



VALBRUNA

SLATER STAINLESS, INC.
2400 TAYLOR STREET WEST - PO BOX 630
FORT WAYNE IN 46802 USA
PHONE 260.484.2800 - FAX 260.484.2801

258277

Product Certification Report

Report Number: 4870420

Certified on Mar 19, 2013 Page 1 of 1

Order I.D. 1300538 001		Order Date 3/04/13		Commodity Code SSRD00372	
Dim 1 6.2500	Dim 2 .0000	Dim 3 .0000	Heat I.D. 258277	Customer I.D. 002720	Customer Purchase Order 5400174878-R05
Product Shape Rounds			Product Surface HR & Rough Turned		Customer Grade 316/316L
Length (Inches) 120.000 Min. 168.000 Max.			Bill of Lading # 419164	Weight	

Ship To
TKM/COPPER AND BRASS SALES
10648 WEST LITTE YORK
SUITE 400
HOUSTON, TX 77041

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

Lifts: 0007 0008

NACE MRO175-10 ISO 15156-3
ASTMA 479-12

ASTMA 182-11a Chem Only
AMS 5648L

ASTMA 276-10
AMS 5653H

CHEMICAL ANALYSIS

C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Co	N
.023	1.68	.030	.027	.39	16.85	10.01	2.03	.54	.16	.06

BRINELL HARDNESS ASTM E10-12

HBW
165

TENSILE PROPERTIES ASTM E8-11

TS (PSI)	.2%YS (PSI)	%EL(2")	%RA
81900	36200	72.2	80.3

MACRO ASTM E340-00/E381-01

MACRO
OK

GRAIN SIZE ASTM E112-10

GRAIN SIZE	Etchant	Magnification X
6	Oxalic	100

ASTM A262-10 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.
Material is RoHS compliant.

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

From: DHackett@valbruna.us Dennis Hackett
Copper and Brass Sales CA

Cust. M2M MACHINING

Del.: 2402640839

CstAr

CstOr 2012-344

Wgt.: 880.000 LB

Date 08/16/2013

John L. Zambetti