



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

Numero:  
Number:  
19102

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Tubos de Acero de México, S.A.  
Carr. Mty-Laredo Km 24.2  
Apartado Postal 43  
(65550) C. de Flores, N.L. Mex.  
(52) 81 8305 9600 tel  
(52) 81 8305 9620 fax

Vendido a: Sold to:	ALLIED HOUSTON	Pedido del Cliente No: Customers Order No:	110106RM -	Lista de Empaque: Packing List:	9844	Fecha/Date:	1 de Noviembre de 2007
Especificaciones y Grados / Standard or Specification and Steel Grade	Seamless Fittings according to ASTM A 234"M" WPB-97, A234"M" WPB-05a, NACE MR 01.75-2003 Conform to ASME II Ed. 2001 ASME SA-234"M", Grade WPB.	Dimensiones y tolerancias / Dimension and tolerances	ASME B 16.9 - 2003 and ASME B 16.28 - 1994		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	T33853	6	ELLS 16 X 90° I.R. SCH-XS	318	488	42	87					
2	T35714	71	ELLS 8 X 90° S.R. SCH-STD	311	478	37	95					
3	T34258	79	ELLS 8 X 90° S R SCH-STD	294	474	38	88					

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
RF	T33853	33853	0.310	0.180	0.680	0.008	0.002	0.280	0.040	0.060	0.030	0.030	0.000	0.000
RF	T35714	35714	0.330	0.180	0.760	0.009	0.001	0.300	0.050	0.072	0.024	0.040	0.000	0.000
RF	T34258	34258	0.310	0.170	0.670	0.009	0.001	0.290	0.060	0.070	0.040	0.040	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°: 7025882 7040886 7033022

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°: 7025882 7040886 7033022

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.

<b>Notes:</b> Formado en caliente a 620°C-880°C, enfriado al aire; Formado en frío normalizado a 940°C max. Tiempo de permanencia 10'. Inspección Dimensional: Satisfactoria. RF: FORMADO EN CALIENTE/HOT FORMED	<b>Notes:</b> Hot formed fittings in a range from 620°C to 880°C, cooled in still air, Cold formed normalized at 940°C max. Holding time 10'. Visual dimensional check: Satisfactory. CF: FORMADO EN FROJO/COLD FORMED	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.
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Jefe de Calidad:  
Quality Manager:   
ING. JOSE MARTINEZ MACIAS

CC-008

**ALLIED FITTING  
TRUE COPY OF  
ORIGINAL MTR  
SIGN **