANULADO		
MURO 10.4A	MURO 10.4A	Cam. 10.3//10.5	0+080 - 0+184	1	0+080 - 0+184	L:103,6 Hmx:3,5	L:103,6 Hmx:3,5	X		
MURO 10.4B	MURO 10.4B	Cam. 10.3//10.5	0+000 - 0+184	1	0+000 - 0+184	L:184 Hmx:2,45	L:184 Hmx:2,45		X	Cambio en el módulo 1
ACT. ESTRUCT. EXISTENTES										
VIAD. SEGRE	VIAD. SEGRE	1	7+850 - 8+020	1	7+850 - 8+020	Reparación	Reparación		X	Remozo.
PI 8.4	PI 8.4	1	8+330	1	8+330				X	Estructura de tablero-losa
PS 9.0	PS 9.0	1	9+000	1	9+000	Reparación		X		
PS 9.3	PS 9.3	1	9+280	1	9+280	Reparación	Reparación		X	Refuerzo de los pilares.
OTROS										
INTER. EJES	INTER. EJES	1	3+580 - 3+820			Nave viga acero		MODIFICADO 1		Nuevo emplazamiento en el subtramo VII. Ejecutado con el montaje de la via
CAM. ANCHOS	CAM. ANCHOS	1	9+800 - 9+900	1	9+800 - 9+900	Nave viga acero	Nave viga acero		X	Adaptación a lo que pide Talgo.
TALLER ELEC.	TALLER ELEC.	1	7+450	1	7+720	Nave viga acero	Nave viga acero		X	Cambio de sitio y dimensiones.

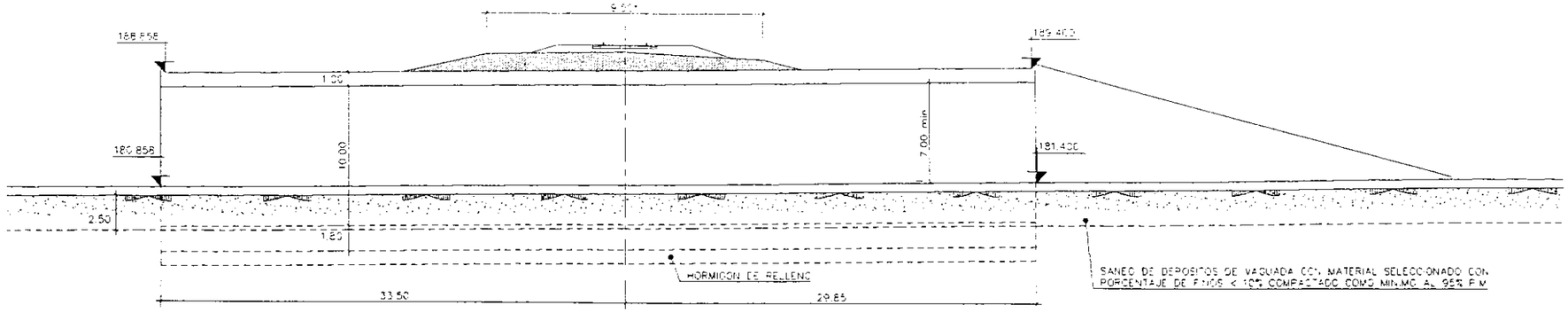
2. Descripción :tipología, aparatos de apoyo, juntas, impermeabilización, etc

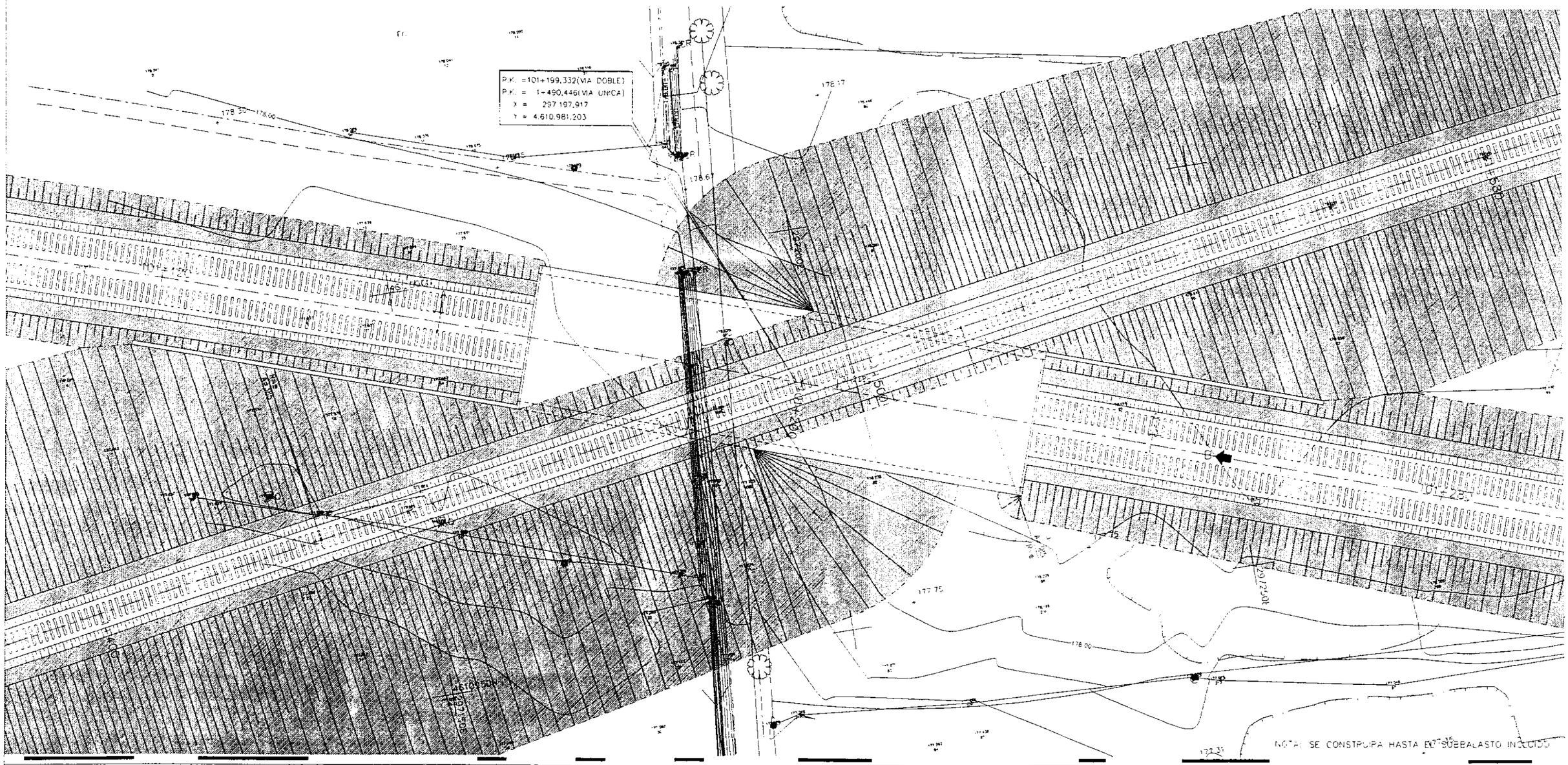
ESTRUCTURAS

IDENTIFICACIÓN	Eje	PK	Tipología	Aparatos de apoyo	Impermeabilización	Juntas
PASOS INFERIORES						
PASO INFERIOR 0.1	SC	0+100	Ampliación de paso existente con un marco cerrado y aletas de hormigón in situ	NO DISPONE	Impermeabilización asfáltica, doble geotextil y dren envuelto en material filtrante	Porexpan y juntas water-stop
PASO INFERIOR 0.8	SC	0+850	Marco cerrado y aletas de hormigón armado ejecutado in situ	NO DISPONE	Impermeabilización asfáltica, doble geotextil y dren envuelto en material filtrante	Porexpan
PASO INFERIOR ESTACIÓN	AL	7+600	Losa de hormigón armado sobre pantallas de hormigón armado ejecutadas in situ	NO DISPONE	Impermeabilización asfáltica de la losa	Porexpan y juntas water-stop
PASOS SUPERIORES						
PASO SUPERIOR 10.6	AL	10+650	Un solo vano con losa de hormigón armado, estribos de suelo reforzado y cargadero de hormigón armado	Apoyos elastoméricos	Dren debajo de los cargaderos e impermeabilización asfáltica del tablero	Junta de dilatación de caucho de 25 mm de recorrido
OTRAS ESTRUCTURAS						
PASARELA PEATONAL 5.1	AL	5+080	Cimentaciones, pilares y rampa de acceso de hormigón armado in situ. Tablero prefabricado de fibra de vidrio	Neopreno armado	Pavimento antideslizante en las rampas de acceso	NO DISPONE
SALTO DEL CARNERO 1.4	SC	1+490	Pórtico y aletas de hormigón armado	NO DISPONE	Impermeabilización asfáltica, doble geotextil y dren envuelto en material filtrante	Porexpan
MUROS						
MURO 0.0	AL	0+080	Muro de hormigón armado	NO DISPONE	Impermeabilización asfáltica, doble geotextil y dren envuelto en material filtrante	NO DISPONE
MURO 10.4A	C-10.3//10.5	0+100	Muro de hormigón armado	NO DISPONE	Impermeabilización asfáltica, doble geotextil y dren envuelto en material filtrante	Porexpan y juntas water-stop
MURO 10.4B	C-10.3//10.5	0+100	Muro de hormigón armado	NO DISPONE	Impermeabilización asfáltica, doble geotextil y dren envuelto en material filtrante	Porexpan y juntas water-stop
ACTUACIÓN EN ESTRUCTURAS EXISTENTES						
VIADUCTO DEL SEGRE	AL	7+900	Reparación pilaretes con resinas y morteros	NO SE CAMBIAN	NO SE CAMBIA	NO SE CAMBIAN
PASO INFERIOR 8.4	AL	8+330	Tablero de vigas prefabricadas y losa de hormigón armado, estribo de hormigón armado in situ	Apoyos elastoméricos	NO DISPONE	Junta de dilatación de caucho de 100 mm de recorrido
PASO SUPERIOR 9.3	AL	9+280	Refuerzo pilares con hormigón armado	NO SE CAMBIAN	NO SE CAMBIA	NO SE CAMBIAN
EDIFICACIONES						
INTERCAMBIADOR EJES	SUBTRAMO VII		Nave de vigas de acero	NO DISPONE	NO DISPONE	NO DISPONE
CAMBIADOR DE ANCHOS	AL	9+850	Nave de vigas de acero	NO DISPONE	NO DISPONE	NO DISPONE
TALLER ELECTRIFICACIÓN	AL	7+720	Nave de vigas de acero	NO DISPONE	NO DISPONE	NO DISPONE

3. Definición geométrica

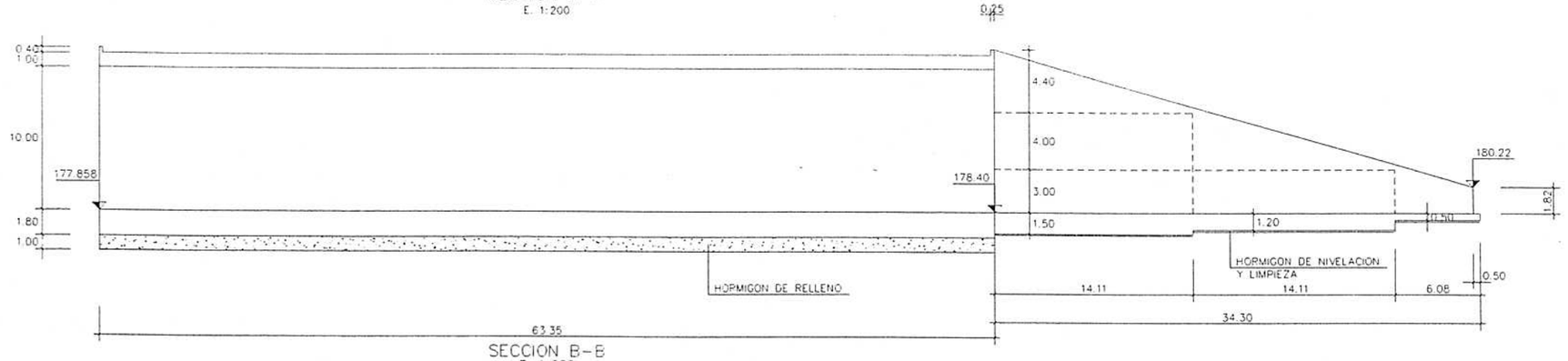




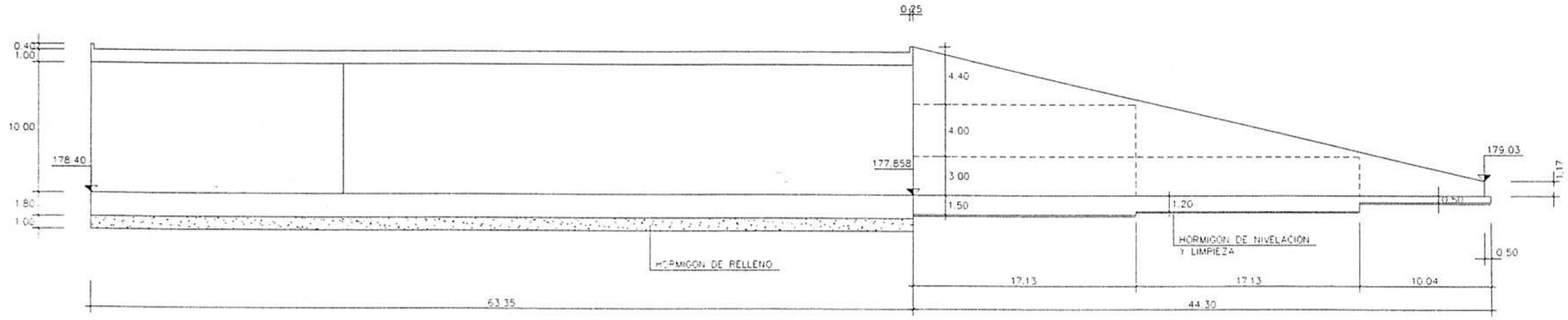


GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID–ZARAGOZA–BARCELONA–FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo.: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo.: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:200 1:250 Numérico Gráfico: 0 4 8 12m / 0 5 10 15m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO ESTRUCTURAS SALTO DE CARNERO 1.4 PLANO GENERAL	Nº DE PLANO 2.9.1 Hoja 1 de 9

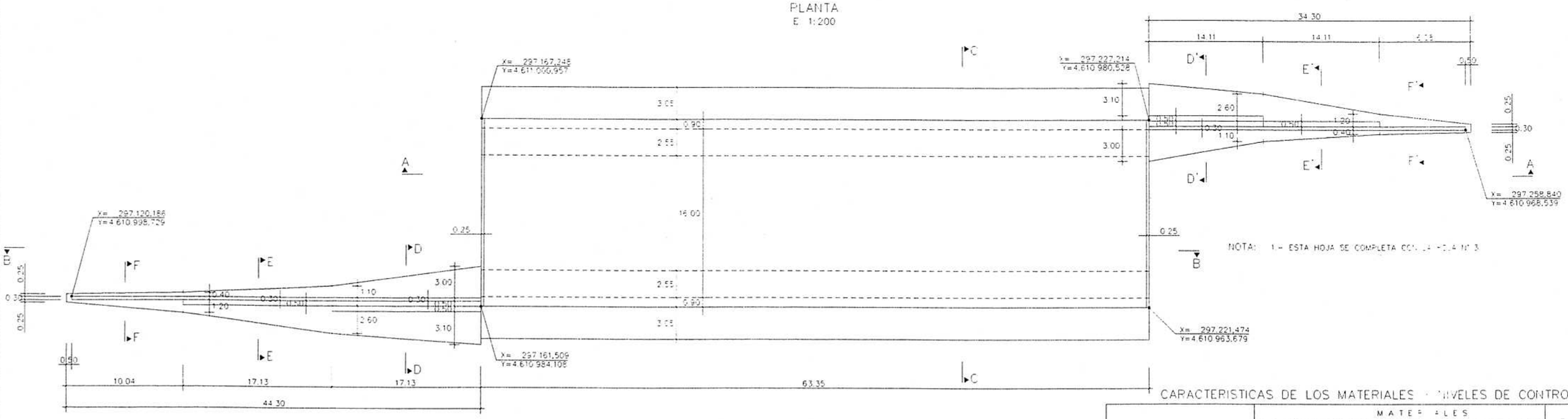
SECCION A-A
E. 1:200



SECCION B-B
E. 1:200



PLANTA
E. 1:200



NOTA: 1.- ESTA HOJA SE COMPLETA CON LA HOJA Nº 3

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

ELEMENTO	MATERIALES						EJECUCION
	HORMIGON			ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
CAPA DE LIMPIEZA, NIVELACION Y RELLENOS	HM-12.5	---	---	---	---	---	---
CIMENTACION	HA-25/P/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL
ALZADOS	HA-25/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	INTENSO

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

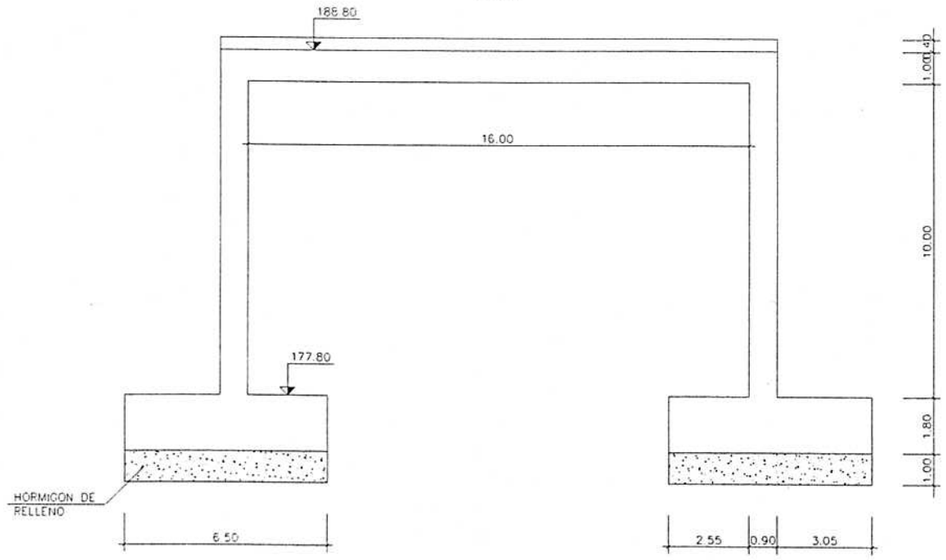
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0 4 8 12m Gráfica

FECHA
NOVIEMBRE 2002

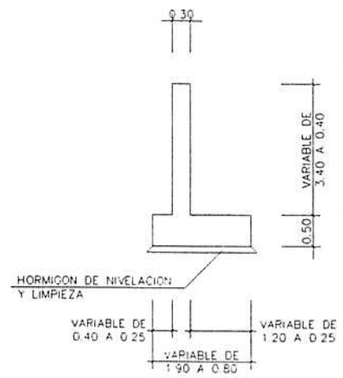
TITULO DEL PLANO
ESTRUCTURAS
SALTO DE CARNERO 1.4
DEFINICION GEOMETRICA (1)

Nº DE PLANO
2.9.1
Hoja 2 de 9

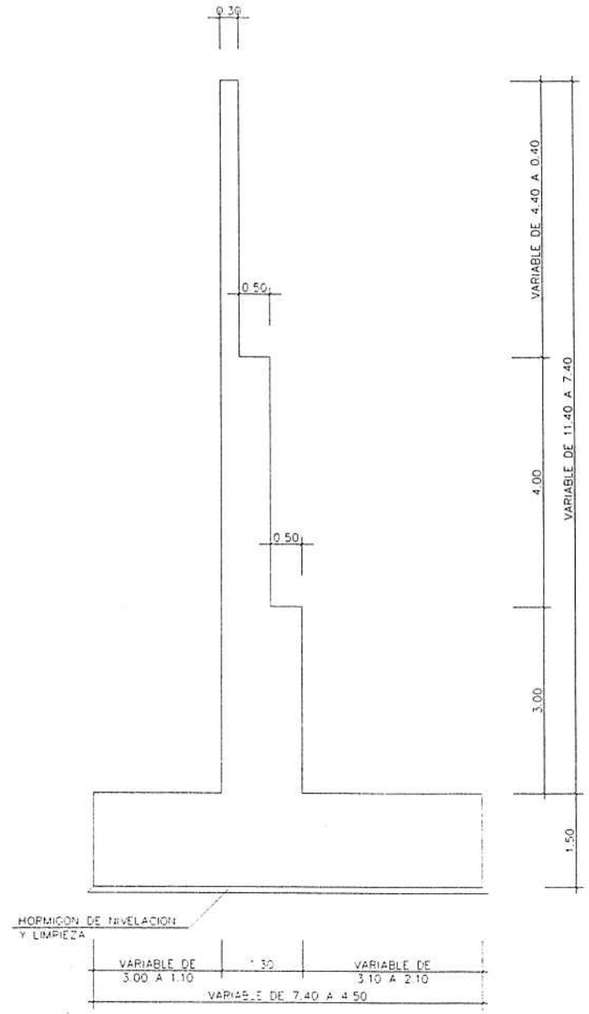
SECCION C-C
E. 1:200



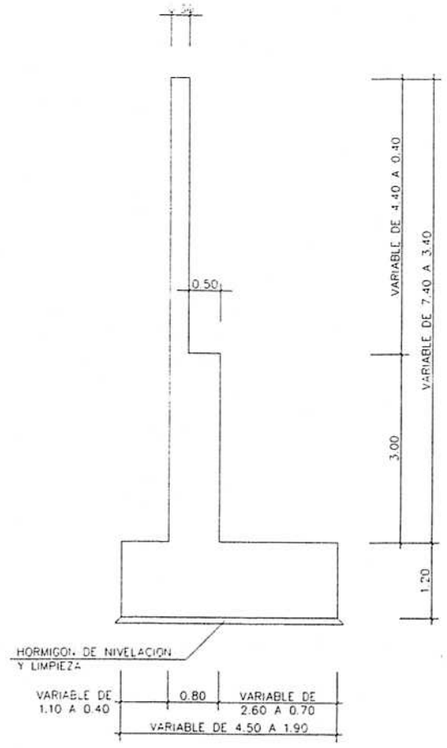
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E. 1:50



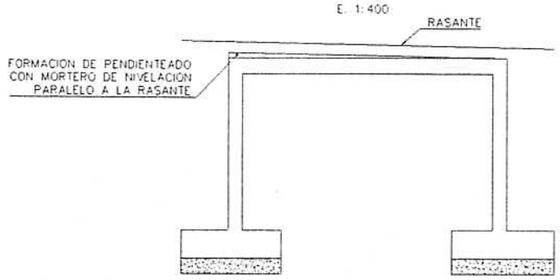
SECCION D-D
E. 1:50



SECCION E-E
E. 1:50



DETALLE DE PENDIENTEADO
E. 1:400



NOTA: 1.- ESTA HOJA SE COMPLETA CON LA HOJA Nº 2.
2.- SE PENDIENTARA CON MORTERO DE NIVELACION PARALELO A LA RASANTE, EL DINTEL BAJO LA PLATAFORMA DE BALASTO

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

ELEMENTO	MATERIALES						EJECUCION
	HORMIGON			ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
CAPA DE LIMPIEZA, NIVELACION Y RELLENOS	HM-12.5	---	---	---	---	---	---
CIMENTACION	HA-25/P/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL
ALZADOS	HA-25/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	INTENSO

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

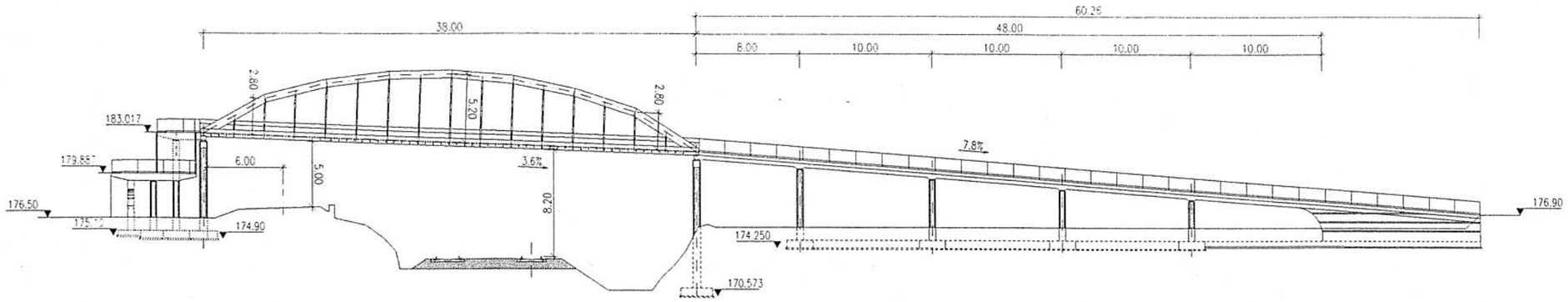
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1:50
1:200
Numérica
Gráfica 0 1 2 3m / 0 4 8 12m

FECHA
NOVIEMBRE 2002

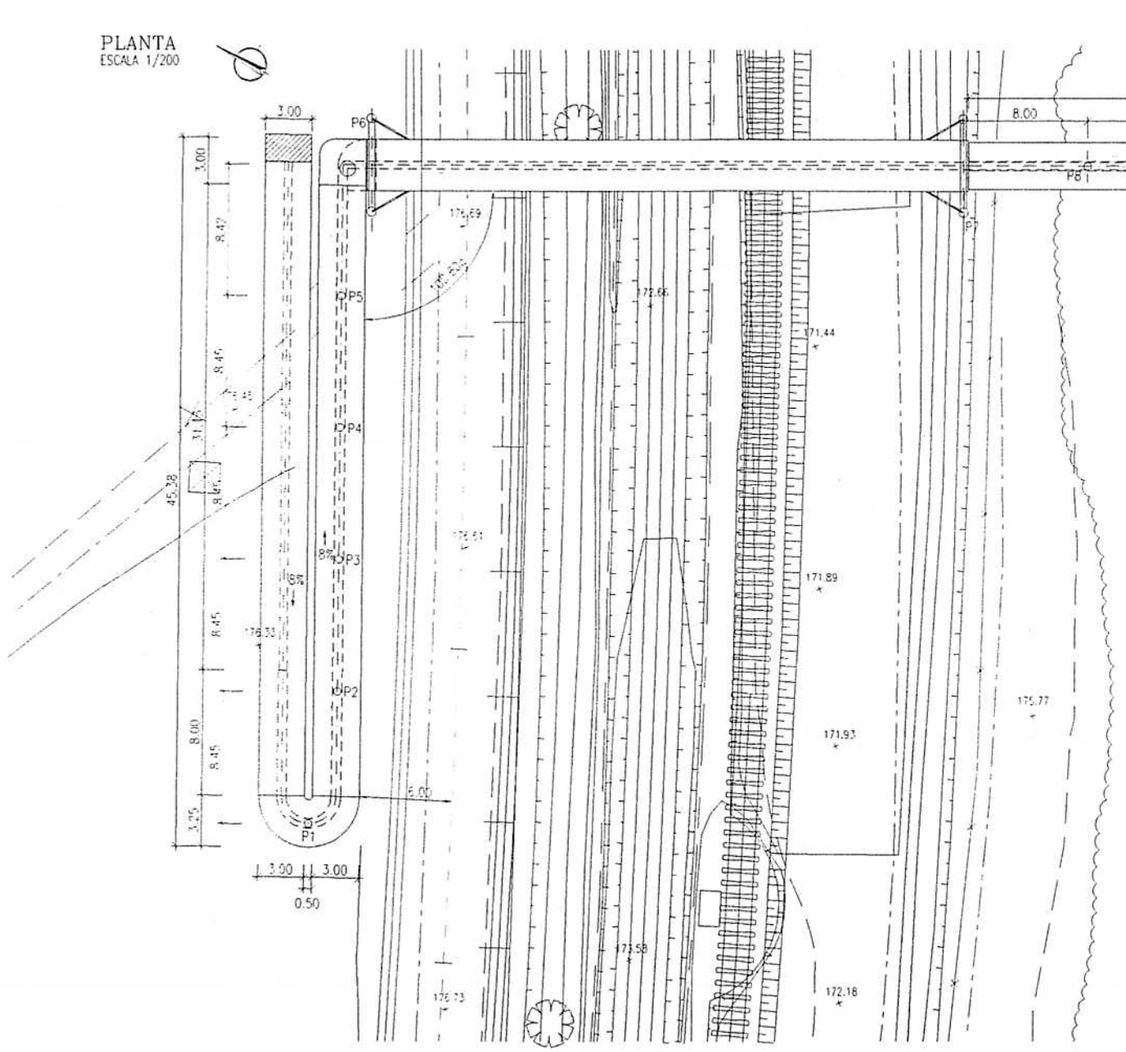
TITULO DEL PLANO
ESTRUCTURAS
SALTO DE CARNERO 1.4
DEFINICION GEOMETRICA (II)

Nº DE PLANO
2.9.1
Hoja 3 de 9

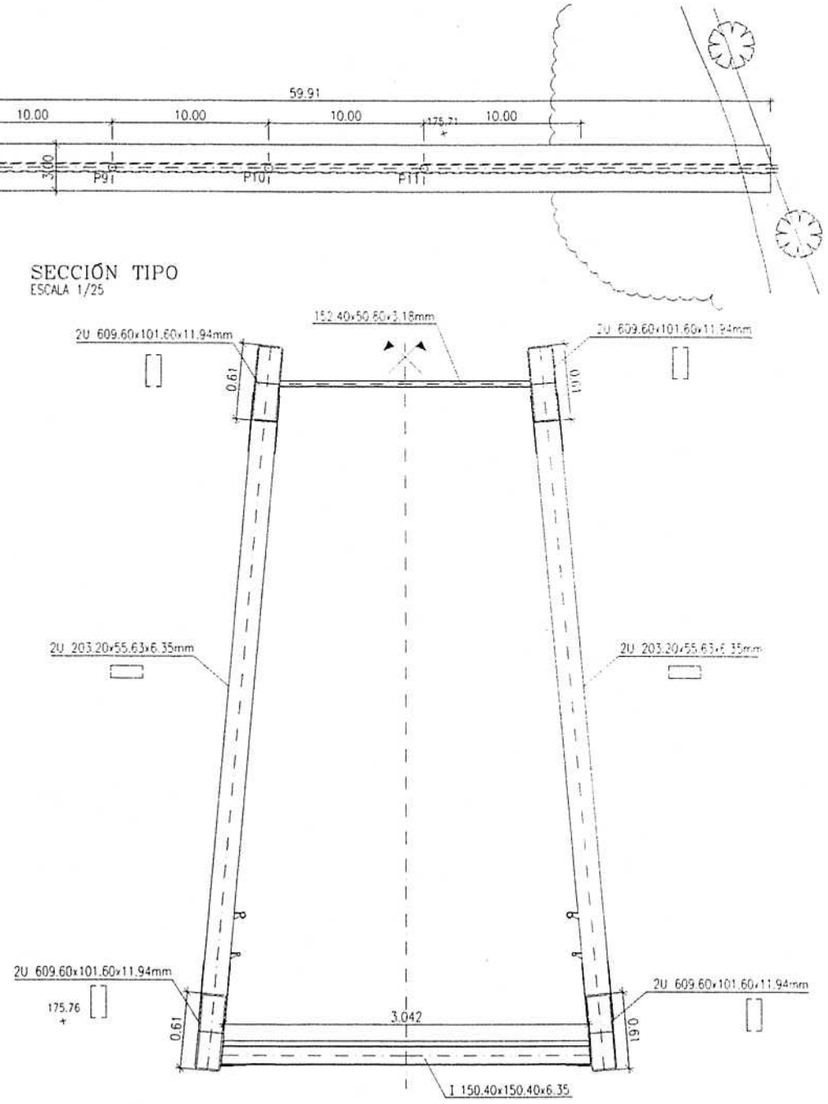
ALZADO
ESCALA 1/200



PLANTA
ESCALA 1/200



SECCIÓN TIPO
ESCALA 1/25



CARACTERISTICAS DE LOS MATERIALES
NIVELES DE CONTROL Y COEFICIENTES DE SEGURIDAD ADOPTADOS

HORMIGONES			
ELEMENTO ESTRUCTURAL	TIPO	CONTROL	γ
ALZADOS	-A-30/20/P/IIb	NORMAL	1.50
CIMENTACIONES	-A-30/20/P/IIa	NORMAL	1.50
NIVELACIÓN	-H-15	NORMAL	1.50

ACEROS			
ACEROS	TIPO	CONTROL	γ
ACERO PARA ARMAR CORRUGADO	B 500 S	NORMAL	1.15

EJECUCIÓN DE LA OBRA

ELEMENTOS IN SITU. CONTROL INTENSO
COEFICIENTES DE MAYORACIÓN DE LAS ACCIONES SEGÚN EHE.
RECUBRIMIENTO DE LAS ARMADURAS 35 mm

PERFILES DE FIBRA DE VIDRIO	
PERFILES	RESISTENCIA A FLEXION
SUPERESTRUCTURAL SERIE 1625	σ_u > 227 MPa

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

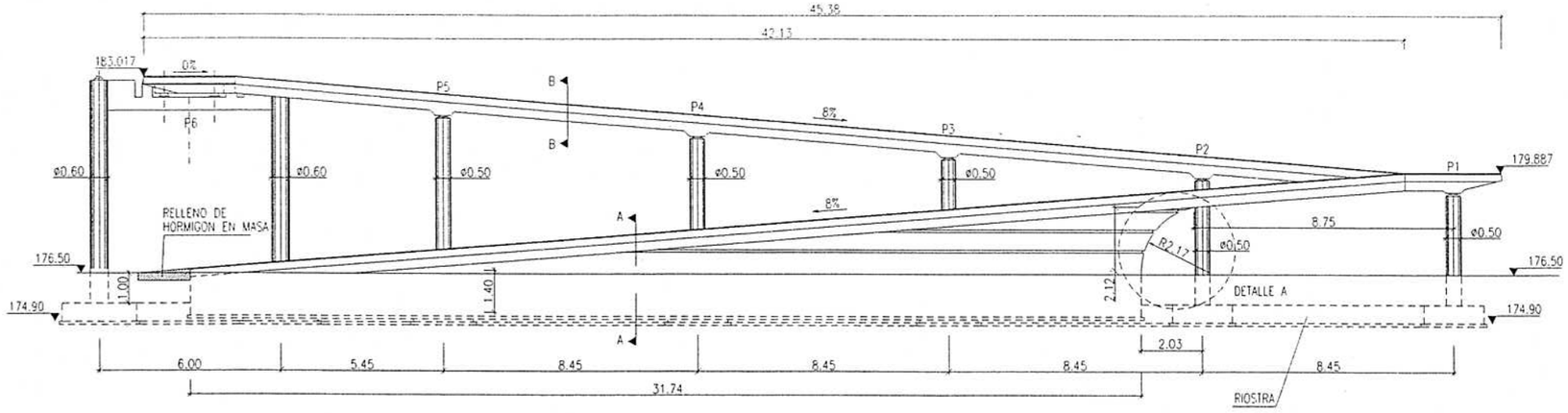
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FECHA
NOVIEMBRE 2002

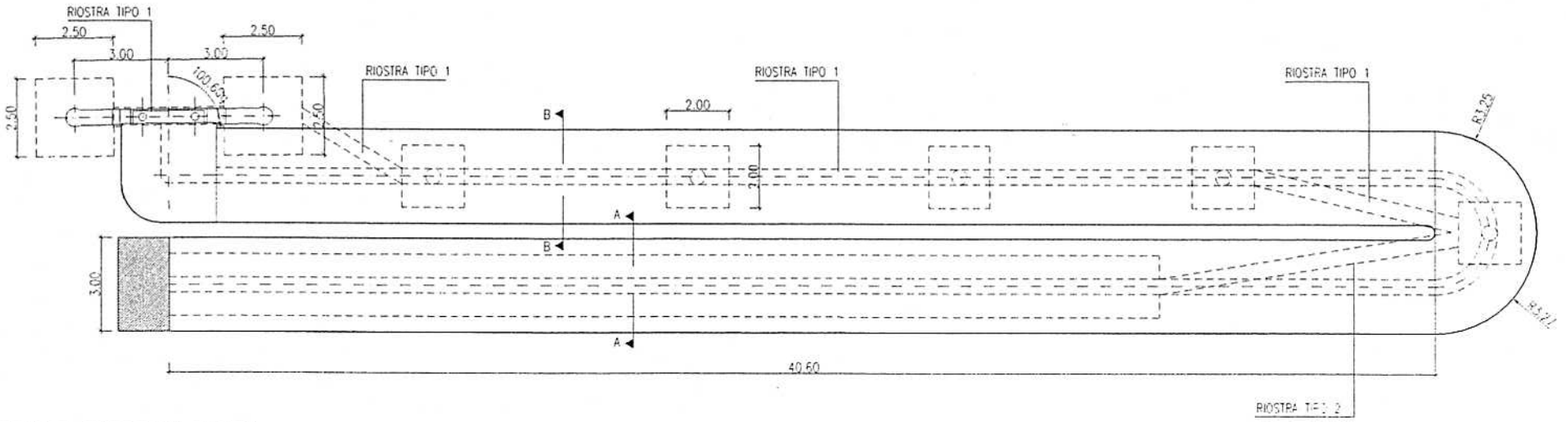
TITULO DEL PLANO
PASARELA PEATONAL
PLANTA, ALZADO Y SECCIONES

Nº DE PLANO
2.9.2
Hoja 1 de 32

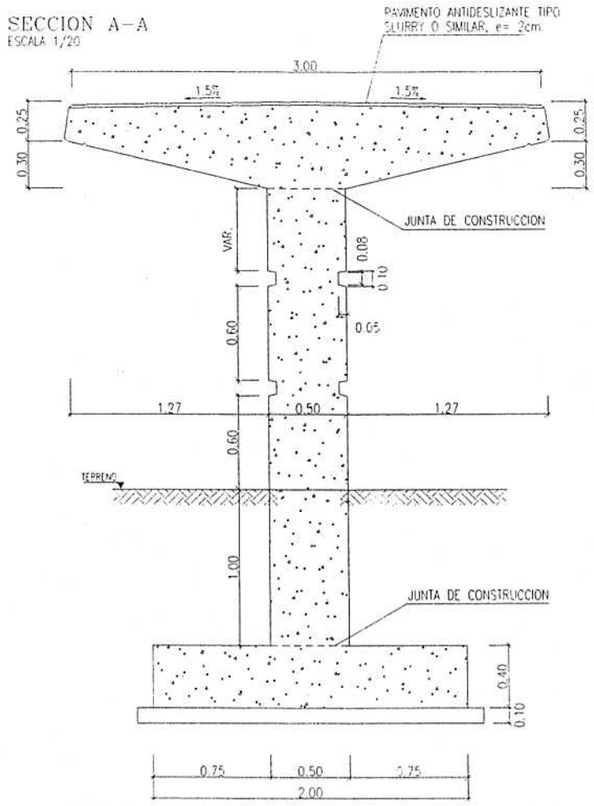
ALZADO
ESCALA 1/100



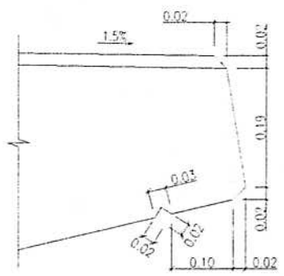
PLANTA
ESCALA 1/100



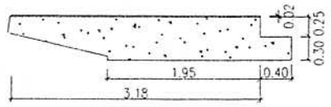
SECCION A-A
ESCALA 1/20



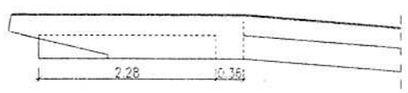
DETALLE EXTREMO RAMPA
ESCALA 1/5



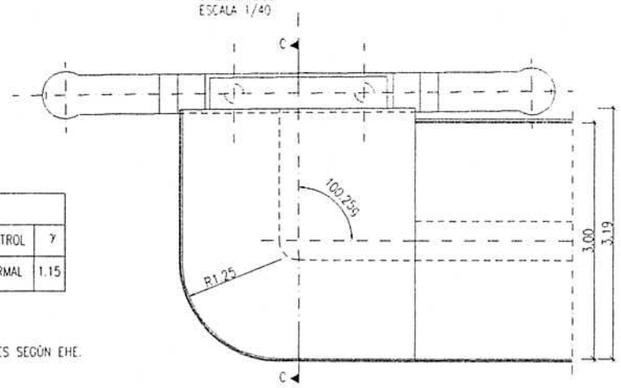
SECCION C-C
ESCALA 1/40



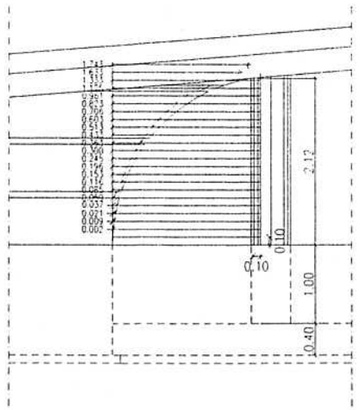
ALZADO
ESCALA 1/40



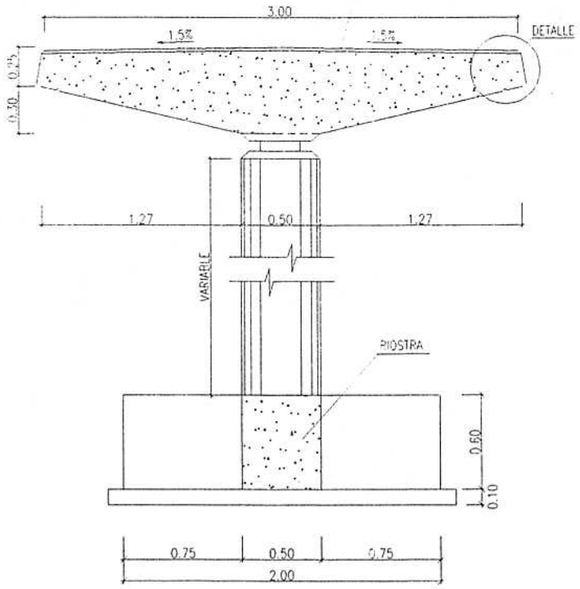
PLANTA
ESCALA 1/40



DETALLE A
ESCALA 1/40



SECCION B-B
ESCALA 1/20



CARACTERISTICAS DE LOS MATERIALES
NIVELES DE CONTROL Y COEFICIENTES DE SEGURIDAD ADOPTADOS

HORMIGONES			
ELEMENTO ESTRUCTURAL	TIPO	CONTROL	γ
ALZADOS	HA-30/20/P/IIb	NORMAL	1.50
CIMENTACIONES	HA-30/20/P/IIa	NORMAL	1.50
NIVELACIÓN	HM-15	NORMAL	1.50

ACEROS			
ACEROS	TIPO	CONTROL	γ
ACERO PARA ARMAR CORRUGADO	B 500 S	NORMAL	1.15

EJECUCIÓN DE LA OBRA

ELEMENTOS IN SITU CONTROL INTENSO
COEFICIENTES DE MAYORACIÓN DE LAS ACCIONES SEGÚN EHE.
RECUBRIMIENTO DE LAS ARMADURAS 35 mm

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

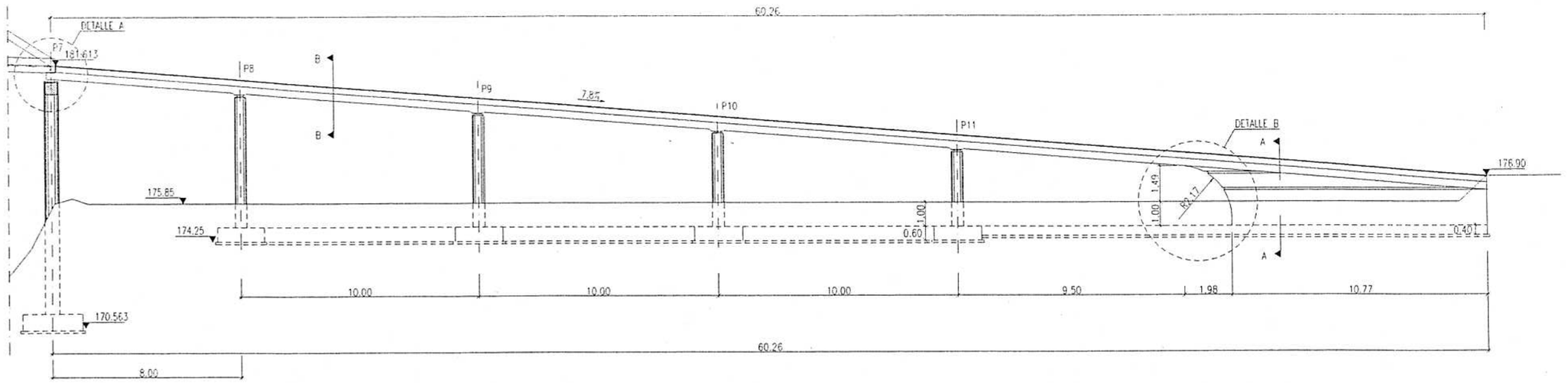
ESCALA NORMAL
1:100 Numérica
0 2 4 6m Gráfico

FECHA
NOVIEMBRE 2002

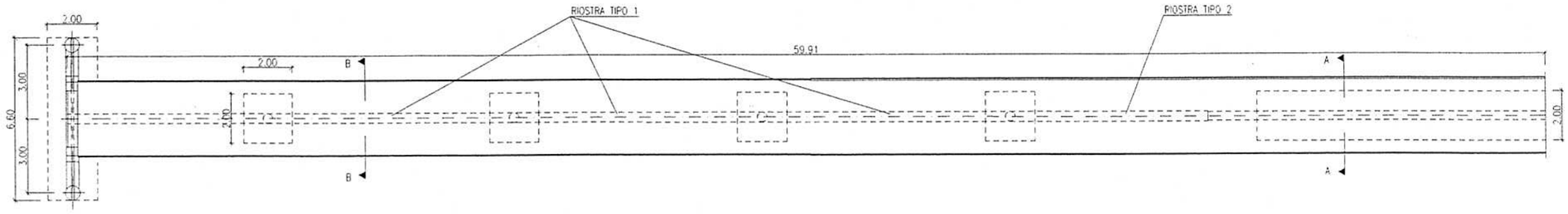
TITULO DEL PLANO
PASARELA PEATONAL
RAMPA DE DOBLE TRAMO
DEFINICION GEOMETRICA

Nº DE PLANO
2.9.2
Hoja 2 de 32

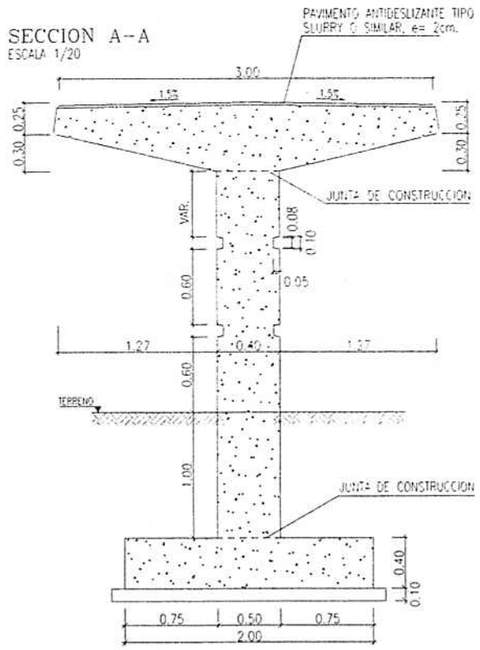
ALZADO
ESCALA 1/100



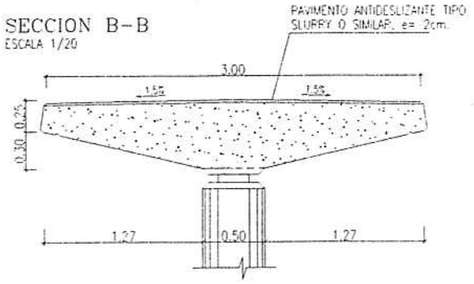
PLANTA
ESCALA 1/100



SECCION A-A
ESCALA 1/20



SECCION B-B
ESCALA 1/20



CAPACTERISTICAS DE LOS MATERIALES
NIVELES DE CONTROL Y COEFICIENTES DE SEGURIDAD ADOPTADOS

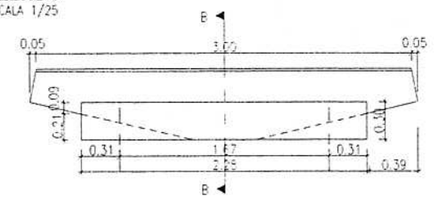
HORMIGONES			
ELEMENTO ESTRUCTURAL	TIPO	CONTROL	γ
ALZADOS	HA-30/20/P/IIb	NORMAL	1.50
CIMENTACIONES	HA-30/20/P/IIo	NORMAL	1.50
NIVELACIÓN	HM-15	NORMAL	1.50

ACEROS			
ACEROS	TIPO	CONTROL	γ
ACERO PARA ARMAR CORRUGADO	B 500 S	NORMAL	1.15

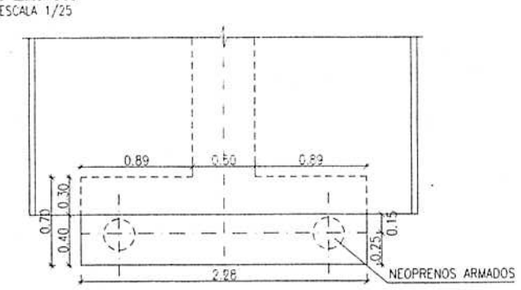
EJECUCIÓN DE LA OBRA

ELEMENTOS IN SITU CONTROL INTENSO
COEFICIENTES DE MAYORACIÓN DE LAS ACCIONES SEGÚN EHE.
RECUBRIMIENTO DE LAS ARMADURAS 35 mm

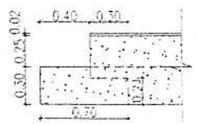
ALZADO
ESCALA 1/25



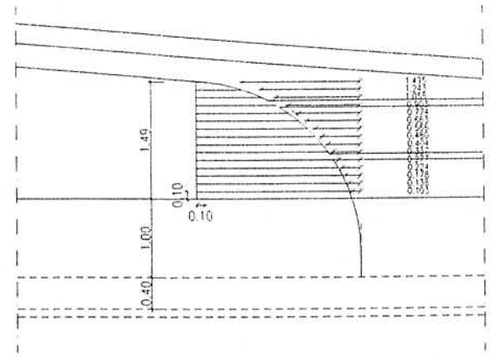
PLANTA
ESCALA 1/25



DETALLE A
ESCALA 1/25

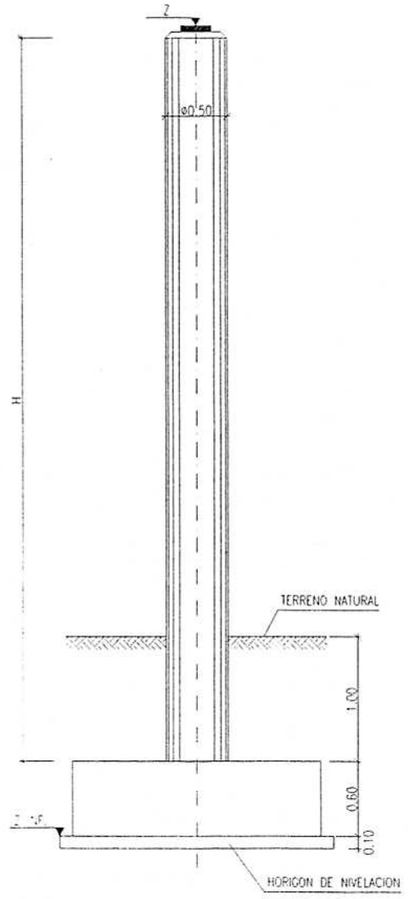


DETALLE B
ESCALA 1/40



GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:100 Numérica Gráfica 0 2 4 6m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO PASARELA PEATONAL RAMPA DE TRAMO SIMPLE DEFINICION GEOMETRICA	Nº DE PLANO 2.9.2 Hoja 3 de 32

ALZADO
ESCALA 1/25



CARACTERISTICAS DE LOS MATERIALES
NIVELES DE CONTROL Y COEFICIENTES DE SEGURIDAD ADOPTADOS

HORMIGONES			
ELEMENTO ESTRUCTURAL	TIPO	CONTROL	γ
ALZADOS	HA-30/20/P/IIb	NORMAL	1.50
CIMENTACIONES	HA-30/20/P/IIa	NORMAL	1.50
NIVELACIÓN	HM-15	NORMAL	1.50

ACEROS			
ACEROS	TIPO	CONTROL	γ
ACERO PARA ARMAR CORRUGADO	B 500 S	NORMAL	1.15

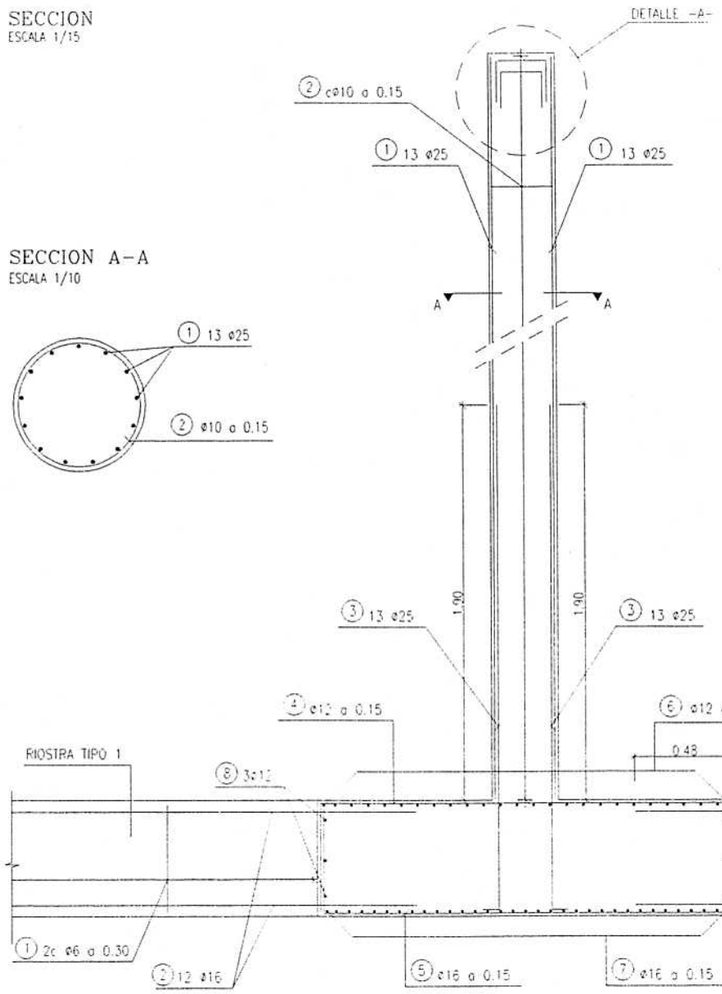
EJECUCIÓN DE LA OBRA

ELEMENTOS IN SITU CONTROL INTENSO
COEFICIENTES DE MAYORACIÓN DE LAS ACCIONES SEGÚN EHE.
RECUBRIMIENTO DE LAS ARMADURAS 35 mm

NOTA: SE HA CONSIDERADO UNA TENSION ADMISIBLE DE 2.0 Kp/cm2 PARA EL DISEÑO DE LA CIMENTACION

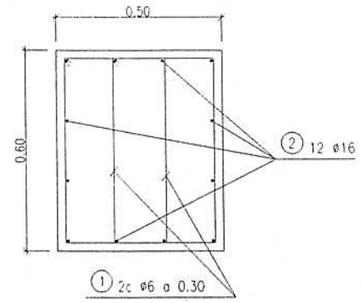
Nº PILA	Z	H	Z INF.
1	179.27	3.57	175.00
2	179.808	4.11	175.00
3	180.485	4.79	175.00
4	181.163	5.46	175.00
5	181.845	6.14	175.00
8	180.335	5.36	174.24
9	179.539	4.59	174.24
10	178.745	3.79	174.24
11	177.95	3.00	174.24

SECCION
ESCALA 1/15

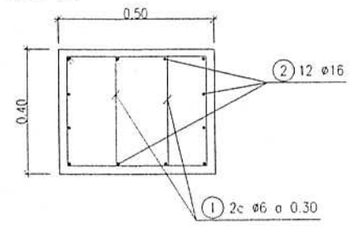


SECCION A-A
ESCALA 1/10

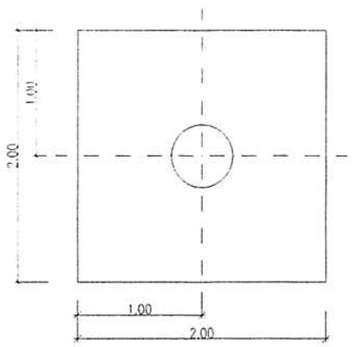
SECCIÓN B-B. RIOSTRA TIPO 1
ESCALA 1/10



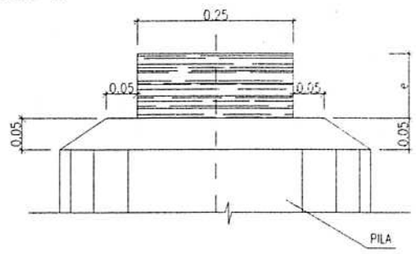
SECCIÓN B-B. RIOSTRA TIPO 2
ESCALA 1/10



PLANTA
ESCALA 1/25



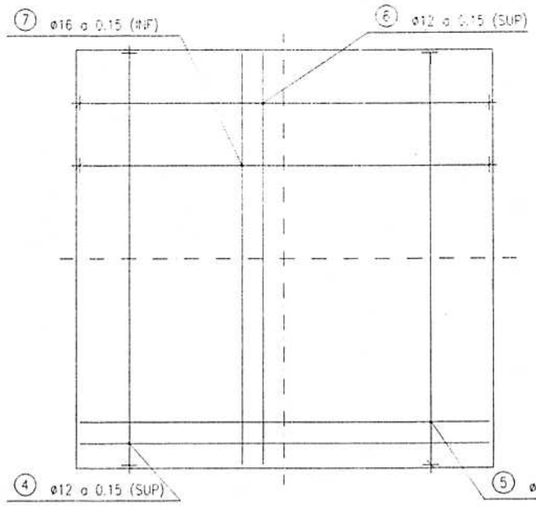
APARATOS DE APOYO
ESCALA 1/5



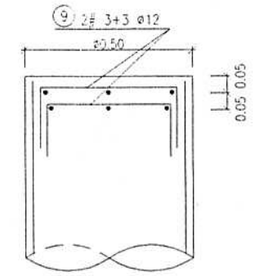
	D	e	
P1 A P5	ø250	41(29)	NEOPRENO ARMADO
P8	ø250	63(45)	NEOPRENO ARMADO
P9 A P11	ø250	41(29)	NEOPRENO ARMADO

COTAS EN mm

PLANTA
ESCALA 1/15



DETALLE -A-
ESCALA 1/10



GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

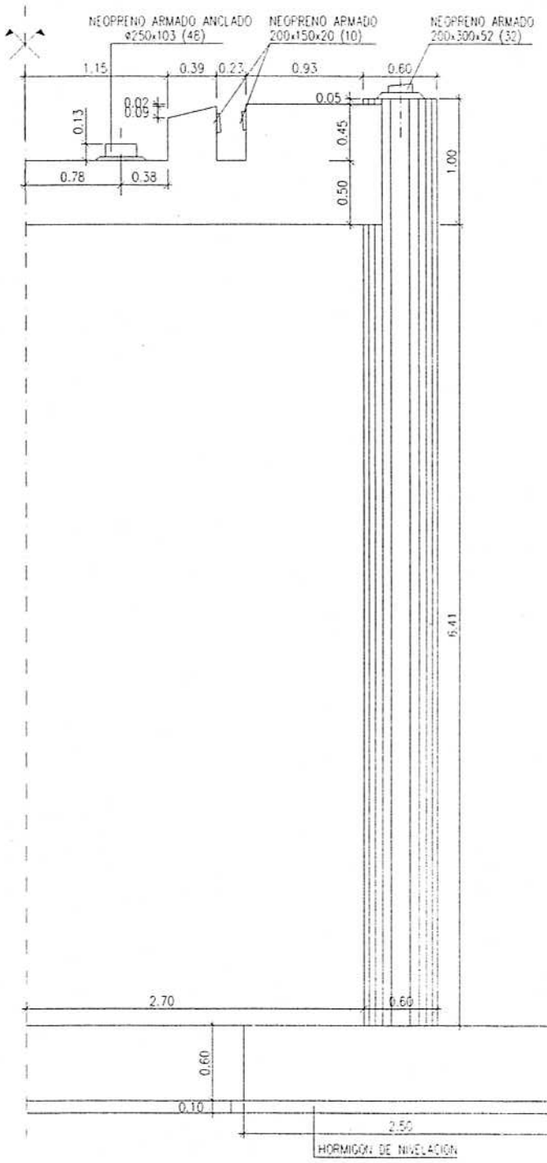
ESCALA NORMAL
1:25
0 0.5 1 1.5m
Numérica | Gráfica

FECHA
NOVIEMBRE 2002

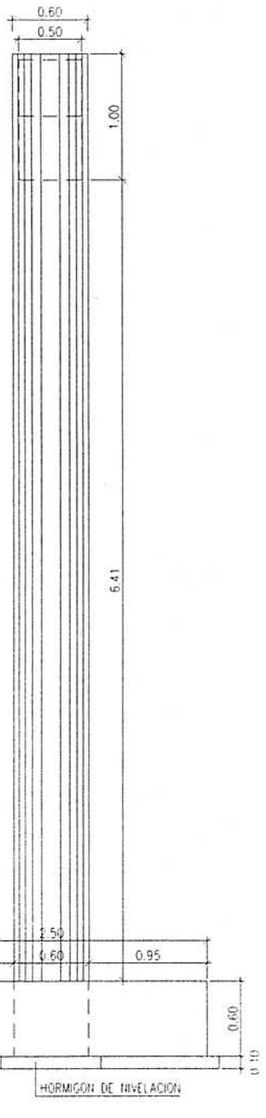
TITULO DEL PLANO
PASARELA PEATONAL
PILAS DE UN SOLO FUSTE
DEFINICIÓN GEOMETRICA Y ARMADO

Nº DE PLANO
2.9.2
Hoja 4 de 32

SEMIALZADO PILA 6
ESCALA 1/25



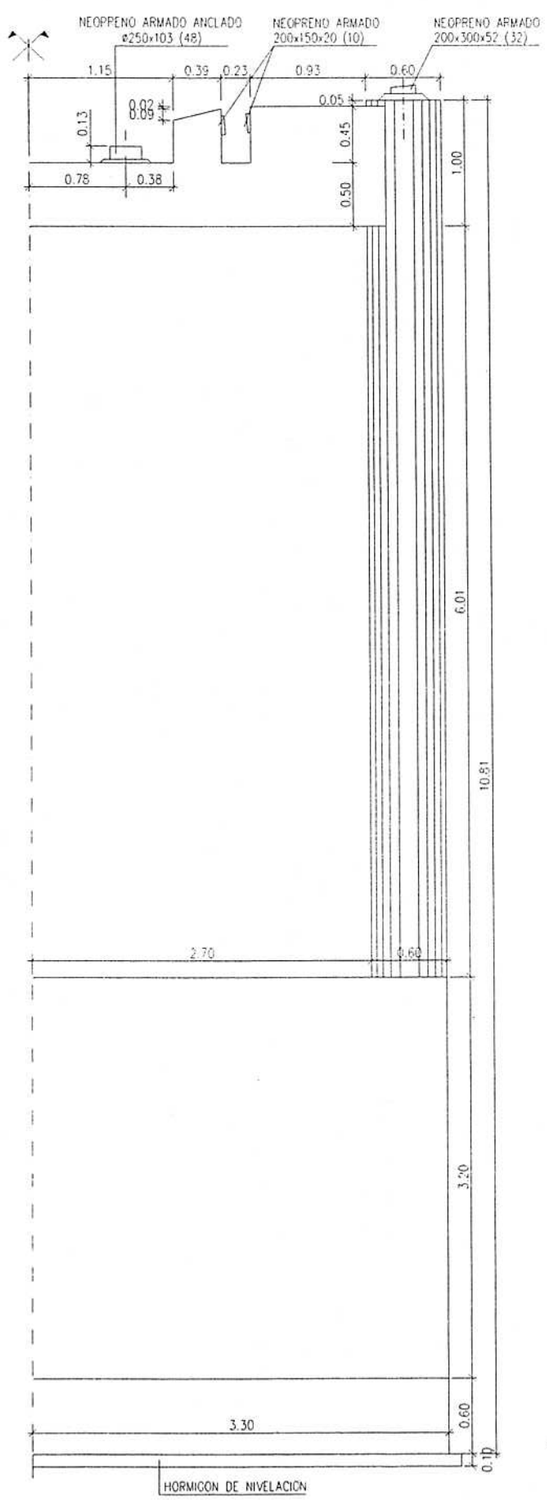
VISTA LATERAL PILA 6
ESCALA 1/25



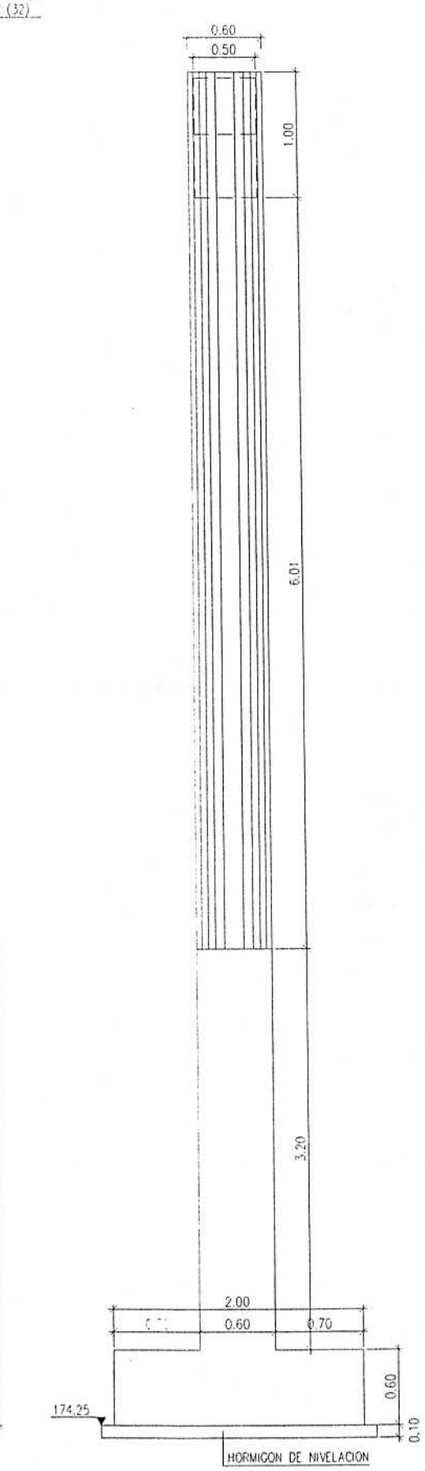
NEOPRENOS
ESCALA 1/10



SEMIALZADO PILA 7
ESCALA 1/25



VISTA LATERAL PILA 7
ESCALA 1/25



CARACTERISTICAS DE LOS MATERIALES
NIVELES DE CONTROL Y COEFICIENTES DE SEGURIDAD ADOPTADOS

HORMIGONES			
ELEMENTO ESTRUCTURAL	TIPO	CONTROL	γ
ALZADOS	HA-30/20/P/IIb	NORMAL	1.50
CIMENTACIONES	HA-30/20/P/IIa	NORMAL	1.50
NIVELACIÓN	HM-15	NORMAL	1.50

ACEROS			
ACEROS	TIPO	CONTROL	γ
ACERO PARA ARMAR CORRUGADO	B 500 S	NORMAL	1.15

EJECUCIÓN DE LA OBRA

ELEMENTOS IN SITU CONTROL INTENSO
COEFICIENTES DE MAYORACIÓN DE LAS ACCIONES SEGÚN EHE.
RECUBRIMIENTO DE LAS ARMADURAS 35 mm

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

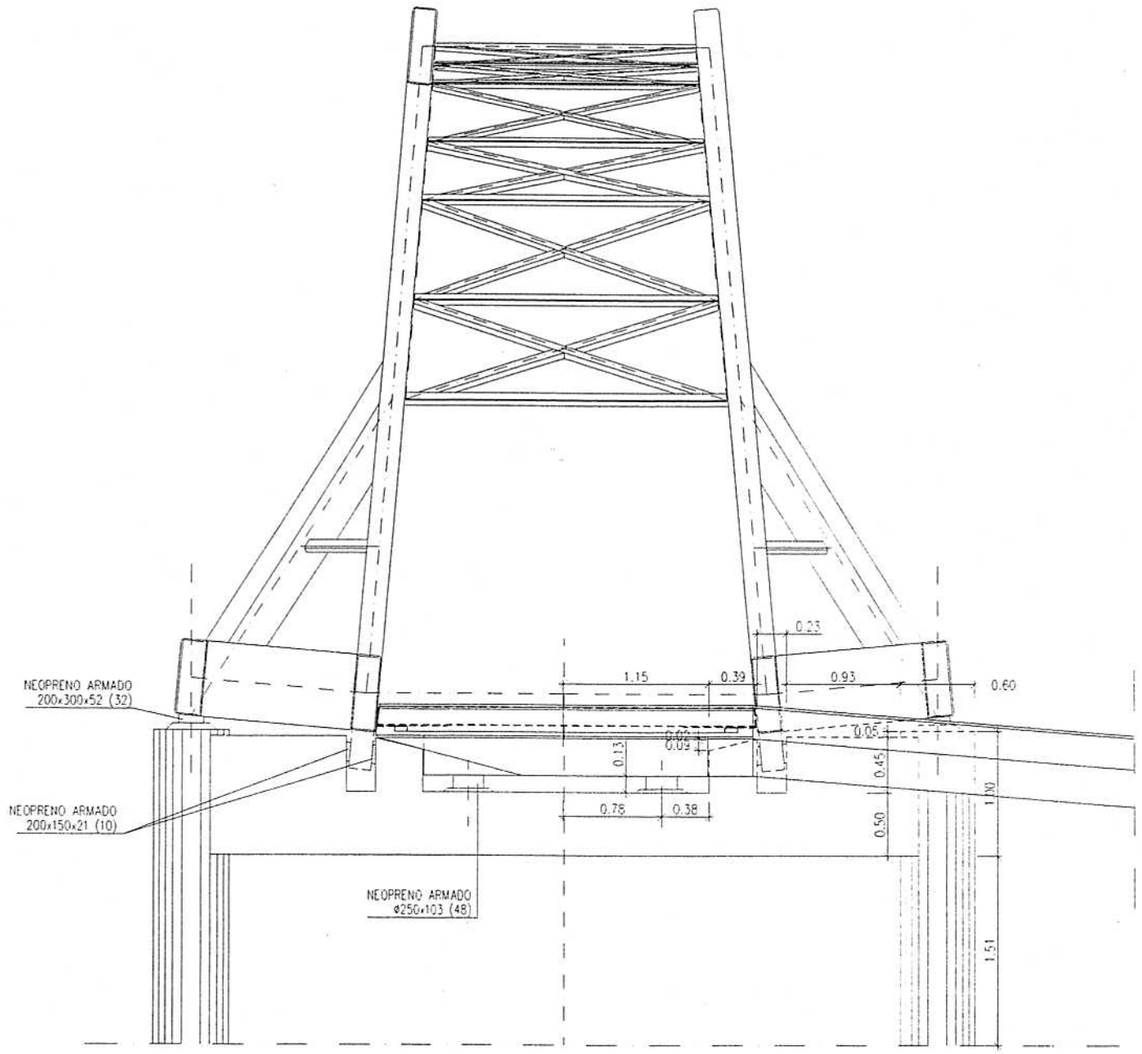
CONSULTOR (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

ESCALA NORMAL
1:50
Numérica | Gráfico
0 4 8 12m

FECHA
NOVIEMBRE 2002

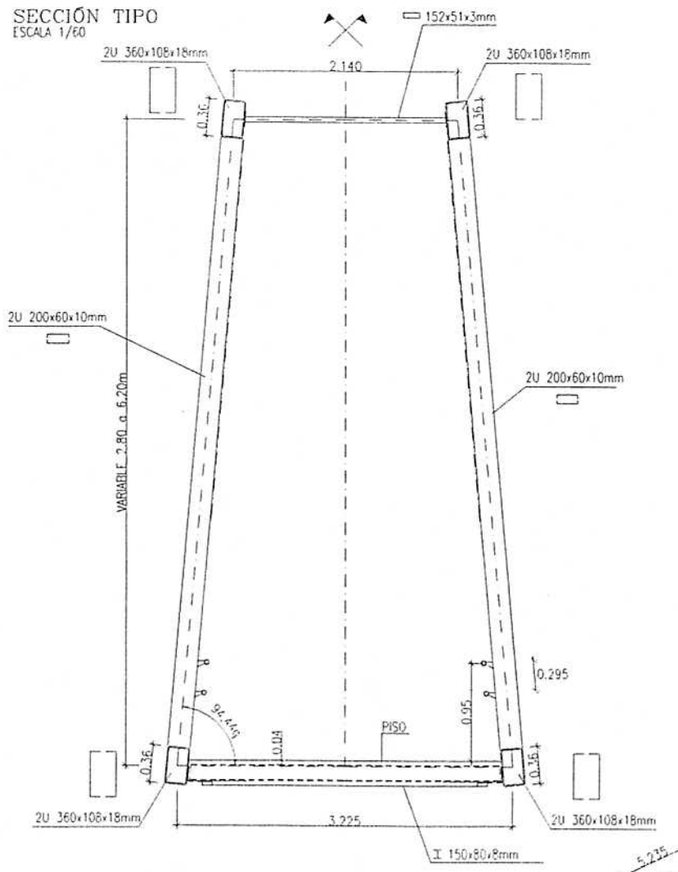
TITULO DEL PLANO
PASARELA PEATONAL
PILAS DE DOS FUSTES
DEFINICIÓN GEOMETRICA

Nº DE PLANO
2.9.2
Hoja 5 de 32



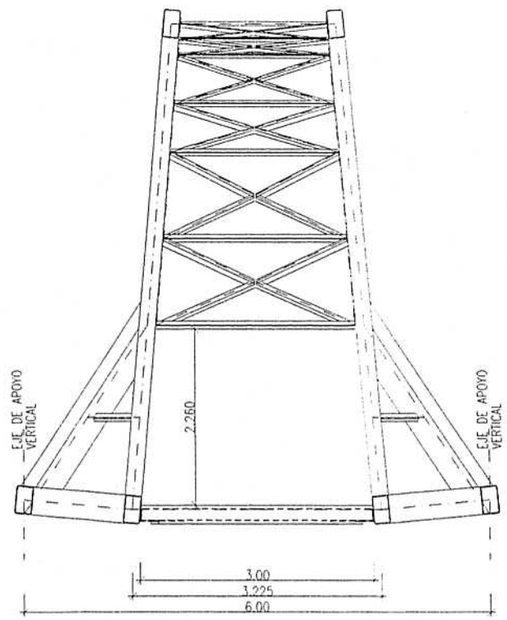
GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:50 Numérica | Gráfica 0 4 8 12m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO PASARELA PEATONAL PILAS DE DOS FUSTES DETALLE DE APOYO DE LA PASARELA	Nº DE PLANO 2.9.2 Hoja 6 de 32

SECCIÓN TIPO
ESCALA 1/60

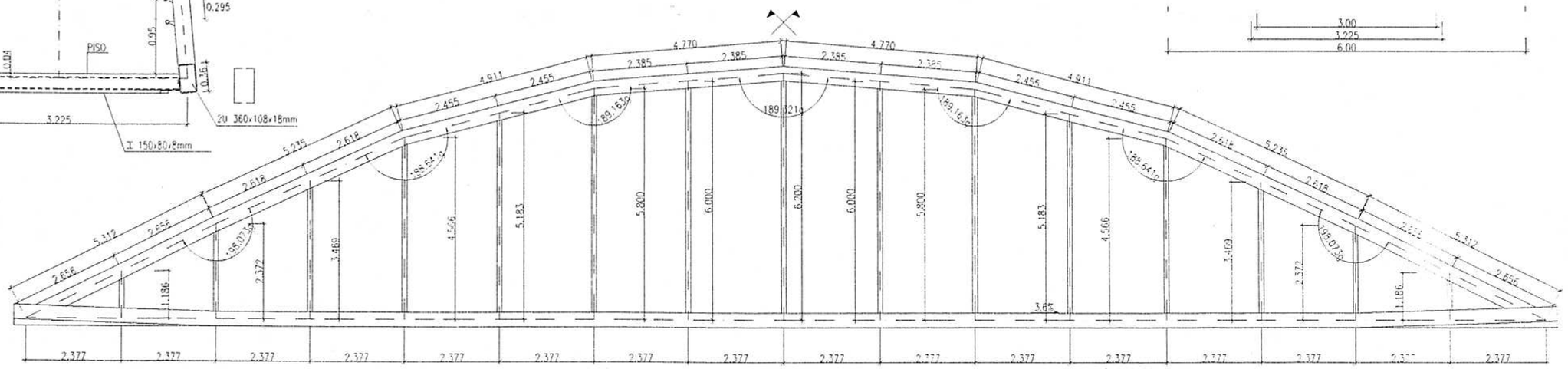


PERFILES DE FIBRA DE VIDRIO	
PERFILES	RESISTENCIA A FLEXION
SUPERESTRUCTURAL SERIE 1625	$\sigma_u > 227$ MPa

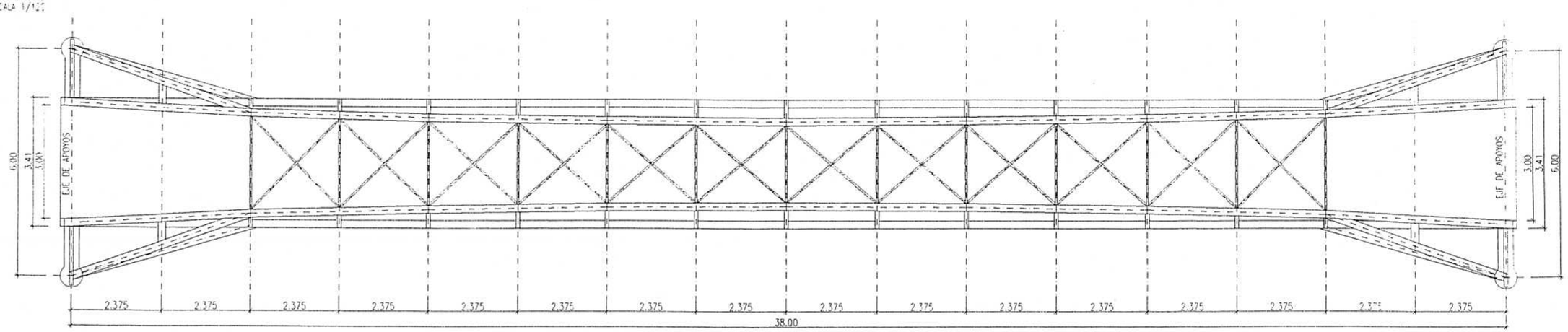
ALZADO FRONTAL
ESCALA 1/80



ALZADO
ESCALA 1/100

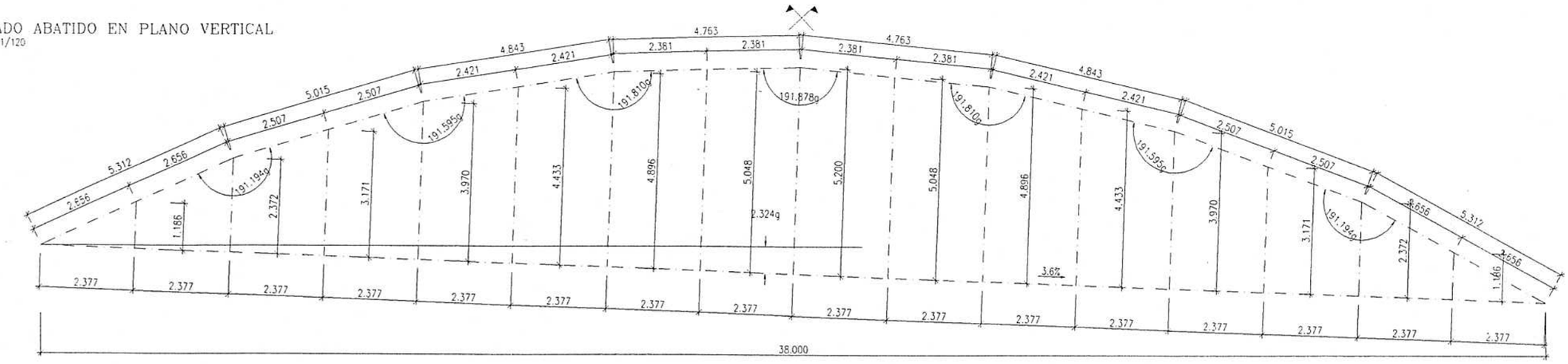


PLANTA
ESCALA 1/100

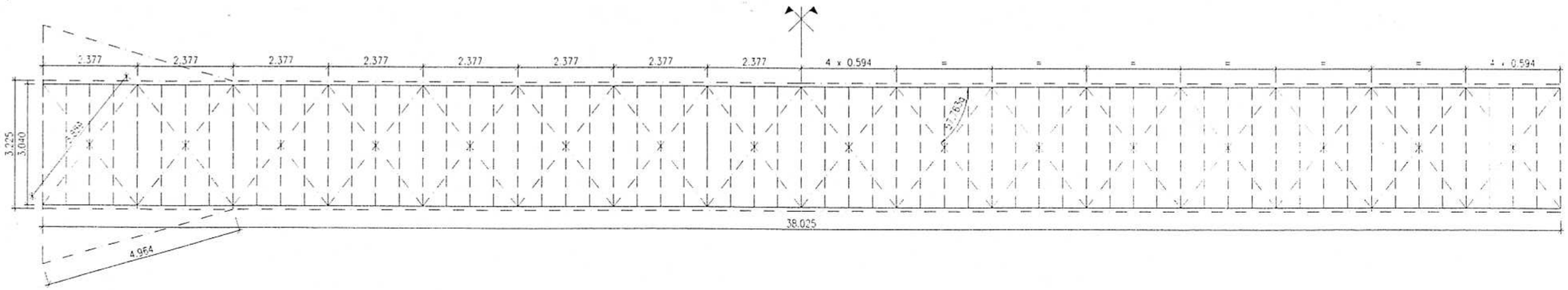


GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID–ZARAGOZA–BARCELONA–FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo. D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:120 Numérica / Gráfica 0 1.2 2.4 3.6m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO PASARELA PEATONAL ZONA SOBRE VIAS PLANTA, ALZADO Y SECCION	Nº DE PLANO 2.9.2 Hoja 11 de 32

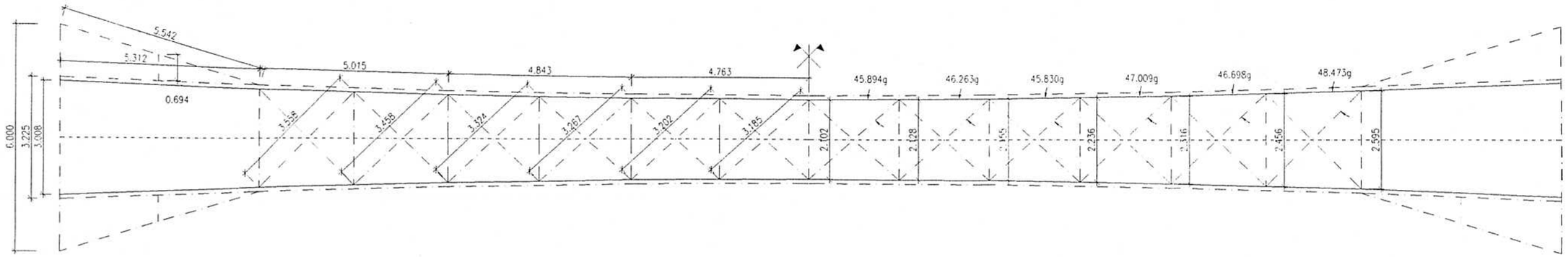
ALZADO ABATIDO EN PLANO VERTICAL
ESCALA 1/120



PLANTA DEL PISO INFERIOR
ESCALA 1/120



DESARROLLO DEL ARCO SUPERIOR
ESCALA 1/120



GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID–ZARAGOZA–BARCELONA–FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:120 Numérica / Gráfica 0 1.2 2.4 3.6m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO PASARELA PEATONAL ZONA SOBRE VIAS DEFINICIÓN GEOMETRICA EJES DE PERFILES	Nº DE PLANO 2.9.2 Hoja 12 de 32

ALZADO B
E 1:100

E-2 E-1

SECCION A-A
E 1:50

PLANTA
E 1:200

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUCTIVO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD

