



# METALLURGICAL TEST REPORT

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

C143366

740 Imperial Road North

Certificate: 124788 1  
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: 12/17/2015 Page: 1

Steel: 304/304L

Finish: RT

Corrosion: ASTM A262-10 Prac A/E OK

Red Ratio: 3.7 :1

Your Order: P037309

NAS Order: IN 0222977 04

## PRODUCT DESCRIPTION:

NACE MR0175 (MID RADIUS ONLY)  
Round Bar, Hot Rolled, Annealed, Rough Turned  
UNS 30400/30403 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  
AMS 5639H, AMS 5647J, AMS QQS-763C, QQS-763F  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/08 CL 1 GR B8  
ASTM A193/10A-ASME SA193/10 CL 1 GR B8 (EXC PAR 7.2)

## 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
BH2690 1		4.5000		1,340	144.00		4	1

Lab Accreditation Bureau, 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 A751/08

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
V5Y8	US	.0181	.2635	18.0495	.3335	1.4725	.3095	.0705	8.5030	.0285
		S %	SI %							
		.0240	.2585							

## MECHANICAL PROPERTIES

Product Id	l d	HB	.2YS	UTS	RA	Elong
	o i	No.	KSI	KSI	%	% 4D
	c r					
BH2690 1	R L	143.0	37.00	82.00	70.00	59.00

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.

*AB Bhavs*

ABHIJEET BHAVE -

12/17/2015