

Wire Rope Manufacturing Lubricants



MOVING YOUR WORLD

Wire Rope Lubricants

Keeping the world moving, that is what drives us. We don't just develop lubricants; we develop efficient and sustainable lubrication solutions. We partner with our customers, provide insights and move their world - with unconditional reliability. It is the basis of our work, aspiration, and promise, both internally and externally.

Finding the perfect formula for a lubricant is always a challenge. After all, every request is different. We therefore develop solutions that are specifically tailored to your own needs and help keep your world moving. Reliably, efficiently, and sustainably. 90 years of experience and 6,000 employees support us in these efforts. As well as non-negotiable quality standards.

Our dedicated wire rope lubricant manufacturing plant produces specialist products, which have consistent physical characteristics across batches. Our products protect each strand from corrosion minimising metal-to-metal contact thereby optimising rope life.

Experts in the field

Due to the extreme conditions wire ropes are exposed to during their lifetime, ensuring the correct lubricant is key to their performance and longevity.

Correct choice and application can reduce operational costs and provide reliability.

Main problems

What are the main issues facing wire rope performance? **Fretting**:

Rope movement (Bending/flexing) under high load pressures causes metal rubbing which leads to surface damage and debris formation, which further exaggerates the wear process and accelerates corrosion.

Corrosion:

The gradual degradation or deterioration of rope metals due to chemical reactions with their environment (Which are often arduous).

Fortunately, FUCHS can help with both of these problems.



Solution

By choosing the right lubricant during the manufacture and aftercare of wire ropes, the effects of fretting and corrosion can be greatly reduced. Lubricants help form a protective barrier around each strand to minimise friction and helps withstand adverse weather conditions. Specially developed for the intricate requirements of the wire rope sector, FUCHS products offer protection for both the core of each rope whilst also protecting on the surface. This ensures total coverage for maximum protection and rope efficiency - extending maintenance intervals with the assurity of performance.

For best results

- Wire ropes should be thoroughly cleaned before any new lubricant is applied. This removes any dirt or build-up to provide the best possible surface for the new product to adhere to.
- Speaking with your local FUCHS representative will remove any compatibility concerns before application.
- Our lubrication experts can also advise as to a lubrication plan - This will take into account many factors which may affect the lifespan of the most suitable product.



Lubricant Solutions

We have a wide range of lubricants for the wire rope industry for industries including elevators, mining, drilling and cranes. Our products help preserve and lubricate wire ropes and the individual strands within each wire. By choosing a suitable wire rope lubricant, users can benefit from a 200% increase in fatigue life compared with a non-lubricated wire rope.



Elevators

FUCHS wire rope lubricants ensure smooth operation and prevent premature wear in elevator systems.



Mining

FUCHS lubricants withstand the demanding conditions of mining environments, protecting wire ropes from abrasion and corrosion.



Drilling

Our products provide superior lubrication for drilling operations, minimising downtime and enhancing equipment life.



Fishing

Our corrosion resistant lubricants protect fishing ropes from salt water and harsh marine environments



GP-Engineering

FUCHS offers a range of lubricants suitable for various general engineering applications, including heavy-duty construction equipment.



Construction

FUCHS lubricants ensure smooth operation and extended lifespan for construction equipment, including excavators and lifting machinery.



Cranes

FUCHS offers a range of specialised lubricants that penetrate deeply into the strands of wire ropes used in cranes, offering complete lubrication and corrosion protection.



Offshore

Our lubricants are specifically formulated to withstand the extreme conditions of offshore environments, protecting wire ropes from salt, water and harsh weather.

Bespoke Solutions

FUCHS recognise that not every job fits within a standard framework which is why we work with our customers to develop the best lubricant solution for their operation.

Please speak to your local FUCHS representative to find out more about our bespoke solutions. Email: contact-uk@fuchs.com

Application Guide

Primary lubrication

Lubricants which can be applied during the wire rope manufacturing process to provide high performance, extend rope life and reduce maintenance costs.

- Excellent salt water resistance
- Outstanding adhesive power minimise fling-off
- Good oxidation stability
- Excellent sealing properties
- All conform to ISO 4346

	Intended use	Drop point ASTM D3954 (IP371) min.	Break point IP80	Salt water protection ASTM B117 (720 hrs min.)	Available pack sizes
ANTICORIT WRC PJ 202 Cranes, Mining		100	-55	>1000 Hours	175KG
ANTICORIT WRC PJ 204 Mining*	₽ ♪	100	-35	1000 Hours	175KG
ANTICORIT WRC PJ 206 Elevators, Fishing Also: Mining, GP-Engineering, Cranes		95	-40	>1000 Hours	19KG 175KG
ANTICORIT WRC PJ 207 Offshore Also: Drilling*		85	-30	>2000 Hours	170KG
ANTICORIT WRC PJ 210 Cranes, GP-Engineering Also: Elevators, Fishing		95	-35	>1000 Hours	175KG
ANTICORIT WRC PJ 221 Mining*, Elevators		65	-35		175KG
ANTICORIT WRC PJ 238 Drilling* Also: Fishing, Offshore		105	-51	>2000 Hours	175KG
ANTICORIT WRC PJ 239 Cranes, Drilling* Also: Fishing, Offshore		100	-52	>2000 Hours	175KG
ANTICORIT WRC PJ 33 GP-Engineering	Ŋ	65	-30		175KG
		Drop point ISO2176	DIN Classification DIN 51 825	Dynamic anti-rust - 5% NaCl Soln. IP220 (Mod)	Available pack sizes
RENOLIT AQUA 2 Construction**		140	K 2 E-30	0.0 Max	400G 500G 18KG 50KG

 * Not for applications requiring compliance with DIN 21258, 4.1 & 4.2

** Pre-cast concrete applications NOT for stay cable bridge tendons

Secondary Lubrication

What is secondary lubrication/wire rope dressing? Lubricants which can be applied to wire ropes after manufacture/currently in use. Special characteristics ensure total coverage despite in-situ application.

