



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

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

Certificato nr. MEST386282 / 2019 /
 Prüfung/Test/Essai

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

Stato di fornitura : Hot rolled - Annealed Peeled
 Lieferzustand
 Delivery state
 Etat de livraison

Produttore :
 Hersteller/Hersteller/Usine productrice

ACCIAIERIE VALBRUNA S.P.A.

Ordine nr. 808007098
 Bestell
 Your order
 Commande

Tipo di Elaborazione: E+A0D
 Erzeugnisart
 Melting process
 Mode d'élaboration

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



Conferma ordine nr. EI18008502
 Werkz/Our Order/Ref. nr.

Qualità: 304/304L
 Werkstoff/Grade/Numéro

Punzone del Collaudatore:
 Stempel des Werkssachverständigen
 Inspector's stamp/Plaqueon de l'essayeur

MR

Avviso di Spedizione: D-VI19009106
 Lieferanzeige/Packing list/B.L.

Marca: MVAISL (MAXIVAL)
 Markenbezeichnung
 Brand / Marque

Punzonatura: 304/304L
 Kennzeichnung
 Marking
 Marquage

SPECIFICHE :

Note.

Anforderungen / Requirements / Edigences

Aufzeichnungen / Notes / Notes

VSI 0 304/304L A
 AISI 304/304L
 AMS 5639 J S30400 A
 AMS 5647 K S30403 A
 AMS-QQ-S-763 D 304/304L A
 ASME SA182 2017 S30400/03 A (0)
 ASME SA193 2017 B8 CLASS 1 (1)
 ASME SA276 2017 S30400/03 A (2)
 ASME SA320 2017 B8 CLASS1 (3)
 ASME SA479 2017 S30400/03 A (4)
 ASTM A182 2018 S30400/03 A (5)
 ASTM A193 2017 B8 CLASS 1
 ASTM A262 2015 PRACTICE E
 ASTM A276 2017 S30400/03 A
 ASTM A314 2015 S30400/03
 ASTM A320 2017A B8 CLASS1
 ASTM A370 2017 .
 ASTM A473 2001 S30400/03 (6)
 ASTM A479 2018 S30400/03 A
 MIL-S-862 B/1 304/304L
 NACE MR0103 2015 S30400/03 A (7)
 NACE MR0175 2015 S30400/03 A (3)
 QQ-S-763 F 304/304L A

(0)Section II Part A 2017 EDITION For products machined directly from bar refer to ASME SA479.

(1)Section II Part A 2017 EDITION

(2)Section II Part A 2017 EDITION

(3)Section II Part A 2017 EDITION

(4)Section II Part A 2017 EDITION

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

(6)Chemical analysis only.

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

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

Tolleranza: ASTM A484-18 TABLE 3

Tolleranza/Allowance/Tolerance

Pos. nr. Pos. nr. Stell. Nr. nr. de poste	Oggetto Description/ Product description Déscription du produit	Dimensioni - In		Lunghezza - In Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stücke/ Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Lose/ Lot no. Lot nr.
		Dimensionen Dimensions Dimension	Abmessungen					
0090	Round	6,2500		136/ 136	277600	1	1.217	824303760

Vicenza, 25/03/19

YCCQ08 - MEST386282

(Mod. MCEZ) INTERNET (MEST386282) 03/03/2019

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

M. RIZZOTTO *M. Rizzotto*

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TEST ALLO STATO DI FORNITURA												
Test on delivery condition / Prüfung auf lieferbarem produkt / Test a l'etat de fourniture / Prueba sobre el material así como entregado												
TEST	Proveita/ Probeite	°F	Posto/ Saggio	Snervamento	Snervamento	Resistenza	Allungamento	Strizione	Resistenza	Durezza		
	Speichereigenschaften Lap. diam. Stress Brin. Char., Ditch Wall Diam. Thickness Lap. diam. Spine		Proveita Lap. diam. Stress Brin. Char., Ditch Wall Diam. Thickness Lap. diam. Spine	Bruchgrenze Yield Stress Limite elastico Rp 0,2%	Bruchgrenze Yield Stress Limite elastico	Zugfestigkeit Tensile strength Résistance à traction Rm					Bruchdehnung Elongation Allongement E 4d	Bruchdehnung Reduction of area Reduction
Valori richiesti		min		30	-	75	-	40	-	50	-	140
Anforderungen/Requisitos values		max				115						223
A	12,5	68	L	41		83		61		70		164

TEST ALLO STATO DI FORNITURA			
Test on delivery condition / Prüfung auf lieferbarem produkt / Test a l'etat de fourniture / Prueba sobre el material así como entregado			
TEST	min	max	
A Grain size for ASTM E112			4

Mechanical properties according to ASTM A370.

Analisi chimica												
Chemische Zusammensetzung/Chemical Analysis/Analyse chimique												
Colata / Heat	min	-	-	18,00	-	-	8,00	-	-	0,020	-	-
Schmelze/Coulee	max	0,030	1,00	20,00	1,00	1,00	10,50	-	0,040	0,030	0,100	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %	
277600	0,012	0,47	1,32	18,32	0,44	0,50	8,01	0,133	0,031	0,025	0,072	

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 = 11,1 : 1
 Annealing temperature: 1976° F for 3.5 h/water.
 Material is DFARS Compliant

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

Controllo antimiscelazione: OK
 Verwechslungsprüfung: spektrometrisch durchgeführt
 Antimixing testing performed: OK
 Contrôle antimélange fait: r. s. s.

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

Vicenza, 25/03/19

VCQ006 - MEST386282

(Mod. MCE2)

Il collaudatore di stabilimento / der Werksachverständige / Works inspector / L'agent d'usine

M. RIZZOTTO

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Acciaierie Valbruna S.p.A.

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

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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.

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

The Quality Management System is Certified acc. Pressure Equipment Directive 2014/68/EU Annex 1, chapl.4.3 by TUEV 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.
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.

Vicenza, 25/03/19

VCC008 - MEST386282

(Mod. MCE2)

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M. RIZZOTTO

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