

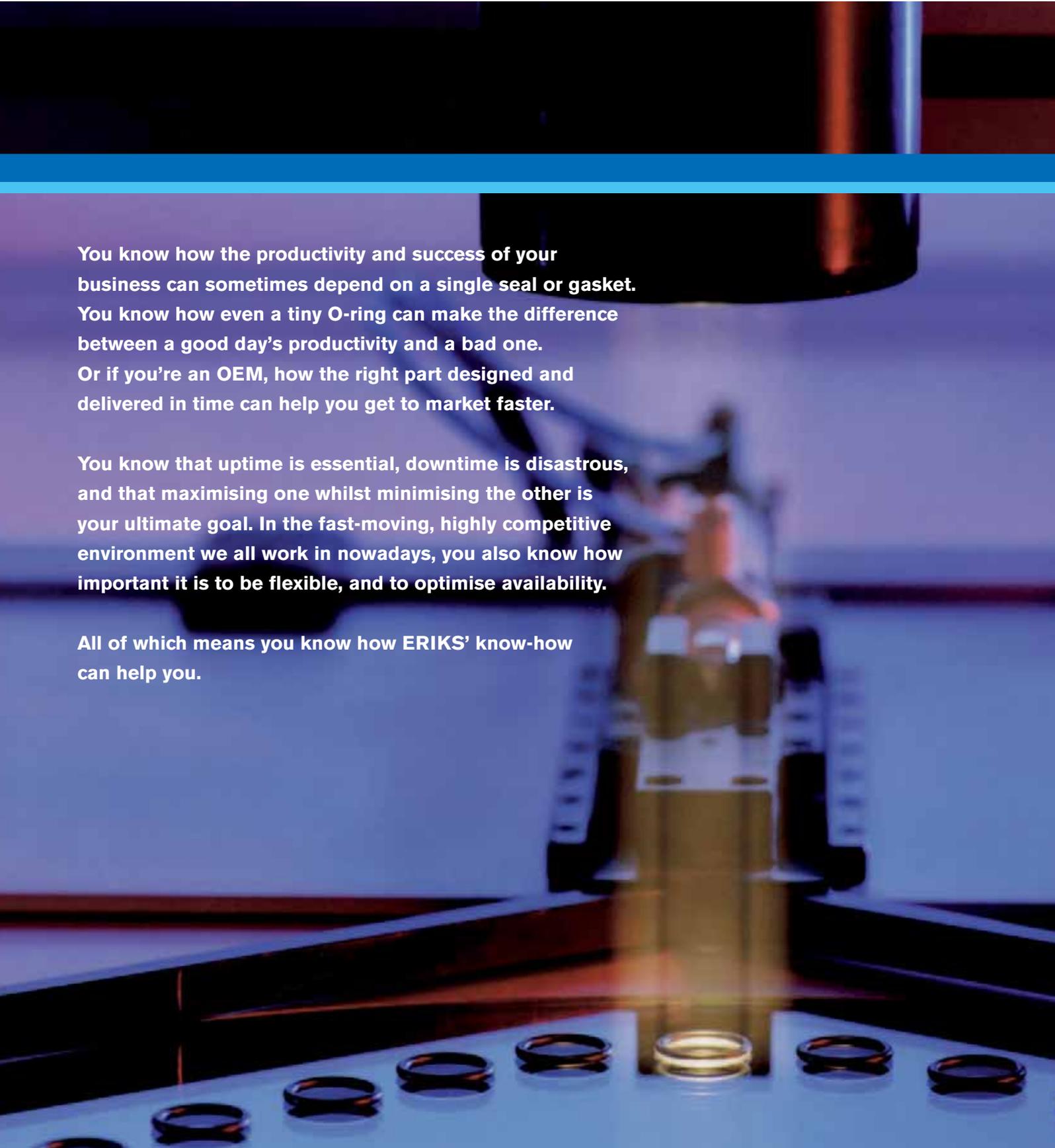


All the **SEALING TECHNOLOGY**
know-how you need

MARKET • PRODUCT • APPLICATION • CUSTOMISATION • LOGISTICS • INFRASTRUCTURE

know-how makes the difference

ERIKS



You know how the productivity and success of your business can sometimes depend on a single seal or gasket. You know how even a tiny O-ring can make the difference between a good day's productivity and a bad one. Or if you're an OEM, how the right part designed and delivered in time can help you get to market faster.

You know that uptime is essential, downtime is disastrous, and that maximising one whilst minimising the other is your ultimate goal. In the fast-moving, highly competitive environment we all work in nowadays, you also know how important it is to be flexible, and to optimise availability.

All of which means you know how ERIKS' know-how can help you.

Know how we can help you?

Making the difference since 1952

ERIKS is a world leader with more than 50 years' experience in the production and distribution of O-rings and elastomeric seals, as well as producing and distributing gaskets, rubber products, engineering plastics, valves and hoses.

We offer a range of more than 60,000 seal and gasket stock items, including 20,000 different O-rings alone.

Our business incorporates more than 50 operating companies worldwide, and 62 technical and production centres, spread throughout Europe, the Far East and the USA.

Our Kitting, Vendor Managed Inventory and OEM spare parts supply services are available throughout the UK via our nationwide network, so you can get the parts you need, when you need them. You can be sure our exceptional supply chain capabilities are supported by unrivalled technology, testing and design.

Maintenance or manufacture? We have the know-how.

Do you require product support for maintaining your production equipment at peak operational performance? Or are you looking for a source of high quality, value for money, sealing and rubber products for your OEM operations?

Whichever is the case, ERIKS has the solution. If you require a highly efficient supply chain, we can provide it. If you're looking for maintenance and repairs support, we can provide that too. And when you need to resolve a technical problem, ERIKS have the resources to work with you to provide valuable engineering assistance.

Whatever your needs, our unique combination of skills can be relied upon to provide cost effective commercial and technical solutions. So for example, if our maintenance team observes a seal to have an abnormally high failure rate, we can draw this to your attention and subsequently re-engineer the application if considered appropriate.

From drawing and assembly graphics and 3D visualisations, to testing, development and in-house manufacturing, we can match your requirements for small batch samples or large volume production. And whatever the quantity, ERIKS' products meet the highest quality standards, with ISO9001-2001 accreditation and TS16949 certification.

We're also already working on developing next-generation technology, new technical solutions, and specialist compounds to meet the demands of new applications as they emerge.



Design



Test



Service



Logistics



Manufacture



Quality



Market know-how

Our understanding reaches far beyond sealing technology. Through our consultative partnership approach to customer relationships, we also understand your market and your product and solution requirements, and use this knowledge to inform our product development and the services we offer, to ensure we are always proactive in meeting changing market demands.

Product know-how

Our market know-how drives our product development – enabling us to create innovative products to meet the changing needs of our customers: including OEMs. Our product know-how includes in-depth understanding of product properties and performance – from material specifications to styles and types. We also make this knowledge available to you, through comprehensive technical documentation, electronic resources, and face-to-face via our engineers.

Although product know-how is important, it's the products themselves which are essential. So we make sure we know how best to maintain high product stock levels and availability at all times.

Application know-how

Because we know how your industry operates and how your applications work, we are easily able to translate concepts into practical product selections. However, our know-how goes further.

We utilise 3D CAD technology and conduct Finite Element Analysis to minimise design time, and we work with specialist materials for specialist applications – with aggressive media, for example. So we not only optimise your existing applications, but also work with you to develop solutions for new applications, to improve your efficiency and reduce your costs.

How know-how makes the difference

ERIKS' know-how isn't limited to knowing a great deal about just one aspect of sealing and rubber technology. It extends from our customers' markets to their products and applications, and from customisation to logistics and infrastructure. And it makes a difference you can see.



Customisation know-how

Sometimes it's not what we know, but what we can do with what we know. So if you have a particular concept for your application, you will appreciate our ability to convert that concept into a product specification and, ultimately, a product.

By 'thinking outside the box', we can design a product that offers real improvements. Alternatively, we can design to specification, and manufacture and supply the necessary sub-assemblies. We offer kitting, gasket cutting, and provide full maintenance and support facilities, to ensure we deliver a long-term solution, not a short-term fix.



