



We have decades of experience in plant perfection, and our job is to help you with your rotating main equipment management from planning to optimized maintenance, modernizations, and repairs.

SKILLED MAINTENANCE SHORTENS TIME NEEDED FOR OVERHAULS

Generator maintenance is based on overhauls inspections that take place at set intervals, which are supplemented if necessary by various measurements.

In our maintenance service measures and their scheduling, we take into account the generator's operational history and the changes which have taken place over the years. Fortum's expertise is based on technical know-how obtained over decades and on experience in maintenance, measurements, inspections and operations involving the generators of various different manufacturers. In generator maintenance our aim is to take overall responsibility for the maintenance work by a turnkey arrangement, at the same time handling any necessary subcontracting.

REGULAR MAINTENANCE

The state of the generator is checked out during short shutdowns, without taking out the rotor. By diagnostic measurements which are carried out at the same time, we establish the nature and extent of the necessary maintenance measures, and draw up a work and procurements plan.

IN REGULAR MAINTENANCE WHERE THE ROTOR IS TAKEN OUT, WE PERFORM THE FOLLOWING:

- Bearing inspections (refurbishment if needed)
- Inspection of stator wedging and re-wedging if needed
- Any cleaning, inspections, and coating that are required
- Repairs to windings and joints
- Electrical measurements
- Endoscope inspections
- Rotor retaining inspections and replacements

Fortum Power and Heat Oy,
Turbine and Generator Services
P.O.Box100, 00048 Fortum
Keilalahdentie 2-4, CD-buldng, Espoo, Finland
www.fortum.com/enext

Vesa Kymälä +358 50 454 6323
vesa.kymala@fortum.com
Ville Holmström +358 50 453 4817
ville.holmstrom@fortum.com

CONDITION MANAGEMENT:

- Long term condition management planning
- On-line and off-line condition monitoring and equipment:

MECHANICAL CONDITION MONITORING

Vibration measurements, endoscope inspections, NDT inspections.

ELECTRICAL CONDITION MONITORING

Partial discharge sensors, flux probes.

OTHER MAINTENANCE:

- Rotor factory overhaul (rewinding with original/new copper, retaining ring replacement, balancing)
- Fixed-term inspections of generator protection relays
- Inspections of excitation, protection and synchronization systems

We also provide owner's engineering services and long term service agreements for the whole turbine-generator unit.

Benefits

- Reliable operation
- Lower maintenance costs
- Shorter overhaul times
- Lower spare parts costs

Fortum
eNext