

Acciaierie Valbruna S.p.A.



QUALITY MANAGEMENT SYSTEM
CERTIFIED BY LLOYD'S REGISTER

259205

Avviso di Spedizione: D-VII2034015
Lieferanzahl/Packing list/BL

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

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4
Cliente / Besteller/Purchaser/Client
VALBRUNA STAINLESS INC.
2400 TAYLOR STREET WEST
46801-FORT WAYNE, IN 46801-US

Produttore: ACCIAIERIE VALBRUNA S.P.A.
Hersteller/Item/Usine producer

Ordine nr: 32816 STOCK HOUSTON
Bestel/Your order/Commande

Certificato nr: MEST274102/2012/
Prüfung/Test/Essai

Confirma ordina nr: E112002820
Werkz/Our Order/Ref. nr.

Marchio di Fabbrica:
Zeichen des Lieferwerkes
Trade mark
Sigle de fusine producer



Punzone del Collaudatore:
Stempel des Werksachverständigen
Inspector's stamp/Pointon de l'essayeur

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

Tipo di Elaborazione: E+AOD
Erschneidungsart/Finishing process/Mode d'elaboration

Specifiche:
Anforderungen / Requirements / Exigences

VSI 0 316/316L A
AMS 5653 G 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 2011 S31600/03 A
NACE MR0175 2009 S31600/03 A (7)

SAISI 316/316L
AMS-QQ-S-763 B 316/316L A
ASME SA278 2010 S31600/03 A (2)
ASTM A182 2011A S31600/03 A (5)
ASTM A276 2010 S31600/03 A
ASTM A370 2012
MIL-S-862 B/1 316/316L
QQ-S-763 F 316/316L A

AMS 5648 L S31600 A
ASME SA182 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 2007 S31600/03 A

- (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 to ASTM A479.
- (7) ANSI/NACE MR0175/ISO 15156-3, second edition 2009-10-15

- (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
- (6) Chemical analysis only.
- (7) Technical circular 1:2011 Published 2011-06-14

National Specialty Alloys - Test Reports
Customer: M2M MACHINING LTD.
P.O. No.: 2012-314
Part No.:
Descrpt.: See item #1 on packing list.
Shop Order #: N08182500

Qualità: 316/316L

Werkstoff/Grade/Qualite

Marca: APML

Markenbezeichnung
Brand/Mark

Tolleranza: Tol. as requested

Toleranz/Akcesance/Tolerance

Punzonatura: 316/316L

Kennzeichnung/Marking/Markage

Pos. nr. Pos. nr. Nr. de poste	Oggetto Gegenstand Product description Descrip. du produit	Dimensioni - In Abmessungen Dimension Dimension	Lunghezza - In Länge Length Longueur	Colata Schmelze Mest Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Lothr. Lot nr. Lot nr.
0060	Round	22,1248	66 / 66	259205		7.363	208602820

TEST ALLO STATO DI FORNITURA

Test on delivery condition Prüfung auf Lieferbareitem produkt test a l'etat de fourniture Prueba sobre el material así como entregado

TEST	Provetta/Probetas Specimen/Eprouvette Längsform, Dicke, Draht Diam., Dicke Wahl Draht, Thickness Läng. diam., Höhe mm	°F	Posiz. Saggio Position Epreuve	Snervamento Bruchgrenze Yield Stress Rp 0,2% k.s.i.	Snervamento Bruchgrenze Yield Stress Limite élastique	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.i.	Allungamento Bruchdehnung Elongation Allongement E 4d %	Strizione Bruchdehnung Reduction of area Ectricion RA %	Resilienza Kerbschlagenergie Impact Value Resilience	Durezza Härte Hardness Dureza HB
	Valori richiesti 1 Anforderungen/Required values Valeurs requises	min max		30	-	75 115	- 40	- 50	-	140 223
A	12,5	68 L		37		82	61	73		164

TEST	min	max
A Grain size for ASTM E112		4

Mechanical properties according to ASTM A370.

1) L - longitudinal/Ängs, T - transversal/quer, C - Tangenzial/tangentiel

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata / Mest Schmelze/Coulée	min - max 0,030	1,00	1,25 2,00	18,50 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 %				
259205	0,025	0,37	1,66	16,85	2,00	0,67	10,05	0,095	0,029	0,025	0,082				

Produced without class I-II Ozone depleting substances.
Solution heat treated free from continuous carbide network.
Annealing temperature: 1940°F for 14 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, 22/11/12 VCO12 (Mod. MCE2)	Il collaudatore di stabilimento / der Werkssachverständige / Works Inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 2
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Acciaierie Valbruna S.p.A.



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

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

Avviso di Spedizione: D-VI12034015
Lieferanzsige/Packing list/B.L.

Ordine nr: 32816 STOCK HOUSTON
Bestel/Your order/Commande

Certificato nr: MEST274102/2012/
Prüfung/Test/Essai

Confirma ordina nr: E112002820
Werkz/Our Order/Ref. nr.

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Zeichen des Lieferwerkes
Trade mark
Sigle de l'usine productrice



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

Tipo di Elaborazione: E+AOD
Ernechtungszustand/Meiting process/Mode d'elaboration

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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 matériel a été livré conforme aux exigences

Controllo antimiscelazione: OK
Verwechslungsprüfung: ependenzsitzsch durchgeführt
Antimixing testing performed: OK
Contrôle antimélange fait: r.i.s.

Controllo visivo e dimensionale: soddisfa le esigenze
Besichtigung und Aunmessung: ohne Beanstandung
Visual inspection and dimensional checks:satisfactory
Contrôle visuel et dimensions: 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.

Vicenza, 22/11/12
VCC012
(Mod. MCE2)

Il collaudatore di stabilimento / der Werkssachverständige / Works Inspector / L' agent d' usine

M. Rizzotto

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