

**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
Aparado 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:	4136 -	Lista de Empaque:	10177	Fecha/Date:	7 de Febrero de 2008
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	
Seamless Fittings according to ASTM A 234 "W" WPB-97, A234 "W" WPB-08a, NACE MR 01.76-2003		ASME B 16.9 - 2003 and ASME B 16.28 - 1994		Biselado / Bevelled ends			
Conform to ASME II Ed. 2001 ASME SA-234 "W", Grade WPB.							

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	EP5	20	TAPON 6 CED-XS	386	562	36	159						
2	HE5	20	TAPON 14 CED-XS	305	458	38	143						
3	HJ5	20	TAPON 16 CED-XS	44363	66618	38	143						

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	EP5	EA021TD	0.415	0.210	1.060	0.009	0.006	0.200	0.050	0.160	0.010	0.060	0.010	0.001
HF	HE5	0	0.299	0.170	0.770	0.009	0.008	0.156	0.000	0.000	0.000	0.000	0.001	0.001
HF	HJ5	280173	0.299	0.170	0.770	0.009	0.008	0.156	0.000	0.000	0.000	0.000	0.001	0.001

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 (Tubería Sin Costura) conforme ASTM A 106 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°.

0 43513 0

Notas: **Formado en caliente a 620°C-800°C, enfriado al aire; Formado en frío normalizado a 940°C max.**

Hot formed fittings in a range from 620°C to 800°C, cooled in still air. Cold formed normalized at 940°C max.

Tempo 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

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. JOSE MARTINEZ MACIAS

CC-008