

(A 04) 	(A 01) Via Bresciani, 16 46040 Gazoldo degli Ippoliti Mantova Italy Tel. +39 - 0376 685 1 www.marcegaglia.com Stabilimento di Forlì: Via E.Mattei, 20 47034 Forlimpopoli, Forlì-Cesena Tel. +39 - 0543 470111 Fax +39 - 0543 470105	(A 02) Inspection Certificate 3.1 EN 10204 according to EN 10204:2004 alphanumeric codes according to EN 10168:2004 (A 03) Certificate Number 10524333837 (Z 02) Issue Date 15/05/2024
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CUSTOMER DATA AND DELIVERY

(A 06.1)	CUSTOMER:	NEREZOVE MATERIALY, S.R.O.		
(A 06.1)	Customer Code:	0000068417		
(A 06.2)	CONSIGNEE:	NEREZOVE MATERIALY, S.R.O.		
(A 06.2)	Consignee Code:	0000068417		
(A 10)	Delivery Number:	8930411286	Of	15/05/2024
(A 10)	Shipping Notice:	1005004789	Of	15/05/2024

ORDER DATA

(A 08)	Marcegaglia Order Number:	1191761609/000340
(A 07)	Customer Order Number:	OV-1347/2024
(A 07)	Date Of Order Confirmation To The Customer:	07/05/2024
(A 09)	Part Number:	

PRODUCT IDENTIFICATION

(B 01)	Material Code:	59004611
(B 09, B 10, B 11)	Material Description:	TXT002 18x1,5x6000 4307/304L LAS Z
(B 02)	Stainless Steel Grade:	14307 TP 304L 1.4307/1.4301 X2CrNi18-9/X5CrNi18-10
(B 03)	Manufacturing Standard:	EN 10217-7 TC1
(B 03)	Dimensional Tolerance Standard:	ISO 1127 D3-T3
(B 14)	Welding Technology:	LASER WELDING
(B 04)	Delivery Conditions:	W0
(B 05)	Heat Treatment:	
(B 15)	Additional Works:	BRUSHED
(B 06)	Marking:	{LGO:MARCEGAGLIA} \$Diametro\$ X \$Spessore_Nom\$ Heat n°\$Colata\$ EN 1.4301 / EN 1.4307 - TP 304 / TP 304L EN 10217-7 TC1 \$Stato di Fornitura\$ \$Sigla\$ \$Data\$ \$Ora\$

SUPPLIED BATCH CHARACTERISTICS

ITEM	(B 07, C00) BATCH NUMBER	(B 05) HEAT NUMBER	(B 16) QUANTITY (M)	(B 17) QUANTITY (KG)	(B 08) QUANTITY (PCS)
1	24K4000517	E231653	1014	546	169

(C70) STEELMAKING PROCESS: ELECTRIC ARC FURNACE-VOD/AOD-CONTINUOUS CASTING

CHEMICAL ANALYSIS

The chemical analysis refers to the raw material used. In accordance with EN 10204:2004 the values of the chemical analysis, unless otherwise specified, refer to the 3.1 type certificate of the raw material supplier.

ITEM	(B 07, C00) BATCH NUMBER	(C 71) C (%)	(C 72) Si (%)	(C 73) Mn (%)	(C 74) P (%)	(C 75) S (%)	(C 76) N (%)	(C 77) Cr (%)	(C 78) Ni (%)
	MIN							17.5	8
	MAX	0.03	1	2	0.045	0.015	0.11	19.5	10
1	24K4000517	0.024	0.323	1.590	0.0230	0.0007	0.0780	18.240	8.150

MECHANICAL PROPERTIES

The mechanical properties are measured on each tube batch

TENSILE TEST (C 03) AT ROOM TEMPERATURE t = (22 ± 4)°C							
		(C 01) SAMPLE POSITION	(C 02) SAMPLE DIRECTION	(C 12) Rp0.2 (MPa)	(C 12) Rp1.0 (MPa)	(C 11) Rm (MPa)	(C 13) A5 (%)
	MIN			180	215	470	40
	MAX					670	
ITEM	(B 07, C00) BATCH NUMBER						
1	24K4000517	CAMP1	L	370	410	600	49.6

