

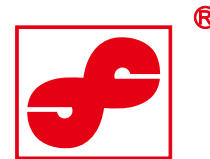
Quality of Life

FUKKOL

KALEN Lubricant Technology International (HuiZhou)LTD. is HongKong-Japanese joint venture. JAPAN FUKKOL Lubricants Corporation is engaged in the field of industrial lubricating oil with 26-years' experiences. The market share is stable for its advanced technology . Established in 1993 , Hongkong KALEN International Co., Ltd. set up Dongguan FUKKOL Lubricants Co., Ltd. in 1996, relying on stable development of international trade network.

The company has organized a number of lubricating oil development and research for industry , machinery since it established . Great achievement has obtained in metal processing oil,aluminum volatilizing cutting oil, plastic additive and machinery maintenance oil . It owns hundreds of lubricating technology patents and offers 1,000 specifications and models to meet all demands . Fukkol products can make the machine work smoothly , no matter in the condition of -80°C (low temperature) or 1400°C (extreme high temperature).

With predominant location and outstanding enterprise management mode, it constantly expands and provides first-class service for customers with rich experience in international trade.



FUKKOL

26 YEARS EXPERIENCE TESTIMONY



1996年



1997年



1998年



1999年



2000年



2001年



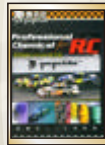
2002年



2003年



2006年



2007年



2008年



2009年



2005年



2004年



2012年



2011年



2010年

Years

5 most best-selling products

No 1

H.T PASTE



It can be used on the parts of any precision mould that need to be combustion resistant, including the mould parts (slide way, mould plates, ejector pin), etc. Its unique adhesiveness ensures that it will not get fluid even under a temperature up to 1400°C. It has reached the requirements as recommended by F.D.A. and can increase wear resistance substantially.

No 2

RUST REMOVER DAC 2



Its unique cation formula helps remove against hard-to-remove rust stains and restore gloss to the metal surface by removing rust stains. It can be used for removing rust from many metals and from the bottoms of ships.

No 3

H.T.M.ELASTICIZER



1.H.T.M was based on special chemical additives. The medium viscosity is designed with new and recycle plastic material to improve. The surface reflects and toughens, and also provides stability with material.

2.H.T.M can be used with all most plastic that is in compliance with ETV and ASTM norms. Absolutely no side effect.

No 4

MOULD PROTECTOR (GREEN)



It is a 5-year long term anti-rust agent, used in metal and injection plastic moulds. The ultrathin displaces water so the film dries fast and is not easy to run out. In different conditions, which don't need any cleaning before used, and can be melted in general injection plastic temperature.

No 5

M.T.C PLASTIC MACHINES SCREW CLEANING RESIN

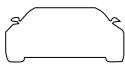


M.T.C is a resin with a wide range of melting point of 80°C-300°C, which can dissolve plastic, toner and carbide on the screw of plastic injection machine by its intermiscibility characteristic. The resin can purge the contamination after dissolving in a short time and be poured out. Solutope can be used around 10-15 times. So it can cut the cost and save time.





PAPER INDUSTRY
LUBRICATING OIL



AUTOMOTIVE



ADHESIVE



REPAIR AND
MAINTENANCE



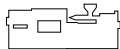
CONSTRUCTION



FOOD EQUIPMENT
AND MACHINE



SEWING
INDUSTRY



INJECTION PLASTIC



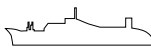
AEROSOL



CLEANING



MACHINE
EQUIPMENT



VESSEL WARE



METAL WORKING



PAINT

Forever to make
an extra effort

in industrial



FUKKOL®

INDEX

General Lubricants

Hydraulic Oil	9
Circulating Oil	10
Turbine Oil	11
Refrigeration&Diffusion Pump Oil	12
Air Compressor Oil	13
Gear Lubricants	14
Knitting Machine Oil	15
Tooling And Parts Lubricants	16
Wire Rope & Chain Oil	17
White Oil	18
Thermally Stable Oil	18
Machine Oil	18

Metal Working & Protection Series

EDM Oil	20
Soluble Cutting Fluids	21-22
Neat Cutting Oil	23
Net Cutting Oil	24
Drilling and Grinding Fluids	25
Metal Tapping Oil	26
Quenching Oil	27

Material Suitability Table	28-29
----------------------------	-------

Rustking Series

Anti-Rust Oil	31
---------------	----

Metal Drawing Series

Metal Drawing Oil	34
Deep Drawing Oil	34
General Metal Working Oil	35
Stamping And Rolling Series	36
Metal Bending Oil	37
Volatility Stamping And Rolling Oil	38
Aluminum Film Stamping Oil	39
Manufacturing Recommend Lubricants	40

Die Casting Series

Die Casting Series	42-43
--------------------	-------

Lubricate Grease Series

Assemble Grease Series	45
Machine Lubricant Grease	46-47
Stop Mould Burn Effect Series	48
Silicone Series	50
Anti-Seize Compound	50

Aerosol Series

Anti-Rust Series	52-61
Mould Release Series	62-68

Lubricating Series	69-75
Cleaner Series	76-81
Testing Series	82-83
Spray Paint Series	84-87

Engineering Chemicals Series

Hand Torch and MAPP Gas Sets	89-90
Engineering Chemicals	91-92
Welding and Cutting Series	93

Cleaning Product Series

Cleaning Products	95-100
Adhesive Series	101-102
Instant Adhesive &Clay	103
Repair Clay	103

Injection Plastic

Additives	105
Injection Plastic Machine	106
Screw Cleaner	

Watch Series

Watch Assemble Series	107
-----------------------	-----

Automotive Series

Treatment Series	109
Automotive Cleaning	110
Engine Oil	111

5 Promise



↗ Innovation

We promise that we will develop three new products every year at least.

We are absorbed in exploiting and developing industrial lubricating oil and related field based on first-class technology. There are a number of experienced lubricating oil engineers and high-level R & D group. With hundreds of lubricating technology patents, we have developed more pragmatic and effective products by combining with actual situations in China and customer's requirements.



↗ Quality

APPROVED BY ISO 9001 CERTIFICATION AND TECHNICAL CERTIFICATION AUTHORITY.

The company provides advanced, reliable and eco-nomical products for customers with perfect and effective quality management system, stable and reliable quality insurance, constant innovation and improving quality spirit.

↗ Service



Service is composed of quality, credit and efficiency, which means that the user gets quality insurance after purchase.

Quality, credit and efficiency are what customer will enjoy satisfying service anytime and anywhere for the promptest and most professional treatment.

↗ Profession

KALEN TECHNOLOGY(HUI ZHOU) COMPANY LTD. has regarded first-class technology as its development base since it established.

There are five grades of basic oil in the lubricating oil market: solvent refined mineral oil of 1960s, hydrocracking oil mineral oil of 1980s, hydrogenated stereoisomer dewaxed mineral oil of late 1990s, polyolefin synthetic oil for formula car or aviation, ester synthetic oil for aviation & spaceflight and industrial machine oil. Fukkol has adopted polyolefin and ester synthetic oil as basic oil when other lubricating oil companies still use basic oil of 1960s. The high-precision basic oil is as pure as water, its life is twice of that of 1960s mineral oil. The oil sludge reduces 90%.

↗ Green

Obtained Material Safety Data Sheet and ROHS.

Try to make every product be reused and realize zero-discharge.

Our mission: offer the most reasonable lubricating oil to customer, prolong machine life, improve efficiency and save the cost, as well as hold the concept of protection environment and the earth.





General Lubricants

MASS ANTIWEAR HYDRAULIC OIL

ISO 32,46,68,100,150,220 Ref:100001



Blended from HVI paraffinic base oils and additive to prevent wear, oxidation, corrosion and foaming.

Improved thermal stability-to protect against thermal degradation, permitting higher operating temperatures.

Excellent filterability prevent premature blocking of ultrafine filters.

Outstanding antiwear performance under sever loading and low loading conditions.

Low friction characteristics minimize the stick slip in critical motion system operating at low loads and low speeds.

Good water seperation to prevent emulsification and antifoam properties to avoid cavitation and increased compressibility.



200L

18L

4L

2L

MASS OIL ZZ 32,46,68

Ref:100003

Fukkol Mass Oil ZZ anti wear hydraulic oil is a special refined paraffin mineral oil base solvent, with anti-wear and anti-corrosion inhibitors and contains no zinc. This special formula ensures a better performance in filtering and thermal stability.



Recycle machine

HYDRO GUARD FIRE RESISTANT HYDRALIC OIL

ISO 46

Ref:100008

Water- glycol fire-resistant fluid containing anti- wear agents and rust inhibitors for use in high pressure hydraulic systems where the requirements for fire resistance, pump wear protection and viscosity are satisfied by water- glycol fluids.



MASS B REPRODUCIBLE HYDRAULIC OIL

ISO 32,46,68

Ref:100002

MASS OIL B can be used in circulate. Antiwear hydraulic oils designed to give long service in high output hydraulic systems that use vane, piston or gear pumps.

They can also be used for oil-lubricated bearings and machine tool circulating bath systes.

They should not be used in specialized pumps with silver faced bearing surface of highly loaded steel-on-bronze contacts.



CYCUS CIRCULATING OILS

ISO 32,46,68,100,150,320

Ref: 100035-32/46/68
100037-100/150/220

Highly refined paraffinic mineral oil suitable for industrial circulating systems and general purpose lubrication where straight mineral oils are acceptable.

uses in:

- *General purpose industrial lubrication, particularly in "once-through" lubrication systems
- *Industrial circulating systems, particularly those incorporating clay filters to remove high levels of contamination
- *Light duty gear cases
- *Plain and rolling element bearings
- *Engine air cleaners
- *Machine tools
(Air compressors, as appropriate (not recommended for use in breathing air compressors))
- *Vacuum pumps
- *Heat transfer fluid where uninhibited oils are recommended.



Paper Machine

NAPHTEX TRANSFORMER OIL

10N,25N,45N

Ref: 100020

FUKKOL Naphtex Transformer Oil is a specially refined, inhibited light mineral oil.

The oil is dosed with an oxidation inhibitor for high temperature electrical applications.

FUKKOL Naphtex Transformer Oil possesses good dielectric properties. It is highly resistant to acids and sludge) and being of low viscosity circulates easily to provide efficient heat transfer.