Logistics know-how

ERIKS' logistics systems integrate seamlessly with your own, for the greatest speed and efficiency of supply. We offer a broad range of supply options, from simple component supply right through to fully integrated solutions, including kitting, VMI, KANBAN and just-in-time delivery.

And naturally, our support is provided 24 hours a day, seven days a week, every day of the year.



Infrastructure know-how

To develop, produce and deliver the right products at the right time demands robust processes, advanced production facilities and optimised and modern logistics.

ERIKS has the necessary infrastructure know-how – from beginning to end of the process – to make the difference. Developed and refined over more than 50 years, and building on extensive experience in providing sealing solutions to OEM customers, our processes are robust, our production facilities are advanced, our logistics modern and optimised, and our IT support leading edge and flexible. All of which helps us to deliver real value to you.

Around 12,000 customers a year from a wide range of markets worldwide call on our O-ring know-how to meet their needs and solve their problems.



O-rings



ERIKS has developed over 200 material compounds, that satisfy various international standards, for the production of our 'O' rings. We are also able to produce to FDA specifications in small quantities in over 40 compounds to 5000 mm diameter. A wide range of materials is used in the production of ERIKS' seals:-

- **Encapsulated**
- **NBR**
- **EPDM**
- **Neoprene®**
- **ACM**
- **PUR (polyurethane)**
- **Silicone**
- **Fluorsilicone**
- **Aflas®**
- **Viton®**
- **Kalrez®**
- **High Purity compounds**

We can supply most customers from stock in no fewer than 20,000 standard sizes. Quad-rings®, back-up rings and cords are also available

But if even our extensive stock doesn't hold the precise O-ring you're looking for, we can produce new moulds within 24 hours, and small quantities of non-standard O-rings – such as coloured versions – in just 1-5 days.

Even when we reduce the turnaround time, we never lower our standards: using only the most effective compound formulations, whilst adhering to rigorous inspection both during and after production. Our total quality system meets ISO 9001:2002, and continuous quality improvement is the keystone of our processes. That's why our in-house laboratory conducts stringent quality checks, including material composition analysis, Compression Set and Fluid Immersion Testing.

Passing the toughest tests

Some of the most demanding applications for elastomeric and plastic parts are in the food, biochemical, pharmaceutical and life science industries, due to the wide range of process media and active ingredients, the aggressive cleaning and sterilisation processes, and the manufacturing regulations and hygiene standards.

ERIKS' range of elastomers and plastics has homologation certification, and complies with the requirements of the FDA, Food Contact Notification, United States Pharmacopoeia, WRAS, and many other statutory bodies. Some compounds offered by ERIKS also prevent the development of bacteria and micro-biofilm.



Dynamic Sealing

10,000 different sizes of dynamic seals are available from stock, 24/7, from our central warehouse. And if you have a requirement for a special Rotary or Hydraulic dynamic sealing solution, decades of close working partnerships with customers and manufacturers across the entire dynamic seals marketplace have given us the technical and applications know-how to meet your needs.

At the forefront of technology, ERIKS are continually working to deliver new elastomers or alternative solutions to improve your equipment's performance. Because in addition to one of the most comprehensive ranges of dynamic seals available, we also offer special custom-made solutions to meet your specific or unique application.

Solutions can be developed using our own extensive know-how, or by calling on the experience of our supply partners.

Our design and testing technology – incorporating Finite Element Analysis, ensures the solutions we create meet our high standards as well as your specific requirements. We can even provide 3D rendered models for you to insert into your own graphic files, to ensure our product suits your design before manufacture goes ahead.

And whether from stock or manufactured to your specification, our solutions utilise only the highest quality materials, and are rigorously inspected and quality controlled – both during manufacture and prior to despatch – to ensure only the best products ever reach you, our customer.

DYNAMIC SEALING – HYDRAULIC

ERIKS' hydraulic seals capability encompasses a variety of seal types and materials, as well as design expertise and manufacturing resources to meet all kinds of requirements.

