

ADVANCED TURBINE SUPPORT

MS7001FA FIRST STAGE TURBINE BUCKET CRACKING

PURPOSE

To inform users of potential cracking in the first stage turbine buckets.

UNIT TYPE

This newsletter addresses the 7231 and 7241 MS7001FA gas turbines.

HISTORY

We have identified turbine bucket cracks on the first stage bucket platforms. This cracking initiates at the pressure-side platform and or the trailing edge platform. We are identifying cracks or linear indications on 90% of the units we inspect.

These cracks have lead to the total failure of the pressure side platform on at least one unit in the fleet.

RECOMMENDATION

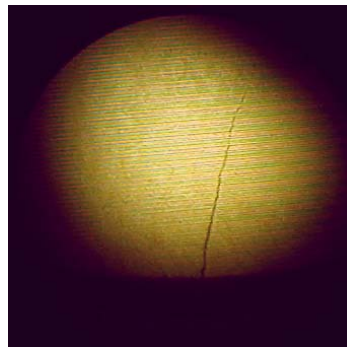
Users should have ATS inspect the leading and trailing edge of each first stage bucket using ultra-close up technology. This inspection will verify the presence or absence of cracking. If cracks are found this information should be submitted to General Electric engineering for disposition.



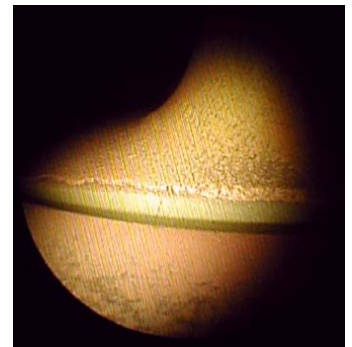
Trailing edge platform indication.



Platform crack in TBC coated bucket.



Platform crack in a non-TBC coated bucket.



Faint platform indication.