

ERIKS Sealing & Rubber Technology

Let's make industry work better

ERIKS

Know how ERIKS can help you

You know how the productivity and success of your business sometimes can depend on a singly seal. You know how even a tiny O-ring can make the difference between a good day's productivity and a bad one. Or how the right part designed and delivered in time can help you get to market faster. ERIKS' know-how makes the difference since 1940.



ERIKS is a world leader with more than 75 years' experience in the production and distribution of high-performance O-rings, dynamic seals and rubber products. Whatever your needs, ERIKS has the solution.

Our business incorporates numerous group companies in multiple countries around the globe. We have a dedicated local team with national stocks and the support of the worldwide ERIKS network, so you can get the parts you need, when you need them.

Our hallmark is quality. From design to testing; from supply to after-service; from manufacturing to innovation, ERIKS is entirely focused on providing you, the customer, with excellence in all that we do.

We ensure that semi-conductors, drilling companies, vessel repairers, (petro)chemical plants, utility suppliers, food manufacturers, pharmaceuticals and other key industries function effectively by supplying only the best materials available on the market.

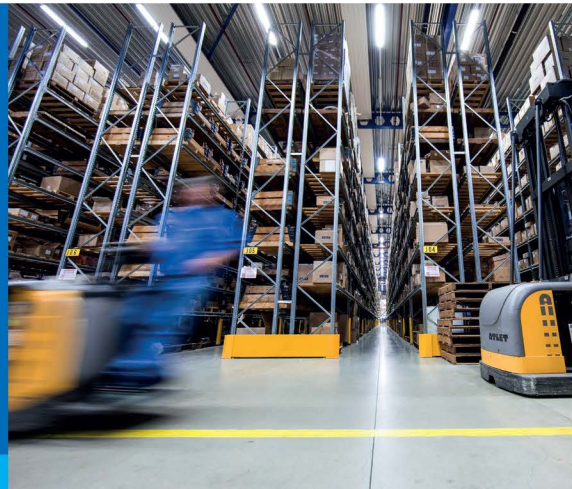


ERIKS' range of seals and rubber products has homologation certification, and complies with the requirements of the FDA, Food Contact Notification, United States Pharmacopoeia, WRAS, and many other statutory bodies. Some compounds offered by ERIKS also prevent the development of bacteria and micro-biofilm.



ERIKS is committed to keeping your site at full production

Our aim is to build long-term working relationships so that you get the product you want, when you want it, at the right price and with superb services. Our extensive stocks and flexible logistics systems can provide you with considerable savings.



Quick supply

As largest stockholder of sealing and associated products, you are assured of the highest level of availability to keep your operation working. We hold extensive stocks of O-rings, that may be dispatched same-day to meet your requirements.

Customer specific stock holding is our specialty. Our advanced logistic software helps us optimise customer specific stock to maximise availability yet minimise your capital exposure.



Supply chain solutions

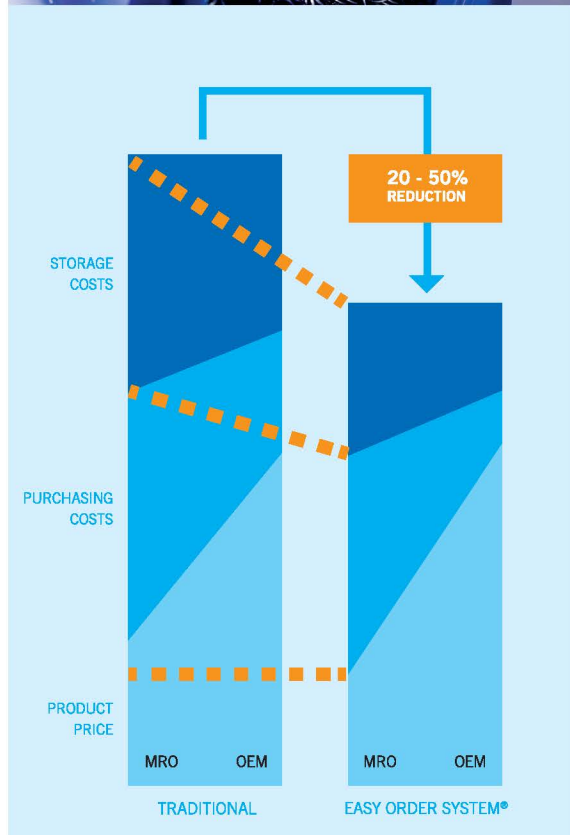
- Are you planning to reduce your procurement costs?
- Do you want to reduce your Total Cost of Ownership once and for all?
- Are you looking for a solid partner who can help you achieve these goals?

