



## **Product Certificate for Reinforcing Steel Products** No.: DK-FC-030-10080-003 version 3

Issued by FORCE Certification A/S in accordance with ABC-Reinforcing steel General terms for certification of reinforcing steel products 17th edition - October 2019

Issued to: **Badische Stahlwerke GmbH** 

> **Graudenzer Straße 45** D-77694 Kehl/Rhein

Germany

For the following product: Reinforcing steel in coils

Production address: Badische Stahlwerke GmbH

> Zur Rauhen Horst 7 D-32312 Lübbecke

Germany

Manufacturing process: Non-alloyed hot rolled, ribbed, cold stretched and coiled

Characteristic strength,  $R_{eH} = 550 \text{ N/mm}^2 \text{ (MPa)}$ Product specifications:

Characteristic ductility,  $R_m/R_{eH} = 1,08$  and  $A_{gt} = 5\%$ 

Class: B, according to Euro code 2

Characteristic bonding  $f_R = 0.040$  for 8 mm  $\leq d \leq 12$  mm

 $f_R = 0.056 \text{ for } d > 12 \text{ mm}$ 

Diameter d = 8 mm, 10 mm, 12 mm, 14 mm, 16 mm, and 20 mm

Standard specifications: Weight per meter, bend ability, weld ability, and fatigue are all fulfilled

Straightening: Suitable for roller and spinner straightening

As shown overleaf Rib geometry:

Rolled-in marking: 1 (Germany) and 21 (BSW) as shown overleaf Initial Inspection: FORCE Certification A/S file No. 113-31978.a

Type testing: FORCE Technology file No. 114-21132.a/122-27749

Previous certificate: DK-FC-030-10080-003 version 2, dated 2017-08-28

The examined reinforcing steel product fulfils the requirements in Danish Standard DS/EN 10080, 2<sup>nd</sup> Edition 2006-01-13, as well as Eurocode 2, DS/EN 1992-1-1+AC:2008 including DS/EN 1992-1-1 DK NA:2021.

The product certificate is valid for 5 years from the date of issue provided that periodical inspections are carried out during this period. If the product is altered or modified or the certification agreement terminates this certificate is no longer valid. The manufacturer shall inform FORCE Certification A/S about any planned modification.

Date of issue: Sianature: 2022-08-28

Date of expiry: 2027-08-28 FC task No.:

122-26983

FC ID No.: DK-0200-02845-3 Certification Manager



## The basis for issuing of certificate DK-FC-030-10080-003 version 3

| Danish Standard                         | DS/EN 10080, 2 <sup>nd</sup> Edition 2006-01-13 |
|---|---|
| FORCE Certification document            | Publication                                     |
|   | ABC-Reinforcing steel                           |
|   | 17 <sup>th</sup> Edition of October 2019        |
| FORCE Certification document            | Tjekliste for EN 10080 audit, version 1.5       |
| Initial Inspection Report               | FORCE Certification A/S file No. 113-31978.a    |
| Type Testing Report(s)                  | FORCE Technology file No. 114-21132.a           |
|   | FORCE Technology file No. 122-27749             |
| Continuous surveillance                 | Annual audit reports                            |
| QA responsible to FORCE Certification   | Jürgen Schultz                                  |
| Note in relation to update from version | General renewal                                 |
| 2 to version 3                          | Expansion, addition of diameter 20 mm           |

Rolled in code:





