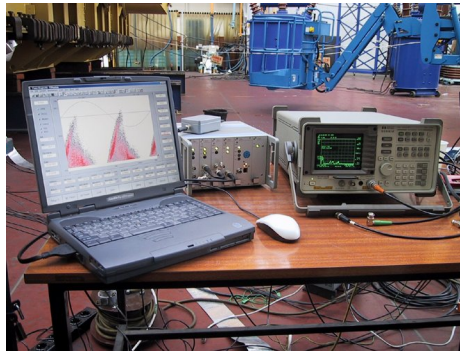


# Services



Measurement in a transformer test bay

Power Diagnostix provides various services such as on-site measurements, commissioning tests, DKD calibration of instruments, installation of couplers and monitoring systems, as well as rental of test equipment. Additionally, Power Diagnostix acts as a consultant to analyze defect mechanism or to improve high voltage insulation systems, for instance.

### Consulting

Power Diagnostix assists to analyze encountered defects, failure mechanism, and helps to improve insulation systems. Further, support is provided to implement monitoring systems and to integrate embedded partial discharge sensors into insulation systems. Additionally, Power Diagnostix offers interpretation service for partial discharge pattern acquired by local testing groups. Instruments equipped with modem allow also having Power Diagnostix dialing in for performing remote measurements and diagnosis.

discharge measurements. Such on-site measurements cover on-line and off-line diagnostics on rotating machines including large motors, partial discharge mapping on cable systems, survey-type measurements on gas-insulated substation equipment, and partial discharge acceptance testing and PD location on large transmission-class power transformers. All required instruments are provided, of course. VLF sources and smaller high voltage sources can be provided as well. However, rental of larger test sets needs to be subcontracted.



On-site measurements

### On-site Measurements

Power Diagnostix engineers are available on short notice for on-site partial

### Seminars and Training

Standard shop-floor partial discharge testing is a comparable easy task. How



Seminar held in Aachen 2006

ever, applying in-depth partial discharge diagnostics requires knowledge and experience. Here, Power Diagnostix assists with training sessions for testing and engineering personnel and with seminars for larger service groups. Besides the mere installation and usage of the instruments, emphasis is put on understanding the theoretical background of partial discharge pattern, defect mechanism, and the interpretation of measurement results.



Installing couplers on site

#### Installation Service

Especially for monitoring systems a complete installation service is offered. Typically, this installation of couplers and instruments include the calibration of the entire setup and the base-line measurement.

#### Rental of Equipment

Generally, Power Diagnostix testing equipment is available for rental or leasing, if budget constraints do not allow an investment, for instance.

#### DKD Calibration Service

Power Diagnostix operates a calibration laboratory, which has received the accreditation within the German Calibration Service DKD by 2003. The au-

dit was held by 'Physikalisch Technische Bundesanstalt' (PTB), the German authority of standards. Power Diagnostix' accreditation is filed under DKD-K-31101. The accreditation covers impulse charge (pC), voltages, and timing parameters. Since 2006 the accreditation includes also on-site calibration of voltages up to 100 kV<sub>AC</sub>.

The DKD calibration service is of course also available for instruments and calibrator of other vendors. However, the cost-effective factory calibration applies only to instruments of Power Diagnostix make, if the full traceability of the DKD calibration is not needed.

1103006  
DKD-K-31101  
2011-03

DKD-calibration



Factory-calibration



Accreditation certificate

Power Diagnostix offers in-depth support including on-site testing and installation services as well as consulting on partial discharge issues. Training sessions and seminars are offered at Power Diagnostix factory in Aachen or on-site. The DKD calibration of instruments and calibrators is offered at a competitive price.