

<b>CERTIFICADO DE CALIDAD</b> <b>INSPECTION CERTIFICATE</b> ( DIN EN 10204:2004E - ISO 10474 3.1.B )	Numero: Number:  25190	Pagina/Page:  1
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Vendido a: Sold to: PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No: 11177 - 11570 - 11409 - 10963 -	Lista de Empaque: Packing List: 13004	Fecha/Date: 8 de Diciembre de 2011
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	T56077	64	CODO 3 X 90° R.L. CED-STD	328	477	40	120					
2	T56077	31	CODO 3 X 45° CED-STD	328	477	40	120					
3	T39507	18	CODO 8 X 90° R.L. CED-XS	254	446	34	96					
4	T57394	18	CODO 8 X 90° R.L. CED-XS	290	473	42	98					
5	T57395	60	CODO 6 X 90° R.L. CED-XS	324	479	44	118					
6	R71005	66	CODO 1 X 90° R.L. CED-STD	329	462	46	163					
7	S38130	80	CODO 1 1/2 X 90° R.L. CED-XS	358	524	34	130					
8	T33902	50	CODO 1 X 90° R.L. CED-XS	294	418	54	135					

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	T56077	56077	0.300	0.170	0.690	0.014	0.001	0.280	0.040	0.048	0.011	0.030	0.000	0.000
HF	T56077	56077	0.300	0.170	0.690	0.014	0.001	0.280	0.040	0.048	0.011	0.030	0.000	0.000
HF	T39507	39507	0.300	0.170	0.670	0.012	0.001	0.280	0.050	0.058	0.011	0.030	0.000	0.000
HF	T57394	57394	0.300	0.170	0.670	0.009	0.001	0.260	0.050	0.074	0.025	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	R71005	71005	0.310	0.170	0.720	0.009	0.002	0.210	0.050	0.018	0.018	0.080	0.001	0.001
HF	S38130	38130	0.313	0.180	0.710	0.009	0.001	0.280	0.030	0.043	0.020	0.022	0.001	0.001
HF	T33902	33902	0.280	0.149	0.564	0.012	0.001	0.191	0.052	0.049	0.022	0.039	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°: 11038748 11038748 8028051 11050768 11054423 2270324 258860 5944

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°: 11038748 11038748 8028051 11050768 11054423 2270324 258860 5944

"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	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.
Quality Manager / Jefe de Calidad: ING. WALDO GALLEGOS GALVAN		FOR03161