

TRANSFORMERS MAGAZINE

EDITORIAL BOARD

Editor in Chief: Mladen Banovic, PhD; Merit Media Int.; Croatia
mladen.banovic@transformers-magazine.com

EXECUTIVE EDITORS

Michel Duval, PhD; Hydro Quebec; Canada
Jean Sanchez, PhD; Utility; France
Jin Sim; Jin Sim & Associates, Inc.; USA
Juliano Montanha; SIEMENS; Brazil
Craig Adams; TRAFIX; Australia
Arne Petersen; AP Consulting; Australia
Michael Krüger; OMICRON electronics GmbH; Austria

Art Director: Momir Blazek

Photo: Shutterstock.com

Front page: Image by OMICRON electronics GmbH, prepared by David Kaiser

Language Editor: Marina C. Williams

ADVERTISING AND SUBSCRIPTION

Marin Ante Dugandzic
+44 20 373 474 69
marin.dugandzic@merit-media.com

TRANSFORMERS MAGAZINE

Transformers Magazine is published quarterly by Merit Media Int. d.o.o., Setaliste 150. brigade 10, 10 090 Zagreb, Croatia. Published articles don't represent official position of Merit Media Int. d.o.o. Merit Media Int. d.o.o. is not responsible for the content. The responsibility for articles rests upon the authors, and the responsibility for ads rests upon advertisers. Manuscripts, photos and other submitted documents are not returned.

Subscription rate:

Print Edition: \$86 (1 year, 4 issues)

Digital Edition: \$44 (1 year, 4 issues)

Online Edition: Free of charge for registered users
www.transformers-magazine.com

REPRINT

Libraries are permitted to photocopy for the private use of patrons. Abstracting is permitted with credit to the source. A per-copy fee must be paid to the Publisher, contact Subscription. For other copying or republication permissions, contact Subscription. All rights reserved.

Publisher: Merit Media Int. d.o.o.
Setaliste 150. brigade 10,
10 090 Zagreb, Croatia
Contact: +385 91 222 8820 Croatia
Contact: +44 20 373 474 69 UK
VAT number: HR09122628912
www.transformers-magazine.com
Bank name: Zagrebacka banka
Bank identifier code: ZABAHR2X
Bank IBAN: HR8023600001102375121
Director: Marin Ante Dugandzic



Dear Readers,

I would like to thank all of you who have provided feedback on what we should improve about Transformers Magazine to be more informative and educative, and to make our services more reader-friendly.

Thank you to all of you who commended us. I was quite surprised to hear that many of our readers find our services helpful in doing their daily business. This encourages us, but also obliges us to continue in this direction.

In this issue you will find several technical articles, three interviews, and a few advertorials.

We have modernized the interview format, making it more compact, and focusing on the matter relevant to a wider audience. This has made room to enrich the content by adding one more interview.

Advertorials are technical articles which don't undergo an editorial review. Therefore, they not only provide more freedom to communicate particular features of a product or service, but also enable better understanding of these features by a wider audience. We recommend them because they complement standard technical articles in educating the audience.

M. Ohlen, Director of Transformer Test Business at Megger, shares with us the actual Megger's philosophy of transformer testing, and his view of the future of transformer testing.

B. Menzies, Commercial Director and Head of MIDEL Transformer Fluids at M&I Materials, gives an overview of how the company works with manufacturers and end users to deliver cost savings, asset performance improvements and risk mitigation.

K. Foell and H. Gieser, Managing Partners at Isotek - a German transformer insulation company - present their business model, which has enabled them to grow significant-

ly, organically and by acquisitions, despite the challenging market conditions.

In his article, A.T. Garcia provides a practical guide to transformer field tests from the perspective of predictive maintenance, describing the common off-line and on-line techniques, as well as other key points.

M. Krüger, U. Ranninger, and L.V. Badicu discuss the design and installation of a diagnostic and monitoring system on an old transformer with high concentrations of hydrogen and methane.

D.M. Robalino presents a theoretical approach to measurements of Dielectric Frequency Response with examples of field measurements.

S. Coenen brings an overview of new trends in transformer monitoring systems, including HVDC and offshore applications, as well as the growing importance of continuous on-line monitoring of bushings, dissolved gases and new technology, such as partial discharge monitoring and the IEC 61850 standard in digital substations.

B. Klimpke and C. Su write about finite element modelling techniques, used to simulate three types of transformers. These simulations show a potential of finite element solutions as a useful and reliable tool to analyse transformers in detail.

In his article, J. Bernal brings forward a study of installing surge arresters close to a power transformer to provide protection against lightning overvoltage. He has analysed the voltage at base insulators of surge arresters and bushings for different cable lengths in a typical substation.

Have a pleasant reading.

Mladen Banovic, Editor-in-Chief