

# CERTIFICATE

### **TUV SUD BABT Unlimited**

certifies that

FDB – FORGIA DI BOLLATE S.p.A. Strada Provinciale 4, n. 9

IT - 46013 Canneto sull'Oglio (MN)

has implemented, operates and maintains a

Quality Assurance System in accordance with the Pressure Equipment (Safety) Regulation 2016/1105, Schedule 2, Part. 4, Para. 31 (8) as well as EN 764-5, Para. 4.2

as a material manufacturer for the scope of

forgings in austenitic and ferritic steels.

The scope of the approval is described in the annex to this certificate. Further details are mentioned in report no. C-722297696-22.

The manufacturer is therefore authorized to issue certificates of specific product control within the scope of the assessed quality system and in accordance with the Pressure Equipment (Safety) Regulation 2016/1105. Possible additional requirements - specific to applied technical specifications to meet PER 2016/1105, Schedule 2 - are not affected.

This certificate is valid through 2025-12-31.

In order to adhere the validity an annual surveillance audit is required.

Certificate No.: PER-0168-QS-M 3257599 /2023/MUC-01

Fareham, 2023-01-23

**TUV SUD BABT Unlimited** 

Certification Body
Materials and Permanent Joining

TUV SUD BABT Unlimited Octagon House, Concorde Way Segensworth North, Fareham, Hampshire, PO 15 5RL, United Kingdom







### Scope of the approval - Manufacturer of material in accordance with PER 2016/1105, Schedule 2, Part 4, Para. 31 (8)

#### Annex to certificate no. PER-0168-QS-M 3257599/2023/MUC-01 von / dated 2023-01-23

FDB - FORGIA DI BOLLATE S.p.A. Name:

Street:

City:

Strada Provinciale 4, n. 9 46013 Canneto sull'Oglio (MN) Country: Page Date: rev. 0 IT 2023-01-23 1 of 4

**Competent Body of TUV SUD BABT Unlimited** 

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No.	Material Designation	Mat	terial	Delivery	Description		Dime	nsions	i	W	eight	Requir	ements	D = 11 = 11 = 0 700007000 00	
	Material Grade	Speci	fication	Condition	Product	Thi	ckness	Dia	ameter	1=t		Technical Rules		Report no. C-722297696-22	
							mm]	_	mm]	2=kg				dated 2022-10-11	
		Spec.	No.	Code		١.	i,	-	1	2 1/9				Remarks	
		'				from	to	from	to	$\downarrow$	value	Spec.	No.		
1	2	3a	3b	4	5	6a	6b	7a	7b	8a	8b	9a	9b	10	
01*)	Allgemeine Baustähle / constructional steels	EN	10250-2	N	Schmiedestück / forging Stabstahl / bar Flansch / flange	-	250	-	-	1	18,5			*) To fulfil essential safety requirements of PER Schedule 2, for each material acc. to non designated standards a Particular Material Appraisal (PMA) is	
02	X5CrNi18-10 (1.4301), X5CrNi18-12 (1.4303), X2CrNi19-11 (1.4306), X2CrNiN18-10 (1.4311), X5CrNiMo17-12-2 (1.4401), X2CrNiMo17-12-2 (1.4404), X2CrNiMoN 17-11-2 (1.4406), X6CrNiTi18-10 (1.4541), X6CrNiMoTI17-12-2 (1.4571)	EN	10222-5	AT	Schmiedestück / forging Stabstahl / bar Flansch / flange	-	250	-	-	1	5			mandatory.	
03	16Mo3 (1.5415), 11CrMo9-10 (1.7383), 13CrMo4-5 (1.7335), P250GH / C22.8 (1.0460), P245GH (1.0352), P265GH (1.0425), P280GH (1.0426), P295GH (1.0481), P305GH (1.0436)*2	EN	10222-2	N/QT	Schmiedstück / forging Stabstahl / bar Flansch / flange Schüsse / steel sections	-	250 *2 300	-	-	1	18,5 *2 8,2				
	, , ,										,				
04	P250GH / C22.8 (1.0460)	EN VdTÜV	10222-2 350/3*)	N	Flansch / flange	-	250	-	-	1	2			For the use of materials acc. to column 2 till	
05	18MnMoNi5-5 (1.6308)	EN	10222-2	QT	Schmiedestück / forging Stabstahl / bar	-	220	-	-	1	2,1			4 the regulations and limits of the respective standards have to be observed.  The specific material operating conditions	
06	12Ni14 (1.5637)	EN	10222-3	QT	Schmiedestück / forging Stabstahl / bar Flansch / flange Schüsse / steel sections	-	105	-	-	1	2			have to be approved by the pressure equipment manufacturer or respectively by the Approved Body in charge.	