EL DIRECTOR DEL PROYECTO CONSTRUCTIVO

EL AUTOR DEL PROYECTO CONSTRUCTIVO

ASISTENCIA TECNICA AL PROYECTO DE OBRAS
AEPO

ESCALA NORMAL
1:50
1:100
1:200
Numérica

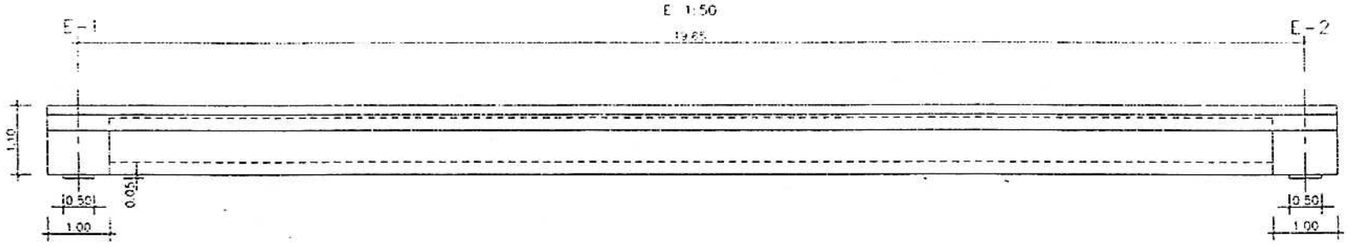
0 1 2 3m
0 2 4 6m
0 4 8 12m
Gráfica

FECHA
NOVIEMBRE 2002

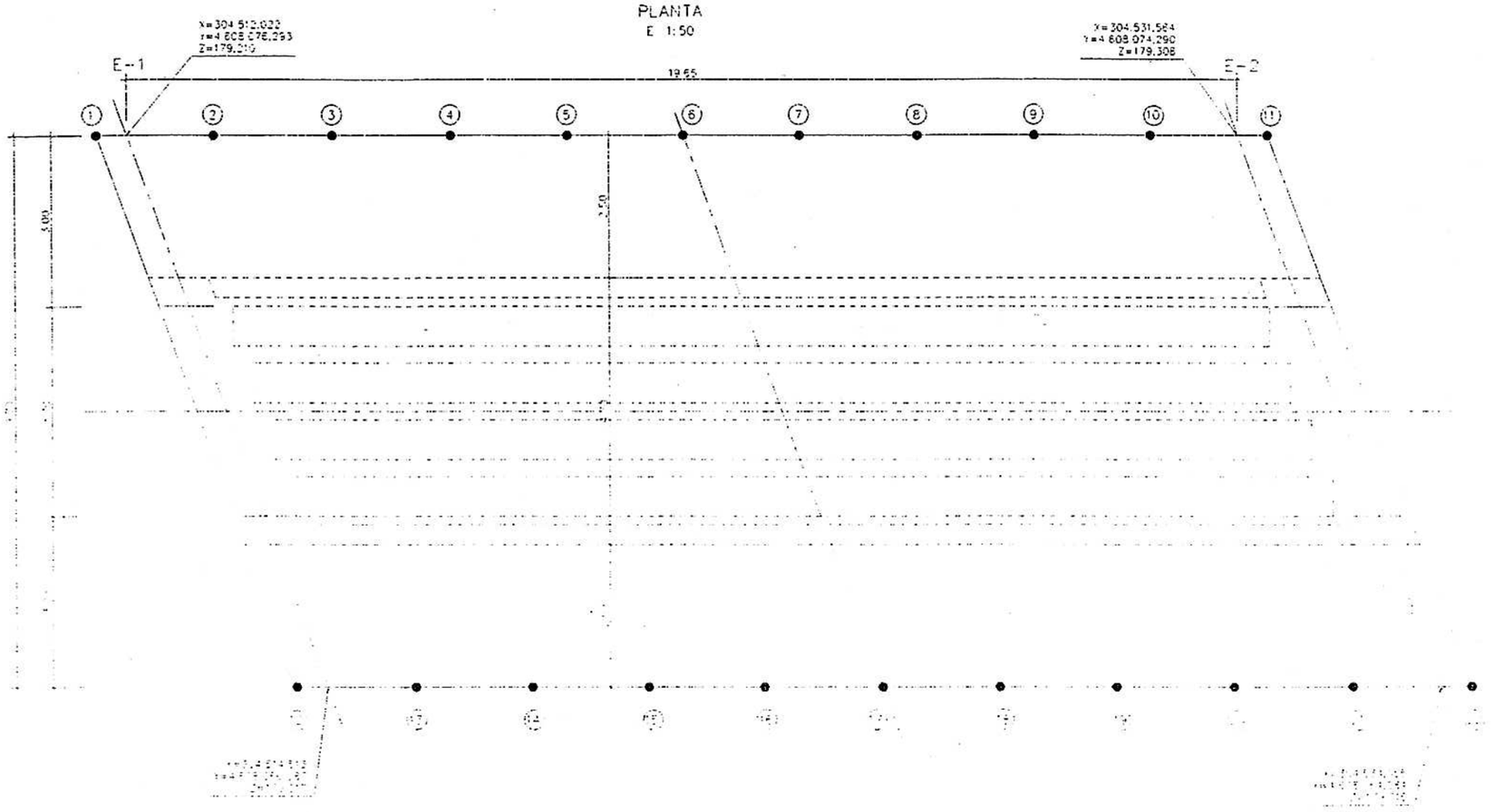
TITULO DEL PLANO
ESTRUCTURAS
PASO SUPERIOR P.S.6
PLANO GENERAL

Nº DE PLANO
2.9.3

ALZADO
E 1:50



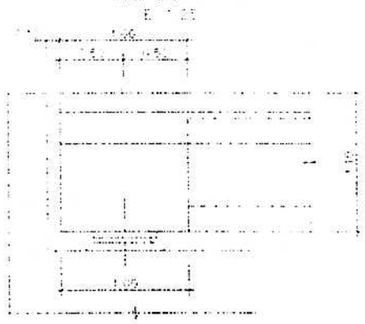
PLANTA
E 1:50



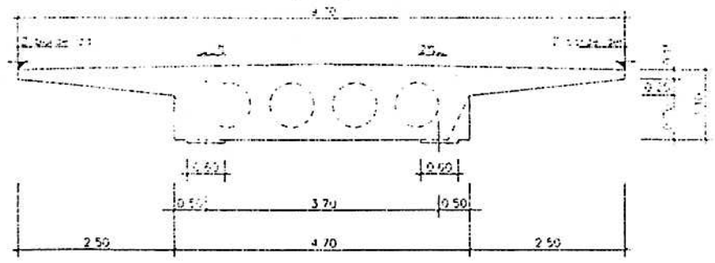
REPLANTEO DEL TABLERO

	PUNTO	X	Y	Z cota
BORDE IZQUIERDO	①	304.511,494	4.608.076,348	179,142
	②	304.513,977	4.608.076,093	179,155
	③	304.515,931	4.608.075,893	179,164
	④	304.517,886	4.608.075,693	179,174
	⑤	304.519,840	4.608.075,493	179,184
	⑥	304.521,794	4.608.075,292	179,194
	⑦	304.523,748	4.608.075,092	179,204
	⑧	304.525,702	4.608.074,892	179,213
	⑨	304.527,657	4.608.074,691	179,223
	⑩	304.529,611	4.608.074,491	179,233
	⑪	304.529,611	4.608.074,491	179,233

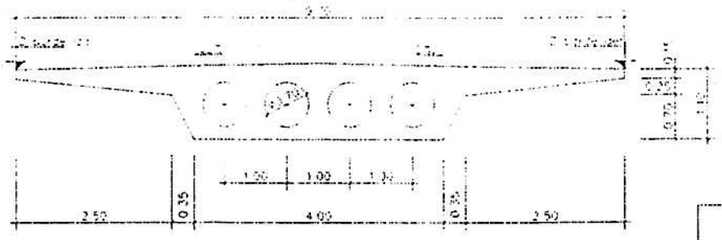
	PUNTO	X	Y	Z cota
BORDE DERECHO	⑫	304.513,965	4.608.066,342	179,189
	⑬	304.516,468	4.608.066,087	179,202
	⑭	304.518,422	4.608.065,887	179,192
	⑮	304.520,376	4.608.065,686	179,182
	⑯	304.522,330	4.608.065,486	179,221
	⑰	304.524,284	4.608.065,286	179,211
	⑱	304.526,238	4.608.065,086	179,201
	⑲	304.528,192	4.608.064,885	179,191
	⑳	304.530,146	4.608.064,685	179,181
	㉑	304.532,100	4.608.064,485	179,171
	㉒	304.534,055	4.608.064,285	179,161



SECCION PILA ESTRIBO
E 1:50



SECCION TIPO
E 1:50



NOTAS

-LOS RECUBRIMIENTOS SERAN DE 3cm
-LOS SOLAPES SE EFECTUARAN DE ACUERDO CON LA NORMA EHE

CARACTERISTICAS DE LOS MATERIALES - NIVELES DE CONTROL

ELEMENTO	MATERIALES					EJECUCION
	HORMIGON		ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
TABLERO	HA-30/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	INTENSO

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ TAUREAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

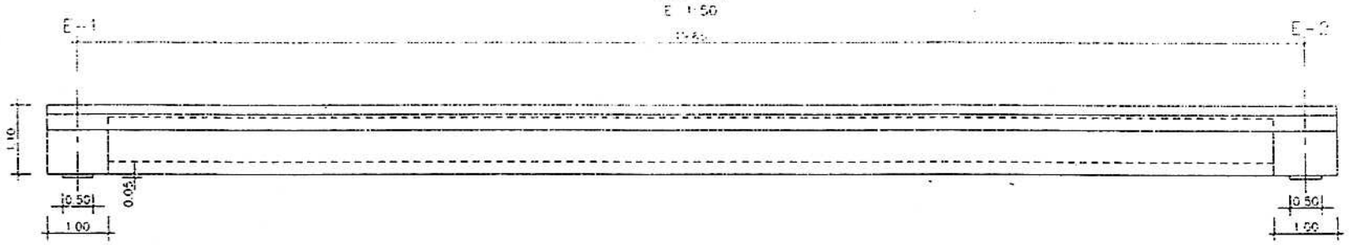
ESCALA NORMAL
1:25
1:50
Numérica
Gráfica
0 0.5 1 1.5m
0 1 2 3m

FECHA
NOVIEMBRE 2002

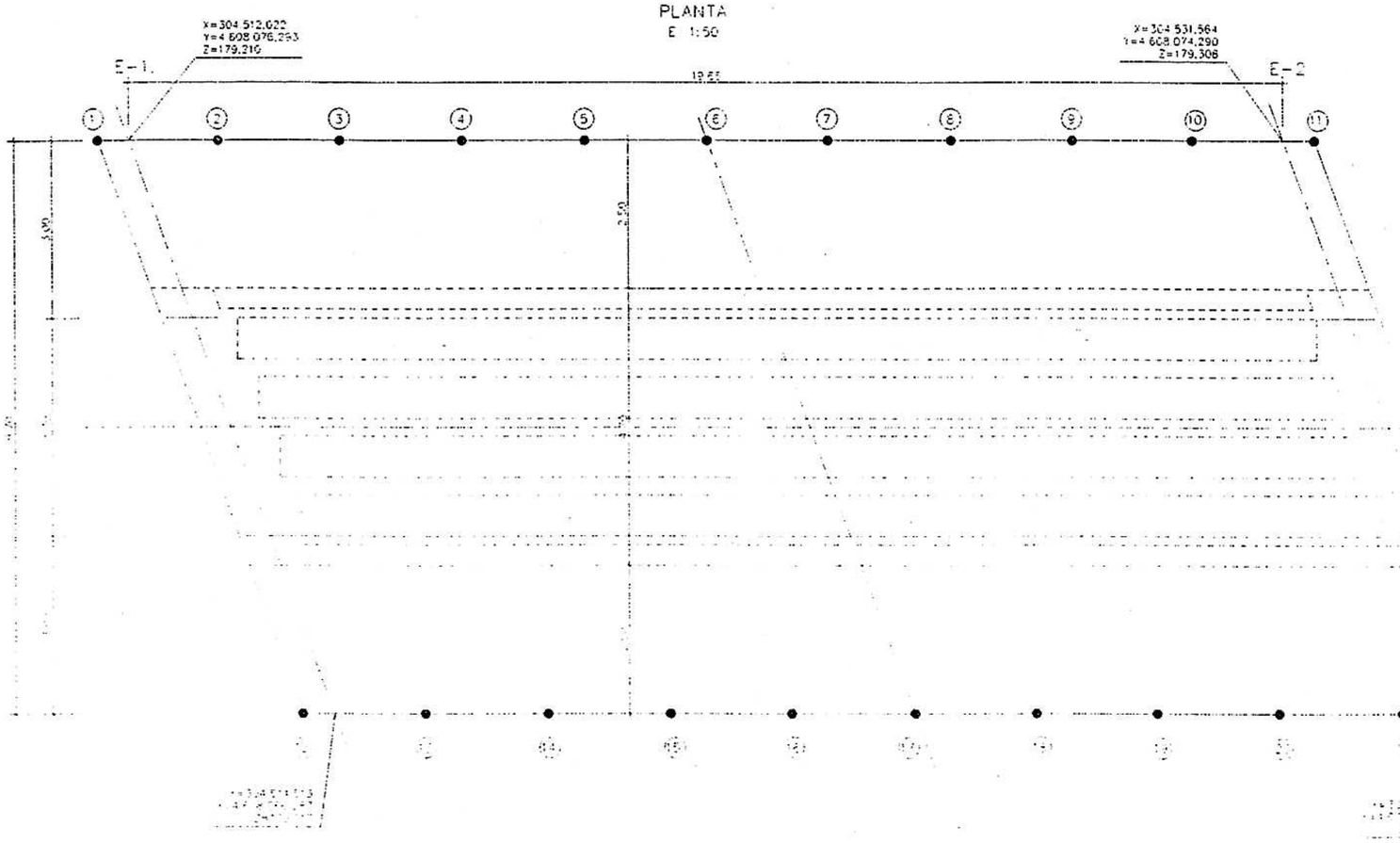
TITULO DEL PLANO
ESTRUCTURAS
PASO SUPERIOR 10.6
TABLERO. DEFINICION GEOMETRICA

Nº DE PLANO
2.9.3
Hoja 2 de 8

ALZADO
E 1:50



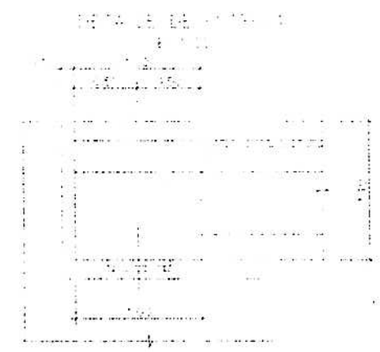
PLANTA
E 1:50

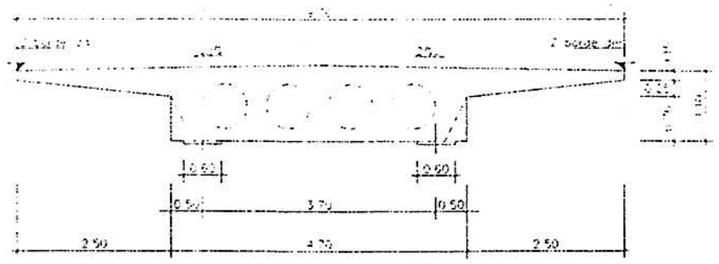


REPLANTEO DEL TABLERO

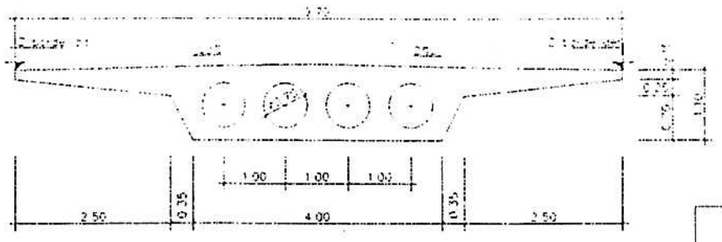
	PUNTO	X	Y	Z (m)
BORDE IZQUIERDO	1	304 511,494	4 608 076,342	179,152
	2	304 513,977	4 608 076,093	179,155
	3	304 515,931	4 608 075,893	179,164
	4	304 517,886	4 608 075,693	179,174
	5	304 519,840	4 608 075,493	179,184
	6	304 521,794	4 608 075,292	179,194
	7	304 523,748	4 608 075,092	179,204
	8	304 525,702	4 608 074,892	179,213
	9	304 527,657	4 608 074,691	179,223
	10	304 529,611	4 608 074,491	179,233
	11	304 529,611	4 608 074,491	179,233

	PUNTO	X	Y	Z (m)
BORDE DERECHO	12	304 513,985	4 608 066,340	179,159
	13	304 516,468	4 608 066,095	179,172
	14	304 518,422	4 608 065,895	179,182
	15	304 520,376	4 608 065,695	179,192
	16	304 522,330	4 608 065,494	179,201
	17	304 524,285	4 608 065,294	179,211
	18	304 526,239	4 608 065,094	179,221
	19	304 528,193	4 608 064,893	179,231
	20	304 530,147	4 608 064,693	179,241
	21	304 532,101	4 608 064,493	179,250





SECCION TIPO
E 1:50



NOTAS:

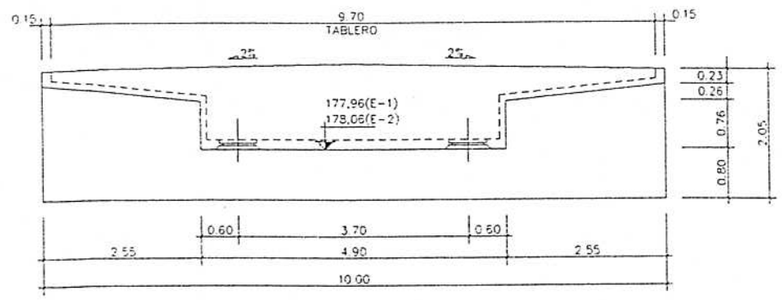
- LOS RECUBRIMIENTOS SERAN DE 3cm.
- LOS ACOPLES SE EFECTUARAN DE ACUERDO CON LA NORMA EHE

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

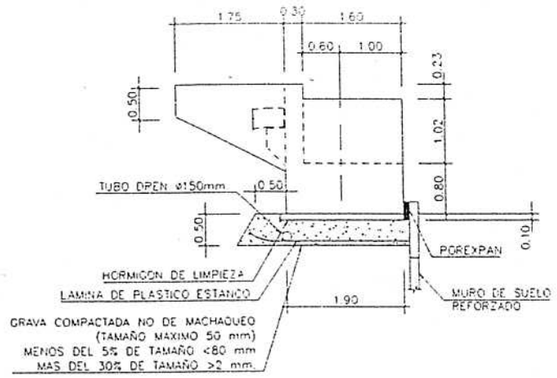
ELEMENTO	MATERIALES					EJECUCION
	HORMIGON		ACERO			
	TIPO	CONTROL	%	TIPO	CONTROL	γ_s	CONTROL
TABLERO	HA-30/B/20/IIa	NORMAL	4%	B500S	NORMAL	1.15	INTENSO

GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:25 1:50 Numérica / Gráfica 0 0.5 1 1.5m 0 1 2 3m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO ESTRUCTURAS PASO SUPERIOR 12.6 TABLERO. DEFINICION GEOMETRICA	Nº DE PLANO 2.9.3 Hoja 2 de 8

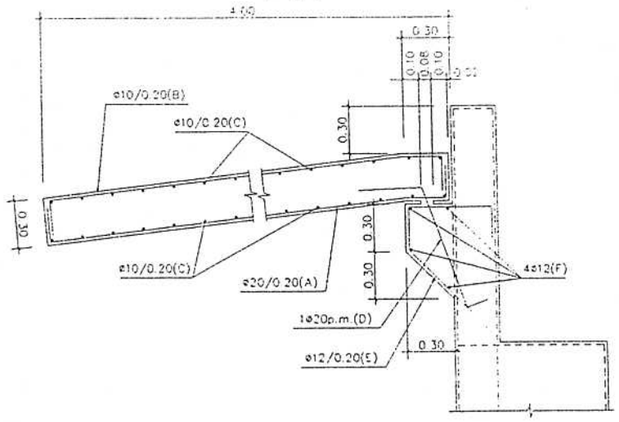
ALZADO
E. 1:50



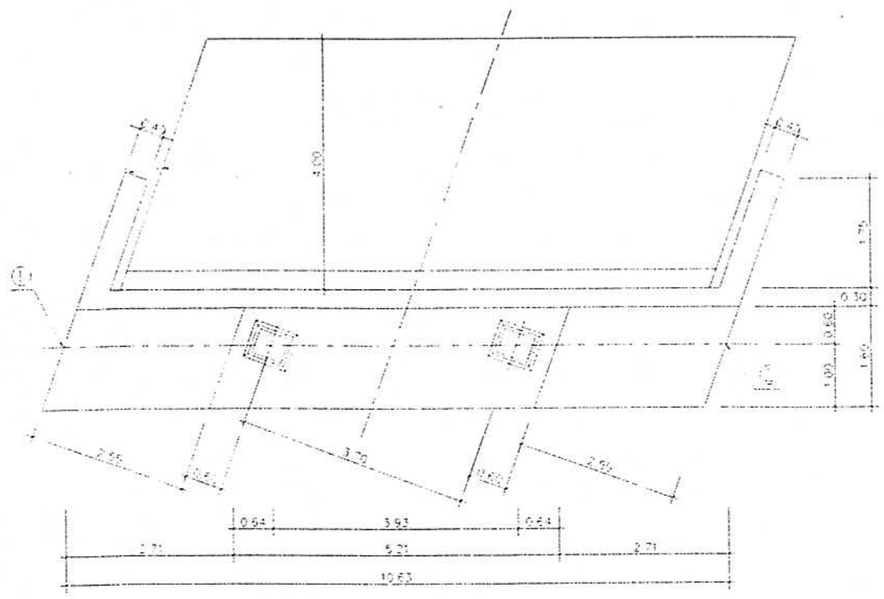
ALZADO LATERAL
E. 1:50



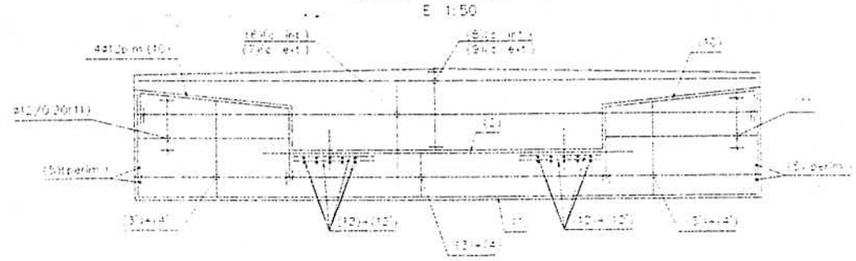
LOSA DE TRANSICION
E. 1:20



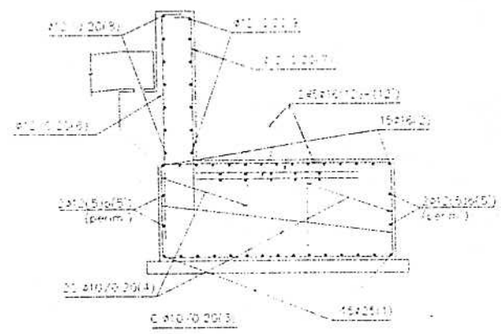
PLANTA
E. 1:50



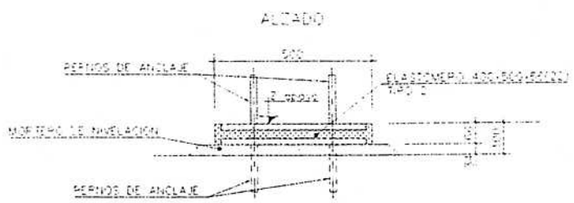
ALZADO ARMADURAS
E. 1:50



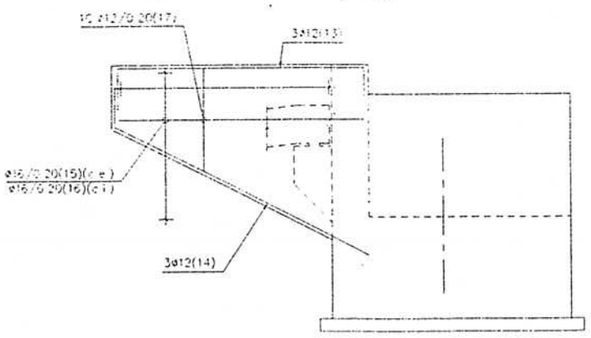
SECCION TRANSVERSAL
E. 1:25



APOYO ELASTOMERICO
E. 1:10 (COTAS en mm.)



ARMADURA DE ALETAS
E. 1:25



REPLANTEO DE ESTRIBO E-1

PUNTO	X	Y
①	304 511,983	4 608 076,448
②	304 514,551	4 608 066,132

REPLANTEO DE ESTRIBO E-2

PUNTO	X	Y
①	304 531,526	4 608 074,445
②	304 534,093	4 608 064,129

NOTAS

-LOS RECUBRIMIENTOS SERAN DE 3cm EN ALZADOS Y DE 4cm EN CIMIENTOS
-LOS SOLAPES SE EFECTUARAN DE ACUERDO CON LA NORMA EHE
-(c.e.) INDICA CARA EXTERIOR, (c.i.) INDICA CARA INTERIOR

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

ELEMENTO	MATERIALES						EJECUCION
	HORMIGON			ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
CAPA DE LIMPIEZA, NIVELACION Y RELLENOS	HM-12.5	---	---	---	---	---	---
CIMENTACION	HA-25/P/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL
ALZADOS Y LOSA DE TRANSICION	HA-25/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	INTENSO

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ ESPERICUETA

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

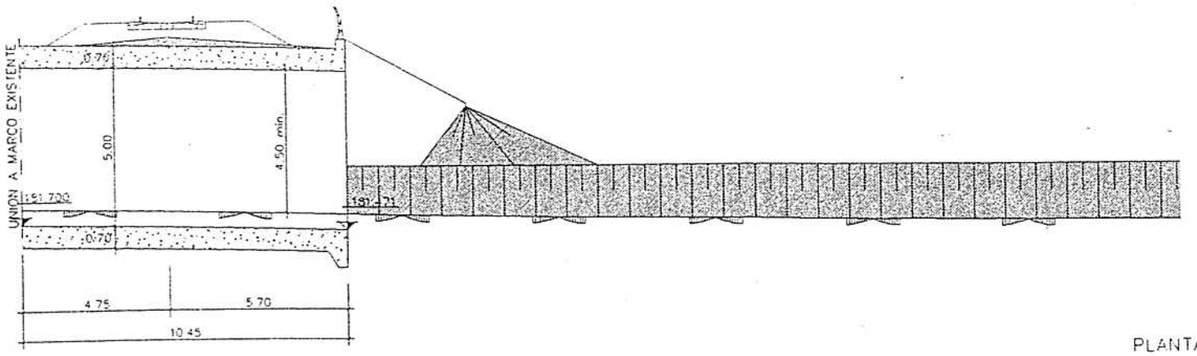
ESCALA NORMAL
LAS INDICADAS
Numérica | Gráfica

FECHA
NOVIEMBRE 2002

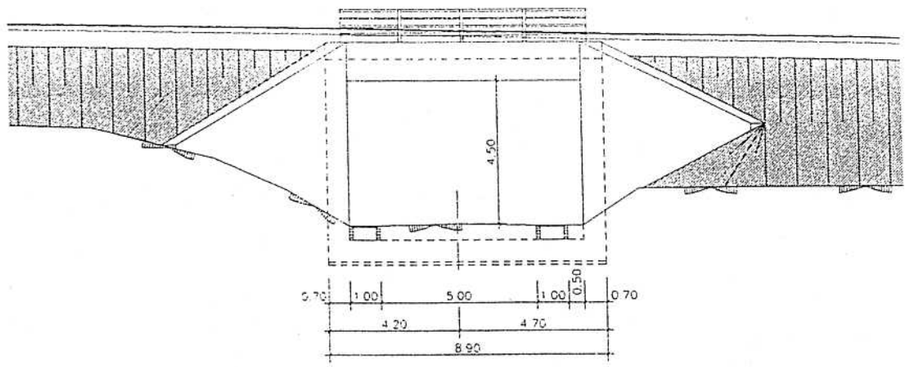
TITULO DEL PLANO
ESTRUCTURAS
PASO SUPERIOR 10.6
ESTRIBOS. DEFINICION Y ARMADURAS

Nº DE PLANO
2.9.3
Hoja 4 de 8

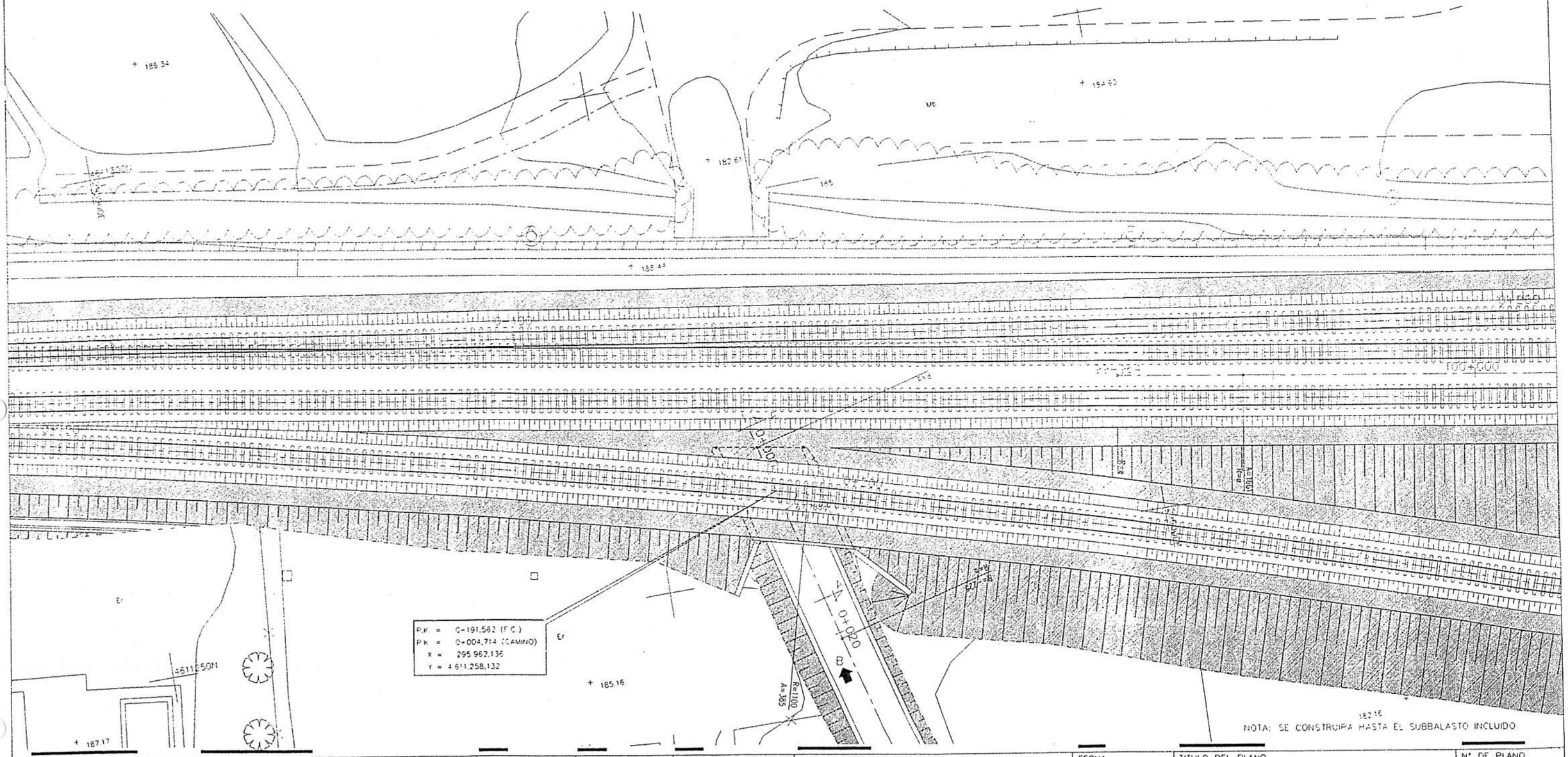
SECCION A-A
E. 1:100



ALZADO B
E. 1:100

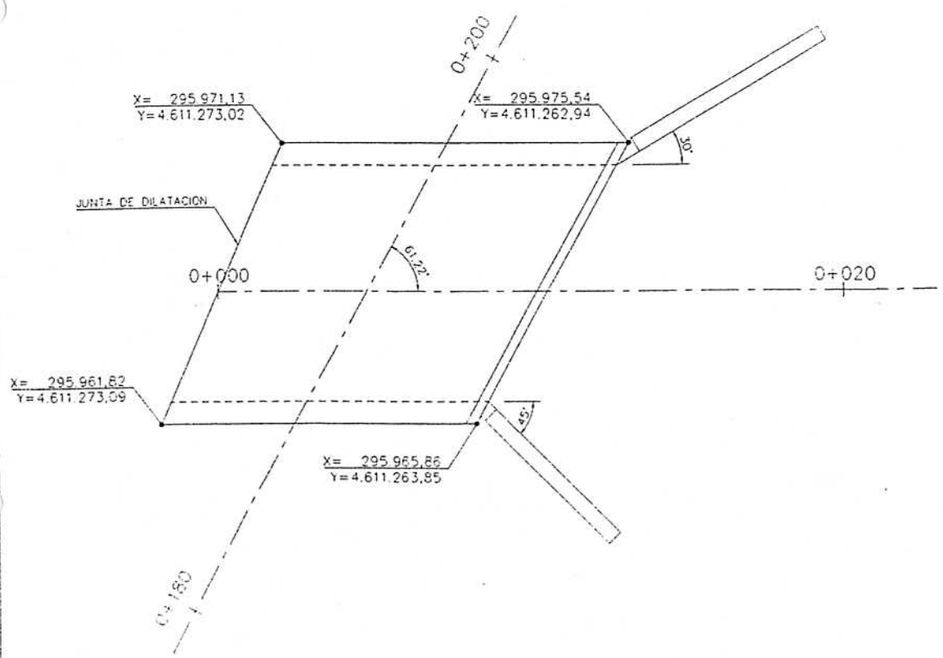


PLANTA
E. 1:200

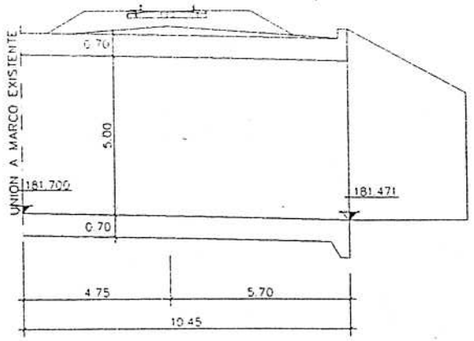


GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:100 1:200 Numérica Gráfica 0 2 4 6m 0 4 8 12m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO ESTRUCTURAS PASO INFERIOR 0.1 PLANO GENERAL	Nº DE PLANO 2.9.4 Hoja 1 de 6

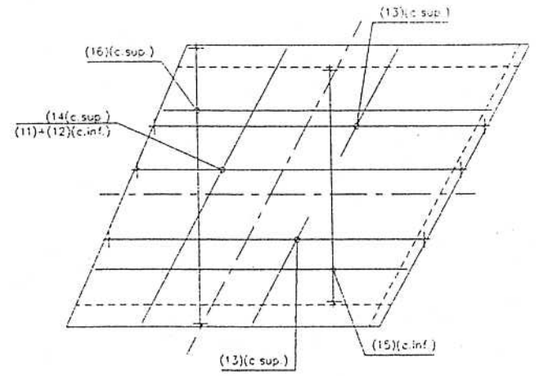
PLANTA
E 1:100



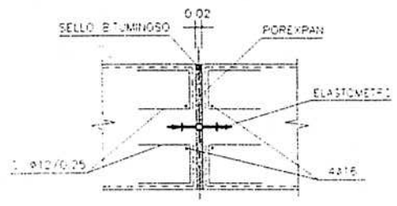
SECCION A-A
E 1:100



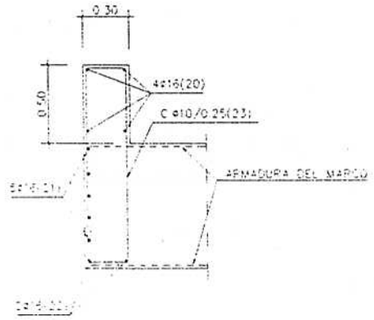
DISPOSICION DE ARMADURAS EN LOSA SUPERIOR
E 1:100



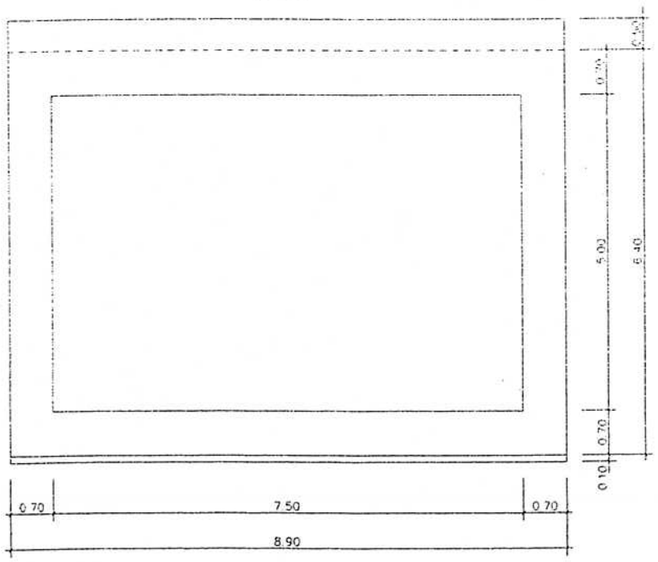
JUNTA DE DILATACION EN MARCO
S/E



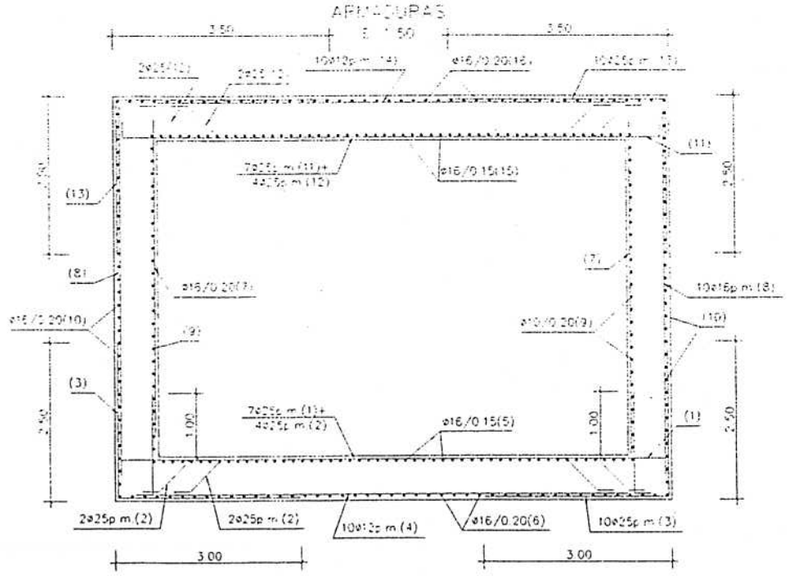
DETALLE DE PETO
E 1:20



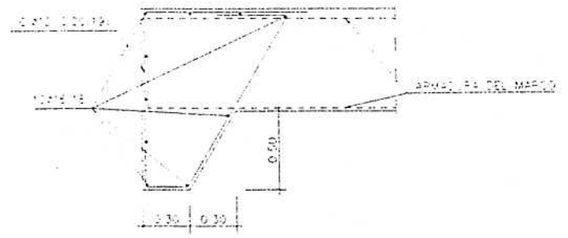
DEFINICION GEOMETRICA
E 1:50



ARMADURAS
E 1:50



DETALLE DE TACON
E 1:20



NOTAS

-LOS RECUBRIMIENTOS SERAN DE 3cm
-LOS SOLAPES SE EFECTUARAN DE ACUERDO CON LA NORMA EHE

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

ELEMENTO	MATERIALES						EJECUCION
	HORMIGON			ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
CAPA DE LIMPIEZA, NIVELACION Y RELLENOS	HM-12.5	---	---	---	---	---	---
CIMENTACION	HA-25/P/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL
ALZADOS	HA-25/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

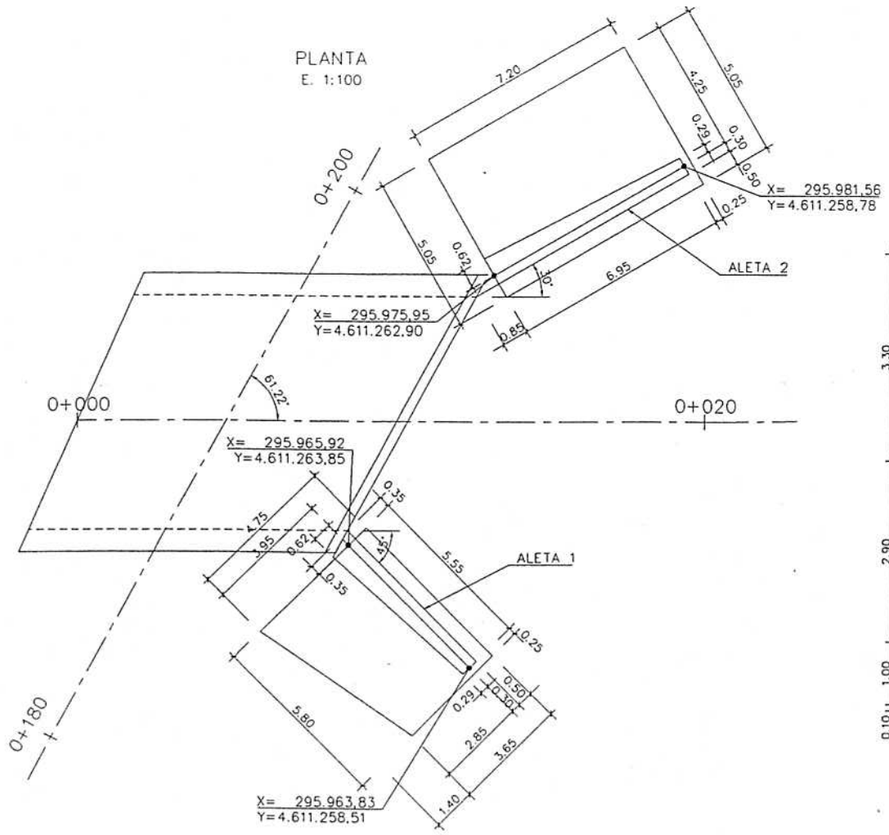
ESCALA NORMAL
1:20
1:50
1:100
Numérica
Gráfica 0 0.4 0.8 1.2m / 0 1 2 3m / 0 2 4 6m

FECHA
NOVIEMBRE 2002

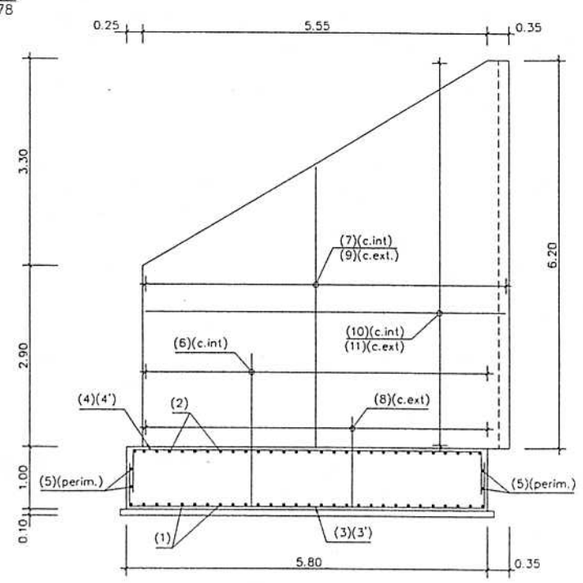
TITULO DEL PLANO
ESTRUCTURAS
PASO INFERIOR O.1
MARCO. DEFINICION Y ARMADURAS

Nº DE PLANO
2.9.4
Hoja 2 de 6

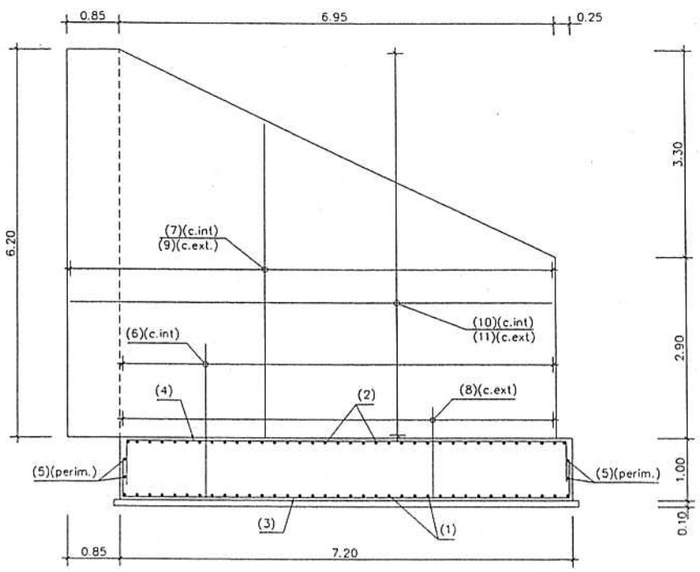
PLANTA
E. 1:100



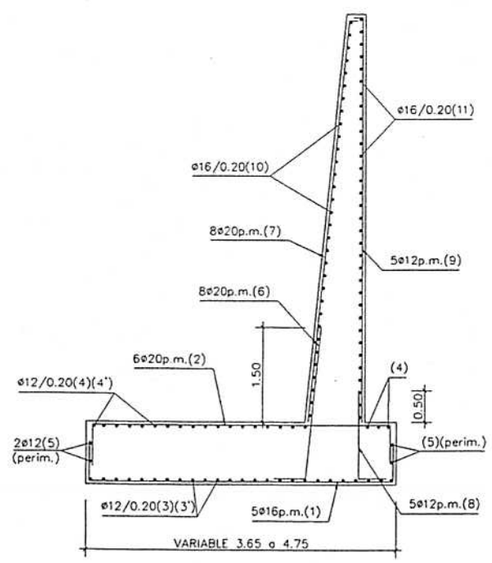
ALZADO ARMADURAS ALETA 1
E. 1:50



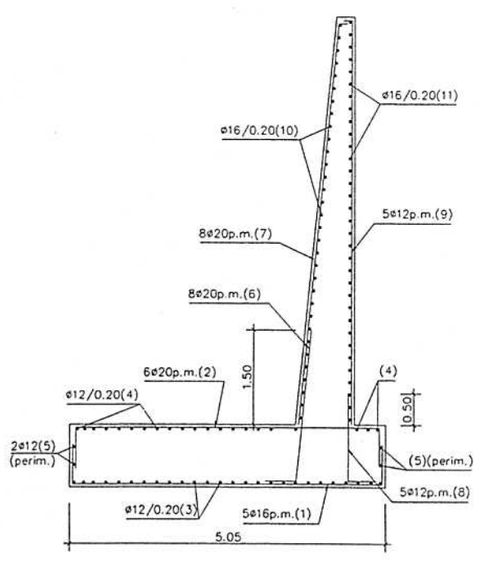
ALZADO ARMADURAS ALETA 2
E. 1:50



SECCION TRANSVERSAL ALETA 1
E. 1:50



SECCION TRANSVERSAL ALETA 2
E. 1:50



NOTAS:

-LOS RECUBRIMIENTOS SERAN DE 3cm.
-LOS SOLAPES SE EFECTUARAN DE ACUERDO CON LA NORMA EHE.

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

ELEMENTO	MATERIALES						EJECUCION
	HORMIGON			ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
CAPA DE LIMPIEZA, NIVELACION Y RELLENOS	HM-12.5	---	---	---	---	---	---
CIMENTACION	HA-25/P/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL
ALZADOS	HA-25/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

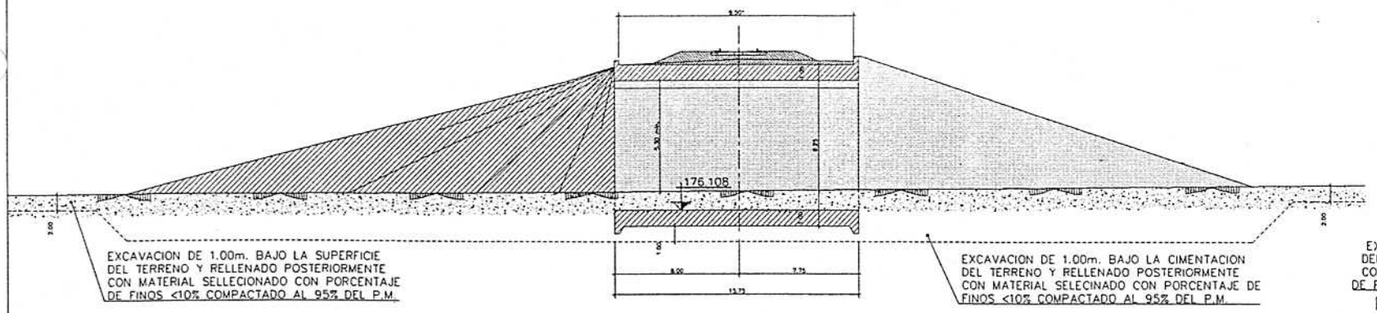
ESCALA NORMAL
1:50
1:100
Numérico
Gráfica
0 1 2 3m
0 2 4 8m

FECHA
NOVIEMBRE 2002

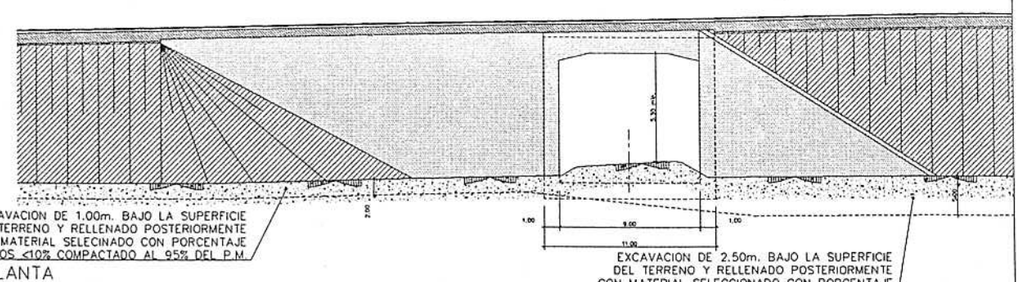
TITULO DEL PLANO
ESTRUCTURAS
PASO INFERIOR 0.1
ALETAS. DEFINICION Y ARMADURAS

Nº DE PLANO
2.9.4
Hoja 3 de 6

SECCION A–A
E. 1:200



ALZADO B
E. 1:200



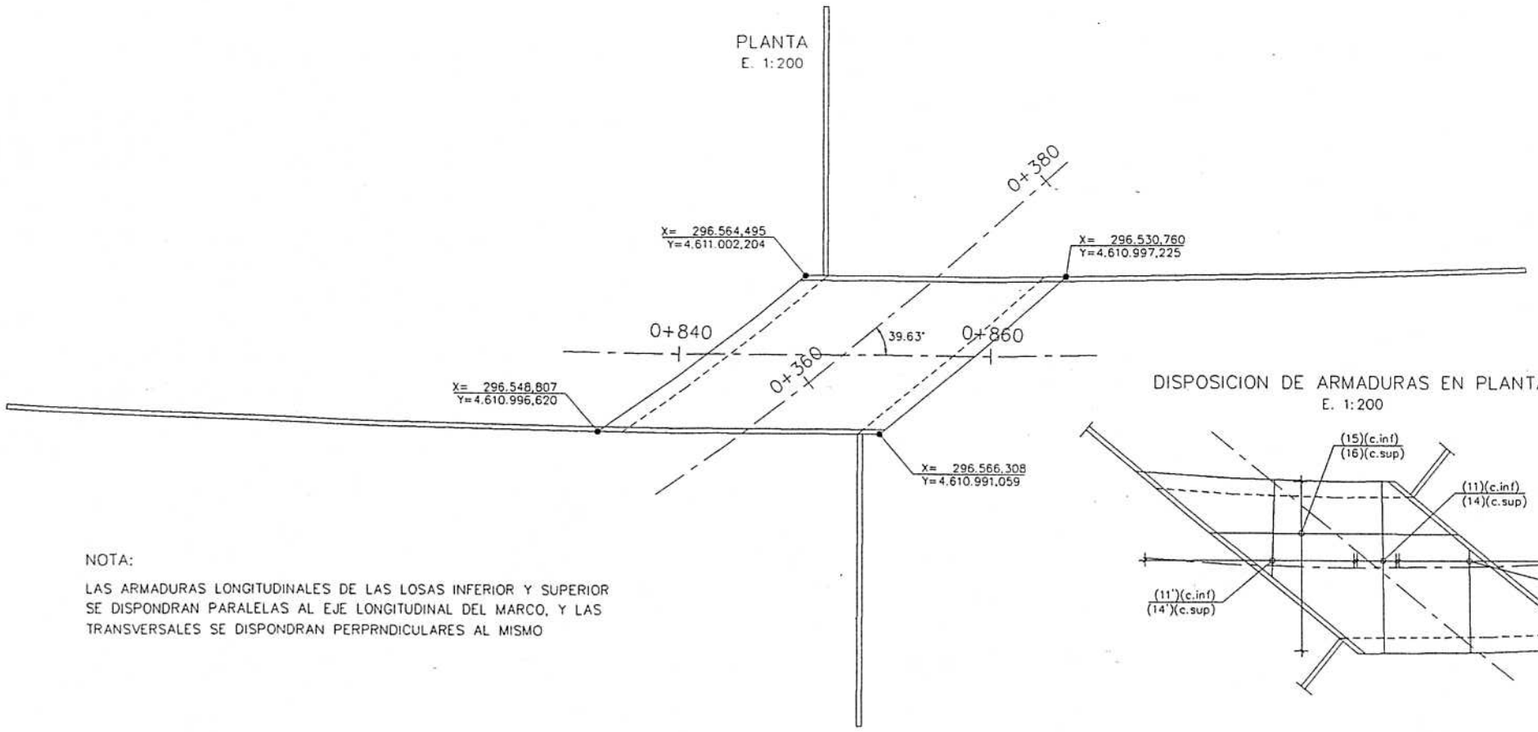
PLANTA
E. 1:200

P.K. = 0+850,531 (F.C.)
P.K. = 0+362,806 (CAMINO)
X = 296.565,412
Y = 4.610.996,628

NOTA: SE CONSTRUIRA HASTA EL SUBBALASTO INCLUIDO

GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID–ZARAGOZA–BARCELONA–FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:200 Numérica | Gráfica 0 4 8 12m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO ESTRUCTURAS PASO INFERIOR 0.8 PLANO GENERAL	Nº DE PLANO 2.9.5 Hoja 1 de 8

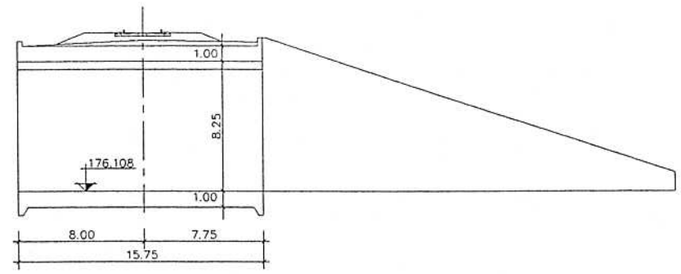
PLANTA
E. 1:200



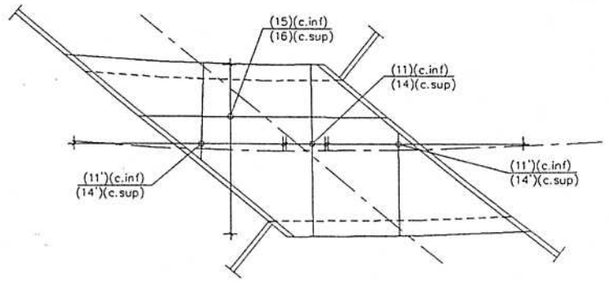
NOTA:

LAS ARMADURAS LONGITUDINALES DE LAS LOSAS INFERIOR Y SUPERIOR SE DISPONDRAN PARALELAS AL EJE LONGITUDINAL DEL MARCO, Y LAS TRANSVERSALES SE DISPONDRAN PERPRNDICULARES AL MISMO

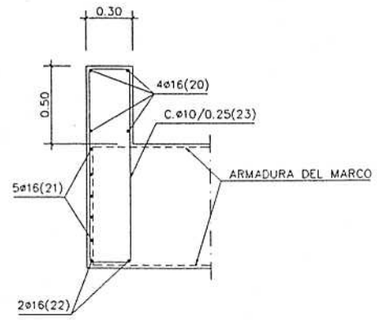
SECCION A-A
E. 1:200



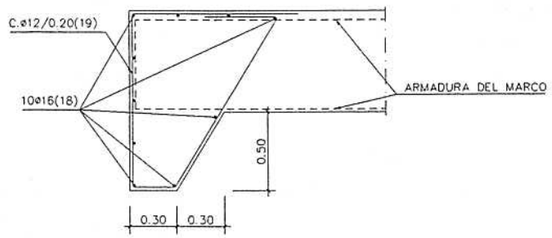
DISPOSICION DE ARMADURAS EN PLANTA
E. 1:200



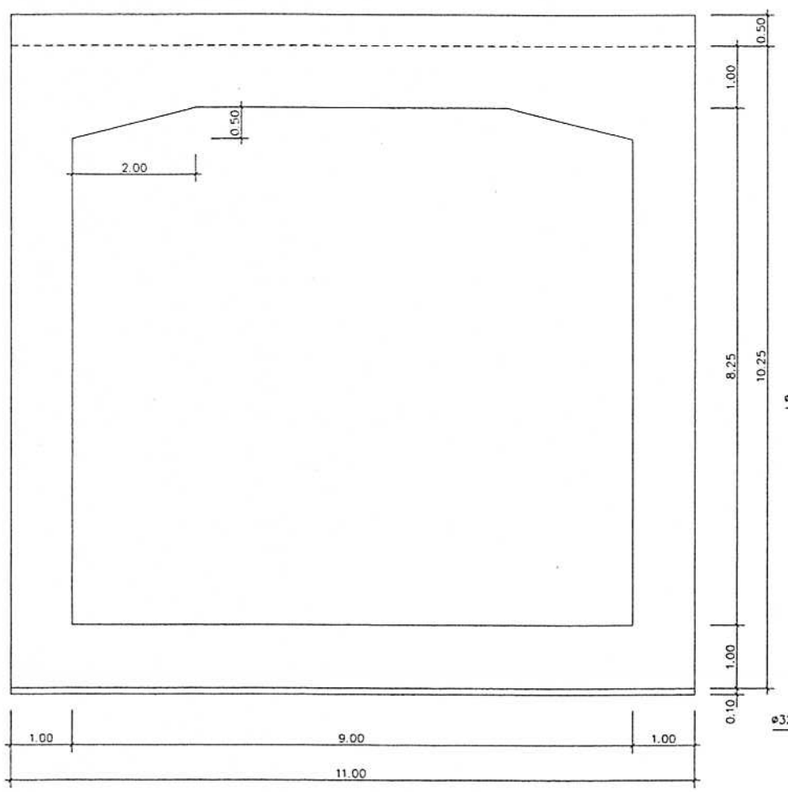
DETALLE DE PETO
E. 1:20



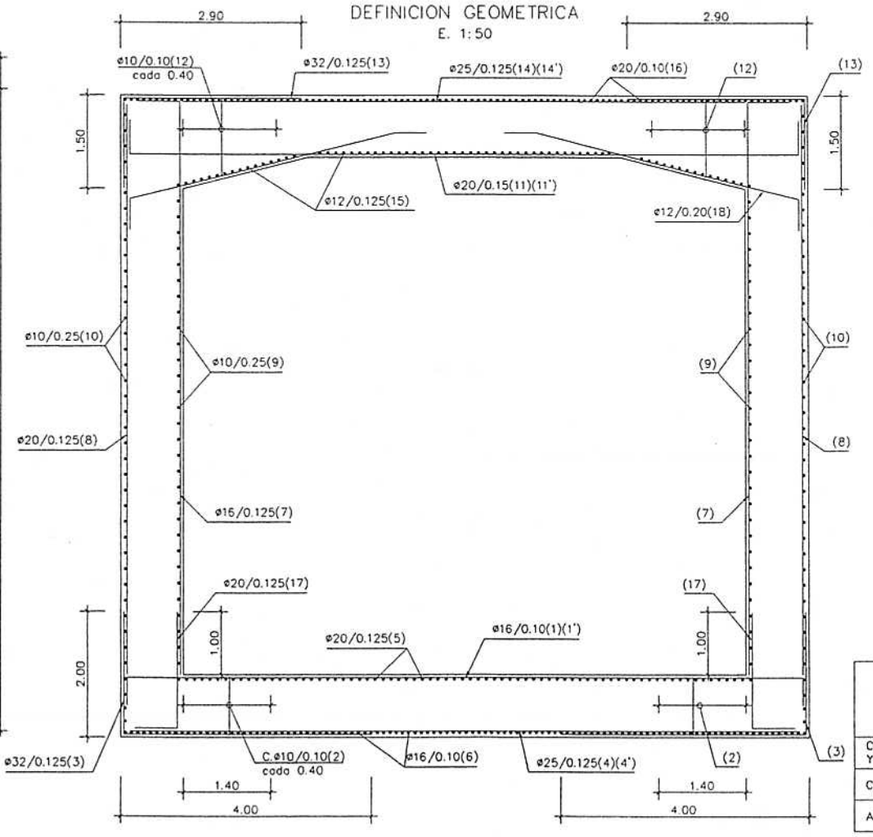
DETALLE DE TACON
E. 1:20



DEFINICION GEOMETRICA
E. 1:50



DEFINICION GEOMETRICA
E. 1:50



NOTAS:

-LOS RECUBRIMIENTOS SERAN DE 3cm.
-LOS SOLAPES SE EFECTUARAN DE ACUERDO CON LA NORMA EHE.

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

ELEMENTO	MATERIALES						EJECUCION
	HORMIGON			ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
CAPA DE LIMPIEZA, NIVELACION Y RELLENOS	HM-12.5	---	---	---	---	---	---
CIMENTACION	HA-25/P/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL
ALZADOS	HA-25/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	INTENSO

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

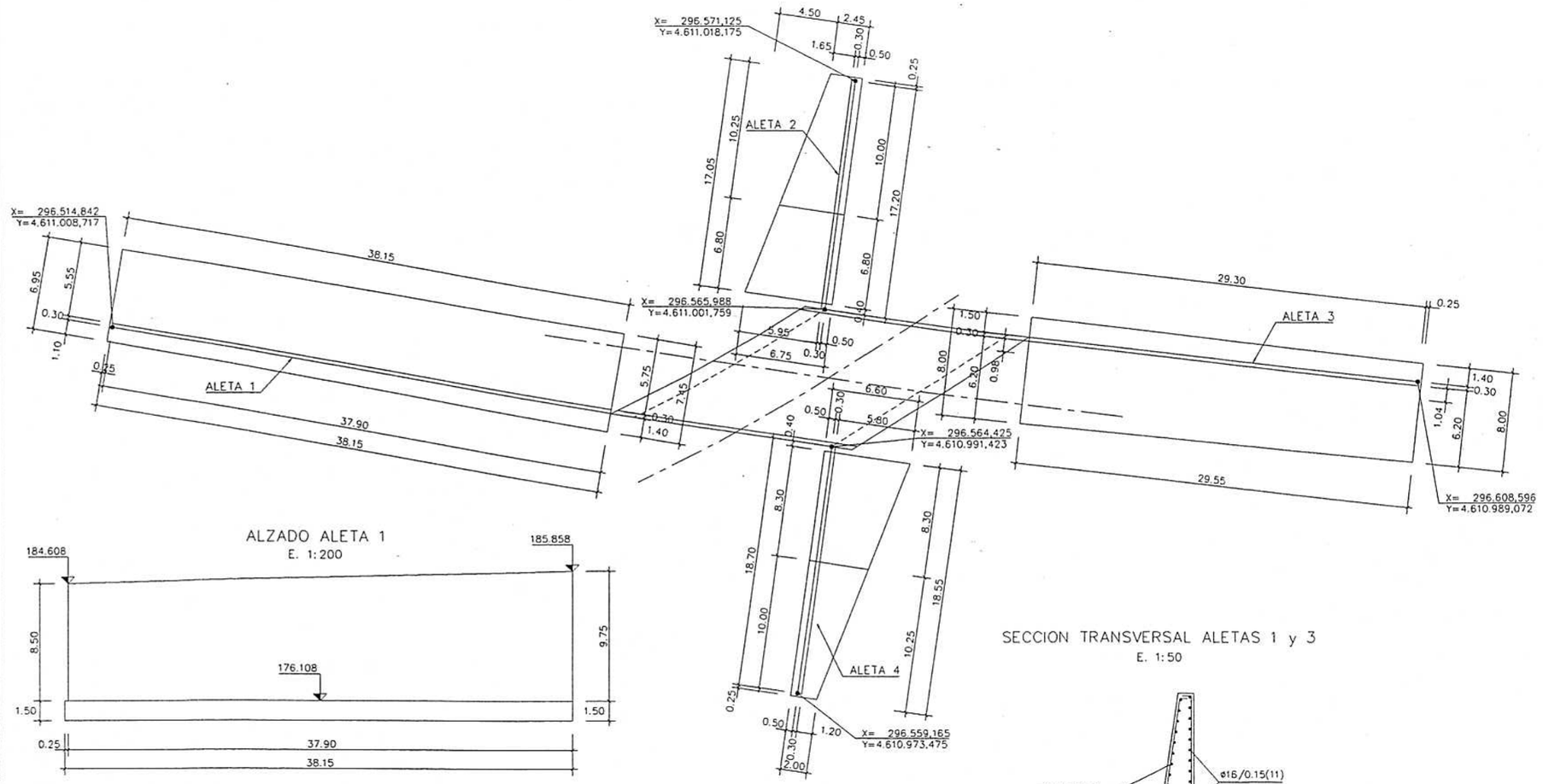
ESCALA NORMAL
1:20
1:50
1:200
Numérica
Gráfica
0 0.4 0.8 1.2m
0 1 2 3m
0 4 8 12m

FECHA
NOVIEMBRE 2002

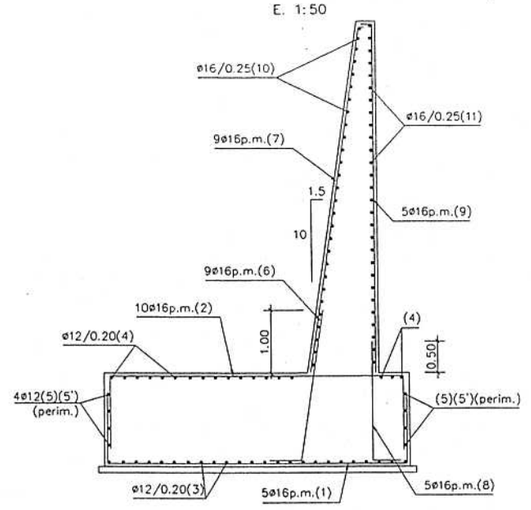
TITULO DEL PLANO
ESTRUCTURAS
PASO INFERIOR 0.8
MARCO. DEFINICION Y ARMADURAS

Nº DE PLANO
2.9.5
Hoja 2 de 8

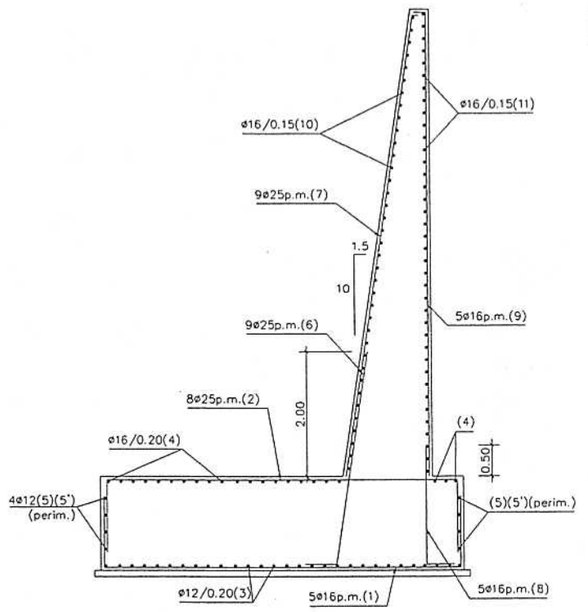
PLANTA
E. 1:200



SECCION TRANSVERSAL TIPO 1 ALETAS 2 y 4
E. 1:50

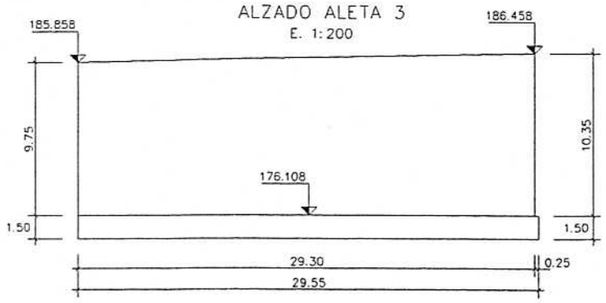


SECCION TRANSVERSAL TIPO 2 ALETAS 2 y 4
E. 1:50

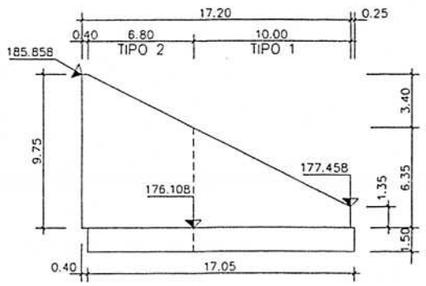


ALZADO ALETA 1
E. 1:200

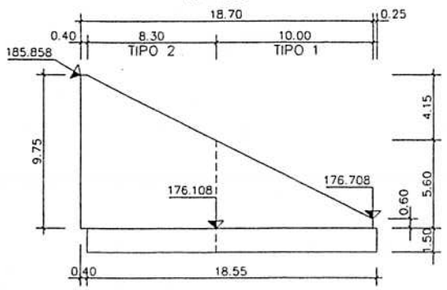
ALZADO ALETA 3
E. 1:200



ALZADO ALETA 2
E. 1:200



ALZADO ALETA 4
E. 1:200



SECCION TRANSVERSAL ALETAS 1 y 3
E. 1:50

NOTAS:

-LOS RECUBRIMIENTOS SERAN DE 3cm.
-LOS SOLAPES SE EFECTUARAN DE ACUERDO CON LA NORMA EHE.

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

ELEMENTO	MATERIALES						EJECUCION
	HORMIGON			ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
CAPA DE LIMPIEZA, NIVELACION Y RELLENOS	HM-12.5	---	---	---	---	---	---
CIMENTACION	HA-25/P/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL
ALZADOS	HA-25/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	INTENSO

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

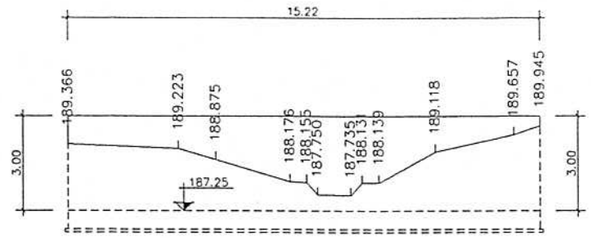
ESCALA NORMAL
1:50
1:200
Numérica
Gráfica
0 1 2 3m
0 4 8 12m

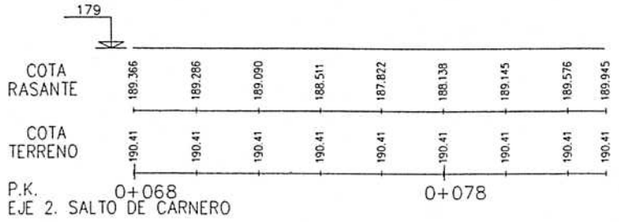
FECHA
NOVIEMBRE 2002

TITULO DEL PLANO
ESTRUCTURAS
PASO INFERIOR 0.8
ALETAS. DEFINICION Y ARMADURAS (I)

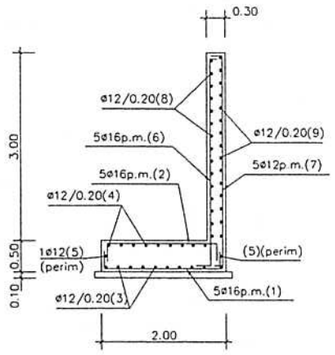
Nº DE PLANO
2.9.5
Hoja 3 de 8

ALZADO
E. 1:100





SECCION TIPO
E. 1:50



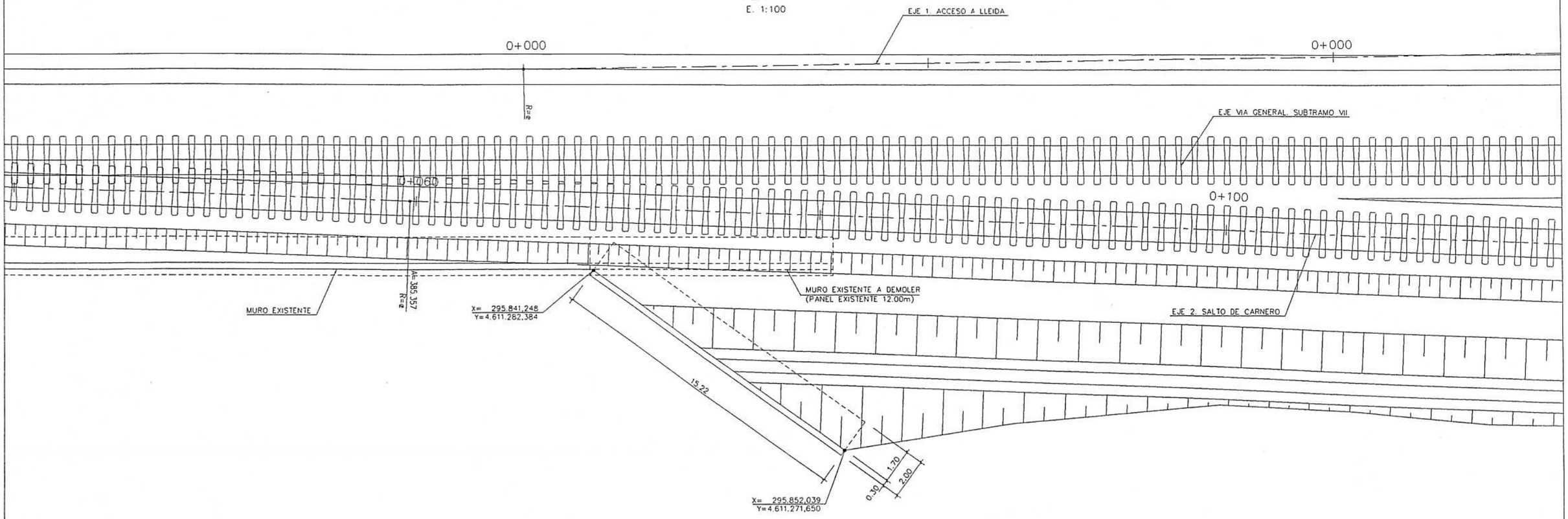
NOTAS:

-LOS RECUBRIMIENTOS SERAN DE 3cm.
-LOS SOLAPES SE EFECTUARAN DE ACUERDO CON LA NORMA EHE.

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

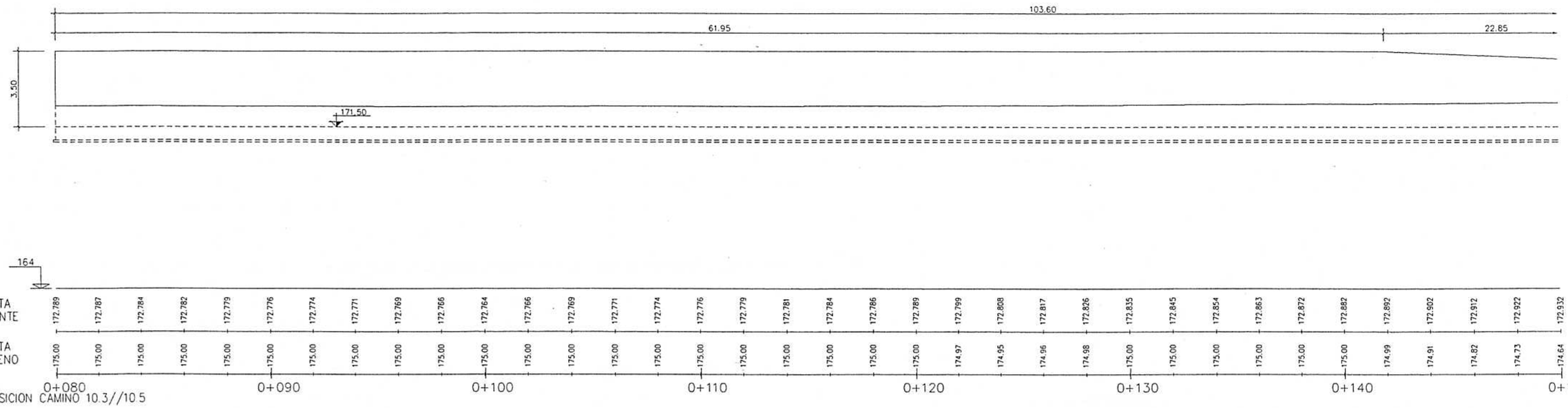
ELEMENTO	MATERIALES						EJECUCION
	HORMIGON			ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
CAPA DE LIMPIEZA, NIVELACION Y RELLENOS	HM-12.5	---	---	---	---	---	---
CIMENTACION	HA-25/P/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL
ALZADOS	HA-25/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL

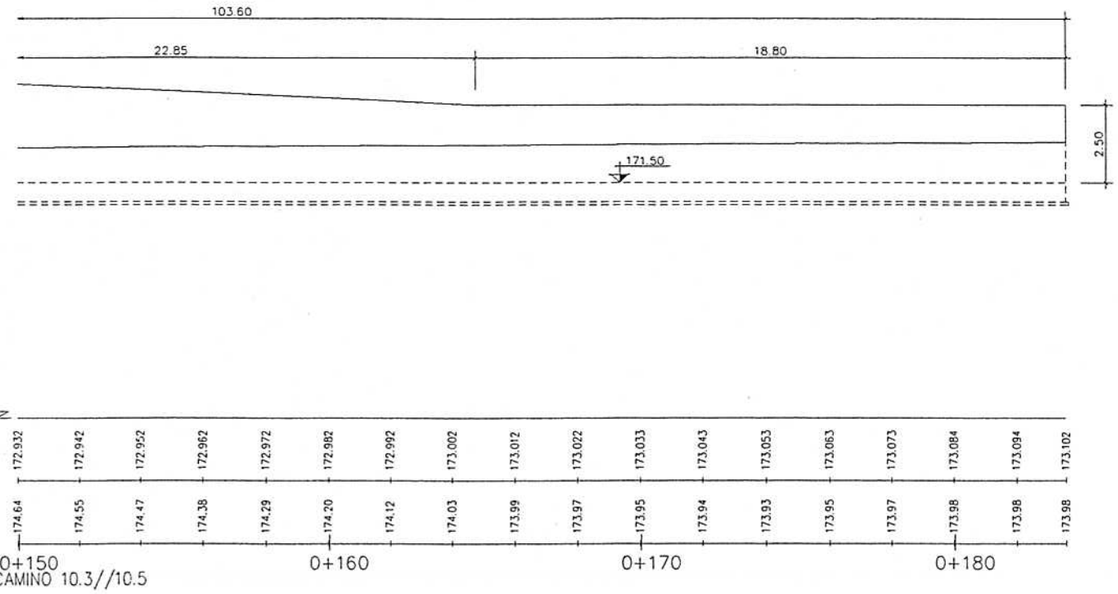
PLANTA
E. 1:100



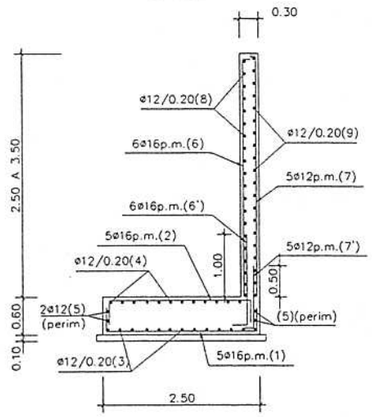
GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:50 1:100 Numérica Gráfica 0 1 2 3m 0 2 4 6m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO ESTRUCTURAS MUROS MURO 0.0	Nº DE PLANO 2.9.7 Hoja 1 de 7

ALZADO
E. 1:100





SECCION TIPO
E. 1:50



NOTAS:

-LOS RECUBRIMIENTOS SERAN DE 3cm.
-LOS SOLAPES SE EFECTUARAN DE ACUERDO CON LA NORMA EHE.

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

ELEMENTO	MATERIALES						EJECUCION
	HORMIGON			ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
CAPA DE LIMPIEZA, NIVELACION Y RELLENOS	HM-12.5	---	---	---	---	---	---
CIMENTACION	HA-25/P/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL
ALZADOS	HA-25/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

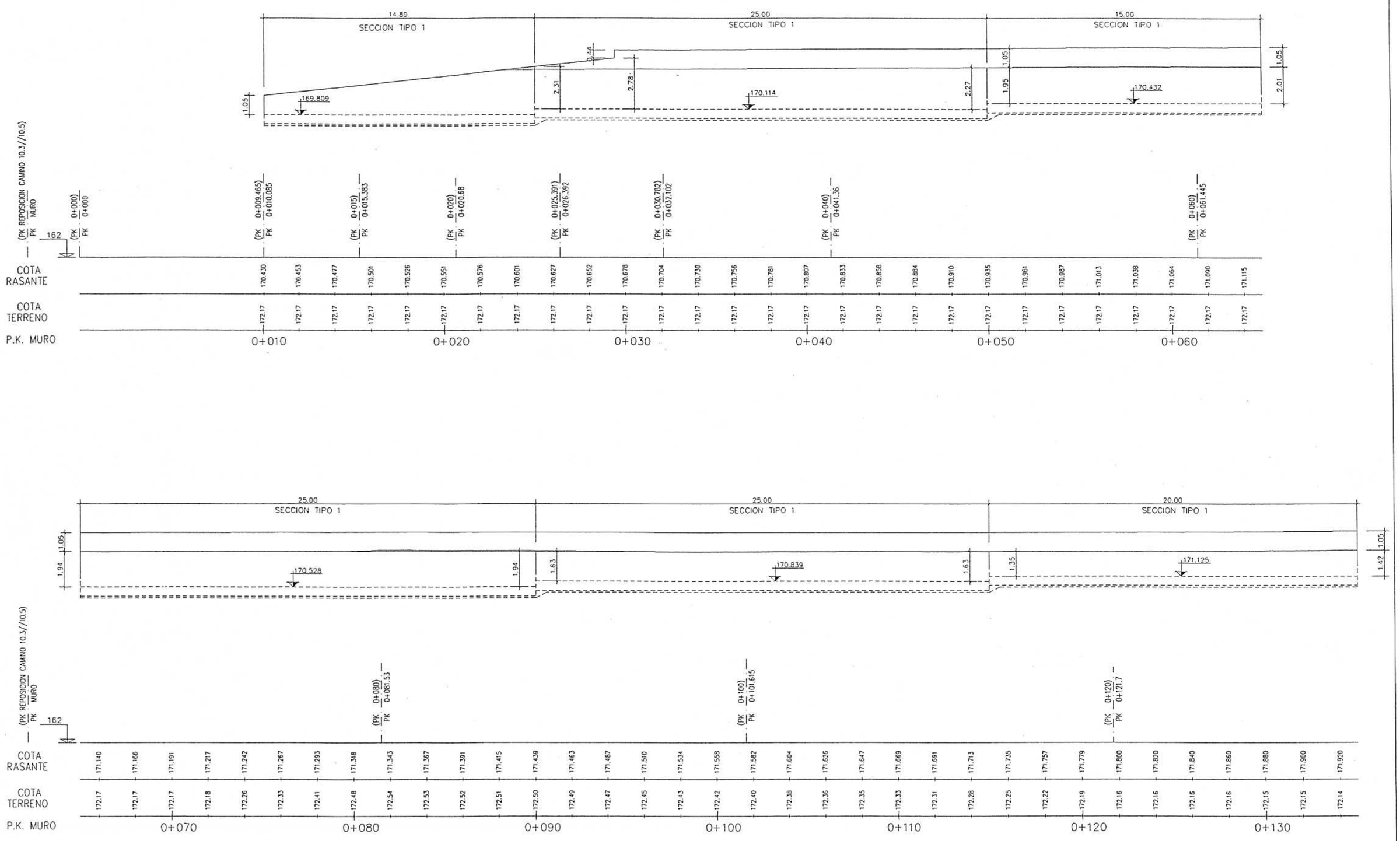
ESCALA NORMAL
1:50
1:100
Numérica
Gráfica
0 1 2 3m
0 2 4 6m

FECHA
NOVIEMBRE 2002

TITULO DEL PLANO
ESTRUCTURAS
MUROS
MURO 10.4A

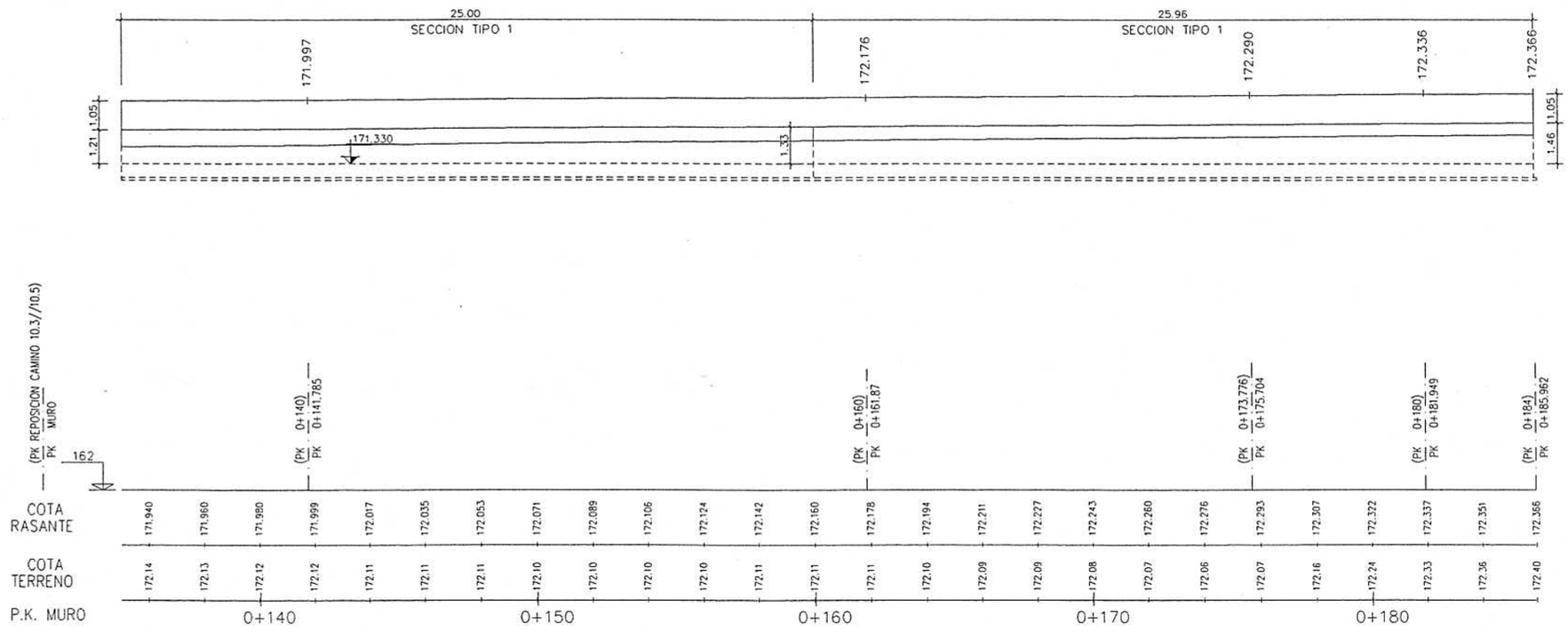
Nº DE PLANO
2.9.7
Hoja 2 de 7

ALZADO
E. 1:100

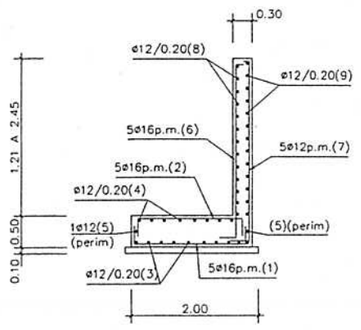


GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID–ZARAGOZA–BARCELONA–FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:100 Numérica / Gráfica 0 2 4 6m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO ESTRUCTURAS MODIFICACION MURO MURO 10.4B (I)	Nº DE PLANO 2.9.7 Hoja 3 de 7

ALZADO (continuación)
E. 1:100



SECCION TIPO 1
E. 1:50



NOTAS:

-LOS RECUBRIMIENTOS SERAN DE 3cm.
-LOS SOLAPES SE EFECTUARAN DE ACUERDO CON LA NORMA EHE.

