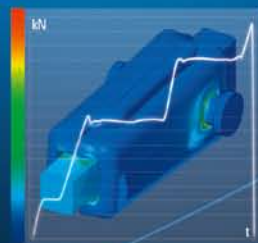


RIBE®

ELECTRICAL FITTINGS



RIBE® WEDGE-TYPE TENSION CLAMPS
OPTIMIZED INSTALLATION AND MAXIMUM SAFETY



Discover the new generation of RIBE® wedge-type tension clamps – with optimized installation features and maximum safety

Wedge-type tension clamps have a long tradition at RIBE® and are one of our success stories. More than 250,000 of these clamps have been installed throughout Europe in the past 50 years, over 45,000 of them in the last six years. The B118, the new generation of RIBE® wedge-type tension clamps, combines all the advantages of its predecessor and many details have been optimized in the new design.

Faster installation and higher specified minimum failure loads

The B118 wedge-type tension clamp with its newly designed straps and optimized jumper clamp is easier and faster to install than ever without special tools or cutting the conductor. The new fitting has a lower mass than competitive products, which makes it even better to handle during installation – and the conductor can be easily retensioned after installing the fitting.

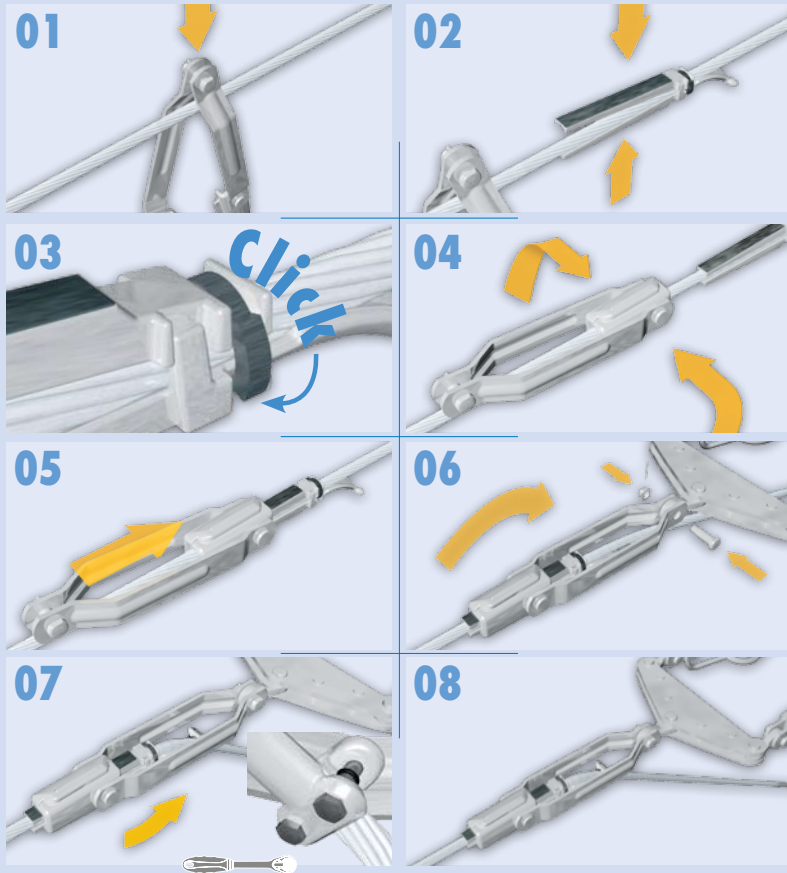
The newly developed housing design ensures higher specified minimum failure loads. The patented conductor groove of the pair of wedges also provides a better grip of the steel cores of ACSR conductors for optimum specified minimum failure loads. The series has been extended in the course of the redesign and three housing sizes and the corresponding pairs of wedges now cover conductor diameters from 14.1 to 33.0mm – a definite potential saving of storage and logistic costs for our customers.



