



METALLURGICAL TEST REPORT

F5N2 - 2.125 in

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

Certificate: 824028 22 Mail To:
COPPER AND BRASS SALES, INC.
ATTN: ACCOUNTS PAYABLE
SOUTHFIELD MI 48086-
Customer: 0925 023
NAS Order: LN 94742 5
Your Order: 5400171197

Ship To:
COPPER AND BRASS SALES, INC.
13338 ORDEN DRIVE
SANTA FE SPRINGS CA 90670

Date: 4/03/2013 Page: 1 of 1
Steel: 316/316L
Finish: Cold Finish
Dia/Thk: 2.1250 in
Leg Length:
Length: 144.00 in
Corrosion: ASTM A262 Prac E OK

Item Code:

PRODUCT DESCRIPTION:

Round Bar, Annealed, Smooth Turned, Cold Finished
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 (MID RADIUS ONLY),
SOLUTION ANNEAL TEMP 1900F MIN

REMARKS:

COMPLIES W/REQUIREMENTS OF DPAR 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

Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight
BF26069	2159								

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Chemical Analysis per ASTM A751/08

Heat	Supplier #	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
F5N2		US	.014	.25	16.56	.46	1.32	2.00	.041	10.51	.031	.0240
			SI %									
			.30									

MECHANICAL PROPERTIES

Id	HB	.2YS	UTS	RA	Elong	
o i	No.	KSI	KSI	%	% 4D	
BF26069	R-L	141.0	39.00	84.00	54.00	42.00

NAS hereby certifies that the analysis and 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 described and are not to be construed, except in its entirety, without the written approval of NAS

Technical Dept. Mgr.

CstAr

CstOr Bozo

Wgt.: 309

Date 08/20/2014

John Zambetti