McMASTER-CARR®

# Certificate

562-692-5911
562-695-2323 (fax)
la.sales@mcmaster.com

| Purchase Order | Order Date | Placed By | McMaster-Carr Number | Number of Certificates |
|---|---|---|---|---|
| PO26442267 | 11/4/2026 | Christopher Berger | 8302956-02 | 1 |

| Line | | Product | Ordered | Status | Certificate |
|---|---|---|---|---|---|
| 5 | 8992K137 | Multipurpose 304 Stainless Steel Bar, 3/4" Thick, 1-1/2" Wide, 1/2 Feet Long, Hot Rolled | 1 each | 1 each delivers November 5 | 326–0391 |

**Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.**

From: Valbruna Stainless Inc Date: 1/20/2026 To: T W METALS, INC SO#: B406564 Ln#: 1 PO#: M 49509164 Part: 07534 Qty: 2000 Heat#: 284380
Tag: V9149316B Page: 1 of 3


# 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
https://www.valbruna-stainless-steel.com/


**CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION - CERTIFICADO DE INSPECCIÓN**

In conformità a / Nach/According to/Selon/De conformidad con: EN 10204 (2004) , 3.1 / ISO 10474 (2013) , 3.1

Certificato nr. / Prüfung/Test/Essai/Num. de certificado: MEST136779 / 2024 /

Cliente / Besteller/Purchaser/Client/Cliente:
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
L5T 5Z1 - MILTON, ONT L5T 5Z1 - CA

Ordine nr: 408010693 STOCK
Bestell / Your order / Commande / Num. de pedido

Conferma ordine nr: EI24006855
Werks/Our Order/Ref nr. / Num. de confirmación de pedido

Avviso di Spedizione: D-VI24024279
Lieferanzeige/Packing list/B.L. / Aviso de embarque

Stato di fornitura: Hot rolled Annealed Pickled
Lieferzustand / Delivery state / Etat de livraison / Estado de la entrega

Tipo di Elaborazione: E+AOD
Erschmelzungsart / Melting process / Mode d'elaboration / Método de fusión

Qualità: 304/304L
Werkstoff/Grade/Nuance / Calidad

Marca: AISL
Markenbezeichnung / Brand / Nuance / Marca

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

Marchi di Fabbrica: AV
Zeichen des Lieferwerkes / Trade marks / Sigles de l'usine productrice / Marcas de fábrica

Punzone del Collaudatore: MR
Stempel des Werksachverständigen / Inspector's stamp/Poinçon de l'assayeur / Sello del Comprobador

Punzonatura: 304/304L
Kennzeichnung / Marking / Marquage / Sello

| SPECIFICHE : | Note: |
|---|---|
| Anforderungen / Requirements / Exigences / Especificaciones | Aufzeichnungen / Notes / Notes / Notas |
| VSI 0/3 304/304L A | |
| AISI . 304/304L | |
| AMS 5639 K S30400 A | |
| AMS 5647 M S30403 A | |
| AMS-QQ-S-763 D 304/304L A | |
| ASME SA182 2023 S30400/03 A (0) | (0)Section II Part A 2023 EDITION For products machined directly from bar refer to ASME SA479. |
| ASME SA193 2023 B8 CLASS 1 (1) | (1)Section II Part A 2023 EDITION |
| ASME SA276 2023 S30400/03 A (2) | (2)Section II Part A 2023 EDITION |
| ASME SA320 2023 B8 CLASS 1 (3) | (3)Section II Part A 2021 EDITION |
| ASME SA479 2023 S30400/03 A (4) | (4)Section II Part A 2023 EDITION |
| ASTM A182 2024B S30400/03 A (5) | (5)For products machined directly from bar refer also to ASTM A479. |
| ASTM A193 2023 B8 CLASS 1 | |
| ASTM A262 PR. E 2015 304/304L (6) | (6)Reapproved 2021 |
| ASTM A276 2024A S30400/03 A | |
| ASTM A314 2023 S30400/03 | |
| ASTM A320 2022 B8 CLASS 1 | |
| ASTM A473 2024A S30400/03 (7) | (7)Chemical analysis only. |
| ASTM A479 2024 S30400/03 A | |
| MIL-S-862 B/1 304/304L | |
| NACE MR0103 2015 S30400/03 A (8) | (8)ANSI/NACE MR0103/ISO 17945 November 23, 2015 |
| NACE MR0175 4 S30400/03 A (9) | (9)ANSI/NACE MR0175/ISO 15156-3:2020 Fourth edition, approved 21 Sep 2022. |
| QQ-S-763 F 304/304L A | |

Tolleranza: ASTM A484-24B TAB 5
Toleranz/Allowance/Tolerance/Tolerancia

| Pos. nr. / Pos. nr. / Item nr. / Nr. de poste / Número de artículo | Oggetto / Gegenstand / Product description / Descrip. du produit / Descripción del producto | Dimensioni - In / Abmessungen / Dimension / Dimension / Dimensiones | Lunghezza - In / Lange / Length / Longueur / Longitud | Colata / Schmelze / Heat / Coulée / Colada | Pezzi / Stückzahl / Pieces / Pièces / Piezas | Peso - LB / Gewicht / Weight / Poids / Peso | Lotto nr. / Losnr. / Lot nr. / Lot nr. / Lote nro. |
|---|---|---|---|---|---|---|---|
| 0020 | Flat | 1,5000 x 0,7500 | 144,0/156,7 | 284380 | | 3.144 | 408710030 |