Transformer



200L

18L

FUGAL | TURBINE OIL ISO 32,46,68 Ref:100074

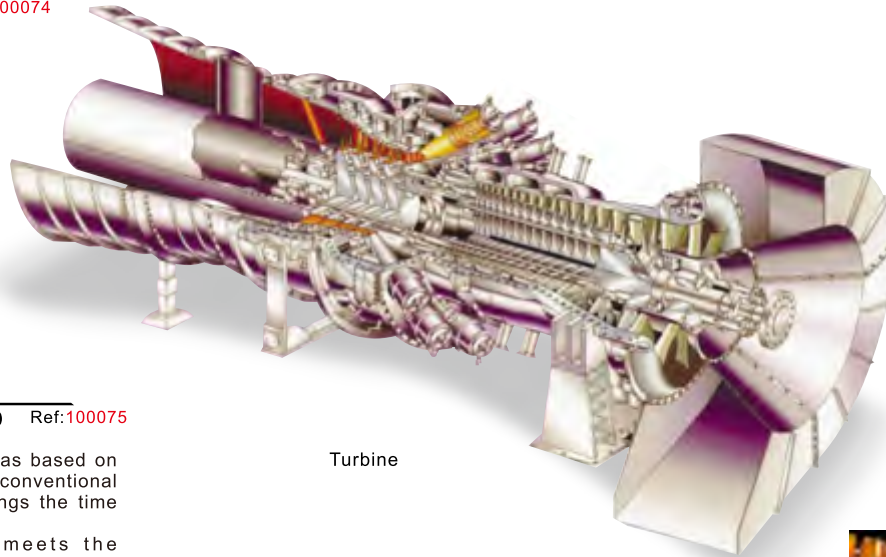
Premium performance, specially inhibited turbine oil designed for the lubrication of modern, high severity, heavy-duty industrial gas turbines. Formulated from severely refined, turbine-grade base stocks and an advanced oxidation, rust and foam inhibitor system. The high performance, ashless, low volatility anti-oxidant package imparts exceptional oxidation stability for the severest applications.

FUGAL | TB TURBINE OIL ISO 32,46,68,100,150 Ref:100075

FUKKOL TB turbine series was based on non-conventional base on non-conventional base stock, this lubricant prolongs the time between oil changes.

Its unique additivation meets the specifications of both steam and gas turbines, which makes it an ideal product choice for the lubrication of single shaft combined cycle machines.

The anti-wear level allows the lubrication of turbines equipped with the most severely loaded gear boxes.



Turbine

Premium performance, synthetic polyol ester based turbine lubricant for use in modified aviation-type gas turbines in stationary and marine service. A special additive system imparts excellent high temperature thermal and oxidation stability.



Refrigeration & Diffusion Pump Oil

REFRIGERATION COMPRESSOR OIL

NP 32, 68

Ref:120018

FUKKOL Refrigeration Compressor Oil is designed for the lubrication of compressors with ammonia(R717) as refrigerant. It can also be used when hydrocarbon(e.g.R600a) are the refrigerant. It may be used with halogenated hydrocarbon (R12,R22).For all refrigeration and air-conditioning applications:domestic, commercial and industrial systems with high, moderate or low evaporation temperatures.

Apart from the application in refrigerators FUKKOL Refrigeration Compressor Oil can also be used for general lubrication at low temperatures.

SYNTHETIC REFRIGERATION COMPRESSOR OIL

K32, 68

Ref:120019

Operate at peak productivity. It takes proper maintenance to operate an industrial refrigeration system.Interruption of service or reduced system capacity can result in significant loss of production or products in storage. The FUKKOL Synthetic Refrigeration Compressor Oil helps enable efficient, reliable operation and is suitable for use with a range of refrigerants commonly encountered in industrial applications.

Exceptional lubrication for multiple applications. FUKKOL Synthetic Refrigeration Compressor Oil provides refrigeration systems - as well as commercial, heat pump, and marine refrigeration systems - using CFC (R12), HCFC (R22), ammonia (R717),and carbon dioxide (R744) refrigerants. This series includes a range of viscosity grades for use in reciprocating and rotary compressor designs, including screw compressors.

MOTONO DIFFUSION PUMP SILICONE FLUID

704 705

Ref: 100054, 100055

FUKKOL Motono Diffusion Pump Silicone Fluids are designed for high vacuum and for fast pumping of large volumes of gas or vapor in production operations.

FUKKOL Motono Diffusion Pump Silicone Fluids is a colorless to straw- colored, single- component fluid designed for ultrahigh vacuum applications in the range of 10⁻⁹ to 10⁻¹⁰ torr (untrapped) and 10⁻¹¹ torr (trapped).

FUKKOL Motono Diffusion Pump silicone Fluids are so low that use of traps or refrigeration is unnecessary for some ultrahigh and ultraclean vacuum applications. It has the highest phenyl content of all silicone diffusion pump fluids and the best resistance to radiation.

VACCO

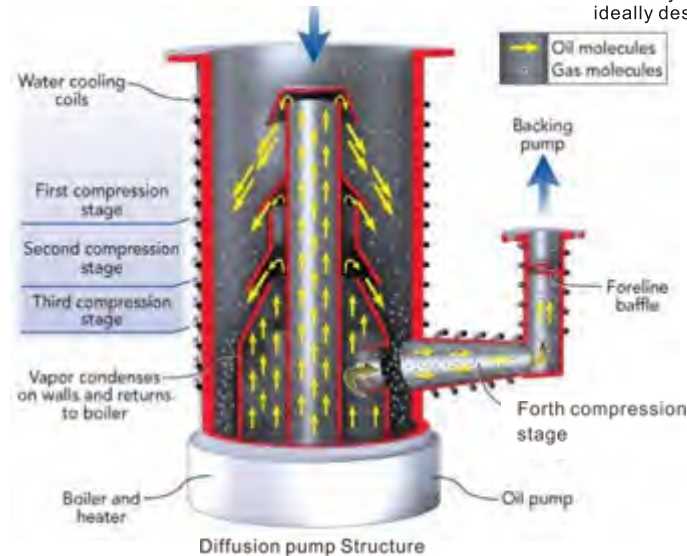
VACUUM PUMP OIL

ISO 32,68,100

Ref:100052

VACCO SERIES OIL is a kind of highly refined oil which is an oil- soluble, heat- stable compound contraining heavy duty extreme pressure additives.

For that reason, it can be operated at a high temperature. Besides, it contains anti-rust additives and has a low carbon- forming tendency. Therefore, it is ideally designed.



R.P.M | COMPRESSOR OIL

ISO 32,46,68,100 Ref:100049

Premium-quality, inhibited mineral-oil-type compressor oil for the lubrication of reciprocating air compressor with discharge temperatures up to 220°C contains an additive system that includes a special ashless high-temperature antioxidant, corrosion and foam inhibitors.

Recommended for stationary, semi-mobile and mobile reciprocating air compressor, inter gases compressor, crank case and cylinder. Also recommended for use in compression chamber and rotating gear of rotary air compressor.

Applicable for any air compressor that requires use of oil that contains rust inhibitor and anti-oxidant.

SYN COMPRESSOR OIL

ISO 46,68 Ref:100050

Premium performance, synthetic compressor oil based on diester technology and containing an inhibitor system to give outstanding oxidation resistance and corrosion protection under severe operating conditions.



Air Compressor



SCREW COMPRESSOR OIL

ISO 32,46,68

Ref:100051

Products based on HVI paraffinic base Oils, treated to reduce the polycyclic aromatic content into which are blended additives to impart antioxidation, antiwear, anticorrosion, antifoam and dispersing properties.

Extended field evaluation have demonstrated vastly superior performances which offer the following benefits:

- outstanding oxidation and thermal stability serves to extend the service life even with bulk oil temperatures up to 120deg. c.

- excellent cleanliness properties, eliminating the blockage of separators/coalescers.

- good protection against corrosion.

- Limited carry over of oil into the air stream.

- good air release properties to minimise or avoid cavitation effects and increased compressibility.

OTO SYNTHETIC ROTARY AND SCREW COMPRESSOR OIL

ISO 32,46,68

Ref:100053

FUKKOL OTO is synthetic hydrocarbon based lubricants affording the ver best protection for rotary air compressors and turbo chargers.

Possession of superior thermal and oxidation stability enables them to function stability enables them to function over a greater range of application temperatures with low coking tendency and resistance to residue formation.

GEARFUL GEAR OIL

ISO 32,46,68,100,150,220,460,680 Ref:100251,100252

Industrial gear lubricants intended for enclosed gear sets operating under severe service conditions. They provide outstanding anti-wear and friction reducing characteristics, enhanced oxidation stability, protection from corrosion and resistance from foaming as the result of a unipue additive system.

For all types of enclosed gear drives with circulation or plash lubrication systems. Particularly recommended for gear sets working under heavy or shock conditions up to operating temperatures of 95 °C.(For wormgears the buld oil temperature is usually restricted to 95°C.)



SYN -GEARFUL GEAR OIL

ISO 46,68 Ref:100253

The Fukkol syn-gearful series were developed by using synthesized hydrocarbon fluids which have proven their versatility in extreme service applications at high and low temperatures. Fukkol syn-gearful series lubricants exhibit low fluid traction coefficients and naturally high viscosity indexes. These properties combine to provide reduced power consumption ,extended parts life ,and extended lubricant life beyond the capabilities of mineral oils.



Knitting Machine Oil

TEXTILE FORCE 22 ISO 32,46,68

Washable Textile Machine Oil

Ref: **100106-22/32/46/68**

FUKKOL TEXTILE FORCE 22 is water soluble and will emulsify in cold water eliminating the need to use detergent or hot water to remove machine oil stains. FUKKOL TEXTILE FORCE 22 will not affect dyeing operations or form scums when finished work is dyed.

FUKKOL TEXTILE FORCE 22 will give excellent performance as a textile and spindle lubricant. 140 is suitable for machine sump and oil can lubrication.

FUKKOL TEXTILE FORCE 22 has been applied with considerable success to high speed wood working equipment to prevent gum build up on machine beds, cutter blades and band saw blades, especially where timber with high sap content is being processed.

Quick Effect Evaporate Type Thread Lubricant

Ref: **100124**

QUICK EFFECT THREAD LUBRICANT reduces chatter and heat build up by eliminating friction and static electricity. It prevents yarn fraying and reduces thread breakage. Quick-Effect is an odorless solvent based formula which may be applied by dipping spools directly into the lubricant or with a thread lubricator box. The thread will remain moist during handling but will evaporate without leaving any residue.



