

INDUSTRY/MACHINE OIL

- The following products are factory direct deployment
- Reduce costs, improve efficiency, achieve the effect of mechanical maintenance.
- Provide the required package, use the most convenient packaging materials packaging products.
- If within the following product of industrial oil, can be customized deployment :

Product	Designation	Functional Description
Circulation Oil	R32 R46 R68 R90	◆Widely used in various circulation to a variety of mechanical plain bearing oil system, the work of the sliding part of the general parts of machinery.
Super Circulation	SR100 SR150 SR220	◆Used in a variety of high-speed loop to the oil bearing, high viscosity that are widely used in various large load of high temperature bearing lubrication.
Hydraulic Oil	AW32 AW46 AW68	◆Universal anti-wear hydraulic oil can withstand a variety of demanding industrial hydraulic system loads, reducing engine wear and extending component life.
Slideway Oil	S32 S46 S68	◆Add special additive formulations of metal surface stickiness excellent lubrication machine can effectively prevent the jumping phenomenon of the working platform, the working machine operating smoothly, improve the quality of processed products.
Air compressor Oil	P22 P32 P46 P68	◆For screw compressors, vane compressors, centrifugal compressors. All ISO viscosity grades are equipped with excellent oxidation properties, wear protection, rust and corrosion resistance, fast water separation and foam control.
Super Compressor Oil	SP68 SP100 SP150	◆Suggest used in high-pressure reciprocating air compressor. It's are effective as "once-through" lubrication of reciprocating air compressor cylinders as well as crankcases and some types of rotary compressors.
Cutting Oil	Oily Cutting Oil Soluble Cutting	◆According to different metals and different processing methods, the use of cutting fluids with different

	Oil Synthetic Oil	performances can provide long-lasting cutting tools and product finishes. Careful selection must be used. It also concerns issues such as water quality and use environment in various countries.
Heat-transfer Oil	HT22 HT32 HT46	◆The good thermal conductivity oil, recommended for use in liquid phase heat transfer systems.
Metal Rust Preventive Oil	M-RS M-RP M-RL	◆Low viscosity, according to the anti-rust cycle, product use method (immersion, painting, spraying) and other processes, the whole series of this product does not contain antimony, the safety is improved, the thin oil film is not easy to peel off, and the formed oil film is not easy to peel off.
Plunger Oil	B-200	◆Plunger lubricants can be used in small to large machines to minimize wear on the plunger head, extending its service life and reducing downtime for replacement. They also help provide a seal around the tip to prevent molten metal from leaking through the tip.
Premium quench oil Fast quenching oil Speed quenching oil Bright-Fast quenching oil	Q18 Q22 Q32	◆ The heating parts are placed in the cooling medium, excellent hot oil oxidation, high flash point, short film breaking time, quick cooling speed, low volatility, high temperature products can be quickly cooled, and the workpiece surface can be bright.
Industrial extreme pressure Gear Oil	G-EP68 G-EP100 G-EP150	◆Suitable for lubrication of all industrial machinery, such as helical gears, helical gears and worm gears, and require this high viscosity oil. ◆According to customers need to adjust the extreme pressure (EP) rating of the lubricant, divided into light load, medium and heavy load.
Diesel Industry Machinery Oil	CD/CF/CG 10W/SAE40/1 5W40/20W50	◆Widely used in various engineering machinery four-stroke diesel engine, turbocharger and the mechanical supercharger and diesel engines.

■ Packing: 18/20L plastic pail, 200L drum (can be customized packaging)

工業用油/機械用油

- 以下產品是工廠直接調配生產
- 降低成本，提高效率，達到機械維護的效果。
- 提供所需的包裝，使用最方便的包裝材料以包裝產品。
- 如果在以下產品中使用工業用油，可以訂制調配：

產品	番號	說明敘述
循環油	R32 R46 R68 R90	◆廣泛應用於各種循環往復機械的各種機械滑動軸承系統，滑動部分工作的機械通用零部件。
特級循環油	SR100 SR150 SR220	◆用於各種高速迴路中的含油軸承，高黏度即廣泛用於各種大負荷的高溫軸承的潤滑。
液壓油	AW32 AW46 AW68	◆通用型的抗磨液壓油，可承受各種苛刻的工業液壓系統負載，減少發動機磨損並延長零件使用壽命。
滑道油	S32 S46 S68	◆添加特殊的金屬表面黏性添加劑配方，優良的潤滑機能有效防止工作台跳躍現象，工作機器運轉平穩，提高加工產品質量。
空壓機油	P32 P46 P68	◆用於螺桿壓縮機，葉片式壓縮機，離心式壓縮機。所有ISO黏度等級都配有出色的氧化性能，耐磨損保護，防鏽和耐腐蝕性，快速的水分離和泡沫控制。
特級空壓機油	SP68 SP100 SP150	◆建議用於高壓往復式空氣壓縮機，這對於往復式空氣壓縮機氣缸以及曲軸箱和某些類型的旋轉式壓縮機的“一次通過”潤滑是有效的。
切削油/液	油性極壓切削油 活性/非活性極壓 水溶性切削油 合成切削液	◆根據不同的金屬和不同的加工方法，使用不同性能的切削液可以提供持久的切削工具和產品表面處理。依照比例添加配比，提供潤滑/冷卻性能，延長刀具

		及加工工藝產品的完整性，特殊添加劑減緩氣味產生，此產品涉及水質和使用環境問題，須慎重選擇。
熱媒油／導熱油	HT22 HT32 HT46	◆良好的導熱油，推薦用於液相傳熱系統，具有抗高溫抗氧，阻焦功能，有良好的熱穩定性，長期使用結焦少，壽命長，導熱效果迅速。
油性防鏽油	M-RS M-RP M-RL	◆低黏度，依照防鏽週期，產品使用方法（浸置，塗刷，噴灑）等工藝，此產品全系列皆不含鋇，安全性提升，薄油膜不易剝落，形成的油膜不易剝落。
柱塞油	B17-200	◆柱塞潤滑油可用於小型到大型機械，可最大限度地減少柱塞頭的磨損，從而延長其使用壽命並減少更換的停機時間。它們還有助於在尖端周圍提供密封，以防止熔融金屬通過尖端洩漏並引起柱塞前進和縮回的機械問題。
低溫淬火油－ 特級淬火油 快速淬火油 超速(高速)淬火油 快速光亮淬火油	Q18 Q22 Q32	◆加熱部件放置在冷卻介質中，優異的熱油氧化性，高閃點，破膜時間短，催冷速度快，揮發性小，高溫產品可快速冷卻，並可使工件表面光亮。
工業極壓潤滑油	EP-32 EP-46 EP-G68 EP-G100 EP-G150	◆適用於所有工業機械，如斜齒輪，斜齒輪和蝸輪的潤滑，並要求這種高黏度的油。 ◆可依照客需調整潤滑油的極壓(EP)等級，分為輕負荷、中重負荷及GL-4、GL-5規範。
柴油機械引擎油	CD/CF/CG SAE40/15W40/20W50 10W	◆廣泛應用於各種工程機械的四衝程柴油機，增壓器和機械增壓器及柴油機。 ◆10W是專為怪手液壓系統的潤滑油

■ 包裝：18/20 公升塑膠桶，200 公升鐵桶(可以客製化包裝形式)



OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil –Circulation Oil R

OIL KNIGHT- Circulating oil can withstand all kinds of industrial cycle oil system harsh load, reduce the wear of parts to extend the life of parts.

- Steam Turbine: R32 and R46 are widely used in the circulation of the oil system direct steam turbine, R68 widely used in the cycle to the oil system of the tooth-type steam turbine, R90 is widely used in the cycle of the oil system to the ship Tooth knot turbine.
- Air Compressor: R32 and R46 widely used in cylinder and piston design more sophisticated air compressor, R68 widely used in single-cylinder vertical or horizontal air compressor. R90 is widely used for high temperatures.
- This type of oil is also widely used in other high-speed cycle to the oil bearings, gears, hydraulic systems, motors, generators, hydroelectric turbine and so on.

