

**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

Order Number: 4224

Date: 07/02/02

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

Heat Code	Quantity	Description / Specifications			
EG01XP	24	STD CAP	A/SA 234 - 00	WPB	
		A516-70 117/AlF128	NORM. 1650		NACE MR0175
EB02HI	16	X 12 STD CONC	A/SA 234 - 00	WPB	
		A106-B 9/A40037	NORM. 1650		NACE MR0175
EJ01EE	14	X 12 STD ECC	A/SA 234 - 00	WPB	
		A106-B 48/91194	NORM. 1650		NACE MR0175
EJ01EE	14	X 10 STD ECC	A/SA 234 - 00	WPB	
		A106-B 48/91194	NORM. 1650		NACE MR0175

**Chemical Analysis**

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
EG01XP	M	.200	1.030	.007	.003	.260	.190	.120	.110	.040	.0260
EB02HI	M	.190	.710	.006	.007	.210	.010	.030	.060	.010	.0310
EJ01EE	M	.190	.690	.006	.001	.290	.070	.040	.010	.010	.0220
EJ01EE	M	.190	.690	.006	.001	.290	.070	.040	.010	.010	.0220

**Chemical Analysis (cont.)**

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
EG01XP		.010	.0005	.0300	.010	.014	.007	.003	.050	.424
EB02HI	.0050	.010	.0005	.0100	.010	.002	.002	.001	.050	.326
EJ01EE	.0063	.010	.0005	.0100	.010	.004	.003	.002	.050	.318
EJ01EE	.0063	.010	.0005	.0100	.010	.004	.003	.002	.050	.318

**Physical Properties**

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
EG01XP	81.0	T		49.2	30.0	71.0	137
EB02HI	73.0	L		41.7	38.0	72.0	121
EJ01EE	73.9	L		46.6	38.0	72.0	123
EJ01EE	73.9	L		46.6	38.0	72.0	123.

**Charpy Results**

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds Later.	Expansion	% Shear
EG01XP						
EB02HI						
EJ01EE						
EJ01EE						

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