

CERTIFIED MATERIAL TEST REPORT
Hackney Ladish Inc.

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

Order Number: 4616

Date: 05/22/08

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

Heat Code Description / Specifications

H07HSS	18 X 14 STD CONC	A/SA 234 - 07	WPB (SMLS)
	A106B 9 A22101	STRESS RELIEVED	NACE MR0175
G07FX1	18 STD CAP	A/SA 234 - 07	WPB (SMLS)
	A516-70 154 7103514	HOT FORMED	NACE MR0175
383ZN	18 X 12 STD ECC	A/SA 234 - 07	WPB (SMLS)
	A106B MIW/9 A22577	NORMALIZED	NACE MR0175
155ZN	18 X 14 STD ECC	A/SA 234 - 06A	WPB (SMLS)
	A106B MIW/9 A22577	NORMALIZED	NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
H07HSS	M	.180	1.030	.011	.004	.180	.050	.030	.070	.030	.0330
G07FX1	M	.190	1.030	.013	.001	.170	.240	.070	.090	.000	.0240
383ZN	M	.190	1.070	.010	.003	.180	.020	.020	.080	.030	
155ZN	M	.190	1.070	.010	.003	.180	.020	.020	.080	.030	

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
H07HSS		.003	.0003	.0020	.001					.377
G07FX1	.0080	.003	.0001	.0010	.001	.009				.400
383ZN		.000	.0003	.0020	.001					.392
155ZN		.000	.0003	.0020	.001					.392

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
H07HSS	69.0	L		37.6	36.0	72.0	123
G07FX1	76.1	T		53.6	26.4		156
383ZN	74.0	L		54.0	33.0	71.0	147
155ZN	74.0	L		56.5	35.0	67.0	123

Charpy Results

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
H07HSS						
G07FX1						
383ZN						
155ZN						

Test: M=Mill Product
 Type: L=Longitudinal 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.