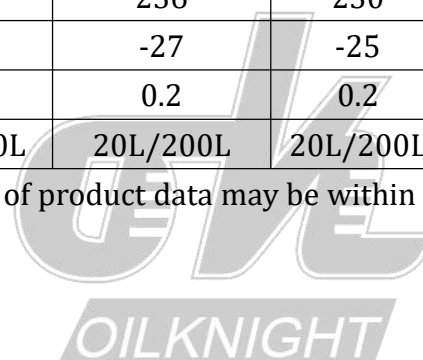
► Features/Superiority

- Tough oil film, film resistance characteristics, load operation, can provide good protection.
- With excellent filterability, metal compatibility, heat resistance and anti-wear ability.
- Use the lubricating system oil in the fixed flow cycle, as the lubricating oil for the rotating machinery.

► Product Properties

Designation	Method	R32	R46	R68	R90	
ISO Viscosity Grade	-	32	46	68	90	
Color	-	Yellow	Yellow	Yellow	Yellow	
Specific Gravity @15/4 °C	ASTM D4052	0.860	0.864	0.868	0.874	
Kinematic viscosity, cSt	40°C	ASTM D445	32.8	46.2	67.5	88.7
	100°C	ASTM D445	5.7	7.2	9.3	11
Viscosity Index	ASTM D2270	115	112	112	110	
Flash Point °C	ASTM D92	244	240	236	230	
Pour Point °C	ASTM D97	-39	-30	-27	-25	
TAN, mg KOH/g	ASTM D974	0.18	0.18	0.2	0.2	
Package	-	20L/200L	20L/200L	20L/200L	20L/200L	

Above data for the current product of the typical value of each batch of product data may be within the scope of quality standards allowed to change.





油騎士工業用油

產品數據資料

工業用油 - 循環油 R

- OIL KNIGHT-循環油可以承受各種工業循環油系統苛刻的負載，減少零件的磨損，延長零件的使用壽命。
- 汽輪機：R32 和 R46 廣泛應用於油系統直流汽輪機的循環中，R68 廣泛應用於齒輪式汽輪機油系統的循環中，R90 廣泛應用於循環油系統中船齒結渦輪。
- 空壓機：R32 和 R46 廣泛應用於氣缸和活塞設計更複雜的空壓機，R68 廣泛應用於單缸立式或臥式空壓機，R90 廣泛用於高溫環境。
- 這種類型的油還廣泛用於其他高速循環中的油軸承，齒輪，液壓系統，電機，發電機，水電渦輪機等。

特點/優勢

- 油膜堅韌，耐膜特性好，負載運行時，可提供良好的保護。
- 具有優良的過濾性，金屬兼容性，耐熱性和抗磨損能力。
- 在固定流動循環中使用潤滑油作為旋轉機械的潤滑油。

產品性狀

番號	實驗方法	R32	R46	R68	R90	
ISO 等級	-	32	46	68	90	
外觀	-	琥珀色	琥珀色	琥珀色	琥珀色	
比重@15/4 °C	ASTM D4052	0.860	0.864	0.868	0.874	
運動黏度, cSt	40°C	ASTM D445	32.8	46.2	67.5	88.7
	100°C	ASTM D445	5.7	7.2	9.3	11
黏度指數	ASTM D2270	115	112	112	110	
閃火點 °C	ASTM D92	244	240	236	230	
流動點 °C	ASTM D97	-39	-30	-27	-25	
酸價, mg KOH/g	ASTM D974	0.18	0.18	0.2	0.2	
包裝	-	20L/200L	20L/200L	20L/200L	20L/200L	

以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。

儲存

所有包裹都應該存放在密封狀態下，如果外部存放是不可避免的，應盡量保持包裝為水平放置，避免水分進入、桶裝標示消除，產品不應存放在 60°C 以上，暴露於烈日或冷凍條件下。





OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil –Super Circulation Oil SR

OIL KNIGHT- Circulating oil can withstand all kinds of industrial cycle oil system harsh load, reduce the wear of parts to extend the life of parts.

- This type of oil is widely used in the oil ring to the oil turbine, giant high-pressure air compressor, giant low-speed diesel engine, a variety of closed gears, load larger or higher temperature bearings and hydraulic systems lubrication.
- This series of super-circulating oil for high-load circulation system used by the lubricating oil, if the general use of light load and general industrial machinery recycling system, the choice of circulating oil low viscosity (S32 / S46 / S68/ S90).

► Features/Superiority

- Providing a high degree of chemical and thermal stability, fast and complete water separation, and high resistance to emulsification.
- Provide outstanding rust, corrosion resistance, anti-seawater and anti-wear function.
- It's have a high viscosity index that ensures that the film thickness varies only at very different temperatures, and that the kinetic energy has only a minimum loss at start-up.
- Use the lubricating system oil in the fixed flow cycle, as the lubricating oil for the rotating machinery.

► Product Properties

Designation		Method	SR100	SR150	SR220
ISO Viscosity Grade		-	100	150	220
Color		-	Amber	Amber	Amber
Specific Gravity @15/4 °C		ASTM D4052	0.890	0.896	0.898
Kinematic viscosity, cSt	40°C	ASTM D445	95.1	146	200
	100°C	ASTM D445	11.5	15.8	18.7
Viscosity Index		ASTM D2270	110	115	105
Flash Point °C		ASTM D92	228	230	224
Pour Point °C		ASTM D97	-30	-28	-23
TAN, mg KOH/g		ASTM D974	0.2	0.2	0.2
Package		-	20L/200L	20L/200L	20L/200L

Above data for the current product of the typical value of each batch of product data may be within the scope of quality standards allowed to change.



油騎士工業用油

產品數據資料

工業用油 - 超級循環油 SR

- OIL KNIGHT-循環油可以承受各種工業循環油系統苛刻的負載，減少零件的磨損，延長零件的使用壽命。
- 這類油廣泛應用於油環給油之透平機，巨型高壓空氣壓縮機，巨型低速柴油機，各種閉式齒輪，負荷較大或較高溫度的軸承及液壓系統的潤滑。
- 該系列超級循環油適用於高負荷循環系統所使用的潤滑油，如果一般使用輕負荷和一般工業機械循環系統，則選用循環油低粘度 (S32 / S46 / S68 / S90)。

特點／優勢

- 提供高度的化學和熱穩定性，快速和完全的水分離，以及高抗乳化性。
- 提供優異的防銹，耐腐蝕，抗海水和抗磨損功能。
- 它具有很高的粘度指數，可確保薄膜厚度僅在非常不同的溫度下變化，並且動能在啟動時只有最小的損失。
- 在固定流動循環中使用潤滑油作為旋轉機械的潤滑油。

產品性狀

番號	實驗方法	SR100	SR150	SR220	
ISO 等級	-	100	150	220	
外觀	-	琥珀色	琥珀色	琥珀色	
比重 @15/4 °C	ASTM D4052	0.890	0.896	0.898	
運動黏度, cSt	40°C	ASTM D445	95.1	146	200
	100°C	ASTM D445	11.5	15.8	18.7
黏度指數	ASTM D2270	110	115	105	
閃火點 °C	ASTM D92	228	230	224	
流動點 °C	ASTM D97	-30	-28	-23	
酸價, mg KOH/g	ASTM D974	0.2	0.2	0.2	
包裝	-	20L/200L	20L/200L	20L/200L	

以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。

儲存

所有包裹都應該存放在密封狀態下，如果外部存放是不可避免的，應盡量保持包裝為水平放置，避免水分進入、桶裝標示消除，產品不應存放在 60°C 以上，暴露於烈日或冷凍條件下。





OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil –Hydraulic Oil AW

OIL KNIGHT-Hydraulic oil is design for the number of factory equipment and mobile equipment operation, providing effective protection and significant performance, in high temperature operating environment, maintains good lubrication and performance even under high temperature and high-pressure operation, oil film is tough, provides good defoaming and water separation characteristics. It is widely used in hydraulic systems below 5000 psi.

► Features/Superiority

- It can prevent high heat and Chemical reactions lead to equipment failure, which helps to extend equipment life and oil change intervals.
- Added high quality resistance additives, can be maintained under a variety of operating conditions, high performance, including low load and extreme high load conditions.
- The oil can help reduce the impact of pollutants on the filter blockage, thereby extending the life of the filter and more sophisticated use of filters to enhance the protection of equipment.

