



CERTIFICATE

TUV SUD BABT Unlimited

certifies that

voestalpine BÖHLER Edelstahl GmbH & Co KG
Mariazeller Straße 25
AT-8605 Kapfenberg

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, bars, ingots,
continuous casting billets, slabs and billets.

The scope of the approval is described in the annex to this certificate.
Further details are mentioned in report no. C-725196072-22.

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 2025-02-28.

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

Certificate No.: PER-0168-QS-M 3203317/2022/MUC-01
Fareham, May 9th, 2022

TUV SUD BABT Unlimited

(M. Strobel)

Certification Body
Materials and Permanent Joining

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

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CERTIFICAT

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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 3203317/2022/MUC-01 dated 2022-05-09

| | | | | |
|---|--------------------|----------------------------|----------------|---|
| Name: voestalpine Böhler Edelstahl GmbH & Co KG | Country: AT | Date: rev. 0 2022-05-09 | Page 1 of 5 | Competent Body of TUV SUD BABT Unlimited |
| Manufacturer: Street: Mariazeller Straße 25 | | | | |
| City: AT-8605 Kapfenberg | | | | |

| No. | Material Designation Material Grade | Material Specification | | Delivery Condition Code | Description Product | Dimensions | | | | Weight | | Requirements Technical Rules | | Report no. C-725196072-22 dated 2022-03-16 |
|------|--|------------------------|---|----------------------------|--|---------------------------|--------------------------|---------------------------|-------|--------|---------|------------------------------|----|--|
| | | Spec. | No. | | | Thickness [mm] from to | Diameter [mm] from to | 1=t 2=kg ↓ value | Spec. | No. | Remarks | | | |
| 1 | 2 | 3a | 3b | 4 | 5 | 6a | 6b | 7a | 7b | 8a | 8b | 9a | 9b | 10 |
| 01*) | Allgemeine Baustähle constructional steels | EN EN | 10025-2 10250-2 | N | Schmiedestück / forging Stabstahl / bar | | 100 | | 100 | | | | | *) To fulfil essential safety requirements of PER Schedule 2, for each material acc. to non designated standards a Particular Material Appraisal (PMA) is mandatory. |
| 02 | Warmfeste Stähle Heat resitant steels | EN | 10222-2 | QT | Stabstahl / bar | | | | d | | | | | |
| 03 | P250GH (1.0460) | EN | 10222-2 | N | Schmiedestück / forging Stabstahl / bar | | 350 | | 500 | | | | | |
| 04 | P305GH (1.0436) 16Mo3 (1.5415) 13CrMo4-5 (1.7335) 11CrMo9-10 (1.7383) | EN | 10222-2 | N/QT N/QT N/QT QT | Schmiedestück / forging Stabstahl / bar | | 250 | | 375 | | | | | |
| 05 | 12Ni14 (1.5637) X12Ni5 (1.5680), X8Ni9 (1.5662) | EN | 10222-3 | N/QT N/QT | Schmiedestück / forging Stabstahl / bar | | 70 | | 105 | | | | | |
| 06 | Austenitische Stähle Austenitic steels | EN EN EN EN | 10222-5 10272 10269 10302 10088 | AT | Schmiedestück / forging Stabstahl / bar | | d | | d | | | | | |
| 07 | A2, A4 | EN ISO | 3506-1 | AT | Stabstahl für Verbindungselemente / bars for fasteners | | | | d | | | | | |

Explanation: 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
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PER 2016/1105, Schedule 2, Part 4, Para. 31 (8)**

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| Manufacturer: Street: Mariazeller Straße 25 | | | | |
| City: AT-8605 Kapfenberg | | | | |

