



**CERTIFICADO DE CALIDAD
INSPECTION CERTIFICATE**
(DIN EN 10204:2004E - ISO 10474.3.1.B)

Tubos de Acero de Mexico, S.A.
Carr. Mty-Laredo Km 24.2
Aparado Postal 43
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Vendido a: PLESA ANAHUAC Y CIA. S.A. DE C.V.
Pedido del Cliente No: 5022 - 4848
Fecha/Date: 4 de Septiembre de 2008

Sold to: PLESA ANAHUAC Y CIA. S.A. DE C.V.
Customers Order No: 5022 - 4848
Factura/Invoice: Bocas / Ends
Biselado / Bevelled ends

Seamless Fittings according to ASTM A 234 "W" WPB-97, A234 "W" WPB-05a, NACE MR 01.75-2003
ASME B 16.9 - 2003 and ASME B 16.28 - 1994

Dimensiones y tolerancias / Dimension and tolerances
Lista de Empaque: 10792
Fecha/Date: 4 de Septiembre de 2008

Numero: 20966
Pagina/Page: 1 DE 1

Numero: 20966
Pagina/Page: 1 DE 1

ART. ITEM	COLADA HEAT CODE	CANTIDAD QUANTITY	DESCRIPCION / DESCRIPTION	PRUEBAS MECANICAS / MECHANICAL TEST		PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C			
				ESF. CEDENCIA YIELD STRENGTH (Mpa)	ESF. RUPTURA TENSILE STRENGTH (Mpa)	1	2	3	PROMEDIO AVERAGE
1	T36018	1	CODO 14 X 90° R. I. CED-STD	354	499	1	2	3	
2	T40516	6	CODO 14 X 90° R. I. CED-STD	322	503				
3	T40156	10	TEE 8 CED-STD	325	524				
4	T29863	1	CODO 6 X 45° CED-STD	342	476				
5	T40745	69	CODO 6 X 45° CED-STD	316	469				
6	T39958	10	RED. CONC. 8 X 4 CED-STD	319	487				
7	S26550	25	CODO 4 X 45° CED-STD	341	475				
8	T36285	3	RED. CONC. 8 X 6 CED-STD	348	490				
9	T37092	2	RED. CONC. 8 X 6 CED-STD	303	463				
10	T38264	2	RED. CONC. 8 X 6 CED-STD	314	486				
11	T38887	1	CODO 8 X 45° CED-STD	324	461				

ANALISIS QUIMICO / CHEMICAL ANALYSIS

PROCESO PROCESS	COLADA HEAT CODE	COLADANHEAT M.P./MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T36018	36018	0.320	0.180	0.670	0.012	0.002	0.270	0.050	0.096	0.028	0.040	0.000	0.000
HF	T40516	40516	0.310	0.180	0.680	0.009	0.001	0.280	0.050	0.066	0.008	0.030	0.000	0.000
HF	T40156	40156	0.300	0.170	0.700	0.011	0.001	0.290	0.040	0.049	0.006	0.030	0.000	0.000
HF	T29863	29863	0.320	0.180	0.680	0.007	0.002	0.280	0.050	0.067	0.030	0.030	0.000	0.000
HF	T40745	40745	0.300	0.170	0.670	0.009	0.002	0.280	0.040	0.044	0.006	0.020	0.000	0.000
CF	T39958	39958	0.310	0.180	0.670	0.009	0.002	0.270	0.050	0.058	0.007	0.030	0.000	0.000
HF	S26550	26550	0.320	0.190	0.720	0.010	0.002	0.270	0.040	0.018	0.010	0.013	0.001	0.001
CF	T36285	36285	0.300	0.170	0.660	0.011	0.002	0.270	0.050	0.066	0.030	0.030	0.000	0.000
CF	T37092	37092	0.320	0.180	0.690	0.010	0.001	0.280	0.060	0.053	0.018	0.030	0.000	0.000
CF	T38264	38264	0.300	0.180	0.660	0.010	0.001	0.260	0.040	0.047	0.007	0.030	0.000	0.000
HF	T38887	38887	0.300	0.160	0.670	0.009	0.001	0.280	0.060	0.065	0.023	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 (Tuberia 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) cents conform to ASTM A106 Grade B N°
7045980 8039152 8041366 7033023 8045575 8040184 420901
7048654 8014046 8017024 8033347

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.

Formado en caliente a 620° C.-980° C., enfriado al aire. Formado in fire normalized a 940° C. max. Cold formed normalized at 940° C. max.
Tiempo de permanencia 10'. Holding time 10'.
Inspeccion Dimensional Satisfactoria. Visual dimensional check. Satisfactory.
HF FORMADO EN CALIENTE/HOT FORMED CF FORMADO EN FRIOCOLD FORMED

Quality Manager/Jefe de Calidad:
ING. WALDO GALLEGOS GALVAN