

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

Número:
Number:
24352

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: 9913 -

Lista de Empaque:
Packing List: 12520

Fecha/Date:
17 de Febrero de 2011

Especificaciones y Grados / Standard or Specification and Steel Grade
Seamless Fittings according to ASTM A 234 WPB-07, NACE MR 01.75-2003
Conform to ASME II Ed. 2001 ASME SA-234, 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	S42357	20	CODO 6 X 90° R.C. CED-STD	284	473	37	130					
2	S42141	10	CODO 6 X 90° R.C. CED-STD	313	504	34	142					
3	S42235	60	CODO 4 X 90° R.C. CED-STD	312	483	32	128					
4	S45280	23	CODO 3 X 90° R.C. CED-XS	323	485	35	123					
5	S31051	4	CODO 3 X 90° R.C. CED-XS	297	473	33	133					
6	S33571	6	CODO 3 X 90° R.C. CED-XS	298	469	31	137					
7	S31681	7	CODO 3 X 90° R.C. CED-XS	301	465	34	115					
8	S29506	2	CODO 3 X 90° R.C. CED-XS	308	474	32	137					
9	T51345	1	CODO 8 X 90° R.C. CED-STD	317	483	41	122					
10	S42357	8	CODO 6 X 90° R.C. CED-XS	284	471	36	135					

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	S42357	42357	0.330	0.190	0.750	0.012	0.001	0.310	0.030	0.040	0.010	0.019	0.002	0.002
HF	S42141	42141	0.350	0.200	0.810	0.010	0.001	0.330	0.030	0.046	0.010	0.029	0.002	0.002
HF	S42235	42235	0.330	0.190	0.770	0.012	0.001	0.300	0.030	0.033	0.010	0.027	0.004	0.001
HF	S45280	45280	0.330	0.180	0.780	0.011	0.003	0.280	0.040	0.048	0.030	0.046	0.001	0.001
HF	S31051	31051	0.340	0.200	0.750	0.008	0.001	0.280	0.030	0.030	0.010	0.021	0.001	0.000
HF	S33571	33571	0.320	0.190	0.710	0.010	0.003	0.290	0.030	0.027	0.010	0.016	0.001	0.000
HF	S31681	31681	0.320	0.190	0.720	0.010	0.001	0.250	0.030	0.015	0.010	0.016	0.001	0.000
HF	S29506	29506	0.330	0.190	0.720	0.009	0.001	0.300	0.040	0.047	0.020	0.032	0.001	0.000
HF	T51345	51345	0.310	0.170	0.710	0.012	0.002	0.290	0.060	0.062	0.017	0.030	0.000	0.000
HF	S42357	42357	0.320	0.180	0.750	0.010	0.001	0.300	0.040	0.040	0.010	0.018	0.001	0.002


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°: 10053977 10058592 10053814 316357 457123 479004 470999 455306 10049782 10053816

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°: 10053977 10058592 10053814 316357 457123 479004 470999 455306 10049782 10053816

"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.

CC-008