

**CERTIFICADO DE CALIDAD**  
**INSPECTION CERTIFICATE**  
(DIN EN 10204:2004E - ISO 10474 3.1.B)

Vendido a: Sold to: Especificaciones y Grados / Standard or Specification and Steel Grade 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	PLESA ANAHUAC Y CIA. S. A. DE C. Y. Pedido del Cliente No: Customers Order No: Dimensiones y tolerancias / Dimension and tolerances ASME B 16.9 - 2003 and ASME B 16.28 - 1994	1883 - 1917 Lista de Empaque: Packing List:	Fecha/Date: 5 de Octubre de 2006
Numero: Number: 16770		Pagina/Page: 1 DE 1	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. RUPURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules		
1	T29437	10	CODO 8 X 45° CED-XS	302	479	42	116							
2	T28614	60	CODO 6 X 90° R. I. CED-STD.	333	482	44	126							
3	T28070	140	CODO 6 X 90° R. I. CED-STD.	281	459	29	117							
4	T29390	76	TEE 4 CED-STD	282	474	33	125							
5	T21587	34	TEE 4 CED-STD	413	504	35	109							
6	T29388	30	CODO 6 X 45° CED-STD	320	483	42	105							
7	T27436	6	TEE 8 CED-XS	333	472	33	116							
8	T27497	3	TEE 6 CED-XS	323	494	46	113							
9	T27073	1	TEE 6 CED-XS	302	478	48	124							
10	T29031	20	RED. CONC. 8 X 4 CED-STD	318	477	46	120							
11	T27073	30	RED. CONC. 8 X 6 CED-STD	330	463	35	108							

**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	T29437	29437	0.300	0.170	0.670	0.009	0.001	0.280	0.030	0.073	0.028	0.030	0.000	0.000
HF	T28614	28614	0.310	0.170	0.680	0.009	0.002	0.290	0.050	0.098	0.029	0.040	0.000	0.000
HF	T28070	28070	0.310	0.170	0.670	0.009	0.003	0.300	0.060	0.084	0.042	0.040	0.000	0.000
HF	T29390	29390	0.310	0.170	0.700	0.007	0.002	0.290	0.030	0.055	0.034	0.030	0.000	0.000
HF	T21587	21587	0.310	0.170	0.670	0.011	0.002	0.300	0.060	0.071	0.038	0.030	0.000	0.000
HF	T29388	29388	0.290	0.160	0.670	0.010	0.001	0.270	0.040	0.059	0.026	0.030	0.000	0.000
HF	T27436	27436	0.300	0.160	0.670	0.010	0.001	0.270	0.070	0.078	0.037	0.030	0.000	0.000
HF	T27497	27497	0.300	0.170	0.660	0.011	0.002	0.300	0.050	0.070	0.017	0.030	0.000	0.000
HF	T27073	27073	0.310	0.170	0.680	0.007	0.003	0.280	0.060	0.078	0.026	0.040	0.000	0.000
CF	T29031	29031	0.310	0.170	0.670	0.009	0.002	0.280	0.050	0.076	0.041	0.040	0.000	0.000
CF	T27073	27073	0.310	0.170	0.680	0.007	0.003	0.280	0.050	0.075	0.026	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 (Tuberías 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°.

6023349 6028030 6026645 6024604 5016058 6023117  
6015521 6008082 6007138 6026943 6003965

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.

Notes:  
Formado en caliente a 620°C-980°C, enfriado al aire.  
Formed in hot normalized at 940°C max.  
Holding time 10'.  
Visual dimensional check. Satisfactory

Notes:  
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

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