



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

METALLURGICAL TEST REPORT

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

Certificate: 375252 3 Mail To: Ship To: Date: 1/25/2018 Page: 1
Customer: 007130 023 ROLLED ALLOYS CANADA INC. ROLLED ALLOYS CANADA INC. Steel: 316/316L
4008 51 AVENUE N.W. 4008 51 AVENUE N.W. Finish: ST
EDMONTON, AB T6B 3T5 EDMONTON, AB T6B 3T5 Corrosion: ASTM A262/15 Prac A/E OK
Your Order: 1005687ED NAS Order: DS 0013756 03 Red Ratio: 4.7 :1

PRODUCT DESCRIPTION:

Round Bar, Annealed, Smooth Turned, Cold Finished
UNS S31600/S31603, EN 10204 3.1, ASTM A484/16
ASTM A276/17, ASTM A479/17, ASTM A182/16a CHEM ONLY,
ASME SA479/13, ASME SA182/13 CHEM ONLY
AMS 5648M/AMS 5653H, AMS QQS-763D, QQS 763F
NACE MR0175-03/MR0103-05 (MID RADIUS ONLY),
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/17a CL 1 GR B8M
ASTM A193/16-ASME SA193/13 CL 1 GR B8M(EXC PAR 6.2)

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
IA4103 4		4.0000		1,001	144.00	3	1	

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

CHEMICAL ANALYSIS

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
624J	US	.023	.32	16.69	.45	1.33	2.077	.037	10.58	.033
		S %	SI %							
		.0285	.22							

MECHANICAL PROPERTIES

Product Id	l o c	d i c	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
IA4103 4	R	L	182.0	45.00	91.00	67.00	46.00

HEAT # 624J



TRACER # 0003899ED



Receiving Inspection
By: Juan Duling
Date: 2/6/18

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

1/25/2018

Sep 23/18 plates JNS