

BACK BY POPULAR DEMAND

Advanced Solutions to Transformer Life Cycle Management Regional Workshop

"Optimization of Transformer Operation through Advance Implementation of Transformer Life Management and Life Extension"

Hilton* Nairobi, Kenya * 06th – 08th December 2010 *

Course Trainer:



Georg Daemisch,
Managing Director
DIDEE GmbH (Daemisch Industriedienstleistungen GmbH),
Germany
Consultant
DTC (Daemisch Transformer Consult), Germany
Over 20 years of experiences in transformer life management.

Regular speaker in the international TECHCON events Workshops In India, Dubai, Abu Dhabi and others

"A MUST ATTEND" event for those who had attended the first workshop.

ABSOLUTE reasons why you should attend:

UNDERSTANDING basics knowledge about transformer design, variations, and types in order to understand the specific background.

Critical evaluation measurement results for condition assessment

MAINTENANCE strategies time base, event based, condition based
In connection to the above the actual ageing condition will be clarified and the ageing behavior of transformers discussed.

How to understand and deal with ageing behavior with preservation schemes and residual life time calculations.

ECONOMICS versus ECOLOGY will be discussed in order to give the attendees also the necessary knowledge to defend the minor investment in monitoring and preservation as necessary effort in order to prevent their company from bigger losses by unforeseen break downs or even fatal catastrophes.

EXAMPLE:
There will show on base of examples and case studies what is possible, what can be done and last not least, what is the profit of a well planned Transformer population management.

IN-HOUSE TRAINING

Absolute BME can also customize this course exclusively for your organization on an in-house basis, tailored to meet your specific needs, at a place and time of your convenience.
To discuss how we can work with you to meet your training requirements, please contact: iht@absolute-bme.com

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Note: The Course Trainer speaks English and the contracts will be discussed in English.

Workshop Overview:

In current ever-growing industry, it has been reported that there is increasing trend in transformer breakdown since 1990s. Such a breakdown can potentially cause high amount of loss for different industries.Thus, appropriate implementation of transformer life cycle management is of great concern in current state. Whether the transformer has been in operation for long period or is newly operating, urgent actions are required to optimize transformer performance through higher availability.

This customized 3-day workshop aims to provide a thorough understanding of transformer life management and life extension strategies. Understanding of transformer characterization and working principle will be the essential foundation before proceeding with development of management strategies. Overview of transformer design and mechanical construction will also be presented to give comprehensive representation of transformer's features.

Following that, various implementations of new diagnostic techniques will be presented. Systematic and detailed studies on each diagnostic technique along with appropriate interpretation of these studies will lead to early detection of transformer failure. Subsequently, a certain degree of preventive actions can be implemented for such condition.

This workshop will also include a study of "Substance assessment of transformer". Delegates will have an opportunity to learn useful methods to assess transformer's useful lifetime strength.

Furthermore, acquisition of latest practical knowledge and application with regards to transformer optimization, i.e. "Optimized Asset Exploitation (OAE)" will also be one of the highlights of this workshop. The course facilitator will attend to specific queries and provide practical recommendations for particular transformer condition. Overall, this workshop will serve as a platform as an advanced course to answer the needs for optimized transformer operation in various industries.

Who Should Attend

This workshop is specially designed for those who are involved in developing and implementing life maintenance strategies of transformers in their plant. These include:

- Maintenance Managers/ Supervisors/ Engineers
- Facilities Managers/ Supervisors/ Engineers
- Utility Managers/ Supervisors/ Engineers
- Plant Maintenance Head
- Plant Supervisors/ Managers/ Engineers
- Electrical Maintenance Managers/ Engineers
- Electrical and Test Managers/ Engineers
- Head of Engineering
- Manufacturing and Production Managers/ Supervisors/Engineers
- Operations Managers/ Supervisors/ Engineers

08:30	- Registration & Tea
09:00	- Morning Session Begins
10:40-11:00	- Refreshments & Networking
12:30	- Lunch
13:45	- Afternoon Session Begins
15:10-15:30	- Refreshments & Networking
17:00	- Finish of Day/Course

Pre-course Questionnaires:

A Pre-course Questionnaire will be sent to you upon your registration, which allows you to raise your specific interests and questions. The course trainer will review and analyse the questionnaires prior to the event and will address your interests & questions during the event, seeking to fully meet your learning objectives.

Course Trainer
Mr. Georg Daemisch

About Your Course Facilitator

Language skills: German, English and Spanish

Georg Daemisch has over twenty years of experiences in dealing with transformer management. Currently the Owner and Managing Director of DIDEE GmbH (Daemisch Industriedienstleistungen
GmbH) and DTC (Daemisch Transformer Consult) in Germany, he has successful track record in providing transformer consultancy all around the globe.