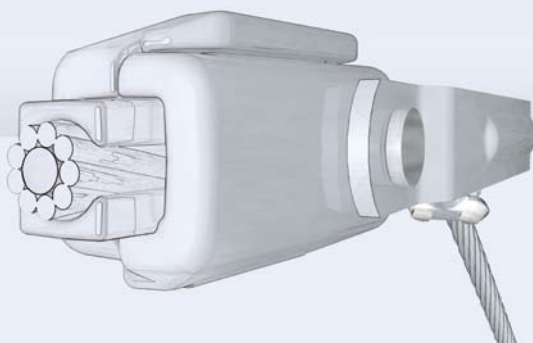
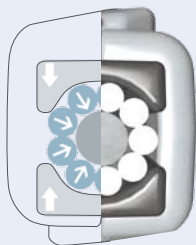
RIBE® B118 WEDGE-TYPE TENSION CLAMP

Optimized installation

- 01 Hanging the clamp on the conductor
- 02 Positioning the clamp wedges
- 03 Initially fixing the wedges with a clip
- 04 Assembling the two halves of the housing
- 05 Sliding the housing over the wedges
- 06 Connecting the straps to the tension string link
- 07 Fixing the conductor in the jumper clamp
- 08 RIBE® B118 wedge-type tension clamp installed



Patented conductor groove





The new RIBE® wedge-type tension clamps – innovative technology for proven safety

Innovative electrical fittings need innovative design methods. The new RIBE® wedge-type tension clamp was designed completely with 3D-CAD systems. Finite Element Method simulations were used throughout the development phase to simulate the possible tension conditions in the clamp and achieve optimum component design. The forging processes were also examined using a special simulation tool. This enables subsequent forging errors and faults in the material structures to be eliminated at an early stage during the design of the fitting and the forging tools.

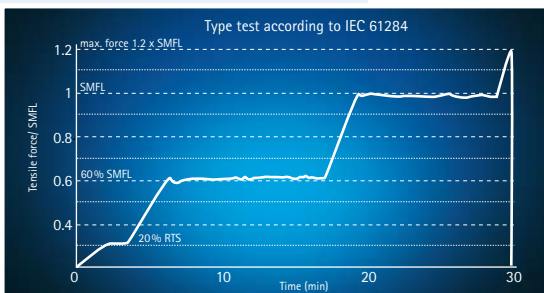


Safety tested under real operating conditions

The clamps had to withstand extensive tests on vibration test beds and tensile test machines under real conditions in our test fields: Are the installation sequences better, is the new design reliable and safe under the possible operating conditions, are the required specified minimum failure loads reached and exceeded?