Then we would like to welcome you to the ERIKS Easy Order System®

ERIKS

Easy Order System®

Local presence	Shipment clustering
VMI service	On-site warehouse
e-Stock management	Just-in-time delivery



ERIKS O-rings: dedicated to the future

After the invention of the O-ring in the early 40's of the last century, ERIKS was one of the pioneers to bring this product to the world market. We provide a wide assortment with one goal: to offer you the best solution with the perfect seal.

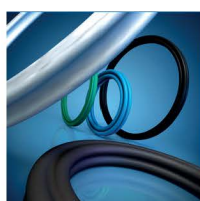
The most common type of static seal is the flexible elastomer O-ring. O-rings provide an affordable, simple to install seal.

- 15,000 different dimensions on stock
- Available in a variety of materials to suit every sealing application
- Produced in modern injection and compression moulding machines
- Compounds following international norms and controlled in our laboratories
- Fully moulded O-rings are manufactured to several international size standards, incl. BS1806, BS4518, AS568, ISO 3601, JIS B2401 and DIN 3771
- Non-standard custom sizes, up to 2.5m (8ft) diameter can be produced in a single moulded version to meet specific requirements, and even unlimited diameter with our Vulc-O-rings



ERIKS O-ring most used compounds

Polymer type	Compound reference	Hardness (IRHD)	Temperature	Application
NBR	36624	70	-30 to +120 °C	Standard compound with good compression-set values and medium acrylonitrile content for use with oils, animal fats, acetylene, alcohols, fuels and many other fluids
NBR	47702	90	-30 to +120 °C	Similar to NBR 36624 with higher hardness for higher pressure applications
FKM	51414	75	-20 to +200 °C	General purpose compound with very good compression-set values at high temperatures and chemical resistance to oils, fats, fuels. Suitable for vacuum applications
FKM	514320	90	-20 to +200 °C	Similar to FKM 51414 with higher hardness for higher pressure applications
EPDM	55914	70	-50 to +130 °C	EPDM terpolymer sulphur cured - industrial standard EPDM O-ring compound with very good compression-set and good ozone, weathering and ageing resistance
EPDM	55985	68	-45 to +150 °C	Good chemical resistance and better physical properties than standard sulphur cured EPDM-compounds. Many certificated for drinking water and food applications
VMQ	714177	70	-60 to +220 °C	General purpose silicone with very good compression set and excellent physical and applicable in a wide temperature range
HNBR	88625	70	-30 to +150 °C	Hydrogenated nitrile compound of standard quality, good steam resistance (up to 130 °C), particularly suitable for chemical and mechanical applications



Outperforming standard O-rings in dynamic applications

X-rings

- Sealing is achieved by the diametrical squeeze in a right angled groove
- Lower diametrical squeeze than with O-rings as standard grooves are deeper
- More sealing capacity and a groove for lubrication; very favourable for dynamic sealing
- High stability for dynamic applications and more resistant to spiral failure



Versatile sealing solution to improve your equipment lifetime

V-rings

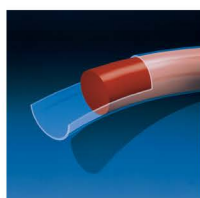
- Ring rotates with the shaft and holds itself in position by its elastic fit on the shaft
- Serves as a dynamic sealing element as well as a flinger
- Sealing lip provides excellent protection against water spray and dust
- Standard materials include NBR or FKM for higher temperatures or aggressive media



