

CO# 3462



HUNTINGTON ALLOYS CORPORATION
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Certificate No. 56419-00

Dated 13-NOV-15

CERTIFIED MATERIALS TEST REPORT

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This report relates only to the item(s) tested and may not be reproduced except in full.

Customer
 CORROSION MATERIALS INC
 2262 GROOM RD
 BAKER
 LA
 70714

Ship To
 CORROSION MATERIALS INC
 2262 GROOM RD
 BAKER
 LA
 70714

Heat # MM6511BG11



Tracer # T0794161



Sales Order Number	Purchase Order Number	Mark Order Number	Material Heat / Lot Identity
100063802 / 1.1	PO0039228-B	39228-B	MM6511BG11
			UNS Number
			N04400

Material Description

MONEL alloy 400, EAF-AOD-ELECTROSLAG REMELTED, , HOT ROLLED PLATE, DESCALED, ANNEALED, 1.7500, 96.0000, 144.0000, IN 1 PC PLATE# P75680 7900 LBS

Specifications

ASTM B 127-05 (2014)/ ASME SB-127 2013 EDITION/ US FED QQ-N-281D AM 2 CL A FM 6/ FLATNESS PER ASTM A 480/ NACE MR0175-ISO 15156-3 (2009)/ NACE MR0103-2010/ MARK PER ORDER.

ANALYSIS

	C %	MN %	FE %	S %	SI %	CU %	NI %	AL %	CO %
H	.1	1.1	2.45	.001	.2	31.7	63.4	.1	.04
Method	C/S	ICP	ICP	C/S	ICP	ICP	ICP	ICP	ICP
	P %	PB %	SN %	ZN %					
H	.01	.0003	.0004	.0003					
Method	ICP	ICP-MS	ICP-MS	ICP-MS					
	NI+CO								
H	63.5								
Method									

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EF595



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ANALYSIS METHOD LEGEND

Heat # MM65118611



Tracer # T0794161



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

TENSILE TEST

ROOM TEMP TENSILE - TRANS|LAB|MECHANICAL

PIECE	TEST TEMPER	HARDNESS	HARD TYPE	TENSILE KSI	.2% YIELD KSI	EFF GA	LNTH IN	RED OF AREA%
P75680	AN	83.4	HRB	85.1	52.1	2.000		65.4

ELONG% ORIENT

39.6 TRANS

HEAT TREATMENT

TREATMENT	FURNACE	TEMP SCALE	TEMP 1 F	TEMP 1 HOLD	CHANGE 1
ANNEAL	AF	F	1400	2HR/15MN	AC

OTHER TESTS

GRAIN SIZE MEASUREMENT|LAB|METALLOGRAPHY

PIECE ID	TEST TEMPER	TEST ORIENT	AV GS ASTM	NRM or DUP
P75680	AN	TRANSVERSE	6	NORMAL

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

AN - Annealed

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.

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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).

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."

AUTHORIZED QUALITY CERTIFICATION REPRESENTATIVES:

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

Heat #
MM6511BG11
Tracer #
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End Of Certificate

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.

Signed

REV. 8/08

For and on behalf of HUNTINGTON ALLOYS CORPORATION
Authorized Signature

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