Knitting Machine



Emulsified Silicone Thread Lubricant

Ref: **120102**

Emulsified silicone Thread Lubricant is a Stainless/Odorless Lubricant that is formulated for use on sewing threads to reduce heat/friction and prevent thread breakage. With the addition of silicone to the formulation, Emulsified Silicone Thread Lubricant is even more effective than the standard thread Lubricant in reducing friction and preventing thread breakage.

EASYLUB HIGH PURITY TEXTILE MACHINE WHITE OIL

Ref: **120104**

FUKKOL EASYLUB HIGH PURITY TEXTILE MACHINE WHITE OIL is low viscosity textile machinery lubricants that have been specially developed for lubrication of the needle mechanisms of flat and circular bed knitting and weaving machines. They are based on highly refined mineral oils and contain additives to resist oil fling off, minimise wear and to provide high levels of corrosion protection.



500ml

180ml

SLIDELUB | SLIDE WAY OIL

ISO 32,68,220

Ref:100065-32,68
100066-220

Lubricants specially developed to meet the most exacting conditions, which occur in the lubrication of machine tool slideways. They have superior frictional properties to reduce stick-slip, protect against wear and corrosion and eliminate staining problems. Exceptional separation from most water-based cutting fluids to minimize the problems and costs of coolant disposal.



LUBCO | HIGH TEMPERATURE SLIDE WAY OIL

ISO 68,220

Ref:100067-68
100068-220

Fukkol Lubco has a chemical attraction for moving metals, it penetrates these metal surfaces while smoothing them. This penetration of moving metal surfaces enables to create a protective shield against extreme temperatures, acid from combustion, food and so on.



KAMENT | SPINDURA OIL

ISO 5,10,22

Ref:100084

KAMENT series are highly refined oil with low carbon forming, anti-wear and anti-oxidation additive which are free from development of gums or carbon deposits on bearing or slideway surface. Lubricating oil is suitable for bearings/slideway of high speed precision machine.



Pneumatic tool

MARAS ROCK DRILL OIL

Ref:120160

Specially developed to meet the lubrication requirements of all percussion type pneumatic tools, particularly of rock drills.

The oils meet the requirements of maintaining high oil film strength and to lubricate under boundary, extreme-pressure conditions and satisfactory equipment life.



CASTO | PNEUMATIC TOOL LUBRICANTS

ISO 5,10

Ref:100059

High performance lubricant for percussion-type air tools, which is formulated from high refined mineral Oils, EP, Oiliness and tackiness additives, emulsifiers, rust and corrosion inhibitors, and anti-foam and anti-fogging agents.

MOLY ROCK DRILL OIL

32/46/68/100/150/220/320 Ref:100161

Moly Rock Drill Oil is a premium quality anti-wear, extreme pressure, emulsifiable, low fog generating oil that is primarily formulated to meet the lubrication requirements of pneumatically operated rock drills, drifters, jackhammers, sinkers and other air operated percussion tools and pneumatic equipment used in underground, surface mining, contractor and other industrial applications. Moly Rock Drill Oil is also suitable for use in percussive and rotary type tools.



Wire Rope & Chain Oil

WEST-TECH WIRE ROPE&CHAIN OIL

Ref: 100244

1. Specially developed to lubricate steel cables & wire ropes used at mining sites or industrial factories.
2. Free flowing oils blended from turbine quality base stocks.
3. Fully blended to inhibit oxidation, wear & rust to provide longer life, extra rust protection & protection against abrasive wear.
4. Fortified with a tackifier to provide adhesion of the lubricant to wire ropes.
5. Can be used in severe duty, elevated temperatures and in the presence of moisture.

HIGH TEMPERATURE WIRE ROPE &CHAIN OIL

HT WEST-TECH

Ref: 100245

FUKKOL Wire Rope & Chain oil is a high performance lubricant designed for the convenient, effective lubrication of roller drive and conveyor chains, particularly those fitted with automatic lubrication systems.

FUKKOL Lubricant offers a wide selection in base oils, graphite and other additives, thus ensures the formation of the protective film that gives effective lubrication and heat resistance.

SYN-WESTECH 320

ESTER BASED SYNTHETIC HIGH

TEMPERATURE CHAIN OIL

Ref: 100099

FUKKOL SYN-WESTECH 320 is an ester based high temperature chain oil specifically formulated for the lubrication of all drive and transport chains and bearings running continuously at temperatures up to 230°C and up to 280°C for short periods.

The oil is formulated from a combination of synthetic esters and a special antioxidant package which ensures the highest performance in terms of thermal stability, low evaporation loss and minimal deposit formation.

TEFLONATION H1 PTFE DRY

FILM CHAIN LUBRICANT

Ref: 100246

Teflonation H1 PTFE chain lube is a non-toxic, water resistant lubricant designed primarily for the effective lubrication of all types of chains & conveyor's operating in food, pharmaceutical and other clean environments.

FOOD GRADE WIRE ROPE AND CHAINE

Ref: 1000247

FUKKOL Maras Rock Drill Oil is a special, highly water white blend of U.S.P fluid treated with synthetic compounds to produce a stable high film strength lubricant surpassing the highest purity standards.

FUKKOL Maras Rock drill oil is fortified with a special food grade polymer, to impart tackiness and adhesiveness, which adheres strongly to assure a tenacious lubricant film. FUKKOL Maras Rock Drill Oil will penetrate and lubricate temperature parts. Recommend for use where low corrosion of both ferrous and non-ferrous metals at high temperature.



White oil

WHITE OIL A | F.D.A WHITE OIL A

ISO 5,10,15,22 Ref:120100

Principal uses are in food packaging materials, food packaging materials, food processing, pharmaceuticals, cosmetics, plastics & industries for applications which demand extremely high standards of purity.



WHITE OIL B | INDUSTRY WHITE OIL B

ISO 5,10,15,22 Ref:100101

White oil is applicable to chemical, aluminum processing, such as rubber plasticized oil, but also to do textile machinery, precision instruments, lubricating oil and oil-sealed compressor. good color, non-fluorescent, non-corrosion, oxidation stability and good performance, run-way narrow the scope of small viscosity.



Thermal Machine

Thermally Stable Oil & Machine Oil

F SERIES MACHINE OIL

ISO 10,20,30,40,50 Ref: 100234-10 100236-30
100235-20 100237-40
100238-50

Machine oil is a series of general purpose oil incorporates special oil-soluble extreme pressure additives which is suitable for general lubrication. It combines controlled frictional characteristics with high film-strength and excellent load-carrying properties, thus reducing the power requirement in machine tools. These oils also increase the useful life of machinery by minimizing both wear and corrosion.

THERMDO | THERMALLY STABLE OIL

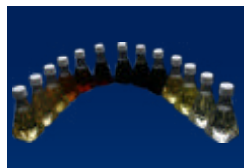
ISO 32,46 Ref:100094

Thermdo is a highly refined paraffinic oil selected for its stability, low volatility and good heat transfer features. It is suitable for use in closed heat transfer systems (sealed with cold oil or insert gas operating at temperatures up to 315°C) Open systems operating at temperatures up to 200°C. System must have forced circulation of the heat transfer fluid.

SYN - THERMDO | THERMALLY STABLE OIL

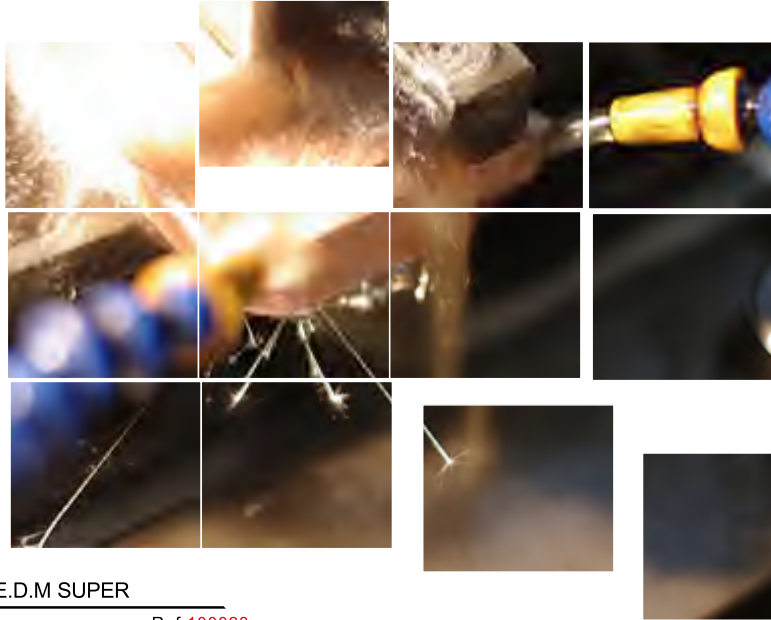
ISO 32,46 Ref:100095

Syn-Thermdo is a highly refined synthetic oil selected for its stability, low volatility and good heat transfer features. It is suitable for use in closed heat transfer systems (Sealed with cold oil or insert gas operating at temperature up to 340°C). Open systems operating at temperatures up to 200°C. System must have forced circulation of the heat transfer fluid.



EDM Oil
Soluble Cutting Fluids
Neat Cutting Oil
Drilling Grinding Fluids
Metal Tapping Oil
Quenching Oil
Anti-Rust Oil
Metal Drawing Oil
Stamping And Rolling Series
Die Casting Series

EDM Oil



E.D.M SUPER

Ref:100028

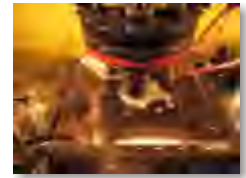
Fukkol E.D.M Fluid Super is an advanced-formula ,dielectric fluid, which combines high dielectric strength and chemical stability with low electric conductivity. This clear and highly refined fluid serves as an excellent coolant with quick flushing action for the efficient removal of small metalchips.

E.D.M Fluid Super unique dielectric properties provide super insulation, as well as an intensified spark, by constricting the spark channel. This minimizes electrode wear and results in high machining precision and an improved workpiece finish. Most importantly, E.D.M..Fluid Super meets U.S.A.F.D.A. requirements and is a user friendly fluid. Therefore, there are no unpleasant odors or irritants to the skin.

