

CERTIFICADO DE CALIDAD INSPECTION CERTIFICATE

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

Vendido a: VALVULAS Y TUBOS DE MEXICO
 Sold to: Pedido del Cliente No: 3440, 3441
 Especificaciones y Grados / Standard or Specification and Steel Grade Customers Order No:
 Seamless Fittings according to ASTM/ASME AISA 234 WPB - NACE MR Dimensiones y tolerancias / Dimension and tolerances
 01.75 ed. 02 - Conform to ASME II Ed. 2001 ASME B 16.9 and ASME B 16.28 edition 2001

DESCRIPCION DE MATERIAL / MATERIAL DESCRIPTION		PRUEBAS MECANIZAS / MECHANICAL TEST					PRUEBA DE IMPACTO -0°C / IMPACT TEST -0°C					
ART. / EM	COLADA / HEAT CODE	CANTIDA / QUANTITY	DESCRIPCION / DESCRIPTION	ESF. CEDENCIA / YIELD STRENGTH (Mpa)	ESF. RUPTURA / TENSILE STRENGTH (Mpa)	ELONG. / %Z	DUREZA / HARDNESS HB	DIMENSIONES / SAMPLE DIM mm	1 Joules	2 Joules	3 Joules	PROMEDIO / AVG JOU
1	TQNS	3	RED. CONC. 14 X 12 CED STD	328	478	35	144					
2	TNQ5	5	RED. CONC. 14 X 6 CED STD	315	486	42	144					
3	TWMS	5	TEE 14 CED STD	339	474	50	141					
4	TCS	200	TEE 2 CED STD	338	489	36	197					
5	RZ5	150	TEE 3 CED STD	325	478	25	121					
6	RUS	40	TEE 3 CED XS	309	465	40	132					
7	TAJ6	100	TEE 4 CED STD	311	487	41	129					
8	SH5	40	TEE 4 CED XS	346	481	37	111					
9	TBX6	100	TEE 6 CED STD	308	474	44	124					

ANALISIS QUIMICO / CHEMICAL ANALYSIS														
PROCESO / PROCESS	COLADA / HEAT CODE	COLADAREAT / M.P./MOTHER PIPE	%C.E.	%C	%Mn	%P	%S	%SI	%CT	%Cu	%Mo	%Ni	%V	%Nb
CF	TQNS	98665	0.326	0.190	0.660	0.010	0.003	0.290	0.050	0.065	0.046	0.030	0.000	0.000
CF	TNQ5	97212	0.314	0.180	0.670	0.008	0.001	0.270	0.040	0.070	0.034	0.040	0.000	0.000
CF	TWMS	10733	0.325	0.180	0.670	0.009	0.003	0.270	0.060	0.081	0.064	0.040	0.000	0.000
CF	TCS	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	RZ5	EG02LF	0.310	0.180	0.710	0.009	0.004	0.210	0.030	0.010	0.010	0.020	0.010	0.000
CF	RUS	KJ02RW	0.309	0.170	0.740	0.006	0.004	0.210	0.050	0.020	0.010	0.030	0.001	0.000
CF	TAJ6	13369	0.320	0.180	0.690	0.015	0.001	0.270	0.060	0.060	0.036	0.030	0.000	0.000
CF	SH5	EM02PP	0.331	0.190	0.700	0.012	0.006	0.210	0.070	0.020	0.020	0.050	0.010	0.000
CF	TBX6	14495	0.309	0.170	0.650	0.012	0.003	0.270	0.070	0.093	0.036	0.050	0.000	0.000

Notas: Hot formed fittings in a range from 760°C to 940°C, cooled in air.
 Formado en caliente a 760°C-940°C, enfriado al aire.
 Cold formed normalized at 940°C max.
 Fijado en frio normalizado a 940°C max.
 Holding time 10'

Material certificate issued by the manufacturer and/or supplier Raw material certs N°:
 02019474 02018022 03010841
 0468 0468 0468
 03017149 0468 03020922

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.

Gerente de Aseguramiento de Calidad: Quality Assurance Mannanar