

Base Fluids for Lubricant Applications *GEAR FLUIDS*

Durasyn® Polyalphaolefins

Durasyn Polyalphaolefins (PAO) can be used as base stocks for the formulation of full and part-synthetic gear oils. PAOs have excellent lubricating properties over a wide temperature range, and show better oxidation resistance and higher thermal stability than conventional mineral oil base stocks. Durasyn Polyalphaolefins show excellent water displacement and are not subject to hydrolysis in the presence of moisture. These properties make Durasyn Polyalphaolefins ideal base fluids for high performance industrial and transportation gear lubricants.

Extended Drain Interval Benefits of PAO Synthetic Gear Lubricants

Prominent axle manufacturer Eaton offers incentives in the form of extended drain intervals when commercial fleet operators choose approved synthetic gear lubricants (500,000 miles for synthetic versus 50-100,000 miles for mineral oils). The extended drain intervals afforded by PAO-based synthetic multi-grade gear lubricants provide a very substantial cost justification for their use.

Synthetic Industrial Gear Oil Applications

Industrial gear applications that benefit from PAO-based synthetic lubricants include, but are not limited to:

- Heavily loaded gear boxes in steel mills
- Cooling tower fan drives
- Paper mill gear drives
- Hoist gear boxes
- Conveyor worm drives
- Power plant coal pulverizers
- Rubber mill gear reducers
- Chemical plant reactor gear drives
- Cold ambient outdoor gear drives
- Wire forming gear drives

In these applications, synthetic industrial gear lubricants provide effective lubrication under conditions where typical petroleum-based lubricants fail. These lubricants can reduce maintenance and operating costs, conserve energy, reduce oil consumption, and minimize seasonal oil change outs.



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