

**CERTIFICADO DE CALIDAD
INSPECTION CERTIFICATE**

01.75 ed. 02 - Conform to ASME II Ed. 200

ASME B 16.9 and ASME B 16.28 edition 2001

Biselado / Bevelled ends

Vendido a: TUCOTA

Pedido del Cliente No:

Customers Order No:

Lista de Empaque: 6568

Fecha/Date: 26 de Febrero de 2004

Dimensiones y tolerancias / Dimension and tolerances

Bocas / Ends

01.75 ed. 02 - Conform to ASME II Ed. 2001

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. RUPURA TENSILE STRENGTH (Mpa)	ELONG. %2"	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	SVK5	20	CODO 4 X 45 CED XS	330	482	39	137					
2	TDB6	144	CODO 6 X 45 CED STD	320	496	41	136					
3	TDB6	200	CODO R.L. 6 X 90 CED STD	320	496	41	136					
4	GV5	3	RED. CONC. 16 X 12 CED XS	361	487	46	144					
5	SWA5	50	RED. CONC. 4 X 2 CED STD	310	460	40	137					
6	TCG6	10	RED. CONC. 6 X 5 CED STD	319	488	39	119					
7	TYI5	24	TEE 10 CED STD	331	502	42	140					
8	TC5	150	TEE 2 CED STD	338	489	36	197					
9	TDO6	5	TEE 5 CED STD	313	481	40	126					

ANALISIS QUIMICO / CHEMICAL ANALYSIS

PROCESO PROCESS	COLADA CODE	HEAT M.P/MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%SI	%Cr	%Cu	%Mo	%NI	%V	%NB
HF	SVK5	26013	0.339	0.180	0.830	0.010	0.001	0.310	0.040	0.050	0.030	0.040	0.001	0.001
HF	TDB6	14999	0.311	0.170	0.690	0.010	0.003	0.280	0.050	0.086	0.035	0.050	0.000	0.000
HF	TDB6	14999	0.311	0.170	0.690	0.010	0.003	0.280	0.050	0.086	0.035	0.050	0.000	0.000
CF	GV5	96772	0.304	0.170	0.690	0.006	0.003	0.280	0.040	0.070	0.016	0.040	0.000	0.000
CF	SWA5	24822	0.324	0.190	0.740	0.007	0.001	0.290	0.020	0.040	0.010	0.020	0.001	0.001
CF	TCG6	13824	0.344	0.190	0.790	0.009	0.003	0.240	0.050	0.048	0.038	0.030	0.000	0.000
CF	TYI5	12438	0.342	0.180	0.780	0.013	0.001	0.290	0.080	0.078	0.033	0.070	0.000	0.000
CF	TC5	EG98CO	0.308	0.170	0.740	0.008	0.006	0.250	0.040	0.040	0.010	0.020	0.001	0.000
CF	TDO6	15280	0.305	0.170	0.670	0.010	0.003	0.270	0.040	0.092	0.030	0.050	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 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 N°:

165681	04001242	04001242
02011814	161657	03015989
03012394	0468	04003195

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.

Notes:

Formado en caliente a 790°C-940°C, enfriado al aire; Formado en frío normalizado a 940°C max.
Formed hot formed fittings in a range from 790°C to 940°C, cooled in still air.
Cold formed normalized at 940°C max.
Holding time 10'.
Visual dimensional check: Satisfactory
Visual dimensional check: Satisfactory

Gerente de Aseguramiento de Calidad:
Quality Assurance Manager: