



VALBRUNA

SLATER STAINLESS, INC.
2400 Taylor Street West, P.O. Box 630
Fort Wayne, Indiana USA 46801
Phone: 260-434-2882 Fax: 260-434-2905

424263

Product Certification Report

Report Number: 4641520

Certified on Mar 18, 2011 Page 1 of 1

Order I.D. 1100133 006		Order Date 1/11/11		Commodity Code 316D5.0			
Dim 1 5.0000	Dim 2 .0000	Dim 3 .0000	Heat I.D. 424263	Customer I.D. 002476	Customer Purchase Order 101003050		
Product Shape Rounds			Product Surface HR & Rough Turned			Customer Grade 316/316L	
Length (Inches) 132.000 Min. 156.000 Max.			Bill of Lading # 413818	Weight			

Ship To

THYSSENKRUPP MATERIALS N.A.
O/A COPPER & BRASS SALES CA.
4143 101st STREET
EDMONTON, ALBERTA T6E 0A4

Sold To

VALBRUNA CANADA LTD.
8724 HOLGATE CRESCENT
MILTON, ONTARIO L9T5Z1

Lifts: 0030

NACE MRO 175-05 ISO 15156
ASMESA 479-07

ASTMA 276-08a

ASTMA 479-10a

CHEMICAL ANALYSIS

C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Co	N
.021	1.76	.027	.023	.52	16.90	10.15	2.10	.51	.07	.08

BRINELL HARDNESS ASTM E10-08

HBW
169

TENSILE PROPERTIES ASTM E8-08

TS (PSI)	.2%YS (PSI)	%EL(2")	%RA
87200	40200	61.4	79.6

MACRO ASTM E340-00/E381-01

MACRO
OK
OK

GRAIN SIZE ASTM E112-96

GRAIN SIZE	Etchant	Magnification X
8	Oxalic	100

ASTMA 262-10 PR E(A Utilized)

OXALIC	Etchant	Magnification X
OK	Oxalic	500

Heated to 1900F min. and water quenched (heating time & temp appropriate for optimum quality).

Chemical testing performed to one or more of the following ASTM methods: E415-08, E572-02a, E1019-08, E1085

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

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