

CERTIFIED MATERIAL TEST REPORT

Trinity Fitting Group Inc.

Hackney * Ladish * Flo-Bend

P.O. Box 568887 - 2525 Stemmons Freeway - Dallas, TX 75356 - 8887

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BPCS

Order Number: 7217

(271469-002) DOC #00141890 03/12/05 Date: 12/06/03

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	
644UO	1	2 X 3/4 XH ECC A105 133/ NIAGARA	A/SA 234 - 02 WPB AS ROLLED NACE MR0175
28WO	2	3 X 1 STD ECC A106B 133/ 30/ 444699	A/SA 234 - 02 WPB HOT FORMED NACE MR0175
136WN	3	3 X 2 1/2 STD ECC A106B 133/ 30/ 445154	A/SA 234 - 02 WPB HOT FORMED & A.C. NACE MR0175
181WN	20	5 X 4 STD ECC A106B 133/ 07/ PY0009	A/SA 234 - 02 WPB HOT FORMED & A.C. NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
644UO	M	.270	.790	.011	.015	.210	.080	.040	.020	.020	
28WO	M	.190	.640	.007	.006	.240	.190	.090	.140	.040	
136WN	M	.210	.670	.005	.005	.250	.210	.140	.130	.040	
181WN	M	.210	.890	.006	.003	.230	.190	.080	.060	.010	

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
644UO		.004			.001					.418
28WO		.002			.003					.351
136WN		.002			.003					.379
181WN		.001			.001					.390

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
644UO	78.4	R		53.3	27.9		197
28WO	75.1			49.9	38.0		197
136WN	70.6	L		48.3	30.0	62.9	197
181WN	78.1	L		51.9	31.3	70.5	197

Charpy Results

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
644UO						
28WO						
136WN						
181WN						

Test: M=Mill Product

Type: R=Round 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