

STD LR 90ELL WPB 18; HEAT REO4RX

142002

TRINITY MATERIAL TEST REPORT
Trinity Fitting Group Inc.
Hackney * Ladish * Flo-Bend

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BPCS

Order Number: 04-1044

(278563-003) DOC #00160389 04/09/13 Date: 09/14/04

Sold to: GFF INC
5650 EAST PONCE DE LEON
STONE MOUNTAIN GA 30083

Ship to: GFF, INC.
5650 PONCE DE LEON AVE
STONE MOUNTAIN GA 30083

Heat Code	Quantity	Description / Specifications
REO4RX	4	18 STD LR 90 DEG EL A/SA 234 - 03 WPB A106B 48 16685 AS ROLLED NACE MR0175
EAO4NW	50	4 STD TEE A/SA 234 - 01 WPB A106-B 55/29181 NORM. 1650 NACE MR0175
EFO4DR	10	3 X 2 STD RED TEE A/SA 234 - 03 WPB 106-B 55/59134 NORM. 1650 NACE MR0175
RB04JBA	10	3 XH LR 45 DEG EL A/SA 234 - 02 WPB A106B 55 29260 STRESS RELIEVE NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
REO4RX	M	.180	1.010	.012	.002	.250	.013	.070	.100	.040	.0200
EAO4NW	M	.180	.690	.009	.005	.310	.080	.040	.040	.020	.0240
EFO4DR	M	.200	.700	.013	.010	.300	.060	.040	.040	.010	.0130
RB04JBA	M	.180	.800	.012	.001	.290	.040	.020	.030	.010	.0200

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
REO4RX		.000	.0000		.000	.010				.381
EAO4NW	.0040	< .010	<.0005	<.0100	<.010	.006	.003	.001	<.050	.317
EFO4DR	.0032	< .010	<.0005	<.0100	<.010	.005	.002	<.001	<.130	.335
RB04JBA		< .010			<.010					.327

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
REO4RX	76.6			54.3	42.0		197
EAO4NW	71.6	L		47.1	31.0	69.0	138
EFO4DR	76.9	L		49.7	27.0	65.0	136
RB04JBA	68.6	L		40.7	34.0	60.0	127

Charpy Results

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
REO4RX						
EAO4NW						
EFO4DR						
RB04JBA						

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