



METALLURGICAL TEST REPORT

NORTH AMERICAN STAINLESS
6870 HIGHWAY 42 EAST
GHENT, KY 41045

C100907

6870 HIGHWAY 42 EAST

Certificate: 928269 1 Mail To:
ASA ALLOYS
Customer: 007226 001 20 CHALLENGER CRES.
SHERWOOD PARK, AB T8H2R1

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

Date: 3/13/2014 Page: 1

Steel: 316/316L

Finish: ST

Your Order: P031955

NAS Order: PN 0035459 07

L4R8-325

Corrosion: ASTM A262 Prac E OK

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 A276/10, ASTM A479/13a, ASTM A182/13 CHEM ONLY,
ASME SAA479/10a, ASME SA182/10 CHEM ONLY, ASTM F899/11
AMS 5648L/AMS 5653G, 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 D FAR 252.225-7008 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
BG1484 9		3.2500		1,073	144.00	10	1	

CHEMICAL ANALYSIS

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
L4R8	US	.0261	.3285	16.5240	.2745	1.2655	2.0010	.0414	10.5000	.0375
		S %	SI %							
		.0265	.2855							

MECHANICAL PROPERTIES

Product Id	id	HB	.2YS	UTS	RA	Elong
	o i	No.	KSI	KSI	%	% 4D
	c r					
BG1484 9	R L	175.00	48.00	88.00	55.00	41.00

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.

ERIC HESS

3/13/2014