

Acciaierie Valbruna S.p.A.



259274

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

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

Avviso di Spedizione: D-V113010306
Lieferungs/Packing list/S.L.

Certificato nr: MEST329908/2013/
Prüfung/Prüfprotokoll

Conferma ordine nr: E113002282
Werk/Our Order/Ref. nr.

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



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

Tipo di Elaborazione: E+AOD
Erzeugungsverfahren/Herstellung process/Mode de fabrication

Funzione del Collaudatore:
Compt. des Werkstoffschwerdindgen
Inspector's stamp/Posten de l'inspecteur

Specifiche:
Anforderungen / Requirements / Exigences

VSI 0318/316 L
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 2012 S31600/03 A
NACE MR0175 2009 S31600/03 A (7)

AISI 316/316L
AMS-QQ-S-763 B 316/316 L A
ASME SA278 2010 S31600/03 A (2)
ASTM A182 2011A S31600/03 A (5)
ASTM A276 2010 S31600/03 A
ASTM A370 2012A
MIL-S-882 B/1 316/316L
QQ-S-763 F 316/316 L 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 A479 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
- (3) SEC.II P.T.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 P.T.A 2010 EDITION ADD. 2011a
- (4) SEC.II P.T.A 2010 EDITION ADD. 2011a
- (6) Chemical analysis only.
- (7) Technical circular 1:2011 Published 2011-08-14

Qualità: 316/316L
Werkstoff/Grade/Qualität

Marca: APML
Lieferantenmarkierung
Brand/Mark

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

Punzonatura: 316/316L
Kennzeichnung/Marking/Markage

Pos. nr. Pos. nr. Item no. Nr. de poste	Oggetto Designation Product description Design. du produit	Dimensioni - In Abmessungen Dimension	Lunghezza - In Länge Length Langueur	Colata Stemmel Heat Casting	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losn. Lot nr. Lot nr.
0020	Round	8,5000	197 / 198	259274		6.724	224103900

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

TEST	Provetta/Prova Specimen/Prove Lap/Probe Weld Clad, Clad Weld Clad, Thickness Lap/Clad, mm	°F	Post. Doggie Tensile Tensile	Sneramento Strain Yield Stress Upper Rp 0,2% k.s.l.	Sneramento Strain Yield Stress Lower Rp 0,01% k.s.l.	Resistenza Zugfestigkeit Tensile strength Resistance à la traction Rm k.s.l.	Allungamento Strain Elongation Allongement E 4d %	Strizione Strain Reduction of area Striction RA %	Resilienza Kerbschlagenergie Impact Value Resilience	Durezza Härten Hardness Dureté HB
	Valori richiesti 1 Anforderungen/Required values Valeurs demandées	min max		30	-	75 115	40	-	50	140 223
A	12,5	68	L	37		82	61		72	168

TEST	min	max
A Grain size for ASTM E112		4

Mechanical properties according to ASTM A370.

1) L=Length/Strichlänge, T=Temperature/Temp., Q=Temperature/Température

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata Heat Stemmel/Heat	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	-	-	-	-
259274	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %				
	0,020	0,39	1,71	16,84	2,03	0,75	10,00	0,102	0,030	0,024	0,079				

Produced without class I-II Ozone depleting substances.
Solution heat treated free from continuous carbide network.
Annealing temperature: 1640°F for 6 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, 04/04/13 V0000 Ond. MCEZ	Il collaudatore di stabilimento / der Werkstoffschwerdindgen / Works Inspector / L'agent d'usine <i>M. Rizzotto</i>	Pagina - 1 di 2
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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

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

Clienti / Kunden/Purchaser/Client
VALBRUNA STAINLESS INC.
2400 TAYLOR STREET WEST
48901-FORT WAYNE, IN 46801-US

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

Avviso di Spedizione: D-V113010306
Lieferungs/Packing list/LL

Ordine nr: 35344 STOCK HOUSTON
Bestell/Your order/Order no.

Tipo di Elaborazione: E+AOD
Erzeugnis/herstellig process/Mode d'elaboration

Certificato nr: MEST329908/2013/
Prüfung/Test/Exam

Conferma ordine nr: EH13002282
Werkz/Our Order/Ref. nr.

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



Punzone del Collaudatore:
Stempel des Werkstoffverständigen
Inspector's stamp/Prüfer des F. Inspekteur



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

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind erfüllt
The material has been finished in accordance with the requirements
Le matériel a été traité conformément aux exigences

Controllo antirisciacquo: OK
Verschmutzungsprüfung: spärstoffanalytisch durchgeführt
Antirising testing procedure: OK
Controlli strutturali: IFA

Controllo visivo e dimensionale: soddisfa le esigenze
Aussehenprüfung und Ausmessung: ohne Beanstandung
Visual inspection and dimensional check: satisfactory
Contôle visuel et dimension: 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 TÜEV 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, 04/04/13 V0026 (Mod. MCE2)	Il collaudatore di stabilimento / der Werkstoffverständiger / Works Inspector / L' agent d' usine M. Rizzotto	Pagina - 2 di 2
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