E.D.M PAHS

Ref:100151

Special formula non aromatic content is approval by euro PAHS test and also have the excellent dispersive characteristic. dispersive characteristic. when mixing FUKKOL μ tech additives can be process produces superior surface finishes in significantly shorter time. Other benefits include a 30 percent reduction in machining time as well as reduced finishing time compared to standard EDM technology.



μ TECH ADDITIVES

Ref:100152

Uses a proprietary non-toxic powder, called μ Tech. Its specific gravity is almost zero, allowing it to float readily in FUKKOL EDM PAHS and disperse evenly throughout a cavity. This property makes it possible to machine deep cavities while achieving excellent finishes on sidewalls. Even dispersion also allows it to be used for both roughing and finishing, eliminating the need for separate tanks or cleaning between jobs.



EDM Machine

FK-2700 | EMULSION CUTTING OIL

Ref: 100117

FUKKOL FK-2700 contains bio-stability additive and no nitrite, and has high mineral oil content (above 60%) and a long service cycle. With the low requirement of dilution ratio of 1:20~25, it is suitable for various types of machine tools, especially for the large processing machine. As a general purpose cutting oil, it could also save the investment.



FK-3700 | SEMI-SYNTHETIC FLUID

Ref: 100118

FUKKOL FK-3700 is general purpose, biostable, and semi-synthetic cutting fluid concentrate with mineral oil content (above 40%). Specifically developed for multiple operations on various types of diluents waters, it is the product of choice when grade rationalization is to be considered in larger machine shop environments.

FL-888 | SEMI-SYNTHETIC CUTTING FLUID

Ref: 100113

FukkOL FL-888 is bistable, semi-synthetic cutting concentrate specially formulated with high levels of lubricity for use with aluminium and its alloys in the most arduous modern machining operations, using a wide range of diluent waters. Combines the advantages of the new bistable technology, and its inherent resistance to bacteria, with the traditional values of an oil-based, high lubricity cutting fluid.

FK-4700 MICROEMULSION

BIO CUTTING FLUID

Ref: 100437

Semi synthetic, water miscible metalworking fluid concentrate that produces an ultra stable micro emulsion for use in all waters with extremely long life. Chlorine-free.

FK-4700 is a clear, water-mix cutting fluid used for sawing, turning, milling, drilling and threading, general purpose surface, cylindrical and centreless grinding on ferrous alloys including cast iron. Its performance on cast iron is excellent.



Soluble Cutting Fluids

K8K SEMI-SYNTHETIC CUTTING FLUID

Ref:100126

Fukkol Hydromate K8K is biostable,universal,semi-synthetic cutting fluid concentrate with relatively high mineral oil content .Formulated with state-of-the-art technology combining high levels of non-staining EP additives and multi-metal corrosion inhibitors for sue in a wide range of the most arduous heavy-duty machining operations.With this new type of product,it is now possible to combine the advantages of the new biostable technology,and its inherent resistance to bacteria,with high levels of anti-corrosion and chemical EP additives.



K3 SEMI-SYNTHETIC CUTTING FLUID

Ref:100125

- Ideal as a rationalisation coolant on multi-metal machining operations, suitable for turning, milling and grinding.
- Superior cooling and wetting properties.
- Good anti-corrosion resistance.
- Extremely stable having a high degree of bacterial resistance, even in tropical climates.
- Low odour levels, promoting a high level of operator acceptability.
- High degree of tolerance to tramp oil contamination.
- Free from phenols, nitrites and phosphorus compounds.

K4-1 SYNTHETIC CUTTING FLUID

Ref:100153

K4-1 is a high performance water soluble metalworking fluid for machining aluminum and aluminum alloys. K4-1 is chlorine-free, yet it overcomes the difficulties normally associated with machining aluminum such as chip welding, tool wear, poor surface finish and staining.

K4-1 contains lubrication additives that work in synergy to enhance surface finish and extend fluid life beyond the capabilities of traditional aluminum machining fluids. K4-1 is suitable for large central systems and single sump machines.

MYCUT Q7 SEMI-SYNTHETIC FLUID

Ref:120151

MYCUT Q7 is high performance extreme pressure water-mix cutting fluid, extreme pressure coolant based on solvent synthetic oil. It forms a fluorescent green transparent emulsion in water.

MYCUT Q7 has a high reserve alkalinity, which resists PH drops and ensures emulsion stability. The incorporation of an effective biocide/fungicide package formulated into this product inhibits microbiological degradation in use and extends coolant life. Recommend for use in medium to heavy-duty machining operations on ferrous and non-ferrous metals and is widely used on lathes, CNC machine and FMC's.



Machine tools that look this good...are this good!

Neat cutting oil

CNC 848 | CNC CUTTING FLUID

Ref:100109

Low-viscosity, light-pale naphthenic mineral oil for the machining and grinding of copper, ferrous metal and steel moulds.

Provides longer tool life and improved surface finish as it rapidly dissipates heat to minimize tool and work piece temperatures.

Safe to use with as it contains no water to react to form heat and explosive hydrogen.

Assists efficient machining by permitting a clean view of the tool and workpiece as it remains light colored . and transparent in service .

Minimizes oil loss as its low viscosity enable it to drain rapidly from machining swarf.

C.N.C 949 | HIGH SPEED CNC MACHINE CUTTING FLUID

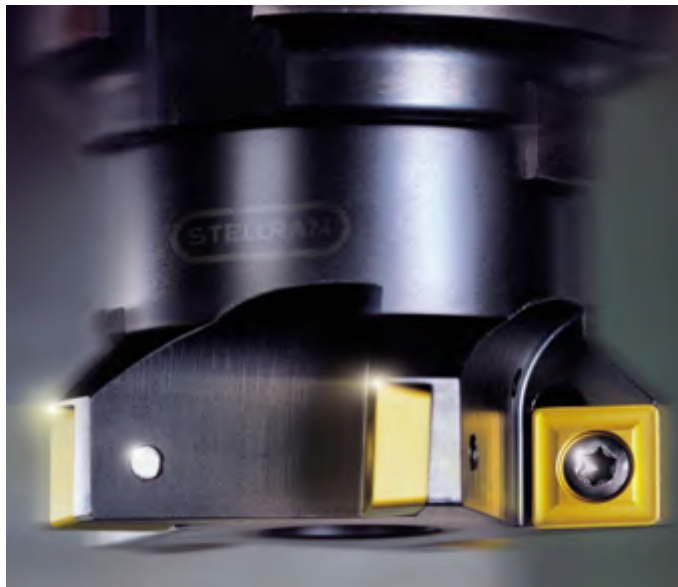
Ref:100107

Series of transparent, light colored, chlorine-free, sulfur-free tri-purpose oils for use as cutting oils, machine tool lubricants and hydraulic fluids in certain machine tools. Formulated with a unique, non-staining passive EP additive system, a special non-fatty lubricity additive, rust and oxidation inhibitors, and an anti-mist additive. Specifically designed for applications where staining by chlorinated additives could be a problem, or where oils containing chlorine may present a waste or storage problem.

SHINTO 772 | STAINLESS STEEL CUTTING OIL

Ref:100110

SHINTO 772 of dark colored, heavy-duty, chlorine-free, active sulfur cutting oils designed for tough machining operations. Formulated with highly effective EP and fatty oil additives.



T-CUT 12 | T-CUT 32 | SULFUR FREE CUTTING OIL

Ref: 100121 -12 100122 -32

Low-viscosity, light-yellow naphthenic mineral oil for the machining and grinding of copper, ferrous and steel mould.



ALUCUT X | ALUMINUM AND COPPER CUTTING OIL

Ref:100120

Alucut X of transparent, light coloured, tri-purpose oils for use as cutting oils. Formulated with a special non-staining EP additive system, rust and oxidation inhibitors, and an anti-mist additive.

STABLE 323 | CHORINE FREE CUTTING OIL

Ref:100111

STABLE 323 is transparent, light colored, anti-mist, active, sulfur cutting oils designed for moderate to severe machining operations. Available in different EP levels, fatty oil contents and viscosity grades to wide variety of applications and metals.

Neat cutting oil

STABLE 323A | HIGH VISCOSITY CHORINE FREE CUTTING OIL

Ref:100112

STABLE 323A is high viscosity, transparent, yellow color, anti-mist, chlorine-free, active sulfur cutting oils designed for moderate to severe machining operations. Available in different EP levels, fatty oil contents and viscosity grades to cover a wide variety of applications and metals, particularly those where contact with chlorine must be avoided, or where oils containing chlorine may present a waste or storage problem.

XTRA | DEEP DRILLING OIL

Ref:100150

A high performance neat cutting oil with powerful extreme pressure qualities imparted by active sulphurised and chlorinated additives. A synthetic ester is incorporated to enhance lubricity. Unlike many competitive heavy duty cutting oils, FUKKOL Xtra DRILLING OIL has little odour.

X-CUT 15 | CHORINE FREE LOW VISCOSITY CUTTING OIL

Ref:120123

Series of transparent, light coloured, anti-mist, chlorine-free, sulfur-free, ester cutting oil is designed for moderate to severe machining operations. Available in different EP levels, fatty oil contents and viscosity grades to cover a wide variety of applications and metals, particularly those where contact with chlorine must be avoided, or where oils containing chlorine may present a waste or storage problem.

JJ 8040 | STAINLESS STEEL CUTTING OIL

Ref:100108

JJ8040 series of products are designed for gun drilling and other deep hole drilling, as well as milling, trepanning operations and other cutting operations on difficult-to-machine materials. The optimized heat transfer properties permit higher feed and cutting speeds. The abbreviation LE means "low evaporation" and stands for excellent antistim properties and low evaporation during use. Such oils contribute towards reducing environmental and workshop pollution.



SUPER MAX 3 | SYNTHETIC CUTTING OIL

Ref:120124

Synthetic oil Base, light colored, anti-mist, active sulfur cutting oils designed for moderate to severe machining operations. Special fatty oil contents and viscosity to cover a wide variety of applications and metals, particularly those where contact with chlorine must be avoided, or where oils containing chlorine may present a waste or storage problem.

DUCAL 413 | ROLLING OIL

Ref:100119

Fukkol Ducal 413 is a neat cutting oil based on highly refined mineral oils and contains fat, sulphurised and chlorinate extreme pressure additives.

Fukkol Ducal 413 is for precision high speed operations including gear shaping, gear hobbling, gear grinding, thread rolling, drilling, boring, turning and reaming.



