

**CERTIFICADO DE CALIDAD  
INSPECTION CERTIFICATE  
(DIN EN 10204 3.1-B - ISO 10474.3.1.B)**

Verdido a:	PIESA ANAHTUAC	Pedido del Cliente No:	1019 1052	Numero:	15656	Page/Number:	1 DE 1
Sold to:		Customers Order No:		Lista de Empaque:	8055	Fecha/Date:	27 de Febrero de 2006
Especificaciones y Grados / Standard or Specification and Steel Grade				Dimensiones y tolerancias / Dimension and tolerances			
Seamless Fittings according to ASTM A 234-97, A234-02 / ASME AISA 234 WPB -				ASME B 16.9 and ASME B 16.28 edition 2001			
MACE MR 01.75-2003 - Conform to ASME II Ed. 2001				Bocas / Ends Biselado / Bevelled ends			

ART ITEM	COLADA HEAT CODE	CANTIDA QUANTITY	DESCRIPCION / DESCRIPTION	PRUEBAS MECANICAS / MECHANICAL TEST		PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C							
				ESF. CEBDENIA YIELD STRENGTH (Mpa)	ESF. RUPATURA TENSILE STRENGTH (Mpa)	ELONG. %Z"	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules	
1	T19162	6	ELLS 10 X 45 SCH-XH	321	482	42	119						
2	T15280	1	ELLS 10 X 90 L R SCH-XH	313	481	40	126						
3	T21775	1	ELLS 10 X 90 L R SCH-XH	353	489	40	122						
4	T22033	7	ELLS 10 X 90 L R SCH-XH	330	466	37	170						
5	T25993	11	ELLS 10 X 90 L R SCH-XH	320	485	42	124						
6	T25669	6	ELLS 14 X 90 L R SCH-STD	336	494	47	109						
7	S37368	24	ELLS 2 X 45 SCH-STD	324	499	21	114						
8	S39564	100	ELLS 2 X 90 L R SCH-STD	455	585	36	133						
9	S31739	25	ELLS 4 X 90 L R SCH-XH	318	492	37	106						
10	S35969	13	ELLS 4 X 90 L R SCH-XH	329	476	39	137						
11	S60750	12	ELLS 4 X 90 L R SCH-XH	333	493	50	148						

**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	T19162	19162	0.314	0.180	0.660	0.009	0.003	0.280	0.050	0.063	0.040	0.030	0.000
HF	T15280	15280	0.305	0.170	0.670	0.010	0.003	0.270	0.040	0.092	0.030	0.050	0.000
HF	T21775	21775	0.301	0.170	0.660	0.009	0.003	0.300	0.050	0.069	0.024	0.030	0.000
HF	T22033	22033	0.313	0.170	0.700	0.009	0.002	0.270	0.060	0.061	0.040	0.030	0.000
HF	T25993	25993	0.314	0.180	0.670	0.006	0.002	0.280	0.050	0.071	0.026	0.030	0.000
HF	T25669	25669	0.312	0.170	0.680	0.008	0.001	0.270	0.060	0.073	0.044	0.040	0.000
HF	S37368	37368	0.325	0.180	0.750	0.011	0.003	0.300	0.030	0.025	0.050	0.028	0.001
HF	S39564	39564	0.319	0.180	0.740	0.011	0.003	0.320	0.040	0.030	0.020	0.020	0.002
HF	S31739	31739	0.333	0.190	0.750	0.014	0.002	0.280	0.030	0.055	0.020	0.064	0.001
HF	S35969	35969	0.323	0.190	0.720	0.009	0.001	0.290	0.030	0.025	0.020	0.014	0.001
HF	S60750	60750	0.321	0.170	0.760	0.011	0.003	0.280	0.050	0.070	0.030	0.042	0.002

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 conforme ASTM A106/GradoB 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 certis conform to ASTM A106 Grade B N°.

04028098 04003195 05008845  
05009104 06000051 05028329  
255052 266490 201063  
238315 207939

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: Formateo en caliente a 780°C-840°C, enfriado al aire. Formado en frío normalizado a 940°C max. Tiempo de permeancia 10'. Inspeccion Dimensional: Satisfactoria.

Notes: Hot formed fittings in a range from 780°C to 840°C, cooled in still air. Cold formed normalizer at 940°C max. Holding time 10'. Visual dimensionalcheck: Satisfactory.

Formado EN CALIENTE/HOT FORMED CF FORMADO EN FRIJO/COOLD FORMED

Jefe de Aseguramiento de Calidad:  
Quality Assurance Coordinator

ING. JOSE MARTINEZ MACIAS

CC-008