Certificate

Quality management system for Manufacturer of Materials acc. to Directive 2014/68/EU

Certificate no.: 01 202 USA/Q-03 8928.00

Name and address of the certificate holder:
Carpenter Technology Corporation
101 West Bern Street
Reading PA 19601
USA

Herewith we certify that the material manufacturer has established and applies a Quality Management System. The system was audited according to the European Directive 2014/68/EU, Annex I, point 4.3, with regard to the materials as listed in the scope of approval.

Test basis: **QM System acc. to EN 764-5, Clause 4.2 and AD 2000-Merkblatt W0**

Audit report no.: 01 202 USA/Q-03 8928

Scope: **Manufacturer of austenitic steel and non-ferrous bars, forgings and wire products, see annex to certificate: 01 202 USA/Q-03 8928, revision 19 from 3-Nov-22**

Manufacturing plant: see annex 2

Validity: **This certificate is valid to 2027-07-30.**

Cologne, 2024-08-01

Ines Krüger-Führ

TÜVRheinland® 0035 Notified Body

TÜV Rheinland Industrie Service GmbH
Notified Body for Pressure Equipment, ID-No. 0035
Am Grauen Stein, D-51105 Cologne

E-108a

Annex 2

Quality management system for Manufacturer of Materials acc. to Directive 2014/68/EU

Certificate no.: 01 202 USA/Q-03 8928.00

Name and address of the certificate holder:

Carpenter Technology Corporation
101 West Bern Street
Reading PA 19601
USA

Manufacturing plants:

Carpenter Technology Corporation
101 West Bern Street
Reading PA 19601
USA

Carpenter Technology Corporation
Hartsville Operations
205 Carpenter Technology Lane
McBee SC 29101
USA

Carpenter Technology Corporation
Orwigsburg Operations
116 Pinedale Industrial Road
Orwigsburg PA 17961
USA

Carpenter Technology Corporation
Athens Operations
22110 Thomas L Hammons Rd.,
Tanner AL 35671
USA

TÜVRheinland® 0035 Notified Body

Cologne,
2024-08-01

Ines Krüger-Führ

TÜV Rheinland Industrie Service GmbH
Notified Body for Pressure Equipment, ID-No. 0035
Am Grauen Stein, D-51105 Cologne

E-999

Annex to Certificate No. : 01 202 USA/Q-03 8928

TÜVRheinland®

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☐ EN 764-4	☒ AD 2000-Merkblatt W0	☐ Regulation (EU) No. 305/2011(System 2+)

Manufacturer	Work	Nationality	Date	Page No..	
Company Name: Carpenter Technology Corporation	-Same As Manufacturer -116 Pinedale Ind. Rd., Orwigsburg, PA 17961	USA	3-Nov-22	1	TÜV Rheinland Industrie Service GmbH
Location: 101 Bern St. Reading PA 19601 USA	-205 Carpenter Technology Ln, McBee, SC 29101 -22110 Thomas L Hammons Rd, Tanner, AL 35671		Rev.: 19	of : 4	

Cur -	Materials-term Materials-No.	Material Specification	Delivery Cond.	Article Type of Product	Dimensions Thick-ness mm from	Up to	∅ mm from	Up to	Weight max 1=t / 2=kg ⇓	result	Technical Specifications Requirements Technical Regulations	Remarks
1	2	3	4	5	6a	6b	7a	7b	8a	8b	9	10
2. Materials according to the AD 2000-Code												
The use of the materials according to DGR 2014/68/EU is bound to the publication of Harmonized European Standards or to the qualification by a European material approval or to the particular material appraisal. With that the manufacturing reliability for equivalent material grades according to other standards (e.g. BS, AFNOR, ASME) is proved. The requirements and limits of the applicable code respectively the PED must be observed for the use of material grades listed in column 2 to 4.												
	Reading & Orwigsburg											
01	1.4301, 1.4306, 1.4401, 1.4404	EN 10272	A	Bar	3.2	250	2.5	250	-	-	AD2000-W0, W2, W10	For Bars >160mm UT Operator to be qualified in accordance with PED Annex I 3.1.3
02	1.4303	EN 10269	A	Wire	-	-	2.5	32	-	-	AD2000-W0, W2, W10	
	Athens											
03	1.4401, 1.4404	EN 10272 (Excluded Mechanical)*	AF	Bar	-	-	153	180	-	-	AD2000-W0, W2	For Bars >160mm UT Operator to be qualified in accordance with PED Annex I 3.1.3

