



Monolec® Spindle Oil (6330)

Premium Fluid Ensures Long-Term Protection for Spindle Bearings

Monolec® Spindle Oil is a high-quality oil designed for use in high-speed, precision machine tool spindle bearings. It is formulated using low-viscosity, highly refined mineral oil and offers rust and corrosion protection, oxidation stability and water-separating characteristics. It contains Monolec, LE's proprietary wear-reducing additive that provides additional protection from friction, heat and wear.

Beneficial Qualities

Protects Against Water, Rust & Corrosion

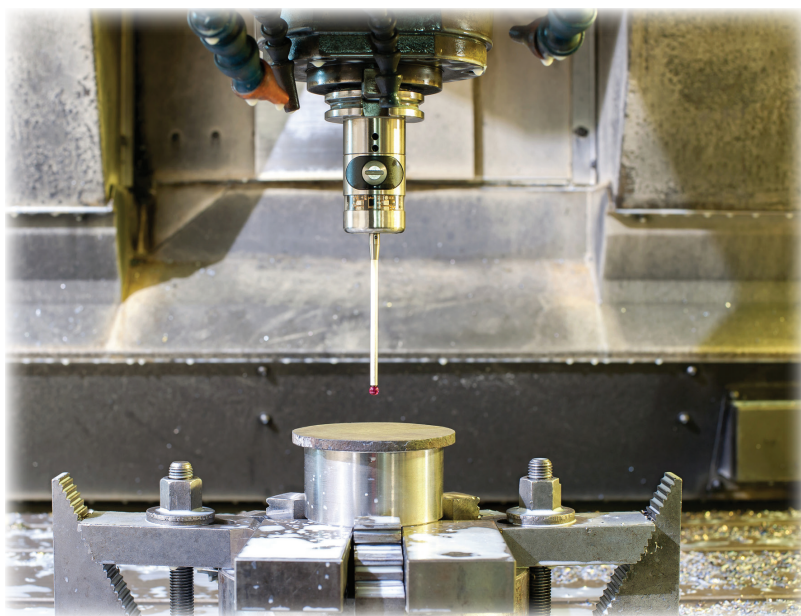
- Separates rapidly from water, allowing excess water to accumulate for easy drain-off
- Protects metal surfaces against rust and corrosion
- Delivers enhanced oxidation resistance
- Provides exceptional resistance to moisture

Provides Long-Lasting Protection

- Minimizes wear under high-load conditions
- Provides long oil service life
- Reduces maintenance costs
- Prolongs equipment life

Minimizes Varnish & Sludge

- Inhibits sludge, varnish and deposit formation
- Prevents sludge during service
- Keeps systems clean and operating smoothly



Proprietary Additive

LE's proprietary additives are used exclusively in LE lubricants. Monolec Spindle Oil contains Monolec.

Monolec® wear-reducing additive creates a single molecular lubricating film on metal surfaces, vastly increasing oil film strength without affecting clearances. An invaluable component in LE's engine oils, industrial oils and many of its other lubricants, Monolec allows opposing surfaces to slide by one another, greatly reducing friction, heat and wear.



Technical Data

Monolec® Spindle Oil

Typical Applications

- High-speed precision machine tool spindles
- Low-viscosity, low-pressure hydraulics

	6330
Color	Amber
ISO VG	2
Viscosity @ 100°C, cSt, ASTM D445	1.02
Viscosity @ 40°C, cSt, ASTM D445	2.31
Flash Point °C (°F), (COC), ASTM D92	101 (213)
Pour Point °C (°F), ASTM D97	-39 (-38)
Rust Test 4 hrs @ 60°C, DI H2O, ASTM D665A	Pass
Copper Corrosion 3 hrs @ 100°C, ASTM D130	1a
Oxidation by RPVOT @ 150°C, minutes, ASTM D2272	350
Four-Ball Wear @ 50°C, 1800 rpm, 20 kgf, 60 minutes, mm wear, ASTM D4172	0.29
Emulsion Characteristics @ 54°C, oil-water-emulsion/minutes, ASTM D1401	40-40-0/05
Foaming Characteristics @ 24°C/93.5°C/24°C, 3 sequences, ml of foam/time to break, ASTM D892	0/0; 0/0; 0/0

