





HIGH PERFORMANCE OILS & GREASES

TREAT YOUR EQUIPMENT LIKE A KING™



## MINING LUBRICANT GUIDE

**WORLD CLASS LUBRICANTS FOR THE WORLDWIDE MINING LUBRICANTS MARKET**


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In today's mining environment, ever-increasing production demands placed on electric rope shovels, walking draglines, hydraulic excavators mobile and process equipment require specialized, high performance lubricants. Royal's high performance, severe-duty lubricants are critical in the daily efforts to combat wear, maximize uptime and minimize lubricant related operating costs.

Royal's high-performance lubricants are engineered to provide maximum equipment protection in extreme conditions of temperature, high loads and shock loads. Royal's lubricants provide maximum protection against the effects of contamination including air borne dirt and dust, water, snow and ice.



**ADVANCED ISOGOLD™ TECHNOLOGY**

Royal's Advanced ISOGOLD™ Technology is a proprietary blend of high-performance additives engineered to protect and lengthen the life of equipment.


**ROYAL 876 GREASE**

A heavy-duty lithium complex grease designed for high-load capabilities. Formulated with high-viscosity base oils and a synergistic combination of high-quality extreme pressure (EP) and heavy-duty additives, it offers excellent structural and oxidative stability and high resistance to water washout. Also contains a tackiness additive enhancing stay-in-place properties.



GREASE COLOR: RED

- LITHIUM COMPLEX**
-  EXTREME PRESSURE
-  WATER RESISTANT
-  EXTENDED SERVICE
-  HIGH TEMPERATURE
-  HIGH VISCOSITY
-  HIGH TACK


**ROYAL TUNDRA GREASE**

A long life, fully synthetic, calcium sulfonate complex grease embodied with solid lubricants specially designed to extend service life in arctic climate conditions. This grease is formulated with fully synthetic polyalphaolefin (PAO) base oil and is engineered with compatible synergistic additives to provide the highest performance under heavy/shock load applications.



GREASE COLOR: BLUE

- CALCIUM SULFONATE COMPLEX**
-  EXTREME PRESSURE
-  WATER RESISTANT
-  EXTENDED SERVICE
-  HIGH/LOW TEMP
-  SHOCK LOAD


**ROYAL ULTRA 865M GREASE**

High-viscosity base oil and overbased calcium sulfonate complex thickener system fortified with molybdenum and our proprietary Advanced ISOGOLD™ technology. Contains 5% lubricating solids. A perfect choice for heavily loaded applications in hot or wet and corrosive environments.



GREASE COLOR: BLACK

- CALCIUM SULFONATE COMPLEX**
-  EXTREME PRESSURE
-  WATER RESISTANT
-  EXTENDED SERVICE
-  HIGH TEMPERATURE
-  HIGH VISCOSITY
-  SHOCK LOAD
-  CORROSION PROTECTION
- ADVANCED ISOGOLD™ TECHNOLOGY**



GREASE COLOR: AMBER

## ROYAL ULTRA 865 HD GREASE

Suitable for heavily loaded conditions, wet environments, and where high temperatures exist. Will perform virtually in all industrial applications, especially environments with concurrent high temperatures and water ingress.



### CALCIUM SULFONATE COMPLEX

- EXTREME PRESSURE
- WATER RESISTANT
- EXTENDED SERVICE
- HIGH TEMPERATURE
- HIGH VISCOSITY
- SHOCK LOAD
- CORROSION PROTECTION



GREASE COLOR: AMBER

## ROYAL BARIUM ROD GREASE

A premium barium complex grease with advanced additives protection to provide excellent lubrication and adherence on metal surfaces. This long fibrous structure is designed for temperatures -18°C to 150°C. Recommended in diamond drill rod applications and reduces wear and friction between drill rod and rock strata.



### BARIUM COMPLEX

- EXTREME PRESSURE
- WATER RESISTANT
- CORROSION PROTECTION
- HIGH/LOW TEMPERATURE



GREASE COLOR: BLUE

## ROYAL VOLT GREASE

A premium, EP, multipurpose, long life, electric motor grease which exhibits excellent thermal stability, excellent high and low temperature capabilities, and superior shear stability when compared to typical polyurea greases. This grease has excellent water resistance characteristics and will not wash out.



