



J5C3

METALLURGICAL TEST REPORT

NORTH AMERICAN STAINLESS
6870 HIGHWAY 42 EAST
GHENT, KY 41045

C091401

6870 HIGHWAY 42 EAST

Certificate: 880308 7
Customer: 007226 001
Mail To: ASA ALLOYS
20 CHALLENGER CRES.
SHERWOOD PARK, AB T8H2R1

Ship To: ASA ALLOYS
20 CHALLENGER CRES.
SHERWOOD PARK, AB T8H2R1

Date: 10/15/2013 Page: 1

Steel: 316/316L

Finish: ST

Your Order: P030797

NAS Order: PN 0031057 08

Corrosion: ASTM A262 Prac E OK

PRODUCT DESCRIPTION:

NACE MR0175(MID RADIUS ONLY)
Round Bar, Annealed, Smooth Turned, Cold Finished
UNS 31600/31603, EN 10204 3.1, ASTM A484/11
ASTM A276/10, ASTM A479/13a, 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
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
BF7656 7		2.0000		915	144.00	8	1	

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 %
J5C3	US	.0179	.2730	16.5385	.5000	1.6335	2.0415	.0408	10.6100	.0330
		S %	SI %							
		.0200	.2485							

MECHANICAL PROPERTIES

Product Id	l d	o i	HB	.2YS	UTS	RA	Elong
	c r	No.	KSI	KSI	%	% 4D	
BF7656 7	R L	144.00	39.00	81.00	70.00	59.00	

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 analyzed and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

ERIC HESS

10/15/2013