

CERTIFICADO DE CALIDAD INSPECTION CERTIFICATE

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

Vendido a: Sold to:	PLESA ANAHUAC Y CIA. S. A. DE C. V.	Pedido del Cliente No: Customers Order No:	3825	Lista de Empaque: Packing List:	9977	Fecha/Date:	6 de Diciembre de 2007
Especificaciones y Grados / Standard or Specification and Steel Grade	Seamless Fittings according to ASTM A 234 "N" WPB-97, A234 "M" WPB-06a, NACE MR 01.76-2003	Dimensiones y tolerancias / Dimension and tolerances	Factura/Invoice: Bocas / Ends Biselado / Bevelled ends				
Conform to ASME II Ed. 2001 ASME SA-234 "M", Grade WPB.	ASME B 16.9 - 2003 and ASME B 16.28 - 1994						

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
12	T36428	20	CODO 8 X 45° CED-STD	304	477	39	89					
13	T36926	18	CODO 12 X 90° R.I. CED-STD	316	478	43	92					
14	T36428	60	CODO 8 X 90° R.I. CED-STD	304	477	39	89					
15	S22585	40	CODO 2 1/2 X 45° CED-STD	331	485	30	125					
16	T34523	9	CODO 16 X 90° R.I. CED-STD	325	492	35	94					
17	T36427	100	RED. CONC. 6 X 4 CED-STD	315	485	40	90					
18	T29613	16	TEE RED. 8 X 4 CED-STD	317	497	34	89					
19	S26169	40	CODO 2 1/2 X 90° R.I. CED-XS	264	473	37	126					
20	S45664	20	CODO 2 X 45° CED-XS	309	496	34	130					
21	T11782	9	TEE RED. 8 X 3 STD	321	486	42	140					
22	T97620	7	TEE RED. 8 X 3 STD	313	481	33	143					

ANALISIS QUIMICO / CHEMICAL ANALYSIS

PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T36428	36428	0.300	0.170	0.690	0.010	0.280	0.040	0.045	0.010	0.030	0.000	0.000
HF	T36926	36926	0.310	0.170	0.680	0.010	0.280	0.050	0.067	0.037	0.030	0.000	0.000
HF	T36428	36428	0.300	0.170	0.690	0.010	0.280	0.040	0.045	0.010	0.030	0.000	0.000
HF	S22585	22585	0.310	0.170	0.760	0.012	0.270	0.040	0.026	0.010	0.022	0.001	0.002
HF	T34523	34523	0.330	0.180	0.690	0.011	0.300	0.070	0.086	0.041	0.040	0.000	0.000
CF	T36427	36427	0.300	0.170	0.680	0.010	0.290	0.040	0.075	0.027	0.030	0.000	0.000
HF	T29613	29613	0.310	0.160	0.730	0.012	0.260	0.070	0.089	0.031	0.050	0.000	0.000
HF	S26168	26168	0.325	0.180	0.810	0.008	0.290	0.020	0.038	0.010	0.019	0.001	0.001
HF	S45664	45664	0.340	0.200	0.770	0.010	0.300	0.030	0.022	0.020	0.017	0.001	0.002
HF	T11782	11782	0.295	0.160	0.670	0.010	0.260	0.050	0.094	0.035	0.004	0.000	0.000
HF	T97620	97620	0.353	0.190	0.850	0.008	0.300	0.050	0.072	0.021	0.040	0.000	0.000

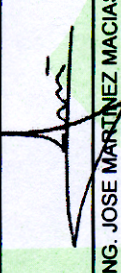
Notas:
Formado en caliente a 620°C-980°C, enfriado al aire.
Formed in air normalized at 940°C max.
Time of permanence 10'.
Inspección Dimensional: Satisfactoria.
HF: FORMADO EN CALIENTE/HOT FORMED
CF: FORMADO EN FRIJO/COLD FORMED

Hot formed fittings in a range from 620°C to 980°C, cooled in still air.
Cold formed normalized at 940°C max.
Holding time 10'.
Visual dimensional check: Satisfactory

Centificamos 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°. 7050464 7052136 7050464 3862255 7037400 7048259 6042959 165677 321679 03009107 02013589

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