

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

Número:
Number:
23330

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:	7818 - 7773	Lista de Empaque: Packing List:	11913	Fecha/Date:	9 de Abril de 2010
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	S33021	40	CODO 4 X 45° CED-STD	325	501	35	142					
2	S32307	70	CODO 2 1/2 X 90° R.L. CED-STD	314	486	31	122					
3	S31050	120	CODO 1 1/2 X 90° R.L. CED-STD	367	534	32	130					
4	S38130	2	CODO 1 1/2 X 90° R.L. CED-XS	358	524	34	130					
5	S24684	4	CODO 1 1/2 X 90° R.L. CED-XS	337	492	39	112					
6	S26167	2	CODO 1 1/2 X 90° R.L. CED-XS	341	487	49	120					
7	JG5	1	CODO 1 1/2 X 90° R.L. CED-XS	336	485	48	128					
8	SF06	1	CODO 1 1/2 X 90° R.L. CED-XS	332	483	42	130					
9	S24683	80	CODO 1 1/2 X 90° R.L. CED-XS	331	482	42	133					
10	S31050	10	CODO 1 1/4 X 45° CED-STD	367	534	32	130					
11	S31050	96	CODO 1 1/2 X 45° CED-STD	367	534	32	130					

PLEASA ANAHUAC Y CIAS. S.A. DE C.V.

CONTROL DE CALIDAD

FECHA: 12 Abr 2010

FIRMA: EGOZ
E. RUIZ

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°: 473674 468319 479680 258860 161655 165673 152461 160515 160515 479680 479680
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	S33021	33021	0.320	0.180	0.740	0.013	0.001	0.300	0.030	0.045	0.010	0.025	0.001	0.000	
HF	S32307	32307	0.330	0.190	0.710	0.012	0.002	0.260	0.050	0.039	0.010	0.028	0.001	0.001	
HF	S31050	31050	0.330	0.190	0.760	0.007	0.002	0.270	0.030	0.023	0.010	0.013	0.001	0.000	
HF	S38130	38130	0.313	0.180	0.710	0.009	0.001	0.280	0.030	0.043	0.020	0.022	0.001	0.001	
HF	S24684	24684	0.333	0.190	0.740	0.007	0.001	0.290	0.040	0.030	0.040	0.020	0.001	0.001	
HF	S26167	26167	0.315	0.180	0.730	0.008	0.002	0.270	0.020	0.070	0.010	0.030	0.001	0.001	
HF	JG5	22069	0.316	0.180	0.700	0.010	0.001	0.280	0.050	0.040	0.020	0.030	0.001	0.001	
HF	SF06	24683	0.335	0.190	0.790	0.007	0.001	0.280	0.005	0.040	0.040	0.020	0.001	0.001	
HF	S24683	24683	0.344	0.190	0.790	0.007	0.001	0.280	0.050	0.040	0.040	0.020	0.001	0.001	
HF	S31050	31050	0.330	0.190	0.760	0.007	0.002	0.270	0.030	0.023	0.010	0.013	0.001	0.000	
HF	S31050	31050	0.330	0.190	0.760	0.007	0.002	0.270	0.030	0.023	0.010	0.013	0.001	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