

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
Telephon number : 0039 (0) 44968211

Clienti / Berater/Purchase/Client
VALBRUNA STAINLESS INC.
2400 TAYLOR STREET WEST
48801-FORT WAYNE, IN 48801-US

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

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

Specifico:
Anforderungen / Requirements / Exigences

- VS1 0 316/316 L A
- AMS 5653 H S31603 A
- ASME SA193 2010 B8M CLASS1 (1)
- ASME SA479 2010 S31600/03 A (4)
- ASTM A262 2013 PRACTICE E
- ASTM A320 2011A B8M CLASS1
- ASTM A479 2013A S31600/03 A
- NACE MR0175 2009 S31600/03 A (7)

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

- AISI 316/316L
- AMS-QQ-S-763 B 316/316 L A
- ASME SA276 2010 S31600/03 A (2)
- ASTM A182 2012B S31600/03 A (5)
- ASTM A276 2013 S31600/03 A
- ASTM A370 2013
- MIL-S-862 B/1 316/316L
- QQ-S-763 F 316/316 L A

Certificato nr: MEST538048/2014/
Prüfung/Test:Essai

Confirma ordine nr: E14008528
Works/Our Order/Not. n.

Marchio di Fabbrica:
Zeichen des Lieferanten
Trade mark
Sigle de l'usine productrice



Tipo di Elaborazione: E+AOD
Erzeugnisverfahren/Producing process/Mode d'elaboration

Funzione del Collaudatore:
Stempel des Werksachverständigen
Inspector's stamp/Fonction de l'essayeur

- AMS 5648 L S31600 A
- ASME SA182 2010 S31600/03 A (0)
- ASME SA320 2010 B8M CLASS1 (3)
- ASTM A183 2011A B8M CLASS1
- ASTM A314 2008 S31600/03
- ASTM A473 2001 S31600/03 (6)
- NACE MR0103 2010 S31600/03 A

- (0) For products machined directly from bar refer to ASME SA479.
- (2) SEC.II PT.A 2010 EDITION ADD. 2011a
- (4) SEC.II PT.A 2010 EDITION ADD. 2011a
- (5) to ASTM A479.
- (7) ANSINACE MR0175/ISO 15166-3, second edition 2009-10-15

Qualità: 316/316L
Werkstoff/Grade/Qualité

Marca: APML
Markenname/Brand Name

Tolleranza: ASTM A484-14a TABLE 3
Toleranz/Allowance/Tolérance

Punzonatura: 316/316L
Kennzeichnung/Marking/Markage

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Geometrie Product description Désign. du produit	Dimensioni - in Abmessung Dimension Dimension	Lunghezza - in Länge Length Longueur	Colata Schmelze Melt Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Loose. Lot nr. Lot nr.
0190	Round	9,0000	177 / 182	264222	2	6.722	407008690

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	Proveita/Probezeit Specimen Exposure Lap time/Expt Expt. time Werkstoff-Prüfung Lap time/Expt mm	°F	Posti. Bolge Post. n. Bolge n.	Snervamento Stranchatura Tensile Stress Limite élastique Rp 0,2% k.s.l.	Snervamento Stranchatura Tensile Stress Limite élastique k.s.l.	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.l.	Allungamento Bruchdehnung Elongation Allongement E 4d %	Strizione Ductility Reduction of area Striction RA %	Resistenza Kerbschlagarbeit Impact Value Resistance	Durezza Harte Hardness Dureté HB
Valori richiesti 1 Anforderungen/Requisit Values de -réquisit		min max		30	-	75 115	- 40	- 50	-	140 223
A	12,5	68 L		38		81	64	74		187

TEST	min	max
A Grain size for ASTM E112		4

1)-lunghezza/länge, T=temperatura, C=temperatura

Mechanical properties according to ASTM A370.

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata/Melt 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	-	-	-	-
264222	C %	SI %	Mn %	Cr %	Mo %	Cu %	NI %	Co %	P %	S %	N %				
	0,013	0,41	1,77	16,88	2,08	0,78	10,00	0,099	0,030	0,025	0,080				

Produced without class I-II Ozone depleting substances.
Solution heat treated free from continuous carbide network.
Annealing temperature: 1940°F for 6 h/water.
Micro and macro etch test: OK
Reduction ratio > 4 : 1
Intergranular corrosion test per ASTM A262 pract. E: ok.

Scan i.c.

i.c. O.k
09. Dec 2014

Vicenza, 24/06/14 VCO008 (Prod MCEZ)	Il collaudatore di stabilimento / der Werksachverständiger/ Works Inspector / L'agent d'usine M. Rizzotti	Pagina - 1 di 2
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From: Copper and Brass Sales CA

Cust. NEXXA INDUSTRIES LTD.

Del.: 2403551092

CstAr

CstOr 79086

John R. Zambetti

Acciaierie Valbruna S.p.A.



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INSPECTION CERTIFICATE
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EN 10204 (2004) , 3.1

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 Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4
 Telephone number : 0039 (0) 444968211

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

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**
 Hersteller/Usine producteur

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 erfüllt
 The material has been furnished in accordance with the requirements
 Le matériel a été livré conforme aux exigences

Controllo antimiscelazione: OK
 Vermischungsprüfung: erfolgreich durchgeführt
 Antimixing test performed: OK
 Contrôle antimélange test: r.s.s.

Controllo visivo o dimensionale: soddisfa le esigenze
 Besichtigung und Abmessung: ohne Beanstandung
 Visual inspection and dimensional check 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-VH4021133
 Lieferanweisung/Packing instruction

Certificato nr: MEST538048/2014/
 Prüfung/Test/Exam

Conferma ordine nr: EI14008528
 Werke/Our Order/Ref. nr.

Marchio di Fabbrica:
 Zeichen des Lieferwerkes
 Trade mark:
 Eigle de l'usine producteur



Ordine nr: 40641 STOCK CHINO
 Bestell/Your order/Commande

Tipo di Elaborazione: E+AOD
 Erzeugniszustand/Leistung process/Mode of elaboration

Punzone del Collaudatore:
 Stempel des Werksschwermetallprüfer
 Inspector's stamp/Plombon de l'assesseur



ThyssenKrupp Materials NA, Inc.	
Copper and Brass Sales Division Sold To:	
Customer:	CBS Edmonton
Your PO#:	5405232416
CBS Order #:	24033167174
Quantity:	3314 #
Date:	9-4-14
By:	<i>Salome Gonzalez</i>
	Quality Check

Vicenza, 24/06/14 VCC000 (Mod. MCE2)	Il collaudatore di stabilimento / der Werkssachverständiger/ Works Inspector / L' agent d' usine <i>M. Rizzotto</i>	Pagina - 2 di 2
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From: Copper and Brass Sales CA

Cust. NEXXA INDUSTRIES LTD.

Del.: 2403551092

CstAr

CstOr 79086 ✓ POA

Salome Gonzalez