



Engineering, Shop, and On-Site Expertise

GENERATOR OVERHAUL SERVICES



Engineering Services

- › Equipment Condition Assessment
- › Turbine/Generator Materials Analysis
- › Extending Equipment Life
- › Non-Destructive Examination (NDE)

On-Site Services

- › Complete Stator Rewinds
- › HIT Skid Testing
- › Stator Rewedges with Modified Ripple Spring Design
- › Address Loose End Winding Hardware & Blocking
- › Stator Electrical Testing
- › Clean, Inspect & Test Hydrogen Seal Assemblies

Advanced Technologies

Complete generator overhaul services and comprehensive engineering analysis of equipment and operational dynamics.

Generator Services

- › Electro/Mechanical Testing
- › Rotor Modernization
- › Stator Modernization
- › Outage Management & Field Services

Frame 7F CT Generator (7FH2) Services

- › In-Depth Inspections Based on Extensive Experience
- › Repairs for Known Technical Issues
- › Assessments to Uncover Systemic Problems

Shop Services

- › Complete or Partial Rotor Rewinds
- › J-Strap & Main Lead Replacement/Reconditioning
- › Spacer Block Repairs
- › Amortissuer Assembly Repairs
- › Collector Ring Machining & Replacement
- › High-Speed Balancing

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GENERATOR OVERHAUL SERVICES



Turn to Toshiba for Generator & Engineering Expertise

Toshiba is uniquely qualified to design and implement creative solutions to handle your most challenging repairs with a team of highly skilled in-house engineers. We have many years of experience on hundreds of projects in all primary disciplines, from mechanical to electrical as well as dynamics and metallurgical specialties. Toshiba can provide fully integrated turbine/generator solutions and a comprehensive range of services that includes outage management and field services.

ElectroMechanical Testing

- › DC Controlled Overvoltage
- › Insulation Resistance
- › EL-CID Testing
- › Shorted Turn Diagnostics
- › Stator Wedge Tightness
- › Mechanical Resonance (Bump Testing)
- › Water-Cooled Stator Winding Dry-Out Testing

Balance & Overspeed Facility

- › Below Ground for Safe High-Speed & Overspeed Operation
- › Full Overhead Crane Access to Handle Large Rotors
- › Handles Rotors Up to 52'L, 7'Diameter & 150 Tons
- › Collection & Evaluation of Indicator Run-Out Readings
- › Electrical Testing:
 - Running impedance tests (0 to 3,600 rpm to 0)
 - Running flux probe test at 3,600 rpm
 - Running Megger testing

Rotor Modernization Services

- › Complete Rewinds - new or refurbished copper winding
- › Retaining Ring Machining & Replacement
 - Large Inventory of 18-18 Retaining Ring Forgings
- › Inspect, Repair, Manufacture
 - Main Leads
 - Collector Rings
 - Hydrogen Seals
- › Diagnostic Inspection & Evaluation
- › Bearing Journal Machining & Repairs

Stator Modernization Services

- › Complete Rewinds, Including Water-Cooled Stators
- › Winding and Insulation Inspection & Repairs
- › Core Inspections, Repairs & Evaluation
- › Diagnostic Inspection & Evaluation
- › Core Restacking
- › Frame & Mechanical Inspection & Repairs
- › Re-Wedging

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