



VALBRUNA

SLATER STAINLESS, INC.

2400 TAYLOR STREET WEST - PO BOX 630
FORT WAYNE IN 46802 USA
PHONE 260.434.2800 - FAX 260.434.2801

253926

Product Certification Report

Report Number: 4719171

Certified on Nov 03, 2011 Page 1 of 2

Order I.D. 1102298 002		Order Date 9/16/11		Commodity Code			
Dim 1 8.0000	Dim 2 .0000	Dim 3 .0000	Heat I.D. 253926	Customer I.D. 002558	Customer Purchase Order 5400116288-R05		
Product Shape Rounds			Product Surface HR & Rough Turned			Customer Grade 316/316L	
Length (inches) 120.000 Min. 168.000 Max.			Bill of Lading # 415236	Weight			

Ship To

**COPPER AND BRASS SALES
10648 WEST LITTLE YORK
SUTIE 400
HOUSTON, TX 77041**

Sold To

**VALBRUNA STAINLESS, INC.
2400 TAYLOR STREET WEST
FORT WAYNE, IN 46802**

Lifts: 0057

CONDITION A	*NACE MR0175-10 ISO 15156-3	QQ-S-763F
ASTMA 276-10	ASTMA 479-10a	ASMESA 479-10
AMS 5648K	AMS 5653G	SAE-AMS QQ-S-763B

CHEMICAL ANALYSIS

C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Co	N
.016	1.73	.031	.024	.48	16.60	10.07	2.06	.47	.10	.06

BRINELL HARDNESS ASTM E10-08

HBW
155

TENSILE PROPERTIES ASTM E8-08

TS (PSI)	.2%YS (PSI)	%EL(2")	%RA
79300	34900	63.5	79.5

MACRO ASTM E340-00/E381-01

MACRO
OK
OK

GRAIN SIZE ASTM E112-96

GRAIN SIZE	Etchant	Magnification X
7	Oxalic	100

ASTMA 262-10 PR E(A Utilized)

OXALIC	Etchant	Magnification X
OK	Oxalic	500

No mercury or low melting alloy contamination. Continuous carbide and intergranular corrosion test OK. No welding or weld repair done.

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

Material meets the ordered requirements of 316 and 316L.

*Certification revised at Valbruna by D. Hackett (1/4/13).

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.

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 las 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

Dennis Hackett



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

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Manager Laboratory Services

email: DHackett@valbruna.us

Dennis Hackett