

# home of diagnostics

**statex®**  
Estimate remaining  
life time



**BAUR Software 4**  
Evaluate cable condition



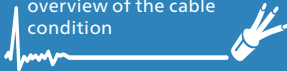
## BAUR Diagnostics Centre of Excellence

Advice and  
development of your  
own individual  
diagnostics strategy  
with assessment  
matrix; training



### Online diagnostics

Quick and easy  
measurements for an initial  
overview of the cable  
condition



### BAUR measurement technology

Precise offline diagnostics  
with VLF, TD, and PD

**true:sinus®**



## All from a single source

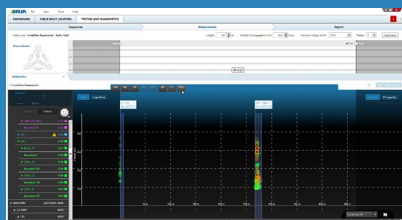
BAUR brings high-end measuring devices and the latest analysis software under one roof. This enables measurement engineers and asset managers to plan ahead, ensuring they make the right decisions, combining network availability and cost efficiency.

### Hardware: BAUR measurement technology

The BAUR product portfolio covers all the important requirements of network operators with regard to testing and diagnostics technology in the medium-voltage range.



viola VLF tester and diagnostics device ↑



BAUR Software 4 ↑

### Software: Evaluation of diagnostic measurements

#### BAUR Software 4 – for objective condition evaluation

→ see  
inside

- Intuitive operation
- Efficient and cost-saving
- Perfect for cable testing and diagnostic measurement
- Determining partial discharges in cables and accessories

#### statex® – analysis software for calculating the remaining life time

- Calculating the statistical remaining life time of cables with the patented algorithm
- Evaluating dissipation factor measurement ( $\tan \delta$  measurement)
- More precise prediction than with IEEE criteria
- Enables optimum utilisation of the maintenance budget

### Advice: The BAUR Diagnostics Centre of Excellence

Benefit from the know-how and experience of the experts at the BAUR Diagnostics Centre of Excellence in all areas of cable diagnostics.

We support you:

- In developing a customised diagnostics strategy and assessment logic
- With device and software training; on-site workshops
- In evaluation
- In refining an existing strategy and adapting measurement sequences or evaluations to new requirements
- In purchasing (additional) devices and software

