

The type approval body **Inspecta Sertifiointi Oy** has issued a type approval decision based on the Act on the Type Approval of Certain Construction Products (954/2012) to demonstrate that the product meets the requirements of the documents **Ympäristöministeriön asetus hitsattavien betoniterästen ja betoniteräsverkkojen olennaisista teknisistä vaatimuksista 125/2016** (Ministry of the Environment Decree on essential technical requirements of weldable reinforcing steel and mesh reinforcements) and **Ympäristöministeriön asetus hitsattavien betoniterästen ja betoniteräsverkkojen tyyppihyväksynnästä 126/2016** (Ministry of the Environment Decree on type approval of weldable reinforcing steel and mesh reinforcements). The decision concerns the following product:

### Reinforcement bars B500C, diameters 10 - 25 mm

The characteristics of the product are as follows:

- Characteristic value of offset limit 500 MPa
- Characteristic value of breaking yield ratio 1,15 – 1,35
- Characteristic value of overall uniform elongation 7,5 %
- Fatigue resistance: meets the requirements  $F_a$ ,  $F_b$ 
  - Linear density: meets the requirements
- Weldability and long-term durability: meets the requirements
  - Adhesion: meets the requirements
  - Bendability: meets the requirements

The product is designed to be used for the reinforcement of load-bearing concrete structures. The technical properties of the product have been type tested in the extent presented in standard **SFS 1300:2017**, and the factory's internal production quality control system meets the requirements of the standard.

The product also meets the following properties exceeding the minimum requirements:

- tack weldability has been tested according to the standard SFS 1202
  - characteristic value of tensile strength  $R_m \geq 600$  MPa
  - characteristic value of overall uniform elongation  $A_{gt} \geq 8,0$  %
- bendability 10 mm: 1,6d, 12 mm: 1,7d, 14 mm: 1,8d, 16 mm: 2,0d, 20 mm: 2,5d, 25 mm: 3,2d
  - relative rib area  $f_R$ : 10mm  $\geq 0,068$ , 12 - 25 mm  $\geq 0,073$

Manufacturer of the product:

### NLMK-Kaluga LLC

20, st. Liskina, Borovskiy district, Kaluga region, 249020 Vorsino

**Manufacturing place of the product:** Vorsino, Russia

The type approval decision has been made on 2018-06-18.  
The decision is in effect until 2023-06-18.



Mikko Törmänen, Managing Director

The type approval decision is based on the initial production inspection and the testing commissioned by the type approval body. The decision is in effect provided that the requirements included in the General Rules for Product Certification and the above-mentioned regulations and documents are continuously met. The quality control certifier mentioned in the annex continuously monitors the internal production quality control carried out by the factory and performs selection and testing of random samples. If the product is transferred to the scope of the CE marking, the type approval expires. The validity of the decision can be checked at [www.inspecta.fi](http://www.inspecta.fi)



Identification of the product: The product or its identification tag must include the type approval mark, product marking **B500C**, name of the manufacturer, manufacturing place as well as identification number of the type approval decision. The product must have a rolled manufacturer's mark. The manufacturer's mark is 9/47.

The quality control certifier of the product is **VTT Expert Services Oy**, Espoo.  
Date of the quality control agreement: 04.07.2017.

The inspection visit and testing reports that the decision is based on:  
**VTT-S-00672-18, VTT-S-00710-18, VTT-S-02274-18**