

Welcome to Creative Solutions





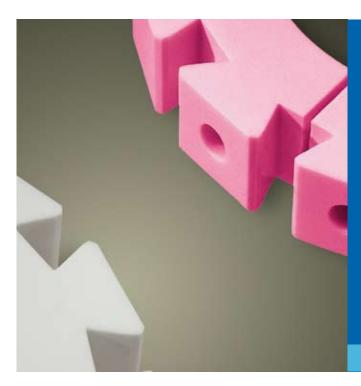
Welcome to the superior way of engineering

Every day at ERIKS we renew our commitment to a culture of continuous improvement in the engineering, design and manufacturing of seals, gaskets, hoses, elastomer parts and plastic parts.

The spirit that binds ERIKS is one of teamwork: common goals, shared enthusiasm for problem solving; and a passionate, company-wide belief that we can always make a positive difference.

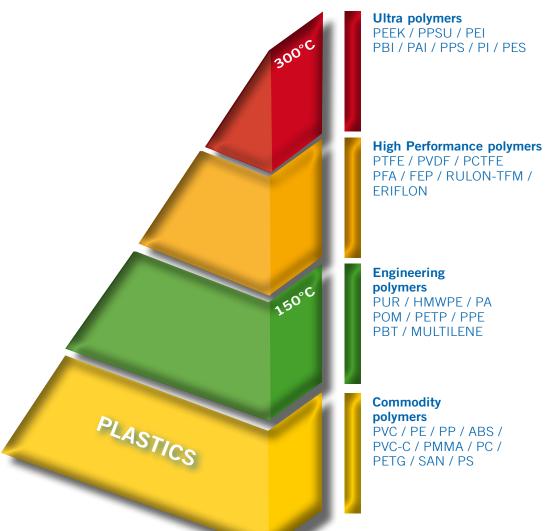


- seals
- gaskets
- hoses
- elastomer parts
- plastic parts



ERIKS is your future!

Plastics, Isolation materials, Elastomers ERIKS is continuously exploring new technologies, developing new products, engineering new applications.

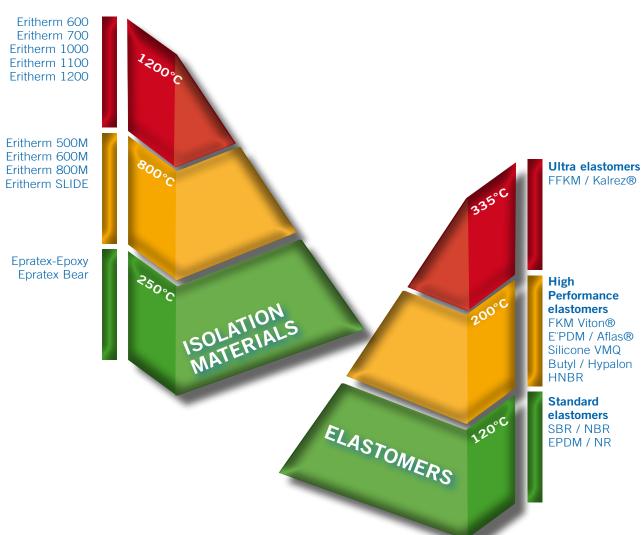


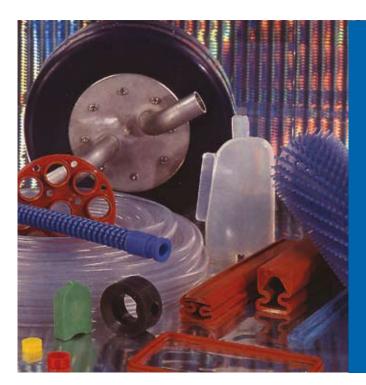
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ERIKS is your future!

Quality features

Networking, customer thinking, innovation, action, readiness for change are the quality features on which our success is based.

We continue to look for new ways to advance developments in the future.

Sound Corporate Structure

ERIKS Group nv is a holding company of a group of technical distribution companies. The ERIKS group has become a leading and innovative supplier to all segments of industry, in the twin roles of specialist and total supplier. ERIKS is, especially by offering the six know-how domains, able to contribute positively to the conduct of business of its customers and manufacturers.

Competent Development Partner

The development begins with the selection of suitable polymer and elastomer compounds and shaping in terms of technical as well as cost aspects.

Innovative technically mature solutions can be realised for prototyping to mass production.

Rapid Prototyping

We secure the result of our development by completing prototypes. 3D-data provides in most cases the basis for virtual production.

Design

For many products we have experienced design teams that use the latest 3D CAD technology and Finite Element Analysis (FEA). In many cases we supply drawings for integrating into the customer's schematics to help our customers.

