An expert guide
Primary Test Manager saves time and money

Over time, minor damage to equipment can lead to costly errors. But regular testing makes it possible to identify damage like this early on, keeping the likelihood of serious consequences occurring to a minimum. Used in conjunction with OMICRON’s CPC 100, Primary Test Manager (PTM) is the perfect tool for performing tests in a way that is both time-saving and cost-effective – and ensures maximum safety for the test engineer.

The PTM software solution makes it possible to perform a multitude of tests on power transformers, circuit breakers, and current transformers. It provides active guidance for the user during the process of testing with the CPC 100, making tests faster, easier, and safer. “It’s incredible how much time this tool saves!,” says an enthusiastic Morne Nothnagel, Sales Engineer at Maschinenfabrik Reinhausen in South Africa. During all tests, the tool can be relied upon to ensure compliance with international standards such as IEEE 62 (C57.152), IEC 60076-1, or IEC 60076-3.

Preparation makes perfect
The testing procedure is based on a four-step concept that covers everything from the preparation stage right through to the test report. The first step involves planning the relevant test. “It’s really nice to be able to do this in the office,” says Nothnagel happily. “It means we can make thorough preparations for the testing day and reduce the amount of time spent outside in the field.” In this case, one feature that is especially user-friendly is the structured way in which all the equipment is stored in the PTM database. “You can find the transformer you’re looking for with just a few clicks – everything is quick and easy. Any minor adjustments you make in the field are transferred to the database, so they’re available for the next test too,” explains Nothnagel. Not only this, but measured data from previous asset tests can also be accessed during the preparation stage and, further down the line, can be compared with the most recent results.

«PTM makes everything easier and faster!»
Morne Nothnagel, Sales Engineer, Reinhausen South Africa
OMICRON Primary Test Manager (PTM)

Software-based workflow support for testing and measuring with the CPC 100
- High-performance database for managing asset data
- Dynamic test plan creation
- Guided test procedures in compliance with industry standards
- Comprehensive test templates and reports
- Interfaces for data import and export

Guided testing
Thanks to the way PTM works and the preparation stage, testing in the field takes place virtually automatically. Clear connection diagrams help the user ensure the test equipment is set up correctly. Not only does this keep errors to a minimum, but it also provides protection for the user.

«We use PTM not only for testing, but also for training purposes.»

«Something we have found really beneficial is the fact that we no longer have to stay right next to the test device,” states Nothnagel, and adds with a smile: “Now we can just sit in the shade with our laptops and monitor measurements from there!” All results are displayed as diagrams and tables in real time, and the system also shows the progress of the measurements as well as the tasks that are still remaining. The results are evaluated automatically on the basis of limit values that have been entered (such as values conforming to international standards).

Efficient data management
All equipment-related data is stored in the integrated database. This provides guaranteed access to tests that have already been carried out, plus the associated con-
Reinhausen South Africa (Pty) Ltd.

The Reinhausen-Group is in the power technology business and consists of the Maschinenfabrik Reinhausen in Regensburg as well as 22 subsidiaries around the world. Regulation of power transformers is the company’s core business. Locally Reinhausen South Africa offers a wide range of services and is able to offer not only tap changers and related services as an accredited Premium Service Provider, but also a complete range of MESSKO measuring instruments in and around transformers.

Useful connection diagrams keep measurement errors to a minimum and ensure maximum safety.

**Individual test reports**

While it is possible to have test reports created automatically on the basis of predefined reports, the test engineer is also given the freedom to decide which data he wants the reports to represent. Additional information, such as the company logo, photos, or results from tests that have already been performed, can also be incorporated with ease.

“We don’t just use PTM for testing — we use it for training both established and new employees too,” says Nothnagel. “With the wide variety of applications this software solution can be used in, it has proven an ideal training tool for our needs.”

connection diagrams and test reports, at any time. Meanwhile, the integrated search function ensures that the user can access specific items of this data quickly and easily. Various interfaces are available for the purpose of exchanging data with other systems or databases.