



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

Empresas Riga, S.A.
Carr. My-Laredo Km 24.2
Apartado Postal 43
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Vendido a:	PLESA ANAHUAC Y CIA. S. A.	Pedido del Cliente No:	100000806	Lista de Empaque:	7 283	Fecha/Date:	20 de Enero 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		ASME B 16.9 and ASME B 16.28 edition 2001		Biselado / Bevelled ends	
Seamless Fittings according to ASTM A 234-07, A234-02 / ASME ASA 234 WPB.							
MACE MR 01.78 ed. 02 - 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. RUPATURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules
1	T17397	50	TEE 4" SCH-STD.	280	468	42	139				
2	T17678	16	CONC. RED. 12" X 10" SCH-STD.	339	488	46	144				
3	T17678	15	CONC. RED. 12" X 6" SCH-STD.	339	488	46	144				
4	T18066	20	RED. TEE 10" X 4" SCH-STD.	346	490	45	139				
5	T18072	9	ELIS 6" X 90° L.R. SCH-STD.	327	475	43	137				
6	T18120	87	TEE 6" SCH-STD.	300	461	44	139				
7	T18325	10	CONC. RED. 10" X 4" SCH-STD.	309	474	42	141				
8	T18805	9	ELIS 16" X 90° L.R. SCH-STD.	355	513	42	126				
9	T18954	60	ELIS 6" X 90° L.R. SCH-STD.	313	472	41	104				
10	T18955	68	ELIS 6" X 90° L.R. SCH-STD.	298	486	41	109				
11	T19162	10	TEE 5" SCH-STD.	304	473	40	98				

ANALISIS QUIMICO / CHEMICAL ANALYSIS

PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%SI	%Cr	%Cu	%Mo	%Ni	%V	%Nb
CF	T17397	TAMSA	0.311	0.180	0.680	0.018	0.003	0.290	0.040	0.062	0.020	0.020	0.000	0.000
CF	T17678	17678	0.303	0.170	0.680	0.015	0.002	0.280	0.040	0.062	0.030	0.030	0.000	0.000
CF	T17678	17678	0.303	0.170	0.680	0.015	0.002	0.280	0.040	0.062	0.030	0.030	0.000	0.000
CF	T18066	18066	0.332	0.180	0.780	0.008	0.003	0.290	0.050	0.066	0.030	0.030	0.000	0.000
HF	T18072	18072	0.308	0.170	0.660	0.012	0.003	0.260	0.060	0.069	0.046	0.030	0.000	0.000
CF	T18120	18120	0.298	0.170	0.650	0.009	0.003	0.260	0.040	0.057	0.032	0.020	0.000	0.000
CF	T18325	18325	0.328	0.190	0.670	0.009	0.002	0.270	0.060	0.056	0.043	0.030	0.000	0.000
HF	T18805	18805	0.342	0.180	0.810	0.010	0.002	0.290	0.050	0.086	0.041	0.040	0.000	0.000
HF	T18954	18954	0.311	0.170	0.680	0.008	0.003	0.280	0.050	0.080	0.049	0.040	0.000	0.000
HF	T18955	18955	0.314	0.170	0.680	0.007	0.002	0.280	0.050	0.074	0.066	0.040	0.000	0.000
CF	T19162	19162	0.323	0.190	0.650	0.009	0.003	0.280	0.050	0.063	0.040	0.030	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 A106/Grado B 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°.

04018979 04016876 04016876
 04018127 04020937 04019137
 04019646 04022945 04022664
 04022940 04026897

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: **Hot formed fittings in a range from 780°C to 940°C, cooled in still air.**
 Formado en caliente a 780°C-940°C, enfriado al aire.
 Cold formed normalized at 940°C max.
 Formado en frío normalizado a 940°C max.
 Holding time 10'.
 Tiempo de permanencia 10'.
 Visual dimensional check: Satisfactory.
 Inspección Dimensional: Satisfactoria.

Jefe de Aseguramiento de Calidad:
Quality Assurance Coordinator

ING. JOSE MARRINEZ MACIAS

CC-008