CARACTERISTICAS DE LOS MATERIALES Y NIVELES DE CONTROL

ELEMENTO	MATERIALES						EJECUCION
	HORMIGON			ACERO			
	TIPO	CONTROL	γ_c	TIPO	CONTROL	γ_s	CONTROL
CAPA DE LIMPIEZA, NIVELACION Y RELLENOS	HM-12.5	---	---	---	---	---	---
CIMENTACION	HA-25/P/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL
ALZADOS	HA-25/B/20/IIa	NORMAL	1.50	B500S	NORMAL	1.15	NORMAL

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

ESCALA NORMAL
1:50
1:100
Numérica
Gráfica
0 1 2 3m
0 2 4 6m

FECHA
NOVIEMBRE 2002

TITULO DEL PLANO
ESTRUCTURAS
MUROS
MURO 10.4B (II)

Nº DE PLANO
2.9.7
Hojo 4 de 7

MURO 0.0

SITUACION	?(mm.)	DIAGRAMA DE DOBLADO (m)	NUMERO DE BARRAS	LONGITUD UNITARIA	LONGITUD TOTAL	PESO Kg/m	PESO PARCIAL
(1)	16	0,40 | 1,90 | 0,40	77	2,70	207,90	1,58	328,48
(2)	16	0,40 | 2,90 | 0,40	77	3,70	284,90	1,58	450,14
(3)	12	0,40 | 8,00 | 0,40	20	8,80	176,00	0,89	156,64
(4)	12	0,40 | 8,00 | 0,40	20	8,80	176,00	0,89	156,64
(5)	12	2,10 | 1,90 | 2,10	2	6,10	12,20	0,89	10,86
(5')	12	12,00	2	12,00	24,00	0,89	21,36
(6)	16	0,30 | 3,30 | 0,30	77	3,90	300,30	1,58	474,47
(7)	12	0,30 | 3,30 | 0,30	77	3,90	300,30	0,89	267,27
(8)	12	8,10	30	8,10	243,00	0,89	216,27
(9)	12	8,10	30	8,10	243,00	0,89	216,27

Total Kg ... 2.298,40

RESUMEN TOTAL POR DIAMETROS

?(mm.)	LONGITUD(m)	PESO(Kg)
12	1.174,50	1.045,31
16	793,10	1.253,10

Total Kg ... 2.298,40

MURO 10.3A

SITUACION	?(mm.)	DIAGRAMA DE DOBLADO (m)	NUMERO DE BARRAS	LONGITUD UNITARIA	LONGITUD TOTAL	PESO Kg/m	PESO PARCIAL
(1)	16	0,50 | 2,40 | 0,50	5	3,40	17,00	1,58	26,86
(2)	16	0,50 | 2,40 | 0,50	5	3,40	17,00	1,58	26,86
(3)	12	0,50 | 1,00 | 0,50	13	2,00	26,00	0,89	23,14
(4)	12	0,50 | 1,00 | 0,50	13	2,00	26,00	0,89	23,14
(5)	12	1,00	4	1,00	4,00	0,89	3,56
(6)	16	0,25 | 3,60	6	3,85	23,10	1,58	36,50
(6')	16	0,30 | 1,50	6	1,80	10,80	1,58	17,06
(7)	12	0,25 | 3,60	5	3,85	19,25	0,89	17,13
(7')	12	0,30 | 1,00	5	1,30	6,50	0,89	5,79
(8)	12	1,00	16	1,00	16,00	0,89	14,24
(9)	12	1,00	16	1,00	16,00	0,89	14,24

Total Kg ... 208,52

RESUMEN TOTAL POR DIAMETROS

?(mm.)	LONGITUD(m)	PESO(Kg)
12	113,75	101,24
16	67,90	107,28

Total Kg ... 208,52

MURO 10.3B

SITUACION	?(mm.)	DIAGRAMA DE DOBLADO (m)	NUMERO DE BARRAS	LONGITUD UNITARIA	LONGITUD TOTAL	PESO Kg/m	PESO PARCIAL
(1)	16	0,40 | 1,90 | 0,40	5	2,70	13,50	1,58	21,33
(2)	16	0,40 | 1,90 | 0,40	5	2,70	13,50	1,58	21,33
(3)	12	0,40 | 1,00 | 0,40	10	1,80	18,00	0,89	16,02
(4)	12	0,40 | 1,00 | 0,40	10	1,80	18,00	0,89	16,02
(5)	12	1,00	2	1,00	2,00	0,89	1,78
(6)	16	0,30 | 2,20 | 0,30	5	2,80	14,00	1,58	22,12
(7)	12	0,30 | 2,20 | 0,30	5	2,80	14,00	0,89	12,46
(8)	12	1,00	9	1,00	9,00	0,89	8,01
(9)	12	1,00	9	1,00	9,00	0,89	8,01

Total Kg ... 127,08

RESUMEN TOTAL POR DIAMETROS

?(mm.)	LONGITUD(m)	PESO(Kg)
12	70,00	62,30
16	41,00	64,78

Total Kg ... 127,08

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
Fdo: MAURO BRAVO DOMINGUEZ

CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

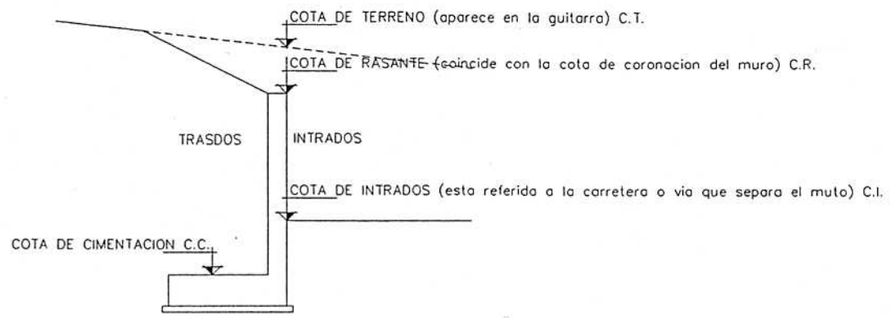
ESCALA NORMAL
SIN ESCALA
Numérica | Gráfica

FECHA
NOVIEMBRE 2002

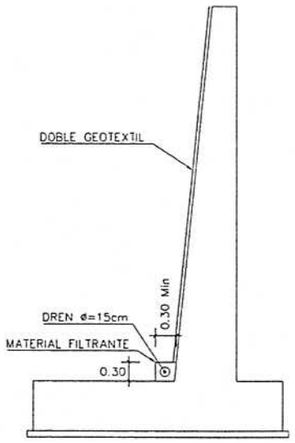
TITULO DEL PLANO
ESTRUCTURAS
MUROS
DESPIECES 6

Nº DE PLANO
2.9.7
Hoja 5 de 7

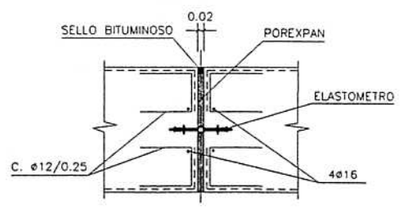
ESQUEMA TIPO. SECCION
E. 1:50



DETALLE DE DRENAJE EN MUROS
E. 1:50

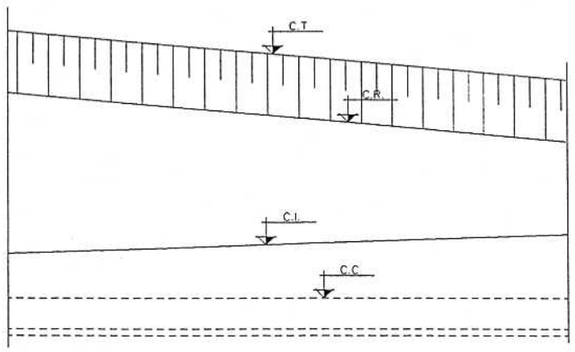


JUNTA DE DILATACION EN MUROS
S/E



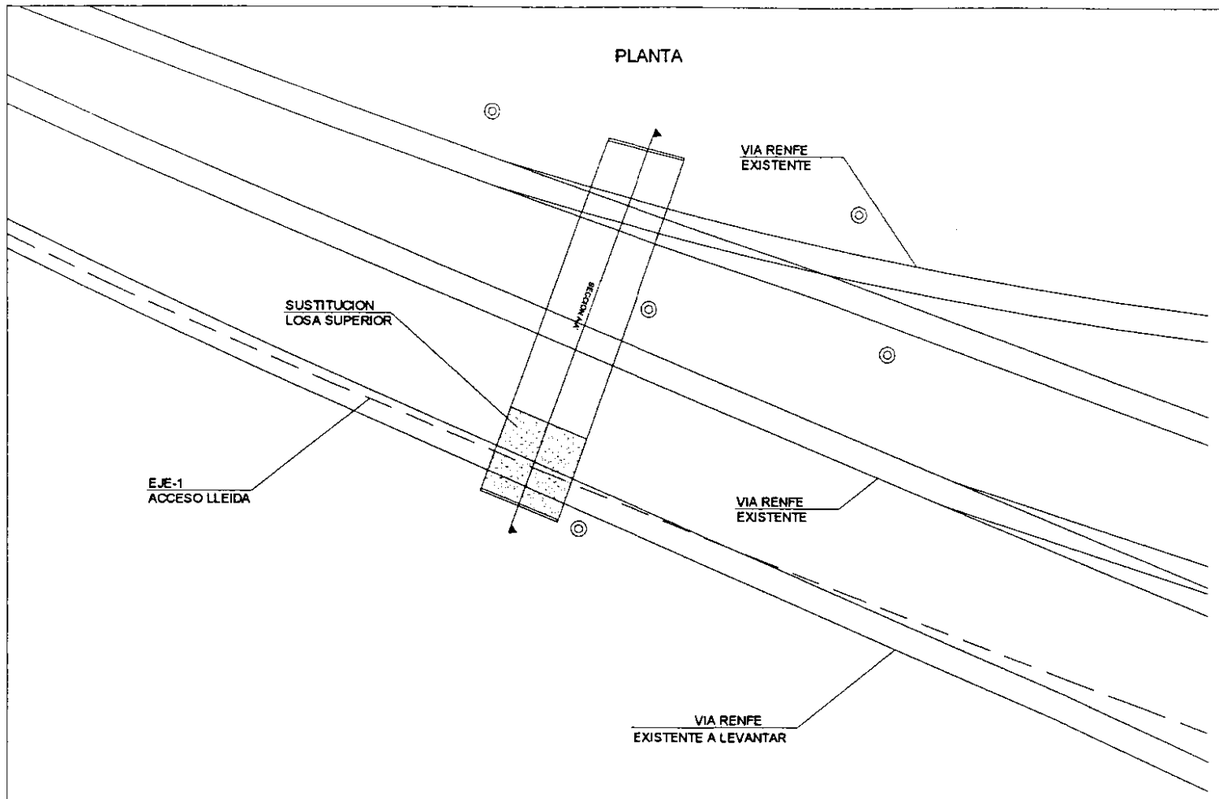
**TODOS LOS MURO CON MAS DE 25.00 m DE LONGITUD,
TENDRAN UNA JUNTA DE DILATACION CADA 25.00m.
O A LA MITAD DE SU LONGITUD SI ESTE ES INFERIOR A 50.00m.**

ESQUEMA TIPO. ALZADO
E. 1:50

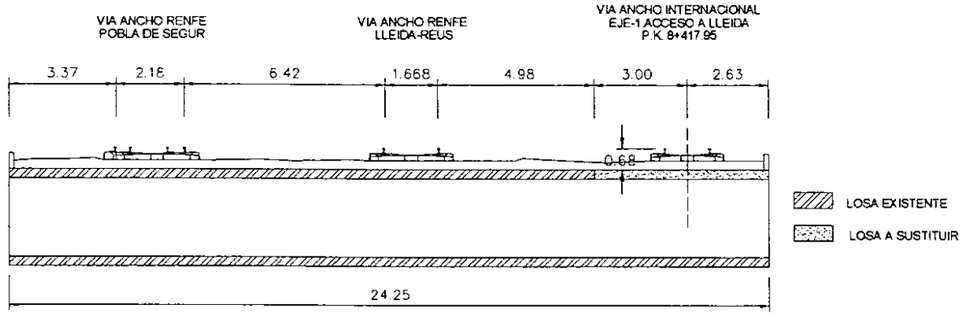


GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID–ZARAGOZA–BARCELONA–FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1:50 Numérico / Gráfico 0 1 2 3m	FECHA NOVIEMBRE 2002	TITULO DEL PLANO ESTRUCTURAS MUROS DETALLES Y SECCIONES TIPO (I)	Nº DE PLANO 2.9.7 Hoja 6 de 7

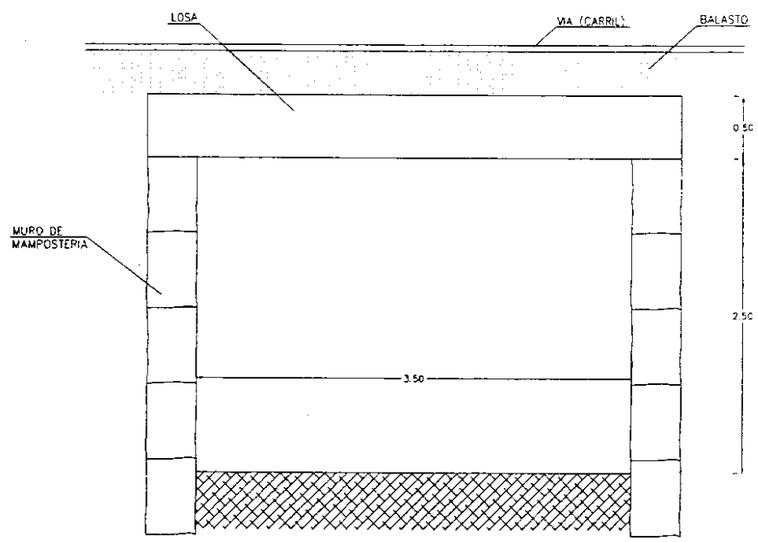
PLANTA



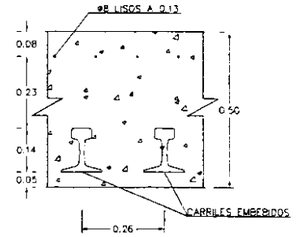
SECCION A-A'



SECCION TRANSVERSAL
PASO INFERIOR
E. 1:25



DETALLE - A
E. 1:10



ACTUACIONES DE REPARACION:

ZONAS CON PERFIL VISTO.

1.-LIMPIEZA DEL OXIDO DEL PERFIL CON CHORRO DE ARENA, GRADO So 2 1/2, NORMA SIS 055900 O MEDIANTE CEPILLO DE PUAS METALICAS, GRADO ST 3.
2.-APLICACION DE DOS MANOS DE UN REVESTIMIENTO PASIVANTE (SIKA TOP 110 EPOCEM O SIMILAR).
3.-APLICACION DE UNA CAPA DE 20 MM DE ESPESOR MINIMO DE UN MORTERO DE REPARACION, $f_{ck} \geq 500 Kp/cm^2$, (SIKA TOP 122 O SIMILAR).

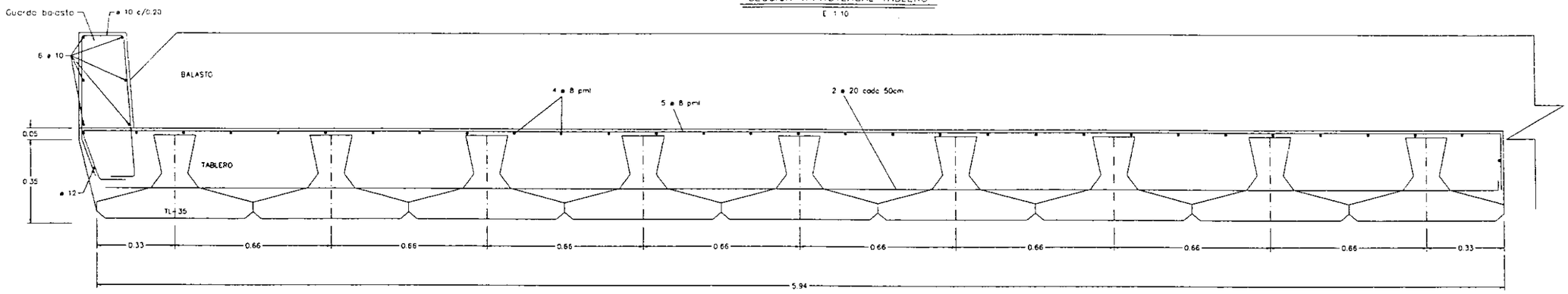
ZONAS CON POSIBLE DESCONCHE DE HORMIGON:

1.-REPICADO DEL HORMIGON CON RIESGO DE DESCONCHARSE.
2.-LIMPIEZA CON CEPILLO DE PUAS METALICAS DE LA SUPERFICIE DE HORMIGON.
3.-APLICACION DE MORTERO DE REPARACION (SIKA TOP 122 O SIMILAR), HASTA ENRASAR CON LA SUPERFICIE DEL HORMIGON NO REPICADO. LA SUPERFICIE DEL HORMIGON DEBE ESTAR MOJADA EN EL MOMENTO DE APLICACION DEL MORTERO DE REPARACION.

GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL VARIAS Numérico | Gráfica	FECHA NOVIEMBRE 2002	TITULO DEL PLANO ACONDICIONAMIENTO ESTRUCTURAS EXISTENTES PASO INFERIOR 8.4 SITUACION ACTUAL Y ACTUACIONES	Nº DE PLANO 2.9.8.2 Hoja 1 de 3

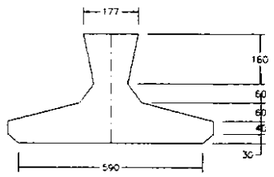
SECCION TRANSVERSAL TABLERO

E. 1:10



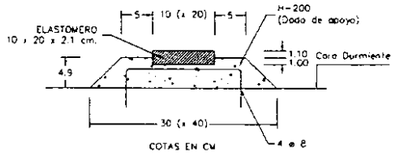
DEFINICION GEOMETRICA VIGA TL-35

E. 1:10



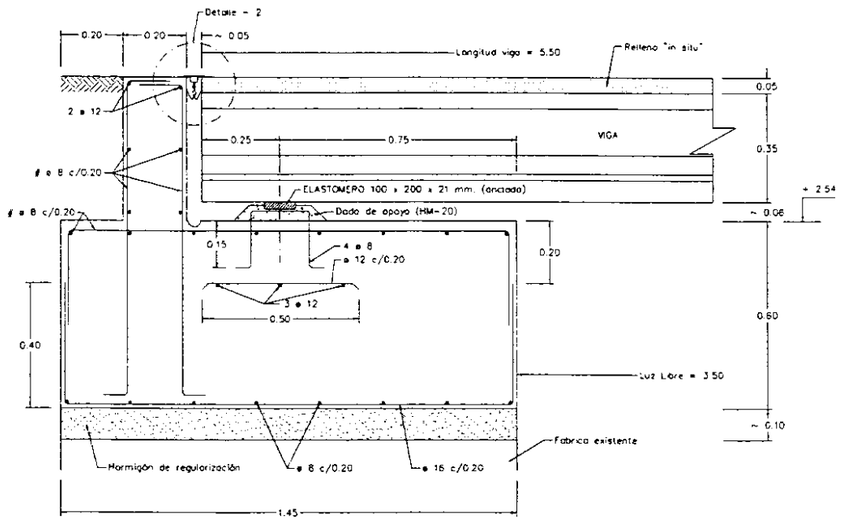
DETALLE COLOCACION PLACA NEOPRENO

E. 1:5



DEFINICION DURMIENTE - APOYO VIGA

E. 1:10



- Tensión admisible considerada : σ Adm. = 2.00 Kp/cm^2

CARACTERISTICAS DE LOS MATERIALES

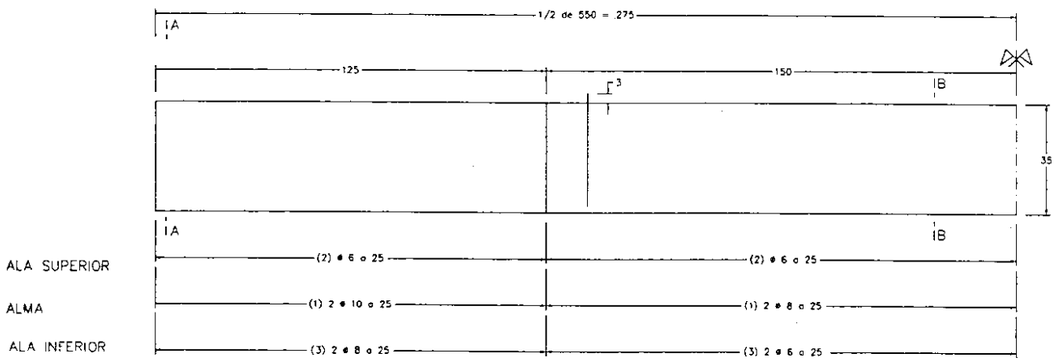
	NIVEL DE CONTROL	γ	fk kg/cm.^{2}
HORMIGON DURMIENTE	NORMAL	1.50	HA-25/B/20/IIa
HORMIGON RELLENO LOSA	NORMAL	1.50	HA-25/B/20/IIa
ACERO PASIVO LOSA	NORMAL	1.15	B500S
EJECUCION	INTENSO	1.50	---
	SEGUN EHE		

GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL VARIAS Numérica | Gráfica	FECHA NOVIEMBRE 2002	TITULO DEL PLANO ACONDICIONAMIENTO ESTRUCTURAS EXISTENTES PASO INFERIOR 8.4 DEFINICION LOSA A RECONSTRUIR	Nº DE PLANO 2.9.8.2 Hoja 2 de 3

ARMADO VIGAS

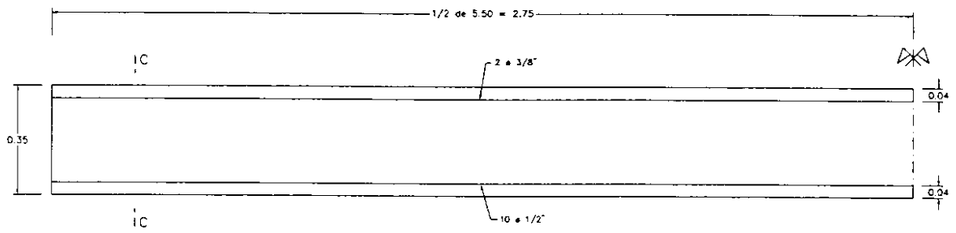
SEMI-SECCION LONGITUDINAL VIGA TL-35 (Armadura pasiva)

E. 1:10



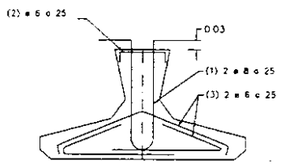
SEMI-SECCION LONGITUDINAL VIGA TL-35 (Armadura activa)

E. 1:10



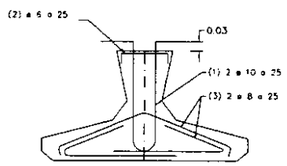
SECCION A-A

E. 1:10



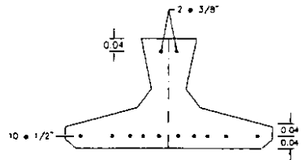
SECCION B-B

E. 1:10



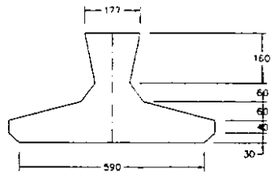
SECCION C-C

E. 1:10



DEFINICION GEOMETRICA VIGA TL-35

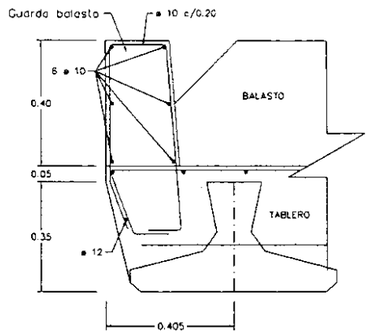
E. 1:10



DETALLES

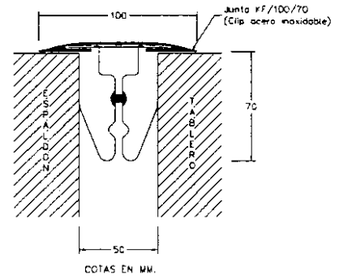
DETALLE - 1

E. 1:10



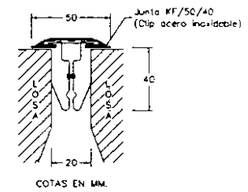
DETALLE - 2

E. 1:5



DETALLE - 3

E. 1:5



CARACTERISTICAS MATERIALES VIGA

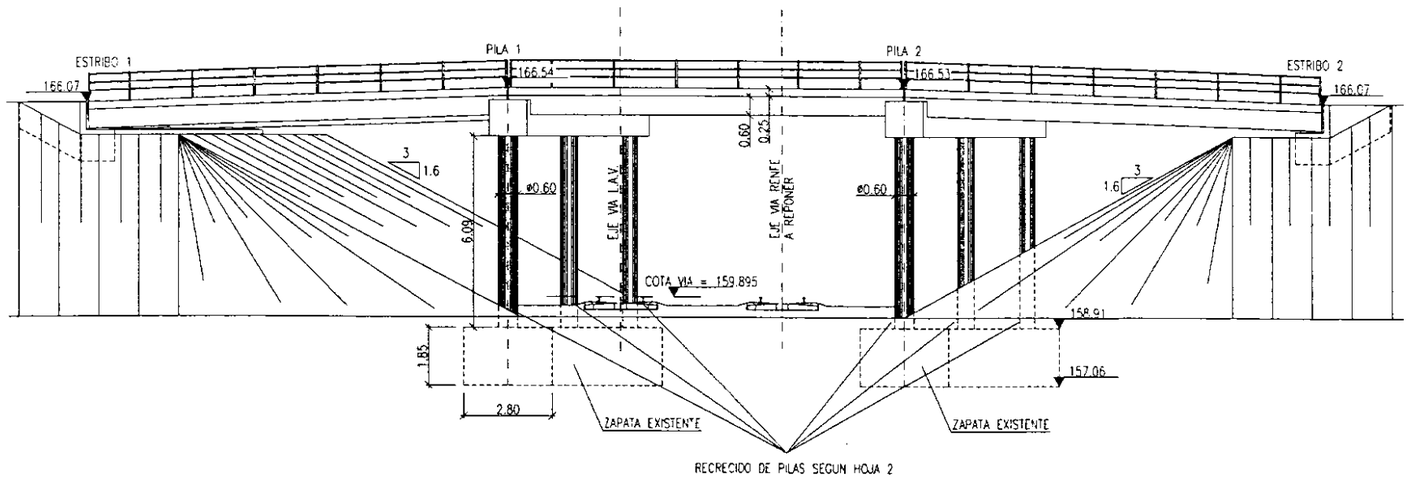
	NIVEL DE CONTROL	γ	fk kg/cm²
HORMIGON VIGA	INTENSO	1.50	HA-42.5/B/20Qa
ACERO PASIVO	INTENSO	1.15	B500S
ACERO ACTIVO	INTENSO	1.15	f max 19000
EJECUCION	INTENSO	1.50	---

NOTA.-

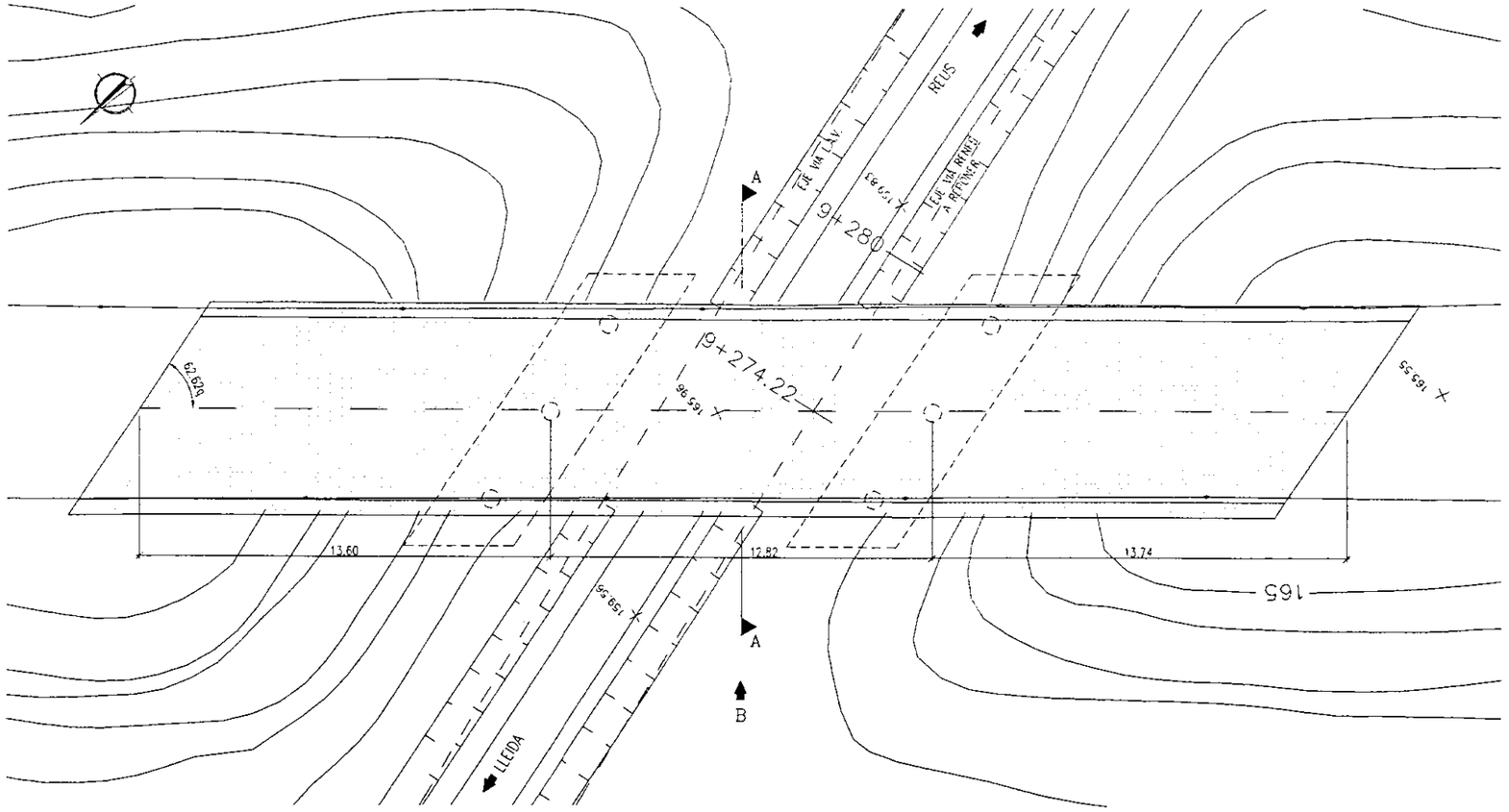
CONSIDERAR SOLO LAS COTAS REPRESENTADAS, NUNCA MEDIR SOBRE EL PLANO

GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL VARIAS Numérica / Gráfica	FECHA NOVIEMBRE 2002	TITULO DEL PLANO ACONDICIONAMIENTO ESTRUCTURAS EXISTENTES PASO INFERIOR 8.4 DEFINICION ARMADURA VIGA L-35 Y DETALLES	Nº DE PLANO 2.9.8.2 Hoja 3 de 3

ALZADO B
ESCALA 1/100

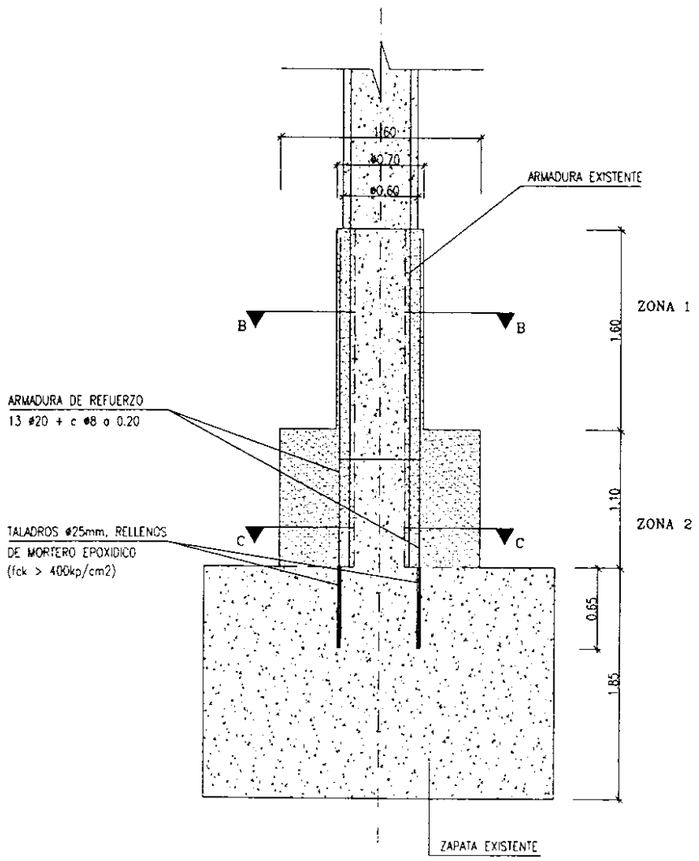


PLANTA
ESCALA 1/100

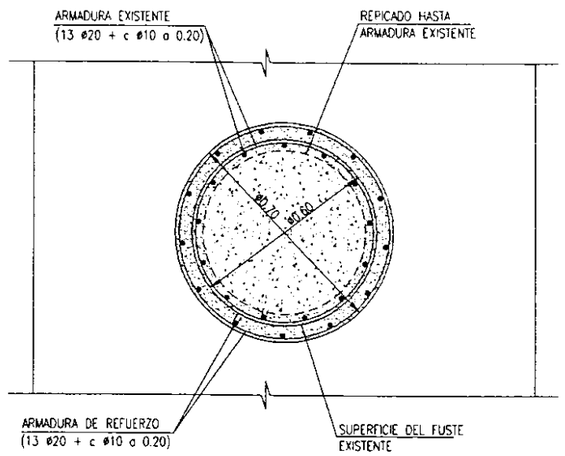


GIF Gestor de Infraestructuras Ferroviarias	PROYECTO CONSTRUIDO PLATAFORMA DE LOS ACCESOS A LLEIDA LINEA DE ALTA VELOCIDAD MADRID–ZARAGOZA–BARCELONA–FRONTERA FRANCESA	EL DIRECTOR DEL PROYECTO CONSTRUIDO Fdo: D. LUIS Mª PEREZ FABREGAT	EL AUTOR DEL PROYECTO CONSTRUIDO Fdo: MAURO BRAVO DOMINGUEZ	CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS) AEPO	ESCALA NORMAL 1/100 1/25 Numérica 0 2 4 6 0 8 16 24 Gráfica ORIGINALES DIN-A1	FECHA NOVIEMBRE 2002	TITULO DEL PLANO PASO SUPERIOR 9.3 PLANTA, ALZADO Y SECCION	Nº DE PLANO 2.9.8.4 Hoja 1 de 2

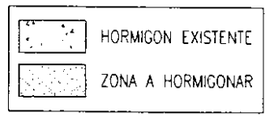
SECCION A-A
ESCALA 1/25



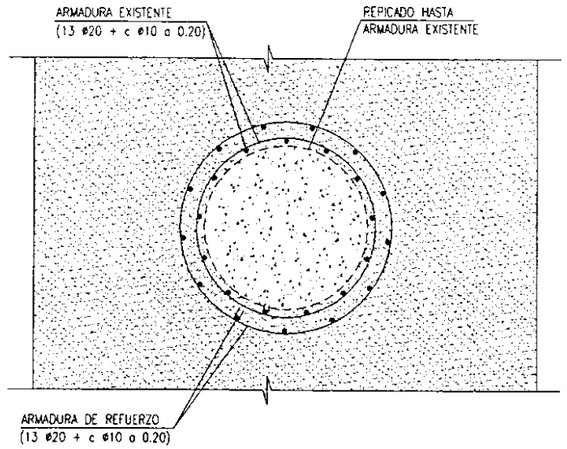
SECCION B-B (ZONA 1)
ESCALA 1/10



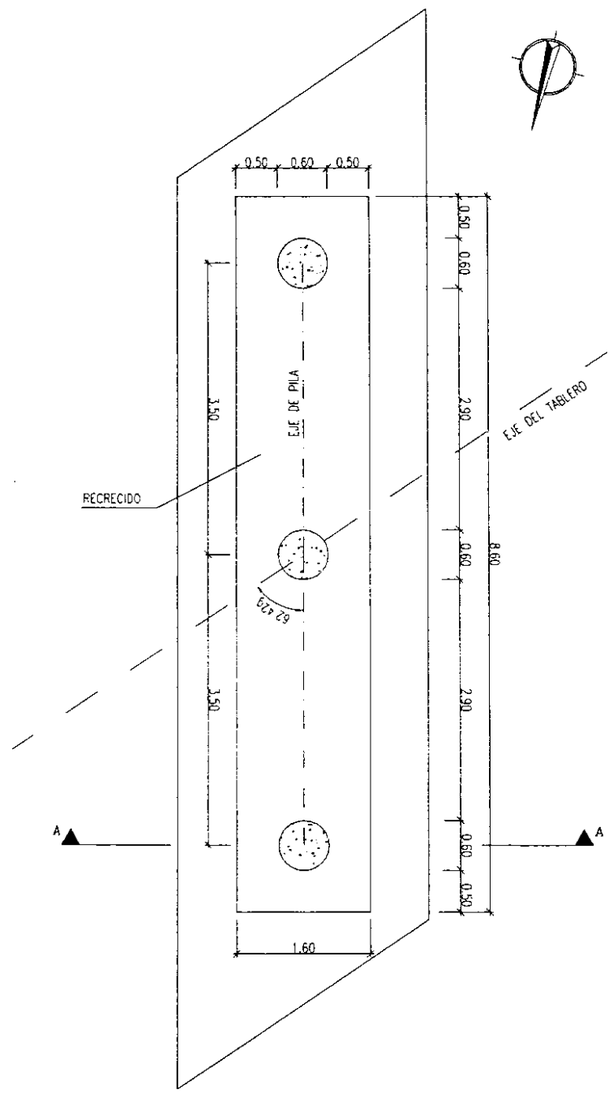
LEYENDA



SECCION C-C (ZONA 2)
ESCALA 1/10



PLANTA PILAS 1 Y 2
ESCALA 1/30



CARACTERISTICAS DE LOS MATERIALES
NIVELES DE CONTROL Y COEFICIENTES DE SEGURIDAD ADOPTADOS

HORMIGONES		
ELEMENTO ESTRUCTURAL	TIPO	CONTROL
HORMIGON DE REFUERZO	HA-25/12/F/IV	NORMAL

ACEROS		
ACEROS	TIPO	CONTROL
ACERO PARA ARMAR CORRUGADO	B 500 S	NORMAL

RECUBRIMIENTO NOMINAL DE LAS ARMADURAS = 40mm

EJECUCION DE LA OBRA

ELEMENTOS IN SITU CONTROL INTENSO.
COEFICIENTES DE MAYORACION DE LAS ACCIONES SEGUN EHE.

PROCESO DE EJECUCION:

1.- REPICADO DEL FUSTE EN LAS ZONAS 1 Y 2 HASTA DESCUBRIR LAS ARMADURAS EN TODA SU SUPERFICIE.
2.- ELIMINACION DEL OXIDO DE LAS ARMADURAS.
3.- PREPARACION DE LA SUPERFICIE DEL HORMIGON EXISTENTE QUE PRESENTARA CONTACTO CON EL HORMIGON A COLOCAR CON CHORREADO DE ARENA.
4.- APLICACION DE UN TRATAMIENTO PASIVANTE EN LA ARMADURA EXISTENTE.
5.- IMPRIMACION MEDIANTE ADHESIVO EPOXI PARA LA UNION DE HORMIGON FRESCO CON HORMIGON FRAGUADO DE LA SUPERFICIE DESCRITA EN EL PUNTO 3.
6.- HORMIGONADO DEL REFUERZO

GIF Gestor de Infraestructuras Ferroviarias

PROYECTO CONSTRUIDO
PLATAFORMA DE LOS ACCESOS A LLEIDA
LINEA DE ALTA VELOCIDAD
MADRID-ZARAGOZA-BARCELONA-FRONTERA FRANCESA

EL DIRECTOR DEL PROYECTO CONSTRUIDO
Fdo: D. LUIS Mª PEREZ FABREGAT

EL AUTOR DEL PROYECTO CONSTRUIDO
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CONSULTOR: (ASISTENCIA AL CONTROL DE OBRAS)
AEPO

ESCALA NORMAL
INDICADAS
Numérico | Gráfica ORIGINALES DIN-A1

FECHA
NOVIEMBRE 2002

TITULO DEL PLANO
PASO SUPERIOR 9.3
ACTUACION EN PILAS EXISTENTES. ARMADO

Nº DE PLANO
2.9.8.4
Hoja 2 de 2

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4.3 PASO INFERIOR 0.8
4.4 PASO INFERIOR PEATONAL EN LA ESTACIÓN DE LLEIDA
4.5 PASARELA PEATONAL P.K 5+100
4.6 SALTO DE CARNERO 1.4.
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4.1 PASO SUPERIOR 10.6

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1. Memoria

1. MEMORIA

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1.2 INSTRUCCIONES Y NORMAS APLICADAS

1.3 NIVELES DE CONTROL DE CALIDAD ADOPTADOS

1.4 CARACTERÍSTICAS DE LOS MATERIALES

1.5 CARACTERÍSTICAS DEL TERRENO

1.6 ACCIONES SÍSMICAS

1.7 SECCIONES TIPO

1.8 CARGAS Y SOBRECARGAS ACTUANTES

1. MEMORIA

1.1. GENERALIDADES

La estructura P.S.F. 10.6 corresponde al paso sobre ferrocarril situado en el punto kilométrico P.K. 10+651,670 correspondiente a los accesos a Lleida de la Linea de Alta Velocidad Madrid-Barcelona, y se resuelve mediante una losa biapoyada de un solo vano de 19,65 metros de luz.

El ancho de la plataforma es de 10,00 metros que se distribuyen de la siguiente forma:

- Dos aceras de 1,00 metros de ancho.
- Dos barreras rígidas de 0,50 metros.
- Dos calzadas de 3,50 metros.

El desarrollo en planta de la estructura es recto y su peralte es constante en todo el tablero e igual al 2,0 %. La estructura presenta un esviaje con respecto al eje del ferrocarril de 70,17°.

La sección transversal del tablero es una losa construida "in situ" de hormigón armado y de canto constante de 1,10 cm. La losa tiene cuatro aligeramientos de 0,70 m de diámetro y consta de dos voladizos laterales de 2,50 metros a cada lado del núcleo central.

Las cargas son transmitidas a estribos mediante aparatos de apoyo de neopreno zunchado.

Los estribos son del tipo cargadero y se construyen "in situ" de hormigón armado. Para evitar el derrame de las tierras sobre el ferrocarril, se proyectan muros de suelo reforzado.

1.2. INSTRUCCIONES Y NORMAS APLICADAS

Las normas aplicadas son las vigentes en la fecha de redacción de este Anejo de Cálculo.

- Acciones:

"Instrucción relativa a las acciones a considerar en el Proyecto de Puentes de Carreteras I.A.P" del 12 de Febrero de 1998.

- Hormigón armado:

"Instrucción para el proyecto y la ejecución de obras de hormigón en masa o armado EH-91" de 28 de Junio de 1991.
"Instrucción de Hormigón Estructural EHE"

- Sismo:

Norma de Construcción Sismorresistente NCSE-94 de 29 de Diciembre de 1994.

1.3. NIVELES DE CONTROL DE CALIDAD ADOPTADOS.

El control de calidad se atendrá a lo especificado en la Instrucción EHE con los siguientes niveles:

- Materiales:

Situación de proyecto	Hormigón	Acero pasivo
Persistente o transitoria	γ_C =1,50	γ_S =1,15
Accidental	γ_C =1,30	γ_S =1,00

- Ejecución:

Tipo de acción	Nivel de control de ejecución	
	Intenso	Normal
Permanente	γ_G =1,35	γ_G =1,50
Permanente de valor no cte.	γ_G =1,50	γ_G =1,60
Variable	γ_G =1,50	γ_G =1,60

1.4. CARACTERÍSTICAS DE LOS MATERIALES

Se consideran las siguientes características en los materiales empleados en el proyecto de la estructura:

La resistencia característica de los diferentes hormigones utilizados es la siguiente:

- S Hormigón de nivelación y limpieza ..... HM-12,5 f_{ck}=150 Kg/cm^2
- S Hormigón en alzados de estribos ..... HA-25 f_{ck} = 250 Kg/cm^2
- S Hormigón en tablero ..... HA-30 f_{ck} = 300 Kg/cm^2

El tipo de acero empleado en todas las armaduras dispuestas será un B-500 S cuyo límite elástico es f_{yk} = 5100 Kg/cm^2.

Se considera un peso específico del hormigón γ = 2,50 t/m^2 y del pavimento de γ_p = 2,30 t/m^2

1.5. CARACTERISTICAS DEL TERRENO

Conforme a los parámetros dados en el Anejo de Geotecnia, y considerando que los estribos apoyan sobre un suelo reforzado, se considera una tensión admisible del terreno de 2,50 Kg/cm^2.

1.6. ACCIONES SISMICAS

Según la Norma de Construcción Sismorresistente NCSE-94, el estribo se haya situado en una zona en la cual la aceleración sísmica básica es menor de 0,04 g.

La Norma define en el apartado 1.2.2 la clasificación de las construcciones, en función de su importancia, quedando, los estribos, encuadrados dentro de las de "Especial importancia".

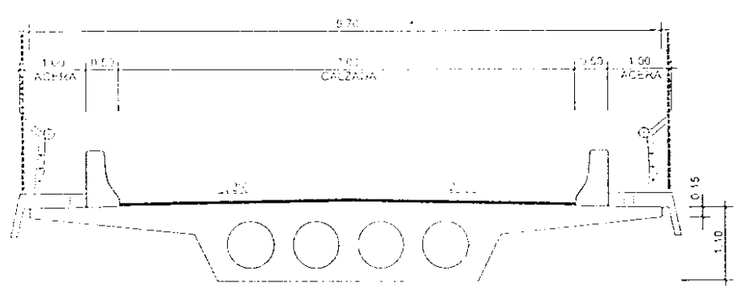
En el apartado 1.2.3 se definen los criterios de aplicación de la Norma, indicándose que no es de obligada aplicación en los siguientes casos:

- S En las construcciones de moderada importancia.
- S En las demás construcciones cuando la aceleración sísmica de cálculo "a_c" (artículo 2.2) sea inferior a 0,06g, siendo "g" la aceleración de la gravedad.

Por tanto, no es necesario tener en cuenta la hipótesis de sismo en el cálculo de la estructura.

1.7. SECCIONES TIPO

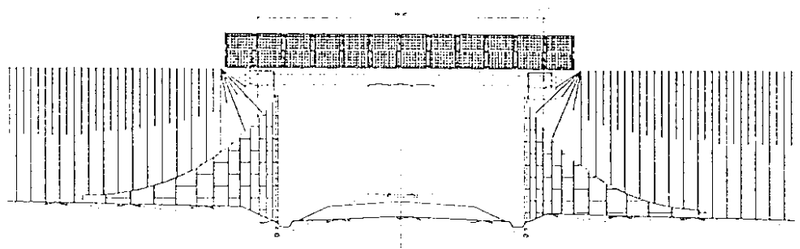
Sección transversal del tablero:



Las características de la sección del tablero son las siguientes:

- Área ..... 5,23 m^2
- Perímetro ..... 20,59 m
- Inercia I_{xx} ..... 0,6814 m^4
- Distancia al centro de gravedad y_g desde fibra inferior ..... 0,7231 m

Sección longitudinal del tablero:



1.8. CARGAS Y SOBRECARGAS ACTUANTES

Se consideran las siguientes cargas actuando sobre el tablero:

Cargas verticales:

- Peso propio del tablero.
- Cargas permanentes actuando sobre el tablero:
  - Peso de barrera rígida.
  - Peso de pavimento.
  - Peso de aceras y barandillas.
- Sobrecarga uniforme de 400 Kg/m^2 actuando sobre el tablero. Se considera la posibilidad de que la sobrecarga pueda estar actuando en toda la estructura o sólo en parte de ella.
- Sobrecarga de vehículo pesado de 60 Tn actuando sobre el tablero. Se considera la posibilidad de que el vehículo pesado pueda estar situado en posición centrada con respecto al tablero o con la máxima excentricidad a uno u otro lado del mismo.
- Sobrecarga de nieve.
- Incremento de temperatura.
- Gradiente térmico.

Cargas horizontales:

- Longitudinales: Incremento de temperatura, retracción y fluencia procedentes del tablero y fuerza de frenado.
- Transversales: Viento.

2. Cálculo del tablero

2. CÁLCULO DEL TABLERO

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2.1.1 DEFINICIÓN GEOMÉTRICA

2.1.2 ACCIONES CONSIDERADAS

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2.6.1 RESISTENCIA A ESFUERZO CORTANTE

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2.10 REACCIIONES MÁXIMAS Y MÍNIMAS EN APOYOS

2.11 CÁLCULO DE LA ARMADURA EN APOYO DE ESTRIBOS

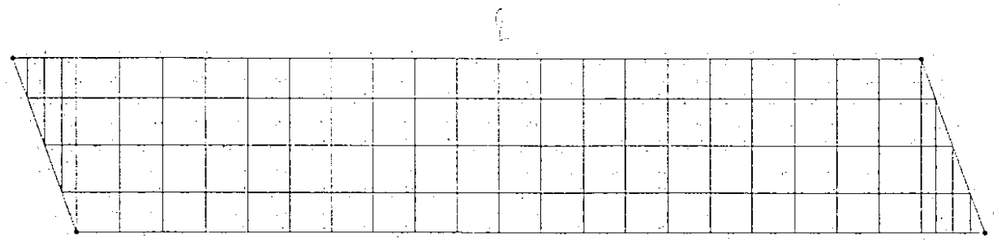
2.12 CÁLCULO DE LA ARMADURA TRANSVERSAL DE WOOD

2. CALCULO DEL TABLERO

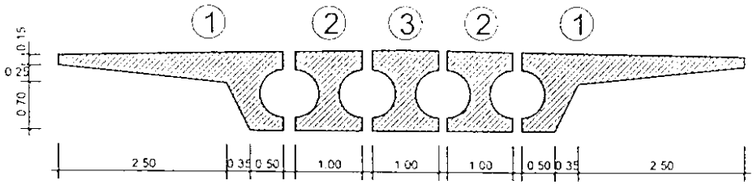
2.1. MODELO DE CÁLCULO

El cálculo se realiza mediante el programa de ordenador "GRID", que resuelve estructuras reticuladas planas tipo emparrillado, es decir, estructuras con 3 grados de libertad (movimiento según el eje Y y giros respecto a los ejes X y Z) estando la estructura contenida en el plano XZ. El programa está basado en el cálculo matricial de estructuras y obtiene los esfuerzos máximos que se producen en cada una de las barras que componen el modelo empleado calculando además las armaduras necesarias de acuerdo con la Instrucción EH-91. El programa se ha ejecutado en ordenador PENTIUM con más de 16 Mb de memoria RAM.

Se ha modelizado un emparrillado formado por 125 nudos y 224 barras (120 barras longitudinales y 104 transversales) tal y como aparece en la siguiente figura:



Para llevar a cabo la discretización de la figura se ha dividido la sección transversal del tablero en cinco secciones cada una de las cuales corresponde a cada una de las cinco bandas que componen las barras longitudinales del modelo:



Sección	Área (m^2)	Inercia (m^4)	Y_{gi} (m)
1	1,4198	0,1533	0,8177
2	0,7922	0,1233	0,6072
3	0,8072	0,1282	0,6179

Se coacciona al movimiento vertical los nudos 1, 15, 111 y 125, que corresponden a los apoyos del tablero en estribos.

2.1.1. Definición Geométrica.

A continuación se presentan los listados correspondientes a la definición geométrica de cada uno de los elementos que componen el emparrillado.

Los parámetros no definidos en la salida de datos son los siguientes:

N_i Nudo dorsal

N_j Nudo frontal

Pro.X Proyección de la barra según el eje "X"

Pro.Y Proyección de la barra según el eje "Y"

DATOS GENERALES

N° de Nudos.....: 125
N° de Barras.....: 224
Máx. dif. Nudos..: 5

Módulo de Elasticidad (E) .....: 3300000
Coeficiente de Poisson .....: 0.20
Módulo de Rigidez Transversal (G): 1375000

Tipo de Rigidez	Barras
Biempotrada	1 a 224

DATOS GEOMETRICOS DE LAS BARRAS

Barra	Ni	Nj	Pro.X	Pro.Y	Inercia	Torsión	Area	Canto	Ancho
1	1	2	0.307	0.000	0.1533	0.3066	1.420	1.100	1.290
2	2	4	0.361	0.000	0.1533	0.3066	1.420	1.100	1.290
3	4	7	0.361	0.000	0.1533	0.3066	1.420	1.100	1.290
4	7	11	0.307	0.000	0.1533	0.3066	1.420	1.100	1.290
5	11	16	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
6	16	21	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
7	21	26	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
8	26	31	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
9	31	36	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
10	36	41	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
11	41	46	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
12	46	51	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
13	51	56	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
14	56	61	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
15	61	66	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
16	66	71	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
17	71	76	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
18	76	81	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
19	81	86	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
20	86	91	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
21	91	96	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
22	96	101	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
23	101	106	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
24	106	111	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
25	3	5	0.361	0.000	0.1233	0.2466	0.792	1.100	1.000
26	5	8	0.361	0.000	0.1233	0.2466	0.792	1.100	1.000
27	8	12	0.307	0.000	0.1233	0.2466	0.792	1.100	1.000
28	12	17	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
29	17	22	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
30	22	27	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
31	27	32	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
32	32	37	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
33	37	42	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
34	42	47	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
35	47	52	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
36	52	57	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
37	57	62	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
38	62	67	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
39	67	72	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
40	72	77	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
41	77	82	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
42	82	87	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
43	87	92	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
44	92	97	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
45	97	102	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
46	102	107	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
47	107	112	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
48	112	116	0.307	0.000	0.1233	0.2466	0.792	1.100	1.000
49	6	9	0.361	0.000	0.1282	0.2564	0.807	1.100	1.000
50	9	13	0.307	0.000	0.1282	0.2564	0.807	1.100	1.000
51	13	18	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
52	18	23	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
53	23	28	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
54	28	33	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
55	33	38	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
56	38	43	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
57	43	48	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
58	48	53	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
59	53	58	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
60	58	63	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
61	63	68	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
62	68	73	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000

Barra	Ni	Nj	Pro.X	Pro.Y	Inercia	Torsión	Area	Canto	Ancho
63	73	78	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
64	78	83	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
65	83	88	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
66	88	93	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
67	93	98	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
68	98	103	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
69	103	108	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
70	108	113	0.897	0.000	0.1282	0.2564	0.807	1.100	1.000
71	113	117	0.307	0.000	0.1282	0.2564	0.807	1.100	1.000
72	117	120	0.361	0.000	0.1282	0.2564	0.807	1.100	1.000
73	10	14	0.307	0.000	0.1233	0.2466	0.792	1.100	1.000
74	14	19	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
75	19	24	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
76	24	29	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
77	29	34	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
78	34	39	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
79	39	44	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
80	44	49	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
81	49	54	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
82	54	59	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
83	59	64	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
84	64	69	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
85	69	74	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
86	74	79	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
87	79	84	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
88	84	89	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
89	89	94	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
90	94	99	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
91	99	104	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
92	104	109	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
93	109	114	0.897	0.000	0.1233	0.2466	0.792	1.100	1.000
94	114	118	0.307	0.000	0.1233	0.2466	0.792	1.100	1.000
95	118	121	0.361	0.000	0.1233	0.2466	0.792	1.100	1.000
96	121	123	0.361	0.000	0.1233	0.2466	0.792	1.100	1.000
97	15	20	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
98	20	25	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
99	25	30	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
100	30	35	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
101	35	40	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
102	40	45	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
103	45	50	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
104	50	55	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
105	55	60	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
106	60	65	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
107	65	70	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290

Barra	Ni	Nj	Pro.X	Pro.Y	Inercia	Torsión	Area	Canto	Ancho
108	70	75	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
109	75	80	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
110	80	85	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
111	85	90	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
112	90	95	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
113	95	100	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
114	100	105	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
115	105	110	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
116	110	115	0.897	0.000	0.1533	0.3066	1.420	1.100	1.290
117	115	119	0.307	0.000	0.1533	0.3066	1.420	1.100	1.290
118	119	122	0.361	0.000	0.1533	0.3066	1.420	1.100	1.290
119	122	124	0.361	0.000	0.1533	0.3066	1.420	1.100	1.290
120	124	125	0.307	0.000	0.1533	0.3066	1.420	1.100	1.290
121	2	3	0.000	-0.850	0.0304	0.0608	0.160	1.100	0.334
122	4	5	0.000	-0.850	0.0328	0.0657	0.173	1.100	0.361
123	7	8	0.000	-0.850	0.0304	0.0608	0.160	1.100	0.334
124	11	12	0.000	-0.850	0.0548	0.1096	0.289	1.100	0.602
125	16	17	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
126	21	22	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
127	26	27	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
128	31	32	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
129	36	37	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
130	41	42	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
131	46	47	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
132	51	52	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
133	56	57	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
134	61	62	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
135	66	67	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
136	71	72	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
137	76	77	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
138	81	82	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
139	86	87	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
140	91	92	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
141	96	97	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
142	101	102	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
143	106	107	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
144	111	112	0.000	-0.850	0.0548	0.1096	0.289	1.100	0.733
145	5	6	0.000	-1.000	0.0328	0.0657	0.173	1.100	0.361
146	8	9	0.000	-1.000	0.0304	0.0608	0.160	1.100	0.334
147	12	13	0.000	-1.000	0.0548	0.1096	0.289	1.100	0.602
148	17	18	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
149	22	23	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
150	27	28	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
151	32	33	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
152	37	38	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897

Barra	Ni	Nj	Pro.X	Pro.Y	Inercia	Torsión	Area	Canto	Ancho
153	42	43	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
154	47	48	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
155	52	53	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
156	57	58	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
157	62	63	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
158	67	68	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
159	72	73	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
160	77	78	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
161	82	83	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
162	87	88	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
163	92	93	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
164	97	98	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
165	102	103	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
166	107	108	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
167	112	113	0.000	-1.000	0.0548	0.1096	0.289	1.100	0.602
168	116	117	0.000	-1.000	0.0304	0.0608	0.160	1.100	0.334
169	9	10	0.000	-1.000	0.0304	0.0608	0.160	1.100	0.334
170	13	14	0.000	-1.000	0.0548	0.1096	0.289	1.100	0.602
171	18	19	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
172	23	24	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
173	28	29	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
174	33	34	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
175	38	39	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
176	43	44	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
177	48	49	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
178	53	54	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
179	58	59	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
180	63	64	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
181	68	69	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
182	73	74	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
183	78	79	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
184	83	84	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
185	88	89	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
186	93	94	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
187	98	99	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
188	103	104	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
189	108	109	0.000	-1.000	0.0816	0.1632	0.430	1.100	0.897
190	113	114	0.000	-1.000	0.0548	0.1096	0.289	1.100	0.602
191	117	118	0.000	-1.000	0.0304	0.0608	0.160	1.100	0.334
192	120	121	0.000	-1.000	0.0328	0.0657	0.173	1.100	0.361
193	14	15	0.000	-0.850	0.0548	0.1096	0.289	1.100	0.602
194	19	20	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
195	24	25	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
196	29	30	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
197	34	35	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897

Barra	Ni	Nj	Pro.X	Pro.Y	Inercia	Torsión	Area	Canto	Ancho
198	39	40	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
199	44	45	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
200	49	50	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
201	54	55	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
202	59	60	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
203	64	65	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
204	69	70	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
205	74	75	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
206	79	80	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
207	84	85	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
208	89	90	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
209	94	95	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
210	99	100	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
211	104	105	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
212	109	110	0.000	-0.850	0.0816	0.1632	0.430	1.100	0.897
213	114	115	0.000	-0.850	0.0548	0.1096	0.289	1.100	0.602
214	118	119	0.000	-0.850	0.0304	0.0608	0.160	1.100	0.334
215	121	122	0.000	-0.850	0.0328	0.0657	0.173	1.100	0.361
216	123	124	0.000	-0.850	0.0304	0.0608	0.160	1.100	0.334
217	1	3	0.307	-0.850	0.1109	0.2218	1.100	1.100	1.000
218	3	6	0.361	-1.000	0.1109	0.2218	1.100	1.100	1.000
219	6	10	0.361	-1.000	0.1109	0.2218	1.100	1.100	1.000
220	10	15	0.307	-0.850	0.1109	0.2218	1.100	1.100	1.000
221	111	116	0.307	-0.850	0.1109	0.2218	1.100	1.100	0.602
222	116	120	0.361	-1.000	0.1109	0.2218	1.100	1.100	1.000
223	120	123	0.361	-1.000	0.1109	0.2218	1.100	1.100	1.000
224	123	125	0.307	-0.850	0.1109	0.2218	1.100	1.100	1.000

N U D O S

	COORDENADAS		COACCIONES DE APOYOS		
Nudo	Coor.X	Coor.Y	Movim. Z	Giro X	Giro Y
1	0.000	3.700	∞		
2	0.307	3.700			
3	0.307	2.850			
4	0.667	3.700			
5	0.667	2.850			
6	0.667	1.850			
7	1.028	3.700			
8	1.028	2.850			
9	1.028	1.850			
10	1.028	0.850			
11	1.334	3.700			
12	1.334	2.850			
13	1.334	1.850			
14	1.334	0.850			
15	1.334	0.000	∞		
16	2.231	3.700			
17	2.231	2.850			
18	2.231	1.850			
19	2.231	0.850			
20	2.231	0.000			
21	3.128	3.700			
22	3.128	2.850			
23	3.128	1.850			
24	3.128	0.850			
25	3.128	0.000			
26	4.025	3.700			
27	4.025	2.850			
28	4.025	1.850			
29	4.025	0.850			
30	4.025	0.000			
31	4.922	3.700			
32	4.922	2.850			
33	4.922	1.850			
34	4.922	0.850			
35	4.922	0.000			
36	5.819	3.700			
37	5.819	2.850			
38	5.819	1.850			
39	5.819	0.850			
40	5.819	0.000			
41	6.716	3.700			
42	6.716	2.850			
43	6.716	1.850			
44	6.716	0.850			
45	6.716	0.000			
46	7.613	3.700			
47	7.613	2.850			
48	7.613	1.850			
49	7.613	0.850			
50	7.613	0.000			
51	8.510	3.700			
52	8.510	2.850			
53	8.510	1.850			
54	8.510	0.850			
55	8.510	0.000			
56	9.407	3.700			
57	9.407	2.850			
58	9.407	1.850			
59	9.407	0.850			
60	9.407	0.000			
61	10.304	3.700			
62	10.304	2.850			
63	10.304	1.850			
64	10.304	0.850			
65	10.304	0.000			
66	11.201	3.700			
67	11.201	2.850			
68	11.201	1.850			
69	11.201	0.850			
70	11.201	0.000			
71	12.098	3.700			
72	12.098	2.850			
73	12.098	1.850			
74	12.098	0.850			
75	12.098	0.000			
76	12.995	3.700			
77	12.995	2.850			
78	12.995	1.850			
79	12.995	0.850			
80	12.995	0.000			
81	13.892	3.700			
82	13.892	2.850			
83	13.892	1.850			
84	13.892	0.850			
85	13.892	0.000			
86	14.789	3.700			
87	14.789	2.850			
88	14.789	1.850			

Nudo	Coor.X	Coor.Y	Movim. Z	Giro X	Giro Y
89	14.789	0.850			
90	14.789	0.000			
91	15.686	3.700			
92	15.686	2.850			
93	15.686	1.850			
94	15.686	0.850			
95	15.686	0.000			
96	16.583	3.700			
97	16.583	2.850			
98	16.583	1.850			
99	16.583	0.850			
100	16.583	0.000			
101	17.480	3.700			
102	17.480	2.850			
103	17.480	1.850			
104	17.480	0.850			
105	17.480	0.000			
106	18.377	3.700			
107	18.377	2.850			
108	18.377	1.850			
109	18.377	0.850			
110	18.377	0.000			
111	19.274	3.700	~		
112	19.274	2.850			
113	19.274	1.850			
114	19.274	0.850			
115	19.274	0.000			
116	19.581	2.850			
117	19.581	1.850			
118	19.581	0.850			
119	19.581	0.000			
120	19.941	1.850			
121	19.941	0.850			
122	19.941	0.000			
123	20.302	0.850			
124	20.302	0.000			
125	20.608	0.000	~		

2.1.2. Acciones consideradas

Se adoptan las indicadas en la "Instrucción sobre las acciones a considerar en el Proyecto de Puentes de Carreteras I.A.P.". De acuerdo con ella distinguiremos:

– **Peso propio del tablero:**

Se considera un peso específico del hormigón de 2,50 t/m^3 en todas las barras longitudinales del emparrillado.

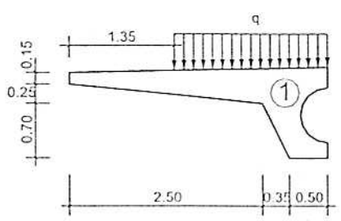
– **Cargas permanentes:**

Pavimento: Se considera una capa de 8 centímetros de pavimento sobre el tablero (Artículo 3.2.1.2 de la I.A.P.), que origina unas sobrecargas uniformes de valor "q" y unos momentos torsores uniformes de valor "T" en cada una de las barras longitudinales del emparrillado:

Voladizo: $q_1 = 2,3 \times 0,12 \times 2,00 = 0,55$ t/m

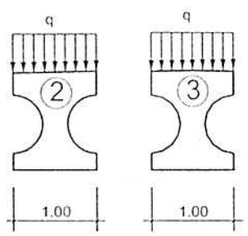
$T_1 = 0,65 \times q = 0,358$ mt/m

$x_{g1} = 0,65$ m



Núcleo central: $q_2 = 2,3 \times 0,12 \times 1,00 = 0,28$ t/m

$q_3 = 2,3 \times 0,12 \times 1,00 = 0,28$ t/m



Como la carga está aplicada sobre el centro de gravedad de la sección, no existe momento torsor en estas barras.

Barrera rígida: Se considera un peso de 1500 Kg/ml aplicado en las barras correspondientes a los voladizos del tablero, que producen unas sobrecargas uniformes de valor "q" y unos momentos torsores uniformes de valor "T":

$q = 1,5$ t/m

$T = 2,20 \times 0,75 + 2,925 \times 0,75 = 3,84$ mt/m

– **Sobrecarga uniforme de 400 Kg/m^2**

Se considera una sobrecarga uniforme de 400 Kg/m^2 extendida a toda la superficie a nivel de la calzada o a parte de ella, según sea más desfavorable. Esto producirá unas sobrecargas y torsores uniformes en las barras longitudinales del emparrillado de valor:

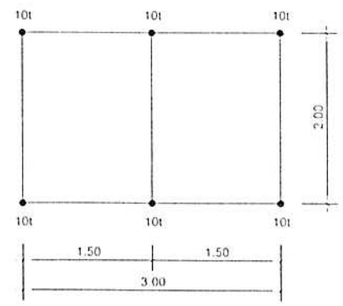
Voladizo: $q_1 = 0,4 \times 2,00 = 0,80$ t/m

$T_1 = 0,52$ mt/m

Núcleo central: $q_2 = q_3 = 0,4 \times 1,00 = 0,40$ t/m

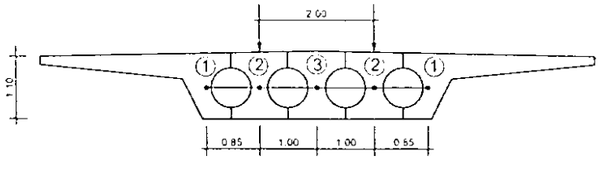
– **Carro de la Instrucción de 60 Tn.**

Se considera el vehículo de 60 t dado en la Instrucción, cuyo eje longitudinal se considerará paralelo al eje de la calzada y formado por seis cargas de 10 t, pudiendo desplazarse en sentido transversal hasta no menos de 0,50 metros del borde de la barrera.

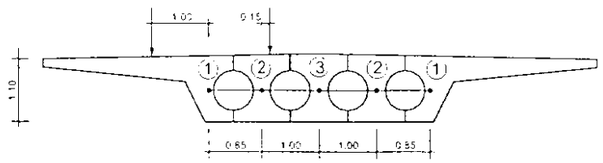


Transversalmente se considera el carro centrado en el tablero y en posición excéntrica tal y como se define a continuación:

- Carro centrado en el tablero:



- Carro excéntrico en el tablero:



Las cargas debidas al carro introducidas en el emparrillado, corresponden al reparto isostático de cada una de las cargas del vehículo a las barras longitudinales adyacentes y se situarán sobre éstas perpendicularmente a la posición de las ruedas del mismo.

– **Sobrecarga de Nieve:**

Según se indica en el apartado 3.2.3.2.2. de la I.A.P., se supondrá actuando una sobrecarga de nieve en todas aquellas superficies del tablero sobre las que no se ha considerado la actuación de la sobrecarga de uso.

Se toma como valor característico: $q = 0,8 \times S_k$ siendo S_k la sobrecarga característica de nieve sobre un terreno horizontal (S_k=0,4).

– **Gradiente térmico:**

Se define como gradiente térmico al obtenido a partir de una diferencia de temperatura entre las fibras extremas de una sección transversal del elemento. Se define en el apartado 3.2.3.2.3 de la I.A.P.

Para losas aligeradas de hormigón:

$$\Delta T_{SI} = (K_1 \times K_2 \times K_3) \times \Delta T_{SI,ref}$$

siendo: K_1 factor de corrección relativo al canto del tablero ($K_1 = 0.7975$)

K_2 factor de corrección relativo a la existencia de aligeramientos ($K_2 = 1,065$)

K_4 factor de corrección relativo al espesor de pavimento bituminoso ($K_4 = 1.10$)

$\Delta T_{SI,ref}$ ΔT_S de referencia ($\Delta T_{SI,ref} = 11.50$)

Por lo tanto $\Delta T_{SI} = 10,74°$

2.2. HIPOTESIS DE CARGA

Las hipótesis de carga consideradas corresponden a las cargas anteriormente expuestas, teniendo en cuenta que se han calculado 5 hipótesis de sobrecarga uniforme, cada una de las cuales sitúa los 400 Kg/m^2 en cada una de las bandas correspondientes al modelo de cálculo. Además se tienen en cuenta 6 hipótesis del carro de la Instrucción, que corresponden a la situación del mismo en posiciones centrada y excéntrica a L/2, L/4 y sobre estribo.

Los coeficientes de seguridad de las acciones consideradas son los siguientes:

ACCIONES	FAVORABLE	DESFAVORABLE
Peso propio	1,00	1,35
Cargas permanentes	1,00	1,35
Sob. unif. de 400 Kg/m^2	0	1,50
Carro de 60 t	0	1,50
Nieve	0	1,50
Gradiente térmico	0	1,50

A continuación se presenta el listado correspondiente a las hipótesis de carga empleadas en el programa de ordenador, para el cálculo del tablero.

Hipótesis	Titulo
1	PESO PROPIO
2	CARGAS PERMANENTES
3	SOBRECARGA UNIFORME DE 400 Kg/m2 EN BANDA 1
4	SOBRECARGA UNIFORME DE 400 Kg/m2 EN BANDA 2
5	SOBRECARGA UNIFORME DE 400 Kg/m2 EN BANDA 3
6	SOBRECARGA UNIFORME DE 400 Kg/m2 EN BANDA 4
7	SOBRECARGA UNIFORME DE 400 Kg/m2 EN BANDA 5
8	CARRO 1 (CENTRADO EN CENTRO DE VANO)
9	CARRO 2 (EXCENTRICO EN CENTRO DE VANO)
10	CARRO 3 (CENTRADO A L/4)
11	CARRO 4 (EXCENTRICO A L/4)
12	CARRO 5 (CENTRADO EN APOYO)
13	CARRO 6 (EXCENTRICO EN APOYO)
14	SOBRECARGA DE NIEVE
15	GRADIENTE TERMICO

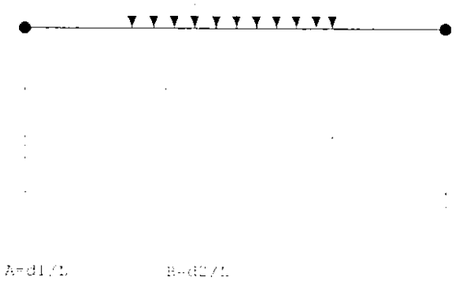
CARGAS EN BARRAS:

	TIPO	P1	P2	A	B
Uniforme	: 0	, P		, A	, B
Trapecial	: 1	, P1	, P2	, A	, B
Concentrada	: 2	, F		, A	,
Torsor Concentrado	: 3	, T		, A	,
Torsor Uniforme	: 4	, Tu		, A	, B
Gradiente Termico	: 5	, °C	, K°		
Flector Puntual	: 6	, M		,A	
Peso Propio	: 7	, Peso especifico			

Las cargas son positivas según los ejes globales de la estructura.

P1 y P2 son los valores de la carga en los puntos A y B excepto en el caso de Gradiente, donde P1 son los grados centigrados y P2 es el coeficiente de dilatación térmica y en el caso de peso propio que P1 es el peso especifico.

A y B son los porcentajes, en tanto por 1 de barra, de la posición inicial (A) y final (B) de la carga:



Hipótesis 1 : PESO PROPIO

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
0	-3.550		0.000	1.000	1-24,97-120
0	-1.980		0.000	1.000	25-48,73-96
0	-2.020		0.000	1.000	49-72
4	2.590		0.000	1.000	97-102
4	-2.590		0.000	1.000	1-24

Hipótesis 2 : CARGAS PERMANENTES

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
0	-0.550		0.000	1.000	1-24,97-120
4	0.358		0.000	1.000	97-120
4	-0.358		0.000	1.000	1-24
0	-0.280		0.000	1.000	24-96
0	-1.500		0.000	1.000	1-24,97-120
4	3.840		0.000	1.000	97-120
4	-3.840		0.000	1.000	1-24

Hipótesis 3 : SOBRECARGA UNIFORME DE 400 Kg/m2 EN BANDA 1

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
0	-0.800		0.000	1.000	1-24
4	-0.520		0.000	1.000	1-24

Hipótesis 4 : SOBRECARGA UNIFORME DE 400 Kg/m2 EN BANDA 2

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
0	-0.400		0.000	1.000	25-48

Hipótesis 5 : SOBRECARGA UNIFORME DE 400 Kg/m2 EN BANDA 3

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
0	-0.400		0.000	1.000	49-72

Hipótesis 6 : SOBRECARGA UNIFORME DE 400 Kg/m2 EN BANDA 4

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
0	-0.400		0.000	1.000	73-96

Hipótesis 7 : SOBRECARGA UNIFORME DE 400 Kg/m2 EN BANDA 5

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
0	-0.800		0.000	1.000	97-120
4	1.600		0.000	1.000	97-120

Hipótesis 8 : CARRO 1 (CENTRADO EN CENTRO DE VANO)

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
2	-10.000		0.328		82,96
2	-10.000		0.000		64,78
2	[illegible]		[illegible]		85,33

Hipótesis 9 : CARRO 2 (EXCENTRICO EN CENTRO DE VANO)

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
2	-10.000		0.328		13
2	-10.000		0.000		15
2	-10.000		0.672		16
2	-9.400		0.328		36
2	-9.400		0.000		38
2	-9.400		0.672		39
2	-0.600		0.328		59
2	-0.600		0.000		61
2	-0.600		0.672		62
3	-10.000		0.328		13
3	-10.000		0.000		15
3	-10.000		0.672		16
3	1.080		0.328		36
3	1.080		0.000		38
3	1.080		0.672		39
3	-0.190		0.328		59
3	-0.190		0.000		61
3	-0.190		0.672		62

Hipótesis 10 : CARRO 3 (CENTRADO A L/4)

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
2	-10.000		0.328		77,31
2	-10.000		0.000		79,33
2	-10.000		0.672		80,34

Hipótesis 11 : CARRO 4 (EXCENTRICO A L/4)

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	barras
2	-10.000		0.328		8
2	-10.000		0.000		10
2	-10.000		0.672		11
2	-9.400		0.328		31
2	-9.400		0.000		33
2	-9.400		0.672		34
2	-0.600		0.328		54
2	-0.600		0.000		56
2	-0.600		0.672		57
3	-10.000		0.328		8
3	-10.000		0.000		10
3	-10.000		0.672		11
3	1.080		0.328		31
3	1.080		0.000		33
3	1.080		0.672		34
3	-0.190		0.328		54
3	-0.190		0.000		56
3	-0.190		0.672		57

Hipótesis 12 : CARRO 5 (CENTRADO EN APOYO)

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	barras
2	-10.000		0.000		73,27
2	-10.000		0.330		75,29
2	-10.000		0.000		77,31

Hipótesis 13 : CARRO 6 (EXCENTRICO EN APOYO)

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
2	-10.000		0.000		2
2	-10.000		0.395		5
2	-10.000		0.067		7
2	-9.400		0.000		25
2	-9.400		0.395		28
2	-9.400		0.067		30
2	-0.600		0.395		51
2	-0.600		0.067		53
3	-10.000		0.000		2
3	-10.000		0.395		5
3	-10.000		0.067		7
3	1.080		0.000		25
3	1.080		0.395		28
3	1.080		0.067		30
3	-0.190		0.395		51
3	-0.190		0.067		53

Hipótesis 14 : SOBRECARGA DE NIEVE

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
0	-0.117		0.000	1.000	1-24,97-120
4	-0.073		0.000	1.000	1-24
4	0.073		0.000	1.000	97-120
0	-0.026		0.000	1.000	25-96

Hipótesis 15 : GRADIENTE TERMICO

CARGAS EN BARRAS:

TIPO	P1	P2	A	B	Barras
5	11.000	0.000010			1-120

2.3. ESFUERZOS MAXIMOS Y MINIMOS

A continuación se presentan los listados correspondientes a los esfuerzos máximos y mínimos, obtenidos por el programa de ordenador, de los momentos flectores, momentos torsores, cortantes y reacciones de cada una de las barras que componen el emparrillado, con sus esfuerzos concomitantes.

