

Acciaierie Valbruna S.p.A.



QUALITY MANAGEMENT SYSTEM
CERTIFIED BY Lloyd's Register

254298

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

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

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

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

Avviso di Spedizione: D-VII11019841
Lieferanweisung/Packing list/E.L.

Certificato nr: MEST068770/2011/
Prüfung/Inspektion

Confirma ordine nr: E111003780
Werte/Our Order/Ref. nr.

Marchio di Fabbrica:
Zusammen des Lieferanten
Trade mark
Styl de l'usine producer



Ordine nr: 30109 STOCK HOUSTON
Bestell/Your order/Commande

Tipo di Elaborazione: E+AOD
Erzeugungsbearbeitung/Welding process/Mode d'elaboration

Funzione del Collaudatore:
Stempel des Werkzeugsachverständigen
Inspector's stamp/Poligon de l'inspecteur

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

Specifiche:
Anforderungen / Requirements / Exigences

VSI 0 316/316L A
AMS-QQ-S-783 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 2010
MIL-S-882 B/1 316/316L

AMS 5848 K S31600 A
ASME SA182 2010 S31600/03 A (0)
ASME SA320 2010 B8M CLASS1 (3)
ASTM A183 2010A B8M CLASS1
ASTM A314 2008 S31600/03
ASTM A473 2001 S31600/03 (5)
NACE MR0175 2003 S31600/03 (7)

AMS 5653 F S31603 A
ASME SA153 2010 B8M CLASS1 (1)
ASME SA479 2010 S31600/03 A (4)
ASTM A262 2010 PRACTICE E
ASTM A320 2010A B8M CLASS1
ASTM A479 2010A S31600/03 A
QQ-S-783 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. complement 1 2006/02/15 & 2 2006/09/01

- (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/Qualité

Marca: APML
Markenbezeichnung/Brand/Marque

Punzonatura: 316/316L
Kennzeichnung/Marking/Marquage

Pos. nr. Item nr. Nr. de poste	Objetto Component Product description Descr. du produit	Dimensioni - in Abmessungen Dimension	Tolleranza Tolerance Tolérance	Lunghezza - in Länge Length Longueur	Colata Schmelze Fusé Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0040	Round	10,1250	ASREQ	146 / 146	254298		6.751	135600250

TEST ALLO STATO DI FORNITURA Test on delivery condition Prüfung auf lieferbarem Produkt test à l'état de livraison Prueba sobre el material así como entregado										
TEST	Provetta/Prova Specimen/Éprouve Lap. Dim. Spec. Werkst. Dim. Probe Lap. Dim. éprouve mm	°F	Posti Sagitt Center Position	Snervamento Break Stress Yield Stress Units elongate Rp 0,2% k.s.l.	Snervamento Break Stress Yield Stress Units elongate	Resistenza Tensile strength Resistance à traction Rm k.s.l.	Allungamento Elongation Elongation Allongement E 4d %	Strizione Strain hardening Reduction of area Strain RA %	Resistenza Impact energy Impact Value KJ/m²	Durezza Hardness Dureté HB
Valori richiesti / Anforderungen/required values Valeurs demandées		min max		30	-	75 115	- 40	- 50	-	140 223
A	12,5	68 L		39		85	58	72		178

TEST	min	max
A Grain size for ASTM E112		4

Mechanical properties according to ASTM A370.

YL=longitudinale/long, T=transversale/quer, O=Tangenziale/tangential

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/analyse chimique

Colata Heat Schmelze/Coulée	min - max 0,030	1,00	1,25 2,00	15,50 18,00	2,00 3,00	1,00	10,00 14,00	-	0,040	0,020 0,030	0,100	-	-	-	-
254298	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %				
	0,028	0,36	1,74	16,95	2,01	0,47	10,00	0,108	0,029	0,030	0,090				

Produced without class I-II Ozone depleting substances.
Solution heat treated free from continuous carbide network.
Annealing temperature: 1940 °F for 6,5h/water.
Micro and macro etch test: OK
Reduction ratio > 4 : 1
Intergranular corrosion test per ASTM A262 pract. E: ok.

Vicenza, 14/06/11 V00006 (Mod. MCEP)	Il collaudatore di stabilimento / der Werkzeugsachverständiger / Works Inspector / L'agent d'usine <i>M. Rizzotto</i>	Pagina - 1 di 2
--	--	-----------------

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

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

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

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

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

Avviso di Spedizione: D-VI11019641
Lieferzeitpunkt/Shipping label

Ordine nr: 30109 STOCK HOUSTON
Bestell-/Your order/Commande

Tipo di Elaborazione: E+AOD
Erweiterungsbearbeitung/Working process/Mode d'elaboration

Certificato nr: MEST066770/2011/
Prüfung/Test/Essai

Conferma ordine nr: EI11003780
Werk-/Our Order/Nr.

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

Firma del Collaudatore:
Stempel des Werkssachverständigen
Inspector's stamp/Plombon 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 fourni conforme aux exigences

Controllo antimiscelazione: OK
Verwechslungsprüfung: spektralanalytisch durchgeführt
Anti-leaking testing performed: OK
Contrôle antimélange fait: r.s.s.

Controllo visivo e dimensionale: soddisfa le esigenze
Bezüglich und Auswertung: ohne Beanstandung
Visual inspection and dimensional check/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 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, 14/06/11
V00005
(Mod. MCE2)

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

M. Rizzotto

Pagina - 2 di 2