Drilling and Grinding Fluids

FULLY-SYN II | SYNTHETIC DRILLING AND GRINDING FLUIDS

Ref:100114

Synthetic coolants which had been developed for use as a general purpose grinding and light to medium duty machining fluid for ferrous metals. They form a clear, stable solution in both hard and soft waters. exhibit good anti-corrosion properties coupled with a high resistance to bacterial attack.

YC-2700 | WIRE CUTTING FLUIDS

Ref:100116

Fukkol YC-2700 is general purpose cutting fluid concentrate with mineral oil content (about 60%). specifically developed for multiple operations on various types of diluent waters, it is the product of choice when grade rationalization is to be considered within larger machine shop environments.



Grinding

FULLY-SYN III | SYNTHETIC DRILLING FLUIDS

Ref:100115

Biostable, water-based, fully synthetic grinding fluid concentrate which gives high levels of corrosion protection at low concentrations in water. Specifically developed to overcome foam problems in large, high velocity grinding systems where fluid turbulence and air retention are a problem. Forms a clear solution when mixed with water and contains no mineral oil.



Drilling

GRINDMIX 7R | SYNTHETIC GRINDING FLUIDS

Ref: 100157

FUKKOL GRINDMIX 7R is a fully biostable mineral oil free metalworking fluid. Specially formulated for high performance grinding and light duty machining. FUKKOL GRINDMIX 7R is a carefully balanced product designed to give excellent machining performance and long change life. Excellent performance in all grinding operations except Creep Feed Grinding. Very low foam potential even when severely agitated in soft water.



Wire cutting



Honing

SEMIO | SYNTHETIC GRINDING OIL

Ref:100154

Large, high velocity grinding systems

Plain and form grinding of: all ferrous metals including cast iron, aluminium and its alloys, all non-ferrous metals.

Z4 | HONING OIL

Ref:100156

FUKKOL Z4 is one kind of low viscosity greasiness cutting oil, it includes the fat, the chlorination additives as well as other special chemical additives, the wettability is extremely good.

Metal Tapping Oil

CF R.T.D ROKA | COPPER AND ALUMINUM TAPPING OIL

Ref:100146

FUKKOL CF-ROKA is a type of high-viscosity fluid with ultrahigh pressure additives and is suitable for use in various cutting operations on metal parts, including reaming, cutting, tapping, drilling, etc. FUKKOL CF-ROKA can be used on all non-ferrous materials, including copper, aluminum, zinc alloys, aluminum alloys, copper alloys, magnesium alloys, metal materials that need to be electroplated, etc. It can substantially reduce friction and enable excellent cutting performance.

FUKKOL CF-ROKA can also be added to ordinary mineral cutting oil for the most severe cutting operations, such as broaching and gear cutting on the toughest metals.

R.T.D ROKA | STAINLESS STEEL TAPPING OIL

Ref:100148

R.T.D ROKA is a special type of cutting fluid, existing in the form of a liquid containing ultrahigh pressure additives. It is suitable for use in various cutting operations on metal parts, including reaming, cutting, tapping, drilling, etc. R.T.D ROKA steel tapping oil can be used on all non-ferrous materials, including hardened steel, titanium, nickel molybdenum alloy, etc. It can substantially reduce friction and enable excellent cutting performance. The product can be used to paste scrap iron, and no ferrous metal will be left in the hole after the use of the product.

WATER/OIL SOLUBLE DRILLING FLUIDS

Ref:100435

FUKKOL Water / Oil Soluble Drilling Fluids lubricating and cooling properties for any process where friction is caused. FUKKOL Water / Oil Soluble Drilling Fluids Cutting, Tapping & Drilling Fluid provides superior cutting and cooling properties for thread cutting, drilling and mill-cutting. FUKKOL Water / Oil Soluble Drilling Fluids can be used for all aluminum metal substrates and all types of steel alloys, stainless steel, cast and high-grade steel.

CF ROKA | COPPER AND ALUMINUM TAPPING OIL

Ref:100149

FUKKOL CF-ROKA is a type of high-viscosity fluid with ultrahigh pressure additives and is suitable for use in various cutting operations on metal parts, including reaming, cutting, tapping, drilling, etc. FUKKOL CF-ROKA can be used on all non-ferrous materials, including copper, aluminum, zinc alloys, aluminum alloys, copper alloys, magnesium alloys, metal materials that need to be electroplated, etc. It can substantially reduce friction and enable excellent cutting performance.

SUPER ROKA | STAINLESS STEEL TAPPING ADDITIVE

Ref:100147

FUKKOL SUPER ROKA is a type of liquid with high viscosity and an ultrahigh pressure additive added. It is suitable for use in various cutting operations on metal parts, including reaming, cutting, tapping, drilling, etc. This product can also be used as an additive for normal cutting fluids containing mineral oil so as to help the cutting fluid handle the most demanding cutting operations, like the broaching of ultrahard metal parts, the forming of gear wheels through cutting, etc.



100146

100148

100147

100149

100435

Quenching Oil

VITEX QUENCHING OIL

Ref: 100088

Description

Fukkol vitex is a high flash point refined oil which provides an efficient hardening process as well as a desirable hardness of the steel. This is a good quality oil which is highly heat resistance while oxidation and acidity inhibitor can prolong the oil life, with little or no effect on viscosity and acidity increase. In addition, it prolongs the tools life after the quenching procedure.

Application

Suitable For Heating Treatment Of Mould Making And Mechanical Parts.

Benefits

Excellent cooling ability .
Safe in operation due to high flash point.
Good hardening characteristics .
Superior thermal stability.

Quenching Fluid 6112

Ref: 100089

Description

FUKKOL Quenching Fluid 6112 is a water miscible quenching fluid, specially formulated for massive quenching. The product formulation is at the forefront of environmental protection and health and safety improvements. It is a blend of high weight Polyalkylene glycol polymers (PAG). The carefully Polymers give good microbial resistance. FUKKOL Quenching Fluid 6112 easily disperses in water giving a stable and odorless solution. The recommended concentration varies with type and size of work piece, but will typically be between 5 and 20%.

Application

- Forging: carbon steels XC, steel alloys CrMo4, NiCr and NiCrMo
- Pre-treated bars
- Springs and torsion bars: steels 55S7, 60SCr7, 50CrV4
- Nuts and bolts, screws and bolts: steels 20MnB5, 20MnCr5
- Agricultural equipment .



Material suitability table

	Neat oil series												
Product Material	C.N.C 848	C.N.C 949	ALUCUT X	STABLE 323	STABLE 323A	SHINTO 772	DUCAL 413	SUPER MAX 3	JJ 8040	XTRADRILLING OIL	T-CUT 12	T-CUT 32	X-CUT 15
Stainless steel	●●	●●	●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●
High strength steel	●●	●●	●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●
Titanium alloy	●●●	●●●	●●●	●	●			●●●	●●●	●●●	●	●	●
Alloy steel	●●	●●	●	●●●	●●●	●●	●●	●●●			●	●	
Aluminum alloy	●●●	●●●	●●●	●	●			●●●			●	●	●
Aluminum	●●●	●●●	●●●	●	●				●		●●●	●●●	●●●
Zinc alloy	●●●	●●●	●●●	●	●			●●	●		●●●	●●●	●●●
Iron	●●●	●●●	●●●	●●●	●●●	●	●●	●●●			●●●	●●●	●●●
Copper	●●●	●●●	●●●	●	●						●●●	●●●	●●●
Magnesium	●●●	●●●	●●●					●●●			●●●	●●●	●●●
Plastic	●●●	●●●	●●	●							●●	●●	●●

●●● High recommended

●● Recommended

● Compatible

Material suitability table

	Soluble series												
Product Material	FL-888	FULLY-SYN III	FK-2700	FK-3700	FK-4700	YC-2700	HYDROMATE K3	HYDROMATE K8K	K4-1	MY CUT Q7	FULLY SYN II	SEMIO	GRINDMIX 7R
Stainless steel	●●●	●●●	●●	●●	●●●		●●●	●●●	●●●	●●●	●●●	●●●	●●
High strength steel	●●	●●●	●	●	●	●	●●	●●●	●●●	●●●	●●●	●●●	●
Titanium alloy	●●	●●●	●●●	●●●	●●●	●	●●●	●●●	●●●	●●	●●	●●●	●●●
Alloy steel	●●●	●●	●	●●	●●	●	●●	●	●●	●	●	●●	●●
Aluminum alloy		●●●	●●●	●●	●●●	●●	●	●	●			●	●●
Aluminum		●●●	●●●	●●●	●●●	●●	●	●	●●●	●	●	●●●	●●●
Zinc alloy	●●●	●●	●●●	●●●	●●●	●●●	●	●	●●●	●●	●●	●●●	●●●
Iron	●●	●	●●	●●●	●●●	●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●
Copper	●●●	●●●	●●●	●●●	●●●	●●	●	●	●●●	●●	●●	●●●	●●●
Magnesium	●●	●●	●●	●●●	●●●	●●	●	●	●●●	●●	●	●●●	●●●
Plastic	●●	●●●	●●	●●	●●	●●	●●●	●●●	●●	●●	●●	●●	●●

●●● High recommended

●● Recommended

● Compatible

CORROSIVE INHIBITOR SERIES



RUSTKING S

Ref:100138

Fukkol Rustking is containing oxidation and corrosion inhibitors and diluted with a petroleum solvent for ease of application. Designed for the temporary rust protection of steel in covered, storage or packaged shipment.

Temporary protection of sheet steel, hand tools, small parts, bearings and highly machined surfaces under relatively mild conditions of indoor storage, packaged shipment or interprocess handling.

May be applied by brush, dip or spray.

Where a higher level of oily film rust protection is required.

RUSTKING W

Ref:100139

RUSTKING W is a new technology, high performance, environmental friendly water-based corrosion preventive formulated on a synergistic blend of corrosion inhibitors.

RUSTKING W deposits an almost imperceptible light, soft greasy film with excellent drying properties. RUSTKING W does not contain barium.

RUSTKING Y

Ref:100137

FUKKOL Rustking Y is a general purpose medium term inhibited protective oil. can be applied by complete immersion, brushing or spraying. Removal of the protective film is not normally necessary but if required a petroleum solvent, alkaline cleaner or vapour degreasant can be used.

