

**CERTIFICADO DE CALIDAD
INSPECTION CERTIFICATE
(DIN EN 10204:2004E - ISO 10474 3.1.B)**

Número:
Number:

23135

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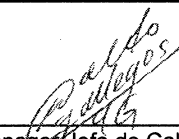
Tabbs de Acero de México, S.A.
Carr. Mty-Laredo Km 24.2
Apartado Postal 43
(65550) C. de Flores, N.L. Méx.
(52) 81 8305 9600 tel
(52) 81 8305 9620 fax

Vendido a: Sold to:	PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No:	7563 - 7566	Lista de Empaque: Packing List:	11812	Fecha/Date:	25 de Enero de 2010
Especificaciones y Grados / Standard or Specification and Steel Grade Seamless Fittings according to ASTM A 234M WPB-07, NACE MR 01.75-2003 Conform to ASME II Ed. 2001 ASME SA-234M Grade WPB, NACE MR0103-2003	Dimensiones y tolerancias / Dimension and tolerances ASME B 16.9 - 2007 and ASME B 16.28 - 1994			Factura/Invoice: Bocas / Ends Biselado / Bevelled ends			

DESCRIPCION DE MATERIAL / MATERIAL DESCRIPTION				PRUEBAS MECANICAS / MECHANICAL TEST				PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C				
ART. ITEM	COLADA HEAT CODE	CANTIDAD QUANTITY	DESCRIPCION / DESCRIPTION	ESF. CEDENCIA YIELD STRENGTH (Mpa)	ESF. RUPTURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HBW	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T41223	12	TEE 4 CED-XS	304	477	40	120	<p align="center">PLEASA ANAHUAC Y CIAS. S.A. DE C.V.</p> <p align="center">CONTROL DE CALIDAD</p> <p>FECHA <u>26 Ene 2010</u></p> <p>FIRMA <u>E. RUIZ</u></p>				
2	S21171	24	CODO 2 1/2 X 45° CED-STD	327	500	31	116					
3	T40183	5	RED. CONC. 6 X 5 CED-STD	318	488	36	109					
4	S31050	80	CODO 1 1/4 X 90° R.L. CED-STD	367	534	32	130					
5	S25531	25	RED. CONC. 4 X 3 CED-STD	310	486	35	111					
6	T46806	25	TEE 6 CED-STD	309	476	44	120					
7	T46857	10	TEE RED. 8 X 4 CED-STD	327	499	41	126					
8	S31052	10	CODO 2 X 45° CED-XS	326	495	31	120					
9	S35969	2	CODO 4 X 45° CED-XS	329	476	39	119					
10	S31159	1	CODO 4 X 45° CED-XS	273	458	33	105					
11	S22162	1	CODO 4 X 45° CED-XS	319	489	40	124					

ANALISIS QUIMICO / CHEMICAL ANALYSIS															
PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb	
HF	T41223	41223	0.300	0.170	0.660	0.013	0.002	0.260	0.050	0.071	0.013	0.030	0.000	0.000	<p>Certificamos que los resultados de los Análisis Químicos y Pruebas Mecánicas son verdaderos o una copia fiel de los certificados enviados por el Fabricante y/o el proveedor de Materia Prima (Tubería Sin Costura) conforme ASTM A106 Grado B con N°: 9049429 369597 8037445 457348 410976 9062307 9063904 458095 238315 462048 380137</p> <p>We certify that result of chemical analysis and mechanical test are true and correct copy of the test certificate issued by the manufacturer and/or supplier Raw material (Seamless Pipe) certs conform to ASTM A106 Grade B N°: 9049429 369597 8037445 457348 410976 9062307 9063904 458095 238315 462048 380137</p> <p>"Este material cumple con los requerimientos especificados en la orden".</p> <p>"The material of this certificate heat number mentioned above is in compliance with the requirements specified in the order".</p>
HF	S21171	21171	0.310	0.180	0.740	0.010	0.001	0.290	0.010	0.018	0.010	0.010	0.001	0.002	
CF	T40183	40183	0.300	0.170	0.670	0.011	0.002	0.260	0.070	0.066	0.010	0.030	0.000	0.000	
HF	S31050	31050	0.330	0.190	0.760	0.007	0.002	0.270	0.030	0.023	0.010	0.013	0.001	0.000	
CF	S25531	25531	0.330	0.190	0.720	0.009	0.001	0.300	0.040	0.039	0.020	0.026	0.001	0.001	
HF	T46806	46806	0.310	0.180	0.670	0.009	0.002	0.290	0.040	0.066	0.029	0.030	0.000	0.000	
HF	T46857	46857	0.310	0.180	0.660	0.012	0.004	0.290	0.050	0.080	0.029	0.040	0.000	0.000	
HF	S31052	31052	0.320	0.180	0.740	0.009	0.001	0.260	0.040	0.035	0.010	0.020	0.001	0.001	
HF	S35969	35969	0.323	0.190	0.720	0.009	0.001	0.290	0.030	0.025	0.020	0.014	0.001	0.000	
HF	S31159	31159	0.340	0.200	0.760	0.012	0.001	0.270	0.040	0.041	0.010	0.014	0.001	0.000	
HF	S22162	22162	0.330	0.200	0.710	0.008	0.001	0.270	0.040	0.027	0.010	0.014	0.001	0.001	

Notas:	Notes:
Formado en caliente a 620°C-980°C, enfriado al aire; Formado en frío normalizado a 940°C max.	Hot formed fittings in a range from 620°C to 980°C, cooled in still air, Cold formed normalized at 940°C max.
Tiempo de permanencia 10'.	Holding time 10'.
Inspección Dimensional: Satisfactoria.	Visual dimensional check: Satisfactory
HF: FORMADO EN CALIENTE/HOT FORMED	CF: FORMADO EN FRIO/COLD FORMED


Quality Manager / Jefe de Calidad:
ING. WALDO GALLEGOS GALVAN

The Products described herein were produced in accordance with the above referenced specification and are identified with the "R" which is permanently marked on each fitting./ The values of hardness for fittings NPS 2 1/2" and smaller ones obtain from the conversion of hardness Rockwell B to hardness Brinell HBW by means of table WILSON DESK CHART 60. Los valores de dureza para conexiones de NPS de 2 1/2" y menores, se obtienen de la conversión de dureza Rockwell B a dureza Brinell HBW mediante la tabla WILSON DESK CHART 60.