► Product Properties

Designation	Method	AW32	AW46	AW68	
ISO VG	-	32	46	68	
Color	-	Yellow	Yellow	Yellow	
Specific Gravity @15/4 °C	ASTM D4052	0.860	0.864	0.868	
Kinematic viscosity , cSt	40°C	ASTM D445	32.8	46.2	67.5
	100°C	ASTM D445	5.7	7.1	9
Viscosity Index	ASTM D2270	115	110	108	
Flash Point °C	ASTM D92	244	240	236	
Acid Number, mg KOH/g	ASTM D974	0.58	0.6	0.6	
Pour Point °C	ASTM D97	-39	-30	-27	
Water Separability@54°C,40-37-3	ASTM D1401	15	20	20	
Copper corrosion(@100°C,3hr)	ASTM D130	1A	1A	1A	
Rust test (distilled water@24hr)	ASTM D665A	PASS	PASS	PASS	
Rust test (seawater@24hr)	ASTM D665B	PASS	PASS	PASS	
Package	-	20L/200L	20L/200L	20L/200L	

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OILKNIGHT



油騎士工業用油

產品數據資料

工業用油 - 液壓油 AW 系列

OIL KNIGHT-液壓油專為工廠設備和移動設備操作提供潤滑、抗氧、抗腐、抗磨及良好的極壓特性，提供有效的保護和出色的性能，即使在高溫和高壓操作下，皆能保持良好的潤滑及性能，油膜堅韌不易斷裂，並提供良好的消泡及水分離特性，廣泛應用於 5000psi 以下之液壓系統。

特性/優勢

- 它可以防止高溫和化學反應導致設備故障，這有助於延長設備使用壽命和換油週期。
- 適用於各種液壓設備系統上，添加了高品質的性能添加劑，可以在各種工作條件下保持高性能，包括低負載和極高負載條件。
- 此產品可以幫助減少污染物對過濾器堵塞的影響，從而延長過濾器的使用壽命和更複雜的過濾器使用，以加強對設備的保護。

產品性狀

黏度番號	實驗方法	AW32	AW46	AW68	
ISO 等級	-	32	46	68	
外觀	-	澄黃液體	澄黃液體	澄黃液體	
比重@15/4 °C	ASTM D4052	0.860	0.860	0.866	
運動黏度, cSt	40°C	ASTM D445	32.8	45.8	67.5
	100°C	ASTM D445	5.7	6.8	9
黏度指數	ASTM D2270	115	110	108	
閃火點 °C	ASTM D92	244	240	250	
酸價, mg KOH/g	ASTM D974	0.58	0.6	0.6	
流動點 °C	ASTM D97	-39	-30	-27	
水分離性@ 54°C	ASTM D1401	15	20	20	
銅片腐蝕@100°C, 3hrs	ASTM D130	1B	1B	1B	
防鏽測試@蒸餾水, 24hrs	ASTM D665A	通過	通過	通過	
防鏽測試@人工海水, 24hrs	ASTM D665B	通過	通過	通過	
包裝	-	20L/200L	20L/200L	20L/200L	

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。





OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil –Slide Way Oil S

OIL KNIGHT-Slide way oil is design for be lubricated in the machine tool slide, workstations and parts, etc. Enhanced adhesion and anti-crawling performance, providing excellent frictional performance, carefully selected additives, ultra-high performance sliding surface oil for a variety of machine.

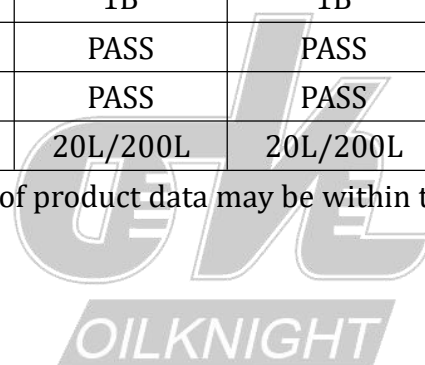
► Features/Superiority

- It the low effective friction sliding surface of the lubrication, due to the effective preparation and lowering agent, can expect high engineering accuracy.
- Due to the strong adhesion of high speed, even in the load caused by the floating phenomenon, excellent power, in the sliding surface by the vertical bonding strength and oil film retention while maintaining a sufficient oil film to maintain stability.
- It has excellent anti-wear properties for slippery road, gear, bearing and hydraulic system to provide internal parts protect from wear.

► Product Properties

		Method	S32	S46	S68
ISO Viscosity Grade			32	46	68
Color			Yellow	Yellow	Yellow
Specific Gravity @15/4 °C		ASTM D4052	0.860	0.864	0.880
Kinematic viscosity , cSt	40°C	ASTM D445	32	45.5	67.5
	100°C	ASTM D445	5.7	7.2	9.5
Viscosity Index		ASTM D2270	118	123	120
Flash Point °C		ASTM D92	238	236	240
Pour Point °C		ASTM D97	-23	-23	-28
Acid Number, mg KOH/g		ASTM D974	1.2	1.2	1.22
Copper corrosion(@100°C,3hr)		ASTM D130	1B	1B	1B
Rust test (distilled water@24hr)		ASTM D665A	PASS	PASS	PASS
Rust test (seawater@24hr)		ASTM D665B	PASS	PASS	PASS
Package			20L/200L	20L/200L	20L/200L

Above data for the current product of the typical value of each batch of product data may be within the scope of quality standards allowed to change.





油騎士工業用油

產品數據資料

工業用油 - 滑道油 S

OIL KNIGHT-滑道油專為在機床滑台，工作台和零件等部件上進行潤滑而設計的，增強的附著力和抗爬行性能，提供出色的摩擦性能，精心挑選的添加劑，各種超高性能滑動面的機械。

添加特殊的金屬表面黏性添加劑配方，優良的潤滑機能有效防止工作台跳躍現象，工作機器運轉平穩，提高加工產品質量

特點／優勢

- 配置了有效的摩擦降低劑，其潤滑的低效摩擦滑動表面可期望高的工程精度。
- 油膜具有高速黏附力強，即使在負載引起的浮動現象下，動力性也極佳，在滑動面上受垂向粘接強度和油膜保持力的同時保持足夠的油膜保持穩定。
- 它具有優異的抗磨損性能，適用於滑道，齒輪，軸承和液壓系統，以保護內部零件免受磨損。
- 加強熱安定性能，剪切穩定性高，有優越的過濾性及抗乳化、抗磨效能。

產品性狀

番號	實驗方法	S32	S46	S68	
ISO 等級	-	32	46	68	
外觀	-	澄黃液體	澄黃液體	澄黃液體	
比重@15/4 °C	ASTM D4052	0.860	0.864	0.880	
運動黏度, cSt	40°C	ASTM D445	32	45.5	67.5
	100°C	ASTM D445	5.7	7.2	9.5
黏度指數	ASTM D2270	118	123	120	
閃火點°C	ASTM D92	238	236	240	
流動點 °C	ASTM D97	-23	-23	-28	
酸價, mg KOH/g	ASTM D974	1.2	1.2	1.22	
銅片腐蝕@100°C, 3hrs	ASTM D130	1B	1B	1B	
防鏽測試@蒸餾水, 24hrs	ASTM D665A	通過	通過	通過	
防鏽測試@人工海水, 24hrs	ASTM D665B	通過	通過	通過	
包裝	-	20L/200L	20L/200L	20L/200L	

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。





OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil – Air compressor Oil P

OIL KNIGHT – Air compressor Oil has been formulated from highly refined paraffinic base oils and high performance additives to provide outstanding lubrication in a variety of rotary and screw-type air compressors. All ISO viscosity grades are formulated with outstanding oxidation performance, wear protection, resistance to rust and corrosion, rapid water separation and foam control. According to the general compressor working cycle of 2000 hours as the standard, Suitable for compression temperatures up to 220 ° C (inclusive) and pressures up to 20 (inclusive) bar.

► Application

Recommended for screw air compressors: P46

▲ If the ambient temperature is < 5 °C: P32

▲ If the ambient temperature > 25°C: P68

Specifications: ISO 6743, DIN 51506-VDL certifications for rotary air compressors

► Features/Superiority

- The thermal stability and oxidation resistance of these fluids can help to maintain cleaner.
- It's has outstanding anti-wear and corrosion protection are designed to enhance equipment life.
- Reduced sludge formation in crankcases, discharge lines, coalescers and coolers
- Meets the L-DAG light load and L-DAH medium load grade specifications of rotary compressor.

