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CERTIFICADO DE CALIDAD INSPECTION CERTIFICATE (DIN EN 10204:2004E - ISO 10474: 2013 3.1.B)		Numero: Number: 32469	Pagina/Page: 1
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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 - 27241	Lista de Empaque: Packing List: 18118	Fecha/Date: 30 de abril 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	T98480	471	CODO 3 X 90° R.L. CED-STD	354	492	36	146					
2	T98478	300	CODO 6 X 90° R.L. CED-STD.	285	474	30	137					
3	T95484	3	CODO 16 X 90° R.L. CED-XS	287	473	35	143					
4	T96570	36	CODO 8 X 90° R.L. CED-XS	300	433	34	135					
5	T96575	71	CODO 6 X 90° R.L. CED-XS	400	520	30	137					
6	T98481	49	CODO 6 X 90° R.L. CED-XS	318	477	42	118					
7	T99150	36	CODO 12 X 90° R.L. CED-STD	276	425	33	138					
8	T96801	80	CODO 10 X 90° R.L. CED-STD	304	475	30	158					
9	T96380	5	CODO 12 X 90° R.L. CED-XS	269	426	35	140					
10	T96113	3	CODO 10 X 90° R.L. CED-80	325	455	35	136					
11	T94250	17	CODO 10 X 90° R.L. CED-80	299	479	42	118					

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	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	T98478	98478	0.300	0.170	0.660	0.006	0.002	0.250	0.040	0.080	0.020	0.040	0.001	0.000
HF	T95484	95484	0.290	0.160	0.660	0.007	0.002	0.290	0.040	0.061	0.026	0.030	0.002	0.000
HF	T96570	96570	0.300	0.170	0.670	0.014	0.002	0.260	0.050	0.059	0.018	0.030	0.020	0.000
HF	T96575	96575	0.310	0.180	0.660	0.012	0.002	0.270	0.060	0.060	0.030	0.030	0.001	0.000
HF	T98481	98481	0.310	0.180	0.670	0.007	0.001	0.250	0.050	0.070	0.020	0.030	0.002	0.000
HF	T99150	99150	0.300	0.170	0.670	0.007	0.003	0.280	0.040	0.060	0.030	0.040	0.002	0.000
HF	T96801	96801	0.310	0.170	0.680	0.011	0.002	0.290	0.060	0.076	0.021	0.040	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	T96113	96113	0.310	0.170	0.700	0.013	0.002	0.270	0.060	0.063	0.030	0.030	0.002	0.000
HF	T94250	94250	0.310	0.180	0.680	0.007	0.002	0.290	0.050	0.063	0.017	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°:
19008879 19008889 18054675 18064261 19013874 19016982 19017211 19000299 18062290 18058542 18054676
"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
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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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Vendido a: Sold to:	PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No:	27931 - 27241 -	Lista de Empaque: Packing List:	18118	Fecha/Date:	30 de abril 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
12	T98480	50	CODO 3 X 45° CED-XS	331	474	37	143					
13	T95484	2	RED. CONC. 12 X 8 CED-STD	329	483	45	120					
14	T88853	22	CODO 5 X 45° CED-XS	404	506	30	141					
15	T6971	7	CODO 5 X 45° CED-XS	288	479	42	120					
16	T7537	1	CODO 5 X 45° CED-XS	303	472	39	150					
17	T98372	12	TEE 12 CED-40	333	483	43	122					
18	T72870	1	RED. CONC. 12 X 6 CED-80	276	460	31	139					
19	T86483	1	RED. CONC. 12 X 6 CED-80	321	457	37	134					
20	T87037	1	CODO 8 X 90° R.C. CED-XS	311	431	35	134					

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	T98480	98480	0.300	0.170	0.660	0.009	0.001	0.260	0.050	0.070	0.020	0.030	0.002	0.000
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	T88853	88853	0.310	0.180	0.680	0.010	0.002	0.270	0.050	0.068	0.020	0.030	0.000	0.000
HF	T6971	6971	0.310	0.180	0.700	0.005	0.002	0.300	0.020	0.041	0.010	0.020	0.000	0.000
HF	T7537	7537	0.300	0.170	0.720	0.007	0.002	0.270	0.030	0.042	0.008	0.020	0.000	0.000
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
CF	T72870	72870	0.310	0.180	0.670	0.006	0.002	0.280	0.040	0.062	0.016	0.040	0.000	0.000
CF	T86483	86483	0.310	0.180	0.690	0.009	0.002	0.270	0.030	0.059	0.014	0.030	0.000	0.000
HF	T87037	87037	0.330	0.180	0.800	0.011	0.001	0.310	0.040	0.048	0.015	0.020	0.000	0.000

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°:
 19009689 19009284 17047653 14044789 14011757 19016915 14041844 17024577 17034027
 "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 MR0103,2015 ONLY HARDNESS
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