

**CERTIFICADO DE CALIDAD
 INSPECTION CERTIFICATE**
 (DIN EN 10204:2004E - ISO 10474: 2013 3.1.B.)

Numero:
 Number: 32695
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Vendido a:
 Sold to: PLESA ANAHUAC Y CIA. S.A. DE C.V.

Pedido del Cliente No:
 Customers Order No: 28216 - 27931 - 26804 - 27241 -

Lista de Empaque:
 Packing List: 18280

Fecha/Date: 1 de agosto de 2019

Especificaciones y Grados / Standard or Specification and Steel Grade
 Seamless Fittings according to ASTM A 234 WPB-18e
 Conform to ASME II Ed. 2017, ASME SA-234 Grade WPB

Dimensiones y tolerancias / Dimension and tolerances
ASME B 16.9 - 2018

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. RUP.TURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HBW	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T98477	30	CODO 6 X 45° CED-XS	404	507	30	142					
2	T92058	10	CODO 6 X 90° R.C. CED-STD	341	490	30	148					
3	T30287	40	TEE 6 CED-XS	352	472	39	136					
4	T99271	60	CODO 4 X 90° R.C. CED-STD	325	479	39	142					
5	T99151	2	CODO 12 X 90° R.L. CED-XS	339	477	36	138					
6	T96380	1	CODO 12 X 90° R.L. CED-XS	269	426	35	140					
7	T99271	20	CODO 6 X 90° R.C. CED-XS	395	497	31	131					
8	T99271	40	CODO 4 X 90° R.C. CED-XS	333	482	42	143					
9	T99270	80	CODO 4 X 45° CED-XS	332	473	39	143					

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	T98477	98477	0.300	0.170	0.660	0.007	0.001	0.270	0.040	0.100	0.020	0.040	0.002	0.000
HF	T92058	92058	0.330	0.180	0.750	0.011	0.002	0.270	0.060	0.075	0.029	0.040	0.002	0.000
HF	T30287	30287	0.310	0.170	0.680	0.009	0.002	0.260	0.080	0.070	0.030	0.040	0.002	0.000
HF	T99271	99271	0.310	0.170	0.680	0.006	0.002	0.280	0.060	0.060	0.030	0.030	0.002	0.000
HF	T99151	99151	0.310	0.180	0.680	0.006	0.004	0.280	0.040	0.060	0.020	0.030	0.002	0.000
HF	T96380	96380	0.300	0.170	0.670	0.011	0.002	0.280	0.050	0.066	0.025	0.030	0.001	0.000
HF	T99271	99271	0.320	0.180	0.670	0.006	0.002	0.280	0.060	0.060	0.030	0.030	0.002	0.000
HF	T99271	99271	0.320	0.180	0.680	0.006	0.002	0.280	0.050	0.060	0.030	0.030	0.002	0.000
HF	T99270	99270	0.310	0.180	0.670	0.006	0.001	0.280	0.050	0.070	0.030	0.030	0.002	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°:
 19033881 18020106 19035030 19029772 19030463 18062290
 19029770 19028686 19026252
 "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. ALFONSO ORTEGA GARCIA

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: 2015 AND NACE MR01030/ISO 15156: 2015