### POLYUREA

- EXTREME PRESSURE
- EXTENDED SERVICE
- SEALED FOR LIFE
- HIGH TEMPERATURE
- CORROSION PROTECTION



GREASE COLOR: GREY

## ROYAL HAMMER PASTE

A high-performance grease specifically designed for hydraulic hammers and other tools requiring anti-seize compounds. Hydraulic hammers and other such tools experience extreme shock and axial loads that can lead to rapid wear and tear of contact surfaces and guide bushings.



### CALCIUM SULFONATE COMPLEX

- EXTREME PRESSURE
- EXTENDED SERVICE
- HIGH TEMPERATURE
- SHOCK LOAD



GREASE COLOR: BLACK

## ROYAL NLZ TOOL JOINT COMPOUND

Anti-seize compound specifically formulated for drill pipe, weight pipe and collars. Special formula prevents metal-to-metal contact under severe operating conditions and provides protection against seizure, galling and breakdown. Pipe dope designed for making breakouts and connections.



### LITHIUM COMPLEX

- EXTREME PRESSURE
- WATER RESISTANT
- HIGH/LOW TEMP



**ROYAL ULTIMATE 1000**

Premium, high quality, semi-fluid open gear grease with an aluminum complex soap, high viscosity base oil and does not contain any asphalt or chlorine to maximize gear protection. Royal Ultimate can be applied by aerosol spray, immersion and brush systems. Its operating temperature range is -18°C to 150°C (0°F to 300°F).

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GREASE COLOR: BLACK

**ALUMINUM COMPLEX**

- EXTREME PRESSURE
- WATER RESISTANT
- SHOCK LOAD
- CORROSION PROTECTION
- HIGH TACK

**ADVANCED ISOGOLD™ TECHNOLOGY**



**ROYAL ULTIMATE 2500**

A high performance service lubricant for mining equipment in extreme operating conditions. Royal Ultimate can be applied by aerosol spray, immersion and brush systems. Similar to Royal Ultimate 1000, but with higher viscosity: 2500 cSt @ 40°C.

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GREASE COLOR: BLACK

**ALUMINUM COMPLEX**

- EXTREME PRESSURE
- WATER RESISTANT
- SHOCK LOAD
- CORROSION PROTECTION
- HIGH TACK
- HIGH VISCOSITY

**ADVANCED ISOGOLD™ TECHNOLOGY**



**ROYAL ULTIMATE 50K**

Royal Ultimate 50K is a super tacky compound type open gear lubricant with a base oil viscosity of 50,000 cSt @ 40°C. It is solvent, asphalt and chlorine free recommended for dragline and rope shovel hoist, drag, crowd, propel and swing open gears, house rollers and rails, dipper sticks and handles and house rollers.

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GREASE COLOR: BLACK

**ALUMINUM COMPLEX**

- EXTREME PRESSURE
- WATER RESISTANT
- CORROSION PROTECTION
- HIGH TACK
- HIGH VISCOSITY
- HEAVY LOAD

**ADVANCED ISOGOLD™ TECHNOLOGY**



**INLUBE INDUSTRIAL GEAR OIL**

Recommended for use in all types of enclosed industrial gear drives, bearings, chain and slides requiring extreme pressure oils — with excellent antifoam and water separation. Satisfies most major industrial gear manufacturers' requirements, including AGMA 250.04, US Steel 224, and MIL-PRF-2105E.

**46 68 100 150 220**

GREASE COLOR: AMBER

**PREMIUM GEAR OIL**

- EXTREME PRESSURE
- WATER RESISTANT
- SHOCK LOAD
- HEAVY LOAD



**ROYAL CENTURION PREMIUM GEAR LUBRICANT**

A new generation of industrial gear oil with quality base oils and proven organic polymeric compounds that won't shear out under stress, even in highly contaminated environments. Meets or exceeds the performance requirements of AGMA 250.04, 251.02; US Steel 224, Cincinnati Milacron P-76, P-77, P-74, P-59, P-35 and MIL-PRF-2105E.

**150 80W-90 320 85W-140**

**PREMIUM GEAR OIL**

- EXTREME PRESSURE
- EXTENDED SERVICE
- HEAVY LOAD

**ADVANCED ISOGOLD™ TECHNOLOGY**



## ROYAL MULTI-GEAR SELECT EP GL-5

Multi-purpose gear lubricant that attains high performance using a sulfur-phosphorus additive treatment. Recommended for run-of-mine-vehicles, tractors, earthmoving and other heavy-duty equipment for which an API GL-5 gear oil is specified.

