



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

**METALLURGICAL TEST REPORT**

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

Certificate: 496172 2      Mail To:      Ship To:      Date: 3/29/2019      Page: 1  
Customer: 007175 007      ENCORE METALS, DIV. OF RMCL      ENCORE METALS, DIV. OF RMCL  
7805 51ST STREET S.E.      7805 51ST STREET S.E.      Steel: 316/316L  
CALGARY, AB T2C 2Z3      CALGARY, AB T2C 2Z3      Finish: ST  
Your Order: P119090875      NAS Order: PN 0103653 03      Heat Treat Code: 52,286      Corrosion: ASTM A262/15 Prac A/E OK  
Red Ratio: 14.4 :1

**PRODUCT DESCRIPTION:**

Round Bar, Annealed, Smooth Turned, Cold Finished  
UNS S31600/S31603, EN 10204 3.1, ASTM A484/18  
ASTM A276/17, ASTM A479/18, ASTM A182/18 CHEM ONLY,  
ASME SA479/17, ASME SA182/18 CHEM ONLY,  
AMS 5648/M, AMS 5653/H, AMS-QQ8-763/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 SA193/17 CL 1 GR B8M(EXC PAR 6.2)  
GRAIN SIZE = 6-8

**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

*P119090 R153657 525425 B52X 875*

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BK2665 4		2.2500		1.323	144.00	4	1	525425

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 %
B52X	US	.020	.29	16.97	.39	1.36	2.033	.037	10.63	.035
		S %	SI %							
		.0225	.22							

**MECHANICAL PROPERTIES**

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BK2665 4	R L	190.0	47.00	92.00	64.00	42.00

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.

*[Signature]*  
KRIS LARK

3/29/2019

*ANS*