

**CERTIFICADO DE CALIDAD  
INSPECTION CERTIFICATE**  
( DIN EN 10204:2004E - ISO 10474 3.1.B )

Numero:  
Number: 27101  
Pagina/Page: 3

Vendido a: PLESA ANAHUAC Y CIA. S.A. DE C.V.  
Sold to:

Pedido del Cliente No: 13506 - 14833 - 13591 - 13962  
Customers Order No:

Lista de Empaque: 14056  
Packing List:  
Fecha/Date: 28 de Febrero de 2013

Especificaciones y Grados / Standard or Specification and Steel Grade  
Seamless Fittings according to ASTM A 234 WPB-07, NACE MR 01.75-2003  
Conform to ASME II Ed. 2001 ASME SA-234, Grade WPB, NACE MR0103-2003

Dimensiones y tolerancias / Dimension and tolerances  
ASME B 16.9 - 2007

Factura/Invoice:  
Bocas / Ends  
Biselado / Bevelled ends

DESCRIPCION DE MATERIAL / MATERIAL DESCRIPTION				PRUEBAS MECANICAS / MECHANICAL TEST				PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C				
ART. ITEM	COLADA HEAT CODE	CANTIDAD QUANTITY	DESCRIPCION / DESCRIPTION	ESF. CEDENCIA YIELD STRENGTH (Mpa)	ESF. RUPTURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HBW	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
23	T61865	27	TEE 6 CED-STD	320	486	36	139					
24	T60970	36	TEE 6 CED-STD	327	487	35	149					
25	T62890	37	TEE 6 CED-STD	263	478	36	139					
26	T60717	18	CODO 12 X 90° R.L. CED-40	312	480	33	144					
27	T62782	10	TEE RED. 10 X 6 CED-STD	368	509	30	142					
28	T61893	4	TEE RED. 12 X 8 CED-STD	304	471	36	129					
29	S22546	20	CODO 1 1/4 X 45° CED-STD	388	519	48	147					
30	S22546	72	CODO 1 1/2 X 45° CED-STD	388	519	48	147					
31	T4887	35	CODO 3 X 90° R.C. CED-STD	356	500	39	153					
32	T62650	20	TEE RED. 6 X 3 CED-STD	309	474	38	144					
33	S22546	553	CODO 2 1/2 X 90° R.C. CED-XS	260	463	35	142					

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
HF	T61865	61865	0.300	0.170	0.670	0.016	0.001	0.280	0.040	0.053	0.018	0.030	0.000	0.000
HF	T60970	60970	0.320	0.180	0.760	0.014	0.001	0.280	0.040	0.072	0.018	0.030	0.000	0.000
HF	T62890	62890	0.350	0.190	0.800	0.013	0.001	0.290	0.050	0.074	0.037	0.040	0.000	0.000
HF	T60717	60717	0.300	0.170	0.680	0.012	0.004	0.280	0.040	0.067	0.021	0.030	0.000	0.000
HF	T62782	62782	0.330	0.180	0.750	0.012	0.002	0.260	0.050	0.057	0.026	0.030	0.000	0.000
HF	T61893	61893	0.310	0.180	0.660	0.012	0.001	0.280	0.040	0.061	0.018	0.030	0.000	0.000
HF	S22546	22546	0.340	0.190	0.750	0.011	0.001	0.300	0.060	0.040	0.020	0.021	0.003	0.001
HF	S22546	22546	0.340	0.190	0.750	0.011	0.001	0.300	0.060	0.040	0.020	0.021	0.003	0.001
HF	T4887	4887	0.310	0.170	0.770	0.006	0.002	0.330	0.020	0.031	0.005	0.020	0.000	0.000
HF	T62650	62650	0.310	0.180	0.670	0.014	0.001	0.280	0.040	0.067	0.030	0.040	0.000	0.000
HF	S22546	22546	0.340	0.190	0.750	0.012	0.001	0.290	0.060	0.030	0.020	0.020	0.004	0.002

Certificamos que los resultados de los Análisis Químicos y Pruebas Mecánicas son verdaderos o una copia fiel de los certificados enviados por el Fabricante y/o el proveedor de Materia Prima (Tubería 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°:  
12066078 12034586 12085271 12032537 12085291 12073170  
13004240 13004240 12063388 12082083 13008552  
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 620°C-980°C, enfriado al aire; Formado en frío normalizado a 940°C max.  
Tiempo de permanencia 10'.  
Inspección Dimensional: Satisfactoria.  
HF: FORMADO EN CALIENTE/HOT FORMED

Notes:  
Hot formed fittings in a range from 620°C to 980°C, cooled in still air.  
Cold formed normalized at 940°C max.  
Holding time 10'.  
Visual dimensional check: Satisfactory  
CF: FORMADO EN FRIO/COLD FORMED

**Quality Manager / Jefe de Calidad:**  
**ING. WALDO GALLEGOS GALVAN**

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./ The values of hardness for fittings NPS 2 1/2" and smaller ones obtain from the conversion of hardness Rockwell B to hardness Brinell HBW by means of table WILSON DESK CHART 60.  
Los valores de dureza para conexiones de NPS de 2 1/2" y menores, se obtienen de la conversión de dureza Rockwell B a dureza Brinell HBW mediante la tabla WILSON DESK CHART 60.