

CERTIFIED MATERIAL TEST REPORT  
 Trinity Fitting Group Inc.  
 Hackney \* Ladish \* Flo-Bend  
 P.O. Box 568887 - 2525 Stemmons Freeway - Dallas, TX 75356 - 8887  
 Phone: (214) 589-8177 Fax: (214) 589-8892

Date: 07/02/02

Order Number: 4224

Sold to: TUBOS CONEXIONES Y TANQUES  
 VALLE DE LAS ALAMEDAS NO.66 B  
 SAN FRANCISCO CHILPAN  
 TULTITLAN, EOO. DE MEXICO

Ship to:

Heat Code	Quantity	Description / Specifications	
EL01YS	10	STD CAP	A/SA 234 - 00 WPB NORM. 1650 NACE MR0175
EJ01DZ	3 X 2	STD ECC	A/SA 234 - 00 WPB NORM. 1650 NACE MR0175
KD02QH	4 X 3	STD TEE	A/SA 234 - 01 WPB STRESS RELIEVED NACE MR0175
KC02QF	6 X 3	STD TEE	A/SA 234 - 00 WPB STRESS RELIEVED NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
EL01YS	M	.180	1.040	.007	.003	.240	.240	.130	.100	.040	.0290
EJ01DZ	M	.210	1.110	.004	.004	.230	.020	.030	.060	.020	.0340
KD02QH	M	.170	.730	.006	.007	.220	.030	.020	.070	.010	
KC02QF	M	.130	.670	.006	.004	.220	.120	.060	.050	.020	

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
EL01YS		.010	.0005	.0200	.010	.013	.004	.003	.050	.407
EJ01DZ		.010	.0005	.0100	.010	.003	.003	.003	.050	.416
KD02QH		.001			.001					.311
KC02QF		.002			.001					.270

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
EL01YS	84.1	T		46.9	32.0	69.0	131
EJ01DZ	74.6	L		47.6	28.0		143
KD02QH	69.0			44.3	42.0		135
KC02QF	62.1			40.1	37.0		117.

Charpy Results

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
EL01YS						
EJ01DZ						
KD02QH						
KC02QF						

Test: M-Mill Product

Type: T-Transverse L-Longitudinal

We certify that the material herein described has been manufactured, heat treated, sampled, tested, and inspected in accordance with the above standards and specifications and satisfies those requirements. We certify these flanges and fittings capable of passing a hydrostatic test compatible with their rating. The above figures are correct as contained in the records of the Company. This information has been electronically transmitted to our customer.  
 /s/ Glinda LaFleur