

CERTIFIED MATERIAL TEST REPORT
Hackney Ladish Inc.

P.O. Box 803466 - 5495 Beltline Rd. #290 - Dallas, TX 75254
Phone: (800) 527-4500 Fax: (214) 269-5601

Order Number: 1989

Date: 10/20/06

Sold to: FERRETERA ANAHUAC, SA DE CV Ship to:
VALLE DE LAS ALAMEDAS NO 66 B
SAN FRANCISCO CHILPAN
TULTITLAN EOO DE 54940

Heat Code	Quantity	Description / Specifications
EC05XV	16 XH CAP	A/SA 234 - 03 WPB (SMLS) A516-70 154/A5N0405 AS FORMED NACE MR0175
7A06AA	18 STD LR 45 DEG EL	A/SA 234 - 06 WPB (SMLS) A106B 176 053783 HOT FORMED NACE MR0175
D06RXS	4 STD CAP	A/SA 234 - 05A WPB (SMLS) A516-70 154 B6Q6116 STRESS RELIEVED NACE MR0175
E06WM	8 XH CAP	A/SA 234 - 06 WPB (SMLS) A516-70 173 161P24490 HOT FOMRED NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
EC05XV	M	.240	1.080	.013	.002	.230	.150	.040	.050	.011	
7A06AA	M	.210	.350	.011	.011	.200	.040	.020	.020	.012	
D06RXS	M	.230	1.070	.014	.003	.190	.230	.060	.090	.013	.0280
E06WM	M	.170	1.050	.008	.002	.366	.251	.190	.020	.003	.0370

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
EC05XV		.004			.000					.445
7A06AA		.015								.281
D06RXS		.003	.0003	.0020	.000	.007				.448
E06WM	.0040	.001	.0001	.0020	.001	.003				.379

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
EC05XV	75.4	T		47.6	33.9		149
7A06AA	70.3			50.8	33.0		143
D06RXS	73.7	T		45.9	29.0	56.0	150
E06WM	74.8			48.5	26.0		156

Charpy Results

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
EC05XV						
7A06AA						
D06RXS						
E06WM						

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 latest editions unless otherwise noted. We certify these fittings capable of passing a hydrostatic test compatible with their rating.