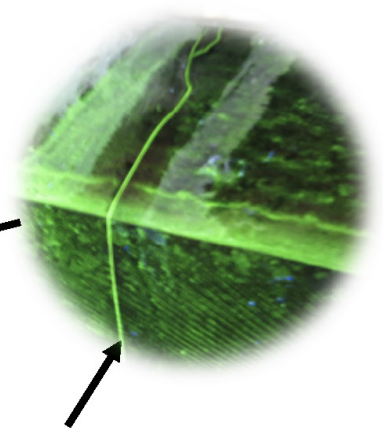
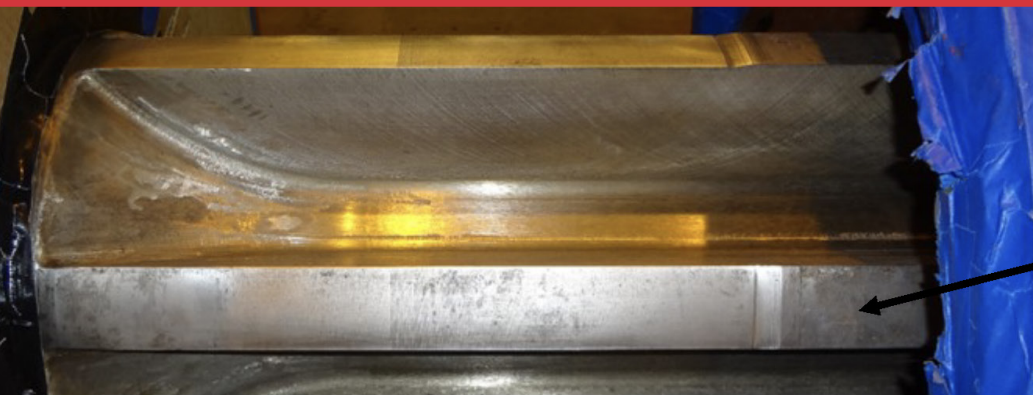


WHAT CAN **EME** DO FOR ME?

WESTINGHOUSE MARK II EXCITER SHAFT INSPECTION & REPAIR



FAILURE MECHANISM



Aluminum Shield fretting during bending works oxide particles into forging and initiates cracks.

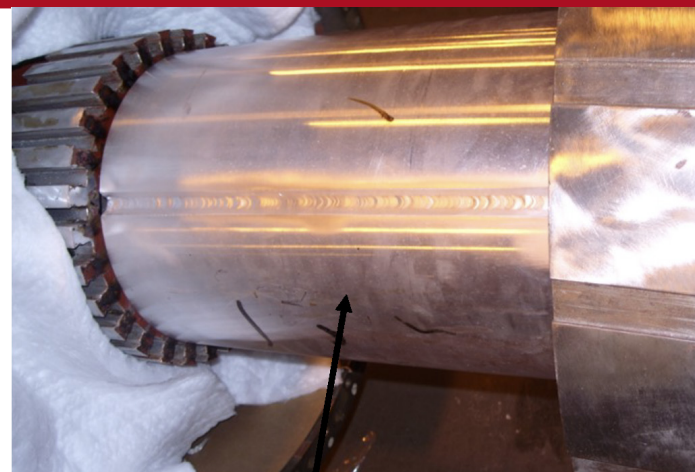
PROACTIVE REPAIR & INSPECTION

1. PROACTIVE REPAIR

- Eliminate the failure mechanism before it becomes a critical problem.
- Cost effective: can be implemented without a rewind in a short outage window.

2. PERIODIC UT INSPECTION

- Identify cracks and monitor their growth in combination with Fracture Mechanics Analysis to estimate time to critical crack size.
- Provides information to preemptively plan a scheduled outage for repair implementation before cracks reach point of rapid eminent failure.



**EME'S TWO PIECE
REPLACEMENT SHIELD**



In our 35+ year history,

EME has been supporting power generation with our knowledge and experience of Westinghouse brushless exciters.

EME has supported owners and service and repair companies with inspection and testing services, root cause failure analysis, upgrades, replacement parts, and complete overhauls of these machines.

FAILURE MECHANISM

Product bulletin issued stating reports of cracks of the shrink fit interfaces between the phase lead shield and the shaft.

- **Cracks can propagate to critical size in as little as 32 hours**
- **Recommendation for periodic ultrasonic inspection of shaft splines**

PROACTIVE REPAIR & INSPECTION

EME combines industry leading Brushless Exciter knowledge and experience:

- **A qualified ultrasonic inspection by leading experts in the field**
- **A repair that is implemented proactively with minimal invasiveness to the machine (NO REWIND REQUIRED)**

412.351.0290



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At EME, we are focused on providing engineered solutions that make positive change and improve peoples' lives.