

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

Vendido a:	PIESA ANATUAC	Pedido del Cliente No:	451	Lista de Empaque:	7783	Fecha/Date:	12 de Octubre de 2005
Sold to:		Customers Order No:		Packing List:			
Especificaciones y Grados / Standard or Specification and Steel Grade		Dimensiones y tolerancias / Dimension and tolerances		Factura/Invoice:		Bocas / Ends	
Seamless Fittings according to ASTM A 234-97, A234-02 / ASME A5A 234 WPB -		ASME B 16.9 and ASME B 16.28 edition 2001		Biselado / Bevelled ends			
NACE MR 01.75-2003 - Conform to ASME II Ed. 2001							

ART. ITEM	COLADA HEAT CODE	CANTIDAD 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 HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules	
1	T18902	1	RED. TEE 12 X 10 SCH-STD	329	495	31	113						
2	T19740	2	RED. TEE 12 X 10 SCH-STD	300	471	33	100						
3	NT5	4	TEE 12 SCH-40	347	481	48	146						
4	T15954	10	RED. TEE 6 X 4 SCH-STD	315	506	40	116						
5	T22093	5	CONC. RED. 12 X 10 SCH-STD	345	508	42	122						
6	T21683	1	CONC. RED. 16 X 12 SCH-STD	364	483	43	106						
7	S37672	228	ELLS 4 X 90 L.R. SCH-STD	340	497	35	123						
8	S32536	528	ELLS 3 X 90 L.R. SCH-STD	327	488	50	102						
9	T24359	72	ELLS 6 X 45 SCH-STD	319	475	42	116						
10	S37672	150	ELLS 4 X 45 SCH-STD	340	497	35	123						
11	S60750	15	ELLS 4 X 45 SCH-XH	333	493	50	148						

**ANALISIS QUIMICO / CHEMICAL ANALYSIS**

PROCESO PROCESS	COLADA HEAT CODE	COLADAN/HEAT M.P/MOTHER PIPE	%C	%E	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
CF	T18902	18902	0.332	0.190	0.720	0.014	0.003	0.310	0.050	0.057	0.033	0.030	0.000	0.000
CF	T19740	19740	0.328	0.190	0.650	0.011	0.003	0.260	0.070	0.085	0.037	0.040	0.000	0.000
CF	NT5	98847	0.317	0.180	0.650	0.010	0.003	0.270	0.070	0.064	0.041	0.030	0.000	0.000
CF	T15954	15954	0.325	0.190	0.690	0.009	0.003	0.280	0.050	0.087	0.004	0.050	0.000	0.000
CF	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
CF	T21683	21683	0.328	0.190	0.690	0.008	0.001	0.260	0.050	0.056	0.034	0.030	0.000	0.000
HF	S37672	37672	0.307	0.170	0.750	0.011	0.001	0.290	0.030	0.004	0.020	0.020	0.001	0.001
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	T24359	24359	0.297	0.160	0.680	0.008	0.000	0.280	0.050	0.063	0.039	0.030	0.000	0.000
HF	S37672	37672	0.307	0.170	0.750	0.011	0.001	0.290	0.030	0.004	0.020	0.020	0.001	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	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 y/o el proveedor de Materia Prima conforme ASTM A106GradsB 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°.

04027546 04029382 02018311  
04009328 05009129 05008490  
255068 207922 05021168  
255068 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:  
Formado en caliente a 780°C-840°C, enfriado al aire.  
Formed in hot normalized at 840°C max.  
Time of preheating 10'.  
Holding time 10'.  
Visual dimensional check: Satisfactory

Jefe de Aseguramiento de Calidad:  
Quality Assurance Coordinator

ING. JOSE MARTINEZ MACIAS

CC-008