



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

METALLURGICAL TEST REPORT

C179974
6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 284935 2 Mail To: Ship To: Date: 4/19/2017 Page: 1
Customer: 007226 001 ASA ALLOYS ASA ALLOYS
20 CHALLENGER CRES. 20 CHALLENGER CRES.
SHERWOOD PARK, AB T8H2R1 SHERWOOD PARK, AB T8H2R1
Steel: 316/316L
Finish: RT
Corrosion: ASTM A262 Prac E OK
Red Ratio: 5.3 :1

Your Order: P041007 NAS Order: IN 0246461 01

PRODUCT DESCRIPTION:

NACE MR0175 (MID RADIUS ONLY)
Round Bar, Hot Rolled, Annealed, Rough Turned
UNS S31600/S31603 EN 10204 3.1, ASTM A484/13a
ASTM A276/16, ASTM A479/16, ASTM A182/13 CHEM ONLY,
ASME SA479/13, ASME SA182/10 CHEM ONLY, ASTM F899/11
AMS 5648L/AMS 5653H, AMS QQS-763D, 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 252.225-7009 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
BI6143 6		3.7500		995	144.00	2	1	

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
343Y	US	.0269	.2455	16.6265	.3910	1.5300	2.0245	.0342	10.5650	.0340
		S %	SI %							
		.0260	.2190							

MECHANICAL PROPERTIES

Product Id	l o i c r	HB	.2YS KSI	UTS KSI	RA %	Elong % 4D
BI6143 6	R L	150.0	39.00	83.00	68.00	57.00

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.

KRIS LARK 6/23/2017

ANS