

NX1303AG11



HUNTINGTON ALLOYS CORPORATION
3200 Riverside Drive, Huntington, West Virginia 25705-1771 USA
Tel: +1.304.526.5100 Toll-Free in the USA: 1.800.334.4628
Fax: +1.304.526.6643 info@specialmetals.com

Certificate No. N40378-00

Dated 19-SEP-14

CERTIFIED MATERIALS TEST REPORT

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Note: The recording of false, fictitious or fraudulent statements on entries on this document may be punishable as a felony under federal statute.

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

Customer
ROLLED ALLOYS INC
125 W STERNS RD
TEMPERANCE
MI
48182-0310

Ship To
ROLLED ALLOYS INC
125 W STERNS RD
TEMPERANCE
MI
48182-0310

Sales Order Number
100060998 / 1.1

Purchase Order Number
0113743-TEM

Mark Order Number
0113743-TEM

Material Heat / Lot Identity
NX1303AG11 ✓

UNS Number
N06625 ✓

Material Description

INCONEL alloy 625 EAF-AOD-ELECTROSLAG REMELTED, , HOT ROLLED PLATE, DESCALED, ANNEALED,
1.2500, 96.0000, 160.0000-180.0000, IN
1 PC PLATE# P28050 6494 LBS

Specifications

SAE AMS 5599G/ ASTM B 443-00(2009) GR 1/ASME SB-443 2013 EDITION GRADE 1/ SAE AMS 5666G
CHEMISTRY AND MECHANICAL PROPERTIES ONLY/ ASTM B 446-03 (2008) GRADE 1 CHEMISTRY AND
MECHANICAL PROPERTIES ONLY/ ASME SB-446 2013 EDITION GRADE 1 CHEMISTRY AND MECHANICAL
PROPERTIES ONLY/ GE S-1000(12-04-13) / GE S-400 (10-15-2012) NACE MR0175-ISO 15156-3
(2009) / NACE MR0103-2010 / HONEYWELL EMS 95377 REV D MARKING WAIVED/ WERKSTOFF 2.4856.

HEAT # NX1303AG11 ✓

TRACER # 0433091US

ANALYSIS

	C %	MN %	FE %	S %	SI %	NI %	CR %	AL %	TI %
H	.02	.11	3.33	.001	.24	60.8 ✓	22.51 ✓	.16	.23

BRIGHTRAY, CORRONEL, FERRY, INCOCLAD, INCOLOY, INCONEL, INCOTHERM, INCO-WELD, KOTHERM, MAXORB, MONEL, NILO, NILOMAG, NIMONIC, NIOTHERM, NI-SPAN, UDIMET & WIGGIN are trademarks of the Special Metals group of companies



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Method	C/S	ICP	ICP	C/S	ICP	ICP	ICP	ICP	ICP
	CO %	MO %	NB %	TA %	P %				
H	.08	8.85	3.42	.002	.009				
Method	ICP	ICP	ICP	ICP	ICP				
	AL+TI		NB+TA						
H	.39		3.43						
Method									

ANALYSIS METHOD LEGEND

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

TENSILE TEST

ROOM TEMP TENSILE - TRANS|LAB|MECHANICAL

PIECE ID TEST TEMPER HARDNESS HARD TYPE TENSILE KSI .2% YIELD KSI EFF GA LNTH IN RED OF AREA ELONG

P28050	AN	94.3	HRB	122.0	66.6	2.000	49.6	52.2
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ORIENT

TRANS

HEAT TREATMENT

TREATMENT FURNACE TEMP SCALE TEMP 1 F TEMP 1 HOLD CHANGE 1

ANNEAL	AFG	F	1650	1HR/45MN	AC
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OTHER TESTS

GRAIN SIZE MEASUREMENT|LAB|METALLOGRAPHY

PIECE ID TEST TEMPER TEST ORIENT AV GS ASTM NRM or DUP

P28050	AN	TRANSVERSE	4	NORMAL
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LOCATION LEGEND: B = BACK C = CENTER F = FRONT H = HEAD M = MIDDLE T = TOE

BRIGHTRAY, CORRONEL, FERRY, INCOCLAD, INCOLOY, INCONEL, INCOTHERM, INCO-WELD, KOTHERM, MAXORB, MONEL, NILO, NILOMAG, NIMONIC, NIOOTHERM, NI-SPAN, UDIMET & WIGGIN are trademarks of the Special Metals group of companies



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TEST TEMPER LEGEND

AN - Annealed

NO WELD REPAIR HAS BEEN PERFORMED ON THIS MATERIAL.

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

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 127805 (EXPIRES OCTOBER 31, 2014) FOR ALL TESTING SPECIFIED IN THE SCOPE OF ACCREDITATION. MATERIAL PRODUCED UNDER QA SYSTEM DOCUMENTED IN HUNTINGTON ALLOYS CORP QA MANUAL REV. 50, DATED 4/8/2013 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.E. BOLEN, D.K. MILLER, K.R. SMITH, G.J. BURKHEAD, S.E. LEER, M. WINSEMIUS

CERTIFIED TESTING LABORATORY DATA SOURCE IAI AEBG VENDOR NO. 47150 M. R. B. CASE RECORD NO. : NONE

AUTHORIZED VENDOR SIGNATURE Michelle Winsemius DATE Sept 19, 2014

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ROLLED ALLOYS QUALITY ASSURANCE
APPROVED *[Signature]*
DATE 9-24-14

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.

REV. 8/08

Signed

Michelle Anderson

For and on behalf of HUNTINGTON ALLOYS CORPORATION
Authorized Signature

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