

Grease analysis

Using an innovative sampling tool, this test program provides accurate, streamlined analysis to help improve the reliability of equipment that cannot easily be monitored through standard fluid analysis.

Description

The program is designed to provide valuable insights on in-service grease and equipment performance in four critical areas:

- **Wear** - Detects ferrous debris and wear metals in the grease
- **Consistency** - Evaluates changes in consistency compared to the baseline grease
- **Contamination** - Determines if the grease has been contaminated with another grease or foreign materials
- **Quality** - Assesses the overall grease quality and determines if regreasing adjustments are needed

Repeatable and representative samples are easily extracted and sent to our lab, where reliable tests can be performed at a fraction of standard grease analysis costs. From a single one-gram sample, the lab can perform up to seven tests.



Analysis trace slate

- Trace metals
- Colorimetry
- Stress index
- Infrared spectroscopy
- Ferrous debris
- Water content

Key Benefits



Increases productivity by minimizing unscheduled downtime



Saves time and money by limiting parts replacement and labor costs



Enhances equipment life and reliability by identifying problems before they occur



Makes grease sampling easy and convenient while enabling consistent, accurate analysis



Mobil™ Lubricant Analysis - Grease analysis

Test	Purpose	Importance of test
Trace metals	Determine presence and levels of metallic content in the grease, including contaminants and wear particles	Helps detect equipment component wear and harmful contamination in the grease. Can assist in identifying early issues and in improving long-term equipment performance
Colorimetry	Detect grease aging, overheating or environmental contamination	Helps validate changes in grease appearance, track trends such as darkening due to aging or overheating, indicate contamination, and qualify if environmental contaminants are accumulating in the grease
Stress index	Determine grease consistency as an alternate method to NLGI grade	Indicates grease softening or hardening. Changes in stress index provide a screening tool to assess grease performance in equipment
Infrared spectroscopy	Provide a fingerprint of grease composition by analyzing the molecular bonds within it	Identifies possible grease breakdown or contamination
Ferrous debris	Can be used as an early indicator to identify ferrous wear particles in grease samples	Early identification of wear particles can help address potential performance issues and extend equipment life
Water content	Detect presence of water contamination on the bearing	Can help with early intervention to prevent rust or adjust operating conditions to minimize water ingress

Analysis	Service Level — ◆ Essential	Service Level — ◆◆ Enhanced
Metals	●	●
Water ppm Karl Fischer	●	●
Ferrous Debris	●	●
Color		●
IR Correlation		●
Stress Index		●