

Acciaierie Valbruna S.p.A.



QUALITY MANAGEMENT SYSTEM
CERTIFIED BY LLOYD'S REGISTER

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

38100 VICENZA (Italia) - Viale della scienza, 25 z.l.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

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

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

Avviso di Spedizione: D-VI12005417
Lieferungsgepäckung Art./B.L.

Certificato nr: MEST163613/2012/
Prüfung/Test/Essai

Conferma ordine nr: E112000089
Werkz/Our Order/Ref nr.

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



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

Ordine nr: 32148 STOCK HOUSTON
Bestell./Your order/Commande

Punzone del Collaudatore:
Stempel des Werkssachverständigen
Inspector's stamp/Plombon de l'inspecteur



Specifiche:
Anforderungen / Requirements / Exigences

VSI 0 316/316L A
AMS-QQ-S-763 B 316/316L A
ASME SA276 2010 S31600/03 A (2)
ASTM A192 2011 S31600/03 A (6)
ASTM A276 2010 S31600/03 A
ASTM A370 2011
MIL-S-882 B/1 316/316L

AMS 5648 K S31600 A
ASME SA192 2010 S31600/03 A (0)
ASME SA320 2010 B8M CLASS1 (3)
ASTM A193 2011 B8M CLASS1
ASTM A314 2008 S31600/03
ASTM A473 2001 S31600/03 (6)
NACE MR0175 2009 S31600/03 A (7)

AMS 5653 F S31603 A
ASME SA193 2010 B8M CLASS1 (1)
ASME SA479 2010 S31600/03 A (4)
ASTM A282 2010 PRACTICE E
ASTM A320 2011 B8M CLASS1
ASTM A479 2011 S31600/03 A
QQ-S-763 F 316/316L 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

Qualità: 316/316L
Werkstoff/Grade/Qualité

Marca: APML

Punzonatura: 316/316L

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Product description Descript. du produit	Dimensioni - in Abmessungen Dimension Dimension	Tolleranza Toleranz Allowance Tolérance	Lunghezza - in Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0040	Round	13,1563	ASREQ	172 / 172	256943	1	6.742	123301040

TEST ALLO STATO DI FORNITURA										
Test on delivery condition Prüfung auf Lieferzustand Prüfung a l'état de fourniture Pruebas sobre el material así como entregado										
TEST	Proveita/Prova Beproeve/Prova Lang. diam. Spec. Bohle Diam. Diale Wich. diam. Thickness Lang. diam. épais mm	° F	Prova Saggio Prüfung Essai	Snervamento Biegeprobe Yield Stress Limite elastic Rp 0,2% k.s.l.	Snervamento Biegeprobe Yield Stress Limite elastic	Resistenza Zugfestigkeit Tensile strength Résistance à traction Rm k.s.l.	Allungamento Bruchdehnung Elongation Allongement E 4d %	Strizione Zugbrüchigkeit Reduction of area Striction RA %	Resilienza Kerbschlagarbeit Impact Value Resilience	Durezza Kernhärte Dureté HB
Valori richiesti 1 Anforderungen/Requisit values Valeurs demandées	min max			30	-	75 115	- 40	- 50	-	140 223
A	12,5	68	L	37		81	62	74		167

TEST	min	max
A Grain size for ASTM E112		4

Mechanical properties according to ASTM A370.

1) L=longitudinale/Länge, Transversale/quer, Q=Temperatur/Temperatur

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 %					
256943	0,022	0,39	1,69	16,58	2,04	0,50	10,08	0,094	0,030	0,028	0,075					

Produced without class I-II Ozone depleting substances.
Solution heat treated free from continuous carbide network.
Annealing temperature: 1940°F for 8,5 h/water.
Micro and macro etch test: OK
Reduction ratio > 4 : 1
Intergranular corrosion test per ASTM A262 pract. E: ok.

Vicenza, 20/02/12 VCC003 (Mod. MCE2)	Il collaudatore di stabilimento / der Werkssachverständige / 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: ATLANTIS INDUSTRIES

Del: 2401803054

Part:

PO: Bozo

Wgt: 1,440.000 LB

Date: 04/13/2012

James K Baber

Acciaierie Valbruna S.p.A.



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CERTIFIED BY LLOYD'S REGISTER

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

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VALBRUNA STAINLESS INC.
2400 TAYLOR STREET WEST
48801-FORT WAYNE, IN 46801-US

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

State of formura: - Annealed FORGED
Lieferzustand/Delivery state/Etat de livraison

Avviso di Spedizione: D-VI12005417
Lieferanzeige/Frachtung list/B.L.

Ordine nr: 32146 STOCK HOUSTON
Bestell/Your order/Commande

Tipo di Elaborazione: E+AOD
Erneuerungsart/Altering process/Mode d'elaboration

Certificato nr: MEST163613/2012/
Prüfung/Test/Essai

Conferma ordine nr: EI12000089
Werkz/Our Order/Ref. nr.

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

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



Material is DFARS Compliant

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

Controllo antimiscelanza: OK
Verwechslungsprüfung: spektroskopisch durchgeführt
Anfrischung testing performed: OK
Contrôle antimélange fait: r.i.s.

Controllo visivo e dimensionale: soddisfa le esigenze
Beachtung 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.

Vicenza, 20/02/12

VCC008
(Mod. MCE3)

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

M. Rizzotto

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