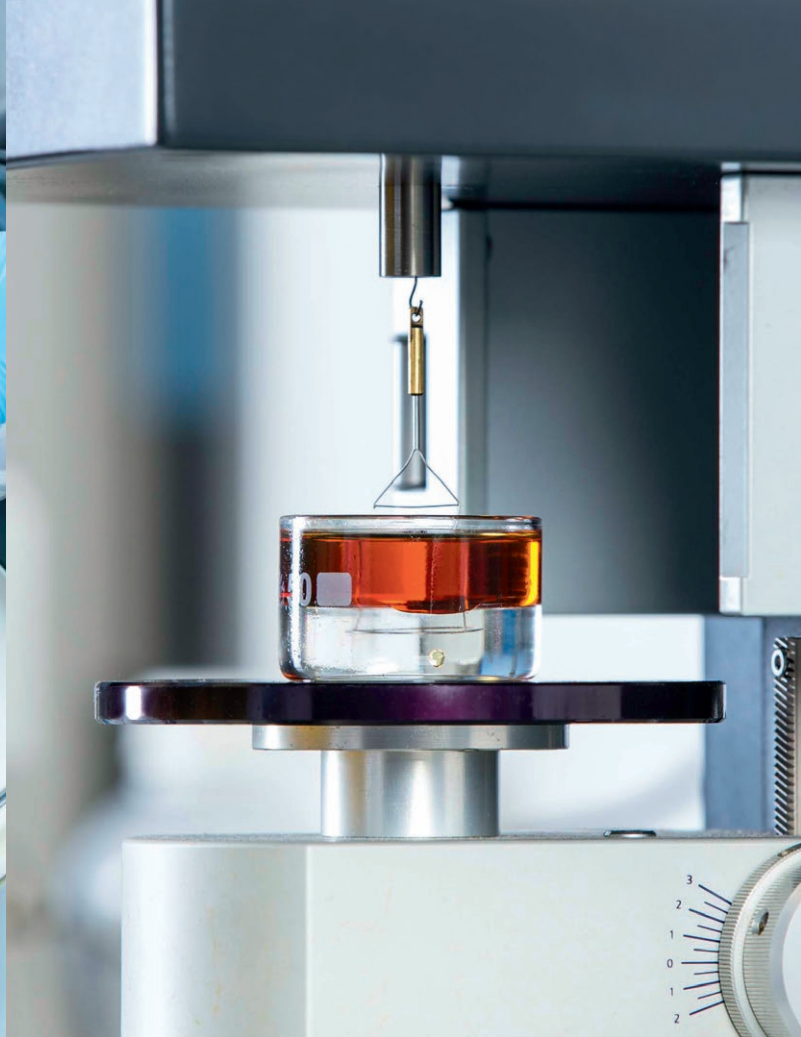


Laboratory services

Assessment of transformer conditions



Electrical Oil Services can assess the condition of your transformers

The quality of the insulating oil has to be measured on a regular basis in order to ensure operational safety of the oil-filled electrical equipment. In case of deviations from the standardised limit values, the operational safety and lifetime of the transformers inevitably decreases.

With our many years of experience and based on key findings of our laboratory services, we are in the position to offer you a comprehensive assessment of the condition of your insulating transformer oil. These results can be used as a starting point for making well-founded decisions about the maintenance measures to be carried out.

Electrical Oil Services offers you regular tests in accordance with DIN EN 60422 assessing the electrical, physical and chemical properties of your insulating oil. You will receive a comprehensible, summarised condition assessment from us upon completion of the examination. Our technical service is at your disposal for further explanations of the individual parameters.

We offer you the following insulating oil test measures according to DIN EN 60422:

- ◆ Appearance and determination of the colour number DIN ISO 2049
- ◆ Determination of the breakdown voltage DIN EN 60156
- ◆ Determination of water content DIN EN 60814
- ◆ Determination of acidity DIN EN 62021-1
- ◆ Determination of dielectric loss factor ($\tan \delta$) IEC 60247
- ◆ Inhibitor determination and oxidation stability DIN 60422
- ◆ Determination of interfacial tension Ring method DIN EN IEC 62961

In addition, we carry out the following analyses for you:

- ◆ Gas-in-oil analysis DIN EN 60567
- ◆ Furfurol analysis DIN EN 61198
- ◆ Determination of PCB content DIN EN 12766-1, -2

**Contact us today for an accurate condition
assessment of your transformer.**



About EOS

Electrical Oil Services (EOS) is a Haltermann Carless Group company and a leading supplier of both regenerated and unused electrical insulating oils and associated services in Europe. EOS specialists have '70 years' experience in the production and marketing of insulating oils and supply both large and small customers in the electricity distribution industry with tailor-made solutions.

With its three locations in Europe EOS is in the position to offer a complete transformer service package to large and small customers in the electricity distribution industry all over Europe.



Electrical Oil Services

www.electricaloilservices.com

Electrical Oil Services Ltd.
Bridges Road, Ellesmere Port
Cheshire CH65 4EQ
Great Britain
+44 (0)845 602 1003
EOS@electricaloilservices.com

Electrical Oil Services GmbH
Oehleckerring 6a
22419 Hamburg
Germany
+49 (0) 40 500 910 850
sales@electricaloilservices.com

The product information contained in this brochure has been compiled to the best of our knowledge on the basis of thorough tests and research work and with regard to the current state of our practical experience in the industry. This product information is non-binding. Our statements relating to possible uses of the product do not constitute a guarantee that such uses are appropriate in a particular user's case or that such uses do not infringe the patents or proprietary rights of any third party. We assume no risk or liability whatever in connection with any particular use, if not expressly confirmed by us in writing. Therefore, Haltermann Carless Group GmbH and its affiliated companies grant no warranty and does not accept any liability in connection with this product information or its use. Except where noted otherwise, all registered trademarks are owned by Haltermann Carless Group GmbH or its affiliated companies. The reproduction of any or all of the information contained in this brochure is expressly forbidden without the prior written consent of Haltermann Carless Group GmbH.