| No. | Material Designation Material Grade | Material Specification | | Delivery Condition Code | Description Product | Dimensions | | | | Weight | | Requirements Technical Rules | | Report no. C-725196072-22 dated 2022-03-16 |
|------|---|------------------------|-------|----------------------------|--|----------------|-----|---------------|------------|--------|-------|------------------------------|-----|---|
| | | Spec. | No. | | | Thickness [mm] | | Diameter [mm] | | 1=t | value | Spec. | No. | |
| | | | | | | from | to | from | to | ↓ | | | | |
| 1 | 2 | 3a | 3b | 4 | 5 | 6a | 6b | 7a | 7b | 8a | 8b | 9a | 9b | 10 |
| 08*) | X 8 CrNiNb 16 13 X 8 CrNiMoNb 16 16 X 8 CrNiMoVNb 16 13 | VdTÜV | 104 | AT | Schmiedestück / forging Stabstahl / bar | | 260 | | 300 400 | | | | | *) To fulfil essential safety requirements of PER Schedule 2, for each material acc. to non designated standards a Particular Material Appraisal (PMA) is mandatory. 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. |
| 09*) | X20CrMoV11-1 (1.4922) | VdTÜV | 110 | QT | Schmiedestück / forging Stabstahl / bar | | 250 | | 375 | | | | | |
| 10*) | X 8 CrNiMoBNb 16 16 wk (T262) | VdTÜV | 113/2 | b1 | Stabstahl / bar | | | | 80 | | | | | |
| 11*) | 14 MoV 6-3 (1.7715) | VdTÜV | 184 | QT | Schmiedestück / forging | | 60 | | | | | | | |
| 12*) | X 4 CrNiMoN 23 15 | VdTÜV | 307 | AT | Schmiedestück / forging | | 200 | | 300 | | | | | |
| 13*) | X6CrNi18-11 | DIN | 17460 | QT | Stabstahl / bar | | | | 160 | | | | | |
| 14*) | 20 NiCrMo 14 5 (1.6772) | VdTÜV | 337 | QT | Stabstahl / bar | | | | 130 | | | | | |
| 15*) | C 22.8 (1.0460) | VdTÜV | 350/3 | N | Schmiedestück / forging Stabstahl / bar | | 150 | | 225 | | | | | |
| 16*) | C 22.3 (1.0427) | VdTÜV | 364 | N | Schmiedestück / forging Stabstahl / bar | | 150 | | 225 | | | | | |
| 17*) | 15NiCuMoNb5 (1.6368) | VdTÜV | 377/3 | QT | Schmiedestück / forging Stabstahl / bar | | 250 | | 375 | | | | | |
| 18*) | X5CrNi13-4 (1.4313) | VdTÜV | 395/3 | QT | Schmiedestück / forging Stabstahl / bar | | 400 | | 400 | | | | | |

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| Manufacturer: Street: Mariazeller Straße 25 | | | | |
| City: AT-8605 Kapfenberg | | | | |

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|------|--|------------------------|-------|----------------------------|--|----------------|------------|---------------|-------------|--------|-------|------------------------------|-----|--|
| | | Spec. | No. | | | Thickness [mm] | | Diameter [mm] | | 1=t | value | Spec. | No. | Remarks |
| | | | | | | from | to | from | to | ↓ | | | | |
| 1 | 2 | 3a | 3b | 4 | 5 | 6a | 6b | 7a | 7b | 8a | 8b | 9a | 9b | 10 |
| 19*) | NiMo16Cr15W (2.4819) (L276) | VdTÜV | 400 | AT | Stabstahl / bar | | 360 | | 360 | | | | | *) To fulfil essential safety requirements of PER Schedule 2, for each material acc. to non designated standards a Particular Material Appraisal (PMA) is mandatory. |
| 20*) | 20MnMoNi5-5 (1.6310) | VdTÜV | 401/3 | QT | Massivteile / full parts Hohlteile / hollow parts | | 270 350 | | 400 1700 | | | | | |
| 21*) | X3CrNiMoN17-13-5 (1.4439) | VdTÜV | 405 | AT | Schmiedestück / forging Stabstahl / bar | | 300 | | 300 | | | | | |
| 22*) | X10NiCrAlTi32-20 (1.4876) | VdTÜV | 412 | AT | Schmiedestück / forging Stabstahl / bar | | 250 | | 300 | | | | | |
| 23*) | X2CrNiMoN22-5-3 (1.4462) (A903) | VdTÜV | 418 | AT | Schmiedestück / forging Stabstahl / bar | | 225 | | 300 | | | | | |
| 24*) | X2NiCrMoCu26-20-05 (1.4539) | VdTÜV | 421 | AT | Schmiedestück / forging Stabstahl / bar | | 160 | | 160 | | | | | |
| 25*) | X10NiCrAlTi32-20 H (1.4876) | VdTÜV | 434 | AT | Schmiedestück / forging Stabstahl / bar | | 250 | | 300 | | | | | |
| 26*) | X5NiCrTi26-15 (1.4980) (T200) | VdTÜV | 435/3 | b2 | Schmiedestück / forging Stabstahl / bar | | 300 | | 300 | | | | | |
| 27*) | 1.4533, 1.4553 1.4579 | VdTÜV | 451 | AT | Schmiedestück / forging Stabstahl / bar | | d | | d | | | | | |
| 28*) | NiCr21Mo14 W (2.4602) (L022) | VdTÜV | 479 | AT | Stabstahl / bar | | 360 | | 360 | | | | | |
| 29*) | 1.6909 | VdTÜV | 277/2 | b1 | Stabstahl / bar | | | | 60 | | | | | 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. |