TEST ALLO STATO DI FORNITURA

| TEST | | min | max | |
|---|---|---|---|---|
| A | Grain size for ASTM E112 | | | 5 |

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QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER ACCORDING TO ISO 9001 : 2015, IATF 16949 : 2016, AS 9100D

| Vicenza, 04/11/2024 | Direzione Qualità / Qualitätsmanagement/Quality Management/Gestion Qualité/Gerente de calidad | Direzione Prodotto / Produktmanagement/Product Management/Direction Produit/Gerente de producto | Pagina |
|---|---|---|---|
| VCQ012 - MEST136779 | R.BERTELLI | P.MESSORI | 1 di 3 |

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## Test on delivery condition per ASTM A370

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

| TEST | Provetta/ Probestab / Specimen/Eprouvette Larg.diam Spess. / Breite Diam. Dicke / Width Diam. Thickness / Larg. diam. epais mm / Probeta | °F | Posiz. Saggio / Probenlage / Location / Emplacement / Ubicación 1) | Snervamento Streckgrenze/Yield Stress Limite elastique Limite elástico Rp 0,2% k.s.i. | Snervamento Streckgrenze/Yield Stress Limite elastique Limite elástico | Resistenza Zugfestigkeit/Tensile strengt Resistance à traction Resistencia a la tracción Rm k.s.i. | Allungamento Bruchdehnung Elongation Allongement / Elongación E 4d % | | Strizione Einschnürung Reduction of area Striction / Reducción de área RA % | | Resilienza Kerbschlagarbeit Impact Value/ Resilience Prueba de impacto | | | Durezza Haerte Hardness Dureta / Dureza HB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Valori richiesti / Anforderungen/Required values / Valeurs démandées / Valores requeridos | | min | | 30 | - | 75 | - | 40 | - | 50 | - | | | 140 | | |
| | | max | | | | 115 | | | | | | | | 235 | | |
| B | 12,5 | 68 | L | 46 | | 89 | | 51 | | 68 | | | | 180 | | |

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

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

| TEST | Provetta/ Probestab / Specimen/Eprouvette Larg.diam Spess. / Breite Diam. Dicke / Width Diam. Thickness / Larg. diam. epais mm / Probeta | °F | Posiz. Saggio / Probenlage / Location / Emplacement / Ubicación 1) | Snervamento Streckgrenze/Yield Stress Limite elastique Limite elástico Rp 0,2% k.s.i. | Snervamento Streckgrenze/Yield Stress Limite elastique Limite elástico | Resistenza Zugfestigkeit/Tensile strengt Resistance à traction Resistencia a la tracción Rm k.s.i. | Allungamento Bruchdehnung Elongation Allongement / Elongación E 4d % | | Strizione Einschnürung Reduction of area Striction / Reducción de área RA % | | Resilienza Kerbschlagarbeit Impact Value/ Resilience Prueba de impacto | | | Durezza Haerte Hardness Dureta / Dureza | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Valori richiesti / Anforderungen/Required values / Valeurs démandées / Valores requeridos | | min | | 30 | - | 75 | - | 40 | - | 50 | - | | | - | | |
| | | max | | | | | | | | | | | | | | |
| D | 12,5 | 68 | L | 47 | | 90 | | 53 | | 69 | | | | | | |

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## Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique/Análisis químico

| Colata/Heat/Coulée / Schmelze/Colada | C % | Si % | Mn % | Cr % | Mo % | Cu % | Ni % | Co % | P % | S % | N % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| min - | - | - | - | 18,00 | - | - | 8,00 | - | - | 0,020 | - | - | - | - | - | - |
| max | 0,030 | 1,00 | 2,00 | 20,00 | 1,00 | 1,00 | 10,50 | - | 0,040 | 0,030 | 0,100 | - | - | - | - | - |
| 284380 | 0,021 | 0,42 | 1,75 | 18,15 | 0,60 | 0,64 | 8,11 | 0,132 | 0,032 | 0,020 | 0,092 | | | | | |

**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 = 44,6 : 1
Material solution annealed 1940°F for 1 h/water cooled.
Material is DFARS Compliant

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Kennzeichnung / Marking / Marquage / Sello

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 à été trouvé conforme aux exigences
El material cumple de acuerdo a los requisitos

Controllo antimescolanza con tecnica XRF/OES portatile : OK
Verwechslungprüfung: durch XRF/QES Gerät geführt : OK
Antimixing testing performed with XRF/OES portable : OK
Contrôle antimélange svt technique XRF/OES portable : OK
Prueba de anti mezcla con técnica XRF/OES portátil: OK

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

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 to Pressure Equipment Directive 2014/68/EU Annex 1,chapt.4.3 by TÜV and LLOYD`S
The Quality Management System is also Certified according to PER 2016/1105, Schedule 2, Part 4, Para 31 (8) by Competent Body TÜV SUD BABT Unlimited.
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.
Maxival 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.

WSPTFF5400ECA551ECS7520059730EC96

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