The most economic solution for large non-standard diameters

The Vulc-O-rings

- O-ring from high-performance cord, similar quality as moulded O-rings
- Very low compression set values and available in FDA compliant quality
- Available in many materials, such as NBR, FKM, EPDM, VMQ, CR and HNBR
- No upper diameter restrictions and no moulds required - resulting in cost savings



World's best encapsulated O-ring for critical applications

TEFLEX®

- High flexibility combined with the ultimate chemical resistance of Teflon® FEP/PFA
- Original Viton® or silicone cores with good compression set: no low quality compromise
- Available in all dimensions up to 5,000 mm in diameter, FDA compliant, USP Class VI
- Particularly suitable for food & pharmaceutical applications



Total flexibility to meet your specific needs

Extrusions

- Extensive range of special cords in high-tech compounds
- Standard round cords in NBR, EPDM, FKM, VMQ, and CR
- Standard square and rectangular cords in VMQ, EPDM, FKM and CR
- Specialty extrusions in many materials and various hardnesses



Excellent back-up for high pressure applications

Back-up rings

- Anti-extrusion ring, used to extend the operating pressure of an O-ring
- Axially compresses with pressure, increasing the radial width to close the extrusion gap
- Available thermoplastic materials include PTFE, PEEK and Glass filled PTFE
- Back-up rings are groove specific, please contact our sales team for detailed advice



Rely on Kalrez® in the harshest processing environments

The high chemical resistance, high temperature, high purity seal for optimum performance in demanding applications.

High performance perfluoroelastomer

Kalrez® compounds last longer and seal more effectively than other elastomers in demanding processing environments. Kalrez® compounds are resistant to almost any chemical, solvent including sour multi-phase fluids. Kalrez® parts offer extreme high temperature stability, meet FDA/USP requirements for high purity and deliver outstanding performance under pressure.

Kalrez® can reduce your costs and improve your process by:

- Resisting degradation in harsh chemicals
- Maintaining sealing force at high temperatures to reduce leakage
- Containing fewer ingredients that extract into the process
- Providing better vacuum sealing and lower outgassing in semicon applications
- Meeting stringent FDA/USP regulations for purity and cleanliness in food and pharmaceutical applications



Kalrez® uses and applications



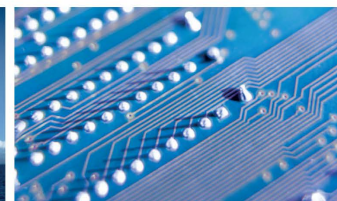
(Oleo)-Chemical
6375, 7075 and others as best solution for high temperature and chemical resistance.



Food & Pharmaceutical
6221 and 6230 for high purity conform FDA & USP Class VI regulations.



Oil & Gas
7090 for high pressures and 0090 for H₂S, AED/ RGD & Norsok M710 approved.



Semiconductor
8900, 9100 and others for ultimate chemical, vacuum resistance and low outgassing.

ERIKS is a synonym for quality



The correct compound and curing process is critical to achieve the desired performance of any seal - ERIKS frequently tests the key mechanical properties to ensure material conformity.

Quality assurance

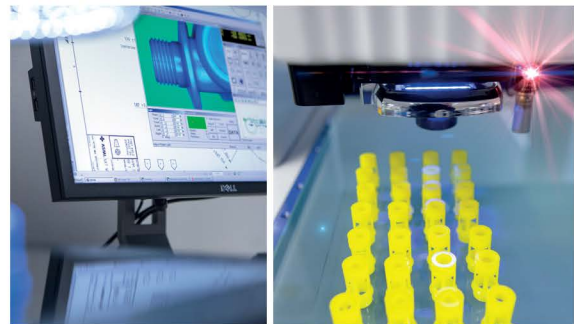
Our extensive in-house material test capability allows us to ensure the highest quality of the products we supply. We go above and beyond industry standards to ensure that our products are manufactured with high quality, high performance materials and consistent, repeatable and documented procedures.

All of our manufacturing sites are ISO 9001 certified, some are QS 9000 and TS 16949. Our rubber laboratory, Elastomer Research Testing (ERT) is ISO 17025 certified and enables us to both test and measure compounds and to develop new solutions. ERIKS invested in non-contact inspection devices and machines to offer zero-defect services.

