

CERTIFICADO DE CALIDAD INSPECTION CERTIFICATE (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:	12170	Lista de Empaque: Packing List:	13092	Fecha/Date:	27 de Enero 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
12	S42831	35	CODO 3 X 45° CED-STD	240	508	32	122					
13	T50526	5	CODO 14 X 45° CED-STD	330	500	35	105					
14	T51308	1	CODO 14 X 45° CED-STD	278	477	34	103					
15	S26168	15	CODO 2 1/2 X 90° R.L. CED-STD	312	465	51	164					
16	S46693	1	CODO 2 1/2 X 90° R.L. CED-STD	337	486	32	133					
17	S46803	49	CODO 2 1/2 X 90° R.L. CED-STD	328	498	30	98					
18	S32307	3	CODO 2 1/2 X 90° R.L. CED-STD	314	485	31	122					
19	S42828	11	CODO 5 X 45° CED-STD	307	473	36	101					
20	S32203	14	CODO 5 X 45° CED-STD	302	495	34	133					
21	T56000	9	CODO 16 X 90° R.L. CED-STD	298	500	43	120					
22	T51311	7	CODO 12 X 45° SHC-80	286	473	46	124					

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	S42831	42831	0.330	0.190	0.800	0.012	0.002	0.320	0.020	0.014	0.010	0.009	0.001	0.002
HF	T50526	50526	0.320	0.190	0.670	0.013	0.002	0.280	0.050	0.059	0.019	0.030	0.000	0.000
HF	T51308	51308	0.310	0.180	0.660	0.014	0.001	0.280	0.040	0.055	0.024	0.030	0.000	0.000
HF	S26168	26168	0.325	0.180	0.810	0.008	0.001	0.290	0.020	0.038	0.010	0.019	0.001	0.001
HF	S46693	46693	0.320	0.180	0.720	0.013	0.001	0.270	0.050	0.038	0.010	0.025	0.001	0.001
HF	S46803	46803	0.340	0.190	0.760	0.010	0.001	0.300	0.040	0.047	0.020	0.060	0.002	0.001
HF	S32307	32307	0.330	0.190	0.710	0.012	0.002	0.260	0.050	0.039	0.010	0.028	0.001	0.001
HF	S42828	42828	0.320	0.180	0.770	0.012	0.001	0.320	0.030	0.037	0.020	0.020	0.003	0.002
HF	S32203	32203	0.330	0.180	0.780	0.010	0.001	0.300	0.050	0.040	0.010	0.016	0.001	0.001
HF	T56000	56000	0.320	0.180	0.710	0.011	0.001	0.290	0.040	0.071	0.020	0.030	0.000	0.000
HF	T51311	51311	0.310	0.180	0.660	0.011	0.001	0.270	0.040	0.062	0.027	0.040	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°: 11035968 10041724 10041848 165677 329515 11042716 468317 11008316 473980 11033964 10041657

"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.