

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

Numero:
Number:

24923

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Vendido a: Sold to:	PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No:	10963 - 11071 - 11080	Lista de Empaque: Packing List:	12858	Fecha/Date:	15 de Septiembre 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 and ASME B 16.28 - 1994	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	T50508	1	CODO 6 X 45° CED-XS	308	491	42	102					
2	T52744	29	CODO 6 X 45° CED-XS	331	497	41	122					
3	T56077	456	CODO 4 X 90° R.L. CED-STD	322	490	36	118					
4	T55441	55	TEE 4 CED-STD	311	484	39	128					
5	T55440	60	CODO 6 X 90° R.L. CED-XS	308	479	42	118					
6	T47231	1	CODO 8 X 45° CED-STD	304	478	38	120					
7	T51345	1	CODO 8 X 45° CED-STD	324	486	41	124					
8	T51816	1	CODO 8 X 45° CED-STD	327	494	39	96					
9	T49307	3	CODO 8 X 45° CED-STD	312	487	40	117					
10	T52308	1	CODO 8 X 45° CED-STD	307	480	42	122					
11	T54114	12	CODO 8 X 45° CED-STD	318	480	40	120					

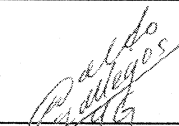
ANALISIS QUIMICO / CHEMICAL ANALYSIS														
PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T50508	50508	0.320	0.180	0.670	0.011	0.002	0.260	0.060	0.070	0.024	0.030	0.000	0.000
HF	T52744	52744	0.340	0.190	0.770	0.010	0.000	0.300	0.040	0.067	0.035	0.040	0.000	0.000
HF	T56077	56077	0.300	0.170	0.680	0.012	0.001	0.280	0.040	0.047	0.010	0.030	0.000	0.000
HF	T55441	55441	0.320	0.180	0.680	0.010	0.001	0.290	0.070	0.053	0.017	0.030	0.000	0.000
HF	T55440	55440	0.310	0.180	0.680	0.008	0.001	0.290	0.040	0.057	0.014	0.030	0.000	0.000
HF	T47231	47231	0.310	0.180	0.650	0.012	0.001	0.280	0.040	0.054	0.023	0.030	0.000	0.000
HF	T51345	51345	0.310	0.170	0.720	0.012	0.001	0.290	0.060	0.062	0.017	0.030	0.000	0.000
HF	T51816	51816	0.320	0.180	0.720	0.009	0.002	0.310	0.060	0.069	0.027	0.040	0.000	0.000
HF	T49307	49307	0.310	0.180	0.670	0.012	0.002	0.300	0.030	0.048	0.019	0.020	0.000	0.000
HF	T52308	52308	0.300	0.170	0.680	0.016	0.001	0.270	0.040	0.057	0.021	0.030	0.000	0.000
HF	T54114	54114	0.310	0.180	0.690	0.009	0.002	0.280	0.060	0.038	0.011	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°: 10037285 11011337 11037704 11030656 11034177 9066436 10046503 10047437 10023801 10056323 11022887

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°: 10037285 11011337 11037704 11030656 11034177 9066436 10046503 10047437 10023801 10056323 11022887

"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:	Notes:
Formado en caliente a 620°C-980°C, enfriado al aire: Formado en frío normalizado a 940°C max.	Hot formed fittings in a range from 620°C to 980°C, cooled in still air. Cold formed normalized at 940°C max.
Tiempo de permanencia 10'.	Holding time 10'.
Inspección Dimensional: Satisfactoria.	Visual dimensional check: Satisfactory
HF: FORMADO EN CALIENTE/HOT FORMED	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.