In-house engineering

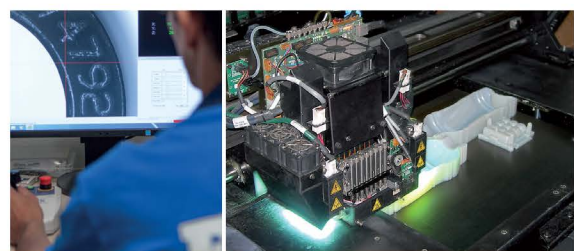
Our in-house engineers can design bespoke seals or custom rubber parts to offer you the best sealing solution for your requirements.

- Compound development & testing
- Rapid prototyping
- 3-D CAD, 3-D printing
- Prototype or 0-series production
- Custom seal or rubber part design with 3-D CAD and Finite Element Method
- ISO Class 7 cleanroom with ISO Class 5 flowbench packaging capabilities



Following test papers are available on request:

- Initial testing automatic certificate
- PPAP reports
- Inspection reports
- Compound certificates
- Surface inspection reports
- Datasheets
- Material safety datasheets
- Initial sample inspection report





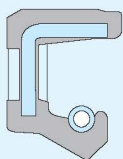
ERIKS: Leader for years in rotary seals

Since 1952, ERIKS has been at the forefront of sealing technology. We have 9,000 moulds to produce standard oil seals in all possible executions. Our high-performance oil seals are produced in conformity with international standards.

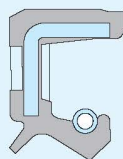
Common types of oil seals

Construction with outside rubber surface

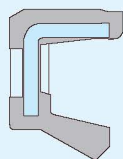
TYPE R



TYPE RST

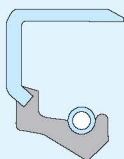


TYPE RZV

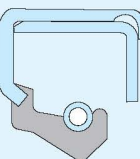


Construction with outside metal surface

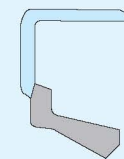
TYPE M



TYPE GV

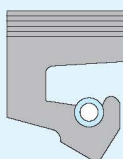


TYPE MZV

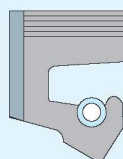


Construction with fabric insert reinforcement

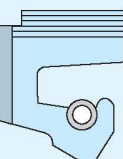
TYPE WR5



TYPE WR6

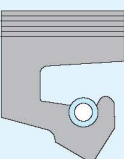


TYPE WR7

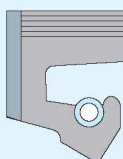


Split construction 'split seals'

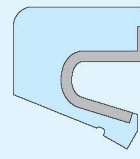
WR5 SPLIT



WR6 SPLIT

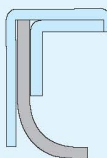


R-SPLIT

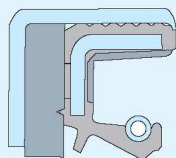


Driver products

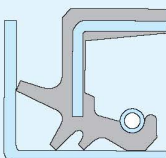
PTFE LIP



COMBI



CASSETTE



Information provided is indicative only. Our sales team will be delighted to provide detailed, technical advice.

