

# STANDARD- AND SPECIAL DESIGNED SEALING SOLUTIONS



www.haagensenseals.com

We have thousands of sealing solutions in stock. As standard.

If a standard solution isn't the answer, we develop custom solutions from scratch.

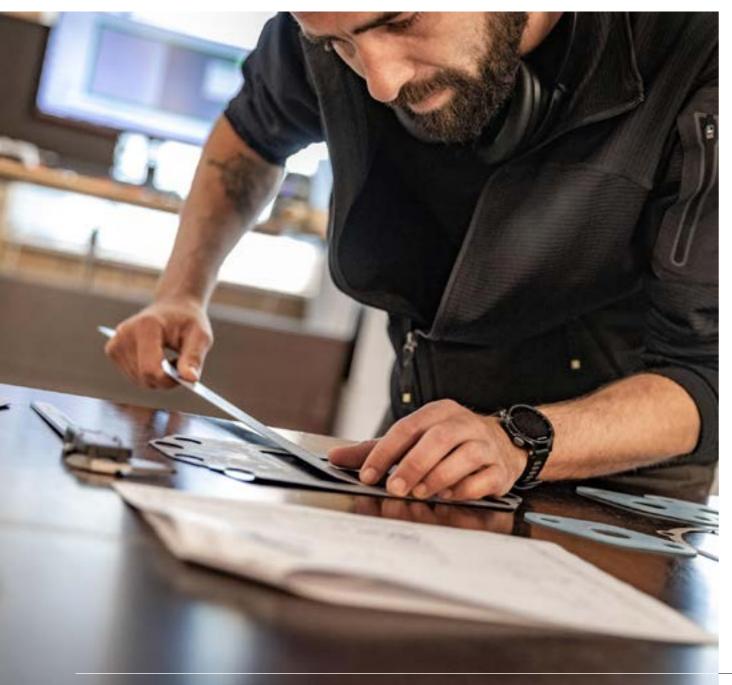
Let us help you choose the right solution.

We test and simulate performance before you select your next sealing solution.

Exactly as you need it.



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### About us

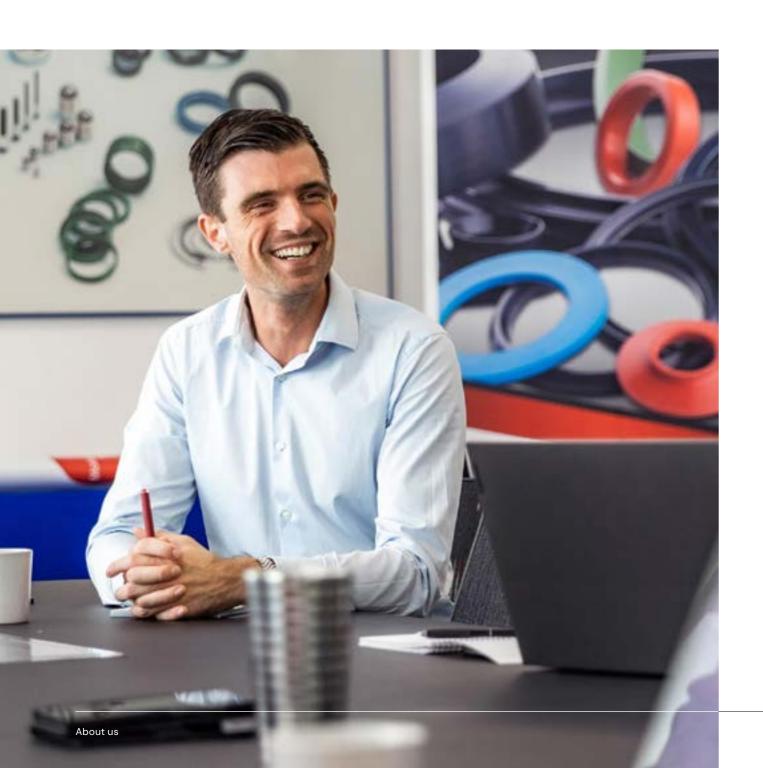
Haagensen is a company specializing in sealing systems, focusing on delivering high-quality solutions to a wide range of industries. We are dedicated to providing products that meet the highest standards of performance and durability.

With deep expertise and experience in sealing technology, we offer consulting and tailored solutions that meet our customers' specific needs.

