

ADVANCED TURBINE SUPPORT

MS5001 BLEED AIR HOOK FIT CRACKING

PURPOSE

To inform users of potential hook fit cracking that has led to catastrophic compressor failures. This problem is also addressed in the OEM TIL 1304-3.

UNIT TYPE

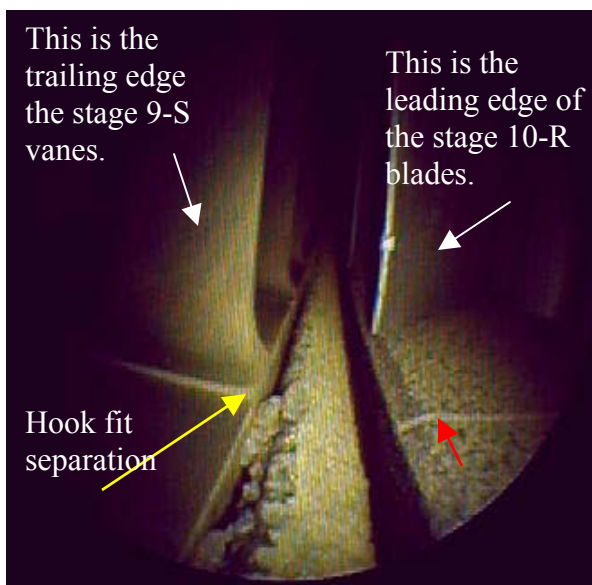
This newsletter addresses the MS5001 gas turbines.

HISTORY

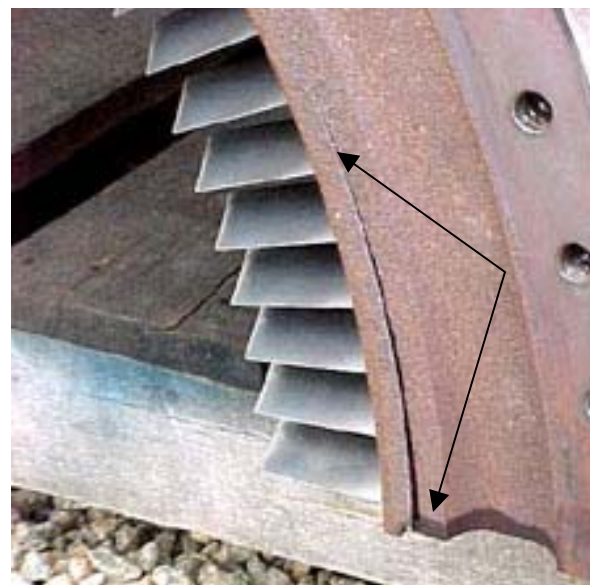
There have been numerous hook-fit failures throughout the fleet of Frame 5 compressors. We have developed an inspection technique that allows us to inspect the bleed air slot at the case breaks where cracking typically initiates. This has allowed us to identify cracked hook fits on several machines before there was a total failure of the hook fit.

RECOMMENDATION

Users should have ATS perform a borescope inspection of their units as soon as possible. If cracking is identified at the bleed air slot a maintenance outage should be planned to replace or repair the compressor.



This view is showing a unit with a cracked hook fit before a total failure. The red arrow designates the case break.



This is a general view showing how the hook fit cracking typically starts at the case break and propagates around the unit until a total failure occurs.