

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

Vendido a:	PIESA ANAHUAC	Pedido del Cliente No.:	493	Lista de Empaque:	7841	Fecha/Date:	8 de Noviembre de 2005
Sold to:		Customers Order No.:		Packing List:		Factural/Invoice:	Bocas / Ends
Specificaciones y Grados / Standard or Specification and Steel Grade	ASME B 16.9 and ASME B 16.28 edition 2001			Biselado / Bevelled ends			
Seamless Fittings according to ASTM A 234-97, A234-02 / ASME A53 234 WPB -							
NACE MR 01.75-2003 - Conform to ASME II Ed. 2001							

ART. ITEM	COLADA HEAT CODE	CANTIDA 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)	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules
1	T23622	32	ELLS 10 X 90 L.R. SCH-STD	302	473	1	1	1	
2	T24282	8	ELLS 10 X 90 L.R. SCH-STD	276	466	1	1	1	
3	S26167	40	ELLS 1 1/2 X 45 SCH-STD	341	487	1	1	1	
4	MCS	50	ELLS 1 X 45 SCH-STD	254	432	1	1	1	
5	T22093	1	ELLS 16 X 90 L.R. SCH-STD	345	508	1	1	1	
6	T22094	1	ELLS 16 X 90 L.R. SCH-STD	353	509	1	1	1	
7	T25112	7	ELLS 16 X 90 L.R. SCH-STD	345	494	1	1	1	
8	S33415	24	ELLS 2 1/2 X 45 SCH-STD	347	500	1	1	1	
9	S37672	228	ELLS 4 X 90 L.R. SCH-STD	340	497	1	1	1	
10	T24360	60	ELLS 8 X 90 L.R. SCH-STD	307	480	1	1	1	
11	S37674	15	CONC. RED. 4 X 2 SCH-STD	354	497	1	1	1	

**ANALISIS QUIMICO / CHEMICAL ANALYSIS**

PROCESO PROCESS	COLADA HEAT CODE	COLADA HEAT M.P.MOTHER PIPE	%C	%E	%Mn	%P	%S	%SI	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T23622	23622	0.294	0.160	0.670	0.007	0.003	0.280	0.040	0.061	0.043	0.030	0.000	0.000
HF	T24282	24282	0.295	0.160	0.670	0.007	0.001	0.280	0.050	0.067	0.035	0.030	0.000	0.000
HF	S26167	26167	0.315	0.180	0.730	0.008	0.002	0.270	0.020	0.070	0.010	0.030	0.001	0.001
HF	MCS	21646	0.257	0.150	0.540	0.008	0.001	0.209	0.039	0.057	0.019	0.028	0.001	0.000
HF	T22093	22093	0.366	0.190	0.850	0.010	0.001	0.270	0.070	0.073	0.065	0.030	0.000	0.000
HF	T22094	22094	0.355	0.180	0.850	0.011	0.001	0.260	0.070	0.073	0.064	0.030	0.000	0.000
HF	T25112	25112	0.333	0.190	0.690	0.009	0.001	0.290	0.070	0.074	0.034	0.030	0.000	0.000
HF	S33415	33415	0.339	0.180	0.830	0.014	0.001	0.300	0.050	0.065	0.020	0.033	0.001	0.001
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	T24360	24360	0.305	0.170	0.670	0.009	0.001	0.290	0.050	0.053	0.041	0.030	0.000	0.000
CF	S37674	37674	0.309	0.170	0.750	0.012	0.001	0.030	0.030	0.035	0.020	0.027	0.001	0.001

Notes: Formado en caliente a 780°C-840°C, enfriado al aire. Formed in hot normalized at 840°C max. Holding time 10'. Visual dimensional check: Satisfactory. CF FORMADO EN FRIO/COLD FORMED

Notes: Hot formed fittings in a range from 780°C to 840°C, cooled in still air. Cold formed normalized at 840°C max. Holding time 10'. Visual dimensional check: Satisfactory. CF FORMADO EN FRIO/COLD FORMED

Jefe de Aseguramiento de Calidad:  
 Quality Assurance Coordinator  
 ING. JOSE MARTINEZ MACIAS

CC-008