

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: **3758 -** Fecha/Date: **16 de Noviembre de 2007**
 Sold to: **PLESA ANAHUAC Y CIA. S.A. DE C.V.** Customers Order No: **3758 -** Packing List: **9905**

Especificaciones y Grados / Standard or Specification and Steel Grade Dimensiones y tolerancias / Dimension and tolerances
 Seamless Fittings according to ASTM A 234" M" WPB-97, A234" M" WPB-05a, NACE MR 01.75-2003
 Conform to ASME II Ed. 2001 ASME SA-234" M", Grade WPB. **ASME B 16.9 - 2003 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	PROMEDIO AVERAGE Joules
12	T22409	30	CODO 5 X 45° CED-XS	304	452	44	116	1	3
13	T33396	10	TEE 5 CED-XS	303	473	38	90	2	3

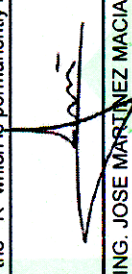
ANÁLISIS QUÍMICO / CHEMICAL ANALYSIS														
PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T22409	22409	0.300	0.170	0.670	0.007	0.000	0.270	0.040	0.054	0.017	0.030	0.000	0.000
HF	T33396	33396	0.340	0.180	0.790	0.007	0.002	0.280	0.060	0.048	0.033	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°: 5013693 7014191

"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. JOSE MARTINEZ MACIAS CC-008

Notes:
 Formado en caliente a 620°C-980°C, enfriado al aire; Formado en frío normalizado a 940°C max.
 Holding time 10'.
 Inspección Dimensional: Satisfactoria.
 Visual dimensional check: Satisfactory
 HF: FORMADO EN CALIENTE/HOT FORMED CF: FORMADO EN FRIO/COLD FORMED