

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

Numero: 11433 Pagina/Page: 1 DE 1

Pedido del cliente No: 7663, 7696, 7731 Lista de empaque: 6483 Fecha: 19/3 de 2004

Customers Order No: Dimensiones y tolerancias / Dimension and tolerances Packing List: Bocas / Ends: Bistecado / Bevelled ends

ASME B 16.3 and ASME B 16.28 edition 2001

Specifications y Grados / Standard or Specification and Steel Grade
 unless fittings according to ASTM/ASME ASA 234 WPB - NACE MR 01.75 ed. 02.
 inform to ASME B 16.3 2001

ITEM	COLADA HEAT CODE	CANTIDAD 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	TCP6	40	CODO R.L. 10 X 90 CED STD	332	493	38	135	N/A	N/A	N/A	N/A	N/A
2	BNS	80	CODO R.L. 1 1/2 X 90 CED STD	334	514	50	124	N/A	N/A	N/A	N/A	N/A
3	JG5	100	CODO R.L. 1 1/2 X 90 CED XS	336	485	48	128	N/A	N/A	N/A	N/A	N/A
1	SZL5	243	CODO R.L. 1 1/4 X 90 CED STD	367	521	51	133	N/A	N/A	N/A	N/A	N/A
5	MC5	200	CODO R.L. 1 X 90 CED STD	254	432	60	124	N/A	N/A	N/A	N/A	N/A
5	ONS	150	CODO 2 X 45 CED STD	343	493	36	126	N/A	N/A	N/A	N/A	N/A
7	TBI6	528	CODO R.L. 3 X 90 CED STD	349	484	40	130	N/A	N/A	N/A	N/A	N/A
3	TAV6	49	CODO 4 X 45 CED STD	362	490	41	138	N/A	N/A	N/A	N/A	N/A
9	TAY6	101	CODO 4 X 45 CED STD	350	484	40	137	N/A	N/A	N/A	N/A	N/A

ANALISIS QUIMICO / CHEMICAL ANALYSIS

OCESO ACCESS	COLADA HEAT CODE	COLADA/HEAT M.P./OTHER PIPE	%C.E.	%C	%Mn	%P	%S	%Si	%Cr	%Cu	%Mo	%Ni	%V	%Nb
F	TCP6		0.3238	0.180	0.670	0.013	0.004	0.280	0.070	0.097	0.036	0.050	0.000	0.000
F	BNS		0.3250	0.180	0.770	0.010	0.000	0.300	0.040	0.040	0.020	0.020	0.001	0.001
F	JG5		0.3160	0.180	0.700	0.010	0.001	0.280	0.050	0.040	0.020	0.030	0.001	0.001
F	SZL5		0.3248	0.180	0.790	0.010	0.002	0.290	0.030	0.040	0.010	0.020	0.001	0.001
F	MC5		0.2578	0.150	0.540	0.008	0.001	0.209	0.039	0.057	0.019	0.028	0.001	0.000
F	ONS		0.3198	0.180	0.750	0.009	0.002	0.310	0.020	0.050	0.020	0.040	0.001	0.001
F	TBI6		0.3078	0.170	0.680	0.013	0.003	0.260	0.050	0.054	0.042	0.030	0.000	0.000
F	TAV6		0.3078	0.180	0.650	0.009	0.003	0.270	0.030	0.053	0.026	0.030	0.000	0.000
F	TAY6		0.3078	0.180	0.650	0.008	0.003	0.270	0.030	0.053	0.027	0.030	0.000	0.000

Material Certificate No: 2005327 152461
 T-1128/1 158105
 030116927 03016369 030118601

Gerente de Aseguramiento de Calidad