Common materials

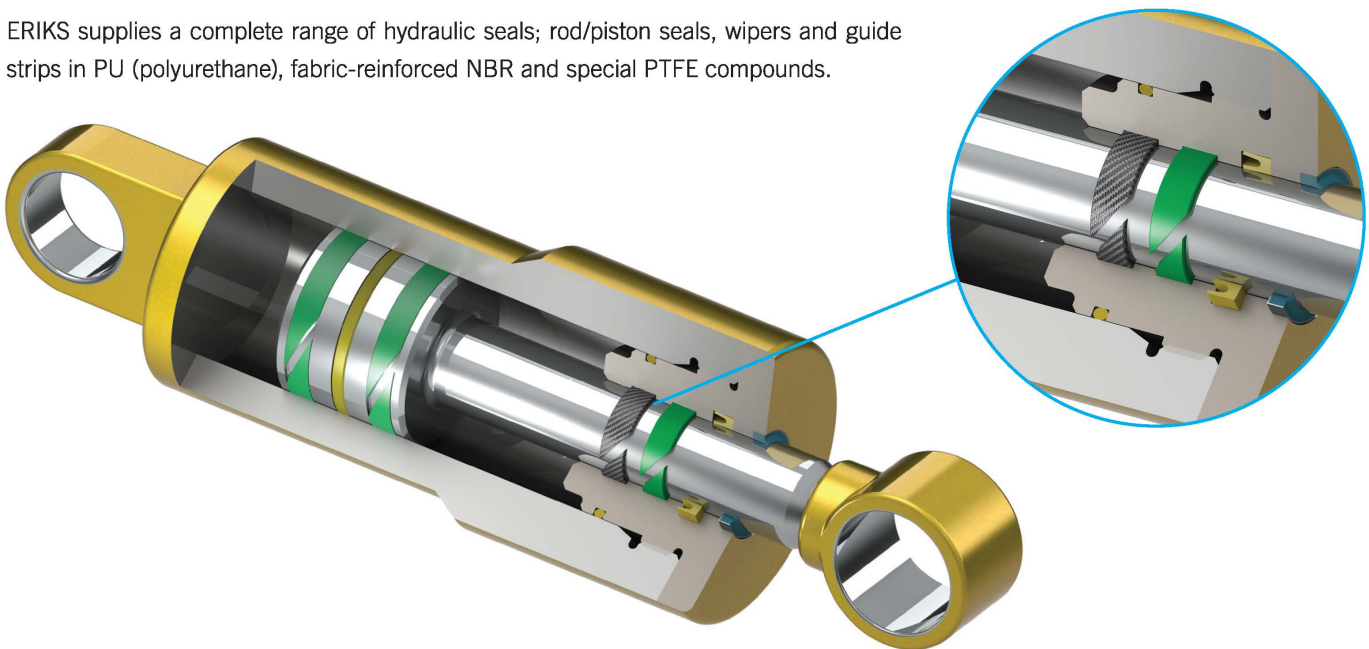
TYPE	°C	CHARACTERISTICS
NBR	-35 to +100	- High wear resistance - Good running properties for general use
ACM	-20 to +130	- Better heat, oil & chemical resistance than NBR - Use in oil with load bearing activities
FPM	-15 to +180	- High level of chemical resistance - High temperature resistance
VMQ	-50 to +150	- Wide temperature range - Commonly used in low temp. applications
PTFE	-80 to +200	- Very high level of chemical resistance - Low co-efficient in friction, poor elastic properties



Innovative solutions in hydraulic seals

ERIKS' hydraulic seal capability encompasses a variety of seal types and materials, as well as design and manufacturing resources. We consider it a challenge to advise, develop and produce the optimum seal for every application.

ERIKS supplies a complete range of hydraulic seals; rod/piston seals, wipers and guide strips in PU (polyurethane), fabric-reinforced NBR and special PTFE compounds.



Spring energised seal: The high-performance allrounder

Spring energised (SE) seals are often the ideal solution for demanding industrial applications, such as chemical pumps, gas turbine engines and vacuum equipment. SE seals are precision machined from PTFE and other high performance polymers and work consistently under a wide array of temperatures and pressures. With our in-house design and manufacturing capabilities we match every harsh challenge with the best solution.

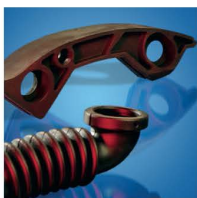




ERIKS: your reliable partner in rubber

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

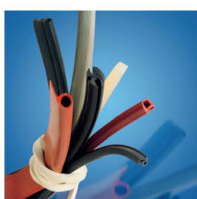
Our wide range of rubber products and innovative thinking enable us to meet the needs of a variety of industries, including those with specific requirements and exceptional demands. Our product range encompasses mouldings, profiles, inflatable seals, anti-vibration mounts, bellows, cellular/sponge rubber, high performance and high purity rubbers, coated rubber parts, O-rings, and specialties such as assemblies, kits and cylinder coverings.