► Product Properties

		Method	P22	P32	P46	P68
ISO Viscosity Grade		-	22	32	46	68
Specific Gravity @15/4 °C		ASTM D4052	0.842	0.850	0.860	0.868
Kinematic viscosity, cSt	40°C	ASTM D445	22	32.1	45.8	68.8
	100°C	ASTM D445	4.3	5.6	7.5	9.8
Viscosity Index		ASTM D2270	110	115	125	125
Flash Point °C		ASTM D92	200	222	228	236
Pour Point °C		ASTM D97	-25	-21	-30	-30
Foaming Sequences I		ASTM D892	< 30/0	< 30/0	< 30/0	< 30/0
Water Separability@54°C		ASTM D1401	15	15	15	20
Package		-	20L/200L	20L/200L	20L/200L	20L/200L

Above data for the current product of the typical value of each batch of product data may be within the scope of quality standards allowed to change.



油騎士工業用油

產品數據資料

工業用油 - 空壓機油 P - 迴轉螺旋式

OIL KNIGHT - 空壓機油採用高度精製的石蠟基礎油和高性能添加劑配製而成，可在各種旋轉式、螺桿式空氣壓縮機中提供優異的潤滑效果。所有 ISO 粘度等級都配有出色的氧化性能，耐磨損保護，防銹和耐腐蝕性，快速的水分離和泡沫控制。依照一般壓縮機工作週期為 2000 小時為標準，適用於壓縮溫度最高可達 220°C(含)，壓力承受最高為 20(含) bar。

應用

迴轉螺桿式壓縮機，螺旋式壓縮機，葉片式壓縮機，部分往復(空壓)壓縮機。

螺旋式空氣壓縮機推薦使用：P46

▲如周圍環境溫度 < 5°C：P32

▲如周圍環境溫度 > 25°C：P68

規格：ISO 6743, DIN 51506-VDL certifications 供迴轉式空氣壓縮機使用

特點／優勢

- 這些流體的熱穩定性和抗氧化性可以幫助保持清潔。
- 它具有出色的抗磨和防腐保護功能，旨在提高設備使用壽命。
- 減少曲軸箱，排放管線，聚結器和冷卻器中的油泥形成。
- 具有優良的積碳特性，依照客需調配需要使用的換油週期，配比適合的添加劑。
- 可符合 L-DAG 輕負荷和 L-DAH 中負荷的等級規範的迴轉式螺桿式壓縮機油。

產品特性

番號	實驗方法	P22	P32	P46	P68	
ISO 等級	-	22	32	46	68	
比重 @15/4 °C	ASTM D4052	0.842	0.850	0.860	0.868	
運動黏度, cSt	40°C	ASTM D445	22	32.1	45.8	68.8
	100°C	ASTM D445	4.3	5.6	7.5	9.8
黏度指數	ASTM D2270	110	115	125	125	
閃火點 °C	ASTM D92	200	222	228	236	
流動點 °C	ASTM D97	-25	-21	-30	-30	
泡沫性測試 I, ml/ml	ASTM D892	< 30/0	< 30/0	< 30/0	< 30/0	
水分離性@ 54°C, min	ASTM D1401	15	15	15	20	
包裝	-		20L/200L	20L/200L	20L/200L	

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。



OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil – Super Compressor Oil SP

OIL KNIGHT - Compressor Oil has been formulated from highly refined paraffinic base oils and high performance additives to provide outstanding lubrication in a variety of rotary and reciprocating air compressors. All ISO viscosity grades are formulated with outstanding oxidation performance, wear protection, resistance to rust and corrosion, rapid water separation and foam control.

According to the requirements of mechanical use, choose the number: SP68, SP100, SP150

Application

- This series is effective as a "one pass" lubrication for reciprocating compressor cylinders and certain types of rotary compressors.
- Specifications: ISO 6743, DIN 51506-VDL certifications for reciprocating air compressors.
- If the air-cooled piston output power is <20KW, it is recommended to use air compressor oil P32, P46 or special air compressor oil SP100.
- For water-cooled pistons, SP68 or SP100 is recommended.

Features/Superiority

- Excellent anti-wear and anti-corrosion protection designed to increase equipment life.
- Excellent ashless additives reduce deposits, and mechanical damage to the exhaust system.
- Reciprocating compressor oil that meets the L-DAA light duty and L-DAB medium duty rating.

Product Properties

	Method	SP68	SP100	SP150	
ISO Viscosity Grade	-	68	100	150	
Color	-	Yellow	Yellow	Yellow	
Specific Gravity @15/4 °C	ASTM D4052	0.864	0.870	0.89	
Kinematic viscosity, cSt	40°C	ASTM D445	68	100.8	147
	100°C	ASTM D445	9.5	12.8	17
Viscosity Index	ASTM D2270	120	122	125	
Flash Point °C	ASTM D92	220	222	236	
Pour Point °C	ASTM D97	-20	-21	-30	
Copper Corrosion	ASTM D130	1B	1B	1B	
Water Separability	ASTM D1401	PASS	PASS	PASS	
Package	-	20L/200L	20L/200L	20L/200L	

Above data for the current product of the typical value of each batch of product data may be within the scope of quality standards allowed to change.



油騎士工業用油

產品數據資料

工業用油 - 特級空壓機油 SP - 往復式

OIL KNIGHT - 壓縮機油採用高度精製的石蠟基礎油和高性能添加劑配製而成，可在各種往復式空氣壓縮機中提供優異的潤滑效果，所有 ISO 黏度等級都配有出色的氧化性能，耐磨損保護，防銹和耐腐蝕性，快速的水分離和泡沫控制。

依照機械使用要求選用番號：SP68, SP100, SP150

應用

- 此系列作為往復式壓縮機氣缸和某些類型的旋轉式壓縮機“一次通過”潤滑是有效的。
- 規格：ISO 6743, DIN 51506-VDL certifications 供往復式空氣壓縮機使用。
- 若為空冷式活塞輸出功率<20KW，建議選用空壓機油 P32, P46 或特級空壓機油 SP100
- 若為水冷式活塞，建議選用 SP68 或 SP100

特點／優勢

- 此空壓機油具有優異的熱穩定性和抗氧化性可以幫助機械內部保持清潔。
- 具有出色的抗磨和防腐保護功能，旨在提高設備使用壽命。
- 採用加氫基礎油，與一般礦物油相比，具有良好的抗氧化性。
- 出色的無灰添加劑，可減少排放管的沉積物產生、阻塞，減少排放系統的機械損壞。
- 可符合 L-DAA 輕負荷和 L-DAB 中負荷的等級規範的往復式壓縮機油。

產品性狀

		實驗方法	SP68	SP100	SP150
ISO 等級		-	68	100	150
外觀		-	黃色液體	黃色液體	黃色液體
比重 @15/4 °C		ASTM D4052	0.864	0.870	0.88
運動黏度, cSt	40°C	ASTM D445	68	100.8	147
	100°C	ASTM D445	9.5	12.8	17
黏度指數		ASTM D445	120	122	125
閃火點 °C		ASTM D92	220	222	236
流動點 °C		ASTM D97	-20	-21	-30
銅片腐蝕		ASTM D130	1B	1B	1B
水分離性		ASTM D1401	通過	通過	通過
包裝		-	20L/200L	20L/200L	20L/200L

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。



OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil- Oily-EP/Soluble/Synthetic Cutting Oil

OIL KNIGHT Cutting oil- it divided into oily (active/inactive EP), Soluble, synthetic cutting fluid. Oily cutting oil is mainly used for metal cutting, the product is chlorine-free and can avoid harmful by-products in the cutting process, additive contains non-active/active sulfur elements, providing excellent compression and wear resistance to prevent friction with the processing product.

Application

- Cutting, drilling, threading, reaming and other processing techniques, suitable for a variety of materials: alloy steel, stainless steel, non-ferrous metals, gears...etc.
- According to the processing material (non-ferrous metal) or metal hardness, the corresponding active or inactive oil extreme pressure cutting oil should be selected.

