

**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: PLESA ANAHUAC Y CIA. S. A. DE C. V.  
 Especificaciones y Grados / Standard or Specification and Steel Grade  
 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 WPB  
 ASME B 16.9 - 2003 and ASME B 16.28 - 1994

Pedido del Cliente No.: 2390 - 2327  
 Customers Order No.:  
 Dimensiones y tolerancias / Dimension and tolerances

Lista de Empaque: 8774 Fecha/Date: 4 de Enero de 2007  
 Packing List: Bocal / 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. % <sup>2"</sup>	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T29389	8	CODO 6 X 45° CED-XS	297	473	42	126					
2	T28070	22	CODO 6 X 45° CED-XS	269	431	39	107					
3	T31301	6	CODO 16 X 45° CED-STD	301	475	37	86					
4	T29862	165	CODO 6 X 90° R.I. CED-STD	333	492	37	86					
5	T29863	35	CODO 6 X 90° R.I. CED-STD	342	476	36	99					
6	T27912	9	TEE 12 CED-STD	342	478	49	122					
7	T29437	24	CODO 8 X 90° R.I. CED-XS	298	471	36	116					
8	T29863	40	CODO 6 X 90° R.I. CED-XS	306	468	40	86					
9	T31593	40	CODO 8 X 45° CED-STD	345	477	36	86					
10	T21932	21	CODO 12 X 90° R.I. CED-STD	314	477	42	104					
11	T29890	5	CODO 12 X 90° R.I. CED-STD	338	515	42	122					

**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	T29389		0.300	0.690	0.007	0.002	0.280	0.040	0.054	0.032	0.030	0.000	0.000
HF	T28070		0.310	0.660	0.009	0.003	0.290	0.060	0.082	0.042	0.040	0.000	0.000
HF	T31301		0.320	0.690	0.008	0.001	0.280	0.070	0.037	0.040	0.000	0.000	0.000
HF	T29862		0.310	0.670	0.007	0.002	0.280	0.070	0.073	0.034	0.040	0.000	0.000
HF	T29863		0.310	0.670	0.007	0.002	0.280	0.070	0.073	0.034	0.040	0.000	0.000
HF	T27912		0.310	0.690	0.009	0.003	0.290	0.060	0.019	0.030	0.000	0.000	0.000
HF	T29437		0.300	0.670	0.009	0.001	0.280	0.030	0.028	0.028	0.030	0.000	0.000
HF	T29863		0.300	0.660	0.006	0.001	0.270	0.040	0.070	0.024	0.030	0.000	0.000
HF	T31593		0.320	0.660	0.007	0.002	0.270	0.070	0.068	0.027	0.040	0.000	0.000
HF	T21932		0.320	0.660	0.009	0.001	0.270	0.050	0.077	0.034	0.080	0.000	0.000
HF	T29890		0.320	0.740	0.006	0.001	0.280	0.040	0.061	0.022	0.030	0.000	0.000

El producto descrito herein fue producido en conformidad con la especificación referida y se identificó con el "R" que es permanentemente marcado en cada fitting.  
 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.

Formado en caliente a 620°C-890°C, enfriado al aire.  
 Formed in hot normalized a 840°C max.  
 Tiempo de permanencia 10'.  
 Holding time 10'.

Inspección Dimensional Satisfactoria.  
 Visual dimensional check Satisfactory.  
 HF FORMADO EN CALIENTE/HOT FORMED  
 CF FORMADO EN FRIJO/COLD FORMED

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