

M6086BG

HUNTINGTON ALLOYS CORPORATION

A Special Metals Company

HUNTINGTON, WEST VIRGINIA 25705-1771

NOTE: THE RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHABLE AS A FELONY UNDER FEDERAL STATUTE.

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CORROSION MATERIALS INC 2262 GROOM RD BAKER LA 70714		CERTIFIED MATERIAL TEST REPORT		No. 15945	
CORROSION MATERIALS INC 2262 GROOM RD BAKER LA 70714		HA ORDER NO./ITEM 100047926 1	DATE 05/27/11	PAGE 1	OF 2
		QUANTITY 428 LBS	INSPECTED BY HA/SMC		
		CHARGE ORDER NO. 88105X	MARK ORDER NO. 88105X-1-051753750		
		DESCRIPTION OF MATERIAL SHIPPED MONEL ALLOY 400 HOT FIN RND ROUGH T STR REL 3.7500 IN 120-168 IN NOM			

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 BELOW FIGURES ARE IN ACCORDANCE WITH THE SPECIFIED CONTRACT REQUIREMENTS.

REV. 8/08

*****THIS REPORT RELATES ONLY TO THE ITEM(S) TESTED AND MAY NOT BE REPRODUCED EXCEPT IN FULL.*****

SPECIFICATIONS: ASTM B 164-03 (2008)\ASME SB-164 2010 EDITION NO ADDENDA\ UNS:N04400
 ASTM B 564-06 CHEM ONLY\
 ASME SB-564 2010 EDITION NO ADDENDA CHEM ONLY\
 US FED QQ-N-281D AM 2 CL A FM 1 MARKING WAIVED\
 QUALITY SYSTEM CERTIFICATION: ISO 9001:2008 (ABS-QE CERT. 30125);
 EN 10 204/DIN 50049 (TYPE 3.1) ✓


CHEMICAL ANALYSIS (WT. %)

HEAT#	C	MN	FE	S	SI	CU	NI	AL	CO
	P	PPM	PPM	PPM	NI+CO				
M6086BG	0.12	1.08	2.49	0.001	0.31	30.42	65.45	0.08	0.04
	0.011	3.3	7.4	25.1	65.49				

COUNTRY OF ORIGIN: MELTED AND MANUFACTURED IN THE USA
 TO CONVERT PPM TO WT.%, MOVE DECIMAL POINT FOUR PLACES TO THE LEFT.
 MELT METHOD: EF/AOD + ELECTROSLAG REMELTED

MECHANICAL PROPERTIES

HEAT/LOT	QUANTITY	HARDNESS	GRAIN SIZE	YIELD STRENGTH	TENSILE STRENGTH	ELONGATION	R/A	DEC F
				2% PSI	PSI	2"	%	
M6086BG 16	1 PC							
ROOM TEMP-HRB	-AS SHIPPED	92.5		0642	0935	37.8	72.8	
PC #: 2								

HEAT# M6086BG 16

 TRACER# 647908

YIELD STRENGTH WAS DETERMINED USING A STRESS STRAIN CURVE

NO WELDING OR WELD REPAIR WAS PERFORMED.

MATERIAL HEAT TREAT: STRESS RELIEVE IN A CONTINUOUS FURNACE AT

Certificate of compliance with NACE specs to be sent by encore. ✓ validated m.a.w.

Bob

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REV. 8/06

1250 DEG. F. FOR 12.4 MINUTES. AIR COOLED.

VISUAL AND DIMENSIONAL EXAMINATION SATISFACTORY.

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

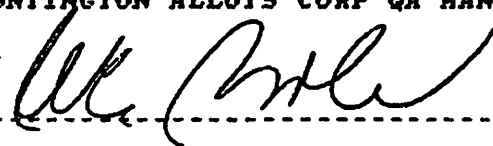
"CHEMICAL ANALYSIS AS REQUIRED FOR CARBON, SULFUR, NITROGEN OR OXYGEN IS PERFORMED BY COMBUSTION TECHNIQUES. ALL OTHER REPORTED ELEMENTS ARE ANALYZED BY X-RAY AND/OR EMISSION SPECTROSCOPY."

"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 31, 2011)."

HUNTINGTON ALLOYS CORPORATION IS AN ACCREDITED INDEPENDENT NADCAP MATERIALS TESTING LABORATORY VIA CERTIFICATE NUMBER 127805 (EXPIRES APRIL 30, 2011) FOR ALL TESTING SPECIFIED IN THE SCOPE OF ACCREDITATION.

MATERIAL PRODUCED UNDER QA SYSTEM DOCUMENTED IN HUNTINGTON ALLOYS CORP QA MANUAL REV. 49, DATED 2/17/2011

AUTHORIZED QUALITY CERTIFICATION REPRESENTATIVES :
 W.E. BOLEN, M.A. MORRISON, D.K. MILLER



HEAT# M60868G16



TRACER# 647908

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