Features/Advantages

- Excellent cutting performance providing continuous high quality finish and accuracy.
- Long oil service life due to its stable highly refined base and addition of oxidation inhibitors.
- Low oil mist Helps to improve working Environment.
- Excellent rust prevention and EP ability: Effectively prevent rusting of parts and prolong the service life of the machine.
- High lubricity: Provides accurate lubrication and is not easy to volatilize during high speed.

▶ Product Properties

Type	Method	Active EP	Inactive EP	Soluble	Synthetic
Color	-	Amber	Amber	Amber	Amber
Specific Gravity @15/4°C	ASTM D4052	0.86	0.86	0.9	0.95
Kinematic viscosity, cSt@40°C	ASTM D445	VG 10/20/30		-	-
Flash Point °C	ASTM D92	200	208	-	-
Acid Number, mg KOH/g	ASTM D974	0.75	0.45	-	>20
PH value(5%@24hr)	DIN51369	-	-	9.0±0.5	9.0±0.5
Pour Point°C	ASTM D97	-12	-15	-	-
Copper Corrosion@100°C,1hrs	ASTM D130	1B	1B	-	-
Rust Test	ASTM D665A	PASS	PASS	PASS	PASS
Chlorine	ASTM D6443	No	No	No	No
Package	-	20L/200L	20L/200L	20L/200L	20L/200L



油騎士工業用油

產品數據資料

工業用油 - 油性極壓切削油/水溶性/合成型

OIL KNIGHT 切削油/液：切削油分為油性(活性 EP/非活性 EP)、水溶性、合成切削液。

油性切削油主要用於金屬切削，本產品皆不含氯，可避免產生切削過程中的有害副產物，添加劑含非活性/活性硫元素，提供極好的抗壓、抗磨特性，以防止刀具與加工工產品之間的摩擦。

水溶性切削油主要用於金屬切削，成型、玻璃加工等研磨和冷卻，與水混合後呈乳白色，是一種乳化水基切削油，安定性高，不易變質，可保護機械部件，添加抗菌劑，以防止強烈的氣味產生。

合成性切削油主要用於金屬切削，成型、加工等研磨和冷卻，不含有毒的化學物質：亞硝酸鹽，抗泡性好，有良好的防鏽性。

➤ 應用

- 油性：切削、鑽孔、螺紋加工、鉸孔加工，適合材質：合金鋼、不鏽鋼、有色金屬、齒輪。
- 水溶性：金屬切割、成型、玻璃研磨、冷卻，適合多種材質：鐵、鋁、鋼、玻璃。
- 合成型：金屬切割、成型加工切削、車削、冷卻，適合多種材質：黑色/深色/有色金屬。

➤ 特性/優勢

- 卓越的切削性能、抗泡、防鏽、親水性佳，提供持續的高質量表面和精度。
- 抗磨、極壓佳：有效阻止物件與機件部件的磨擦，延長機械使用壽命。
- 高潤滑性：提供準確的潤滑度，不易在高速、高壓加工時揮發。

➤ 產品性狀

類型	實驗方法	活性 EP	非活性 EP	水溶性	合成性
比重@15/4 °C	ASTM D4052	0.86	0.86	0.9	0.95
運動黏度@40°C	ASTM D445	VG 10/20/30		-	-
閃火點 °C	ASTM D92	200	208	-	-
酸價, mg KOH/g	ASTM D974	0.75	0.45	-	>20
酸鹼值, 5%@24hr	DIN51369	-	-	9±0.5	9±0.5
流動點 °C	ASTM D97	-12	-15	-	-
銅片腐蝕@100°C, 1hr	ASTM D130	1B	1B	-	-
防鏽測試	ASTM D665A	通過	通過	通過	通過
氣份 %	ASTM D6443	無	無	無	無
包裝	-	20L/200L	20L/200L	20L/200L	20L/200L

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。



油騎士工業用油

產品數據資料

工業用油 - 水溶性切削油

油騎士切削油/液：切削油分為水溶性(水性)和油性、合成型切削液，可依照客需調整。

水溶性切削油主要用於金屬切削，成型、玻璃加工等研磨和冷卻，與水混合後呈乳白色，是一種乳化水基切削油，安定性高，不易變質，可保護機械部件，添加抗菌劑，以防止強烈的氣味產生。

➤ 應用

■ 金屬切割、成型、玻璃加工研磨、冷卻等性能，適合多種材質：鐵、鋁、鋼、玻璃……。

➤ 特性/優勢

■ 有別於市面上水溶性切削油與基礎油有不相溶性，此產品安定性優異，不易變質。

■ 抗硬水佳：應避免與水質硬度太高的混和，而造成無法乳化。

■ 防鏽性佳：有效阻止物件與機件部件的生鏽，延長機械使用壽命。

■ 親水性佳：具有良好的清洗性，可保持機械部件、刀具的清潔度。

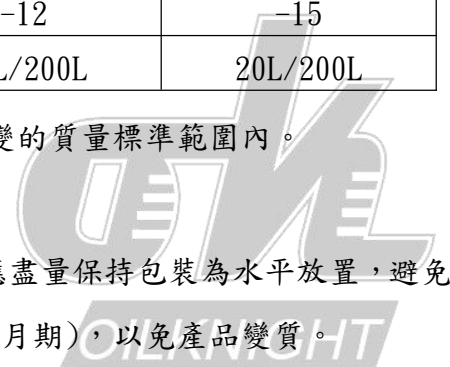
➤ 產品性狀

類型	方法	水溶性切削油	油性切削油
比重@15/4 °C	ASTM D1	0.862	0.870
運動黏度, cSt	40°C	ASTM D445	31.35
	100°C	ASTM D445	5.3
黏度指數	ASTM D2270	100	114
閃火點 °C	ASTM D92	228	240
酸價, mg KOH/g	ASTM D974	0.3	0.3
酸鹼值, 5%@24hr	DIN51369	9.2	-
流動點 °C	ASTM D97	-12	-15
包裝	-	20L/200L	20L/200L

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。

➤ 儲存

所有包裹都應該存放在密封狀態下，如果外部存放是不可避免的，應盡量保持包裝為水平放置，避免水分進入或暴露於烈日或冷凍條件下，此產品應盡速使用完畢(三個月期)，以免產品變質。





油騎士工業用油

產品數據資料

工業用油 - 合成性切削油

油騎士切削油/液：切削油分為水溶性(水性)和油性、半成型切削液，可依照客需調整。

合成性切削油主要用於金屬切削，成型、加工等研磨和冷卻，此產品不含硫、氯等極壓特性之元素，亦不含有毒的化學物質：亞硝酸鹽，抗泡性好，有良好的防鏽性。

➤ 應用

■ 金屬切割、成型加工切削、車削、冷卻，適合多種材質：黑色／深色／有色金屬……。

➤ 特性/優勢

■ 此產品可與水調配成合成稀釋加工液，可用於一般金屬(黑色或有色金屬)加工工業。

■ 抗泡性佳：此產品無泡，形成良好的保護膜，可保護刀具及加工產品表面。

■ 潤滑性佳：有效阻止物件與機件部件的摩擦，延長刀具使用壽命。

■ 若需使用於重負荷的金屬加工，可依客需加入極壓效果之添加劑。

➤ 產品性狀

類型	方法		合成性切削油
比重@15/4 °C	ASTM D1298		1.02
運動黏度, cSt	40°C	ASTM D445	2.2
	100°C	ASTM D445	-
酸價, mg KOH/g	ASTM D974		35
酸鹼值, 5%@24hr	DIN51369		9.3
包裝	-		20L/200L

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。

➤ 儲存

所有包裹都應該存放在密封狀態下，如果外部存放是不可避免的，應盡量保持包裝為水平放置，避免水分進入、桶裝標示消除，產品不應存放在 60°C 以上，暴露於烈日或冷凍條件下。





OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil –Heat Transfer Oil HT

OIL KNIGHT-Heat Transfer Oil can be used in liquid heating systems, with hydraulic or oil-free working environment, suitable for forced closed loop systems with heat transfer mainstream temperature not exceeding 320 °C, with high quality paraffin-based hydrogenated base oil configuration High temperature antioxidants that quickly remove heat and transfer heat.

