
COURSE DESCRIPTION

CHH635 – GMD Ring Motor PD Online Measurements with TMS6141

Course goal

The goal of this course is to understand the basics of a gearless mill drive (GMD) ring motor and its stator winding, the basics of partial discharges (PD), the features of the PD measurement device TMS6141, and how to take PD online measurements with the TMS6141 device.

Main learning objectives

The participants will be able to:

- Understand the basics of PD phenomena
- Operate the PD measuring device TMS6141 in standalone mode and with a laptop connected
- Take PD online measurements on operating GMD ring motors
- Send measurement data for further analysis and reporting

Participant profile

This training is targeted to skilled electricians and service engineers.

Prerequisites

Participants should have basic knowledge of the GMD system and the ring motor. Knowledge or experience in electrical instrumentation and electrical work is required.

Topics

- Introduction to the basics of the PD phenomena
- Features of the TMS6141 PD measurement device and parameter settings
- Operation of the TMS6141 device and TMS2141 software

- Take PD online measurements in standalone mode and with laptop connected
- Take PD online measurements during the practical part

Course type and methods

The course is split in a theoretical part (50%) and a practical part (50%). The theoretical part is an instructor-led course with presentations and interactive classroom discussions. The practical part will cover PD online measurements at customer's GMD.

Duration

The duration is 1 day.

Remarks

This course does not cover how to analyze the PD online measurement data.

This training course can only be delivered at customer's site where the dedicated equipment is available for demonstration and practical exercise purposes.

Course map

	MORNING – THEORETICAL PART	AFTERNOON – PRACTICAL PART
Topics	<p>Welcome, personnel introduction</p> <p>Course introduction</p> <p>Introduction to the basics of the partial discharge phenomena</p> <p>Features of the TMS6141 PD measurement device and parameter settings</p> <p>Operation of the TMS6141 device and TMS2141 software</p> <p>Procedure how to take PD online measurements in standalone mode and with laptop connected</p>	<p>Take PD online measurements</p> <p>This part requires:</p> <ul style="list-style-type: none"> – GMD in operation (with load) – Access to the connection box of the PD sensors – TMS 6141 device with laptop and TMS2141 software installed (all firewalls deactivated at the laptop for the test) – Power supply for the TMS device close to the PD sensor connection box – Site specific work permit for PD online testing
Time	8:00 a.m. – 12:00 p.m.	1:00 p.m. – 5:00 p.m.

Typical course layout (time or sequence may change)