

(A 04) 	(A 01) Via Bresciani, 16 46040 Gazoldo degli Ippoliti Mantova Italy Tel. +39 - 0376 685 1 www.marcegaglia.com Stabilimento di Forli: Via E.Mattei, 20 47034 Forlimpopoli, Forli-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 10524224215 (Z 02) Issue Date 27/03/2024
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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:	8930369763	Of	27/03/2024
(A 10)	Shipping Notice:	1005003148	Of	27/03/2024

ORDER DATA

(A 08)	Marcegaglia Order Number:	1191715525/000410
(A 07)	Customer Order Number:	OV-98/2024
(A 07)	Date Of Order Confirmation To The Customer:	12/01/2024
(A 09)	Part Number:	

PRODUCT IDENTIFICATION

(B 01)	Material Code:	59004640
(B 09, B 10, B 11)	Material Description:	TXT003 28x1,5x6000 TP304L LAS LZ
(B 02)	Stainless Steel Grade:	14307 TP 304L 1.4307/1.4301 X2CrNi18-9/X5CrNi18-10
(B 03)	Manufacturing Standard:	EN 10217-7 TC1 EN 10357 ASTM A270
(B 03)	Dimensional Tolerance Standard:	EN 10357 - DIN 11850
(B 14)	Welding Technology:	LASER WELDING
(B 04)	Delivery Conditions:	CL1 W2b CC
(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 EN10217-7 TC1 EN 10357 \$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	24W8000362	E231437	546	495.31	91

(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	24W8000362	0.021	0.336	1.690	0.0350	0.0010	0.0900	18.320	8.170

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	24W8000362	CAMP1	L	371	411	600	49.5

DESTRUCTIVE TESTS

(C 62)DRIFT EXPANDING TEST ACCORDING TO EN ISO 8493:2005: CONFORM

(C 60)FLATTENING TEST ACCORDING TO EN ISO 8492:2004: CONFORM

(C 63)RING EXPANDING TEST ACCORDING TO EN ISO 8495:2004: CONFORM

TENSILE TEST ACCORDING TO EN ISO 6892-1:2009

(D 51)INTERGRANULAR CORROSION TEST ACCORDING TO EN ISO 3651-2:1998: CONFORM

NON DESTRUCTIVE TESTS

(D 02)EDDY CURRENT TEST FOR THE VERIFICATION OF HYDRAULIC LEAKTIGHTNESS ACCORDING TO EN ISO 10893-1:2011: CONFORM

(D 03)EDDY CURRENT TEST FOR THE DETECTION OF IMPERFECTIONS ACCORDING TO EN ISO 10893-2:2011: CONFORM

(D 05)ANTIMIXING TEST: CONFORM

(D 01)VISUAL INSPECTION AND DIMENSIONAL CONTROLS: CONFORM

CLASS 1 - CL1 ROUGHNESS RA VALUES MEASURED FOR RAW MATERIAL MAX 0,8 UM AND INTERNAL WELDING AREA MAX 1,6 UM ACCORDING TO EN 10357 : 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 ACCONDRING 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 ACCONDRING 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 ENVIROMENTAL 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 W2\W10 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 DIAMETRS 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 DIN 11850 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.Toscana** - 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.