

HVPD High Voltage Test Facility



The HVPD HV Faraday Test Facility is an indoor laboratory with complete electromagnetic shielding for making high voltage tests and sensitive partial discharge measurements.

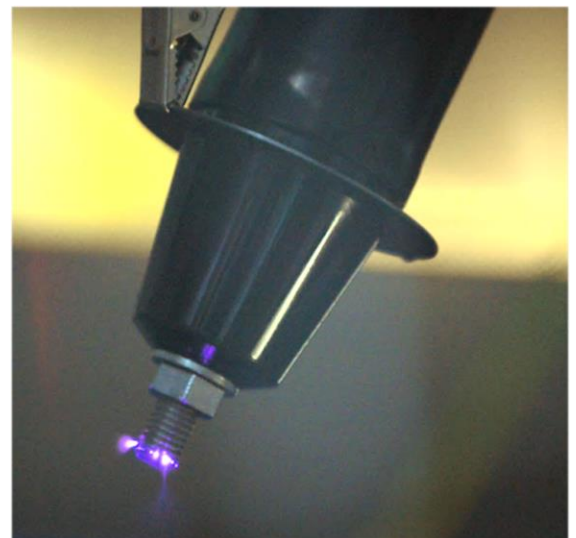
It provides high resolution, off-line partial discharge (PD) test capability (to the IEC 60270 and other industry standards) along with tan delta (loss-angle) testing capability. The test facility complements HVPD's on-line PD technology and test services for in-service HV plant.

Services Offered

- Routine and type test services
- Design consultancy and advice
- Development testing for HV components
- Process engineering: problem solving and design troubleshooting
- Forensic investigations
- Training courses

Test Capabilities

- Testing up to 100 kV, 50 Hz AC
- Partial Discharge (PD) & Tan Delta measurements
- Voltage withstand testing
- Low noise level for PD measurements to 1 pC using IEC 60270 system
- Acoustic PD measurements
- Ultra wideband PD measurements to pinpoint location of PD on items under test
- Temperature and humidity measurement
- Forensic investigations
- Low-light photography



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Design

- The facility is divided into two areas: for test control, and a larger area for HV testing.
- To ensure the highest sensitivity PD measurements, the room is fully screened.

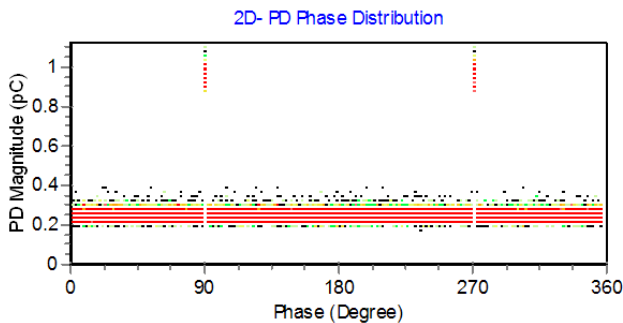
Width	4.65 m
Length	3.75 m
Ceiling-to-Floor Clearance	3.50 m
Door Height	2.45 m
Door Width	1.90 m



Technical Specification

- Maximum test voltage: 100 kV, 50 Hz, AC
- 1st HV supply: Single phase, 100 kV, 100 mA, 1 kVA transformer
- 2nd HV supply: Single phase, 50 kV, 30 mA, 1.5 kVA transformer (also suitable for at-site testing)

1 pC Calibration Recorded in HV Test Facility



PD Over Time for Stepped Voltage Test on 25 kV Cable

