

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

Numero:
Number: 30091
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Vendido a: Sold to: PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No: 22581	Lista de Empaque: Packing List: 15658	Fecha/Date: 8 de enero de 2016
Especificaciones y Grados / Standard or Specification and Steel Grade Seamless Fittings according to ASTM A 234 WPB-13e Conform to ASME II Ed. 2013 ASME SA-234, Grade WPB	Dimensiones y tolerancias / Dimension and tolerances ASME B 16.9 - 2012		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	T74289	5	CODO 16 X 90° R.L. CED-XS	264	434	33	141					
2	T75781	15	RED. CONC. 10 X 8 CED-STD	318	496	42	141					
3	T72798	18	CODO 12 X 90° R.L. CED-STD	281	435	35	144					
4	T64059	1	CODO 10 X 90° R.L. CED-XS	308	473	38	148					
5	T70959	1	CODO 10 X 90° R.L. CED-XS	260	495	34	145					
6	T72971	4	CODO 10 X 90° R.L. CED-XS	319	470	32	145					
7	T72619	4	CODO 10 X 90° R.L. CED-XS	290	451	34	136					
8	T7533	14	CODO 6 X 90° R.C. CED-XS	299	481	30	146					
9	T6966	6	CODO 6 X 90° R.C. CED-XS	310	479	42	118					
10	T77075	5	RED. CONC. 16 X 12 CED-STD	318	480	31	136					
11	T73977	6	CODO 14 X 90° R.L. CED-40	321	477	36	147					

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	T74289	74289	0.310	0.180	0.690	0.006	0.001	0.270	0.060	0.071	0.030	0.040	0.000	0.000
CF	T75781	75781	0.320	0.180	0.680	0.006	0.001	0.260	0.060	0.064	0.020	0.050	0.000	0.000
HF	T72798	72798	0.340	0.180	0.780	0.007	0.001	0.280	0.060	0.079	0.042	0.040	0.000	0.000
HF	T64059	64059	0.300	0.170	0.660	0.014	0.002	0.290	0.050	0.063	0.038	0.040	0.000	0.000
HF	T70959	70959	0.310	0.170	0.760	0.007	0.001	0.260	0.030	0.073	0.016	0.040	0.000	0.000
HF	T72971	72971	0.310	0.180	0.670	0.007	0.001	0.300	0.040	0.080	0.015	0.040	0.000	0.000
HF	T72619	72619	0.310	0.180	0.670	0.007	0.001	0.280	0.040	0.066	0.024	0.040	0.000	0.000
HF	T7533	7533	0.300	0.170	0.720	0.006	0.001	0.270	0.020	0.036	0.008	0.020	0.000	0.000
HF	T6966	6966	0.320	0.190	0.710	0.008	0.001	0.280	0.020	0.024	0.007	0.020	0.000	0.000
CF	T77075	77075	0.320	0.170	0.670	0.006	0.001	0.280	0.050	0.074	0.027	0.040	0.000	0.000
HF	T73977	73977	0.320	0.190	0.670	0.014	0.002	0.280	0.070	0.058	0.013	0.040	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°:
15016454 15007293 15012179 13020334 14025245 15000972 15000972 14020893 14020893 15019045 14054482
"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.

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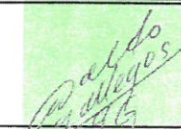
Vendido a: Sold to:	PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No: Customers Order No:	22581 -	Lista de Empaque: Packing List:	15658	Fecha/Date:	30 de diciembre de 2015
Especificaciones y Grados / Standard or Specification and Steel Grade Seamless Fittings according to ASTM A 234 WPB-13e Conform to ASME II Ed. 2013 ASME SA-234, Grade WPB		Dimensiones y tolerancias / Dimension and tolerances ASME B 16.9 - 2012			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	T8434	50	CODO 2 1/2 X 90° R.L. CED-XS	338	493	38	130					

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	T8434	8434	0.310	0.180	0.690	0.006	0.001	0.290	0.040	0.032	0.009	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°: 14040494
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°: 14040494

"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
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MATERIAL ACCORDING TO NACE MR0175/ISO 15156-1,2009 AND NACE MR0103, 2012 ONLY HARDNESS

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