

**CERTIFICADO DE CALIDAD**  
**INSPECTION CERTIFICATE**

(DIN EN 10204 3.1 B - ISO 10474 3.1 B)

Numero:  
Number: 11278

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Fecha/Date: 12 de 2003

Vendido / **YUCOTA**  
Sold to:

Especificaciones y Grados / Standard or Specification and Steel Grade  
Seamless Fittings according to ASTM/ASME ASA 234 WPB - NACE MR 01.75 ed. 02 -  
Conform to ASME II Ed. 2001

Pedido del cliente No: 6700  
Customers Order No

Dimensiones y tolerancias / Dimension and tolerances  
ASME B 16.9 and ASME B 16.28 edition 2001

Lista de empaque: 6413  
Bocas / Ends  
Packing List: **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	CANTIDAD QUANTITY	DESCRIPCION / DESCRIPTION	EST. CEDENCIA YIELD STRENGTH (MPa)	EST. RUPITURA TENSILE STRENGTH (MPa)	ELONG. % <sup>2"</sup>	DUREZA HARDNESS HB	DIMENSIONES SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO AVERAGE Joules
1	TAY6	460	CODO R.L. 4 X 90 CED STD	350	484	40	137	N/A	N/A	N/A	N/A	N/A
2	SBH6	10	CODO 5 X 45 CED STD	315	467	39	141	N/A	N/A	N/A	N/A	N/A
3	TZZ5	300	CODO R.L. 6 X 90 CED STD	321	484	41	139	N/A	N/A	N/A	N/A	N/A
4	TYYS	50	CODO 8 X 45 CED STD	311	481	43	136	N/A	N/A	N/A	N/A	N/A
5	TXO5	120	CODO R.L. 8 X 90 CED STD	317	482	40	137	N/A	N/A	N/A	N/A	N/A
6	KH5	8	RED. CONC. 10 X 4 CED STD	328	480	42	147	N/A	N/A	N/A	N/A	N/A
7	NP5	12	RED. CONC. 10 X 4 CED STD	334	493	44	140	N/A	N/A	N/A	N/A	N/A
8	TAL6	10	RED. CONC. 14 X 8 CED STD	347	504	40	143	N/A	N/A	N/A	N/A	N/A
9	TWY5	1	RED. CONC. 16 X 8 CED STD	345	485	44	138	N/A	N/A	N/A	N/A	N/A

**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
HP	TAY6	13613	0.3070	1.80	0.660	0.008	0.003	0.270	0.030	0.051	0.027	0.030	0.000	0.000
HF	SBH6	28899	0.3240	1.80	0.740	0.011	0.001	0.270	0.050	0.030	0.030	0.001	0.001	0.001
HF	TZZ5	13370	0.3160	1.80	0.670	0.013	0.003	0.260	0.050	0.054	0.043	0.030	0.000	0.000
HF	TYYS	13015	0.3170	1.80	0.670	0.008	0.003	0.270	0.050	0.062	0.039	0.050	0.000	0.000
HF	TXO5	12430	0.3310	1.90	0.670	0.008	0.002	0.260	0.070	0.066	0.036	0.050	0.000	0.000
GF	KH5	95769	0.3230	1.80	0.660	0.009	0.004	0.270	0.070	0.060	0.056	0.050	0.000	0.000
GF	NP5	98779	0.3130	1.80	0.680	0.010	0.003	0.270	0.050	0.068	0.018	0.030	0.000	0.000
GF	TAL6	12133	0.3400	1.80	0.770	0.012	0.001	0.280	0.080	0.079	0.031	0.070	0.000	0.000
GF	TWY5	11652	0.3180	1.80	0.670	0.014	0.003	0.300	0.060	0.071	0.036	0.040	0.000	0.000

**PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C**

PROCESO PROCESS	COLADA HEAT CODE	COLADA/HEAT M.P. MOTHER PIPE	Material certs N°	155685	03016792	02007292	03019145
HP	TAY6	13613	030118601	155685	03016792	02007292	03019145
HF	SBH6	28899	030118601	155685	03016792	02007292	03019145
HF	TZZ5	13370	030118601	155685	03016792	02007292	03019145
HF	TYYS	13015	030118601	155685	03016792	02007292	03019145
HF	TXO5	12430	030118601	155685	03016792	02007292	03019145
GF	KH5	95769	030118601	155685	03016792	02007292	03019145
GF	NP5	98779	030118601	155685	03016792	02007292	03019145
GF	TAL6	12133	030118601	155685	03016792	02007292	03019145
GF	TWY5	11652	030118601	155685	03016792	02007292	03019145

**Gerente de Aseguramiento de Calidad:**  
Quality Assurance Manager

NO JOSE MARTINEZ MACIAS

CC 008