

**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.
(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.:	5674 - 5624 -	Lista de Empaque:	11198	Fecha/Date:	22 de Enero de 2009
Sold to:		Customers Order No.:		Packing List:			
Especificaciones y Grados / Standard or Specification and Steel Grade		Dimensiones y tolerancias / Dimension and tolerances		Factura/Invoice:	Bocas / Ends Biselado / Bevelled ends		
Seamless Fittings according to ASTM A 234 "W" WPB-07, NACE MR 01:75-2003		ASME B 16.9 - 2007 and ASME B 16.28 - 1994					
Conform to ASME II Ed. 2001 ASME SA-234"WM", Grade WPB, NACE MR0103-2003							

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	T41827	15	RED. CONC. 8 X 4 CED-STD	240	434	35	111					
2	T41032	5	RED. CONC. 8 X 4 CED-STD	418	591	31	106					
3	T41827	40	RED. CONC. 8 X 6 CED-STD	240	434	35	111					
4	T42339	18	CODO 12 X 90° R.T. CED-40	323	482	33	109					

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
CF	T41827	41827	0.310	0.170	0.660	0.011	0.001	0.280	0.060	0.064	0.031	0.040	0.000	0.000
CF	T41032	41032	0.310	0.180	0.670	0.007	0.002	0.270	0.040	0.065	0.009	0.030	0.000	0.000
CF	T41827	41827	0.310	0.170	0.660	0.011	0.001	0.280	0.060	0.064	0.031	0.040	0.000	0.000
HF	T42339	42339	0.300	0.170	0.660	0.010	0.002	0.280	0.050	0.068	0.009	0.030	0.000	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) certs conform to ASTM A106 Grade B N°: 8063630 8043827 8063630 8063615

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.

Notas: Formado en caliente a 620°C-980°C, enfriado al aire, Formado en frio 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'. Inspeccion Dimensional: Satisfactoria. Visual dimensional check: Satisfactory

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CF: FORMADO EN CALIENTE/HOT FORMED
HF: FORMADO EN FRIO/COLD FORMED

Quality Manager
[Signature]
ING. WALDO GALLEGOS GALVAN

CC-008