

# Product Certificate

## Reinforcing Steel Products

### No.: DK-FC-030-10080-001 version 3

According to EN 10080, 2<sup>nd</sup> Edition 2006-01-13 and ABC-Reinforcing steel 9<sup>th</sup> Edition, product certificate is 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**

**Certified product:**

**Reinforcing steel in coils**

**Manufacturing process:**

**Non-alloyed hot rolled, ribbed , cold stretched and coiled**

**Product specifications:**

**Characteristic strength,  $R_{eH} = 550 \text{ N/mm}^2$  (MPa)**  
**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  $8 \text{ mm} \leq d \leq 12 \text{ mm}$**   
 **$f_R = 0,056$  for  $d > 12 \text{ mm}$**   
**Diameters,  $D = 8 \text{ mm}, 10 \text{ mm}, 12 \text{ mm}, 14 \text{ mm}$  and  $16 \text{ mm}$**

**Standard specifications:**

**Weight per meter, bend ability, weld ability and fatigue are all fulfilled**

**Straightening:**

**Suitable for roller and spinner straightening**

**Rib geometry:**

**As shown overleaf and extra mark for grade 550 MPa**

**Rolled-in marking:**

**1 (Germany) and 21 (BSW) as shown overleaf**

**Initial Inspection:**

**FORCE Certification: File No. m1472-210140 and 80.971-606/09**

**Type testing:**

**FORCE Technology: File No. 109-26570, 111-24835 and historical data**

**Previous certificate**

**This certificate replaces certificate No. DK-FC-030-10080-001 version 2**

The examined reinforcing steel product fulfils the requirements in EN 10080, 2<sup>nd</sup> Edition 2006-01-13. The product certificate is valid for 5 years from the date of issue provided that periodical inspections are carried out during this period according to Annex A of the standard. If the product is altered or modified or the certification agreement terminates this certificate is no longer valid.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 (yyyy-mm-dd):*

2016-05-04

*Signature:*



*Expiry date (yyyy-mm-dd):*

2021-05-04

*FORCE Certification A/S:*

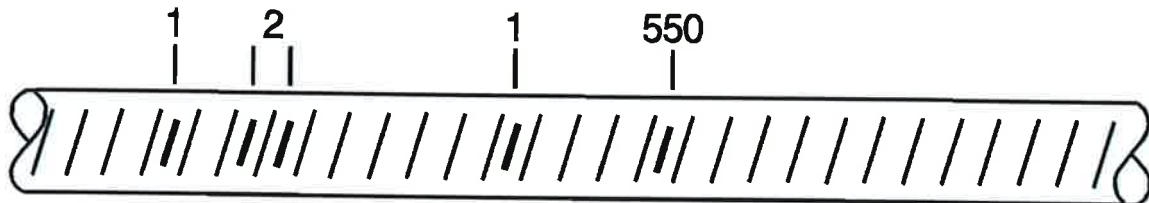
ID: 676/116-25802

Kasper Munk Eliassen  
Certification Manager

**The basis for issuing of certificate DK-FC-030-10080-001 version 3**

<b>Danish Standard</b>	<b>EN 10080, 2<sup>nd</sup> Edition 2006-01-13</b>
<b>FORCE Certification</b>	<b>Publication 1816-5-da, ABC-Reinforcing steel, 9<sup>th</sup> Edition of March 2009</b>
<b>FORCE Certification</b>	<b>Check list, Edition 1</b>
<b>Initial Inspection Report</b>	<b>FORCE Technology file no. m1472-210140 and FORCE Certification file no. 80.971-606/09</b>
<b>Type Testing Report</b>	<b>FORCE Technology file no. 107-22027.a, 107-22027.b, 107-22027.c, 108-31983, 109-26570, 111-24835, 115-32202 and historical data</b>
<b>QA responsible to FORCE Certification</b>	<b>Jürgen Schulz</b>

Rolled in code:



Or