## Other BAUR Brochures



Cable testing and diagnostics



Cable fault location



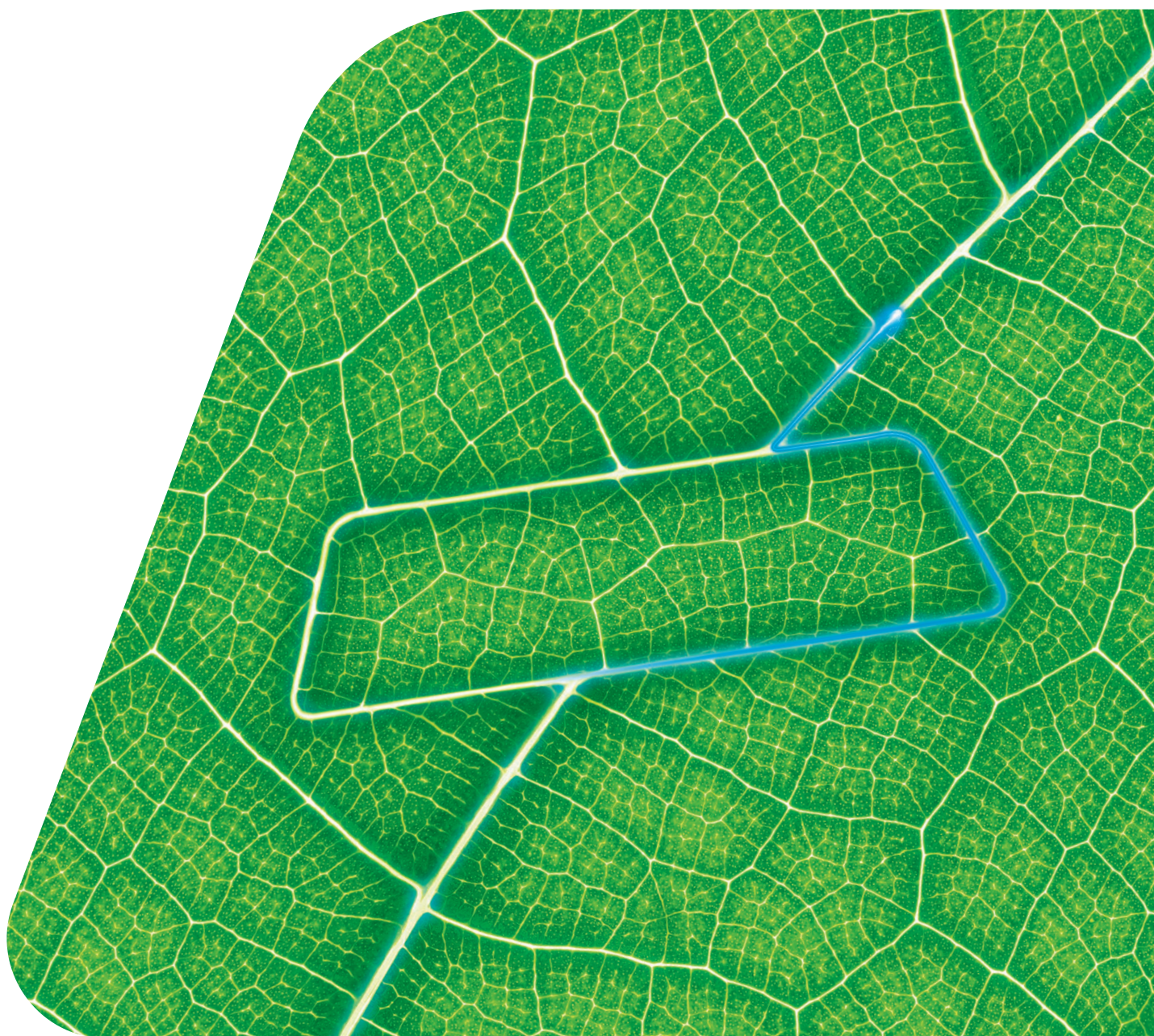
Insulating oil testing



Product overview



Further product information is available at:  
[baur.eu/brochures](https://baur.eu/brochures)



# BAUR Software 4

## Effective and user-friendly condition evaluation of medium-voltage cables



BAUR Solutions

# BAUR Software 4 –

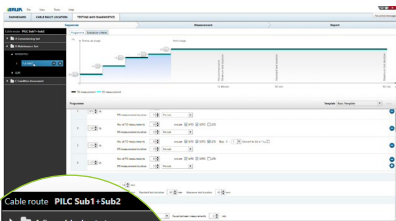
## Your basis for making the right decisions concerning the maintenance of medium-voltage cables

BAUR Software 4 provides measurement engineers and asset managers with a user-friendly complete solution for testing and diagnosing medium-voltage cables. Fast and precise determination of the measurement data provides the basis for reliable condition evaluation and enables network operators to make fact-based decisions.

### SEQUENCES

Different tasks – individual sequences

Diagnostics and measurement sequences are configured in the BAUR Software 4 which can be used to start standard-compliant procedures. In addition, you can define and save your own company-specific specifications for the cable (sheath) testing or diagnostic measurement procedure. For example, testing and partial discharge measurement following commissioning or repair, could be different from a test on an aged cable. This allows you to define your own diagnostics philosophy that fits your strategy and network conditions.



← Configured diagnostics and measurement sequences

### MEASUREMENT

Two diagnostics procedures for reliable condition evaluation

**Dissipation factor measurement** (tan  $\delta$  measurement) provides information on:

- Insulation ageing
- Damaged spots in the insulation of XLPE cables caused by moisture and impurities
- Weak points in the insulation of paper-insulated mass-impregnated cables due to drying out or moisture
- Moisture in cable segments, joints, or cable terminations
- Possible partial discharges and ageing effects

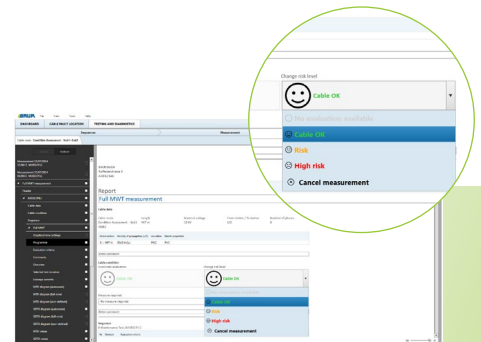
**Partial discharge measurement** (PD measurement) measures and analyses:

- Faults in accessories, such as improperly mounted joints or terminations
- Faults in the insulation of XLPE cables
- Insufficient mass-impregnated paper insulation due to drying
- Mechanical damage to the cable sheath
- Ageing-related weak points in cable accessories
- Precise location of weak points

### EVALUATION

From measurement to the individual report

BAUR Software 4 automatically generates reports on the measurements, including all the information about the cable under test. The measurement results are easy to understand thanks to their clear presentation in the form of a graph or table. Measurement engineers can also add their own comments to the reports. It is also possible to integrate a company logo and address.



