rcorem

CERTIFICATE OF TEST

Page 01 of 02

Certification Date 23-OCT-2017

CUSTOMER ORDER NUMBER

1400

ENCORE METALS DIVISION OF RMCL 7805 - 51ST STREET S.E. T2C 2Z3 CALGARY AB

Invoice Number S207808

CUSTOMER PART NUMBER

506516

SOLD TO:

TECHNOWORX INC

SHIP TO:

TECHNOWORX INC

4788 50 AVENUE SE

CALGARY AB T2B 3R4

4788 50 AVENUE SE CALGARY AB T2B 3

4140 HR Q&T BAR - 207/237 BHN (22 RC MAX) Description:

4-3/4 RD S/C 3'0" (36.0")

Line Total: 180.93 LB

HEAT: 94781

ITEM: 506516

Specifications:

ASTM A322 13

NACE MR-01-75 09

ASTM A29 15

CHEMICAL ANALYSIS

______ SI CR NI S P MN 1.00 0.26 0.13 0.20 0.022 0.43 0.012 0.98 V CU AL

0.007 0.025

RCPT: R141492

COUNTRY OF ORIGIN: USA

MECHANICAL PROPERTIES

ULT TEN %ELONG %RED HARDNESS YLD STR IN 02 IN IN AREA BHNDESCRIPTION PSI PSI 234 84546.0 108954.0 22.7 64.6

GRAIN SIZE :5 -

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination.

We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes.

Material did not come in contact with mercury while in our possession.



PURCHASING MANAGER

en-(-) (=metals

CERTIFICATE OF TEST

Page 02 of 02

Certification Date 23-OCT-2017

CUSTOMER ORDER NUMBER

1400

ENCORE METALS DIVISION OF RMCL 7805 - 51ST STREET S.E. CALGARY AB T2C 2Z3 Invoice Number \$207808

CUSTOMER PART NUMBER

506516

SOLD TO:

TECHNOWORX INC

SHIP TO:

TECHNOWORX INC

4788 50 AVENUE SE CALGARY AB T2B 3R4 4788 50 AVENUE SE CALGARY AB T2B 3

VACUUM DEGASSED

Description:

4140 HR Q&T BAR - 207/237 BHN (22 RC MAX)

4-3/4 RD S/C 3'0" (36.0")

Line Total: 180.93 LB

HEAT: 94781

ITEM: 506516

STRAND CAST REDUCTION RATIO 9.1 TO 1

MATERIAL IS FREE FROM MERCURY CONTAMINATION NO WELD REPAIR PERFORMED ON MATERIAL

THERMAL TREATMENT: OK

AUSTENITIZED 1700 F FOR 4 HRS - WATER QUENCHED

TEMPERED 1270 F FOR 2.4 HRS

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination.

We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes.

Material did not come in contact with mercury while in our possession.



PURCHASING MANAGER