

**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

BPCS

Order Number: 6448

(267790-001) DOC #00132629 03/07/18 Date: 07/19/03

Sold to: TUBOS CONEXIONES Y TANQUES  
 VALLE DE LAS ALAMEDAS NO 66 B  
 SAN FRANCISCO CHILPAN  
 TULTITLAN EOO DE 54940

Ship to: TUBOS CONEXIONES Y TANQUES 001  
 C/O SPECIALIST IN TRANSIT FWR  
 1801 MARKLEY - MODERN IND PARK  
 LAREDO TX 78041

Heat Code	Quantity	Description / Specifications
RE02CZ	2	24 STD LR 45 DEG EL A/SA 234 - 99 WPB A106B 9 A41342 AS ROLLED NACE MR0175
RB03AX	6	20 STD LR 45 DEG EL A/SA 234 - 01 WPB A106B 48 98664 AS ROLLED NACE MR0175
RC03DJ	6	20 STD LR 45 DEG EL A/SA 234 - 01 WPB A106B 48 97213 AS ROLLED NACE MR0175
RE03HY	2	24 STD LR 90 DEG EL A/SA 234 - 01 WPB 470 9 A61331 AS ROLLED NACE MR0175

**Chemical Analysis**

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
RE02CZ	M	.160	.730	.010	.009	.230	.030	.020	.060	.010	.0290
RB03AX	M	.180	.660	.012	.002	.290	.064	.030	.050	.025	.0190
RC03DJ	M	.180	.680	.010	.002	.290	.107	.040	.050	.038	.0160
RE03HY	M	.180	.690	.008	.004	.230	.020	.040	.080	.020	

**Chemical Analysis (cont.)**

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
RE02CZ		.001	.0001		.001					.299
RB03AX		.000	.0000	.0000	.000	.004				.311
RC03DJ	.0070	.000	.0000	.0000	.000	.006				.320
RE03HY		.001	.0001		.001					.319

**Physical Properties**

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
RE02CZ	68.0			46.4	46.0		147
RB03AX	71.7			48.0	49.0		197
RC03DJ	72.5			46.8	43.0		197
RE03HY	70.0			47.2	44.0		174

**Charpy Results**

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
RE02CZ						
RB03AX						
RC03DJ						
RE03HY						

Test: M=Mill Product

Type:

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