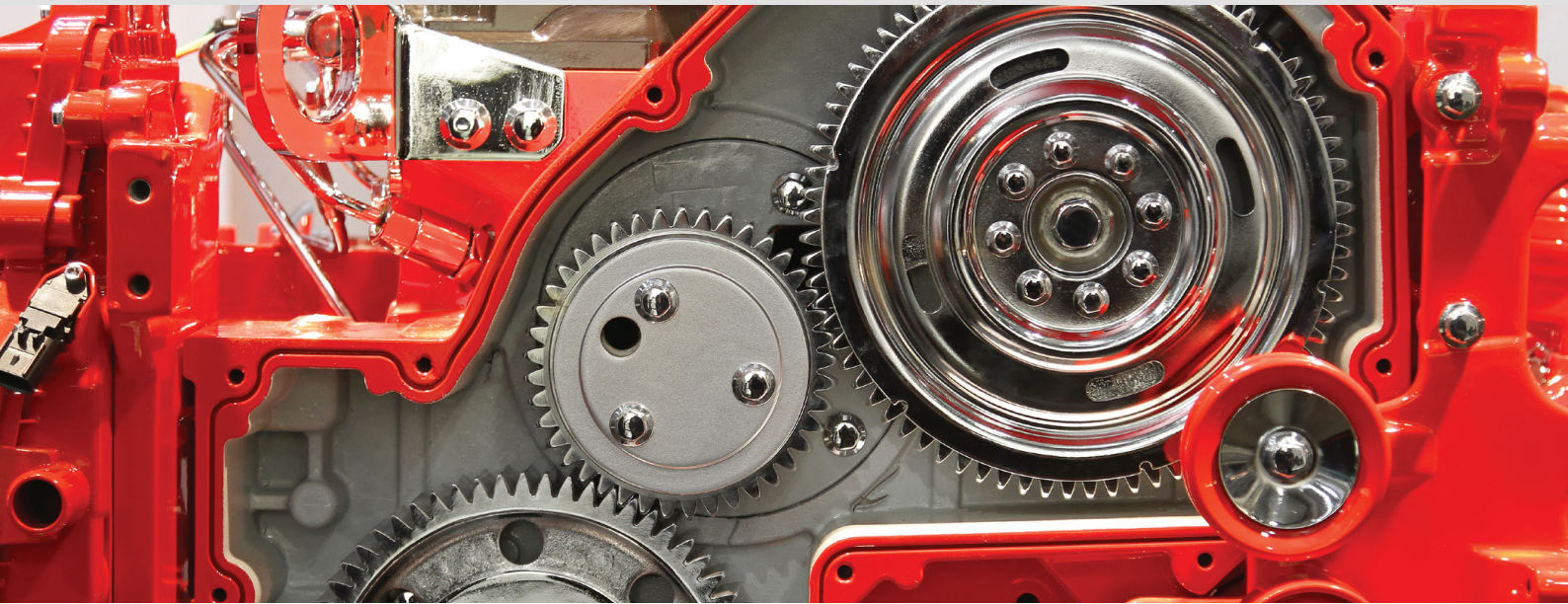


SYNTHETIC GEAR OILS

*High Performance Synthetic Oils
For Gears*



Specially formulated synthetic PAO based oils for higher efficiency, long oil life and equipment protection.

Molygraph's range of Synthetic gear oils are formulated with PAO base stocks and have an advanced proprietary additive to provide excellent protection against conventional wear modes such as scuffing and micro pitting. In addition, compared to conventional gear oil chemistries, they offer improved lubrication of gearbox rolling element bearings, which provides outstanding benefits in terms of efficiency, long oil life, and equipment protection.

The flash point for synthetics as a class is always higher, and they exhibit reduced flammability and thus higher safety, which is a key driver for synthetics growing popularity in high-temperature applications.

The benefits of Molygraph's synthetic oils are related to the stable molecules, that include a higher degree of hydrolytic stability and demulsibility, a higher viscosity index (VI) and a lower pour point. The VI and pour point allow these oils to perform better across a broader temperature range. They have inherently better oxidation stability than mineral oil, increasing the service life by upto x2 to x5 times. This improved oxidation stability accounts for higher operating temperatures that these synthetic oils can accommodate.

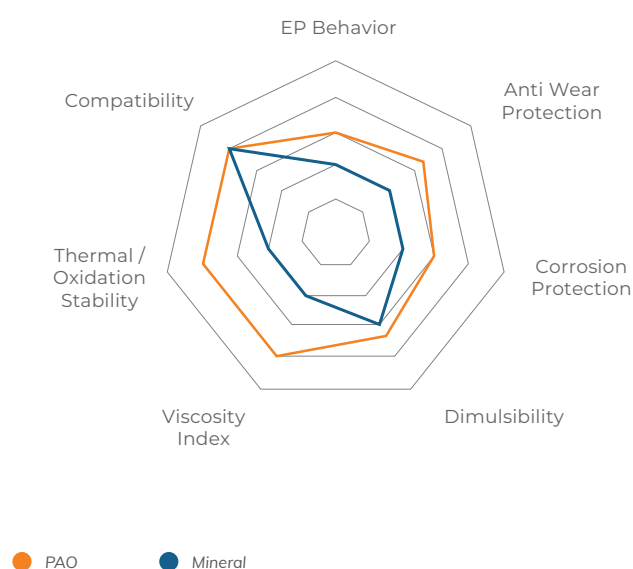
Best properties for optimum performance

- Exceptional EP/anti-wear protection helps extend gear and bearing life in enclosed gear drives operating under extreme conditions of load, speed and temperature.
- Helps reduce unplanned downtime; less maintenance - especially critical for difficult to access gear boxes.
- Protection against rust and corrosion and good demulsibility in service helps to ensure smooth, trouble-free operation at high temperatures or in applications subject to water contamination.
- High viscosity index equating to reduced viscosity change with temperature helps resistance to degradation at higher temperatures.
- Very good thermal and oxidative stability that reduces sludge formation and deposits resulting in longer service life.
- Excellent compatibility enables easy change over from many mineral based products.

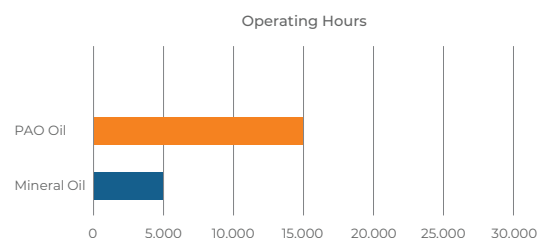
Properties

PRODUCTS	BASE OIL	FLASH POINT (°C)	POUR POINT (°C)	COPPER CORROSION (RATING)
Ultra Gear Syn 32/46/68/100/150/220/320	Synthetic [PAO]	≥ 220	-40	1A
Ultra Gear Syn 1000	Synthetic [PAO]	≥ 220	-27	1A

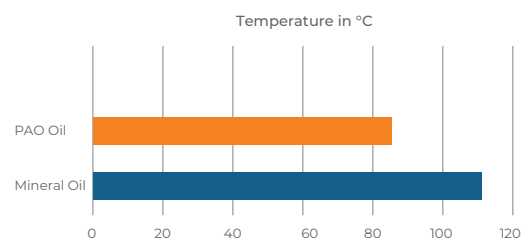
Mineral vs. Synthetic Gear Oils



Extended Oil Change Intervals



Approximate oil change intervals of gear oils at an operating temp of 80°C



Oil sump temperatures after 300 operating hours

