

# Wind turbine flushing and filtration services



Energy lives here™

► This service facilitates trouble-free gearbox flushing and filtration to optimize turbine reliability.

## Description

We'll share expertise — either directly or through a third party — on proper flushing and filtration procedures for installing wind turbine gear oils. Then, we'll provide you with detailed procedures for the gear oil changeover process to ensure trouble-free operation.

## Application

Expert engineers will work with you to:

- Establish oil compatibility through comprehensive testing
- Flush to remove contamination and residues and deliver clean oil
- Ensure optimal gear oil delivery and filtration method
- Recommend appropriate level of filtration for gear oil
- Document and report results of service

## Potential Benefits



Improve gear oil performance, component life and operating efficiencies



Ensure trouble-free changeover for maximum reliability and gearbox life



Reduce unnecessary parts and labor costs



Remove contaminants and deposits to maximize oil life

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**Deliverable:** The Engineering Service Report details the cleaning steps, documents the cleanliness level and lubricant condition before and after, recommends steps to maintain cleanliness, and provides an estimated value of the service. The completed report will be distributed and presented to wind plant operators and maintenance personnel.

## Common opportunity areas

- Elevated oil temperature
- Poor filter life
- Gear bearing and seal failures
- Lubricant leakage and contamination

## Safety, health and environment

Our field engineers are attuned to the hazards of handling, storing and using petroleum products. They strictly observe safety and environmental rules, as well as ExxonMobil and customer safety practices. They coordinate efforts through designated plant personnel verifying electrical and mechanical lockout and proper tagging prior to working on equipment, and providing recommendations to help reduce hazards.

## Process details

1

### Wind turbine system inspection

- Inspect for deposits in the gearbox
- Recommend level of flushing

2

### Wind turbine flushing and cleaning

- Remove contaminants from gearbox

3

### Filling

- Flush and clean gearbox, filter lubricant, fill system and certify cleanliness

4

### Final inspection and report

- Document performance improvement\*
- Provide final report

Industrial  
Lubricants



By helping you enhance equipment life and reliability — which minimizes maintenance costs and downtime — our expert services can help you achieve your safety, environmental care and productivity goals.

\*Results obtained may vary depending on equipment condition.

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