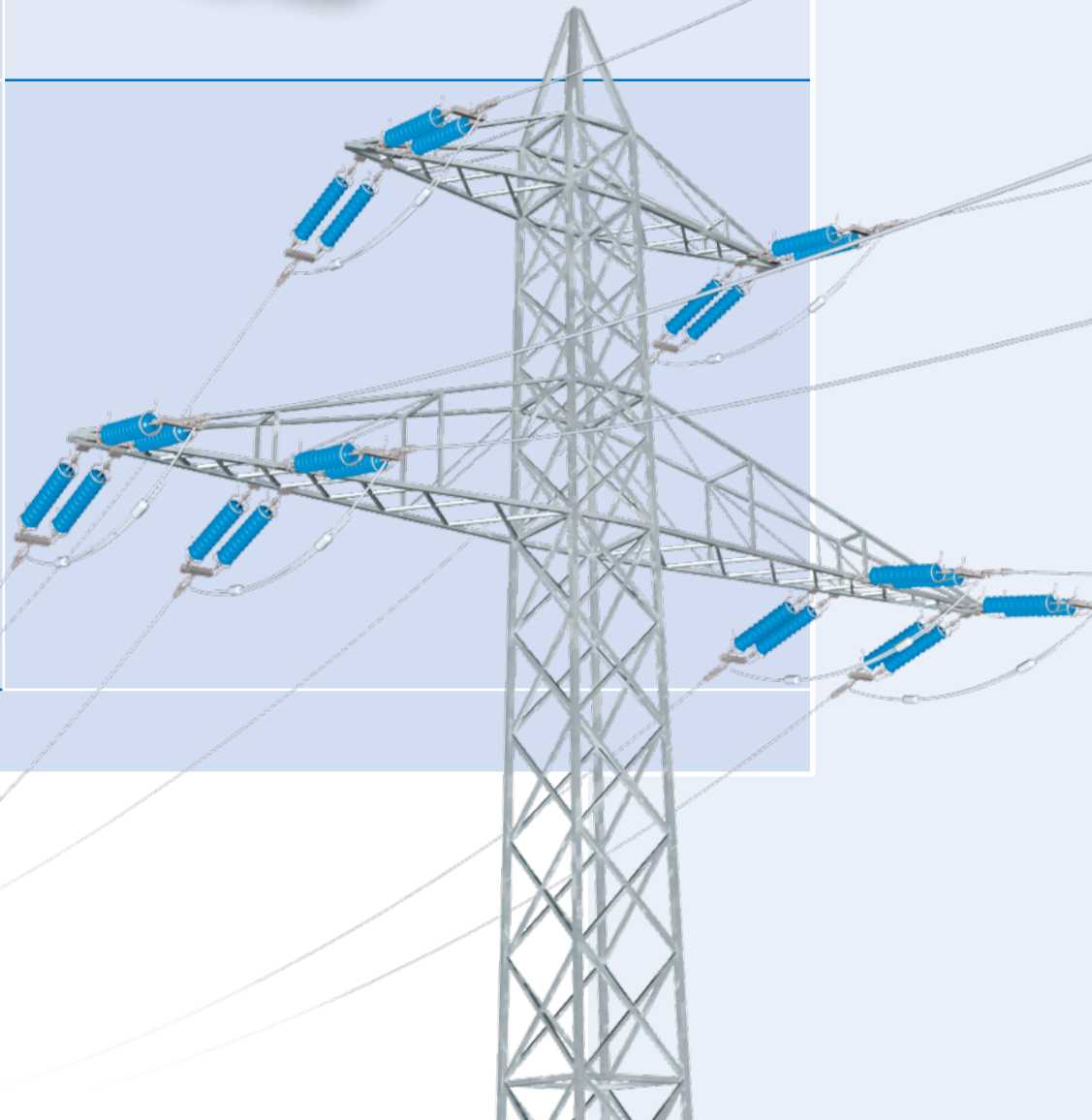
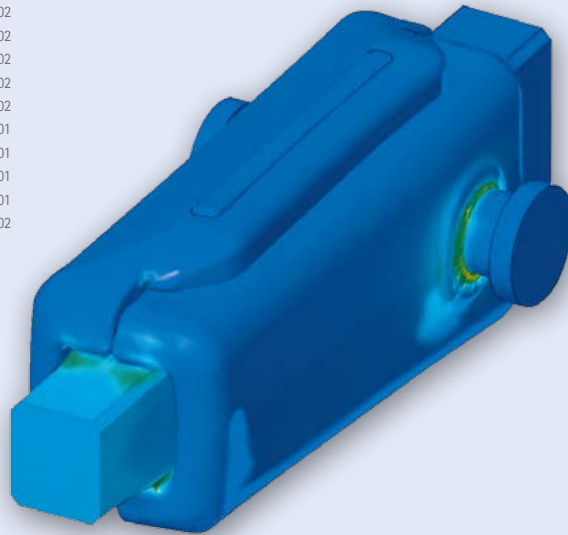
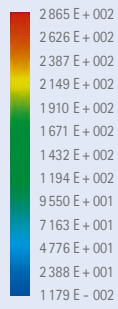


The result was that the new generation of RIBE® wedge-type tension clamps passed its type test – with optimum specified minimum failure loads and unrivaled installation features. The laboratory tests also showed that the specified minimum failure loads previously verified in tensile tests for over 40 conductor types can also be used for the new generation of wedge-type tension clamps.