Remarks

+AT = solution annealed
+AF = as forged
+M = thermo mechanical treated
+N = normalized or normalizing formed
+SH = Strain Hardened
+NT = normalized and tempered
+QT = quenched and tempered
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a = PMA for the use in pressure equipment in Directive 2014/68/EU neccessary

Annex to Certificate No. : 01 202 USA/Q-03 8928

TÜVRheinland®

Scope according to	☒ Directive 2014/68/EU Annex I §4.3	☐ EN 764-4	☐ AD 2000-Merkblatt W0	☐ Regulation (EU) No. 305/2011(System 2+)

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	3. Materials according to international standards (e. g. ASTM, ASME, IBR etc.)											
	The use of the materials according to Directive 2014/68/EU is bound to the publication of Harmonized European Standards or to the qualification by a European material approval or to the particular material appraisal. With that the manufacturing reliability for equivalent material grades according to other standards (e.g. BS, AFNOR, ASME) is proved. The requirements and limits of the applicable code respectively the PED must be observed for the use of material grades listed in column 2 to 4.											
	Reading & Orwigsburg											
01	1.4301, 1.4306, 1.4401, 1.4404	EN 10088-3	AT	Bar	3.2	250	3.2	250	-	-	EN	a
02	1.4303	EN 10088-3	AT	Bar	3.2	250	3.2	250	-	-	EN	a
	McBee											
03	1.4401, 1.4404	EN 10088-3	AT	Bar	-	-	22	76	-	-	EN	a

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	Reading & Orwigsburg											
01	316,316L,316N,304,304L,304N	ASTM / ASME A/SA276	A	Bars	3.2	83	3.2	83	-	-	ASTM/ASME	a
02	304, 304N, 316, 316N	ASTM / ASME A/SA276	SH	Bars	3.2	83	3.2	83	-	-	ASTM/ASME	a
03	316,316L,316N,304,304L,304N	ASTM / ASME A/SA479	A	Bars	3.2	250	3.2	250	-	-	ASTM/ASME	a
04	304, 304L, 316, 316L	ASTM / ASME A/SA 479	SH	Bars	3.2	250	3.2	250	-	-	ASTM/ASME	a
05	F316, F316L, F304, F304L	ASTM / ASME A/SA182 (Chem. Only)	AT	Bars	3.2	83	3.2	83	-	-	ASTM/ASME	a
06	Grade 660	ASTM / ASME A/SA453	AT	Bars	3.2	250	3.2	250	-	-	ASTM/ASME	a
07	N04400	ASTM / ASME B/SB164	SR	Bars	3.2	250	3.2	250	-	-	ASTM/ASME	a
08	Alloy N10276	ASTM / ASME B/SB574	A	Bars	3.2	250	3.2	250	-	-	ASTM/ASME	a
09	N07750	ASTM / ASME B/SB637	A	Bars	3.2	250	3.2	250	-	-	ASTM/ASME	a
10	N06625	ASTM / ASME B/SB446	A	Bars	3.2	255	3.2	255	-	-	ASTM/ASME	a
11	N08020	ASTM / ASME B/SB473	A	Bars	3.2	255	3.2	255	-	-	ASTM/ASME	a

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3. Materials according to international standards (e. g. ASTM, ASME, IBR etc.)												
	McBee											
12	316,316L,316N,304,304L,304N	ASTM / ASME A/SA 276	A	Bars	22	38	22	76	-	-	ASTM/ASME	a
13	304, 304N, 316, 316N	ASTM / ASME A/SA 276	SH	Bars	22	38	22	76	-	-	ASTM/ASME	a
14	316,316L,316N,304,304L,304N	ASTM / ASME A/SA 479	A	Bars	22	38	22	76	-	-	ASTM/ASME	a
15	304, 304L, 316, 316L	ASTM / ASME A/SA 479	SH	Bars	22	38	22	76	-	-	ASTM/ASME	a
			A	Wire	-	-	13	38	-	-	ASTM/ASME	a
16	F316, F316L, F304, F304L	ASTM / ASME A/SA 182	AT	Bars	22	38	22	76	-	-	ASTM/ASME	a
		(Chemistry Only)	AT	Wire	-	-	13	38	-	-	ASTM/ASME	a
17	**Athens**											
	316/316L	ASTM / ASME A/SA 484 (Excluding Mechanicals)	AF	Bar	-	-	153	180	-	-	ASTM/ASME	a
	All Facilites (except Athens)											
18	UNS S17400 (Type 630)	ASTM / ASME A/SA 564	AT & AT/SH	Bars	-	-	3.2	102	-	-	ASTM/ASME	a
	17-4 PH (H900, H1150)		AT & A/TSH	Wire	-	-	9.1	38	-	-	ASTM/ASME	a

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