

## WE CARE:

---

- Diagnostic/condition assessment of electrical assets like motors, generators, transformers, cables.
- Provides cleaning, drying, varnishing services including specialized cryogenic cleaning services on-site.





## Our Objective

---

- Whenever you need to get your motor/generator diagnosed or cleaned, **we strive to be the first name you recall!**
- Needless to mention that this recall value will only be achieved when you are extremely satisfied with the quality of our services and strict adherence to safety protocols.
- This is our ultimate objective that stems from our passion towards supporting you in your maintenance goals.





## Our Strengths

---

- Our Expert Panel has individuals with 15+ years of experience in developing algorithms and analyzing the insulation health of over 10,000+ HT Rotating Machines (motors and Generators) and 200+ Transformers.
- These world class algorithms offer superior analysis besides just parametric tables and graphs, providing accurate identification of insulation defects.
- Our reports provide maintenance plan over the lifetime of the electrical assets that help to prevent premature failures, increase reliability and optimize maintenance budget through better scheduling – based on condition vs application criticality





## Our Strengths

---

- Qualified and Trained Field-Testing Team
- Testing Equipment confirming to Global Standards



## Our Service Offering

### MV/HV Motors & Generators

- Offline Condition Assessment
- Residual Life Analysis / Electrical Testing
- Conventional Cleaning
- Dry-Ice Cleaning
- Training / Consultancy





# Glimpses of our Work

## Resolving high temperature issue

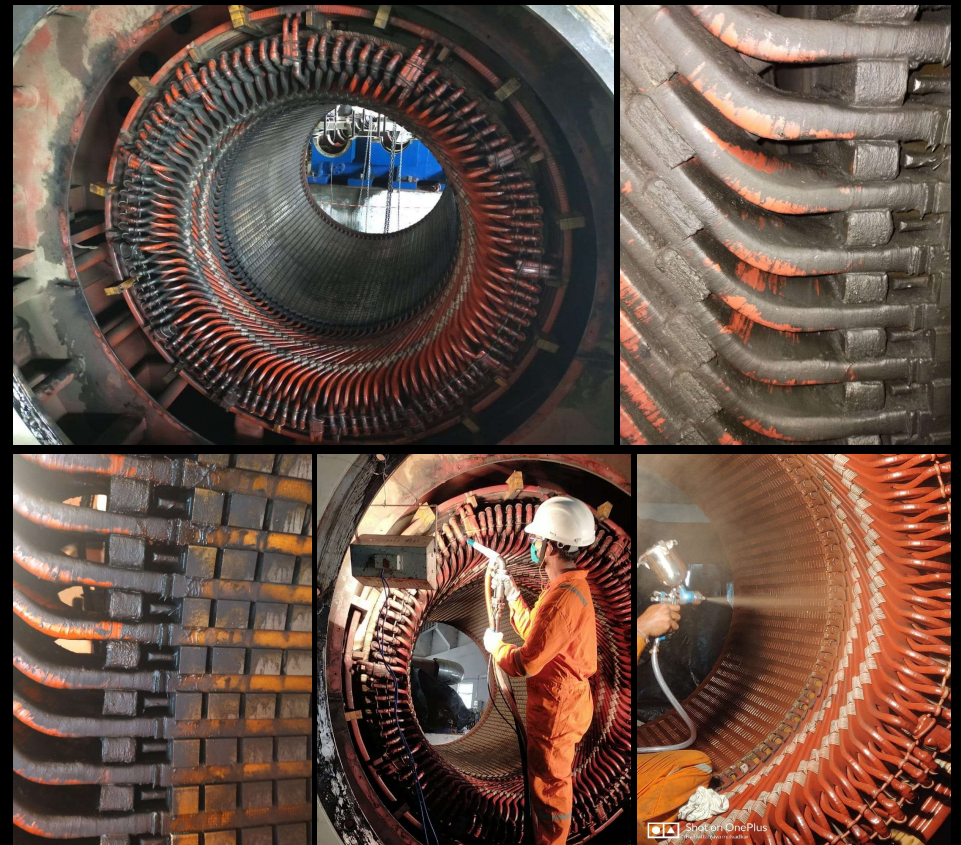
**Machine:** 37.5 MVA, 11 kV, 1500 rpm generator

**Issue:** High Operating Stator temperatures upto 100 °C.

**Observation:** The stator and rotor had excessive oil and dust contamination.

**Solution:** Solvent pre-cleaning followed by cryogenic cleaning using dry-ice, drying out and confirming the improvements in the Insulation Resistance and Polarization Index values, stator/rotor/exciter was varnished.

**Benefit:** Reduced temp - 90 °C, improved reliability, life extension



# Glimpses of our Work

## High Partial Discharge - Overhangs

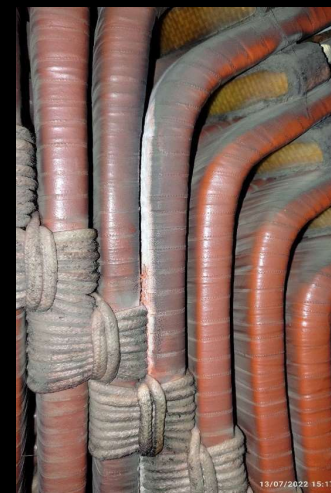
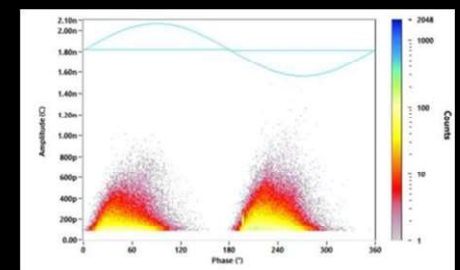
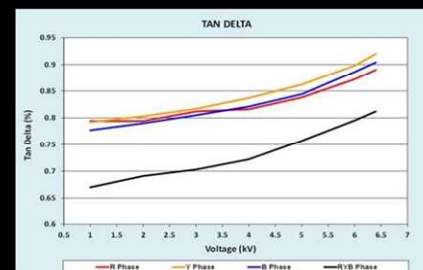
**Machine:** 22 MW, 11 kV, 1443A, 1500 rpm generator

**Issue:** Diagnostic Testing detected high end-arm PD.

**Observation:** White powder formation due to erosion of resin content of varnish layer and epoxy-resin component of ground-wall insulation.

**Solution:** Cleaning of the overhangs, varnishing, insertion of additional insulation

**Benefit:** Reduced end-arm PD, maintaining insulation life and improved reliability



# Glimpses of our Work

## High Partial Discharge – Slot Exits

**Machine:** 30 MW, 11 kV, 1500 rpm generator

**Issue:** Diagnostic Testing detected high energy spark gap PD.

**Observation:** White powder formation due to erosion of external stress grade tape at slot-ends.

**Solution:** Cleaning of the stator windings, application of SiC paint

**Benefit:** Reduced Slot-exit PD, maintaining insulation life and improved reliability