Para ello se han realizado las combinaciones de acciones definidas en el apartado 4 de la Instrucción I.A.P.:

Combinación C-1: $\gamma_{pp}.PP + \gamma_{cp}.CP + \gamma_{scu}.SCU + 0{,}60.(\gamma_{carro}.Carro + \gamma_{nieve}.Nieve + \gamma_{GT}.GT)$

Combinación C-2: $\gamma_{pp}.PP + \gamma_{cp}.CP + \gamma_{carro}.Carro + 0{,}60.(\gamma_{scu}.SCU + \gamma_{nieve}.Nieve + \gamma_{GT}.GT)$

Combinación C-3: $\gamma_{pp}.PP + \gamma_{cp}.CP + \gamma_{nieve}.Nieve + 0{,}60.(\gamma_{scu}.SCU + \gamma_{carro}.Carro + \gamma_{GT}.GT)$

Combinación C-4: $\gamma_{pp}.PP + \gamma_{cp}.CP + \gamma_{GT}.GT + 0{,}60.(\gamma_{scu}.SCU + \gamma_{carro}.Carro + \gamma_{nieve}.Nieve)$

Combinación C-1:

Máximos y Mínimos del Esfuerzo FLECTOR

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
1	<MAX>	21.30	18.00	70.04	55.75	-27.42	82.02
	<MIN>	64.77	10.06	-3.09	25.34	2.58	9.35
2	<MAX>	44.15	34.34	72.96	31.99	-21.76	85.07
	<MIN>	23.32	-2.63	9.87	21.30	5.08	17.92
3	<MAX>	36.16	21.62	78.94	33.00	-18.03	91.39
	<MIN>	20.24	-5.42	19.08	18.22	7.87	26.01
4	<MAX>	38.76	16.76	87.91	36.08	-13.70	99.38
	<MIN>	18.03	-8.34	27.70	16.31	10.42	32.97
5	<MAX>	42.98	10.74	99.57	26.02	5.18	105.62
	<MIN>	16.63	-11.31	36.99	11.61	17.40	49.66
6	<MAX>	32.21	-5.36	128.18	32.42	10.36	156.12
	<MIN>	13.55	-17.72	59.43	8.03	23.81	69.81
7	<MAX>	37.55	-10.42	164.67	29.69	19.34	165.63
	<MIN>	9.79	-27.67	81.62	4.73	28.76	89.12
8	<MAX>	32.26	-14.79	206.69	15.40	32.71	216.67
	<MIN>	6.41	-26.14	102.89	1.38	32.23	106.34
9	<MAX>	19.63	-26.89	242.29	11.77	35.81	266.39
	<MIN>	2.87	-28.42	122.43	-2.16	34.50	122.75
10	<MAX>	12.97	-26.74	275.23	-3.89	44.16	275.97
	<MIN>	-0.82	-29.89	139.57	-5.84	35.97	134.89
11	<MAX>	-9.38	-45.47	296.77	-17.24	53.59	298.11
	<MIN>	-4.81	-30.86	156.62	-9.63	36.95	147.50
12	<MAX>	-16.04	-43.50	313.99	-2.98	41.51	308.92
	<MIN>	-8.46	-31.55	165.20	-13.46	37.63	156.39
13	<MAX>	-1.85	-31.19	329.33	-18.70	49.07	318.72
	<MIN>	-17.29	-37.09	174.32	-17.32	38.17	160.04

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
14	<MAX>	-15.45	-39.45	340.88	-23.31	48.37	323.50
	<MIN>	-16.17	-32.56	178.20	-21.19	38.65	161.45
15	<MAX>	-22.68	-36.59	347.60	-39.54	54.51	315.67
	<MIN>	-20.04	-33.02	179.83	-25.07	39.11	159.60
16	<MAX>	-36.35	-44.84	341.72	-53.21	62.76	302.94
	<MIN>	-23.94	-33.51	178.20	-28.96	39.60	154.48
17	<MAX>	-52.30	-52.23	330.65	-51.88	52.52	281.32
	<MIN>	-27.90	-34.03	173.33	-32.92	40.12	146.06
18	<MAX>	-57.28	-52.88	309.14	-58.74	53.46	257.03
	<MIN>	-31.91	-34.60	165.18	-36.93	40.69	134.31
19	<MAX>	-63.30	-53.66	283.76	-65.57	54.41	227.13
	<MIN>	-36.06	-35.25	153.74	-41.09	41.33	119.14
20	<MAX>	-70.33	-54.30	253.41	-72.94	55.21	191.07
	<MIN>	-40.46	-35.94	138.89	-45.48	42.03	100.31
21	<MAX>	-73.61	-46.72	217.26	-81.47	56.64	147.71
	<MIN>	-45.34	-36.64	120.45	-50.37	42.73	77.53
22	<MAX>	-92.76	-67.29	174.41	-92.54	55.22	94.52
	<MIN>	-51.21	-37.20	97.98	-59.56	46.89	49.36
23	<MAX>	-107.37	-66.66	124.56	-108.11	69.54	26.19
	<MIN>	-58.25	-13.64	67.52	-87.92	41.08	6.30
24	<MAX>	-140.64	-59.60	61.02	-86.24	38.49	-36.84
	<MIN>	-97.88	-1.58	20.40	-171.07	43.74	-109.50
25	<MAX>	64.57	24.75	15.49	54.79	-25.72	35.49
	<MIN>	16.17	-9.53	1.56	13.74	7.35	6.99
26	<MAX>	45.11	21.53	35.70	43.80	-21.53	51.73
	<MIN>	15.37	-9.46	7.69	15.55	9.46	13.44
27	<MAX>	38.14	15.86	51.24	37.03	-15.88	62.77
	<MIN>	17.27	-12.03	14.20	16.58	12.03	19.38
28	<MAX>	35.59	2.24	61.99	29.71	-4.18	88.45
	<MIN>	18.20	-13.22	20.82	16.17	13.22	36.24

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
29	<MAX>	33.36	-7.13	90.18	30.09	7.13	118.64
	<MIN>	18.88	-18.00	38.64	16.85	18.00	54.66
30	<MAX>	34.24	-16.15	121.89	30.97	16.15	151.13
	<MIN>	18.65	-22.42	57.02	16.62	22.42	72.83
31	<MAX>	37.05	-23.36	154.25	29.32	22.39	180.92
	<MIN>	17.37	-24.79	74.78	15.35	24.79	89.46
32	<MAX>	27.69	-28.13	183.53	24.41	28.13	206.89
	<MIN>	15.37	-26.19	90.96	13.35	26.19	103.84
33	<MAX>	28.94	-32.82	208.69	17.21	31.85	225.60
	<MIN>	12.93	-27.03	105.00	10.90	27.03	115.70
34	<MAX>	17.96	-35.61	229.75	6.23	34.64	238.90
	<MIN>	10.25	-27.58	116.65	8.22	27.58	124.93
35	<MAX>	8.72	-37.38	239.87	13.54	31.76	252.88
	<MIN>	7.45	-27.94	125.74	5.42	27.58	131.51
36	<MAX>	15.68	-34.34	254.82	4.14	33.37	261.70
	<MIN>	4.56	-28.32	132.22	2.54	28.32	136.41
37	<MAX>	4.56	-36.57	260.84	1.38	36.57	265.26
	<MIN>	1.65	-28.65	136.67	-0.35	28.65	138.65
38	<MAX>	4.68	-40.03	266.12	-7.22	39.03	261.11
	<MIN>	-1.29	-28.96	137.28	-7.77	28.98	138.25
39	<MAX>	-7.05	-43.75	261.66	-16.78	41.87	251.38
	<MIN>	-4.18	-29.33	135.85	-6.21	29.32	131.19
40	<MAX>	-16.59	-47.84	241.99	-19.87	43.86	235.64
	<MIN>	-7.15	-29.72	131.77	-9.13	29.72	124.49
41	<MAX>	-21.78	-45.46	230.08	-24.97	39.41	215.84
	<MIN>	-10.82	-30.14	125.03	-11.61	30.14	116.13
42	<MAX>	-29.53	-40.08	216.54	-28.80	40.08	192.17
	<MIN>	-13.60	-30.60	115.60	-15.05	30.60	103.03
43	<MAX>	-30.67	-40.66	195.69	-34.95	40.66	163.71
	<MIN>	-16.00	-31.10	103.42	-18.09	31.10	88.10

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
44	<MAX>	-36.58	-40.89	163.95	-39.85	40.89	129.67
	<MIN>	-19.36	-31.58	88.33	-21.39	31.58	70.05
45	<MAX>	-44.04	-39.98	129.29	-47.31	39.98	88.32
	<MIN>	-23.22	-31.83	69.99	-25.25	31.83	48.25
46	<MAX>	-49.33	-35.20	85.87	-52.61	35.20	40.15
	<MIN>	-27.22	-31.06	47.48	-32.98	39.61	20.93
47	<MAX>	-41.82	-42.94	34.43	-9.87	-2.17	14.97
	<MIN>	-10.65	-10.62	17.56	-45.41	53.62	-12.08
48	<MAX>	3.52	8.50	19.92	2.83	-8.50	20.90
	<MIN>	-19.40	-38.71	-13.65	-20.53	38.71	-19.76
49	<MAX>	26.22	17.84	20.36	29.05	-15.14	30.80
	<MIN>	19.66	-19.79	-3.44	14.46	16.91	2.21
50	<MAX>	30.59	13.09	32.37	29.46	-13.09	41.57
	<MIN>	19.71	-21.52	3.51	16.46	17.59	9.05
51	<MAX>	32.06	3.92	43.20	33.09	-0.98	72.37
	<MIN>	21.19	-22.09	11.34	18.00	18.07	29.23
52	<MAX>	38.45	-12.91	76.82	35.12	12.91	109.82
	<MIN>	22.53	-23.68	32.73	20.47	23.68	53.01
53	<MAX>	39.92	-22.46	114.72	36.60	22.46	149.04
	<MIN>	22.08	-26.70	54.66	20.02	26.70	73.54
54	<MAX>	36.14	-28.07	152.50	32.27	28.24	183.09
	<MIN>	19.93	-28.03	75.17	17.87	28.03	92.11
55	<MAX>	30.42	-31.82	184.99	27.10	31.82	210.79
	<MIN>	17.28	-28.61	93.04	15.21	28.61	107.61
56	<MAX>	24.30	-34.60	211.77	20.44	34.77	231.59
	<MIN>	14.49	-28.91	108.12	12.43	28.91	120.19
57	<MAX>	17.97	-37.04	231.98	14.11	37.22	246.46
	<MIN>	11.56	-29.12	120.45	9.50	29.12	129.89
58	<MAX>	17.46	-33.74	246.66	14.14	33.74	260.83
	<MIN>	8.54	-29.30	130.00	6.48	29.30	136.74

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
59	<MAX>	11.20	-35.58	261.34	8.55	38.71	270.05
	<MIN>	5.48	-29.51	136.76	3.42	29.51	140.76
60	<MAX>	5.24	-39.05	269.88	1.92	39.05	273.09
	<MIN>	2.46	-29.76	140.74	0.39	29.76	142.02
61	<MAX>	-2.15	-39.42	273.02	-5.48	39.42	269.60
	<MIN>	-0.57	-30.03	141.97	-2.63	30.03	140.53
62	<MAX>	-8.74	-39.80	269.62	-12.07	39.80	260.28
	<MIN>	-3.56	-30.32	140.44	-5.63	30.32	136.31
63	<MAX>	-15.67	-40.18	259.97	-18.99	40.18	244.43
	<MIN>	-6.56	-30.61	136.15	-8.62	30.61	129.34
64	<MAX>	-20.37	-40.52	244.10	-23.70	40.52	224.34
	<MIN>	-9.53	-30.89	129.09	-11.59	30.89	119.62
65	<MAX>	-24.77	-40.71	223.76	-28.09	40.71	200.05
	<MIN>	-12.44	-31.13	119.21	-14.69	31.13	107.13
66	<MAX>	-29.19	-40.50	198.96	-32.52	40.50	171.29
	<MIN>	-15.30	-31.04	106.47	-17.36	31.24	91.83
67	<MAX>	-33.27	-39.27	169.40	-36.99	39.27	138.07
	<MIN>	-18.02	-31.02	90.77	-20.08	31.02	73.68
68	<MAX>	-35.61	-35.56	134.89	-38.93	35.56	101.46
	<MIN>	-20.20	-29.96	71.95	-22.26	29.96	52.91
69	<MAX>	-33.62	-26.98	96.76	-36.94	26.98	65.11
	<MIN>	-20.58	-27.09	50.16	-23.39	29.91	30.59
70	<MAX>	-30.02	-13.15	60.80	-32.21	9.13	35.29
	<MIN>	-19.78	-28.94	34.77	-24.95	36.07	7.20
71	<MAX>	-27.58	0.40	31.09	-26.17	-4.33	23.46
	<MIN>	-18.13	-29.06	4.46	-18.83	29.76	-1.09
72	<MAX>	-23.60	6.98	22.11	-21.03	-10.61	14.23
	<MIN>	-12.53	-24.13	-2.60	-17.46	27.93	-8.16
73	<MAX>	0.66	13.78	26.58	0.17	-14.41	27.11
	<MIN>	22.51	-30.58	-13.87	21.38	30.58	-7.15

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
74	<MAX>	15.12	8.50	22.93	42.19	29.95	45.18
	<MIN>	44.36	-43.55	-5.26	7.24	-0.41	20.84
75	<MAX>	52.04	-22.18	51.56	48.77	22.18	96.78
	<MIN>	28.63	-27.66	24.17	26.60	27.66	48.94
76	<MAX>	46.47	-27.98	99.97	43.19	27.98	140.18
	<MIN>	24.79	-28.57	49.78	22.76	28.57	71.11
77	<MAX>	38.25	-30.51	141.17	34.97	30.51	174.01
	<MIN>	21.05	-28.53	71.19	19.02	28.53	89.16
78	<MAX>	31.16	-32.29	174.06	30.19	35.63	201.39
	<MIN>	17.84	-28.32	88.88	15.81	28.32	103.97
79	<MAX>	32.55	-35.73	200.78	21.75	33.97	220.95
	<MIN>	15.04	-28.17	103.43	13.01	28.17	116.01
80	<MAX>	18.89	-35.57	219.94	20.73	36.68	236.15
	<MIN>	12.10	-28.12	115.31	10.07	28.12	125.25
81	<MAX>	16.76	-33.18	235.45	16.15	36.71	250.96
	<MIN>	8.94	-28.15	124.52	6.91	28.19	131.63
82	<MAX>	17.91	-37.00	249.69	5.64	37.00	258.87
	<MIN>	5.99	-28.34	130.94	3.96	28.34	135.41
83	<MAX>	7.33	-37.38	257.98	4.06	37.38	263.08
	<MIN>	3.10	-28.55	134.73	1.07	28.55	136.60
84	<MAX>	6.68	-37.77	262.14	-5.60	37.77	258.58
	<MIN>	0.21	-28.76	135.89	-1.81	28.76	135.18
85	<MAX>	-3.83	-38.10	257.54	-16.11	38.10	249.99
	<MIN>	-2.65	-28.94	134.43	-4.68	28.94	131.13
86	<MAX>	-14.15	-38.28	249.22	-17.42	38.28	235.06
	<MIN>	-5.50	-29.08	130.33	-7.52	29.08	124.49
87	<MAX>	-17.97	-38.14	233.97	-21.25	38.14	216.37
	<MIN>	-8.27	-29.12	123.59	-10.29	29.12	115.26
88	<MAX>	-21.98	-37.56	214.85	-25.26	37.56	193.67
	<MIN>	-10.92	-29.00	114.20	-12.95	29.00	103.50

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
89	<MAX>	-25.42	-36.26	191.65	-28.69	36.26	167.37
	<MIN>	-13.35	-28.54	102.21	-15.38	28.54	89.32
90	<MAX>	-27.76	-33.59	164.71	-31.04	33.59	138.33
	<MIN>	-15.34	-27.49	87.67	-17.37	27.49	73.00
91	<MAX>	-28.30	-28.66	134.99	-31.57	28.66	108.13
	<MIN>	-16.54	-25.38	70.59	-18.57	25.38	55.14
92	<MAX>	-26.87	-20.68	104.67	-30.15	20.68	79.10
	<MIN>	-16.62	-21.72	52.62	-18.65	21.72	36.80
93	<MAX>	-25.76	-9.36	76.91	-29.04	9.36	52.34
	<MIN>	-15.69	-16.34	34.23	-18.79	23.00	18.93
94	<MAX>	-32.19	3.61	52.61	-33.31	-3.61	42.59
	<MIN>	-16.68	-20.83	17.12	-17.38	20.83	11.90
95	<MAX>	-38.82	9.28	42.83	-40.13	-9.28	28.61
	<MIN>	-15.24	-17.55	13.84	-16.88	15.49	5.28
96	<MAX>	-49.09	14.81	38.16	-48.60	-14.99	10.49
	<MIN>	-12.74	-15.62	4.16	-13.55	15.62	-0.59
97	<MAX>	90.05	-32.43	-26.79	128.54	45.26	69.94
	<MIN>	159.52	-32.02	-94.23	93.65	-2.56	21.67
98	<MAX>	98.43	-54.50	43.44	97.68	51.62	133.11
	<MIN>	67.25	-21.72	14.98	55.07	9.53	68.69
99	<MAX>	83.32	-41.07	110.95	90.31	59.71	184.25
	<MIN>	53.37	-39.26	51.50	48.35	33.17	98.11
100	<MAX>	73.24	-43.10	161.94	69.54	58.64	227.15
	<MIN>	47.73	-38.84	79.69	40.70	32.75	130.56
101	<MAX>	66.75	-48.56	204.50	54.84	58.64	249.01
	<MIN>	42.97	-38.26	107.64	37.95	32.18	133.14
102	<MAX>	56.74	-48.22	238.02	48.88	59.31	265.39
	<MIN>	38.51	-37.56	120.38	33.49	31.48	142.68
103	<MAX>	48.35	-46.77	262.75	47.85	61.70	304.39
	<MIN>	34.68	-36.27	134.85	29.66	32.50	163.71

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
104	<MAX>	49.74	-47.91	281.03	41.88	42.13	322.13
	<MIN>	31.32	-36.70	145.85	26.30	32.94	171.69
105	<MAX>	42.16	-48.62	298.86	34.30	42.83	333.15
	<MIN>	27.92	-37.03	153.70	22.89	33.26	176.49
106	<MAX>	34.54	-49.15	309.43	26.68	43.37	336.88
	<MIN>	24.47	-37.30	158.36	19.45	33.54	176.05
107	<MAX>	26.39	-49.75	312.93	18.53	43.97	333.08
	<MIN>	20.99	-37.53	159.78	15.97	33.77	176.36
108	<MAX>	18.76	-50.07	308.94	10.91	44.28	322.26
	<MIN>	17.52	-37.70	157.98	12.50	33.93	171.45
109	<MAX>	11.17	-50.24	297.78	3.31	44.46	304.28
	<MIN>	14.04	-37.75	152.98	9.01	33.99	163.33
110	<MAX>	5.21	-49.56	279.92	-2.65	43.77	281.07
	<MIN>	10.55	-37.62	144.83	5.93	33.86	152.05
111	<MAX>	-0.27	-48.17	257.09	-8.12	42.38	253.33
	<MIN>	7.09	-37.16	133.61	2.07	33.40	137.72
112	<MAX>	-5.48	-45.69	230.07	-13.33	39.91	221.63
	<MIN>	3.68	-36.16	119.54	-1.34	32.40	120.58
113	<MAX>	-10.20	-41.48	199.75	-18.06	35.70	187.07
	<MIN>	0.42	-34.28	102.95	-4.60	30.52	101.08
114	<MAX>	-14.39	-34.90	167.68	-22.24	29.12	151.25
	<MIN>	-2.65	-31.12	84.52	-7.67	27.36	79.89
115	<MAX>	-17.97	-25.63	135.89	-25.83	19.85	116.24
	<MIN>	-5.61	-26.36	65.24	-10.64	22.60	57.95
116	<MAX>	-19.66	-13.54	106.55	-27.52	7.76	85.40
	<MIN>	-7.63	-22.60	45.99	-13.79	16.22	36.07
117	<MAX>	-18.56	-1.03	83.90	-21.25	-0.95	77.80
	<MIN>	-11.59	-15.83	30.66	-14.61	12.31	26.51
118	<MAX>	-14.52	5.35	78.27	-17.60	-7.67	72.48
	<MIN>	-13.01	-12.83	23.99	-16.43	9.33	18.54

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
119	<MAX>	-10.90	12.04	75.38	-8.53	-10.71	71.68
	<MIN>	-15.25	-9.49	16.61	-18.87	6.30	10.21
120	<MAX>	-19.03	13.48	77.07	-7.36	-10.51	73.86
	<MIN>	-19.98	-5.04	9.07	-29.37	1.91	1.62
121	<MAX>	1.79	1.85	1.77	4.58	-0.41	4.19
	<MIN>	11.68	-9.91	-7.97	5.66	7.85	1.15
122	<MAX>	-6.30	-3.51	3.37	2.61	-1.90	3.67
	<MIN>	3.13	-0.83	-2.24	-4.28	7.30	-4.56
123	<MAX>	-6.24	-1.16	3.47	1.47	-2.72	2.83
	<MIN>	0.68	0.10	-1.16	-5.73	4.85	-4.55
124	<MAX>	-7.81	-0.69	5.07	1.39	-6.43	4.24
	<MIN>	0.70	1.64	-2.24	-6.74	6.68	-6.42
125	<MAX>	-4.72	5.99	4.37	0.97	-15.69	3.79
	<MIN>	-1.96	8.30	-2.46	-6.09	3.27	-6.76
126	<MAX>	-2.54	11.25	1.89	0.21	-20.01	0.84
	<MIN>	-0.94	13.58	-5.38	-0.98	-13.71	-6.20
127	<MAX>	-2.35	13.44	-0.74	0.34	0.67	-0.78
	<MIN>	-1.09	16.95	-5.83	-4.33	-23.55	-7.74
128	<MAX>	-0.90	7.92	-2.32	0.43	-13.93	-2.29
	<MIN>	-4.09	24.79	-6.79	-4.15	-23.99	-10.31
129	<MAX>	-1.17	9.38	-3.50	1.34	-12.16	-3.00
	<MIN>	-1.21	27.65	-10.25	-1.28	-26.86	-11.31
130	<MAX>	-1.08	10.28	-4.40	1.07	-11.48	-3.98
	<MIN>	-3.70	30.02	-8.96	-3.78	-29.26	-12.11
131	<MAX>	-2.50	13.90	-4.90	1.09	-11.35	-4.42
	<MIN>	-1.47	31.81	-10.34	-1.47	-31.81	-11.59
132	<MAX>	-0.44	12.80	-5.14	1.15	-14.34	-4.64
	<MIN>	-1.43	28.84	-10.59	-1.43	-28.84	-11.62
133	<MAX>	-0.77	13.03	-5.26	1.23	-14.37	-4.63
	<MIN>	-3.58	30.43	-9.80	-3.58	-30.43	-12.85

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
134	<MAX>	-0.78	13.59	-5.37	1.76	-14.58	-4.38
	<MIN>	-0.95	32.32	-11.94	-0.95	-32.32	-12.75
135	<MAX>	-0.79	23.06	-5.42	1.28	-14.79	-4.62
	<MIN>	-3.53	34.23	-9.81	-3.53	-34.23	-12.80
136	<MAX>	-0.75	23.38	-5.40	1.27	-23.95	-4.67
	<MIN>	-1.29	35.84	-10.64	-1.29	-35.84	-11.75
137	<MAX>	-0.23	24.34	-5.23	-0.23	-24.34	-5.42
	<MIN>	-3.16	27.56	-8.36	-3.28	-37.02	-11.11
138	<MAX>	-0.43	24.82	-5.14	-0.43	-24.82	-5.51
	<MIN>	-1.47	25.60	-8.29	-2.34	-37.62	-10.10
139	<MAX>	-0.17	25.26	-5.15	-0.08	-25.70	-5.29
	<MIN>	-0.88	25.93	-8.38	-1.24	-28.08	-9.35
140	<MAX>	0.40	25.74	-5.21	0.50	-26.12	-4.86
	<MIN>	0.17	28.74	-8.71	0.07	-28.37	-8.58
141	<MAX>	1.41	25.53	-5.49	3.25	-16.54	-3.99
	<MIN>	2.99	29.38	-9.58	0.80	-30.51	-7.49
142	<MAX>	3.71	20.71	-6.29	12.31	-21.38	-0.24
	<MIN>	12.50	29.89	-12.79	3.99	-25.60	-4.99
143	<MAX>	14.36	20.44	-9.84	44.10	-21.91	15.01
	<MIN>	46.56	26.81	-25.06	16.78	-25.43	1.64
144	<MAX>	16.93	-9.43	-6.48	41.72	-20.04	16.16
	<MIN>	41.74	20.49	-19.43	16.95	8.98	7.79
145	<MAX>	-2.38	2.81	0.55	5.09	5.77	6.98
	<MIN>	6.66	-7.43	-1.95	-2.18	-2.78	2.12
146	<MAX>	-2.48	3.84	6.66	-2.20	-3.15	4.28
	<MIN>	0.67	-5.74	0.23	0.39	5.06	0.80
147	<MAX>	-4.72	8.90	11.17	-4.47	-8.36	6.69
	<MIN>	-2.44	-6.17	2.05	-3.70	7.86	-1.46
148	<MAX>	-7.86	19.44	12.46	-7.86	-19.44	4.60
	<MIN>	-4.80	12.57	3.97	-9.50	2.84	-5.01

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
149	<MAX>	-8.52	12.08	8.27	-6.13	-21.31	0.41
	<MIN>	-4.27	16.07	0.29	-9.66	-6.67	-6.81
150	<MAX>	-6.59	13.15	3.74	-4.27	-19.62	-2.46
	<MIN>	-3.23	21.03	-3.10	-8.57	-13.02	-8.95
151	<MAX>	-3.77	12.72	0.04	-1.93	-20.72	-3.53
	<MIN>	-3.40	27.99	-5.78	-5.52	-26.65	-10.88
152	<MAX>	-3.03	12.65	-1.74	-1.45	-11.58	-4.44
	<MIN>	-1.95	29.74	-7.69	-5.20	-28.75	-12.24
153	<MAX>	-1.93	13.05	-3.16	-1.77	-13.85	-4.99
	<MIN>	-1.71	28.69	-8.90	-4.08	-30.56	-12.64
154	<MAX>	-1.72	13.47	-3.91	-0.47	-15.19	-5.23
	<MIN>	-1.98	29.30	-9.59	-3.68	-32.25	-12.62
155	<MAX>	-1.53	14.60	-4.26	-0.28	-14.36	-5.35
	<MIN>	-1.80	33.96	-9.91	-3.53	-29.62	-12.83
156	<MAX>	-1.27	14.94	-4.33	-1.10	-15.62	-5.51
	<MIN>	-1.20	34.52	-10.01	-3.59	-31.17	-12.66
157	<MAX>	-1.61	15.10	-4.11	-1.44	-15.73	-5.62
	<MIN>	-0.81	34.89	-9.95	-4.16	-30.87	-13.49
158	<MAX>	-1.17	15.26	-4.32	-1.03	-15.85	-5.48
	<MIN>	-0.97	35.17	-9.83	-3.53	-34.46	-13.11
159	<MAX>	-1.32	25.09	-4.29	-1.08	-16.17	-5.46
	<MIN>	-0.39	35.44	-9.63	-3.33	-36.18	-12.68
160	<MAX>	-0.13	25.29	-4.87	0.19	-16.33	-4.81
	<MIN>	-1.48	37.73	-9.56	-1.61	-37.23	-11.13
161	<MAX>	0.19	25.97	-4.97	0.67	-16.53	-4.41
	<MIN>	-0.31	28.59	-9.21	-0.80	-37.99	-9.87
162	<MAX>	0.56	25.88	-4.63	1.36	-16.71	-3.63
	<MIN>	0.97	28.93	-8.91	0.16	-39.40	-8.36
163	<MAX>	1.43	26.14	-4.26	2.93	-16.71	-2.60
	<MIN>	3.02	20.63	-8.46	1.52	-30.36	-6.34

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
164	<MAX>	3.32	26.21	-3.80	7.04	-21.44	1.76
	<MIN>	6.74	20.09	-8.27	3.05	-25.17	-3.79
165	<MAX>	7.08	25.66	-3.17	13.66	-23.20	8.59
	<MIN>	12.88	17.80	-7.58	6.71	-24.28	0.78
166	<MAX>	15.65	12.33	-0.32	17.27	-19.10	16.34
	<MIN>	12.01	23.81	-3.82	10.52	-18.86	7.04
167	<MAX>	8.45	0.65	3.22	15.40	-18.22	16.46
	<MIN>	11.39	14.39	-0.19	3.84	3.78	5.50
168	<MAX>	4.25	-0.25	2.23	11.84	-9.15	11.12
	<MIN>	9.55	7.66	-1.13	0.78	2.66	2.54
169	<MAX>	-0.34	5.57	9.86	-1.93	2.53	3.91
	<MIN>	0.71	-4.57	1.65	-6.21	-4.61	-0.51
170	<MAX>	-12.29	11.80	15.49	-6.39	3.38	4.96
	<MIN>	-2.95	-5.21	4.41	-9.11	-8.10	-0.46
171	<MAX>	-14.43	9.48	15.46	-11.35	-2.71	1.34
	<MIN>	-9.70	16.62	5.74	-14.59	-22.35	-5.88
172	<MAX>	-11.76	13.51	8.04	-5.77	-20.75	-1.67
	<MIN>	-7.74	21.97	-0.60	-13.73	-14.72	-10.18
173	<MAX>	-5.33	16.06	1.02	-1.73	-21.55	-2.64
	<MIN>	-4.45	22.46	-5.12	-8.03	-16.67	-11.19
174	<MAX>	-2.54	12.23	-2.10	-0.31	-23.33	-3.40
	<MIN>	-3.21	28.33	-8.08	-4.71	-18.60	-11.89
175	<MAX>	-1.75	12.52	-3.78	0.98	-23.41	-3.44
	<MIN>	-2.11	29.61	-9.76	-2.92	-20.14	-12.17
176	<MAX>	0.66	14.43	-4.66	1.15	-23.47	-3.78
	<MIN>	-1.37	30.88	-10.48	-1.86	-21.54	-11.98
177	<MAX>	0.26	15.24	-5.00	1.66	-23.37	-3.82
	<MIN>	-0.92	32.06	-10.82	-0.69	-32.57	-11.48
178	<MAX>	0.48	14.57	-5.13	1.81	-24.33	-3.80
	<MIN>	-0.33	30.01	-10.97	-0.50	-30.56	-11.37

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
179	<MAX>	1.47	15.44	-5.25	1.65	-14.85	-3.70
	<MIN>	-0.69	31.30	-11.06	-0.86	-31.89	-11.82
180	<MAX>	1.89	15.68	-5.35	2.06	-15.05	-3.38
	<MIN>	-0.73	32.74	-11.10	-0.90	-33.36	-11.91
181	<MAX>	1.54	15.91	-5.12	1.71	-15.24	-3.50
	<MIN>	-0.67	34.18	-10.85	-0.84	-34.86	-11.59
182	<MAX>	1.78	15.94	-5.18	1.95	-15.23	-3.33
	<MIN>	-0.23	35.50	-10.53	-0.40	-36.21	-10.83
183	<MAX>	0.85	16.11	-4.57	1.01	-15.36	-3.67
	<MIN>	0.29	36.42	-9.89	0.12	-37.18	-9.66
184	<MAX>	1.07	16.14	-4.39	1.23	-15.34	-3.18
	<MIN>	0.95	36.93	-9.11	0.79	-37.73	-8.20
185	<MAX>	1.81	15.94	-3.86	2.23	-26.11	-1.98
	<MIN>	1.73	37.06	-8.08	1.31	-32.92	-6.40
186	<MAX>	1.96	25.30	-3.03	3.51	-20.31	0.39
	<MIN>	2.80	28.77	-6.72	2.37	-23.80	-4.30
187	<MAX>	3.92	29.21	-1.43	5.67	-18.69	4.03
	<MIN>	5.29	12.08	-5.33	3.58	-22.98	-1.59
188	<MAX>	5.85	27.08	1.18	8.53	-21.68	9.03
	<MIN>	7.14	8.93	-3.43	4.76	-18.16	1.99
189	<MAX>	8.29	29.19	5.35	8.28	-29.19	13.63
	<MIN>	7.71	0.89	-1.80	5.47	-14.71	5.88
190	<MAX>	5.78	14.79	6.84	6.63	-15.05	10.64
	<MIN>	5.30	-4.25	0.18	3.05	4.79	3.46
191	<MAX>	2.96	5.42	4.11	3.79	-7.32	7.79
	<MIN>	0.20	-2.90	1.22	-0.08	3.61	1.24
192	<MAX>	-2.81	-3.31	6.03	5.84	-6.54	9.74
	<MIN>	3.57	4.06	2.29	-1.35	5.00	-0.70
193	<MAX>	-37.40	14.47	16.12	-15.84	12.10	-5.29
	<MIN>	-14.95	-10.31	6.96	-36.44	-16.49	-16.73

		NUDO DORSAL (i)			NUDO FRONTAL (j)		
Barra		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
194	<MAX>	-44.22	12.56	16.54	-13.34	-18.23	-9.57
	<MIN>	-16.79	22.44	1.14	-42.46	-15.16	-23.89
195	<MAX>	-12.83	11.67	1.33	-4.73	-21.68	-6.35
	<MIN>	-5.23	27.98	-6.09	-11.62	-18.88	-13.51
196	<MAX>	-5.54	12.28	-2.49	-1.19	-23.50	-5.60
	<MIN>	-1.14	27.60	-8.79	-2.99	-18.31	-11.01
197	<MAX>	-2.47	23.37	-3.57	-1.11	-21.71	-5.25
	<MIN>	-0.49	18.31	-10.05	-0.59	-18.69	-10.54
198	<MAX>	-2.53	23.18	-3.54	-0.00	-21.26	-5.01
	<MIN>	0.36	19.20	-10.43	0.27	-19.62	-10.19
199	<MAX>	-1.26	22.63	-3.80	0.74	-23.21	-4.49
	<MIN>	1.56	30.08	-10.34	1.36	-20.57	-9.15
200	<MAX>	-0.70	22.88	-3.77	0.90	-23.07	-3.92
	<MIN>	2.36	31.00	-9.97	2.24	-21.60	-8.00
201	<MAX>	-0.76	23.05	-3.63	0.83	-22.89	-3.81
	<MIN>	2.27	29.77	-9.77	2.27	-29.77	-7.84
202	<MAX>	-0.83	14.31	-3.45	1.18	-22.86	-3.74
	<MIN>	2.15	30.91	-9.67	2.15	-30.91	-8.05
203	<MAX>	-1.33	14.46	-3.11	1.21	-13.72	-3.74
	<MIN>	2.11	32.15	-9.87	2.11	-32.15	-8.07
204	<MAX>	-0.82	14.59	-3.29	1.23	-13.73	-3.69
	<MIN>	2.13	33.36	-9.68	2.13	-33.36	-7.98
205	<MAX>	-0.78	14.69	-3.23	1.25	-13.71	-3.65
	<MIN>	2.21	34.41	-9.29	2.21	-34.41	-7.41
206	<MAX>	0.85	14.73	-3.85	0.85	-14.73	-3.13
	<MIN>	2.32	35.15	-8.70	2.32	-35.15	-6.72
207	<MAX>	1.24	15.13	-3.70	1.57	-19.08	-2.52
	<MIN>	2.54	34.72	-7.91	2.21	-30.77	-5.67
208	<MAX>	1.50	14.55	-3.10	1.85	-18.44	-1.58
	<MIN>	2.75	34.54	-6.86	2.41	-30.66	-4.77

		NUDO DORSAL (i)			NUDO FRONTAL (j)		
Barra		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
209	<MAX>	2.20	18.02	-1.97	2.26	-17.22	-0.09
	<MIN>	2.71	21.75	-5.70	2.64	-22.55	-3.40
210	<MAX>	2.73	15.84	-0.34	2.73	-15.84	1.98
	<MIN>	2.94	20.34	-4.30	2.94	-20.34	-1.80
211	<MAX>	2.50	29.15	1.73	3.54	-18.15	4.72
	<MIN>	2.96	15.56	-2.51	2.92	-15.35	-0.61
212	<MAX>	2.48	24.64	4.76	5.67	-12.91	7.71
	<MIN>	5.81	0.30	-2.33	2.57	-11.87	1.72
213	<MAX>	1.87	12.31	5.00	9.29	-3.91	8.09
	<MIN>	8.50	-3.33	-3.72	1.06	-5.00	1.96
214	<MAX>	0.67	5.86	3.26	7.09	-0.89	5.29
	<MIN>	6.51	-2.81	-3.00	1.10	-2.13	1.05
215	<MAX>	0.30	5.06	4.05	7.21	1.44	5.64
	<MIN>	6.58	-4.97	-3.34	-1.83	-1.59	0.93
216	<MAX>	-0.07	3.07	4.02	3.63	-3.57	4.36
	<MIN>	-4.67	-7.24	1.52	-8.56	7.73	-3.01
217	<MAX>	1.59	6.08	3.75	21.73	3.40	15.91
	<MIN>	69.55	47.42	-50.63	48.79	-57.34	-9.39
218	<MAX>	-10.56	9.59	21.97	-1.64	-2.17	14.65
	<MIN>	14.28	50.78	-17.15	6.11	-57.34	-6.49
219	<MAX>	-37.45	19.60	27.07	-19.03	-6.51	-1.81
	<MIN>	0.43	56.38	-13.53	-19.35	-68.74	-25.34
220	<MAX>	-68.43	20.47	15.96	2.47	-67.47	-19.51
	<MIN>	-4.85	78.46	-28.75	-78.32	-28.12	-60.67
221	<MAX>	-0.21	72.76	-26.60	73.73	-16.89	9.14
	<MIN>	66.08	35.72	-72.97	14.35	-83.58	-30.11
222	<MAX>	25.50	13.40	-12.50	47.02	-27.02	23.92
	<MIN>	29.91	77.12	-35.91	3.48	-59.30	-12.55
223	<MAX>	12.88	10.73	2.95	26.32	-21.26	21.35
	<MIN>	2.91	64.23	-13.54	-10.53	-53.70	-15.16

		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
Barra		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
224	<MAX>	-4.63	5.49	8.30	9.23	-12.22	9.50
	<MIN>	-35.80	64.33	-4.02	-51.09	-55.90	-43.17

Máximos y Mínimos del Esfuerzo TORSOR

		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
Barra		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
1	<MAX>	54.09	33.61	62.53	32.94	9.06	14.97
	<MIN>	32.38	-5.59	4.45	49.10	-30.93	77.84
2	<MAX>	40.12	38.82	69.85	28.16	12.96	27.52
	<MIN>	28.46	-9.74	15.91	24.11	-28.76	73.60
3	<MAX>	29.07	28.05	60.33	24.29	18.13	39.90
	<MIN>	27.06	-14.80	30.66	26.62	-25.32	76.36
4	<MAX>	33.74	24.39	75.87	21.91	22.74	50.98
	<MIN>	24.26	-19.91	43.90	31.65	-22.07	85.88
5	<MAX>	37.24	22.39	77.41	16.75	34.16	79.33
	<MIN>	23.63	-25.88	61.22	30.40	-12.71	102.10
6	<MAX>	36.04	11.43	96.31	11.83	45.07	112.61
	<MIN>	18.71	-36.79	86.91	29.95	-4.64	125.90
7	<MAX>	31.67	4.82	124.43	7.25	55.31	146.75
	<MIN>	14.12	-45.04	137.16	28.57	1.97	152.79
8	<MAX>	30.61	1.95	155.31	2.48	58.04	179.91
	<MIN>	9.35	-50.66	174.61	15.13	12.26	190.70
9	<MAX>	19.85	-9.15	182.55	-0.19	67.91	221.13
	<MIN>	4.22	-54.22	209.77	13.28	15.52	167.27
10	<MAX>	13.66	-8.16	195.98	-8.10	69.94	248.61
	<MIN>	-0.14	-56.56	252.30	4.10	17.55	151.19
11	<MAX>	5.47	-12.72	159.20	-27.49	72.29	278.14
	<MIN>	-6.26	-58.37	190.68	0.45	18.81	161.62
12	<MAX>	1.70	-13.57	170.41	-34.17	71.04	293.67
	<MIN>	-20.31	-62.06	313.03	-6.30	19.66	169.59
13	<MAX>	5.44	-11.94	228.42	-35.97	71.76	286.62
	<MIN>	-31.01	-62.78	318.01	-7.15	20.26	174.19
14	<MAX>	-5.99	-14.71	183.19	-44.39	72.49	289.05
	<MIN>	-36.44	-63.51	321.30	-11.02	20.80	179.97

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
15	<MAX>	-9.88	-15.19	184.80	-50.21	73.15	278.61
	<MIN>	-42.26	-64.18	320.08	-14.90	21.28	173.69
16	<MAX>	-13.79	-15.67	183.15	-63.81	81.19	291.28
	<MIN>	-48.29	-64.85	313.97	-18.82	21.76	168.53
17	<MAX>	-17.79	-16.16	178.24	-70.78	79.62	268.50
	<MIN>	-62.82	-70.64	328.42	-22.81	22.24	160.03
18	<MAX>	-21.87	-16.64	169.99	-75.74	80.37	242.51
	<MIN>	-67.79	-71.39	306.88	-26.90	22.73	148.12
19	<MAX>	-26.19	-17.09	158.33	-81.65	81.34	211.87
	<MIN>	-73.70	-72.36	281.54	-31.22	23.18	132.58
20	<MAX>	-30.93	-17.42	143.02	-88.41	82.35	175.69
	<MIN>	-80.46	-73.37	251.43	-35.95	23.51	113.02
21	<MAX>	-37.75	-17.36	131.33	-94.94	83.40	126.44
	<MIN>	-86.99	-74.42	208.03	-42.77	23.56	95.23
22	<MAX>	-45.20	-16.39	105.56	-104.52	84.34	76.96
	<MIN>	-96.56	-75.37	167.15	-50.23	22.46	62.76
23	<MAX>	-59.68	-12.98	72.49	-119.24	83.67	14.74
	<MIN>	-111.29	-74.69	118.14	-64.70	19.07	16.71
24	<MAX>	-99.55	-0.73	23.62	-153.76	75.96	-78.84
	<MIN>	-145.47	-66.98	55.36	-104.82	6.82	-68.04
25	<MAX>	50.94	26.93	13.12	20.85	11.36	10.20
	<MIN>	21.96	-11.36	2.44	49.51	-27.49	32.65
26	<MAX>	38.56	24.35	32.59	24.29	15.83	20.33
	<MIN>	25.38	-15.93	11.37	37.53	-24.95	46.31
27	<MAX>	30.61	20.84	43.96	26.02	19.91	29.69
	<MIN>	26.97	-19.91	21.48	29.73	-20.84	53.22
28	<MAX>	23.95	13.79	51.09	27.18	27.17	58.61
	<MIN>	30.47	-27.17	32.75	21.92	-13.79	71.66
29	<MAX>	23.70	5.18	72.01	29.18	36.27	90.52
	<MIN>	32.48	-36.27	62.87	21.67	-5.18	92.36

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
30	<MAX>	24.53	-2.04	94.20	29.49	42.58	122.61
	<MIN>	32.79	-42.58	94.68	22.50	2.04	115.35
31	<MAX>	27.91	-8.30	117.35	27.52	46.35	152.57
	<MIN>	31.22	-46.35	126.04	17.42	7.33	136.38
32	<MAX>	15.09	-11.19	99.25	25.91	48.51	187.42
	<MIN>	29.21	-48.51	162.71	13.06	11.19	111.87
33	<MAX>	12.98	-12.39	112.84	22.09	49.99	210.77
	<MIN>	25.39	-49.99	189.47	10.95	12.39	123.58
34	<MAX>	10.46	-13.11	124.29	17.84	50.97	229.87
	<MIN>	21.14	-50.97	212.40	8.43	13.11	132.76
35	<MAX>	7.73	-13.60	133.30	5.25	52.22	240.44
	<MIN>	8.54	-52.22	234.25	5.71	13.60	139.33
36	<MAX>	4.89	-13.97	139.79	0.59	53.74	243.44
	<MIN>	3.88	-53.74	241.44	2.86	13.97	143.23
37	<MAX>	1.99	-14.32	143.89	-3.29	54.56	242.41
	<MIN>	-0.69	-54.56	244.50	-1.03	14.32	144.47
38	<MAX>	-0.91	-14.66	144.78	-8.51	55.11	237.36
	<MIN>	-5.21	-55.11	243.51	-2.92	14.66	143.04
39	<MAX>	-3.84	-15.01	143.36	-13.22	56.05	229.61
	<MIN>	-7.46	-57.02	256.27	-5.87	15.01	138.99
40	<MAX>	-6.79	-15.38	139.26	-20.31	58.05	220.61
	<MIN>	-17.01	-58.65	246.54	-9.82	15.38	132.26
41	<MAX>	-9.78	-15.77	132.49	-21.36	60.29	209.55
	<MIN>	-21.76	-60.29	230.54	-11.81	15.77	122.61
42	<MAX>	-12.90	-16.13	122.99	-24.76	61.33	185.19
	<MIN>	-26.47	-61.33	210.36	-14.92	16.13	110.52
43	<MAX>	-16.24	-16.40	110.63	-34.59	62.16	156.33
	<MIN>	-31.29	-62.16	185.08	-18.27	16.40	95.15
44	<MAX>	-21.22	-16.24	101.69	-36.87	62.98	116.93
	<MIN>	-35.57	-62.98	150.31	-23.25	16.24	81.73

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
45	<MAX>	-26.45	-14.95	81.21	-45.10	63.55	78.11
	<MIN>	-41.81	-63.55	117.09	-28.48	14.95	56.58
46	<MAX>	-29.31	-16.56	54.45	-51.77	62.22	32.15
	<MIN>	-48.47	-62.22	77.11	-31.33	10.56	27.25
47	<MAX>	-7.05	2.43	21.93	-46.21	53.88	-11.80
	<MIN>	-42.91	-53.88	28.16	-9.08	-2.43	14.69
48	<MAX>	4.04	8.60	19.71	-21.04	38.81	-19.71
	<MIN>	-19.92	-38.81	-13.44	3.34	-8.60	20.85
49	<MAX>	25.83	19.33	19.62	19.46	20.90	3.85
	<MIN>	20.81	-20.90	-3.41	25.00	-19.33	28.78
50	<MAX>	25.36	18.65	29.88	25.14	26.78	13.40
	<MIN>	26.28	-26.78	5.53	24.66	-18.65	37.54
51	<MAX>	24.95	13.27	37.66	31.01	35.58	46.78
	<MIN>	34.35	-35.58	17.46	22.89	-13.27	59.11
52	<MAX>	26.57	2.25	61.72	35.86	45.13	86.34
	<MIN>	39.20	-45.13	52.68	24.51	-2.25	84.63
53	<MAX>	28.22	-5.95	88.13	35.64	50.06	124.28
	<MIN>	38.99	-50.06	90.81	26.15	5.95	112.52
54	<MAX>	25.54	-11.17	115.11	32.49	52.00	157.64
	<MIN>	35.83	-52.00	127.01	22.94	11.34	136.76
55	<MAX>	17.24	-13.28	100.93	29.36	52.75	194.32
	<MIN>	32.71	-52.75	166.48	15.18	13.28	115.46
56	<MAX>	14.47	-13.87	116.04	24.97	53.23	219.03
	<MIN>	28.32	-53.23	195.13	12.41	13.87	128.10
57	<MAX>	11.55	-14.19	128.40	20.51	53.52	239.26
	<MIN>	23.85	-53.52	219.37	9.48	14.19	137.83
58	<MAX>	8.53	-14.41	137.96	8.03	54.42	249.06
	<MIN>	11.37	-54.42	240.35	6.46	14.41	144.69
59	<MAX>	5.48	-14.63	144.73	2.83	55.57	252.81
	<MIN>	6.18	-55.57	248.77	3.42	14.63	148.72

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
60	<MAX>	2.46	-14.88	148.71	-2.20	56.36	252.04
	<MIN>	1.14	-56.36	252.51	0.39	14.88	149.98
61	<MAX>	-0.56	-15.10	149.93	-7.14	56.94	246.85
	<MIN>	-3.79	-56.94	251.76	-2.63	15.10	148.50
62	<MAX>	-3.55	-15.46	148.40	-12.18	58.28	253.62
	<MIN>	-8.29	-58.11	262.72	-5.62	15.46	144.28
63	<MAX>	-6.55	-15.72	144.10	-18.41	60.22	237.92
	<MIN>	-15.06	-60.22	252.93	-8.61	15.72	137.31
64	<MAX>	-9.51	-15.96	137.02	-23.46	61.45	217.56
	<MIN>	-20.11	-61.45	237.10	-11.57	15.96	127.57
65	<MAX>	-12.42	-16.09	127.12	-28.31	62.21	192.65
	<MIN>	-24.96	-62.21	216.54	-14.48	16.09	115.06
66	<MAX>	-15.26	-15.91	114.32	-32.96	62.50	163.22
	<MIN>	-25.62	-62.50	191.29	-17.32	15.91	99.71
67	<MAX>	-18.68	-14.72	105.77	-36.26	62.30	132.95
	<MIN>	-32.91	-60.30	163.96	-20.94	14.72	87.91
68	<MAX>	-20.24	-11.51	85.84	-39.45	60.70	85.99
	<MIN>	-36.10	-60.73	119.88	-23.30	11.51	66.76
69	<MAX>	-19.52	-4.72	68.85	-39.46	55.82	47.29
	<MIN>	-36.11	-55.82	81.19	-20.19	4.72	46.34
70	<MAX>	-17.31	5.82	44.41	-34.16	45.82	11.93
	<MIN>	-30.81	-45.82	41.07	-19.38	-5.22	27.96
71	<MAX>	-13.25	10.44	28.90	-25.29	36.10	0.15
	<MIN>	-24.15	-36.10	7.71	-15.96	-10.44	22.19
72	<MAX>	-19.09	11.72	21.22	-18.61	29.04	-8.15
	<MIN>	-17.29	-29.04	-1.66	-10.86	-11.72	14.20
73	<MAX>	2.35	14.51	26.29	21.89	30.67	-6.94
	<MIN>	23.02	-30.67	-13.82	1.66	-14.51	26.91
74	<MAX>	14.32	8.75	22.65	41.86	43.81	34.05
	<MIN>	45.16	-43.81	-4.98	12.29	-8.75	34.59

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
75	<MAX>	36.57	-5.07	40.83	46.84	51.56	81.63
	<MIN>	50.13	-51.56	38.14	34.54	5.07	72.72
76	<MAX>	33.14	-10.60	75.58	40.55	52.93	120.67
	<MIN>	43.85	-52.93	82.82	31.11	10.60	104.40
77	<MAX>	22.91	-13.19	82.87	34.56	52.59	153.10
	<MIN>	37.85	-52.59	120.63	20.88	13.19	102.51
78	<MAX>	18.02	-13.62	95.94	30.41	52.07	187.83
	<MIN>	33.70	-52.07	159.09	15.99	13.62	111.19
79	<MAX>	14.94	-13.69	110.92	25.85	51.72	211.50
	<MIN>	29.15	-51.72	186.83	12.91	13.69	123.41
80	<MAX>	11.86	-13.74	122.99	21.13	51.51	230.63
	<MIN>	24.43	-51.51	210.20	9.83	13.74	132.71
81	<MAX>	8.63	-13.84	132.29	9.99	51.76	238.78
	<MIN>	13.29	-51.76	228.34	6.61	13.84	139.13
82	<MAX>	5.65	-14.02	138.75	4.56	52.87	242.78
	<MIN>	7.86	-52.87	237.21	3.62	14.02	142.91
83	<MAX>	2.75	-14.23	142.55	-0.48	53.69	242.28
	<MIN>	2.82	-53.68	241.24	0.72	14.23	144.10
84	<MAX>	-0.13	-14.43	143.71	-5.32	54.26	237.48
	<MIN>	-2.03	-54.26	240.78	-2.15	14.43	142.69
85	<MAX>	-2.97	-14.59	142.24	-9.65	55.17	242.11
	<MIN>	-6.35	-55.17	249.30	-5.00	14.59	138.66
86	<MAX>	-5.78	-14.69	138.15	-15.21	56.62	228.16
	<MIN>	-11.92	-56.62	240.27	-7.81	14.69	132.05
87	<MAX>	-8.48	-14.66	131.62	-20.35	57.51	209.24
	<MIN>	-17.06	-57.51	226.02	-10.90	14.66	122.91
88	<MAX>	-10.96	-14.36	122.09	-24.35	57.73	186.03
	<MIN>	-21.66	-57.73	206.94	-12.99	14.36	111.35
89	<MAX>	-13.06	-13.54	110.24	-28.99	57.14	159.85
	<MIN>	-25.70	-57.14	183.38	-15.09	13.54	97.61

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
90	<MAX>	-15.43	-11.50	103.60	-31.08	55.61	121.74
	<MIN>	-27.79	-55.61	148.15	-17.46	11.50	88.84
91	<MAX>	-15.72	-7.83	87.00	-32.52	52.21	90.05
	<MIN>	-29.23	-52.21	117.75	-17.74	7.83	72.00
92	<MAX>	-14.88	-2.22	70.36	-31.83	45.97	58.24
	<MIN>	-28.53	-45.97	85.32	-16.91	2.22	56.11
93	<MAX>	-15.18	5.46	55.79	-29.15	36.55	28.74
	<MIN>	-25.86	-36.55	58.42	-17.20	-5.46	41.27
94	<MAX>	-23.18	12.37	43.27	-25.34	28.64	17.64
	<MIN>	-24.40	-28.64	25.26	-24.05	-12.37	36.03
95	<MAX>	-30.53	16.50	36.89	-23.48	24.00	8.05
	<MIN>	-22.37	-24.00	16.31	-31.56	-16.50	25.49
96	<MAX>	-42.50	19.57	35.44	-19.04	16.28	-0.03
	<MIN>	-17.54	-18.26	6.64	-43.65	-19.57	9.93
97	<MAX>	108.63	-0.75	-57.99	133.25	55.16	59.51
	<MIN>	141.20	-64.24	-63.58	108.61	-1.33	37.20
98	<MAX>	88.23	-13.35	33.78	101.58	61.78	120.36
	<MIN>	109.53	-70.76	25.68	63.21	7.26	92.74
99	<MAX>	93.31	-17.80	80.97	87.59	60.24	168.13
	<MIN>	95.54	-71.22	85.59	48.29	11.71	131.54
100	<MAX>	40.13	-19.56	97.39	78.52	61.31	207.97
	<MIN>	86.27	-70.68	134.15	35.10	13.47	131.13
101	<MAX>	33.43	-19.74	114.73	71.62	60.26	250.25
	<MIN>	79.77	-69.54	161.06	28.41	13.66	142.46
102	<MAX>	28.65	-19.41	133.83	64.64	59.10	278.77
	<MIN>	72.59	-68.06	217.22	24.47	13.32	157.27
103	<MAX>	24.85	-18.31	149.66	58.36	60.70	301.94
	<MIN>	66.31	-66.05	246.93	19.62	14.54	168.52
104	<MAX>	21.22	-16.85	159.83	45.46	67.72	310.46
	<MIN>	53.41	-66.56	266.11	16.19	15.07	176.60

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
105	<MAX>	17.77	-19.19	167.76	39.63	62.25	316.29
	<MIN>	47.58	-68.09	277.18	12.74	15.43	181.44
106	<MAX>	14.30	-19.47	172.45	33.87	63.36	316.31
	<MIN>	41.83	-69.20	282.37	9.28	15.71	183.02
107	<MAX>	10.82	-19.69	173.90	28.16	64.12	310.78
	<MIN>	36.11	-69.96	281.94	5.79	15.92	181.35
108	<MAX>	7.36	-19.81	172.13	23.43	65.03	315.35
	<MIN>	31.38	-70.87	290.76	2.34	16.04	176.48
109	<MAX>	3.90	-19.78	167.19	17.39	66.51	298.99
	<MIN>	25.35	-72.35	279.81	-1.13	16.01	168.44
110	<MAX>	0.47	-19.49	159.16	11.47	67.28	276.63
	<MIN>	19.43	-73.12	262.76	-4.55	15.72	157.34
111	<MAX>	-2.85	-18.74	148.21	5.72	67.11	246.80
	<MIN>	13.67	-72.95	240.11	-7.87	14.98	143.40
112	<MAX>	-5.99	-17.24	134.69	1.70	65.96	206.45
	<MIN>	8.16	-71.52	212.91	-12.56	13.23	136.62
113	<MAX>	-9.74	-14.56	129.06	-3.04	63.21	171.33
	<MIN>	3.83	-68.36	190.98	-15.84	10.10	117.58
114	<MAX>	-12.66	-9.98	111.66	-7.37	58.03	133.99
	<MIN>	-0.49	-63.17	157.52	-18.76	5.51	97.57
115	<MAX>	-15.11	-3.86	94.48	-11.41	49.81	96.22
	<MIN>	-4.52	-54.95	103.36	-21.21	-0.61	78.19
116	<MAX>	-16.66	3.84	78.85	-15.54	38.42	59.77
	<MIN>	-8.67	-43.56	70.63	-21.76	-8.30	62.06
117	<MAX>	-16.60	13.21	67.17	-14.96	30.49	41.46
	<MIN>	-12.60	-32.24	45.69	-16.48	-13.74	62.44
118	<MAX>	-10.04	16.51	65.44	-10.94	24.82	29.82
	<MIN>	-14.18	-26.88	35.42	-12.49	-18.30	61.38
119	<MAX>	-5.90	20.76	66.50	-16.92	18.75	17.16
	<MIN>	-16.62	-20.71	24.61	-10.82	-22.69	64.88

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
120	<MAX>	-13.70	19.76	71.69	-18.42	13.08	8.28
	<MIN>	-18.98	-14.48	14.52	-18.69	-21.65	67.23
121	<MAX>	2.01	1.89	1.58	11.45	9.94	1.95
	<MIN>	11.45	-9.94	-7.78	2.01	-1.89	3.29
122	<MAX>	1.11	3.13	1.84	-4.27	7.45	-4.32
	<MIN>	-4.27	-7.45	-0.69	1.11	-3.13	2.78
123	<MAX>	0.09	3.99	1.78	-5.59	5.04	-3.24
	<MIN>	-5.59	-5.04	1.51	0.09	-3.99	1.86
124	<MAX>	-0.88	8.88	3.12	-7.26	7.39	-4.15
	<MIN>	-7.26	-7.39	2.03	-0.88	-6.88	2.37
125	<MAX>	-1.95	19.58	2.63	-5.64	5.79	-3.52
	<MIN>	-5.64	-5.79	1.28	-1.95	-19.58	0.97
126	<MAX>	-2.50	24.55	-0.03	-4.74	1.48	-4.21
	<MIN>	-4.74	-1.48	-0.18	-2.30	-24.55	-1.99
127	<MAX>	-2.10	20.66	-3.65	-3.24	-2.53	-6.95
	<MIN>	-3.24	2.53	-3.92	-2.10	-20.86	-4.44
128	<MAX>	-1.74	20.84	-4.75	-4.34	-6.00	-7.96
	<MIN>	-4.04	6.00	-4.57	-1.74	-20.86	-6.14
129	<MAX>	-2.32	21.17	-6.35	-1.58	-9.35	-5.46
	<MIN>	-1.58	9.35	-4.13	-2.02	-21.17	-8.67
130	<MAX>	-1.84	22.08	-7.17	-1.38	-8.82	-6.61
	<MIN>	-1.38	8.82	-4.83	-1.84	22.08	-8.74
131	<MAX>	-1.19	22.89	-10.23	-1.05	-8.45	-6.51
	<MIN>	-1.05	8.45	-5.24	-1.19	-22.89	-11.33
132	<MAX>	-2.20	24.13	-8.75	-1.17	-8.76	-6.69
	<MIN>	-1.17	8.76	-5.62	-2.20	-24.13	-11.61
133	<MAX>	-2.13	24.68	-8.25	-1.19	-9.01	-6.59
	<MIN>	-1.15	9.01	-5.57	-2.13	-24.68	-10.41
134	<MAX>	-2.11	25.04	-8.31	-1.14	-9.04	-6.57
	<MIN>	-1.13	9.04	-5.61	-2.11	-25.04	-10.11

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
135	<MAX>	-3.23	35.49	-9.72	-1.10	-9.47	-6.54
	<MIN>	-1.10	9.47	-5.62	-3.23	-35.49	-12.46
136	<MAX>	-1.00	37.15	-10.55	-1.04	-9.71	-6.49
	<MIN>	-1.04	9.71	-5.60	-1.00	-37.15	-11.41
137	<MAX>	-2.98	38.38	-8.23	-0.92	-9.96	-6.39
	<MIN>	-0.92	9.96	-5.60	-2.98	-38.38	-10.76
138	<MAX>	-2.04	39.03	-8.01	-0.71	-10.21	-6.24
	<MIN>	-0.71	10.21	-5.64	-2.04	-39.03	-9.74
139	<MAX>	-1.19	39.56	-7.97	-0.29	-10.43	-6.01
	<MIN>	-0.29	10.43	-5.76	-1.19	-39.56	-8.98
140	<MAX>	-0.17	40.09	-8.01	0.52	-10.56	-5.62
	<MIN>	0.52	10.56	-6.06	-0.17	-40.09	-8.16
141	<MAX>	1.62	40.71	-8.03	2.44	-10.34	-5.00
	<MIN>	2.44	10.34	-7.07	1.62	-40.71	-6.65
142	<MAX>	6.78	41.18	-9.65	9.45	-9.73	-1.45
	<MIN>	9.45	9.73	-9.49	6.78	-41.18	-3.89
143	<MAX>	26.23	40.62	-16.69	34.85	-6.92	11.29
	<MIN>	34.85	6.92	-18.33	26.23	-40.62	5.60
144	<MAX>	41.74	20.49	-19.43	16.93	9.43	7.91
	<MIN>	16.93	-9.43	-6.48	41.74	-20.49	16.64
145	<MAX>	-3.44	4.30	7.22	6.67	7.50	4.89
	<MIN>	6.67	-7.50	-1.78	-3.44	-4.30	3.79
146	<MAX>	-2.56	5.14	5.93	0.96	5.80	1.69
	<MIN>	0.96	-5.80	0.73	-2.56	-5.14	3.37
147	<MAX>	-4.41	11.13	9.63	-2.40	8.62	0.50
	<MIN>	-2.40	-8.62	2.90	-4.41	-11.13	5.20
148	<MAX>	-7.26	23.84	10.08	-7.43	5.43	-2.32
	<MIN>	-7.43	-5.43	5.09	-7.26	-23.84	2.82
149	<MAX>	-5.89	28.71	4.32	-7.59	-0.41	-4.57
	<MIN>	-7.59	0.41	3.02	-5.89	-28.71	-1.58
150	<MAX>	-3.84	31.29	-0.67	-7.65	-4.53	-7.21
	<MIN>	-7.65	4.53	0.44	-3.84	-31.29	-4.51
151	<MAX>	-2.17	32.50	-4.11	-3.03	-7.54	-6.01
	<MIN>	-3.03	7.54	-2.98	-2.17	-32.50	-6.28
152	<MAX>	-1.52	33.22	-6.59	-1.53	-8.33	-5.82
	<MIN>	-1.53	8.33	-4.29	-1.52	-33.22	-8.12
153	<MAX>	-0.90	33.70	-7.76	-0.89	-8.73	-6.17
	<MIN>	-0.89	8.73	-5.28	-0.90	-33.70	-8.66
154	<MAX>	-3.57	34.14	-8.57	-0.55	-8.98	-6.38
	<MIN>	-0.55	8.98	-5.83	-3.57	-34.14	-12.14
155	<MAX>	-1.88	35.13	-9.50	-0.37	-9.18	-6.47
	<MIN>	-0.37	9.18	-6.10	-1.88	-35.13	-11.38
156	<MAX>	-1.26	35.74	-9.60	-0.29	-9.36	-6.50
	<MIN>	-0.29	9.36	-6.21	-1.26	-35.74	-10.85
157	<MAX>	-0.86	36.15	-9.54	-0.25	-9.56	-6.48
	<MIN>	-0.25	9.56	-6.23	-0.86	-36.15	-10.41
158	<MAX>	-0.62	36.48	-9.42	-0.19	-9.76	-6.40
	<MIN>	-0.20	9.76	-6.19	-0.62	-36.48	-10.03
159	<MAX>	-2.21	38.08	-8.80	-0.12	-9.98	-6.24
	<MIN>	-0.12	9.98	-6.12	-3.01	-38.08	-12.01
160	<MAX>	-1.52	39.14	-9.13	0.04	-10.19	-5.97
	<MIN>	0.04	10.19	-6.01	-1.52	-39.14	-10.64
161	<MAX>	-0.65	39.84	-8.72	0.37	-10.40	-5.51
	<MIN>	0.37	10.40	-5.88	-0.65	-39.84	-9.36
162	<MAX>	0.34	40.31	-8.15	1.04	-10.55	-4.70
	<MIN>	1.04	10.55	-5.74	0.34	-40.31	-7.80
163	<MAX>	1.66	40.63	-6.82	1.66	-10.62	-3.63
	<MIN>	2.66	10.55	-6.28	1.66	-40.63	-5.17
164	<MAX>	4.17	41.07	-4.69	3.13	-9.82	-0.65
	<MIN>	5.63	9.82	-6.29	4.55	-40.86	-1.53
165	<MAX>	10.16	40.17	-0.21	10.28	-7.60	4.44
	<MIN>	10.28	7.60	-5.84	10.16	-40.17	4.94
166	<MAX>	17.36	36.63	-2.74	10.56	-1.59	8.86

Barra		N U D O D O R S A L (i) Cortante	<TORSOR>	Flector	N U D O F R O N T A L (j) Cortante	<TORSOR>	Flector
	<MIN>	10.56	1.59	-1.70	17.36	-36.63	14.62
167	<MAX>	15.44	18.85	0.97	3.81	4.41	5.55
	<MIN>	3.81	-4.41	1.74	15.44	-18.85	16.41
168	<MAX>	11.74	9.16	-0.83	0.87	2.68	2.74
	<MIN>	0.87	-2.68	1.86	11.74	-9.16	10.92
169	<MAX>	-9.35	6.82	9.25	0.63	4.70	3.00
	<MIN>	0.63	-4.70	2.37	-9.35	-6.82	-0.10
170	<MAX>	-13.18	14.54	14.30	-3.18	7.85	2.43
	<MIN>	-3.18	-7.85	5.61	-13.18	-14.54	1.11
171	<MAX>	-15.45	29.74	12.37	-11.11	2.82	-2.43
	<MIN>	-11.11	-2.82	8.68	-15.45	-29.74	-3.08
172	<MAX>	-9.03	33.18	3.35	-11.30	-3.90	-7.67
	<MIN>	-11.30	3.90	3.63	-9.03	-33.18	-5.68
173	<MAX>	-4.02	34.02	-2.57	-7.03	-7.12	-9.01
	<MIN>	-7.03	7.12	-1.99	-4.02	-34.02	-6.59
174	<MAX>	-1.50	34.03	-5.66	-2.44	-8.66	-6.77
	<MIN>	-2.44	8.66	-4.33	-1.50	-34.03	-7.16
175	<MAX>	-0.48	34.04	-7.64	-0.82	-8.91	-6.04
	<MIN>	-0.82	8.91	-5.22	-0.48	-34.04	-8.12
176	<MAX>	0.21	34.04	-8.36	-0.05	-9.03	-5.90
	<MIN>	-0.05	9.03	-5.06	0.21	-34.04	-8.15
177	<MAX>	0.80	34.10	-8.69	0.41	-9.11	-5.75
	<MIN>	0.41	9.11	-6.16	0.80	-34.10	-7.88
178	<MAX>	-0.04	34.85	-10.23	0.61	-9.20	-5.64
	<MIN>	0.61	9.22	-6.25	-0.04	-34.85	-10.27
179	<MAX>	0.44	35.45	-10.06	0.68	-9.36	-5.57
	<MIN>	0.68	9.36	-6.25	0.44	-35.45	-9.62
180	<MAX>	0.71	35.87	-9.83	0.70	-9.51	-5.56
	<MIN>	0.70	9.51	-6.20	0.71	-35.87	-9.12
181	<MAX>	0.89	36.19	-9.56	0.73	-9.66	-5.38
	<MIN>	0.73	9.66	-6.11	0.89	-36.19	-8.67
182	<MAX>	-0.35	37.39	-10.07	0.79	-9.80	-5.17
	<MIN>	0.79	9.80	-5.96	-0.35	-37.39	-10.41
183	<MAX>	0.18	38.31	-9.41	0.93	-9.91	-4.80
	<MIN>	0.93	9.91	-5.73	0.16	-38.31	-9.23
184	<MAX>	0.86	38.81	-8.61	1.22	-9.94	-4.16
	<MIN>	1.22	9.94	-5.38	0.86	-38.81	-7.75
185	<MAX>	1.66	38.95	-7.51	1.82	-9.82	-3.06
	<MIN>	1.82	9.82	-4.88	1.66	-38.95	-5.85
186	<MAX>	2.48	38.68	-5.24	3.32	-9.28	-1.63
	<MIN>	3.32	9.28	-4.95	2.48	-38.68	-2.75
187	<MAX>	4.41	37.79	-3.13	4.94	-7.75	1.07
	<MIN>	4.94	7.75	-3.87	4.41	-37.79	1.28
188	<MAX>	6.84	35.37	0.06	6.51	-4.72	4.16
	<MIN>	6.51	4.72	-2.35	6.84	-35.37	0.99
189	<MAX>	8.71	33.42	4.02	7.08	0.34	6.81
	<MIN>	7.08	-0.34	-1.08	8.71	-30.42	12.33
190	<MAX>	5.88	15.28	6.49	3.21	4.83	3.61
	<MIN>	3.21	-4.83	0.61	5.88	-15.28	12.14
191	<MAX>	3.74	7.36	3.08	-0.03	3.65	1.43
	<MIN>	-0.03	-3.65	1.45	3.74	-7.36	7.63
192	<MAX>	5.84	6.61	3.71	-4.36	5.07	-0.03
	<MIN>	-4.36	-5.07	4.34	5.86	-6.61	9.67
193	<MAX>	-36.44	14.68	14.05	-16.84	12.10	-5.09
	<MIN>	-16.84	-18.10	8.19	-36.44	-16.49	-16.77
194	<MAX>	-28.70	43.44	4.79	-31.36	-3.42	-19.69
	<MIN>	-35.36	3.42	11.39	-29.74	-53.83	-15.49
195	<MAX>	-6.05	44.57	-4.30	-9.90	-6.76	-10.55
	<MIN>	-9.90	6.76	-0.13	-6.05	-34.37	-9.44
196	<MAX>	-1.32	33.97	-6.93	-2.85	-8.14	-8.61
	<MIN>	-2.85	8.14	-6.19	-1.32	-33.97	-8.65
197	<MAX>	0.19	33.45	-8.19	-0.41	-8.65	-6.19

		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
Barra		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
	<MIN>	-0.41	8.65	-5.84	0.19	-33.45	-8.03
198	<MAX>	0.78	33.03	-8.46	0.24	-8.64	-5.76
	<MIN>	0.24	8.64	-5.96	0.78	-33.03	-7.80
199	<MAX>	1.66	32.73	-8.36	1.02	-8.61	-4.98
	<MIN>	1.02	8.61	-5.85	1.66	-32.73	-6.95
200	<MAX>	2.01	32.62	-7.89	1.60	-8.69	-4.29
	<MIN>	1.60	8.69	-5.65	2.01	-32.62	-6.18
201	<MAX>	2.09	33.27	-9.16	1.56	-8.84	-4.13
	<MIN>	1.56	8.84	-5.46	2.09	-33.27	-7.38
202	<MAX>	2.19	33.91	-8.81	1.55	-8.99	-4.05
	<MIN>	1.55	8.99	-5.37	2.19	-33.91	-6.95
203	<MAX>	2.27	34.36	-8.54	1.56	-9.12	-3.99
	<MIN>	1.56	9.12	-5.31	2.27	-34.36	-6.60
204	<MAX>	2.31	34.67	-8.27	1.56	-9.22	-3.89
	<MIN>	1.56	9.22	-5.21	2.31	-34.67	-6.31
205	<MAX>	1.92	35.54	-8.95	1.56	-9.29	-3.74
	<MIN>	1.56	9.29	-5.07	1.92	-35.54	-7.32
206	<MAX>	2.03	36.23	-8.54	1.60	-9.28	-3.47
	<MIN>	1.60	9.28	-4.83	2.03	-36.23	-6.61
207	<MAX>	2.18	36.51	-7.53	1.69	-9.12	-3.02
	<MIN>	1.69	9.12	-4.46	2.18	-36.51	-5.66
208	<MAX>	2.39	36.29	-6.44	1.89	-8.71	-2.37
	<MIN>	1.89	8.71	-3.87	2.39	-36.29	-4.41
209	<MAX>	2.12	35.46	-4.20	2.81	-7.76	-1.37
	<MIN>	2.81	7.76	-3.76	2.12	-35.46	-2.45
210	<MAX>	2.54	33.80	-2.12	3.19	-6.91	0.12
	<MIN>	3.19	6.91	-2.59	2.54	-33.80	0.04
211	<MAX>	2.85	30.63	0.06	3.65	-2.09	1.66
	<MIN>	3.65	3.09	-1.45	2.85	-30.63	3.64

		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
Barra		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
212	<MAX>	2.74	25.59	3.92	5.55	0.65	3.23
	<MIN>	5.55	-0.65	-1.49	2.74	-25.59	6.25
213	<MAX>	2.09	12.71	4.37	8.28	3.73	3.94
	<MIN>	8.28	-3.73	-3.09	2.09	-12.71	6.15
214	<MAX>	0.75	6.04	2.96	6.43	3.00	2.76
	<MIN>	6.43	-3.00	-2.70	0.75	-6.04	3.60
215	<MAX>	0.31	5.20	3.84	6.57	5.12	2.49
	<MIN>	6.57	-5.12	-3.10	0.31	-5.20	4.11
216	<MAX>	0.40	3.60	3.82	-5.34	7.77	-2.82
	<MIN>	-5.34	-7.77	1.72	0.40	-3.60	4.16
217	<MAX>	46.88	59.84	-40.33	24.21	6.38	13.09
	<MIN>	24.21	-6.38	-8.78	46.68	-59.84	2.03
218	<MAX>	3.96	58.49	-9.26	-0.18	0.96	11.74
	<MIN>	-0.18	-0.96	11.92	3.96	-58.49	-5.05
219	<MAX>	-19.77	68.79	-3.96	-18.87	-6.16	-4.25
	<MIN>	-18.87	6.16	15.80	-19.77	-68.79	-24.97
220	<MAX>	-29.21	84.65	-24.42	-42.99	-10.75	-26.85
	<MIN>	-42.99	10.75	9.69	-29.21	-84.65	-50.53
221	<MAX>	40.16	92.20	-63.11	45.25	-16.04	4.94
	<MIN>	45.25	16.04	-35.94	40.16	-92.20	-26.81
222	<MAX>	30.33	77.17	-35.55	25.08	-13.35	13.89
	<MIN>	25.08	13.35	-12.86	30.33	-77.17	-3.31
223	<MAX>	9.37	67.69	-17.81	9.37	-7.44	12.07
	<MIN>	9.37	7.44	2.71	9.37	-67.69	-6.04
224	<MAX>	-26.06	65.98	-2.00	-5.79	-2.11	0.89
	<MIN>	-5.79	2.11	6.07	-26.06	-65.98	-34.59

Máximos y Mínimos del Esfuerzo CORTANTE

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
1	<MAX>	75.23	9.64	-2.47	72.51	-6.57	20.17
	<MIN>	10.65	20.29	68.34	8.93	-18.21	71.35
2	<MAX>	63.69	10.72	18.86	51.49	1.89	38.03
	<MIN>	4.11	20.92	64.11	2.09	-18.47	65.24
3	<MAX>	47.93	-0.10	37.56	44.73	3.71	54.25
	<MIN>	8.77	16.18	60.75	6.75	-13.73	63.54
4	<MAX>	43.91	-3.06	54.88	41.19	6.12	67.93
	<MIN>	13.15	11.30	61.15	11.43	-9.22	64.91
5	<MAX>	44.34	17.75	92.92	35.74	-5.98	123.19
	<MIN>	15.17	-16.32	39.64	10.15	22.41	50.99
6	<MAX>	61.61	4.22	121.27	33.75	4.70	155.06
	<MIN>	11.72	-23.38	63.68	6.70	29.47	71.94
7	<MAX>	38.82	-4.44	158.68	30.96	13.36	189.97
	<MIN>	9.49	-28.65	87.42	-2.84	38.46	111.33
8	<MAX>	33.52	-8.78	198.44	18.11	21.55	191.26
	<MIN>	0.23	-35.59	130.58	-4.82	45.76	140.38
9	<MAX>	21.05	-19.77	210.08	13.95	16.61	182.49
	<MIN>	-2.43	-38.93	153.45	-8.26	57.63	193.87
10	<MAX>	16.32	-12.45	190.42	10.03	18.38	191.03
	<MIN>	-6.19	-51.17	222.25	-13.96	62.37	257.81
11	<MAX>	12.88	-13.45	205.99	7.27	18.94	202.98
	<MIN>	-12.27	-55.08	273.15	-27.48	72.29	278.14
12	<MAX>	12.96	-14.06	234.16	4.49	19.73	216.45
	<MIN>	-20.42	-61.03	298.71	-34.07	71.04	283.87
13	<MAX>	5.44	-11.94	228.42	-7.15	20.28	174.19
	<MIN>	-31.01	-62.76	316.61	-38.07	71.76	286.62
14	<MAX>	-5.95	-20.03	237.13	-10.97	26.12	229.54
	<MIN>	-36.44	-63.51	301.30	-44.79	72.49	285.09

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
15	<MAX>	-9.88	-15.19	184.80	-14.90	21.28	173.69
	<MIN>	-42.26	-64.18	320.08	-50.21	73.15	278.61
16	<MAX>	-13.79	-15.67	183.15	-18.82	21.76	169.53
	<MIN>	-46.29	-64.85	313.97	-63.61	81.19	291.28
17	<MAX>	-17.79	-16.16	178.24	-22.81	22.24	160.03
	<MIN>	-50.82	-70.64	328.42	-70.75	79.60	268.50
18	<MAX>	-21.87	-16.64	169.99	-26.90	22.73	148.12
	<MIN>	-67.79	-71.39	306.88	-75.74	80.37	242.51
19	<MAX>	-26.19	-17.09	158.33	-31.22	23.18	132.58
	<MIN>	-73.70	-72.36	281.64	-81.65	81.34	211.87
20	<MAX>	-30.93	-17.42	143.02	-35.95	23.51	113.02
	<MIN>	-82.46	-73.37	251.43	-88.41	82.35	175.69
21	<MAX>	-36.48	-17.44	123.59	-41.51	23.53	89.61
	<MIN>	-89.09	-74.93	216.78	-96.20	83.31	133.06
22	<MAX>	-43.09	-16.74	97.10	-48.41	22.87	57.68
	<MIN>	-97.88	-74.96	176.62	-105.83	83.96	88.05
23	<MAX>	-50.29	-15.64	67.52	-56.27	19.73	13.02
	<MIN>	-110.72	-74.33	133.19	-120.97	83.50	38.43
24	<MAX>	-79.30	-33.29	34.93	-84.57	39.34	-38.56
	<MIN>	-164.55	-33.99	43.60	-172.74	42.90	-107.76
25	<MAX>	64.78	24.14	15.41	56.08	-31.47	35.24
	<MIN>	14.39	-6.74	1.88	13.53	4.74	6.90
26	<MAX>	47.21	14.91	30.65	48.89	-14.92	48.61
	<MIN>	16.19	-6.71	8.17	14.33	4.73	13.65
27	<MAX>	41.72	9.37	40.25	37.45	-12.84	69.61
	<MIN>	16.84	-8.04	14.49	14.15	8.99	19.55
28	<MAX>	37.09	-10.78	45.80	32.09	16.30	71.60
	<MIN>	16.37	7.66	40.13	14.04	-7.06	53.64
29	<MAX>	32.31	-11.43	71.47	31.45	25.85	107.14
	<MIN>	15.75	-8.21	53.76	12.52	8.53	78.51

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
30	<MAX>	36.68	-37.64	105.95	33.38	40.56	137.68
	<MIN>	16.61	-5.56	68.44	12.95	6.02	96.46
31	<MAX>	38.26	-39.46	146.11	28.95	46.06	160.05
	<MIN>	15.10	-11.14	97.81	11.89	10.50	110.32
32	<MAX>	29.21	-48.51	162.71	25.91	48.51	187.42
	<MIN>	13.77	-12.89	112.22	11.74	12.89	123.66
33	<MAX>	29.17	-48.31	197.53	22.09	49.99	210.77
	<MIN>	11.74	-28.96	117.10	9.72	28.96	126.73
34	<MAX>	21.23	-30.04	220.27	17.96	30.04	237.84
	<MIN>	9.12	-29.67	127.89	1.26	32.82	158.35
35	<MAX>	17.31	-36.80	236.74	14.13	36.02	246.33
	<MIN>	4.06	-35.29	159.11	1.95	36.08	166.32
36	<MAX>	15.96	-37.26	251.45	4.50	29.75	217.51
	<MIN>	1.12	-36.66	162.40	-1.09	37.51	167.06
37	<MAX>	5.53	-35.84	250.11	2.69	27.71	214.38
	<MIN>	-1.87	-39.11	172.83	-4.33	47.24	209.47
38	<MAX>	5.59	-23.81	197.35	-2.88	16.43	151.83
	<MIN>	-5.42	-52.35	230.19	-8.56	53.34	228.59
39	<MAX>	-3.48	-22.34	184.81	-5.87	15.01	138.99
	<MIN>	-9.89	-54.57	233.94	-19.22	56.05	245.61
40	<MAX>	-6.79	-15.38	139.26	-8.82	15.38	132.26
	<MIN>	-17.01	-58.65	246.54	-20.31	58.65	229.80
41	<MAX>	-9.78	-15.77	132.49	-11.81	15.77	122.81
	<MIN>	-21.76	-60.29	230.56	-25.06	60.29	209.55
42	<MAX>	-12.90	-16.13	122.99	-14.92	16.13	110.52
	<MIN>	-26.47	-61.33	210.35	-29.76	61.33	185.13
43	<MAX>	-16.06	-31.10	103.42	-18.09	31.10	88.10
	<MIN>	-31.29	-62.16	185.88	-34.59	62.16	156.33
44	<MAX>	-19.36	-31.58	88.33	-21.39	31.58	70.05
	<MIN>	-37.13	-47.18	162.29	-40.40	47.18	127.52

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
45	<MAX>	-23.22	-31.83	69.99	-25.25	31.83	48.25
	<MIN>	-44.67	-46.20	127.21	-47.95	46.20	85.67
46	<MAX>	-27.22	-31.06	47.48	-29.25	31.06	22.15
	<MIN>	-50.14	-41.27	83.33	-53.41	41.27	36.89
47	<MAX>	-5.70	1.43	18.99	-7.73	-1.43	12.97
	<MIN>	-44.26	-52.88	31.10	-47.55	52.88	-10.08
48	<MAX>	5.39	5.55	16.84	4.70	-5.55	18.39
	<MIN>	-22.34	-33.24	-8.48	-23.47	33.24	-15.50
49	<MAX>	31.52	11.68	17.71	30.18	-11.68	28.83
	<MIN>	13.24	-9.91	-0.34	12.41	9.91	4.28
50	<MAX>	32.81	9.09	30.43	31.67	-9.09	40.31
	<MIN>	16.04	-13.07	5.30	15.34	13.07	10.11
51	<MAX>	37.73	-32.28	22.27	34.39	32.28	54.62
	<MIN>	18.04	7.15	27.60	15.98	-7.15	42.86
52	<MAX>	43.05	-42.47	60.71	39.71	42.47	97.83
	<MIN>	19.10	-2.31	44.53	17.04	2.31	60.74
53	<MAX>	42.79	-47.93	102.44	39.45	47.93	139.32
	<MIN>	20.88	-8.84	63.41	18.81	8.84	81.21
54	<MAX>	37.29	-50.32	142.26	33.94	50.32	174.20
	<MIN>	18.60	-14.24	97.24	16.53	14.24	112.99
55	<MAX>	32.71	-52.75	166.48	29.36	52.75	194.32
	<MIN>	15.76	-15.68	114.38	13.70	15.68	127.59
56	<MAX>	28.32	-53.23	195.13	24.97	53.23	219.03
	<MIN>	13.25	-16.32	128.48	11.19	16.32	139.44
57	<MAX>	23.85	-53.52	219.37	20.51	53.52	239.26
	<MIN>	10.45	-16.64	139.95	8.39	16.64	148.40
58	<MAX>	19.02	-53.77	239.37	15.70	52.78	250.44
	<MIN>	5.49	-19.71	168.79	3.41	20.71	177.28
59	<MAX>	11.96	-54.06	255.05	8.73	53.06	259.65
	<MIN>	2.43	-19.93	172.99	0.25	20.93	178.88

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
60	<MAX>	5.38	-52.54	254.51	2.25	51.55	253.17
	<MIN>	-0.49	-36.91	176.04	-2.77	37.91	179.35
61	<MAX>	-0.24	-18.00	164.10	-2.53	17.01	158.08
	<MIN>	-4.11	-54.09	237.59	-7.24	55.09	237.27
62	<MAX>	-3.43	-16.43	153.03	-5.62	15.44	144.28
	<MIN>	-8.93	-54.16	259.22	-12.18	58.28	253.62
63	<MAX>	-6.53	-16.71	148.59	-8.61	15.72	137.31
	<MIN>	-15.81	-54.55	249.65	-19.13	55.54	238.49
64	<MAX>	-9.51	-15.96	137.02	-11.57	15.96	127.57
	<MIN>	-20.54	-55.92	238.18	-23.88	55.92	218.25
65	<MAX>	-12.42	-16.09	127.12	-14.48	16.09	115.06
	<MIN>	-24.99	-56.22	217.71	-28.33	56.22	193.80
66	<MAX>	-15.26	-15.91	114.32	-17.32	15.91	99.71
	<MIN>	-29.62	-62.50	191.29	-32.96	62.50	163.22
67	<MAX>	-17.80	-14.94	98.50	-19.87	14.94	81.61
	<MIN>	-33.98	-62.08	161.22	-37.33	62.08	129.25
68	<MAX>	-18.99	-12.10	79.61	-21.05	12.10	61.65
	<MIN>	-37.35	-60.11	126.10	-40.69	60.11	91.10
69	<MAX>	-17.16	-5.72	58.89	-19.22	5.72	42.57
	<MIN>	-37.46	-54.82	86.18	-40.82	54.82	51.06
70	<MAX>	-15.95	3.81	40.81	-18.01	-3.81	25.58
	<MIN>	-32.33	-38.68	47.61	-35.67	38.68	17.11
71	<MAX>	-15.01	-16.13	8.04	-15.72	16.13	3.33
	<MIN>	-28.70	-4.12	30.63	-29.84	4.12	21.66
72	<MAX>	-11.56	-14.47	1.32	-12.39	14.47	-3.00
	<MIN>	-25.65	-0.03	20.03	-26.99	0.03	10.54
73	<MAX>	32.04	-25.85	-9.57	26.31	22.43	1.21
	<MIN>	-4.03	10.23	21.80	-4.72	-10.23	20.45
74	<MAX>	48.65	-41.21	-1.36	45.36	41.21	40.81
	<MIN>	7.28	4.74	15.35	5.26	-4.74	20.98

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
75	<MAX>	55.85	-26.73	46.86	50.79	29.05	93.86
	<MIN>	28.63	-27.66	24.17	26.60	27.66	48.94
76	<MAX>	49.45	-34.02	96.30	46.17	34.02	139.18
	<MIN>	24.79	-28.57	49.78	22.76	28.57	71.11
77	<MAX>	45.27	-35.34	139.34	36.12	36.78	165.07
	<MIN>	21.05	-28.53	71.19	17.11	31.42	101.42
78	<MAX>	33.70	-52.07	159.09	30.41	52.07	187.83
	<MIN>	16.88	-31.16	101.51	14.86	31.16	115.75
79	<MAX>	32.88	-50.66	194.90	25.85	51.72	211.50
	<MIN>	13.98	-16.41	122.85	11.95	16.41	134.48
80	<MAX>	24.43	-51.51	210.20	21.13	51.51	230.63
	<MIN>	10.90	-16.35	134.13	3.68	19.14	161.99
81	<MAX>	19.90	-51.50	229.14	16.60	51.50	245.51
	<MIN>	5.62	-19.30	161.84	3.60	19.30	165.98
82	<MAX>	18.34	-51.77	243.92	8.23	48.42	247.04
	<MIN>	3.11	-19.43	165.74	1.02	20.49	172.14
83	<MAX>	7.78	-50.37	243.49	4.64	49.38	244.39
	<MIN>	0.15	-21.32	176.02	-2.03	22.31	179.84
84	<MAX>	7.36	-45.24	223.50	-1.67	30.54	144.86
	<MIN>	-3.00	-26.52	196.90	-5.89	34.69	232.04
85	<MAX>	-1.83	-36.45	175.79	-4.68	28.94	131.13
	<MIN>	-7.21	-39.01	237.11	-16.11	38.10	249.99
86	<MAX>	-5.41	-29.87	134.81	-7.52	29.08	124.49
	<MIN>	-14.24	-37.49	244.75	-17.42	38.28	235.06
87	<MAX>	-8.27	-29.12	123.59	-10.29	29.12	115.26
	<MIN>	-17.97	-38.14	233.97	-21.25	38.14	216.37
88	<MAX>	-10.92	-29.00	114.20	-12.95	29.00	103.50
	<MIN>	-22.11	-52.64	208.75	-25.41	52.64	187.45
89	<MAX>	-13.06	-13.54	110.24	-15.09	13.54	97.61
	<MIN>	-25.92	-51.68	185.22	-29.21	51.68	160.49

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
90	<MAX>	-14.40	-11.79	96.12	-16.43	11.79	82.29
	<MIN>	-28.95	-49.69	157.64	-32.24	49.69	130.19
91	<MAX>	-14.50	-8.52	80.48	-16.53	8.52	66.56
	<MIN>	-30.60	-45.89	126.52	-33.89	45.89	97.59
92	<MAX>	-13.49	-3.33	64.95	-15.52	3.33	51.94
	<MIN>	-30.27	-39.37	93.17	-33.56	39.37	64.55
93	<MAX>	-13.57	3.93	51.64	-15.59	-3.93	38.56
	<MIN>	-28.14	-29.86	60.06	-31.44	29.86	33.34
94	<MAX>	-15.61	-11.95	17.91	-16.30	11.95	13.02
	<MIN>	-32.62	0.58	52.45	-33.74	-0.58	42.28
95	<MAX>	-14.76	-9.47	12.34	-15.58	9.47	6.87
	<MIN>	-39.04	6.52	42.43	-40.36	-6.52	28.12
96	<MAX>	-12.07	-13.45	4.27	-12.88	13.45	-0.23
	<MIN>	-49.31	14.20	28.16	-50.62	-14.20	10.14
97	<MAX>	162.70	-29.52	-90.17	154.84	20.60	52.24
	<MIN>	80.08	-35.50	-33.39	75.06	29.42	36.20
98	<MAX>	112.97	-68.17	34.91	105.02	59.19	132.67
	<MIN>	60.04	-15.62	16.49	55.02	9.53	68.09
99	<MAX>	98.26	-68.69	99.68	90.31	59.71	184.25
	<MIN>	46.05	-18.83	60.18	41.03	12.74	99.24
100	<MAX>	87.53	-70.20	140.77	79.58	61.23	215.72
	<MIN>	38.86	-19.64	90.77	33.84	13.56	123.39
101	<MAX>	79.77	-69.26	182.26	71.82	60.28	250.25
	<MIN>	33.43	-19.74	114.73	28.41	13.66	142.46
102	<MAX>	72.59	-68.08	217.22	64.64	59.10	278.77
	<MIN>	28.65	-19.41	133.83	23.62	13.32	157.27
103	<MAX>	66.31	-66.05	246.03	58.36	60.20	301.94
	<MIN>	24.65	-18.31	148.66	19.62	14.54	168.52
104	<MAX>	60.36	-66.38	269.32	52.41	60.54	319.90
	<MIN>	21.22	-18.83	159.83	16.19	15.07	176.60

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
105	<MAX>	52.76	-67.05	287.19	44.81	61.20	330.95
	<MIN>	17.77	-19.19	167.76	12.74	15.43	181.44
106	<MAX>	45.11	-67.57	297.80	37.16	61.73	334.69
	<MIN>	14.30	-19.47	172.45	9.28	15.71	183.02
107	<MAX>	37.49	-68.93	295.22	29.54	63.09	325.30
	<MIN>	10.82	-19.69	173.90	5.79	15.92	181.35
108	<MAX>	31.38	-70.87	290.76	23.43	65.03	315.35
	<MIN>	7.36	-19.81	172.13	2.34	16.04	176.48
109	<MAX>	25.35	-72.35	279.81	17.50	65.48	286.68
	<MIN>	3.06	-28.42	208.26	-2.07	25.68	221.07
110	<MAX>	19.43	-73.12	262.76	12.06	66.68	264.95
	<MIN>	-0.82	-27.89	195.10	-6.43	24.72	203.79
111	<MAX>	13.70	-72.17	235.15	6.81	66.17	233.05
	<MIN>	-4.26	-27.62	183.73	-10.35	24.02	188.48
112	<MAX>	8.83	-66.62	186.91	2.46	49.65	147.64
	<MIN>	-8.08	-26.09	175.14	-14.65	32.97	207.36
113	<MAX>	4.36	-62.84	155.21	-0.81	46.57	119.07
	<MIN>	-11.61	-23.48	156.61	-19.32	29.69	178.83
114	<MAX>	1.25	-46.66	94.18	-3.78	42.89	93.04
	<MIN>	-15.66	-28.93	162.62	-23.51	23.15	145.05
115	<MAX>	-1.47	-44.34	74.43	-6.49	40.57	70.86
	<MIN>	-19.30	-19.97	132.83	-27.16	14.18	111.99
116	<MAX>	-4.16	-35.65	50.00	-9.19	31.88	44.01
	<MIN>	-21.12	-8.53	105.22	-28.98	2.75	82.75
117	<MAX>	-4.24	-2.94	64.43	-5.95	1.65	62.87
	<MIN>	-23.70	-20.85	52.44	-26.42	18.86	44.77
118	<MAX>	1.19	2.81	62.72	-0.83	-4.33	62.80
	<MIN>	-26.26	-16.40	41.13	-29.45	14.05	31.10
119	<MAX>	7.12	9.12	64.82	5.10	-10.63	67.02
	<MIN>	-30.41	-11.60	28.33	-33.61	9.26	16.79

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
120	<MAX>	2.52	10.74	72.28	0.81	-12.03	72.79
	<MIN>	-35.79	-7.37	15.21	-38.51	5.37	3.83
121	<MAX>	12.22	-9.71	-7.68	12.22	9.71	2.70
	<MIN>	1.23	1.65	1.47	1.23	-1.65	2.51
122	<MAX>	3.57	-0.48	-1.79	3.57	0.48	1.25
	<MIN>	-6.73	-3.84	2.93	-6.73	3.84	-2.79
123	<MAX>	1.73	1.54	0.67	1.73	-1.54	2.14
	<MIN>	-6.43	-1.66	2.99	-6.43	1.66	-2.48
124	<MAX>	1.73	3.63	1.62	1.73	-3.63	3.09
	<MIN>	-8.41	-0.43	4.14	-8.41	0.43	-3.01
125	<MAX>	1.40	10.83	1.74	1.40	-10.83	2.93
	<MIN>	-6.48	1.43	-0.39	-6.48	-1.43	-5.90
126	<MAX>	0.60	14.45	0.08	0.60	-14.45	0.59
	<MIN>	-5.44	5.34	-0.38	-5.44	-5.34	-5.01
127	<MAX>	1.00	16.99	-2.01	1.00	-16.99	-1.16
	<MIN>	-4.94	12.99	-3.11	-4.94	-12.99	-7.31
128	<MAX>	0.89	20.73	-3.41	0.89	-20.73	-2.65
	<MIN>	-4.58	13.93	-6.00	-4.58	-13.93	-9.89
129	<MAX>	1.61	23.82	-4.89	1.61	-23.82	-3.52
	<MIN>	-3.06	15.24	-5.92	-3.06	-15.24	-8.53
130	<MAX>	1.22	24.19	-5.44	1.22	-24.19	-4.40
	<MIN>	-3.89	17.66	-8.24	-3.89	-17.66	-11.55
131	<MAX>	1.24	24.13	-5.92	1.24	-24.13	-4.87
	<MIN>	-3.69	15.59	-7.47	-3.69	-15.59	-10.61
132	<MAX>	1.26	25.85	-6.15	1.26	-25.85	-5.08
	<MIN>	-3.64	30.68	-7.90	-3.64	-30.68	-11.00
133	<MAX>	1.32	25.61	-6.17	1.32	-25.61	-5.05
	<MIN>	-3.67	28.34	-9.34	-3.67	-28.34	-12.46
134	<MAX>	1.85	16.43	-6.34	1.85	-16.43	-4.77
	<MIN>	-2.49	31.97	-7.93	-2.49	-31.97	-10.05