Anything is possible

Custom mouldings

- Practically any shape can be created as we know how to design the required tool
- Moulding by compression, transfer and injection methods
- Used method is determined by the volume and compound type required



The options are many

Extruded rubber profiles

- Comprehensive product range of rubber profiles, from cord to sponge rubber
- Thermo Plastic Elastomer (TPE) solutions available
- Quick design and accurately manufacturing with in-house CAD/CAM capability



Reduce the noise and vibration in your workshop

Anti-vibration mounts

- Cylindrical mounts for general low cost applications
- Technical mounts for reducing noise and vibration transmission and shock protection
- Levelling mounts and anti-vibration plates



Protect your machine elements

Bellows

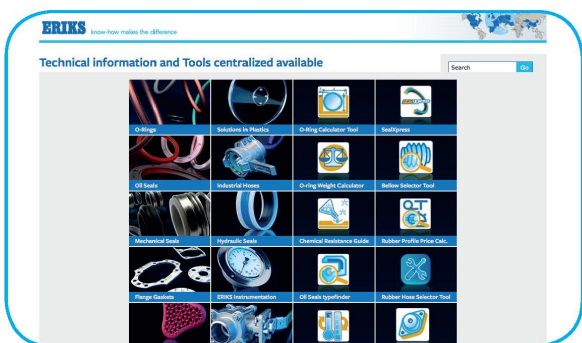
- Protect cylinders and other machine elements against dust, water and other chemicals
- Produced primarily from Neoprene®; good oil and heat-aging resistance
- We offer bellows of nearly any configuration without additional tooling cost



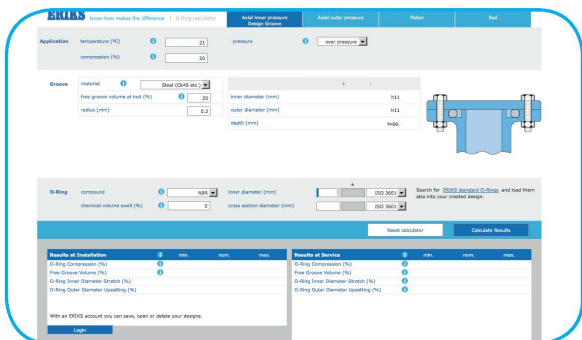
Benefit from ERIKS' know-how online

Technical information centralised available. Visit our specialist website and benefit from ERIKS know-how online where you can find information on our product range, including technical datasheets and production methods.

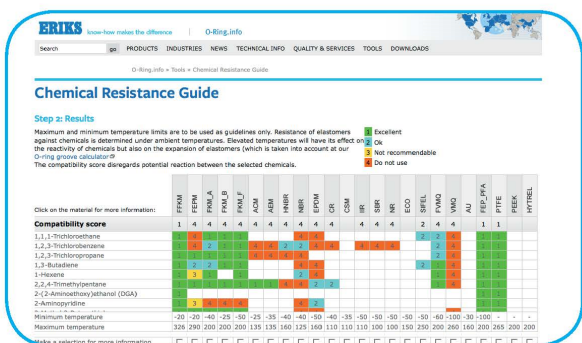
ERIKS offers different methods of interactive customer solutions. Read about our services and possibilities they hold for your company.



WWW.ERIKS.INFO



O-RING DESIGN CALCULATOR



CHEMICAL RESISTANCE GUIDE

- Numerous technical datasheets; 120 datasheets for O-rings available at all times
- Numerous approvals/certificates
- Construction and installation instructions
- Multiple online selection tools and calculators
- Over 4,000 pages of technical information regarding our comprehensive product range

Tools & Calculators

- O-ring Design Calculator
- O-ring Weight Calculator
- Rubber Profile Calculator
- Bellow Selector
- ERIKS SealXpress
- Unit Converter
- Chemical Resistance Guide

Product websites

- O-ring.info
- Oil-seals.info
- Rubbertechnology.info
- Hydraulic-seal.info
- Flange-gaskets.info
- Mechanical-seals.info

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Let's make industry work better