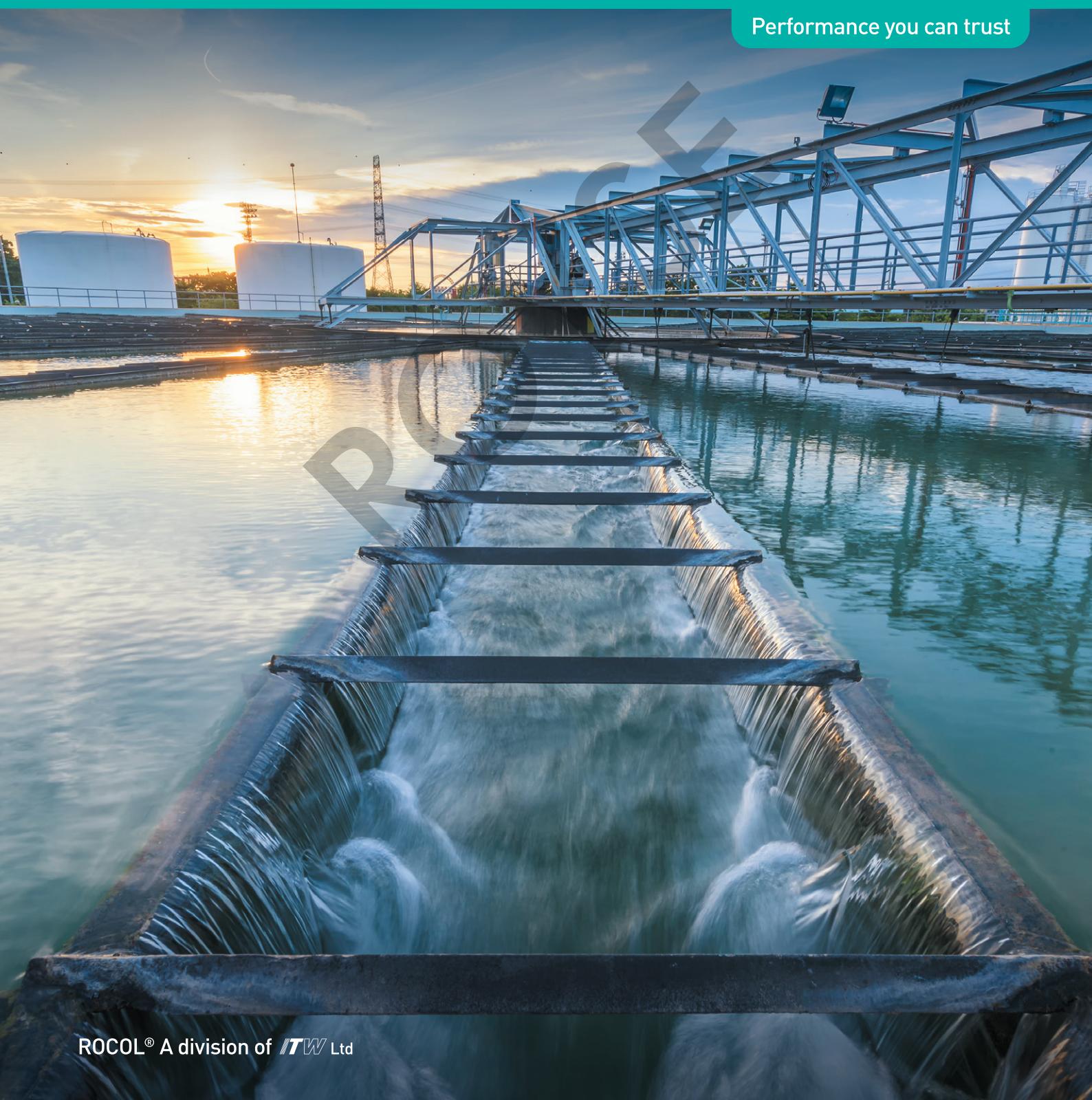




WATER INDUSTRY

Lubrication Guide

Performance you can trust



Contents

From product concept, design and development through to technical expertise and customer services, Rocol® supports all lubrication needs in the water industry.

