

249413

# Acciaierie Valbruna S.p.A.



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

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

Clienti / Kunden / Clients: **VALBRUNA STAINLESS INC.**  
 2400 TAYLOR STREET WEST  
 46801-FORT WAYNE, IN 46801-USA

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

Avviso di Spedizione: D-VI10000813  
 Lieferungs/Shipping order

Certificato nr: MEST821912/2010/  
 Prüfung/Exam

Confirma ordine nr: E109007032  
 Werk/Dur Order/Nr.

Marchio di Fabbrica:  
 Zeichen des Hersteller  
 Trade mark  
 Signe de l'usine producer



Ordine nr: 25887 STOCK HOUSTON  
 Verkauf/Your order/Commande

Tipo di Elaborazione: E+AOD  
 Erzeugnisgruppen/Manufact process/Mode d'elaboration

Punzoni del Collaudatore:  
 Stempel des Werkprüfmaschinen  
 Inspector's stamp/Prüfung des Erzeugnis

Oggetto Provs: - Annealed FORGED  
 Prüfgegenstand/Objekt/Item: Annealed FORGED

**Specifiche:**

Anforderungen / Requirements / Exigences

- VSI 0 316/316L A
- AMS-QQ-S-763 B 316/316L A
- ASME SA276 2007 S31600/03 A 2
- ASTM A182 2009A S31600/03 A 5
- ASTM A276 2008A S31600/03 A
- ASTM A370 2009A
- MIL-S-882 B/1 316/316L
- (0) SEC.II PT.A 2007 EDITION ADD. 2008a
- (1) SEC.II PT.A 2007 EDITION ADD. 2008a
- (3) SEC.II PT.A 2007 EDITION ADD. 2008a
- (5) Chemical analysis only and mechanical properties.
- (7) \* ISO 15156-3

- AMS 5648 K S31600 A
- ASME SA182 2007 S31600/03 A 0
- ASME SA320 2007 B8M CLASS 1
- ASTM A193 2009 B8M CLASS 1
- ASTM A314 2008 S31600/03
- ASTM A473 2001 S31600/03 5
- NACE MR0175 2003 S31600/03 7

- AMS 5653 F S31603 A
- ASME SA193 2007 B8M CLASS 1 (1)
- ASME SA479 2007 S31600/03 A (4)
- ASTM A282 2002A PRACTICE E
- ASTM A320 2008 B8M CLASS 1
- ASTM A479 2008 S31600/03 A

- 0Chemical analysis only and mechanical properties.
- 2SEC.II PT.A 2007 EDITION ADD. 2008a
- 4SEC.II PT.A 2007 EDITION ADD. 2008a
- 6Chemical analysis only.

Qualità: 316/316L  
 Werkstoff/Qualität

Marca: APML

Punzonatura: 316/316L

Pos. nr. Item nr. Nr. de pozitie	Oggetto Description Descrip. du produit	Dimensioni - in Dimensions Dimensions	Tolleranza Tolerance Tolérance	Lunghezza - in Length Lang./L	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Lot nr. Lot nr.
0030	Round	11,1250	ASREQ	127 / 133	249413		7.310	911202450

Sono stati soddisfatte tutte le condizioni richieste  
 Die gegebenen Anforderungen sind b. Anlage erfüllt  
 The material has been furnished in accordance with the request/requirements  
 Le matériel a été fourni conforme aux exigences

Controllo antimiscelazione: OK  
 Verträglichkeitsprüfung: befriedigend durchgeführt  
 Antimixing testing performed: OK  
 Contrôle de la teneur: satisfaisant

Controllo visivo e dimensionale: soddisfa le esigenze  
 Sichtprüfung und Abmessung: ohne Beanstandung  
 Visual inspection and dimensioning: check successful history  
 Contrôle visuel et dimension: satisfaisant

TEST ALLO STATO DI FORNITURA										
Test on delivery condition: Prüfung auf Lieferzustand / Test à l'état de livraison / Prueba sobre el material así como entregado										
TEST	Proveita/Prova Bewährung/Prüfung Long. diam. Spec. Bore Diam. Größe Long. Diam. Thickness Long. diam. wall mm	°F	Spessore Bore Länge mm	Sneramento Yield Stress Rp 0,2% k.s.l.	Sneramento Tensile Stress Tensile strength k.s.l.	Resistenza Tensile strength Yield strength Rm k.s.l.	Allungamento Elongation Elongation E 4d %	Stirazione Elongation Reduction of area RA %	Resistenza Impact strength Impact k.s.l.	Durezza Hardness HB
	Valori richiesti / Anforderungen/Requisitos Values requested	min max		30		75 115	40	50		140 223
A	12,5	68	L	42		84	56	72		153
TEST	min		max							
A	Grain size for ASTM E112								6	

Mechanical properties according to ASTM A370.

1) L - lunghezza / Länge, T - spessore / épaisseur, Cr - Target/ziel/Anforderung

**Analisi chimica**

Colata / Schmelze	min. max. 0,030	1,00	1,25 2,00	16,50 18,00	2,00 3,00	1,00	16,00 14,00	0,040	0,020 0,030	0,100			
249413	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %		
	0,024	0,42	1,77	16,68	2,09	0,65	10,28	0,100	0,032	0,025	0,092		

Produced without class I-II Ozone depleting substances.  
 Solution heat treated free from continuous carbide network.  
 Annealing temperature: 1940°F for 7,5 h/water.  
 Micro and macro stich test: OK

Vicenza, 15/01/10  
 Il collaudatore di stabilimento / der Werkprüfmaschinen / Works Inspector / L'agent d'usine  
*M. Rizzotto*  
 Pagina: 1/02

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Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

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

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

Oggetto Prove: - Annealed FORGED  
Prüfung/Prüfung inspected/inspected

Avviso di Spedizioni: D-V11000813  
Lieferung/Lieferung

Ordine nr: 25987 STOCK HOUSTON  
Bestell/Nr order/Orders

Tipo di Elaborazione: E+AOD  
Erzeugung/Erzeugung process/Process & elaboration

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

Certificato nr: MEST821912/2010/  
Prüfung/Prüfung

Conferma ordine nr: E109007032  
Werkstoff/Order/Prüfung

Marchio di Fabbrica:  
Zusatz die Information  
Trade mark  
Stich der usine / Hersteller



Funzione del Collaudatore:  
Stempel für Werkstoffabnahme/Prüfung  
Inspector / Prüfer/Prüfer der T-Anspruch



Reduction ratio > 4 : 1  
Intergranular corrosion test per ASTM A262 pract. E: ok.  
Material is OFARS Compliant

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.  
The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1.4, 4.3 by TÜEV and LLOYD'S

Vicenza, 15/01/10 vccm 00013/0013	Il collaudatore di stabilimento / der Werkstoffverständiger / Works inspector / L' opera di usina M. Rizzotto	Pagina - 2 di 2
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