

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

Número:  
Number:  
22481

Página/Page:  
1 DE 1

Vendido a: Sold to:	PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No:	6398 - 6397 -	Lista de Empaque: Packing List:	11438	Fecha/Date:	20 de Mayo de 2009
Especificaciones y Grados / Standard or Specification and Steel Grade Seamless Fittings according to ASTM A 234M WPB-07, NACE MR 01.75-2003 Conform to ASME II Ed. 2001 ASME SA-234M Grade WPB, NACE MR0103-2003		Dimensiones y tolerancias / Dimension and tolerances <b>ASME B 16.9 - 2007 and ASME B 16.28 - 1994</b>			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	T41467	6	CODO 8 X 90° R.L. CED-STD	326	503	34	118					
13	T42773	24	CODO 8 X 90° R.L. CED-STD	365	494	34	106					
14	T40546	6	TEE 10 CED-STD	280	473	35	103					
15	S43766	25	RED. CONC. 4 X 3 CED-STD	341	501	40	124					
16	T42161	25	TEE 6 CED-STD	301	460	38	104					
17	T41761	15	TEE RED. 10 X 4 CED-STD	289	456	33	116					
18	T42340	9	TEE RED. 8 X 4 CED-STD	310	470	43	118					
19	T39854	1	TEE RED. 8 X 4 CED-STD	290	470	43	102					
20	T41644	10	TEE RED. 8 X 3 STD	306	471	34	98					
21	T40516	10	RED. CONC. 10 X 4 CED-STD	320	490	31	113					

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	T41467	41467	0.310	0.180	0.670	0.010	0.001	0.280	0.040	0.061	0.005	0.030	0.000	0.000
HF	T42773	42773	0.310	0.180	0.670	0.016	0.001	0.260	0.040	0.071	0.023	0.030	0.000	0.000
HF	T40546	40546	0.310	0.180	0.670	0.009	0.001	0.290	0.050	0.060	0.010	0.030	0.000	0.000
CF	S43766	43766	0.350	0.200	0.820	0.011	0.001	0.290	0.030	0.062	0.020	0.023	0.002	0.001
HF	T42161	42161	0.300	0.170	0.670	0.016	0.001	0.280	0.040	0.050	0.009	0.020	0.000	0.000
HF	T41761	41761	0.300	0.170	0.690	0.011	0.001	0.280	0.040	0.035	0.007	0.020	0.000	0.000
HF	T42340	42340	0.310	0.180	0.670	0.011	0.002	0.290	0.050	0.062	0.007	0.030	0.000	0.000
HF	T39854	39854	0.320	0.190	0.690	0.011	0.001	0.290	0.040	0.052	0.006	0.020	0.000	0.000
HF	T41644	41644	0.300	0.170	0.660	0.013	0.001	0.280	0.050	0.051	0.009	0.030	0.000	0.000
CF	T40516	40516	0.290	0.160	0.680	0.009	0.001	0.270	0.050	0.065	0.008	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°:  
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°:  
8052358 9002848 8050706 311696 9002593 8068632 8063658 8069915 8059496 8039769  
"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

*Waldo Gallegos*  
**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.