

259428 - 8.0



VALBRUNA
SLATER STAINLESS, INC.
2888 TAYLOR STREET WEST - PO BOX 690
FORT WORTH, TX 76163 USA
PHONE 817.434.2890 - FAX 817.434.2861

Product Certification Report
Report Number: 4898710

Certified on Jul 02, 2013 Page 1 of 2

Order I.D. 1301564 005	Order Date 6/20/13	Commodity Code 316D8.0
Dim 1 8.0000	Dim 2 .0000	Dim 3 .0000
Heat I.D. 259428	Customer I.D. 002471	Customer Purchase Order 36070
Product Shape Rounds	Product Surface HR & Rough Turned	Customer Grade 316/316L
Length (Inches) 120.000 Min. 168.000 Max.	Out of Lading ? 419791	Weight

Ship To
VALBRUNA STAINLESS, INC
4747 OATES ROAD
HOUSTON, TX 77013

Sold To
VALBRUNA STAINLESS, INC.
4747 OATES ROAD
HOUSTON, TX. 77013

Life: 0042 0052 0060

MIL-S-7720A AMEND 1 XCPT Cu	MIL-S-862B	NACE MR0175-10 ISO 15156-3
UNS S31600/S31603		ASTMA 182-13 Chem Only
ASTMA 193-11	ASTMA 276-10	ASTMA 320-11 chem only
ASTMA 479-12	ASTMA 484-11	ASMESA 182 10 ED Chem Only
ASMESA 193 07 ED	ASMESA 479-10	ASMESA 484 10 ED
AMS 5648L	AMS 5653H	SAE-AMS QQ-S-763B

CHEMICAL ANALYSIS

C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Co	N
.018	1.59	.028	.026	.46	16.54	10.76	2.10	.54	.10	.06

BRINELL HARDNESS ASTM E10-12
HBW 162

TENSILE PROPERTIES ASTM E8-11

TS (PSI)	.2%YS (PSI)	%EL(2")	%RA
78400	32600	67.8	79.8

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

Free of mercury and low melting alloy contamination.
Solution annealed at 1900F min. and water quenched (heating time & temp appropriate for optimum quality).
No welding or weld repair done.
Electric Furnace melted; AOD refined.
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.

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
Dennis Hackett

DFhackett@valbruna.us

From: Copper and Brass Sales CA

Cust. M2M MACHINING

Del.: 2403539870

CstAr

CstOr 2012 - 525

Wgt.: 59.210 LB

Date 12/02/2014

John J. Zambetti



VALBRUNA

SLATER STAINLESS, INC.
 5400 TAYLOR STREET WEST - PO BOX 880
 FORT WORTH TX 76102 USA
 PHONE 817.494.2880 - FAX 817.494.2891

Product Certification Report

Report Number: **4898710**

Certified on Jul 02, 2013 Page 2 of 2

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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.

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Manager Laboratory Services

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email: DHackett@valbruna.us

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