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<b>CERTIFICADO DE CALIDAD</b> <b>INSPECTION CERTIFICATE</b> ( DIN EN 10204:2004E - ISO 10474 3.1.B )		Numero: Number: 26596	Pagina/Page: 3
Vendido a: Sold to: PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No: 14222	Lista de Empaque: Packing List: 13794	Fecha/Date: 22 de Noviembre 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
23	T59442	41	CODO 4 X 90° R.I. CED-XS	308	487	30	147					
24	T61397	7	TEE RED. 8 X 6 CED-STD	304	483	42	118					
25	T61981	3	TEE RED. 8 X 6 CED-STD	303	477	45	124					
26	T59567	5	RED. CONC. 16 X 14 CED-STD	331	481	37	154					
27	S47300	30	CODO 5 X 90° R.I. CED-XS	269	477	34	116					
28	T59567	7	RED. CONC. 16 X 12 CED-STD	331	481	37	154					
29	T48110	4	CODO 12 X 45° CED-40	324	468	37	143					
30	S45402	50	CODO 2 1/2 X 90° R.I. CED-XS	294	466	36	130					
31	GZ5	13	CODO 3 1/2 X 90° R.I. CED-XS	346	500	44	143					
32	OL5	11	CODO 3 1/2 X 90° R.I. CED-XS	340	503	34	136					
33	CP5	6	CODO 3 1/2 X 90° R.I. CED-XS	341	472	42	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	T59442	59442	0.310	0.170	0.670	0.017	0.001	0.300	0.080	0.061	0.023	0.030	0.000	0.000
HF	T61397	61397	0.310	0.180	0.650	0.012	0.003	0.280	0.040	0.065	0.028	0.030	0.000	0.000
HF	T61981	61981	0.310	0.170	0.680	0.010	0.000	0.280	0.070	0.073	0.037	0.040	0.000	0.000
CF	T59567	59567	0.310	0.180	0.660	0.013	0.003	0.260	0.040	0.070	0.015	0.040	0.000	0.000
HF	S47300	47300	0.330	0.200	0.750	0.012	0.001	0.290	0.020	0.034	0.010	0.015	0.001	0.002
CF	T59567	59567	0.310	0.180	0.660	0.013	0.003	0.260	0.040	0.070	0.015	0.040	0.000	0.000
HF	T48110	48110	0.310	0.180	0.670	0.010	0.003	0.290	0.030	0.077	0.023	0.030	0.000	0.000
HF	S45402	45402	0.317	0.180	0.740	0.009	0.001	0.290	0.040	0.038	0.010	0.021	0.001	0.001
HF	GZ5	22039	0.334	0.190	0.760	0.012	0.001	0.310	0.030	0.050	0.020	0.050	0.001	0.001
HF	OL5	21484	0.324	0.190	0.720	0.012	0.001	0.300	0.030	0.060	0.010	0.020	0.001	0.001
HF	CP5	95795	0.305	0.170	0.670	0.007	0.003	0.270	0.050	0.066	0.029	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°:  
 12032245 12065449 12073646 12075071 11046243 12075071 11052253 329135 151500 150428 02006511  
 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 FRIJO/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.