Test and development

Comprehensive in-house test facilities allow us to perform validation testing to our own and customer's specification.

Competence and reliability

For the production of our tools we rely on a series of highly specialised partners who have proven themselves over many years.



Ready for high demanding markets

ERIKS operates in an environment of continuous improvement, supported by extensive investment in facilities which promote continuous efficiency improvements.

Compounds for demanding markets

ERIKS develops every year new compounds and designs to satisfy the most demanding requirements of our customers. Due to this innovative approach ERIKS delivers many OEM's worldwide in different sectors:

- Nuclear
- Oil and gas
- Life science
- Semiconductor
- Potable water
- Food and pharma
- CPI
- 'green' energy
- Electronics
- Automotive

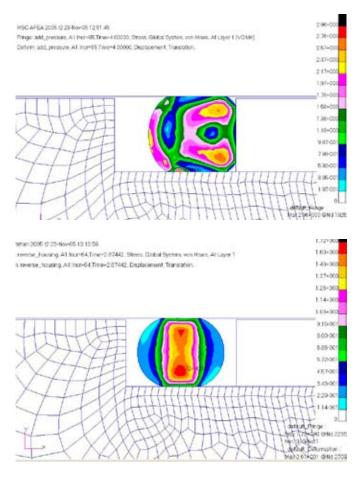




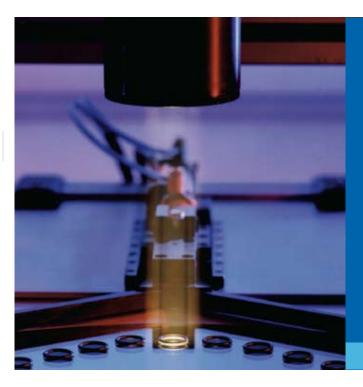
Working together to deliver solutions

ERIKS has experience in different fields in the industry.

Our dedicated material, market and engineering specialists are your partner for individual solutions.







Innovative solutions O-rings

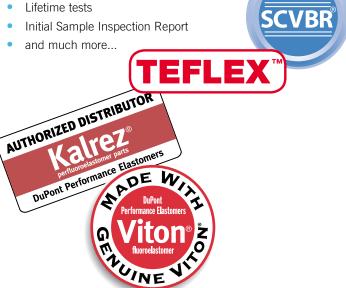
For more than 50 years ERIKS has provided a diverse customer base with successful elastomer rubber/sealing solutions, combining innovative design and uncompromising performance

O-rings

- Compound development
- Standard imperial and metric sizes
- Non-standard sizes
- **Encapsulated O-rings**
- Extensive range of more than 400 compounds in 17 elastomer families
- 20.000 moulds available
- Rapid mould manufacturing
- Website O-ring groove calculator

Extensive controls

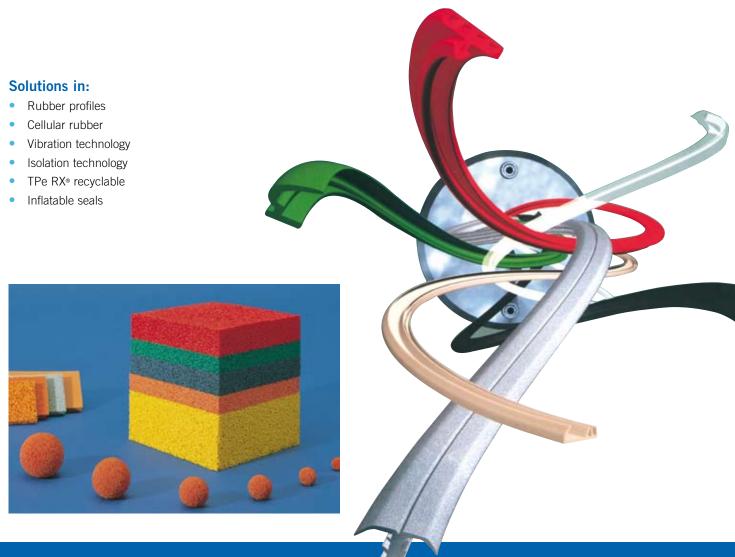
- PPAP Documentation
- ISO 3601-4 class N or S surface control
- FDA extraction tested USP tested
- TGA & FTIR analysis
- Tolerance checks
- Tensile strength
- Compression set
- Lifetime tests
- Initial Sample Inspection Report
- and much more...





Innovative solutions in rubber technology

As a vibrant engineering partner ERIKS solves sealing and rubber challenges to produce effective components in high technology specification materials.



