

D06 MW

CERTIFIED MATERIAL TEST REPORT
Hackney Ladish Inc.

P.O. Box 803466 - 5495 Beltline Rd. #290 - Dallas, TX 75254
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Heat Code	Quantity	Description / Specifications
D06MW		T-REDS-16-10STD 471D 9 Y26127 A/SA 234 - 05A WPB (SMLS) HOT FORMED NACE MR0175
ED98AH		T-REDS-10-8C20 API 5L 57/73914 A/SA 234 - 96A WPB (SMLS) N 1650 NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
D06MW	M	.160	1.190	.011	.003	.200	.030	.070	.090	.050	.0330
ED98AH	M	.167	.670	.002	.003	.290	.142	.050	.090	.057	.0022

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
D06MW	.0050	.066	.0001		.001					.406
ED98AH	.0006	.000	.0000	.0000	.000	.006				.319

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
D06MW	74.0	L		51.0	47.0		149
ED98AH	71.1	L		45.9	41.0		197

Charpy Results

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
D06MW						
ED98AH						

Test: M=Mill Product
Type: L=Longitudinal

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.