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
135	<MAX>	1.37	16.40	-6.19	1.37	-16.40	-5.02
	<MIN>	-3.62	32.63	-9.34	-3.62	-32.63	-12.40
136	<MAX>	1.40	16.16	-6.25	1.40	-16.16	-5.07
	<MIN>	-2.16	33.04	-7.86	-2.16	-33.04	-9.71
137	<MAX>	-0.05	16.29	-5.78	-0.05	-16.29	-5.83
	<MIN>	-3.37	35.91	-7.85	-3.37	-35.91	-10.72
138	<MAX>	-0.17	16.48	-5.79	-0.17	-16.48	-5.93
	<MIN>	-2.44	36.75	-7.65	-2.44	-36.75	-9.73
139	<MAX>	0.29	21.64	-6.58	0.29	-21.64	-6.33
	<MIN>	-1.64	32.43	-6.99	-1.64	-32.43	-8.39
140	<MAX>	1.34	21.75	-6.94	1.34	-21.75	-5.80
	<MIN>	-0.85	24.85	-6.98	-0.85	-24.85	-7.70
141	<MAX>	3.69	25.62	-7.94	3.69	-25.62	-4.80
	<MIN>	0.36	25.43	-7.16	0.36	-25.43	-6.85
142	<MAX>	12.56	26.94	-12.31	12.56	-26.94	-1.63
	<MIN>	3.65	23.66	-6.77	3.65	-23.66	-3.67
143	<MAX>	46.54	26.80	-25.06	46.54	-26.80	14.50
	<MIN>	14.34	20.44	-9.84	14.34	-20.44	2.35
144	<MAX>	41.74	20.49	-19.43	41.74	-20.49	16.04
	<MIN>	16.93	-9.43	-6.48	16.93	9.43	7.91
145	<MAX>	6.77	-7.44	-1.36	6.77	7.44	5.40
	<MIN>	-3.44	4.30	7.22	-3.44	-4.30	3.79
146	<MAX>	1.02	-5.66	0.74	1.02	5.66	1.76
	<MIN>	-2.62	5.00	5.92	-2.62	-5.00	3.30
147	<MAX>	-2.12	2.37	5.48	-2.12	-2.37	3.36
	<MIN>	-5.07	-3.88	5.57	-5.07	3.88	0.50
148	<MAX>	-4.07	12.62	4.91	-4.07	-12.62	0.85
	<MIN>	-11.39	3.65	7.91	-11.39	-3.65	-3.48
149	<MAX>	-3.41	16.50	1.77	-3.41	-16.50	-1.64
	<MIN>	-10.84	10.63	4.39	-10.84	-10.63	-6.44

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
150	<MAX>	-2.20	18.19	-1.30	-2.20	-18.19	-3.51
	<MIN>	-8.88	13.31	0.13	-8.88	-13.31	-8.76
151	<MAX>	-1.14	21.53	-3.82	-1.14	-21.53	-4.96
	<MIN>	-6.97	14.25	-3.52	-6.97	-14.25	-10.49
152	<MAX>	-0.43	23.16	-4.46	-0.43	-23.16	-4.89
	<MIN>	-6.20	16.87	-5.50	-6.20	-16.87	-11.70
153	<MAX>	0.00	26.15	-5.61	0.00	-26.15	-5.61
	<MIN>	-4.81	19.05	-7.22	-4.81	-19.05	-12.03
154	<MAX>	0.16	21.78	-6.61	0.16	-21.78	-6.45
	<MIN>	-4.26	21.04	-7.71	-4.26	-21.04	-11.97
155	<MAX>	0.27	23.23	-6.62	0.27	-23.23	-6.35
	<MIN>	-4.04	18.59	-8.10	-4.04	-18.59	-12.14
156	<MAX>	0.42	29.64	-7.20	0.42	-29.64	-6.78
	<MIN>	-4.07	15.77	-7.86	-4.07	-15.77	-11.93
157	<MAX>	0.39	20.21	-7.28	0.39	-20.21	-6.90
	<MIN>	-4.64	27.38	-7.66	-4.64	-27.38	-12.30
158	<MAX>	0.42	20.25	-7.32	0.42	-20.25	-6.90
	<MIN>	-4.01	29.24	-7.93	-4.01	-29.24	-11.94
159	<MAX>	0.51	20.29	-7.26	0.51	-20.29	-6.75
	<MIN>	-3.82	31.12	-7.52	-3.82	-31.12	-11.35
160	<MAX>	0.71	20.34	-7.13	0.71	-20.34	-6.42
	<MIN>	-2.16	32.35	-7.89	-2.16	-32.35	-10.06
161	<MAX>	1.22	21.22	-6.60	1.22	-21.22	-5.38
	<MIN>	-1.35	33.23	-7.56	-1.35	-33.23	-8.90
162	<MAX>	1.99	21.22	-6.43	1.99	-21.22	-4.44
	<MIN>	-0.47	33.89	-7.09	-0.47	-33.89	-7.55
163	<MAX>	3.76	22.93	-7.64	3.76	-22.93	-3.88
	<MIN>	0.69	23.84	-5.09	0.69	-23.84	-4.40
164	<MAX>	7.69	26.25	-7.72	7.69	-26.25	-0.03
	<MIN>	2.46	24.13	-4.59	2.46	-24.13	-2.13

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
165	<MAX>	14.70	26.59	-7.40	14.70	-26.59	7.31
	<MIN>	5.66	20.89	-3.61	5.66	-20.89	2.05
166	<MAX>	18.29	20.06	-2.15	18.29	-20.06	16.14
	<MIN>	9.50	17.91	-2.26	9.50	-17.91	7.25
167	<MAX>	15.44	18.85	0.97	15.44	-18.85	16.41
	<MIN>	3.81	-4.41	1.74	3.81	4.41	5.55
168	<MAX>	11.84	9.15	-0.72	11.84	-9.15	11.12
	<MIN>	0.78	-2.66	1.76	0.78	2.66	2.54
169	<MAX>	0.72	-4.69	2.17	0.72	4.69	2.90
	<MIN>	-9.45	6.81	9.45	-9.45	-6.81	0.00
170	<MAX>	-2.91	-5.84	4.46	-2.91	5.84	1.55
	<MIN>	-13.21	13.71	14.97	-13.21	-13.71	1.76
171	<MAX>	-8.68	15.67	5.94	-8.68	-15.67	-2.74
	<MIN>	-16.73	12.09	14.89	-16.73	-12.09	-1.84
172	<MAX>	-5.12	18.70	0.98	-5.12	-18.70	-4.14
	<MIN>	-14.13	15.33	4.09	-14.13	-15.33	-10.04
173	<MAX>	-1.37	23.73	-1.76	-1.37	-23.73	-3.13
	<MIN>	-8.38	14.50	-2.31	-8.38	-14.50	-10.69
174	<MAX>	0.18	25.30	-4.08	0.18	-25.30	-3.90
	<MIN>	-5.20	16.63	-6.19	-5.20	-16.63	-11.39
175	<MAX>	1.58	27.35	-7.05	1.58	-27.35	-5.47
	<MIN>	-3.51	16.50	-6.70	-3.51	-16.50	-10.22
176	<MAX>	1.83	31.79	-8.24	1.83	-31.79	-6.40
	<MIN>	-2.53	13.52	-6.90	-2.53	-13.52	-9.44
177	<MAX>	2.47	31.48	-8.91	2.47	-31.48	-6.44
	<MIN>	-1.65	14.98	-7.20	-1.65	-14.98	-8.65
178	<MAX>	2.67	32.25	-9.09	2.67	-32.25	-6.41
	<MIN>	-1.43	13.17	-7.35	-1.43	-13.17	-8.78
179	<MAX>	2.54	32.07	-8.86	2.54	-32.07	-6.32
	<MIN>	-1.75	14.68	-7.45	-1.75	-14.68	-9.21

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
180	<MAX>	2.94	32.10	-8.94	2.94	-32.10	-6.00
	<MIN>	-1.78	16.32	-7.51	-1.78	-16.32	-9.29
181	<MAX>	2.58	22.37	-8.55	2.58	-22.37	-5.97
	<MIN>	-1.71	27.43	-7.32	-1.71	-27.43	-9.04
182	<MAX>	2.82	22.19	-8.56	2.82	-22.19	-5.74
	<MIN>	-1.28	28.95	-7.05	-1.28	-28.95	-8.33
183	<MAX>	1.90	22.15	-7.88	1.90	-22.15	-5.98
	<MIN>	-0.78	30.09	-6.49	-0.78	-30.09	-7.27
184	<MAX>	2.24	20.99	-7.93	2.24	-20.99	-5.69
	<MIN>	-0.16	30.83	-5.84	-0.16	-30.83	-5.99
185	<MAX>	3.00	22.90	-7.23	3.00	-22.90	-4.23
	<MIN>	0.53	31.25	-4.97	0.53	-31.25	-4.43
186	<MAX>	4.42	20.56	-5.83	4.42	-20.56	-1.41
	<MIN>	1.43	23.27	-3.90	1.43	-23.27	-2.47
187	<MAX>	6.75	25.14	-4.59	6.75	-25.14	2.16
	<MIN>	2.56	20.13	-2.35	2.56	-20.13	0.20
188	<MAX>	9.39	21.25	-1.84	9.39	-21.25	7.55
	<MIN>	3.89	18.59	-0.42	3.89	-18.59	3.47
189	<MAX>	11.18	15.11	1.44	11.18	-15.11	12.62
	<MIN>	4.74	14.77	2.09	4.74	-14.77	6.82
190	<MAX>	6.11	4.20	3.50	6.11	-4.20	9.62
	<MIN>	2.93	6.16	3.47	2.93	-6.16	6.39
191	<MAX>	3.80	7.23	3.80	3.80	-7.23	7.59
	<MIN>	-0.08	-3.51	1.52	-0.08	3.51	1.44
192	<MAX>	5.86	6.61	3.71	5.86	-6.61	9.57
	<MIN>	-4.36	-5.07	4.34	-4.36	5.07	-0.03
193	<MAX>	-14.92	-10.76	7.08	-14.92	10.76	-5.61
	<MIN>	-37.42	14.92	16.00	-37.42	-14.92	-15.80
194	<MAX>	-13.34	18.23	1.77	-13.34	-18.23	-9.57
	<MIN>	-46.66	17.55	16.04	-46.66	-17.55	-23.63

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
195	<MAX>	-3.27	21.53	-4.06	-3.27	-21.53	-6.84
	<MIN>	-14.11	17.86	-0.08	-14.11	-17.86	-12.07
196	<MAX>	-0.15	23.40	-7.19	-0.15	-23.40	-7.31
	<MIN>	-5.89	16.66	-3.25	-5.89	-16.66	-8.25
197	<MAX>	0.96	22.93	-7.93	0.96	-22.93	-7.11
	<MIN>	-3.27	18.34	-4.59	-3.27	-18.34	-7.37
198	<MAX>	1.38	22.45	-8.16	1.38	-22.45	-6.98
	<MIN>	-2.92	18.50	-4.56	-2.92	-18.50	-7.05
199	<MAX>	2.20	26.46	-8.67	2.20	-26.46	-6.80
	<MIN>	-1.53	14.29	-4.22	-1.53	-14.29	-5.52
200	<MAX>	2.88	26.29	-8.45	2.88	-26.29	-6.00
	<MIN>	-0.87	14.83	-4.18	-0.87	-14.83	-4.92
201	<MAX>	2.78	26.25	-8.23	2.78	-26.25	-5.86
	<MIN>	-0.89	15.29	-4.03	-0.89	-15.29	-4.78
202	<MAX>	2.75	26.22	-8.13	2.75	-26.22	-5.79
	<MIN>	-0.92	15.91	-3.84	-0.92	-15.91	-4.62
203	<MAX>	2.74	28.01	-8.10	2.74	-28.01	-5.77
	<MIN>	-1.41	16.31	-3.51	-1.41	-16.31	-4.70
204	<MAX>	2.73	27.96	-7.98	2.73	-27.96	-5.66
	<MIN>	-0.91	25.83	-3.71	-0.91	-25.83	-4.49
205	<MAX>	2.72	27.86	-7.80	2.72	-27.86	-5.49
	<MIN>	-0.89	26.38	-3.67	-0.89	-26.38	-4.42
206	<MAX>	2.73	18.18	-7.33	2.73	-18.18	-5.01
	<MIN>	0.70	26.51	-4.31	0.70	-26.51	-3.71
207	<MAX>	2.83	21.37	-6.82	2.83	-21.37	-4.41
	<MIN>	1.00	29.40	-5.06	1.00	-29.40	-4.21
208	<MAX>	3.07	20.62	-5.96	3.07	-20.62	-3.35
	<MIN>	1.20	29.50	-4.17	1.20	-29.50	-3.15
209	<MAX>	3.49	21.56	-4.89	3.49	-21.56	-1.92
	<MIN>	1.41	19.32	-2.90	1.41	-19.32	-1.70

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
210	<MAX>	4.06	21.34	-2.97	4.06	-21.34	0.48
	<MIN>	1.64	18.13	-1.70	1.64	-18.13	-0.31
211	<MAX>	4.69	17.44	-0.70	4.69	-17.44	3.28
	<MIN>	1.77	16.06	-0.07	1.77	-16.06	1.44
212	<MAX>	6.68	11.89	0.57	6.68	-11.89	6.25
	<MIN>	1.56	12.89	1.86	1.56	-12.89	3.18
213	<MAX>	9.63	3.40	-1.00	9.63	-3.40	7.18
	<MIN>	0.72	5.51	2.26	0.72	-5.51	2.88
214	<MAX>	7.21	0.83	-0.97	7.21	-0.83	5.16
	<MIN>	-0.04	2.18	1.21	-0.04	-2.18	1.18
215	<MAX>	7.93	-2.03	-1.95	7.93	2.03	4.79
	<MIN>	-1.05	2.11	2.69	-1.05	-2.11	1.80
216	<MAX>	0.84	3.15	2.91	0.84	-3.15	3.63
	<MIN>	-5.76	-7.32	2.59	-5.76	7.32	-2.30
217	<MAX>	71.24	48.15	-52.31	71.24	-48.15	12.07
	<MIN>	-0.16	5.30	3.20	-0.16	-5.30	3.06
218	<MAX>	22.75	44.41	-14.00	22.75	-44.41	10.18
	<MIN>	-18.18	15.10	17.31	-18.18	-15.10	-2.02
219	<MAX>	4.11	51.09	-7.86	4.11	-51.09	-3.50
	<MIN>	-42.85	24.37	21.71	-42.85	-24.37	-23.85
220	<MAX>	4.36	70.15	-26.45	4.36	-70.15	-22.51
	<MIN>	-77.62	25.78	13.66	-77.62	-25.78	-56.48

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
221	<MAX>	86.28	35.72	-72.97	86.28	-35.72	4.99
	<MIN>	-0.21	72.76	-26.60	-0.21	-72.76	-26.79
222	<MAX>	53.41	32.74	-34.42	53.41	-32.74	22.35
	<MIN>	2.37	57.98	-14.18	2.37	-57.98	-11.66
223	<MAX>	28.52	23.02	-9.78	28.52	-23.02	20.53
	<MIN>	-12.72	51.94	-0.81	-12.72	-51.94	-14.34
224	<MAX>	9.72	10.60	-0.74	9.72	-10.60	8.04
	<MIN>	-51.52	57.48	4.81	-51.52	-57.48	-41.74

Combinación C-2:

Máximos y Mínimos del Esfuerzo FLECTOR

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
1	<MAX>	22.59	17.77	70.14	73.66	-33.63	85.07
	<MIN>	81.65	15.13	-4.86	25.34	2.58	9.35
2	<MAX>	58.79	43.16	74.89	40.80	-24.68	90.15
	<MIN>	23.32	-2.63	9.87	21.30	5.08	17.92
3	<MAX>	43.94	26.03	82.80	40.95	-22.56	98.09
	<MIN>	20.24	-5.42	19.08	18.22	7.87	26.01
4	<MAX>	46.46	22.23	93.54	43.93	-19.28	107.39
	<MIN>	18.03	-8.34	27.70	16.31	10.42	32.97
5	<MAX>	49.89	20.23	101.78	27.46	3.41	135.06
	<MIN>	16.63	-11.31	36.99	11.61	17.40	49.66
6	<MAX>	34.01	-2.02	135.56	40.04	4.14	170.36
	<MIN>	13.05	-17.72	59.43	8.03	23.81	68.88
7	<MAX>	45.97	-4.22	174.07	38.54	12.86	211.97
	<MIN>	9.76	-22.67	81.62	4.73	28.76	88.12
8	<MAX>	40.53	-6.94	221.10	18.11	30.58	245.08
	<MIN>	6.41	-26.14	102.89	1.38	32.23	106.38
9	<MAX>	23.22	-24.03	259.02	15.79	32.67	276.52
	<MIN>	2.87	-28.42	122.43	-2.16	34.50	122.75
10	<MAX>	16.15	-21.00	294.76	-6.28	44.63	292.46
	<MIN>	-0.82	-29.89	139.57	-5.84	35.97	136.59
11	<MAX>	-1.87	-35.44	314.36	-24.30	59.08	304.94
	<MIN>	-4.61	-30.86	153.92	-9.63	36.95	147.52
12	<MAX>	-23.64	-47.76	329.64	3.80	38.11	327.01
	<MIN>	-8.44	-31.55	165.20	-13.46	37.63	155.38
13	<MAX>	4.39	-26.45	346.61	-18.04	50.09	338.17
	<MIN>	-12.29	-32.09	173.32	-17.32	38.17	160.04
14	<MAX>	-13.89	-39.79	360.28	-21.31	48.43	344.50
	<MIN>	-16.17	-32.56	178.20	-21.19	38.65	161.45
15	<MAX>	-21.53	-34.55	369.63	-43.96	58.19	333.54
	<MIN>	-20.04	-33.02	179.83	-25.07	39.11	159.60
16	<MAX>	-39.87	-47.83	361.69	-62.29	71.47	318.20
	<MIN>	-23.94	-33.51	178.20	-28.96	39.60	154.48
17	<MAX>	-61.93	-59.65	348.87	-55.57	53.91	291.82
	<MIN>	-27.90	-34.03	173.33	-32.92	40.12	146.06
18	<MAX>	-65.63	-60.23	322.43	-62.39	54.95	264.88
	<MIN>	-31.91	-34.60	165.18	-36.93	40.69	134.31
19	<MAX>	-70.83	-61.01	293.42	-68.94	56.03	232.67
	<MIN>	-36.06	-35.25	153.74	-41.09	41.33	119.14
20	<MAX>	-77.33	-61.62	260.19	-76.02	56.90	194.60
	<MIN>	-40.46	-35.94	138.89	-45.48	42.03	100.35
21	<MAX>	-76.81	-48.73	221.76	-84.24	57.37	149.54
	<MIN>	-45.34	-36.64	120.45	-50.37	42.73	77.53
22	<MAX>	-95.67	-69.30	177.21	-95.02	56.95	94.91
	<MIN>	-51.21	-37.20	97.98	-61.78	49.29	49.08
23	<MAX>	-110.03	-68.61	125.93	-113.23	73.65	24.76
	<MIN>	-58.25	-13.64	67.52	-96.66	48.80	3.43
24	<MAX>	-143.32	-61.30	61.15	-85.57	38.83	-37.53
	<MIN>	-97.88	-1.58	20.40	-178.33	49.19	-116.42
25	<MAX>	72.93	27.20	17.52	57.60	-28.82	38.51
	<MIN>	17.26	-9.83	1.65	13.75	6.19	7.15
26	<MAX>	47.96	24.97	38.68	46.73	-24.97	55.76
	<MIN>	16.28	-8.36	7.88	15.47	8.36	13.60
27	<MAX>	41.19	18.95	55.21	40.14	-18.95	67.68
	<MIN>	17.10	-10.81	14.32	16.40	10.81	19.45
28	<MAX>	39.80	5.80	66.73	32.40	-9.03	94.39
	<MIN>	18.20	-13.22	20.82	16.17	13.22	36.24

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
29	<MAX>	35.95	-2.39	96.04	32.90	2.39	126.92
	<MIN>	18.88	-18.60	38.64	16.85	18.60	54.66
30	<MAX>	36.96	-12.03	130.23	33.90	12.03	162.01
	<MIN>	18.65	-22.42	57.02	16.62	22.42	72.83
31	<MAX>	42.38	-20.59	165.16	25.22	18.97	193.30
	<MIN>	17.37	-24.79	74.78	15.35	24.79	89.46
32	<MAX>	28.65	-26.50	196.04	25.59	26.50	220.35
	<MIN>	15.37	-26.19	90.96	13.35	26.19	103.84
33	<MAX>	33.32	-33.15	222.12	16.16	31.53	237.99
	<MIN>	12.93	-27.03	105.00	10.90	27.03	115.70
34	<MAX>	17.99	-37.09	238.97	0.83	35.47	249.58
	<MIN>	10.25	-27.58	116.65	8.22	27.58	124.93
35	<MAX>	5.76	-39.58	250.44	16.18	30.20	265.33
	<MIN>	7.45	-27.98	125.74	5.42	27.98	131.51
36	<MAX>	20.96	-34.14	266.60	3.80	32.52	275.52
	<MIN>	4.56	-28.32	132.22	2.54	28.32	135.41
37	<MAX>	5.10	-37.52	276.85	2.04	37.52	280.05
	<MIN>	1.65	-28.65	136.07	-0.38	28.65	136.65
38	<MAX>	8.68	-42.92	280.92	-8.48	41.30	274.69
	<MIN>	-1.25	-28.98	137.28	-3.28	28.98	135.25
39	<MAX>	-7.24	-46.32	275.12	-24.40	44.70	263.11
	<MIN>	-4.18	-29.33	135.85	-6.21	29.33	131.19
40	<MAX>	-19.77	-48.65	263.66	-22.83	48.65	244.55
	<MIN>	-7.10	-29.72	131.77	-9.12	29.72	124.49
41	<MAX>	-24.32	-50.93	244.87	-26.20	40.83	222.35
	<MIN>	-10.02	-30.14	125.03	-12.05	30.14	115.13
42	<MAX>	-27.75	-41.56	223.15	-30.81	41.56	196.89
	<MIN>	-13.00	-30.60	115.60	-15.03	30.60	103.03
43	<MAX>	-32.62	-42.19	197.49	-35.68	42.19	166.86
	<MIN>	-16.06	-31.10	103.42	-18.09	31.10	88.10

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
44	<MAX>	-38.25	-42.44	167.17	-41.31	42.44	131.48
	<MIN>	-19.36	-31.58	88.33	-21.39	31.58	70.05
45	<MAX>	-45.47	-41.54	131.16	-48.53	41.54	89.00
	<MIN>	-23.22	-31.83	69.99	-25.25	31.83	48.25
46	<MAX>	-50.55	-36.73	86.62	-53.61	36.73	39.91
	<MIN>	-27.22	-31.06	47.48	-35.46	45.31	20.12
47	<MAX>	-43.47	-46.08	34.17	-9.01	-1.88	14.17
	<MIN>	-11.83	-14.05	16.75	-47.20	58.48	-14.55
48	<MAX>	4.26	8.13	19.22	3.57	-8.13	20.42
	<MIN>	-19.48	-42.45	-16.04	-20.53	42.45	-22.16
49	<MAX>	28.36	20.22	22.70	31.01	-17.66	33.89
	<MIN>	20.36	-20.23	-3.49	15.43	17.49	2.47
50	<MAX>	32.18	15.70	35.59	31.12	-15.70	45.28
	<MIN>	20.96	-22.32	3.81	16.01	15.79	9.47
51	<MAX>	32.83	6.55	47.15	34.07	-5.93	78.15
	<MIN>	20.74	-20.49	11.67	18.00	18.07	29.23
52	<MAX>	40.38	-8.19	82.80	37.27	8.19	117.63
	<MIN>	22.53	-23.68	32.73	20.47	23.68	52.01
53	<MAX>	41.89	-18.30	122.77	38.78	18.30	158.96
	<MIN>	22.08	-26.70	54.66	20.02	26.70	73.54
54	<MAX>	37.42	-24.95	162.69	33.42	25.24	194.31
	<MIN>	19.93	-28.03	75.17	17.87	28.03	92.11
55	<MAX>	30.85	-30.07	196.31	27.74	30.07	222.59
	<MIN>	17.28	-28.61	93.04	15.21	28.61	107.61
56	<MAX>	23.87	-34.19	223.57	19.86	34.48	242.77
	<MIN>	14.49	-28.91	108.12	12.43	28.91	120.19
57	<MAX>	16.68	-38.00	243.06	12.67	38.28	256.37
	<MIN>	11.56	-29.12	120.45	9.50	29.12	129.89
58	<MAX>	19.27	-32.29	256.53	16.17	32.29	272.43
	<MIN>	8.54	-29.30	130.00	6.48	29.30	136.74

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
59	<MAX>	12.34	-35.17	273.21	10.35	40.38	283.14
	<MIN>	5.48	-29.51	136.76	3.42	29.51	140.76
60	<MAX>	5.87	-40.72	282.85	2.76	40.72	286.72
	<MIN>	2.46	-29.76	140.74	0.39	29.76	142.02
61	<MAX>	-3.00	-41.09	286.65	-6.11	41.09	282.57
	<MIN>	-0.57	-30.03	141.97	-2.63	30.03	140.53
62	<MAX>	-10.54	-41.47	282.70	-13.65	41.47	271.85
	<MIN>	-3.56	-30.32	140.44	-5.63	30.32	136.31
63	<MAX>	-18.65	-41.85	271.53	-21.76	41.85	253.41
	<MIN>	-6.56	-30.61	136.15	-8.62	30.61	129.34
64	<MAX>	-23.08	-42.19	253.17	-26.19	42.19	231.07
	<MIN>	-9.53	-30.89	129.09	-11.59	30.89	119.62
65	<MAX>	-27.07	-42.38	230.60	-30.17	42.38	204.92
	<MIN>	-12.44	-31.13	119.21	-14.50	31.13	107.13
66	<MAX>	-31.16	-42.17	203.90	-34.27	42.17	174.56
	<MIN>	-15.30	-31.24	106.47	-17.36	31.24	91.83
67	<MAX>	-34.94	-40.94	172.71	-38.05	40.94	139.98
	<MIN>	-18.02	-31.02	90.77	-20.08	31.02	73.68
68	<MAX>	-36.98	-37.21	136.81	-40.08	37.21	102.24
	<MIN>	-20.20	-29.96	71.95	-22.26	29.96	52.91
69	<MAX>	-34.66	-28.56	97.54	-37.77	28.56	65.05
	<MIN>	-20.58	-27.09	50.16	-23.89	31.78	30.47
70	<MAX>	-30.68	-14.61	60.71	-33.10	12.19	32.29
	<MIN>	-20.99	-33.96	26.50	-26.39	41.55	6.11
71	<MAX>	-28.28	-2.68	30.68	-25.10	-3.85	22.50
	<MIN>	-19.01	-34.02	3.20	-19.72	34.02	-2.73
72	<MAX>	-22.60	6.46	21.19	-20.21	-9.95	13.64
	<MIN>	-12.72	-27.74	-4.22	-17.37	31.41	-9.80
73	<MAX>	2.15	15.16	28.50	4.80	-16.20	29.68
	<MIN>	23.24	-31.30	-14.22	22.19	31.30	-7.26

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
74	<MAX>	18.06	10.21	25.84	44.48	27.41	50.30
	<MIN>	45.85	-44.66	-5.33	6.45	-2.14	20.90
75	<MAX>	53.22	-18.09	57.10	50.16	18.09	103.47
	<MIN>	28.63	-27.66	24.17	26.60	27.66	48.94
76	<MAX>	47.53	-24.47	107.05	44.47	24.47	148.31
	<MIN>	24.79	-28.57	49.78	22.76	28.57	71.11
77	<MAX>	38.94	-27.88	149.62	35.89	27.88	183.18
	<MIN>	21.05	-28.53	71.19	19.02	28.53	89.16
78	<MAX>	31.26	-30.75	183.41	32.04	36.30	211.49
	<MIN>	17.84	-28.32	88.88	15.81	28.32	103.97
79	<MAX>	37.05	-36.50	210.88	21.44	33.57	230.14
	<MIN>	15.04	-28.17	103.43	13.01	28.17	116.01
80	<MAX>	17.75	-36.26	229.02	23.22	38.10	244.79
	<MIN>	12.10	-28.12	115.31	10.07	28.12	125.25
81	<MAX>	17.82	-32.22	244.22	19.25	38.11	262.06
	<MIN>	8.94	-28.18	124.52	6.91	28.18	131.63
82	<MAX>	23.13	-38.46	260.51	5.07	38.46	270.85
	<MIN>	5.99	-28.34	130.94	3.96	28.34	135.41
83	<MAX>	8.83	-38.93	269.93	5.77	38.93	276.48
	<MIN>	3.10	-28.55	134.73	1.07	28.55	136.60
84	<MAX>	11.04	-39.43	275.49	-7.02	39.43	270.57
	<MIN>	0.21	-28.76	135.89	-1.81	28.76	135.18
85	<MAX>	-3.19	-39.85	269.48	-21.24	39.85	260.84
	<MIN>	-2.65	-28.94	134.43	-4.68	28.94	131.13
86	<MAX>	-17.13	-40.09	260.29	-20.19	40.09	243.55
	<MIN>	-5.50	-29.08	130.33	-7.52	29.08	124.49
87	<MAX>	-20.37	-39.92	242.57	-23.43	39.92	222.92
	<MIN>	-8.27	-29.12	123.59	-10.29	29.12	115.26
88	<MAX>	-24.12	-39.29	221.43	-27.18	39.29	198.43
	<MIN>	-10.92	-29.00	114.20	-12.95	29.00	103.50

Barra		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
89	<MAX>	-27.26	-37.93	196.41	-30.32	37.93	170.58
	<MIN>	-13.35	-28.54	102.21	-15.38	28.54	89.32
90	<MAX>	-29.30	-35.21	167.89	-32.36	35.21	140.23
	<MIN>	-15.34	-27.49	87.67	-17.37	27.49	73.00
91	<MAX>	-29.52	-30.22	136.85	-32.58	30.22	109.00
	<MIN>	-16.54	-25.38	70.89	-18.57	25.38	55.14
92	<MAX>	-27.74	-22.16	105.48	-30.80	22.16	79.22
	<MIN>	-16.62	-21.72	52.62	-18.65	21.72	36.80
93	<MAX>	-26.25	-10.72	76.97	-29.31	10.72	52.05
	<MIN>	-15.69	-16.34	34.23	-19.50	27.44	18.72
94	<MAX>	-32.55	1.17	52.23	-33.59	-1.17	42.09
	<MIN>	-16.94	-23.52	16.77	-17.64	23.52	11.47
95	<MAX>	-38.94	7.04	42.29	-40.17	-7.04	28.03
	<MIN>	-15.33	-19.99	10.44	-17.52	23.22	4.73
96	<MAX>	-48.86	12.70	27.51	-47.41	-16.34	10.05
	<MIN>	-12.64	-18.43	3.47	-13.45	18.43	-1.24
97	<MAX>	94.91	-31.27	-24.23	126.98	40.85	74.87
	<MIN>	161.44	-33.11	-95.63	93.65	-2.26	21.67
98	<MAX>	100.00	-52.28	50.39	96.80	47.24	139.68
	<MIN>	64.37	-19.28	15.58	55.02	9.53	68.09
99	<MAX>	82.23	-37.00	119.87	94.15	60.30	193.50
	<MIN>	53.37	-39.26	52.50	48.35	33.17	98.12
100	<MAX>	71.23	-39.98	172.97	72.08	40.43	238.43
	<MIN>	47.73	-38.84	79.69	42.70	32.75	120.26
101	<MAX>	67.97	-49.20	215.22	60.54	40.56	272.85
	<MIN>	42.97	-38.26	102.06	37.95	32.18	138.34
102	<MAX>	56.55	-49.11	249.70	49.12	40.47	297.09
	<MIN>	38.51	-37.56	120.38	33.49	31.48	152.68
103	<MAX>	47.10	-47.80	273.94	51.93	43.48	315.53
	<MIN>	34.68	-36.27	134.85	29.66	32.50	163.71

Barra		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
104	<MAX>	53.43	-49.30	291.54	46.00	43.80	336.13
	<MIN>	31.32	-36.70	145.85	26.30	32.94	171.69
105	<MAX>	44.83	-50.20	312.08	37.40	44.70	348.96
	<MIN>	27.92	-37.03	153.70	22.89	33.26	176.49
106	<MAX>	36.16	-50.88	324.27	28.73	45.38	353.36
	<MIN>	24.47	-37.30	158.36	19.45	33.54	178.05
107	<MAX>	26.62	-51.73	328.39	19.19	46.22	348.94
	<MIN>	20.99	-37.53	159.78	15.97	33.77	176.36
108	<MAX>	17.95	-52.19	323.73	10.52	46.69	336.50
	<MIN>	17.52	-37.70	157.98	12.50	33.93	171.45
109	<MAX>	9.33	-52.56	310.76	1.91	47.05	315.82
	<MIN>	14.04	-37.75	152.98	9.01	33.99	163.33
110	<MAX>	3.41	-51.76	290.23	-4.02	46.26	289.97
	<MIN>	10.55	-37.62	144.83	5.53	33.86	152.05
111	<MAX>	-1.78	-50.24	264.84	-9.21	44.73	259.91
	<MIN>	7.09	-37.16	133.61	2.07	33.40	137.72
112	<MAX>	-6.68	-47.66	235.56	-14.11	42.15	226.24
	<MIN>	3.68	-36.16	119.54	-1.34	32.40	120.58
113	<MAX>	-11.08	-43.36	203.31	-18.50	37.86	190.04
	<MIN>	0.42	-34.28	102.95	-4.60	30.52	101.08
114	<MAX>	-14.91	-36.68	169.62	-22.34	31.18	152.92
	<MIN>	-2.65	-31.12	84.52	-7.67	27.36	79.89
115	<MAX>	-18.13	-27.28	136.59	-25.56	21.78	117.00
	<MIN>	-5.61	-26.36	65.24	-10.64	22.60	57.95
116	<MAX>	-19.42	-15.03	106.41	-26.85	9.52	85.66
	<MIN>	-6.86	-24.34	45.85	-13.79	16.22	36.07
117	<MAX>	-17.82	-2.41	83.61	-20.36	0.53	77.76
	<MIN>	-10.72	-17.32	30.62	-14.61	12.31	26.51
118	<MAX>	-13.58	4.09	77.94	-16.56	-6.30	72.52
	<MIN>	-12.07	-14.16	23.92	-16.43	9.33	18.54

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
119	<MAX>	-9.66	10.95	75.13	-3.44	-6.41	72.46
	<MIN>	-14.19	-10.60	16.58	-18.87	6.30	10.21
120	<MAX>	-17.36	12.61	77.07	-4.23	-8.21	75.27
	<MIN>	-19.90	-5.04	9.07	-26.27	2.64	2.05
121	<MAX>	1.88	1.89	1.87	5.58	-0.00	4.76
	<MIN>	14.73	-10.75	-10.24	5.66	7.85	1.15
122	<MAX>	-6.30	-3.42	3.50	3.60	-1.26	4.23
	<MIN>	4.12	-1.70	-3.44	-3.29	8.17	-4.91
123	<MAX>	-6.27	-1.05	3.60	2.31	-2.11	3.39
	<MIN>	0.90	-0.60	-1.87	-5.51	5.55	-5.07
124	<MAX>	-7.73	-0.96	5.33	2.67	-5.32	5.23
	<MIN>	1.51	0.58	-3.75	-5.93	7.74	-7.25
125	<MAX>	-4.76	5.80	4.89	2.60	-14.30	5.33
	<MIN>	-3.16	7.58	-3.62	-6.39	3.99	-8.17
126	<MAX>	-2.39	11.49	2.39	1.49	-18.71	2.20
	<MIN>	0.39	13.77	-7.46	0.34	-13.98	-7.15
127	<MAX>	-2.52	15.28	-0.45	1.78	-6.47	0.54
	<MIN>	-1.29	15.05	-7.09	-5.01	-23.58	-8.41
128	<MAX>	-0.50	8.09	-2.04	1.65	-12.25	-1.19
	<MIN>	-4.87	23.46	-7.44	-4.90	-22.98	-11.61
129	<MAX>	-1.20	9.71	-3.24	2.91	-13.50	-1.78
	<MIN>	-0.25	27.41	-12.30	-0.29	-26.94	-12.54
130	<MAX>	-1.10	10.70	-4.24	2.32	-14.20	-2.93
	<MIN>	-4.49	30.89	-9.61	-4.53	-30.43	-13.42
131	<MAX>	-0.31	16.39	-4.78	2.34	-13.80	-3.53
	<MIN>	-0.81	33.56	-11.59	-0.81	-33.56	-12.28
132	<MAX>	-0.25	14.29	-5.04	2.40	-16.86	-3.79
	<MIN>	-0.77	28.38	-11.85	-0.77	-28.38	-12.51
133	<MAX>	-0.82	14.79	-5.15	2.50	-16.69	-3.70
	<MIN>	-4.36	30.85	-10.45	-4.36	-30.85	-14.17

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
134	<MAX>	-0.86	15.18	-5.30	3.37	-16.84	-3.28
	<MIN>	0.01	33.84	-14.01	0.01	-33.84	-14.00
135	<MAX>	-0.88	24.67	-5.38	2.55	-16.99	-3.71
	<MIN>	-4.31	36.84	-10.46	-4.31	-36.84	-14.12
136	<MAX>	-0.85	25.00	-5.39	2.53	-25.95	-3.82
	<MIN>	-0.63	39.33	-11.90	-0.63	-39.33	-12.44
137	<MAX>	-0.03	26.37	-5.13	-0.03	-26.37	-5.16
	<MIN>	-3.90	31.63	-8.12	-4.01	-41.09	-11.49
138	<MAX>	-0.46	26.91	-5.03	-0.46	-26.91	-5.43
	<MIN>	-1.27	28.15	-8.00	-2.60	-41.85	-10.00
139	<MAX>	-0.21	27.41	-5.08	-0.16	-27.66	-5.26
	<MIN>	-0.67	28.48	-8.10	-1.18	-32.51	-9.04
140	<MAX>	0.38	27.89	-5.17	0.44	-28.12	-4.84
	<MIN>	0.35	33.02	-8.46	0.29	-32.79	-8.18
141	<MAX>	1.54	27.94	-5.46	3.26	-18.56	-3.97
	<MIN>	3.22	33.39	-9.40	0.93	-29.47	-7.11
142	<MAX>	3.71	20.71	-6.29	12.21	-23.41	-0.15
	<MIN>	12.84	33.48	-12.78	3.98	-24.55	-4.71
143	<MAX>	14.34	20.44	-9.84	45.80	-26.52	15.53
	<MIN>	47.76	30.29	-25.57	16.30	-24.21	1.85
144	<MAX>	16.94	-9.25	-6.54	44.35	-22.04	17.06
	<MIN>	44.36	22.31	-20.71	16.95	8.98	7.79
145	<MAX>	-1.77	1.97	7.90	5.19	6.09	7.84
	<MIN>	7.39	-8.34	-2.28	-1.89	-2.46	2.13
146	<MAX>	-2.46	3.12	7.25	-2.24	-2.61	4.88
	<MIN>	0.69	-6.49	0.17	0.47	5.98	0.77
147	<MAX>	-4.95	7.72	12.35	-4.70	-7.18	7.63
	<MIN>	-2.47	-5.88	2.12	-4.41	9.04	-1.88
148	<MAX>	-8.76	17.96	14.36	-8.76	-17.96	5.60
	<MIN>	-4.71	12.90	4.06	-11.06	3.57	-6.15

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
149	<MAX>	-9.36	10.92	9.92	-7.08	-21.23	1.21
	<MIN>	-4.13	16.29	0.39	-11.41	-5.70	-7.99
150	<MAX>	-7.72	13.21	5.23	-5.40	-19.67	-2.10
	<MIN>	-3.04	20.09	-2.92	-10.43	-11.22	-9.95
151	<MAX>	-4.54	14.19	1.18	-2.22	-20.88	-3.07
	<MIN>	-3.92	28.05	-5.51	-7.46	-25.81	-12.28
152	<MAX>	-3.94	14.43	-0.57	-1.48	-11.75	-4.10
	<MIN>	-2.28	29.61	-7.36	-7.54	-28.85	-13.82
153	<MAX>	-2.55	14.78	-2.26	-2.46	-15.26	-4.74
	<MIN>	-2.23	27.61	-8.57	-6.02	-31.59	-14.07
154	<MAX>	-2.45	15.25	-3.08	-0.53	-17.31	-4.97
	<MIN>	-2.87	28.48	-9.29	-5.52	-34.21	-13.79
155	<MAX>	-2.25	16.96	-3.48	-0.34	-15.80	-5.10
	<MIN>	-2.72	36.12	-9.61	-5.38	-29.50	-13.98
156	<MAX>	-1.87	17.35	-3.52	-1.77	-17.76	-5.33
	<MIN>	-1.72	36.94	-9.68	-5.52	-32.07	-14.71
157	<MAX>	-2.46	17.44	-3.14	-2.36	-17.82	-5.54
	<MIN>	-1.09	37.42	-9.58	-6.48	-34.64	-15.09
158	<MAX>	-1.77	17.53	-3.51	-1.67	-17.88	-5.22
	<MIN>	-0.70	37.74	-9.42	-5.45	-37.23	-14.55
159	<MAX>	-2.03	27.40	-3.52	-1.86	-18.27	-5.43
	<MIN>	-0.45	38.03	-9.20	-5.17	-39.85	-13.64
160	<MAX>	-0.10	27.55	-4.60	0.15	-18.38	-4.56
	<MIN>	-2.36	41.70	-9.22	-2.46	-41.39	-11.64
161	<MAX>	0.30	27.80	-4.75	0.71	-18.57	-4.22
	<MIN>	-0.80	32.80	-8.86	-1.21	-42.33	-9.97
162	<MAX>	0.66	28.11	-4.56	1.39	-18.78	-3.52
	<MIN>	0.75	33.26	-8.42	0.02	-42.90	-8.13
163	<MAX>	1.57	28.37	-4.23	2.99	-18.79	-1.88
	<MIN>	2.95	19.44	-8.04	1.53	-29.32	-5.93

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
164	<MAX>	3.58	28.43	-3.78	7.21	-23.52	1.96
	<MIN>	6.58	18.92	-7.89	2.98	-24.13	-3.49
165	<MAX>	7.60	27.81	-3.15	14.33	-27.93	9.10
	<MIN>	12.54	16.68	-7.25	6.48	-23.27	0.88
166	<MAX>	16.38	14.21	-0.26	18.20	-22.41	17.25
	<MIN>	11.94	24.12	-3.59	10.43	-19.13	7.06
167	<MAX>	9.17	1.92	3.28	16.44	-20.41	17.36
	<MIN>	12.18	15.77	-0.16	3.84	3.78	5.50
168	<MAX>	4.96	0.42	2.10	12.85	-10.17	11.83
	<MIN>	10.81	8.82	-1.34	0.88	2.51	2.55
169	<MAX>	-7.83	4.90	10.44	-1.89	2.69	4.79
	<MIN>	0.99	-5.17	1.60	-5.84	-4.25	-0.39
170	<MAX>	-12.06	10.98	16.72	-6.54	3.52	6.35
	<MIN>	-2.95	-5.21	4.41	-8.98	-6.26	-0.49
171	<MAX>	-14.21	8.38	16.96	-11.46	-2.77	2.94
	<MIN>	-9.60	16.89	5.75	-15.29	-20.59	-6.70
172	<MAX>	-11.65	13.74	9.18	-5.78	-21.10	-0.63
	<MIN>	-8.56	20.88	-0.70	-14.43	-13.53	-11.10
173	<MAX>	-4.67	16.40	1.52	-1.15	-22.02	-1.48
	<MIN>	-5.52	20.99	-5.13	-9.01	-15.07	-12.26
174	<MAX>	-2.49	12.56	-1.58	0.14	-24.93	-2.47
	<MIN>	-4.54	27.62	-8.21	-5.96	-17.74	-13.33
175	<MAX>	-1.35	12.88	-3.42	1.77	-25.08	-2.38
	<MIN>	-3.47	29.73	-9.99	-4.20	-20.09	-13.73
176	<MAX>	1.30	15.99	-4.40	1.71	-25.22	-2.92
	<MIN>	-2.68	31.83	-10.66	-3.10	-22.30	-13.45
177	<MAX>	0.31	17.30	-4.75	2.36	-25.06	-3.03
	<MIN>	-1.56	33.75	-10.95	-1.67	-34.06	-12.56
178	<MAX>	0.53	16.11	-4.88	2.52	-26.64	-3.03
	<MIN>	-1.37	30.25	-11.11	-1.48	-30.58	-12.53

Barra		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
179	<MAX>	2.14	17.48	-5.08	2.24	-17.12	-2.90
	<MIN>	-1.99	32.30	-11.26	-2.10	-32.65	-13.30
180	<MAX>	2.81	17.77	-5.26	2.92	-17.39	-2.41
	<MIN>	-2.07	34.56	-11.37	-2.17	-34.94	-13.49
181	<MAX>	2.21	18.06	-4.94	2.31	-17.65	-2.69
	<MIN>	-1.97	36.83	-11.05	-2.08	-37.23	-13.07
182	<MAX>	2.57	18.02	-5.15	2.67	-17.59	-2.55
	<MIN>	-1.27	38.89	-10.66	-1.37	-39.32	-11.97
183	<MAX>	0.91	18.24	-4.32	1.01	-17.78	-3.37
	<MIN>	-0.47	40.32	-9.83	-0.57	-40.77	-10.33
184	<MAX>	1.07	18.27	-4.11	1.16	-17.79	-3.01
	<MIN>	0.50	41.10	-8.90	0.41	-41.58	-8.43
185	<MAX>	1.87	18.04	-3.75	2.24	-22.54	-1.82
	<MIN>	1.49	41.40	-7.70	1.12	-36.90	-6.27
186	<MAX>	2.09	27.36	-2.94	3.63	-22.37	0.59
	<MIN>	2.66	27.79	-6.28	2.23	-22.82	-4.01
187	<MAX>	4.12	31.31	-1.32	5.88	-20.69	4.35
	<MIN>	5.11	11.14	-4.96	3.39	-22.04	-1.41
188	<MAX>	6.16	28.96	1.38	8.93	-25.04	9.65
	<MIN>	6.90	8.08	-3.17	4.61	-18.38	2.10
189	<MAX>	8.88	32.28	5.72	8.88	-32.28	14.59
	<MIN>	7.61	1.22	-1.62	5.38	-15.05	5.97
190	<MAX>	6.34	16.51	7.16	6.58	-17.05	13.52
	<MIN>	3.32	-3.95	0.22	3.08	4.49	3.53
191	<MAX>	3.10	5.72	4.25	4.23	-8.27	8.37
	<MIN>	0.20	-2.92	1.22	-0.02	3.43	1.29
192	<MAX>	-2.22	-2.68	6.09	6.73	-7.49	10.57
	<MIN>	3.59	4.09	2.29	-4.14	4.80	-0.09
193	<MAX>	-38.96	13.96	17.75	-16.46	12.81	-5.13
	<MIN>	-14.95	-10.31	6.96	-37.33	-16.85	-16.99

Barra		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
194	<MAX>	-46.90	13.09	18.60	-13.34	-18.23	-9.57
	<MIN>	-16.98	20.69	1.05	-41.86	-12.88	-23.88
195	<MAX>	-14.57	12.18	2.73	-5.66	-23.75	-6.34
	<MIN>	-5.64	26.90	-6.19	-11.72	-17.06	-13.92
196	<MAX>	-7.21	12.83	-1.25	-1.32	-25.91	-5.61
	<MIN>	-1.70	26.45	-8.99	-3.42	-16.77	-11.65
197	<MAX>	-3.81	24.82	-2.54	-1.65	-22.46	-5.16
	<MIN>	-1.09	17.76	-10.43	-1.15	-17.99	-11.40
198	<MAX>	-4.16	24.66	-2.37	-0.04	-21.91	-4.86
	<MIN>	-0.25	19.33	-10.87	-0.31	-19.58	-11.13
199	<MAX>	-2.56	24.33	-2.84	0.78	-25.31	-4.38
	<MIN>	1.01	30.71	-10.75	0.81	-21.21	-10.03
200	<MAX>	-1.96	24.78	-2.90	0.70	-25.10	-3.82
	<MIN>	1.88	32.29	-10.26	1.76	-22.83	-8.70
201	<MAX>	-2.01	25.08	-2.78	0.63	-24.75	-3.71
	<MIN>	1.80	30.01	-10.07	1.80	-30.01	-8.54
202	<MAX>	-2.10	16.51	-2.53	1.23	-24.65	-3.64
	<MIN>	1.61	31.74	-10.30	1.61	-31.74	-8.93
203	<MAX>	-2.94	16.72	-2.01	1.29	-15.49	-3.68
	<MIN>	1.54	33.66	-10.34	1.54	-33.66	-9.02
204	<MAX>	-2.09	16.91	-2.37	1.32	-15.48	-3.66
	<MIN>	1.58	35.54	-10.10	1.58	-35.54	-8.76
205	<MAX>	-2.03	17.40	-2.37	1.35	-15.45	-3.54
	<MIN>	1.73	37.19	-9.58	1.73	-37.19	-8.11
206	<MAX>	0.66	17.21	-3.58	0.66	-17.21	-3.02
	<MIN>	1.92	38.38	-8.79	1.92	-38.38	-7.15
207	<MAX>	1.32	17.23	-3.59	1.62	-21.49	-2.37
	<MIN>	2.19	38.54	-7.80	1.89	-34.28	-6.04
208	<MAX>	1.62	16.58	-3.02	1.94	-20.78	-1.42
	<MIN>	2.47	38.53	-6.57	2.15	-34.32	-4.70

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
209	<MAX>	2.35	19.97	-1.88	2.38	-19.49	0.12
	<MIN>	2.46	20.85	-5.33	2.42	-21.33	-3.24
210	<MAX>	2.90	17.68	-0.20	2.90	-17.68	2.27
	<MIN>	2.69	19.51	-3.99	2.69	-19.51	-1.71
211	<MAX>	2.73	32.21	2.01	3.77	-21.22	5.19
	<MIN>	2.74	15.79	-2.24	2.70	-15.58	0.08
212	<MAX>	2.76	27.42	5.22	5.96	-15.69	8.41
	<MIN>	5.63	0.64	-2.08	2.39	-12.21	1.83
213	<MAX>	2.24	13.93	5.40	9.66	-5.53	8.81
	<MIN>	8.48	-3.03	-3.57	1.04	-5.29	2.09
214	<MAX>	0.91	6.70	3.51	7.31	-1.72	5.74
	<MIN>	6.53	-2.64	-2.93	0.12	-2.30	1.15
215	<MAX>	0.67	5.87	4.36	8.09	0.63	6.23
	<MIN>	6.70	-4.78	-3.29	-0.71	-1.70	1.08
216	<MAX>	0.72	3.90	4.14	1.25	-4.19	5.09
	<MIN>	-4.67	-7.24	1.52	-5.21	7.53	-2.79
217	<MAX>	2.00	6.26	3.93	27.13	5.44	19.33
	<MIN>	77.72	44.02	-57.00	48.23	-56.46	0.24
218	<MAX>	-8.21	8.20	23.08	1.85	0.35	19.23
	<MIN>	14.28	50.78	-17.15	5.62	-57.90	-5.87
219	<MAX>	-36.05	18.55	30.47	-17.59	-4.44	2.23
	<MIN>	0.43	56.38	-13.53	-20.53	-69.41	-25.50
220	<MAX>	-73.92	21.16	19.86	1.20	-66.07	-17.95
	<MIN>	-2.65	74.26	-28.43	-77.09	-28.88	-61.80
221	<MAX>	-0.19	73.15	-27.04	75.70	-28.68	8.97
	<MIN>	91.61	39.10	-78.62	22.42	-86.04	-30.48
222	<MAX>	25.78	13.93	-13.47	48.48	-28.22	24.33
	<MIN>	34.60	80.68	-40.27	3.48	-59.36	-12.55
223	<MAX>	13.67	11.28	1.54	31.10	-25.02	22.27
	<MIN>	6.90	67.44	-16.30	-10.53	-53.70	-15.16

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
224	<MAX>	-1.88	7.20	7.25	12.79	-14.33	11.19
	<MIN>	-32.31	66.51	-5.43	-49.36	-56.56	-42.62

Máximos y Mínimos del Esfuerzo TORSOR

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
1	<MAX>	70.97	38.68	60.75	34.22	8.29	15.47
	<MIN>	33.66	-5.82	4.56	66.12	-36.10	81.25
2	<MAX>	54.09	46.25	71.43	29.35	13.29	28.48
	<MIN>	29.64	-10.07	16.44	30.86	-31.49	76.28
3	<MAX>	35.33	31.05	68.27	25.43	18.60	41.35
	<MIN>	28.20	-15.27	31.69	33.05	-28.43	80.59
4	<MAX>	40.92	27.98	82.44	23.05	23.36	52.87
	<MIN>	25.40	-20.53	45.44	38.99	-25.76	94.68
5	<MAX>	44.18	27.58	85.71	17.56	35.06	81.64
	<MIN>	24.44	-26.78	62.80	37.27	-16.31	112.84
6	<MAX>	43.10	14.71	105.28	12.79	46.31	116.34
	<MIN>	19.66	-38.03	101.79	37.43	-8.20	141.39
7	<MAX>	42.87	8.09	138.37	8.36	54.88	152.21
	<MIN>	15.23	-46.60	141.63	37.21	-1.58	174.29
8	<MAX>	38.77	6.76	175.87	3.73	60.79	187.40
	<MIN>	10.61	-52.52	180.96	20.47	12.12	168.91
9	<MAX>	23.08	-9.22	175.08	-0.98	64.88	226.62
	<MIN>	5.61	-56.35	218.28	17.12	15.48	186.84
10	<MAX>	16.68	-5.96	226.47	-6.58	67.61	256.36
	<MIN>	0.94	-58.91	258.88	4.10	17.55	151.19
11	<MAX>	5.47	-12.72	159.20	-34.55	77.79	292.88
	<MIN>	-4.89	-60.85	289.57	0.45	18.81	161.86
12	<MAX>	1.70	-13.57	170.31	-41.44	74.96	293.30
	<MIN>	-33.91	-66.26	327.09	-3.32	19.66	169.59
13	<MAX>	10.48	-10.44	261.80	-44.84	75.60	292.45
	<MIN>	-37.32	-66.91	329.31	-7.15	20.28	174.19
14	<MAX>	-5.99	-14.71	183.19	-49.44	76.33	288.17
	<MIN>	-41.92	-67.63	329.13	-11.02	20.80	175.57
15	<MAX>	-9.88	-15.19	184.80	-54.71	76.98	279.53
	<MIN>	-47.18	-68.28	325.22	-14.90	21.28	173.69
16	<MAX>	-13.79	-15.67	183.15	-72.90	89.90	306.53
	<MIN>	-52.76	-68.93	316.91	-18.82	21.76	168.53
17	<MAX>	-17.79	-16.16	178.24	-79.98	86.76	278.27
	<MIN>	-72.46	-78.06	346.64	-22.81	22.24	160.03
18	<MAX>	-21.87	-16.64	169.99	-83.66	87.43	248.51
	<MIN>	-76.14	-78.73	320.18	-26.90	22.73	148.12
19	<MAX>	-26.19	-17.09	158.33	-88.76	88.40	214.96
	<MIN>	-81.24	-79.71	291.20	-31.22	23.18	132.58
20	<MAX>	-30.93	-17.42	143.02	-94.98	89.39	176.38
	<MIN>	-87.46	-80.69	258.21	-35.95	23.51	113.02
21	<MAX>	-37.24	-17.39	128.24	-101.62	90.34	127.72
	<MIN>	-94.10	-81.64	215.49	-42.26	23.48	92.58
22	<MAX>	-44.68	-16.54	102.98	-110.93	91.03	75.88
	<MIN>	-103.41	-82.34	172.01	-49.70	22.63	60.65
23	<MAX>	-59.11	-13.24	70.50	-125.61	89.98	11.22
	<MIN>	-118.09	-81.28	120.52	-64.13	19.33	15.23
24	<MAX>	-98.88	-1.07	22.33	-161.01	81.40	-85.76
	<MIN>	-153.15	-72.71	55.14	-104.16	7.16	-68.73
25	<MAX>	54.12	29.57	14.17	21.75	11.60	10.59
	<MIN>	22.86	-11.60	2.55	52.51	-30.50	35.76
26	<MAX>	41.77	27.96	35.68	25.31	16.18	21.11
	<MIN>	26.41	-16.18	11.78	40.83	-27.96	50.57
27	<MAX>	33.62	23.78	47.12	27.16	20.40	30.73
	<MIN>	28.10	-20.40	22.27	32.81	-23.78	57.30
28	<MAX>	27.49	16.65	55.50	28.31	27.92	60.33
	<MIN>	31.39	-27.92	33.55	25.46	-16.65	79.25
29	<MAX>	27.52	7.60	79.73	30.61	37.31	93.49
	<MIN>	33.69	-37.31	64.65	25.49	-7.60	103.50

Barra		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
30	<MAX>	28.52	-0.43	105.67	31.20	43.87	127.08
	<MIN>	34.28	-43.87	97.72	26.50	0.43	130.35
31	<MAX>	34.46	-8.08	132.55	29.88	47.86	158.75
	<MIN>	32.96	-47.86	130.56	18.33	6.46	154.06
32	<MAX>	15.09	-11.19	99.25	27.75	50.18	192.18
	<MIN>	30.83	-50.18	165.92	13.06	11.19	111.87
33	<MAX>	12.98	-12.39	112.84	24.23	51.72	217.35
	<MIN>	27.31	-51.72	194.23	10.95	12.39	123.58
34	<MAX>	10.46	-13.11	124.29	20.24	52.75	238.48
	<MIN>	23.32	-52.75	218.95	8.43	13.11	132.76
35	<MAX>	7.73	-13.60	133.30	2.50	54.41	248.45
	<MIN>	5.58	-54.41	244.82	5.71	13.60	139.33
36	<MAX>	4.89	-13.97	139.75	-1.93	56.61	248.91
	<MIN>	1.15	-56.61	249.27	2.86	13.97	143.23
37	<MAX>	1.99	-14.32	143.59	-6.20	57.64	245.73
	<MIN>	-3.11	-57.64	249.90	-0.03	14.32	144.47
38	<MAX>	-0.91	-14.66	144.78	-10.37	58.26	238.91
	<MIN>	-7.29	-58.26	246.83	-2.93	14.66	143.06
39	<MAX>	-3.84	-15.01	143.35	-24.83	59.47	257.34
	<MIN>	-7.65	-61.09	269.73	-5.87	15.01	138.99
40	<MAX>	-6.79	-15.38	139.26	-23.27	63.43	238.72
	<MIN>	-20.19	-63.43	258.21	-8.82	15.38	132.26
41	<MAX>	-9.78	-15.77	132.49	-27.80	65.76	215.79
	<MIN>	-24.72	-65.76	239.35	-11.81	15.77	122.81
42	<MAX>	-12.90	-16.13	122.99	-32.19	67.01	189.07
	<MIN>	-29.11	-67.01	216.57	-14.92	16.13	110.52
43	<MAX>	-16.24	-16.40	110.63	-36.69	67.90	158.35
	<MIN>	-33.61	-67.90	189.88	-18.27	16.40	95.15
44	<MAX>	-20.81	-16.29	99.05	-41.11	68.68	119.55
	<MIN>	-38.03	-68.68	155.05	-22.83	16.29	79.48

Barra		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
45	<MAX>	-25.96	-15.12	78.99	-47.22	69.08	78.82
	<MIN>	-44.14	-69.08	119.80	-27.99	15.12	54.79
46	<MAX>	-28.77	-10.84	52.71	-53.84	67.52	30.98
	<MIN>	-50.76	-67.52	77.89	-30.79	10.84	26.00
47	<MAX>	-6.51	2.03	20.75	-47.68	58.63	-14.38
	<MIN>	-44.60	-58.63	27.00	-8.54	-2.03	14.00
48	<MAX>	4.57	8.19	19.09	-20.84	42.51	-22.13
	<MIN>	-19.79	-42.51	-15.91	3.88	-8.19	20.39
49	<MAX>	28.48	21.98	21.49	20.25	21.33	4.07
	<MIN>	21.51	-21.33	-3.46	27.65	-21.98	31.61
50	<MAX>	27.96	21.42	32.78	26.18	27.40	13.97
	<MIN>	27.25	-27.40	5.79	27.26	-21.42	41.24
51	<MAX>	28.10	15.83	41.82	32.21	36.47	48.13
	<MIN>	35.33	-36.47	17.84	26.04	-15.83	66.10
52	<MAX>	30.10	4.22	69.16	37.44	46.31	89.11
	<MIN>	40.57	-46.31	54.12	28.03	-4.22	95.23
53	<MAX>	31.78	-4.65	99.16	37.51	51.46	128.69
	<MIN>	40.64	-51.46	93.64	29.72	4.65	126.75
54	<MAX>	28.28	-10.89	129.73	34.59	53.57	163.85
	<MIN>	37.72	-53.57	131.43	25.31	11.17	153.62
55	<MAX>	17.24	-13.28	100.93	31.33	54.42	199.25
	<MIN>	34.46	-54.42	169.75	15.18	13.28	115.46
56	<MAX>	14.47	-13.87	116.04	27.27	54.90	225.86
	<MIN>	30.40	-54.90	200.00	12.41	13.87	128.10
57	<MAX>	11.55	-14.19	128.40	23.22	55.19	248.33
	<MIN>	26.35	-55.19	226.10	9.48	14.19	137.83
58	<MAX>	8.53	-14.41	137.96	5.91	56.52	256.69
	<MIN>	9.04	-56.52	249.99	6.46	14.41	144.69
59	<MAX>	5.48	-14.63	144.73	0.78	58.24	258.26
	<MIN>	3.90	-58.24	256.16	3.42	14.63	148.72

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
60	<MAX>	2.46	-14.88	148.71	-4.12	59.33	255.47
	<MIN>	-0.99	-59.33	257.76	0.39	14.88	149.98
61	<MAX>	-0.56	-15.16	149.93	-8.84	60.06	248.51
	<MIN>	-5.71	-60.06	255.04	-2.63	15.16	148.50
62	<MAX>	-3.55	-15.44	148.40	-13.77	62.03	264.65
	<MIN>	-9.74	-61.74	275.06	-5.62	15.44	144.28
63	<MAX>	-6.55	-15.72	144.10	-20.68	65.00	246.53
	<MIN>	-17.55	-65.00	263.67	-8.61	15.72	137.31
64	<MAX>	-9.51	-15.96	137.02	-25.67	66.82	223.83
	<MIN>	-22.54	-66.82	245.45	-11.57	15.96	127.57
65	<MAX>	-12.42	-16.09	127.12	-30.37	67.87	196.76
	<MIN>	-27.24	-67.87	222.60	-14.48	16.09	115.06
66	<MAX>	-15.26	-15.91	114.32	-34.81	68.30	165.41
	<MIN>	-31.68	-68.30	195.23	-17.32	15.91	99.71
67	<MAX>	-18.45	-14.81	102.86	-38.27	68.05	126.00
	<MIN>	-35.15	-68.05	158.92	-20.51	14.81	85.39
68	<MAX>	-19.74	-11.74	83.35	-41.24	66.27	87.19
	<MIN>	-38.11	-66.27	122.78	-21.80	11.74	64.72
69	<MAX>	-17.98	-5.12	61.89	-40.90	61.06	46.91
	<MIN>	-37.77	-61.06	82.19	-20.04	5.12	44.83
70	<MAX>	-16.77	4.65	42.97	-35.04	50.52	10.44
	<MIN>	-31.92	-50.52	40.47	-18.83	-4.65	27.01
71	<MAX>	-18.47	9.78	27.05	-25.89	40.17	-1.43
	<MIN>	-24.82	-40.17	6.33	-19.18	-9.78	21.28
72	<MAX>	-18.24	11.06	20.34	-18.52	32.52	-9.77
	<MIN>	-17.27	-32.52	-3.32	-19.06	-11.06	13.61
73	<MAX>	5.18	16.26	28.07	22.50	31.35	-7.14
	<MIN>	23.55	-31.35	-14.19	4.49	-16.26	29.56
74	<MAX>	17.58	10.37	25.68	43.25	44.81	35.01
	<MIN>	46.33	-44.81	-5.16	15.55	-10.37	40.53

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
75	<MAX>	39.93	-3.95	47.28	48.59	52.81	84.11
	<MIN>	51.67	-52.81	39.15	37.90	3.95	82.19
76	<MAX>	36.06	-10.05	85.45	42.47	54.32	124.77
	<MIN>	45.55	-54.32	85.29	34.04	10.05	116.89
77	<MAX>	22.49	-13.24	80.62	36.65	54.09	158.94
	<MIN>	39.73	-54.09	124.69	20.46	13.24	99.89
78	<MAX>	18.02	-13.62	95.94	32.36	53.59	192.63
	<MIN>	35.44	-53.59	162.23	15.99	13.62	111.19
79	<MAX>	14.94	-13.69	110.92	28.08	53.20	218.12
	<MIN>	31.16	-53.20	191.55	12.91	13.69	123.41
80	<MAX>	11.86	-13.74	122.99	23.62	52.93	239.27
	<MIN>	26.70	-52.93	216.70	9.83	13.74	132.71
81	<MAX>	8.63	-13.84	132.29	8.65	53.34	245.40
	<MIN>	11.73	-53.34	236.26	6.61	13.84	139.12
82	<MAX>	5.65	-14.02	138.75	3.01	55.07	247.63
	<MIN>	6.09	-55.07	243.55	3.62	14.02	142.91
83	<MAX>	2.75	-14.23	142.55	-2.04	56.26	245.41
	<MIN>	1.04	-56.26	245.85	0.72	14.23	144.10
84	<MAX>	-0.13	-14.43	143.71	-6.77	57.05	239.00
	<MIN>	-3.69	-57.05	243.69	-2.15	14.43	142.69
85	<MAX>	-2.97	-14.59	142.24	-10.65	58.42	251.37
	<MIN>	-7.57	-58.42	259.56	-5.00	14.59	138.66
86	<MAX>	-5.78	-14.69	138.15	-16.63	60.77	235.69
	<MIN>	-13.55	-60.77	249.23	-7.81	14.69	132.05
87	<MAX>	-8.48	-14.66	131.42	-21.98	62.26	214.93
	<MIN>	-18.90	-62.26	233.26	-10.50	14.66	122.91
88	<MAX>	-10.96	-14.36	122.09	-26.57	62.85	189.85
	<MIN>	-23.49	-62.85	212.30	-12.99	14.36	111.35
89	<MAX>	-13.06	-13.54	110.24	-30.47	62.44	160.96
	<MIN>	-27.39	-62.44	186.91	-15.09	13.54	97.61

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
90	<MAX>	-15.02	-11.61	100.61	-32.74	60.86	125.00
	<MIN>	-29.66	-60.86	152.98	-17.05	11.61	86.22
91	<MAX>	-15.23	-8.11	84.40	-33.90	57.25	91.69
	<MIN>	-30.82	-57.25	120.72	-17.26	8.11	69.82
92	<MAX>	-14.33	-2.67	68.20	-32.82	50.66	58.60
	<MIN>	-29.73	-50.66	86.66	-16.35	2.67	54.44
93	<MAX>	-14.53	4.85	54.13	-29.61	40.74	28.29
	<MIN>	-26.53	-40.74	53.47	-16.56	-4.85	40.18
94	<MAX>	-22.24	11.63	41.81	-25.87	32.30	17.20
	<MIN>	-24.93	-32.30	24.99	-23.04	-11.63	34.88
95	<MAX>	-29.54	15.72	35.51	-23.75	27.30	7.41
	<MIN>	-22.65	-27.30	15.77	-30.48	-15.72	24.70
96	<MAX>	-41.38	18.84	24.63	-18.76	21.01	-0.70
	<MIN>	-17.65	-21.01	5.87	-42.32	-18.84	9.54
97	<MAX>	113.50	0.40	-55.43	136.60	56.63	60.93
	<MIN>	144.12	-65.33	-64.98	108.47	-6.49	44.13
98	<MAX>	72.17	-12.54	41.38	104.81	63.46	123.72
	<MIN>	112.33	-72.16	26.33	67.15	6.45	103.87
99	<MAX>	56.75	-17.55	97.53	91.02	64.09	173.52
	<MIN>	98.54	-72.79	88.49	51.72	11.46	146.18
100	<MAX>	39.62	-19.59	94.74	82.03	63.29	215.58
	<MIN>	89.55	-71.99	138.62	34.60	13.50	128.04
101	<MAX>	33.43	-19.74	114.73	75.33	62.25	256.73
	<MIN>	82.85	-70.95	185.80	28.41	13.66	142.46
102	<MAX>	28.65	-19.41	133.83	68.45	61.00	287.53
	<MIN>	75.97	-69.70	222.76	23.62	13.32	157.27
103	<MAX>	24.65	-18.31	148.66	62.45	61.98	313.27
	<MIN>	69.97	-67.54	253.89	19.62	14.54	168.52
104	<MAX>	21.22	-18.83	159.83	44.95	62.51	318.17
	<MIN>	52.48	-68.07	274.47	16.19	15.07	176.60

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
105	<MAX>	17.77	-19.19	167.76	39.27	64.81	322.32
	<MIN>	46.79	-70.37	283.73	12.74	15.43	181.44
106	<MAX>	14.30	-19.47	172.45	33.73	66.46	320.55
	<MIN>	41.26	-72.02	286.92	9.28	15.71	183.02
107	<MAX>	10.82	-19.69	173.90	28.31	67.56	313.26
	<MIN>	35.83	-73.13	284.49	5.79	15.92	181.35
108	<MAX>	7.36	-19.81	172.13	24.49	68.98	326.57
	<MIN>	32.01	-74.55	301.21	2.34	16.04	176.48
109	<MAX>	3.90	-19.78	167.19	18.53	71.47	308.70
	<MIN>	26.05	-77.03	288.70	-1.13	16.01	168.44
110	<MAX>	0.47	-19.49	159.16	12.75	73.00	284.50
	<MIN>	20.27	-78.56	269.68	-4.55	15.72	157.34
111	<MAX>	-2.85	-18.74	148.21	7.22	73.33	254.72
	<MIN>	14.74	-78.89	244.87	-7.87	14.98	143.40
112	<MAX>	-5.99	-17.24	134.69	2.88	72.34	214.41
	<MIN>	9.47	-77.74	215.14	-11.94	13.31	132.92
113	<MAX>	-9.36	-14.58	125.12	-1.72	69.50	177.13
	<MIN>	5.16	-74.64	175.59	-15.03	10.40	114.18
114	<MAX>	-12.07	-10.19	108.14	-5.86	64.04	137.90
	<MIN>	1.02	-69.18	140.07	-17.74	6.00	94.77
115	<MAX>	-14.31	-4.26	91.45	-9.66	55.35	98.63
	<MIN>	-2.79	-60.49	104.21	-19.98	0.08	76.07
116	<MAX>	-14.62	3.25	76.39	-13.52	43.26	61.21
	<MIN>	-6.65	-48.41	70.26	-20.28	-7.44	60.74
117	<MAX>	-12.52	11.45	64.99	-12.97	34.59	42.46
	<MIN>	-10.62	-36.34	46.07	-14.46	-12.88	60.86
118	<MAX>	-7.96	15.72	63.67	-14.76	28.45	30.78
	<MIN>	-12.00	-30.52	35.59	-10.24	-17.40	60.39
119	<MAX>	-3.48	20.03	65.29	-14.42	21.78	18.24
	<MIN>	-14.12	-23.74	24.78	-8.22	-21.82	64.58

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
120	<MAX>	-10.74	19.12	71.19	-15.29	15.38	9.68
	<MIN>	-15.86	-16.78	14.96	-15.59	-20.91	67.67
121	<MAX>	2.11	1.93	1.68	14.51	10.78	2.28
	<MIN>	14.51	-10.78	-10.05	2.11	-1.93	3.47
122	<MAX>	1.15	3.20	1.98	-3.33	8.30	-4.72
	<MIN>	-3.33	-8.30	-1.89	1.15	-3.20	2.96
123	<MAX>	0.10	4.09	1.93	-5.36	5.73	-3.14
	<MIN>	-5.36	-5.73	1.41	0.10	-4.09	2.01
124	<MAX>	-0.90	9.12	3.40	-7.01	8.65	-3.97
	<MIN>	-7.01	-8.65	1.99	-0.90	-9.12	2.63
125	<MAX>	-2.09	20.15	2.98	-5.82	7.55	-3.34
	<MIN>	-5.82	-7.55	1.61	-2.09	-20.15	1.20
126	<MAX>	-2.46	25.29	0.29	-5.46	3.03	-4.54
	<MIN>	-5.46	-3.03	0.11	-2.46	-25.29	-1.80
127	<MAX>	-2.25	28.75	-2.36	-1.56	-1.58	-6.50
	<MIN>	-1.56	1.58	-5.17	-2.25	-28.75	-4.28
128	<MAX>	-1.87	30.89	-4.44	-4.80	-5.92	-9.30
	<MIN>	-4.80	5.92	-5.22	-1.87	-30.89	-6.03
129	<MAX>	-1.90	32.27	-5.97	-1.59	-7.35	-5.49
	<MIN>	-1.59	7.35	-4.13	-1.90	-32.27	-7.59
130	<MAX>	-1.69	33.22	-6.76	-1.38	-8.02	-6.00
	<MIN>	-1.38	8.02	-4.83	-1.69	-33.22	-8.20
131	<MAX>	-0.63	34.21	-11.53	-1.25	-8.45	-6.31
	<MIN>	-1.25	8.45	-5.24	-0.63	-34.21	-12.07
132	<MAX>	-4.13	36.00	-8.05	-1.19	-8.76	-6.48
	<MIN>	-1.19	8.76	-5.46	-4.13	-36.00	-11.56
133	<MAX>	-2.93	36.68	-7.97	-1.15	-9.01	-6.55
	<MIN>	-1.15	9.01	-5.57	-2.93	-36.68	-10.46
134	<MAX>	-2.24	37.06	-8.05	-1.13	-9.24	-6.57
	<MIN>	-1.13	9.24	-5.61	-2.24	-37.06	-9.96

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
135	<MAX>	-4.13	37.60	-10.40	-1.10	-9.47	-6.54
	<MIN>	-1.10	9.47	-5.62	-4.13	-37.60	-13.91
136	<MAX>	-0.45	40.12	-11.84	-1.04	-9.71	-6.49
	<MIN>	-1.04	9.71	-5.60	-0.45	-40.12	-12.24
137	<MAX>	-3.83	41.90	-8.03	-0.92	-9.96	-6.39
	<MIN>	-0.92	9.96	-5.60	-3.83	-41.90	-11.28
138	<MAX>	-2.42	42.69	-7.73	-0.71	-10.21	-6.24
	<MIN>	-0.71	10.21	-5.64	-2.42	-42.69	-9.79
139	<MAX>	-1.29	43.25	-7.72	-0.29	-10.43	-6.01
	<MIN>	-0.29	10.43	-5.76	-1.29	-43.25	-8.81
140	<MAX>	-0.13	43.76	-7.79	0.52	-10.56	-5.62
	<MIN>	0.52	10.56	-6.06	-0.13	-43.76	-7.91
141	<MAX>	1.79	44.29	-8.00	2.41	-10.40	-4.89
	<MIN>	2.41	10.40	-6.94	1.79	-44.29	-6.48
142	<MAX>	7.17	44.64	-9.75	9.41	-9.85	-1.39
	<MIN>	9.41	9.85	-9.38	7.17	-44.64	-3.66
143	<MAX>	27.54	43.92	-17.28	34.75	-7.10	11.28
	<MIN>	34.75	7.10	-18.26	27.54	-43.92	6.13
144	<MAX>	44.36	22.31	-20.71	16.94	9.25	7.86
	<MIN>	16.94	-9.25	-6.54	44.36	-22.31	16.99
145	<MAX>	-3.52	4.38	7.54	7.40	8.38	5.22
	<MIN>	7.40	-8.38	-2.18	-3.52	-4.38	4.02
146	<MAX>	-2.65	5.25	6.22	1.24	6.54	2.04
	<MIN>	1.24	-6.54	0.80	-2.65	-5.25	3.57
147	<MAX>	-4.60	11.40	10.15	-2.23	9.91	0.93
	<MIN>	-2.23	-9.91	3.16	-4.60	-11.40	5.55
148	<MAX>	-7.49	24.47	10.59	-7.88	7.07	-2.16
	<MIN>	-7.88	-7.07	5.71	-7.49	-24.47	3.11
149	<MAX>	-6.11	29.52	4.76	-8.49	0.85	-4.99
	<MIN>	-8.49	-0.85	3.50	-6.11	-29.52	-1.35

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
150	<MAX>	-4.02	32.23	-0.29	-9.53	-3.79	-8.39
	<MIN>	-9.53	3.79	1.14	-4.02	-32.23	-4.31
151	<MAX>	-2.32	33.55	-3.76	-2.87	-7.56	-5.70
	<MIN>	-2.87	7.56	-2.83	-2.32	-33.55	-6.07
152	<MAX>	-1.48	34.32	-6.06	-1.53	-8.33	-5.82
	<MIN>	-1.53	8.33	-4.29	-1.48	-34.32	-7.54
153	<MAX>	-0.80	34.81	-7.17	-0.89	-8.73	-6.17
	<MIN>	-0.89	8.73	-5.28	-0.80	-34.81	-7.97
154	<MAX>	-5.46	35.35	-8.04	-0.55	-8.98	-6.38
	<MIN>	-0.55	8.98	-5.83	-5.46	-35.35	-13.50
155	<MAX>	-2.75	36.82	-9.35	-0.37	-9.18	-6.47
	<MIN>	-0.37	9.18	-6.10	-2.75	-36.82	-12.11
156	<MAX>	-1.75	37.67	-9.43	-0.29	-9.36	-6.50
	<MIN>	-0.29	9.36	-6.21	-1.75	-37.67	-11.18
157	<MAX>	-1.12	38.17	-9.34	-0.25	-9.56	-6.48
	<MIN>	-0.25	9.56	-6.23	-1.12	-38.17	-10.46
158	<MAX>	-0.73	38.53	-9.18	-0.20	-9.76	-6.40
	<MIN>	-0.20	9.76	-6.19	-0.73	-38.53	-9.91
159	<MAX>	-5.09	40.99	-8.27	-0.12	-9.98	-6.24
	<MIN>	-0.12	9.98	-6.12	-5.09	-40.99	-13.36
160	<MAX>	-2.38	42.54	-8.97	0.04	-10.19	-5.97
	<MIN>	0.04	10.19	-6.01	-2.38	-42.54	-11.35
161	<MAX>	-1.13	43.48	-8.53	0.37	-10.40	-5.51
	<MIN>	0.37	10.40	-5.88	-1.13	-43.48	-9.66
162	<MAX>	0.13	44.05	-7.92	1.04	-10.55	-4.70
	<MIN>	1.04	10.55	-5.74	0.13	-44.05	-7.80
163	<MAX>	1.72	44.39	-6.83	2.57	-10.53	-3.46
	<MIN>	2.57	10.53	-6.03	1.72	-44.39	-5.11
164	<MAX>	4.81	44.54	-6.08	5.54	-9.91	-0.52
	<MIN>	5.54	9.91	-6.06	4.81	-44.54	-1.27

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
165	<MAX>	10.70	43.72	-5.22	10.18	-7.77	4.52
	<MIN>	10.18	7.77	-5.66	10.70	-43.72	5.48
166	<MAX>	18.29	39.94	-2.75	10.47	-1.86	8.88
	<MIN>	10.47	1.86	-1.59	18.29	-39.94	15.54
167	<MAX>	16.46	20.79	0.87	3.82	4.16	5.53
	<MIN>	3.82	-4.16	1.70	16.46	-20.79	17.33
168	<MAX>	12.80	10.17	-1.09	0.94	2.52	2.68
	<MIN>	0.94	-2.52	1.73	12.80	-10.17	11.71
169	<MAX>	-9.62	6.97	9.64	0.96	5.37	3.55
	<MIN>	0.96	-5.37	2.59	-9.62	-6.97	0.01
170	<MAX>	-13.50	14.88	14.79	-3.38	8.93	2.97
	<MIN>	-3.38	-8.93	6.35	-13.50	-14.88	1.29
171	<MAX>	-15.85	30.46	12.95	-11.93	4.01	-2.48
	<MIN>	-11.93	-4.01	9.45	-15.85	-30.46	-2.90
172	<MAX>	-9.31	34.04	3.79	-12.24	-3.08	-8.35
	<MIN>	-12.24	3.08	3.89	-9.31	-34.04	-5.52
173	<MAX>	-4.21	34.97	-2.20	-8.08	-6.77	-10.24
	<MIN>	-8.08	6.77	-2.16	-4.21	-34.97	-6.41
174	<MAX>	-1.65	35.06	-5.30	-2.35	-8.66	-6.52
	<MIN>	-2.35	8.66	-4.16	-1.65	-35.06	-6.96
175	<MAX>	-0.55	35.07	-7.06	-0.82	-8.91	-6.04
	<MIN>	-0.82	8.91	-5.22	-0.55	-35.07	-7.61
176	<MAX>	0.11	35.04	-7.67	-0.05	-9.03	-5.90
	<MIN>	-0.05	9.03	-5.86	0.11	-35.04	-7.56
177	<MAX>	0.77	35.12	-7.90	0.41	-9.11	-5.75
	<MIN>	0.41	9.11	-6.16	0.77	-35.12	-7.13
178	<MAX>	-0.76	36.29	-10.38	0.61	-9.22	-5.64
	<MIN>	0.61	9.22	-6.25	-0.76	-36.29	-11.14
179	<MAX>	0.01	37.17	-10.09	0.68	-9.36	-5.57
	<MIN>	0.68	9.36	-6.25	0.01	-37.17	-10.08

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
180	<MAX>	0.46	37.75	-9.74	0.70	-9.51	-5.50
	<MIN>	0.70	9.51	-6.20	0.46	-37.75	-9.28
181	<MAX>	0.74	38.15	-9.38	0.73	-9.66	-5.38
	<MIN>	0.73	9.66	-6.11	0.74	-38.15	-8.64
182	<MAX>	-1.34	40.02	-10.38	0.79	-9.80	-5.17
	<MIN>	0.79	9.80	-5.96	-1.34	-40.02	-11.72
183	<MAX>	-0.53	41.45	-9.54	0.93	-9.91	-4.80
	<MIN>	0.93	9.91	-5.73	-0.53	-41.45	-10.07
184	<MAX>	0.45	42.23	-8.60	1.22	-9.94	-4.16
	<MIN>	1.22	9.94	-5.38	0.45	-42.23	-8.16
185	<MAX>	1.45	42.52	-7.37	1.82	-9.82	-3.06
	<MIN>	1.82	9.82	-4.88	1.45	-42.52	-5.92
186	<MAX>	2.58	42.30	-5.28	3.16	-9.29	-1.48
	<MIN>	3.16	9.29	-4.64	2.58	-42.30	-2.70
187	<MAX>	4.66	41.32	-3.05	4.78	-7.87	1.20
	<MIN>	4.78	7.87	-3.58	4.66	-41.32	1.61
188	<MAX>	7.25	38.72	0.27	6.36	-4.94	4.26
	<MIN>	6.36	4.94	-2.10	7.25	-38.72	7.52
189	<MAX>	9.30	33.50	5.00	7.19	0.01	6.29
	<MIN>	7.19	-0.01	-0.90	9.30	-33.50	14.29
190	<MAX>	6.49	17.07	6.81	3.17	4.51	3.74
	<MIN>	3.17	-4.51	0.57	6.49	-17.07	13.31
191	<MAX>	4.20	8.29	4.06	0.02	3.46	1.41
	<MIN>	0.02	-3.46	1.39	4.20	-8.29	8.25
192	<MAX>	6.74	7.53	3.73	-4.15	4.84	0.02
	<MIN>	-4.15	-4.84	4.17	6.74	-7.53	10.47
193	<MAX>	-37.33	16.85	14.74	-16.46	12.81	-5.13
	<MIN>	-16.46	-12.81	8.86	-37.33	-16.85	-16.99
194	<MAX>	-24.27	34.60	5.10	-36.31	-2.74	-19.02
	<MIN>	-36.31	2.74	11.84	-24.27	-34.60	-15.53

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
195	<MAX>	-6.27	35.22	-4.00	-10.41	-6.34	-11.10
	<MIN>	-10.41	6.34	-2.26	-6.27	-35.22	-9.33
196	<MAX>	-1.48	34.89	-6.64	-3.25	-8.09	-9.41
	<MIN>	-3.25	8.09	-6.65	-1.48	-34.89	-7.90
197	<MAX>	0.06	34.42	-7.76	-0.41	-8.65	-6.19
	<MIN>	-0.41	8.65	-5.84	0.06	-34.42	-7.71
198	<MAX>	0.65	33.98	-8.00	0.24	-8.64	-5.76
	<MIN>	0.24	8.64	-5.96	0.65	-33.98	-7.44
199	<MAX>	1.50	33.63	-7.83	1.02	-8.61	-4.98
	<MIN>	1.02	8.61	-5.85	1.50	-33.63	-6.55
200	<MAX>	1.61	33.44	-7.16	1.60	-8.69	-4.29
	<MIN>	1.60	8.69	-5.65	1.61	-33.44	-5.79
201	<MAX>	1.80	34.43	-9.41	1.56	-8.84	-4.13
	<MIN>	1.56	8.84	-5.46	1.80	-34.43	-7.87
202	<MAX>	1.98	35.39	-8.89	1.55	-8.99	-4.05
	<MIN>	1.55	8.99	-5.37	1.98	-35.39	-7.21
203	<MAX>	2.13	36.04	-8.48	1.56	-9.12	-3.98
	<MIN>	1.56	9.12	-5.31	2.13	-36.04	-6.67
204	<MAX>	2.19	36.47	-8.11	1.56	-9.22	-3.89
	<MIN>	1.56	9.22	-5.21	2.19	-36.47	-6.24
205	<MAX>	1.56	37.86	-9.37	1.56	-9.29	-3.74
	<MIN>	1.56	9.29	-5.07	1.56	-37.86	-8.05
206	<MAX>	1.75	39.02	-8.57	1.60	-9.28	-3.47
	<MIN>	1.60	9.28	-4.83	1.75	-39.02	-7.09
207	<MAX>	1.97	39.61	-7.57	1.69	-9.12	-3.02
	<MIN>	1.69	9.12	-4.46	1.97	-39.61	-5.89
208	<MAX>	2.26	39.58	-6.32	1.89	-8.71	-2.27
	<MIN>	1.89	8.71	-3.87	2.26	-39.58	-4.41
209	<MAX>	2.27	38.82	-4.24	2.57	-7.79	-1.27
	<MIN>	2.57	7.79	-3.46	2.27	-38.82	-2.30

