

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

Numero:
Number:

28951

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Vendido a: Sold to:	PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No:	19265 -	Lista de Empaque: Packing List:	15078	Fecha/Date:	12 de septiembre de 2014
Especificaciones y Grados / Standard or Specification and Steel Grade	Seamless Fittings according to ASTM A 234 WPB-13e			Dimensiones y tolerancias / Dimension and tolerances		Factura/Invoice:	
Conform to ASME II Ed. 2001 ASME SA-234, Grade WPB	ASME B 16.9 - 2007					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	T70305	2	CODO 16 X 45° CED-STD	255	468	38	143					
2	T65548	3	CODO 16 X 45° CED-STD	255	465	37	142					
3	T65007	7	CODO 16 X 45° CED-STD	277	486	36	143					
+4	T71010	72	CODO 16 X 90° R.L. CED-STD	249	465	37	145					

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	T70305	70305	0.290	0.160	0.700	0.004	0.001	0.270	0.040	0.053	0.017	0.030	0.000	0.000
HF	T65548	65548	0.310	0.180	0.680	0.012	0.001	0.280	0.040	0.058	0.011	0.030	0.000	0.000
HF	T65007	65007	0.340	0.190	0.760	0.011	0.002	0.290	0.060	0.073	0.043	0.040	0.000	0.000
HF	T71010	71010	0.290	0.160	0.700	0.006	0.001	0.280	0.040	0.058	0.014	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°: 14021653 13039676 13025935 14020425

"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.

MATERIAL ACCORDING TO NACE MR0175 / ISO 15156-1, 2009 AND NACE MR0103, 2012 ONLY HARDNESS

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