



Steam Turbine Diaphragm

Partial Steam Path Repair

GE Power offers a partial steam path repair solution for major steam turbine diaphragm repairs. As part of the repair process, the damaged exit side of the steam path and sidewalls is machined so that it is returned to the transition point of the partition, typically about one-third of the depth. The removed steam path side is then replaced with new partial partitions and sidewalls.

Reduced Weld/Grind Time, Cycle Time And Cost

The steam path repair process eliminates about 95% of the manual hand grinding and restores the steam path to its original geometry. Our repair process also can lower the overall repair cost by up to 20%.

Repair Process

Faro® scan data and the original model are used to create the partial partitions and obtain proper alignment for the throats and pitches. The partial steam paths usually are made in sections of about five to six partitions. Once created, these sections are fitted to the correct location and tacked in. The grooves are then filled with weld. The final steps are stress relief and machining the set-backs.

Features and Benefits

- Custom-machined partial partitions to restore steam path areas back to original condition
- Patent pending GE proprietary technology
- Higher recoverable losses compared to standard weld repair



Assemble Partial Steam Paths



Seal Weld



Fit and Tack



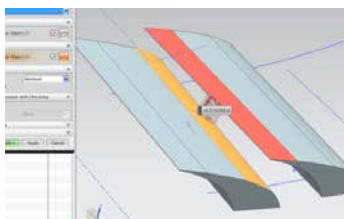
Groove Weld



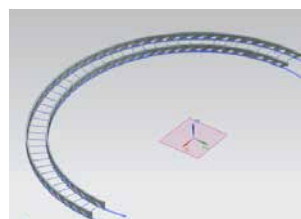
Steam Path Machined



Faro Scan



Model



Model

To learn more about this offering, contact your GE sales representative or visit powergen.gepower.com.