Barra		N U D O D O R S A L (i) Cortante	<TORSOR>	Flector	N U D O F R O N T A L (j) Cortante	<TORSOR>	Flector
210	<MAX>	2.73	37.05	-2.00	2.96	-6.04	0.20
	<MIN>	2.96	6.04	-2.31	2.73	-37.05	0.32
211	<MAX>	3.08	33.69	0.93	3.43	-3.32	1.74
	<MIN>	3.43	3.32	-1.18	3.08	-33.69	3.55
212	<MAX>	3.02	28.38	4.37	5.37	0.31	3.33
	<MIN>	5.37	-0.31	-1.23	3.02	-28.38	6.94
213	<MAX>	2.40	14.32	4.86	8.31	3.43	4.03
	<MIN>	8.31	-3.43	-3.04	2.40	-14.32	6.90
214	<MAX>	0.95	6.87	3.26	6.49	2.81	2.84
	<MIN>	6.49	-2.81	-2.68	0.95	-6.87	4.07
215	<MAX>	0.63	5.99	4.17	6.74	4.90	2.62
	<MIN>	6.74	-4.90	-3.10	0.63	-5.99	4.71
216	<MAX>	1.03	4.23	4.02	-4.98	7.57	-2.60
	<MIN>	-4.98	-7.57	1.64	1.03	-4.23	4.90
217	<MAX>	47.29	60.01	-40.15	32.38	9.77	16.31
	<MIN>	32.38	-9.77	-12.94	47.29	-60.01	2.59
218	<MAX>	3.57	59.90	-8.37	2.51	3.92	15.49
	<MIN>	2.51	-3.92	12.82	3.57	-59.90	-4.58
219	<MAX>	-20.78	69.44	-3.19	-17.78	-3.90	-1.45
	<MIN>	-17.78	3.90	17.44	-20.78	-69.44	-25.29
220	<MAX>	-30.98	85.35	-23.95	-44.26	-9.35	-27.29
	<MIN>	-44.26	9.35	12.70	-30.98	-85.35	-51.94
221	<MAX>	45.50	95.58	-68.76	45.27	-16.43	4.52
	<MIN>	45.27	16.43	-36.38	45.50	-95.58	-27.65
222	<MAX>	34.85	80.71	-40.05	25.53	-13.90	13.45
	<MIN>	25.53	13.90	-13.69	34.85	-80.71	-3.00
223	<MAX>	10.27	70.46	-15.71	10.15	-8.14	11.74
	<MIN>	10.15	8.14	0.94	10.27	-70.46	-4.80
224	<MAX>	-32.50	68.08	-3.53	-4.02	-2.77	1.43
	<MIN>	-4.02	2.77	5.06	-32.50	-68.08	-32.89

Máximos y Minimos del Esfuerzo CORTANTE

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
1	<MAX>	91.87	14.79	-4.30	89.30	-11.82	23.47
	<MIN>	11.78	21.25	67.75	10.06	-19.17	71.10
2	<MAX>	77.44	18.27	21.32	59.42	0.23	43.29
	<MIN>	5.00	22.18	63.61	2.98	-19.74	65.05
3	<MAX>	54.94	2.80	41.95	51.91	0.70	61.20
	<MIN>	9.54	17.70	60.23	7.52	-15.25	63.29
4	<MAX>	50.91	0.72	61.11	48.34	2.25	76.32
	<MIN>	13.84	13.01	60.56	12.13	-10.93	64.53
5	<MAX>	50.77	23.24	100.19	42.11	-9.84	132.44
	<MIN>	15.76	-14.32	38.58	10.73	20.41	50.46
6	<MAX>	48.26	7.90	128.58	40.83	0.74	168.53
	<MIN>	12.25	-21.12	61.98	7.23	27.21	70.71
7	<MAX>	46.73	-0.64	170.35	39.30	9.28	208.94
	<MIN>	9.00	-26.26	85.34	-6.54	38.55	121.40
8	<MAX>	41.29	-3.33	216.15	21.27	20.77	200.45
	<MIN>	-2.54	-35.48	140.24	-7.59	45.65	147.56
9	<MAX>	24.20	-19.57	220.56	17.53	16.13	195.98
	<MIN>	-4.56	-38.53	158.91	-10.39	57.23	197.42
10	<MAX>	19.94	-12.10	203.73	14.28	18.10	212.30
	<MIN>	-7.97	-50.93	225.60	-16.35	63.15	276.98
11	<MAX>	17.20	-13.30	224.55	11.82	19.03	230.39
	<MIN>	-14.29	-56.01	289.48	-34.55	77.79	292.88
12	<MAX>	15.51	-14.30	246.82	10.43	19.77	251.04
	<MIN>	-33.98	-65.64	319.69	-41.44	74.96	293.30
13	<MAX>	10.48	-10.44	261.80	-7.15	20.28	174.19
	<MIN>	-37.32	-66.91	329.31	-44.84	75.60	292.45
14	<MAX>	-5.92	-23.58	273.08	-10.95	29.67	265.52
	<MIN>	-41.92	-67.63	329.13	-49.44	76.33	288.17

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
15	<MAX>	-9.88	-15.19	184.80	-14.90	21.28	173.69
	<MIN>	-47.18	-68.28	325.22	-54.71	76.98	279.53
16	<MAX>	-13.79	-15.67	183.15	-18.82	21.76	168.53
	<MIN>	-52.76	-68.93	316.91	-72.90	89.90	306.53
17	<MAX>	-17.79	-16.16	178.24	-22.81	22.24	160.03
	<MIN>	-72.46	-78.06	346.64	-79.98	86.76	278.27
18	<MAX>	-21.87	-16.64	169.99	-26.90	22.73	148.12
	<MIN>	-76.14	-78.73	320.18	-83.66	87.43	248.51
19	<MAX>	-26.19	-17.09	158.33	-31.22	23.18	132.58
	<MIN>	-81.24	-79.71	291.20	-88.76	88.40	214.96
20	<MAX>	-30.93	-17.42	143.02	-35.95	23.51	113.02
	<MIN>	-87.46	-80.69	258.21	-94.98	89.39	176.38
21	<MAX>	-36.48	-17.44	123.59	-41.51	23.53	88.61
	<MIN>	-94.86	-81.59	220.14	-102.38	90.29	131.69
22	<MAX>	-43.89	-16.78	99.10	-48.91	22.87	57.48
	<MIN>	-104.20	-82.09	175.89	-111.72	90.79	79.05
23	<MAX>	-58.25	-13.64	67.52	-63.27	19.73	13.02
	<MIN>	-118.95	-80.88	123.50	-126.47	89.58	13.43
24	<MAX>	-79.30	-33.25	34.93	-84.57	39.34	-38.56
	<MIN>	-171.56	-40.04	41.99	-179.33	48.68	-115.38
25	<MAX>	73.06	26.83	17.47	59.52	-22.38	34.78
	<MIN>	14.44	-5.82	2.09	13.63	5.82	7.15
26	<MAX>	51.22	16.89	34.42	49.99	-16.89	52.66
	<MIN>	16.15	-6.70	8.17	15.33	6.70	13.85
27	<MAX>	46.65	11.33	52.20	40.40	-17.13	67.58
	<MIN>	16.84	-8.99	14.49	16.15	8.99	19.55
28	<MAX>	42.20	-14.70	47.73	34.78	11.47	77.54
	<MIN>	16.07	7.06	40.13	14.04	-7.06	53.64
29	<MAX>	41.42	-28.76	74.59	36.29	21.09	115.42
	<MIN>	15.75	-0.21	53.78	11.70	0.73	86.18

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
30	<MAX>	39.47	-36.36	110.69	36.38	41.24	145.24
	<MIN>	16.61	-5.56	68.44	11.86	6.32	105.81
31	<MAX>	43.58	-36.69	157.02	30.49	47.68	163.23
	<MIN>	14.21	-12.51	106.97	10.21	11.44	118.59
32	<MAX>	30.83	-50.18	165.92	27.75	50.18	192.18
	<MIN>	12.89	-14.02	120.86	10.87	14.02	131.51
33	<MAX>	33.61	-48.92	207.67	24.23	51.72	217.35
	<MIN>	10.95	-30.25	125.17	8.92	30.25	134.08
34	<MAX>	23.45	-27.82	228.17	20.39	27.82	247.82
	<MIN>	8.37	-31.07	135.39	-3.38	36.30	180.63
35	<MAX>	20.08	-38.61	245.23	17.08	38.14	259.19
	<MIN>	1.81	-40.16	181.36	-0.27	40.63	184.75
36	<MAX>	21.10	-39.01	262.31	4.20	27.41	206.76
	<MIN>	-1.18	-42.22	182.52	-3.32	42.73	183.29
37	<MAX>	6.89	-38.21	265.97	4.15	30.45	233.39
	<MIN>	-4.06	-44.18	187.00	-6.41	51.95	219.85
38	<MAX>	9.69	-26.97	218.18	-2.90	15.72	148.32
	<MIN>	-7.41	-56.60	238.84	-10.40	57.19	233.65
39	<MAX>	-3.31	-26.10	207.63	-5.87	15.01	138.99
	<MIN>	-11.63	-58.14	237.33	-24.83	59.47	257.34
40	<MAX>	-6.79	-15.38	139.26	-8.82	15.38	132.26
	<MIN>	-20.19	-63.43	258.21	-23.27	63.43	238.72
41	<MAX>	-9.78	-15.77	132.49	-11.81	15.77	122.81
	<MIN>	-24.72	-65.76	239.35	-27.80	65.76	215.79
42	<MAX>	-12.90	-16.13	122.99	-14.92	16.13	110.52
	<MIN>	-29.11	-67.01	216.57	-32.19	67.01	189.07
43	<MAX>	-16.06	-31.10	103.42	-18.09	31.10	88.10
	<MIN>	-33.61	-67.90	189.88	-36.69	67.90	158.35
44	<MAX>	-19.36	-31.58	88.33	-21.39	31.58	70.05
	<MIN>	-39.17	-52.92	164.40	-42.23	52.92	127.89

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
45	<MAX>	-23.22	-31.83	69.99	-25.25	31.83	48.25
	<MIN>	-46.53	-51.90	127.70	-49.59	51.90	84.59
46	<MAX>	-27.22	-31.06	47.48	-29.25	31.06	22.15
	<MIN>	-51.88	-46.85	82.38	-54.94	46.85	34.47
47	<MAX>	-5.70	1.43	18.99	-7.73	-1.43	12.97
	<MIN>	-45.40	-58.03	28.76	-48.48	58.03	-13.35
48	<MAX>	5.41	4.20	15.95	4.72	-4.20	17.51
	<MIN>	-22.41	-34.33	-9.30	-23.47	34.33	-16.33
49	<MAX>	33.75	16.00	20.29	32.50	-16.00	32.24
	<MIN>	13.24	-9.91	-0.34	12.41	9.91	4.28
50	<MAX>	34.67	13.86	33.85	33.61	-13.86	44.31
	<MIN>	16.04	-13.07	5.30	15.34	13.07	10.11
51	<MAX>	39.52	-32.48	23.32	36.39	32.48	57.36
	<MIN>	18.04	7.15	27.60	15.98	-7.15	42.86
52	<MAX>	45.53	-42.95	63.50	42.40	42.95	102.93
	<MIN>	19.10	-2.31	44.53	17.04	2.31	60.74
53	<MAX>	45.65	-48.56	107.57	42.52	48.56	147.11
	<MIN>	20.88	-8.84	63.41	18.81	8.84	81.21
54	<MAX>	39.00	-51.00	150.13	35.87	51.00	183.70
	<MIN>	17.85	-15.76	106.67	15.79	15.76	121.75
55	<MAX>	34.46	-54.42	169.75	31.33	54.42	199.25
	<MIN>	14.77	-17.28	123.34	12.71	17.28	135.67
56	<MAX>	30.40	-54.90	200.00	27.27	54.90	225.86
	<MIN>	12.44	-17.94	136.77	10.37	17.94	147.00
57	<MAX>	26.35	-55.19	226.10	23.22	55.19	248.33
	<MIN>	9.72	-18.28	147.66	7.66	18.28	155.45
58	<MAX>	21.78	-55.44	248.35	18.67	54.84	263.80
	<MIN>	3.47	-23.25	189.34	1.40	23.84	194.22
59	<MAX>	13.54	-55.73	266.62	10.48	55.13	274.59
	<MIN>	0.40	-23.47	191.83	-1.73	24.07	194.05

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
60	<MAX>	5.96	-54.95	271.32	2.97	54.36	272.46
	<MIN>	-2.34	-39.71	189.34	-4.54	40.31	189.12
61	<MAX>	-0.37	-16.86	158.43	-2.57	16.27	154.25
	<MIN>	-5.91	-58.35	246.54	-8.90	58.95	242.76
62	<MAX>	-3.48	-16.04	151.17	-5.62	15.44	144.28
	<MIN>	-10.68	-56.22	274.15	-13.77	62.03	264.65
63	<MAX>	-6.53	-16.31	146.79	-8.61	15.72	137.31
	<MIN>	-18.78	-56.62	263.00	-21.90	57.21	247.47
64	<MAX>	-9.51	-15.96	137.02	-11.57	15.96	127.57
	<MIN>	-23.25	-57.59	247.24	-26.38	57.59	224.98
65	<MAX>	-12.42	-16.09	127.12	-14.48	16.09	115.06
	<MIN>	-27.28	-57.89	224.55	-30.41	57.89	198.67
66	<MAX>	-15.26	-15.91	114.32	-17.32	15.91	99.71
	<MIN>	-31.68	-68.30	195.23	-34.81	68.30	165.41
67	<MAX>	-17.80	-14.94	98.50	-19.87	14.94	81.61
	<MIN>	-35.79	-67.92	163.28	-38.92	67.92	129.78
68	<MAX>	-18.99	-12.10	79.61	-21.05	12.10	61.65
	<MIN>	-38.86	-65.91	126.52	-41.99	65.91	90.25
69	<MAX>	-17.16	-5.72	58.89	-19.22	5.72	42.57
	<MIN>	-38.59	-60.46	85.19	-41.72	60.46	49.17
70	<MAX>	-15.95	3.81	40.81	-18.01	-3.81	25.58
	<MIN>	-32.98	-40.14	47.52	-36.11	40.14	16.53
71	<MAX>	-15.01	-16.13	8.04	-15.72	16.13	3.33
	<MIN>	-28.96	-5.40	30.04	-30.02	5.40	21.01
72	<MAX>	-11.50	-15.75	0.68	-12.32	15.75	-3.61
	<MIN>	-25.62	-1.13	19.37	-26.87	1.13	9.90
73	<MAX>	37.16	-24.41	-8.33	28.44	18.71	4.80
	<MIN>	-4.03	10.23	21.80	-4.72	-10.23	20.45
74	<MAX>	50.72	-41.56	-0.96	47.64	41.56	43.15
	<MIN>	7.28	4.74	15.35	5.26	-4.74	20.98

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
75	<MAX>	59.57	-25.68	49.27	53.53	29.54	98.61
	<MIN>	28.63	-27.66	24.17	26.60	27.66	48.94
76	<MAX>	52.50	-34.54	100.93	49.44	34.54	146.65
	<MIN>	24.79	-28.57	49.78	22.76	28.57	71.11
77	<MAX>	50.64	-35.93	146.57	37.79	38.33	168.29
	<MIN>	21.05	-28.53	71.19	15.84	33.35	109.60
78	<MAX>	35.44	-53.59	162.23	32.36	53.59	192.63
	<MIN>	16.25	-33.05	109.94	14.22	33.05	123.60
79	<MAX>	37.37	-51.43	205.00	28.08	53.20	218.12
	<MIN>	13.34	-18.23	130.80	11.32	18.23	141.86
80	<MAX>	26.70	-52.93	216.70	23.62	52.93	239.27
	<MIN>	10.26	-18.09	141.55	-0.42	22.73	181.50
81	<MAX>	22.75	-52.90	237.59	19.67	52.90	256.61
	<MIN>	3.62	-22.94	181.54	1.59	22.94	183.88
82	<MAX>	23.56	-53.24	254.74	9.07	48.79	259.55
	<MIN>	1.41	-23.03	183.73	-0.65	23.67	186.81
83	<MAX>	9.26	-52.63	258.95	6.27	52.04	263.11
	<MIN>	-1.53	-24.15	188.98	-3.65	24.74	189.46
84	<MAX>	11.60	-48.51	243.91	-1.73	29.82	140.99
	<MIN>	-4.56	-28.39	204.77	-7.35	36.19	236.67
85	<MAX>	-1.48	-40.54	198.48	-4.68	28.94	131.13
	<MIN>	-8.61	-42.27	240.30	-21.24	39.85	260.84
86	<MAX>	-5.44	-29.55	133.02	-7.52	29.08	124.49
	<MIN>	-17.19	-39.62	257.60	-20.19	40.09	243.55
87	<MAX>	-8.27	-29.12	123.59	-10.29	29.12	115.26
	<MIN>	-20.37	-39.92	242.57	-23.43	39.92	222.92
88	<MAX>	-10.92	-29.00	114.20	-12.95	29.00	103.50
	<MIN>	-24.24	-54.36	215.33	-27.32	54.36	192.21
89	<MAX>	-13.06	-13.54	110.24	-15.09	13.54	97.61
	<MIN>	-27.76	-53.35	189.98	-30.84	53.35	163.70

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
90	<MAX>	-14.40	-11.79	96.12	-16.43	11.79	82.29
	<MIN>	-30.48	-51.31	160.82	-33.56	51.31	132.10
91	<MAX>	-14.50	-8.52	80.48	-16.53	8.52	66.56
	<MIN>	-31.82	-47.45	128.38	-34.90	47.45	98.45
92	<MAX>	-13.49	-3.33	64.95	-15.52	3.33	51.94
	<MIN>	-31.14	-40.86	93.98	-34.22	40.86	64.67
93	<MAX>	-13.57	3.93	51.64	-15.59	-3.93	38.56
	<MIN>	-28.63	-31.22	60.12	-31.71	31.22	33.06
94	<MAX>	-15.61	-11.95	17.91	-16.30	11.95	13.02
	<MIN>	-32.81	-0.65	52.13	-33.85	0.65	41.92
95	<MAX>	-14.76	-9.47	12.34	-15.58	9.47	6.87
	<MIN>	-39.08	5.38	42.04	-40.31	-5.38	27.74
96	<MAX>	-11.75	-15.47	3.64	-12.56	15.47	-0.74
	<MIN>	-48.99	12.34	27.50	-50.22	-12.34	9.61
97	<MAX>	166.62	-29.83	-90.70	159.20	21.19	55.43
	<MIN>	80.08	-35.50	-33.39	75.06	29.42	36.20
98	<MAX>	116.55	-68.55	37.77	109.02	59.85	138.94
	<MIN>	60.04	-15.62	16.49	55.02	9.53	68.09
99	<MAX>	101.67	-69.00	105.67	94.15	60.30	193.50
	<MIN>	46.09	-18.83	60.18	41.03	12.74	99.24
100	<MAX>	90.31	-71.94	142.59	82.79	63.24	220.22
	<MIN>	38.86	-19.64	90.77	33.84	13.56	123.39
101	<MAX>	82.85	-70.95	185.80	75.33	62.25	256.73
	<MIN>	33.43	-19.74	114.73	28.41	13.66	142.46
102	<MAX>	75.97	-69.70	222.76	68.45	61.00	287.53
	<MIN>	28.65	-19.41	133.83	23.62	13.32	157.27
103	<MAX>	69.97	-67.54	253.89	62.45	61.98	313.27
	<MIN>	24.65	-18.31	148.66	19.62	14.54	168.52
104	<MAX>	64.05	-67.77	279.82	56.53	62.21	333.90
	<MIN>	21.22	-18.83	159.83	16.19	15.07	176.60

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
105	<MAX>	55.43	-68.63	300.42	47.91	63.07	346.76
	<MIN>	17.77	-19.19	167.76	12.74	15.43	181.44
106	<MAX>	46.73	-69.30	312.64	39.21	63.74	351.17
	<MIN>	14.30	-19.47	172.45	9.28	15.71	183.02
107	<MAX>	38.13	-71.41	306.63	30.61	65.85	337.46
	<MIN>	10.82	-19.69	173.90	5.79	15.92	181.35
108	<MAX>	32.01	-74.55	301.21	24.49	68.98	326.57
	<MIN>	7.36	-19.81	172.13	2.34	16.04	176.48
109	<MAX>	26.05	-77.03	288.70	18.59	70.86	301.31
	<MIN>	2.50	-34.18	235.63	-2.58	31.03	243.02
110	<MAX>	20.27	-78.56	269.68	13.10	72.64	277.49
	<MIN>	-1.69	-33.49	219.07	-7.06	30.08	222.31
111	<MAX>	14.76	-78.42	241.89	7.88	72.76	245.27
	<MIN>	-5.17	-32.70	202.12	-10.83	29.04	201.72
112	<MAX>	9.96	-70.72	188.70	3.59	53.76	150.45
	<MIN>	-8.76	-30.84	185.87	-14.90	37.99	217.67
113	<MAX>	5.55	-67.13	157.35	0.38	50.86	122.27
	<MIN>	-11.98	-27.76	163.00	-19.26	34.25	185.09
114	<MAX>	2.49	-50.65	95.22	-2.53	46.88	95.20
	<MIN>	-15.67	-33.10	166.59	-23.10	27.59	149.20
115	<MAX>	-0.13	-50.28	77.30	-5.15	46.51	74.94
	<MIN>	-18.93	-23.88	134.76	-26.36	18.38	114.45
116	<MAX>	-2.65	-40.75	51.11	-7.68	36.98	46.48
	<MIN>	-20.30	-12.02	105.61	-27.73	6.52	84.07
117	<MAX>	-2.43	-7.22	65.22	-4.15	5.93	64.21
	<MIN>	-22.27	-23.94	52.54	-24.84	22.04	45.32
118	<MAX>	3.17	-0.97	63.21	1.15	-0.54	64.00
	<MIN>	-24.55	-19.17	41.05	-27.58	16.93	31.66
119	<MAX>	9.40	5.97	65.21	7.38	-7.49	68.23
	<MIN>	-28.29	-13.96	28.28	-31.31	11.72	17.53

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
120	<MAX>	5.41	8.36	72.85	3.69	-9.65	74.25
	<MIN>	-32.99	-9.20	15.46	-35.56	7.30	4.96
121	<MAX>	15.25	-10.57	-9.99	15.25	10.57	2.98
	<MIN>	1.34	1.70	1.60	1.34	-1.70	2.74
122	<MAX>	4.49	-1.35	-3.02	4.49	1.35	0.80
	<MIN>	-6.67	-3.74	3.11	-6.67	3.74	-2.56
123	<MAX>	2.47	1.45	0.80	2.47	-1.45	2.90
	<MIN>	-6.41	-1.52	3.17	-6.41	1.52	-2.28
124	<MAX>	2.90	3.20	1.83	2.90	-3.20	4.29
	<MIN>	-8.39	0.18	4.62	-8.39	-0.18	-2.51
125	<MAX>	2.97	10.33	2.07	2.97	-10.33	4.59
	<MIN>	-6.72	-0.18	-1.73	-6.72	0.18	-7.44
126	<MAX>	1.85	14.10	0.43	1.85	-14.10	2.00
	<MIN>	-6.13	2.86	-0.18	-6.13	-2.86	-5.39
127	<MAX>	2.44	16.79	-1.92	2.44	-16.79	0.15
	<MIN>	-5.62	13.02	-3.20	-5.62	-13.02	-7.98
128	<MAX>	2.11	22.05	-3.35	2.11	-22.05	-1.55
	<MIN>	-5.33	12.92	-6.66	-5.33	-12.92	-11.19
129	<MAX>	3.18	24.29	-4.90	3.18	-24.29	-2.20
	<MIN>	-3.10	16.40	-5.77	-3.10	-16.40	-8.41
130	<MAX>	2.46	24.71	-5.38	2.46	-24.71	-3.29
	<MIN>	-4.64	19.63	-9.04	-4.64	-19.63	-12.98
131	<MAX>	2.46	24.56	-5.93	2.46	-24.56	-3.85
	<MIN>	-4.40	15.58	-7.40	-4.40	-15.58	-11.15
132	<MAX>	2.48	27.44	-6.18	2.48	-27.44	-4.07
	<MIN>	-4.35	33.93	-7.84	-4.35	-33.93	-11.54
133	<MAX>	2.56	27.10	-6.14	2.56	-27.10	-3.97
	<MIN>	-4.42	29.60	-10.18	-4.42	-29.60	-13.94
134	<MAX>	3.42	17.95	-6.42	3.42	-17.95	-3.51
	<MIN>	-2.47	35.22	-7.82	-2.47	-35.22	-9.92

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
135	<MAX>	2.61	17.95	-6.17	2.61	-17.95	-3.95
	<MIN>	-4.36	35.88	-10.18	-4.36	-35.88	-13.88
136	<MAX>	2.62	17.61	-6.28	2.62	-17.61	-4.06
	<MIN>	-1.97	36.12	-7.76	-1.97	-36.12	-9.45
137	<MAX>	0.11	17.87	-5.50	0.11	-17.87	-5.41
	<MIN>	-4.07	40.42	-7.80	-4.07	-40.42	-11.26
138	<MAX>	-0.24	18.22	-5.50	-0.24	-18.22	-5.70
	<MIN>	-2.66	41.32	-7.51	-2.66	-41.32	-9.78
139	<MAX>	0.20	23.52	-6.33	0.20	-23.52	-6.16
	<MIN>	-1.57	36.94	-6.88	-1.57	-36.94	-8.22
140	<MAX>	1.27	23.74	-6.73	1.27	-23.74	-5.66
	<MIN>	-0.65	23.83	-6.87	-0.65	-23.83	-7.42
141	<MAX>	3.68	30.36	-7.92	3.68	-30.36	-4.79
	<MIN>	0.52	24.33	-7.03	0.52	-24.33	-6.59
142	<MAX>	12.88	31.71	-12.49	12.88	-31.71	-1.55
	<MIN>	3.67	22.48	-6.58	3.67	-22.48	-3.46
143	<MAX>	47.76	30.29	-25.57	47.76	-30.29	15.02
	<MIN>	14.34	20.44	-9.84	14.34	-20.44	2.35
144	<MAX>	44.36	22.31	-20.71	44.36	-22.31	16.99
	<MIN>	16.94	-9.25	-6.54	16.94	9.25	7.86
145	<MAX>	7.55	-8.28	-1.48	7.55	8.28	6.07
	<MIN>	-3.52	4.38	7.54	-3.52	-4.38	4.02
146	<MAX>	1.27	-6.46	0.81	1.27	6.46	2.08
	<MIN>	-2.68	5.17	6.22	-2.68	-5.17	3.53
147	<MAX>	-2.02	0.98	5.74	-2.02	-0.98	3.72
	<MIN>	-5.46	-6.13	5.16	-5.46	6.13	-0.31
148	<MAX>	-4.10	12.44	4.74	-4.10	-12.44	0.64
	<MIN>	-12.60	1.54	7.71	-12.60	-1.54	-4.89
149	<MAX>	-3.46	15.94	1.54	-3.46	-15.94	-1.92
	<MIN>	-12.46	9.58	4.77	-12.46	-9.58	-7.68

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
150	<MAX>	-2.30	17.60	-1.45	-2.30	-17.60	-3.75
	<MIN>	-10.61	11.40	0.72	-10.61	-11.40	-9.89
151	<MAX>	-1.29	19.94	-3.76	-1.29	-19.94	-5.05
	<MIN>	-8.77	14.27	-3.27	-8.77	-14.27	-12.04
152	<MAX>	-0.62	22.57	-3.76	-0.62	-22.57	-4.38
	<MIN>	-8.37	17.74	-5.09	-8.37	-17.74	-13.46
153	<MAX>	-0.17	27.60	-5.06	-0.17	-27.60	-5.24
	<MIN>	-6.57	20.75	-7.09	-6.57	-20.75	-13.65
154	<MAX>	-0.07	20.46	-6.37	-0.07	-20.46	-6.44
	<MIN>	-5.93	23.57	-7.42	-5.93	-23.57	-13.35
155	<MAX>	0.04	23.02	-6.22	0.04	-23.02	-6.19
	<MIN>	-5.70	19.03	-7.83	-5.70	-19.03	-13.53
156	<MAX>	0.25	30.71	-6.67	0.25	-30.71	-6.42
	<MIN>	-5.81	17.04	-7.78	-5.81	-17.04	-13.59
157	<MAX>	0.18	21.40	-6.83	0.18	-21.40	-6.66
	<MIN>	-6.78	29.46	-7.35	-6.78	-29.46	-14.13
158	<MAX>	0.19	21.56	-6.92	0.19	-21.56	-6.73
	<MIN>	-5.75	32.14	-7.85	-5.75	-32.14	-13.60
159	<MAX>	0.29	21.72	-6.90	0.29	-21.72	-6.62
	<MIN>	-5.48	34.85	-7.25	-5.48	-34.85	-12.73
160	<MAX>	0.48	21.88	-6.80	0.48	-21.88	-6.32
	<MIN>	-2.79	36.47	-8.00	-2.79	-36.47	-10.79
161	<MAX>	1.08	23.42	-6.06	1.08	-23.42	-4.98
	<MIN>	-1.58	37.48	-7.63	-1.58	-37.48	-9.21
162	<MAX>	1.84	23.54	-5.95	1.84	-23.54	-4.12
	<MIN>	-0.43	38.14	-7.10	-0.43	-38.14	-7.54
163	<MAX>	3.65	25.37	-7.20	3.65	-25.37	-3.56
	<MIN>	0.87	22.44	-5.07	0.87	-22.44	-4.20
164	<MAX>	7.78	31.51	-7.50	7.78	-31.51	0.28
	<MIN>	2.54	22.63	-4.58	2.54	-22.63	-2.03

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
165	<MAX>	15.14	30.69	-7.10	15.14	-30.69	8.05
	<MIN>	5.67	20.51	-3.73	5.67	-20.51	1.94
166	<MAX>	19.12	23.63	-2.06	19.12	-23.63	17.06
	<MIN>	9.50	17.91	-2.26	9.50	-17.91	7.25
167	<MAX>	16.46	20.79	0.87	16.46	-20.79	17.33
	<MIN>	3.82	-4.16	1.70	3.82	4.16	5.53
168	<MAX>	12.85	10.17	-1.02	12.85	-10.17	11.83
	<MIN>	0.88	-2.51	1.67	0.88	2.51	2.55
169	<MAX>	1.01	-5.36	2.47	1.01	5.36	3.48
	<MIN>	-9.68	6.96	9.76	-9.68	-6.96	0.08
170	<MAX>	-2.92	-5.59	4.44	-2.92	5.59	1.52
	<MIN>	-13.56	13.49	15.91	-13.56	-13.49	2.36
171	<MAX>	-8.68	15.67	5.94	-8.68	-15.67	-2.74
	<MIN>	-17.27	12.37	16.15	-17.27	-12.37	-1.12
172	<MAX>	-5.13	18.31	0.87	-5.13	-18.31	-4.26
	<MIN>	-14.68	13.89	3.65	-14.68	-13.89	-11.02
173	<MAX>	-0.94	23.33	-0.84	-0.94	-23.33	-1.77
	<MIN>	-9.22	13.77	-2.74	-9.22	-13.77	-11.96
174	<MAX>	0.44	26.11	-3.21	0.44	-26.11	-2.77
	<MIN>	-6.26	16.56	-6.77	-6.26	-16.56	-13.03
175	<MAX>	2.14	28.33	-6.34	2.14	-28.33	-4.21
	<MIN>	-4.57	17.15	-7.41	-4.57	-17.15	-11.99
176	<MAX>	2.16	32.92	-7.49	2.16	-32.92	-5.33
	<MIN>	-3.54	14.90	-7.58	-3.54	-14.90	-11.13
177	<MAX>	2.92	32.65	-8.35	2.92	-32.65	-5.43
	<MIN>	-2.38	16.99	-7.84	-2.38	-16.99	-10.22
178	<MAX>	3.13	34.14	-8.56	3.13	-34.14	-5.42
	<MIN>	-2.16	13.63	-8.00	-2.16	-13.63	-10.16
179	<MAX>	2.89	33.99	-8.17	2.89	-33.99	-5.28
	<MIN>	-2.75	15.79	-8.16	-2.75	-15.79	-10.92

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
180	<MAX>	3.55	34.18	-8.34	3.55	-34.18	-4.80
	<MIN>	-2.80	18.15	-8.30	-2.80	-18.15	-11.10
181	<MAX>	2.93	24.61	-7.86	2.93	-24.61	-4.93
	<MIN>	-2.71	29.98	-8.03	-2.71	-29.98	-10.74
182	<MAX>	3.29	24.47	-8.02	3.29	-24.47	-4.73
	<MIN>	-2.01	32.14	-7.69	-2.01	-32.14	-9.70
183	<MAX>	1.65	24.57	-7.11	1.65	-24.57	-5.46
	<MIN>	-1.23	33.69	-6.94	-1.23	-33.69	-8.16
184	<MAX>	1.98	22.88	-7.52	1.98	-22.88	-5.54
	<MIN>	-0.30	34.60	-6.14	-0.30	-34.60	-6.44
185	<MAX>	2.78	26.46	-6.86	2.78	-26.46	-4.08
	<MIN>	0.59	35.06	-5.12	0.59	-35.06	-4.53
186	<MAX>	4.26	23.23	-5.23	4.26	-23.23	-0.97
	<MIN>	1.58	21.67	-3.99	1.58	-21.67	-2.41
187	<MAX>	6.75	29.37	-3.99	6.75	-29.37	2.75
	<MIN>	2.65	19.54	-2.59	2.65	-19.54	0.06
188	<MAX>	9.61	25.39	-1.10	9.61	-25.39	8.50
	<MIN>	3.94	18.03	-0.70	3.94	-18.03	3.24
189	<MAX>	11.65	18.71	2.19	11.65	-18.71	13.84
	<MIN>	4.77	14.59	1.89	4.77	-14.59	6.65
190	<MAX>	6.65	6.09	3.98	6.65	-6.09	10.63
	<MIN>	2.96	6.37	3.36	2.96	-6.37	6.33
191	<MAX>	4.23	8.21	4.02	4.23	-8.21	8.25
	<MIN>	-0.02	-3.37	1.43	-0.02	3.37	1.41
192	<MAX>	6.74	7.53	3.73	6.74	-7.53	10.47
	<MIN>	-4.15	-4.84	4.17	-4.15	4.84	0.02
193	<MAX>	-14.93	-10.58	7.03	-14.93	10.58	-5.66
	<MIN>	-38.97	14.23	17.68	-38.97	-14.23	-15.45
194	<MAX>	-13.34	18.23	1.77	-13.34	-18.23	-9.57
	<MIN>	-48.87	16.86	18.10	-48.87	-16.86	-23.44

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
195	<MAX>	-3.30	20.35	-3.85	-3.30	-20.35	-6.65
	<MIN>	-15.80	18.49	1.39	-15.80	-18.49	-12.03
196	<MAX>	-0.30	22.30	-6.92	-0.30	-22.30	-7.18
	<MIN>	-7.55	17.26	-1.89	-7.55	-17.26	-8.31
197	<MAX>	0.76	21.92	-7.64	0.76	-21.92	-7.00
	<MIN>	-4.60	19.77	-3.44	-4.60	-19.77	-7.35
198	<MAX>	1.17	21.52	-7.86	1.17	-21.52	-6.87
	<MIN>	-4.54	19.89	-3.26	-4.54	-19.89	-7.12
199	<MAX>	1.97	25.62	-8.37	1.97	-25.62	-6.69
	<MIN>	-2.79	15.64	-3.11	-2.79	-15.64	-5.48
200	<MAX>	2.65	25.53	-8.14	2.65	-25.53	-5.89
	<MIN>	-2.10	16.28	-3.16	-2.10	-16.28	-4.94
201	<MAX>	2.54	25.58	-7.92	2.54	-25.58	-5.75
	<MIN>	-2.10	16.74	-3.02	-2.10	-16.74	-4.81
202	<MAX>	2.52	25.64	-7.82	2.52	-25.64	-5.68
	<MIN>	-2.16	17.47	-2.76	-2.16	-17.47	-4.60
203	<MAX>	2.51	28.72	-7.81	2.51	-28.72	-5.68
	<MIN>	-2.99	17.83	-2.25	-2.99	-17.83	-4.78
204	<MAX>	2.49	28.77	-7.68	2.49	-28.77	-5.56
	<MIN>	-2.15	27.32	-2.64	-2.15	-27.32	-4.46
205	<MAX>	2.48	28.76	-7.49	2.48	-28.76	-5.39
	<MIN>	-2.10	27.97	-2.66	-2.10	-27.97	-4.45
206	<MAX>	2.50	19.17	-7.02	2.50	-19.17	-4.89
	<MIN>	0.54	27.97	-3.89	0.54	-27.97	-3.43
207	<MAX>	2.60	24.83	-6.49	2.60	-24.83	-4.28
	<MIN>	1.04	32.65	-5.41	1.04	-32.65	-4.53
208	<MAX>	2.85	24.14	-5.58	2.85	-24.14	-3.16
	<MIN>	1.30	32.85	-4.35	1.30	-32.85	-3.25
209	<MAX>	3.28	24.20	-4.36	3.28	-24.20	-1.57
	<MIN>	1.55	18.65	-3.09	1.55	-18.65	-1.77

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
210	<MAX>	3.89	25.35	-2.34	3.89	-25.35	0.96
	<MIN>	1.76	17.50	-1.93	1.76	-17.50	-0.43
211	<MAX>	4.58	21.30	0.12	4.58	-21.30	4.01
	<MIN>	1.89	15.50	-0.34	1.89	-15.50	1.26
212	<MAX>	6.66	15.46	1.62	6.66	-15.46	7.28
	<MIN>	1.68	12.44	1.52	1.68	-12.44	2.95
213	<MAX>	9.89	5.37	-0.29	9.89	-5.37	8.12
	<MIN>	0.81	5.45	2.09	0.81	-5.45	2.77
214	<MAX>	7.39	1.69	-0.62	7.39	-1.69	5.66
	<MIN>	0.04	2.33	1.19	0.04	-2.33	1.22
215	<MAX>	8.23	-1.21	-1.57	8.23	1.21	5.43
	<MIN>	-0.86	2.30	2.64	-0.86	-2.30	1.91
216	<MAX>	1.45	3.79	3.17	1.45	-3.79	4.40
	<MIN>	-5.38	-7.14	2.46	-5.38	7.14	-2.11
217	<MAX>	79.35	44.69	-56.53	79.35	-44.69	15.17
	<MIN>	0.33	5.55	3.44	0.33	-5.55	3.74
218	<MAX>	26.05	42.04	-12.78	26.05	-42.04	14.91
	<MIN>	-18.58	15.52	18.20	-18.58	-15.52	-1.55
219	<MAX>	5.37	49.04	-5.02	5.37	-49.04	0.69
	<MIN>	-43.86	25.02	22.47	-43.86	-25.02	-24.16
220	<MAX>	4.34	70.53	-26.87	4.34	-70.53	-22.95
	<MIN>	-80.91	24.88	18.30	-80.91	-24.88	-54.81
221	<MAX>	91.61	39.10	-78.62	91.61	-39.10	4.16
	<MIN>	-0.19	73.15	-27.04	-0.19	-73.15	-27.21
222	<MAX>	57.93	36.29	-38.92	57.93	-36.29	22.66
	<MIN>	2.82	58.53	-15.01	2.82	-58.53	-12.02
223	<MAX>	32.42	26.07	-12.69	32.42	-26.07	21.77
	<MIN>	-11.84	52.65	-2.07	-11.84	-52.65	-14.66
224	<MAX>	13.21	12.78	-2.15	13.21	-12.78	9.79
	<MIN>	-49.72	58.07	3.68	-49.72	-58.07	-41.25

Combinación C-3:

Máximos y Mínimos del Esfuerzo FLECTOR

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
1	<MAX>	22.85	18.98	69.45	54.28	-27.72	81.40
	<MIN>	61.67	9.32	-2.65	25.34	2.58	9.35
2	<MAX>	42.79	34.73	72.28	30.74	-22.22	83.92
	<MIN>	23.32	-2.63	9.87	21.30	5.08	17.92
3	<MAX>	34.97	22.19	77.68	31.92	-18.68	89.72
	<MIN>	20.24	-5.42	19.08	18.22	7.87	26.01
4	<MAX>	37.69	17.51	86.09	35.10	-14.53	97.24
	<MIN>	18.03	-8.34	27.70	16.31	10.42	32.97
5	<MAX>	41.88	13.77	93.11	25.30	3.96	122.39
	<MIN>	16.63	-11.31	36.99	11.61	17.40	49.66
6	<MAX>	31.44	-3.91	124.22	31.92	8.73	153.59
	<MIN>	13.05	-17.72	59.43	8.03	23.81	68.88
7	<MAX>	36.99	-8.65	159.42	29.41	17.39	189.19
	<MIN>	9.76	-22.67	81.62	4.73	28.76	88.12
8	<MAX>	31.92	-12.80	199.80	15.33	30.54	219.60
	<MIN>	6.41	-26.14	102.89	1.38	32.23	106.38
9	<MAX>	19.52	-24.76	234.08	11.94	33.50	248.19
	<MIN>	2.87	-28.42	122.43	-2.16	34.50	122.75
10	<MAX>	13.10	-24.03	265.87	-3.48	41.77	266.15
	<MIN>	-0.82	-29.89	139.57	-5.84	35.97	136.59
11	<MAX>	-0.00	-33.40	286.39	-16.59	51.14	280.33
	<MIN>	-4.61	-30.86	153.92	-9.63	36.95	147.52
12	<MAX>	-15.41	-41.27	302.50	-2.08	39.03	298.42
	<MIN>	-8.44	-31.55	165.20	-13.46	37.63	155.38
13	<MAX>	-0.97	-28.83	317.69	-17.55	46.57	308.00
	<MIN>	-12.29	-32.09	173.32	-17.32	38.17	160.04
14	<MAX>	-14.32	-37.12	328.92	-21.91	45.86	312.67
	<MIN>	-16.17	-32.56	178.20	-21.19	38.65	161.45
15	<MAX>	-21.31	-34.25	335.53	-37.89	51.99	304.95
	<MIN>	-20.04	-33.02	179.83	-25.07	39.11	159.60
16	<MAX>	-34.72	-42.49	329.75	-51.31	60.23	292.56
	<MIN>	-23.94	-33.51	178.20	-28.96	39.60	154.48
17	<MAX>	-50.42	-49.86	319.01	-49.73	49.98	271.49
	<MIN>	-27.90	-34.03	173.33	-32.92	40.12	146.06
18	<MAX>	-55.15	-50.51	298.05	-56.33	50.90	247.97
	<MIN>	-31.91	-34.60	165.18	-36.93	40.69	134.31
19	<MAX>	-60.90	-51.27	273.44	-62.89	51.84	219.08
	<MIN>	-36.06	-35.25	153.74	-41.09	41.33	119.14
20	<MAX>	-67.65	-51.88	244.09	-69.99	52.61	184.27
	<MIN>	-40.46	-35.94	138.89	-45.48	42.03	100.35
21	<MAX>	-70.62	-44.29	209.17	-78.20	53.03	142.43
	<MIN>	-45.34	-36.64	120.45	-50.37	42.73	77.53
22	<MAX>	-81.32	-43.86	167.44	-88.91	52.60	91.08
	<MIN>	-51.21	-37.20	97.98	-59.56	46.89	49.36
23	<MAX>	-102.57	-63.72	118.73	-105.83	68.80	24.23
	<MIN>	-58.25	-13.64	67.52	-85.03	38.64	6.91
24	<MAX>	-134.32	-57.00	58.11	-85.57	38.83	-37.53
	<MIN>	-97.88	-1.58	20.40	-166.33	41.12	-106.44
25	<MAX>	63.55	23.96	15.14	53.84	-24.93	34.78
	<MIN>	16.18	-8.37	1.81	13.75	6.19	7.15
26	<MAX>	44.09	20.98	35.01	42.84	-20.98	50.68
	<MIN>	16.28	-8.36	7.88	15.47	8.36	13.60
27	<MAX>	37.16	15.38	50.20	36.11	-15.38	61.44
	<MIN>	17.10	-10.81	14.32	16.40	10.81	19.45
28	<MAX>	34.34	3.25	60.65	28.64	-5.19	86.06
	<MIN>	18.20	-13.22	20.82	16.17	13.22	36.24

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
29	<MAX>	32.06	-5.77	87.64	28.97	5.77	115.02
	<MIN>	18.88	-18.60	38.64	16.85	18.60	54.66
30	<MAX>	32.96	-14.53	118.10	29.86	14.53	146.28
	<MIN>	18.65	-22.42	57.02	16.62	22.42	72.83
31	<MAX>	35.86	-21.60	149.26	24.30	20.63	174.94
	<MIN>	17.37	-24.79	74.78	15.35	24.79	89.46
32	<MAX>	26.63	-26.29	177.45	23.54	26.29	199.94
	<MIN>	15.37	-26.19	90.96	13.35	26.19	103.84
33	<MAX>	28.05	-30.93	201.66	16.49	29.96	217.84
	<MIN>	12.93	-27.03	105.00	10.90	27.03	115.70
34	<MAX>	17.25	-33.69	218.93	5.70	32.72	230.52
	<MIN>	10.25	-27.58	116.65	8.22	27.58	124.93
35	<MAX>	8.20	-35.45	231.44	13.19	29.83	244.06
	<MIN>	7.45	-27.98	125.74	5.42	27.98	131.51
36	<MAX>	15.55	-32.40	245.15	3.99	31.43	252.61
	<MIN>	4.56	-28.32	132.22	2.54	28.32	135.41
37	<MAX>	4.22	-34.62	253.70	1.13	34.62	256.10
	<MIN>	1.65	-28.65	136.07	-0.38	28.65	136.65
38	<MAX>	4.57	-38.05	256.89	-6.98	37.07	252.02
	<MIN>	-1.25	-28.98	137.28	-3.28	28.98	135.25
39	<MAX>	-6.80	-40.29	252.53	-18.36	39.31	242.55
	<MIN>	-4.18	-29.33	135.85	-6.21	29.33	131.19
40	<MAX>	-16.14	-41.90	243.12	-19.24	41.90	227.25
	<MIN>	-7.10	-29.72	131.77	-9.12	29.72	124.49
41	<MAX>	-20.72	-43.49	227.66	-23.11	37.43	208.08
	<MIN>	-10.02	-30.14	125.03	-12.05	30.14	115.13
42	<MAX>	-24.68	-38.09	208.74	-27.78	38.09	185.22
	<MIN>	-13.00	-30.60	115.60	-15.03	30.60	103.03
43	<MAX>	-29.62	-38.66	185.71	-32.71	38.66	157.75
	<MIN>	-16.06	-31.10	103.42	-18.09	31.10	88.10

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
44	<MAX>	-35.31	-38.88	157.98	-38.40	38.88	124.92
	<MIN>	-19.36	-31.58	88.33	-21.39	31.58	70.05
45	<MAX>	-42.51	-37.97	124.53	-45.60	37.97	85.02
	<MIN>	-23.22	-31.83	69.99	-25.25	31.83	48.25
46	<MAX>	-47.53	-33.26	82.62	-50.63	33.26	38.59
	<MIN>	-27.22	-31.06	47.48	-32.98	39.61	20.93
47	<MAX>	-40.58	-42.66	32.65	-9.01	-1.88	14.17
	<MIN>	-9.86	-8.89	17.62	-44.02	51.32	-11.09
48	<MAX>	4.26	8.13	19.22	3.57	-8.13	20.42
	<MIN>	-19.04	-36.96	-12.66	-20.09	36.96	-18.65
49	<MAX>	25.40	17.18	19.77	28.36	-14.33	29.98
	<MIN>	19.37	-18.23	-2.73	14.31	15.38	2.82
50	<MAX>	29.93	12.24	31.53	28.86	-12.24	40.54
	<MIN>	19.26	-19.71	4.07	16.01	15.79	9.47
51	<MAX>	31.11	3.63	42.14	30.85	-2.29	70.45
	<MIN>	20.74	-20.49	11.67	18.00	18.07	29.23
52	<MAX>	36.88	-11.21	74.68	33.74	11.21	106.36
	<MIN>	22.53	-23.68	32.73	20.47	23.68	52.01
53	<MAX>	38.40	-20.56	111.09	35.25	20.56	144.12
	<MIN>	22.08	-26.70	54.66	20.02	26.70	73.54
54	<MAX>	34.76	-26.09	147.48	31.08	26.26	176.92
	<MIN>	19.93	-28.03	75.17	17.87	28.03	92.11
55	<MAX>	29.24	-29.81	178.76	26.09	29.81	203.57
	<MIN>	17.28	-28.61	93.04	15.21	28.61	107.61
56	<MAX>	23.31	-32.58	204.51	19.63	32.75	223.53
	<MIN>	14.49	-28.91	108.12	12.43	28.91	120.19
57	<MAX>	17.18	-35.02	223.89	13.50	35.19	237.74
	<MIN>	11.56	-29.12	120.45	9.50	29.12	129.89
58	<MAX>	16.86	-31.71	237.92	13.72	31.71	251.64
	<MIN>	8.54	-29.30	130.00	6.48	29.30	136.74

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
59	<MAX>	10.81	-33.55	252.14	8.34	36.68	260.58
	<MIN>	5.48	-29.51	136.76	3.42	29.51	140.76
60	<MAX>	5.05	-37.02	260.40	1.91	37.02	263.53
	<MIN>	2.46	-29.76	140.74	0.39	29.76	142.02
61	<MAX>	-2.14	-37.39	263.46	-5.29	37.39	260.12
	<MIN>	-0.57	-30.03	141.97	-2.63	30.03	140.53
62	<MAX>	-8.53	-37.77	260.15	-11.67	37.77	251.08
	<MIN>	-3.56	-30.32	140.44	-5.63	30.32	136.31
63	<MAX>	-15.26	-38.15	250.78	-18.40	38.15	235.69
	<MIN>	-6.56	-30.61	136.15	-8.62	30.61	129.34
64	<MAX>	-19.76	-38.49	235.38	-22.90	38.49	216.24
	<MIN>	-9.53	-30.89	129.09	-11.59	30.89	119.62
65	<MAX>	-23.96	-38.68	215.70	-27.10	38.68	192.79
	<MIN>	-12.44	-31.13	119.21	-14.50	31.13	107.13
66	<MAX>	-28.19	-38.49	191.75	-31.33	38.49	165.06
	<MIN>	-15.30	-31.24	106.47	-17.36	31.24	91.83
67	<MAX>	-32.08	-37.29	163.23	-35.22	37.29	133.05
	<MIN>	-18.02	-31.02	90.77	-20.08	31.02	73.68
68	<MAX>	-34.26	-33.67	129.97	-37.41	33.67	97.83
	<MIN>	-20.20	-29.96	71.95	-22.26	29.96	52.91
69	<MAX>	-32.24	-25.28	93.30	-35.38	25.28	62.97
	<MIN>	-20.58	-27.09	50.16	-23.39	29.91	30.59
70	<MAX>	-28.80	-11.84	58.88	-31.26	9.43	32.13
	<MIN>	-19.78	-28.94	26.77	-24.09	34.46	7.52
71	<MAX>	-26.98	-0.44	30.66	-25.51	-3.48	22.62
	<MIN>	-17.68	-27.95	4.88	-18.39	27.95	-0.64
72	<MAX>	-22.91	6.17	21.28	-20.21	-9.95	13.64
	<MIN>	-12.38	-22.59	-1.99	-17.17	26.37	-7.46
73	<MAX>	0.12	13.41	26.10	1.43	-14.04	26.41
	<MIN>	22.07	-28.82	-12.76	21.01	28.82	-6.16

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
74	<MAX>	14.26	8.20	22.13	40.95	29.67	43.39
	<MIN>	42.98	-41.24	-4.27	6.45	-2.14	20.90
75	<MAX>	50.06	-20.24	50.00	46.97	20.24	93.52
	<MIN>	28.63	-27.66	24.17	26.60	27.66	48.94
76	<MAX>	44.76	-25.97	96.67	41.66	25.97	135.43
	<MIN>	24.79	-28.57	49.78	22.76	28.57	71.11
77	<MAX>	36.79	-28.50	136.42	33.70	28.50	168.03
	<MIN>	21.05	-28.53	71.19	19.02	28.53	89.16
78	<MAX>	29.93	-30.29	168.10	29.14	33.63	194.41
	<MIN>	17.84	-28.32	88.88	15.81	28.32	103.97
79	<MAX>	31.53	-33.74	193.83	20.90	31.98	213.16
	<MIN>	15.04	-28.17	103.43	13.01	28.17	116.01
80	<MAX>	18.06	-33.59	212.18	20.08	34.70	227.73
	<MIN>	12.10	-28.12	115.31	10.07	28.12	125.25
81	<MAX>	16.13	-31.21	227.07	15.73	34.74	242.09
	<MIN>	8.94	-28.18	124.52	6.91	28.18	131.63
82	<MAX>	17.48	-35.04	240.86	5.38	35.04	249.73
	<MIN>	5.99	-28.34	130.94	3.96	28.34	135.41
83	<MAX>	7.09	-35.42	248.88	4.00	35.42	253.86
	<MIN>	3.10	-28.55	134.73	1.07	28.55	136.60
84	<MAX>	6.63	-35.82	252.96	-5.46	35.82	249.44
	<MIN>	0.21	-28.76	135.89	-1.81	28.76	135.18
85	<MAX>	-3.68	-36.16	248.45	-15.78	36.16	241.11
	<MIN>	-2.65	-28.94	134.43	-4.68	28.94	131.13
86	<MAX>	-13.80	-36.35	240.40	-16.90	36.35	226.63
	<MIN>	-5.50	-29.08	130.33	-7.52	29.08	124.49
87	<MAX>	-17.44	-36.22	225.59	-20.54	36.22	208.55
	<MIN>	-8.27	-29.12	123.59	-10.29	29.12	115.26
88	<MAX>	-21.27	-35.67	207.10	-24.37	35.67	186.64
	<MIN>	-10.92	-29.00	114.20	-12.95	29.00	103.50

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
89	<MAX>	-24.54	-34.41	184.70	-27.64	34.41	161.29
	<MIN>	-13.35	-28.54	102.21	-15.38	28.54	89.32
90	<MAX>	-26.75	-31.83	158.73	-29.84	31.83	133.34
	<MIN>	-15.34	-27.49	87.67	-17.37	27.49	73.00
91	<MAX>	-27.19	-27.04	130.13	-30.29	27.04	104.35
	<MIN>	-16.54	-25.38	70.89	-18.57	25.38	55.14
92	<MAX>	-25.75	-19.31	101.04	-28.85	19.31	76.56
	<MIN>	-16.62	-21.72	52.62	-18.65	21.72	36.80
93	<MAX>	-24.69	-8.35	74.53	-27.79	8.35	50.99
	<MIN>	-15.69	-16.34	34.23	-18.79	23.00	18.93
94	<MAX>	-31.27	3.11	51.28	-32.32	-3.11	41.54
	<MIN>	-16.51	-19.62	17.19	-17.20	19.62	12.02
95	<MAX>	-37.86	8.73	41.79	-39.11	-8.73	27.91
	<MIN>	-15.16	-16.44	11.10	-16.79	18.38	5.47
96	<MAX>	-48.14	14.02	27.45	-47.78	-16.21	10.10
	<MIN>	-12.75	-14.45	4.41	-13.56	14.45	-0.34
97	<MAX>	89.38	-32.76	-27.48	122.23	42.67	67.02
	<MIN>	153.78	-29.40	-91.18	93.65	-2.26	21.67
98	<MAX>	96.14	-53.76	41.48	92.88	48.68	127.29
	<MIN>	64.37	-19.28	15.58	55.02	9.53	68.09
99	<MAX>	79.69	-38.45	107.52	78.87	36.28	177.28
	<MIN>	53.37	-39.26	52.50	48.35	33.17	98.12
100	<MAX>	68.97	-40.49	157.66	66.35	37.21	219.07
	<MIN>	47.73	-38.84	79.69	42.70	32.75	120.26
101	<MAX>	63.80	-45.96	197.57	56.21	37.22	251.39
	<MIN>	42.97	-38.26	102.06	37.95	32.18	138.34
102	<MAX>	54.07	-45.65	229.97	46.48	36.91	275.07
	<MIN>	38.51	-37.56	120.38	33.49	31.48	152.68
103	<MAX>	45.94	-44.21	253.70	45.71	39.32	293.11
	<MIN>	34.68	-36.27	134.85	29.66	32.50	163.71

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
104	<MAX>	47.59	-45.37	271.20	40.00	39.77	310.49
	<MIN>	31.32	-36.70	145.85	26.30	32.94	171.69
105	<MAX>	40.26	-46.08	288.48	32.68	40.48	321.18
	<MIN>	27.92	-37.03	153.70	22.89	33.26	176.49
106	<MAX>	32.89	-46.63	298.72	25.31	41.03	324.81
	<MIN>	24.47	-37.30	158.36	19.45	33.54	178.05
107	<MAX>	24.98	-47.24	302.10	17.40	41.64	321.12
	<MIN>	20.99	-37.53	159.78	15.97	33.77	176.36
108	<MAX>	17.61	-47.57	298.22	10.03	41.97	310.62
	<MIN>	17.52	-37.70	157.98	12.50	33.93	171.45
109	<MAX>	10.27	-47.76	287.38	2.68	42.16	293.19
	<MIN>	14.04	-37.75	152.98	9.01	33.99	163.33
110	<MAX>	4.55	-47.11	270.06	-3.03	41.51	270.74
	<MIN>	10.55	-37.62	144.83	5.53	33.86	152.05
111	<MAX>	-0.68	-45.77	247.97	-8.26	40.17	243.96
	<MIN>	7.09	-37.16	133.61	2.07	33.40	137.72
112	<MAX>	-5.64	-43.38	221.89	-13.23	37.78	213.42
	<MIN>	3.68	-36.16	119.54	-1.34	32.40	120.58
113	<MAX>	-10.14	-39.31	192.68	-17.72	33.71	180.18
	<MIN>	0.42	-34.28	102.95	-4.60	30.52	101.08
114	<MAX>	-14.10	-32.95	161.84	-21.69	27.35	145.79
	<MIN>	-2.65	-31.12	84.52	-7.67	27.36	79.89
115	<MAX>	-17.48	-24.00	131.36	-25.06	18.39	112.26
	<MIN>	-5.61	-26.36	65.24	-10.64	22.60	57.95
116	<MAX>	-18.94	-12.33	103.33	-26.52	6.73	82.94
	<MIN>	-7.63	-22.60	45.99	-13.79	16.22	36.07
117	<MAX>	-17.58	-0.20	81.76	-20.17	-1.71	75.98
	<MIN>	-11.59	-15.83	30.66	-14.61	12.31	26.51
118	<MAX>	-13.43	5.99	76.60	-16.48	-8.25	71.21
	<MIN>	-13.01	-12.83	23.99	-16.43	9.33	18.54

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
119	<MAX>	-9.65	12.50	74.22	-7.17	-10.70	71.00
	<MIN>	-15.25	-9.49	16.61	-18.87	6.30	10.21
120	<MAX>	-17.56	13.78	76.45	-8.90	-11.49	73.27
	<MIN>	-19.90	-5.04	9.07	-26.27	2.64	2.05
121	<MAX>	2.02	1.58	1.44	4.46	-0.33	3.98
	<MIN>	11.32	-9.71	-7.75	5.66	7.85	1.15
122	<MAX>	-6.24	-3.81	3.11	2.67	-1.57	3.43
	<MIN>	3.01	-0.64	-2.09	-4.40	7.11	-4.51
123	<MAX>	-6.23	-1.48	3.26	1.49	-2.37	2.62
	<MIN>	0.66	0.27	-1.06	-5.76	4.67	-4.47
124	<MAX>	-7.82	-1.31	4.74	1.40	-5.74	3.87
	<MIN>	0.73	1.93	-2.11	-6.71	6.39	-6.27
125	<MAX>	-4.85	4.83	4.02	0.88	-14.46	3.33
	<MIN>	-2.68	8.64	-2.36	-5.91	2.93	-6.50
126	<MAX>	-2.69	10.13	1.66	0.13	-18.51	0.52
	<MIN>	-0.72	13.73	-5.30	-1.83	-3.08	-5.96
127	<MAX>	-2.48	12.80	-0.86	0.21	-6.04	-1.00
	<MIN>	-1.77	16.29	-5.75	-4.11	-22.88	-7.46
128	<MAX>	-1.01	7.56	-2.40	0.29	-10.26	-2.48
	<MIN>	-3.90	23.75	-6.65	-3.93	-23.27	-9.99
129	<MAX>	-1.29	9.00	-3.56	1.19	-11.46	-3.16
	<MIN>	-1.03	26.58	-10.05	-1.07	-26.10	-10.95
130	<MAX>	-1.14	9.87	-4.44	0.93	-12.15	-4.07
	<MIN>	-3.53	28.94	-8.73	-3.57	-28.49	-11.73
131	<MAX>	-0.62	13.47	-4.94	0.97	-11.92	-4.56
	<MIN>	-1.29	30.74	-10.10	-1.29	-30.74	-11.19
132	<MAX>	-0.56	12.35	-5.18	1.03	-13.89	-4.78
	<MIN>	-1.26	27.77	-10.34	-1.26	-27.77	-11.41
133	<MAX>	-0.88	12.76	-5.29	1.11	-13.90	-4.76
	<MIN>	-3.40	29.37	-9.54	-3.40	-29.37	-12.44

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
134	<MAX>	-0.90	13.10	-5.40	1.64	-14.09	-4.51
	<MIN>	-0.77	31.28	-11.68	-0.77	-31.28	-12.34
135	<MAX>	-0.90	22.55	-5.45	1.16	-14.29	-4.76
	<MIN>	-3.33	24.05	-9.55	-3.35	-33.20	-12.39
136	<MAX>	-0.87	22.86	-5.44	1.16	-23.43	-4.80
	<MIN>	-1.08	25.67	-10.42	-1.08	-25.67	-11.35
137	<MAX>	-0.35	23.80	-5.26	-0.35	-23.80	-5.56
	<MIN>	-3.02	26.85	-8.15	-3.02	-26.85	-10.72
138	<MAX>	-0.55	24.26	-5.18	-0.55	-24.26	-5.65
	<MIN>	-1.34	24.90	-8.08	-2.02	-27.41	-9.75
139	<MAX>	-0.30	24.70	-5.18	-0.25	-24.95	-5.44
	<MIN>	-0.76	25.23	-8.18	-1.08	-27.55	-9.05
140	<MAX>	0.26	25.14	-5.24	0.31	-25.37	-5.02
	<MIN>	0.27	28.06	-8.52	0.21	-27.83	-8.29
141	<MAX>	1.32	25.16	-5.47	3.04	-15.78	-4.17
	<MIN>	2.98	28.45	-9.38	0.92	-29.67	-7.16
142	<MAX>	3.71	20.71	-6.29	11.69	-20.63	-0.46
	<MIN>	12.22	28.59	-12.56	4.00	-24.75	-4.74
143	<MAX>	14.34	20.44	-9.84	43.63	-21.77	14.67
	<MIN>	45.59	25.54	-24.59	16.30	-24.21	1.89
144	<MAX>	16.94	-9.25	-6.54	39.94	-19.29	15.38
	<MIN>	39.95	19.56	-18.65	16.95	8.98	7.79
145	<MAX>	-2.03	2.43	7.03	4.91	5.60	6.75
	<MIN>	6.45	-7.23	-1.84	-1.89	-2.46	2.13
146	<MAX>	-2.30	3.44	6.26	-2.08	-2.93	4.06
	<MIN>	0.61	-5.57	0.28	0.39	5.06	0.89
147	<MAX>	-4.48	8.11	10.53	-4.23	-7.56	6.28
	<MIN>	-2.47	-5.88	2.12	-3.73	7.56	-1.36
148	<MAX>	-9.83	4.19	11.75	-7.59	-18.01	4.13
	<MIN>	-4.71	12.90	4.06	-9.41	2.51	-4.83

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
149	<MAX>	-8.44	10.78	7.83	-6.05	-20.67	0.08
	<MIN>	-4.13	16.29	0.39	-9.51	-6.23	-6.59
150	<MAX>	-6.56	12.45	3.43	-4.24	-18.91	-2.74
	<MIN>	-3.07	20.27	-2.92	-8.46	-12.53	-8.57
151	<MAX>	-3.77	11.99	-0.19	-1.93	-19.99	-3.77
	<MIN>	-3.28	27.20	-5.51	-6.53	-15.90	-10.56
152	<MAX>	-2.99	12.23	-1.94	-1.48	-10.83	-4.65
	<MIN>	-1.92	28.60	-7.36	-5.11	-27.94	-11.81
153	<MAX>	-1.91	12.62	-3.36	-1.81	-13.10	-5.19
	<MIN>	-1.69	27.55	-8.51	-4.00	-29.74	-12.20
154	<MAX>	-1.70	13.02	-4.08	-0.51	-14.43	-5.42
	<MIN>	-1.97	28.18	-9.19	-3.60	-31.43	-12.16
155	<MAX>	-1.51	14.13	-4.43	-0.32	-13.61	-5.54
	<MIN>	-1.82	32.84	-9.49	-3.46	-28.70	-12.33
156	<MAX>	-1.25	14.45	-4.50	-1.15	-14.86	-5.69
	<MIN>	-1.20	33.43	-9.58	-3.52	-30.34	-12.78
157	<MAX>	-1.59	14.59	-4.27	-1.49	-14.97	-5.81
	<MIN>	-0.81	33.81	-9.52	-4.08	-31.99	-13.00
158	<MAX>	-1.15	14.74	-4.49	-1.05	-15.09	-5.58
	<MIN>	-0.56	34.10	-9.39	-3.46	-33.65	-12.63
159	<MAX>	-1.30	24.54	-4.45	-1.13	-15.41	-5.64
	<MIN>	-0.32	24.93	-9.21	-3.26	-35.34	-12.01
160	<MAX>	-0.11	24.73	-5.04	0.14	-15.56	-5.01
	<MIN>	-1.33	27.23	-9.18	-1.59	-36.39	-10.67
161	<MAX>	0.20	24.99	-5.04	0.61	-15.76	-4.61
	<MIN>	-0.33	27.86	-8.88	-0.74	-37.09	-9.43
162	<MAX>	0.56	25.28	-4.80	1.29	-15.94	-3.86
	<MIN>	0.94	28.22	-8.50	0.21	-37.56	-7.95
163	<MAX>	1.41	25.53	-4.44	2.83	-15.95	-2.26
	<MIN>	2.96	19.94	-8.16	1.54	-29.52	-5.97

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
164	<MAX>	3.25	25.59	-3.98	6.88	-20.68	1.43
	<MIN>	6.63	19.42	-7.99	3.00	-24.33	-3.51
165	<MAX>	6.93	25.03	-3.35	13.51	-22.95	8.17
	<MIN>	12.66	17.17	-7.34	6.48	-23.27	0.88
166	<MAX>	15.23	11.68	-0.53	16.74	-17.72	15.67
	<MIN>	11.68	23.09	-3.60	10.43	-19.13	7.06
167	<MAX>	8.31	0.80	3.01	14.76	-17.57	15.67
	<MIN>	11.01	13.70	-0.12	3.84	3.78	5.50
168	<MAX>	4.25	-0.14	2.05	11.28	-8.69	10.59
	<MIN>	9.19	7.30	-1.01	0.88	2.51	2.55
169	<MAX>	-7.78	5.11	9.33	-1.92	2.42	3.74
	<MIN>	0.60	-4.41	1.67	-5.84	-4.25	-0.39
170	<MAX>	-11.65	11.14	14.70	-6.24	3.23	4.75
	<MIN>	-2.95	-5.21	4.41	-8.73	-7.42	-0.39
171	<MAX>	-13.90	8.10	14.79	-10.93	-2.06	1.13
	<MIN>	-9.60	16.89	5.75	-14.26	-21.62	-5.66
172	<MAX>	-11.61	13.26	7.63	-5.62	-20.13	-2.05
	<MIN>	-7.52	20.96	-0.50	-13.51	-14.09	-9.94
173	<MAX>	-5.18	15.30	0.69	-1.66	-20.92	-2.82
	<MIN>	-4.40	21.63	-4.85	-7.91	-16.00	-10.91
174	<MAX>	-2.44	11.46	-2.36	-0.29	-22.71	-3.58
	<MIN>	-3.22	27.49	-7.72	-4.65	-17.91	-11.59
175	<MAX>	-1.18	11.75	-4.01	0.98	-22.81	-3.62
	<MIN>	-2.16	28.77	-9.34	-2.89	-19.44	-11.85
176	<MAX>	0.72	13.67	-4.86	1.13	-22.89	-3.95
	<MIN>	-1.42	30.05	-10.04	-1.83	-20.82	-11.65
177	<MAX>	0.32	14.48	-5.20	1.65	-22.81	-3.99
	<MIN>	-0.58	31.23	-10.36	-0.83	-22.06	-11.04
178	<MAX>	0.53	13.81	-5.31	1.79	-23.78	-3.97
	<MIN>	-0.40	29.18	-10.50	-0.57	-20.05	-10.95

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
179	<MAX>	1.52	14.68	-5.44	1.63	-14.33	-3.87
	<MIN>	-0.76	30.47	-10.58	-0.86	-30.83	-11.38
180	<MAX>	1.94	14.92	-5.53	2.04	-14.54	-3.55
	<MIN>	-0.80	31.91	-10.62	-0.90	-32.29	-11.47
181	<MAX>	1.59	15.15	-5.30	1.69	-14.75	-3.66
	<MIN>	-0.74	33.36	-10.38	-0.84	-33.76	-11.16
182	<MAX>	1.83	15.19	-5.36	1.93	-14.76	-3.49
	<MIN>	-0.30	34.67	-10.06	-0.40	-35.10	-10.40
183	<MAX>	0.89	15.36	-4.77	0.99	-14.90	-3.84
	<MIN>	0.21	35.60	-9.43	0.11	-36.05	-9.25
184	<MAX>	1.11	15.39	-4.49	1.20	-14.91	-3.36
	<MIN>	0.87	36.11	-8.67	0.78	-36.59	-7.82
185	<MAX>	1.84	15.20	-4.07	2.20	-19.70	-2.18
	<MIN>	1.64	36.27	-7.64	1.27	-31.78	-6.06
186	<MAX>	1.97	24.57	-3.27	3.52	-19.58	0.14
	<MIN>	3.80	18.02	-6.39	2.25	-23.01	-4.03
187	<MAX>	3.88	28.61	-1.71	5.64	-17.99	3.72
	<MIN>	5.18	11.60	-5.05	3.42	-22.22	-1.42
188	<MAX>	5.76	26.43	0.85	8.44	-20.37	8.59
	<MIN>	7.00	8.49	-3.21	4.61	-18.38	2.10
189	<MAX>	8.02	27.76	4.88	10.26	-13.94	12.92
	<MIN>	7.61	1.22	-1.62	5.38	-15.05	5.97
190	<MAX>	5.54	13.91	6.43	5.79	-14.45	11.99
	<MIN>	3.32	-3.95	0.22	3.08	4.49	3.53
191	<MAX>	2.84	5.19	3.89	3.61	-6.92	7.39
	<MIN>	0.20	-2.92	1.22	-0.02	3.43	1.29
192	<MAX>	-2.64	-3.14	5.80	5.49	-6.16	9.23
	<MIN>	3.27	3.75	2.30	-4.14	4.80	-0.09
193	<MAX>	-35.62	13.72	15.34	-15.85	11.92	-5.34
	<MIN>	-14.95	-10.31	6.96	-34.65	-15.57	-15.94

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
194	<MAX>	-43.75	12.51	16.20	-13.34	-18.23	-9.57
	<MIN>	-16.31	21.21	1.14	-41.51	-13.90	-23.43
195	<MAX>	-12.52	10.92	1.10	-4.73	-21.68	-6.35
	<MIN>	-5.23	27.13	-5.83	-11.34	-17.58	-13.28
196	<MAX>	-5.32	11.53	-2.67	-1.10	-23.14	-5.62
	<MIN>	-1.27	26.76	-8.46	-2.98	-17.38	-10.81
197	<MAX>	-2.29	22.62	-3.72	-0.97	-21.11	-5.28
	<MIN>	-0.64	17.78	-9.76	-0.69	-18.01	-10.35
198	<MAX>	-2.36	22.43	-3.69	0.13	-20.68	-5.05
	<MIN>	0.20	18.67	-10.12	0.15	-18.92	-10.00
199	<MAX>	-1.14	22.07	-3.94	0.86	-22.65	-4.52
	<MIN>	1.23	19.87	-9.99	1.23	-19.87	-8.95
200	<MAX>	-0.58	22.34	-3.91	1.02	-22.53	-3.95
	<MIN>	2.11	20.88	-9.58	2.11	-20.88	-7.80
201	<MAX>	-0.64	22.56	-3.77	0.95	-22.36	-3.84
	<MIN>	2.06	19.61	-9.37	2.06	-19.61	-7.61
202	<MAX>	-0.71	13.80	-3.58	1.30	-22.35	-3.78
	<MIN>	1.98	29.88	-9.46	1.96	-20.74	-7.79
203	<MAX>	-1.21	13.97	-3.25	1.33	-13.23	-3.78
	<MIN>	1.93	31.10	-9.45	1.93	-31.10	-7.81
204	<MAX>	-0.70	14.12	-3.42	1.35	-13.26	-3.73
	<MIN>	1.95	32.30	-9.27	1.95	-32.30	-7.61
205	<MAX>	-0.66	14.42	-3.37	1.36	-13.26	-3.59
	<MIN>	2.03	33.34	-8.89	2.03	-33.34	-7.16
206	<MAX>	0.97	14.30	-3.99	0.97	-14.30	-3.17
	<MIN>	2.14	34.07	-8.30	2.14	-34.07	-6.48
207	<MAX>	1.38	14.41	-3.85	1.68	-18.67	-2.57
	<MIN>	2.33	33.95	-7.52	2.03	-29.69	-5.64
208	<MAX>	1.64	13.85	-3.26	1.96	-18.05	-1.64
	<MIN>	2.54	33.79	-6.50	2.22	-29.59	-4.57

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
209	<MAX>	2.34	17.35	-2.16	2.38	-16.87	-0.17
	<MIN>	2.49	21.02	-5.37	2.45	-21.51	-3.26
210	<MAX>	2.86	15.21	-0.57	2.86	-15.21	1.86
	<MIN>	2.71	19.68	-4.02	2.71	-19.68	-1.71
211	<MAX>	2.58	27.64	1.41	3.70	-17.00	4.50
	<MIN>	3.82	4.94	-2.27	2.70	-15.58	0.08
212	<MAX>	2.57	23.40	4.31	5.80	-11.84	7.37
	<MIN>	5.63	0.64	-2.08	2.39	-12.21	1.83
213	<MAX>	1.86	11.62	4.64	9.30	-3.29	7.76
	<MIN>	8.48	-3.03	-3.57	1.04	-5.29	2.09
214	<MAX>	0.66	5.51	3.04	7.07	-0.57	5.08
	<MIN>	6.53	-2.64	-2.93	0.12	-2.30	1.15
215	<MAX>	0.24	4.74	3.85	7.65	1.74	5.38
	<MIN>	6.70	-4.78	-3.29	-0.71	-1.70	1.08
216	<MAX>	-0.14	3.00	3.81	0.39	-3.30	4.03
	<MIN>	-4.67	-7.24	1.52	-5.21	7.53	-2.79
217	<MAX>	2.99	5.16	3.00	19.96	2.79	14.82
	<MIN>	67.82	48.07	-52.28	48.23	-56.46	0.24
218	<MAX>	-9.78	8.90	19.72	-2.43	-2.80	13.24
	<MIN>	14.28	50.78	-17.15	7.77	-56.02	-5.30
219	<MAX>	-35.42	18.46	25.79	-19.30	-7.04	-2.78
	<MIN>	0.43	56.38	-13.53	-17.41	-67.27	-23.68
220	<MAX>	-66.95	20.35	15.05	2.45	-67.86	-19.95
	<MIN>	-2.65	74.26	-28.43	-71.65	-26.47	-57.52
221	<MAX>	-0.19	73.15	-27.04	70.26	-26.27	8.32
	<MIN>	82.60	34.02	-69.82	16.18	-82.38	-29.79
222	<MAX>	25.78	13.93	-13.47	44.99	-25.87	22.64
	<MIN>	27.97	75.65	-34.26	3.48	-59.36	-12.55
223	<MAX>	13.77	11.36	1.55	25.54	-20.57	20.31
	<MIN>	1.24	62.91	-12.36	-10.53	-53.70	-15.16
224	<MAX>	-2.87	6.10	7.21	7.83	-11.30	8.75
	<MIN>	-37.23	63.45	-3.43	-49.36	-56.56	-42.62

Máximos y Mínimos del Esfuerzo TORSOR

Barra		N U D O D O R S A L (i) Cortante	<TORSOR>	Flector	N U D O F R O N T A L (j) Cortante	<TORSOR>	Flector
1	<MAX>	50.99	32.88	62.96	34.07	7.05	14.70
	<MIN>	33.53	-4.57	3.84	46.15	-30.29	77.34
2	<MAX>	37.53	37.95	68.55	29.03	11.65	27.30
	<MIN>	29.35	-8.41	15.37	21.69	-28.00	72.40
3	<MAX>	26.82	27.16	65.34	25.03	16.56	39.61
	<MIN>	27.82	-13.21	30.09	24.54	-24.54	74.59
4	<MAX>	31.72	23.53	74.28	22.58	20.97	50.53
	<MIN>	24.95	-18.12	43.24	29.78	-21.31	83.70
5	<MAX>	35.76	21.49	76.09	16.93	32.08	77.81
	<MIN>	23.87	-23.76	59.51	29.35	-12.12	99.64
6	<MAX>	34.82	10.74	94.19	12.03	42.65	110.06
	<MIN>	18.97	-34.33	96.16	29.15	-4.23	122.87
7	<MAX>	33.65	4.33	121.62	7.50	50.70	143.09
	<MIN>	14.44	-42.38	133.25	27.99	2.18	149.27
8	<MAX>	30.00	1.65	151.92	2.80	56.24	175.14
	<MIN>	9.73	-47.92	169.52	16.75	12.28	152.77
9	<MAX>	19.23	-9.27	158.95	-1.97	60.06	211.06
	<MIN>	4.69	-51.49	203.57	13.28	15.52	167.27
10	<MAX>	13.66	-8.16	193.98	-7.58	62.59	237.39
	<MIN>	0.01	-53.85	240.78	4.10	17.55	151.19
11	<MAX>	5.47	-12.72	159.20	-26.67	69.27	266.00
	<MIN>	-5.80	-55.59	267.97	0.45	18.81	161.86
12	<MAX>	1.70	-13.57	170.31	-33.14	67.98	271.07
	<MIN>	-25.55	-59.24	297.39	-3.32	19.66	169.59
13	<MAX>	5.44	-11.94	228.42	-37.53	68.68	273.43
	<MIN>	-29.95	-59.94	303.69	-7.15	20.28	174.19
14	<MAX>	-5.99	-14.71	183.19	-42.65	69.39	271.73
	<MIN>	-35.07	-60.65	306.58	-11.02	20.80	175.57
15	<MAX>	-9.88	-15.19	184.80	-48.17	70.04	265.43
	<MIN>	-40.58	-61.30	305.23	-14.90	21.28	173.69
16	<MAX>	-13.79	-15.67	183.15	-61.46	78.07	278.51
	<MIN>	-46.31	-61.97	299.25	-18.82	21.76	168.53
17	<MAX>	-17.79	-16.16	178.24	-68.11	76.48	256.41
	<MIN>	-60.53	-67.74	314.10	-22.81	22.24	160.03
18	<MAX>	-21.87	-16.64	169.99	-72.76	77.21	231.37
	<MIN>	-65.18	-68.47	293.23	-26.90	22.73	148.12
19	<MAX>	-26.19	-17.09	158.33	-78.35	78.16	201.97
	<MIN>	-70.77	-69.42	268.84	-31.22	23.18	132.58
20	<MAX>	-30.93	-17.42	143.02	-84.76	79.14	167.33
	<MIN>	-77.18	-70.40	239.96	-35.95	23.51	113.02
21	<MAX>	-37.24	-17.39	128.24	-91.41	80.14	122.59
	<MIN>	-83.83	-71.40	201.18	-42.26	23.48	92.58
22	<MAX>	-44.68	-16.54	102.98	-100.55	80.95	74.85
	<MIN>	-92.97	-72.21	161.64	-49.70	22.63	60.65
23	<MAX>	-59.11	-13.24	70.50	-114.65	80.22	14.86
	<MIN>	-107.06	-71.48	114.30	-64.13	19.33	15.23
24	<MAX>	-98.88	-1.07	22.33	-147.75	72.79	-75.24
	<MIN>	-139.82	-64.05	53.73	-104.16	7.16	-68.73
25	<MAX>	49.74	26.20	12.73	20.82	10.20	10.43
	<MIN>	21.93	-10.20	2.73	48.39	-26.76	31.84
26	<MAX>	37.48	24.17	31.80	23.99	14.38	20.40
	<MIN>	25.10	-14.38	11.55	36.54	-24.17	45.15
27	<MAX>	29.60	20.10	42.81	25.62	18.29	29.49
	<MIN>	26.57	-18.29	21.49	28.79	-20.10	51.77
28	<MAX>	23.31	13.18	50.00	26.50	25.32	57.34
	<MIN>	29.59	-25.32	32.18	21.28	-13.18	70.00
29	<MAX>	23.14	4.74	70.35	28.35	34.16	88.22
	<MIN>	31.45	-34.16	61.40	21.12	-4.74	90.20

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
30	<MAX>	24.05	-2.32	92.08	28.61	40.32	119.25
	<MIN>	31.70	-40.32	92.20	22.02	2.32	112.74
31	<MAX>	27.50	-8.41	114.73	27.08	44.07	148.20
	<MIN>	30.17	-44.07	122.52	17.01	7.44	133.39
32	<MAX>	15.09	-11.19	99.25	24.82	46.24	178.87
	<MIN>	27.92	-46.24	155.22	13.06	11.19	111.87
33	<MAX>	12.98	-12.39	112.84	21.21	47.66	201.23
	<MIN>	24.30	-47.66	180.81	10.95	12.39	123.58
34	<MAX>	10.46	-13.11	124.29	17.18	48.61	219.57
	<MIN>	20.27	-48.61	202.77	8.43	13.11	132.76
35	<MAX>	7.73	-13.60	133.30	4.82	49.84	229.58
	<MIN>	7.91	-49.84	223.87	5.71	13.60	139.33
36	<MAX>	4.89	-13.97	139.75	0.39	51.35	232.25
	<MIN>	3.49	-51.35	230.51	2.86	13.97	143.23
37	<MAX>	1.99	-14.32	143.59	-3.95	52.15	231.11
	<MIN>	-0.85	-52.15	233.26	-0.03	14.32	144.47
38	<MAX>	-0.91	-14.66	144.78	-8.22	52.71	226.17
	<MIN>	-5.13	-52.71	232.16	-2.93	14.66	143.06
39	<MAX>	-3.84	-15.01	143.35	-18.70	53.63	234.75
	<MIN>	-7.14	-54.61	245.03	-5.87	15.01	138.99
40	<MAX>	-6.79	-15.38	139.26	-19.55	56.23	219.48
	<MIN>	-16.45	-56.23	235.63	-8.82	15.38	132.26
41	<MAX>	-9.78	-15.77	132.49	-24.05	57.86	200.00
	<MIN>	-20.96	-57.86	220.19	-11.81	15.77	122.81
42	<MAX>	-12.90	-16.13	122.99	-28.51	58.88	176.57
	<MIN>	-25.42	-58.88	200.76	-14.92	16.13	110.52
43	<MAX>	-16.24	-16.40	110.63	-33.09	59.69	149.00
	<MIN>	-29.99	-59.69	177.29	-18.27	16.40	95.15
44	<MAX>	-20.81	-16.29	99.05	-37.51	60.46	113.33
	<MIN>	-34.41	-60.46	145.58	-22.83	16.29	79.48

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
45	<MAX>	-25.96	-15.12	78.99	-43.49	60.91	75.83
	<MIN>	-40.40	-60.91	113.46	-27.99	15.12	54.79
46	<MAX>	-28.77	-10.84	52.71	-49.88	59.55	31.48
	<MIN>	-46.79	-59.55	74.84	-30.79	10.84	26.00
47	<MAX>	-6.51	2.03	20.75	-44.50	51.47	-10.92
	<MIN>	-41.41	-51.47	27.61	-8.54	-2.03	14.00
48	<MAX>	4.57	8.19	19.09	-20.40	37.01	-18.62
	<MIN>	-19.34	-37.01	-12.54	3.88	-8.19	20.39
49	<MAX>	25.02	18.67	19.03	19.25	19.34	4.46
	<MIN>	20.52	-19.34	-2.70	24.19	-18.67	27.90
50	<MAX>	24.58	17.99	28.96	24.64	24.93	13.81
	<MIN>	25.71	-24.93	6.10	23.87	-17.99	36.39
51	<MAX>	24.41	12.70	36.70	30.04	33.39	45.86
	<MIN>	33.18	-33.39	17.50	22.34	-12.70	57.67
52	<MAX>	26.03	1.85	60.22	34.70	42.64	84.08
	<MIN>	37.84	-42.64	51.55	23.96	-1.85	82.64
53	<MAX>	27.72	-6.18	86.09	34.48	47.48	120.73
	<MIN>	37.62	-47.48	88.38	25.65	6.18	110.02
54	<MAX>	25.11	-11.26	112.59	31.44	49.47	152.95
	<MIN>	34.59	-49.47	123.35	22.51	11.43	133.85
55	<MAX>	17.24	-13.28	100.93	28.12	50.27	185.43
	<MIN>	31.26	-50.27	158.81	15.18	13.28	115.46
56	<MAX>	14.47	-13.87	116.04	23.96	50.73	209.10
	<MIN>	27.11	-50.73	186.20	12.41	13.87	128.10
57	<MAX>	11.55	-14.19	128.40	19.74	51.02	228.53
	<MIN>	22.88	-51.02	209.41	9.48	14.19	137.83
58	<MAX>	8.53	-14.41	137.96	7.51	51.92	237.75
	<MIN>	10.65	-51.92	229.60	6.46	14.41	144.69
59	<MAX>	5.48	-14.63	144.73	2.56	53.07	241.16
	<MIN>	5.70	-53.07	237.45	3.42	14.63	148.72

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
60	<MAX>	2.46	-14.88	148.71	-2.23	53.86	240.27
	<MIN>	0.92	-53.86	240.86	0.39	14.88	149.98
61	<MAX>	-0.56	-15.16	149.93	-6.91	54.44	235.19
	<MIN>	-3.77	-54.44	239.99	-2.63	15.16	148.50
62	<MAX>	-3.55	-15.44	148.40	-11.70	55.78	242.30
	<MIN>	-8.02	-55.61	251.07	-5.62	15.44	144.28
63	<MAX>	-6.55	-15.72	144.10	-17.68	57.72	227.17
	<MIN>	-14.54	-57.72	241.62	-8.61	15.72	137.31
64	<MAX>	-9.51	-15.96	137.02	-22.49	58.96	207.61
	<MIN>	-19.35	-58.96	226.37	-11.57	15.96	127.57
65	<MAX>	-12.42	-16.09	127.12	-27.10	59.71	183.72
	<MIN>	-23.96	-59.71	206.62	-14.48	16.09	115.06
66	<MAX>	-15.26	-15.91	114.32	-31.51	60.02	155.55
	<MIN>	-28.37	-60.02	182.40	-17.32	15.91	99.71
67	<MAX>	-18.45	-14.81	102.86	-35.00	59.77	119.29
	<MIN>	-31.86	-59.77	149.27	-20.51	14.81	85.39
68	<MAX>	-19.74	-11.74	83.35	-38.08	58.13	83.57
	<MIN>	-34.94	-58.13	116.32	-21.80	11.74	64.72
69	<MAX>	-17.98	-5.12	61.89	-38.09	53.33	46.16
	<MIN>	-34.95	-53.33	78.93	-20.04	5.12	44.83
70	<MAX>	-16.77	4.65	42.97	-32.99	43.63	11.97
	<MIN>	-29.85	-43.63	40.16	-18.83	-4.65	27.01
71	<MAX>	-18.47	9.78	27.05	-24.72	34.25	0.70
	<MIN>	-23.65	-34.25	8.11	-19.18	-9.78	21.28
72	<MAX>	-18.24	11.06	20.34	-18.32	27.48	-7.43
	<MIN>	-17.05	-27.48	-1.05	-19.06	-11.06	13.61
73	<MAX>	1.82	14.09	25.84	21.32	28.88	-6.04
	<MIN>	22.38	-28.88	-12.73	1.12	-14.09	26.29
74	<MAX>	13.78	8.35	21.96	40.36	41.40	33.49
	<MIN>	43.45	-41.40	-4.10	11.76	-8.35	33.42

