

KOMO[®]
product certificate



Number	K53316/02	Replaces	K53316/01
Issued	2013-10-15	Dated	2009-11-19
Valid until	Indefinite	Page	1 van 3

Mechanical Connections for Reinforcement Steel
Category 2, Ductility Class B
Types 4010 and 2020/2020-P

Demu Metaalindustrie B.V.

STATEMENT BY KIWA

This product certificate is issued on the basis of BRL " Mechanical Connections for Reinforcement Steel " issued on 2012-11-08 in accordance with the Kiwa Regulations for Product Certification.

Kiwa declares that legitimate confidence exists that the by the producer manufactured products on delivery comply with the technical specifications as laid down in this product certificate, provided that they have been marked with the KOMO[®]-mark in the manner as indicated in this product certificate.

Bouke Meekma
Kiwa

The certificate is included in the summary on the website of KOMO: www.komo.nl.
Advice: consult www.kiwa.nl in order to ensure that this certificate is still valid.

Holder of Certificate
Demu Metaalindustrie B.V.
Atoomweg 1, 3542 AA UTRECHT
P.O. Box 8486, 3503 RL UTRECHT
Tel. +31 (0)30 2 412 421
Fax +31 (0)30 2 414 469
E-mail info@demu.nl
www.demu.nl

Kiwa N.V.
Sir W. Churchill-laan 273
Postbus 70
2280 AB RIJSWIJK ZH
Tel. 070 414 44 00
Fax 070 414 44 20
www.kiwa.nl



Evaluated is:
quality system
product
Periodic inspection

Mechanical Connections for Reinforcement Steel

PRODUCT SPECIFICATION

General

Mechanical connections for reinforcement steel meet the requirements of section 2 of BRL 0504. Straightening, cutting and bending of the rebar ends and rebar anchors meet the requirements of section 4.3.2 of BRL 0503 "Cutting, bending and tack welded (prefab) reinforcing steel structures". The reinforcement steel of these couplers in the B500B meet the requirements of section 2 of BRL 0501 "Reinforcement Steel" and, therefore of section 1 "performance requirements" of NEN 6008.

Only complete mechanical rebar couplers made of reinforcement steel produced from the rebar anchors and rebar ends, specified under "additional information" are covered by this KOMO product certificate.

Further specification

Scope

The products are intended to make mechanical connections with KOMO certified reinforcement steel quality B500B according to NEN6008, and to be applied in concrete structures with a dynamic character such as, for example, bridge structures in accordance with NEN-EN 1992-1-1 + C2: 2011/NB: 2011. Fatigue strength category 2.

Category 2

For the mechanical connection, category 2, the supplier will determine the stress amplitude (2α) in accordance with Annex III of BRL 0504 at 2×10^6 load cycles.

Characteristic fatigue strength

The characteristic fatigue strength has been determined at 66 N/mm².

The characteristic fatigue strength has been determined in accordance with annex III of the BRL0504 with a stress amplitude (2α) at 2×10^6 load cycles and matches the reliability index: $P = 10 \%$

In these values the material factor for reinforcement steel: $\gamma_m = 1,15$ is not included.

Quality reinforcement steel

The reinforcement steel is supplied in the grade B500B (hot rolled).

The reinforcement steel can be supplied in any required length.

The reinforcement steel can be supplied as straight and bent rods where the bending mandrel must meet the requirements of section 4.3.2 of BRL 0503 "Cutting, bending and tack welded (prefab) reinforcing steel structures".

Diameter reinforcement steel

The reinforcement steel B500B (hot rolled), \varnothing 20 and 25 mm.

Production location

Production takes place at Demu Metaalindustrie B.V., Utrecht.

Markings

The products are provided with a label on which at least the following information is specified clearly and indelibly:

- KOMO[®] logo;
- Certificate number;
- Name or logo of the supplier;
- Coupler type;
- Ductility Class;
- Category number, specifying the Characteristic fatigue strength 2α .



Marking on the product:

The applied "supplier mark" for type 2020 is the character: D.

The applied "supplier mark" for type 4010 is the text: DEMU.

TIPS FOR THE USER

Inspect the following upon delivery:

- That what has been agreed has been delivered;
- The mark and marking method are correct;
- The products do not exhibit any damage or defect as a result of transport or handling.

If you decide to reject the product(s) based on the above, contact:

- DEMU Metaalindustrie B.V.
and, if required,
- Kiwa Nederland B.V.

Mechanical Connections for Reinforcement Steel

REGULATION BUILDING PRODUCTS

If a construction product is subject to a European harmonized technical specification, the statements in this KOMO (attestation including) product certificate must not be used as a replacement for the CE marking on such construction product and/or for the associated obligatory Declaration of Performance.

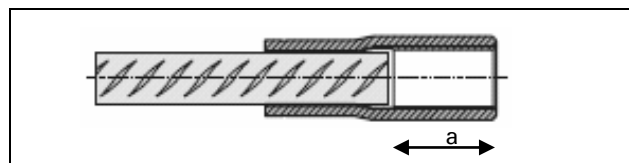
LIST OF DOCUMENTS MENTIONED*

NEN-EN 1992-2 Eurocode 2: Design of concrete structures - Concrete bridges - Design and detailing rules
 + C2+NB + National Annex
 NEN 6008 Reinforcement Steel
 BRL 0501 Reinforcement Steel
 BRL 0503 Cutting, bending and tack welded (prefab) reinforcing steel structures

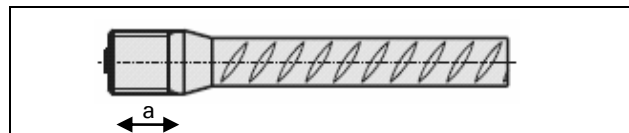
* For the correct version of the above-mentioned standards, please refer to the last revision page of BRL 0504.

ADDITIONAL INFORMATION

Rebar anchor 4010 (pressed version)



Rebar end 2020/2020-P (swaged and rolled version)



Tightening torque

	Ø20/M24	Ø25/M30
A rebar anchor 4010 size	38	48
A rebar end 2020 size	≥38	≥48
Tightening torque (Nm)	160	250
Tightening torque tolerances +/- 5%		