



CARRETERA TOLEDO, KM. 9  
28021 MADRID  
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## QUALITY CERTIFICATE

APS 3511 - 3

DIRECCIÓN DE DESCARGA		CLIENTE	
PLESA ANAHUAC SA DE CV AV. VALLE DE LAS ALAMEDAS NO 66-A COL. SAN FRANCISCO CHILPAN TULTITLAN, EDO. MEX. C.P. 54940		PLESA ANAHUAC SA DE CV AV. VALLE DE LAS ALAMEDAS NO 66-A COL. SAN FRANCISCO CHILPAN TULTITLAN, EDO. MEX. C.P. 54940	
MATERIAL EXPEDIDO Y CERTIFICADO POR		CARTA DE CREDITO	PUERTO DE CARGA
ACERALIA PERFILES OLABERRIA, S.L. CARRETERA MADRID - IRUN, KM. 419 20212 OLABERRIA (Guipúzcoa) TELEF. (943) 80.50.00 - FAX (943) 88.04.04		I103887	PASAJES, PTO. ESPAÑOL
		PUERTO DE DESCARGA	BARCO
		VERACRUZ, MEXICO	TIGER DURBAN
N / REFERENCIA	Nº DE CONTRATO	Nº DE PEDIDO	FECHA
MERCHE	E-9678	2ºT04	29/06/04

Material: 1,234,445 KGS DE VIGA W CALIDAD ASTM A36-A572 G50/A6 APROXIMADO:  
10 PORC. MAS O MENOS COST AND FREIGHT VERACRUZ, MEXICO.  
TOTAL EMBARCADO: 1.240.248 KGS

El exportador de los productos incluidos en el presente documento,  
Autorización aduanera no.

ACERALIA PERFILES MADRID, S.L. ES/28/0047/03  
ACERALIA PERFILES BERGARA, S.A. ES/48/0021/03  
ACERALIA PERFILES OLABERRIA S.L. ES/20/0040/03

Declara que, salvo indicación en sentido contrario, estos  
productos gozan de un origen preferencial ESPAÑA

# COPIA

MATERIAL	LARGO	PAQUETE	BARRAS PAQUETE	TOTAL BARRAS	PESO PAQUETE	PESO TOTAL	COLADAS
<b>O.C. 10000353 + / AMARILLO</b>							
WF BEAMS 8x13 <i>8x4-19.4</i>	40'	16	21	336	4954	79.264	43481,43482,43483,43505,4 3506,43508,43509,43510,43 511
WF BEAMS 8x15 <i>8x4-22.2</i>	40'	6	18	108	4898	29.388	43467,43468,43469,43470
WF BEAMS 8x18 <i>8x5 1/4-26.7</i>	40'	6	15	90	4899	29.394	43586,43611,43614,43630
WF BEAMS 8x21 <i>8x5 1/4-31.2</i>	40'	7	12	84	4572	32.004	43634,43635,43636
WF BEAMS 10x15 <i>10x4-22.4</i>	40'	14	18	252	4898	68.572	43771,43772,43774,43777,4 3778,43779
WF BEAMS 10x30 <i>10x5 3/4-44.6</i>	40'	7	8	56	4355	30.485	43762,43763
WF BEAMS 12x30 <i>12x6 1/2-71.6</i>	40'	18	8	144	4355	78.390	43511,43512,43513,43514
WF BEAMS 12x40 <i>12x8-59.5</i>	40'	8	6	48	4355	34.840	43479
WF BEAMS 14x30 <i>14x6 3/4-49.6</i>	40'	11	8	88	4355	47.905	43584,43585

TOTAL PAQUETES 93 TOTAL PESO 430.242 Kg.

