

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

Vendido a:	PIESA ANAHUAC	Pedido del Cliente No:	22, 68, 346	Lista de Empaque:	7701	Fecha/Date:	8 de Septiembre de 2005
Sold to:		Customers Order No:	Dimensiones y tolerancias / Dimension and tolerances	Packing List:		Factural/invoice:	Bocas / Ends
Especificaciones y Grados / Standard or Specification and Steel Grade	Seamless Fittings according to ASTM A 234-97, A234-02 / ASME AISA 234 WPB.						
NACE MR 01.75 ed. 02 - Conform to ASME II Ed. 2001	ASME B 16.9 and ASME B 16.28 edition 2001						

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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)	ELONG. %2"	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules
1	T21230	6	ELLS 12 X 45 SCH-STD	303	483	41	113				
2	T21682	24	ELLS 12 X 45 SCH-STD	325	488	42	120				
3	T17005	4	ELLS 16 X 45 SCH-STD	322	482	46	141				
4	T22093	3	ELLS 16 X 45 SCH-STD	345	508	42	122				
5	T22094	3	ELLS 16 X 45 SCH-STD	353	509	38	122				
6	T19005	4	ELLS 14 X 45 SCH-STD	327	490	42	112				

PROCESO PROCESS	COLADA HEAT CODE	COLADAMOTHER PIPE	ANALISIS QUIMICO / CHEMICAL ANALYSIS											
			%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T21230	21230	0.317	0.180	0.680	0.008	0.002	0.270	0.050	0.086	0.025	0.040	0.000	0.000
HF	T21682	21682	0.306	0.180	0.660	0.008	0.001	0.270	0.050	0.056	0.003	0.030	0.000	0.000
HF	T17005	17005	0.315	0.180	0.680	0.014	0.002	0.250	0.050	0.062	0.026	0.030	0.000	0.000
HF	T22093	22093	0.366	0.190	0.850	0.010	0.017	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	T19005	19005	0.316	0.180	0.700	0.009	0.002	0.290	0.030	0.067	0.031	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 conforme ASTM A106GradeB 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°
 05003969 05007805 04013922
 05009129 05009087 04023741

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:

Formado en caliente a 780°C-940°C, enfriado al aire.
 Formed in air normalized to 940°C max.
 Time de permanencia 10'

Inspeccion Dimensional Satisfactoria
 Visual dimension check Satisfactory

HF FORMADO EN CALIENTE/HOT FORMED

Notes:

Hot formed fittings in a range from 780°C to 940°C, cooled in still air.
 Cold formed normalized at 940°C max.
 Holding time 10'

Visual dimension check Satisfactory

CF FORMADO EN FRIOCALD FORMED

Jefe de Aseguramiento de Calidad:
 Quality Assurance Coordinator

ING. JOSE MARTINEZ MACIAS