

CERTIFIED MATERIAL TEST REPORT
Hackney Ladish Inc.

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Heat Code Description / Specifications

A07NXS	RED-EXEC-10X8STD	A/SA 234 - 06A WPB (SMLS)
	A106B 180 2603909	STRESS RELIEVED NACE MR0175

Chemical Analysis

<u>Heat Code</u>	<u>Test</u>	<u>C</u>	<u>Mn</u>	<u>P</u>	<u>S</u>	<u>Si</u>	<u>Cu</u>	<u>Ni</u>	<u>Cr</u>	<u>Mo</u>	<u>Al</u>
A07NXS	M	.150	1.100	.003	.001	.280	.010	.010	.020	.000	

Chemical Analysis (cont.)

<u>Heat Code</u>	<u>N</u>	<u>V</u>	<u>B</u>	<u>Ti</u>	<u>Cb</u>	<u>Sn</u>	<u>W</u>	<u>Pb</u>	<u>Co</u>	<u>CE</u>
A07NXS		.020		.0020	.002					.342

Physical Properties

<u>Heat Code</u>	<u>Tensile KSI</u>	<u>Type</u>	<u>Thickness</u>	<u>Yield KSI</u>	<u>% Elong. (4D)</u>	<u>% RA</u>	<u>Hardness HB</u>
A07NXS	71.0	L		50.0	30.0		144

Charpy Results

<u>Heat Code</u>	<u>Size x 10mm</u>	<u>Type</u>	<u>Temp. (F)</u>	<u>Foot Pounds</u>	<u>Later. Expansion</u>	<u>% Shear</u>
A07NXS						

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.