Welcome to Creative Solutions



Innovative high purity seals for life science indurstries

ERIKS is a leading developer of high quality advanced elastomer components for the pharmaceutical, potable water, bioscience, food and dairy processing industries.





Innovative solutions in anti-vibration technology

ERIKS is ideally placed to meet your requirements for safe choice, high quality, quick supplies and cost efficient solutions.

Alternative solutions in anti-vibration technology

We work with partners who are global specialist for the manufacturing and supply of rubber to metal bonded antivibration mounts and systems.

ERIKS is ideally placed to meet your requirements for safe choice, high quality, quick supplies and cost efficient solutions.

With a strong reputation for engineering ERIKS pride themselves on their ability to work very closely with you, the customer, to provide optimal designs and ideal products to solve your specific vibration or shock problem.







Innovative solutions for customer parts in rubber, TPE and plastics

ERIKS designs and develops innovative solutions in custom moulded shapes. With our worldwide partners we offer fast delivery, competitive prices and engineering support. Our in-house CAD/CAM and FEA analysis and quality systems guarantee an individual approach.

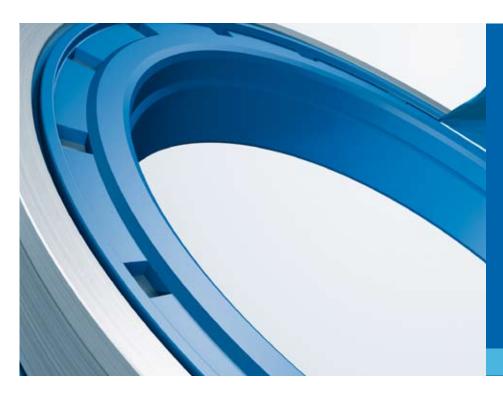
Solutions in:

- Various rubber compounds
- · Various industrial and high tech plastics
- TPe RX® compounds





Passion for Technology



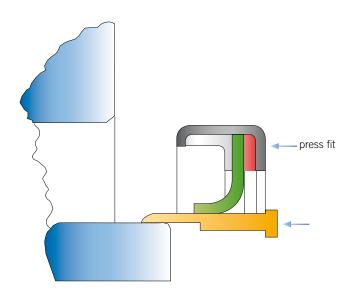
Innovative solutions in rotating seals

ERIKS has been at the forefront of sealing technology and has enjoyed an enviable reputation with major OEM's for over 50 years.

At the forefront of sealing technology

Our highly experienced design team has extensive material expertise and use the latest 3D-CAD technology, parantric modelling and FEA analysis.

Comprehensive test facilities allow us to perform validation testing to our own and customers' specification, and to replicate real world operating conditions.









Innovative solutions in hydraulic seals

Over forty years of experience brought ERIKS to a leading position in the Hydraulic Sealing industries. Our knowledge driven sales force is confronted daily with the most sophisticated technical issues or applications.

Durable and cost saving advises

Solutions are provided based upon new developed products or materials that also enables us to provide our customers with more durable and cost saving advises. With our extensive portfolio of RX-branded products, A-brand products and in house made quick supply and prototype products we are able to serve any size of OEM business.

New standards for Hydraulic cylinders

- Efficiency due to innovative Sealing systems
- Continuous innovation driven by knowledge
- Fast and flexible



More with less...

By standardising a set of seals into a concept and doing so standardise the groove dimensions, makes it not only easier to specify what to use but also leads to reduction of seals and thus space! With these new developments we enable you to reduce your cost price by reducing the length of a stack of seals and guide strips.





Innovative solutions in gaskets

Our in depth knowledge of the products, processes and applications enable us to provide solutions for every flange connection. With our knowledge of the market and the quality products of our well respected A-brand manufacturers we are able to fill in every specification. Thanks to our wide and deep productportfolio, well equiped production facilities and local presence we are able to deliver quickly.

Soft gaskets

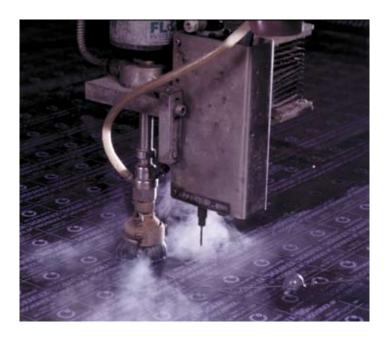
- Graphite
- Fibre sheet
- PTFE
- Rubber
- Mica

Metalic and semi-metalic gaskets

- Spiral wound
- Ring type joints
- Kammprofile
- Metal reinforced gaskets

Other flange solutions:

- Insulation sets
- Isolation materials





Innovative solutions in engineering plastics

ERIKS combines know-how both in machined parts and in injected moulded parts.

