H9R9

METALLURGICAL TEST REPORT

NORTH AMERICAN STAINLESS
6870 HIGHWAY 42 EAST
GHENT, KY 41045

6870 HIGHWAY 42 EAST

Certificate: 867684 1
Customer: 007035 520

Mail To:
RYERSON CANADA, INC.
C/O 35 - RYERSON ETOBICOKE
161 THE WEST MALL
ETOBICOKE, ON M9C4V8

Ship To:
RYERSON CANADA, INC.
C/O 35 - RYERSON ETOBICOKE
161 THE WEST MALL
ETOBICOKE, ON M9C4V8

Date: 9/05/2013 Page: 1
Steel: 316/316L
Finish: RT
Corrosion: ASTM A262 Prac E OK

Your Order: 737357
NAS Order: PN 0029226 01

PRODUCT DESCRIPTION:

Round Bar, Hot Rolled, Annealed, Rough Turned
UNS 31600/31603 EN 10204 3.1, ASTM A484/11
ASTM A276/10, ASTM A479/12, ASTM A182/10 CHEM ONLY,
ASME SA479/10a, ASME SA182/10 CHEM ONLY, ASTM F899/11
AMS 5648L/AMS 5653G, AMS QQS-763B, QQS 763F
NACE MR0175/MR0103(MID RADIUS ONLY),
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/08 CL 1 GR B8M
ASTM A193/10A-ASME SA193/10 CL 1 GR B8M(EXC PAR 7.2)

REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7014A-1 EU DIRECTIVE
2011/65/EU.RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-------Length------	Mark	Pieces	Commodity Code
BF5652 1		3.7500		938	144.00	1	1	71643375

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Chemical Analysis per ASTM A751/08

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
H9R9	US	.0205	.2130	16.6085	.3275	1.4020	2.0285	.0436	10.5400	.0295

	S %	SI %
	.0275	.2215

MECHANICAL PROPERTIES

Product Id	Loc	Id Or	HB No.	.2YS KSI	UTS KSI	RA %	Elng % 4D
BF5652 1	R	L	153.00	43.00	84.00	52.00	41.00

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical Dept. Mgr. ERIC HESS 05/2013

M2M MACHINING P.O. - 2012-438 S.O. - 407605