RUSTKING L

Ref:100140

Fukkol Rustking L type is a light grease-like coating that has a brown colour that visably shows where the product has been applied. Rustking L type displaces moisture and provides corrosion protection for 50°C~60°Cnot flux more than five years of indoor storage and three years of outdoor.



RUSTER P3

Ref: 100143

FUKKOL RUSTER P3 is a multi-purpose antirust paint,suitable for rotor,and facilities,including steel workpiece,sliding parts, other exposed surfaces stored in the indoor equipment,for general corrosion protection.

Anti-rust Oil

RUSTKING V

Ref:100141

RUSTKING V is a volatile rust preventive fluid, which has good properties of rapid water displacemet and deposits an oily protective film after evaporation of the solvent.

Dry metallic parts particularly after pickling and washing processes. Also ideal for protecting components that have been machined with soluble oil emulsions of water based alkaline solutions. Especially suitable for short term inter-operational protection during processes.

RUSTKING S5

Ref:100145

Fukkol Rusting S5 is the latest technology rust preventives, possess dewatering-water displacing ability;secondary amine and heavy metals free enables safer disposal of separated water layer;also high covering capacity due to the exceptional level of rust protection from a thin film.These products are cost effective due to high quality, loss reduction and increased covering capacity. It can be applied by dipping, spraying, brushing or flooding.



METAL WORKING SERIES

Deep Drawing



ISO 1 METAL DRAWING OIL

Ref:100197

A chlorinated wax specially designed for high temperature and high pressure metal forming operation. With its ultimate lubrication, forming oil reduce the heat in the operation. Thus, it can protect the metal parts from cracking or burning by over-heating,so as to prevent metal pick-up, scoring and it has the function of anti-welding which reduces friction, increase product quality and the tool use life.

ISO 3 METAL DRAWING OIL

Ref:100199

FUKKOL ISO 3 is a high performance extreme pressure cold metal forming lubricant formulated for a wide range of pressworking operations ,from medium gauge drawing and forming to light gauge blanking and piercing of ferrous metals.

FUKKOL ISO 3 contains extreme pressure additives to prevent metal pick up between the work piece and tool and provide a cost effective route to increased production rates.



ISO 2 METAL DRAWING OIL

Ref:100198

FUKKOL ISO 2 is a high performance medium viscosity cold metal forming lubricant, specially suitable for use with stainless and a wide range of ferrous and non-ferrous metal .

FUKKOL ISO 2 contains extreme pressure additives which prevent metal pick up between the work piece and tool and provide a cost effective to increased production rates.

EP FORM SPECIAL HIGH VISCOSITY FORMING OIL

ISO 10000,20000,30000 Ref:100226-10000

100227-20000

100228-30000

It is a sulfur, oil of soap and fatty materials without pigment, and contains 10%fat. Ep form 10000 is a sulfur special grease for drawing steel with to obtain a bright finish usually, 1 part of EP form 10000 mixed with 3parts of Hydraulic oil and the wire passes through a container of the product. EP form 10000 is products for hot-process heavy-duty tube bending, extrusion and forging. Its high-viscosity base oil minimizes lubricant with the die throughout the drawing.





Drawing machine

ISO FORM SERIES

SULFUR CHLORINE FREE FORMING OIL

32,150,1000,1500,3000,4500 Ref:100206-32
100207-150
100208-1000
100209-1500
100210-3000
100211-4500

Viscosity	General use	Material
32	Metal pipe surface drawing, forming, cold heading	Copper, stainless steel, alloy
150	Metal pipe surface drawing, forming, cold heading	Copper, stainless steel, alloy
1000	Metal pipe surface/inside deep drawing, wire drawing	Copper, steel, nickel, titanium
1500	Metal pipe surface/inside deep drawing, wire drawing	Copper, steel, nickel, titanium
3000	Metal pipe surface,rolling, heat rolling, deep drawing	Copper, steel, nickel, titanium
4500	Rolling, deep drawing, metal pipe inside, wire drawing	Copper, steel,coating



H6 GRAPHITE HOT FORGING FLUID

Ref:100222
H6 Graphite Hot Forging Fluid is a water soluble lubricant used for hot forging steel parts. The product is a very dark water bases dispersion of graphite designed to provide excellent die adhesion, which assists in metal flow and prevents parts from sticking to the die or the punch.



Spinning machine

F3 SYNTHETIC HOT FORGING FLUID

Ref:100221
FUKKOL F3 Synthetic Hot Forging Fluid is a water base,non graphited forging lubricant.It is specially formulated to provide effective lubrication and release for hot and warm forging. The main design features are incorporation of high temperature wetting agent and polymeric film for ming ingredients.This makes Fukkol F3 Synthetic Hot Forging Fluid suitable for dies with shallow cavities or rib sections where build up of lubricant residue is undesirable.FUKKOL F3 Synthetic Hot Forging Fluid is diluted with water. Add water to the product under constant agitation. Typical dilution ratio of 1 part product to 5 parts water is recommended for initial trial.The dilution ratios may vary depending on the complexity of the part.Spray application is recommended.Low dilution ratio may be required for swab application.





Stamping & Rolling Series

VERA 9300 | COPPER & ALUMINUM BENDING OIL

Ref:100185

Description

-Fukkol vera 9300 is a mobile volatile solvent cutting and forming fluid, capable of rapid drying, lubricating, anti- rusting and cooling effectively. It increases the efficiency of high - speed cutting & forming operation, improves surface finish and greatly extends tools life.

-Fukkol vera 9300 series contains good quality lubricity, coolant additives, and anti-rust inhibitors. The vera series will only remain a thin film to protect metal surface after rapid volatile process. It does not contaminate the surface and extends the tools life.

Application

Typical used for laminator, micro electric- motor case, connectors, air- conditioner, heat dispersal devices, electronic and computer components, button battery case and other small metall parts.

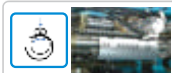
Benefits

- Rapid drying metal parts will not stick together.
- Strong lubricity, improves surface finish.
- Low viscosity, cools effectively.
- Extends tools life.
- Inhibits corrosion.
- Clear view working area.

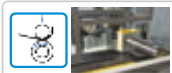


Volatility stamping and rolling oil

Use Profession



Multi Bending



Urethane Bending



Welding



Expanding



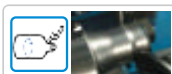
Side Punching



Trimming



Loading



Trimming



Shrinking

VERA 8011(L) ALUMINUM STAMPING OIL

Ref:100176

Vera 8011L High volatile cutting and stamping fluid, contains a package of special highly refined desulphurised volatile solvent with special E.P. additive, capable of rapid drying, lubricating, anti-rusting and cooling effectively. It increases the efficiency of high-speed cutting and forming operation, improves surface finish and greatly extends tool life. The Vera 8011L stamping oil will only remain a thin film to protect metal surface after rapid volatile process. It does not contaminate the surface and extends the tool life.

Vera 8011L is suitable for high speed cutting and forming small materials such as air-conditioners, heat dispersal devices, electronic parts, electrical appliances, computer components,etc.

EP ADD STAMPING OIL ADDITIVE

Ref:100170

An extra forming additive specially designed for high temperature, high pressure metal forming and stamping operation. With its ultimate lubrication, forming and stamping oil reduce the heat in the operation. EP ADD is also not containing chlorine, surface and phosphorus. So that, it can be particularly suitable for copper and alloys, aluminum along with most steels. Stamping and forming.

PRO-STAMP 133 SUPER METAL FORMING OIL

Ref:100169

An extra forming additive specially designed for high temperature, high pressure metal forming and stamping operation. With its ultimate lubrication, forming and stamping oil reduce the heat in the operation. PRO-STAMP 133 is also not containing chlorine, surface and phosphorus. So that, it can be particularly suitable for copper and alloys, aluminum along with most steels. Stamping and forming. In simple application it can dilute with trichloroethylene and kerosene. Useable temperature range in continuous service is blow 500℃

VENUS VOLATILITY STAMPING OIL

Ref:100187,100188,100189
100190,100191

Fukkol venus series is a mobile volatile solvent cutting and forming fluid,capable of rapid drying,lubricating,anti-rusting and cooling effectively.It increases the efficiency of high-speed cutting&forming operation,improves surface finish and greatly extends tools life.

Fukkol venus series contains good quality lubricity,coolant additives,and anti-rust inhibitors.The venus series will only remain a thin film to protect metal surface after rapid volatile process.It does not contaminate the surface and extends the tools life.



Ref:100187
Volatilize fast, designed to cutting(thickness around 0.1-0.5mm)stainless steel, brass, phosphorus bronze and other medium/light operation. It is suitable for high speed cutting and forming small materials such as air-conditioners, heat dispersal devices, electronic parts, electrical appliances, computer components, etc.



Ref:100188
Volatilize middle, moderate-duty cutting and stamping(speed from 600to 1000ppm)steel(thickness from 1.5-1mm) and other general materials, also suitable for machining precision electrical accessory. It is suitable for high speed cutting and forming, small materials such as air-conditioners, heat dispersal devices, electronic parts, electrical appliances, computer components,etc.



Ref:100189
Volatilize fast, designed to cutting thickness around 0.8-1.2mm, designed for light duty stamping, blaking and plercing oprations on ferrous and non-ferrous metals. It is ideal for use in the forming and production of electrical and audio-visual mechanisms.



Ref:100190
Volatilize middle slowly, is a mobile volatile solvent cutting and forming fluid, capable of rapid drying, lubricating, anti-rusting and cooling effectively, is specially designed for cutting(thickness 1-2.5mm) stainless steel, brass, phosphorus bronze and other severe operation.



Ref:100191
Volatilize solwly, designed to cutting thickness around 2.0-3.0mm. It is a package of special, highly refined desulphurized volatile solvent with special E.P additive cutting and stamping fluid, capable of rapid drying, lubricating, anti-rusting and cooling effectively. It increase the efficiency of high-speed cutting and forming operation, improves surface finish and greatly exteds tools life.

Aluminum stamping oil

VERA 9011 ALUMINUM STAMPING OIL

Ref:100175

Description

-Fukkol vera 9011 is a mobile volatile solvent cutting and forming fluid, capable of rapid drying, lubricating, anti-rusting and cooling effectively. It increases the efficiency of high-speed cutting & forming operation, improves surface finish and greatly extends tools life.

-Fukkol vera 9011 series contains good quality lubricity, coolant additives, and anti-rust inhibitors. The vera series will only remain a thin film to protect metal surface after rapid volatile process. It does not contaminate the surface and extends the tools life.

