

**CERTIFICADO DE CALIDAD
 INSPECTION CERTIFICATE**
 (DIN EN 10204:2004E - ISO 10474.3.1.B)

Vendido a: **PIESA ANAHUAC Y CIA. S.A. DE C.V.**
 Sold to: **PIESA ANAHUAC Y CIA. S.A. DE C.V.**
 Especificaciones y Grados / Standard or Specification and Steel Grade
 Seamless Fittings according to ASTM A 234-97, A 234-05a, NACE MR 01-75-2003
 Conform to ASME II Ed. 2001 ASME SA-234, Grade WPB
 Pedido del Cliente No.: **2097 - 1999 - 1883 - 1917**
 Customers Order No.: **2097 - 1999 - 1883 - 1917**
 Dimensiones y tolerancias / Dimension and tolerances
 ASME B 16.9 - 2003 and ASME B 16.28 - 1994
 Lista de Empaque: **8616**
 Packing List:
 Factura/Invoice: **Bocas / Ends**
 Biselado / Bevelled ends
 Fecha/Date: **30 de Octubre de 2006**

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 HARDNESS HB	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T29417	15	CODO 16 X 90° R. I. CED-XS	310	476	45	87				
2	T27436	10	TEE 8 CED-XS	333	472	33	106				
3	S80268	40	CODO 4 X 45° CED-STD	313	475	36	114				
4	T27384	5	TEE 10 CED-XS	319	498	44	97				
5	S35369	40	CODO 5 X 45° CED-STD	325	484	50	119				
6	T29390	1	RED. CONC. 6 X 4 CED-STD	324	489	42	118				
7	T27406	5	TEE RED. 10 X 6 CED-STD	338	488	44	111				
8	S33992	40	CODO 2 X 45° CED-XS	321	468	35	116				
9	S45279	20	CODO 3 X 45° CED-XS	317	488	33	105				
10	S33990	30	CODO 2 1/2 X 90° R. C. CED-XS	344	487	51	101				
11	GJ4	10	TEE RED. 3 X 2 1/2 CED-STD	304	468	39	116				

ANALISIS QUIMICO / CHEMICAL ANALYSIS

PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	%C	%E	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T29417	29417	0.300	0.170	0.670	0.008	0.000	0.260	0.040	0.068	0.031	0.030	0.000	0.000
HF	T27436	27436	0.300	0.160	0.670	0.010	0.001	0.270	0.070	0.077	0.036	0.030	0.000	0.000
HF	S80268	80268	0.330	0.170	0.750	0.011	0.003	0.290	0.040	0.037	0.030	0.270	0.001	0.001
HF	T27384	27384	0.310	0.180	0.680	0.009	0.003	0.280	0.040	0.050	0.026	0.040	0.000	0.000
HF	S35369	35369	0.294	0.160	0.750	0.011	0.001	0.310	0.020	0.033	0.010	0.015	0.001	0.001
CF	T29390	29390	0.310	0.170	0.700	0.007	0.002	0.290	0.030	0.056	0.034	0.030	0.000	0.000
HF	T27406	27406	0.300	0.170	0.690	0.009	0.001	0.270	0.040	0.067	0.021	0.030	0.000	0.000
HF	S33992	33992	0.331	0.130	1.110	0.012	0.001	0.270	0.030	0.037	0.030	0.016	0.001	0.001
HF	S45279	45279	0.323	0.180	0.730	0.010	0.001	0.300	0.050	0.055	0.020	0.048	0.001	0.000
HF	S33990	33990	0.314	0.180	0.720	0.012	0.001	0.300	0.030	0.037	0.020	0.019	0.001	0.001
HF	GJ4	KK001Z	0.287	0.150	0.730	0.007	0.005	0.230	0.050	0.010	0.010	0.020	0.007	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 (Tuberia Sin Costura) 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 (Seamless Pipe) certs conform to ASTM A106 Grade B N° 6023014 6015521 330260 6028007 238320 6023438 6023969 218898 31973 218549 0334

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.

The Products described herein were produced in accordance with the above referenced specification and are identified with the "R" which is permanently marked on each fitting.

Jefe de Calidad:
 Quality Manager:

ING. JOSE MARTINEZ MACIAS

CC-008

Notes

Formado en caliente a 620°C-980°C, enfriado al aire.
 Formed in furnace at 620°C to 980°C, cooled in still air.
 Formado en frio normalizado a 940°C max.
 Cold formed normalized at 940°C max.
 Tiempo de permanencia 10'.
 Holding time 10'.
 Inspeccion Dimensional Satisfactoria.
 Visual dimensional check: Satisfactory

Notes

Formado en caliente a 620°C-980°C, enfriado al aire.
 Formed in furnace at 620°C to 980°C, cooled in still air.
 Formado en frio normalizado a 940°C max.
 Cold formed normalized at 940°C max.
 Tiempo de permanencia 10'.
 Holding time 10'.
 Inspeccion Dimensional Satisfactoria.
 Visual dimensional check: Satisfactory

Formado en caliente a 620°C-980°C, enfriado al aire.
 Formed in furnace at 620°C to 980°C, cooled in still air.
 Formado en frio normalizado a 940°C max.
 Cold formed normalized at 940°C max.
 Tiempo de permanencia 10'.
 Holding time 10'.
 Inspeccion Dimensional Satisfactoria.
 Visual dimensional check: Satisfactory