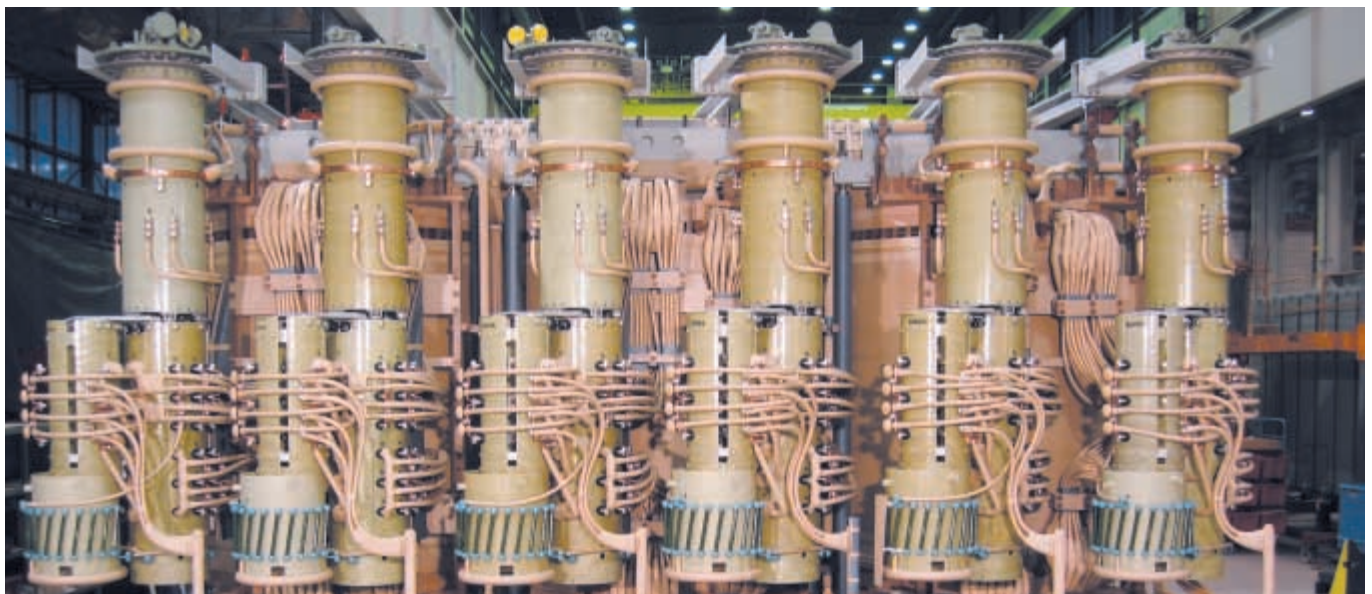




US phase shifter: complete solution-package



The job was difficult: SMIT was to supply a North American customer with a phase shifter transformer for power flow regulation from - 350 MW to 350 MW. Six on-load tap-changers were to handle the regulation (three for the load side and three for the source side). MR delivered a complete solution package. First the specialists designed the on-load tap-changer and potential connection layout. It was important that load and source side have precisely specified on-load tap position combinations (switching matrix). Then MR built six OILTAP® RI 3003 on-load tap-changers with the two related motor drives. A TAPCON® 260 developed especially for this purpose was added. Its tasks: Measure and regulate the power within the limits of the matrix. In addition it supplies the link to a host system with the DNP 3.0 protocol and provides for indication and transmission of error messages. The TAPCON® 260 also handles the transmission of signals from the control room. ●

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Although this newsletter has been prepared with the greatest of care, it cannot be guaranteed that the information is free of errors and accurate. Editor: Marketing Communications, o.reichmeyer@reinhausen.com
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ISSN 1612-1856

Links that are worth your while

Take a quick picture - no problem with a digital camera. A wealth of Internet pages offer advice and help on every aspect of this topic. We have selected five of the best for you.

www.agfanet.com

A treasure chest for digital photographers: Newsletters, e-cards and all kinds of imaging programs available as freeware or shareware.

www.steves-digicams.com

If you're planning on buying a digital camera, this address is a must. Steve tests everything for you.