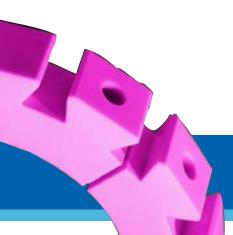
In-house services

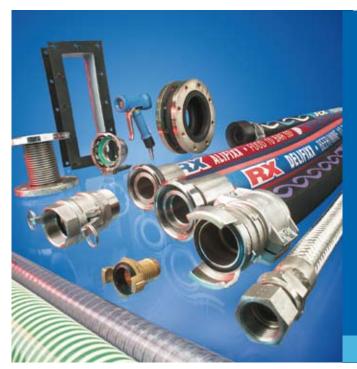
ERIKS disposes of modern in-house machine shops and a team of engineers to realise your projects. In order to provide our customers with complete solutions for their engineering and production needs, we are pleased to offer in-house precision CNC machine shop services. Our state-of-the art equipment can be put to work for you to build prototypes or production runs of all types of plastic components.

We produce finished parts from semi-finished materials of leading European suppliers.

For bigger series ERIKS has the experience and the engineering facilities to offer injection- moulded parts.







Innovative solutions in hose technology

Our in depth knowledge of the products, processes and applications enable us to provide solutions for every flange connection. With our knowledge of the market and the quality products of our well respected A-brand manufacturers we are able to fill in every specification. Thanks to our wide and deep productportfolio, well equiped production facilities and local presence we are able to deliver quickly.

Product innovations for the life science industries

ERIKS is the leading driver of high quality solutions for industrial hoses and accessories. Our in depth knowledge of the products and the applications enable us to provide you the best solution for each hose connection. The intense relationship with our strategic suppliers allows us to be the first to initiate the most recent innovation in hoses and couplings technologies.

High purity hose solutions

- Passes USP class VI
- Meets FDA 21R177.2600
- Animal derived ingredients free
- Safe to use in explosive zones

Solutions in:

- Rubber hoses
- Metal hoses
- Plastic hoses
- Composite hoses
- PTFE hoses
- Bellows
- Couplings
- Assemblies





In-house hose production facilities and services

- Modern workshop with highquality assembly equipment
- Experienced staff
- Optimum connection of couplings on the hose
- Hoses deliverable with required material and test certificates
- On-site hose testing

Research & Engineering

- Product development
- Product adjustment
- Several Cad/Cam systems

Certified Welding

C N C machine park

Assemblies & testing

Clean room assembly and storage (ISO class 7 - class 10.000)







In-house production facilities for plastics, seals and rubber

ERIKS disposes of a vast range of machines to produce your component in the right tolerance at the right time. Our production plants are located in different countries to be close to our customers.

In-house production of:

- PTFE seals
- Plastic finished products
- Hydraulic seals
- Gaskets
- Mechanical seals repair shop

ERIKS is certified TS 16949 for the production of PTFE seals. Our partners in manufacturing have mostly QS9000 or TS16949.







ERIKS MTC: Material Technology Centre

In-house engineering for our customers

Expert theoretical knowledge combined with an extensive test capability means that we are able to offer you an inrivalled capability.

There are 4 elements to our material testing program.

Product Validation

No one wants to waste time and money, or risk a serious failure, testing a new product for the first time on a real application. Therefore we offer validation programs that will demonstrate the products suitability for a specific application.

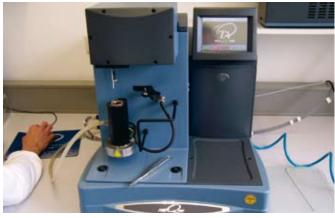
Failure Mode Analysis (FMA)

We have extensive experience in identifying failure modes, and although most failures are caused by installation or simply incorrect choice of seal for the application, it is not uncommon for a customer to be receiving products that are not of the claimed material grade.

Research & Development

Material properties change with temperature and change over time as the material is exposed to temperature, chemicals, ozone and sunlight. We use our test capabilities to understand how the performance of different compounds are affected by these factors. The results we achieve are used to advise customers on what compounds are best suited to their requirements, and to allow us to better model (FEA) the performance of a material in the real world







ERIKS MTC: Material Technology Centre

In-house engineering for our customers

ERIKS' objective is to offer you, our customer, the best sealing solution for your requirements. To enable us to do this we invest heavily in our engineering capability.

R & D

Continuous R & D is core to our success in innovative design solutions, new material compounds and development of our FEA Models to continuously improve the accuracy of which we can predict seal performance. Our extensive in-house material test capability allows us to ensure the highest quality of the products we supply, validate the performance of new materials before they are used by our customers, and to more accurately correlate theoretical performance with real world performance.

