GEAR LUBRICATION

The demand for better Gear Oils has become more important as modern technology introduces gearboxes that require less oil volume, faster lubricant circulation times, and higher load carrying capabilities. Gear Oils therefore, need to,

- Reduce Friction and Wear despite higher loads and boundary lubricating conditions
- Withstand shock loads
- Resist oxidation tendencies in order to prolong service life



Our portfolio for Gear Lubrication presents a full-range for both enclosed gearboxes and open gear drives.

MINERAL-BASED, EXTREME PRESSURE GEAR OILS

The LUBERITE EP range is a CLP mineral-based lubricant containing Extreme Pressure (EP) additives required for modern, heavy-loaded gearboxes. Passing FZG stage 12, Luberite EP provides protection in case of boundary lubricating conditions, ensuring minimal friction and gear damage. For worm gears, especially those utilizing bronze wheels, our compounded LUBERITE WG series is the optimal choice as it does not attack yellow metals.

| | ISO VG 150 | ISO VG 220 | ISO VG 320 | ISO VG 460 | ISO VG 680 | WG ISO VG 390 | WG ISO VG 700 |
|-------------------------------|------------|------------|------------|------------|------------|---------------|---------------|
| Viscosity at 40 °C (cSt) | 143.8 | 217.3 | 318.1 | 477.6 | 662.6 | 388 | 674.1 |
| Viscosity Index | 94 | 94 | 95 | 97 | 89 | 95 | 83 |
| Flash Point ([°] C) | 236 | 238 | 232 | 236 | 234 | 242 | 286 |

All available in 20 liter pails and 200 liter drums

POLYALPHAOLEFIN-BASED

Oil Sludge

Our Syngear 7000 series of synthetic PAO gear oils provide a higher performance level as compared to mineral oil-based fluids. It exhibits friction and wear protection even at elevated temperatures, and can withstand a significantly higher load condition, as exhibited by its 250 kg weld load rating on a 4-ball wear test. Furthermore, PAO's being of higher oxidation resistance, can extend gear oil service intervals.

| Syngear | 7150 | 7220 | 7320 | 7460 | 7680 |
|--------------------------------------|------|------|-------|------|------|
| Viscosity at 40 [°] C (cSt) | 154 | 219 | 319.1 | 466 | 659 |
| Viscosity Index | 153 | 159 | 156 | 157 | 164 |
| Flash Point ([°] C) | 248 | 259 | 239 | 247 | 240 |
| Copper Corrosion | 1A | 1A | 1A | 1A | 1A |
| 4-Ball Weld Load, kgs | 250 | 250 | 250 | 250 | 250 |
| 4-Ball Scar, mm | 0.45 | 0.36 | 0.36 | 0.36 | 0.36 |
| Timken Load Ok, Ibs | 35 | 50 | 50 | 50 | 50 |

All available in 18 liter pails and 208 liter drums

Normal

DID YOU KNOW that SYNTHETIC OILS, due to its high oxidation stability and anti-carbonization properties, can extend drain oil intervals by 3-4 times compared to Mineral Oils? Mineral Oils rapidly oxidize at 90 °C, and considering typical gearbox temperatures of above 80 °C, it is no wonder that Mineral Oils need to be drained within a short period of time. Synthetic Oils such as PAO, Esters, and Glycols, on the other hand, rapidly oxidize starting at 110 °C.

DID YOU KNOW that the 4-ball Weld Load Test is a reliable indicator of the ability of an oil or grease to withstand high loads? The 4-ball weld load test rig uses three steel balls held in a cup with the lubricant. A fourth ball is rotated against the three balls at a given speed. A starting load is applied and increased at pre-determined intervals until the rotating ball seizes and welds to the stationary balls.