<http://photo.askey.net>

Phil Askey deals with the latest developments in digital photography and peripherals.

www.dpreview.com

One of the best sources for digital camera information.

www.photolinks.com

As the name says: tons of interesting links concerning photography.

Subscribe today to our newsletter!
Visit the news section on www.reinhausen.com
to get this MR infoletter regularly.

New Training Center in China



Starting immediately, MR Guangdong OLTC Ltd in Panyu has a modern, completely equipped training center. General Manager Dr. Jens Frost: "We are looking forward to being able to show our customers how to perform maintenance on on-load tap-changers VACUTAP® AVT, OILTAP® V and M and the oil filter plant at our new practice-oriented training center. We are also offering training in installation, commissioning and operator control." Zhong Jian Hua ensures that everything is done correctly. With support from Xie Chong Can, he is responsible for comprehensive support and training of the customers. The team places highest value on the usual high MR standard of quality. ●

Contact: jens.frost@mr-china.cn

VACUTAP® AVT for "Red Pagoda"



The "Red Pagoda" is considered the best-known cigarette brand in China. Its manufacturer, the Yunnan Hongta Group in Yuxi in the province of Yunnan, relies on MR quality for its large factories. Up to now MR Guangdong has delivered 18 VACUTAP® AVT, all in four-steps design. Dr. Jens Frost's team sees its success primarily based on the fact that the cigarette manufacturer has had bad experience with competitor tap-changers and their lifespans. This is the reason that a delegation actually traveled to Panyu to inspect quality assurance at MR before placing their order. Yunnan Hongta has announced that it will equip all locations with AVT tap-changers if experience is good. ●

Contact: jens.frost@mr-china.cn

Register now!
March 18th to 19th
in Pattaya, Thailand



www.transform2004.com

Tokyo and MR Reinhausen – Partnership since 40 years

For the last 40 years, a very close cooperative partnership has been in existence between Maschinenfabrik Reinhausen (MR) and the Japanese companies Toshiba and Mitsubishi. For this reason a high-ranking delegation of company representatives, led by Michitada Endo, the General Manager of the transformer division of the newly founded joint venture Toshiba-Mitsubishi T&D, traveled to Regensburg. At MR the guests signed a new license contract and were then welcomed by the Lord Mayor Hans Schaidinger at the historical city hall. MR Managing director Dr.-Ing. Harro M. Lührmann emphasized that the signing of the contract represents a further high point in a long cooperative business relationship of trust. "The Japanese are absolutely reliable partners who fully meet our idea of quality and service." The latest agreement provides for the licensed manufacturing of MR on-load tap-changers by TM T&D. The company has its head-



quarters in Tokyo and, with its more than 2700 employees, is one of the five largest transformer manufacturers in the world. ●

Reactive Power Compensation for Chinese Paper Factories



PQM-Erfurt Supplies New Generation of POCOS® Systems

China's quickly growing industry has an increasing demand for systems to compensate reactive power and improve voltage quality. And in February PQM-Erfurt delivered the first five of a total of nine POCOS® systems for two paper factories.

POCOS® improves the cos phi displacement factor. The systems increase transmission capability of the power system and, depending on the design, reduce voltage distortion at the connection point. The customer saves power costs with POCOS®.

POCOS® systems are compact compensation units for voltages up to 17.5 kV, built for installation in cabinets. They consist of up to 6 steps. Each cabinet module represents a compensation step and contains capacitors, filter reactor, switching device, high-voltage circuit breaker and all necessary protection and control devices. A central regulator and control device switches the compensation steps automatically on and off and handles monitoring.

