



N1J7-5.0

METALLURGICAL TEST REPORT

North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

C110971

740 Imperial Road North

Certificate: 974218 3 Mail To:
Customer: 007226 001 ASA ALLOYS
20 CHALLENGER CRES.
SHERWOOD PARK, AB T8H2R1

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

Date: 8/06/2014 Page: 1

Steel: 316/316L

Finish: RT

Corrosion: ASTM A262 Prac E OK

Red Ratio: 3.0 :1

Your Order: P033816

NAS Order: IN 0196071 01

PRODUCT DESCRIPTION:

NACE MR0175 (MID RADIUS ONLY)
Round Bar, Hot Rolled, Annealed, Rough Turned
UNS 31600/31603 EN 10204 3.1, ASTM A484/13a
ASTM A276/13, ASTM A479/13a, ASTM A182/13 CHEM ONLY,
ASME SA479/13, 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 DFMAR 252.225-7009 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
BG5009 7		5.0000		1.790	144.00	3	1	

CHEMICAL ANALYSIS

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
N1J7	US	.0144	.3500	16.5325	.3755	1.6930	2.0000	.0448	10.5250	.0310
		S %	SI %							
		.0183	.4380							

MECHANICAL PROPERTIES

Product Id	1 d	o i	HB	.2YS	UTS	RA	Elong
	c r	No.	KSI	KSI	%	% 4D	
BG5009 7	R L	142.0	42.00	81.00	54.00	61.00	

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.

AB Bhavs

ABHIJEET BHAVE 8 / 2014