For example, our in-house CNC machine enables us to cut one-off seals to meet customer requests for unique solutions. The same machine also makes it simple, economical and quick for us to provide sealing solutions in an emergency. We can easily manufacture a new seal for prototyping, and just as easily manufacture an otherwise obsolescent seal for a particularly old machine.

Having our own in-house CNC machine also makes it easy for us to deliver small production runs which would otherwise prove uneconomical for our customers.

Specifically, the ERIKS Hydraulic Seals range comprises:

- **Rod/Piston Seals**
- **Dirt Wipers**
- **Guide Rings**

All these seal types are available in PUR (polyurethane), fabric-reinforced NBR, and special PTFE compounds.





DYNAMIC SEALING – ROTARY

ERIKS' unmatched range of rotary shaft and bearing seals comprises:

■ **Elastomeric Oil Seals**

- NBR
- HNBR
- Viton
- Silicon etc.

■ **Fabric-Reinforced Rubber Seals**

■ **Split Seals**

Unique gas-tight radial lip seals which can be removed and fitted without breaking down the rest of the machinery, thus minimising downtime.

■ **V-Rings**

Protection against water spray and dust.

■ **PTFE Seals**

ERIKS is a market leader in PTFE seal technology, having designed and manufactured this seal type for more than 30 years. Many ERIKS PTFE Seals have FDA certification for use in the food sector.

Rubber technology

Whatever your industry and whatever your application, ERIKS has the know-how to be your one-stop supplier for development, prototyping, testing, production and certification of your rubber seals and parts.

Our comprehensive product range incorporates not only rubber, but also Thermo Plastic Elastomer (TPE). Our TPE solutions are a prime example of our innovative thinking, combining two or three thermo plastic elastomers in one product to reduce the steps in the manufacturing process.

Our in-house CAD/CAM capability also enables us to quickly design and accurately manufacture innovative solutions to meet new applications and operating conditions.

Our wide range enables us to meet the needs of a variety of industries and markets: including those with specific requirements and exceptional demands.

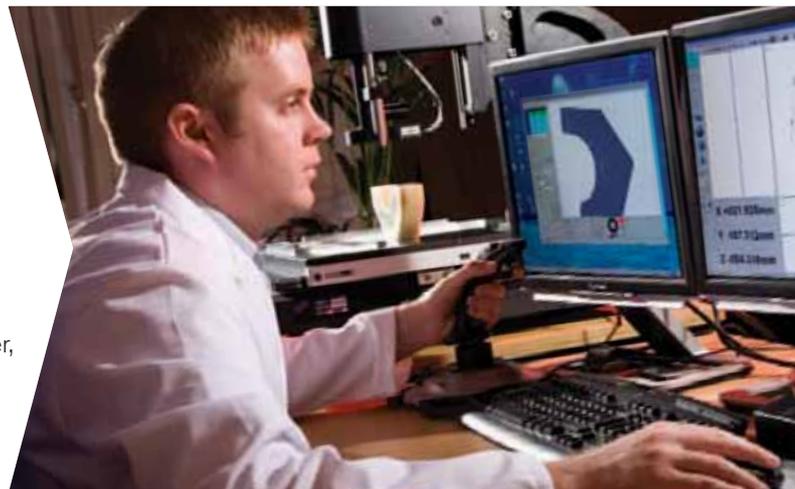
For example, the oil and gas industry requires seals and components for exploration and drilling applications, as well as for the unique – and uniquely demanding – environments of down-hole wells. These are operating environments of extreme high temperatures and pressures, placing unprecedented strains on elastomers. The environments may also contain chemicals, or use chemicals in drilling, completion or intervention processes, which can actively degrade common

elastomers. However, ERIKS' know-how ensures that the products we supply meet the needs of our oil and gas customers, and perform perfectly whatever the conditions.

Similarly demanding but at the opposite end of the spectrum is the biotechnology industry, where rubber sealing and technical components are used in a wide range of applications. ERIKS' products for this market include gaskets and miniature components, to meet the need for ultra-high purity, and also resistance to aggressive chemical environments.

The semi-conductor industry and the automotive industry are also major customers for ERIKS' rubber technology products, which prove themselves over and over again with their quality, capability, performance and durability.