Condition evaluation at a glance ↑



EASY DATA  
EXCHANGE

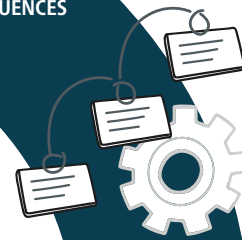
Simple generation  
of meaningful  
reports

REPORT



Time and cost  
savings through  
consistent  
measurement  
sequences in  
the field

SEQUENCES



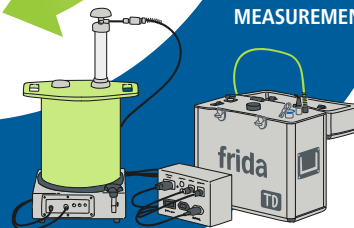
IMPLEMENTATION OF A  
COMPANY DIAGNOSTICS  
PHILOSOPHY

EVALUATION



Clear condition  
evaluation with  
all the important  
details

MEASUREMENT



Comprehensive  
measurement  
methods for a  
holistic assessment  
of the cable  
condition

## Overview of BAUR Software 4:

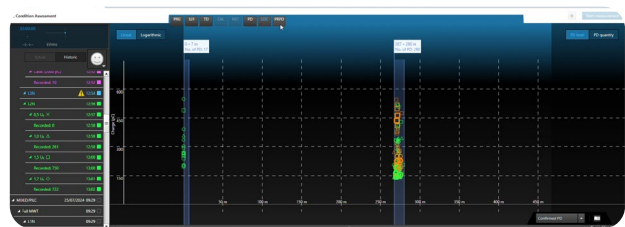
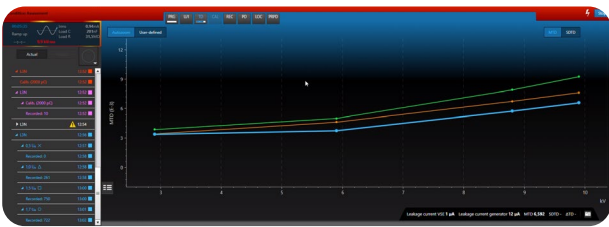
- Condition evaluation of medium-voltage cables
- Cable diagnostics with dissipation factor and partial discharge measurement
- Time-saving test and measurement methods – TD||PD parallel and Full MWT
- Configured diagnostics and measurement sequences
- Intuitive software operation including report generation
- Quick location of cable routes with cable database
- Use on-site, or as an asset management tool
- Implementation of company-specific testing and diagnostics philosophy

# Maximum time savings. Maximum efficiency. Maximum transparency.

## SPEED | TWO DIAGNOSTICS PROCEDURES IN PARALLEL

TD||PD parallel: BAUR Software 4 combines dissipation factor and partial discharge measurements in one test sequence. This increases the effectiveness of cable

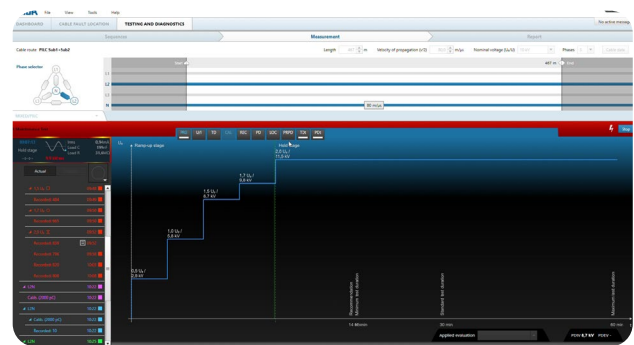
diagnostics. Only by combining TD and PD diagnostics is it possible to obtain a clear, comprehensive assessment that takes into account all aspects of cable ageing.



## MAXIMUM EFFICIENCY | SIMULTANEOUS DIAGNOSTICS AND CABLE TESTING

Full MWT: With the IEEE-approved Monitored Withstand Test for service-aged cable systems, you can perform the dissipation factor measurement as well as a time and location resolved PD measurement during the withstand voltage test. The Full MWT allows the test duration to be adapted to the cable condition. During the first test phase, the measurement voltage increases gradually to minimise stress on the cable. If a cable is over-aged, this is detected by BAUR Software 4. The measurement engineer can stop the programme sequence to avoid exposing the cable to an even higher test voltage. If the cable is in good condition, the diagnostic measurements are continued in the second phase.

Avoiding unnecessary maintenance work and resolving problems at an early stage, enables resources to be utilised more efficiently.



## OPTIMUM EVALUATION | OFFICE LICENCE FOR ASSET MANAGEMENT

Using the optional office licence for BAUR Software 4, the asset management team can parameterise and configure measurement sequences and reports in the office, view and maintain the cable database, and process the test results supplied by the measurement engineer. This makes it easy to implement your own

diagnostics philosophy and evaluate the results supplied by the service team at your desk. In addition, measured values for cables of the same age or repeat measurements on the same cable can be compared, trends can be identified, and well-informed maintenance decisions can be made.