

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

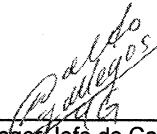
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Vendido a: Sold to:	PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No:	9798	Lista de Empaque: Packing List:	12477	Fecha/Date:	24 de Enero de 2011
Especificaciones y Grados / Standard or Specification and Steel Grade	Seamless 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		Factura/Invoice: Bocas / Ends Biselado / Bevelled ends		
			ASME B 16.9 - 2007 and ASME B 16.28 - 1994				

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	T51525	6	CODO 16 X 45° CED-STD	327	489	43	124					
2	T53006	100	CODO 6 X 90° R.L. CED-STD.	297	471	41	118					
3	T51345	11	TEE 4 CED-STD	349	499	30	104					
4	T47231	44	TEE 4 CED-STD	322	493	39	122					
5	T49259	30	RED. CONC. 10 X 8 CED-STD	328	490	42	107					
6	S42236	40	CODO 4 X 45° CED-STD	323	489	32	108					
7	S28891	7	CODO 3 X 45° CED-STD	293	455	31	110					
8	T50952	22	CODO 3 X 45° CED-STD	358	499	36	122					
9	T52307	21	CODO 3 X 45° CED-STD	383	533	36	91					
10	T50878	13	CODO 8 X 45° CED-STD	318	493	41	106					
11	T51816	37	CODO 8 X 45° CED-STD	327	494	39	96					

ANALISIS QUIMICO / CHEMICAL ANALYSIS															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°: 10049515 11000884 10049766 10007063 10021561 10053811 440948 10055648 10055648 10040351 10047440
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	T51525	51525	0.320	0.190	0.680	0.014	0.002	0.280	0.040	0.063	0.016	0.030	0.000	0.000	
HF	T53006	53006	0.300	0.180	0.660	0.012	0.001	0.290	0.030	0.035	0.017	0.020	0.000	0.000	
HF	T51345	51345	0.310	0.170	0.720	0.012	0.002	0.290	0.060	0.063	0.017	0.030	0.000	0.000	
HF	T47231	47231	0.300	0.170	0.660	0.013	0.001	0.280	0.040	0.055	0.024	0.030	0.000	0.000	
CF	T49259	49259	0.300	0.170	0.680	0.011	0.002	0.270	0.040	0.073	0.023	0.030	0.000	0.000	
HF	S42236	42236	0.330	0.190	0.760	0.011	0.001	0.290	0.040	0.031	0.020	0.035	0.002	0.002	
HF	S28891	28891	0.340	0.200	0.750	0.010	0.002	0.280	0.030	0.029	0.010	0.033	0.001	0.000	
HF	T50952	50952	0.320	0.190	0.650	0.014	0.002	0.290	0.040	0.076	0.033	0.030	0.000	0.000	
HF	T52307	52307	0.310	0.180	0.670	0.013	0.003	0.280	0.040	0.060	0.022	0.030	0.000	0.000	
HF	T50878	50878	0.300	0.170	0.700	0.015	0.001	0.280	0.040	0.054	0.016	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	

<p>Notas:</p> <p>Formado en caliente a 620°C-980°C, enfriado al aire; Formado en frío normalizado a 940°C max.</p> <p>Tiempo de permanencia 10'.</p> <p>Inspección Dimensional: Satisfactoria.</p> <p>HF: FORMADO EN CALIENTE/HOT FORMED</p>	<p>Notes:</p> <p>Hot formed fittings in a range from 620°C to 980°C, cooled in still air.</p> <p>Cold formed normalized at 940°C max.</p> <p>Holding time 10'.</p> <p>Visual dimensional check: Satisfactory</p> <p>CF: FORMADO EN FRIO/COLD FORMED</p>	<p>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.</p> <p>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.</p>
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Quality Manager / Jefe de Calidad:
ING. WALDO GALLEGOS GALVAN