



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

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

Certificato nr. **MEST114575 / 2017 /**
 Prüfung/Test/Essai

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

Stato di fornitura: **Forged - Annealed Peeled**
 Lieferzustand
 Delivery state
 Etat de livraison

Produttore:
 Hersteller/Fabrik/Usine productrice

ACCIAIERIE VALBRUNA S.P.A.

Ordine nr: 707006464 Stock - Canada

Bestell
 Your order
 Commande

Tipo di Elaborazione: **E+AOD**
 Erzeugnisart:
 Making process
 Mode d'elaboration

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



Conferma ordine nr: **EI17007679**

Works/Our Order/Ref. nr.

Qualità: **304/304L**
 Werkstoff/Grade/Ruance

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

MR

Avviso di Spedizione: **D-V117023109**

Lieferanzeige/Packing list/B.L.

Marca: **AISL**

Mar/kenbezeichnung
 Brand / Ruance

Punzonatura: **304/304L**

Kenzeichnung
 Marking
 Marquage

SPECIFICHE :

Anforderungen / Requirements / Exigences

Note:

Anzeichnungen / Notes / Notes

VSI 0 304/304L A
 AISI 304/304L
 AMS 5639 H S30400 A
 AMS 5647 J S30403 A
 AMS-QQ-S-763 D 304/304L A
 ASME SA182 2015 S30400/03 A (0)
 ASME SA193 2015 B8 CLASS1 (1)
 ASME SA276 2015 S30400/03 A (2)
 ASME SA320 2015 B8 CLASS1 (3)
 ASME SA479 2015 S30400/03 A (4)
 ASTM A182 2016 S30400/03 A (5)
 ASTM A193 2016 B8 CLASS1
 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 2017 S30400/03 A
 MIL-S-862 B/1 304/304L
 NACE MR0103 2010 S30400/03 A
 NACE MR0175 2015 S30400/03 A (7)
 QQ-S-763 F 304/304L A

(0)SECTION II PT.A 2015 EDITION For products machined directly from bar refer to ASME SA479.

(1)SECTION II PT.A 2015 EDITION

(2)SECTION II PT.A 2015 EDITION

(3)SECTION II PT.A 2015 EDITION

(4)SECTION II PT.A 2015 EDITION

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

(6)Chemical analysis only.

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

Tolleranza: ASTM A484-16 TABLE 3

Tolleranza/Allowance/Tolerance

Pos. nr. Pos. nr. Item nr. N. de poste	Oggetto Object/Item Prodot description Descrip. du produit	Dimensioni - In		Lunghezza - in Length Länge Longueur	Colata Casting Hot Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gross Weight Poids	Lotto nr. Lot no. Lot nr. Lot n.
		Abmessungen Dimension Dimension						
0080	Round	8,5000		210/ 233	273536		7.190	708114100

Vicenza, 23/08/17

VCQ005 - MEST114575

(Mod. MCE2) WSP06MCE119702005/0002/09/2010 00

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

M.RIZZOTTO

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 Erzeugungsmethode
 Melting process
 Mode d'elaboration

Marchi di Fabbrica:
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 Trade marks
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 Brand / Nuance

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TEST ALLO STATO DI FORNITURA											
Test on delivery condition / Prüfung auf lieferbarem Produkt / Test a l'état de fourniture / Prueba sobre el material así como entregado											
TEST	Provetta/ Probe	°F	Post. Saggio/ Probe displacement	Snervamento	Snervamento	Resistenza	Allungamento	Strizione	Resilienza	Durezza	
	Specimen/Éprouvette			Strength	Yield Stress	Tensile strength	Elongation	Reduction of area	Impact Value		
	Long. diam. Ø spez. / Brutto Diam. Dicke / With Diam. Thickness / Long. diam. ø spez. / mm		mm	Yield Stress Rp 0,2%	Yield Stress Limite elastique	Tensile strength Rm	Elongation E 4d	Reduction of area RA	Impact Value Resilience	Hardness Durezza HB	
Valori richiesti		min		30	-	75	-	40	-	50	140
Antecedenti/previous values		max				115				223	
A	12,5	68	L	38		82	62	73		165	

TEST ALLO STATO DI FORNITURA				
Test on delivery condition / Prüfung auf lieferbarem Produkt / Test a l'état 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	-	1,00	1,00	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 %		
273536	0,012	0,41	1,59	18,15	0,46	0,41	8,00	0,123	0,031	0,027	0,080		

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 = 7,6 : 1
 Annealing temperature: 1940°F for 4 h/water.
 Material is DFARS Compliant

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

Controllo antimiscelanza: OK
 Verwechslungsprüfung: spezialanalytisch durchgeführt
 Antimixing testing performed: OK
 Contrôle antimélange fait: r.a.s.

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



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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 : 2008, ISO/TS16949 : 2009, AS 8100C

The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1, s.,4.3 and 2014/68/EU 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.

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 Product.

Vicenza, 23/08/17

VCQ005 - MEST114575

(Mod. MCE2) www.acciaierievalbruna.com

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M. RIZZOTTO

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