

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

Verificado a:	PLEESA ANAHUAC	Pedido del Cliente No.:	22 68	Lista de Empaque:	7594	Fecha/Date:	11 de Junio de 2005
Sold to:		Customers Order No.:		Packing List:		Factura/Invoice:	Bocas / Ends
Especificaciones y Grados / Standard or Specification and Steel Grade				Dimensiones y tolerancias / Dimension and tolerances			
Seamless Fittings according to ASTM A 234.87, A234.02 / ASME A5A 234 WPB -				ASME B 16.9 and ASME B 16.28 edition 2001			
NAEC MR 01.75 ed. 02 - Conform to ASME II Ed. 2001				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. CEJENCA YIELD STRENGTH (Mpa)	ESF. RUPATURA TENSILE STRENGTH (Mpa)	ELONG. %E ²	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	Joules	Joules	Joules	PROMEDIO AVERAGE Joules
1	T17649	50	CODO 3 X 45 STD	351	505	42	139	1				
2	T21933	9	CODO 12 X 45 STD	282	482	43	124	2				
3	S32536	10	CODO 3 X 45 XS	327	488	50	102	3				
4	S32202	30	CODO 2 1/2 X 45 STD	344	497	50	150					
5	S22281	20	CODO 2 1/2 X 90 RL XS	438	492	31	135					
6	T22409	13	CODO 8 X 90 RL HS	256	462	44	120					
7	TK06	2	CODO 8 X 90 RL XS	304	483	42	144					
8	S24693	100	CODO 2 X 90 RL XS	317	450	38	126					
9	S24350	100	CODO 2 X 90 RL XS	313	460	39	130					
10	S35969	50	CODO 4 X 90 RL XS	329	476	39	137					
11	S31740	10	CODO 4 X 45 XS	318	492	50	147					

PROCESO PROCESS	COLADA HEAT CODE	COLAD/HEAT M.P./MOTHER PIPE	ANALISIS QUIMICO / CHEMICAL ANALYSIS											
			%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T17649	17649	0.342	0.180	0.830	0.015	0.003	0.280	0.040	0.078	0.042	0.030	0.000	0.000
HF	T21933	21933	0.328	0.190	0.710	0.010	0.001	0.260	0.040	0.072	0.032	0.010	0.000	0.000
HF	S32536	32536	0.338	0.190	0.820	0.009	0.001	0.300	0.020	0.031	0.020	0.018	0.001	0.001
HF	S32202	32202	0.329	0.190	0.500	0.010	0.001	0.300	0.400	0.044	0.020	0.021	0.001	0.001
HF	S22281	22281	0.334	0.190	0.760	0.012	0.001	0.270	0.040	0.050	0.020	0.020	0.001	0.001
HF	T22409	22409	0.299	0.170	0.670	0.007	0.000	0.270	0.040	0.054	0.018	0.030	0.000	0.000
HF	TK06	17397	0.311	0.188	0.680	0.019	0.004	0.290	0.040	0.063	0.020	0.020	0.000	0.000
HF	S24693	24693	0.323	0.120	1.020	0.009	0.013	0.250	0.080	0.065	0.050	0.039	0.001	0.001
HF	S24350	24350	0.318	0.150	1.050	0.009	0.001	0.260	0.060	0.062	0.020	0.035	0.001	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	0.000
HF	S31740	31740	0.328	0.190	0.760	0.015	0.002	0.290	0.020	0.048	0.010	0.027	0.001	0.001

Certificamos que los resultados de los Analisis Quimicos y Pruebas Mecanicas son verdaderos o una copia fiel de los certificados enviados por el Fabricante u/o el proveedor de Material. Prima conforme ASTM A1065GradaB 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 certs conform to ASTM A106 Grade B N°:
 04016155 05008822 207922
 04019362 05010164 05010781
 207960 152470 05010781
 238315 201063 05010163

Este material cumple con los requerimientos especificados en la orden.
 The material of this certificate has number mentioned above is in compliance with the requirements specified in the order.

Notas:
 Formado en caliente a 780°C-840°C, enfriado al aire. Formado en frío normalizado a 840°C máx.
 Hot formed in air from 780°C to 840°C, cooled in air. Cold formed normalized at 840°C max.
 Tiempo de perforación 10' Molding time 10'
 Inspección Dimensional Satisfactoria. Visual dimensional check Satisfactory.
 Inspección Dimensional Satisfactoria. Visual dimensional check Satisfactory.
 CP: FORMADO EN FRIO/COLD FORMED

Jefe de Aseguramiento de Calidad:
Quality Assurance Coordinator

ING. JOSE MARTINEZ MAACIAS

CC-008