

**CERTIFICADO DE CALIDAD  
INSPECTION CERTIFICATE**

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

Vendido a: PLESA ANAHUAC Y CIA. S.A. DE C.V.  
Sold to:

Especificaciones y Grados / Standard or Specification and Steel Grade  
Seamless Fittings according to ASTM A 234" M" WPB-37, A234" M" WPB-06a, NACE MR 01.75-2003  
Conform to ASME II Ed. 2001 ASME SA-234" M", Grade WPB.

Pedido del Cliente No: 3773 - 3780 -  
Customers Order No:

Dimensiones y tolerancias / Dimension and tolerances

ASME B 16.9 - 2003 and ASME B 16.28 - 1994

Lista de Empaque:  
Packing List:

Factura/Invoice:  
Bocas / Ends  
Biselado / Bevelled ends

Fecha/Date:  
21 de Noviembre de 2007

Numero:  
Number:  
1 9238

Pagina/Page:  
1 DE 1

Tubbs 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

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	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T34523	10	CODO 16 X 90° R.I. CED-STD	325	492	35	94					
2	T35601	5	CODO 12 X 90° R.I. CED-40	318	491	46	88					
3	T36223	4	CODO 12 X 90° R.I. CED-40	308	486	46	87					
4	T36472	10	TEE RED. 12 X 8 CED-STD	319	489	41	120					
5	T33435	5	CODO 12 X 45° CED-40	330	496	43	86					
6	T35601	10	TEE RED. 8 X 4 CED-STD	319	489	34	90					

ANALISIS QUIMICO / CHEMICAL ANALYSIS														
PROCESO PROCESS	COLADA HEAT CODE	COLADA M.P./MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T34523	34523	0.330	0.180	0.690	0.011	0.001	0.300	0.070	0.086	0.041	0.040	0.000	0.000
HF	T35601	35601	0.310	0.170	0.680	0.010	0.001	0.290	0.060	0.072	0.034	0.030	0.000	0.000
HF*	T36223	36223	0.310	0.170	0.680	0.012	0.001	0.270	0.060	0.080	0.020	0.030	0.000	0.000
HF	T36472	36472	0.330	0.180	0.750	0.013	0.003	0.290	0.060	0.067	0.028	0.030	0.000	0.000
HF	T33435	33435	0.320	0.180	0.680	0.010	0.002	0.260	0.050	0.058	0.034	0.030	0.000	0.000
HF	T35601	35601	0.320	0.180	0.680	0.011	0.001	0.300	0.060	0.070	0.034	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 (Tubería 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°: 7037405 7048512 7048473 7051212 7035166 7041814

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.

Notes:  
Formado en caliente a 620°C-900°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

Hot formed fittings in a range from 620°C to 900°C, cooled in still air.  
Cold formed normalized at 940°C max.  
Holding time 10'.  
Visual dimensional check: Satisfactory  
CF: FORMADO EN FRIOCOLD FORMED

Jefe de Calidad:  
Quality Manager:

ING. JOSE MARTINEZ MACIAS

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.

CC-008