

260674-11.0

Acciaierie Valbruna S.p.A.



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

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

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

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

Specifiche: Anforderungen / Requirements / Exigences

- VS1 0 316/316L A
- AMS 5653 H S31603 A
- ASME SA193 2010 B8M CLASS1 (1)
- ASME SA479 2010 S31600/03 A (4)
- ASTM A262 2010 PRACTICE E
- ASTM A320 2011A B8M CLASS1
- ASTM A479 2012 S31600/03 A
- NACE MR0175 2009 S31600/03 A (7)

- AISI 316/316L
- AMS-QQ-S-763 B 316/316L A
- ASME SA278 2010 S31600/03 A (2)
- ASTM A182 2012B S31600/03 A (5)
- ASTM A276 2010 S31600/03 A
- ASTM A370 2012A
- MIL-S-882 B/1 316/316L
- QQ-S-763 F 316/316L A

- (0) SEC.II FT.A 2010 EDITION ADD. 2011a
- (1) SEC.II FT.A 2010 EDITION ADD. 2011a
- (2) SEC.II FT.A 2010 EDITION ADD. 2011a
- (3) SEC.II FT.A 2010 EDITION ADD. 2011a
- (4) For products machined directly from bar refer to ASTM A479.
- (5) For products machined directly from bar refer to ASTM A479.
- (6) ANS/NACE MR0175/ISO 15156-3, second edition 2009-10-15

- (0) For products machined directly from bar refer to ASME SA479.
- (1) SEC.II FT.A 2010 EDITION ADD. 2011a
- (2) SEC.II FT.A 2010 EDITION ADD. 2011a
- (3) SEC.II FT.A 2010 EDITION ADD. 2011a
- (4) SEC.II FT.A 2010 EDITION ADD. 2011a
- (5) Chemical analysis only.
- (6) Technical circular 12011 Published 2011-08-14

Qualità: S16/316L
Werkstoff/Qualitätsbezeichnung

Marca: **APML**
Werkstoffbezeichnung/Brandname

Tolleranza: **ASTM A484-11 TABLE 3**
Toleranz/Tolerance/Toleranz

Funzionatura: **316/316L**
Kornstruktur/Marking/Alage

Pos. nr. Pos. nr. No. de pozitie	Oggetto Designation Product description Descr. du produit	Dimensioni - in Abmessungen Dimension Dimensionen	Lunghezza - in Länge Length Langueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Lose, Lot nr. Lot nr.
0010	Round	11,0000	132 / 136	260674		14,983	307106280

TEST ALLO STATO DI FORNITURA

TEST		Prova Essai	Temperatura Temperatur	Spessore Dicke	Spessore Dicke	Resistenza Zugfestigkeit Tensile strength Zugfestigkeit	Allungamento Elongazione Elongation Elongation	Strizione Elongazione Elongation Elongation	Resistenza Kerbschlagenergie Impact Value Resilience	Durezza Brinell Rockwell Durezza	
A	12,5	68	L	38	83	58	71	188			
TEST		min		max		min		max		max	
A	Grain size for ASTM E112					4					

Mechanical properties according to ASTM A370.

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata Heat Schmelze/Heat	min	max	0,030	1,00	1,25	16,00	2,00	3,00	1,00	10,00	14,00	0,045	0,030	0,100	-	-	-	-
260674	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %							
	0,017	0,24	1,70	16,83	2,03	0,48	10,02	0,169	0,030	0,029	0,082							

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.
Material is DFARS Compliant

Vicenza, 04/07/13 V30008 (Mod. MCB2)	Il collaudatore di stabilimento / der Werkssachverständiger / Works Inspector / L'agent d'usine <i>M. Rizzotto</i>	Pagina - 1 di 2
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From: Copper and Brass Sales CA

Cust. M2M MACHINING

CstAr

Wgt.: 4,383 LB

Del.: 2403322530

CstOr 2012-486

Date 08/11/2014

John. Zambetti

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

Certificato nr: MEST970874/2013/
Prüfung/Exam

Conferma ordine nr: E115005294
Werk/Our Order/Nr.

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



Funzione del Collaudatore:
Funktions des Werkssachverständigen
Inspector a stamp/Poligon de l'essayeur

- AMS 5848 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

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 2400 TAYLOR STREET WEST
 46801-FORT WAYNE, IN 46801-US

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

Stato di fornitura: Forged - Annealed FORGED
 Lieferzustand / Delivery condition: aus dem Ofen

Sono state soddisfatte tutte le condizioni richieste
 Die gestellten Anforderungen sind erfüllt, Anlage erfüllt
 The essential tests have been carried out in accordance with the requirements
 Le stipulées à été trouvée conforme aux exigences

Controllo antimicrobico: OK
 Verschleißprüfung: spez. herstellereigentlich durchgeführt
 Antifouling testing procedure: OK
 Corrosion anforderung: erfüllt

Molten 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, 4.3 by TÜV 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.

Avviso di Spedizione: D-VI13020287
 Lieferungsanweisung: BOLL

Ordine nr 36145 STOCK CHINO
 Bestelnummer / Order: CHINA

Tipo di Elaborazione: E+AOD
 Erhebungsart / Working process: AOD's elaboration

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

Certificato nr: MEST370874/2013/
 Prüfung/Vorstellung

Conferma ordine nr: EI13005284
 Works Order-Ref. nr.

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



Funzione del Collaudatore:
 Zweck der Werkstoffüberprüfung
 Inspector's stamp/Person de l'analyseur



Controllo visivo e dimensionale: soddisfatta la esigenza
 Maßprüfung und Abmessung: ohne Beanstandung
 Visual inspection and dimensional check: satisfactory
 Contrôle visuel et dimensionnel: satisfaisant

Vicenza, 04/07/13 vccoss (Mod. MCE2)	Il collaudatore di stabilimento / der Werkssachverständige / Works Inspector / L'ageni d' usine M. Rizzotto	Pagina - 2 di 2
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