

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

Vendido a: **PIESA ANAHUAC** Pedido del Cliente No: **668 800** Fecha/Date: **24 de Enero de 2006**
 Sold to: Customers Order No: Dimensiones y tolerancias / Dimension and tolerances

Especificaciones y Grados / Standard or Specification and Steel Grade Lista de Empaque: **7990** Factura/invoice: **Bocas / Ends**
 Seamses Fittings according to ASTM A 234-47, A234-02 / ASME A54 234 WPB - Packing List: Biselado / Bevelled ends
 NACE MR 01-75-2003 - Conform to ASME II Ed. 2001 ASME B 16.9 and ASME B 16.28 edition 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. RUPTURA TENSILE STRENGTH (Mpa)	DIMENSIONES SAMPLE DIM (mm)	1 Joules	2 Joules	3 Joules
1	T25509	13	ELLS 10 X 45 SCH-STD	330	473	42	106		
2	T25993	40	ELLS 10 X 45 SCH-STD	320	485	42	124		
3	S25296	50	ELLS 1 1/2 X 45 SCH-STD	349	491	35	122		
4	S26167	22	ELLS 1 1/2 X 45 SCH-STD	341	487	49	133		
5	T25668	18	ELLS 12 X 90 L.R. SCH-STD	337	480	44	121		
6	S32202	48	ELLS 2 1/2 X 45 SCH-STD	344	497	50	150		
7	S37368	48	ELLS 2 X 45 SCH-STD	324	499	21	114		
8	T19193	2	ELLS 6 X 45 SCH-STD	306	470	40	116		
9	T25751	58	ELLS 6 X 45 SCH-STD	304	473	38	124		
10	T25752	20	ELLS 8 X 45 SCH-STD	306	478	42	116		
11	T25720	9	TBE 12 SCH-STD	320	499	34	118		

PROCESO PROCESS	COLADA HEAT CODE	COLADAN/HEAT M.P./MOTHER PIPE	ANALISIS QUIMICO / CHEMICAL ANALYSIS											
			%C.E.	%C	%Mn	%P	%S	%SI	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T25509	25509	0.316	0.180	0.670	0.010	0.002	0.280	0.040	0.088	0.038	0.040	0.000	0.000
HF	T25993	25993	0.314	0.180	0.670	0.006	0.002	0.280	0.050	0.071	0.026	0.030	0.000	0.000
HF	S25296	25296	0.324	0.180	0.790	0.010	0.002	0.290	0.030	0.040	0.010	0.020	0.001	0.001
HF	S26167	26167	0.315	0.180	0.730	0.008	0.002	0.270	0.020	0.070	0.010	0.030	0.001	0.001
HF	T25668	25668	0.296	0.160	0.670	0.008	0.003	0.290	0.040	0.075	0.043	0.040	0.000	0.000
HF	S32202	32202	0.329	0.190	0.300	0.010	0.001	0.300	0.400	0.044	0.020	0.021	0.001	0.001
HF	S37368	37368	0.325	0.180	0.750	0.011	0.001	0.300	0.030	0.025	0.050	0.028	0.001	0.001
HF	T19193	19193	0.316	0.180	0.650	0.006	0.001	0.280	0.060	0.080	0.039	0.040	0.000	0.000
HF	T25751	25751	0.303	0.170	0.680	0.008	0.002	0.280	0.040	0.078	0.020	0.030	0.000	0.000
HF	T25752	25752	0.315	0.180	0.680	0.008	0.002	0.280	0.050	0.077	0.021	0.030	0.000	0.000
CF	T25720	25720	0.330	0.190	0.670	0.010	0.002	0.290	0.080	0.070	0.024	0.050	0.000	0.000

Certificamos que los resultados de los Analisis Quimicos y Pruebas Mecanicas son veridicos o una copia fiel de los certificados enviados por el Fabricante y/o el proveedor de Materia Prima conforme ASTM A108/Grades 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 A108 Grade B N°.
 05026637 06000051 165671
 165673 05027288 207960
 255052 04027372 05027681
 05029650 05029062

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: Formado en caliente a 780°C-840°C, enfriado al aire.
 Formed in air range from 780°C to 840°C, cooled in air.
 Formado en frío normalizado a 840°C max.
 Cold formed normalized at 840°C max.
 Tiempo de permanencia 10'.
 Holding time 10'.
 Aprobación Dimensional: Satisfactoria.
 Visual dimensional check: Satisfactory.
 HF: FORMADO EN CALIENTE/HOT FORMED CF: FORMADO EN FRIJO/COLD FORMED

Jefe de Aseguramiento de Calidad:
 Quality Assurance Coordinator

ING. JOSE MARTINEZ MACIAS

CC-008