

Acciaierie Valbruna S.p.A.



QUALITY MANAGEMENT SYSTEM
CERTIFIED BY LLOYD'S REGISTER

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
Cliente / Besteller/Purchaser/Clien

Avviso di Spedizione: D-VI13015020
Lieferanzeige/Packing list/B.L.

Certificato nr: MEST348333/2013/
Prüfung/Test/Essai

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

Ordine nr: 210040668 ZAPP 7511003182
Bestell/Your order/Commande

Conferma ordine nr: E112008289
Werks/Our Order/Ref nr.

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



Stato di fornitura: Hot rolled Descaled Annealed Hot rolled
Lieferzustand/Delivery state/Etat de livraison

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

Punzone del Collaudatore:
Stempel des Werksachverständigen
Inspector's stamp/Poinçon de l'assesseur



Specifiche:
Anforderungen / Requirements / Exigences

VAL STOCK 2010 1.4404/316L A
ASME SA182 2010 S31600 A (0)
ASME SA276 2010 S31600 A (3)
ASME SA479 2010 S31600 A (6)
ASTM A182 2012B S31603 (9)
ASTM A276 2010 S31600 A
ASTM A320 2011A B8M CLASS1
DIN 17440 96 1.4401 A
EN 10088-3 2005 1.4404 A
NACE MR0103 2010 S31600 A
NACE MR0175 2009 S31603 A (B)

AISI 316
ASME SA182 2010 S31603 A (1)
ASME SA276 2010 S31603 A (4)
ASME SA479 2010 S31603 A (7)
ASTM A193 2011A B8M CLASS1
ASTM A276 2010 S31603 A
ASTM A479 2012 S31600 A
DIN 17440 96 1.4404 A
EN 10272 2007 1.4401 A
NACE MR0103 2010 S31603 A

AISI 316L
ASME SA193 2010 B8M CLASS1 (2)
ASME SA320 2010 B8M CLASS1 (5)
ASTM A182 2012B S31600 A (8)
ASTM A262 2010 PRACTICE E
ASTM A314 2008 S31600
ASTM A479 2012 S31603 A
EN 10088-3 2005 1.4401 A
EN 10272 2007 1.4404 A
NACE MR0175 2009 S31600 A (A)

(0) SEC.II PT.A 2010 EDITION ADD. 2011a
(1) SEC.II PT.A 2010 EDITION ADD. 2011a
(2) SEC.II PT.A 2010 EDITION ADD. 2011a
(4) SEC.II PT.A 2010 EDITION ADD. 2011a
(6) SEC.II PT.A 2010 EDITION ADD. 2011a
(8) For products machined directly from bar refer to ASTM A479.
(A) ANSI/NACE MR0175/ISO 15156-3, second edition 2009-10-15
(B) 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) SEC.II PT.A 2010 EDITION ADD. 2011a
(5) SEC.II PT.A 2010 EDITION ADD. 2011a
(7) SEC.II PT.A 2010 EDITION ADD. 2011a
(9) For products machined directly from bar refer to ASTM A479.
(A) Technical circular 1:2011 Published 2011-06-14
(B) 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: APLM
Markenbezeichnung
Brand/Nuance

Tolleranza: EN 10058
Tolleranz/Allowance/Tolerance

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

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Product description Descr. du produit	Dimensioni - mm Abmessungen Dimension Dimension	Lunghezza - mm Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pieces	Peso - KG Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0040	Flat	64,750 x 39,700	5000 / 6000	261026		19567,0	229104160

TEST ALLO STATO DI FORNITURA
Test on delivery condition Prüfung auf lieferbarem produkt test a l'etal de fourniture Prueba sobre el material así como entregado

TEST	Provetta/Probetas Specimen/Eprouvette Lang diam Spess Breda Diam Dicks Width Diam Thickness Lang diam epess mm	°C	Posiz. Saggio Lage Location Emplacement	Snervamento Streckgrenze Yield Stress Limite élastique Rp 0,2% N/mm2	Snervamento Streckgrenze Yield Stress Limite élastique Rp 1% N/mm2	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm N/mm2	Allungamento Bruchdehnung Elongation Allongement		Strizione Enschonung Reduction of area Striction		Resilienza Kerbschlagarbeit Impact Value Resilience		Durezza Härte Hardness Dure HB	
							A5 %	E 4d %	Z %	RA %	KV J			
Valori richiesti 1 Anforderungen/Required values Valeurs demandées		min max		205	240	515 690	40	40	-	50	100			215
A	10	20	L	254	309	565	58	61	70	70	271	264	261	170
B	10	20	L	251	303	554	59	62	71	71	276	260	263	168

TEST		min	max	
A	Grain size for ASTM E112			5

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

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata/Heat Schmelze/Coulée	min - max	1,00	2,00	16,50 18,00	2,00 2,50	10,00 13,00	0,045	0,030	0,100	-	-	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Ni %	P %	S %	N %					
261026	0,023	0,43	1,29	16,75	2,04	10,05	0,030	0,027	0,070					

Intergranular corrosion test per ASTM A262 pract. E: ok.
I.Korrosion nach EN ISO 3651-2A Sensibilisierung : T1 : OK

Vicenza, 17/05/13 VCO008 (Mod. MGE2)	Il collaudatore di stabilimento / der Werkssachverständige / Works inspector / L'agent d'usine <i>M. Rizzotto</i>	Pagina - 1 di 2
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3/8" NPT F/F/F FXD TEE 15K 316L