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Customer Service: +44 (0)113 232 2700

One simple solution

The UK delivers over 16 billion litres of high-quality water each day to its 64 million residents. It takes multiple water processing plants across the UK, each one reliant on robust machinery operating around the clock, to meet their demands.

Water companies understand just how crucial it is that each piece of equipment across their plant remains in operation, maximising uptime. Rather than increasing infrastructure, instead, they are searching to optimise that which is in place today. As the industry continues to innovate its current processes – to facilitate a growing population, reduce operational costs and carbon footprint, and lower the cost to the consumer – effective maintenance and preservation of machinery has become more vital than ever.

A world-leader in high-performance lubrication and machine maintenance solutions, Rocol® assists customers in the water industry with products specific to their sector needs, assuring their equipment is cared for, and production lines run efficiently. Developed by our in-house team of highly-skilled engineers and chemists, our technically advanced systems are helping to keep the water industry flowing.



Performance you can trust

Our range in highly-developed and technically advanced lubricants is designed to meet the demands of our customers.

THE BENEFITS

- ▶ Extending component life
- ▶ Increasing lubrication intervals
- ▶ Reducing downtime

HOW OUR PRODUCTS ARE SUPPORTING THE WATER INDUSTRY

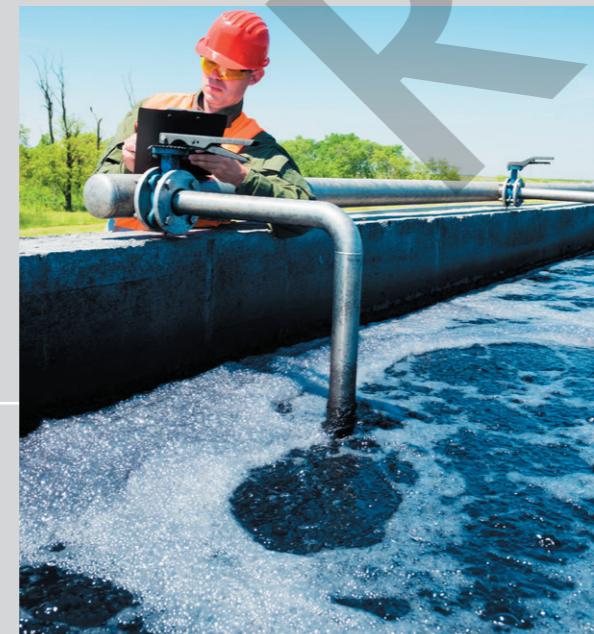
- ▶ Reducing power draw across site
- ▶ Protecting against corrosion
- ▶ Lowering total cost of ownership and labour costs

ROCOL MEETS STRINGENT HYGIENE AND SANITATION STANDARDS AND HAS VARIOUS CERTIFICATIONS, INCLUDING:

- ▶ ISO 21469 The international standard for the manufacture of food-grade lubricants.
- ▶ Full portfolio of NSF H1 and 3H lubricants and NSF registered cleaners.
- ▶ WRAS approved products for drinking water facilities

THE SECTORS WE SERVE

- ▶ Clean water
- ▶ Waste water
- ▶ Drinking water



Keeping the Water Industry flowing freely

Case studies from across the UK

ANGLIAN WATER SITE AT HUNTINGDON

“SAPPHIRE® Hi Torque was trialled on six aeration tank drive gearboxes for 6 months to try and save energy. Sapphire Hi Torque showed a saving of 4% on energy consumption. This amounted to an annual saving of £19K+”

LUCY LANGMAID – ENERGY INNOVATION TECHNOLOGIST



Northumbrian Water and Seafield Sewage Works using TUFLUBE® Allweather on penstock screws. Previously rusting and seizing, the screws are now able to extend the interval between lubrications to annually.



Anglian Water, Pyewipe, Grimsby; switched to using SAPPHIRE® Autolube on the air blower bearings within the drier plant. This ensured the highly stressed bearings did not fail and has significantly reduced labour.



ROCOLCARE®

OUR HISTORY

Established in 1878, Rocol® has become a market leader in the development of high-performing chemicals and lubricants, by understanding the complex needs of the industrial, clean and safety markets. Our comprehensive range includes high performance lubricants, cutting fluids, line marking and anti-slip systems. Operating to internationally-recognised standards in quality, environment, and safety, Rocol is proud of its commitment to the continual engagement and development of staff and its Investors In People accreditation.

