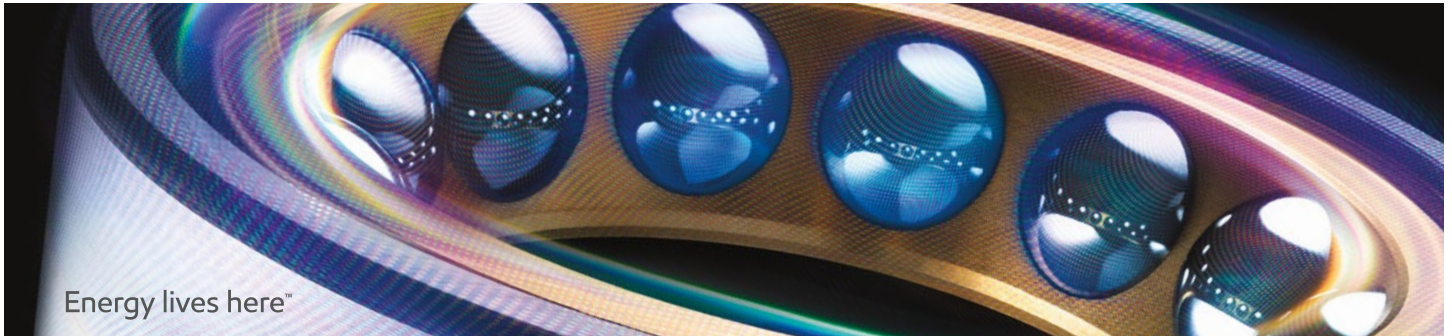


Simplify your grease lubrication program

How to find and eliminate sources of complexity



Where do you find complexity?

Complexity appears in many forms in a grease program, all of which could be impacting your costs, productivity, and

equipment efficiency. Below are some common examples of where it shows up.

Too many greases

- Risk of using the wrong grease for a particular piece of equipment increases
- Product mixing leads to unplanned compatibility experiments

Over-greasing or under-greasing

- Too much grease can damage seals and cause excess heat
- Too little grease can cause lubricant starvation
- Both stem from lack of training and clarity in a grease program

Storage and handling

- Inefficient inventory practices drive up cost on the shelf
- Labeling challenges are caused by multiple brands, and too many products lead to misuse

Multiple vendors

- Makes purchasing processes inefficient and complicated
- Conflicting product and use recommendations cause unnecessary confusion

Right-size your grease program

Eliminating complexity from each of these categories can reduce downtime and increase productivity.

Our grease experts can help

Ask your ExxonMobil representative or Authorized Distributor to perform a lubrication assessment to uncover opportunities to simplify your grease program.

Understanding grease

Grease is made up of oil, thickener, and additives. Understanding how each component works can help you make the right choices for your needs.



Oil (80 to 90%)

Oil forms a lubricating film between metal surfaces to reduce friction and prevent wear. High-viscosity (thicker) oils prevent wear in low-speed applications, while low-viscosity (thinner) oils work best in high-speed applications.



Thickener (10 to 15%)

Thickener holds the oil in place until triggered by movement or temperature to release it. Common thickeners include lithium complex, calcium sulfonate, and polyurea. Thickeners are a primary driver of compatibility and can impart other essential grease characteristics.



Additives (5 to 10%)

Additives enhance or add characteristics beyond what the oil and thickener alone provide. Examples include wear protection under sliding conditions, oxidation resistance, rust or corrosion protection, and friction modifiers.

The right grease for the right applications

Consolidating grease requires an understanding of your specific applications. You will also need to consider where the grease will be used. Inside (typically climate-

controlled) or outside (potentially extreme hot or cold) environments may influence your product selection.

	<p>Electric motors</p> <p>Electric motors are found in almost every industry. Because motors operate at higher speeds (1800 to 3600 rpm) than other equipment, they tend to need lighter oil viscosities and higher thickener content, or NLGI grade, to stay in place. As a result, electric motors and other high-speed fan and pump bearings may require a different grease than the rest of your equipment.</p>
	<p>General purpose</p> <p>A large portion of the equipment in most facilities tends to have similar operating conditions (range of speeds, temperatures, environmental factors). A general-purpose grease usually can be selected to have the properties to safely protect this variety of applications.</p>
	<p>Low speed/no rotation</p> <p>In low-speed conditions, where oil viscosity alone cannot separate metal surfaces, greases may need additional wear-preventing additives to protect all components. A common example of this is molybdenum disulphide (moly).</p>
	<p>Other</p> <p>Some applications may have unique requirements that don't fit within the above categories. Examples of these would be grease-lubricated couplings, equipment operating in environments above 180°F, or food-production equipment requiring NSF H-1–certified food-grade grease. If needed, greases for these purposes should also be discussed during the Lubrication Assessment.</p>