

<b>CERTIFICADO DE CALIDAD</b> <b>INSPECTION CERTIFICATE</b> ( DIN EN 10204:2004E - ISO 10474 3.1.B )	Numero: Number:	Pagina/Page:	
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Vendido a: Sold to: PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No: 12701 - 12427 - 12726 - 11109	Lista de Empaque: Packing List: 13266	Fecha/Date: 10 de Abril de 2012
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
1	T56989	14	CODO 6 X 45° CED-XS	330	496	41	115					
2	T57395	46	CODO 6 X 45° CED-XS	323	479	44	103					
3	T59006	100	CODO 6 X 90° R.L. CED-STD.	334	487	34	104					
4	T55130	3	CODO 16 X 90° R.L. CED-XS	252	456	38	101					
5	T56077	26	CODO 6 X 45° CED-STD	318	485	39	101					
6	T56078	34	CODO 6 X 45° CED-STD	325	496	40	101					
7	T55926	20	RED. CONC. 8 X 6 CED-STD	311	487	43	101					
8	T56077	22	CODO 2 1/2 X 90° R.L. CED-STD	350	478	39	114					
9	T58293	10	CODO 12 X 45° CED-STD	279	460	36	95					
10	T55130	4	CODO 16 X 45° CED-XS	252	456	38	101					
11	T56059	6	RED. CONC. 16 X 8 CED-STD	267	467	34	106					

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	T56989	56989	0.310	0.180	0.690	0.015	0.002	0.280	0.050	0.060	0.017	0.030	0.000	0.000
HF	T57395	57395	0.310	0.170	0.700	0.009	0.002	0.270	0.040	0.067	0.021	0.030	0.000	0.000
HF	T59006	59006	0.320	0.190	0.680	0.014	0.002	0.300	0.040	0.075	0.015	0.040	0.000	0.000
HF	T55130	55130	0.310	0.180	0.680	0.007	0.001	0.270	0.050	0.069	0.019	0.040	0.000	0.000
HF	T56077	56077	0.300	0.170	0.680	0.014	0.001	0.270	0.050	0.046	0.010	0.030	0.000	0.000
HF	T56078	56078	0.300	0.170	0.680	0.013	0.001	0.270	0.050	0.046	0.011	0.030	0.000	0.000
CF	T55926	55926	0.310	0.170	0.680	0.012	0.001	0.290	0.060	0.067	0.021	0.030	0.000	0.000
HF	T56077	56077	0.300	0.170	0.690	0.013	0.002	0.280	0.050	0.047	0.011	0.030	0.000	0.000
HF	T58293	58293	0.310	0.180	0.670	0.006	0.002	0.290	0.060	0.054	0.016	0.030	0.000	0.000
HF	T55130	55130	0.310	0.180	0.680	0.007	0.001	0.270	0.050	0.069	0.019	0.040	0.000	0.000
CF	T56059	56059	0.310	0.180	0.660	0.011	0.002	0.280	0.050	0.067	0.012	0.030	0.000	0.000

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°: 12018759 11047201 12010442 11024389 11045472 11045472 11044304 11038735 12012045 11024389 11040703

"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.