



Cracked Welds Detected on Oil Cooler

1. What happened?

During planned unit outage, deformation was identified on the oil cooler shell and piping. This prompted additional checks, which revealed cracking in the welds. The damage is likely the result of in-situ loading from pipe stresses over time. The defect had the potential to develop into an oil leak with environmental and machine reliability risks. Fortunately, the issue was detected early enough that repairs can be completed without affecting the wider outage, avoiding the unplanned downtime that would have occurred if the failure happened during normal operations.



2. What did we learn?

- Planned inspections were effective in identifying the defect before failure.
- Station design—including sump drainage and the inline oil separator—minimises environmental risk from any release.
- Detection prevented disruption to the outage; outside of outage conditions, downtime would have been likely.
- As the organisation grows, sharing engineering-related defects more broadly would support wider learning and risk reduction.
- Stress related failures are a risk for pipework and associated equipment that warrants periodic inspections.

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