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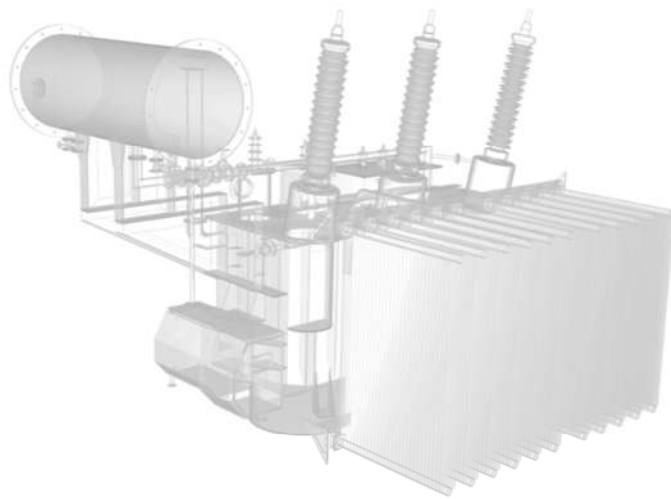
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Dear Readers,

In this issue, the Transformers Magazine brings you a wide range of technical articles – from general overviews to advanced specialised articles, and two columns.

Jean Sanchez presents an overview of six most commonly used power transformer winding types: continuous disc windings, interleaved windings, intershieldded windings, layer windings, helical windings, and pancake windings.

Dielectric and thermal design considerations for the use of esters as insulating and cooling fluid are presented in the article by Mark Lashbrook. Three case studies are described, including the details which caused decisions to be made about the usage of alternative fluids, for example, greater demand for fire safety, the increased need for protection of the environment from pollution and avoiding fire extinguishing system.

In his column Trends in Power Transformer Failure Analysis, Wallace Binder writes about different failure modes in transformers and methods for detection of these failures.

Andre Canelhas and Matti Stoor bring forward description of the transformers in HVDC power transmission, reasons for utilising HVDC transmission, voltage levels and ratings of present systems, descriptions of converter technology as well as the effects of renewable energy sources on the system.

Carlos Gamez points out once more in his column Power Transformer Life, that transformer life time is determined by the life time of solid insulation, and he writes about insulation, criteria for detection of the end of life and ageing mechanisms: thermal degradation, hydrolytic degradation, oxidation, and acids.

David Sundin puts forward thermal design considerations when using alternative, fire resistant fluids which are different from mineral oil due to higher viscosity of these fluids. The paper gives a historical overview of using alternative insulating fluids and cooling designs modifications for their use.

Finally, read an article by Markus Pütter, Michael Rädler and Boris Unterer about the influences of residual magnetism on the transformer core and how this can be avoided.

I hope everyone will find something interesting in this issue and that reading it will be a pleasurable experience.

Mladen Banovic, Editor in Chief