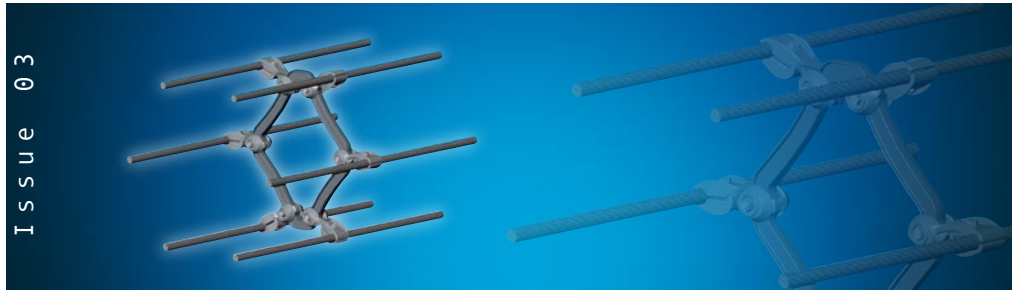




NEWS LETTER



Issue 03

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Introduction

Dear Readers,



2007 is a successful and international year for RIBE®. Our Info Day in Schwabach has become an established event with an encouraging response.

We were able to intensify existing

relationships and make new contacts at this year's event, as at many international exhibitions. The exchange of views at the Grid Construction and Operation Forum (Forum Netzbau und -betrieb) proved to be particularly valuable and also gave us the opportunity to explain the principle of operation of our RITHERM® monitoring system. With the support of our new partner LTB Leitungsbau GmbH, the system can now also be installed live-line and therefore much more flexibly. Our RIBE Optofit® fittings are ideal products for use with Optical Phase Conductors (OPPC). Our Representatives Conference in Pruhonice brought together RIBE® representatives from all over the world for the first time.

Enjoy reading this new issue of our newsletter.

W. Pfandl

Dr. Walter Pfandl
Managing Director

RIBE® Info Day

The positive feedback from our customers after the first Info Day in summer 2006 persuaded us to organize more events of this kind. This year's RIBE® Info Day on 23 May focused on presentations of railway fittings and again took place the Gaswerk Gallery in Schwabach.

RIBE® moves Athens

The participants at these presentations sourced information about the operation and use of the RIBE® tension wheel with integrated cable brake and the innovative RIBE® parallelogram steady arm. They obtained an extensive overview of our product spectrum of railway fittings for local transport systems. The film on streetcars in Athens especially impressed our guests from Deutsche Bahn AG and the Dresden and Nuremberg local transport companies: Dresdner Verkehrsbetriebe AG and VAG Nürnberg. "We move Athens" is an impressive show of the products RIBE® supplied for streetcar systems for the 2004 Olympic Games.

The many power utilities present like E.on, N-Ergie, RWE and Vattenfall and grid service companies such as Envia, LTB and NSW were provided with extensive up-to-date infor-



mation, plus lots of technical background knowledge on our latest innovation, a plastic spacer with helical rod fixing, and on monitoring overhead transmission lines.

RITHERM® – initial practical experience

A member of the ČEPS staff and a speaker from our company reported on practical experience with the RITHERM® system and its installation. We launched the RITHERM® system for determining conductor temperature on the market in summer 2006. The Czech power utility ČEPS has already successfully installed the system, which is running smoothly.



RITHERM®

Live line installation

Since the completion of the installation of four RITHERM® Central Units with eight measuring points for the Czech power utility ČEPS, more than 200,000 measuring points have now been collected during the several months of trouble-free operation. Each measuring point corresponds to a measured conductor temperature, which is recorded once a minute. Each Central Unit mounted on the tower is equipped with two sensors for measuring the conductor temperature. The Central Units are installed on cross-border 380kV and 220kV lines and send their measurements to a central computer in Nošovice, which collects, processes and edits all data.

A powerful partner

We have now gained the services of LTB Leitungsbau GmbH as installation partner, a company which can also install the



RITHERM® monitoring system on live lines. This means the system can be used even more flexibly, as the lines no longer need to be shut down before installing the system. A live test installation has already been completed.

To effectively cover all the possible applications of RITHERM®, we have revised our brochure. This is now obtainable as a dynamic brochure in nine languages and will be extended to suit demand. The DVDs showing the installation in the Czech Republic and live line installation are also in several languages.



The time between the wide-ranging presentations was filled with an intensive exchange of views, product information and making new contacts. The RIBE® works canteen treated the guests to coffee, snacks and a varied buffet. The RIBE® Info Day 2007 was rounded off by the live broadcast of the UEFA Champions League final in Athens.