His consultancy services exclusively specialize in the areas of condition assessment, ageing behavior, life enhancement and substance evaluation of medium to very large transformers.
For each consultancy service, he conducts specific condition assessment to develop customized life management strategies suitable for the transformer. In various countries, he has provided consultancy services to a large number of transformer fleet owners.

Georg was a graduate from Karlsruhe University, Germany as Dipl. Ing. in Electrical Power Engineering. His educational background had supported him in his early career stage and gave him opportunities to be lead sales engineer in major transformer manufacturing companies, such as Maschinenfabrik Reinhausen, Siemens, and ABB.

Through his roles in these major companies, he has gained comprehensive knowledge on different types of transformer, ranging from small to large power transformers. Being a renowned author in this field, Georg has published numerous papers in view of transformer life management. Some of his outstanding works are “The Aged Transformer Diagnosis, Treatment and Life Management, 2003-2004”, “Ageing behavior, substance evaluation and conservation of power transformers, 2005”, as well as “Transformer population Management (TPM), 2006.” He has also been a regular presenter in various prestigious workshop and conferences in this industry, such as Eurotechcon 2009, CIGRE 2009, and many more. Partial list of companies that have benefited from his experience:

Middle East and Africa:
- ALBA Aluminum, Bahrain
- BABCO, Bahrain
- Div. El Companies, Egypt
- EON Hydropower
- Israel Electric Corporation, Israel
- Khousestan Steel, Iran
- Khuzistan Water and Power Authority (KWPA) Power Plants,Iran
- Ministry of Electricity and Water, Dubai
- Mobarakeh Steel Plant, Iran
- Saudi Electricity Company, Saudi Arabia
- Suweihat Power Plant, Abu Dhabi
- TAVANIR, Iran

Europe:
- ABB, Germany
- Pechiney, Greece
- Siemens, Germany
- Solvay, Belgium
- Vattenfall, Germany

Asia:
- India Div. Power stations + substation transfers
- Malakoff, Malaysia
- PT Aprilasia Sumatra, Indonesia
- PT International Nickel Indonesia Tbk, Indonesia
- Tenaga Nasional Berhad, Malaysia
- Tuticorin, India

“Developing Weather,” Weather Risk Management Question/Answer Forum, Energy Risk Magazine Special Weather Risk Report, August, 2004.

PROGRAM SCHEDULE DAY 1 – DAY 3

Day 1:

Introduction to the seminar
- General
- Ageing
- The 60/6 Estimation
- Life time
- PRESERVATION
- Maintenance Philosophies
- Sustainability

OVERVIEW OF TRANSFORMER
- Introduction to transformer working principle
- Characterization of various transformers
- Transformer types: Distribution, power, generator, rectifier,arc furnace
- Dry type transformer
- Liquid-filled type transformer

Transformer design and construction
- Design of: core, windings, tank and cooling
- Oil filling
- Electrical withstand
- Temperatures
- Short circuit withstand
- General

Autotransformer
- Tap changers
- Bushings
- Conservator
- Solid insulation

Day 2:

CASE STUDIES: MODERN FIELD TESTS EXAMPLE OF OMICRON SYSTEMS

TRANSFORMER POPULATION MANAGEMENT
- Correct sampling as basis for correct data
- Methods of transformer oil testing and sampling
- Critically reading an oil test protocol
- Data interpretation of transformer oil testing
- Dissolved gas – fault gas analysis
- New problems: Corrosive Sulphur analysis
- Monitoring of obtained data for appropriate Management strategy
- Treatment ageing of transformer
- The tools and their correct use: By pass plants Regeneration etc.
- Optimizing transformer operation
- Maintenance of Special transformers
- Dry type
- Silicon filled

SPECIFIC RECOMMENDATIONS AND PRACTICAL APPLICATIONS
- Workshop on transformer toolbox/ guidelines
- New experiences and case studies of transformer life assessments
- Recommendation and analysis for specific Transformer conditions

Open End Discussion

TRANSFORMER dielectric liquids TRANSFORMER OIL BEHAVIOUR
- Characterization of transformer oil
- Distinct behaviours of transformer oil
- Insulation Fluids Alternatives
- Molecular basic structure
- Naphthenic Oil
- Paraphinic Oil
- Typical data of a new mineral oil
- Oil qualities
- Inhibitors

SUBSTANCE ASSESSMENT OF TRANSFORMER
- Fundamentals of substance assessment of transformer
- The aging behavior of transformer
- Practical analysis of substance assessment and preservation Measures

THE AGEING INDICATORS AND ACCELERATORS
MOISTURE ASSESSMENT IN TRANSFORMER
- Overview of water content of transformers
- Implementation of On-Line drying method
- Oxygen in transformers

Open End Discussion

Day 3:

Case studies:
- Fit with fifty: Case study of a life time extension project of a CHP Plant
- 10 years preservation in a Alumina mill
- Evaluation of 30 years old grid transformers good/bad