OUR PRODUCTS

Rocol holds many patented trademark brands within the food and industrial manufacturing markets; brands such as FOOLUBE®, DETEX™, SAPPHIRE® and FLO-LINE® that help a facility to operate safely, without sacrificing performance.

Our portfolio features a wide range of lubricants developed to answer the specific needs of the most demanding applications in the markets we serve. Comprising of premium grade base oils, including synthetics, renewable oils and silicones, these lubricants are treated with the most effective additives to address the performance and application needs of today's varied industry-specific manufacturing processes. With higher load carrying capability, superior resistance to water washout, lower flammability ratings and greater temperature ranges, our products are designed to preserve and protect against costly breakdowns and ensure maximum performance.

ISO 21469 CERTIFICATION

Rocol takes pride in having become one of the first companies worldwide to achieve ISO 21469 approval.

This certification takes into consideration our manufacturing facility for hygiene, quality, dedicated manufacturing areas and good manufacturing practice.

NSF.org states: ISO 21469:2006 specifies hygiene requirements for the formulation, manufacture, use and handling of lubricants.

Within a factory environment, lubricants can have incidental contact with products and packaging used in the food, food-processing, cosmetics, pharmaceutical, tobacco or animal feeding-stuffs industries. All Rocol food grade products are manufactured within the strict guidelines of ISO 21469:2006, ensuring zero risks to consumer products in the event of a contamination.

FULLY AUDITED PROCESS

Rocol is audited annually by NSF, ensuring the highest standards of hygiene and quality are maintained. A sample of every NSF H1 product manufactured by Rocol has been tested in an NSF laboratory to ensure it complies with the highest standards of food safety. The ISO 21469 certification ensures that every Rocol NSF H1 product comes from a strict recipe.



Use your phone camera to scan the QR code to find out more

What is RocolCare®

- ▶ **Full Audit Compliance** – Rocol® is the UK's first ISO21469:2006 certified lubricants manufacturer. ISO21469 is a globally-recognised hygiene certification that ticks an important box for auditors in providing credible, independent assurance that all Rocol products are formulated, manufactured, and supplied hygienically and safely.
- ▶ **Increased Efficiency** – Increases lubricant efficiency, improvements in plant productivity and a reduction in costs.

- ▶ **Risk Reduction** - Establishes all your lubricant requirements and ensures contamination free lubrication.
- ▶ **Rationalisation** - Rationalises your lubricant usage and reduces your stock holding on site.
- ▶ **Training** - Best practice lubrication training is available. RocolCare® is the premium service package for food, clean and industrial markets that offers many features and benefits.



RocolCare® CUSTOMERS – WHAT TO EXPECT

- ▶ **Enjoy peace of mind** – Assurance that you and the lubrication experts are working together in partnership.
- ▶ **Achieve operational excellence** – Efficiencies are increased through the Rocol preventative and proactive approach to lubrication management.
- ▶ **Assurance of full traceability** – All Rocol products are developed, manufactured, passed through a stringent QC process and dispatched from our UK manufacturing site.

Clean water package



FOODLUBE® HI-POWER 46

High performance, fully synthetic oils incorporating an optimum blend of high performance additives. Suitable for use in hydraulics, air compressors and airline systems.

- ▶ Enhanced oxidation stability
- ▶ Extremely low sludge build up
- ▶ Minimal foaming
- ▶ Unique L-CO system, reduces carry over

15995 20L 18 H1

TEMP RANGE

-35°C to +120°C



FOODLUBE® HI-TORQUE

High performance fully synthetic gear oils incorporating start up protection system (SUPS) and anti wear additives to provide maximum lubrication and protection in all types of gearboxes.

- ▶ SUPS – a unique protection for gear teeth on start up and in use
- ▶ Outstanding load carrying performance: FZG load stage 12
- ▶ Excellent anti-wear performance - no need for additional additive treatments

Hi-Torque 220 15525 20L 8 H1

Hi-Torque 460 15775 20L 27 H1

TEMP RANGE

-20°C to +150°C

FREE YELLOW HAZARDOUS LOCKER WITH PACKAGE

Enquire now



FOODLUBE® CHAIN SPRAY

Convenient aerosol chain lubricant. Ideal for lubrication of all types of drive and conveyor chains.

