

Jul 18, 2008 8:44AM

CERTIFIED MATERIAL TEST REPORT
Hackney Ladish Inc.

No. 3838 P. 3

P.O. Box 803466 - 5495 Beltline Rd. #290 - Dallas, TX 75254

Phone: (800) 527-4500 Fax: (214) 269-5601

Order Number: 4727

Date: 07/18/08

Sold to: PLESA ANAHUAC Y CIAS S. A. DE Ship to:
VALLE DE LAS ALAMEDAS NO 66-0
TULTITLAN MEX 54940

*Amerax
trans*

Heat Code	Description / Specifications
B08ZS1	24 STD CAP A516-70 154 7108814 A/SA 234 - 07 WPB (SMLS) HOT FORMED NACE MR0175
E08FB	16 STD CAP A516-70 154 7107184 A/SA 234 - 07 WPB (SMLS) HOT FORMED NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
B08ZS1	M	.180	1.060	.020	.006	.180	.270	.060	.110	.020	.0230
E08FB	M	.180	1.050	.012	.001	.170	.290	.080	.110	.010	.0230

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
B08ZS1		.002	.0003	.0010	.001	.012				.405
E08FB		.004	.0004	.0010	.001	.009				.404

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
B08ZS1	82.5	T		53.5	23.0		163
E08FB	84.1	T		56.2	21.5		174

Charpy Results

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
B08ZS1						
E08FB						

Test: M=Mill Product
Type: T=Transverse

We certify that the material herein described has been manufactured in accordance with the above standards and specifications and satisfies all the requirements of the editions specified. We certify all materials provided comply with ISO 10204 paragraph. 3.1 which replaces type 3.1.B of the 1991 edition of EN 10204. Our ISO9001:2000 certificate number is CERT11763-2007-AQ-HOU-RVA/ANAB. We certify these fittings capable of passing 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.