



Tubos de Acero de México, S.A.
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CERTIFICADO DE CALIDAD
INSPECTION CERTIFICATE
 (DIN EN 10204:2004E - ISO 10474 3.1.B)

Numero:
 Number:
 27925

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Vendido a: **PLESA ANAHUAC Y CIA. S.A. DE C.V.** Pedido del Cliente No: **15528 - 14833 -** Lista de Empaque: **14506** Fecha/Date: **2 de Septiembre de 2013**
 Sold to:

Especificaciones y Grados / Standard or Specification and Steel Grade: **Seamless Fittings according to ASTM A 234 WPB-10, 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**

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	T5925	2	TEE 4 CED-STD	268	461	35	148					
2	T5295	53	TEE 4 CED-STD	303	490	34	162					
3	T65039	10	TEE RED. 6 K 4 CED-XS	288	472	45	161					
4	T62067	10	TEE 10 CED-80	305	473	40	146					

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	T5925	5925	0.300	0.160	0.760	0.005	0.001	0.300	0.040	0.034	0.005	0.020	0.000	0.000
HF	T5295	5295	0.320	0.180	0.780	0.009	0.001	0.310	0.020	0.033	0.006	0.020	0.000	0.000
HF	T65039	65039	0.300	0.170	0.660	0.012	0.002	0.250	0.050	0.048	0.027	0.030	0.000	0.000
HF	T62067	62067	0.330	0.190	0.670	0.008	0.001	0.300	0.060	0.066	0.032	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°. 13032762 12080800 13034073 12073168

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.