



N1A6 - 2.0in

METALLURGICAL TEST REPORT

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

740 Imperial Road North

Certificate: 968728 6
Customer: 007226 001

Mail To:
ASA ALLOYS
20 CHALLENGER CRES.
SHERWOOD PARK, AB T8H2R1

Ship To:
ASA ALLOYS
20 CHALLENGER CRES.
SHERWOOD PARK, AB T8H2R1

Date: 7/18/2014 Page: 1

Steel: 316/316L

Finish: ST

Corrosion: ASTM A262 Prac E OK

Red Ratio: 18.1 :1 C110030

Your Order: P032985

NAS Order: PN 0040126 11

PRODUCT DESCRIPTION:

NACE MR0175(MID RADIUS ONLY)
Round Bar, Annealed, Smooth Turned, Cold Finished
UNS 31600/31603, EN 10204 3.1, ASTM A484/13a
ASTM A276/13, ASTM A479/13a, ASTM A182/13 CHEM ONLY,
ASME SA479/13, ASME SA182/10 CHEM ONLY, ASTM F899/11
AMS 5648L/AMS 5653H, AMS QQS-763B, 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

Table with columns: Product Id, Skid #, Diameter, Size, Weight, Length, Mark, Pieces, Commodity Code. Row: BG4890 9, 2.0000, 1,262, 144.00, 11, 1

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Chemical Analysis per ASTM A751/08

Table with columns: HEAT, CM, C %, CO %, CR %, CU %, MN %, MO %, N %, NI %, P %, S %, SI %. Row: N1A6, US, .0154, .2315, 16.6590, .3595, 1.2500, 2.0315, .0438, 10.5250, .0300, .0255, .2580

MECHANICAL PROPERTIES

Table with columns: Product Id, d, o, i, HB, No., .2YS, KSI, UTS, KSI, RA, %, Elng, % 4D. Row: BG4890 9, R L, 154.0, 40.00, 85.00, 56.00, 69.00

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: AB Bhawe

ABHIJEET BHAVE 7/18/2014