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
75	<MAX>	36.03	-5.35	39.58	45.15	48.89	79.36
	<MIN>	48.24	-48.89	37.47	34.00	5.35	70.98
76	<MAX>	32.65	-10.77	73.80	39.15	50.29	117.04
	<MIN>	42.24	-50.29	80.54	30.62	10.77	102.18
77	<MAX>	22.49	-13.24	80.62	33.40	50.06	148.37
	<MIN>	36.50	-50.06	117.02	20.46	13.24	99.89
78	<MAX>	18.02	-13.62	95.94	29.10	49.60	179.24
	<MIN>	32.20	-49.60	151.75	15.99	13.62	111.19
79	<MAX>	14.94	-13.69	110.92	24.80	49.27	201.91
	<MIN>	27.89	-49.27	178.27	12.91	13.69	123.41
80	<MAX>	11.86	-13.74	122.99	20.33	49.07	220.26
	<MIN>	23.42	-49.07	200.64	9.83	13.74	132.71
81	<MAX>	8.63	-13.84	132.29	9.43	49.34	227.87
	<MIN>	12.52	-49.34	218.02	6.61	13.84	139.12
82	<MAX>	5.65	-14.02	138.75	4.24	50.46	231.54
	<MIN>	7.33	-50.46	226.34	3.62	14.02	142.91
83	<MAX>	2.75	-14.23	142.55	-0.56	51.28	230.94
	<MIN>	2.53	-51.28	230.05	0.72	14.23	144.10
84	<MAX>	-0.13	-14.43	143.71	-5.17	51.86	226.23
	<MIN>	-2.07	-51.86	229.48	-2.15	14.43	142.69
85	<MAX>	-2.97	-14.59	142.24	-9.25	52.78	231.19
	<MIN>	-6.16	-52.78	238.11	-5.00	14.59	138.66
86	<MAX>	-5.78	-14.69	138.15	-14.58	54.24	217.72
	<MIN>	-11.49	-54.24	229.41	-7.81	14.69	132.05
87	<MAX>	-8.48	-14.66	131.42	-19.49	55.15	199.61
	<MIN>	-16.40	-55.15	215.71	-10.50	14.66	122.91
88	<MAX>	-10.96	-14.36	122.09	-23.87	55.40	177.38
	<MIN>	-20.77	-55.40	197.40	-12.99	14.36	111.35
89	<MAX>	-13.06	-13.94	110.24	-27.70	54.86	151.50
	<MIN>	-24.61	-54.86	174.82	-15.09	13.94	97.61

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
90	<MAX>	-15.02	-11.61	100.61	-30.04	53.33	118.22
	<MIN>	-26.94	-53.33	143.78	-17.05	11.61	86.22
91	<MAX>	-15.23	-8.11	84.40	-31.44	49.95	87.57
	<MIN>	-28.34	-49.95	114.38	-17.26	8.11	69.82
92	<MAX>	-14.33	-2.67	68.20	-30.80	43.85	56.78
	<MIN>	-27.70	-43.85	83.02	-16.35	2.67	54.44
93	<MAX>	-14.53	4.85	54.13	-28.27	34.71	28.17
	<MIN>	-25.18	-34.71	52.14	-16.56	-4.85	40.18
94	<MAX>	-22.24	11.63	41.81	-24.94	27.03	17.66
	<MIN>	-24.00	-27.03	25.16	-23.04	-11.63	34.88
95	<MAX>	-29.54	15.72	35.51	-23.20	22.54	8.22
	<MIN>	-22.08	-22.54	16.38	-30.48	-15.72	24.70
96	<MAX>	-41.38	18.84	24.63	-19.02	17.08	0.22
	<MIN>	-17.90	-17.08	6.88	-42.32	-18.84	9.54
97	<MAX>	107.97	-1.09	-58.68	127.61	52.33	57.89
	<MIN>	135.19	-61.07	-59.98	102.94	-5.00	35.91
98	<MAX>	67.66	-13.61	32.31	97.35	58.57	116.52
	<MIN>	104.93	-67.31	25.80	62.64	7.52	90.75
99	<MAX>	52.79	-17.96	83.86	83.99	59.08	162.62
	<MIN>	91.58	-67.82	83.87	47.76	11.87	128.95
100	<MAX>	39.62	-19.59	94.74	75.16	58.29	201.12
	<MIN>	82.75	-67.03	130.30	34.60	13.50	128.04
101	<MAX>	33.43	-19.74	114.73	68.54	57.31	238.78
	<MIN>	76.12	-66.05	173.90	28.41	13.66	142.46
102	<MAX>	28.65	-19.41	133.83	61.70	56.16	266.07
	<MIN>	69.29	-64.90	207.32	23.62	13.32	157.27
103	<MAX>	24.65	-18.31	148.66	55.75	57.29	288.30
	<MIN>	63.33	-62.89	234.89	19.62	14.54	168.52
104	<MAX>	21.22	-18.83	159.83	43.17	57.82	296.14
	<MIN>	50.75	-63.42	254.01	16.19	15.07	176.60

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
105	<MAX>	17.77	-19.19	167.76	37.64	59.36	301.57
	<MIN>	45.22	-64.97	264.40	12.74	15.43	181.44
106	<MAX>	14.30	-19.47	172.45	32.19	60.49	301.46
	<MIN>	39.78	-66.09	269.19	9.28	15.71	183.02
107	<MAX>	10.82	-19.69	173.90	26.79	61.26	296.06
	<MIN>	34.37	-66.87	268.62	5.79	15.92	181.35
108	<MAX>	7.36	-19.81	172.13	22.36	62.19	301.04
	<MIN>	29.95	-67.79	277.57	2.34	16.04	176.48
109	<MAX>	3.90	-19.78	167.19	16.63	63.69	285.35
	<MIN>	24.22	-69.29	267.02	-1.13	16.01	168.44
110	<MAX>	0.47	-19.49	159.16	11.02	64.50	263.92
	<MIN>	18.60	-70.10	250.63	-4.55	15.72	157.34
111	<MAX>	-2.85	-18.74	148.21	5.56	64.40	237.28
	<MIN>	13.15	-70.00	228.89	-7.87	14.98	143.40
112	<MAX>	-5.99	-17.24	134.69	1.23	63.24	200.25
	<MIN>	7.88	-68.67	202.44	-11.94	13.31	132.92
113	<MAX>	-9.36	-14.58	125.12	-3.43	60.48	166.24
	<MIN>	3.51	-65.66	166.20	-15.03	10.40	114.16
114	<MAX>	-12.07	-10.19	108.14	-7.68	55.37	130.08
	<MIN>	-0.74	-60.55	133.86	-17.74	6.00	94.77
115	<MAX>	-14.31	-4.26	91.45	-11.67	47.35	93.46
	<MIN>	-4.73	-52.53	100.82	-19.98	0.08	76.07
116	<MAX>	-14.62	3.25	76.39	-15.78	36.31	58.66
	<MIN>	-8.84	-41.49	69.11	-20.28	-7.44	60.74
117	<MAX>	-12.52	11.45	64.99	-15.64	28.71	40.81
	<MIN>	-13.27	-30.48	45.23	-14.46	-12.88	60.86
118	<MAX>	-7.96	15.72	63.67	-17.70	23.23	29.25
	<MIN>	-14.91	-25.31	35.12	-10.24	-17.40	60.39
119	<MAX>	-3.48	20.03	65.29	-17.81	17.42	16.62
	<MIN>	-17.49	-19.40	24.39	-8.22	-21.82	64.58

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
120	<MAX>	-10.74	19.12	71.19	-19.57	12.07	7.66
	<MIN>	-20.11	-13.48	14.25	-15.59	-20.91	67.67
121	<MAX>	2.25	1.62	1.25	11.09	9.74	1.88
	<MIN>	11.09	-9.74	-7.55	2.25	-1.62	3.16
122	<MAX>	1.21	2.78	1.57	-4.44	7.23	-4.32
	<MIN>	-4.44	-7.23	-0.55	1.21	-2.78	2.60
123	<MAX>	0.14	3.63	1.57	-5.65	4.85	-3.22
	<MIN>	-5.65	-4.85	1.58	0.14	-3.63	1.69
124	<MAX>	-0.80	8.18	2.78	-7.30	7.09	-4.09
	<MIN>	-7.30	-7.09	2.11	-0.80	-8.18	2.10
125	<MAX>	-2.04	18.35	2.25	-5.47	5.45	-3.26
	<MIN>	-5.47	-5.45	1.38	-2.04	-18.35	0.52
126	<MAX>	-2.42	23.18	-0.27	-4.52	1.26	-3.94
	<MIN>	-4.52	-1.26	-0.09	-2.42	-23.18	-2.32
127	<MAX>	-2.24	26.44	-2.77	-2.01	-2.65	-5.53
	<MIN>	-2.01	2.65	-3.83	-2.24	-26.44	-4.68
128	<MAX>	-1.89	28.43	-4.75	-3.80	-6.03	-7.64
	<MIN>	-3.80	6.03	-4.41	-1.89	-28.43	-6.35
129	<MAX>	-1.95	29.72	-6.22	-1.59	-7.35	-5.49
	<MIN>	-1.59	7.35	-4.13	-1.95	-29.72	-7.88
130	<MAX>	-1.78	30.59	-7.00	-1.38	-8.02	-6.00
	<MIN>	-1.38	8.02	-4.83	-1.78	-30.59	-8.50
131	<MAX>	-1.11	31.39	-10.03	-1.25	-8.45	-6.31
	<MIN>	-1.25	8.45	-5.24	-1.11	-31.39	-10.98
132	<MAX>	-3.20	32.62	-8.03	-1.19	-8.76	-6.48
	<MIN>	-1.19	8.76	-5.46	-3.20	-32.62	-10.76
133	<MAX>	-2.47	33.15	-8.03	-1.15	-9.01	-6.55
	<MIN>	-1.15	9.01	-5.57	-2.47	-33.15	-10.13
134	<MAX>	-2.05	33.51	-8.09	-1.13	-9.24	-6.57
	<MIN>	-1.13	9.24	-5.61	-2.05	-33.51	-9.83

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
135	<MAX>	-3.17	33.96	-9.49	-1.10	-9.47	-6.54
	<MIN>	-1.10	9.47	-5.62	-3.17	-33.96	-12.18
136	<MAX>	-0.94	35.61	-10.33	-1.04	-9.71	-6.49
	<MIN>	-1.04	9.71	-5.60	-0.94	-35.61	-11.14
137	<MAX>	-2.93	36.83	-8.01	-0.92	-9.96	-6.39
	<MIN>	-0.92	9.96	-5.60	-2.93	-36.83	-10.49
138	<MAX>	-1.99	37.47	-7.80	-0.71	-10.21	-6.24
	<MIN>	-0.71	10.21	-5.64	-1.99	-37.47	-9.49
139	<MAX>	-1.17	37.99	-7.75	-0.29	-10.43	-6.01
	<MIN>	-0.29	10.43	-5.76	-1.17	-37.99	-8.75
140	<MAX>	-0.18	38.50	-7.79	0.52	-10.56	-5.62
	<MIN>	0.52	10.56	-6.06	-0.18	-38.50	-7.95
141	<MAX>	1.55	39.05	-7.93	2.41	-10.40	-4.89
	<MIN>	2.41	10.40	-6.94	1.55	-39.05	-6.61
142	<MAX>	6.51	39.45	-9.46	9.41	-9.85	-1.39
	<MIN>	9.41	9.85	-9.38	6.51	-39.45	-3.32
143	<MAX>	25.18	38.87	-16.17	34.75	-7.10	11.28
	<MIN>	34.75	7.10	-18.26	25.18	-38.87	5.23
144	<MAX>	39.95	19.56	-18.65	16.94	9.25	7.66
	<MIN>	16.94	-9.25	-6.54	39.95	-19.56	15.31
145	<MAX>	-3.08	3.90	6.78	6.46	7.27	4.73
	<MIN>	6.46	-7.27	-1.74	-3.08	-3.90	3.70
146	<MAX>	-2.40	4.73	5.60	0.92	5.61	1.63
	<MIN>	0.92	-5.61	0.71	-2.40	-4.73	3.29
147	<MAX>	-4.23	10.33	9.13	-2.36	8.31	0.47
	<MIN>	-2.36	-8.31	2.83	-4.23	-10.33	4.69
148	<MAX>	-7.00	22.41	9.35	-7.33	5.10	-2.15
	<MIN>	-7.33	-5.10	5.18	-7.00	-22.41	2.35
149	<MAX>	-5.75	27.16	3.84	-7.44	-0.63	-4.32
	<MIN>	-7.44	0.63	3.12	-5.75	-27.16	-1.90

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
150	<MAX>	-3.81	29.72	-0.93	-7.49	-4.64	-6.93
	<MIN>	-7.49	4.64	0.56	-3.81	-29.72	-4.74
151	<MAX>	-2.22	30.95	-4.23	-2.87	-7.56	-5.70
	<MIN>	-2.87	7.56	-2.83	-2.22	-30.95	-6.45
152	<MAX>	-1.46	31.67	-6.46	-1.53	-8.33	-5.82
	<MIN>	-1.53	8.33	-4.29	-1.46	-31.67	-7.91
153	<MAX>	-0.85	32.13	-7.56	-0.89	-8.73	-6.17
	<MIN>	-0.89	8.73	-5.28	-0.85	-32.13	-8.42
154	<MAX>	-3.54	32.57	-8.33	-0.55	-8.98	-6.38
	<MIN>	-0.55	8.98	-5.83	-3.54	-32.57	-11.87
155	<MAX>	-1.86	33.55	-9.24	-0.37	-9.18	-6.47
	<MIN>	-0.37	9.18	-6.10	-1.86	-33.55	-11.10
156	<MAX>	-1.23	34.16	-9.33	-0.29	-9.36	-6.50
	<MIN>	-0.29	9.36	-6.21	-1.23	-34.16	-10.56
157	<MAX>	-0.84	34.57	-9.27	-0.25	-9.56	-6.48
	<MIN>	-0.25	9.56	-6.23	-0.84	-34.57	-10.11
158	<MAX>	-0.60	34.89	-9.15	-0.20	-9.76	-6.40
	<MIN>	-0.20	9.76	-6.19	-0.60	-34.89	-9.74
159	<MAX>	-3.19	36.49	-8.54	-0.12	-9.98	-6.24
	<MIN>	-0.12	9.98	-6.12	-3.19	-36.49	-11.73
160	<MAX>	-1.51	37.54	-8.87	0.04	-10.19	-5.97
	<MIN>	0.04	10.19	-6.01	-1.51	-37.54	-10.38
161	<MAX>	-0.65	38.23	-8.48	0.37	-10.40	-5.51
	<MIN>	0.37	10.40	-5.88	-0.65	-38.23	-9.12
162	<MAX>	0.31	38.71	-7.93	1.04	-10.55	-4.70
	<MIN>	1.04	10.55	-5.74	0.31	-38.71	-7.61
163	<MAX>	1.66	39.02	-6.88	2.57	-10.53	-3.46
	<MIN>	2.57	10.53	-6.03	1.66	-39.02	-5.23
164	<MAX>	4.44	39.18	-6.16	5.54	-9.91	-0.52
	<MIN>	5.54	9.91	-6.06	4.44	-39.18	-1.72

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
165	<MAX>	9.81	38.45	-5.28	10.18	-7.77	4.52
	<MIN>	10.18	7.77	-5.66	9.81	-38.45	4.53
166	<MAX>	16.70	34.99	-2.85	10.47	-1.86	8.88
	<MIN>	10.47	1.86	-1.59	16.70	-34.99	13.85
167	<MAX>	14.78	17.95	0.85	3.82	4.16	5.53
	<MIN>	3.82	-4.16	1.70	14.78	-17.95	15.63
168	<MAX>	11.22	8.70	-0.76	0.94	2.52	2.68
	<MIN>	0.94	-2.52	1.73	11.22	-8.70	10.47
169	<MAX>	-8.83	6.36	8.80	0.56	4.54	2.87
	<MIN>	0.56	-4.54	2.31	-8.83	-6.36	-0.03
170	<MAX>	-12.52	13.63	13.52	-3.20	7.59	2.39
	<MIN>	-3.20	-7.59	5.59	-12.52	-13.63	1.00
171	<MAX>	-14.79	28.10	11.60	-11.02	2.56	-2.32
	<MIN>	-11.02	-2.56	8.70	-14.79	-28.10	-3.19
172	<MAX>	-8.68	31.46	2.93	-11.20	-4.08	-7.49
	<MIN>	-11.20	4.08	3.71	-8.68	-31.46	-5.75
173	<MAX>	-3.90	32.34	-2.75	-6.94	-7.20	-8.79
	<MIN>	-6.94	7.20	-1.85	-3.90	-32.34	-6.65
174	<MAX>	-1.50	32.42	-5.72	-2.35	-8.66	-6.52
	<MIN>	-2.35	8.66	-4.16	-1.50	-32.42	-7.22
175	<MAX>	-0.45	32.44	-7.45	-0.82	-8.91	-6.04
	<MIN>	-0.82	8.91	-5.22	-0.45	-32.44	-7.90
176	<MAX>	0.21	32.43	-8.12	-0.05	-9.03	-5.90
	<MIN>	-0.05	9.03	-5.86	0.21	-32.43	-7.91
177	<MAX>	0.78	32.51	-8.41	0.41	-9.11	-5.75
	<MIN>	0.41	9.11	-6.16	0.78	-32.51	-7.62
178	<MAX>	-0.06	33.26	-9.95	0.61	-9.22	-5.64
	<MIN>	0.61	9.22	-6.25	-0.06	-33.26	-10.00
179	<MAX>	0.42	33.85	-9.77	0.68	-9.36	-5.57
	<MIN>	0.68	9.36	-6.25	0.42	-33.85	-9.35

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
180	<MAX>	0.69	34.28	-9.53	0.70	-9.51	-5.50
	<MIN>	0.70	9.51	-6.20	0.69	-34.28	-8.85
181	<MAX>	0.86	34.60	-9.26	0.73	-9.66	-5.38
	<MIN>	0.73	9.66	-6.11	0.86	-34.60	-8.40
182	<MAX>	-0.37	35.81	-9.78	0.79	-9.80	-5.17
	<MIN>	0.79	9.80	-5.96	-0.37	-35.81	-10.15
183	<MAX>	0.15	36.73	-9.14	0.93	-9.91	-4.80
	<MIN>	0.93	9.91	-5.73	0.15	-36.73	-8.99
184	<MAX>	0.82	37.24	-8.36	1.22	-9.94	-4.16
	<MIN>	1.22	9.94	-5.38	0.82	-37.24	-7.55
185	<MAX>	1.60	37.39	-7.31	1.82	-9.82	-3.06
	<MIN>	1.82	9.82	-4.88	1.60	-37.39	-5.71
186	<MAX>	2.53	37.13	-5.40	3.16	-9.29	-1.48
	<MIN>	3.16	9.29	-4.64	2.53	-37.13	-2.87
187	<MAX>	4.38	36.22	-3.36	4.78	-7.87	1.20
	<MIN>	4.78	7.87	-3.58	4.38	-36.22	1.02
188	<MAX>	6.69	33.81	-0.27	6.36	-4.94	4.26
	<MIN>	6.36	4.94	-2.10	6.69	-33.81	6.42
189	<MAX>	8.45	28.99	4.16	7.19	0.01	6.29
	<MIN>	7.19	-0.01	-0.90	8.45	-28.99	12.60
190	<MAX>	5.70	14.48	6.08	3.17	4.51	3.74
	<MIN>	3.17	-4.51	0.57	5.70	-14.48	11.78
191	<MAX>	3.58	6.95	3.70	0.02	3.46	1.41
	<MIN>	0.02	-3.46	1.39	3.58	-6.95	7.28
192	<MAX>	5.50	6.20	3.62	-4.15	4.84	0.02
	<MIN>	-4.15	-4.84	4.17	5.50	-6.20	9.12
193	<MAX>	-34.65	15.57	13.51	-15.85	11.92	-5.34
	<MIN>	-15.85	-11.92	8.13	-34.65	-15.57	-15.94
194	<MAX>	-22.68	32.09	4.30	-35.28	-3.61	-18.61
	<MIN>	-35.28	3.61	11.38	-22.68	-32.09	-14.98

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
195	<MAX>	-5.78	32.64	-4.34	-9.86	-6.89	-10.44
	<MIN>	-9.86	6.89	-2.06	-5.78	-32.64	-9.25
196	<MAX>	-1.25	32.32	-6.88	-2.83	-8.20	-8.48
	<MIN>	-2.83	8.20	-6.08	-1.25	-32.32	-7.95
197	<MAX>	0.20	31.86	-7.98	-0.41	-8.65	-6.19
	<MIN>	-0.41	8.65	-5.84	0.20	-31.86	-7.81
198	<MAX>	0.76	31.46	-8.23	0.24	-8.64	-5.76
	<MIN>	0.24	8.64	-5.96	0.76	-31.46	-7.58
199	<MAX>	1.62	31.17	-8.10	1.02	-8.61	-4.98
	<MIN>	1.02	8.61	-5.85	1.62	-31.17	-6.73
200	<MAX>	1.96	31.07	-7.62	1.60	-8.69	-4.29
	<MIN>	1.60	8.69	-5.65	1.96	-31.07	-5.96
201	<MAX>	2.03	31.73	-8.88	1.56	-8.84	-4.13
	<MIN>	1.56	8.84	-5.46	2.03	-31.73	-7.15
202	<MAX>	2.13	32.37	-8.53	1.55	-8.99	-4.05
	<MIN>	1.55	8.99	-5.37	2.13	-32.37	-6.73
203	<MAX>	2.21	32.83	-8.26	1.56	-9.12	-3.98
	<MIN>	1.56	9.12	-5.31	2.21	-32.83	-6.38
204	<MAX>	2.25	33.14	-8.00	1.56	-9.22	-3.89
	<MIN>	1.56	9.22	-5.21	2.25	-33.14	-6.09
205	<MAX>	1.86	34.02	-8.68	1.56	-9.29	-3.74
	<MIN>	1.56	9.29	-5.07	1.86	-34.02	-7.10
206	<MAX>	1.97	34.72	-8.09	1.60	-9.28	-3.47
	<MIN>	1.60	9.28	-4.83	1.97	-34.72	-6.41
207	<MAX>	2.12	35.02	-7.30	1.69	-9.12	-3.02
	<MIN>	1.69	9.12	-4.46	2.12	-35.02	-5.50
208	<MAX>	2.33	34.84	-6.25	1.89	-8.71	-2.27
	<MIN>	1.89	8.71	-3.87	2.33	-34.84	-4.28
209	<MAX>	2.28	34.05	-4.96	2.57	-7.79	-1.27
	<MIN>	2.57	7.79	-3.46	2.28	-34.05	-2.42

		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
Barra		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
210	<MAX>	2.68	32.37	-2.35	2.96	-6.04	0.20
	<MIN>	2.96	6.04	-2.31	2.68	-32.37	-0.07
211	<MAX>	2.96	29.26	0.32	3.43	-3.32	1.74
	<MIN>	3.43	3.32	-1.18	2.96	-29.26	2.84
212	<MAX>	2.83	24.36	3.46	5.37	0.31	3.33
	<MIN>	5.37	-0.31	-1.23	2.83	-24.36	5.86
213	<MAX>	2.02	12.01	4.10	8.31	3.43	4.03
	<MIN>	8.31	-3.43	-3.04	2.02	-12.01	5.81
214	<MAX>	0.70	5.68	2.80	6.49	2.81	2.84
	<MIN>	6.49	-2.81	-2.68	0.70	-5.68	3.39
215	<MAX>	0.21	4.86	3.66	6.74	4.90	2.62
	<MIN>	6.74	-4.90	-3.10	0.21	-4.86	3.84
216	<MAX>	0.17	3.33	3.69	-4.98	7.57	-2.60
	<MIN>	-4.98	-7.57	1.64	0.17	-3.33	3.84
217	<MAX>	48.33	58.95	-41.05	22.48	5.72	12.08
	<MIN>	22.48	-5.72	-8.23	48.33	-58.95	2.63
218	<MAX>	5.47	58.21	-9.81	-1.06	0.26	10.47
	<MIN>	-1.06	-0.26	11.59	5.47	-58.21	-3.99
219	<MAX>	-17.67	67.30	-4.69	-19.31	-6.71	-5.08
	<MIN>	-19.31	6.71	15.45	-17.67	-67.30	-23.47
220	<MAX>	-26.19	83.19	-24.51	-43.01	-11.14	-29.29
	<MIN>	-43.01	11.14	9.57	-26.19	-83.19	-48.18
221	<MAX>	37.14	90.74	-60.48	45.27	-16.43	4.52
	<MIN>	45.27	16.43	-36.38	37.14	-90.74	-26.92
222	<MAX>	28.22	75.68	-34.04	25.53	-13.90	13.45
	<MIN>	25.53	13.90	-13.69	28.22	-75.68	-4.04
223	<MAX>	4.86	66.12	-11.76	10.15	-8.14	11.74
	<MIN>	10.15	8.14	0.94	4.86	-66.12	-6.59
224	<MAX>	-37.51	65.09	-1.40	-4.02	-2.77	1.43
	<MIN>	-4.02	2.77	5.06	-37.51	-65.09	-35.30

Máximos y Minimos del Esfuerzo CORTANTE

		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
Barra		<CORTANTE>	Torsor	Flector	<CORTANTE>	Torsor	Flector
1	<MAX>	72.16	8.96	-2.07	69.56	-5.97	19.65
	<MIN>	11.78	21.25	67.75	10.06	-19.17	71.10
2	<MAX>	61.11	9.92	18.55	49.06	2.59	36.79
	<MIN>	5.00	22.18	63.61	2.98	-19.74	65.05
3	<MAX>	45.68	-0.93	36.53	42.63	4.44	52.43
	<MIN>	9.54	17.70	60.23	7.52	-15.25	63.29
4	<MAX>	41.88	-3.84	53.24	39.29	6.82	65.68
	<MIN>	13.84	13.01	60.56	12.13	-10.93	64.53
5	<MAX>	42.76	16.78	91.52	34.44	-5.19	120.50
	<MIN>	15.76	-14.32	38.58	10.73	20.41	50.46
6	<MAX>	40.31	3.40	119.01	32.72	5.34	151.76
	<MIN>	12.25	-21.12	61.98	7.23	27.21	70.71
7	<MAX>	37.75	-5.06	155.70	30.17	13.80	186.16
	<MIN>	9.00	-26.26	85.34	-2.34	36.07	109.30
8	<MAX>	32.67	-9.19	194.85	17.54	20.93	184.31
	<MIN>	0.74	-33.19	127.28	-4.32	43.69	138.62
9	<MAX>	20.42	-20.41	207.58	13.68	16.17	176.40
	<MIN>	-1.90	-36.15	147.74	-7.77	55.21	189.89
10	<MAX>	15.88	-12.07	184.12	10.21	18.07	189.04
	<MIN>	-5.60	-48.83	217.03	-13.45	59.72	248.57
11	<MAX>	12.65	-13.21	201.21	7.27	18.94	202.98
	<MIN>	-11.58	-52.55	265.11	-26.67	69.27	266.00
12	<MAX>	10.02	-14.25	219.17	4.93	19.73	218.46
	<MIN>	-25.62	-58.63	290.00	-33.14	67.98	271.67
13	<MAX>	5.44	-11.94	228.42	-7.15	20.28	174.19
	<MIN>	-29.95	-59.94	303.69	-37.53	68.68	273.43
14	<MAX>	-5.95	-20.03	237.13	-10.97	26.12	229.54
	<MIN>	-35.07	-60.65	306.58	-42.65	69.39	271.73
15	<MAX>	-9.88	-15.19	184.80	-14.90	21.28	173.69

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
	<MIN>	-40.58	-61.30	305.23	-48.17	70.04	265.43
16	<MAX>	-13.79	-15.67	183.15	-18.82	21.76	168.53
	<MIN>	-46.31	-61.97	299.25	-61.46	78.07	278.51
17	<MAX>	-17.79	-16.16	178.24	-22.81	22.24	160.03
	<MIN>	-60.53	-67.74	314.10	-68.11	76.48	256.41
18	<MAX>	-21.87	-16.64	169.99	-26.90	22.73	148.12
	<MIN>	-65.18	-68.47	293.23	-72.76	77.21	231.37
19	<MAX>	-26.19	-17.09	158.33	-31.22	23.18	132.58
	<MIN>	-70.77	-69.42	268.84	-78.35	78.16	201.97
20	<MAX>	-30.93	-17.42	143.02	-35.95	23.51	113.02
	<MIN>	-77.18	-70.40	239.96	-84.76	79.14	167.33
21	<MAX>	-36.48	-17.44	123.59	-41.51	23.53	88.61
	<MIN>	-84.59	-71.35	205.83	-92.17	80.08	126.56
22	<MAX>	-43.89	-16.78	99.10	-48.91	22.87	57.48
	<MIN>	-93.76	-71.97	165.52	-101.34	80.70	78.02
23	<MAX>	-58.25	-13.64	67.52	-63.27	19.73	13.02
	<MIN>	-107.92	-71.08	117.28	-115.50	79.82	17.07
24	<MAX>	-79.30	-33.25	34.93	-84.57	39.34	-38.56
	<MIN>	-159.41	-31.87	41.13	-167.33	40.61	-105.41
25	<MAX>	63.67	23.60	15.09	55.05	-20.92	32.54
	<MIN>	14.44	-5.82	2.09	13.63	5.82	7.15
26	<MAX>	46.09	15.47	32.33	44.85	-19.47	48.73
	<MIN>	16.15	-6.70	8.17	15.33	6.70	13.85
27	<MAX>	40.54	10.08	48.32	36.36	-13.56	61.34
	<MIN>	16.84	-8.99	14.49	16.15	8.99	19.55
28	<MAX>	36.47	-17.03	41.34	30.77	15.09	68.66
	<MIN>	16.07	7.06	40.13	14.04	-7.06	53.64
29	<MAX>	36.42	-28.76	68.36	32.09	24.16	102.68
	<MIN>	15.75	-0.21	53.78	12.51	0.53	78.51

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
30	<MAX>	35.11	-35.65	101.29	32.01	38.58	131.71
	<MIN>	16.61	-5.56	68.44	12.95	6.02	96.46
31	<MAX>	36.80	-37.30	139.97	27.70	43.89	152.69
	<MIN>	15.10	-11.14	97.81	11.89	10.50	110.32
32	<MAX>	27.92	-46.24	155.22	24.82	46.24	178.87
	<MIN>	13.77	-12.89	112.22	11.74	12.89	123.66
33	<MAX>	28.13	-31.34	196.72	21.25	33.02	209.11
	<MIN>	11.74	-28.96	117.10	9.72	28.96	126.73
34	<MAX>	20.52	-28.13	212.45	17.43	28.13	229.47
	<MIN>	9.12	-29.67	127.89	1.26	32.82	158.35
35	<MAX>	16.79	-34.87	228.31	13.75	34.40	239.30
	<MIN>	4.06	-35.29	159.11	1.98	35.76	164.53
36	<MAX>	15.63	-35.32	242.58	4.28	28.15	210.25
	<MIN>	1.12	-36.66	162.40	-1.02	37.17	165.23
37	<MAX>	5.33	-34.61	244.85	2.56	26.84	210.66
	<MIN>	-1.81	-38.40	168.95	-4.16	46.16	203.82
38	<MAX>	5.50	-22.71	192.02	-2.90	15.72	148.32
	<MIN>	-5.25	-51.05	224.17	-8.25	51.64	220.91
39	<MAX>	-3.51	-21.92	183.00	-5.87	15.01	138.99
	<MIN>	-9.54	-52.58	224.50	-18.70	53.63	234.75
40	<MAX>	-6.79	-15.38	139.26	-8.82	15.38	132.26
	<MIN>	-16.45	-56.23	235.63	-19.55	56.23	219.45
41	<MAX>	-9.78	-15.77	132.49	-11.81	15.77	122.91
	<MIN>	-20.96	-57.86	220.19	-24.05	57.86	200.08
42	<MAX>	-12.90	-16.13	122.99	-14.92	16.13	110.51
	<MIN>	-25.42	-58.88	200.76	-28.51	58.88	176.57
43	<MAX>	-16.06	-31.10	103.42	-18.09	31.10	88.13
	<MIN>	-30.17	-44.99	184.50	-33.26	44.99	156.05
44	<MAX>	-19.36	-31.58	88.33	-21.39	31.58	70.55
	<MIN>	-35.86	-45.17	156.31	-38.95	45.17	122.76

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
45	<MAX>	-23.22	-31.83	69.99	-25.25	31.83	48.25
	<MIN>	-43.14	-44.19	122.46	-46.24	44.19	82.37
46	<MAX>	-27.22	-31.06	47.48	-29.25	31.06	22.15
	<MIN>	-48.33	-39.33	80.07	-51.43	39.33	35.33
47	<MAX>	-5.70	1.43	18.99	-7.73	-1.43	12.97
	<MIN>	-42.21	-50.87	29.37	-45.31	50.87	-9.89
48	<MAX>	5.39	5.55	16.84	4.70	-5.55	18.39
	<MIN>	-21.24	-31.86	-8.20	-22.30	31.86	-14.87
49	<MAX>	30.61	12.41	17.81	29.35	-12.41	28.62
	<MIN>	13.24	-9.91	-0.34	12.41	9.91	4.28
50	<MAX>	31.70	10.05	30.15	30.62	-10.05	39.70
	<MIN>	16.04	-13.07	5.30	15.34	13.07	10.11
51	<MAX>	36.02	-30.66	21.36	32.88	30.66	52.27
	<MIN>	18.04	7.15	27.60	15.98	-7.15	42.86
52	<MAX>	41.14	-40.39	58.08	38.00	40.39	93.57
	<MIN>	19.10	-2.31	44.53	17.04	2.31	60.74
53	<MAX>	40.93	-45.60	97.97	37.79	45.60	133.27
	<MIN>	20.88	-8.84	63.41	18.81	8.84	81.21
54	<MAX>	35.61	-47.87	136.08	32.47	47.87	166.61
	<MIN>	18.60	-14.24	97.24	16.53	14.24	112.99
55	<MAX>	31.26	-50.27	158.81	28.12	50.27	185.43
	<MIN>	15.76	-15.68	114.38	13.70	15.68	127.59
56	<MAX>	27.11	-50.73	186.20	23.96	50.73	209.10
	<MIN>	13.25	-16.32	128.48	11.19	16.32	139.44
57	<MAX>	22.88	-51.02	209.41	19.74	51.02	228.53
	<MIN>	10.45	-16.64	139.95	8.39	16.64	148.40
58	<MAX>	18.30	-51.27	228.62	15.17	50.68	240.93
	<MIN>	5.49	-19.71	168.79	3.42	20.31	175.49
59	<MAX>	11.49	-51.56	243.73	8.41	50.96	249.85
	<MIN>	2.43	-19.93	172.99	0.30	20.53	177.03

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
60	<MAX>	5.11	-35.91	254.65	2.10	35.31	255.03
	<MIN>	-0.45	-36.17	172.20	-2.64	36.77	173.68
61	<MAX>	-0.37	-16.86	158.43	-2.57	16.27	154.25
	<MIN>	-3.96	-52.73	231.48	-6.97	53.33	229.44
62	<MAX>	-3.48	-16.04	151.17	-5.62	15.44	144.28
	<MIN>	-8.61	-52.06	249.41	-11.70	55.78	242.30
63	<MAX>	-6.53	-16.31	146.79	-8.61	15.72	137.31
	<MIN>	-15.28	-52.45	240.14	-18.41	53.04	227.73
64	<MAX>	-9.51	-15.96	137.02	-11.57	15.96	127.57
	<MIN>	-19.77	-53.42	227.44	-22.92	53.42	208.30
65	<MAX>	-12.42	-16.09	127.12	-14.48	16.09	115.06
	<MIN>	-23.98	-53.72	207.79	-27.12	53.72	184.86
66	<MAX>	-15.26	-15.91	114.32	-17.32	15.91	99.71
	<MIN>	-28.37	-60.02	182.40	-31.51	60.02	155.55
67	<MAX>	-17.80	-14.94	98.50	-19.87	14.94	81.61
	<MIN>	-32.51	-59.64	153.63	-35.65	59.64	123.97
68	<MAX>	-18.99	-12.10	79.61	-21.05	12.10	61.65
	<MIN>	-35.69	-57.77	120.06	-38.83	57.77	86.63
69	<MAX>	-17.16	-5.72	58.89	-19.22	5.72	42.57
	<MIN>	-35.77	-52.73	81.92	-38.91	52.73	48.42
70	<MAX>	-15.95	3.81	40.81	-18.01	-3.81	25.58
	<MIN>	-30.82	-37.07	45.25	-33.96	37.07	16.20
71	<MAX>	-15.01	-16.13	8.04	-15.72	16.13	3.33
	<MIN>	-27.65	-3.16	30.02	-28.73	3.16	21.38
72	<MAX>	-11.56	-14.47	1.32	-12.39	14.47	-3.00
	<MIN>	-24.81	0.70	19.82	-26.05	-0.70	10.64
73	<MAX>	30.86	-24.47	-8.94	25.20	21.05	1.50
	<MIN>	-4.03	10.23	21.80	-4.72	-10.23	20.45
74	<MAX>	46.41	-39.20	-1.17	43.32	39.20	39.07
	<MIN>	7.28	4.74	15.35	5.28	-4.74	20.98

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
75	<MAX>	53.87	-24.79	45.30	48.99	27.11	90.60
	<MIN>	28.63	-27.66	24.17	26.60	27.66	48.94
76	<MAX>	47.74	-32.02	93.00	44.64	32.02	134.43
	<MIN>	24.79	-28.57	49.78	22.76	28.57	71.11
77	<MAX>	43.81	-33.33	134.59	34.84	34.77	159.10
	<MIN>	21.05	-28.53	71.19	17.11	31.42	101.42
78	<MAX>	32.38	-34.90	158.81	29.28	34.90	186.46
	<MIN>	16.88	-31.16	101.51	14.86	31.16	115.75
79	<MAX>	31.63	-48.21	186.34	24.80	49.27	201.91
	<MIN>	13.98	-16.41	122.85	11.95	16.41	134.48
80	<MAX>	23.42	-49.07	200.64	20.33	49.07	220.26
	<MIN>	10.90	-16.35	134.13	3.68	19.14	161.99
81	<MAX>	19.14	-49.07	218.82	16.04	49.07	234.60
	<MIN>	5.62	-19.30	161.84	3.60	19.30	165.98
82	<MAX>	17.82	-49.36	233.06	7.89	46.44	237.60
	<MIN>	3.11	-19.43	165.74	1.05	20.06	170.33
83	<MAX>	7.47	-48.68	235.81	4.47	48.08	238.36
	<MIN>	0.17	-20.60	172.51	-1.95	21.20	174.52
84	<MAX>	7.19	-44.16	217.85	-1.73	29.82	140.99
	<MIN>	-2.87	-25.65	193.38	-5.70	33.45	226.78
85	<MAX>	-1.91	-36.11	173.96	-4.68	28.94	131.13
	<MIN>	-6.98	-37.41	229.84	-15.78	36.16	241.11
86	<MAX>	-5.44	-29.55	133.02	-7.52	29.08	124.49
	<MIN>	-13.86	-35.88	237.71	-16.90	36.35	226.63
87	<MAX>	-8.27	-29.12	123.59	-10.29	29.12	115.26
	<MIN>	-17.44	-36.22	225.59	-20.54	36.22	208.55
88	<MAX>	-10.92	-29.00	114.20	-12.95	29.00	103.50
	<MIN>	-21.27	-35.67	207.10	-24.37	35.67	186.64
89	<MAX>	-13.06	-13.54	110.24	-15.09	13.54	97.61
	<MIN>	-24.83	-49.41	176.67	-27.92	49.41	153.01

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
90	<MAX>	-14.40	-11.79	96.12	-16.43	11.79	82.29
	<MIN>	-27.69	-47.53	150.28	-30.78	47.53	124.05
91	<MAX>	-14.50	-8.52	80.48	-16.53	8.52	66.56
	<MIN>	-29.23	-43.91	120.54	-32.32	43.91	92.93
92	<MAX>	-13.49	-3.33	64.95	-15.52	3.33	51.94
	<MIN>	-28.88	-37.70	88.71	-31.97	37.70	61.41
93	<MAX>	-13.57	3.93	51.64	-15.59	-3.93	38.56
	<MIN>	-26.82	-28.63	57.13	-29.92	28.63	31.68
94	<MAX>	-15.61	-11.95	17.91	-16.30	11.95	13.02
	<MIN>	-31.52	1.29	51.18	-32.58	-1.29	41.36
95	<MAX>	-14.76	-9.47	12.34	-15.58	9.47	6.87
	<MIN>	-38.00	7.07	41.54	-39.24	-7.07	27.62
96	<MAX>	-12.16	-12.53	4.51	-12.98	12.53	-0.02
	<MIN>	-48.27	13.66	27.45	-49.52	-13.66	9.82
97	<MAX>	157.29	-27.23	-87.81	149.70	18.50	49.89
	<MIN>	80.08	-35.50	-33.39	75.06	29.42	36.20
98	<MAX>	107.80	-64.99	33.55	100.22	56.25	126.84
	<MIN>	60.04	-15.62	16.49	55.02	9.53	68.09
99	<MAX>	93.77	-65.45	95.45	86.19	56.71	176.16
	<MIN>	46.05	-18.83	60.18	41.03	12.74	99.24
100	<MAX>	83.50	-66.98	134.27	75.92	58.24	205.77
	<MIN>	38.86	-19.64	90.77	33.84	13.56	123.39
101	<MAX>	76.12	-66.05	173.90	68.54	57.31	238.78
	<MIN>	33.43	-19.74	114.73	28.41	13.66	142.46
102	<MAX>	69.29	-64.90	207.32	61.70	56.16	266.07
	<MIN>	28.65	-19.41	133.83	23.62	13.32	157.27
103	<MAX>	63.33	-62.89	234.89	55.75	57.29	288.30
	<MIN>	24.65	-18.31	148.66	19.62	14.54	168.52
104	<MAX>	57.69	-63.24	257.23	50.11	57.64	305.58
	<MIN>	21.22	-18.83	159.83	16.19	15.07	176.60

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
105	<MAX>	50.41	-63.92	274.42	42.83	58.32	316.23
	<MIN>	17.77	-19.19	167.76	12.74	15.43	181.44
106	<MAX>	43.06	-64.46	284.62	35.48	58.86	319.84
	<MIN>	14.30	-19.47	172.45	9.28	15.71	183.02
107	<MAX>	35.75	-65.84	281.90	28.17	60.23	310.58
	<MIN>	10.82	-19.69	173.90	5.79	15.92	181.35
108	<MAX>	29.95	-67.79	277.57	22.36	62.19	301.04
	<MIN>	7.36	-19.81	172.13	2.34	16.04	176.48
109	<MAX>	24.22	-69.29	267.02	16.70	63.07	277.96
	<MIN>	3.06	-28.42	208.26	-2.03	25.27	216.15
110	<MAX>	18.60	-70.10	250.63	11.37	64.14	256.91
	<MIN>	-0.82	-27.89	195.10	-6.20	24.48	199.12
111	<MAX>	13.17	-69.53	225.91	6.22	63.83	227.83
	<MIN>	-4.25	-27.31	181.75	-9.91	23.64	182.17
112	<MAX>	8.34	-64.20	182.93	1.93	46.88	141.93
	<MIN>	-7.81	-25.66	169.05	-14.02	33.61	204.86
113	<MAX>	3.86	-60.77	153.45	-1.31	44.16	115.77
	<MIN>	-11.04	-22.86	149.66	-18.48	30.11	175.23
114	<MAX>	0.74	-44.27	92.16	-4.28	40.51	90.57
	<MIN>	-14.86	-29.37	158.81	-22.45	23.76	142.08
115	<MAX>	-2.00	-42.07	73.21	-7.02	38.31	69.16
	<MIN>	-18.27	-20.60	129.53	-25.86	15.00	109.73
116	<MAX>	-4.75	-33.65	49.46	-9.77	29.88	42.95
	<MIN>	-19.82	-9.32	102.53	-27.40	3.72	81.35
117	<MAX>	-4.93	-1.23	64.05	-6.64	-0.06	62.28
	<MIN>	-21.80	-21.55	50.19	-24.39	19.64	43.12
118	<MAX>	0.42	4.33	62.48	-1.60	-5.84	62.28
	<MIN>	-24.15	-17.12	39.31	-27.20	14.87	30.06
119	<MAX>	6.23	10.38	64.63	4.22	-11.90	66.52
	<MIN>	-27.97	-12.31	27.09	-31.02	10.06	16.46

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
120	<MAX>	1.40	11.70	72.04	-0.32	-12.99	72.20
	<MIN>	-32.84	-7.97	14.70	-35.43	6.05	4.23
121	<MAX>	11.87	-9.51	-7.47	11.87	9.51	2.62
	<MIN>	1.47	1.39	1.16	1.47	-1.39	2.41
122	<MAX>	3.39	-0.28	-1.67	3.39	0.28	1.21
	<MIN>	-6.61	-4.17	2.68	-6.61	4.17	-2.94
123	<MAX>	1.65	1.69	0.71	1.65	-1.69	2.11
	<MIN>	-6.37	-1.96	2.83	-6.37	1.96	-2.58
124	<MAX>	1.65	3.57	1.52	1.65	-3.57	2.92
	<MIN>	-8.31	-0.70	4.04	-8.31	0.70	-3.03
125	<MAX>	1.28	10.38	1.51	1.28	-10.38	2.60
	<MIN>	-6.31	1.15	-0.40	-6.31	-1.15	-5.77
126	<MAX>	0.49	13.89	-0.09	0.49	-13.89	0.32
	<MIN>	-5.26	4.98	-0.35	-5.26	-4.98	-4.82
127	<MAX>	0.87	16.36	-2.13	0.87	-16.36	-1.39
	<MIN>	-4.76	12.56	-3.03	-4.76	-12.56	-7.08
128	<MAX>	0.76	20.05	-3.49	0.76	-20.05	-2.84
	<MIN>	-4.40	13.47	-5.89	-4.40	-13.47	-9.63
129	<MAX>	1.47	22.25	-4.83	1.47	-22.25	-3.58
	<MIN>	-2.89	15.63	-5.68	-2.89	-15.63	-8.84
130	<MAX>	1.07	22.67	-5.34	1.07	-22.67	-4.43
	<MIN>	-3.71	17.97	-8.22	-3.71	-17.97	-11.37
131	<MAX>	1.09	22.68	-5.80	1.09	-22.68	-4.87
	<MIN>	-3.52	15.82	-7.45	-3.52	-15.82	-10.44
132	<MAX>	1.11	24.47	-6.01	1.11	-24.47	-5.07
	<MIN>	-3.45	21.36	-7.74	-3.45	-21.36	-10.68
133	<MAX>	1.16	24.31	-6.02	1.16	-24.31	-5.33
	<MIN>	-3.45	18.97	-9.22	-3.45	-18.97	-13.17
134	<MAX>	1.69	19.20	-6.18	1.69	-19.20	-4.75
	<MIN>	-2.28	31.67	-7.86	-2.28	-31.67	-9.80

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
135	<MAX>	1.22	15.25	-6.04	1.22	-15.25	-5.00
	<MIN>	-3.40	32.24	-9.26	-3.40	-32.24	-12.15
136	<MAX>	1.25	15.09	-6.10	1.25	-15.09	-5.05
	<MIN>	-1.95	32.57	-7.79	-1.95	-32.57	-9.45
137	<MAX>	-0.21	15.30	-5.63	-0.21	-15.30	-5.81
	<MIN>	-3.16	35.34	-7.78	-3.16	-35.34	-10.47
138	<MAX>	-0.33	15.56	-5.64	-0.33	-15.56	-5.92
	<MIN>	-2.24	36.10	-7.58	-2.24	-36.10	-9.48
139	<MAX>	0.12	20.81	-6.44	0.12	-20.81	-6.34
	<MIN>	-1.45	31.69	-6.92	-1.45	-31.69	-8.15
140	<MAX>	1.14	20.98	-6.80	1.14	-20.98	-5.83
	<MIN>	-0.66	24.03	-6.90	-0.66	-24.03	-7.47
141	<MAX>	3.46	24.92	-7.81	3.46	-24.92	-4.87
	<MIN>	0.51	24.53	-7.07	0.51	-24.53	-6.63
142	<MAX>	12.25	26.82	-12.27	12.25	-26.82	-1.85
	<MIN>	3.67	22.48	-6.58	3.67	-22.48	-3.46
143	<MAX>	45.59	25.54	-24.59	45.59	-25.54	14.16
	<MIN>	14.34	20.44	-9.84	14.34	-20.44	2.35
144	<MAX>	39.95	19.56	-18.65	39.95	-19.56	15.31
	<MIN>	16.94	-9.25	-6.54	16.94	9.25	7.86
145	<MAX>	6.56	-7.21	-1.32	6.56	7.21	5.24
	<MIN>	-3.08	3.90	6.78	-3.08	-3.90	3.70
146	<MAX>	0.95	-5.52	0.71	0.95	5.52	1.67
	<MIN>	-2.43	4.64	5.60	-2.43	-4.64	3.16
147	<MAX>	-2.15	2.58	5.41	-2.15	-2.58	3.26
	<MIN>	-4.86	-4.49	5.15	-4.86	4.49	0.29
148	<MAX>	-4.10	12.44	4.74	-4.10	-12.44	0.64
	<MIN>	-11.08	2.94	7.53	-11.08	-2.94	-3.55
149	<MAX>	-3.46	15.94	1.54	-3.46	-15.94	-1.92
	<MIN>	-10.56	10.11	4.28	-10.56	-10.11	-6.28

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
150	<MAX>	-2.30	17.60	-1.45	-2.30	-17.60	-3.75
	<MIN>	-8.64	12.71	0.13	-8.64	-12.71	-8.51
151	<MAX>	-1.29	19.94	-3.76	-1.29	-19.94	-5.05
	<MIN>	-6.74	14.61	-3.59	-6.74	-14.61	-10.33
152	<MAX>	-0.63	21.65	-4.31	-0.63	-21.65	-4.93
	<MIN>	-5.96	17.12	-5.57	-5.96	-17.12	-11.53
153	<MAX>	-0.21	24.73	-5.41	-0.21	-24.73	-5.62
	<MIN>	-4.57	19.20	-7.30	-4.57	-19.20	-11.87
154	<MAX>	-0.07	20.46	-6.37	-0.07	-20.46	-6.44
	<MIN>	-4.02	21.09	-7.79	-4.02	-21.09	-11.81
155	<MAX>	0.04	22.01	-6.37	0.04	-22.01	-6.33
	<MIN>	-3.80	18.53	-8.18	-3.80	-18.53	-11.98
156	<MAX>	0.19	28.52	-6.93	0.19	-28.52	-6.75
	<MIN>	-3.83	15.61	-7.94	-3.83	-15.61	-11.77
157	<MAX>	0.15	19.19	-7.01	0.15	-19.19	-6.86
	<MIN>	-4.38	26.81	-7.65	-4.38	-26.81	-12.03
158	<MAX>	0.18	19.33	-7.05	0.18	-19.33	-6.87
	<MIN>	-3.75	28.56	-7.93	-3.75	-28.56	-11.68
159	<MAX>	0.27	19.48	-7.00	0.27	-19.48	-6.72
	<MIN>	-3.57	30.34	-7.52	-3.57	-30.34	-11.09
160	<MAX>	0.47	19.63	-6.87	0.47	-19.63	-6.46
	<MIN>	-1.91	31.47	-7.90	-1.91	-31.47	-9.81
161	<MAX>	0.98	20.61	-6.35	0.98	-20.61	-5.37
	<MIN>	-1.11	32.24	-7.57	-1.11	-32.24	-8.67
162	<MAX>	1.74	20.71	-6.20	1.74	-20.71	-4.46
	<MIN>	-0.24	32.79	-7.11	-0.24	-32.79	-7.39
163	<MAX>	3.50	23.03	-7.54	3.50	-23.03	-4.04
	<MIN>	0.87	22.44	-5.07	0.87	-22.44	-4.20
164	<MAX>	7.44	26.45	-7.64	7.44	-26.45	-0.20
	<MIN>	2.54	22.63	-4.58	2.54	-22.63	-2.03

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
165	<MAX>	14.32	25.72	-7.21	14.32	-25.72	7.11
	<MIN>	5.67	20.51	-3.73	5.67	-20.51	1.94
166	<MAX>	17.66	18.94	-2.18	17.66	-18.94	15.48
	<MIN>	9.50	17.91	-2.26	9.50	-17.91	7.25
167	<MAX>	14.78	17.95	0.85	14.78	-17.95	15.63
	<MIN>	3.82	-4.16	1.70	3.82	4.16	5.53
168	<MAX>	11.28	8.69	-0.70	11.28	-8.69	10.59
	<MIN>	0.88	-2.51	1.67	0.88	2.51	2.55
169	<MAX>	0.62	-4.53	2.19	0.62	4.53	2.81
	<MIN>	-8.89	6.35	8.92	-8.89	-6.35	0.03
170	<MAX>	-2.92	-5.59	4.44	-2.92	5.59	1.52
	<MIN>	-12.56	12.80	14.20	-12.56	-12.80	1.64
171	<MAX>	-8.68	15.67	5.94	-8.68	-15.67	-2.74
	<MIN>	-16.11	10.98	14.23	-16.11	-10.98	-1.87
172	<MAX>	-5.13	18.31	0.87	-5.13	-18.31	-4.26
	<MIN>	-13.75	14.45	3.90	-13.75	-14.45	-9.85
173	<MAX>	-1.45	22.23	-1.67	-1.45	-22.23	-3.12
	<MIN>	-8.13	14.70	-2.49	-8.13	-14.70	-10.62
174	<MAX>	0.00	23.90	-3.88	0.00	-23.90	-3.88
	<MIN>	-4.95	16.73	-6.35	-4.95	-16.73	-11.29
175	<MAX>	1.36	26.26	-6.84	1.36	-26.26	-5.49
	<MIN>	-3.26	15.99	-6.71	-3.26	-15.99	-9.98
176	<MAX>	1.59	30.80	-8.01	1.59	-30.80	-6.42
	<MIN>	-2.29	12.91	-6.89	-2.29	-12.91	-9.18
177	<MAX>	2.22	30.60	-8.67	2.22	-30.60	-6.45
	<MIN>	-1.41	14.27	-7.18	-1.41	-14.27	-8.59
178	<MAX>	2.42	31.47	-8.83	2.42	-31.47	-6.41
	<MIN>	-1.19	12.35	-7.32	-1.19	-12.35	-8.51
179	<MAX>	2.29	31.39	-8.60	2.29	-31.39	-6.31
	<MIN>	-1.52	13.76	-7.42	-1.52	-13.76	-8.94

Barra		N U D O D O R S A L (i) <CORTANTE>	Torsor	Flector	N U D O F R O N T A L (j) <CORTANTE>	Torsor	Flector
180	<MAX>	2.68	31.53	-8.67	2.68	-31.53	-6.00
	<MIN>	-1.54	15.31	-7.48	-1.54	-15.31	-9.02
181	<MAX>	2.33	22.20	-8.38	2.33	-22.20	-6.05
	<MIN>	-1.48	26.31	-7.30	-1.48	-26.31	-8.77
182	<MAX>	2.58	22.13	-8.40	2.58	-22.13	-5.82
	<MIN>	-1.05	27.73	-7.03	-1.05	-27.73	-8.08
183	<MAX>	1.66	22.19	-7.72	1.66	-22.19	-6.06
	<MIN>	-0.56	28.77	-6.48	-0.56	-28.77	-7.03
184	<MAX>	2.00	21.13	-7.76	2.00	-21.13	-5.76
	<MIN>	0.06	29.41	-5.85	0.06	-29.41	-5.79
185	<MAX>	2.76	23.15	-7.07	2.76	-23.15	-4.31
	<MIN>	0.73	29.73	-5.01	0.73	-29.73	-4.28
186	<MAX>	4.19	20.92	-5.67	4.19	-20.92	-1.48
	<MIN>	1.58	21.67	-3.99	1.58	-21.67	-2.41
187	<MAX>	6.51	24.54	-4.35	6.51	-24.54	2.16
	<MIN>	2.65	19.54	-2.59	2.65	-19.54	0.96
188	<MAX>	9.11	20.72	-1.67	9.11	-20.72	7.44
	<MIN>	3.94	18.03	-0.70	3.94	-18.03	3.24
189	<MAX>	10.87	14.40	1.37	10.87	-14.40	12.24
	<MIN>	4.77	14.59	1.89	4.77	-14.59	6.65
190	<MAX>	5.90	3.59	3.29	5.90	-3.59	9.19
	<MIN>	2.96	6.37	3.36	2.96	-6.37	6.33
191	<MAX>	3.61	6.87	3.66	3.61	-6.87	7.27
	<MIN>	-0.02	-3.37	1.43	-0.02	3.37	1.41
192	<MAX>	5.50	6.20	3.62	5.50	-6.20	9.12
	<MIN>	-4.15	-4.84	4.17	-4.15	4.84	0.02
193	<MAX>	-14.93	-10.58	7.03	-14.93	10.58	-5.66
	<MIN>	-35.63	13.99	15.27	-35.63	-13.99	-15.02
194	<MAX>	-13.34	18.23	1.77	-13.34	-18.23	-9.57
	<MIN>	-45.71	16.29	15.70	-45.71	-16.29	-23.16

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
195	<MAX>	-3.30	20.35	-3.85	-3.30	-20.35	-6.65
	<MIN>	-13.81	17.74	-0.30	-13.81	-17.74	-12.03
196	<MAX>	-0.29	22.50	-6.97	-0.29	-22.50	-7.21
	<MIN>	-5.66	15.96	-3.31	-5.66	-15.96	-8.12
197	<MAX>	0.78	22.11	-7.69	0.78	-22.11	-7.03
	<MIN>	-3.08	17.57	-4.62	-3.08	-17.57	-7.23
198	<MAX>	1.19	21.72	-7.92	1.19	-21.72	-6.91
	<MIN>	-2.74	17.66	-4.57	-2.74	-17.66	-6.90
199	<MAX>	1.99	25.81	-8.42	1.99	-25.81	-6.73
	<MIN>	-1.36	13.37	-4.21	-1.36	-13.37	-5.37
200	<MAX>	2.67	25.73	-8.20	2.67	-25.73	-5.93
	<MIN>	-0.72	13.84	-4.16	-0.72	-13.84	-4.77
201	<MAX>	2.57	25.77	-7.97	2.57	-25.77	-5.79
	<MIN>	-0.73	14.22	-4.01	-0.73	-14.22	-4.63
202	<MAX>	2.54	25.83	-7.87	2.54	-25.83	-5.72
	<MIN>	-0.76	14.76	-3.82	-0.76	-14.76	-4.47
203	<MAX>	2.53	27.70	-7.85	2.53	-27.70	-5.69
	<MIN>	-1.26	15.08	-3.48	-1.26	-15.08	-4.55
204	<MAX>	2.52	18.58	-7.69	2.52	-18.58	-5.54
	<MIN>	-0.76	24.53	-3.69	-0.76	-24.53	-4.34
205	<MAX>	2.52	18.55	-7.48	2.52	-18.55	-5.33
	<MIN>	-0.74	25.00	-3.66	-0.74	-25.00	-4.28
206	<MAX>	2.56	18.41	-7.16	2.56	-18.41	-4.99
	<MIN>	0.85	25.05	-4.31	0.85	-25.05	-3.59
207	<MAX>	2.66	21.68	-6.64	2.66	-21.68	-4.38
	<MIN>	1.15	27.88	-5.08	1.15	-27.88	-4.10
208	<MAX>	2.90	21.01	-5.78	2.90	-21.01	-3.32
	<MIN>	1.34	27.93	-4.23	1.34	-27.93	-3.09
209	<MAX>	3.31	21.09	-4.62	3.31	-21.09	-1.80
	<MIN>	1.55	18.69	-3.09	1.55	-18.65	-1.77

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
210	<MAX>	3.88	20.92	-2.74	3.88	-20.92	0.56
	<MIN>	1.76	17.50	-1.93	1.76	-17.50	-0.43
211	<MAX>	4.51	17.08	-0.51	4.51	-17.08	3.32
	<MIN>	1.89	15.50	-0.34	1.89	-15.50	1.26
212	<MAX>	6.51	11.61	0.71	6.51	-11.61	6.24
	<MIN>	1.68	12.44	1.52	1.68	-12.44	2.95
213	<MAX>	9.53	3.14	-1.03	9.53	-3.14	7.07
	<MIN>	0.81	5.45	2.09	0.81	-5.45	2.77
214	<MAX>	7.15	0.54	-1.07	7.15	-0.54	5.01
	<MIN>	0.04	2.33	1.19	0.04	-2.33	1.22
215	<MAX>	7.81	-2.36	-2.09	7.81	2.36	4.54
	<MIN>	-0.86	2.32	2.65	-0.86	-2.32	1.92
216	<MAX>	0.60	2.89	2.81	0.60	-2.89	3.33
	<MIN>	-5.41	-7.12	2.52	-5.41	7.12	-2.08
217	<MAX>	69.53	48.81	-51.77	69.53	-48.81	11.06
	<MIN>	1.28	4.42	2.50	1.28	-4.42	3.65
218	<MAX>	21.87	45.11	-14.33	21.87	-45.11	8.92
	<MIN>	-16.53	13.71	16.59	-16.53	-13.71	-0.97
219	<MAX>	3.66	51.64	-8.21	3.66	-51.64	-4.32
	<MIN>	-40.38	22.67	20.77	-40.38	-22.67	-22.15
220	<MAX>	4.34	70.53	-26.87	4.34	-70.53	-22.95
	<MIN>	-73.94	24.07	13.48	-73.94	-24.07	-53.33
221	<MAX>	82.60	34.02	-69.82	82.60	-34.02	4.62
	<MIN>	-0.19	73.15	-27.04	-0.19	-73.15	-27.21
222	<MAX>	50.93	31.05	-32.72	50.93	-31.05	21.42
	<MIN>	2.82	58.53	-15.01	2.82	-58.53	-12.62
223	<MAX>	26.86	21.62	-8.74	26.86	-21.62	19.81
	<MIN>	-11.84	52.65	-2.07	-11.84	-52.65	-14.66
224	<MAX>	8.29	9.72	-0.15	8.29	-9.72	7.34
	<MIN>	-49.81	58.14	3.80	-49.81	-58.14	-41.21

Combinación C-4:

Máximos y Minimos del Esfuerzo FLECTOR

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
1	<MAX>	13.52	34.47	113.13	44.98	-43.22	122.23
	<MIN>	61.67	9.32	-2.65	25.34	2.58	9.35
2	<MAX>	31.23	52.59	107.49	19.21	-40.09	114.97
	<MIN>	23.32	-2.63	9.87	21.30	5.08	17.92
3	<MAX>	28.40	39.20	104.39	25.37	-35.70	114.07
	<MIN>	20.24	-5.42	19.08	18.22	7.87	26.01
4	<MAX>	35.42	33.56	107.12	32.85	-30.59	117.57
	<MIN>	18.03	-8.34	27.70	16.31	10.42	32.97
5	<MAX>	44.57	28.83	107.84	28.04	-11.13	139.56
	<MIN>	16.63	-11.31	36.99	11.61	17.40	49.66
6	<MAX>	36.31	10.63	133.56	36.86	-5.84	167.34
	<MIN>	13.05	-17.72	59.43	8.03	23.81	68.88
7	<MAX>	42.59	5.36	165.69	35.07	3.34	200.52
	<MIN>	9.76	-22.67	81.62	4.73	28.76	88.12
8	<MAX>	37.99	0.62	204.09	21.47	17.08	229.36
	<MIN>	6.41	-26.14	102.89	1.38	32.23	106.38
9	<MAX>	25.94	-11.83	237.14	18.42	20.53	257.04
	<MIN>	2.87	-28.42	122.43	-2.16	34.50	122.75
10	<MAX>	19.74	-11.42	268.22	3.22	29.12	274.48
	<MIN>	-0.82	-29.89	139.57	-5.84	35.97	136.59
11	<MAX>	6.77	-20.97	288.33	-9.75	38.67	288.37
	<MIN>	-4.61	-30.86	153.92	-9.63	36.95	147.52
12	<MAX>	-8.57	-28.94	304.20	4.83	26.66	306.30
	<MIN>	-8.44	-31.55	165.20	-13.46	37.63	155.38
13	<MAX>	5.94	-16.55	319.26	-10.58	34.25	315.78
	<MIN>	-12.29	-32.09	173.32	-17.32	38.17	160.04
14	<MAX>	-7.37	-24.87	330.41	-14.90	33.57	320.42
	<MIN>	-16.17	-32.56	178.20	-21.19	38.65	161.45
15	<MAX>	-14.33	-22.01	336.99	-30.85	39.71	312.70
	<MIN>	-20.04	-33.02	179.83	-25.07	39.11	159.60
16	<MAX>	-27.72	-30.25	331.21	-44.24	47.95	300.34
	<MIN>	-23.94	-33.51	178.20	-28.96	39.60	154.48
17	<MAX>	-43.40	-37.59	320.50	-42.65	37.66	279.30
	<MIN>	-27.90	-34.03	173.33	-32.92	40.12	146.06
18	<MAX>	-48.14	-38.17	299.55	-49.26	38.52	255.79
	<MIN>	-31.91	-34.60	165.18	-36.93	40.69	134.31
19	<MAX>	-53.96	-38.80	274.92	-55.89	39.33	226.81
	<MIN>	-36.06	-35.25	153.74	-41.09	41.33	119.14
20	<MAX>	-60.89	-39.17	245.40	-63.17	39.86	191.67
	<MIN>	-40.46	-35.94	138.89	-45.48	42.03	100.35
21	<MAX>	-64.26	-31.13	210.02	-71.79	39.82	149.01
	<MIN>	-45.34	-36.64	120.45	-50.37	42.73	77.53
22	<MAX>	-75.94	-29.87	167.17	-83.46	38.57	95.69
	<MIN>	-51.21	-37.20	97.98	-59.56	46.89	49.36
23	<MAX>	-101.97	-63.35	118.00	-105.17	68.39	24.66
	<MIN>	-57.13	1.93	65.53	-83.91	23.06	5.91
24	<MAX>	-133.54	-56.68	57.74	-85.57	38.83	-37.53
	<MIN>	-110.27	19.54	10.72	-177.88	19.64	-126.88
25	<MAX>	81.24	40.33	20.17	71.54	-41.30	46.19
	<MIN>	16.18	-8.37	1.81	13.75	6.19	7.15
26	<MAX>	52.78	37.06	46.03	51.54	-37.06	64.83
	<MIN>	16.28	-8.36	7.88	15.47	8.36	13.60
27	<MAX>	40.46	30.46	63.47	39.41	-30.46	75.73
	<MIN>	17.10	-10.81	14.32	16.40	10.81	19.45
28	<MAX>	32.74	16.92	73.31	27.05	-18.86	97.39
	<MIN>	18.20	-13.22	20.82	16.17	13.22	36.24
29	<MAX>	29.78	6.69	97.35	26.70	-6.69	122.68
	<MIN>	18.88	-18.60	38.64	16.85	18.60	54.68

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
30	<MAX>	31.41	-3.05	125.13	28.33	3.05	151.93
	<MIN>	18.65	-22.42	57.02	16.62	22.42	72.83
31	<MAX>	35.05	-10.86	154.68	23.51	9.89	179.65
	<MIN>	17.37	-24.79	74.78	15.35	24.79	89.46
32	<MAX>	26.28	-16.00	182.04	23.20	16.00	204.23
	<MIN>	15.37	-26.19	90.96	13.35	26.19	103.84
33	<MAX>	27.95	-20.88	205.80	16.41	19.91	221.91
	<MIN>	12.93	-27.03	105.00	10.90	27.03	115.70
34	<MAX>	17.29	-23.75	222.83	5.75	22.78	234.46
	<MIN>	10.25	-27.58	116.65	8.22	27.58	124.93
35	<MAX>	8.32	-25.56	235.18	13.33	19.94	247.92
	<MIN>	7.45	-27.98	125.74	5.42	27.98	131.51
36	<MAX>	15.72	-22.54	248.80	4.18	21.56	256.42
	<MIN>	4.56	-28.32	132.22	2.54	28.32	135.41
37	<MAX>	4.44	-24.77	257.30	1.36	24.77	259.91
	<MIN>	1.65	-28.65	136.07	-0.38	28.65	136.65
38	<MAX>	4.82	-28.20	260.48	-6.72	27.23	255.83
	<MIN>	-1.25	-28.98	137.28	-3.28	28.98	135.25
39	<MAX>	-6.53	-30.44	256.13	-18.07	29.46	246.40
	<MIN>	-4.18	-29.33	135.85	-6.21	29.33	131.19
40	<MAX>	-15.86	-32.04	246.75	-18.94	32.04	231.14
	<MIN>	-7.10	-29.72	131.77	-9.12	29.72	124.49
41	<MAX>	-20.45	-33.60	231.34	-22.83	27.55	212.01
	<MIN>	-10.02	-30.14	125.03	-12.05	30.14	115.13
42	<MAX>	-24.48	-28.14	212.47	-27.56	28.14	189.14
	<MIN>	-13.00	-30.60	115.60	-15.03	30.60	103.03
43	<MAX>	-29.57	-28.55	189.44	-32.65	28.55	161.54
	<MIN>	-16.06	-31.10	103.42	-18.09	31.10	88.10
44	<MAX>	-35.65	-28.42	161.59	-38.73	28.42	128.23
	<MIN>	-19.36	-31.58	88.33	-21.39	31.58	70.05

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
45	<MAX>	-43.61	-26.68	127.58	-46.69	26.68	87.08
	<MIN>	-23.22	-31.83	69.99	-25.25	31.83	48.25
46	<MAX>	-47.74	-19.76	83.87	-50.82	19.76	39.67
	<MIN>	-27.22	-31.06	47.48	-32.98	39.61	20.93
47	<MAX>	-40.32	-42.41	32.43	3.46	-20.47	24.94
	<MIN>	2.62	9.70	17.20	-43.75	51.06	-11.07
48	<MAX>	16.28	25.58	34.27	15.58	-25.58	39.15
	<MIN>	-18.90	-36.78	-12.63	-19.96	36.78	-18.58
49	<MAX>	28.98	32.27	29.64	31.81	-29.53	41.10
	<MIN>	19.24	-18.12	-2.72	14.31	15.38	2.82
50	<MAX>	31.29	29.00	42.53	30.22	-29.00	51.96
	<MIN>	19.26	-19.71	4.07	16.01	15.79	9.47
51	<MAX>	29.56	20.65	52.32	29.32	-19.31	79.24
	<MIN>	20.74	-20.49	11.67	18.00	18.07	29.23
52	<MAX>	34.37	3.29	82.22	31.24	-3.29	111.65
	<MIN>	22.53	-23.68	32.73	20.47	23.68	52.01
53	<MAX>	37.37	-8.36	116.36	34.24	8.36	148.48
	<MIN>	22.08	-26.70	54.66	20.02	26.70	73.54
54	<MAX>	34.42	-15.07	151.99	30.75	15.24	181.13
	<MIN>	19.93	-28.03	75.17	17.87	28.03	92.11
55	<MAX>	29.04	-19.28	183.06	25.91	19.28	207.70
	<MIN>	17.28	-28.61	93.04	15.21	28.61	107.61
56	<MAX>	23.15	-22.24	208.68	19.49	22.41	227.56
	<MIN>	14.49	-28.91	108.12	12.43	28.91	120.19
57	<MAX>	17.05	-24.75	227.95	13.38	24.92	241.49
	<MIN>	11.56	-29.12	120.45	9.50	29.12	129.89
58	<MAX>	16.77	-21.47	241.89	13.64	21.47	255.53
	<MIN>	8.54	-29.30	130.00	6.48	29.30	136.74
59	<MAX>	10.75	-23.32	256.03	8.30	26.44	264.43
	<MIN>	5.48	-29.51	136.76	3.42	29.51	140.76

Barra		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
60	<MAX>	5.03	-26.78	264.26	1.90	26.78	267.36
	<MIN>	2.46	-29.76	140.74	0.39	29.76	142.02
61	<MAX>	-2.13	-27.15	267.30	-5.26	27.15	263.98
	<MIN>	-0.57	-30.03	141.97	-2.63	30.03	140.53
62	<MAX>	-8.48	-27.54	264.00	-11.61	27.54	254.98
	<MIN>	-3.56	-30.32	140.44	-5.63	30.32	136.31
63	<MAX>	-15.18	-27.91	254.67	-18.30	27.91	239.66
	<MIN>	-6.56	-30.61	136.15	-8.62	30.61	129.34
64	<MAX>	-19.65	-28.22	239.33	-22.78	28.22	220.30
	<MIN>	-9.53	-30.89	129.09	-11.59	30.89	119.62
65	<MAX>	-23.82	-28.34	219.73	-26.94	28.34	196.96
	<MIN>	-12.44	-31.13	119.21	-14.50	31.13	107.13
66	<MAX>	-28.00	-27.96	195.87	-31.13	27.96	169.35
	<MIN>	-15.30	-31.24	106.47	-17.36	31.24	91.83
67	<MAX>	-31.74	-26.27	167.44	-34.87	26.27	137.57
	<MIN>	-18.02	-31.02	90.77	-20.08	31.02	73.68
68	<MAX>	-33.25	-21.47	134.33	-36.38	21.47	103.10
	<MIN>	-20.20	-29.96	71.95	-22.26	29.96	52.91
69	<MAX>	-29.74	-10.78	98.59	-32.86	10.78	70.51
	<MIN>	-20.58	-27.09	50.16	-23.39	29.91	30.59
70	<MAX>	-27.26	5.18	67.67	-29.71	-7.60	42.31
	<MIN>	-19.78	-28.94	26.77	-24.09	34.46	7.52
71	<MAX>	-28.34	16.32	42.08	-26.87	-20.24	33.62
	<MIN>	-17.68	-27.95	4.88	-18.39	27.95	-0.64
72	<MAX>	-26.36	21.38	32.40	-23.79	-25.04	23.51
	<MIN>	-12.38	-22.59	-1.99	-17.04	26.26	-7.45
73	<MAX>	-11.90	30.86	44.83	-10.59	-31.48	41.46
	<MIN>	21.93	-28.65	-12.69	20.88	28.65	-6.13
74	<MAX>	1.79	26.79	32.90	40.69	29.42	43.18
	<MIN>	42.71	-40.99	-4.25	-6.02	-20.73	20.48

Barra		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
		Cortante	Torsor	<FLECTOR>	Cortante	Torsor	<FLECTOR>
75	<MAX>	50.25	-6.74	51.07	47.17	6.74	94.77
	<MIN>	28.63	-27.66	24.17	26.60	27.66	48.94
76	<MAX>	45.85	-14.68	98.73	42.77	14.68	138.48
	<MIN>	24.79	-28.57	49.78	22.76	28.57	71.11
77	<MAX>	37.12	-18.04	139.73	34.04	18.04	171.64
	<MIN>	21.05	-28.53	71.19	19.02	28.53	89.16
78	<MAX>	29.86	-20.18	171.89	29.09	23.52	198.15
	<MIN>	17.84	-28.32	88.88	15.81	28.32	103.97
79	<MAX>	31.31	-23.79	197.75	20.70	22.02	216.89
	<MIN>	15.04	-28.17	103.43	13.01	28.17	116.01
80	<MAX>	17.78	-23.71	216.11	19.81	24.82	231.41
	<MIN>	12.10	-28.12	115.31	10.07	28.12	125.25
81	<MAX>	15.84	-21.35	230.96	15.45	24.88	245.72
	<MIN>	8.94	-28.18	124.52	6.91	28.18	131.63
82	<MAX>	17.19	-25.19	244.71	5.11	25.19	253.32
	<MIN>	5.99	-28.34	130.94	3.96	28.34	135.41
83	<MAX>	6.83	-25.57	252.70	3.75	25.57	257.44
	<MIN>	3.10	-28.55	134.73	1.07	28.55	136.60
84	<MAX>	6.40	-25.97	256.76	-5.68	25.97	253.05
	<MIN>	0.21	-28.76	135.89	-1.81	28.76	135.10
85	<MAX>	-3.87	-26.29	252.27	-15.95	26.29	244.77
	<MIN>	-2.65	-28.94	134.43	-4.68	28.94	131.13
86	<MAX>	-13.94	-26.46	244.26	-17.02	26.46	230.37
	<MIN>	-5.50	-29.08	130.33	-7.52	29.08	124.49
87	<MAX>	-17.50	-26.28	229.52	-20.58	26.28	212.45
	<MIN>	-8.27	-29.12	123.59	-10.29	29.12	115.26
88	<MAX>	-21.19	-25.62	211.16	-24.27	25.62	190.78
	<MIN>	-10.92	-29.00	114.20	-12.95	29.00	103.50
89	<MAX>	-24.21	-24.13	188.98	-27.29	24.13	165.88
	<MIN>	-13.39	-28.54	102.21	-15.38	28.54	89.32

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
90	<MAX>	-25.96	-21.09	163.44	-29.04	21.09	138.77
	<MIN>	-15.34	-27.49	87.67	-17.37	27.49	73.00
91	<MAX>	-25.66	-15.56	135.78	-28.74	15.56	111.38
	<MIN>	-16.54	-25.38	70.89	-18.57	25.38	55.14
92	<MAX>	-23.49	-6.85	108.71	-26.57	6.85	86.26
	<MIN>	-16.62	-21.72	52.62	-18.65	21.72	36.80
93	<MAX>	-23.11	5.32	85.76	-26.19	-5.32	63.66
	<MIN>	-15.69	-16.34	34.23	-18.79	23.00	18.93
94	<MAX>	-34.58	18.20	65.57	-35.63	-18.20	54.81
	<MIN>	-16.51	-19.62	17.19	-17.20	19.62	12.02
95	<MAX>	-46.56	24.81	55.93	-47.80	-24.81	38.93
	<MIN>	-15.16	-16.44	11.10	-16.79	18.38	5.47
96	<MAX>	-65.85	30.39	38.87	-65.47	-32.58	15.13
	<MIN>	-12.75	-14.45	4.41	-13.56	14.45	-0.34
97	<MAX>	89.38	-32.76	-27.48	121.45	42.34	66.66
	<MIN>	165.32	-7.92	-111.61	106.04	-23.37	11.98
98	<MAX>	95.49	-53.35	41.31	92.29	48.31	126.56
	<MIN>	63.25	-3.71	14.60	53.90	-6.04	66.10
99	<MAX>	74.24	-24.42	112.11	73.48	22.29	177.02
	<MIN>	53.37	-39.24	52.50	48.35	33.17	98.12
100	<MAX>	62.55	-27.28	164.24	60.00	24.04	219.91
	<MIN>	47.73	-38.84	79.69	42.70	32.75	120.26
101	<MAX>	56.98	-33.21	204.97	49.46	24.51	252.70
	<MIN>	42.97	-38.26	102.06	37.95	32.18	138.34
102	<MAX>	47.07	-33.15	237.70	39.55	24.45	276.55
	<MIN>	38.51	-37.56	120.38	33.49	31.48	152.68
103	<MAX>	38.87	-31.84	261.52	38.70	26.99	294.61
	<MIN>	34.68	-36.27	134.85	29.66	32.50	163.71
104	<MAX>	40.51	-33.06	279.01	32.98	27.49	311.97
	<MIN>	31.32	-36.70	145.85	26.30	32.94	171.69

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
105	<MAX>	33.19	-33.80	296.25	25.67	28.23	322.65
	<MIN>	27.92	-37.03	153.70	22.89	33.26	176.49
106	<MAX>	25.85	-34.35	306.47	18.33	28.78	326.27
	<MIN>	24.47	-37.30	158.36	19.45	33.54	178.05
107	<MAX>	17.97	-34.95	309.85	10.45	29.39	322.61
	<MIN>	20.99	-37.53	159.78	15.97	33.77	176.36
108	<MAX>	10.65	-35.26	306.00	3.13	29.69	312.19
	<MIN>	17.52	-37.70	157.98	12.50	33.93	171.45
109	<MAX>	3.36	-35.40	295.25	-4.16	29.83	294.90
	<MIN>	14.04	-37.75	152.98	9.01	33.99	163.33
110	<MAX>	-2.28	-34.64	278.10	-9.80	29.08	272.68
	<MIN>	10.55	-37.62	144.83	5.53	33.86	152.05
111	<MAX>	-7.38	-33.12	256.30	-14.90	27.56	246.31
	<MIN>	7.09	-37.16	133.61	2.07	33.40	137.72
112	<MAX>	-12.13	-30.41	230.73	-19.65	24.85	216.48
	<MIN>	3.68	-36.16	119.54	-1.34	32.40	120.58
113	<MAX>	-16.27	-25.86	202.44	-23.79	20.30	184.47
	<MIN>	0.42	-34.28	102.95	-4.60	30.52	101.08
114	<MAX>	-19.77	-18.90	173.17	-27.29	13.34	152.07
	<MIN>	-2.65	-31.12	84.52	-7.47	27.86	79.80
115	<MAX>	-22.41	-9.42	145.11	-29.93	3.86	121.63
	<MIN>	-5.61	-26.36	65.24	-10.64	22.60	57.99
116	<MAX>	-21.68	2.76	120.50	-29.21	-8.33	97.67
	<MIN>	-7.63	-22.60	45.99	-13.79	16.22	36.07
117	<MAX>	-15.31	15.85	102.10	-17.88	-17.76	97.01
	<MIN>	-11.59	-15.83	30.66	-14.61	12.31	26.51
118	<MAX>	-6.88	23.01	100.94	-9.90	-25.25	97.93
	<MIN>	-13.01	-12.83	23.99	-16.43	9.33	18.54

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
119	<MAX>	1.89	30.37	105.27	4.39	-28.56	106.21
	<MIN>	-15.25	-9.49	16.61	-18.87	6.30	10.21
120	<MAX>	-8.27	29.28	117.27	0.42	-26.97	116.95
	<MIN>	-19.90	-5.04	9.07	-26.27	2.64	2.05
121	<MAX>	2.01	1.57	1.43	4.44	-0.32	3.96
	<MIN>	13.59	-15.32	-10.09	7.94	13.46	0.73
122	<MAX>	-11.18	-8.15	3.98	2.66	-1.56	3.41
	<MIN>	3.01	-0.64	-2.09	-9.34	11.43	-7.83
123	<MAX>	-10.50	-4.80	4.23	1.49	-2.35	2.61
	<MIN>	0.66	0.27	-1.06	-10.03	7.97	-7.12
124	<MAX>	-12.77	-6.91	5.74	1.42	-5.70	3.86
	<MIN>	0.73	1.93	-2.11	-11.68	11.94	-9.46
125	<MAX>	-6.98	-2.99	4.58	0.91	-14.35	3.33
	<MIN>	-2.68	8.64	-2.36	-8.07	10.64	-7.75
126	<MAX>	-3.36	2.66	2.23	0.13	-18.51	0.52
	<MIN>	-0.72	13.73	-5.30	-2.50	4.39	-5.95
127	<MAX>	-2.91	5.92	-0.23	-0.22	0.84	-0.75
	<MIN>	-1.74	16.13	-5.74	-4.08	-22.72	-7.43
128	<MAX>	-1.33	1.03	-1.89	-0.02	-3.73	-2.24
	<MIN>	-3.87	23.58	-6.63	-3.91	-23.09	-9.95
129	<MAX>	-1.47	2.68	-3.23	1.01	-5.14	-2.99
	<MIN>	-1.00	26.39	-10.03	-1.05	-25.92	-10.90
130	<MAX>	-1.23	3.67	-4.25	0.84	-5.95	-3.95
	<MIN>	-3.50	28.76	-8.70	-3.55	-28.30	-11.68
131	<MAX>	-0.66	7.32	-4.84	0.93	-5.77	-4.49
	<MIN>	-1.26	30.55	-10.06	-1.26	-30.55	-11.14
132	<MAX>	-0.57	6.23	-5.13	1.02	-7.77	-4.74
	<MIN>	-1.23	27.58	-10.30	-1.23	-27.58	-11.36
133	<MAX>	-0.89	6.66	-5.27	1.11	-7.80	-4.74
	<MIN>	-3.37	29.18	-9.50	-3.37	-29.18	-12.38

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
134	<MAX>	-0.89	7.00	-5.39	1.65	-8.00	-4.50
	<MIN>	-0.74	31.09	-11.64	-0.74	-31.09	-12.28
135	<MAX>	-0.90	22.55	-5.45	1.18	-8.19	-4.75
	<MIN>	-3.29	17.77	-9.52	-3.32	-33.00	-12.33
136	<MAX>	-0.87	22.86	-5.44	1.16	-23.43	-4.80
	<MIN>	-1.03	19.38	-10.40	-1.03	-19.38	-11.29
137	<MAX>	-0.35	23.80	-5.26	-0.35	-23.80	-5.56
	<MIN>	-2.95	20.54	-8.18	-2.99	-20.54	-10.68
138	<MAX>	-0.55	24.26	-5.18	-0.55	-24.26	-5.65
	<MIN>	-1.21	18.56	-8.17	-1.89	-21.07	-9.73
139	<MAX>	-0.30	24.70	-5.18	-0.25	-24.95	-5.44
	<MIN>	-0.52	18.82	-8.39	-0.84	-21.14	-9.05
140	<MAX>	0.26	25.14	-5.24	0.31	-25.37	-5.02
	<MIN>	0.74	21.50	-8.93	0.69	-21.27	-8.31
141	<MAX>	1.32	25.16	-5.47	4.07	-9.15	-4.11
	<MIN>	4.02	21.61	-10.17	0.93	-29.47	-7.11
142	<MAX>	3.71	20.71	-6.29	15.45	-13.52	0.78
	<MIN>	15.95	21.28	-14.47	3.98	-24.55	-4.71
143	<MAX>	14.34	20.44	-9.84	57.01	-12.87	20.58
	<MIN>	58.97	16.64	-30.04	16.30	-24.21	1.85
144	<MAX>	13.68	-21.91	-4.11	39.72	-19.19	15.30
	<MIN>	39.74	19.46	-18.55	13.69	21.64	7.45
145	<MAX>	-2.01	2.41	6.99	8.98	10.33	7.77
	<MIN>	10.50	-11.94	-4.85	-1.89	-2.46	2.13
146	<MAX>	-2.28	3.41	6.23	-2.06	-1.90	4.64
	<MIN>	1.70	-9.73	-1.33	1.48	9.22	0.28
147	<MAX>	-4.45	8.05	10.47	-4.20	-7.50	6.25
	<MIN>	-2.53	-13.03	0.39	-3.79	14.72	-3.15
148	<MAX>	-11.27	-5.16	11.70	-7.55	-17.88	4.12
	<MIN>	-4.71	12.90	4.06	-10.90	11.73	-6.31

