



Tubos de Acero de Mexico, S.A.
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**CERTIFICADO DE CALIDAD
 INSPECTION CERTIFICATE**
 (DIN EN 10204 3.1.B - ISO 10474 3.1.B)

Numero: 15874
 Pagina/Page: 1 DE 1

Fecha/Date: 6 de Abril de 2006

Vendido a: **PIESA ANADYAC**
 Pedido del Cliente No: **1052 1150**
 Factura/Invoice: **Bocas / Ends**
 Sold to: **PIESA ANADYAC**
 Customers Order No: **1052 1150**
 Biselado / Bevelled ends

Descripciones y Grados / Standard or Specification and Steel Grade
 Especificaciones y Grados / Standard or Specification and Steel Grade
 Seamsas Primes according to ASTM A 23497, A23492 / ASME ASA 234 WPB.
 NACE MR 01 75-2003 - Conform to ASME II Ed. 2001
 ASME B 16.9 and ASME B 16.28 edition 2001

ART ITEM	COLADA HEAT CODE	CANTIDA 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)	ELONG. %Z	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T27420	10	ELS. 8 X 90 L. R. SCH-XH	293	473	46	116					
2	T25337	9	TEE 12 SCH-STD	364	482	40	126					
3	T27030	4	RED. TEE 12 X 6 SCH-STD	307	478	45	106					
4	T27073	15	RED. TEE 6 X 4 SCH-STD	331	464	35	108					

ANALISIS QUIMICO / CHEMICAL ANALYSIS

PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT MP/MOTHER PIPE	%C	%E	%Mn	%P	%S	%SI	%Cr	%Cu	%Mo	%Ni	%V	%Nb
HF	T27420	27420	0.322	0.180	0.690	0.012	0.003	0.028	0.070	0.075	0.029	0.040	0.000	0.000
CF	T25337	25337	0.320	0.190	0.670	0.011	0.003	0.270	0.040	0.073	0.013	0.040	0.000	0.000
CF	T27030	27030	0.322	0.180	0.700	0.011	0.002	0.300	0.050	0.084	0.032	0.050	0.000	0.000
CF	T27073	27073	0.306	0.170	0.680	0.007	0.002	0.280	0.050	0.075	0.026	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 conforme ASTM A106Grades 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 certs conform to ASTM A106 Grade B N°
 06006671 06002498 06003925 6003965

Notes: Formado en caliente a 780°C/1440°C, enfriado al aire. Formado en frío formado a 890°C máx.
 Heat formed ferrite in a single heat 780°C to 890°C, cooled in air.
 Cold formed formater at 890°C max.
 Holding time 10'
 Visual dimensioncheck satisfactory
 Visual dimensioncheck satisfactory
 CF FORMADO EN CALIENTE/HOT FORMED CF FORMADO EN FRIED/COLD FORMED
 The Products described herein were produced in accordance with the above referenced specification and are identified with the "K" which is permanently marked on each fitting.
 Jefe de Aseguramiento de Calidad:
 Quality Assurance Coordinator
 ING. JOSE MARTINEZ MACIAS
 CC-008