Overhauling of High-Capacity Generator

Project:

Repair and Rewinding of BHEL Generator

Project for:

TANGEDCO, Tuticorin, Tamil Nadu, India

Industry:

Thermal Power Station

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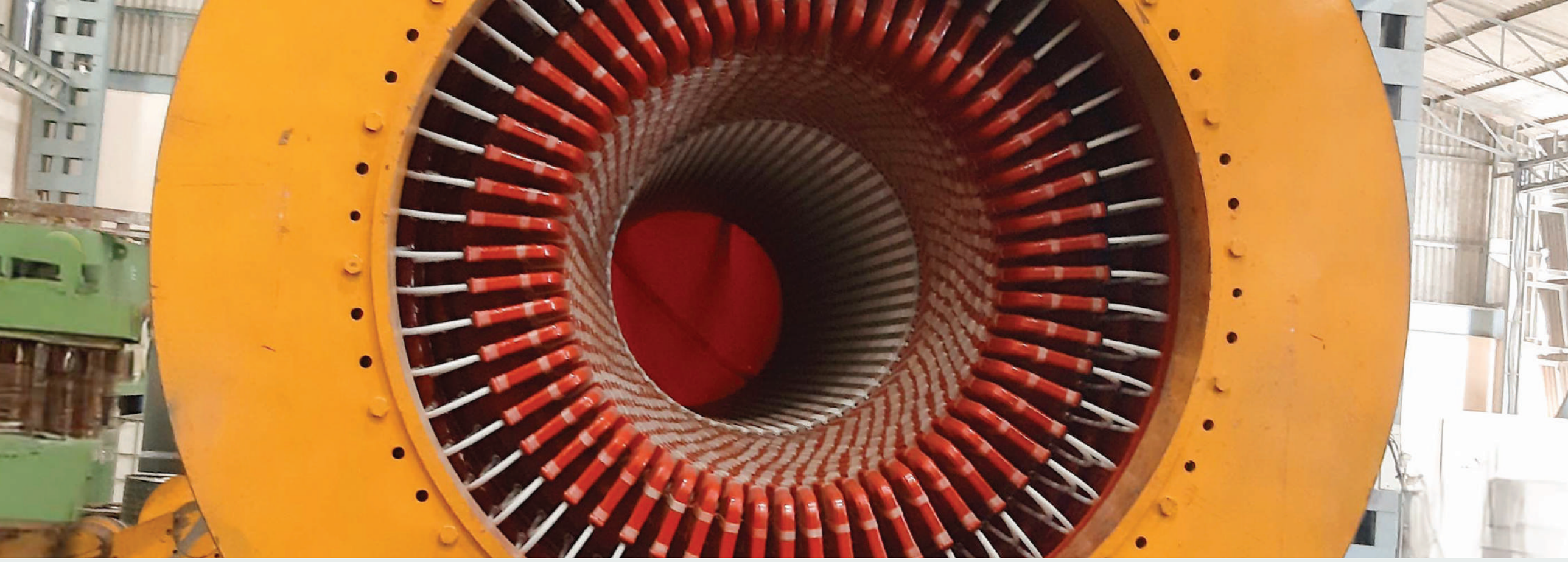

- Capacity : 210 MW
- Voltage : 15,750 V
- Current : 9,050 A
- RPM : 3,000
- Power Factor : 0.85 Lag
- Frequency : 50 Hz
- Insulation Class : F
- Year of Manufacture : 1989

Precision Dismantling & Core Restoration

- Dismantling and cleaning of the stator core.
- ELCID and flux loop tests conducted, hotspot of 124°C detected.
- Damaged laminations replaced, core reassembled using a custom tilting device.