**SAE 80W-90** **SAE 85W-140**

### PREMIUM GEAR OIL

- EXTREME PRESSURE
- WATER RESISTANT
- CORROSION PROTECTION
- EXTENDED SERVICE
- HEAVY LOAD



## ROZEP ADVANCED HYDRAULIC FLUIDS

Superior anti-wear hydraulic oils developed to meet Caterpillar Hydro 10 as well as other HD equipment manufacturer specifications. Designed for superior performance in reciprocating compressors subjected to sour, wet and high-pressure gasses. Recommended for use in high-pressure hydraulic systems which utilize vane, piston or gear pumps.

**ISO 46** **ISO 68** **ISO 100**

### PREMIUM HYDRAULIC FLUID

- EXTREME PRESSURE
- CORROSION PROTECTION
- EXTENDED SERVICE



## MONARCH SYNGEAR OILS

Synthetic, extreme pressure gear lubricants. They provide superior film strength, wear control, and exceptional oxidation resistance resulting in excellent sludge and varnish control for increased oil life. While intended for use in enclosed gear cases, they can also be recommended for use in air compressors, bearings and circulating oil systems.

**ISO 32** **ISO 46** **ISO 68** **ISO 100** **ISO 220** **ISO 320** **ISO 460**

### PREMIUM GEAR OIL

- EXTREME PRESSURE
- CORROSION PROTECTION
- SHOCK LOAD



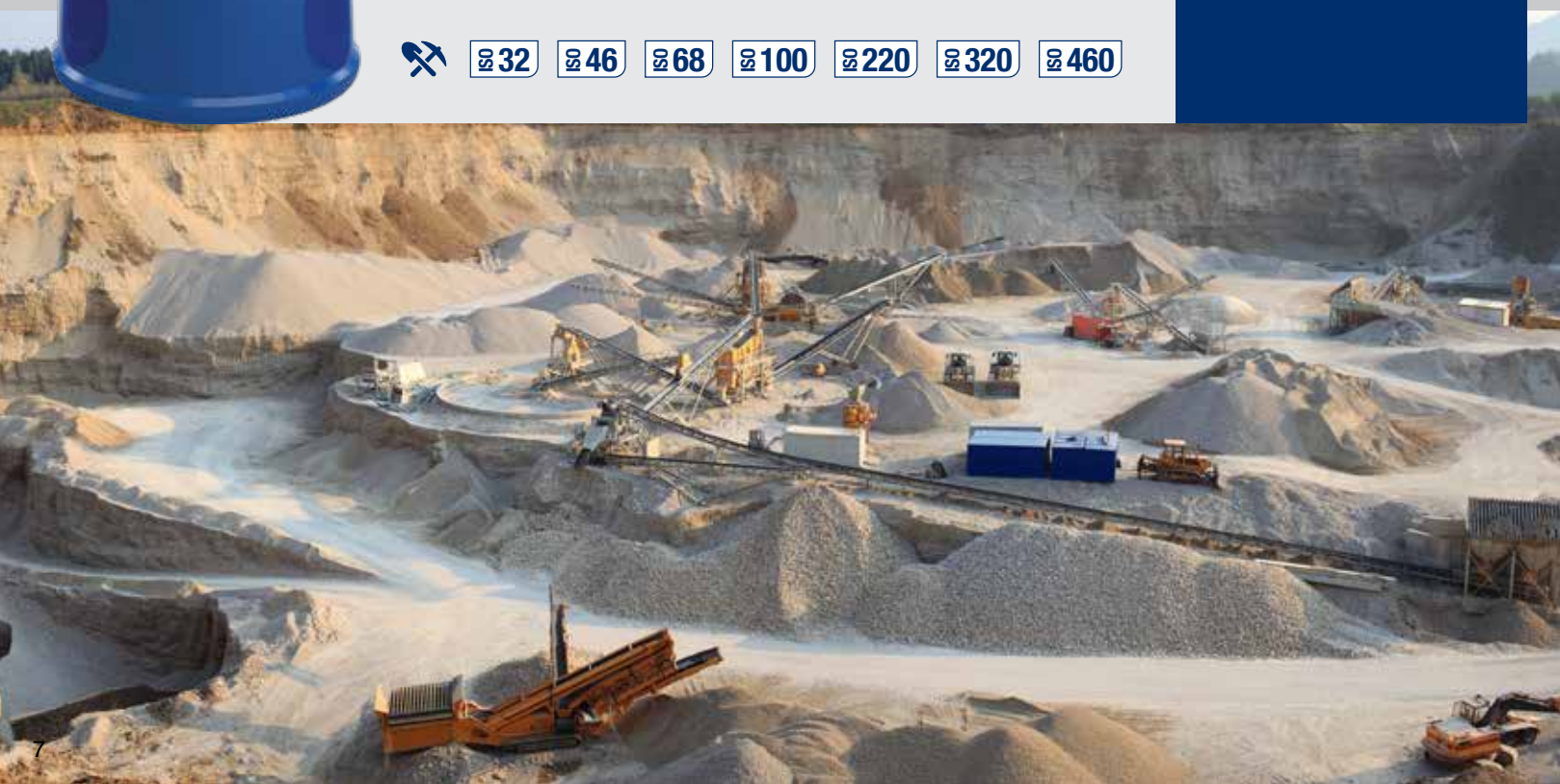
## MONARCH SYNCOMP

Formulated with the highest quality synthetic Polyalphaolefin (PAO) base fluids, which can reduce viscosity loss during use. Recommended for most reciprocating, rotary vane, and screw compressors. These oils have been used successfully in reciprocating and rotary screw compressors from Ingersoll-Rand, Quincy, Sullair, Atlas Copco and Gardner-Denver.

**ISO 32** **ISO 46** **ISO 68** **ISO 100** **ISO 150** **ISO 220** **ISO 460**

### SYNTHETIC COMPRESSOR OIL

- EXTREME PRESSURE
- CORROSION PROTECTION
- EXTENDED SERVICE



## CIRRO XS TURBINE OIL

A superior quality turbine oil designed to inhibit rust and oxidation. The ASTM D-943 TOST exceeding 10,000 hours enables use in applications requiring very long life, where other turbine oils fail. Recommended for use in steam and gas turbines, including the General Electric Frame 7 units, as well as many pumps, compressors, oil circulating systems, centralized oil mist systems and other applications requiring a top quality, long life turbine oil.

