



**HUNTINGTON ALLOYS CORPORATION**  
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Certificate No. 57913-00

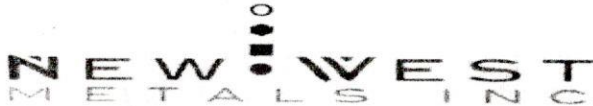
Dated 02-JAN-16

**CERTIFIED MATERIALS TEST REPORT**

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COPY

Heat # MM6562BG11



Tracer # T0795829



Sales Order Number

300034953 / 1.1

Purchase Order Number

PO0039937-B

Mark Order Number

39937-B

Material Heat / Lot Identity

MM6562BG11

UNS Number

N04400

**Material Description**

MONEL alloy 400, EAF-AOD-ELECTROSLAG REMELTED, , HOT FIN ROUND, ROUGH T, STRESS RELIEVED, 9.0000, 120.0000-168.0000, IN 1 PC PC# 112 3071 LBS

**Specifications**

ASTM B 164-03 (2014)/ ASME SB-164 2013 EDITION/ ASTM B 564-15 CHEMISTRY ONLY/ ASME SB-564 2013 EDITION CHEMISTRY ONLY/ US FED QQ-N-281D AM 2 CL A FM 1 MARKING WAIVED/ NACE MR0175-ISO 15156-3 (2009)/ NACE MR0103-2010.

**ANALYSIS**

|        | C %   | MN %   | FE %   | S %    | SI % | CU % | NI % | AL % | CO % |
|--------|-------|--------|--------|--------|------|------|------|------|------|
| H      | .1    | 1.0    | 2.24   | .001   | .3   | 31.1 | 64.3 | .1   | .04  |
| Method | C/S   | ICP    | ICP    | C/S    | ICP  | ICP  | ICP  | ICP  | ICP  |
|        | P %   | PB %   | SN %   | ZN %   |      |      |      |      |      |
| H      | .01   | .0003  | .0004  | .0004  |      |      |      |      |      |
| Method | ICP   | ICP-MS | ICP-MS | ICP-MS |      |      |      |      |      |
|        | NI+CO |        |        |        |      |      |      |      |      |
| H      | 64.3  |        |        |        |      |      |      |      |      |

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**HUNTINGTON ALLOYS CORPORATION**  
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**NEW WEST METALS INC.**

**CERTIFIED MATERIALS TEST REPORT**

Dated 02-JAN-16

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Method

**ANALYSIS METHOD LEGEND**

ICP - Inductively Coupled Plasma  
 C/S - Carbon/Sulfur

Heat # MM65628G11



Trace # T0795829



**TENSILE TEST**

**ROOM TEMP TENSILE - LONG|LAB|MECHANICAL**

| PIECE | TEST | TEMPER | LOCATION | HARDNESS | HARD | TYPE | TENSILE KSI | .2% YIELD KSI | EFF GA | LNTH IN |
|-------|------|--------|----------|----------|------|------|-------------|---------------|--------|---------|
| 112   | SR   | T      |          | 81.7     | HRB  |      | 88.8        | 48.1          | 2      |         |

**RED OF AREA% ELONG% ORIENT**

|      |      |      |
|------|------|------|
| 65.4 | 39.1 | LONG |
|------|------|------|

**HEAT TREATMENT**

| TREATMENT | FURNACE | TEMP SCALE | TEMP 1 F | TEMP 1 HOLD | HOLD 1 UNITS | CHANGE 1 |
|-----------|---------|------------|----------|-------------|--------------|----------|
| STR REL   | SF2     | F          | 1100     | 60          | MN           | AC       |

NO WELD REPAIR HAS BEEN PERFORMED ON THIS MATERIAL.

LOCATION LEGEND: B = BACK C = CENTER F = FRONT H = HEAD M = MIDDLE T = TOE

TEST VERDICT LEGEND: P = PASS W = WAIVER

TEST TEMPER LEGEND

SR - Stress relieved

ALL TEST RESULTS ARE REPORTED TO AT LEAST THE REQUIRED PRECISION BY THE ROUNDING METHOD OF ASTM E 29 UNLESS OTHERWISE REQUIRED BY PURCHASE ORDER OR SPECIFICATION.

COUNTRY OF ORIGIN: MELTED AND MANUFACTURED IN THE USA. DFARS PART 252.225.7014 AND 252.225.7008 COMPLIANT.  
 THIS CERTIFICATION AFFIRMS THAT THE CONTENTS OF THIS REPORT ARE CORRECT AND ACCURATE AND THAT ALL TEST RESULTS AND OPERATIONS PERFORMED BY SPECIAL METALS CORPORATION, INC. OR ITS SUBCONTRACTORS ARE IN COMPLIANCE WITH THE MATERIAL SPECIFICATIONS.

QUALITY SYSTEM MEETS REQUIREMENTS OF DIRECTIVE 97-23/EC (PRESSURE EQUIPMENT DIRECTIVE), ANNEX 1, CHAPTER 4.3 PER ABS GROUP LTD CERTIFICATE 41734 (EXPIRES JULY 28, 2017).

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NEW WEST METALS INC.

CERTIFIED MATERIALS TEST REPORT

HUNTINGTON ALLOYS CORPORATION IS AN ACCREDITED INDEPENDENT NADCAP MATERIALS TESTING LABORATORY VIA CERTIFICATE NUMBER 3200155438 (EXPIRES APRIL 30, 2016) FOR ALL TESTING SPECIFIED IN THE SCOPE OF ACCREDITATION. MATERIAL PRODUCED UNDER QA SYSTEM DOCUMENTED IN HUNTINGTON ALLOYS CORP QA MANUAL REV. 51, DATED 10/17/2014 QA MANUAL NOT TO IMPLY COMPLIANCE TO ASME SECTION III. COMPLIANCE MUST BE OTHERWISE STATED ON CMTR. QUALITY SYSTEM CERTIFICATION: ISO 9001:2008 (ABS-QE CERT. 30125); EN 10 204/DIN 50049 (TYPE 3.1) LABORATORY IS ACCREDITED TO ISO/IEC 17025:2005 FOR MECHANICAL TESTING AND CHEMICAL ANALYSIS.

VISUAL AND DIMENSIONAL EXAMINATION SATISFACTORY.

MATERIAL, WHEN SHIPPED, IS FREE FROM CONTAMINATION BY MERCURY, RADIUM, ALPHA SOURCE, AND LOW MELTING ELEMENTS.


CHEMICAL ANALYSIS AS REQUIRED FOR CARBON, SULFUR, NITROGEN, OR OXYGEN IS PERFORMED BY COMBUSTION TECHNIQUES. ALL OTHER REPORTED ELEMENTS ARE ANALYZED BY X-RAY AND/OR EMISSION SPECTROSCOPY."

Heat #  
**MM6562BG11**  
Tracer #  
**T0795829**

AUTHORIZED QUALITY CERTIFICATION REPRESENTATIVES:

W.E. BOLEN, D.K. MILLER, K.R. SMITH, V.A. POWELL, S.E. LEER, M. WINSEMIUS K.BORSODI

End Of Certificate

|  |   |
|--|---|
| <p>This is to certify that all required samplings inspections and tests have been performed in accordance with the order and specification requirements. The test report represents the actual attributes of the material furnished and the values shown are correct and true. The material described by this certificate is in full compliance with all order and inspection requirements. We hereby certify that the figures given are in accordance with the specified contract requirements.</p> | <p>Signed</p>  |
| <p>REV. 8/08</p>   | <p>For and on behalf of HUNTINGTON ALLOYS CORPORATION<br/><small>Authorized Signature</small></p>   |

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