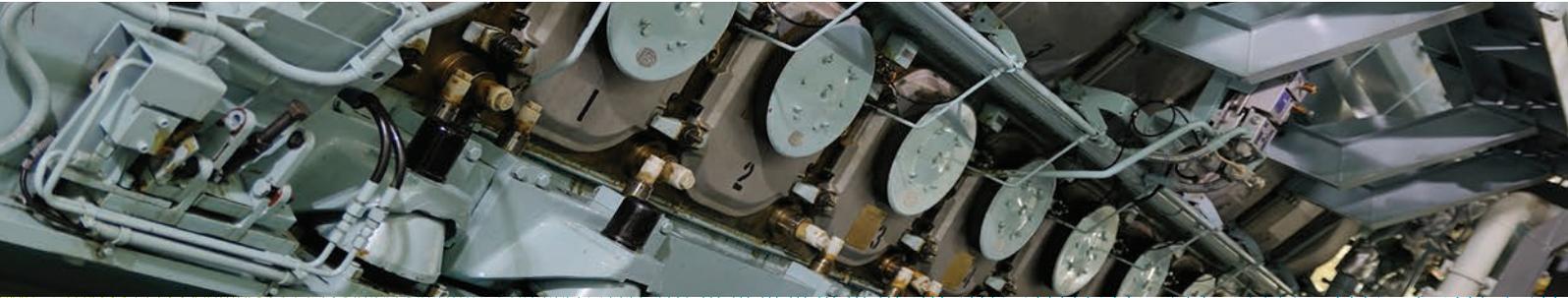


# Engine inspection



Energy lives here™

▶ Expert inspections by our well-trained engineers using borescopes and specialized tools can help your diesel engines run efficiently with potentially extended life.

## Description

Our engineers use their expertise to inspect, report and document the condition of the internal components of diesel engines. They conduct complete engine inspections during engine overhaul and partial inspections during component replacement or repair. Borescope inspections occur during normal preventive maintenance (PM) and in response to abnormal oil analysis reports.

## Application

We work with you to:

- Perform inspections using state-of-the-art borescopes to document engine and lubricant performance
- Follow inspection procedures and standards
- Photograph critical engine components
- Document findings and recommendations
- Compare results with previous inspection data and established performance benchmarks
- Help establish optimum oil drain interval
- Document estimated value and potential benefits of corrective actions

## Potential benefits



Minimized unscheduled downtime and maintenance labor costs



Minimized parts replacement



Enhanced equipment productivity



Safety and environmental enhancements



Long lubricant drain intervals



Establish performance benchmarks

# Engine inspection



**Deliverable:** An Engineering Service Report outlines conditions, recommended corrective actions, improvements to operational or maintenance procedures, the value of the service rendered and potential benefits from implementing recommendations. It will include photographs and borescope pictures as appropriate.

## Common opportunity areas

- Inappropriate air/fuel ratios
- Poor air filtration
- Fuel injector or turbocharger malfunctions
- Poor fuel quality (high sulfur or other contaminants)
- Wrong lubricant
- Lack of optimum temperatures
- Excessive blow-by
- Worn valve guides
- Desire to extend oil drain interval
- Filtration practices

## Safety, health and environment

Our field engineers are attuned to the hazards of handling, storing and using petroleum products, and strictly observe safety and environmental rules and ExxonMobil 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.

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.