**ISO 32** **ISO 46** **ISO 68** **ISO 100**

### R&O TURBINE OIL

- CORROSION PROTECTION
- EXTENDED SERVICE



**ENVIROGUARD WIRE ROPE OIL**

A unique blend of vegetable oils creates a superior lubricant that is “readily biodegradable.” An alternative to mineral oil based lubricants for applications with environmental concerns that require a biodegradable product. Lubricates the individual strands of a wire rope to prevent friction and wear, resulting in extended wire rope life, less downtime, and more production.



**BIODEGRADABLE OIL**

- LOW TEMPERATURE**
- CORROSION PROTECTION**
- HIGH VISCOSITY**



**ROYAL ENVIROGUARD EP GREASE**

Designed for superior performance in environmentally sensitive applications. Will meet VGP requirements and is readily biodegradable. This grease has been fortified with environmentally safe additives enabling superior performance under heavy load, water ingress, and moderately high temperatures.



GREASE COLOR: AMBER

**LITHIUM COMPLEX**

- EXTREME PRESSURE**
- WATER RESISTANT**
- CORROSION PROTECTION**



**ENVIROGUARD AW HYDRAULIC OILS**

Anti-wear hydraulic oils using a vegetable oil base fluid and a unique, non-metallic, ashless additive system. These oils were developed as an alternative to mineral oil based hydraulic fluids in response to environmental concerns and are perfect for use in sensitive areas.



**BIODEGRADABLE OIL**

- LOW TEMPERATURE**
- CORROSION PROTECTION**
- HIGH VISCOSITY**



**ENVIROGUARD ROCK DRILL OILS**

Environmentally friendly product formulated with high quality, biodegradable base oils for the lubrication of pneumatic tools such as rock drills, percussion drills, pavement breakers, and jackhammers. These lubricants contain special extreme pressure and tackiness additives that increase film strength and guard against wear in adverse conditions.



**BIODEGRADABLE OIL**

- EXTREME PRESSURE**
- WATER RESISTANT**
- LOW TEMPERATURE**
- CORROSION PROTECTION**
- HIGH VISCOSITY**

