Tenaris

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

Numero: Number:	Pagina/Page:
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Vendido a: Sold to: PLESA ANAHUAC	Pedido del Cliente No: Customers Order No: 1019 1052 1035	Lista de Empaque: Packing List: 8080	Fecha/Date: 10 de Marzo de 2006
Especificaciones y Grados / Standard or Specification and Steel Grade Seamless Fittings according to ASTM A 234-97, A234-02 / ASME A/SA 234 WPB - NACE MR 01.75-2003 - Conform to ASME II Ed. 2001	Dimensiones y tolerancias / Dimension and tolerances ASME B 16.9 and ASME B 16.28 edition 2001		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	CANTIDA QUANTITY	DESCRIPCION / DESCRIPTION	ESF. CEDENCIA YIELD STRENGTH (Mpa)	ESF. RUPTURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	T26967	18	ELLS 12 X 90 L.R. SCH-STD	316	477	40	112					
2	T26621	20	ELLS 8 X 90 S.R. SCH-STD	307	480	43	121					
3	T25666	10	CONC. RED. 10 X 6 SCH-STD	329	502	45	116					
4	T14610	4	CONC. RED. 12 X 6 SCH-STD	354	514	43	130					
5	T16460	6	CONC. RED. 12 X 6 SCH-STD	285	476	32	103					
6	T25720	5	CONC. RED. 14 X 10 SCH-STD	320	499	34	118					
7	T21683	5	CONC. RED. 16 X 12 SCH-STD	364	483	43	106					
8	T27030	9	TEE 12 SCH-STD	307	478	45	106					
9	T20124	2	TEE 14 SCH-STD	271	478	34	109					
10	TJN6	1	TEE 14 SCH-STD	260	465	35	139					
11	T19813	6	TEE 16 SCH-STD	346	476	49	120					

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	T26967	26967	0.310	0.170	0.670	0.009	0.001	0.300	0.050	0.078	0.050	0.050	0.000	0.000
HF	T26621	26621	0.322	0.180	0.700	0.010	0.001	0.270	0.050	0.082	0.029	0.060	0.000	0.000
CF	T25666	25666	0.333	0.180	0.710	0.008	0.001	0.290	0.070	0.125	0.043	0.050	0.000	0.000
CF	T14610	14610	0.327	0.190	0.680	0.012	0.002	0.290	0.050	0.082	0.029	0.040	0.000	0.000
CF	T16460	16460	0.341	0.180	0.770	0.013	0.003	0.290	0.090	0.079	0.034	0.040	0.000	0.000
CF	T25720	25720	0.330	0.190	0.670	0.010	0.002	0.290	0.080	0.070	0.024	0.050	0.000	0.000
CF	T21683	21683	0.328	0.190	0.690	0.008	0.001	0.260	0.050	0.056	0.034	0.030	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	T20124	20124	0.315	0.180	0.670	0.005	0.003	0.270	0.040	0.078	0.037	0.040	0.000	0.000
CF	TJN6	16795	0.314	0.180	0.670	0.011	0.003	0.270	0.040	0.061	0.040	0.030	0.000	0.000
CF	T19813	19813	0.320	0.180	0.730	0.014	0.004	0.270	0.050	0.050	0.017	0.020	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 A106GradeB con Nº:

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 suplier Raw

material certs conform to ASTM A106 Grade B Nº:

06003195 06000795 05028498
04002101 04009398 05029062
05008490 06003925 05001575
04014242 05005137

"Este material cumple con los requerimientos especificados en la orden".

"The material of this certificate heat number mentioned above is in compilance with the requirements specified in the order".

Notas:

Formado en caliente a 780°C-940°C, enfriado al aire; Formado en frio 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 780°C to 940°C, cooled in still air,

Cold formed nomalized at 940°C max.

Holding time 10'.

Visual dimensionalcheck: Satisfactory

CF: FORMADO EN FRIO/COLD FORMED

Jefe de Aseguramiento de Calidad:
Quality Assurance Coordinator

ING. JOSE MARTINEZ MACIAS

CC-008