Explanation:

Manufacturer:

AT = solution annealed NT = normalized and tempererd N = normalized S = stress relieved TM = thermo-mech. treated U = not annealed

QT = quenched and tempered CR = temperature controlled hot formed (controlled rolled) A = annealed AR = as rolled

**a** = material designation in column 10 **b** = condition in column 10 **c** = object in column 10

 $\mathbf{d}$  = dimensions acc. to technical rules  $\mathbf{e}$  = weight acc. to technical rules  $\mathbf{f}$  = technical rules reference column 10

Created / revised: 2022-02-21 Approved: 2022-02-21 W. Schock Page 1 of 4 File: TS-BABT-M-10\_Scope of approval Revision: V 2 Printed copies are not subject to change service! Copyright TUV SUD BABT Unlimited



# Scope of the approval – Manufacturer of material in accordance with PER 2016/1105, Schedule 2, Part 4, Para. 31 (8)

### Annex to certificate no. PER-0168-QS-M 3257599/2023/MUC-01 von / dated 2023-01-23

Name: FDB – FORGIA DI BOLLATE S.p.A.

Manufacturer:

Street: Strada Provinciale 4, n. 9

City: 46013 Canneto sull'Oglio (MN)

Country: Date: Page rev. 0 2023-01-23 2 of 4

Competent Body of TUV SUD BABT Unlimited

No.	Material Designation  Material Grade	Material Specification		Delivery Condition	'			nsions I		Weight		Requirements Technical Rules		Report no. C-722297696-22
	Waterial Glade	Орссі	noation	Condition	rioduot		ckness		meter	1=t 2=kg		1 00111110	ai raics	dated 2022-10-11
		Spec.	No.	Code		_	mm] 		nm] 					Remarks
					_	from	to	from	to	<b>+</b>	value	Spec.	No.	
1	2	3a	3b	4	5	6a	6b	7a	7b	8a	8b	9a	9b	10
07*)	C 22.3 (1.0427)	VdTÜV	364	N	Schmiedestück / forging Stabstahl / bar Flansch / flange Schüsse / steel sections	-	150	-	-	1	18,5			*) To fulfil essential safety requirements of PER Schedule 2, for each material acc. to non designated standards a Particular Material Appraisal (PMA) is mandatory.
08*)	C 21 (1.0432)	VdTÜV	399/3	N	Schmiedestück / forging Stabstahl / bar Flansch / flange Schüsse / steel sections	-	150	-	-	1	18,5			
09	P355NH (1.0565), P355QH1 (1.0571), P355NL1 (1.0566), P355NL2 (1.1106), W-, T-, StE 355	EN VdTÜV	10222-4 354/3*)	N/QT	Schmiedestück / forging Stabstahl / bar Flansch / flange Schüsse / steel sections	-	400	-	-	1	18,5			
10*)	15NiCuMoNb5 (1.6368)	VdTÜV	377/3	QT	Schmiedstück / forging Stabstahl / bar Flansch / flange	-	300	-	-	1	5			
11	S420N (1.8902), P420NH (1.8932), P420QH (1.8936), S420NL (1.8912)	EN VdTÜV	10222-4 356/3*)	N/QT	Stabstahl / bar Flansch / flange	-	400	-	-	1	18,5			
12	P285NH (1.0477), P460QH (1.8871)	EN	10222-4	N/QT	Schmiedestück / forging	-	340	-	-	1	24,0			
13*)	20Mn5 (1.1133), S235JRG2 (1.0038), S235J2G3 (1.0116), S355J2G3 (1.0570)	EN	10250-2	NT/QT	Schmiedestück / forging	-	400	-	-	1	18,5			For the use of materials acc. to column 2 till 4 the regulations and limits of the respective standards have to be observed.
14*)	20MnMoNi4-5 (1.6311)	EN	10250-3	QT	Schmiedestück / forging Stabstahl / bar	-	635	-	-	1	31,0			The specific material operating conditions have to be approved by the pressure equipment manufacturer or respectively by
15*)	X12Cr13 (1.4006)	EN	10250-4	QT	Schmiedestück / forging	-	160	-	-	1	17,2			the Approved Body in charge.

