

Acciaierie Valbruna S.p.A.



**CERTIFICATO DI COLLAUDO
ABNAHMEPRUEFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION
EN 10204 (2004) , 3.1**

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4
Telephone number : 0039 (0) 444968211

Cliente / Besteller/Purchaser/Client
VALBRUNA U.K. LTD.

OLDBURY ROAD
B70 9BH-WEST BROMWICH B70 9BH GB-GB

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

Stato di fornitura: Hot rolled - Annealed Cold Drawn
Lieferzustand/Delivery state/Etat de livraison

Specifiche:
Anforderungen / Requirements / Exigences

VAL STOCK 2010 1.4404/316L A,CF
AMS 5648 L S31600 A
ASME SA182 2013 S31603 A (1)
ASME SA479 2013 S31600 A (4)
ASTM A182 2012B S31603 (7)
ASTM A276 2013A S31603 A,CF
ASTM A370 2013
EN 10088-3 2005 1.4401 A,CF
EN 10272 2007 1.4404 A,CF
NACE MR0175 2009 S31600 A (8)
QQ-S-763 F 316L A,CF

AISI 316
AMS 5653 H S31603 A,CF
ASME SA276 2013 S31600 A,CF (2)
ASME SA479 2013 S31603 A (5)
ASTM A262 2013 PRACTICE E
ASTM A314 2008 S31600
ASTM A479 2013A S31600 A
EN 10088-3 2005 1.4404 A,CF
NACE MR0103 2010 S31600 A
NACE MR0175 2009 S31603 A (9)

AISI 316L
ASME SA182 2013 S31600 A (0)
ASME SA276 2013 S31603 A,CF (3)
ASTM A182 2012B S31600 A (6)
ASTM A276 2013A S31600 A,CF
ASTM A314 2008 S31600
ASTM A479 2013A S31603 A
EN 10272 2007 1.4401 A,CF
NACE MR0103 2010 S31603 A
QQ-S-763 F 316 A,CF

- (0) SEC.II PT.A 2013 EDITION
- (1) SECTION II PT.A 2013 EDITION
- (2) SEC.II PT.A 2013 EDITION
- (4) SECTION II PT.A 2013 EDITION
- (6) For products machined directly from bar refer also
- (7) For products machined directly from bar refer also
- (8) ANSI/NACE MR0175/ISO 15156-3, second edition 2009-10-15
- (9) ANSI NACE MR0175/ISO 15156-3, second edition 2009-10-15

- (0) For products machined directly from bar refer to ASME SA479.
- (1) For products machined directly from bar refer to ASME SA479.
- (3) SECTION II PT.A 2013 EDITION
- (5) SECTION II PT.A 2013 EDITION
- (6) to ASTM A479.
- (7) to ASTM A479.
- (8) Technical circular 1:2011 Published 2011-06-14
- (9) Technical circular 1:2011 Published 2011-06-14

FLOW TECHNOLOGY LTD
TEST CERTIFICATE
VERIFIED TRUE
COPY OF ORIGINAL

Qualità: 1.4401/1.4404/316/316L
Werkstoff Grade/Nuance

Marca: **MVAPML**
Maximalezeichnung
Brand Nuance **MAXIVAL**

Tolleranza: **h11**
Toleranz./Allowance/Tolerance

Punzonatura: 1.4401/4/316/L
Kennzeichnung/Marking/Marquage

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Product description Descrip. du produit	Dimensioni - mm Abmessungen Dimension Dimension	Lunghezza - mm Large Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pieces	Peso - KG Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0010	Hexagon	25,400	3100 / 3150	265009		1166,0	426605840

TEST ALLO STATO DI FORNITURA

Test on delivery condition Prüfung auf lieferbarem produkt test a l'etat de fourniture Prueba sobre el material asi como entregado

TEST	Provetta/probestab Specimen/Eprovette Larg diam Spess. Breite Diam Dicke Width Diam Thickness Larg. diam. épais mm	°C	Posiz. Saggio Probenlage Position Emploiment 1)	Snervamento	Snervamento	Resistenza	Allungamento		Strizione		Resilienza			Durezza	
				Streckgrenze Yield Stress Limite élastique Rp 0,2% N/mm2	Streckgrenze Yield Stress Limite élastique Rp 1% N/mm2	Zugfestigkeit Tensile strength Résistance à traction Rm N/mm2	A5 %	E 4d %	Z %	RA %	KV J	Impact Value Resilience KV J	Haerthe Hardness Dureté HB		
Valori richiesti 1 Anforderungen/Required values Valeurs demandées		min		207	235	517 900	20	30	-	50	100			140 235	
A	10	20	L	502	538	705	39	42	67	67	185	188	191	229	

TEST	min	max
A	Grain size for ASTM E112	5

1L-Longitudinale/längs, T=Transversale/quer, Q=Tangenziale/tangentiel.

Mechanical properties according to ASTM A370.

Analisi chimica

Chemische Zusammensetzung Chemical Analysis/Analyse chimique

Colata/Heat Schmelze/Coulée	min - max	0,030	1,00	1,25 2,00	16,50 18,00	2,00 2,50	1,00	10,00 13,00	0,040	0,030	0,100
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	P %	S %	N %	
265009	0,019	0,51	1,60	16,65	2,00	0,59	10,00	0,032	0,028	0,051	

Intergranular corrosion test per ASTM A262 pract. E: ok.
Absence of cracks at 20 x magnification after bend test.

Vicenza, 18/11/14
VCC008
(Mod. MCE2)

Il collaudatore di stabilimento / der Werkssachverständige / Works inspector L. ag...
M. Rizzotto

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