



**VALBRUNA**

**SLATER STAINLESS, INC.**

2400 Taylor Street West, P.O. Box 630  
Fort Wayne, Indiana USA 46801  
Phone: 260-434-2892 Fax: 260-434-2905

254354

**Product Certification Report**

**Report Number: 4688070**

Certified on Aug 15, 2011 Page 1 of 1

|  |                |                       |                                      |                           |                                      |                            |  |
|--|----------------|-----------------------|--------------------------------------|---------------------------|--------------------------------------|----------------------------|--|
| Order I.D.<br>1101505 009                    |                | Order Date<br>6/06/11 |                                      | Commodity Code<br>C049122 |                                      |                            |  |
| Dim 1<br>5.2500                              | Dim 2<br>.0000 | Dim 3<br>.0000        | Heat I.D.<br>254354                  | Customer I.D.<br>002476   | Customer Purchase Order<br>106003242 |                            |  |
| Product Shape<br>Rounds                      |                |                       | Product Surface<br>HR & Rough Turned |                           |                                      | Customer Grade<br>316/316L |  |
| Length (Inches)<br>132.000 Min. 156.000 Max. |                |                       | Bill of Lading #<br>415110           | Weight                    |                                      |                            |  |

**Ship To**

VALBRUNA CANADA LTD.  
8724 HOLGATE CRESCENT  
MILTON, ONTARIO L9T5Z1

**Sold To**

VALBRUNA CANADA LTD.  
8724 HOLGATE CRESCENT  
MILTON, ONTARIO L9T5Z1

**Lifts: 0025 0026 0027 0028**

**CONDITION A**

NACE MRO 175-05 ISO 15156

ASTMA 276-10

ASTMA 479-10a

EN 10272 Feb. 2008

**CHEMICAL ANALYSIS**

| C    | Mn   | P    | S    | Si  | Cr    | Ni    | Mo   | Cu  | Co  | N   |
|------|------|------|------|-----|-------|-------|------|-----|-----|-----|
| .019 | 1.67 | .030 | .024 | .41 | 16.74 | 10.10 | 2.00 | .48 | .07 | .07 |

**BRINELL HARDNESS ASTM E10-08**

HBW  
165

**TENSILE PROPERTIES ASTM E8-08**

| TS (PSI) | 2%YS (PSI) | 1%Y.S. (PSI) | %EL(2") | %EL(5d) | %RA  |
|----------|------------|--------------|---------|---------|------|
| 83200    | 38500      | 40000        | 60.0    | 57.0    | 78.7 |

**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             |

**ASTM A 262-10 (Prac E)**

BEND TEST  
OK

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, E1085-95,

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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