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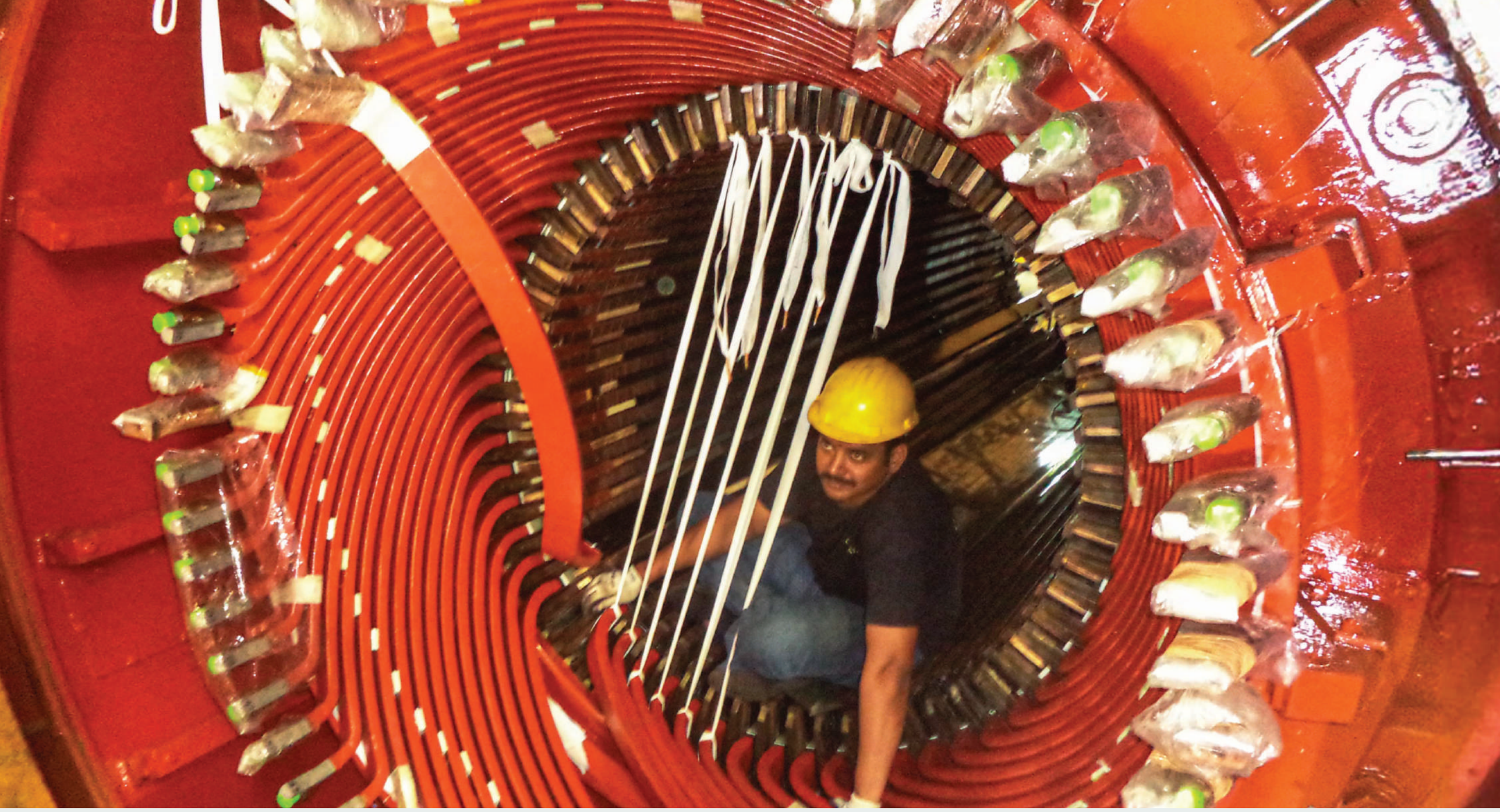
Construction & Testing of Custom Bars

- Each bar is made with 28 solid and 14 hollow conductors.
- Comprehensive tests: Water flow, nitrogen leak, helium leak, thermal shock, AC HV and partial discharge to ensure quality.



Bar Insertion & Core Assembly

- Top and bottom bars inserted with IR and HV testing before and after insertion.

- Wedging and wedge deflection tests to ensure structural stability.

Ensuring Peak Performance

- Leak Tests: Air Pressure Decay, Tracer Gas, Vacuum Decay.
- Electrical Tests: IR, PI, DC/AC High-Pot, PD Analysis.
- Mechanical Tests: End-Winding Vibration, Capacitance Mapping.

All tests met IEEE standards, ensuring safety,reliability and top performance.

Successful Completion & Reliable Performance

The rewound stator was transported back to Tuticorin Thermal Power Station.

Final on-site tests in collaboration with TANGEDCO engineers ensured top performance, reinforcing Coral Group's position as a leader in high-capacity generator repairs.

A one-stop solution
for your requirements.

High quality. Best value. Real partners.

For enquiries reach out to us on LinkedIn.

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