POLYGLYCOL-BASED

The Syngear PG range of gear oils are formulated using high-quality Poly-Alkene Glycols, which provide low coefficients of friction necessary for the sliding friction conditions, as typically found on worm gear drives. The additive package in Syngear PG further ensures maximum compatibility with yellow and soft metals, as well as resistance to oxidation and carbonization. This range is also applicable for oil-lubricated systems for roller and ball bearings.

| | ISO VG 150 | ISO VG 220 | ISO VG 320 | ISO VG 460 | ISO VG 680 |
|-----------------------|------------|------------|------------|------------|------------|
| Viscosity (ISO VG) | 150 | 220 | 320 | 460 | 680 |
| Viscosity Index | 195 | 195 | 205 | 215 | 240 |
| Flash Point (°C) | 240 | 240 | 240 | 240 | 250 |
| Copper Corrosion | 1A | 1A | 1A | 1A | 1B |
| 4 Ball Weld Load, kgs | 230 | 230 | 250 | 250 | 250 |
| 4 Ball Scar, mm | 0.35 | 0.35 | 0.32 | 0.32 | 0.33 |
| FZG Stage | 12 min. |

All available in 18 liter pails and 208 liter drums

FOOD GRADE

All compliant with NSF's H1 rating, our Food Grade Gear Oils ensures safety for usage in food processing equipment. Available in white oil, PAO and PAG formulations.

| | Base Oil | Viscosity (ISO VG) | Viscosity Index | Applications | | |
|---------------------|-----------|--------------------|-----------------|---|--|--|
| Anderol PQ AA 150 | White Oil | 150 | 108 | | | |
| Anderol PQ AA 220 | White Oil | 220 | 109 | | | |
| Anderol PQ AA 320 | White Oil | 320 | 111 | Gears, bearings, chains | | |
| Anderol PQ AA 460 | White Oil | 460 | 110 | | | |
| Anderol PQ AA 680 | White Oil | 680 | 117 | | | |
| Anderol 6150 | PAO | 150 | 133 | | | |
| Anderol 6220 | PAO | 220 | 126 | | | |
| Anderol 6320 | PAO | 320 | 138 | Gears, bearings, | | |
| Anderol 6460 | PAO | 460 | 128 | Gears, bearings, chains, circulating oil | | |
| Anderol 6680 | PAO | 680 | 133 | systems operating at | | |
| Syntech Food PG 320 | PAG | 320 | 252 | elevated temperatures and high loads | | |
| Syntech Food PG 460 | PAG | 460 | 262 | and high loads | | |
| Syntech Food PG 680 | PAG | 680 | 272 | | | |

All available in 18 liter pails and 208 liter drums Contact us for other viscosity requirements

OPEN GEAR LURBRICANTS

Open Gear Lubricants need to perform at a higher level compared to Gear Oils, since the lubricants are exposed to significantly higher loads, and subjected to the environment, water, dust and moisture. Consequently, our products are formulated to have strong adhesive properties, and displays a 4-ball weld load performance that exceeds industry standards. All lubricants do not contain any solvents, bitumen or asphalt.

| | Penetration (NLGI #) | Base Oil | Base Oil Viscosity (cSt at 40°C) | Thickener | Solid Lubricants | 4 ball weld Ioad, kgs | Application |
|----------------------|-------------------------|------------------------|-------------------------------------|------------------|---------------------|--------------------------|--|
| Tacbecon SOG 800 | 0 | Highly refined mineral | 800 | Alassca complex | None | >800 | Standard Grade - Sprayable |
| Tacbecon SOG 800 / 2 | 2 | Highly refined mineral | 800 | Alassca complex | None | >800 | Standard Grade for manual applications |
| Tacbecon SOG 3000 | 000 | Semi-synthetic | 3,000 | Aluminum complex | graphite | >800 | For bath systems, highly adherent |
| Tacbecon SOG 3000 A | 00 | Synthetic blend | 3,000 | Aluminum complex | graphite | >800 | For spray systems, high adhesiveness |
| Tacbecon SOG 3000 B | 0 | Synthetic blend | 3,000 | Aluminum complex | graphite | >800 | For spray systems, high adhesiveness |
| Syntech OGL-5* | N/A | Synthetic hydrocarbon | 16,000 to 18,000 | N/A | N/A | >800 | For spray or bath, non-grease technology, transparent amber |

Available in 18 kg pails and 180 kg drums *Available in 205 liter drums only

fluid SOLUTIONS Everything Runs Smoothly

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Also Available:

PECIALTY LUBRICANTS AND

GREASES High and Low Temperature Grease Chain and Wire Rope Lubricants Open Gear Greases Synthetic Gear, Compressor, Hydraulics Oils Fire Resistant Hydraulic Fluids METALWORKING FLUIDS Die Casting, Forging, Stamping Release Agents Rust Preventives and VCI's Cutting Oils and Coolants, Anti Rust AUTOMATIC LUBRICATORS

OIL SKIMMERS