

**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 3324031/2023/MUC-01 von / dated 2023-08-08**

|                                        |                                     |                            |              |                                                 |
|----------------------------------------|-------------------------------------|----------------------------|--------------|-------------------------------------------------|
| Name: ASOFORGE S.r.L.                  | Country: IT                         | Date: rev. 0<br>2023-08-08 | Page: 1 of 1 | <b>Competent Body of TUV SUD BAPT Unlimited</b> |
| Manufacturer: Street: Via Seriola, 122 | Werk / plant: Via Verginello, 29/31 |                            |              |                                                 |
| City: IT-25035 Ospitaletto (BS)        | IT-25045 Castegnato (BS)            |                            |              |                                                 |

| No.  | Material Designation<br>Material Grade                                                                                                                                                                                                                                            | Material Specification |                           | Delivery Condition<br>Code  | Description<br>Product | Dimensions     |    |               |      | Weight      |       | Requirements<br>Technical Rules |     | Report no. C-722314778-23<br>dated 2023-04-05                                                                                                                                                                                                                                         |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|-----------------------------|------------------------|----------------|----|---------------|------|-------------|-------|---------------------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      |                                                                                                                                                                                                                                                                                   | Spec.                  | No.                       |                             |                        | Thickness [mm] |    | Diameter [mm] |      | 1=t<br>2=kg | value | Spec.                           | No. |                                                                                                                                                                                                                                                                                       |
| 1    | 2                                                                                                                                                                                                                                                                                 | 3a                     | 3b                        | 4                           | 5                      | 6a             | 6b | 7a            | 7b   | 8a          | 8b    | 9a                              | 9b  | 10                                                                                                                                                                                                                                                                                    |
| 01   | C22.8/P250GH (1.0460),<br>15Mo3/16Mo3 (1.5415),<br>10CrMo9-10 (1.7380),<br>11CrMo9-10 (1.7383)                                                                                                                                                                                    | EN<br>DIN*)            | 10222-2<br>17243          | N<br>N/QT<br>NT/QT<br>NT/QT | Stab / bar             | -              | -  | 300           | 1000 | 1           | 13    |                                 |     | *) To fulfil essential safety requirements of PER Schedule 2, for each material acc. to non designated standards a Particular Material Appraisal (PMA) is mandatory.<br>If the max. thickness given in EN standards is exceeded, a PMA is required.                                   |
| 02   | P355NH (1.0565), QH1 (1.0571)<br>W, T, StE 355                                                                                                                                                                                                                                    | EN<br>DIN *)<br>TÜVV*) | 10222-4<br>17103<br>354/3 | N/QT                        | Stab / bar             | -              | -  | 300           | 1000 | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
| 03   | X5CrNi18-10 (1.4301),<br>X2CrNi18-9 (1.4307),<br>X2CrNi18-10 (1.4311),<br>X5CrNiMo17-12-2 (1.4401),<br>X2CrNiMo17-12-2 (1.4404),<br>X2CrNiMoN17-11-2 (1.4406),<br>X2CrNiMo18-14-3 (1.4435),<br>X3CrNiMo17-13-3 (1.4436),<br>X6CrNiTi18-10 (1.4541),<br>X6CrNiMoTi17-12-2 (1.4571) | EN                     | 10222-5                   | AT                          | Stab / bar             | -              | -  | 200           | 600  | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
|      |                                                                                                                                                                                                                                                                                   |                        |                           |                             |                        | -              | -  | 200           | 600  | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
|      |                                                                                                                                                                                                                                                                                   |                        |                           |                             |                        | -              | -  | 200           | 600  | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
|      |                                                                                                                                                                                                                                                                                   |                        |                           |                             |                        | -              | -  | 200           | 960  | 1           | 24    |                                 |     |                                                                                                                                                                                                                                                                                       |
|      |                                                                                                                                                                                                                                                                                   |                        |                           |                             |                        | -              | -  | 200           | 960  | 1           | 24    |                                 |     |                                                                                                                                                                                                                                                                                       |
|      |                                                                                                                                                                                                                                                                                   |                        |                           |                             |                        | -              | -  | 200           | 600  | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
|      |                                                                                                                                                                                                                                                                                   |                        |                           |                             |                        | -              | -  | 200           | 600  | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
|      |                                                                                                                                                                                                                                                                                   |                        |                           |                             |                        | -              | -  | 200           | 600  | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
|      |                                                                                                                                                                                                                                                                                   |                        |                           |                             |                        | -              | -  | 200           | 600  | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
|      |                                                                                                                                                                                                                                                                                   |                        |                           |                             |                        | -              | -  | 200           | 600  | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
| 04   | X2CrNiMoN22-5-3 (1.4462)                                                                                                                                                                                                                                                          | EN<br>TÜVV*)           | 10222-5<br>418            | AT                          | Stab / bar             | -              | -  | 180           | 400  |             |       |                                 |     | For the use of materials acc. to column 2 till 4 the regulations and limits of the respective standards have to be observed.<br>The specific material operating conditions have to be approved by the pressure equipment manufacturer or respectively by the Approved Body in charge. |
| 05*) | A105                                                                                                                                                                                                                                                                              | ASTM                   | A105                      | N/NT/QT                     | Stab / bar             | -              | -  | 300           | 1000 | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
| 06*) | LF2                                                                                                                                                                                                                                                                               | ASTM                   | A350                      | N/NT/QT                     | Stab / bar             | -              | -  | 300           | 1000 | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
| 07*) | F22<br>F51                                                                                                                                                                                                                                                                        | ASTM                   | A182                      | NT/QT<br>AT                 | Stab / bar             | -              | -  | 200           | 1000 | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |
| 08*) | 304, 304L, 304N, 316, 316L; 316N, 316Ti, 321                                                                                                                                                                                                                                      | ASTM                   | A182                      | AT                          | Stab / bar             | -              | -  | 200           | 600  | 1           | 13    |                                 |     |                                                                                                                                                                                                                                                                                       |

**Explanation:** AT = solution annealed NT = normalized and tempered 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  
d = dimensions acc. to technical rules e = weight acc. to technical rules f = technical rules reference column 10