- ▶ Outstanding penetration into links and pins - maximum protection
- ▶ Highly resistant to water wash off - protects throughout clean downs
- ▶ Good water displacing properties
- ▶ Tenacious low drip formulation - reduces the risk of production line contamination
- ▶ Good load carrying capability - protects critical parts of the chain

15610 400ml 16 H1

TEMP RANGE

-20°C to +150°C

FOODLUBE® HI-LOAD SF

A semi-fluid grease for use in automatic lubrication systems feeding highly loaded bearings. Also, very effective when used as a gearbox grease.

- ▶ Specifically designed for use on highly loaded bearings fed by small bore pipe work in automatic lubrication systems
- ▶ Good load carrying capability – 355kg Weld Load
- ▶ Excellent stability – extended relubrication intervals and a reduction in lubricant usage

15966 4kg 66 H1

TEMP RANGE

-20°C to +160°C

FOODLUBE® PREMIER 1

A high performance EP grease, fortified with PTFE, designed for enhanced lubrication, particularly high speed and high temperature applications.

- ▶ For electric motors and fan and conveyor bearings
- ▶ High load and wear properties - significantly extends bearing life
- ▶ Highly resistant to water washout - excellent corrosion protection

15291 380g 42 H1

TEMP RANGE

-30°C to +180°C

FOODLUBE® UNILUBE

A fully automatic gas activated lubricant dispenser filled with FOODLUBE Premier 1 grease. Provides consistent and constant lubrication of all types of ball, roller and plain bearings.

- ▶ Reduces labour, ideal for remote locations
- ▶ Compact design enabling application in hard to reach places
- ▶ Transparent housing making it easier to monitor lubricant levels
- ▶ Variable from 1 – 12 monthly increments
- ▶ Easy to install and maintenance free

13010 120ml 61 H1

GREASE TEMP RANGE

-30°C to +180°C

UNILUBE TEMP RANGE

-20°C to +60°C

Waste water package

SAPPHIRE® HI POWER

Hydraulic, airline and compressor oils

- ISO VG 32, 46, 68, 100
- Reduces material wear to significantly extend component life
- High thermal stability increases oil change intervals and prevents sludge formation
- Outstanding corrosion resistance protects equipment from water damage.

Hi-Power 32	52545	20L
Hi-Power 68	52565	20L

TEMP RANGE

-20°C to +120°C

CHAIN & DRIVE FLUID/SPRAY

High Performance EP Chain and Conveyor Lubricant

- Good resistance to water wash off
- Outstanding corrosion protection
- Has a tenacious water resistant film that deters and protects all types of chains in wet or humid environments.

22001 400ml

22306 5L

22309 20L

TEMP RANGE

-30°C to +150°C

SAPPHIRE® HI TORQUE 320

High performance, semi-synthetic gearbox fluids

- Contain SUPS (Start Up Protection System) for maximum protection against wear in a gearbox upon on start up.
- Excellent thermal stability
- Provides a tenacious, low foaming film with excellent water wash-off resistance and corrosion protection.

21025 20L

TEMP RANGE

-20°C to +120°C

SAPPHIRE® ADVANCE 2

Multi-purpose EP bearing grease fortified with PTFE for maximum bearing life

- Excellent corrosion resistance to protect in humid, damp and even wet conditions.
- Outstanding high speed performance for most applications found in industry.
- Outstanding load carrying capability - 560kg weld load.

12441 380g

TEMP RANGE

-30°C to +160°C

**FREE YELLOW
HAZARDOUS LOCKER
WITH PACKAGE**

Enquire now



SAPPHIRE® 000

High load semi fluid grease for automatic lubrication systems

- Highly resistant to oxidation providing greatly extended lubrication intervals – typically 3 times longer than conventional lubricants.
- Excellent corrosion resistance to protect in humid, damp and even wet conditions.
- Blue in colour for high visibility in use.

