

CERTIFIED MATERIAL TEST REPORT
Hackney Ladish Inc.

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

| Heat Code | Quantity | Description / Specifications |
|-----------|----------|--|
| H07JW | | TAP CAP 12 XS A/SA 234 - 07 WPB (SMLS) A516-70 154 7101456 HOT FORMED NACE MR0175 |

Chemical Analysis

| Heat Code | Test | C | Mn | P | S | Si | Cu | Ni | Cr | Mo | Al |
|-----------|------|------|-------|------|------|------|------|------|------|------|-------|
| H07JW | M | .200 | 1.040 | .009 | .004 | .200 | .370 | .100 | .110 | .020 | .0260 |

Chemical Analysis (cont.)

| Heat Code | N | V | B | Ti | Cb | Sn | W | Pb | Co | CE |
|-----------|---|------|-------|-------|------|------|---|----|----|------|
| H07JW | | .002 | .0001 | .0010 | .001 | .017 | | | | .431 |

Physical Properties

| Heat Code | Tensile KSI | Type | Thickness | Yield KSI | % Elong. (4D) | % RA | Hardness HB |
|-----------|-------------|------|-----------|-----------|---------------|------|-------------|
| H07JW | 79.0 | T | | 51.0 | 22.0 | | 163 |

Charpy Results

| Heat Code | Size x 10mm | Type | Temp. (F) | Foot Pounds | Later. Expansion | % Shear |
|-----------|-------------|------|-----------|-------------|------------------|---------|
| H07JW | | | | | | |

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.