

CPI Fluid Engineering

Lubricants for Air Compressors



Which lubricant is right for you?

With so many different product options out there, how do you choose the best lubricant for your application? CPI has a full range of products for rotary screw, rotary vane, reciprocating and centrifugal compressors with field proven performance to provide you with peace of mind. We work closely with major original equipment manufacturers (OEM's) to offer a wide range of products that meet key criteria for optimal compressor performance including:

- Superior thermal and oxidative stability
- Excellent rust and corrosion protection
- Enhanced wear protection
- Low volatility

Our knowledgeable technical sales staff will help you navigate the extensive CPI portfolio to choose the right product for your application. But CPI technical assistance doesn't stop there, our in-house oil analysis lab provides used oil analysis with 48-hour turnaround to ensure your equipment is running optimally. Our experienced report writers analyze your results and compare them to your fluid's used oil specification and previous samples. Because CPI manufactures the lubricants, we know exactly what should, and shouldn't, be present in the fluid.

Benefits of Synthetic Lubricants

Synthetic lubricants provide improved performance over mineral oils and synthetic blends. Key performance characteristics for air compressor lubricants are shown in the table. CPI's portfolio contains the full range of base oils to meet your specific application needs and price point.



Characteristic	Full Synthetic	Synthetic Blend	Mineral Oil
Operating Temperature	Up to 250°C	Up to 120°C	Up to 60°C
Oxidation Resistance	Excellent	Good	Poor
Demulsibility	Excellent	Good	Poor
Rust Prevention	Excellent	Good	Good
Foaming Tendency	Minimal	Low	High
Reduce Wear	Excellent	Good	Poor
Maintain Viscosity	Excellent	Good	Poor
Thermal Stability	Excellent	Good	Poor
Oil Drain Intervals	8,000 to 12,000	6,000 to 8,000	2,000 to 4,000

Lubricants for Air Compressors

CPI's line of air compressor lubricants offers a complete range of chemistries to meet the needs of your application and ensure the long-term performance of your equipment. Our range of lubricants includes products for flooded rotary screw, reciprocating, rotary vane and centrifugal compressors.

	Product	Viscosity Range	NSF H1 Registered	Rated Oil Life*	Base Oil	Description/Recommended Applications
Flooded Rotary Screw Compressor Lubricants	CPI®-9331	46		4,000 hours	HTMO	Lubricants formulated with high quality hydrotreated, isodewaxed mineral oil and oxidation protection. Recommended for use in flooded rotary screw compressors.
	CPI®-9301	32-100		6,000 hours	HTMO/Ester	Hydrotreated, isodewaxed mineral oil and ester based lubricants with oxidation protection. Recommended for use in flooded rotary screw compressors.
	CPI®-9302	68		6,000 hours	HTMO/Ester	Hydrotreated, isodewaxed mineral oil and ester based lubricants with oxidation protection. This premium version of CPI®-9301 is recommended for use in flooded rotary screw compressors.
	CPI®-4600-F	32-150	✓	4,000 hours	PAO	NSF H1 registered polyalphaolefin lubricants with oxidation protection. Recommended for use in flooded rotary screw compressors and centrifugal compressors with incidental food contact requirements.
	CPI®-4601	32-220		8,000 hours	PAO	CPI's flagship air compressor product is a polyalphaolefin based lubricant with excellent corrosion and oxidation protection. Recommended for use in flooded rotary screw compressors, rotary vane compressors, and centrifugal compressors.
	CPI®-4260-F	32-46, 100	✓	6,000 hours	PAO/Ester	NSF H1 registered polyalphaolefin and food grade ester lubricants with excellent corrosion protection and oxidative stability. Recommended for use in flooded rotary screw compressors with incidental food contact requirements.
	CPI®-4265-F	46-68	✓	8,000 hours	PAO/Ester	NSF H1 registered polyalphaolefin and food grade ester lubricants with superior oxidative stability and resistance to sludge and varnish. Recommended for use in flooded rotary screw compressors with incidental food contact requirements.
	CPI®-4201	32-68		12,000 hours	Ester	Premium ester based lubricants with superior thermal and oxidative stability and no tendency to form sludge or varnish. Recommended for high temperature applications in flooded rotary screw compressors.
	CPI®-1522	46		8,000 hours	PAG/Ester	A cost effective blend of polyalkylene glycol and ester with excellent thermal and oxidative stability. Recommended for use in high temperature, high humidity applications in flooded rotary screw compressors.
	CPI®-1542	32-46		8,000 hours	PAG/Ester	Premium polyalkylene glycol and ester based lubricants with excellent thermal and oxidative stability. Recommended for use in high temperature, high humidity applications in flooded rotary screw compressors.
	CPI®-1562	46		8,000 hours	OSP/Ester	Premium oil-soluble polyalkylene glycol and ester based lubricants that are compatible with PAG and hydrocarbon based fluids. Recommended for use in high temperature, high humidity applications in flooded rotary screw compressors.
	CPI®-Comp Clean II	N/A		500 hours	Ester	Ester based compressor cleaning fluid. Recommended for use in flooded rotary screw compressors when switching from competitor fluids and cleaning varnished compressors.
	CPI®-Comp Oil	68, 150		6,000 hours	HTMO	Lubricants formulated with high quality hydrotreated, isodewaxed mineral oil and antiwear protection. Recommended for use in reciprocating compressors, gearboxes of oil-free compressors and other light gear applications.
Reciprocating, Centrifugal, Rotary Vane, & Oil-Free Rotary Screw Compressor Lubricants	CPI®-FMO	32-220	✓	4,000/6,000 hours	WMO	Lubricants formulated with food-grade technical white mineral oil and antiwear protection. Recommended for use in reciprocating compressors, gearboxes of oil-free compressors and other gear applications.
	CPI®-4608-F	32-220	✓	8,000 hours	PAO	NSF H1 registered polyalphaolefin lubricants with oxidation and anti-wear protection. Recommended for use in reciprocating, rotary vane, and centrifugal compressors with incidental food contact requirements.
	CPI®-4100	32-220		8,000 hours	Ester	Ester based lubricants with excellent oxidative and thermal stability and anti-wear protection. Recommended for use in high temperature reciprocating, rotary vane and flooded rotary screw compressor applications.
	CPI®-4126	32-220		8,000 hours	Ester	Cost effective ester based lubricants with oxidation and anti-wear protection. Recommended for use in reciprocating, rotary vane and flooded rotary screw compressors.
	CPI®-4200	32-150		12,000 hours	Ester	Premium ester based lubricants with superior oxidative and thermal stability, anti-wear protection and no tendency to form sludge or varnish. Recommended for use in high temperature reciprocating, rotary vane and flooded rotary screw compressor applications.

*Rated life at 180°F discharge temperature

Who is CPI?

CPI Fluid Engineering is a division of The Lubrizol Corporation. The Lubrizol Corporation, a Berkshire Hathaway company, is an innovative specialty chemical company that produces and supplies technologies to customers in the global transportation, industrial and consumer markets.

CPI Fluid Engineering is a world leader in synthetic lubricants for compressors and specialty industrial applications. Our formulation and technical application expertise, combined with our flexibility and responsiveness, enhance the quality and value of our customers' products. CPI delivers fluid performance, technology support and customer service to meet customer needs.

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