Our product range encompasses mouldings, profiles, inflatable seals, anti-vibration mounts, bellows, cellular/sponge rubber, high performance and high purity rubbers, coated rubber parts, O-rings, and specialties such as assemblies, kits, and cylinder coverings.







Every flanged connection has an ERIKS' solution. And whether it's from our extensive stock, or manufactured in-house to your specific geometry requirements, it will be backed by product and application know-how that ensures complete compliance with your business needs.

Industrial gaskets



Our solutions cover a wide spectrum of pressure and temperature environments, and range from providing sealing against aggressive chemicals, to FDA-approved gaskets for the food industry. However, whatever your requirement, if the solution is not already available, we have the know-how to develop, design and manufacture it to meet your precise and individual requirements – quickly and cost-effectively.

Designed to suit ASME VIII, EN1591 and PVRC, all our products naturally also comply with ISO9001: 2001.

Design and manufacturing

Our design and manufacturing know-how encompasses products, materials, processes and applications. So we can create a complete sealing solutions package for you that not only suits your application perfectly, but also helps to keep your assets running longer and more efficiently, and reduces maintenance downtime.

Our state-of-the-art cutting system requires no fixed tooling and operates on a CAD/CAM interface, enabling us to provide a fast, flexible manufacturing service, with exceptional dimensional replication and consistent quality. Coupled with the local support available from our network of branches, this means we can guarantee a quick response, 24 hours a day, 7 days a week, 365 days year – even for non-standard parts.

Our product groups cover non-metallic, semi-metallic and metallic gaskets, and we also offer valve stem and stuffing box seals in a range of materials.

■ Non-metallic

Our non-metallic gaskets are available for a wide range of low-pressure applications, and are used across industries of all types, to seal against low-pressure steam, hydrocarbons and their derivatives, strong organic acids, foodstuffs and similar.

■ Semi-metallic

Semi-metallic gaskets are designed for medium and high-pressure applications, and offer a high degree of safety. A comprehensive range of spiral wound and kammprofile gaskets is available ex-works, supported by our made-to-order service for your bespoke requirements.

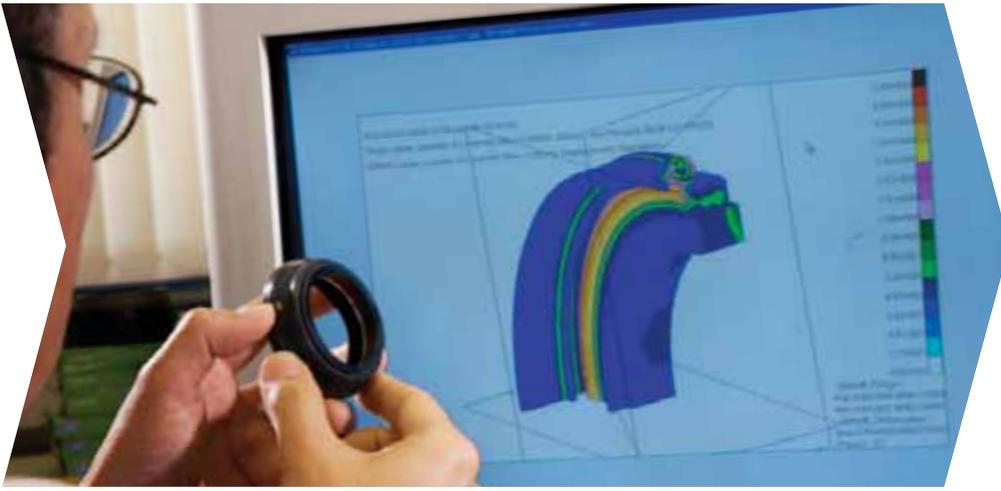
■ Metallic

Metallic gaskets are intended for use in high-pressure environments, where joint integrity is essential. Applications include oil and gas upstream, high temperature reactors, and high-pressure heat exchangers.



Mechanical seals

Industry's ever increasing social responsibility to minimise the contamination of our environment, has made the integrity of seals used in many production processes, of paramount importance. ERIKS' range of mechanical face seals meet this technical challenge whilst ensuring acceptable levels of commercial impact.



