

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

(271469-001) DOC #00142265 03/12/10 Date: 12/11/03

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
788UO	5	1 1/2 X 3/4 XH ECC A/SA 234 - 02 WPB A105 133/ NIAGARA AS ROLLED NACE MR0175
377UO	5	1 1/2 X 3/4 XH ECC A/SA 234 - 02 WPB A105 133/ NIAGARA AS ROLLED NACE MR0175
644UO	4	2 X 3/4 XH ECC A/SA 234 - 02 WPB A105 133/ NIAGARA AS ROLLED NACE MR0175
70WO	20	5 X 2-STD ECC A/SA 234 - 02 WPB A106B 133/ 07/ P40373 HOT FORMED NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
788UO	M	.220	.880	.009	.022	.200	.060	.030	.050	.010	
377UO	M	.250	.750	.010	.023	.210	.130	.050	.090	.020	
644UO	M	.270	.790	.011	.015	.210	.080	.040	.020	.020	
70WO	M	.190	.850	.005	.003	.230	.170	.070	.050	.020	

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
788UO		.005			.001					.385
377UO		.005			.001					.410
644UO		.004			.001					.418
70WO		.001			.001					.361

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
788UO	74.7	L		51.9	30.4		197
377UO	75.4			51.3	30.2		197
644UO	78.4	R		53.3	27.9		197
70WO	74.3			52.7	38.5		197

Charpy Results

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
788UO						
377UO						
644UO						
70WO						

Test: M=Mill Product

Type: L=Longitudinal R=Round

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