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### Scope of the approval - Manufacturer of material in accordance with PER 2016/1105, Schedule 2, Part 4, Para. 31 (8)

#### Annex to certificate no. PER-0168-QS-M 3257599/2023/MUC-01 von / dated 2023-01-23

FDB - FORGIA DI BOLLATE S.p.A. Name:

Street:

City:

Strada Provinciale 4, n. 9 46013 Canneto sull'Oglio (MN)

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Page

Date:

Country:

**Competent Body of TUV SUD BABT Unlimited** 

	T	1		T	T							+		
No.	Material Designation	Material		Delivery Description		Dimensions			Weight		Requirements		Report no. C-722297696-22	
	Material Grade	Speci	fication	Condition	Product	Thic	ckness	Dia	meter	1=t		Technical Rules		dated 2022-10-11
		Cnaa	No.	Code		1]	mm] I	[r	mm] I	2=kg				Remarks
		Spec.	INO.	Code		from	to	from	to	$\downarrow$	value	Spec.	No.	Remarks
1	2	3a	3b	4	5	6a	6b	7a	7b	8a	8b	9a	9b	10
16*)	SA-105	ASME ASTM	SA-105 A105	NT/QT	Schmiedestück / forging	-	805	-	-	1	18,0			*) To fulfil essential safety requirements of PER Schedule 2, for each material acc. to non designated standards a
17*)	F9 F11 Cl3 F12 Cl2 F22 Cl1, Cl3 F22V	ASME ASTM	SA-182 A182	N/QT	Schmiedestück / forging	- - - -	300 500 490 500 580	- - - -	- - - -	1 1 1 1	18,5 18,5 10,6 22,0 14,0			Particular Material Appraisal (PMA) is mandatory.
18*)	F347/F347H F51, F53, F55	ASME ASTM	SA-182 A182	AT	Schmiedestück / forging	-	600 450	-	-	1	18,5 7,5			
19*)	F304, F304L, F316, F316L, F316LN, F316Ti, F317L, F321	ASME ASTM	SA-182 A182	AT	Schmiedestück / forging Stabstahl / bar	-	350	-	-	1	8,0			
20*)	F1, F5, F91 Type 1, F92	ASME ASTM	SA-182 SA-336 A182 A336	NT	Schmiedestück / forging	-	315	-	-	1	5,9			
21*)	F6a Cl.1/Cl.2	ASME ASTM	SA-182 A182	NT	Schmiedestück / forging	-	375	-	-	1	17,2			
22*)	Grade 1, 2, 3, 4	ASME ASTM	SA-266 A266	NT	Schmiedestück / forging	-	340	-	-	1	24,0			
23*)	F11 Cl3, F12, F22 Cl1, Cl3 F22V	ASME ASTM	SA-336 A336	N/NT/QT	Schmiedestück / forging Stabstahl / bar	- - -	500 490 500 580	- - -	- - -	1 1 1	22,0 10,6 22,0 14,0			For the use of materials acc. to column 2 till 4 the regulations and limits of the respective standards have to be observed. The specific material operating conditions have to be approved by the pressure
24*)	LF2 LF6	ASME ASTM	SA-350 A350	N QT	Schmiedestück / forging Stabstahl / bar	-	520 550	-	-	1	13,7 12,9			equipment manufacturer or respectively by the Approved Body in charge.

