

**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: 7217

(271469-004) DOC #00141035 03/11/19 Date: 11/20/03

Sold to: TUBOS CONEXIONES Y TANQUES  
VALLE DE LAS ALAMEDAS NO 66 B  
SAN FRANCISCO CHILPAN  
TULTITLAN EOO DE MEX 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
43WO	11	3 X 1 1/4 STD ECC A/SA 234 - 02 WPB A106B 133/ 30/ 445198 HOT FORMED NACE MR0175
8WO	2	6 X 2 STD ECC A/SA 234 - 02 WPB A106B 133/ 07/ R10010 HOT FORMED NACE MR0175
EE03DD	10	2 X 1 1/4 STD RED TEE A/SA 234 - 01 WPB A106-B 9/A24542 NORM. 1650 NACE MR0175
EK02NZ	15	5 X 4 STD RED TEE A/SA 234 - 01 WPB A106-B 7/P80172 NORM. 1650 NACE MR0175

**Chemical Analysis**

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
43WO	M	.190	.600	.004	.006	.230	.240	.090	.120	.040	
8WO	M	.220	.850	.006	.007	.230	.180	.070	.060	.020	
EE03DD	M	.210	.780	.009	.004	.250	.030	.090	.090	.030	.0260
EK02NZ	M	.150	.590	.009	.005	.200	.170	.060	.050	.010	.0310

**Chemical Analysis (cont.)**

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
43WO		.001			.001					.344
8WO		.001			.001					.394
EE03DD	.0040 <	.010 <	.0005 <	.0100 <	.010 <	.003	.002	.004	<.050	.374
EK02NZ	.0084 <	.010 <	.0005 <	.0200 <	.010 <	.008	<.002	<.001	<.050	.277

**Physical Properties**

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
43WO	75.1			50.2	35.0		197
8WO	77.0			52.2	37.6		197
EE03DD	80.4	L	.132	50.6	21.0	61.0	107
EK02NZ	72.3	L		50.9	31.0	65.0	116

**Charpy Results**

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
43WO						
8WO						
EE03DD						
EK02NZ						

Test: M=Mill Product

Type: 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