A look behind the scenes

Around half the participants used the opportunity on the following day for a close look at the production facilities and laboratories at the Schwabach location. Besides a tour of production with an explanation of the production technologies, the participants were given insights into test procedures on the company's own indoor vibration test bed. On the outdoor vibration test bed they saw the permanently installed RITHERM® equipment, which had already attracted a lot of attention the day before.

"The informative nature of the event and the many good discussions made it extremely valuable," was the upshot of this year's event for participants from inside and outside the company. So the RIBE® Info Day will certainly be continued.

RIBE® equipment for South Africa

Development of a new bundle spacer damper for 765 kV overhead transmission lines

Following the 2004 Olympic Games in Athens, it is now planned to use RIBE® equipment for the FIFA World Cup in South Africa in 2010: The state power utility ESKOM is installing more than 3,000km of 765 kV extra high voltage lines as part of extensive infrastructure measures. For the link between Cape Town and Johannesburg, RIBE® has developed a spacer damper that can cope with high mechanical loads and also absorb the dangerous wind-induced vibrations. A corona test has been carried out and proved full operational reliability at 765 kV.



The photo shows the handover of the first sample to the responsible engineer B. Jacobs from Eskom in Johannesburg.

Participation

in the GRID CONSTRUCTION AND OPERATION FORUM

Current trends and developments in the field of electricity supply are discussed every year at the Grid Construction and Operation Forum. 148 experts, including staff from all the major electricity utilities in Germany and Austria, met at this year's conference in Lübeck-Travemünde on 10-11 May.

DENA Grid Study

The results of the DENA Grid Study were presented by a representative of the German Energy Agency. The study is concerned with the development of electrical energy production and distribution in Germany until 2030. The experts assume that there will be a distinct increase in the electrical energy produced by wind in the offshore segment. This will necessitate modifications and new construction for the 220 kV and 380 kV grids, as the energy produced in the North Sea and Baltic Sea areas must be transported to regions such as the south of Germany.



Dr. Bernauer during his presentation on the RITHERM® monitoring system.

Lines with high temperature conductors

A variety of lengthy approval procedures makes the construction of new overhead transmission lines difficult in Germany. The grid operators are therefore forced to find other solutions for changed load flows and for ensuring a stable electricity supply. One such step is the use of high temperature conductors. These are special conductors that can be loaded at temperatures up to 150 °C. RIBE® is intensively involved with the development, testing and production of suitable fittings for these lines.

Monitoring of overhead transmission lines

The conference also focused on monitoring overhead transmission lines. For more efficient and safe operation of the integrated grid in the face of the new challenges, detailed information is required about the respective operating conditions of the overhead lines. The possible applications and experiences with existing monitoring systems were discussed at various presentations.

RITHERM® permits continuous and low-cost monitoring of overhead transmission lines for the first time using direct measurement of the exact conductor temperature. Many participants visited our information stand in front of the conference room and used the opportunity for in-depth discussions about the system and fittings for other solutions from RIBE®.



Installation of RITHERM® on the tower

Experiences with line failures

The presentations on the failure of the electricity supply in Münsterland were extremely interesting for all participants. Unusual weather conditions were the cause of the collapse of several overhead transmission line towers, when the lines were loaded with ice at up to 15 times the permissible load.

The topics at the Grid Construction and Operation Forum made it clear that RIBE® constantly tackles new challenges in the construction of overhead transmission lines.

Optical Phase Conductor (OPPC) fittings

Fittings for cables with integrated optical fibers

Optical fibers are used for data transmission over long routes. For this purpose, the optical fibers are integrated into conventional conductors in an OPPC cable, which can then be used for transmission of both energy and information. The fittings at the suspension and tension points are exposed to special demands during and after the installation of the OPPC, as the optical fibers must be protected against inadmissible locally concentrated radial forces.

Distribution of forces

For conductors without optical fibers, the fittings used at the tension and suspension points produce the necessary holding forces by applying a large local radial force (e.g. wedge-type tension clamps and suspension clamps). These fittings are not suitable for OPPCs due to the high sensitivity of the embedded optical fibers to pressure, but RIBE Optofit® fittings take this high sensitivity into account. These are specially modified helical fittings. The initiated radial loads are distributed over larger contact areas (e.g.

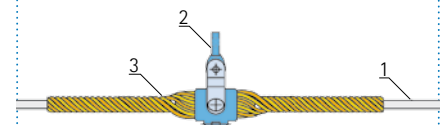
helical tension) so that the necessary forces for holding the OPPC are achieved without overloading the optical fibers. The OPPC suspension and tension fittings also meet the requirement that the fittings must not become warmer than the conductor when the continuous current flows. The fittings are adapted to the OPPC and the operating conditions.

