

## Press release

### **Smart power transformer maintenance**

#### **How OMICRON's Primary Test Manager™ software can improve power transformer testing**

<Klaus, April 19, 2017> OMICRON's Primary Test Manager™ (PTM) software was optimized for initial screening, diagnostic testing and condition assessment of power transformers with the release of software version 4.00. All common chemical, electrical and dielectric tests on power transformers are now supported by one software.

#### **Smart testing**

With proper testing and maintenance, the lifetime of a power transformer can be extended by identifying and fixing defects before they can cause severe failures. A smart combination of an initial screening, e.g. by performing dissolved gas analysis (DGA) and power/dissipation factor tests, and focused diagnostic testing is often utilized to keep the lifecycle management process more cost efficient.

A variety of other electrical test methods, such as transformer turns ratio, DC winding resistance, short-circuit impedance as well as advanced methods such as dielectric response analysis or sweep frequency response analysis (SFRA), can be used to diagnose different problems within the power transformer.

#### **Condition diagnosis in the past and nowadays**

In the past all test data had to be transferred manually from the individual test devices to one common file. Comparisons and reports also had to be prepared manually. Since the software release 4.00, PTM supports all common diagnostic tests performed with various OMICRON test systems as well as the corresponding condition assessment, such as the assessment of DGA test data.

Thus, all data can be collected in one database, resulting in advantages such as overall assessment, easy data management, data comparison, trending, one comprehensive report and less training effort for employees. Combined with the time-saving advantages of new OMICRON test systems such as the TESTRANO 600 three-phase

power transformer test system and the DIRANA for dielectric frequency response analysis, power transformer testing can be done in a fraction of the time needed in the past.

### **Ideal software for medium- and high-voltage asset testing**

In addition to diagnostic testing and condition assessment of power transformers and associated equipment such as bushings and on-load tap changers (OLTC), PTM can also be used for circuit breakers, current and voltage transformers, and rotating machines.

The software guides its user through the testing process with comprehensive testing procedures and detailed wiring diagrams. The performed tests can be automatically assessed in accordance with the applicable international IEEE and IEC standards. Powerful reporting functionalities such as customized, individual reports on test objects, test results and assessments complete the service.

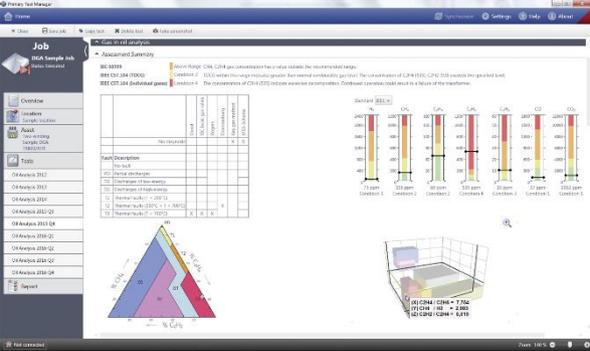
**Images**



State-of-the-art test systems and smart testing and condition assessment software help to keep the lifecycle management process more cost efficient



Based on the nameplate values, PTM generates a customized test plan according to current standards and guidelines for each asset.



The PTM software assesses DGA results using interpretation methods such as Duval's triangles or gas ratio methods according to IEEE C57.104 and IEC 60599..



With PTM user can do trend analysis and side-by-side comparisons with reference values or previous results.

## **Company profile**

OMICRON is an international company serving the electrical power industry with innovative testing and diagnostic solutions. The application of OMICRON products allows users to assess the condition of the primary and secondary equipment on their systems with complete confidence. Services offered in the area of consulting, commissioning, testing, diagnosis and training make the product range complete.

Customers in more than 150 countries rely on the company's ability to supply leading edge technology of excellent quality. Service centers on all continents provide a broad base of knowledge and extraordinary customer support. All of this together with our strong network of sales partners is what has made our company a market leader in the electrical power industry.

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