

TOSHIBA is one of North America's leading turbine/generator service providers. Through our sales, engineering and scheduling professionals and an experienced workforce, we ensure quality and value in rewinding, refurbishing, repairing and testing large generator rotors and stators. In addition to extensive in-house generator modernization capabilities, our comprehensive outage management and field services enable single-point contract responsibility.

We understand the critical nature of outages.

Toshiba's high-bay facilities at our Milwaukee Service Center, with a 300-ton lifting capacity and wide-ranging machining capabilities, make us unique in the power generation service industry. Generator services include:

- *Rotor and stator rewinding*
- *Stator core restacking*
- *Inspection, diagnostics, testing and other engineering services*
- *Large inventory of retaining ring forgings*
- *Design and manufacturing of parts*
- *High-speed balancing*
- *Field services*



Rotor Modernization Services

- *Complete rewinds – new or refurbished copper winding*
- *Retaining ring machining and replacement*
- *Inspect, repair and manufacture*
 - *Main leads*
 - *Collector rings*
 - *Hydrogen seals*
- *Diagnostic inspection and evaluation*
- *Bearing journal machining and repairs*



Toshiba's large inventory of retaining ring forgings fit most rotor sizes.

Stator Modernization Services

- Complete rewinds, including water-cooled stators
- Winding and insulation inspection and repairs
- Core inspections, repairs and evaluation
- Diagnostic inspection and evaluation
- Core restacking
- Frame and mechanical inspection and repairs
- Re-wedging



Balance and Overspeed Facility

- Collection and evaluation of indicator run-out readings
- Balance rotor at rated speed and overspeed
- Electrical testing, including:
 - Running impedance tests (0 to 3,600 rpm to 0)
 - Running flux probe test at 3,600 rpm
 - Running Megger testing



Electro/Mechanical Testing Service

(All testing performed in accordance with IEEE standards.)

- 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