DESTRUCTIVE TESTS

DRIFT EXPANDING TEST ACCORDING TO EN ISO 8493:2005: CONFORM

FLATTENING TEST ACCORDING TO EN ISO 8492:2004: CONFORM

RING EXPANDING TEST ACCORDING TO EN ISO 8495:2004: CONFORM

TENSILE TEST ACCORDING TO EN ISO 6892-1:2009

INTERGRANULAR CORROSION TEST ACCORDING TO EN ISO 3651-2:1998: CONFORM

NON DESTRUCTIVE TESTS

EDDY CURRENT TEST FOR THE VERIFICATION OF HYDRAULIC LEAKTIGHTNESS ACCORDING TO EN ISO 10893-1:2011: CONFORM

EDDY CURRENT TEST FOR THE DETECTION OF IMPERFECTIONS ACCORDING TO EN ISO 10893-2:2011: CONFORM

ANTIMIXING TEST: CONFORM

VISUAL INSPECTION AND DIMENSIONAL CONTROLS: CONFORM

(D 90) WELDING PROCESSES QUALIFICATION

WELDING PROCESS QUALIFICATION: ALL LASER WELDING PROCESS ARE QUALIFIED IN ACCORDING EN STANDARDS AND DIRECTIVE PED 2014/68/EU ALL.I PAR.3.1.2 BY THE NOTIFIED BODY 0474 (RINA).

THE WPS\WPAR ARE AVAILABLE ON REQUEST AT THE MARCEGAGLIA SPECIALTIES FACTORY IN FORLIMPOPOLI - FC - ITALY. WPS LASER ACCORDING TO UNI EN ISO 15609-4; WPAR LASER ACCORDING TO UNI EN ISO 15614-11 AND AD2000-MERKBLATT HP 2/1. ALL HIGH FREQUENCY INDUCTION WELDING PROCESS ARE QUALIFIED ACCORDING TO INTERNAL PROCEDURE.

(D 91) QUALIFICATION OF WELDING PERSONNEL AND NON-DESTRUCTIVE TESTING PERSONNEL

ALL LASER WELDING OPERATORS ARE QUALIFIED IN ACCORDING TO UNI EN ISO 14732; ALL NDT-ET OPERATORS ARE QUALIFIED IN ACCORDING TO UNI EN ISO 9712.

LL HIGH FREQUENCY INDUCTION WELDING OPERATORS ARE QUALIFIED ACCORDING TO INTERNAL PROCEDURE.

(D 92) SYSTEM CERTIFICATIONS

QUALITY SYSTEM CERTIFIED ACCORDING TO EN 9001:2015 AND IATF 16949:2016 AND ISO 3834-2:2005 AND A SAFETY SYSTEM CERTIFIED ACCORDING TO ISO 45001:2018 AND AN ENVIRONMENTAL SYSTEM CERTIFIED ACCORDING TO ISO 14001:2015 AND ENERGY SYSTEM CERTIFIED ACCORDING TO ISO 50001:2018.

(D 93) PRODUCT CERTIFICATIONS

DVGW ACCORDING TO GW541 LASER AND TIG WELDED TUBES STAINLESS STEEL GRADE 1.4404 DIA FROM 15.00 TO 108.00MM AND GRADE 1.4521 FROM 15.00 TO 54.00MM.

TUV AD2000 W2W10 AND PED ANNEX I, PARAGRAPH 4.3 LASER AND TIG WELDED TUBES STAINLESS STEEL GRADE 1.4301, 1.4306, 1.4307, 1.4401, 1.4404, 1.4541, 1.4571, 1.4435, 1.4436 THICKNESS FROM 0.80 TO 4.00MM AND DIAMETERS FROM 8.00 TO 283.00 MM. EHEDG FOR DAIRY TUBES TXT015. EUROPEAN DIRECTIVE 1935:2004 FOR DAIRY TUBES TXT003, TXT014, TXT015.

(D 94) NOTE

CHEMICAL COMPOSITION ACCORDING TO EN 10028-7 TUBE TO EN 10217-7 TC1 AND DIRECTIVE 2014/68/EU (PED), WELDING FACTOR V=1

RAW MATERIAL ACCORDING TO NORSOK M-630 / MDS S15

CERTIFICATE VALIDATION

(Z 01) Dichiarazione di Conformità: WE CERTIFY THAT THE ABOVE MENTIONED PRODUCTS COMPLY WITH THE TERMS OF ORDER CONTRACT AND THE STANDARDS RECALLED IN THE PRESENT TEST CERTIFICATE

(Z 02) The present test certificate is validated by **S.Toscano** - Quality Manager, Marcegaglia Specialties Forlimpopoli Plant authorized inspection representative, independent of the manufacturing department

(Z 03) THIS DOCUMENT WAS PRODUCED AUTOMATICALLY AND IS VALID WITHOUT SIGNATURE as, in according to EN 10204:2004, the present inspection certificate is validated by the responsible person with name and position.