



- Partial Discharge Analysis
- Phase Current Analysis
- Thermography
- Current Injection Testing
- HV Switchboard Partial Discharge Surveys

Condition Monitoring

Sulzer offers a range of specialist electrical condition monitoring services that are designed to help you maximize plant availability and reduce maintenance costs. Using the latest equipment, machinery and reporting systems Sulzer's condition monitoring engineers can provide data which allows you to make the most cost-effective decisions on whether to leave, maintain or replace equipment.

For customers in the offshore industry, we provide this expertise through our Aberdeen service centre, where experienced engineers and technicians hold the industry recognized offshore certifications required to deliver a professional and safe service.

Partial discharge analysis of HV machines

The StatorMONITOR© system was developed to detect and analyse the partial discharge signals found in HV Generators and Motors.

Failures are caused by a combination of electrical, thermal, environmental and mechanical stress factors. Typical problems detected include end winding contamination, coil movement due to loose wedges, main wall insulation damage and ageing.

The system is non-intrusive allowing tests to be performed on-line in service and under normal operating conditions on HV machines above 6 kV.



Ex certified Rogowski coil manufacture

The StatorMONITOR© Partial Discharge (PD) system utilises Rogowski coils as the sensor for the PD detection. Our Rogowski coils are fully Ex certified for use in hazardous areas and are manufactured and tested at the Aberdeen service centre.

Phase current analysis of motors

The MotorMONITOR© system allows diagnosis of many induction motor faults relating to the rotor such as broken bars or cracked end-rings.

The system is non-intrusive allowing tests to be performed on-line in service and under normal operating load. The system is suitable for induction motors over 35 kW with a load exceeding 60% FLC.

Thermographic inspection

Thermographic inspection surveys can be used as a tool for the early detection of problems across a wide range of industries and applications. Regular inspection and analysis of IR data allows remedial actions to be taken before system failure.

Non-intrusive thermal surveys identify electrical faults and hot spots in switchboards and control panels such as overloaded circuits, faulty switchgear and loose terminations.

Protection relay testing (injection testing)

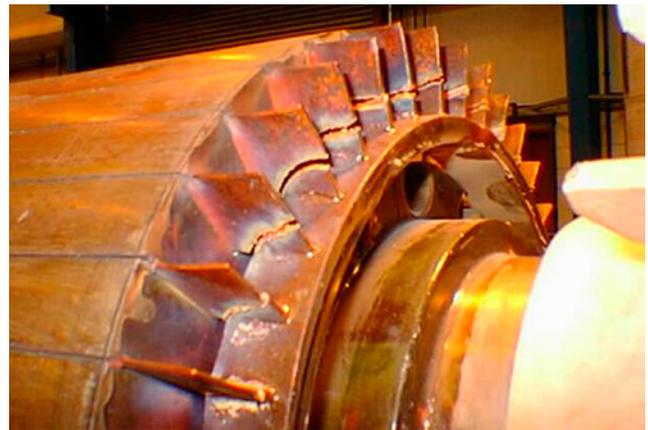
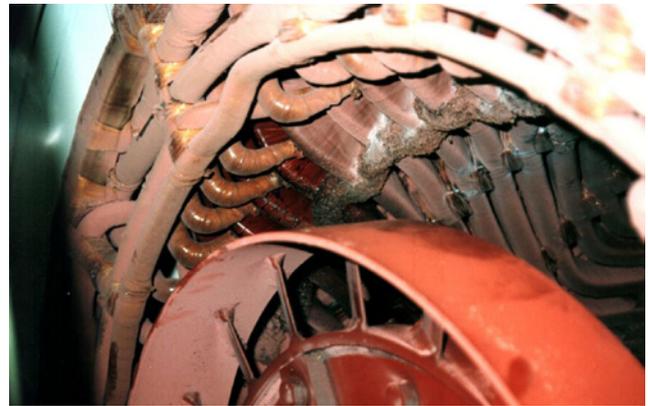
Production relay testing is carried out by our field engineers to determine the status of the relay to ensure that the relays operate within the manufacturer's tolerance.

The full range of relay (secondary) injection testing can be accommodated from 1st generation mechanical devices to the latest multi-function micro-processor units.

HV switchboard PD survey (EA Technology)

In association with EA Technology HV switchboard PD surveys can be performed to monitor the condition of the insulation of the switchboard, cables and ancillary components.

The surveys are performed during normal operation utilising transient earth voltage and ultrasonic detection techniques.



Sulzer Dowding & Mills
Aberdeen (Dyce) Service Centre
Unit 3/4 Kirkton Avenue
Pitmedden Road Industrial Estate, Dyce,
Aberdeen
AB21 0BF
United Kingdom
Tel: +44 (0)1224 427200
Fax: +44 (0)1224 723560
Email: aberdeen.engineering@sulzer.com