Application

Typical used for laminator, micro electric-motor case, connectors, air-conditioner, heat dispersal devices, electronic and computer components, button battery case and other small metal parts.

Benefits

- *Rapid drying, metal parts will not stick together.
- *Strong lubricity, improves surface finish.
- *Low viscosity, cools effectively.
- *Extends tools life.
- *Inhibits corrosion.
- *Clear view working area.



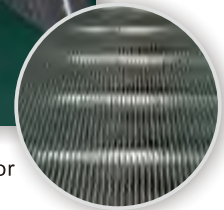
Certificates

Typical data

Color	Clear
Odor	Low
Specific gravity	0.78
Viscosity CST @40°C	2
Flash point °C	80°C
Pour point °F/°C	25/-4
Solubility in water	<0.01%



Air Condition Radiator



Boiling point °F/°C	>284/140
Staining sulfur	0.0%
Chloride	0.0%
Phosphide	0.0%
Solvent volume	100°C
Solid volume	0.0%
Silicone	0.0%



VENUS	A	ISO 1	F	ISO FORM 3000	K	ISO 1	P
ISO 2	B	ISO FORM 32	G	VERA 9300	L	VERA 9011	Q
EP FORMNET650	C	ISO FORM 450	H	ISO FORM 10000	M	VENUS III	R
EP FORMNET	D	ISO 1	I	ISO 2	N	ISO FORM 150	S
ISO FORMNET	E	VENUS III	J	ISO FORM 3000	O	ISO 2	T



Die Casting Series

FUTIP PLUNGER TIP LUBRICANT

PG-1,PG-2

Ref:100162,100163

FUKKOL FUTIP lubricant is a series of lubricant specially designed for prevention of crisply wearing of plunger tips, sleeves and movable centroid. It can be classified into different types: for brush or automatic lubricating machine; without graphite, etc.

It gives a high resistance to profound impact and excellent lubricant for moving parts under high temperature. FUKKOL GP plunger tip lubricant offers a wide selection in base oils, graphite and other additive, thus ensures the formation of the protect -I've film that gives effective lubricant and heat resistance.

FUTIP lubricant is non-corrosive to plunger tips, sleeves or automatic lubricating machines. It does not block nozzle of hazardous gas products. All ingredients of jaeger PG series plunger tip lubricant are specially selected ensures safety in use.

FUKKOL Z300F ZINC DROSSING FLUX

Ref:100135

FUKKOL Z300F Zinc Drossing Flux Powerful Zinc and Zinc Alloy slagging powder its strong slagging ability can minimize the impurity. The product is suitable for numerous Metal Melting or low quality demand, such as: polishing-free products and electroplate-free products, etc.
Recommended Usage: 0.4-0.8kg FUKKOL Z300F Zinc Drossing Flux/100kg Metal Solution.



Drossing flux

A400F ALUMINUM DROSSING FLUX

Ref:100134

Cleaning fluxes are necessary to remove oxides from the melt, while cover fluxes act as a barrier for the surface of the melt against oxide formation. The same flux can generally be used for both purposes.

The temperature range for optimum drossing off reaction is between 720°C and 760°C. The application rate is between 0.5 and 1.0% base on the weight of the treated metal.

Soluble PLUNGER Lubricants B66

Ref:100164

FUKKOL B66 is a heavy-duty, water-based plunger lubricant containing a blend of synthetic base and stabilizers and wetting additives in a water dispersion. Excellent lubrication of shot sleeves and tips, minimal smoke and substantially improved housekeeping are typical performance characteristics.



Case



Auto Parts



M-JET MAGNESIUM DIE CASTING SOLUBLE MOULD RELEASE AGENT

Ref:100133

This product contains a blend of natural lubricants, unique polymers and wetting agents that withstand thermal degradation at core and other high temperature areas of the die while providing excellent finish without overspray buildup.



C-JET COPPER ALLOY DIE CASTING SOLUBLE MOULD RELEASE AGENT

Ref:100132

The base for C-JET is the finest graphite which has been homogenized and surface coated by NF. This permits penetration into the surface of the tool steel resulting in excellent lubrication and protection of the surface, and improved die life.

When sprayed on hot die surfaces, C-JET forms an impermeable lubrication film, which firmly interlinks with the metal matrix, and which virtually emanates metal build-up. It does withstand temperatures exceeding 1,100°C without oxidation.



Audio Parts

Z-JET ZINC DIE CASTING SOLUBLE MOULD RELEASE AGENT

Ref:100131

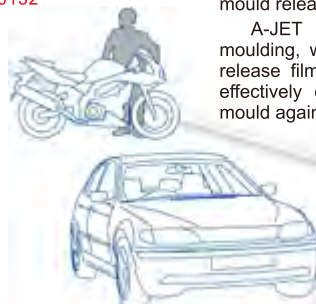
Z-JET zinc die casting mould release agent is consisting base oils of different boiling and flash points so that it can perform the best metal flowing and releasing result for all kinds products shape or mould temperature. Besides, Z-JET performs high precision and effectively on the chilled surface of electroplated products.

A-JET ALUMINUM ALLOY DIE CASTING SOLUBLE MOULD RELEASE AGENT

Ref:100130

A-JET is a high-purity organic compound water soluble aluminum alloy die casting mould release agent.

A-JET has a good adhesion on die moulding, with strong heat resistant mould release film forming, therefore, it performs effectively on mould release plunger and mould against problem of jamming.





GREASE

**Lubricate
Grease
Series**

ELECTRONIC CONTACT GREASE

Ref:100275

Fukkol Electric contact Grease is a synthetic based electrical contact lubricant, formulated to clean contacts and minimizes pitting corrosion and arching. In addition, it will not have effect on most plastic.

KILOPOISE DAMPING GREASE

20,40,60,20L,40L,60L Ref: 100298-20 100300-20L
100299-40 100301-40L
100300-60 100302-60L

FUKKOL KILOPOISE GREASE is specially formulated with highly viscous synthetic oil and soap thickener. It offers smooth easy motion and fine adjustment as well as strong adhesion power. It is used for sliding and rotating parts of varied electrical equipments, instrument optical eject mechanism and stationeries, Cassette Deck, VTR Deck instrument, etc

BLUE RUBBER GREASE

Ref:100513

FUKKOL Blue Rubber Grease is a medium consistency grease based on a vegetable oil and a synthetic gelling agent. It is fortified with additives to improve its resistance to oxidation and corrosion.

FOOD GRADE WHITE PLASTIC GREASE

Ref:100277

FUKKOL WHITE PLASTIC GREASE series are a range of grease like compound with very high viscosity specially designed for lubrication of electrical appliances, toys or any moving part which requires a grease with high adhesiveness and damping effect.

To provide damping motion and "hand-built" feel motion control on movement parts.

Reduce vibration and with effective sealing function.

Typical application includes CD loaders, cassette door, Hi-Fi, telescopes, lens, surveying and measuring equipment, binoculars, etc.

LP Plastic Sealant Grease

Ref: 100295

FUKKOL LP Grease is a polyether synthetic oil, a special lithium soap as thickener and Canada have antioxidant, anti-corrosion, anti-aging additives such as refined plastic / rubber lubrication fat. The plastic / rubber compatible grease designed for triple isopropyl rubber (EPDM), styrene butadiene rubber (SBR), etc. For most oil-sensitive rubber, plastic and metal lubrication between the assembly and has excellent stick attached resistance, wear and corrosion resistance.

Temperature range: -20 ~ +160 °C

HEAT SINK COMPOUND

Ref:100279

Fukkol heat sink compound is a metal oxide filled dielectric thermal transfer agent. Commonly used in electrical and electronic industries. As a thermal transfer medium for facilitating heat dissipation between power components in electrical/electronic assemblies. And heat sink in the assembly process by filling the voids and gaps between the mated surfaces.

S-PLASTIC GREASE

Ref:100278

FUKKOL S-PLASTIC GREASE is formulated from specially selected white petrolatum and inert silica thickeners.

FUKKOL S-PLASTIC GREASE was designed for variety of applications where dielectric strength, water repellence and corrosive protection are important.

FUKKOL S-PLASTIC GREASE is resistant to oxidation and to a broad range of chemicals, while maintaining their characteristics over a wide range of temperature.

SUPER WHITE GREASE

Ref:100276

FUKKOL series are a range of grease like compound with high viscosity specially designed for lubrication of plastic gears or any moving part which requires a grease like lubricant with high adhesiveness and damping effect -s, normally found in electrical appliances and toys manufacturing industry.

XERXES SYNTHETIC BASE PTFE GREASE

Ref: **100293**

FUKKOL XerXes Synthetic Base PTFE GREASE is a patented synthetic NLGL grade 2 heavy-duty, multipurpose lubricant with PTFE. Synthetic base fluids and the addition of PTFE micro powders longer life protection against friction, wear, rust and corrosion. Machinery lasts longer, downtime is reduced, and productivity is increased.

FUKKOL XerXes Synthetic Base PTFE GREASE is a USA listed Food Grade lubricant, rated H-1.

FUJI H.T 2

Ref: **100286**

FUKKOL FUJI H.T 2 is non-melting, EP lubricant made from a highly refined ISO 100 mineral base oil, an organoclay, (modified bentonite) thickener, and an effective EP agent for high temperature (-20°C to 320°C) applications where parts application is available. It can apply to Industrial ball and roller bearings in high temperature applications; Exhaust fan bearings; Furnace door bearings; Kiln car wheel bearings; Roll neck bearings; High temperature conveyor bearings; Rotary kiln bearings.

HSP BEARING GREASE 2

Ref: **100294**

HSP BEARING GREASE 2 is thickened by lithium 12-hydroxystearate, Low Temperature High Speed Bearing Grease is made from high-grade synthetic oil and special antioxidant and corrosion inhibitor through special manufacturing technology at high cleanliness circumstance.

It is suitable for various rolling bearing of miniature to medium-sized electric motor, industrial precision instruments, office and household appliances, especially long term lubrication for miniature bearing, this product do not recommended for low speed and heavy load applications.

FUJITEX AP 0,1,2

Ref: **100287**

FUKKOL FUJITEX AP 2,1,0 is a heavy viscosity oil component provides good lubricating film strength, keeping surfaces separated under Load at slow speeds. The calcium soap provides inherent rust protection because of its ability to emulsify small quantities of water.

