

## Diagnostic test & Condition Assessment of Rotating Machine

Course Code: TR-B-8, Duration: 1 day

- Overview of the Structure of Rotating Machine
  - Stator components
  - Types of dry resin insulation used
  - Rotor components
- Diagnostic testing of stator winding
  - Stresses acting on stator winding
  - Root cause of stator failure
  - Possible defects for origin of PD
  - Partial discharge test and limitations of the various technique
  - Capacitance and Power factor measurement and limits of PF for various dry type insulation.
  - DC insulation resistance and polarization index limits
- Diagnostic testing of Stator Core
  - Stresses acting on Stator Core
  - High Power Ring Flux Test (Thermal Loop)
  - Electro-magnetic Core Imperfection Detector (ELCID) Case studies of damage core
- Diagnostic testing of Rotor
  - Stresses acting on Rotor winding
  - Basic rotor theory
  - Basic construction and location of Air gap search coil (AGSC's)
  - Basic theory behind AGSC's
  - Condition monitoring procedures
  - Root cause of rotor failure
- Condition assessment criteria of Generator
- Case studies- Generator inspection
  - -Minor outage, -Major outage
- Investigation of Generator failure and finding of design, manufacturing weakness.

CALL US ON +91-9374076950

LAXMI ASSOCIATES
VADODARA

EMAIL: rayaradhana@yahoo.com