The delivered systems belong to the latest generation of POCOS® systems built in 370 steps (340 Mvar) which have been produced since 1995. The new design offers greater step sizes, an improved protection concept and high flexibility for cabinet installation. FEAG GmbH in Sangerhausen could be won over as an additional supplier for development and manufacturing directed by PQM-Erfurt. The close proximity to the Erfurt location as well as the capable and motivated FEAG staff all make this partnership attractive. This means two separate manufacturers are now available to PQM for the production of POCOS®. Customer needs can be fulfilled still more quickly. ●

Contact: t.schlegel@reinhausen.com

MTeC® - The all-rounder in Temperature Control



The new EPT 202/203 is coming up soon. It integrates a wide range of functionalities in a single system:

- measuring of top oil and up to three winding temperatures
- measuring of two oil levels
- monitoring of fans, pumps, alarm and trip functions
- life time calculation according to IEV 354
- remote supervision from standard PC or connection to a SCADA system
- local long time data logging

For more information keep in touch with our next newsletter and have a look on our website www.messko.de

TRANSFORM 2004 PARTICIPANT APPLICATION FORM



ROYAL CLIFF BEACH RESORT, PATTAYA, THAILAND – MARCH 18TH TO 19TH, 2004

Please complete and return this form to: TRANSFORM 2004 Secretariat, Maschinenfabrik Reinhausen GmbH, Falkensteinstr. 8, 93059 Regensburg, Germany
Phone +49 941 4090-124, Fax +49 941 4090-666
E-mail: transform2004@reinhausen.com, www.transform2004.com

May we suggest to return your reservation by January 15, 2004 to make sure of your place.

PARTICIPANT

Mr. Ms. Mrs.

First Name _____ Last Name _____ Title _____

Address _____ City _____

State/Prov _____ Postal Code _____ Country _____

Phone _____ Fax _____ E-mail _____

Company/Organisation _____ Department/Function _____

ACCOMPANYING PERSON/S

Mr. Ms. Mrs.

First Name _____ Last Name _____ Title _____

Mr. Ms. Mrs.

First Name _____ Last Name _____ Title _____

ADDITIONAL PROGRAM

Golf Tournament _____ Handicap(s) _____ Number of Persons _____

or Golf Clinic _____ Number of Persons _____

or Catamaran Trip _____ Number of Persons _____

Secretariat use only

Date _____

Reg. No. _____

AUTHORIZED SIGNATURE / COMPANY STAMP

Date _____

Other remarks _____

Please retain the copy of this form for your file.

Fax back to +49 941 4090 666
or E-mail: transform2004@reinhausen.com

HOTEL RESERVATION FORM



ROYAL CLIFF BEACH RESORT, PATTAYA, THAILAND – MARCH 18TH TO 19TH, 2004

**ALL ACCOMMODATION BOOKINGS must be reserved through the following address:
Contact persons Sunisa Yusananda, Director of Sales, sunisa@royalcliff.com
or Arpanij Sawangwieng, Asst. Sales Manager, arpanij@royalcliff.com,
phone +(66 2) 2801737 to 40, fax +(66 2) 6290892, 2820294**

Official hotel: Royal Cliff Beach Resort, Pattaya, Thailand. 353 Phra Tammuk Road, Pattaya, Cholburi 20150, Thailand. Phone: +(66 38) 250421, Fax: +(66 38) 250511, 250513, www.royalcliff.com

All workshops, functions and exhibitions will be held at the Royal Cliff Beach Resort. The rates quoted below are inclusive of 10% service charge, 7% VAT and single breakfast buffet. Please book a room for me. (Check only one)

Royal Cliff Main Building (net/room/night)

Mini Suite, Bht 3,575 (approx. 90 US \$)

Other categories on request

Royal Cliff Grand Building (net/room/night)

Executive Room (single), Bht 4,900 (approx. 123 US \$)

Arrival date _____ Departure date _____ Number of nights _____

PERSONAL DETAILS

First Name _____ Last Name _____ Title _____

Address _____ City _____

State/Prov _____ Postal Code _____ Country _____

Phone _____ Fax _____ E-mail _____

Company/Organisation _____ Department/Function _____

CREDIT CARD TYPE

Master Card Visa American Express Diners Club JCB

Cardholder's name _____ Card number _____ Expiry date _____

(as shown on credit card)

(as shown on credit card)

TERMS OF PAYMENT CONFIRMATION

Hotel bills are to be settled by delegates directly with the hotel. Hotel will take 1 night deposit nonrefundable from each booking. Accommodation: Cancellation charges: cancellation within 3 weeks of arrival – first night deposit nonrefundable

**Fax back to +(66 2) 6290892 or +(66 2) 2820294
or E-mail: sunisa@royalcliff.com or arpanij@royalcliff.com**