

Acciaierie Valbruna S.p.A.

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

Cliente / Besteller/Purchaser/Clien
VALBRUNA CANADA LTD
 8724 HOLGATE CRESCENT
 L5T 5Z1-MILTON, ONT L5T 5Z1-CAN

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

Oggetto Prova: Polished Annealed Peeled
 Prüfgegenstand/Term Inspected/Finissage

Specifiche:

Valbruna / Requirements / Exigences
VAL CANADA 2 316/316L A
 ASME SA182 2007 S31600/03 0
 ASME SA479 2007 S31600/03 3
 ASTM A262 2002A PRACTICE E
 ASTM A320 2008 B8M
 NACE MR0175 2003 S31600/03 6
 (0) SEC.II PT.A 2007 EDITION ADD. 2008a
 (1) SEC.II PT.A 2007 EDITION ADD. 2008a
 (3) SEC.II PT.A 2007 EDITION ADD. 2008a
 (5) * ISO 15166-3

AMS 5648 K S31600
 ASME SA193 2007 B8M 1
 ASTM A182 2009 S31600/03 4
 ASTM A276 2008A S31600/03
 ASTM A479 2008 S31600/03
 QQ-S-763 F 316/316L

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

Avviso di Spedizione: D-VI690T9464
 Dispatching/Packing label

Ordine nr: 909002391 Stock - Canada
 Bestel/Your order/Commande

Tipo di Elaborazione: E+AOD
 Erzeugnisart/Writing process/Mode d'elaboration

Certificato nr: MEST786160/2009/
 Prüfung/Test/Essai

Conferma ordine nr: EI08005160
 Works/Our Order/Nr.

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

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

0Chemical analysis only.
 2SEC.II PT.A 2007 EDITION ADD. 2008a
 4Chemical analysis only.

Qualità: 316/316L
 Werkstoff/Grade/Nuance

Marca: **MVAPML MAXIVAL**
 Markenbezeichnung/Brand/Nuance

Punzonatura: 316/316L
 Kennzeichnung/Marking/Marquage

Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Product description Descr. du produit	Dimensioni - In Abmessungen Dimension Dimension	Tolleranza Tolerance Allowance Tolérance	Lunghezza - In Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losz. Lot nr. Lot nr.
0020	Round	2,1250	484-06B	129 / 157	423070		5.513	820100850

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 fourni conforme aux exigences

Controllo antimiscelanza: OK
 Verwechslungsprüfung: spektroskopisch durchgeführt
 Admixture testing performed: OK
 Contrôle antimélange fait: r.a.a.

Controllo visivo e dimensionale: soddisfa le esigenze
 Beschädigung und Ausmessung ohne Beanstandung
 Visual inspection and dimensional check satisfactory
 Contrôle visuel et dimension: satisfaisant

TEST ALLO STATO DI FORNITURA										
Test on delivery condition Prüfung auf lieferbarem Produkt test à l'état de fourniture Prueba sobre el material así como entregado										
TEST	Proveite/Probestück Specimen/Éprouvette Länge/Size With Dia. Thickness Lap, dia, weight mm	° F	Prova Saggio Essai Essai	Snervamento Buckling Yield Stress Limit elastic Rp 0,2% k.s.l.	Snervamento Elongation Yield Stress Limit elastic Rp 0,2% k.s.l.	Resistenza Tensile strength Tensile strength Resistance à traction Rm k.s.l.	Allungamento Elongation Elongation Allongement E 4d %	Strizione Elongation Reduction of area Striction RA %	Flessibilità Kerfchlagwert Impact Value Resilience	Durezza Hardness Duro HB
Valori richiesti 1 Anforderungen/Required values Valeurs dimensionnelles	min max			30	-	75 115	40	50	-	140 223
A	12,5	68	L	48		92	55	67		182
TEST										
A	Grain size for ASTM E112									6

1)-lunghezza/length, T-temperatura/temperature, G-Tangenziale/horizontal

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata Heat Schmelze/Heat	min - max 0,030	1,00	1,25 2,00	16,00 18,00	2,00 3,00	1,00	10,00 14,00	0,040	0,030	0,100	-	-	-	-
423070	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %			
	0,030	0,49	1,50	16,94	2,03	0,43	10,16	0,101	0,027	0,030	0,055			

Produced without class I-II Ozone depleting substances.
 Solution heat treated free from continuous carbide network.
 Annealing temperature: 1940°F for 1.5h/water.
 Micro and macro etch test: OK
 Intergranular corrosion test per ASTM A262 pract. E: ok.
 Material is DFARS Compliant

Vicenza, 22/09/09 V0008 (Mod. MCER)	Il collaudatore di stabilimento / der Werksachverständiger / Works Inspector / L'agent d'usine M. Rizzotto	Pagina 1 di 2
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C006510

Acciaierie Valbruna S.p.A.



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

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Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

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VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
L5T 5Z1-MILTON, ONT L5T 5Z1-CAN

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

Oggetto Prova: Polished Annealed Peeled
Prüfgegenstand/Item inspected/Finisssage

Avviso di Spedizione: D-VI09019464
Lieferanzugs/Packing Inv/B.L.

Ordine nr: 909002391 Stock - Canada
Bestell/Your order/Commande

Tipo di Elaborazione: E+AOD
Erschmelzungsart/Melting process/Mode of elaboration

Certificato nr: MEST786160/2009/
Prüfung/Test/Essai

Conferma ordine nr: EI09005160
Werkz/Our Order/Ret. nr.

Marchio di Fabbrica:
Zeichen des Lieferwerkes
Trade mark
Sigle de l'usine production



Punzone del Collaudatore:
Stempel des Werkssachverständigen
Inspector's stamp/Pointon de l'essayer



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



Vicenza, 22/09/09
V00609
(Mod. MCER)

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

M. Rizzotto *[Signature]*

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