Tacky and long fibered consistency keeps grease in place, minimizing leakage, and producing a seal against dust and dirt to provide longer intervals between greasing.

FUJITEX EP 0,1,2

Ref: **100288**

Extreme pressure lithium hydroxystearate grease made with new additive technology which has made it possible to eliminate the use of lead while retaining or improving all the performance properties of the previous leaded greases. These new Fujitex EP greases have been developed to meet the growing requirements for multi-service performance including protection from wear under heavy and shock loads and resistance to heat and water washing.

MOLYFU EP 0,1,2

Ref: **100289**

Multipurpose EP grease containing an ISO 220 mineral base oil, lithium thickener, EP additives and rust and oxidation inhibitor, plus molybdenum disulfide. Dark gray in colour.

Automotive, construction earthmoving, quarrying and mining, agricultural equipment, chassis grease point lubrication, pins and bushings, rolling element bearings, ball joints, universal joints (u-joints), high and shock load applications.

GREASE R 0,00

Ref: **100290-R0**
100291-R00

Extreme pressure lithium hydroxystearate grease made with new additive technology which has made it possible to eliminate the use of lead while retaining or improving all the performance properties of the previous leaded greases. These new FUKKOL R Series greases have been developed to meet the growing requirements for multi-service performance including protection from wear under heavy and shock loads and resistance to heat and water washing.

G25-2 SYNTHETIC GRAPHITE PASTE

Ref: **100511**

FUKKOL G25-2 Synthetic Graphite Paste is a non-melt base, low friction, extreme pressure grease that contains 25% graphite powder. It contains a variety of other extreme pressure additives, rust and corrosion inhibitors as well as dry film lubricants combined with non-melt thickeners with our finest petroleum base oil.

BLUE PRESSER GREASE 0,1,2

Ref: **100292**

For use where re-lubrication may be infrequent and a "long-life" capability is desirable.

Wheel bearings and all rolling bearings subjected to heavy loads and high temperatures.

Any application where a high temperature grease is specified and where excellent adhesion and water resistance are desirable.

MAXES 100% PTFE GREASE

Ref:100512

FUKKOL G25-2 Synthetic Graphite Paste is a non-melt base, low friction, extreme pressure grease that contains 25% graphite powder. It contains a variety of other extreme pressure additives, rust and corrosion inhibitors as well as dry film lubricants combined with non-melt thickeners with our finest petroleum base oil.

VIGOR GREASE RE00

Ref:100517

VIGOR GREASE RE 00 is EP lithium grease with excellent wear resistance. It is based on hydrocarbon oil and refined mineral oil, and contains organic molybdenum compound. This soft grease effectively reaches to sophisticated lubrication points of reduction gears, providing improved efficiency and extended lubrication life.

UREALEX GREASE EP 2

Ref:100514

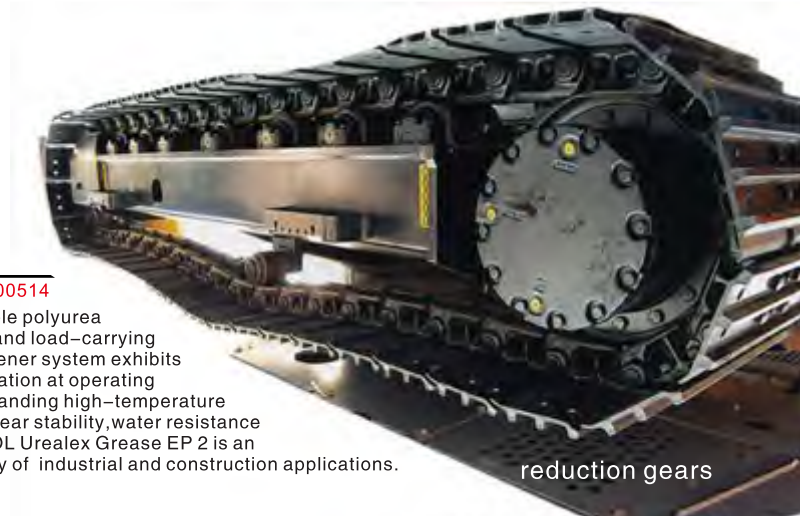
FUKKOL Urealex Grease EP 2 is a shear-stable polyurea grease with excellent extreme-pressure (EP) and load-carrying characteristics. The proprietary polyurea thickener system exhibits excellent resistance to oxidation and oil separation at operating temperatures as high as 160° C. With its outstanding high-temperature oxidation stability, load-carrying capability, shear stability, water resistance and wide operating temperature range, FUKKOL Urealex Grease EP 2 is an excellent multi-purpose grease for a wide array of industrial and construction applications.

LOW TEMPERATURE BEARING GREASE

Ref: 100296

Fukkol Low Temperature Bearing Grease is made from excellent low temperature stearic acid soap performance and oxidation stability due to totally using high purity chemical synthetic oil. It is suitable for long term aerospace lubrication of precision bearing and miniature bearing, especially for high-speed principal axis. It is also suitable for life-time lubrication and protection for miniature electric motor bearing.

Application temperature range: -60° C to 120° C.



Stop Mould Burn Effect Series



Affected By "Burn Effect"

H.T PASTE

Ref:100127

FUKKOL H.T Paste is a paste special formulated by anti-wear additives recommended use in "Mould Parts". It's contains NANO ceramic powder which can "stands" 1400°C temperature and would not "melt" under extreme condition. We warranty that it would not "fill-out" and carbonize inside the mould. This product was certificated and approved by FDA.

Application:

Cleaning of surface is a must, then apply to machine coating of surface by means of brush.

Environment:

Ecology - FUKKOL H.T PASTE is non-toxic, contains no metals and is free from graphite, molybdenum and disulphide based additives.



**Did You
Have Burn In Mould parts
problem?**

Application ①

All Mould Parts



- ①. Ejector Pins
- ②. Sleeves
- ③. Mould Internal Parts



Warranty ③

FUKKOL H.T Paste is NON-TOXIC, FREE of "heavy metal" does not contain graphite, molybdenum, disulphide etc. It is approved by China government, FDA, International SGS and ROHS.



Certificates of Quality

Benefits ②

No Outflow

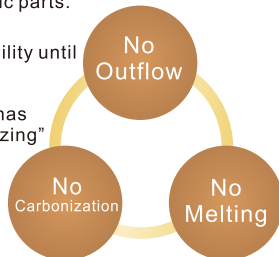
During Plastic injection Process it would not "contaminate" the plastic parts.

No Melting

It has high heat resistibility until 1400°C.

No Carbonization

Nano ceramic powder has resistibility to "Carbonizing" even at 1400°C



Tools & Parts

Life **↑ 25%**

Stop Mould Parts Burn Problem

Extended "Tools & Parts" Life Span 25%!!!

Silicone Series

SILICONE OIL

Ref: 100259-50CST 100260-500CST
100261-1000CST 100262-5000CST
100263-12500CST
100264-60000CST
100265-100000CST

FUKKOL SILICONE OIL is proprietary polydimethylsiloxane and special solve. They are available in a series of standard. It is colorless, chemical inert, odorless and non-toxic. It maintains a high stability under high and low temperature range.

FUKKOL SILICONE OIL is shear stable, when subjected to prolonged shear, they undergo very little permanent change in viscosity. FUKKOL series are clear, colorless and odorless, they are soluble in most aliphatic and automatic solvents. With the exception of the low-viscosity fluid, they are insoluble in water.

FUKKOL CST SERIES are non-volatile silicon oils widely used in personal care products such as two-in-one shampoo, hair tonic, sunscreen and kinds of cosmetics. They have various effects like smoothing, non-adhesive, water-resistant, permeable, luster improving, etc.

CST: 50, 500, 1000, 60000, 100000, 300000, 500000, 1000000

Ref: 100271-SG-1
100272-SG-2
100273-SG-3
100274-SG-4



Category Code: H1
NSF Registration No. 159716

SILICONE GREASE

SG-1, SG-2, SG-3, SG-4

FUKKOL Silicone compound series are formulated from specially selected silicone fluids and inert silica thickeners.

FUKKOL silicone compounds were designed for a variety of applications where dielectric strength, water repellency and corrosive protection are important.

FUKKOL Silicone compounds are resistant to oxidation and to a broad range of chemicals, while maintaining their characteristics over a wide range of temperature.

Available in several consistency to meet specific requirements, application can be made in valve seats; o-rings; and vacuum and pressure systems. They can also be used to lubricate, insulate electrical connectors and ignition components; and as an assembly lubricant for rubber and plastic parts.



Anti-Seize Compound

ANTI-SEIZE COPPER COMPOUND

Ref: 100081

For use when assembling components which are subsequently to corrosion or oxidation subsequently difficult to dismantle.

The grease is effective on any mechanism or component which is subject to corrosion such as those in contact with sea water and also in the mechanical brake linkages of vehicles.

The grease was developed for engine exhaust manifold nuts which frequently seize due to the high temperatures involved.



500g

ANTI-SEIZE NICKEL COMPOUND

Ref: 100085

FUKKOL ANTI-SEIZE NICKEL COMPOUND contains tenacious metals, oils and graphite materials that cannot be burned away or removed by slow moving parts. FUKKOL ANTI-SEIZE NICKEL COMPOUND was designed specifically for use on stainless steel or similar alloys to protect threaded fasteners and fittings from heating, freezing, seizure or galling at temperatures from -54°C to 1316°C. It may be used on pumps, sensors, valves, nuts and bolts where extreme conditions of heat exist.

CONDUCTING SILICONE GREASE

Ref: 100280

FUKKOL Conducting Silicone Grease material covered by this specification is a silica-filled, high viscosity

polydimethyl siloxane fluid.

The formulation compares to a NLGI No. 2 grease in consistency. Key performance properties are operating temperature, water repellent, dielectric strength, adherence, non-solidifying, chemically inactive, hydrolytically stable, and radiation resistant.

C66 ZINC THREAD COMPOUND

Ref: 100510

FUKKOL C66 Zinc Thread Compound Zinc Based Tool joint and drill Collar Compounds are available in four grades, each meeting all APL and IADC material specifications.

FUKKOL C66 Zinc Thread Compound Zinc Base Compounds are made using the highest quality metallic zinc powder, a premium petroleum base, and a FUKKOL C66 Zinc Thread Compound exclusive additive package designed to provide unsurpassed protection to thread and shoulder surfaces.