Explanation:

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# Scope of the approval – Manufacturer of material in accordance with PER 2016/1105, Schedule 2, Part 4, Para. 31 (8)

Deliverv

Description

Material

### Annex to certificate no. PER-0168-QS-M 3257599/2023/MUC-01 von / dated 2023-01-23

Name: FDB – FORGIA DI BOLLATE S.p.A.

Material Designation

Manufacturer:

No.

Street: Strada Provinciale 4, n. 9

City: 46013 Canneto sull'Oglio (MN)

Weiaht

Requirements

Dimensions

Competent Body of TUV SUD BABT Unlimited

NO.	Material Designation	IVIG	lenai	Delivery	Description		Dimensions		,			Report no. C-722297696-22		
	Material Grade	Speci	fication	Condition	Product	Thic	ckness	Dia	meter	1=t		Technic	al Rules	·
														dated 2022-10-11
		Spec	No.	Code		Į.	 	Li	! !!!!! 	Z-kg				Remarks
		0,000				from	to	from	to	<b>\</b>	value	Spec.	No.	
1	2	3a	3b	4	5	6a	6b	7a	7b	8a	8b	9a	9b	10
25*)	Grade 3 Cl.1/Cl.2	ASME ASTM	SA-508 A508	QT	Schmiedestück / forging	-	295	-	-	1	4,6			*) To fulfil essential safety requirements of PER Schedule 2, for each material acc. to non designated standards a
26*)	630	ASME ASTM	SA-564 SA-705 A564	А	Schmiedestück / forging	-	350	-	-	1	2,5			Particular Material Appraisal (PMA) is mandatory.
27*)	F52, F60, F65, F70	ASTM	A694	QT	Schmiedestück / forging	-	580	-	-	1	10,0			
		ASME ASTM	SA-765 A765	NT NT/QT	Schmiedestück / forging Stabstahl / bar	-	220 500	-	-	1	8,0 10,6			
														For the use of materials acc. to column 2 till 4 the regulations and limits of the respective standards have to be observed. The specific material operating conditions have to be approved by the pressure equipment manufacturer or respectively by the Approved Body in charge.
	25*) 26*) 27*)	1 2 25*) Grade 3 Cl.1/Cl.2 26*) 630 27*) F52, F60, F65, F70	Spec.  1 2 3a  25*) Grade 3 Cl.1/Cl.2 ASME ASTM  26*) 630 ASME ASTM  27*) F52, F60, F65, F70 ASTM  28*) Grade II ASME	Spec. No.  1 2 3a 3b  25*) Grade 3 CI.1/CI.2 ASME ASTM A508 ASTM A508 ASTM A508 ASTM A508 ASTM A564 ASTM A694 A705 ASTM A694 ASME SA-765 ASTM A694 ASME SA-765	Spec. No. Code  1 2 3a 3b 4  25*) Grade 3 CI.1/CI.2 ASME ASTM A508 ASTM A508 ASTM A508 ASTM A564 SA-705 ASTM A564 A705 ASTM A694 A705 ASTM A694 QT  28*) Grade II ASME SA-765 NT	Spec.   No.   Code     Finckness   Diameter   Fit   Fit   F52, F60, F65, F70   ASME   ASME   ASME   ASME   ASME   ASME   AFF   ASME   AFF   ASME   AFF   ASME   AFF   ASME   AFF   AFF	Spec. No. Code   Spe	Spec.   No.   Code	Spec.   No.   Code					

Explanation: AT = solution annealed NT = normalized and tempererd N = normalized S = stress relieved TM = thermo-mech. treated U = not annealed

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