RIBE® B118 WEDGE-TYPE TENSION CLAMP

FEM simulation
during development





The new RIBE® wedge-type tension clamps – documented and verifiable quality

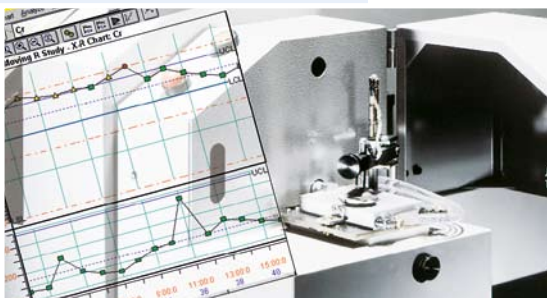
To ensure the highest production quality, an advanced quality monitoring system was implemented at RIBE® for the start of production of the B118 generation of wedge-type tension clamps. This system checks and records quality parameters as part of special test schedules during production and before delivery of the clamps.

Extended material certificate and spectral analysis tests

The perfect quality of the input material is assured by an extended EN 10204 3.1 material certificate as well as the careful selection of our suppliers. The composition of the raw material is also checked by spectral analysis before the forging process and only material that passes the test is released for processing. The forging process itself is based on the parameters specified in the forging simulation and is monitored.

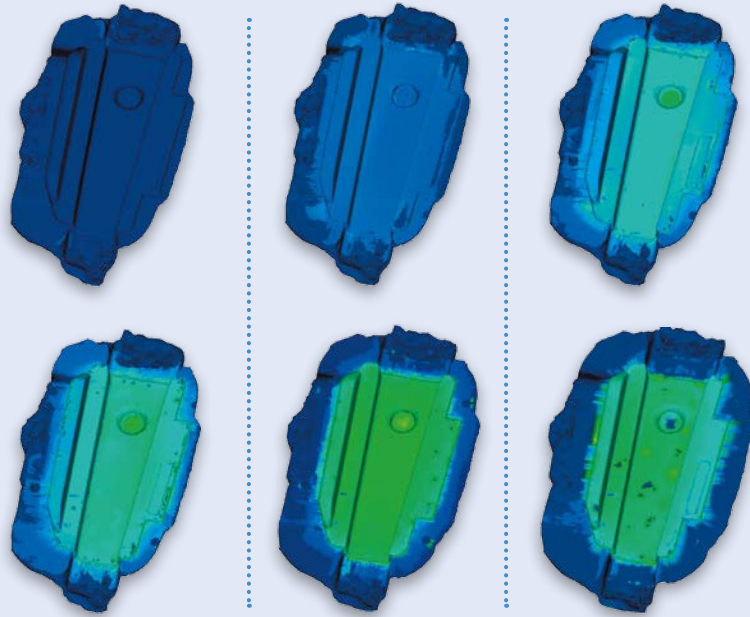
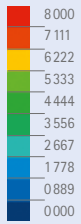
Documented safety for your overhead transmission lines

The production of the fittings to assured quality standards does not start until all components of the fittings have passed the receiving inspection. The batch of clamps is not released until all tests have been completed successfully – including a tensile test on the original conductor with measurement and documentation of the specified minimum failure loads achieved.



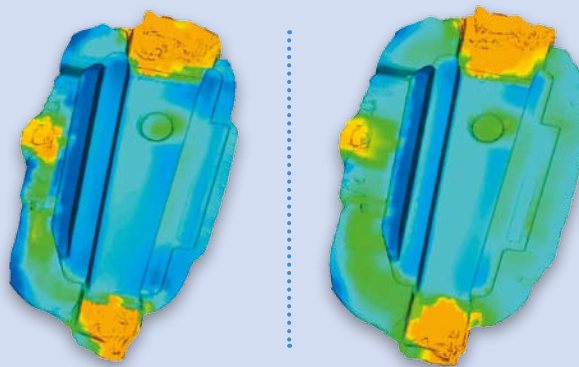
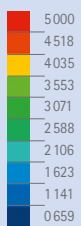
RIBE® B118 WEDGE-TYPE TENSION CLAMP

Forging simulation
Inside pressure E+2
MPa simulation



MAX 1.481E+003 | MIN 4.334E+002

Forging simulation
Forging degree



MAX 4.543E+001 | MIN 6.587E+001



RIBEF[®]

MADE TO **fit**

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