MONITORING SYSTEMS
- Extent of monitoring
- On-Line gas monitoring

OAE (OPTIMIZED ASSET EXPLORATION): PAPER PRESENTED ON EUROTECHCON 2009
- What is behind Optimized Asset Exploitation
- Commercial issue of OAE
- Optimizing transformer operation
- Enhance economic profitability through OAE

THE NEW TRANSFORMER
- The new transformer a risk?
- Hints for specification
- Data to be controlled
- How to select manufacturers
- Controls at FAT

Open End Discussion

SALES AGREEMENT

Please complete and send immediately by fax to:
Marketing (+603 9284 6800)

DELEGATES' DETAILS

Name 1:

Position:

Tel No / Mobile:

Email:

Name 2:

Position:

Tel No / Mobile:

Email:

Name 3:

Position:

Tel No / Mobile:

Email:

Organization:

Address:

Town: State: Postcode:

Tel: ( ) Fax: ( )

Nature of Business:

Company Size:

Finance Department Contact Details:

Name:

Position:

Mobile: Email:

Authorization:

Signatory must be authorized to sign on behalf of contracting organization.

Name:

Position:

Signature: Date: / / /

Venue & Date:

Nairobi, Kenya 06th – 08th December 2010
Workshop Fee:

Workshop Fee:

* USD 3,295
* Group discounts are available; lease contact us for more details
* Free inclusive of course documentation, luncheons, refreshments and 15% services charge.
* The above amount payable is net with holding taxes or any other taxes, if any.

( ) Yes, I would like to organize this workshop for In-house Training and save 40% of total course fee
For more information, please **call: +603 9284 8092** or **email to: iht@absolute-bme.com**

Registration and Enquiries

Absolute BME SDN BHD
M2D/16, Jalan Pandan Indah,
4/3 A Pandan Indah,
55100 Kuala Lumpur, Malaysia

Contact: ***Marketing***

General Line: +603 9284 8092
Direct Line: +603 9284 8419
General Fax: +603 9284 6800
Email: marketing@absolute-bme.com

Electronic Transfer / International Telegraphic Transfer

A/C Name:	**ABSOLUTE BME SDN BHD**
Bank:	**HSBC BANK MALAYSIA BERHAD**
Bank Address:	**HSBC BUILDING, NO.2, LEBOH AMPANG, 50100 KUALA LUMPUR, MALAYSIA**
Branch:	**BUKIT BINTANG BRANCH**
Swift Code:	**HBMBMYKL**
A/C No:	**203 470927 725 (USD Current Account)**

Hotel Accommodation

Accommodation is not included in the training fee. To make a reservation at our corporate rate, please contact the respective hotel.

PAYMENT POLICY:
Payment is due in full at the time of registration no later than 5 business days from the date of invoice. Full payment is mandatory for event attendance. I agree to Absolute BME Sdn Bhd payment terms. Payment must be received prior to the event date. We reserve the right to refuse admission to the event if payment has not been received.

CANCELLATION & SUBSTITUTION POLICY
You may substitute delegates at any time. Absolute BME Sdn Bhd does not provide refunds for cancellations. For cancellations received in writing more than twenty one days prior to the training course you will receive a 100% credit to be used at another Absolute BME Sdn Bhd training course for up to fifteen months from the date of issuance. For cancellations received twenty one days or less prior to an event (including day twenty one), no credits will be issued. In the event that Absolute BME Sdn Bhd cancels an event for any reason, you will receive a 100% credit of the contract fee paid. You may use this credit to attend a future Absolute BME Sdn Bhd event to be mutually agreed with Absolute BME Sdn Bhd. This credit will be available for up to fifteen months from the date of issuance. In the event that Absolute BME Sdn Bhd postpones an event for any reason, and the delegate is unable or unwilling to attend the rescheduled event, you will receive a 100% credit of the contract fee paid towards a future Absolute BME Sdn Bhd event to be mutually agreed with Absolute BME Sdn Bhd. This credit will be available for up to one year from the date of issuance. No refund will be available for cancellations or postponements. Absolute BME Sdn Bhd is not responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. Absolute BME Sdn Bhd shall assume no liability whatsoever in the event this training course is canceled, rescheduled or postponed due to a fortuitous event, Act of God, unforeseen occurrence or any other event that renders performance of this training course impracticable or impossible. For purposes of this clause, a fortuitous event shall include, but not be limited to: war, fire, labor strike, extreme weather or other emergency.

PROGRAM CHANGE POLICY:
Please note that speakers and topics were confirmed at the time of publishing; however, circumstances beyond the control of the organizers may necessitate substitutions, alterations or cancellations of the speakers and/or topics. As such, Absolute BME Sdn Bhd reserves the right to alter or modify the advertised speakers and/or topics if necessary. Any substitutions or alterations will be updated on our web page as soon as possible.