

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

12" RTJ

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

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

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

Avviso di Spedizione: D-VI12001080
Lieferanzsigo/Packing list/B.L.

Ordine nr: 30924 TUCKER STOCK
Bestell/Your order/Commande

Tipo di Elaborazione: E-AOD
Erzeugungsmode/Melting process/Mode elaboration

Certificato nr: MEST146162/2012/
Prüfung/Test/Essai

Conferma ordine nr: EI11006541
Werkz/Our Order/Ret nr.

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



Punzone del Collaudatore:
Stempel des Werksachverständigen
Inspector's stamp/Plomben de l'assyneur

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

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 A182 2011 S31600/03 A (5)
ASTM A276 2010 S31600/03 A
ASTM A370 2011
MIL-S-862 B/1 316/316L

AMS 5648 K S31600 A
ASME SA182 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* 2003 S31600/03 (7)

AMS 5653 F S31603 A
ASME SA193 2010 B8M CLASS1 (1)
ASME SA479 2010 S31600/03 A (4)
ASTM A262 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
- (1) SEC.II PT.A 2010 EDITION
- (3) SEC.II PT.A 2010 EDITION
- (5) For products machined directly from bar refer to ASTM A479.
- (7) * ISO 15156-3. Tec. corrigendum 1 2005/02/15 & 2 2005/09/01

- (0) For products machined directly from bar refer to ASME SA479.
- (2) SEC.II PT.A 2010 EDITION
- (4) SEC.II PT.A 2010 EDITION
- (6) Chemical analysis only.

Qualità: 316/316L
Werkstoff/Grade/Nuance

Marca: APML
Markenbezeichnung/Brand/Nuance

Punzonatura: 316/316L
Kennzeichnung/Marking/Marquage

Pos. nr. Pos. nr. Nr. de poste	Oggetto Gegenstand Produci description Descript. du produit	Dimensioni - In Abmessungen Dimension Dimension	Tolleranza Toleranz Allowance Tolerance	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.
0050	Round	18,1248	ASREQ	90 / 91	256394		20.260	120601320

TEST ALLO STATO DI FORNITURA

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

TEST	Provetta/Probetas Doppie/Eprouvettes Langform Spez. Draht Diam. Dicke Weld Class. Thickness Leng. diam. espes. mm	°F	Posto Saggio Proveggi Lames Ergänzung	Snervamento Yield Stress Rp 0,2% k.s.l.	Snervamento Yield Stress Unité elasticque	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.l.	Allungamento Bruchdehnung Elongation Allongement		Strizione Bruchdehnung Reduction of area Striction		Resilienza Kerbschlagarbeit Impact Value Resilience	Durezza Härte Hardness Dureté HB
							E 4d %	RA %				
	Valori richiesti 1 Anforderungen/Required values Valeurs demandées	min max		30	-	75 115	-	40	-	50	-	140 223
A	12,5	68	L	36		80		61		73		161

TEST	min	max
A	Grain size for ASTM E112	3

1) L - longitudinale/longs, T - trasversale/quer, C - Tangenziale/tangential

Mechanical properties according to ASTM A370.

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 %	-	-	-	-
256394	0,021	0,24	1,71	16,95	2,02	0,51	10,10	0,108	0,030	0,021	0,090				

Produced without class I-II Ozone depleting substances.
Solution heat treated free from continuous carbide network.
Annealing temperature: 1940°F for 11,5h/water.
Micro and macro etch test: OK
Reduction ratio > 4 : 1
Intergranular corrosion test per ASTM A262 pract. E: ok.

Vicenza, 17/01/12 VCC008 (Mod. MCE2)	Il collaudatore di stabilimento / der Werkssachverständige / Works Inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 2
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Produttore: **ACCIAIERIE VALBRUNA S.P.A.**
Hersteller/Werks/Usine productio

Avviso di Spedizione: D-VI12001080
Lieferanzzeige/Packing list/B.L.

Ordine nr: 30924 TUCKER STOCK
Bestell./Your order/Commande

Tipo di Elaborazione: E+AOD
Erzuehmungsernt/Melting process/Mode d'elaboration

Certificato nr: MEST146162/2012/
Prüfung/Test/Essai

Conferma ordine nr: E111006541
Werks/Our Order/Pat. nr.

Marchio di Fabbrica:
Zeichen des Werks/Werks
Trade mark
Sigle de l'usine productio



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



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

Material is DFARS Compliant

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

Controllo antimiscelanza: OK
Verwechslungsprüfung: spektroanalytisch durchgeführt
Antimixing testing performed: OK
Controllo antimiscelanza fatto: r.a.o.k.

Controllo visivo e dimensionale: soddisfa le esigenze
Besichtigung und Abmessung: ohne Beanstandung
Visual inspection and dimensional check: satisfactory
Contrôle 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 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, 17/01/12
VCC003
(Mod. MCE2)

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

M. Rizzotto

Pagina - 2 di 2