

**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.** Pedido del Cliente No: **2327**
 Sold to: **PLESA ANAHUAC Y CIA. S.A. DE C.V.** Customers Order No: **2327**
 Especificaciones y Grados / Standard or Specification and Steel Grade **Dimensiones y tolerancias / Dimension and tolerances**
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 WPP

Numero: **1.7169** Pagina/Page: **1 DE 1**
 Lista de Empaque: **8774** Fecha/Date: **4 de Enero de 2007**
 Packing List: **8774**
 Factura/Invoice: **Bocas / Ends**
 Biselado / Bevelled ends

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 HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules	
12	T99155	10	CODO 12 X 90° R.I. CED-STD	325	492	44	124						
13	T28692	1	CODO 12 X 45° CED-STD	330	495	46	125						
14	T29613	8	CODO 12 X 45° CED-STD	380	511	34	92						
15	T31482	80	CODO 10 X 90° R.I. CED-STD	321	472	36	84						
16	T31594	23	CODO 8 X 90° R.I. CED-STD	309	479	43	124						
17	T31593	37	CODO 8 X 90° R.I. CED-STD	345	477	36	86						
18	T27497	20	CODO 10 X 90° R.I. CED-STD	288	448	37	121						
19	T31301	4	CODO 16 X 90° R.I. CED-STD	301	475	37	86						
20	T31344	5	CODO 16 X 90° R.I. CED-STD	319	488	33	85						
21	T26889	10	CODO 8 X 90° R.C. CED-STD	296	468	39	117						
22	T30550	5	CODO 8 X 90° R.C. CED-STD	337	477	39	141						

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	T99155	99155	0.310	0.170	0.700	0.010	0.002	0.300	0.050	0.059	0.034	0.040	0.000	0.000
HF	T28692	28692	0.310	0.170	0.690	0.011	0.001	0.290	0.070	0.080	0.018	0.030	0.000	0.000
HF	T29613	29613	0.330	0.190	0.710	0.008	0.003	0.290	0.050	0.072	0.032	0.040	0.000	0.000
HF	T31482	31482	0.300	0.170	0.690	0.007	0.001	0.290	0.040	0.057	0.021	0.030	0.000	0.000
HF	T31594	31594	0.310	0.170	0.670	0.009	0.002	0.280	0.070	0.067	0.026	0.040	0.000	0.000
HF	T31593	31593	0.320	0.180	0.660	0.007	0.002	0.270	0.070	0.068	0.027	0.040	0.000	0.000
HF	T27497	27497	0.310	0.180	0.660	0.012	0.002	0.300	0.050	0.073	0.017	0.030	0.000	0.000
HF	T31301	31301	0.320	0.180	0.690	0.008	0.001	0.280	0.070	0.070	0.037	0.040	0.000	0.000
HF	T31344	31344	0.330	0.180	0.690	0.008	0.002	0.270	0.070	0.078	0.055	0.040	0.000	0.000
HF	T26889	26889	0.310	0.170	0.690	0.010	0.002	0.280	0.060	0.078	0.043	0.050	0.000	0.000
HF	T30550	30550	0.320	0.180	0.660	0.007	0.001	0.260	0.060	0.078	0.045	0.040	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°: 6043196 6013900 6038243 6042852 6044001 6043723 6008251 6043766 6043756 6005210 6033772

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.

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-980°C, enfriado al aire.
 Hot formed fittings in a range from 620°C to 980°C, cooled in still air.
 Time of permeability 10'.
 Cold formed normalized at 940°C max.
 Holding time 10'.
 Visual dimensional check. Satisfactory.
 Inspección Dimensional. Satisfactoria.
 Visual dimensional check. Satisfactory.
 Inspección Dimensional. Satisfactoria.
 HF FORMADO EN CALIENTE/HOT FORMED
 CP FORMADO EN FRIO/COLD FORMED

Jefe de Calidad:
 Quality Manager:
 ING. JOSE MARTINEZ MACIAS
 CC-008