

**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
(55550) C. de Flores, N.L. Mex.
(52) 81 8305 9600 tel
(52) 81 8305 9620 fax

Vendido a:	PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No:	4216 - 4215 -	Fecha:	25 de Febrero de 2008
Sold to:		Customers Order No:		Factura/Invoice:	Bocas / Ends
Especificaciones y Grados / Standard or Specification and Steel Grade	Seamless Fittings according to ASTM A 234 "W" WPB-97 A234 "W" WPB-05a, NACE MR 01.75-2003	Dimensiones y tolerancias / Dimension and tolerances	ASME B 16.9 - 2003 and ASME B 16.28 - 1994	Lista de Empaque:	10229
Conform to ASME II Ed. 2001 ASME SA-234 "W" Grade WPB.				Packing List:	

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
12	T35794	12	CODO 14 X 90° R. I. CED-40	347	502	33	87				
13	T33435	4	TEE RED. 8 X 4 CED-STD	336	490	35	91				
14	T36927	11	TEE RED. 8 X 4 CED-STD	306	487	40	96				
15	T27073	10	CODO 10 X 45° CED-80	290	469	46	86				
16	T35903	12	CODO 10 X 45° CED-80	296	480	43	89				
17	T34881	8	CODO 10 X 45° CED-80	290	476	42	87				
18	T27384	4	TEE RED. 10 X 6 CED-XS	319	498	44	97				
19	T35324	4	TEE RED. 12 X 6 CED-STD	383	478	35	99				

PROCESO PROCESS	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	T35794	35794	0.330	0.190	0.700	0.013	0.001	0.270	0.040	0.080	0.023	0.040	0.000	0.000
HF	T33435	33435	0.310	0.180	0.680	0.010	0.001	0.270	0.040	0.058	0.031	0.030	0.000	
HF	T36927	36927	0.300	0.170	0.670	0.010	0.001	0.270	0.050	0.056	0.034	0.030	0.000	
HF	T27073	27073	0.320	0.180	0.700	0.007	0.003	0.280	0.060	0.074	0.026	0.040	0.000	
HF	T35903	35903	0.320	0.180	0.710	0.010	0.001	0.280	0.040	0.052	0.028	0.030	0.000	
HF	T34881	34881	0.320	0.180	0.670	0.009	0.003	0.270	0.060	0.090	0.046	0.040	0.000	
HF	T27384	27384	0.330	0.180	0.800	0.009	0.002	0.290	0.050	0.063	0.014	0.030	0.000	
HF	T35324	35324	0.320	0.180	0.690	0.010	0.003	0.280	0.050	0.077	0.027	0.050	0.000	

Notes:
Formado en caliente a 620°C-980°C, enfriado al aire; Formado en frío normalizado a 940°C max. Tiempo de permanencia 10'.
Inspección Dimensional: Satisfactoria.
Visual dimensional check: Satisfactory

Notes:
Hot formed fittings in a range from 620°C to 980°C, cooled in still air. Cold formed normalized at 940°C max. Holding time 10'.
Visual dimensional check: Satisfactory

CF: FORMADO EN FRIOCALDO FORMED

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 A 106 Grado B con N°
Me 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) con conform to ASTM A 106 Grade B N°
7040902 7049534 8000516 7034086 7041815 7034086 6008122 7050521

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.

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.

Jefe de Calidad:
Quality Manager:

ING. WALTER GALLEGOS GALVAN

CC-008