RIBE® helical fittings have been used on copper conductors and shield wires for telecommunication transmission since the beginning of the 1970s. RIBE Optofit® fittings have been used on self-supporting fiber optic overhead cables since the beginning of the 1980s and have also provided excellent performance in service.

Easy installation

The helical fittings also offer the advantage of easy installation without tools. This eliminates installation faults, especially as correct installation of the helical fitting can be determined with the naked eye.

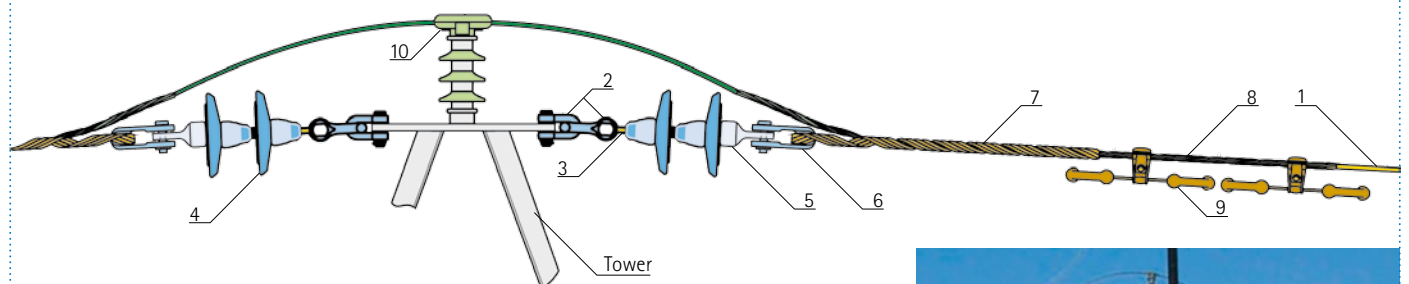
Suspension fittings



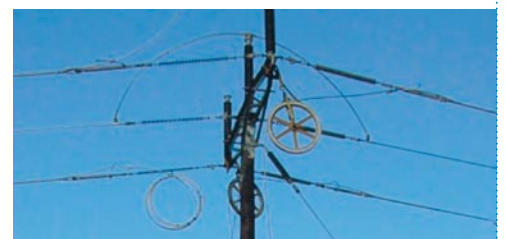
- 1 OPPC
- 2 Twisted double eye
- 3 Armour grip suspension



Tension fittings



- 1 OPPC
- 2 Shackle
- 3 Ball eye
- 4 Insulator
- 5 Socket eye
- 6 Thimble
- 7 Helical dead end
- 8 Protection rod
- 9 Vibration damper
- 10 Standing termination unit



RIBE® & exhibitions

METRO CHINA 2007 in Shanghai

Together with eight other Bavarian companies, RIBE® exhibited in the "Bavarian Pavilion" at the Metro China 2007 in Shanghai from 12-14 June 2007. 150 exhibitors from all segments of the local, regional and high-speed transport industry presented their product spectrum here.

Promising RIBE® technology

During the three days of the exhibition we presented conventional railway fittings plus a 1:5 scale model of our tension wheel with integrated cable brake. Just how promising this RIBE® technology is can be seen from the fact that Chendgu Railway has already installed some of these innovative tension wheels in Mianyang for practical tests.

The two-yearly exhibition offered us a promising platform: We not only made new contacts with consultants and the Chamber

of Foreign Trade, but also with the "German Working Group for Transport in China", in which all well-known German manufacturers of railway equipment the SMOC (Shanghai Metro Operation Co.), the operator of the metro in Shanghai. With a length of 400 km and a planned extension to 500 km, this



company's local transport network is one of the largest in China and represents a large potential market for RIBE®.

RITHERM® at CIRED



Together with our RITHERM® partner LDIC GmbH, RIBE® presented the RITHERM® monitoring system at CIRED in Vienna from 1-4 May 2007. CIRED, the international conference on electricity grids, is organized in a European city every two years.

The visitors to our stand were very interested in RITHERM®. The increased energy consumption, the liberalization of the energy markets and the resulting capacity bottlenecks make it very interesting for many grid operators to carry out direct measurements of the exact conductor temperature. We vividly explained the method of operation and possible applications to the visitors using a film and descriptive demonstration equipment. Many companies were very interested in RITHERM®, including Österreichische Elektrizitätswirtschafts AG (Verbund) and STEWAG-Steg GmbH (operation of distribution grid) and many others.

IREE 2007

India possesses the largest railway network in the world in terms of area and is therefore an important market for us. To obtain an

initial impression of the condition and the fittings required for the replacement of the heavily outdated transport network, RIBE® took part in the 7th International Railway Equipment Exhibition (IREE) in New Delhi from 13-17 February 2007.

