



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

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

Certificato nr. MEST179290 / 2018 /
 Prüfung/Test/Essai

Cliente / Besteller/Purchaser/Client
VALBRUNA U.K. LTD.
 OLDBURY ROAD
 B70 9BH - WEST BROMWICH B70 9BH GB -
 GB

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

Produttore: Hersteller/Item/Usine productrice

ACCIAIERIE VALBRUNA S.P.A.

Ordine nr: 705052028 Sheffield
 Bestell: Your order
 Commande

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

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



Conferma ordine nr: EI17005633
 Werks/Our Order/Ref nr.

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

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

MR

Avviso di Spedizione: D-VI18000358
 Lieferanzeiger/Packing list/V.L.

Marca: MVAPML MAXIVAL
 Markenbezeichnung: Brand / Nuance

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

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/ Probostab Specimen/Eprouvette Leg. diam. Spess. Breite Diam. Dicke Wittth Diam. Thickness Leg. diam. epais mm	°C	Posiz. Saggio Procentage Location Embodiment 1)	1) L=longitudinale/längs, T=trasversale/quer, Q=Tangenziale/tangential		Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm N/mm2	Allungamento Bruchdehnung Elongation Allongement A5 % E 4d %		Strizione Einachnührung Reduction of area Striction Z % RA %		Resilienza Kerbschlagarbeit Impact Value Resilience KV J			Durezza Haerte Hardness Durete HB	
				Sneramento Streckgrenze Yield Stress Limite elastique Rp 0,2% N/mm2	Sneramento Streckgrenze Yield Stress Limite elastique Rp 1% N/mm2										
Valori richiesti		min		207	235	517	20	30	-	50	100		140		
Anforderungen/Required values Valeurs demandées		max				900							235		
A	10	20	L	538	481	689	37	40	68	68	178	180	185	229	

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	min	max
A Grain size for ASTM E112		5

FLOW TECHNOLOGY LTD
 TEST CERTIFICATE
 VERIFIED TRUE
 COPY OF ORIGINAL

Mechanical properties according to ASTM A370.
 Tensile testing according to EN ISO 6892-1

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata /Heat Schmelze/Coulée	min - max	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 %				
429779	0,017	0,52	1,49	17,00	2,03	0,46	10,11	0,026	0,030	0,061				

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

Corrosion test in 16% sulfuric acid and copper sulfate solutions

Test standard: UNI EN ISO 3651-2 Method A

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	Sensitized T1	20	boil	90	5	Absence of cracks	SATISFACTORY

Reduction ratio = 37,5 : 1
 Material solution annealed 1080° C for 1h/water cooled.

Vicenza, 05/01/18

VCCQ012 - MEST179290

(Mod. MCE2) WSPFD488F4C581404298C2184CF82D907

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

M. RIZZOTTO

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