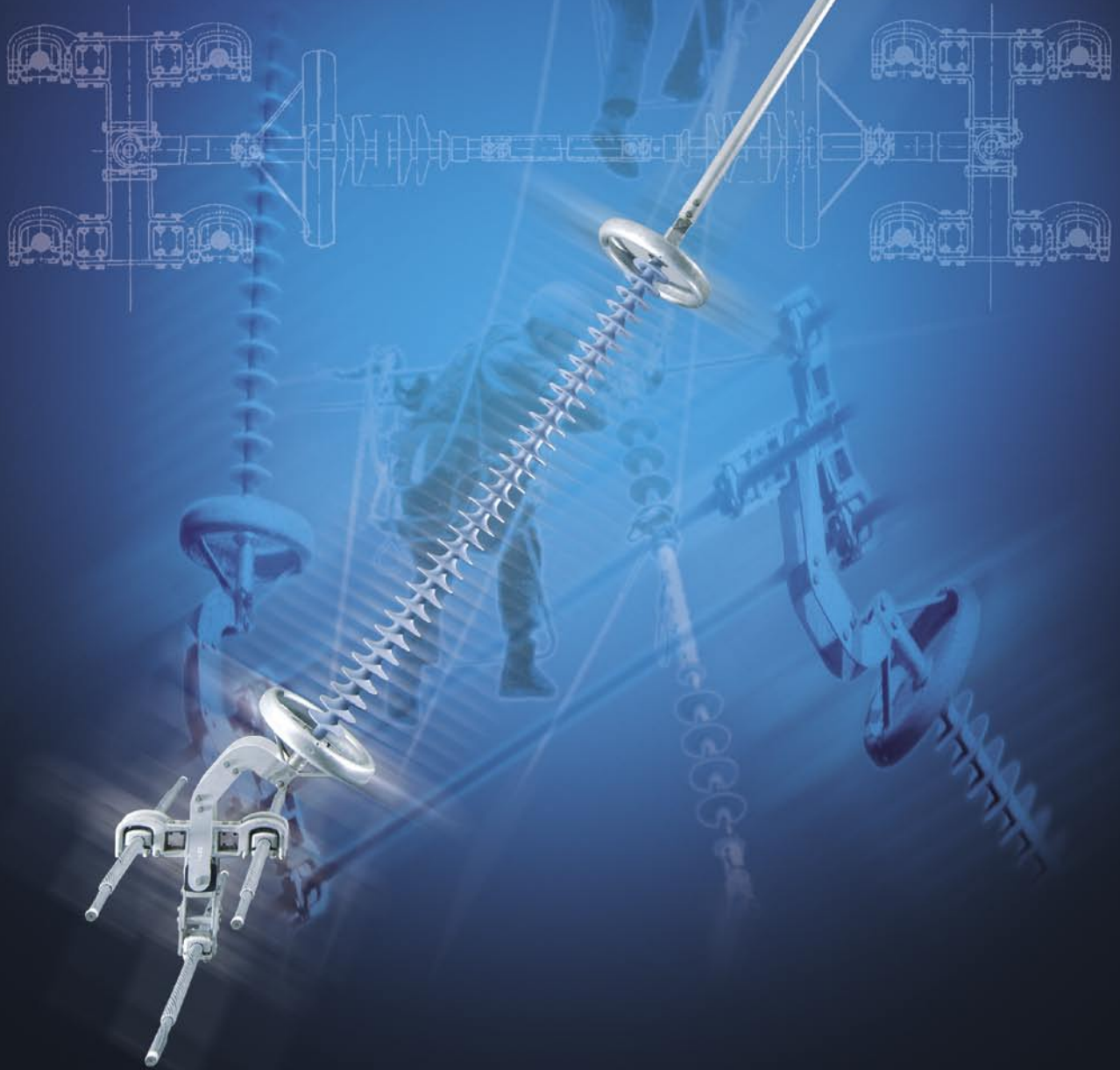


RIBE[®]


ELECTRICAL FITTINGS



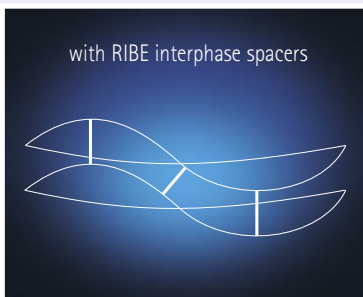
RIBE INTERPHASE SPACERS
PROTECT YOUR INVESTMENT

RIBE interphase spacers the ideal solution for long-wave vibration

Overhead transmission lines represent a major part of the investment of energy suppliers. One of their main concerns is therefore the long-term protection of such investments. Air flows can induce vibration in conductors, which in the worst case results in conductors striking each other and causing a short-circuit that damages the overhead lines.

There are basically 3 types of conductor vibration induced by air flows:

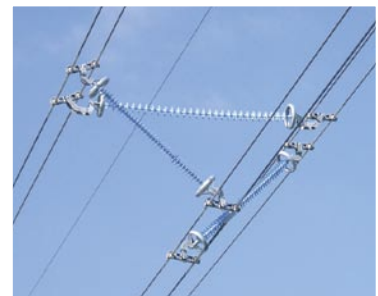
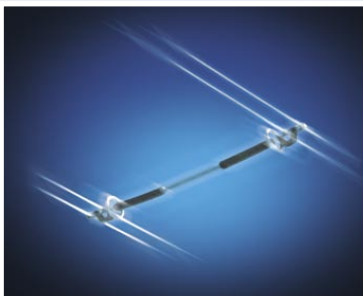
- short-wave vibrations (aeolian)
- subspan oscillations (occur only in bundled conductor systems)
- long-wave vibrations (conductor galloping)



formation of ice deposits on conductors



Long-wave vibrations can particularly occur in winter due to the formation of ice crystals on the conductors, which causes the so-called airfoil effect. RIBE interphase spacers provide safe and reliable protection against conductors striking each other and against unacceptable reduction of the electrical separation in case of conductor galloping. They ensure the energy supply remains uninterrupted and prevent serious damage to the conductors through electrical arcing.



