

FAST GenSM Generator Inspections

Product Sheet

Generator Inspections:

The FAST GenSM generator inspection features breakthrough technology that provides faster, more reliable, comprehensive and cost-effective generator inspections. For more than two decades, the FAST Gen system has provided steam, gas and nuclear plants an invaluable robotic tool for strategic outage planning and preventative maintenance. This inspection technology enables a safe and thorough inspection of the generator with the rotor on-site and minimal disassembly.

FAST Gen Improvements:

The heart of the FAST Gen system is a newly developed and patented technology – the Siemens Multi-frequency Core Analysis System (SMCAS). It features advanced capabilities for detecting imperfections in the stator core inter-laminar insulation. SMCAS uses a specially modified Eddy Current instrument to duplicate the same test results that are available with the standard EL CID equipment. Additional features include the ability of the advanced SMCAS system to allow for multiple inputs while the standard EL CID equipment can only test one stator slot at a time. SMCAS can perform the test at higher frequencies, increasing the sensitivity for detecting an indication. The capability aids in determining the radial depth of an indication.

Scope of Supply:

Another important feature is the ability to perform additional electrical and mechanical tests, typically conducted after the rotor is removed, the rotor on-site. We offer global FAST Gen inspection services for a variety of OEM equipment.



Our Customer Benefits

- Proactive planning of generator maintenance using inspection data for assessments, trending, predictions & recommendations for future maintenance and unit reliability
- Reduced inspection time of up to 50% due to minimal disassembly
- Increased accuracy & thoroughness of inspection due to improved techniques, digital imaging, & enhanced electronic capabilities
- Easy-to-analyze results in computerized format
- Avoid removing & reinstalling the rotor

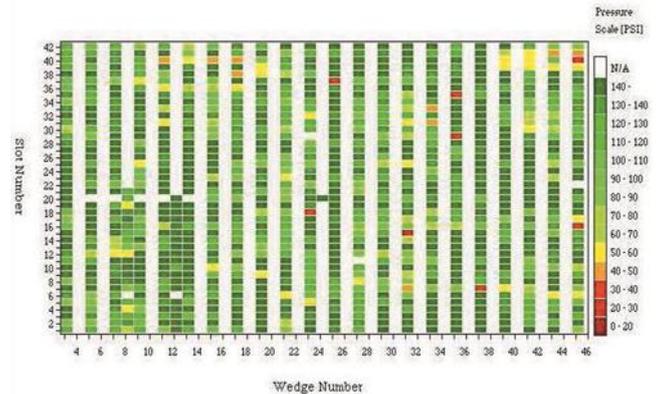
Features:

The FAST Gen inspection service offers reliable and flexible capabilities with the following features:

- By using SMCAS technology, two stator slots can be inspected simultaneously
- Computer operated, precision robotic system with digital data format
- Carriages are made of rugged nylon material & designed to fit air gaps as small as 0.75 inch
- Carriage design allows for manual extraction if required
- High-definition color cameras for recording video & images
- Patented Magna-Cat™ modular motor drives
- Immediate diagnostic results are available on-site & are included in a final report supplied to the customer. Should inspection results indicate a condition assessment and an engineering recommendation is required, EthosEnergy can provide service at the customer's request

References:

The predictive maintenance approach is invaluable when planning for future outages and this leading-edge technology has significantly reduced forced outage time.



EthosEnergy is a leading independent service provider of rotating equipment services and solutions to the power, oil & gas and industrial markets. Globally, these services include facility operations & maintenance; design, manufacture and application of engineered components, upgrades and re-rates; repair, overhaul and optimization of gas and steam turbines, generators, pumps, compressors and transformers; delivery of gas turbines and generators, and supply of overhauled and warranted equipment on a FAST TRACK basis.