

CERTIFICADO DE CALIDAD INSPECTION CERTIFICATE

(DIN EN 10204 3.1 B - ISO 10474 3.1 B)

Empresas Riga, S.A. De CV
Carr. Mérida-Laredo Km 24.2
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Vendido a:	PIESA ANAHUAC Y CIAS. S. A.			Pedido del Cliente No:	1 00000641.653.			Lista de Empaque:	7144		Fecha/Date:	24 de Noviembre de 2004	
Sold to:	PIESA ANAHUAC Y CIAS. S. A.			Customers Order No.:	1 00000641.653.			Packing List:	7144		Factura/Invoice:	Bocas / Ends	
Especificaciones y Grados / Standard or Specification and Steel Grade	ASME B 16.9 and ASME B 16.28 edition 2001			Dimensiones y Tolerancias / Dimension and tolerances			Biselado / Bevelled ends						
Seamless Fittings according to ASTM/ASME ASA 234 WPB - NACE MR													
01.76 ed. 02 - Conform to ASME II Ed. 2001													

DESCRIPCION DE MATERIAL / MATERIAL DESCRIPTION				PRUEBAS MECANICAS / MECHANICAL TEST				PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C				
ART. ITEM	COLADA HEAT CODE	CANTIDA QUANTITY	DESCRIPCION / DESCRIPTION	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	PROMEDIO AVERAGE Joules
1	T17466	36	ELLS 5" X 90° L.R. SCH-STD.	309	482	43	141					
2	T17791	20	ELLS 10" X 45° SCH-STD.	310	482	39	123					
3	T18118	120	ELLS 10" X 90° L.R. SCH-STD.	333	489	42	139					
4	T19004	10	ELLS 14" X 90° L.R. SCH-XH.	309	482	45	103					
5	T65865	10	RED. TEE 8" X 6" SCH-STD.	316	484	44	139					
6	T87613	1	TEE 12" SCH-STD.	384	497	52	103					
7	TAU6	2	CONC. RED. 6" X 3" SCH-STD.	322	478	40	140					
8	TAFA6	4	CONC. RED. 12" X 10" SCH-STD.	342	473	35	106					
9	THS6	10	TEE 10" SCH-STD.	277	483	31	139					
10	TJK6	1	ELLS 12" X 90° L.R. SCH-XH.	295	469	46	137					

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	T17466	17466	0.317	0.180	0.017	0.001	0.270	0.050	0.061	0.047	0.030	0.000	0.000
HF	T17791	17791	0.325	0.190	0.019	0.002	0.280	0.060	0.058	0.034	0.030	0.000	0.000
HF	T18118	18118	0.321	0.180	0.016	0.002	0.270	0.070	0.071	0.033	0.030	0.000	0.000
HF	T19004	19004	0.317	0.180	0.010	0.002	0.280	0.040	0.068	0.024	0.040	0.000	0.000
CF	T65865	65865	0.319	0.180	0.010	0.003	0.290	0.040	0.092	0.022	0.050	0.000	0.000
CF	T87613	87613	0.360	0.160	0.007	0.003	0.240	0.090	0.077	0.026	0.030	0.000	0.022
CF	TAU6	13369	0.310	0.170	0.014	0.001	0.280	0.060	0.054	0.037	0.030	0.000	0.000
CF	TAFA6	16033	0.310	0.180	0.006	0.003	0.280	0.030	0.090	0.008	0.040	0.000	0.000
CF	THS6	15511	0.347	0.190	0.008	0.003	0.100	0.050	0.087	0.032	0.050	0.000	0.000
HF	TJK6	17191	0.327	0.190	0.015	0.003	0.270	0.050	0.073	0.042	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 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. N°.

04016251	04019777	04020022
04022951	04015263	04021744
03017637	04006034	04009399

4016798

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.

Notas: Heat 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.
Heat formed normalized at 940°C max.
Cald formado normalizado a 940°C max.
Holding time 10'.
Tiempo de permanencia 10'.
Visual dimensionalcheck: Satisfactory.
Inspección Dimensional: Satisfactoria.

Jefe de Aseguramiento de Calidad:
Quality Assurance Coordinator

ING. JOSE MARTINEZ MACIAS

CC-008