

CERTIFICADO DE CALIDAD INSPECTION CERTIFICATE (DIN EN 10204:2004E - ISO 10474: 2013 3.1.B)		Numero: Number:	Pagina/Page:
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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 - 27241	Lista de Empaque: Packing List:	18217	Fecha/Date:	1 de julio 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. RUPTURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HBW	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T98372	5	TEE 12 CED-STD	251	415	36	130					
2	T98478	49	CODO 6 X 45° CED-STD	285	474	30	137					
3	T98483	71	CODO 6 X 45° CED-STD	263	738	30	141					
4	T98658	15	TEE 8 CED-XS	392	507	36	147					
5	T98480	50	CODO 3 X 45° CED-STD	354	492	36	146					
6	T99272	71	CODO 8 X 45° CED-STD	249	415	33	136					
7	T98481	18	CODO 8 X 45° CED-STD	338	486	31	136					
8	T98477	31	CODO 8 X 45° CED-STD	302	448	30	146					
9	T96575	48	CODO 2 1/2 X 45° CED-STD	339	483	35	122					
10	T96924	4	RED. CONC. 14 X 10 CED-STD	248	421	36	154					
11	T86019	1	RED. CONC. 14 X 10 CED-STD	271	423	38	129					

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	T98372	98372	0.320	0.180	0.680	0.010	0.002	0.280	0.070	0.060	0.030	0.040	0.002	0.000
HF	T98478	98478	0.300	0.017	0.660	0.006	0.002	0.250	0.040	0.080	0.020	0.040	0.001	0.000
HF	T98483	98483	0.300	0.170	0.650	0.006	0.001	0.250	0.040	0.080	0.020	0.040	0.001	0.000
HF	T98658	98658	0.330	0.180	0.740	0.008	0.003	0.270	0.050	0.080	0.020	0.040	0.002	0.000
HF	T98480	98480	0.300	0.170	0.670	0.009	0.001	0.260	0.050	0.070	0.020	0.030	0.002	0.000
HF	T99272	99272	0.310	0.180	0.670	0.006	0.001	0.290	0.050	0.060	0.030	0.030	0.003	0.000
HF	T98481	98481	0.310	0.180	0.670	0.007	0.001	0.260	0.050	0.070	0.020	0.030	0.002	0.000
HF	T98477	98477	0.300	0.170	0.660	0.008	0.001	0.270	0.040	0.100	0.020	0.040	0.002	0.000
HF	T96575	96575	0.320	0.180	0.670	0.011	0.002	0.270	0.060	0.060	0.030	0.030	0.003	0.000
CF	T96924	96924	0.320	0.180	0.690	0.011	0.002	0.290	0.040	0.078	0.021	0.040	0.002	0.000
CF	T86019	86019	0.300	0.170	0.680	0.011	0.001	0.270	0.030	0.057	0.014	0.020	0.000	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°: 19016915 19008889 19008889 19012856 19008879 19023406 19014502 19014502 19023007 19002890 17009530

"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	Notas: 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 MR0103,2015 ONLY HARDNESS
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CERTIFICADO DE CALIDAD INSPECTION CERTIFICATE (DIN EN 10204:2004E - ISO 10474: 2013 3.1.B)		Numero: Number:	Pagina/Page:
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Especificaciones y Grados / Standard or Specification and Steel Grade Seamless Fittings according to ASTM A 234 WPB-18a 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. RUPTURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HBW	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
12	T95484	4	RED. CONC. 12 X 10 CED-40	274	415	37	127					
13	S23210	64	CODO 2 X 90° R.C. CED-XS	322	485	28	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
CF	T95484	95484	0.300	0.170	0.670	0.007	0.002	0.290	0.040	0.060	0.030	0.030	0.001	0.000
HF	S23210	23210	0.340	0.190	0.770	0.010	0.001	0.300	0.050	0.050	0.010	0.023	0.005	0.001

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°: 19009284 19009248

"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".

<p>Notas:</p> <p>Formado en caliente a 620°C-980°C, enfriado al aire; Formado en frío normalizado a 940°C max. Tiempo de permanencia 10'.</p> <p>Inspección Dimensional: Satisfactoria.</p> <p>HF: FORMADO EN CALIENTE/HOT FORMED</p>	<p>Notes:</p> <p>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'.</p> <p>Visual dimensional check: Satisfactory</p> <p>CF: FORMADO EN FRIO/COLD FORMED</p>	 Quality Manager/Jefe de Calidad: ING. ALFONSO ORTEGA GARCIA	<p>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.</p> <p>MATERIAL ACCORDING TO NACE MR0175/ISO 15156, 2015 AND NACE MR0103,2015 ONLY HARDNESS</p>
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