

Vendido a: PLESA ANAHUAC Y CIA. S.A. DE C.V. Pedido del Cliente No: 3385 -
 Sold to: Customers Order No: Lista de Empaque: 9513 Fecha/Date: 17 de Agosto de 2007

Especificaciones y Grados / Standard or Specification and Steel Grade Dimensiones y tolerancias / Dimension and tolerances Factura/Invoice: Bocas / Ends
 Seamless Fittings according to ASTM A 234" W.P.B.-97, A234"W" WPB-05a, NACE MR 01.75-2003 ASME B 16.9 - 2003 and ASME B 16.28 - 1994 Biselado / Bevelled ends
 Conform to ASME II Ed. 2001 ASME SA-234"W", Grade WPB.

ART. ITEM	COLADA HEAT CODE	CANTIDAD QUANTITY	DESCRIPCION / DESCRIPTION	PRUEBAS MECANICAS / MECHANICAL TEST				PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C			
				ESF. CEDENCIA / YIELD STRENGTH (Mpa)	ESF. RUPTURA / TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA / HARDNESS HB	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
12	T33784	3	CODO 12 X 45° CED-40	322	492	40	86				
13	T33435	1	CODO 12 X 45° CED-40	306	482	42	86				
14	S33990	20	CODO 2 1/2 X 90° R. C. CED-STD	344	487	51	126				

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	T33784	33784	0.320	0.180	0.690	0.009	0.001	0.280	0.050	0.058	0.043	0.030	0.000	0.000
HF	T33435	33435	0.310	0.180	0.670	0.010	0.002	0.270	0.050	0.058	0.034	0.030	0.000	0.000
HF	S33990	33990	0.314	0.180	0.720	0.012	0.001	0.300	0.030	0.037	0.020	0.019	0.001	0.001

Certificamos que los resultados de los Analisis Quimicos y Pruebas Mecanicas 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°
 7019613 7017981 218549

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.

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 820°C-980°C, enfriado al aire. Formado en frío normalizado a 940°C max. Tiempo de permanencia 10'.
 Hot formed fittings in a range from 820°C to 980°C, cooled in still air. Cold formed normalized at 940°C max. Holding time 10'.
 Inspección Dimensional Satisfactoria. Visual dimensional check: Satisfactory.
 HF: FORMADO EN CALIENTE/HOT FORMED CF: FORMADO EN FRIO/COLD FORMED

Jefe de Calidad:
 Quality Manager:
 ING. JOSE MARTINEZ MACIAS CC-008