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
149	<MAX>	-9.82	2.67	8.81	-6.05	-20.67	0.08
	<MIN>	-4.13	16.29	0.39	-10.89	1.88	-6.99
150	<MAX>	-7.73	5.37	4.46	-4.24	-18.91	-2.74
	<MIN>	-3.04	20.09	-2.92	-9.60	-5.27	-8.68
151	<MAX>	-4.52	5.35	0.51	-1.93	-19.99	-3.77
	<MIN>	-3.26	27.01	-5.49	-7.26	-9.07	-10.55
152	<MAX>	-3.40	5.79	-1.52	-1.88	-4.39	-4.64
	<MIN>	-1.90	28.40	-7.32	-5.10	-27.74	-11.76
153	<MAX>	-2.11	6.25	-3.13	-2.01	-6.73	-5.16
	<MIN>	-1.68	27.35	-8.47	-3.99	-29.55	-12.14
154	<MAX>	-1.80	6.69	-3.95	-0.61	-8.10	-5.39
	<MIN>	-1.96	27.98	-9.13	-3.59	-31.24	-12.09
155	<MAX>	-1.55	7.82	-4.36	-0.36	-7.29	-5.51
	<MIN>	-1.82	32.65	-9.43	-3.45	-28.50	-12.27
156	<MAX>	-1.26	8.14	-4.46	-1.16	-8.55	-5.67
	<MIN>	-1.19	33.23	-9.52	-3.51	-30.14	-12.72
157	<MAX>	-1.59	8.28	-4.25	-1.49	-8.66	-5.79
	<MIN>	-0.80	33.61	-9.46	-4.08	-31.79	-12.94
158	<MAX>	-1.14	8.43	-4.48	-1.03	-8.79	-5.56
	<MIN>	-0.56	33.91	-9.33	-3.45	-33.45	-12.57
159	<MAX>	-1.30	24.54	-4.45	-1.09	-9.11	-5.61
	<MIN>	-0.27	18.42	-9.17	-3.25	-35.14	-11.94
160	<MAX>	-0.11	24.73	-5.04	0.24	-9.25	-4.95
	<MIN>	-1.23	20.71	-9.17	-1.58	-36.19	-10.60
161	<MAX>	0.20	24.99	-5.04	0.81	-9.43	-4.51
	<MIN>	-0.12	21.33	-8.93	-0.73	-36.89	-9.37
162	<MAX>	0.56	25.28	-4.80	1.70	-9.55	-3.65
	<MIN>	1.35	21.63	-8.66	0.21	-37.36	-7.90
163	<MAX>	1.41	25.53	-4.44	3.70	-9.41	-1.81
	<MIN>	3.83	13.20	-8.53	1.53	-29.32	-5.93

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
164	<MAX>	3.25	25.59	-3.98	8.71	-13.78	2.48
	<MIN>	8.44	12.32	-8.73	2.98	-24.13	-3.49
165	<MAX>	6.93	25.03	-3.35	16.37	-14.83	10.08
	<MIN>	15.52	9.04	-8.28	6.48	-23.27	0.88
166	<MAX>	15.77	1.25	0.02	17.20	-7.12	16.70
	<MIN>	11.59	22.92	-3.59	10.43	-19.13	7.06
167	<MAX>	5.43	-7.67	3.80	14.69	-17.49	15.58
	<MIN>	11.01	13.70	-0.12	1.04	12.16	3.49
168	<MAX>	1.04	-4.45	3.16	11.23	-8.65	10.53
	<MIN>	9.19	7.30	-1.01	-2.27	6.78	0.51
169	<MAX>	-7.73	5.08	9.28	1.28	6.73	4.84
	<MIN>	3.75	-8.68	-0.37	-5.84	-4.25	-0.39
170	<MAX>	-11.57	11.06	14.61	-3.36	11.70	5.54
	<MIN>	-0.14	-13.59	2.41	-8.73	-7.42	-0.39
171	<MAX>	-14.36	-2.51	15.82	-11.47	8.37	1.68
	<MIN>	-9.60	16.89	5.75	-14.17	-21.45	-5.65
172	<MAX>	-14.47	5.13	9.54	-5.62	-20.13	-2.05
	<MIN>	-7.52	20.96	-0.50	-16.37	-5.96	-10.89
173	<MAX>	-7.01	8.40	1.74	-1.66	-20.92	-2.82
	<MIN>	-4.37	21.43	-4.83	-9.72	-8.90	-11.65
174	<MAX>	-3.31	4.93	-1.90	-0.29	-22.71	-3.58
	<MIN>	-3.22	27.29	-7.68	-5.52	-11.18	-11.96
175	<MAX>	-1.59	5.36	-3.80	0.98	-22.81	-3.62
	<MIN>	-2.16	28.57	-9.29	-3.30	-12.84	-12.01
176	<MAX>	0.52	7.33	-4.76	1.13	-22.89	-3.95
	<MIN>	-1.43	29.85	-9.98	-2.04	-14.28	-11.70
177	<MAX>	0.22	8.17	-5.14	1.65	-22.81	-4.09
	<MIN>	-0.59	31.03	-10.29	-0.94	-15.55	-11.03
178	<MAX>	0.49	7.50	-5.28	1.79	-23.78	-3.97
	<MIN>	-0.41	28.98	-10.43	-0.62	-13.54	-10.91

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
179	<MAX>	1.51	8.38	-5.41	1.61	-8.02	-3.86
	<MIN>	-0.76	30.27	-10.51	-0.87	-30.63	-11.33
180	<MAX>	1.94	8.61	-5.51	2.04	-8.23	-3.53
	<MIN>	-0.81	31.72	-10.56	-0.91	-32.10	-11.41
181	<MAX>	1.60	8.84	-5.28	1.71	-8.44	-3.63
	<MIN>	-0.75	33.16	-10.31	-0.85	-33.56	-11.10
182	<MAX>	1.87	8.87	-5.34	1.97	-8.44	-3.43
	<MIN>	-0.31	34.47	-10.00	-0.41	-34.90	-10.35
183	<MAX>	0.99	9.03	-4.74	1.09	-8.57	-3.71
	<MIN>	0.20	35.40	-9.36	0.10	-35.85	-9.20
184	<MAX>	1.30	9.03	-4.46	1.40	-8.55	-3.13
	<MIN>	0.86	35.91	-8.61	0.77	-36.39	-7.77
185	<MAX>	2.24	8.76	-4.06	2.60	-13.25	-1.76
	<MIN>	1.62	36.08	-7.58	1.26	-31.58	-6.02
186	<MAX>	1.97	24.57	-3.27	4.26	-12.94	0.85
	<MIN>	4.53	11.19	-6.38	2.23	-22.82	-4.01
187	<MAX>	3.88	28.61	-1.71	6.81	-10.91	4.75
	<MIN>	6.32	4.34	-5.16	3.39	-22.04	-1.41
188	<MAX>	5.76	26.43	0.85	9.82	-12.27	9.57
	<MIN>	8.38	0.38	-3.61	4.61	-18.38	2.10
189	<MAX>	7.98	27.63	4.87	11.70	-4.58	12.87
	<MIN>	9.10	-7.99	-3.10	5.38	-15.05	5.97
190	<MAX>	5.51	13.85	6.40	5.76	-14.39	11.93
	<MIN>	3.39	-11.11	-1.57	3.14	11.65	1.80
191	<MAX>	2.83	5.17	3.87	3.60	-6.90	7.36
	<MIN>	-0.89	-7.09	0.70	-1.11	7.60	-0.32
192	<MAX>	-6.71	-7.87	6.82	5.47	-6.14	9.18
	<MIN>	3.27	3.75	2.30	-8.19	9.51	-3.09
193	<MAX>	-35.41	13.63	15.26	-12.59	24.58	-2.92
	<MIN>	-11.68	-22.97	6.62	-34.44	-15.47	-15.85

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
194	<MAX>	-57.13	3.62	22.11	-13.34	-18.23	-9.57
	<MIN>	-16.31	21.21	1.14	-54.89	-5.00	-28.88
195	<MAX>	-16.28	3.81	2.34	-4.73	-21.68	-6.35
	<MIN>	-5.21	26.93	-5.81	-15.08	-10.27	-15.19
196	<MAX>	-6.35	4.89	-2.62	-1.10	-23.14	-5.62
	<MIN>	-1.27	26.56	-8.42	-4.02	-10.54	-11.59
197	<MAX>	-2.29	22.62	-3.72	-0.97	-21.11	-5.28
	<MIN>	-1.10	11.22	-9.78	-1.16	-11.45	-10.76
198	<MAX>	-2.36	22.43	-3.69	0.13	-20.68	-5.05
	<MIN>	-0.04	12.26	-10.13	-0.10	-12.51	-10.21
199	<MAX>	-1.14	22.07	-3.94	0.86	-22.65	-4.52
	<MIN>	1.09	13.53	-9.97	1.09	-13.53	-9.04
200	<MAX>	-0.58	22.34	-3.91	1.02	-22.53	-3.95
	<MIN>	2.03	14.58	-9.54	2.03	-14.58	-7.82
201	<MAX>	-0.64	22.56	-3.77	0.95	-22.36	-3.84
	<MIN>	2.01	13.32	-9.31	2.01	-13.32	-7.60
202	<MAX>	-0.72	7.71	-3.57	1.30	-22.35	-3.78
	<MIN>	1.95	29.69	-9.40	1.92	-14.45	-7.75
203	<MAX>	-1.21	7.88	-3.23	1.32	-7.14	-3.77
	<MIN>	1.90	30.91	-9.40	1.90	-30.91	-7.77
204	<MAX>	-0.70	8.01	-3.40	1.35	-7.16	-3.70
	<MIN>	1.92	32.11	-9.21	1.90	-32.11	-7.58
205	<MAX>	-0.65	8.31	-3.32	1.38	-7.14	-3.54
	<MIN>	2.01	33.15	-8.83	2.01	-33.15	-7.12
206	<MAX>	1.01	8.15	-3.92	1.01	-8.15	-3.67
	<MIN>	2.12	33.88	-8.24	2.12	-33.88	-6.44
207	<MAX>	1.47	8.21	-3.73	1.77	-12.47	-2.39
	<MIN>	2.31	33.76	-7.47	2.01	-29.50	-5.61
208	<MAX>	1.83	7.53	-3.09	2.14	-11.74	-1.31
	<MIN>	2.51	33.61	-6.45	2.28	-29.40	-4.55

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
209	<MAX>	2.65	10.82	-1.92	2.68	-10.34	0.34
	<MIN>	2.46	20.85	-5.33	2.42	-21.33	-3.24
210	<MAX>	3.30	8.33	-0.31	3.30	-8.33	2.49
	<MIN>	2.69	19.51	-3.99	2.69	-19.51	-1.71
211	<MAX>	2.58	27.64	1.41	4.36	-9.53	5.07
	<MIN>	4.48	-2.54	-2.26	2.70	-15.58	0.08
212	<MAX>	2.54	23.29	4.30	7.93	-4.01	7.93
	<MIN>	7.78	-7.07	-3.32	2.39	-12.21	1.83
213	<MAX>	1.84	11.57	4.62	14.25	2.30	8.76
	<MIN>	13.44	-8.58	-6.76	1.04	-5.29	2.09
214	<MAX>	0.66	5.49	3.03	11.34	2.75	6.06
	<MIN>	10.81	-5.94	-5.57	0.12	-2.30	1.15
215	<MAX>	0.25	4.72	3.83	12.60	6.07	6.24
	<MIN>	11.64	-9.10	-6.61	-0.71	-1.70	1.08
216	<MAX>	-0.13	2.99	3.79	0.41	-3.29	4.02
	<MIN>	-6.95	-12.84	1.11	-7.48	13.14	-5.13
217	<MAX>	2.95	5.13	2.99	19.93	2.81	14.77
	<MIN>	98.05	83.94	-81.65	78.45	-92.32	-1.81
218	<MAX>	-9.68	8.82	19.61	-2.33	-2.72	13.24
	<MIN>	28.95	80.44	-34.75	22.44	-85.69	-7.31
219	<MAX>	-35.17	18.32	25.65	-19.30	-7.04	-2.78
	<MIN>	15.57	86.13	-30.51	-2.03	-96.89	-24.44
220	<MAX>	-66.51	20.19	14.99	32.76	-105.67	-13.72
	<MIN>	27.65	112.07	-49.59	-71.21	-26.31	-57.18
221	<MAX>	-30.49	110.96	-20.81	69.82	-26.11	8.27
	<MIN>	82.16	33.86	-69.48	-14.13	-120.19	-50.95
222	<MAX>	25.78	13.93	-13.47	44.74	-25.74	22.50
	<MIN>	12.58	105.26	-35.01	-11.66	-89.12	-29.52
223	<MAX>	13.67	11.28	1.54	25.44	-20.49	20.19
	<MIN>	-13.42	92.58	-14.37	-25.19	-83.37	-32.76

Barra		NUDO DORSAL (i) Cortante	Torsor	<FLECTOR>	NUDO FRONTAL (j) Cortante	Torsor	<FLECTOR>
224	<MAX>	-2.83	6.07	7.16	7.87	-11.27	8.74
	<MIN>	-67.46	99.32	-5.48	-79.59	-92.42	-71.99

Máximos y Mínimos del Esfuerzo TORSOR

Barra		N U D O D O R S A L (i) Cortante	<TORSOR>	Flector	N U D O F R O N T A L (j) Cortante	<TORSOR>	Flector
1	<MAX>	41.93	48.34	106.66	33.83	7.01	14.61
	<MIN>	33.26	-4.55	3.82	37.08	-45.75	118.26
2	<MAX>	26.20	55.76	103.87	28.83	11.58	27.12
	<MIN>	29.13	-8.36	15.26	10.36	-45.81	103.63
3	<MAX>	20.44	44.08	92.25	24.86	16.46	39.35
	<MIN>	27.63	-13.14	29.90	18.17	-41.47	99.20
4	<MAX>	29.62	39.47	95.60	22.43	20.85	50.19
	<MIN>	24.78	-18.02	42.96	27.68	-37.25	104.36
5	<MAX>	38.60	36.40	91.20	16.83	31.90	77.31
	<MIN>	23.70	-23.62	59.13	32.19	-27.03	117.31
6	<MAX>	39.82	25.07	104.15	11.97	42.40	109.36
	<MIN>	18.84	-34.12	95.55	34.15	-18.56	137.32
7	<MAX>	39.35	18.07	128.74	7.46	50.39	142.19
	<MIN>	14.34	-42.11	132.41	33.68	-11.56	161.49
8	<MAX>	36.13	14.76	157.27	2.80	55.90	174.05
	<MIN>	9.67	-47.62	168.46	22.88	-0.83	163.62
9	<MAX>	25.68	3.35	163.27	-1.93	59.70	209.81
	<MIN>	4.66	-51.17	202.31	19.72	2.91	177.37
10	<MAX>	20.29	4.12	197.77	-7.50	62.21	235.99
	<MIN>	0.02	-53.51	239.34	10.73	5.27	160.92
11	<MAX>	12.20	-0.64	162.73	-26.56	68.89	264.49
	<MIN>	-5.76	-55.25	266.39	7.17	6.72	171.41
12	<MAX>	8.46	-1.59	173.71	-32.99	67.59	269.48
	<MIN>	-25.46	-58.90	295.69	3.44	7.68	179.06
13	<MAX>	12.22	-0.01	231.77	-37.34	68.29	271.78
	<MIN>	-29.82	-59.59	301.91	-0.37	8.36	183.62
14	<MAX>	0.79	-2.81	186.52	-42.42	69.00	270.07
	<MIN>	-34.90	-60.30	304.74	-4.23	8.90	184.98
15	<MAX>	-3.10	-3.31	188.12	-47.90	69.65	263.78
	<MIN>	-40.38	-60.95	303.37	-8.13	9.40	183.09
16	<MAX>	-7.03	-3.78	186.45	-61.15	77.67	276.91
	<MIN>	-46.07	-61.61	297.41	-12.05	9.87	177.90
17	<MAX>	-11.05	-4.24	181.51	-67.77	76.08	254.90
	<MIN>	-60.25	-67.38	312.32	-16.07	10.33	169.35
18	<MAX>	-15.19	-4.67	173.20	-72.38	76.81	229.99
	<MIN>	-64.86	-68.11	291.53	-20.21	10.76	157.33
19	<MAX>	-19.62	-4.99	161.39	-77.93	77.76	200.73
	<MIN>	-70.41	-69.06	267.26	-24.64	11.08	141.55
20	<MAX>	-24.58	-5.07	145.77	-84.30	78.74	166.29
	<MIN>	-76.78	-70.04	238.53	-29.60	11.16	121.47
21	<MAX>	-31.34	-4.59	130.32	-90.90	79.73	121.78
	<MIN>	-83.38	-71.03	199.94	-36.36	10.68	99.97
22	<MAX>	-39.80	-2.92	103.73	-99.98	80.53	74.32
	<MIN>	-92.46	-71.83	160.63	-44.82	9.01	65.77
23	<MAX>	-57.99	2.33	68.51	-113.99	79.82	14.69
	<MIN>	-106.47	-71.12	113.57	-63.01	3.76	14.25
24	<MAX>	-111.27	20.04	12.65	-146.90	72.43	-74.88
	<MIN>	-139.04	-63.73	53.36	-116.55	-13.95	-89.53
25	<MAX>	67.58	42.51	17.79	20.68	10.14	10.36
	<MIN>	21.78	-10.14	2.71	66.24	-43.07	43.33
26	<MAX>	46.34	40.17	42.90	23.83	14.30	20.26
	<MIN>	24.94	-14.30	11.47	45.39	-40.17	59.44
27	<MAX>	33.06	35.07	56.22	25.45	18.19	29.30
	<MIN>	26.40	-18.19	21.35	32.26	-35.07	66.25
28	<MAX>	21.89	26.70	62.88	26.33	25.17	56.97
	<MIN>	29.41	-25.17	31.97	19.86	-26.70	81.60
29	<MAX>	21.06	17.00	80.44	28.18	33.95	87.66
	<MIN>	31.26	-33.95	61.01	19.03	-17.00	98.42

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
30	<MAX>	22.69	8.92	99.70	28.43	40.08	118.50
	<MIN>	31.51	-40.08	91.61	20.66	-8.92	119.14
31	<MAX>	26.87	2.05	120.93	26.92	43.80	147.28
	<MIN>	30.00	-43.80	121.75	16.38	-3.02	139.02
32	<MAX>	14.90	-1.19	104.77	24.68	45.95	177.80
	<MIN>	27.76	-45.95	154.28	12.87	1.19	117.22
33	<MAX>	13.01	-2.63	118.07	21.09	47.37	200.04
	<MIN>	24.17	-47.37	179.73	10.98	2.63	128.83
34	<MAX>	10.60	-3.47	129.39	17.09	48.31	218.28
	<MIN>	20.17	-48.31	201.57	8.57	3.47	137.99
35	<MAX>	7.93	-4.00	138.34	4.76	49.54	228.22
	<MIN>	7.84	-49.54	222.58	5.90	4.00	144.55
36	<MAX>	5.11	-4.41	144.77	0.36	51.05	230.86
	<MIN>	3.44	-51.05	229.15	3.08	4.41	148.44
37	<MAX>	2.22	-4.76	148.59	-3.95	51.65	229.70
	<MIN>	-0.87	-51.85	231.85	0.20	4.76	149.68
38	<MAX>	-0.68	-5.11	149.79	-8.19	52.41	224.77
	<MIN>	-5.11	-52.41	230.74	-2.70	5.11	148.28
39	<MAX>	-3.61	-5.47	148.35	-18.64	53.33	233.39
	<MIN>	-7.10	-54.30	243.62	-5.64	5.47	144.19
40	<MAX>	-6.58	-5.83	144.25	-19.46	55.92	218.19
	<MIN>	-16.38	-55.92	234.27	-8.61	5.83	137.44
41	<MAX>	-9.62	-6.18	137.47	-23.93	57.55	198.80
	<MIN>	-20.85	-57.55	218.90	-11.65	6.18	127.93
42	<MAX>	-12.83	-6.49	127.92	-28.36	58.57	175.50
	<MIN>	-25.28	-58.57	199.56	-14.86	6.49	115.51
43	<MAX>	-16.36	-6.60	115.44	-32.90	59.39	148.08
	<MIN>	-29.82	-59.39	176.21	-18.39	6.60	99.86
44	<MAX>	-21.35	-6.14	103.58	-37.29	60.15	112.69
	<MIN>	-34.21	-60.15	144.67	-23.38	6.14	83.52

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
45	<MAX>	-27.31	-4.14	82.77	-43.24	60.59	75.32
	<MIN>	-40.16	-60.59	112.73	-29.34	4.14	57.36
46	<MAX>	-29.26	2.36	54.46	-49.59	59.25	31.24
	<MIN>	-46.51	-59.25	74.34	-31.28	-2.36	27.31
47	<MAX>	5.96	20.62	20.33	-44.23	51.22	-10.90
	<MIN>	-41.15	-51.22	27.39	3.94	-20.62	24.77
48	<MAX>	16.58	25.63	34.14	-20.26	36.84	-18.55
	<MIN>	-19.21	-36.84	-12.50	15.89	-25.63	39.12
49	<MAX>	28.59	33.76	28.90	19.13	19.22	4.43
	<MIN>	20.39	-19.22	-2.69	27.76	-33.76	39.06
50	<MAX>	26.09	34.60	40.01	24.48	24.78	13.71
	<MIN>	25.55	-24.78	6.05	25.39	-34.60	47.90
51	<MAX>	23.06	29.52	47.00	29.85	33.19	45.57
	<MIN>	32.98	-33.19	17.39	21.00	-29.52	66.76
52	<MAX>	23.74	16.09	68.09	34.48	42.38	83.55
	<MIN>	37.61	-42.38	51.22	21.68	-16.09	88.46
53	<MAX>	26.92	5.72	91.92	34.27	47.19	119.97
	<MIN>	37.40	-47.19	87.83	24.85	-5.72	115.13
54	<MAX>	24.96	-0.54	117.87	31.25	49.16	152.00
	<MIN>	34.38	-49.16	122.57	22.36	0.72	139.01
55	<MAX>	17.22	-3.06	106.18	27.96	49.96	184.32
	<MIN>	31.08	-49.96	157.85	15.15	3.06	120.70
56	<MAX>	14.46	-3.85	121.33	23.83	50.42	207.86
	<MIN>	26.96	-50.42	185.08	12.40	3.85	133.37
57	<MAX>	11.54	-4.23	133.70	19.64	50.71	227.19
	<MIN>	22.77	-50.71	208.17	9.47	4.23	143.12
58	<MAX>	8.52	-4.48	143.27	7.44	51.61	236.34
	<MIN>	10.57	-51.61	228.26	6.45	4.48	149.99
59	<MAX>	5.48	-4.71	150.04	2.52	52.75	239.70
	<MIN>	5.65	-52.75	236.04	3.41	4.71	154.02

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
60	<MAX>	2.46	-4.96	154.01	-2.23	53.54	238.80
	<MIN>	0.89	-53.54	239.40	0.39	4.96	155.29
61	<MAX>	-0.56	-5.24	155.24	-6.89	54.13	233.74
	<MIN>	-3.76	-54.13	238.52	-2.63	5.24	153.81
62	<MAX>	-3.55	-5.52	153.70	-11.65	55.47	240.88
	<MIN>	-7.98	-55.29	249.61	-5.61	5.52	149.59
63	<MAX>	-6.54	-5.79	149.40	-17.60	57.41	225.83
	<MIN>	-14.47	-57.41	240.21	-8.60	5.79	142.61
64	<MAX>	-9.50	-6.01	142.32	-22.37	58.64	206.36
	<MIN>	-19.25	-58.64	225.03	-11.56	6.01	132.87
65	<MAX>	-12.41	-6.06	132.40	-26.95	59.40	182.60
	<MIN>	-23.83	-59.40	205.38	-14.47	6.06	120.34
66	<MAX>	-15.24	-5.69	119.56	-31.34	59.71	154.59
	<MIN>	-28.21	-59.71	181.29	-17.30	5.69	104.97
67	<MAX>	-18.30	-4.09	108.02	-34.80	59.47	118.51
	<MIN>	-31.67	-59.47	148.32	-20.37	4.09	90.68
68	<MAX>	-18.93	0.16	88.46	-37.86	57.84	83.01
	<MIN>	-34.73	-57.84	115.56	-21.00	-0.16	70.55
69	<MAX>	-15.69	9.12	67.71	-37.86	53.07	45.83
	<MIN>	-34.73	-53.07	78.40	-17.75	-9.12	52.71
70	<MAX>	-15.42	21.47	52.06	-32.79	43.43	11.85
	<MIN>	-29.66	-43.43	39.86	-17.48	-21.47	37.30
71	<MAX>	-19.99	26.39	38.56	-24.56	34.10	0.65
	<MIN>	-23.49	-34.10	8.01	-20.69	-26.39	32.33
72	<MAX>	-21.81	26.15	31.49	-18.19	27.37	-7.42
	<MIN>	-16.93	-27.37	-1.08	-22.64	-26.15	23.48
73	<MAX>	-10.20	31.54	44.57	21.19	28.71	-6.01
	<MIN>	22.24	-28.71	-12.66	-10.89	-31.54	41.33
74	<MAX>	1.31	26.95	32.73	40.10	41.14	33.27
	<MIN>	43.18	-41.14	-4.08	-0.72	-26.95	33.00

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
75	<MAX>	36.52	7.85	40.89	44.87	48.58	78.86
	<MIN>	47.95	-48.58	37.23	34.49	-7.85	72.74
76	<MAX>	33.99	0.21	76.37	38.91	49.98	116.31
	<MIN>	41.99	-49.98	80.03	31.97	-0.21	105.95
77	<MAX>	23.04	-3.10	84.66	33.20	49.75	147.45
	<MIN>	36.28	-49.75	116.29	21.01	3.10	104.41
78	<MAX>	18.14	-3.82	100.64	28.94	49.29	178.17
	<MIN>	32.02	-49.29	150.84	16.11	3.82	116.00
79	<MAX>	14.87	-4.05	115.91	24.66	48.96	200.71
	<MIN>	27.74	-48.96	177.20	12.84	4.05	128.34
80	<MAX>	11.69	-4.16	128.11	20.22	48.77	218.97
	<MIN>	23.30	-48.77	199.45	9.67	4.16	137.69
81	<MAX>	8.43	-4.29	137.47	9.35	49.04	226.51
	<MIN>	12.43	-49.04	216.74	6.48	4.29	144.12
82	<MAX>	5.42	-4.48	143.95	4.19	50.16	230.13
	<MIN>	7.27	-50.16	224.99	3.49	4.48	147.91
83	<MAX>	2.52	-4.68	147.76	-0.58	50.97	229.52
	<MIN>	2.50	-50.97	228.66	0.49	4.68	149.11
84	<MAX>	-0.35	-4.87	148.93	-5.15	51.56	224.83
	<MIN>	-2.07	-51.56	228.07	-2.38	4.87	147.70
85	<MAX>	-3.19	-5.03	147.46	-9.71	52.48	229.83
	<MIN>	-6.13	-52.48	226.71	-5.22	5.03	143.69
86	<MAX>	-5.98	-5.10	143.37	-14.51	53.95	216.42
	<MIN>	-11.43	-53.95	228.06	-8.00	5.10	137.10
87	<MAX>	-8.62	-5.01	136.65	-19.39	54.85	198.41
	<MIN>	-16.31	-54.85	214.42	-10.64	5.01	128.01
88	<MAX>	-10.99	-4.60	127.34	-23.74	55.11	176.30
	<MIN>	-20.66	-55.11	196.21	-13.02	4.60	116.58
89	<MAX>	-12.87	-3.54	115.59	-27.55	54.58	150.42
	<MIN>	-24.46	-54.58	173.75	-14.90	3.54	103.13

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
90	<MAX>	-14.39	-1.15	106.24	-29.86	53.06	117.45
	<MIN>	-26.78	-53.06	142.86	-16.42	1.15	92.42
91	<MAX>	-13.87	3.14	90.79	-31.25	49.70	86.98
	<MIN>	-28.17	-49.70	113.63	-15.90	-3.14	77.44
92	<MAX>	-12.24	9.59	76.42	-30.61	43.64	56.38
	<MIN>	-27.53	-43.64	82.46	-14.27	-9.59	64.54
93	<MAX>	-13.11	18.37	65.73	-28.09	34.56	27.96
	<MIN>	-25.01	-34.56	51.78	-15.14	-18.37	53.06
94	<MAX>	-25.71	26.60	56.29	-24.77	26.92	17.51
	<MIN>	-23.83	-26.92	24.96	-26.52	-26.60	48.29
95	<MAX>	-38.39	31.72	49.80	-23.03	22.46	8.14
	<MIN>	-21.92	-22.46	16.25	-39.34	-31.72	35.79
96	<MAX>	-59.22	35.15	36.12	-18.87	17.03	0.20
	<MIN>	-17.76	-17.03	6.81	-60.17	-35.15	14.59
97	<MAX>	120.36	20.02	-79.48	126.82	52.61	57.52
	<MIN>	134.34	-60.71	-59.61	115.33	-26.11	26.23
98	<MAX>	66.54	1.96	31.33	96.76	58.20	115.79
	<MIN>	104.28	-66.90	25.63	61.52	-8.05	88.76
99	<MAX>	47.91	-4.35	88.98	83.49	58.71	161.61
	<MIN>	91.01	-67.41	83.35	42.88	-1.74	129.70
100	<MAX>	33.71	-6.80	102.13	74.71	57.92	199.88
	<MIN>	82.23	-66.62	129.49	28.69	0.71	130.12
101	<MAX>	27.08	-7.40	123.18	68.14	56.95	237.35
	<MIN>	75.66	-65.65	172.86	22.05	1.31	145.21
102	<MAX>	22.07	-7.31	142.80	61.34	55.80	264.48
	<MIN>	68.87	-64.49	206.09	17.05	1.22	160.33
103	<MAX>	17.95	-6.33	157.87	55.43	56.92	286.60
	<MIN>	62.95	-62.49	233.50	12.93	2.57	171.72
104	<MAX>	14.48	-6.92	169.14	42.89	57.46	294.35
	<MIN>	50.41	-63.02	252.51	9.46	3.15	179.88

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
105	<MAX>	11.00	-7.30	177.13	37.40	59.01	299.73
	<MIN>	44.92	-64.57	262.81	5.98	3.54	184.74
106	<MAX>	7.52	-7.59	181.85	31.99	60.13	299.61
	<MIN>	39.51	-65.70	267.55	2.50	3.82	186.33
107	<MAX>	4.04	-7.79	183.31	26.63	60.91	294.23
	<MIN>	34.15	-66.47	266.96	-0.99	4.02	184.68
108	<MAX>	0.58	-7.88	181.56	22.24	61.84	299.25
	<MIN>	29.76	-67.40	275.93	-4.44	4.12	179.83
109	<MAX>	-2.86	-7.80	176.67	16.55	63.34	283.65
	<MIN>	24.07	-68.90	265.42	-7.88	4.03	171.85
110	<MAX>	-6.25	-7.40	168.72	10.97	64.16	262.33
	<MIN>	18.49	-69.72	249.11	-11.27	3.63	160.87
111	<MAX>	-9.48	-6.46	157.64	5.55	64.06	235.84
	<MIN>	13.07	-69.62	227.49	-14.50	2.70	147.19
112	<MAX>	-12.44	-4.63	144.80	1.25	62.92	198.92
	<MIN>	7.85	-68.31	201.19	-18.39	0.70	137.24
113	<MAX>	-15.49	-1.47	135.97	-3.36	60.18	165.18
	<MIN>	3.51	-65.32	165.12	-21.16	-2.72	119.53
114	<MAX>	-17.77	3.55	120.37	-7.58	55.11	129.24
	<MIN>	-0.71	-60.25	132.96	-23.44	-7.74	101.89
115	<MAX>	-19.32	10.06	105.90	-11.54	47.14	92.85
	<MIN>	-4.66	-52.28	100.12	-24.99	-14.25	86.03
116	<MAX>	-17.46	18.16	94.06	-15.62	36.16	57.69
	<MIN>	-8.74	-41.30	68.61	-23.13	-22.35	75.85
117	<MAX>	-10.40	27.39	85.66	-15.47	28.60	40.52
	<MIN>	-13.12	-30.36	44.90	-12.34	-28.82	82.18
118	<MAX>	-1.57	32.65	88.28	-17.51	23.15	29.05
	<MIN>	-14.74	-25.22	34.86	-3.85	-34.33	87.31
119	<MAX>	7.86	37.84	96.52	-17.58	17.37	16.52
	<MIN>	-17.29	-19.38	24.21	3.11	-39.62	99.90

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
120	<MAX>	-1.69	34.58	112.11	-19.31	12.04	7.64
	<MIN>	-19.87	-13.44	14.15	-6.54	-36.37	111.37
121	<MAX>	2.23	1.61	1.24	13.37	15.35	1.46
	<MIN>	13.37	-15.35	-9.90	2.23	-1.61	3.14
122	<MAX>	1.21	2.77	1.55	-9.38	11.55	-7.64
	<MIN>	-9.38	-11.55	0.33	1.21	-2.77	2.58
123	<MAX>	0.15	3.61	1.55	-9.93	8.15	-5.87
	<MIN>	-9.93	-8.15	2.57	0.15	-3.61	1.68
124	<MAX>	-0.79	8.13	2.76	-12.26	12.64	-7.28
	<MIN>	-12.26	-12.64	3.14	-0.79	-8.13	2.08
125	<MAX>	-2.01	18.24	2.22	-7.62	13.16	-4.51
	<MIN>	-7.62	-13.16	1.97	-2.01	-18.24	0.51
126	<MAX>	-2.39	23.04	-0.28	-5.22	8.59	-3.95
	<MIN>	-5.22	-8.59	0.49	-2.39	-23.04	-2.31
127	<MAX>	-2.21	26.28	-2.77	-2.44	4.23	-5.28
	<MIN>	-2.44	-4.23	-3.20	-2.21	-26.28	-4.65
128	<MAX>	-1.86	28.26	-4.73	-4.11	0.50	-7.40
	<MIN>	-4.11	-0.50	-3.91	-1.86	-28.26	-6.31
129	<MAX>	-1.93	29.54	-6.19	-1.78	-1.03	-5.31
	<MIN>	-1.78	1.03	-3.80	-1.93	-29.54	-7.83
130	<MAX>	-1.75	30.40	-6.97	-1.47	-1.82	-5.88
	<MIN>	-1.47	1.82	-4.64	-1.75	-30.40	-8.45
131	<MAX>	-1.09	31.20	-10.00	-1.29	-2.30	-6.24
	<MIN>	-1.29	2.30	-5.14	-1.09	-31.20	-10.92
132	<MAX>	-3.17	32.43	-8.00	-1.21	-2.64	-6.44
	<MIN>	-1.21	2.64	-5.40	-3.17	-32.43	-10.70
133	<MAX>	-2.44	32.96	-7.99	-1.15	-2.90	-6.53
	<MIN>	-1.15	2.90	-5.54	-2.44	-32.96	-10.07
134	<MAX>	-2.02	33.32	-8.05	-1.12	-3.14	-6.56
	<MIN>	-1.12	3.14	-5.60	-2.02	-33.32	-9.77

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
135	<MAX>	-3.15	33.76	-9.45	-1.08	-3.38	-6.54
	<MIN>	-1.08	3.38	-5.62	-3.15	-33.76	-12.12
136	<MAX>	-0.92	35.41	-10.29	-1.02	-3.61	-6.50
	<MIN>	-1.02	3.61	-5.62	-0.92	-35.41	-11.08
137	<MAX>	-2.90	36.63	-7.97	-0.87	-3.85	-6.40
	<MIN>	-0.87	3.85	-5.66	-2.90	-36.63	-10.44
138	<MAX>	-1.97	37.28	-7.76	-0.60	-4.07	-6.27
	<MIN>	-0.60	4.07	-5.77	-1.97	-37.28	-9.43
139	<MAX>	-1.15	37.80	-7.71	-0.07	-4.22	-6.07
	<MIN>	-0.07	4.22	-6.01	-1.15	-37.80	-8.69
140	<MAX>	-0.17	38.30	-7.76	0.97	-4.20	-5.68
	<MIN>	0.97	4.20	-6.51	-0.17	-38.30	-7.90
141	<MAX>	1.56	38.85	-7.89	3.44	-3.76	-4.84
	<MIN>	3.44	3.76	-7.76	1.56	-38.85	-6.57
142	<MAX>	6.49	39.25	-9.42	13.17	-2.74	-6.15
	<MIN>	13.17	2.74	-11.34	6.49	-39.25	-8.30
143	<MAX>	25.05	38.67	-16.09	48.26	1.60	17.22
	<MIN>	48.26	-1.60	-23.80	25.05	-38.67	5.20
144	<MAX>	39.74	19.46	-18.55	13.68	21.91	7.52
	<MIN>	13.68	-21.91	-4.11	39.74	-19.46	15.22
145	<MAX>	-3.06	3.87	6.74	10.51	11.98	5.77
	<MIN>	10.51	-11.98	-4.74	-3.06	-3.87	3.67
146	<MAX>	-2.39	4.70	5.57	2.02	9.77	1.11
	<MIN>	2.02	-9.77	-0.91	-2.39	-4.70	3.18
147	<MAX>	-4.20	10.26	9.07	-2.43	15.46	-1.33
	<MIN>	-2.43	-15.46	1.10	-4.20	-10.26	4.66
148	<MAX>	-6.95	22.28	9.29	-8.82	14.32	-3.63
	<MIN>	-8.82	-14.32	5.19	-6.95	-22.28	2.34
149	<MAX>	-5.71	26.99	3.82	-8.86	7.31	-4.73
	<MIN>	-8.86	-7.31	4.13	-5.71	-26.99	-1.89

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
150	<MAX>	-3.78	29.53	-0.93	-8.66	2.44	-7.07
	<MIN>	-8.66	-2.44	1.59	-3.78	-29.53	-4.71
151	<MAX>	-2.20	30.76	-4.20	-3.62	-0.92	-5.74
	<MIN>	-3.62	0.92	-2.13	-2.20	-30.76	-6.40
152	<MAX>	-1.44	31.47	-6.42	-1.93	-1.89	-5.80
	<MIN>	-1.93	1.89	-3.87	-1.44	-31.47	-7.86
153	<MAX>	-0.84	31.93	-7.52	-1.09	-2.37	-6.14
	<MIN>	-1.09	2.37	-5.05	-0.84	-31.93	-8.36
154	<MAX>	-3.53	32.37	-8.28	-0.64	-2.65	-6.35
	<MIN>	-0.64	2.65	-5.70	-3.53	-32.37	-11.81
155	<MAX>	-1.85	33.35	-9.18	-0.41	-2.86	-6.45
	<MIN>	-0.41	2.86	-6.03	-1.85	-33.35	-11.03
156	<MAX>	-1.22	33.96	-9.27	-0.31	-3.06	-6.48
	<MIN>	-0.31	3.06	-6.17	-1.22	-33.96	-10.49
157	<MAX>	-0.83	34.37	-9.21	-0.25	-3.25	-6.46
	<MIN>	-0.25	3.25	-6.21	-0.83	-34.37	-10.05
158	<MAX>	-0.59	34.69	-9.09	-0.19	-3.46	-6.37
	<MIN>	-0.19	3.46	-6.19	-0.59	-34.69	-9.68
159	<MAX>	-3.18	36.29	-8.48	-0.08	-3.67	-6.21
	<MIN>	-0.08	3.67	-6.13	-3.18	-36.29	-11.66
160	<MAX>	-1.50	37.34	-8.81	0.14	-3.88	-5.91
	<MIN>	0.14	3.88	-6.05	-1.50	-37.34	-10.31
161	<MAX>	-0.64	38.03	-8.42	0.57	-4.06	-5.40
	<MIN>	0.57	4.06	-5.98	-0.64	-38.03	-9.07
162	<MAX>	0.32	38.51	-7.88	1.45	-4.15	-4.50
	<MIN>	1.45	4.15	-5.95	0.32	-38.51	-7.56
163	<MAX>	1.65	38.82	-6.84	3.44	-3.99	-3.01
	<MIN>	3.44	3.99	-6.45	1.65	-38.82	-5.19
164	<MAX>	4.42	38.98	-6.12	7.37	-3.00	0.53
	<MIN>	7.37	3.00	-6.84	4.42	-38.98	-1.70

Barra		NUDO DORSAL (i)			NUDO FRONTAL (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
165	<MAX>	9.76	38.26	-5.25	13.09	0.16	6.45
	<MIN>	13.09	-0.16	-6.64	9.76	-38.26	4.51
166	<MAX>	16.61	34.82	-2.83	11.02	8.58	9.98
	<MIN>	11.02	-8.58	-1.04	16.61	-34.82	13.78
167	<MAX>	14.71	17.86	0.84	1.02	12.54	3.53
	<MIN>	1.02	-12.54	2.51	14.71	-17.86	15.55
168	<MAX>	11.17	8.66	-0.76	-2.21	6.79	0.63
	<MIN>	-2.21	-6.79	2.84	11.17	-8.66	10.41
169	<MAX>	-8.78	6.32	8.75	3.71	8.81	3.98
	<MIN>	3.71	-8.81	0.27	-8.78	-6.32	-0.03
170	<MAX>	-12.45	13.55	13.44	-0.39	15.98	3.19
	<MIN>	-0.39	-15.98	3.59	-12.45	-13.55	0.99
171	<MAX>	-14.70	27.93	11.53	-11.56	12.99	-1.77
	<MIN>	-11.56	-12.99	9.80	-14.70	-27.93	-3.17
172	<MAX>	-8.63	31.27	2.92	-14.11	3.85	-8.47
	<MIN>	-14.11	-3.85	5.64	-8.63	-31.27	-5.71
173	<MAX>	-3.88	32.14	-2.73	-8.76	-0.30	-9.57
	<MIN>	-8.76	0.30	-0.80	-3.88	-32.14	-6.61
174	<MAX>	-1.49	32.22	-5.68	-3.22	-2.13	-6.93
	<MIN>	-3.22	2.13	-3.71	-1.49	-32.22	-7.17
175	<MAX>	-0.45	32.23	-7.40	-1.23	-2.52	-6.25
	<MIN>	-1.23	2.52	-5.02	-0.45	-32.23	-7.85
176	<MAX>	0.21	32.23	-8.06	-0.25	-2.69	-6.09
	<MIN>	-0.25	2.69	-5.75	0.21	-32.23	-7.85
177	<MAX>	0.78	32.31	-8.34	0.31	-2.80	-5.79
	<MIN>	0.31	2.80	-6.10	0.78	-32.31	-7.57
178	<MAX>	-0.07	33.06	-9.88	0.57	-2.91	-5.65
	<MIN>	0.57	2.91	-6.22	-0.07	-33.06	-9.95
179	<MAX>	0.41	33.66	-9.70	0.66	-3.05	-5.57
	<MIN>	0.66	3.05	-6.22	0.41	-33.66	-9.30

Barra		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
180	<MAX>	0.68	34.08	-9.47	0.70	-3.20	-5.48
	<MIN>	0.70	3.20	-6.18	0.68	-34.08	-8.79
181	<MAX>	0.85	34.40	-9.20	0.75	-3.35	-5.34
	<MIN>	0.75	3.35	-6.09	0.85	-34.40	-8.35
182	<MAX>	-0.38	35.61	-9.72	0.83	-3.49	-5.10
	<MIN>	0.83	3.49	-5.93	-0.38	-35.61	-10.10
183	<MAX>	0.14	36.53	-9.08	1.02	-3.58	-4.67
	<MIN>	1.02	3.58	-5.70	0.14	-36.53	-8.94
184	<MAX>	0.80	37.04	-8.31	1.42	-3.58	-3.93
	<MIN>	1.42	3.58	-5.35	0.80	-37.04	-7.50
185	<MAX>	1.58	37.20	-7.25	2.22	-3.37	-2.65
	<MIN>	2.22	3.37	-4.87	1.58	-37.20	-5.67
186	<MAX>	2.51	36.94	-5.35	3.91	-2.66	-0.78
	<MIN>	3.91	2.66	-4.68	2.51	-36.94	-2.84
187	<MAX>	4.35	36.03	-3.32	5.95	-0.79	2.23
	<MIN>	5.95	0.79	-3.72	4.35	-36.03	1.03
188	<MAX>	6.65	33.65	-0.26	7.78	3.00	5.27
	<MIN>	7.78	-3.00	-2.52	6.65	-33.65	6.40
189	<MAX>	8.40	28.85	4.15	8.68	9.22	6.30
	<MIN>	8.68	-9.22	-2.38	8.40	-28.85	12.54
190	<MAX>	5.67	14.42	6.05	3.23	11.67	2.01
	<MIN>	3.23	-11.67	-1.22	5.67	-14.42	11.72
191	<MAX>	3.57	6.92	3.68	-1.08	7.62	-0.21
	<MIN>	-1.08	-7.62	0.87	3.57	-6.92	7.24
192	<MAX>	5.48	6.18	3.60	-8.20	9.55	-2.99
	<MIN>	-8.20	-9.55	5.21	5.48	-6.18	9.08
193	<MAX>	-34.44	15.47	13.43	-12.59	24.58	-2.92
	<MIN>	-12.59	-24.58	7.79	-34.44	-15.47	-15.85
194	<MAX>	-22.55	31.89	4.27	-48.80	5.10	-24.15
	<MIN>	-48.80	-5.10	17.33	-22.55	-31.89	-14.89

Barra		N U D O D O R S A L (i)			N U D O F R O N T A L (j)		
		Cortante	<TORSOR>	Flector	Cortante	<TORSOR>	Flector
195	<MAX>	-5.75	32.44	-4.31	-13.62	0.22	-12.40
	<MIN>	-13.62	-0.22	-0.83	-5.75	-32.44	-9.20
196	<MAX>	-1.26	32.12	-6.84	-3.86	-1.56	-9.30
	<MIN>	-3.86	1.56	-6.03	-1.26	-32.12	-7.91
197	<MAX>	0.19	31.67	-7.93	-0.86	-2.29	-6.64
	<MIN>	-0.86	2.29	-5.91	0.19	-31.67	-7.78
198	<MAX>	0.74	31.27	-8.18	0.02	-2.42	-6.00
	<MIN>	0.02	2.42	-6.02	0.74	-31.27	-7.55
199	<MAX>	1.59	30.97	-8.05	0.91	-2.46	-5.11
	<MIN>	0.91	2.46	-5.88	1.59	-30.97	-6.69
200	<MAX>	1.93	30.87	-7.56	1.54	-2.58	-4.35
	<MIN>	1.54	2.58	-5.66	1.93	-30.87	-5.92
201	<MAX>	2.01	31.53	-8.82	1.53	-2.74	-4.16
	<MIN>	1.53	2.74	-5.46	2.01	-31.53	-7.11
202	<MAX>	2.10	32.18	-8.47	1.54	-2.89	-4.05
	<MIN>	1.54	2.89	-5.36	2.10	-32.18	-6.69
203	<MAX>	2.19	32.64	-8.20	1.55	-3.02	-3.97
	<MIN>	1.55	3.02	-5.29	2.19	-32.64	-6.34
204	<MAX>	2.22	32.95	-7.94	1.56	-3.12	-3.88
	<MIN>	1.56	3.12	-5.19	2.22	-32.95	-6.06
205	<MAX>	1.83	33.83	-8.62	1.58	-3.17	-3.68
	<MIN>	1.58	3.17	-5.02	1.83	-33.83	-7.06
206	<MAX>	1.94	34.53	-8.03	1.64	-3.13	-3.37
	<MIN>	1.64	3.13	-4.76	1.94	-34.53	-6.38
207	<MAX>	2.09	34.83	-7.25	1.78	-2.92	-2.83
	<MIN>	1.78	2.92	-4.34	2.09	-34.83	-5.47
208	<MAX>	2.30	34.66	-6.20	2.08	-2.39	-1.94
	<MIN>	2.08	2.39	-3.70	2.30	-34.66	-4.25
209	<MAX>	2.25	33.88	-4.32	2.88	-1.26	-0.77
	<MIN>	2.88	1.26	-3.22	2.25	-33.88	-2.40

Barra		NUDO DORSAL (i) Cortante	<TORSOR>	Flector	NUDO FRONTAL (j) Cortante	<TORSOR>	Flector
210	<MAX>	2.65	32.21	-2.32	3.40	0.84	0.83
	<MIN>	3.40	-0.84	-2.05	2.65	-32.21	-0.07
211	<MAX>	2.93	29.12	0.33	4.13	4.01	2.32
	<MIN>	4.13	-4.01	-1.19	2.93	-29.12	2.83
212	<MAX>	2.80	24.25	3.46	7.52	8.03	3.92
	<MIN>	7.52	-8.03	-2.48	2.80	-24.25	5.84
213	<MAX>	2.01	11.96	4.09	13.28	8.97	5.06
	<MIN>	13.28	-8.97	-6.23	2.01	-11.96	5.79
214	<MAX>	0.70	5.66	2.79	10.77	6.11	3.83
	<MIN>	10.77	-6.11	-5.33	0.70	-5.66	3.38
215	<MAX>	0.21	4.84	3.64	11.68	9.22	3.51
	<MIN>	11.68	-9.22	-6.42	0.21	-4.84	3.82
216	<MAX>	0.18	3.32	3.67	-7.26	13.18	-4.94
	<MIN>	-7.26	-13.18	1.23	0.18	-3.32	3.83
217	<MAX>	78.53	94.79	-70.43	22.48	5.72	12.08
	<MIN>	22.48	-5.72	-8.23	78.53	-94.79	0.52
218	<MAX>	20.24	87.80	-27.52	-1.06	0.26	10.47
	<MIN>	-1.06	-0.26	11.59	20.24	-87.80	-6.01
219	<MAX>	-2.28	96.92	-21.80	-19.31	-6.71	-5.08
	<MIN>	-19.31	6.71	15.45	-2.28	-96.92	-24.22
220	<MAX>	4.55	120.84	-45.72	-43.01	-11.14	-29.29
	<MIN>	-43.01	11.14	9.57	4.55	-120.84	-41.60
221	<MAX>	6.40	128.39	-53.90	45.27	-16.43	4.52
	<MIN>	45.27	16.43	-36.38	6.40	-128.39	-48.12
222	<MAX>	12.83	105.29	-34.79	25.53	-13.90	13.45
	<MIN>	25.53	13.90	-13.69	12.83	-105.29	-21.15
223	<MAX>	-9.91	95.71	-13.77	10.15	-8.14	11.74
	<MIN>	10.15	8.14	0.94	-9.91	-95.71	-24.30
224	<MAX>	-67.70	100.93	-3.51	-4.02	-2.77	1.43
	<MIN>	-4.02	2.77	5.06	-67.70	-100.93	-64.68

Máximos y Mínimos del Esfuerzo CORTANTE

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
1	<MAX>	71.89	8.98	-2.09	69.32	-6.01	19.56
	<MIN>	2.71	36.71	111.45	1.00	-34.63	112.02
2	<MAX>	60.88	9.97	18.44	48.86	2.53	36.61
	<MIN>	-6.33	39.99	98.92	-8.35	-37.54	96.28
3	<MAX>	45.48	-0.85	36.33	42.46	4.34	52.17
	<MIN>	3.16	34.62	87.14	1.14	-32.17	87.91
4	<MAX>	41.71	-3.73	52.95	39.14	6.70	65.34
	<MIN>	11.74	28.95	81.87	10.03	-26.87	85.20
5	<MAX>	45.44	31.84	106.26	37.18	-20.28	137.67
	<MIN>	15.76	-14.32	38.58	10.73	20.41	50.46
6	<MAX>	45.18	17.94	128.36	37.66	-9.24	165.59
	<MIN>	12.25	-21.12	61.98	7.23	27.21	70.71
7	<MAX>	43.35	8.94	161.98	35.83	-0.25	197.49
	<MIN>	9.00	-26.26	85.34	-2.34	36.07	109.39
8	<MAX>	38.75	4.22	199.14	23.68	7.82	195.16
	<MIN>	0.74	-33.19	127.28	-4.32	43.36	137.53
9	<MAX>	26.84	-7.48	210.64	20.13	3.56	186.50
	<MIN>	-1.90	-36.15	147.74	-7.74	54.85	188.63
10	<MAX>	22.51	0.21	187.91	16.85	5.78	198.76
	<MIN>	-5.59	-49.50	215.59	-13.37	59.35	247.17
11	<MAX>	19.37	-1.13	204.74	13.99	6.86	212.53
	<MIN>	-11.54	-52.20	263.53	-26.56	68.89	264.43
12	<MAX>	16.77	-2.27	222.58	11.69	7.74	227.93
	<MIN>	-25.53	-58.28	288.29	-32.99	67.59	269.48
13	<MAX>	12.22	-0.01	231.77	-0.37	8.36	183.62
	<MIN>	-29.82	-59.59	301.91	-37.34	68.29	271.78
14	<MAX>	0.84	-8.13	240.45	-4.19	14.22	238.99
	<MIN>	-34.90	-60.30	304.74	-42.42	69.00	270.07

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
15	<MAX>	-3.10	-3.31	188.12	-8.13	9.40	183.09
	<MIN>	-40.38	-60.95	303.37	-47.90	69.65	263.78
16	<MAX>	-7.03	-3.78	186.45	-12.05	9.87	177.90
	<MIN>	-46.07	-61.61	297.41	-61.15	77.67	276.91
17	<MAX>	-11.05	-4.24	181.51	-16.07	10.33	169.35
	<MIN>	-60.25	-67.38	312.32	-67.77	76.08	254.90
18	<MAX>	-15.19	-4.67	173.20	-20.21	10.76	157.33
	<MIN>	-64.86	-68.11	291.53	-72.38	76.81	229.99
19	<MAX>	-19.62	-4.99	161.39	-24.64	11.08	141.55
	<MIN>	-70.41	-69.06	267.26	-77.93	77.76	200.73
20	<MAX>	-24.58	-5.07	145.77	-29.60	11.16	121.47
	<MIN>	-76.78	-70.04	238.53	-84.30	78.74	166.29
21	<MAX>	-30.58	-4.64	125.67	-35.60	10.73	96.00
	<MIN>	-84.14	-70.98	204.59	-91.66	79.67	125.75
22	<MAX>	-39.01	-3.16	99.85	-44.03	9.25	62.60
	<MIN>	-93.25	-71.59	164.51	-100.77	80.29	77.49
23	<MAX>	-57.13	1.93	65.53	-62.15	4.16	12.03
	<MIN>	-107.32	-70.72	116.55	-114.85	79.42	16.90
24	<MAX>	-79.30	-33.25	34.93	-84.57	39.34	-38.56
	<MIN>	-171.02	-10.43	31.08	-178.88	19.13	-125.85
25	<MAX>	81.37	39.97	20.12	72.75	-37.29	43.95
	<MIN>	14.44	-5.82	2.09	13.63	5.82	7.15
26	<MAX>	54.78	31.55	43.35	53.54	-31.55	62.88
	<MIN>	16.15	-6.70	8.17	15.33	6.70	13.85
27	<MAX>	43.84	25.16	61.59	39.66	-28.64	75.63
	<MIN>	16.84	-8.99	14.49	16.15	8.99	19.55
28	<MAX>	36.28	-16.88	41.13	30.60	14.94	68.30
	<MIN>	14.65	20.58	53.01	12.62	-20.58	65.24
29	<MAX>	36.23	-28.55	67.97	31.92	23.95	102.12
	<MIN>	13.66	12.04	63.88	10.42	-11.73	86.73

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
30	<MAX>	34.92	-35.41	100.70	31.84	38.33	130.96
	<MIN>	15.25	5.68	76.05	11.59	-5.22	102.85
31	<MAX>	36.62	-37.03	139.20	27.53	43.62	151.77
	<MIN>	14.48	-0.68	104.01	11.26	0.04	115.95
32	<MAX>	27.76	-45.95	154.28	24.68	45.95	177.80
	<MIN>	13.58	-2.89	117.74	11.55	2.89	129.01
33	<MAX>	28.03	-21.29	200.86	21.17	22.97	213.18
	<MIN>	11.74	-28.96	117.10	9.72	28.96	126.73
34	<MAX>	20.56	-18.19	216.35	17.48	18.19	233.40
	<MIN>	9.12	-29.67	127.89	1.26	32.82	158.35
35	<MAX>	16.91	-24.98	232.06	13.88	24.51	243.16
	<MIN>	4.06	-35.29	159.11	1.98	35.76	164.53
36	<MAX>	15.80	-25.45	246.23	4.46	18.29	214.07
	<MIN>	1.12	-36.66	162.40	-1.02	37.17	165.23
37	<MAX>	5.55	-24.75	248.45	2.79	16.99	214.66
	<MIN>	-1.81	-38.40	166.95	-4.16	46.16	203.82
38	<MAX>	5.73	-13.16	197.02	-2.67	6.18	153.53
	<MIN>	-5.24	-50.75	222.75	-8.23	51.34	219.51
39	<MAX>	-3.28	-12.37	188.00	-5.64	5.47	144.19
	<MIN>	-9.50	-52.28	223.10	-18.64	53.33	233.39
40	<MAX>	-6.58	-5.83	144.25	-8.61	5.83	137.44
	<MIN>	-16.38	-55.92	234.27	-19.46	55.92	218.19
41	<MAX>	-9.62	-6.18	137.47	-11.65	6.18	127.93
	<MIN>	-20.85	-57.55	218.90	-23.93	57.55	198.80
42	<MAX>	-12.83	-6.49	127.92	-14.86	6.49	115.51
	<MIN>	-25.28	-58.57	199.56	-28.36	58.57	175.50
43	<MAX>	-16.06	-31.10	103.42	-18.09	31.10	88.10
	<MIN>	-30.12	-34.88	188.24	-33.20	34.88	159.84
44	<MAX>	-19.36	-31.58	88.33	-21.39	31.58	70.05
	<MIN>	-36.20	-34.71	159.92	-39.28	34.71	126.07

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
45	<MAX>	-23.22	-31.83	69.99	-25.25	31.83	48.25
	<MIN>	-44.25	-32.90	125.51	-47.33	32.90	84.43
46	<MAX>	-27.22	-31.06	47.48	-29.25	31.06	22.15
	<MIN>	-48.54	-25.83	81.32	-51.62	25.83	36.40
47	<MAX>	6.77	20.02	18.57	4.74	-20.02	23.74
	<MIN>	-41.96	-50.62	29.15	-45.04	50.62	-9.87
48	<MAX>	17.41	23.00	31.88	16.71	-23.00	37.12
	<MIN>	-21.10	-31.68	-8.17	-22.16	31.68	-14.79
49	<MAX>	34.05	27.62	27.69	32.79	-27.62	39.74
	<MIN>	13.24	-9.91	-0.34	12.41	9.91	4.28
50	<MAX>	33.05	26.81	41.16	31.98	-26.81	51.12
	<MIN>	16.04	-13.07	5.30	15.34	13.07	10.11
51	<MAX>	35.82	-30.46	21.24	32.69	30.46	51.97
	<MIN>	16.70	23.97	37.90	14.64	-23.97	51.95
52	<MAX>	40.91	-40.12	57.75	37.78	40.12	93.04
	<MIN>	16.82	11.93	52.40	14.75	-11.93	66.56
53	<MAX>	40.70	-45.31	97.41	37.57	45.31	132.52
	<MIN>	20.07	3.06	69.24	18.01	-3.06	86.31
54	<MAX>	35.41	-47.57	135.30	32.28	47.57	165.66
	<MIN>	18.45	-3.52	102.53	16.39	3.52	118.15
55	<MAX>	31.08	-49.96	157.85	27.96	49.96	184.32
	<MIN>	15.74	-5.46	119.63	13.67	5.46	132.82
56	<MAX>	26.96	-50.42	185.08	23.83	50.42	207.86
	<MIN>	13.24	-6.29	133.76	11.18	6.29	144.71
57	<MAX>	22.77	-50.71	208.17	19.64	50.71	227.19
	<MIN>	10.44	-6.69	145.25	8.38	6.69	153.70
58	<MAX>	18.22	-50.96	227.28	15.10	50.36	239.52
	<MIN>	5.48	-9.78	174.10	3.41	10.38	180.78
59	<MAX>	11.43	-51.25	242.31	8.38	50.65	248.39
	<MIN>	2.43	-10.01	178.30	0.30	10.61	182.33

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
60	<MAX>	5.09	-25.67	258.50	2.09	25.08	258.86
	<MIN>	-0.45	-36.17	172.20	-2.64	36.77	173.68
61	<MAX>	-0.37	-6.94	163.74	-2.56	6.35	159.56
	<MIN>	-3.95	-52.42	230.01	-6.95	53.02	227.99
62	<MAX>	-3.48	-6.12	156.48	-5.61	5.52	149.59
	<MIN>	-8.57	-51.74	247.96	-11.65	55.47	240.88
63	<MAX>	-6.53	-6.39	152.09	-8.60	5.79	142.61
	<MIN>	-15.21	-52.14	238.73	-18.33	52.73	226.39
64	<MAX>	-9.50	-6.01	142.32	-11.56	6.01	132.87
	<MIN>	-19.67	-53.11	226.10	-22.80	53.11	207.05
65	<MAX>	-12.41	-6.06	132.40	-14.47	6.06	120.34
	<MIN>	-23.85	-53.41	206.55	-26.98	53.41	183.75
66	<MAX>	-15.24	-5.69	119.56	-17.30	5.69	104.97
	<MIN>	-28.21	-59.71	181.29	-31.34	59.71	154.59
67	<MAX>	-17.66	-4.22	103.66	-19.72	4.22	86.90
	<MIN>	-32.32	-59.33	152.68	-35.45	59.33	122.29
68	<MAX>	-18.19	-0.20	84.72	-20.25	0.20	67.48
	<MIN>	-35.48	-57.48	119.30	-38.60	57.48	86.07
69	<MAX>	-14.87	8.52	64.71	-16.93	-8.52	50.44
	<MIN>	-35.55	-52.47	81.39	-38.68	52.47	48.09
70	<MAX>	-14.60	20.62	49.90	-16.67	-20.62	35.87
	<MIN>	-30.63	-36.86	44.96	-33.75	36.86	16.08
71	<MAX>	-15.01	-16.13	8.04	-15.72	16.13	3.33
	<MIN>	-29.01	13.60	41.45	-30.08	-13.60	32.39
72	<MAX>	-11.56	-14.47	1.32	-12.39	14.47	-3.00
	<MIN>	-28.26	15.91	30.94	-29.52	-15.91	20.52
73	<MAX>	30.72	-24.29	-8.87	25.07	20.87	1.53
	<MIN>	-16.05	27.68	40.52	-16.74	-27.68	35.50
74	<MAX>	46.14	-38.95	-1.15	43.06	38.95	38.86
	<MIN>	-5.19	23.33	26.12	-7.22	-23.33	20.56

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
75	<MAX>	54.06	-11.29	46.37	49.20	13.61	91.86
	<MIN>	28.63	-27.66	24.17	26.60	27.66	48.94
76	<MAX>	48.82	-20.73	95.06	45.74	20.73	137.48
	<MIN>	24.79	-28.57	49.78	22.76	28.57	71.11
77	<MAX>	44.14	-22.87	137.89	35.19	24.31	162.71
	<MIN>	21.05	-28.53	71.19	17.11	31.42	101.42
78	<MAX>	32.32	-24.79	162.59	29.24	24.79	190.19
	<MIN>	16.88	-31.16	101.51	14.86	31.16	115.75
79	<MAX>	31.48	-47.90	185.27	24.66	48.96	200.71
	<MIN>	13.91	-6.77	127.84	11.89	6.77	139.41
80	<MAX>	23.30	-48.77	199.45	20.22	48.77	218.97
	<MIN>	10.74	-6.77	139.25	3.51	9.56	166.96
81	<MAX>	19.05	-48.77	217.53	15.97	48.77	233.23
	<MIN>	5.42	-9.75	167.02	3.39	9.75	170.97
82	<MAX>	17.76	-49.06	231.70	7.84	46.13	236.20
	<MIN>	2.88	-9.88	170.94	0.82	10.52	175.33
83	<MAX>	7.44	-48.38	234.41	4.46	47.78	236.94
	<MIN>	-0.06	-11.06	177.72	-2.18	11.65	179.52
84	<MAX>	7.19	-44.16	217.85	-1.73	29.82	140.99
	<MIN>	-3.10	-15.80	197.18	-5.91	23.60	230.38
85	<MAX>	-1.91	-36.11	173.96	-4.68	28.94	131.13
	<MIN>	-7.17	-27.54	233.66	-15.95	26.29	244.77
86	<MAX>	-5.44	-29.55	133.02	-7.52	29.08	124.49
	<MIN>	-13.99	-25.99	241.57	-17.02	26.46	230.37
87	<MAX>	-8.27	-29.12	123.59	-10.29	29.12	115.26
	<MIN>	-17.50	-26.28	229.52	-20.58	26.28	212.45
88	<MAX>	-10.92	-29.00	114.20	-12.95	29.00	103.50
	<MIN>	-21.19	-25.62	211.16	-24.27	25.62	190.78
89	<MAX>	-12.87	-3.54	115.59	-14.90	3.54	103.13
	<MIN>	-24.69	-49.13	175.60	-27.77	49.13	152.07

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
90	<MAX>	-13.78	-1.32	101.76	-15.80	1.32	88.49
	<MIN>	-27.52	-47.26	149.36	-30.60	47.26	123.29
91	<MAX>	-13.15	2.72	86.88	-15.17	-2.72	74.18
	<MIN>	-29.05	-43.66	119.79	-32.14	43.66	92.35
92	<MAX>	-11.41	8.93	73.18	-13.43	-8.93	62.04
	<MIN>	-28.70	-37.49	88.15	-31.78	37.49	61.02
93	<MAX>	-12.15	17.45	63.24	-14.18	-17.45	51.43
	<MIN>	-26.65	-28.48	56.76	-29.73	28.48	31.47
94	<MAX>	-15.61	-11.95	17.91	-16.30	11.95	13.02
	<MIN>	-34.84	16.38	65.47	-35.89	-16.38	54.63
95	<MAX>	-14.76	-9.47	12.34	-15.58	9.47	6.87
	<MIN>	-46.69	23.15	55.69	-47.93	-23.15	38.64
96	<MAX>	-12.16	-12.53	4.51	-12.98	12.53	-0.02
	<MIN>	-65.97	30.03	38.86	-67.21	-30.03	14.85
97	<MAX>	168.83	-5.76	-108.24	161.31	-2.94	39.82
	<MIN>	80.08	-35.50	-33.39	75.06	29.42	36.20
98	<MAX>	107.15	-64.58	33.38	99.62	55.88	126.11
	<MIN>	58.92	-0.05	15.50	53.90	-6.04	66.10
99	<MAX>	93.20	-65.04	94.92	85.68	56.34	175.15
	<MIN>	41.17	-5.21	65.30	36.15	-0.88	99.98
100	<MAX>	82.99	-66.57	133.46	75.47	57.87	204.53
	<MIN>	32.96	-6.85	98.16	27.93	0.76	125.47
101	<MAX>	75.66	-65.65	172.86	68.14	56.95	237.35
	<MIN>	27.08	-7.40	123.18	22.05	1.31	145.21
102	<MAX>	68.87	-64.49	206.09	61.34	55.80	264.48
	<MIN>	22.07	-7.31	142.80	17.05	1.22	160.33
103	<MAX>	62.95	-62.49	233.50	55.43	56.92	286.60
	<MIN>	17.95	-6.33	157.87	12.93	2.57	171.72
104	<MAX>	57.35	-62.84	255.72	49.83	57.28	303.79
	<MIN>	14.48	-6.92	169.14	9.46	3.15	179.88

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
105	<MAX>	50.11	-63.52	272.82	42.59	57.96	314.40
	<MIN>	11.00	-7.30	177.13	5.98	3.54	184.74
106	<MAX>	42.80	-64.06	282.98	35.28	58.50	317.98
	<MIN>	7.52	-7.59	181.85	2.50	3.82	186.33
107	<MAX>	35.53	-65.44	280.24	28.01	59.88	308.74
	<MIN>	4.04	-7.79	183.31	-0.99	4.02	184.68
108	<MAX>	29.76	-67.40	275.93	22.24	61.84	299.25
	<MIN>	0.58	-7.88	181.56	-4.44	4.12	179.83
109	<MAX>	24.07	-68.90	265.42	16.61	62.73	276.26
	<MIN>	-3.70	-16.44	217.73	-8.79	13.29	219.56
110	<MAX>	18.49	-69.72	249.11	11.32	63.80	255.33
	<MIN>	-7.55	-15.80	204.66	-12.92	12.39	202.65
111	<MAX>	13.09	-69.16	224.51	6.21	63.50	226.39
	<MIN>	-10.88	-15.02	191.48	-16.54	11.36	185.96
112	<MAX>	8.30	-63.84	181.67	1.93	46.88	141.93
	<MIN>	-14.26	-13.05	179.15	-20.44	20.68	207.92
113	<MAX>	3.86	-60.44	152.36	-1.31	44.16	115.77
	<MIN>	-17.18	-9.75	160.51	-24.55	16.69	179.52
114	<MAX>	0.74	-44.27	92.16	-4.28	40.51	90.57
	<MIN>	-20.53	-15.32	170.14	-28.05	9.76	148.35
115	<MAX>	-2.00	-42.07	73.21	-7.02	38.31	69.16
	<MIN>	-23.21	-6.02	143.27	-30.73	0.46	119.08
116	<MAX>	-4.75	-33.65	49.46	-9.77	29.88	42.95
	<MIN>	-22.56	5.77	119.70	-30.08	-11.33	96.09
117	<MAX>	-2.81	14.71	84.71	-4.53	-15.99	83.59
	<MIN>	-21.65	-21.43	49.86	-24.22	19.53	42.84
118	<MAX>	6.81	21.25	87.09	4.79	-22.77	89.19
	<MIN>	-23.98	-17.03	39.05	-27.01	14.79	29.87
119	<MAX>	17.57	28.19	95.86	15.55	-29.70	101.83
	<MIN>	-27.77	-12.25	26.91	-30.80	10.01	16.35

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
120	<MAX>	10.45	27.16	112.96	8.74	-28.45	115.90
	<MIN>	-32.60	-7.93	14.60	-35.17	6.03	4.21
121	<MAX>	14.13	-15.13	-9.82	14.13	15.13	2.19
	<MIN>	1.47	1.39	1.16	1.47	-1.39	2.41
122	<MAX>	3.38	-0.29	-1.68	3.38	0.29	1.20
	<MIN>	-11.55	-8.49	3.56	-11.55	8.49	-6.26
123	<MAX>	1.65	1.69	0.71	1.65	-1.69	2.11
	<MIN>	-10.64	-5.27	3.81	-10.64	5.27	-5.24
124	<MAX>	1.65	3.57	1.52	1.65	-3.57	2.92
	<MIN>	-13.26	-6.29	5.04	-13.26	6.29	-6.23
125	<MAX>	1.28	10.38	1.51	1.28	-10.38	2.60
	<MIN>	-8.44	-6.67	0.16	-8.44	6.67	-7.02
126	<MAX>	0.49	13.89	-0.09	0.49	-13.89	0.32
	<MIN>	-5.93	-2.49	0.22	-5.93	2.49	-4.82
127	<MAX>	0.87	16.36	-2.13	0.87	-16.36	-1.39
	<MIN>	-5.17	5.52	-2.39	-5.17	-5.52	-6.79
128	<MAX>	0.76	20.05	-3.49	0.76	-20.05	-2.84
	<MIN>	-4.68	6.77	-5.36	-4.68	-6.77	-9.35
129	<MAX>	1.47	22.25	-4.83	1.47	-22.25	-3.58
	<MIN>	-3.05	9.13	-5.53	-3.05	-9.13	-8.10
130	<MAX>	1.07	22.67	-5.34	1.07	-22.67	-4.43
	<MIN>	-3.78	11.58	-7.99	-3.78	-11.58	-11.20
131	<MAX>	1.09	22.68	-5.80	1.09	-22.68	-4.87
	<MIN>	-3.53	9.48	-7.31	-3.53	-9.48	-10.31
132	<MAX>	1.11	24.47	-6.01	1.11	-24.47	-5.07
	<MIN>	-3.44	15.06	-7.64	-3.44	-15.06	-10.59
133	<MAX>	1.16	24.31	-6.02	1.16	-24.31	-5.03
	<MIN>	-3.43	12.67	-9.16	-3.43	-12.67	-12.08
134	<MAX>	1.70	9.11	-6.17	1.70	-9.11	-4.74
	<MIN>	-2.25	31.48	-7.82	-2.25	-31.48	-9.74

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
135	<MAX>	1.23	9.15	-6.04	1.23	-9.15	-4.99
	<MIN>	-3.38	32.04	-9.22	-3.38	-32.04	-12.09
136	<MAX>	1.27	9.00	-6.12	1.27	-9.00	-5.05
	<MIN>	-1.92	32.37	-7.75	-1.92	-32.37	-9.40
137	<MAX>	-0.15	9.19	-5.69	-0.15	-9.19	-5.83
	<MIN>	-3.14	35.15	-7.75	-3.14	-35.15	-10.41
138	<MAX>	-0.22	9.42	-5.77	-0.22	-9.42	-5.95
	<MIN>	-2.22	35.91	-7.54	-2.22	-35.91	-9.42
139	<MAX>	0.34	14.59	-6.69	0.34	-14.59	-6.39
	<MIN>	-1.43	31.49	-6.88	-1.43	-31.49	-8.10
140	<MAX>	1.59	14.62	-7.25	1.59	-14.62	-5.90
	<MIN>	-0.65	23.83	-6.87	-0.65	-23.83	-7.42
141	<MAX>	4.49	18.28	-8.63	4.49	-18.28	-4.81
	<MIN>	0.52	24.33	-7.03	0.52	-24.33	-6.59
142	<MAX>	15.99	19.51	-14.18	15.99	-19.51	-0.59
	<MIN>	3.67	22.48	-6.58	3.67	-22.48	-3.46
143	<MAX>	58.97	16.64	-30.04	58.97	-16.64	20.08
	<MIN>	14.34	20.44	-9.84	14.34	-20.44	2.35
144	<MAX>	39.74	19.46	-18.55	39.74	-19.46	15.22
	<MIN>	13.68	-21.91	-4.11	13.68	21.91	7.52
145	<MAX>	10.61	-11.92	-4.33	10.61	11.92	6.28
	<MIN>	-3.06	3.87	6.74	-3.06	-3.87	3.67
146	<MAX>	2.05	-9.69	-0.90	2.05	9.69	1.15
	<MIN>	-2.42	4.62	5.56	-2.42	-4.62	3.14
147	<MAX>	-2.15	2.59	5.41	-2.15	-2.58	3.26
	<MIN>	-4.89	-11.71	3.36	-4.89	11.71	-1.54
148	<MAX>	-4.10	12.44	4.74	-4.10	-12.44	0.64
	<MIN>	-12.52	-6.41	7.48	-12.52	6.41	-5.04
149	<MAX>	-3.46	15.94	1.54	-3.46	-15.94	-1.92
	<MIN>	-11.94	2.06	5.27	-11.94	-2.00	-6.68

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
150	<MAX>	-2.30	17.60	-1.45	-2.30	-17.60	-3.75
	<MIN>	-9.79	5.44	1.17	-9.79	-5.44	-8.62
151	<MAX>	-1.29	19.94	-3.76	-1.29	-19.94	-5.05
	<MIN>	-7.47	7.78	-2.85	-7.47	-7.78	-10.32
152	<MAX>	-0.63	21.65	-4.31	-0.63	-21.65	-4.93
	<MIN>	-6.35	10.48	-5.12	-6.35	-10.48	-11.47
153	<MAX>	-0.21	24.73	-5.41	-0.21	-24.73	-5.62
	<MIN>	-4.76	12.64	-7.02	-4.76	-12.64	-11.78
154	<MAX>	-0.07	20.46	-6.37	-0.07	-20.46	-6.44
	<MIN>	-4.10	14.56	-7.61	-4.10	-14.56	-11.72
155	<MAX>	0.04	22.01	-6.37	0.04	-22.01	-6.33
	<MIN>	-3.83	12.01	-8.06	-3.83	-12.01	-11.89
156	<MAX>	0.19	28.52	-6.93	0.19	-28.52	-6.75
	<MIN>	-3.83	9.10	-7.85	-3.83	-9.10	-11.68
157	<MAX>	0.15	12.88	-6.99	0.15	-12.88	-6.84
	<MIN>	-4.37	26.61	-7.60	-4.37	-26.61	-11.97
158	<MAX>	0.20	13.03	-7.04	0.20	-13.03	-6.84
	<MIN>	-3.74	28.36	-7.87	-3.74	-28.36	-11.62
159	<MAX>	0.32	13.17	-7.01	0.32	-13.17	-6.69
	<MIN>	-3.56	30.14	-7.47	-3.56	-30.14	-11.03
160	<MAX>	0.57	13.32	-6.91	0.57	-13.32	-6.39
	<MIN>	-1.91	31.27	-7.84	-1.91	-31.27	-9.75
161	<MAX>	1.18	14.27	-6.45	1.18	-14.27	-5.27
	<MIN>	-1.10	32.04	-7.52	-1.10	-32.04	-8.62
162	<MAX>	2.15	14.32	-6.40	2.15	-14.32	-4.35
	<MIN>	-0.24	32.59	-7.06	-0.24	-32.59	-7.30
163	<MAX>	4.37	16.29	-7.91	4.37	-16.29	-3.54
	<MIN>	0.87	27.44	-5.07	0.87	-27.44	-4.20
164	<MAX>	9.24	19.35	-8.38	9.24	-19.35	0.67
	<MIN>	2.54	25.63	-4.58	2.54	-25.63	-2.04

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
165	<MAX>	17.18	17.59	-8.16	17.18	-17.59	9.02
	<MIN>	5.67	20.51	-3.73	5.67	-20.51	1.94
166	<MAX>	18.12	8.34	-1.61	18.12	-8.34	16.51
	<MIN>	9.50	17.91	-2.26	9.50	-17.91	7.25
167	<MAX>	14.71	17.86	0.84	14.71	-17.86	15.55
	<MIN>	1.02	-12.54	2.51	1.02	12.54	3.53
168	<MAX>	11.23	8.65	-0.70	11.23	-8.65	10.53
	<MIN>	-2.27	-6.78	2.78	-2.27	6.78	0.51
169	<MAX>	3.77	-8.80	0.15	3.77	8.80	3.92
	<MIN>	-8.84	-6.31	8.87	-8.84	-6.31	0.03
170	<MAX>	-0.12	-13.97	2.44	-0.12	13.97	2.32
	<MIN>	-12.48	12.71	14.11	-12.48	-12.71	1.63
171	<MAX>	-8.68	15.67	5.94	-8.68	-15.67	-2.74
	<MIN>	-16.57	0.38	15.26	-16.57	-0.38	-1.30
172	<MAX>	-5.13	18.31	0.87	-5.13	-18.31	-4.26
	<MIN>	-16.61	6.33	5.81	-16.61	-6.33	-10.80
173	<MAX>	-1.45	22.23	-1.67	-1.45	-22.23	-3.12
	<MIN>	-9.94	7.69	-1.42	-9.94	-7.60	-11.35
174	<MAX>	0.00	23.90	-3.88	0.00	-23.90	-3.88
	<MIN>	-5.81	9.99	-5.85	-5.81	-9.99	-11.66
175	<MAX>	1.35	26.05	-6.79	1.35	-26.05	-5.44
	<MIN>	-3.68	9.59	-6.51	-3.68	-9.59	-10.19
176	<MAX>	1.59	30.60	-7.95	1.59	-30.60	-6.36
	<MIN>	-2.49	6.58	-6.79	-2.49	-6.58	-9.28
177	<MAX>	2.21	30.40	-8.60	2.21	-30.40	-6.39
	<MIN>	-1.51	7.98	-7.12	-1.51	-7.96	-8.63
178	<MAX>	2.41	31.27	-8.77	2.41	-31.27	-6.35
	<MIN>	-1.24	6.05	-7.29	-1.24	-6.05	-8.52
179	<MAX>	2.28	31.19	-8.53	2.28	-31.19	-6.26
	<MIN>	-1.54	7.46	-7.39	-1.54	-7.46	-8.93

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
180	<MAX>	2.67	31.33	-8.61	2.67	-31.33	-5.94
	<MIN>	-1.54	9.00	-7.46	-1.54	-9.00	-9.00
181	<MAX>	2.34	15.69	-8.29	2.34	-15.69	-5.95
	<MIN>	-1.48	26.31	-7.30	-1.48	-26.31	-8.77
182	<MAX>	2.61	15.62	-8.30	2.61	-15.62	-5.69
	<MIN>	-1.05	27.73	-7.03	-1.05	-27.73	-8.08
183	<MAX>	1.74	15.66	-7.62	1.74	-15.66	-5.88
	<MIN>	-0.56	28.77	-6.48	-0.56	-28.77	-7.03
184	<MAX>	2.19	14.58	-7.67	2.19	-14.58	-5.49
	<MIN>	0.06	29.41	-5.85	0.06	-29.41	-5.79
185	<MAX>	3.15	16.52	-7.01	3.15	-16.52	-3.85
	<MIN>	0.73	29.73	-5.01	0.73	-29.73	-4.28
186	<MAX>	4.92	14.09	-5.66	4.92	-14.09	-0.75
	<MIN>	1.58	21.67	-3.99	1.58	-21.67	-2.41
187	<MAX>	7.66	17.28	-4.46	7.66	-17.28	3.20
	<MIN>	2.65	19.54	-2.59	2.65	-19.54	0.06
188	<MAX>	10.49	12.62	-2.07	10.49	-12.62	8.42
	<MIN>	3.94	18.03	-0.70	3.94	-18.03	3.24
189	<MAX>	12.31	5.04	-0.12	12.31	-5.04	12.19
	<MIN>	4.77	14.59	1.89	4.77	-14.59	6.65
190	<MAX>	5.94	-3.63	1.47	5.94	3.63	7.40
	<MIN>	2.96	6.37	3.36	2.96	-6.37	6.33
191	<MAX>	3.60	6.84	3.64	3.60	-6.84	7.24
	<MIN>	-1.11	-7.54	0.91	-1.11	7.54	-0.20
192	<MAX>	5.48	6.18	3.60	5.48	-6.18	9.08
	<MIN>	-8.20	-9.55	5.21	-8.20	9.55	-2.99
193	<MAX>	-11.67	-23.24	6.69	-11.67	23.24	-3.23
	<MIN>	-35.42	13.90	19.18	-35.42	-13.90	-14.92
194	<MAX>	-13.34	18.23	1.77	-13.34	-18.23	-9.57
	<MIN>	-59.10	7.39	21.62	-59.10	-7.39	-28.62

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
195	<MAX>	-3.30	20.35	-3.85	-3.30	-20.35	-6.65
	<MIN>	-17.54	10.42	0.96	-17.54	-10.42	-13.95
196	<MAX>	-0.30	22.30	-6.92	-0.30	-22.30	-7.18
	<MIN>	-6.68	9.33	-3.26	-6.68	-9.33	-8.94
197	<MAX>	0.76	21.92	-7.64	0.76	-21.92	-7.00
	<MIN>	-3.53	11.21	-4.69	-3.53	-11.21	-7.69
198	<MAX>	1.17	21.52	-7.86	1.17	-21.52	-6.87
	<MIN>	-2.97	11.45	-4.63	-2.97	-11.45	-7.15
199	<MAX>	1.97	25.62	-8.37	1.97	-25.62	-6.69
	<MIN>	-1.47	7.23	-4.25	-1.47	-7.23	-5.50
200	<MAX>	2.65	25.53	-8.14	2.65	-25.53	-5.89
	<MIN>	-0.77	7.73	-4.18	-0.77	-7.73	-4.83
201	<MAX>	2.54	25.58	-7.92	2.54	-25.58	-5.75
	<MIN>	-0.76	8.13	-4.01	-0.76	-8.13	-4.65
202	<MAX>	2.52	25.64	-7.82	2.52	-25.64	-5.68
	<MIN>	-0.78	8.67	-3.81	-0.78	-8.67	-4.47
203	<MAX>	2.51	27.51	-7.79	2.51	-27.51	-5.65
	<MIN>	-1.27	8.98	-3.47	-1.27	-8.98	-4.54
204	<MAX>	2.50	12.29	-7.61	2.50	-12.29	-5.48
	<MIN>	-0.76	24.53	-3.69	-0.76	-24.53	-4.34
205	<MAX>	2.51	12.24	-7.38	2.51	-12.24	-5.24
	<MIN>	-0.74	25.00	-3.66	-0.74	-25.00	-4.28
206	<MAX>	2.57	12.08	-7.03	2.57	-12.08	-4.85
	<MIN>	0.85	25.05	-4.31	0.85	-25.05	-3.59
207	<MAX>	2.72	15.29	-6.48	2.72	-15.29	-4.16
	<MIN>	1.15	27.88	-5.08	1.15	-27.88	-4.10
208	<MAX>	3.05	14.51	-5.55	3.05	-14.51	-2.96
	<MIN>	1.34	27.93	-4.23	1.34	-27.93	-3.09
209	<MAX>	3.60	14.39	-4.34	3.60	-14.39	-1.28
	<MIN>	1.55	18.65	-3.09	1.55	-18.65	-1.77

Barra		NUDO DORSAL (i) <CORTANTE>	Torsor	Flector	NUDO FRONTAL (j) <CORTANTE>	Torsor	Flector
210	<MAX>	4.29	13.88	-2.45	4.29	-13.88	1.19
	<MIN>	1.76	17.50	-1.93	1.76	-17.50	-0.43
211	<MAX>	5.17	9.61	-0.51	5.17	-9.61	3.89
	<MIN>	1.89	15.50	-0.34	1.89	-15.50	1.26
212	<MAX>	8.64	3.78	-0.54	8.64	-3.78	6.80
	<MIN>	1.68	12.44	1.52	1.68	-12.44	2.95
213	<MAX>	14.48	-2.46	-4.23	14.48	2.46	8.07
	<MIN>	0.81	5.45	2.09	0.81	-5.45	2.77
214	<MAX>	11.42	-2.78	-3.73	11.42	2.78	5.98
	<MIN>	0.04	2.33	1.19	0.04	-2.33	1.22
215	<MAX>	12.75	-6.68	-5.41	12.75	6.68	5.42
	<MIN>	-0.86	2.30	2.64	-0.86	-2.30	1.91
216	<MAX>	0.60	2.89	2.81	0.60	-2.89	3.33
	<MIN>	-7.67	-12.74	2.08	-7.67	12.74	-4.44
217	<MAX>	99.73	84.64	-81.16	99.73	-84.64	8.95
	<MIN>	1.28	4.42	2.50	1.28	-4.42	3.65
218	<MAX>	36.54	74.78	-31.93	36.54	-74.78	6.91
	<MIN>	-16.43	13.63	16.48	-16.43	-13.63	-0.98
219	<MAX>	18.80	81.40	-25.19	18.80	-81.40	-5.20
	<MIN>	-40.13	22.53	20.64	-40.13	-22.53	-22.02
220	<MAX>	34.64	108.34	-48.02	34.64	-108.34	-16.72
	<MIN>	-73.50	23.91	13.43	-73.50	-23.91	-52.98
221	<MAX>	82.16	33.86	-69.48	82.16	-33.86	4.78
	<MIN>	-30.49	110.96	-20.81	-30.49	-110.96	-48.35
222	<MAX>	50.68	30.91	-32.59	50.68	-30.91	21.29
	<MIN>	-12.32	88.29	-15.89	-12.32	-88.29	-28.99
223	<MAX>	26.76	21.54	-8.74	26.76	-21.54	19.70
	<MIN>	-26.51	82.31	-4.09	-26.51	-82.31	-32.27
224	<MAX>	8.29	9.72	-0.15	8.29	-9.72	7.34
	<MIN>	-80.01	93.97	1.70	-80.01	-93.97	-70.59