

**CERTIFICADO DE CALIDAD
INSPECTION CERTIFICATE**

(DIN EN 10204:2004E - ISO 10474 3.1.B)

Tubos de Acero de México, S.A.
Carr. My-Laredo Km 24.2
Apartado Postal 43
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(52) 81 8305 9620 fax

Vendido a:	PIESA ANAHUAC Y CIA. S. A. DE C. V.	Pedido del Cliente No:	1883 - 1917 -	Lista de Empaque:	85 28	Fecha/Date:	26 de Septiembre de 2006
Sold to:		Customers Order No:		Packing List:			
Especificaciones y Grados / Standard or Specification and Steel Grade	ASME B 16.9 - 2003 and ASME B 16.28 - 1994						
Seamless Fittings according to ASTM A 234-97, A 234-05a, NACE MR 01-75-2003							
Conform to ASME II Ed. 2001 ASME SA-234, 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. RUPATURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules	
23	S22280	20	CODO 2 1/2 X 90° R. C. CED-STD	308	490	38	136						
24	QHS	5	TEE RED. 4 X 2 CED-XS	313	469	48	156						
25	T23622	10	TEE 5 CED-STD	302	473	36	103						

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
HF	S22280	22280	0.328	0.190	0.730	0.009	0.001	0.270	0.040	0.040	0.020	0.020	0.001	0.001
HF	QHS	202282	0.300	0.170	0.640	0.011	0.001	0.250	0.060	0.100	0.010	0.040	0.001	0.001
HF	T23622	23622	0.300	0.170	0.670	0.009	0.004	0.300	0.040	0.064	0.044	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°.

152464 42376 5021216

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:

CC-008

Notas:
Formado en caliente a 620°C-890°C, enfriado al aire. Formado en frío normalizado a 940°C max. Tiempo de permanencia 10'.
Inspección Dimensional Satisfactoria.
HF: FORMADO EN CALIENTE/HOT FORMED

Notes:
Hot formed fittings in a range from 620°C to 990°C, cooled in still air. Cold formed normalized at 940°C max. Holding time 10'.
Visual dimensional check. Satisfactory
CF: FORMADO EN FRIO/COLD FORMED