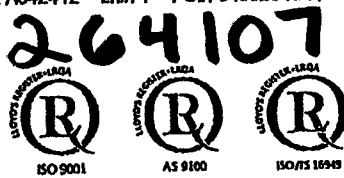


# Acciaierie Valbruna S.p.A.



**CERTIFICATO DI COLLAUDO**  
**ABNAHMEPRUEFZEUGNIS**  
**INSPECTION CERTIFICATE**  
**CERTIFICAT DE RECEPTION**  
**EN 10204 (2004) , 3.1**

38100 VICENZA (Italia) - Viale della scienza, 25 z.l.  
 Stab.: 38100 BOLZANO (Italia) - Via A. Volta, 4  
 Telephone number : 0039 (0) 444868211

Cliente / Besteller/Kunde/Client  
**VALBRUNA STAINLESS INC.**  
 2400 TAYLOR STREET WEST  
 48801-FORT WAYNE, IN 48801-US

Produttore: ACCIAIERIE VALBRUNA S.P.A.  
 Hersteller/Hersteller

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER

Avviso di Spedizione: D-VI14020480  
 Uebernahme/Packing list/B.L.

Certificato nr: MEST535376/2014/  
 Prüfung/Inspection

Confirma ordine nr: E114006409  
 Works/Order/Bestell.

Ordine nr: 40574 STOCK CHINO  
 Bestell/Nr order/Commande

Marchio di Fabbrica:  
 Zeichen des Lieferanten  
 Trade mark  
 Signe de l'usine producteur



Stato di fornitura: Forged - Annealed FORGED  
 Lieferzustand/Delivery state/Etat de livraison

Tipo di Elaborazione: E+AO  
 Erzeugung/Produktion/procédés d'elaboration

Punzone del Collaudatore:  
 Stempel des Werkstoffprüfers  
 Inspector's stamp/Poinçon de l'essayeur

Specifiche:  
 Anforderungen / Requirements / Exigences

- VS10 S16/316L A
- AMS 5663 H S31603 A
- ASME SA193 2010 B8M CLASS1 (1)
- ASME SA478 2010 S31600/03 A (4)
- ASTM A282 2013 PRACTICE E
- ASTM A320 2011A B8M CLASS1
- ASTM A478 2013A S31600/03 A
- NACE MR0175/2009 S31600/03 A (7)

- AISI 316/316L
- AMS-QQ-S-763 B 316/316L A
- ASME SA276 2010 S31600/03 A (2)
- ASTM A182 2013 S31600/03 A (5)
- ASTM A276 2013 S31600/03 A
- ASTM A370 2012A
- MIL-S-882 B/1 316/316L
- QQ-S-763 F 316/316L A

- AMS 5648 L S31600 A
- ASME SA192 2010 S31600/03 A (0)
- ASME SA320 2010 B8M CLASS1 (3)
- ASTM A193 2011A B8M CLASS1
- ASTM A314 2008 S31600/03
- ASTM A473 2001 S31600/03 (6)
- NACE MR0103 2010 S31600/03 A

- (0) SEC.II P.T.A 2010 EDITION ADD. 2011a
- (1) SEC.II P.T.A 2010 EDITION ADD. 2011a
- (2) SEC.II P.T.A 2010 EDITION ADD. 2011a
- (3) SEC.II P.T.A 2010 EDITION ADD. 2011a
- (4) For products machined directly from bar refer also
- (5) Chemical analysis only.
- (6) Technical circular 1:2011 Published 2011-06-14
- (7) Technical circular 1:2011 Published 2011-06-14

- (0) For products machined directly from bar refer to ASME SA478.
- (2) SEC.II P.T.A 2010 EDITION ADD. 2011a
- (4) SEC.II P.T.A 2010 EDITION ADD. 2011a
- (5) to ASTM A478.
- (7) ANSI/NACE MR0175/ISO 15166-3, second edition 2009-10-15

Qualità: 316/316L  
 Werkstoff/Qualitätsklasse

Marca: APMIL  
 Markenbezeichnung  
 Designation

Tolleranza: ASTM A484-13a TABLE 3  
 Toleranz/Abweichung/Tolerance

Punzonatura: 316/316L  
 Kennzeichnung/Markierung/Markierung

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Object Product description Description de produit	Dimensioni - In Abmessungen Dimension Dimension	Lunghezza - In Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stücke Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Lot nr. Lot nr. Lot nr.
0070	Round	11,0000	220 / 220	264107		6.138	407907120

**TEST ALLO STATO DI FORNITURA**  
 Test on delivery condition Prüfung auf Lieferzustand/Produkt test à l'état de livraison Prueba sobre el material así como entregado

TEST	Prova/Prüfung Essai/Prüfung Longitudinal Querschnitt Weld Char. Impact Log. Char. Impact mm	Temp. Temperatur Temperatura °F	Sneramento Erweichung Yield Stress Lower Yield Rp 0,2% k.s.l.	Sneramento Erweichung Yield Stress Upper Yield Rp 0,2% k.s.l.	Resistenza Zugfestigkeit Tensile strength Tensile Strength Rm k.s.l.	Allungamento Bruchdehnung Elongation Elongation		Strizione Zugverschiebung Reduction of area Reduction		Resilienza Kerbschlagenergie Impact Value Resilience	Durezza Härte Hardness Dureté
						E 4d %	RA %	RA %	HB		
Valori richiesti 1 Anforderungen/Required values Valeurs demandées		min max	30	-	75 115	-	40	-	50	-	140 223
A	12,5	68 L	38		84		82		74		168

TEST	min	max
A Grain size for ASTM E112		4

1) L- longitudinal, T- transverse, W- Charpy, Q- Transverse Charpy

Mechanical properties according to ASTM A370.

### Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata/Heat Schmelze/Coulée	min - max 0,030	1,00	1,25 2,00	16,50 18,00	2,00 3,00	1,00	10,00 14,00	-	0,040	0,020 0,030	0,100	-	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %				
264107	0,020	0,34	1,68	16,60	2,05	0,63	10,05	0,088	0,030	0,028	0,086				

Produced without class I-II Ozone depleting substances.  
 Solution heat treated free from continuous carbide network.  
 Annealing temperature: 1940°F for 7 h/water.  
 Micro and macro etch test: OK  
 Reduction ratio > 4 : 1  
 Intergranular corrosion test per ASTM A262 pract. E: ok.

Vicenza, 18/06/14 VC0008 (Mod. MCE3)	Il collaudatore di stabilimento / der Werkstoffprüfer/Works Inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 2
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# Acciaierie Valbruna S.p.A.



**CERTIFICATO DI COLLAUDO**  
**ABNAHMEPRUEFZEUGNIS**  
**INSPECTION CERTIFICATE**  
**CERTIFICAT DE RECEPTION**  
**EN 10204 (2004) , 3.1**

36100 VICENZA (Italia) - Viale della scienza, 25 z.l.  
 Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4  
 Tolophon number : 0039 (0) 444988211

Cliente / Besteller/Purchaser/Client  
**VALBRUNA STAINLESS INC.**  
 2400 TAYLOR STREET WEST  
 46801-FORT WAYNE, IN 46801-US

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**  
 Hersteller/Manufacturer/Produkteur

Stato di fornitura: Forged - Annealed **FORGED**  
 Lieferzustand/Delivery state/Etat de livraison

Absence of cracks at 20 x magnification after bend test.  
 Material is DFARS Compliant

Sono state soddisfatte tutte le condizioni richieste  
 Die gestellten Anforderungen sind in Anlage erfüllt!  
 The material has been furnished in accordance with the requirements  
 Le matériau a été fourni conforme aux exigences

Controllo antimescolanza: OK  
 Verunreinigungsfrei: spezialanalytisch durchgeführt  
 Antimixing testing performed: OK  
 Contrôle antimesclange fait: S.O.

Controllo visivo e dimensionale: soddisfa le esigenze  
 Sichtprüfung und Ausmessung: ohne Beanstandung  
 Visual inspection and dimensional checks: satisfactory  
 Contrôle visuel et dimensionnel: satisfaisant

Melted and manufactured in Italy. No welding or weld repair. Material free from Mercury contamination.  
 We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.

The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1, s., 4.3 by TUEV and LLOYD'S  
 Any act of tampering, modification, alteration, counterfeiting and/or falsification and/or any other action which modifies the contents of this test certificate shall constitute a violation of applicable civil and criminal laws. Acciaierie Valbruna shall protect its rights and interests before any competent court, authority and jurisdiction.  
 The supplied product conforms to requirements expressly requested by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/or in any case different applications than those the material is generally intended for, any different and/or supplementary requirements shall be specifically demanded, at least, upon order of the Product by the Purchaser. Acciaierie Valbruna SpA shall not be responsible for any improper use of the Products.

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER

Avviso di Spedizione: D-VII4020480  
 Lieferanfrage/Packing Print.L.

Certificato nr: MEST535376/2014/  
 Prüfung/TEST/Etat

Confirma ordine nr: EI14006409  
 Works/Our Order/Id. nr.

Ordine nr: 40574 STOCK CHINO  
 Bestell./Your order/Commande

Marchio di Fabbrica:  
 Zeichen des Lieferwerkes  
 Trade mark  
 Signe de l'usine productrice



Tipo di Elaborazione: E+AOD  
 Erzeugnisart/Alloying process/Mode d'elaboration

Punzone del Collaudatore:  
 Stempel des Werksachverständigen  
 Inspector's stamp/Plaqueon de l'attesteur



ThyssenKrupp Materials NA, Inc.

Copper and Brass Sales Division Sold To:

Customer: CBS Edmonton

Your PO#: 5400234041

CBS Order #: 2403367886

Quantity: 5123#

Date: 9-3-14

By: *Edlene Gonzalez*  
 Quality Check

Vicenza, 18/06/14 VCC008 (Mod. MCE2)	Il collaudatore di stabilimento / der Werksachverständiger / Works Inspector / L' agent d' usine M. Rizzotto <i>M. Rizzotto</i>	Pagina - 2 di 2
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