12284 18kg

TEMP RANGE

-30°C to +160°C

TUFLUBE® ALLWEATHER

Tacky water resistant open gear / spindle grease

- Protects heavily loaded mechanisms in the wettest and most corrosive conditions.
- Physical and chemical protection against pitting and corrosion
- Highly adhesive, high load grease which can even be applied underwater.
- Ideal for gate valves and penstocks.

18271 400g

TEMP RANGE

-30°C to +70°C

SAPPHIRE® UNILUBE

Multi-purpose EP bearing grease fortified with PTFE in an automatic lubricator

- Ideal for remote lubrication
- Designed for the effective lubrication and protection of all types of ball, roller and plain bearings.
- Excellent corrosion resistance to protect in humid, damp and even wet conditions.
- PTFE has an extremely low coefficient of friction and reduces stick-slip on start-up ensuring a smooth controlled movement.

13012 125ml

TEMP RANGE

-30°C to +160°C

UNILUBE TEMP RANGE

-20°C to +60°C



Drinking water products

TPM NSF

Approved for use in both hot and cold potable (drinking) water.

Silicone greases designed for the lubrication of seals, slides, slow speed bearings and other applications.

SAPPHIRE® AQUA-SIL

Silicone grease for long term lubrication

- ▶ Good on plastics and rubber
- ▶ Approved for use in both hot and cold potable (drinking) water.
- ▶ Water Regulations Advisory Scheme – Approved Product – Approval Number: 1704534
- ▶ Highly resistant to water wash out
- ▶ Resistant to most chemicals
- ▶ WRAS Approval Number: 1704534

12251 85g

12253 500g

12256 5kg

TEMP RANGE

-40°C to +200°C



SAPPHIRE® AQUA-SIL HI LOAD

Silicone Grease for long term lubrication fortified with molybdenum disulphide (MoS₂)

- ▶ Addition of molybdenum disulphide means this grease has good load carrying and is ideal for long term lubrication at extreme operating temperatures.
- ▶ Water Regulations Advisory Scheme – Approved Product – Approval Number: 1704534
- ▶ WRAS Approval Number: 1704534

12263 500g

12266 5kg

TEMP RANGE

-40°C to +200°C



SAPPHIRE® ENDURE

High performance PFPE grease

- ▶ Designed for use on anti-friction and plain bearings, small gears, slides, pins, valves, plungers, screws etc. particularly where a non-toxic, NSF H1 lubricant is required.
- ▶ Extreme resistance against aggressive chemicals and strong oxidising agents
- ▶ The product has an exceptionally long service life providing excellent cost effectiveness from extended lubrication intervals, reduced downtime and reduced labour costs.
- ▶ SAPPHIRE Endure will have no detrimental effect on rubbers, plastics or metals.
- ▶ WRAS Approval Number: 1905536

12330 100g 56 H1

12331 700g

12334 1kg

TEMP RANGE

-25°C to +280°C



“ The gearbox trial ran for 50 hours with FOODLUBE Hi-Load SF and we didn't notice any changes in the temperature or noise which is a real positive. We have had quite a lot of gearbox failures in the past where the gears have mashed together, and the bearings destroyed and now using FOODLUBE Hi-Load SF we feel that the moving parts will constantly be lubricated dramatically reducing the risk of failure.”

ROCOLCARE® Training

APPLICATION-FOCUSED TRAINING

The scale of UK manufacturing and food production is vast. From frozen goods to bakeries, glass bottles to cardboard boxes, the equipment used for production is put through its paces every day, under conditions that differ from one sub-sector to the next. Which means the maintenance requirements for each piece of equipment can also vary dramatically, depending on their use.

When it comes to keeping your processing equipment in peak condition, a 'one size fits all' approach is not good enough. Rocol® recognises the need to support engineering managers with added value, through support mechanisms tailored to the products and services in their industry niche.

A BESPOKE APPROACH

Each sub-segment of the food industry and manufacturing space has equipment, processes, regulations and unique requirements. No surprise, then, engineering managers find it a challenge to identify only those maintenance products amid the thousands available suited to their niche market. And, once they do uncover any relevant products, all too often the manufacturer focuses its product training on the lubricant's performance rather than its application.

