



# Tenaris

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

Tubos de Acero de México, S.A.  
Carr. Mty-Laredo Km 24.2  
Apartado Postal 43  
(65550) C. de Flores, N.L. Méx.  
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Vendido a:	PLESA ANAHUAC Y CIA. S.A. DE C.V.	Pedido del Cliente No:	4235-	Lista de Empaque:	10261	Fecha/Date:	29 de Febrero de 2008
Sold to:		Customers Order No:		Packing List:			
Especificaciones y Grados / Standard or Specification and Steel Grade		Dimensiones y tolerancias / Dimension and tolerances					
Seamless Fittings according to ASTM A 234 "W", WPB-97, A234 "W", WPB-95, NACE MR 01.75-2003		ASME B 16.9 - 2003 and ASME B 16.28 - 1994					
Conform to ASME II Ed. 2001 ASME SA-234 "W", Grade WPB.							

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)	ELONG. %2"	DUREZA HARDNESS HBW	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules	
1	T37883	10	CODO 16 X 90° R. I. CED-STD	324	487	44	101						
2	T36223	10	CODO 12 X 45° CED-40	308	486	46	87						
3	CTV5	10	TEE RED. 2 X 1 CED-XS	343	496	36	163						
4	CKX5	10	TEE RED. 2 X 1 CED-STD	353	469	42	134						
5	KV5	7	TEE RED. 4 X 3 CED-XS	313	469	48	156						

### 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	T37883	37883	0.330	0.180	0.780	0.011	0.003	0.280	0.040	0.057	0.013	0.030	0.000	0.000
HF	T36223	36223	0.310	0.170	0.680	0.012	0.001	0.270	0.060	0.080	0.020	0.030	0.000	0.000
HF	CTV5	50542	0.283	0.160	0.650	0.019	0.003	0.230	0.030	0.070	0.010	0.020	0.004	0.000
HF	CKX5	44347	0.298	0.170	0.640	0.013	0.002	0.240	0.030	0.001	0.030	0.130	0.001	0.000
HF	KV5	20282	0.300	0.170	0.640	0.011	0.001	0.250	0.060	0.100	0.010	0.040	0.001	0.001

Notes: Formado en caliente a 820°C-980°C, enfriado al aire. Formado en frío normalizado a 940°C max. Time of permanence 10'.  
 Notes: Hot formed fittings in a range from 820°C to 980°C, cooled in still air. Cold formed normalized at 940°C max. Holding time 10'.  
 Visual dimensional check. Satisfactory.  
 Visual dimensional check. Satisfactory.

Jefe de Calidad:  
Quality Manager:

*[Signature]*  
ING. WALTER GALLEGOS GALVAN

CC-008

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.

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) certs conform to ASTM A106 Grade B N°. 8009611 7048512 42376 41650 42230

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.