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|------|--|------------------------|------------------|----------------------------|--|----------------|-------|---------------|----------------|-------------|-------|---------------------------------|-----|---|
| | | Spec. | No. | | | Thickness [mm] | | Diameter [mm] | | 1=t 2=kg | value | Spec. | No. | Remarks |
| 1 | 2 | 3a | 3b | 4 | 5 | 6a | 6b | 7a | 7b | 8a | 8b | 9a | 9b | 10 |
| 30*) | X10CrMoVNb9-1 (1.4903) | VdTÜV | 511/3 | QT | Schmiedestück / forging Stabstahl / bar | | 400 | | 400 | | | | | *) To fulfil essential safety requirements of PER Schedule 2, for each material acc. to non designated standards a Particular Material Appraisal (PMA) is mandatory. 1) Anwendungsgutachten K6031 TÜV SÜD SZA Österreich. Lieferung mit APZ 3.2. |
| 31*) | NiMo16Cr16Ti (2.4610) (L004) | VdTÜV | 424 | AT | Schmiedestück / forging Stabstahl / bar | | 180 | | 250 | | | | | |
| 32*) | X11CrMoWVNb9-1-1 (1.4905) | VdTÜV | 522/3 | QT | Schmiedestück / forging Stabstahl / bar | | 600 | | 600 | | | | | |
| 33*) | UNS 32750 (A913) | ASTM | A484 | AT | Stabstahl / bar | | | | 350 | | | | | |
| 34*) | UNS S32760 (A911SA) | ASTM | A484 | AT | Stabstahl / bar | | | | 350 | | | | | |
| 35*) | UNS S32550 (A926) | ASTM | A484 | AT | Stabstahl / bar | | | | 350 | | | | | |
| 36*) | X5 CrNiCuNb 14 5 3 (N701) | Siehe Bemerkungen1) | | AT | Schmiedestück / forging Stabstahl / bar | | 203,2 | | 203,2 203,2 | | | | | |
| 37*) | UNS N07718 | ASME | SB-637 | AT | Schmiedestück / forging Stabstahl / bar | | | 12,5 | 254 | | | | | |
| 38*) | NiCr22Mo9Nb (2.4856) (L625) UNS N06625 | ASME ASME | SB-564 SB-446 | A | Schmiedestück / forging Stabstahl / bar | | | 6,0 | 254 | | | | | |
| 39*) | NiCr23Mo16Al (2.4605) (L059) UNS N06059 | ASME | SB-564 | A | Schmiedestück / forging Stabstahl / bar | | | 12,5 | 375 | | | | | |

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|------|---|------------------------|--------|----------------------------|---|----------------|-----|---------------|-------|---------------------------|------|---------------------------------|-----|--|
| | | Spec. | No. | | | Thickness [mm] | | Diameter [mm] | | 1=t 2=kg ↓ value | | Spec. | No. | Remarks |
| | | | | | | from | to | from | to | | | | | |
| 1 | 2 | 3a | 3b | 4 | 5 | 6a | 6b | 7a | 7b | 8a | 8b | 9a | 9b | 10 |
| 40*) | NiCr20FeMo3TiCuAl (2.4852) (L925) | ASTM | B637 | A | Schmiedestück / forging Stabstahl / bar | | 375 | 12,5 | 254 | | | | | *) To fulfil essential safety requirements of PER Schedule 2, for each material acc. to non designated standards a Particular Material Appraisal (PMA) is mandatory. |
| 41*) | NiCr23Co12Mo (2.4863) (L617) UNS N06617 | ASME | SB-564 | A | Schmiedestück / forging Stabstahl / bar | | 254 | 12,5 | 235 | | | | | |
| 42 | Werkstoffe von lfd. Nr. 01-46 materials from No. 01-46 | | | | Blöcke / ingot Stranggußknüppel/ continuous casting billet Brammen /slab Knüppel / billet | 50 | 132 | | 252 | 2 | 1000 | | | |
| 43*) | 1.6368 | VdTÜV | 377/3 | QT | Vorgeformtes Halbzeug / Pre- deformed semi- finished products | | | | 700 | | | | | |
| 44*) | XM19 (P511) UNS S20910 | ASMT | SA-479 | AT TM | Schmiedestück / forging Stabstahl / bar Schmiedestück / forging Stabstahl / bar | | 350 | | 350 | | | | | |
| 45*) | Böhler P513 UNS S21800 | ASME | SA-276 | AT | Stabstahl / bar | | | | 203,2 | | | | | |
| 46*) | NiCr21Mo (2.4858) (L825) | ASME | SB-564 | AT | Stabstahl / bar | | | 6,0 | 254 | | | | | 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. |

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