

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

Número:  
 Number: 22940  
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Vendido a: PLESA ANAHUAC Y CIA. S.A. DE C.V.  
 Sold to: Pedido del Cliente No: 7234 - 7265 -  
 Customers Order No: Lista de Empaque: 11700  
 Packing List: Fecha/Date: 9 de Noviembre 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  
 ASME B 16.9 - 2007 and ASME B 16.28 - 1994  
 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
1	S28891	40	CODO 4 X 45° CED-STD	392	508	32	117					
2	S31762	6	CODO 4 X 90° R.L. CED-XS	254	452	33	111					
3	S33739	39	CODO 4 X 90° R.L. CED-XS	299	465	35	111					
4	T29855	4	RED. CONC. 12 X 8 CED-80	323	473	45	120					

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°: 450995 470425 482835 6027123 "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".
PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	
HF	S28891	28891	0.320	0.180	0.730	0.011	0.003	0.260	0.040	0.024	0.010	0.028	0.001	0.000
HF	S31762	31762	0.320	0.180	0.740	0.012	0.001	0.290	0.050	0.023	0.010	0.021	0.001	0.000
HF	S33739	33739	0.340	0.200	0.740	0.010	0.001	0.290	0.040	0.038	0.010	0.017	0.001	0.000
CF	T29855	29855	0.320	0.180	0.660	0.011	0.003	0.280	0.060	0.078	0.032	0.040	0.000	0.000

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.

CC-008