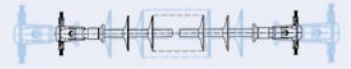
The right solution for every requirement

RIBE has developed, tested and produced intelligent solutions for electrical energy supply plant for more than a 100 years. Our goal is to manufacture high-quality products that guarantee a high level of customer satisfaction. We offer our customers the right interphase spacers for every requirement in plastic or ceramic versions – from spacers for single conductors to models for 4-conductor bundled systems and voltages from 10 kV to 380 kV.

RIBE provides facts and figures as a sound basis for every decision-maker. Our proven test methods and systems guarantee reliable results and a long lifetime, which provides a high degree of investment protection.

The RIBE experts are pleased to advise you on everything from planning and elaboration to the completion of an optimum solution tailored to your needs.

Interphase spacer for single conductor 30 kV



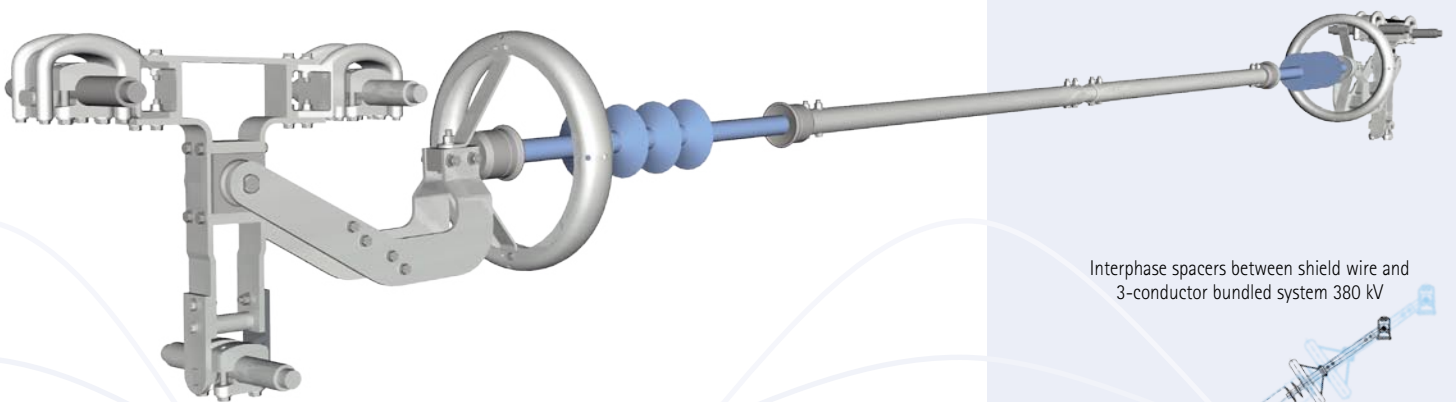
Interphase spacers between 2-conductor bundled system 110 kV



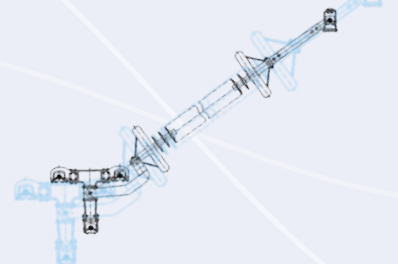
Interphase spacers between 2-conductor bundled system 220 kV



Interphase spacers between 4-conductor bundled system 380 kV



Interphase spacers between shield wire and 3-conductor bundled system 380 kV



RIBE interphase spacers with composite insulators offer the following advantages:

plastic version has smaller dimensions than conventional ceramic insulators

high flexibility

insensitive to bending strains

insensitive to shock-like mechanical stresses

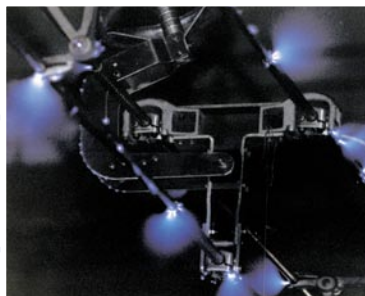
available in large lengths as single insulator

largely insensitive to high-power arcing

water-repellent properties of silicone rubber (hydrophobic surface)
for outstanding insulation properties

ceramic or plastic insulators

specially adapted clamp layouts

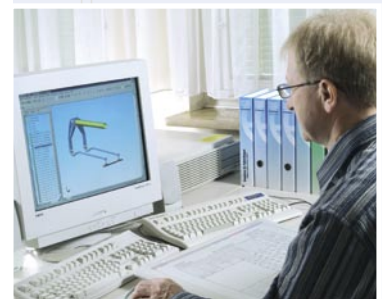


RIBE Engineering – 100 years of development and experience

Since RIBE was founded over 100 years ago, it has always been part of our corporate philosophy to not only develop and optimize electrical plant fittings in our own test laboratories and facilities, but also to use our expertise to solve application problems. A fully equipped indoor vibration test bed with three test spans (2 x 40 m, 1 x 30 m) is available for our competent engineering team to perform vibration tests to all international standards and customer specifications.

Other laboratory facilities with state-of-the-art systems for measuring mechanical and electrical parameters enable us to react flexibly to the customer's specific test requirements.

The RIBE Engineering Group can solve the customer's application problems using its own calculation programs or programs created in close cooperation with noted universities such as the Technical University of Dresden or the Technical University of Darmstadt.





RIBEF[®]

MADE TO **fit**

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