



Acciaierie Valbruna S.p.A.

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
 Telefono 0444.968211 - Fax 0444.963836
 Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4/37
 Telefono 0471.924111 - Fax 0471.924497

CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION

In conformità a : **EN 10204 (2004) , 3.1 / ISO 10474 (2013) , 3.1**

Certificato nr. **MEST098274 / 2022 /**

Nach/According to/Selon

Prüfung/Test/Essai

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

Stato di fornitura : **Hot rolled Descaled Annealed Hot rolled**

Produttore :
 Hersteller/Item/Usine productrice

Lieferzustand
 Delivery state
 Etat de livraison

ACCIAIERIE VALBRUNA S.P.A.

Tipo di Elaborazione: **E+AOD**

Marchi di Fabbrica:
 Zeichen des Lieferwerkes
 Trade marks
 Sigles de l'usine productrice

Erschmelzungsart
 Melting process
 Mode d'elaboration



Ordine nr: **79672 LAWRENCEVILLE**

Bestell
 Your order
 Commande

Qualità: **304/304L**

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

Werkstoff/Grade/Nuance

MR

Conferma ordine nr: **EI22009660**

Werks/Our Order/Ref nr.

Marca: **AISL**

Punzonatura: **304/304L**

Avviso di Spedizione: **D-VI22024042**

Lieferanzeiger/Packing list/B.L.

Markenbezeichnung
 Brand / Nuance

Kennzeichnung
 Marking
 Marquage

SPECIFICHE :

Note:

Anforderungen / Requirements / Exigences

Aufzeichnungen / Notes / Notes

VSI 0/2 304/304L A

AISI . 304/304L

AMS 5639 J S30400 A

AMS 5647 M S30403 A

AMS-QQ-S-763 D 304/304L A

ASME SA182 2021 S30400/03 A (0)

ASME SA193 2021 B8 CLASS 1 (1)

ASME SA276 2021 S30400/03 A (2)

ASME SA320 2021 B8 CLASS 1 CLASS1 (3)

ASME SA479 2021 S30400/03 A (4)

ASTM A182 2021 S30400/03 A (5)

ASTM A193 2020 B8 CLASS 1

ASTM A262 PR. E 2015 304/304L (6)

ASTM A276 2017 S30400/03 A

ASTM A314 2019 S30400/03

ASTM A320 2022 B8 CLASS 1

ASTM A473 2021 S30400/03 (7)

ASTM A479 2021 S30400/03 A

MIL-S-862 B/1 304/304L

NACE MR0103 2015 S30400/03 A (8)

NACE MR0175 2015 S30400/03 A (9)

QQ-S-763 F 304/304L A

(0)Section II Part A 2021 EDITION For products machined directly from bar refer to ASME SA479.

(1)Section II Part A 2021 EDITION

(2)Section II Part A 2021 EDITION

(3)Section II Part A 2021 EDITION

(4)Section II Part A 2021 EDITION

(5)For products machined directly from bar refer also to ASTM A479.

(6)Reapproved 2021

(7)Chemical analysis only.

(8)ANSI/NACE MR0103/ISO 17945 November 23, 2015

(9)ANSI/NACE MR0175/ISO 15156-3, third edition November 23,2015

Tolleranza: ASTM A484-21 TABLE 13

Toleranz/Allowance/Tolerance

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Product description Descrip. du produit	Dimensioni - In Abmessungen Dimension Dimension	Lunghezza - In Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pieces	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0020	Angle Shape	1,000 x 1,000 x 0,2500	240/ 246	284420		3.300	135019731

TEST ALLO STATO DI FORNITURA

TEST	min	max
A Grain size for ASTM E112		6

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Vicenza, **30/09/2022**

VCC052 - MEST098274

Direzione Qualità

Qualitätsmanagement/Quality Management/Gestion Qualité

R. BERTELLI

Direzione Prodotto

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P. MESSORI

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Test on delivery condition per ASTM A370

1) L=longitudinale/längs, T=trasversale/quer, Q=Tangenziale/tangential

TEST	Provetta/ Probetab Specimen/Eprouvette Larg.diam Spess. Breite Diam. Dicke Width Diam. Thickness Larg. diam. epais mm	°F	Posiz. Saggio Probenlage Location Emplacement	Snervamento Streckgrenze Yield Stress Limite elastique Rp 0,2% k.s.i.	Snervamento Streckgrenze Yield Stress Limite elastique	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.i.	Allungamento Bruchdehnung Elongation Allongement	Strizione Einschnürung Reduction of area Striction	Resilienza Kerbschlagarbeit Impact Value Resilience	Durezza Haerte Hardness Durete HB
Valori richiesti		min max		30	-	75 115	- 40	- 50	-	140 235
Anforderungen/Required values Valeurs demandées										
B	20X6.3	68	L	50		93	51	67		188

AEROSpeed 0,005/min up to yeld-0,05/min to rupture

1) L=longitudinale/längs, T=trasversale/quer, Q=Tangenziale/tangential

TEST	Provetta/ Probetab Specimen/Eprouvette Larg.diam Spess. Breite Diam. Dicke Width Diam. Thickness Larg. diam. epais mm	°F	Posiz. Saggio Probenlage Location Emplacement	Snervamento Streckgrenze Yield Stress Limite elastique Rp 0,2% k.s.i.	Snervamento Streckgrenze Yield Stress Limite elastique	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.i.	Allungamento Bruchdehnung Elongation Allongement	Strizione Einschnürung Reduction of area Striction	Resilienza Kerbschlagarbeit Impact Value Resilience	Durezza Haerte Hardness Durete
Valori richiesti		min max		25	-	70	- 40	- 50	-	-
Anforderungen/Required values Valeurs demandées										
D	20X6.3	68	L	50		92	53	69		

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata /Heat Schmelze/Coulée	min - max	-	-	18,00 20,00	-	-	8,00 10,50	-	-	0,020 0,030	-	-	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %				
284420	0,016	0,53	1,71	18,18	0,62	0,45	8,13	0,146	0,030	0,020	0,100				

Corrosion test in 16% sulfuric acid and copper sulfate solutions

Test standard: **ASTM A262-Practice E**

Test	Heat treatment before test	Length of Period (h)	Test temp (°C)	Bend Angle (°)	Ø spindle (mm)	Result of visual inspection at 20 x magnification after bend test	Result
Intergranular corrosion	Sensitization	15	boil	180	5	Absence of cracks	SATISFACTORY

Produced without class I-II Ozone depleting substances.
 Solution heat treated free from continuous carbide network.
 Micro and macro etch test: OK.
 Reduction ratio = 108,0 : 1
 Material annealed 1940°F for 0.5h/water cooled.
 Material is DFARS Compliant

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

Controllo antimiscelanza con tecnica XRF/QES portatile : OK
 Verwechslungsprüfung: durch XRF/QES Gerät geführt : OK
 Antimixing testing performed with XRF/QES portable : OK
 Contrôle antimélange svt technique XRF/QES portable : OK

Controllo visivo e dimensionale: soddisfa le esigenze
 Besichtigung und Ausmessung: ohne Beanstandung
 Visual inspection and dimensional checks:satisfactory
 Contrôle visuel et dimensions: satisfaisant

Melted, poured 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 by the portal system when it leaves the production plant.

The Quality Management System is also Certified according Pressure Equipment Directive 2014/68/EU Annex 1, chapt.4.3 by TÜV 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.

Maximal and/or Valplus grades/products are manufactured with ladle techniques to control composition, distribution, size and shape of non-metallic inclusions for improved machinability.

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.

WSP87002979BCFP2579BCD4C024680099F

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