Application

- HT22 is recommended for application in closed circulation systems with temperatures up to 287° C, particularly applicable where high transfer rates or good flow rates at fairly low temperature are desired.
- HT32 and HT 46 is for application in closed circulation systems with temperatures up to 315°C.

Features/Superiority

- Systems that rely on convective heat transfer media circulation systems do not provide sufficient flow rates to prevent local overheating and rapid oil degradation.
- The low-carbon residue of the scorch retarder is not easy to produce deposits, prolongs the service life and has a long shelf life.
- Good anti-foaming and anti-emulsification properties, reducing the oil quality change between air entering the oil film.
- The high viscosity index combined with the low pour point provides excellent cycling and cold environments and prevents hot spots.

Product Properties

	Method	HT22	HT32	HT46	
ISO VG	-	22	32	46	
Color	-	Amber	Amber	Amber	
Specific Gravity @15/4 °C	ASTM D4052	0.848	0.850	0.858	
Kinematic viscosity, cSt	40°C	ASTM D445	22	30	45
	100°C	ASTM D445	4.5	5.5	7.2
Viscosity Index	ASTM D2270	120	125	120	
Flash Point °C	ASTM D92	210	222	228	
Pour Point °C	ASTM D97	-30	-28	-28	
Package	-	20L/200L	20L/200L	20L/200L	

Above data for the current product of the typical value of each batch of product data may be within the scope of quality standards allowed to change.



油騎士工業用油

產品數據資料

工業用油 - 熱媒油/導熱油 HT

OIL KNIGHT-傳熱油可用於液態加熱系統，配備液壓泵或無油泵的工作環境，適用於所用傳熱主流溫度不超過 320°C 的強制閉式循環系統，以高品質石蠟基加氫基礎油配置高溫抗氧抑制劑，快速帶走熱量並傳遞熱能。

- 具有蒸氣壓低，系統啟動循環平穩，比熱高，導熱係數高等特點，可節約能源。
- 可用於無毒蒸汽，防止高溫使傳導熱能的油膜斷裂。

應用

- HT22 推薦用於溫度高達 287°C 閉式循環系統，特別適用於須高傳輸速率或低溫下良好流速。
- HT32 和 HT 46 適用於溫度高達 315°C 的閉式循環系統。

特點／優勢

- 在推薦的工作溫度下具有抗熱裂性能，其在該溫度下啟動和運行的優異黏性可泵送傳達熱能。
- 依靠對流傳熱介質循環系統的系統無法提供足夠的流速來防止局部過熱和油的快速劣化。
- 阻焦劑低碳殘留物，不易產生沉積物，延長使用壽命，保質期長。
- 抗泡及抗乳化性能佳，減少空氣進入油膜之間造成油質變化。
- 高黏度指數加上低傾點，可提供出色的循環寒冷的環境，並防止熱點產生。

產品性狀

番號	實驗方法	HT22	HT32	HT46	
ISO 等級	-	22	32	46	
外觀	-	琥珀色	琥珀色	琥珀色	
比重 @15/4 °C	ASTM D4052	0.848	0.850	0.858	
運動黏度, cSt	40°C	ASTM D445	22	30	45
	100°C	ASTM D445	4.5	5.5	7.2
黏度指數	ASTM D2270	120	125	120	
閃火點 °C	ASTM D92	210	222	228	
流動點 °C	ASTM D97	-30	-28	-28	
包裝	-	20L/200L	20L/200L	20L/200L	

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。



可依照閉路循環熱傳導設備的主流溫度調配：主流溫度 280°C ~ 320°C



OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil-Metal Rust Preventive Oil-M-RS,M-RP,M-RL

OIL KNIGHT-Metal anti-rust oil has low viscosity, solvent-based soft film anti-rust oil, anti-rust treatment for finished products such as bolts, nuts or steel plates, can be used for sealing or bulk packaging, in addition to anti-rust function, contains special compounds, for moisture, it has fast separation and is suitable for metal parts after cutting, grinding or stamping, period-term rust prevention and outdoor limited storage, easy to use, there are pass wet room test and salt water test. Corresponding products are provided during the anti-rust period and anti-rust treatment methods.

Features/Superiority

- This product does not contain the metal components of "BA" and is not harmful to the environment and the health of the operators.
- Protect machinery, parts, tools, equipment from moisture in the air, and resist corrosive.
- The oil is well preserved, not easy to deteriorate, and the rust resistance is particularly good.
- Thin protective film, which makes the product appearance brighter, and not easy to peel off.
- It can be applied by spraying, hand coating or dip method, and is suitable for use in many types of metal processing products.
- It has good drainage and can replace the moisture or residual water vapor on the metal surface to produce protective film for iron or non-ferrous metals.

Product Properties

Type	Method	M-RS	M-RP	M-RL
Color	-	Amber	Amber	Amber
Specific Gravity @15/4 °C	ASTM D4052	0.8	0.81	0.820
Kinematic viscosity, cSt	40°C	ASTM D445	3.5	3.8
	100°C	ASTM D445	-	-
Flash Point °C	ASTM D92	92	96	100
Acid Number, mg KOH/g	ASTM D974	3.5	1.3	0.85
Salt Spray Test, 24hrs	-	PASS	PASS	PASS
Humidity Cabinet Test, hrs	-	-	240	480
Indoor Exposure Test, days	-	-	30+	30+
Rust prevention period	-	Short-Mid	Medium	Medium-Long
Barium	-	No	No	No
Package	-	20L/200L	20L/200L	20L/200L



油騎士工業用油

產品數據資料

工業用油 - 金屬防鏽油 M-RS, M-RP, M-RL

OIL KNIGHT-金屬防鏽油具有低黏度，溶劑型軟膜防鏽油，對成品如螺栓、螺母或鋼板等進行防鏽處理，可用於密封或散裝包裝，除防鏽功能，含有特殊化合物，對於水分有快速的分離性，適用於切割、研磨加工或沖壓加工後對金屬零件進行，期間防鏽和或室外有限期儲存使用，此產品使用工藝便捷，且通過濕室測試及鹽霧測試，可依照客需的防鏽期間、防鏽處理方法提供相對應產品。

特點／優勢

- 此產品不含『鉍』的金屬成分，對環境及操作人員健康無害。
- 保護機械，零件，工具，設備等免受空氣中水分，可抵禦工業機械產生的腐蝕性氣體，例如：可耐鹼、可抵禦酸性物質的侵蝕。
- 油品保存良好，不易變質，防鏽性能特別好。
- 塗附在金屬表面會形成薄型保護層，使晶體外觀更加精緻光亮，適用範圍內油膜不容易剝落。
- 可利用噴霧、手塗或浸製法施用，適用於多類金屬加工成品使用。
- 有良好的排水性，可取代金屬表面的水分或殘留的水汽，對鐵或非鐵金屬產生良好的保護膜。

產品性狀

產品類型	實驗方法	M-RS	M-RP	M-RL	
外觀	-	琥珀色液體	琥珀色液體	琥珀色液體	
比重 @15/4 °C	ASTM D4052	0.8	0.81	0.820	
運動黏度, cSt	40°C	ASTM D445	3.5	3.8	4.5
	100°C	ASTM D445	-	-	-
閃火點 °C	ASTM D92	92	96	100	
酸價, mg KOH/g	ASTM D974	3.5	1.3	0.85	
鹽霧測試, 24hrs	-	PASS	PASS	PASS	
濕室測試, hrs	-	-	240	480	
室內暴露測試, days	-	-	30+	30+	
防鏽期間	-	中短期	中期/中期裝運	中長期	
鉍	-	無	無	無	
包裝	-	20L/200L	20L/200L	20L/200L	

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。





OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil –Oily Non-Graphite Plunger Oil B-200

OIL KNIGHT-oil plunger oil is an oil-base plunger lubricant for die casting machines, it has excellent lubrication properties, excellent adhesion strength and stable plunger dispersion to prevent tip friction and wear, B-200 is low-viscosity grade that not suitable for large die casting machine.

- **Use fluid directly without dilution and please select according to mechanical requirements.**
- Principle: In high pressure die casting, molten metal is injected into the cavity through a cylindrical sleeve through a piston (or plunger) that forces the molten metal through a narrow hole at high speed and pressure. Proper lubrication of the plunger is essential to provide a smooth filling of the cavity, reducing energy consumption during firing and extending the life of the plunger head and sleeve.