A02 EN 10204/3.1.b

ASTM A36 - A572 G50/A6

(B01/B02/B03) A03

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C70 E	MATERIAL SIZE	COLADA HEAT	COMPOSICION QUIMICA (%) CHEMICAL COMPOSITION (%)													Cev		
			C	Mn	Si	P	S	N	V	Cr	Ni	Mo	Cu	Nb	Al		Ti	
B11	B08		C71	C72	C73	C74	C75	C76	C77	C78								
W-10x15	43771		,08	1,08	,15	,022	,021	,012	,002	,139	,140	,027	,472	,012	,001	,002		,33
W-10x15	43772		,07	1,12	,15	,022	,020	,011	,002	,136	,139	,027	,471	,012	,001	,002		,33
W-10x15	43774		,08	1,09	,20	,028	,026	,012	,002	,162	,146	,028	,485	,013	,002	,003		,34
W-10x15	43777		,07	1,07	,19	,025	,024	,011	,002	,163	,152	,029	,485	,012	,002	,003		,33
W-10x15	43778		,09	1,04	,15	,021	,018	,012	,002	,160	,144	,028	,521	,011	,002	,003		,35
W-10x15	43779		,10	1,13	,15	,021	,011	,011	,002	,252	,164	,030	,518	,019	,002	,003		,39
W-10x30	43762		,08	1,03	,17	,021	,030	,010	,002	,142	,138	,029	,501	,009	,002	,003		,33
W-10x30	43763		,07	,99	,18	,018	,028	,011	,002	,131	,144	,033	,527	,010	,002	,002		,31
W-12x30	43511		,11	1,07	,21	,023	,021	,011	,002	,147	,108	,023	,430	,017	,001	,003		,36
W-12x30	43512		,11	1,10	,21	,020	,024	,010	,002	,125	,136	,031	,404	,014	,001	,003		,36
W-12x30	43513		,10	1,07	,20	,025	,026	,011	,002	,151	,147	,034	,459	,022	,002	,003		,36
W-12x30	43514		,09	1,06	,21	,020	,030	,011	,002	,147	,125	,027	,400	,022	,002	,003		,33
W-12x40	43479		,12	1,12	,20	,027	,026	,011	,002	,169	,127	,029	,448	,019	,001	,003		,39
W-14x30	43584		,17	1,13	,21	,026	,012	,012	,002	,175	,140	,033	,425	,024	,002	,003		,44
W-14x30	43585		,14	1,16	,23	,023	,016	,010	,002	,159	,128	,029	,424	,023	,002	,003		,41
W-8x13	43481		,11	1,05	,19	,018	,019	,011	,002	,104	,137	,022	,451	,012	,002	,002		,34
W-8x13	43482		,09	1,01	,24	,021	,014	,012	,002	,137	,113	,023	,397	,018	,002	,003		,33
W-8x13	43483		,11	1,07	,22	,024	,021	,012	,002	,146	,118	,022	,452	,019	,001	,003		,36
W-8x13	43505		,10	1,06	,20	,023	,025	,011	,002	,149	,149	,032	,464	,021	,002	,003		,36
W-8x13	43506		,12	1,10	,22	,019	,021	,010	,002	,124	,142	,030	,416	,015	,002	,003		,37
W-8x13	43508		,10	1,05	,20	,023	,025	,010	,002	,149	,145	,032	,459	,020	,001	,003		,35
W-8x13	43509		,10	1,04	,20	,023	,024	,011	,002	,149	,147	,032	,463	,021	,002	,003		,35
W-8x13	43510		,11	1,06	,20	,023	,025	,011	,002	,149	,147	,032	,471	,022	,001	,003		,36
W-8x13	43511		,10	1,03	,20	,023	,024	,012	,002	,147	,144	,032	,442	,020	,002	,002		,34
W-8x15	43467		,09	1,01	,18	,028	,024	,011	,002	,137	,124	,023	,478	,011	,001	,002		,33
W-8x15	43468		,10	1,02	,19	,024	,021	,012	,002	,150	,113	,023	,497	,012	,001	,003		,35
W-8x15	43469		,09	1,00	,19	,021	,028	,012	,002	,106	,120	,024	,446	,011	,001	,002		,32
W-8x15	43470		,09	,99	,19	,019	,031	,012	,002	,094	,125	,025	,445	,013	,001	,002		,32
W-8x18	43586		,12	1,05	,20	,020	,014	,010	,002	,139	,128	,027	,388	,025	,002	,003		,36
W-8x18	43611		,09	1,09	,20	,020	,016	,011	,002	,136	,111	,028	,324	,013	,002	,003		,33
W-8x18	43614		,11	1,09	,20	,025	,023	,011	,002	,188	,170	,045	,556	,021	,002	,002		,38
W-8x18	43630		,08	1,06	,16	,020	,026	,010	,002	,127	,183	,046	,487	,022	,001	,002		,34
W-8x21	43634		,10	1,02	,18	,023	,026	,011	,002	,170	,155	,039	,531	,013	,001	,002		,36
W-8x21	43635		,11	1,09	,19	,022	,021	,011	,001	,161	,151	,041	,510	,019	,002	,003		,37
W-8x21	43636		,12	1,10	,22	,028	,022	,011	,002	,187	,147	,038	,483	,015	,001	,003		,39

MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES				FLEXIÓN POR CHOQUE IMPACT TEST					
		ReH MPa	Rm MPa	A% L0=5.65VSo	Doblado 180°	°C	KV300	V1 j.	V2 j.	V3 j.	Media j.
B11	B08	C11	C12	C13	C20	C03	C40/41	C42			C43
W-10x15	43771	358	515	29,		+20°	4	129	119	125	124
W-10x15	43772	358	508	30,7		+20°	4	128	110	146	128
W-10x15	43774	359	540	31,8		+20°	4	90	75	80	82
W-10x15	43777	358	536	29,6		+20°	4	93	81	90	88
W-10x15	43778	359	535	32,8		+20°	4	118	96	133	116
W-10x15	43779	358	550	28,4		+20°	4	112	80	96	96
W-10x30	43762	360	511	29,9		+20°	5	78	71	79	76

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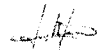
MATERIAL SIZE	COLADA HEAT	PROPIEDADES MECANICAS MECHANICAL PROPERTIES				FLEXIÓN POR CHOQUE IMPACT TEST					
		ReH MPa	Rm MPa	A% L0=5.65VSo	Doblado 180°	°C	KV300	V1 j.	V2 j.	V3 j.	Media j.
B11	B06	C11	C12	C13	C30	C03	C40/41	C42			C43
W-10x30	43763	360	514	31,6		+20°	5	88	74	90	84
W-12x30	43511	383	540	29,9		+20°	5	43	39	38	40
W-12x30	43512	374	549	25,3		+20°	5	47	36	41	41
W-12x30	43513	388	538	28,		+20°	5	37	40	37	38
W-12x30	43514	389	547	29,9		+20°	5	38	38	41	39
W-12x40	43479	384	549	29,2		+20°	5	39	40	35	38
W-14x30	43584	383	543	25,6		+20°	5	46	39	39	41
W-14x30	43585	393	548	25,6		+20°	5	45	37	36	39
W-8x13	43481	380	546	30,1		+20°	4	98	83	84	88
W-8x13	43482	403	540	30,8		+20°	4	114	86	94	98
W-8x13	43483	376	549	29,6		+20°	4	99	87	84	90
W-8x13	43505	358	541	29,7		+20°	4	100	78	87	88
W-8x13	43506	408	540	29,5		+20°	4	81	79	80	80
W-8x13	43508	372	544	31,5		+20°	4	93	67	80	80
W-8x13	43509	383	544	29,5		+20°	4	93	80	72	82
W-8x13	43510	355	538	32,1		+20°	4	92	86	81	86
W-8x13	43511	372	539	32,4		+20°	4	98	72	82	84
W-8x15	43467	355	537	29,2		+20°	5	102	82	86	90
W-8x15	43468	356	541	29,3		+20°	5	92	72	94	86
W-8x15	43469	370	532	31,4		+20°	5	123	104	103	110
W-8x15	43470	379	533	27,7		+20°	5	110	98	109	106
W-8x18	43586	410	544	27,1		+20°	4	79	68	80	76
W-8x18	43611	358	545	32,6		+20°	4	104	88	115	102
W-8x18	43614	360	544	25,8		+20°	4	53	42	49	48
W-8x18	43630	360	539	29,5		+20°	4	116	100	114	110
W-8x21	43634	358	540	31,5		+20°	5	46	41	41	43
W-8x21	43635	360	544	27,2		+20°	5	53	45	41	46
W-8x21	43636	359	538	27,2		+20°	5	41	38	39	39

### 35 análisis

D01: Certificamos que los aceros arriba indicados han sido satisfactoriamente probados de acuerdo con la especificación.

B06: Marca APO

Z01

  
 Luis María Lakunza