Together with several other German companies, RIBE® presented a selection of its railway catenary fittings in the German pavilion. The interest of the more than 50 promising new contacts focused mostly on the sample of the RIBE® parallelogram steady arm and the RIBE® section insulator for local transport systems.



INFO

RIBE® will take part in the following exhibitions and conferences:

- 31.10 - 03.11.2007**
Electric Indonesia 2007 (Jakarta)
- 08 - 11.12.2007**
ELECTRICX 2007 (Cairo)
- 29 - 30.05.2008**
Forum Netzbau & -betrieb (Dresden)
- 23 - 26.09.2008**
InnoTrans 2008 (Berlin)

RIBE® staff

RIBE® Electrical Fittings currently has a workforce of 250



SUSANN RAMM

Sales Radebeul

Susann Ramm joined the HV Transmission Lines Team in September 2006. Her tasks range from order handling, preparing quotations, telephone and written correspondence with customers to project activities. She

Since 01.09.06

completed her degree in business administration at the Business Academy in Dresden in August 2006 and qualified as industrial business management assistant.



FRANK SCHOBERT

Manager Production and Logistics

Frank Schobert took over overall management of production and logistics at our Schwabach, Radebeul and Shanghai locations on 1 January 2007. After training as industrial electronics technician at Siemens Medical, the native of

Since 01.01.07

Erlangen commenced two courses of studies at the Georg Simon Ohm University of Applied Sciences in Nuremberg (mechanical engineering) and in Glamorgan / Wales (energy and environmental technology). His international profile is rounded off by long periods in Denmark, Great Britain, Canada and Italy. His career has concentrated on production and production planning.

Representatives Conference 2007

in Pruhonice

The Representatives Conference in the small town of Pruhonice near Prague is almost a tradition. We therefore met here again in April 2007 – but with one big difference: RIBE® representatives from all over the world attended this year. Besides our long-serving representatives from the Balkans, Central Europe and Northern Europe, we welcomed our representatives from South America and the Middle East for the first time.

Central contacts all over the world

The traditional dinner of suckling pig in a brewery close to the conference location

offered the newcomers the ideal opportunity to talk to their contacts at RIBE® and get to know the other representatives. The following two days were used for presentations in which we informed our representatives about current projects and product innovations from the individual teams. We also introduced our new key account structure, which now gives the representatives a central contact at RIBE®.

Working together with our representatives abroad on a fair basis and regularly informing them about news and innovations from RIBE® is part of our strategy for expanding our market share. We therefore plan to organize

another meeting of all RIBE® worldwide representatives next year.



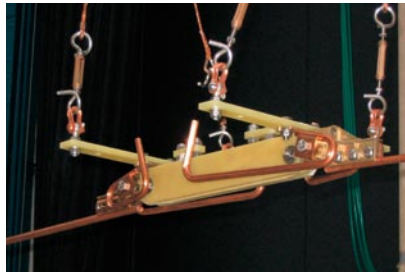
RIBE® home page

We updated our home page at the beginning of the year. As a result, general information about the RIBE® Group and the complete RIBE® Electrical Fittings part are now also online in Russian.

The latest list of our worldwide representatives and our brochures are available for downloading as PDF files.

There is also a LINK for direct access to our online catalogue, which has also been available in Romanian since the start of the year.

Section insulators for local transport systems



Section insulators specially adapted to the customer's requirements by RIBE® are now being installed in the catenary system of the Bucharest streetcar company (RATB) for the second time. For this delivery, the customer insisted on a repetition of the mechanical and electrical type test, which was carried out successfully in the high-voltage labora-

tory of the Technische Universität Dresden and in our own test bed.

Our photo shows the section insulator with its suspension in a surge voltage test in the high-voltage test bed at the Technische Universität Dresden.

Local installation training

The Romanian company ISAF will install the 14 section insulators supplied to replace the usual insulators when it renews a section in Bucharest in the autumn. We will demonstrate the simple installation and possible adjustments as part of local installation training before this work starts.

PREVIEW

- New generation of suspension clamps
- RIBE® Info Day 2008
- Spacer damper for 6-conductor bundles

IMPRINT

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New Vattenfall project

380 kV Bad Lauchstädt – Vieselbach line



RIBE® supplied the major share of the fittings for the new Vattenfall project for the construction of the "380 kV Bad Lauchstädt – Vieselbach line". The first two batches (20 km) were completed by the construction company Alpine-Energie in 2006.

380 kV tension tower of the Bad Lauchstädt–Vieselbach line during conductor tensioning



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