OPERATOR TRAINING

ROCOL training for machine operators is delivered from our head office in Leeds or at your premises. The team at Rocol helps your staff with multi-level training and support, from fundamentals such as "The Essential Principles of Lubrication" to advanced "Train the Trainer" courses designed to upskill your staff with the technical knowledge to conduct your training sessions in-house.

ONLINE TRAINING

At Rocol, we're making it even easier for manufacturing and processing teams to improve efficiency and reduce down-time across their production facilities by introducing our brand new online training. Rocol Online Training is designed for all operators and maintenance engineers involved in equipment maintenance – whether you're new in the role, or a seasoned engineer wanting to refresh your knowledge.

TECHNICAL SUPPORT

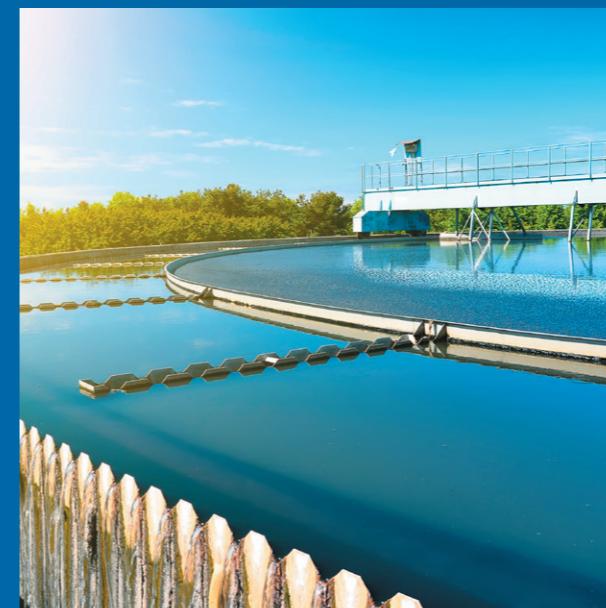
Our technical support team includes multiple experts such as chemists and professional engineers. Using a full range of testing equipment, the team at Rocol is quick to investigate any mechanical failure, providing insight into the root cause before dealing with the identified issues swiftly.



FIND YOUR NICHE

Comprehensive, application-based training takes customers through a typical factory layout in their sub-sector, considering each major item of equipment used within this environment, and providing information and advice on the lubrication relevant to the equipment.

As a leading lubricant manufacturer, our responsibility extends beyond providing your products; it includes training for your operators that considers the equipment, operating conditions and the required registration specific to your industry segment. By highlighting the products most suited to reducing downtime and extending equipment life, and demonstrating application techniques, your team feels empowered to make decisions on products that bring positive results.



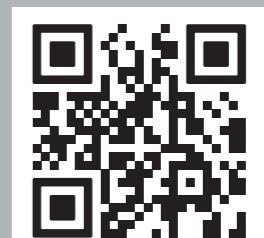
TAKING ADVANTAGE OF TECH

Drawing from our database of Standard Operating Procedures for lubricating major plant items across multiple sectors, our industry-specific lubrication training packages are among the most detailed and comprehensive for the niche they support.

During the current climate, when in-person training is less straightforward and virtual delivery is on the rise, training has become more accessible to larger groups residing in multiple locations. Our team has been making the most of video conferencing to begin delivering application-based training to our specialist distribution partners across the globe. While the feedback from our community has been positive, we are not stopping there, with the next phase - enabling our distribution partners to provide this application specific training themselves – next to roll-out.

To further support our customers across industry, our training courses are now available online. From courses which cover the general principals of lubrication, to more advanced sub-sector specific courses, each one is accessible at a time that is convenient to the customer.

If you are interested in application-based training, contact our technical team to find out more.
E: technical.lubricants@rocol.com
T: +44 (0) 113 232 2600



Use your phone camera to scan the QR code to find out more



ROYSE

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ROCOL® A division of  Ltd



ISO 9001
Quality
Management
Systems
CERTIFIED

AS/EN
9100
Aviation Space and
Defence
CERTIFIED

ISO 14001
Environmental
Management
CERTIFIED

ISO/IEC
27001
Information Security
Management
CERTIFIED

ISO 45001
Occupational Health and Safety
Management
Management
CERTIFIED

FM 12448

FM 667905

EMS 67596

IS 702007

OHS 78173



INVESTORS
IN PEOPLE