



# EMPRESAS RIGA, S.A de C.V.

CONEXIÓN SOLDABLE

CARR. MTY-LAREDO KM. 24.2

APARTADO POSTAL 43 C.P. 65550 CIÉNEGA DE FLORES, N.L., MÉXICO

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CERTIFICADO DE CALIDAD No.: 9576 CERTIFIED TEST REPORT:	LISTA DE EMPAQUE: 5648 PACKING LIST:	FECHA: NOVIEMBRE 29 de 2002 DATE:
VENDIDO A: TUBOS CONEXIONES Y TANQUES, S.A. DE C.V. SOLD TO: VALLE DE LA ALAMEDAS 66-C COL. SAN FCO. CHILPAN, TULTI., EDO. DE MEXICO	PEDIDO DEL CLIENTE No. CUSTOMERS ORDER No. 4797, 4872, 5139, 5197	EMBARCADO A: SHIP TO: LOS MISMOS  PAGINA/PAGE: 1 DE 1

## PRUEBAS MECÁNICAS/MECHANICAL TEST

CANTIDAD QUANTITY	COLADA HEAT CODE	DESCRIPCION DESCRIPTION	PRODUCTO FINAL/FINISHED PRODUCT				
			ESF. DE CEDENCIA YIELD STRENGTH (PSI)	ESF. RUPTURA TENSILE STRENGTH (PSI)	ELONGACION ELONGATION % 2"	DUREZA HARDNESS HB	IMPACTO 0°C IMPACT TEST 0°C X (JOULES)
			324 2 48 7 73 25 46 4 12 10 2	JX5 DX5 LF5 MN5 MR5 LZ5 KQ5 JM5 MH5 KP5 BK5	CODO R.L. 1 1/4 X 90 CED STD CODO 10 X 45 CED STD CODO 10 X 45 CED STD CODO R.L. 10 X 90 CED STD CODO R.L. 10 X 90 CED STD CODO 12 X 45 CED STD CODO R.L. 12 X 90 CED STD CODO R.L. 14 X 90 CED STD CODO R.L. 14 X 90 CED STD CODO R.L. 16 X 90 CED STD CODO R.L. 16 X 90 CED XS	56581 47471 44484 53280 47886 47613 50757 45465 42534 45750 43311	77818 69891 71498 77441 73011 70332 73134 70275 72370 70204 71307

## ANÁLISIS QUÍMICO/CHEMICAL ANALYSIS

COLADA HEAT CODE	COLADA/HEAT M.P./MOTHER PIPE	C.E.	C	Mn	P	S	Si	Cr	Cu	Mo	Ni	V	Nb
JX5 /	21962	0.334	0.180	0.810	0.010	0.001	0.290	0.040	0.040	0.030	0.030	0.001	0.001
DX5 /	96250	0.304	0.170	0.670	0.007	0.002	0.290	0.050	0.076	0.024	0.040	0.000	0.000
LF5 /	97887	0.319	0.180	0.680	0.009	0.003	0.280	0.070	0.077	0.021	0.040	0.000	0.000
MN5 /	98159	0.350	0.190	0.800	0.012	0.003	0.300	0.070	0.073	0.026	0.040	0.000	0.000
MR5 /	98060	0.324	0.166	0.730	0.006	0.002	0.287	0.060	0.091	0.061	0.083	0.001	0.000
LZ5 /	98081	0.322	0.190	0.650	0.007	0.003	0.280	0.050	0.078	0.027	0.040	0.000	0.000
KQ5 /	97799	0.322	0.190	0.650	0.007	0.003	0.270	0.050	0.080	0.030	0.040	0.000	0.000
JM5 /	96548	0.303	0.170	0.680	0.006	0.002	0.270	0.040	0.072	0.022	0.040	0.000	0.000
MH5 /	97799	0.324	0.190	0.660	0.008	0.003	0.280	0.050	0.080	0.029	0.040	0.000	0.000
KP5 /	97680	0.306	0.170	0.660	0.006	0.003	0.270	0.060	0.069	0.036	0.040	0.000	0.000
BK5 /	95719	0.319	0.190	0.660	0.007	0.003	0.280	0.040	0.076	0.016	0.040	0.000	0.000

LOS PRODUCTOS MANUFACTURADOS POR EMPRESAS RIGA, S.A. de C.V. ESTAN CONFORME A LAS SIGUIENTES ESPECIFICACIONES:

PRODUCTS MANUFACTURED BY EMPRESAS RIGA, S.A. de C.V. ARE CONFORMING TO FOLLOWING SPECIFICATIONS:

MATERIA PRIMA T/S/C / STARTING MATERIAL SEAMLESS PIPE: ASTM A 106 GRADE B.ACORDING TO DIN 50049/3.1. B/EN 10204/3.1. B.

MATERIAL CONFORME A:

MATERIAL CONFORM TO: ASTM A 234 WPB, ASME SA 234 WPB, ASME II PART A ED. 2001, ASME B16.9, ASME B16.28 AND TO NACE MR 01.75 ED 2001.

CONEXIONES SIN COSTURA, FORJADO EN CALIENTE (ENFRIADO AL AIRE) O NORMALIZADO (TEMPERATURA 920°C MAX PERMANENCIA 10').

SEAMLESS FITTINGS, HOT FORMED (COOLED IN STILL AIR) OR NORMALIZED (TEMPERATURE IE 920°C MAX. AND HOLDING TIME IE 10').

INSPECCION VISUAL Y DIMENSIONAL CONFORME A STANDARDS APLICABLES.

VISUAL AND DIMENSIONAL TEST CONFORM TO THE APPLICABLE STANDARD.

GERENTE DE ASEGURAMIENTO DE CALIDAD:  
QUALITY ASSURANCE MANAGER:

ING. JOSE MARTINEZ MACIAS.

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