FUCHS provides a range of lubricants for the preservation of wire ropes used in the event of extreme environmental influences and mechanical stressed.

ROPELIFE

Rope protection agent and lubricant based on a mineral oil with inorganic thickeners and solids. The product has excellent penetration properties, protects from corrosion and withstands high pressures. ROPELIFE contains MoS2, graphite and is blended with a synergetic combination of corrosion inhibitors.

Performance Features

- Temperature range: -30 to +125 °C
- Excellent penetration properties
- Protects from corrosion
- Withstands high pressures
- Clean, non-drip protection film
- Wide range of application

Field of application

Used for the lubrication and protection of any kind of wire rope. A clean, non-drip film and corrosion protective film remains on the surface.

Method of application

Brush, spatula or a spray gun.

CEDRACON SL

Low-viscosity wire rope lubricant and preservative containing graphite. The amount of graphite allows its use at considerable mechanical loads. A highly viscous, non-dripping film protects the wire ropes.

Performance Features

- Temperature range: -35 / +75 °C
- Displaces water / weatherproof
- Protects against corrosion
- Good penetrating effect
- Good protection against wear
- Forms a non-dripping protective film on wire ropes
- Extends the life of a wire rope

Field of application

Always used for the lubrication of wire ropes subjected to extreme mechanical loads and chemical influence, for example in the mining, steel and chemical industries.

Method of application

Brush, via immersion or spray application. Also available in 400 ml spray cans.

CEPLATTYN R-VGP

Specially developed to meet the requirements of the US Environmental Protection Agency for Environmentally Acceptable Lubricants (EAL) and thus comply with the Vessel General Permit (VGP). CEPLATTYN R-VGP is a black grease with special solid lubricants and highly effective anti-corrosion and anti-wear additives.

Performance Features

- Temperature range: -20 to +70°C
- Very good wear protection & water resistance
- Reliably prevents rope corrosion
- Biodegradable
- Meets VGP/EAL requirements
- EU Ecolabel (DE/027/222)

Field of application

Intended for the lubrication of wire ropes used in environmentally sensitive areas, such as harbours, ships, water locks, etc.

Method of application

Brush, glove or via suitable rope lubricators.



Quality & Service



UK Manufacturing Excellence

Our production plant is the most modern and efficient lubricant blending facility in the UK, with state of the art process control and quality management systems. The FUCHS engineering team undertakes a continuous improvement programme to maximise and improve production efficiency even further.

Our commitment, as a leading supplier to the wire rope industry, was confirmed by our significant investment in a dedicated wire rope lubricant manufacturing facility. This highly flexible plant produces stranding and closing operation products for supply into a diverse range of sectors. To view the all of our certificates and accreditations visit: www.fuchs.com/uk

Research & Development

The FUCHS Group has a very strong focus on R&D with more than 400 chemists, engineers and specialists in more than 40 laboratories worldwide. Our labs are extremely well-equipped and audited to the highest levels, having state-of-the-art equipment and highly trained staff with extensive technology and application knowledge. Regular dialogue with OEMs, other industry bodies and component suppliers maintains technical advantages. Our continued investment in R&D ensures that we are at the forefront of lubricant technology.

Quality

It is critical that the product performance is consistent across each and every batch that is produced which is why we have strict QC procedures. We carry out a number of Quality Control tests at our plant including penetration, drop point IP371, and viscosity. We also conducted elemental analysis by ICP (Inductively Coupled Plasma) Spectroscopy to detect metal elements present in raw materials or finished product. This technique ensures that the correct additive levels are present within a defined range. At FUCHS, we also conduct FTIR (Fourier Transform Infrared Spectroscopy) testing which produces an IR absorption plot that can be used to check that there are no unknown materials present in the batch sample.

FUCHS Service Support Packages

Expert support in fluid supply, distribution, monitoring and maintenance, geared towards benefiting your company and helping you to build a value added maintenance programme.

High-performance lubricants keep your operations running whilst our advanced monitoring tools, together with unrivalled technical support, remove any unwanted surprises before they happen.

- Fluid management
- Technical support
- Reliability support

Note

The information contained in this product information is based on the experience and know-how of FUCHS LUBRICANTS in the development and manufacturing of lubricants and represents the current state-of-the-art. The performance of our products can be influenced by a series of factors, especially the specific use, the method of application, the operational environment, component pre-treatment, possible external contamination, etc. For this reason, universally-valid statements about the function of our products are not possible. Our products must not be used in aircrafts/spacecrafts or their components, unless such products are removed before the components are assembled into the aircraft/spacecraft. The information given in this product information represents general, non-binding guidelines. No warranty expressed or implied is given concerning the properties of the product or its suitability for any given application.

We therefore recommend that you consult a FUCHS LUBRICANTS application engineer to discuss application conditions and the performance criteria of the products before the product is used. It is the responsibility of the user to test the functional suitability of the product and to use it with the corresponding care.

Our products undergo continuous improvement. We therefore retain the right to change our product program, the products, and their manufacturing processes as well as all details of our product information sheets at any time and without warning, unless otherwise provided in customer-specific agreements. With the publication of this product information, all previous editions cease to be valid.

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