

IDENTIFYING TURBINE MAINTENANCE ISSUES BEFORE COSTLY UNPLANNED DOWNTIME



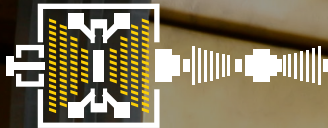
The cost of a single turbine failure can amount to hundreds of thousands of dollars per hour. We explore some of the most common turbine maintenance issues and how you can avoid them.

TURBINE TYPES

GAS



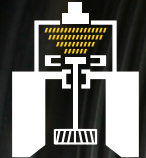
STEAM



COMBINED CYCLE



HYDRO



DEPOSIT FORMATION ON BEARINGS

- Excessive bearing temperatures
- Select a low varnishing potential oil with excellent oxidation and thermal stability
- Use oil condition monitoring to keep an eye out for rising membrane patch colorimetry values

REDUCED HYDRAULIC EFFICIENCY

- Oil foaming in the reservoir
- Choose an oil that has rapid air release and low foaming tendency
- Check for low oil levels, antifoaming additive depletion or oil contamination and degradation

CORROSION

- Water or steam contamination
- Ensure your lubricant has excellent water separation properties
- Centrifugate or vacuum dehydrate your oil to remove excessive water

LOOK OUT FOR

- POTENTIAL REASON
- SOLUTION

DAMAGED AUXILIARY GEAR SYSTEMS

- Increased component wear, due to excessive stress on the lubricant
- Use a high-quality lubricant with high load carrying capacity
- Inspect gears for evidence of scuffing wear

EXPERIENCE AND EXPERTISE IS KEY TO IMPROVE THE EFFICIENCY AND RELIABILITY OF YOUR OPERATIONS



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Shell Turbo

Help reduce your total cost of ownership with a high-quality turbine oil

Shell LubeAdvisor

Determine the right oil for your equipment

Shell LubeAnalyst

Monitor your oil and equipment performance