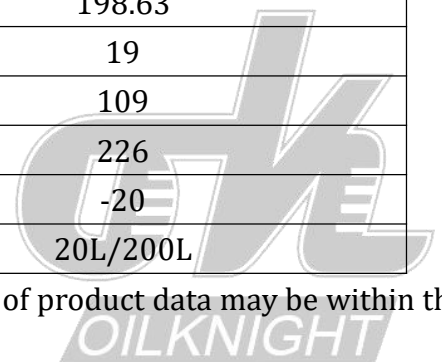
Features/Superiority

- Excellent lubricating ability and tip wetting properties - prevent the wear and seize up for the plunger tip.
- Non-graphite type lubricant promotes a cleaner and safer working environment, contributing to reduced maintenance frequency.
- Does not contain any toxic substances.
- Improve metal castability and injection and limit the porosity of cast parts.

Product Properties

Designation	Method	B-200	
ISO Viscosity Grade	-	200	
Color	-	Amber	
Specific Gravity @15/4 °C	ASTM D4052	0.9	
Kinematic viscosity, cSt	40°C	ASTM D445	198.63
	100°C	ASTM D445	19
Viscosity Index	ASTM D2270	109	
Flash Point °C	ASTM D92	226	
Pour Point °C	ASTM D97	-20	
Package	-	20L/200L	

Above data for the current product of the typical value of each batch of product data may be within the scope of quality standards allowed to change.





油騎士工業用油

產品數據資料

工業用油- 油基非石墨型柱塞油 B-200

OIL KNIGHT-油性柱塞油是一種用於壓鑄機的油基柱塞潤滑劑，具有優異的潤滑性能，優異的黏附強度和穩定的柱塞分散，防止尖端摩擦磨損，此產品B-200為低黏度番號。

- 直接使用液體而不稀釋，並根據生產要求進行調整，不適用於大型壓鑄機操作。
- 原理：在高壓壓鑄中，熔融金屬通過活塞（或柱塞）通過圓柱形套筒注入模腔，該活塞（或柱塞）以高速和高壓迫使熔融金屬通過窄孔。柱塞的適當潤滑對於提供空腔的平滑填充是必不可少的，減少射擊期間的能量消耗並且延長柱塞頭和套筒的壽命。

應用

- 用於製造輕質金屬的輕質部件，例如：鋁、鎂、鋅合金鑄造加工壓鑄機潤滑，此產品低黏度不適合用於大型鑄造機。

特點／優勢

- 優異的潤滑能力及尖端濕潤性-防止磨損並抓住柱塞頭，減少更換待機的時間。
- 非石墨型潤滑劑可促進更清潔，更安全的工作環境降低維護頻率。
- 不含任何有毒物質。
- 提高金屬鑄造性和注射性，並限制鑄件的孔隙率。

產品性狀

番號	實驗方式		B-200
ISO 等級	-		200
外觀	-		琥珀黏稠液體
比重 @15/4 °C	ASTM D4052		0.9
運動黏度, cSt	40°C	ASTM D445	198.63
	100°C	ASTM D445	19
黏度指數	ASTM D2270		109
閃火點 °C	ASTM D92		226
流動點 °C	ASTM D97		-20
包裝	-		20L/200L

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。





OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil - Quenching Oil Q

OIL KNIGHT-Quenching oil is divided into premium quenching oil, fast quenching oil, speed quenching oil and fast bright quenching oil.

According to the cooling speed and the bright surface of the metal surface, this product is added with high-efficiency antioxidant, cool, brightener, anti-rust additives, provide multiple composite functions of metal processing products, short film breaking, this products are low temperature quenching oil.

Application

- Hardening of medium carbon steel, low alloy steel and low element steel.
- Hardening of all type screw nuts after carburizing.
- Suitable for lot of quenching crucible, open quenching oil bath and after salt bathing procedures.
- Applicable oil temperature: 20~80°C, oil bath temperature above 80°C is not applicable.
- Temperature of use under controlled atmosphere (inert gas): 50~100 °C

Features/Superiority

- The carbon deposit is small, and bright performance is outstanding, and the cooling effect is fast.
- Quenching oil continuously runs under long-term high temperature under severe conditions. It requires oil to have good anti-oxidation, anti-thermal decomposition and anti-aging properties.
- Using hydrogenated paraffin base oil to reduce the components of accelerated oil oxidation.
- No contain gums and bitumen, easy to remove protective film for work and equipment.

Product Properties

Designation	Method	Premium	Fast	Speed	Bright-Fast
ISO Viscosity Grade	-	VG 18/22/32			
Color	-	Amber	Amber	Amber	Amber
Specific Gravity @15/4 °C	ASTM D4052	0.852	0.854	0.854	0.854
Kinematic viscosity , cSt@40°C	ASTM D445	16~20	16~20	16~20	16~20
Flash Point °C	ASTM D92	>180			
TAN mg KOH/g	ASTM 974	>2	>2	>2	>2
Insoluble- n-pentane, wt%	ASTM D893A	>0.3	>0.3	>0.3	>0.3
Oil Temperature, °C	JIS K2242	80			
Characteristic Temperature, °C	-	>520	>600	>585	>600
Cooling Time, Sec	-	<5	<4	<6	<4.5
Package	-	20L/200L	20L/200L	20L/200L	20L/200L



油騎士工業用油

產品數據資料

工業用油 - 低溫淬火油 Q

OIL KNIGHT-淬火油，依照需求分為特級淬火油、快速淬火油、超速淬火油及快速光亮淬火油，依照催冷速度及金屬表面光亮特點區分，此產品添加高效能抗氧劑、催冷劑、光亮劑、防鏽劑等，提供金屬加工產品的多重複合性功能，使用週期長、破膜速度短，此系列產品為低溫淬火油，若為半熱淬火或熱淬火油需求，不適用選用此系列產品，依使用油溫、使用機械形式、要求特性溫度等選擇對應產品。

應用

- 中碳鋼和低合金鋼、低元素鋼的硬化。
- 所有類型的螺絲螺帽在滲碳後的硬化。
- 適合使用在任何型式的淬火爐，開放的淬火油槽和在鹽浴製程序之後。
- 適用油溫：20~80℃，高於80℃以上油浴溫度不適用。
- 在受控氣氛（惰性氣體）下的使用溫度：50~100℃

特點／優勢

- 使用周期長，積碳少，且光亮性能突出，催冷效果快速。
- 油具有良好的抗氧化，抗熱分解和抗老化性能，確保油冷卻性能和使用壽命。
- 加氫石蠟基礎油與高效能之添加劑配製而成，減少加速油品氧化的成分，延長換油週期。
- 不含膠質和瀝青，良好的清潔性，工作和設備的保護膜容易清除。

產品性狀

番號	實驗方法	特級淬火	快速淬火	超速淬火	光亮快速
ISO 等級	-	VG 18/22/32			
外觀	-	琥珀液體	琥珀液體	琥珀液體	琥珀液體
比重@15/4 °C	ASTM D4052	0.852	0.854	0.854	0.854
運動黏度@40°C	ASTM D445	16~20	16~20	16~20	16~20
閃火點 °C	ASTM D92	>180	>180	>180	>180
酸價, mg KOH/g	ASTM D974	>2	>2	>2	>2
不溶解分 wt%	ASTM D893A	>0.3	>0.3	>0.3	>0.3
操作油溫	JIS K2242	80	80	80	80
特性溫度	-	>520	>600	>585	>600
冷卻時間(800~400 °C), 秒	-	<5	<4	<6	<4.5
包裝	-	20L/200L	20L/200L	20L/200L	20L/200L

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。

以上數據為各分類淬火油番號 ISO VG18(40°C)之性能，需要更多資訊請直接與製造商聯繫要求。



OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil –EP Gear oil G

OIL KNIGHT-Gear oil is designed for heavy duty industrial gears designed for high quality extreme pressure lubricants, with high load carrying, ability and anti-friction performance, for the gear to bring more excellent performance.

