



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

HT# 863L

**METALLURGICAL TEST REPORT**

C216139

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

Certificate: 429932 1      Mail To:      Ship To:      Date: 7/19/2018      Page: 1  
Customer: 007226 001      ASA ALLOYS      ASA ALLOYS  
20 CHALLENGER CRES.      20 CHALLENGER CRES.      Steel: 316/316L  
SHERWOOD PARK, AB T8H2R1      SHERWOOD PARK, AB T8H2R1      Finish: ST  
Corrosion: ASTM A262/15 Prac A/E OK  
Your Order: P044003      NAS Order: PN 0096245 02      Heat Treat Code: 47,780      Red Ratio: 16.1 :1

**PRODUCT DESCRIPTION :**

NACE MR0175/15(MID RADIUS ONLY)  
Round Bar, Annealed, Smooth Turned, Cold Finished  
UNS S31600/S31603, EN 10204 3.1, ASTM A484/18  
ASTM A276/17, ASTM A479/18, ASTM A182/17 CHEM ONLY,  
ASME SA479/18, ASME SA182/13 CHEM ONLY, ASTM F899/12B  
AMS 5648/M, AMS 5653/H, AMS-QQS-763/D, QQS:763/F  
NACE MR0175/15(MID RADIUS ONLY), MR0103/15(MID RADIUS ONLY)  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/17a CL 1 GR B8M  
ASTM A193/17, ASME SA193/13 CL 1 GR B8M(EXC PAR 6.2)

**REMARKS :**

COMPLIES W/REQUIREMENTS OF D FAR 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
BJ6718 1		2.1250		1,051	144.00	1	1	

ANAB, 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 %
863L	US	.017	.27	16.66	.36	1.38	2.107	.039	10.56	.027
		S %	SI %							
		.0270	.26							

**MECHANICAL PROPERTIES**

Product Id	l o c a t i o n	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BJ6718 1	R L	183.0	47.00	93.00	66.00	46.00

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

7/19/2018