Whatever your application or pump type ERIKS can advise you on the most effective mechanical seal for your needs. With a comprehensive range of standard, ready-made seals to choose from, and capability to produce bespoke seals of all types, ERIKS can guarantee you a sealing solution which will satisfy your economic requirements as effectively as your environmental ones.

Our 24/7 support includes troubleshooting and solving design problems. To minimise production downtime, we undertake to supply

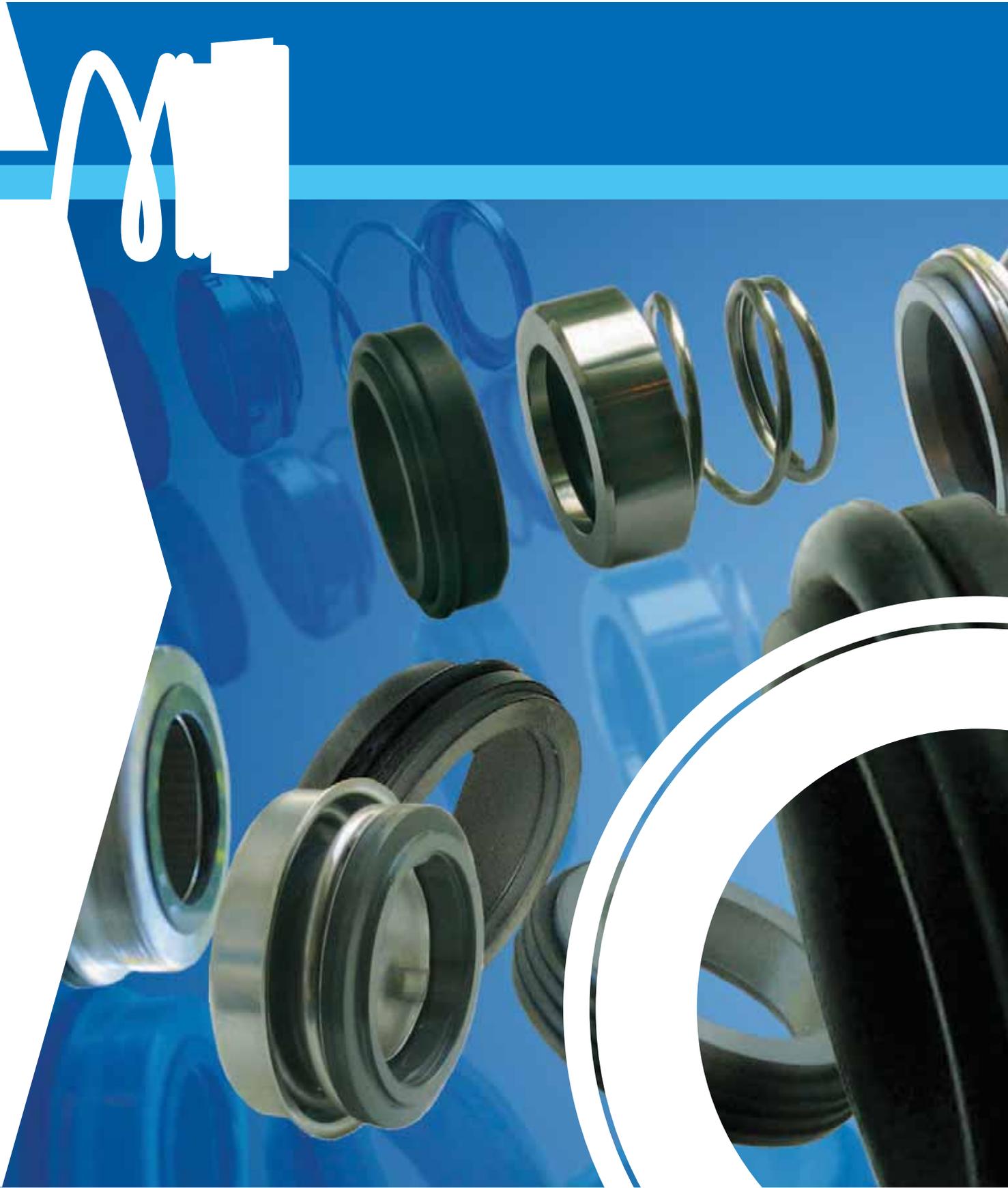
replacement product quickly and efficiently from our comprehensive range of standard seals. Where a solution to a problem calls for a revised or new design, special manufacture is given top priority whenever possible.