Application

- It provides good gear performance for most types of gears and is also suitable for mechanical hydraulic gearboxes, turbo clutches and hydraulics.
- Specification: U.S. Steel-224, AGMA9005-EP2, DIN51517-Part III

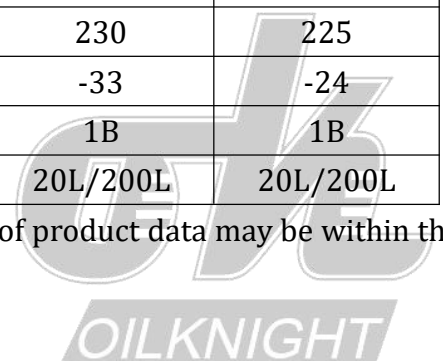
Features/Superiority

- It can prevent the work cycle due to high fever and chemical reactions lead to failure, withstand high heat load, to avoid the formation of sludge, even when the overall temperature rise, can also extend the service life of lubricants.
- Has excellent corrosion resistance, can effectively prevent the steel and bronze surface wear, even if the presence of water and solid contaminants can also effectively protect gears.
- Excellent water separation, you can easily from the lubrication system to discharge excess water, and extend the life of the gear and ensure effective lubrication of the contact area.

Product Properties

		Method	EP-G68	EP-G100	EP-G150
ISO Viscosity Grade		-	68	100	150
Color		-	Amber	Amber	Amber
Specific Gravity @15/4 °C		ASTM D4052	0.884	0.874	0.886
Kinematic viscosity, cSt	40°C	ASTM D445	67.8	125.9	150
	100°C	ASTM D445	9.1	15.3	16.7
Viscosity Index		ASTM D2270	110	125	120
Flash Point °C		ASTM D92	240	230	225
Pour Point °C		ASTM D97	-27	-33	-24
Copper Corrosion@100°C,3hrs		ASTM D130	1B	1B	1B
Package		-	20L/200L	20L/200L	20L/200L

Above data for the current product of the typical value of each batch of product data may be within the scope of quality standards allowed to change.





油騎士工業用油

產品數據資料

工業用油 - 極壓機油 EP-G

OIL KNIGHT - 齒輪油專為重負荷工業齒輪而設計，專為高品質極壓潤滑油而設計，具有高負荷承載能力和抗摩擦性能，為齒輪帶來更卓越的性能，添加硫磷極壓性能突出的添加劑，能在金屬表面形成堅韌的油膜，不僅能承受高負荷衝擊，更能防止高壓下齒面過熱、熔合、咬死的狀況。

此產品依照 DIN51517 規範之齒輪極壓潤滑油，可客製番號或符合機械極壓負荷狀況調整。

應用

- 對大多型態的齒輪能提供良好的齒輪性能，亦適合機械液動變速箱、渦輪離合器和液壓器。
- 規範：U. S. Steel-224, AGMA9005-EP2, DIN51517-PartIII

特點／優勢

- 可以防止因高溫和化學反應引起的工作循環導致故障，承受高熱負荷，避免形成污泥，即使在整體溫度升高的情況下，也能延長潤滑油的使用壽命。
- 具有優異的耐腐蝕性，能有效防止鋼鐵和青銅表面磨損，即使存在水分和固體污染物也能有效保護齒輪。
- 卓越的分水性能，可以很容易地從潤滑系統排出多餘的水分，延長齒輪的使用壽命，並確保接觸區域的有效潤滑。

產品特性

番號	實驗方法	EP-G68	EP-G100	EP-G150	
ISO 等級	-	68	100	150	
外觀	-	琥珀色	琥珀色	琥珀色	
比重 @15/4 °C	ASTM D4052	0.870	0.874	0.886	
運動黏度, cSt	40°C	ASTM D445	67.8	100.5	150
	100°C	ASTM D445	9.1	12.5	16.7
黏度指數	ASTM D2270	110	118	120	
閃火點 °C	ASTM D92	240	230	225	
流動點 °C	ASTM D97	-27	-33	-24	
銅片腐蝕@100°C, 3hr	ASTM D130	1B	1B	1B	
包裝	-	20L/200L	20L/200L	20L/200L	

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。





OILKNIGHT INDUSTRIAL OIL TECHNICAL DATA SHEET

Industrial Oil –Industrial diesel Engine Oil

OIL KNIGHT- Diesel engine Oil provide triple protection under temperature and pressure full range of engines: anti-wear, anti-corrosion, anti-carbon deposition.

Whether high or extreme loads in the piston or the industrial machine, it can provide strong protection, effective control and elimination of harmful carbon deposits in the engine and particulates, provides excellent soot and viscosity control.

Application

- Can be applied to the lubrication function of fixed diesel engines, such as: diesel generator
- Turbocharger or general-intake diesel engine, truck, locomotive, such as: strange hand, excavator, Bobcat special lubricant
- If the required viscosity of the engine oil is in accordance with this product specification, it is also applicable to gearboxes, torque converters, and hydraulic systems.

Features/Superiority

- Clean dispersion additive system to prevent oil viscosity becomes larger, to provide improved engine cleanliness and protection against piston and various parts of the protection.
- Containing anti-wear additives, even in harsh operating environment, but also to provide a strong metal and metal protective film.

Product Properties

	Method	10W	SAE 40	15W-40	20W-50	
Specification	-	CF, CG, CD				
Specific Gravity @15/4 °C	ASTM D4052	0.86	0.87	0.874	0.880	
Kinematic viscosity, cSt	40°C	ASTM D445	34	130	115	150
	100°C	ASTM D445	6	14.5	15	15.8
Viscosity Index	ASTM D2270	125	111	135	125	
Flash Point °C	ASTM D92	220	230	238	230	
Pour Point °C	ASTM D97	-24	-18	-30	-25	
Acid Number mg KOH/g	ASTM D974	2.5	3	3	3	
Total Base NO. mg KOH/g	ASTM D2896	10	11	11	11	
Compression test	-	PASS	PASS	PASS	PASS	
Package	-	20L/200L	20L/200L	20L/200L	20L/200L	



油騎士工業用油

產品數據資料

工業用油 - 工業機械柴油引擎潤滑油

OIL KNIGHT-柴油發動機機油在溫度和壓力範圍內提供三重保護，全系列發動機：抗磨損，抗腐蝕，防碳沉積。

無論活塞還是工業機械的高載荷或極重承載負荷，它都能提供強有力的保護，有效控制和消除發動機和微粒中的有害積碳，提供出色的煙塵和黏度控制。

應用

- 可應用於固定式柴油引擎之潤滑功能，例如：柴油發電機
- 渦輪增壓機或一般進氣式柴油機具、貨車、火車頭，例如：怪手、挖土機、山貓專用潤滑油
- 若對引擎機油的需求黏度與本產品規範相符，亦適用於齒輪箱、扭力變矩器，與液壓系統。

特點／優勢

- 清潔分散添加劑，可減緩油劣化速度，提高發動機的清潔度，提供活塞和各種部件的保護。
- 含有抗磨損添加劑，即使在惡劣的操作環境下，也能提供堅固的金屬和金屬保護膜。
- 具有優異的酸控制能力，有效燃燒油中並產生酸性物質，減少發動機中酸的積聚和腐蝕性。
- 添加高鹼性酸化抑制劑，抗泡、抗磨等高品質引擎潤滑油。
- 添加抗氧化劑，可以破壞可能導致油脂增稠的化學反應。

產品特性

番號	實驗方法	10W	SAE 40	15W-40	20W-50	
規範	-	CG, CF, CD				
比重 @15/4 °C	ASTM D4052	0.86	0.87	0.874	0.880	
運動黏度, cSt	40°C	ASTM D445	34	130	115	150
	100°C	ASTM D445	6	14.5	15	15.8
黏度指數	ASTM D2270	125	111	135	125	
閃火點 °C	ASTM D92	220	230	238	230	
流動點 °C	ASTM D97	-24	-18	-30	-25	
酸價, mg KOH/g	ASTM D974	2.5	3	3	3	
鹼價, mg KOH/g	ASTM D2896	10	11	11	11	
極壓性能測試	-	PASS	PASS	PASS	PASS	
包裝	-	20L/200L	20L/200L	20L/200L	20L/200L	

備註：以上數據為每批產品數據的典型值的當前產品可能在允許改變的質量標準範圍內。