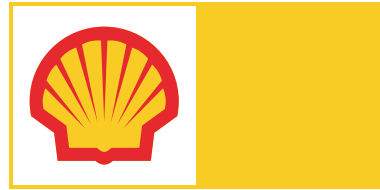


HOW TO ENSURE TROUBLE-FREE TURBINE OPERATIONS



THE DEGRADATION OF OIL AND HOW TO MANAGE IT



THERMAL AND OXIDATIVE DEGRADATION

Turbine oils operate in high-temperature environments and are exposed to air and catalytic metals

Fast flow rates and short reservoir residence times lead to air and oil interacting and reacting and the formation of sludge and varnish

This sludge and varnish can cause increased bearing temperatures, stuck valves and blocked filters



CONTAMINATION

Turbine oils are subject to various damaging contaminants including water, dust, incorrect oil and wear metals

Wear metals such as copper, iron and lead may speed up oil oxidation

Water prevents the turbine oil from dissipating foam correctly and providing rust and corrosion protection



ADDITIVE DEPLETION

Excessive or accelerated additive depletion can significantly reduce an oil's life and performance

Demulsifiers that help the oil to shed water and antifoam additives may agglomerate if it is not routinely circulated

This can decrease the oil's foaming performance or its ability to separate water



TAKING ACTION

An oil monitoring programme such as Shell LubeAnalyst provides detailed oil and equipment analysis, and advice specifically tailored for your machinery.

Shell
LubeAnalyst



This can help extend the life of critical turbine components and extend the life of your turbine oil



- Ultimately resulting in lower costs
- Less unplanned downtime
- And improved operational efficiency

