

**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: 1889 - 1917  
 Sold to: **PLESA ANAHUAC Y CIA. S.A. DE C.V.** Customers Order No: Dimensiones y tolerancias / Dimension and tolerances  
 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 0175-2003  
 Conform to ASME II Ed. 2001 ASME SA-234, Grade WPB

Numero: 16715  
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Lista de Empaque: 8528 Fecha/Date: 26 de Septiembre de 2006  
 Packing List: Factural/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	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	S37672	228	CODO 4 X 90° R.I. CED-STD	340	497	35	123				
2	T28738	270	CODO 4 X 90° R.I. CED-STD	379	507	44	121				
3	S79195	36	CODO 4 X 90° R.I. CED-STD	310	487	30	143				
4	T21445	22	CODO 4 X 90° R.I. CED-STD	342	482	26	110				
5	T28660	9	CODO 16 X 45° CED-STD	334	496	44	117				
6	S45279	105	CODO 3 X 90° R.I. CED-XS	317	488	33	105				
7	S43741	80	CODO 4 X 45° CED-STD	337	520	35	116				
8	S33992	50	CODO 2 X 90° R.I. CED-XS	321	468	35	116				
9	S45186	27	CODO 2 1/2 X 90° R.I. CED-STD	314	476	35	132				
10	T29077	18	CODO 12 X 90° R.I. CED-STD	324	483	43	80				
11	T28420	18	CODO 12 X 90° R.I. CED-STD	368	512	31	121				

**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	S37672	37672	0.307	0.170	0.750	0.011	0.001	0.290	0.030	0.004	0.020	0.020	0.001	0.001
HF	T28738	28738	0.300	0.170	0.670	0.009	0.002	0.300	0.040	0.077	0.022	0.030	0.000	0.000
HF	S79195	79195	0.320	0.190	0.710	0.009	0.003	0.280	0.030	0.033	0.010	0.019	0.001	0.001
HF	T21445	21445	0.320	0.170	0.780	0.008	0.002	0.300	0.050	0.083	0.024	0.040	0.000	0.001
HF	T28660	28660	0.300	0.170	0.650	0.012	0.002	0.280	0.060	0.079	0.031	0.030	0.000	0.000
HF	S45279	45279	0.323	0.180	0.730	0.010	0.001	0.300	0.050	0.055	0.020	0.048	0.001	0.000
HF	S43741	43741	0.337	0.190	0.760	0.015	0.002	0.300	0.040	0.060	0.030	0.035	0.002	0.001
HF	S33992	33992	0.331	0.130	1.110	0.012	0.001	0.270	0.030	0.037	0.030	0.016	0.001	0.001
HF	S45186	45186	0.330	0.190	0.740	0.013	0.002	0.280	0.040	0.042	0.020	0.032	0.001	0.001
HF	T29077	29077	0.310	0.170	0.680	0.008	0.002	0.280	0.050	0.075	0.039	0.040	0.000	0.000
HF	T28420	28420	0.320	0.180	0.680	0.009	0.001	0.290	0.060	0.090	0.037	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 (Tubería Sin Costura) conforme ASTM A106 Grado B con N° 255068 6014464 321654 5006318 6012621 31973 304324 218898 316292 6024921 6013907

Este material cumple con los requerimientos especificados en la orden.  
 This material of this certificate that 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 MASTRINEZ MACIAS

CC-008

Notas:  
 Formado en caliente a 620°C-800°C, enfriado al aire.  
 Formed in hot normalized at 840°C max.  
 Tiempo de permeancia 10'.  
 Inspeccion Dimensional Satisfactoria.  
 Dimensional Inspection Satisfactory.  
 CF: FORMADO EN CALIENTE/HOT FORMED  
 CF: FORMADO EN FRIOCALDO FORMED