

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: 30357

(250457-069) INV #00104411 02/02/07 Date: 02/08/02

Sold to: FORGINGS FLANGES & FTGS
6875 FULTON
HOUSTON TX 77022

Ship to: FORGINGS FLANGES & FTGS. 0001
6875 FULTON
HOUSTON TX 77022

Heat Code	Quantity	Description / Specifications	
YZX587	1	20 X 16 XH CON WPL-6 A/SA 420 - 96 WPL6	
		A106B 09/S51053 Q-1650 T-1250	NACE MR0175
CH5TBY	1	20 S/80 X 8 XH CON WPL A/SA 420 - 96 WPL6	
		Y56 9 A24798 NORM. 1650	NACE MR0175
EE98BL405 ✓	1	14 X 10 S/40 CON WPL- A/SA 420 - 96 WPL6	
		A106B 09 / A61723 NORMALIZE @ 1650/AIR COOL	NACE MR0175
Y524114	1	20 X 18 XH CON WPL-6 A/SA 420 - WPL6	
		SEAMLESS NORM PER PAR 6 A/SA420	NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
YZX587	M	.190	.730	.007	.005	.280	.030	.020	.050	.010	.0034
CH5TBY	M	.200	1.110	.010	.018	.190	.060	.040	.080	.020	.0020
EE98BL405	M	.170	.750	.011	.007	.220	.020	.010	.050	.010	.0027
Y524114	M	.180	1.050	.006	.008	.240	.010	.020	.060	.020	

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
YZX587	.0004	.001			.001					.327
CH5TBY	.0004	.050	.0005	.0010	.010	.010				.421
EE98BL405	.0005	.000	.0001		.000					.309
Y524114		.001	.0000		.010					.373

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
YZX587	73.7	L		52.3	34.0		156
CH5TBY	76.2	T		41.0	32.0	71.0	143
EE98BL405	67.6			42.9	35.0	70.0	132
Y524114	72.6			46.0	36.0		141

Charpy Result

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
YZX587	10.0		-50	127,196,142	85,97,92	50,100,60
CH5TBY	10.0		-50	099,085,060	079,066,055	050,040,030
EE98BL405	10.0		-50	18,35,26	21,33,26	20,20,20
Y524114	10.0		-50	72,71,83	92,67,70	80,80,70

Test Mill Prod
Type: L-Longitudinal T-Transverse

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