



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

Tubos de Acero de México, S.A.
Carr. Mty-Laredo Km 24.2
Apartado Postal 43
(65550) C. de Flores, N.L. Méx.
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Vendido a:	PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No:	4747-4783-	Lista de Empaque:	1 0615	Fecha/Date:	4 de Julio de 2008
Sold to:		Customers Order No:		Packing List:		Factura/Invoice:	Bocas / Ends
Dimensiones y tolerancias / Dimension and tolerances						Biselado / Bevelled ends	

ART. ITEM	COLADA HEAT CODE	CANTIDAD QUANTITY	DESCRIPCION / DESCRIPTION	PRUEBAS MECANICAS / MECHANICAL TEST			PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C						
				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	S25836	15	CODO 6 X 90° R.L. CED-XS	289	479	38	140						
2	S25835	85	CODO 6 X 90° R.L. CED-XS	244	451	32	122						
3	S29142	11	CODO 2 X 45° CED-XS	317	491	31	120						
4	S29143	19	CODO 2 X 45° CED-XS	336	504	30	101						
5	T26553	3	TEE RED. 10 X 6 CED-80	292	459	46	113						
6	S42716	15	CODO 2 1/2 X 90° R.C. CED-XS	298	469	35	100						
7	CKXS	110	TEE RED. 2 X 1 CED-STD	353	469	42	134						

PROCESSO	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	ANALISIS QUIMICO / CHEMICAL ANALYSIS											
			%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	S25836	25836	0.320	0.180	0.750	0.009	0.002	0.290	0.030	0.034	0.010	0.020	0.001	0.001
HF	S25835	25835	0.320	0.180	0.750	0.009	0.001	0.290	0.030	0.035	0.010	0.025	0.001	0.001
HF	S29142	29142	0.340	0.190	0.770	0.010	0.001	0.280	0.040	0.034	0.030	0.034	0.001	0.000
HF	S29143	29143	0.350	0.200	0.780	0.009	0.002	0.280	0.040	0.036	0.020	0.024	0.001	0.000
HF	T26553	26553	0.315	0.130	0.680	0.010	0.002	0.290	0.050	0.050	0.026	0.040	0.000	0.000
HF	S42716	42716	0.303	0.170	0.720	0.009	0.001	0.300	0.030	0.032	0.020	0.016	0.001	0.000
HF	CKXS	44347	0.298	0.170	0.640	0.013	0.002	0.240	0.030	0.001	0.030	0.130	0.001	0.000

Certificamos que los resultados de los Analisis Quimicos y Pruebas Mecanicas son verdaderos o una copia fiel de los certificados enviados por el Fabricante y/o el proveedor de Materia Prima (Tuberia Sin Costura) conforme ASTM A106 Grado B con N°. 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) cents conform to ASTM A106 Grade B N°.

414268 412333 443293 443293 06006487 306020 41650

Este material cumple con los requerimientos especificados en la orden.
The material of this certificate heat number mentioned above is in compliance with the requirements specified in the order.

Notes:
Formado en caliente a 620°C-800°C, enfriado al aire.
Hot formed fittings in a range from 620°C to 800°C, cooled in still air.

Formado en frío normalizado a 940°C max.
Cold formed normalized at 940°C max.

Timeo de permanencia 10'.
Holding time 10'.

Inspección Dimensional: Satisfactoria.
Visual dimensional check: Satisfactory

HF: FORMADO EN CALIENTE/HOT FORMED
CF: FORMADO EN FRIOCALD 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.

CC-008