



# F9W7

## METALLURGICAL TEST REPORT

NORTH AMERICAN STAINLESS  
6870 HIGHWAY 42 EAST  
GHENT, KY 41045

C079000

6870 HIGHWAY 42 EAST

ASA PO 78163 WO 5983/4 CPA 2 FOEL 40/80

147"

Certificate: 830069 24

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

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

Date: 10/01/2013 Page: 1

Customer: 007226 001

Steel: 316/316L

Finish: RT

Your Order: P029905

NAS Order: IN 0166782 22

Corrosion: ASTM A262 Prac E OK

### PRODUCT DESCRIPTION:

Round Bar, Hot Rolled, Annealed, Rough Turned  
UNS 31600/31603 EN 10204 3.1 ASTM A484/11  
ASTM A276/10, ASTM A479/11, ASTM A182/10 CHEM ONLY,  
ASME SA479/10a, ASME SA182/10 CHEM ONLY, ASTM F899/11  
AMS 5648L/AMS 5653G, AMS QQS-763B, QQS 763F  
NACE MR0175/MR0103-09 (MID RADIUS ONLY),  
SOLUTION ANNEAL TEMP 1900F MIN

### REMARKS:

COMPLIES W/REQUIREMENTS OF DEAR 252.225-7014A-1 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

*shy*  
*10/1/13*

Product Id	Skid #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BF3230 3		3.7500		950	144.00	33	1	

### CHEMICAL ANALYSIS

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
F9W7	US	.0156	.2280	16.7415	.3480	1.3565	2.0145	.0466	10.5250	.0300
		S %	SI %							
		.0275	.2300							

### MECHANICAL PROPERTIES

Product Id	HB	2YS	UTS	RA	Elong
	No.	KSI	KSI	%	% 4D
BF3230 3	R L 146.00	39.00	83.00	71.00	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.

*[Signature]*

ERIC HESS

10/01/2013