

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: 5529

(262585-002) INV #00127144 03/04/14 Date: 04/15/03

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
RB03AX	1	20 STD LR 90 DEG EL A/SA 234 - 01 WPB A106B 48 98664 AS ROLLED NACE MR0175
EB03AD	2	20 X 12 STD CON A/SA 234 - 01 WPB A106-B 159/819639 NORM. 1650 NACE MR0175
EM02PH	20	8 X 6 STD ECC A/SA 234 - 01 WPB A106-B 140/682553 NORM. 1650 NACE MR0175
977UN	5	6 X 5 XH ECC A/SA 234 - 02 WPB WPB 133/ 07/ P90237 NORMALIZED NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
RB03AX	M	.180	.660	.012	.002	.290	.064	.030	.050	.025	.0190
EB03AD	M	.160	.810	.018	.006	.230	.160	.180	.150	.070	.0430
EM02PH	M	.160	.610	.018	.008	.300	.020	.020	.010 <	.010	.0350
977UN	M	.210	.880	.010	.003	.210	.190	.070	.060	.020	

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
RB03AX		.000	.0000	.0000	.000	.004				.311
EB03AD		< .010	<.0005	<.0100	<.010	.011	.004	<.001	<.050	.363
EM02PH		< .010	<.0005	<.0100	<.010	.003	<.002	<.001	.050	.270
977UN		.001			.001					.390

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
RB03AX	71.7			48.0	49.0		197
EB03AD	82.4	L		48.1	32.0	71.0	143
EM02PH	75.6	L		48.6	30.0	74.0	126
977UN	76.6			50.9	32.0	68.5	197

Charpy Results

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
RB03AX						
EB03AD						
EM02PH						
977UN						

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