



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

METALLURGICAL TEST REPORT

C282709

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

Certificate: 670803 3 Mail To: Ship To: Date: 2/24/2021 Page: 1
 Customer: 007226 003 ASA ALLOYS ASA ALLOYS
 #100, 112 STRATHMOOR DRIVE #100, 112 STRATHMOOR DRIVE Steel: 316/316L
 SHERWOOD PARK, AB T8H 2B7 SHERWOOD PARK, AB T8H 2B7
 Finish: ST
 Your Order: P050606 NAS Order: IN 0288061 01 Heat Treat Code: 63,027 Corrosion: ASTM A262/15 Prac A/E OK
 Red Ratio: 18.1 :1

PRODUCT DESCRIPTION:
 Round Bar, Annealed, Smooth Turned, Cold Finished
 UNS S31600/S31603, EN 10204 3.1, ASTM A484/20b
 ASTM A276/17, ASTM A479/20, ASTM A182/20 CHEM ONLY,
 ASME SA479/20, ASME SA182/20 CHEM ONLY, GRAIN SIZE = 6-8
 AMS 5648/M, AMS 5653/J, AMS-QQS-763/D, QQS:763/F
 NACE MR0175/15 (MID RADIUS ONLY), MR0103/15 (MID RADIUS ONLY)
 SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/18 CL 1 GR B8M
 ASME SA193/19 CL 1 GR B8M (EXC PAR 7.3.1)
 ASTM A193/20 CL 1 GR B8M (EXC PAR 6.2.1)

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 |
|------------|--------|----------|------|--------|------------------|------|--------|----------------|
| BL6769 2 | | 2.0000 | | 969 | 144.00 | 2 | 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 % |
|----------|----|-------|------|-------|------|------|-------|------|-------|------|
| K71B | US | .017 | .29 | 16.53 | .37 | 1.39 | 2.019 | .038 | 10.53 | .027 |
| | | S % | SI % | | | | | | | |
| | | .0255 | .28 | | | | | | | |

MECHANICAL PROPERTIES

| Product Id | l o c a t i o n | HB | .2YS KSI | UTS KSI | RA % | Elong % 4D |
|------------|--------------------------------------|-------|-------------|------------|---------|---------------|
| BL6769 2 | R L | 172.0 | 45.00 | 87.00 | 68.00 | 49.00 |

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 2/25/2021

NAS