



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

# METALLURGICAL TEST REPORT

C182734  
6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 294465 8      Mail To:      Ship To:      Date: 5/17/2017      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: 3.0 :1

Your Order: P041252      NAS Order: IN 0247616 06

**PRODUCT DESCRIPTION:**

NACE MR0175(MID RADIUS ONLY)  
Round Bar, Hot Rolled, Annealed, Rough Turned  
UNS S31600/S31603 EN 10204 3.1, ASTM A484/16  
ASTM A276/16A, ASTM A479/16A, ASTM A182/16A CHEM ONLY,  
ASME SA479/16A, ASME SA182/16A CHEM ONLY, ASTM F899/11  
AMS 5648M/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
BI6709 2		5.0000		1,774	144.00	9	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 %
369Y	US	.0245	.2850	16.5820	.3130	1.3355	2.0425	.0354	10.5400	.0305
		S %	SI %							
		.0179	.2585							

**MECHANICAL PROPERTIES**

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BI6709 2	R L	151.0	40.00	83.00	70.00	56.00

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      5/17/2017