Computer Aided Design (CAD)

Our in-house engineers can design bespoke seals to meet your individual requirements and provide you with graphic files that you can import into your own CAD system to ensure correct fit and function.

Finite Element Analysis (FEA)

We use a wide range of FEA tools that help you to achieve a right first time sealing solution. Typical of these include basic tools such as modeling the installation force required to fit the seal into its housing. More detailed analysis may include modelling of how the seal deforms under load, and for different assembly variables estimating the load at which failure will occur.







In-house Clean Room

ERIKS is fully equipped to take over your cleaning and packing activities in one's own cleanroom.

Out-gassing of rubber products by means of vacuum ovens is also an added ERIKS-value to the market.

A clear vision on clean products

Due to a growing awareness in the field of purity, industry focuses more and more on effectively controlling manufacturing processes. The goal is to prevent technical components from being the cause of pollution in processes and systems. Pollution can originate from airborne solid particles, which can be visible or invisible. These particles are called aerosols. To avoid this type of pollution is an important factor in the pharmaceutical-, semiconductor and food industry.

ISO class 7

The size of a human hair is $100~\mu m$ on average. Nowadays it is possible to filter up to $0.5~\mu m$ with very good results and relatively little effort. This filtering takes place in the cleanroom. This sealed space is filled with air in which only a limited number of particles, with a size of $0.5~\mu m$ or more, float about. The current norm for the industry is ISO 14644-1. Within this norm Eriks uses ISO class 7 (also known as class 10,000) for her cleanroom. The cleaning and packing takes place in an, even tighter, class 100~environment which is accepted by 90% of the industry.







Quality assurance

The correct compound and curing process is critical to achieve the desired performance of any seal - so for critical applications, in addition to the manufacturing controls, we will often test the key mechanical properties and measure the material compound "finger print" of every batch to ensure material conformity. In general all products for OEM customers will be subject to an inspection plan where material conformity is checked at regular intervals.

Quality Control techniques

ERIKS monitors the manufactured orders using following quality control techniques:

- First off inspection
- In process inspection
- Final inspection

Different material test equipment is used during production. All of our manufacturer sites are ISO 9001 certified, some are QS 9000 and TS 16949.

Following testpapers are available for request:

- Initial testing automatic certificate
- PPAP reports
- Inspection reports
- Compound certificates
- Surface inspection reports
- Data sheets
- Material safety data sheets
- Initial Sample Inspection Report







Supply chain solutions & e-business

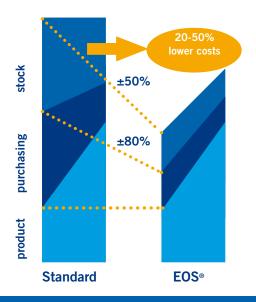
Reduce your procurement costs considerably with EOS: our Easy Order System®.

EOS: Easy Order System®

ERIKS Easy Order System®, a complete set of technical and logistics services enabling your company to reduce procurement costs considerably.

- Are you planning to reduce your procurement costs for C-parts?
- 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 to achieve these goals?

Then we would like to welcome you to the ERIKS Easy Order $\mbox{System}^{\mbox{\tiny \mbox{\scriptsize B}}}$.







Always your partner for innovative new developments

ERIKS has always been and will always be at the forefront of new technical product developments.

A specialist team follows the technical evolution in the world and creates new products adapted to industrial markets. ERIKS is your reference for functional solutions in the industrial world.

Just a few examples

- TPe: recyclable rubber for clean environment
- VR seals: custom made oil seals
- Rocklight: strong as a rock, light as a feather
- EMI: shielding products
- Surfaplus: innovative coatings on rubber
- Eritherm Mica: isolation parts up to 800°C
- Bioplastics







Our interactive technical websites

ERIKS offers different methods of interactive customer solutions. Free programmes are available on our website.

Interactive customer solutions

O-Ring groove Calculator : Industry leading

Rubber Profile Calculator : Industry leading

O-Ring Weight Calculator : Industry leading

Bellow Selector : Industry leading

400 data sheets: Industry leading

Comparison of plastics : Industry leading

Unit Converter : Industry leading

Chemical Resistance Guide : Industry leading

Approvals / Certificats : Industry leading







ERIKS products and services for a better world

Services

- RoHS conform
- MSDS on website
- High Purity USP compliant
- Reach conform
- Datasheets on website
- ADI-free
- Bio-Hygienic
- Potable water certification
- FDA compliant
- Placed in Clean Room













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