We supply and manufacture seals with a range of different face types, such as carbon and silicon carbide. We are also at the leading edge of seal design, continually researching, testing and developing new material solutions to satisfy new applications or more stringent demands – such as zero emissions or FDA regulations.

In the face of other increasing costs, it may be tempting to save money in the short-term by using cheap seals. However, when the downtime,

environmental and repair costs of – for example – an oil leak from a faulty or failed seal – are taken into account, then a high quality, highly effective seal from ERIKS can be seen as an investment, not a cost.

And when legislation, or your application, changes, you can call on ERIKS to work with you to design, develop and manufacture a new solution – quickly and cost-effectively – to keep you legal and keep you operating.



Mechanical Seal Repair and Refurbishment.

Why replace a mechanical seal when it could be more economical and quicker to repair it. The ERIKS service strips your seal and subjects it to a multi stage cleaning process prior to a full inspection and report. With your approval we then go on to fully refurbish the whole seal including grinding and lapping the sealing surface to the same or even higher specification the original manufacturer. Your seal is then returned to you fully protected and ready for reinstallation saving time and money.



ERIKS' solutions and the environment



OEMs and industrial producers face twin pressures to improve their environmental performance. On the one hand, increasing public awareness demands that all businesses must be environmentally accountable, and must play their part in minimising the negative environmental impact of their activities. On the other hand, the EU is making life increasingly difficult for manufacturers and producers, through more and more directives intended to limit pollution of all kinds from industries of all types.



In these prevailing circumstances, the impact that something as small as a seal can have may seem minimal. However the fact is that an ERIKS sealing solution can have environmental benefits in a number of ways.

Limiting pollution

Leaking seals can allow pollutants of all kinds to be released into the environment – whether it is simply lubricating oil, or something more toxic from the process itself. For that reason, it is essential that every seal you use is right for its application, maintained in

optimum condition, and replaced as soon as it becomes worn. ERIKS seals are designed for the job, of consistent high quality, and can be replaced with exact dimensional replicas when worn.

Reducing emissions

The first step towards reducing emissions and any subsequent pollution is, of course, to detect the leak quickly and act on it immediately. ERIKS can provide leak-detecting gaskets which indicate a leak as soon as it happens, enabling you to effect a quick and effective repair or replacement, before irreversible damage is done.

Saving the environment.

Saving money.

Doing your bit for the environment with the help of ERIKS seals is also doing your bit for your bottom line. A high quality seal not only prevents leakage – and therefore pollution – but also increases operating efficiency. And a high quality seal works more efficiently for longer: reducing downtime, maximising uptime, increasing Mean Time Between Failure, and cutting your Total Cost of Ownership.

Where **know-how** makes the difference

Our know-how is concentrated for greater effectiveness. In addition to sealing and rubber technology, we restrict our field of operations to the following core activities, where we know we can make a difference our customers will appreciate.



Power transmission

- Hydraulic hoses and accessories
- Hydraulic components and systems
- Pneumatics
- Electronic components and systems
- Gearboxes, motors and pumps
- Mechanical components
- Bearings



Tools and maintenance products

- Machines
- Company systems and equipment
- Workshop essential supplies



Electrical and mechanical engineering services

- Repair and refurbishment of key rotating assets
- Condition monitoring
- Maintenance programmes
- Impartial repair and replace options



Specialist technologies

- Rencol Tolerance Rings
- Revolve Bearings
- WYKO Tire Technology



Flow technology

- Valves
- Instrumentation
- Industrial hoses and accessories
- Plastic piping



Technical and logistical services

- Machining
- Engineering
- e-Business
- Stock management



Industrial plastics

- Plastics for injection moulding
- Plastic semi-finished products

ERIKS UK, Amber Way, Halesowen,
West Midlands. B62 8WG

Web www.eriks.co.uk
Tel 0845 006 6000

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