

Reactor Coolant Pump Motor Shop Services

Background

During the life of a nuclear power plant, more than just routine inspections of a reactor coolant pump (RCP) motor are necessary to help prevent unscheduled or extended outages. It is recommended that RCP motors be sent to a service center to be disassembled.

Westinghouse has designed, manufactured and repaired hundreds of RCP motors for the global market. Westinghouse is uniquely qualified to perform shop services on Westinghouse, Siemens, Allis-Chalmers and General Electric motors.

Description

We will supply equipment, material and qualified personnel to perform the motor services. The activities and inspections will, in general, consist of the following:

- Perform receipt inspection
- Disassemble motor
- Clean to meet ALARA requirements
- Inspect stator (if not to be rewound)
- Inspect flywheel
- Inspect rotor
- Inspect oil coolers
- Inspect bearing assemblies
- Inspect oil lift system
- Reassemble motor
- Perform commercial no-load test
- Perform final electrical testing
- Package and prepare for shipment



Westinghouse RCP motor

Enhancements

Westinghouse is constantly searching for ways to improve reliability and maintainability to enhance motor operability. As such, a variety of options are available, including:

- Remote visual inspection (RVI) upgrade
- Dynamic Port™ modification
- Spare bearing RTD modification
- Flywheel key modification
- Oil lift modifications
- Oil spillage protection system modification
- Enhanced stator design

Human Performance

Westinghouse conducts lessons learned for each project and applies this knowledge to future projects. The Corrective Actions Process (CAPs) is used to identify and address issues related to quality and performance.

Safety

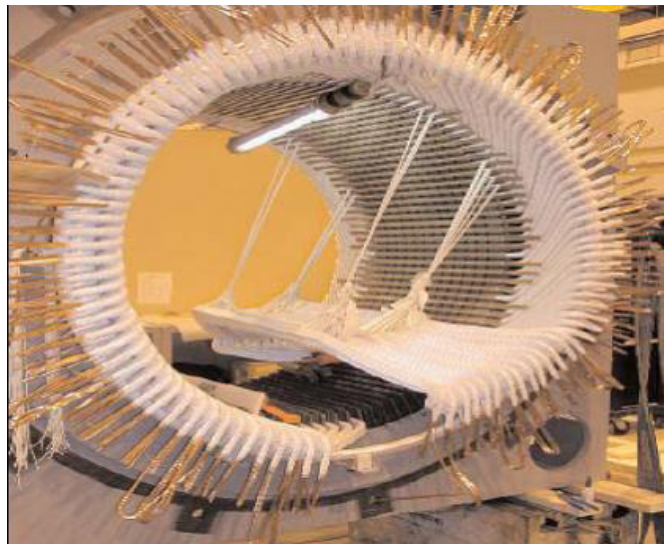
Safety is of paramount importance to Westinghouse and its subsidiaries. Westinghouse conducts extensive safety training for all employees and evaluates OSHA-reportable items on a weekly basis.

Benefits

As the original equipment manufacturer (OEM) of a large portion of the RCPs in the nuclear power industry, Westinghouse has the engineering expertise and experience to increase the reliability of your RCP motors. We have unsurpassed knowledge of OEM design and field engineering to evaluate anomalies and inspection results and perform upgrades for increased reliability of the equipment. Westinghouse can integrate all aspects of RCP services, including field services, hot shop, factory services and spare parts.

Experience

Westinghouse pioneered the development of the RCP motor for the first commercial PWR nuclear power plant. With hundreds of different RCP motor services performed, Westinghouse is the leader in the industry for RCP motor services. From design, manufacture and testing to site service, Westinghouse has the knowledge and technical expertise to keep your RCP motor running.



Stator rewind



Siemens-Allis RCP motor