

# Acciaierie Valbruna S.p.A.



QUALITY MANAGEMENT SYSTEM  
CERTIFIED BY LLOYD'S REGISTER

## CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005) , 3.1

251871

36100 VICENZA (Italia) - Viale della scienza, 25 z.l.  
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

Avviso di Spedizione: D-VI11028628  
Lieferanzeige/Packing list/D.L.

Certificato nr: MEST100604/2011/  
Prüfung/Test/Essai

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

Ordine nr: 30401 STOCK HOUSTON  
Bestell/Your order/Commande

Conferma ordine nr: EI11004710  
Works/Our Order/Ref nr.

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

Tipo di Elaborazione: E+A0D  
Erhmelzungsart/Melting process/Mode d'elaboration

Marchio di Fabbrica:  
Zeichen des Lieferwerkes  
Trade mark  
Signe de fusine production



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

CPA-020

Specifiche:  
Anforderungen / Requirements / Exigences

VS1 0 316/316L A  
AMS-QQ-S-763 B 316/316L A  
ASME SA276 2010 S31600/03 A (2)  
ASTM A182 2010A 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. Item nr. Nr. de poste	Oggetto Gegenstand Product description Descrip. 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 Poids Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0030	Round	22,1248	ASREQ	72 / 72	251871		24.101	114404860

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/Probetenab Sperimen/Eprovette Larg diam Spets Brenn Diam. Dicke Width Diam. Thickness Larg. diam. epais mm	° F	Posiz. Saggio Lageort Empfänger 1)	Snervamento Streckgrenze Yield Stress Limite élastique Rp 0,2% k.s.l.	Snervamento Yield Stress Limite élastique	Resistenza Zugfestigkeit Tensile strength Résistance à traction Rm k.s.l.	Allungamento Bruchdehnung Elongation Allongement E 4d %	Strizione Einachdrung Reduction of area Reduction RA %	Resilienza Kerbschlagarbeit Impact Value Resilience	Durezza Härte Hardness Dureté HB
	Valori richiesti 1 Anforderungen/Requisit 1 values Valeurs demandées	min max		30	-	75 115	- 40	- 50	-	140 223
A	12,5	68 L		38		80	62	76		161

TEST	min	max
A	Grain size for ASTM E112	4

Mechanical properties according to ASTM A370.

1) L=longitudinale/ängs, T=transversale/quers, Q=Tangenziale/winkelig

### 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	-	-	-
251871	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %			
	0,015	0,42	1,69	16,73	2,04	0,47	10,28	0,100	0,030	0,021	0,097			

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.

Vicenza, 20/09/11 VCO008 (Mod. MCE2)	Il collaudatore di stabilimento / der Werksachverständige / Works inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 2
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**CERTIFICATO DI COLLAUDO  
ABNAHMEPRUEFZEUGNIS  
INSPECTION CERTIFICATE  
CERTIFICAT DE RECEPTION  
EN 10204 (2005) , 3.1**

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**Acciaierie  
Valbruna s.p.a.**

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

Officine / Beschneidwerkstätten  
VALBRUNA STAINLESS INC.  
2400 TAYLOR STREET WEST  
46801-FORT WAYNE, IN 46801-US

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**

Stato di fornitura: - Annealed FORGED

Unterstands/Delivery state/Etat de livraison

Typo di Elaborazione: E+AOD  
Errechnungs-/Herstg process/Mode d'elaboration

Ordine nr: 30401 STOCK HOUSTON  
Bestell-/Your order/Commande

Avviso di Spedizione: D-VH 1028628  
Lieferungs-/Frachting list/D.L.

Certificato nr: MEST100604/2011/  
Prüfung/Testing/Exam

Conferma ordine nr: E111004710  
WerkAuftr Ordernr/Ref nr.

Marchio di Fabbrica:  
Zichen des Lieferwerkes  
Trade mark  
Egde del uhrne production

Funzione del Collaudatore:  
Stempel des Werkssachverständigen  
Inspector's stamp/Polignon de l'essayeur



Material is DFARS Compliant

Sono state soddisfatte tutte le condizioni richieste  
The material has been finished in accordance with the requirements  
Le produit a été trouvé conforme aux exigences

Controllo antimiscelazione: OK  
Verwechslungsgefahr: spezialtechnisch durchgefallen  
Controlle antimélange: satisfaisant

Controllo visivo e dimensionale: soddisfa le esigenze  
Bekundung und Ausmessung: ohne Beanstandung  
Visual inspection and dimensions: satisfactory

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, a.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.

Metal 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.  
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