



M2M MACHINING P.O. - 2012-327 S.O. - 399718



VALBRUNA

SLATER STAINLESS, INC.
2409 TAYLOR STREET WEST - PO BOX 630
FORT WAYNE IN 46802 USA
PHONE 200-434-2500 - FAX 200-434-2001

258187

Product Certification Report

Report Number: 4871410

Certified on Mar 22, 2013 Page 1 of 1

Order I.D. 1300416 009		Order Date 2/20/13		Commodity Code	
Dim 1 4.0000	Dim 2 .0000	Dim 3 .0000	Heat I.D. 258187	Customer I.D. 002476	Customer Purchase Order 302004047
Product Shape Rounds			Product Surface HR & Rough Turned		Customer Grade 316/316L
Length (Inches) 132.000 Min. 156.000 Max.			Ball of Loadings 419123	Weight	

Ship To
 Attention: CHRIS ROEDER/LISA P
 VALBRUNA CANADA LTD.
 8724 HOLGATE CRESCENT
 MILTON, ONTARIO L9T5Z1

Sold To
 VALBRUNA CANADA LTD.
 8724 HOLGATE CRESCENT
 MILTON, ONTARIO L9T5Z1

Lifts: 0032

Condition A NACE MR0175-10 ISO 15156-3 ASTM 276-10
 ASTM 479-12 EN 10272 Feb. 2008

CHEMICAL ANALYSIS

C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Co	N
.017	1.46	.029	.030	.54	16.53	10.12	2.06	.54	.10	.06

BRINELL HARDNESS ASTM E10-12

HBW
159

TENSILE PROPERTIES ASTM E8-11

TS (PSI)	.2%YS (PSI)	1%Y.S. (PSI)	%EL(2")	%EL(5d)	%RA
82400	38900	40000	58.8	55.0	73.7

MACRO ASTM E340-00/E381-01

MACRO
OK

GRAIN SIZE ASTM E112-10

GRAIN SIZE	Etchant	Magnification X
5	Oxalic	100

ASTM A262-10 PR E(A Utilized)

OXALIC	Etchant	Magnification X
OK	Oxalic	500

ASTM A 262-10 (Prac E)

BEND TEST
OK

Solution annealed at 1900F min. and water quenched (heating time & temp appropriate for optimum quality).

Chemical testing to one or more of the listed ASTM methods:

E415-08, E572-02a, E1019-11, E1085-95, E1086-08.

Location of tensile fracture: inside middle of gage length.

Chemical Analysis performed at Acciaierie Valbruna, Italy.

No mercury or low melting alloy contamination. No weld repair.

Material melted in Italy, manufactured in the United States.

Material conforms to listed specifications and is DFARS compliant.

Quality system is compliant with ISO 9001:2008. Produced in accordance with EN 10204 3.1.

Results relate only to the items tested. Certification shall not be reproduced except in full, without written approval of Valbruna Stainless Inc. The recording of false, fictitious, or fraudulent statements on this document may be punished as a felony under federal statutes, including Federal law, Title 18, Chapter 47. Consult material safety data sheet (MSDS) for hazard info. I hereby certify that the reported figures are correct as contained in the records of the corporation.

Manager Laboratory Services

Dennis Hackett

email DHackett@valbruna.us

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