Additionally, we serve our customers with a large selection of standard solutions directly from stock. Our employees are ready to assist with everything from product development to technical support, ensuring that our customers always receive the best possible service and the most reliable products.

Our certification according to ISO 9001 underscores our commitment to quality management. Our goal is to deliver innovative and reliable solutions that meet the strictest industry requirements and to be a trusted supplier of sealing systems and technical products.





## Your business partner

At Haagensen, we understand the importance of a stable and reliable supply chain, whether for OEM customers, wholesalers, or retailers. With many years of experience working with major industries, we are a partner that delivers high-quality products while ensuring high delivery reliability and predictability. We confirm our deliveries and work diligently to meet agreed delivery times, helping to minimize disruptions to your production schedules.

Our ability to quickly adapt to changing needs allows us to offer flexible solutions, enabling you to respond effectively to market demands. At the same time, we have strong risk management strategies in place to ensure supply continuity, even under unforeseen circumstances. At Haagensen, we are more than just a supplier – we are your trusted business partner, dedicated to your success.

## Exactly as you need it

We live in a world where your company's ability to produce efficiently is crucial. Where your business relies on systems running, machines operating, and engines turning. Constantly and at full capacity.

Optimal uptime and minimal downtime are key words. This requires a holistic view and attention to each individual part. Even a small component failure can have a significant impact on your company's competitiveness.

#### Customer focused since 1921

When Gunnar Haagensen founded the company in 1921, he placed the customer at the center. Four generations later, it is still our driving force. We ensure that the right components and expertise are always within reach.

For over 80 years, we have specialized in sealing solutions for the industry. We develop, produce, and deliver dynamic and static sealing solutions to essential pharmaceutical companies, leading food manufacturers, and everything in between.

## Thousands of sealing solutions in stock – as standard

With almost a century behind us, we know which solutions hold up – both for your challenges and in the long run.

Usually and most often, we have your sealing solution on the shelf among our thousands of standard solutions. We can pick it right away and deliver exactly when you need it.

We understand that when time is of the essence for you, there is no time to waste. It's easy to do business with us. Data sheets and certificates are always available, and we understand that quick processing is crucial. Downtime costs. Every minute counts. That's why we are happy to run fast and go the extra mile when needed. Otherwise, we are down-to-earth and straightforward to talk to.

#### Security with simulations

When a standard solution isn't the answer, we custom-develop for your specific application.
With state-of-the-art technology, we can simulate flows and test solutions in practice before moving on to production. This removes doubt and provides security.

This makes us the partner you can turn to when effective sealing solutions are needed that precisely meet your needs.

Best regards, Lasse Haagensen, CEO



## Company history

Haagensen was founded in 1921 in Riga, Latvia, by Gunnar Haagensen, a respected and enterprising businessman. The company began with the production of wooden bodies for the Ford Model A at our two factories. In 1940, as a result of World War II, we relocated to Denmark and shifted our focus to seals and sealing elements – an expertise that has defined Haagensen ever since. Today, Haagensen is still a family-owned business, now led by Lasse Haagensen, the fourth generation in the family. Based in Allerød on Zealand, we have built a strong and reputable reputation for quality and reliability in sealing systems. We cherish our values and heritage while continuing to develop and deliver innovative solutions for our customers.

1921

1940

1985

< 201<sup>4</sup>

2017

2024

#### The company is founded

Gunnar Haagensen establishes the company in Riga, Latvia.

#### Relocation to Denmark

The company moves from Latvia to Denmark due to the challenges of the war.

Our core competencies shift from the production of wooden bodies to a trading company specializing in sealing systems.

#### Establishment in Allerød

A company headquarters is established on Hejrevang in Allerød, North Zealand. Here, 1,200 sqm is inaugurated to house management, warehouse, and administration.

#### In-house production established

In-house production of flat gaskets is established in Allerød to achieve faster time-to-market.

#### **Expansion of headquarters**

The warehouse facilities in Allerød are expanded with high-storage towers and semi-automated warehouse management.

#### Re-branding to Haagensen

The company is rebranded as Haagensen A/S.

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### Industries in focus

#### Sealing solutions for industries worldwide

At Haagensen, we offer advanced sealing solutions that meet the unique challenges of a wide range of industrial sectors. Whether it's preventing liquid or gas leaks, protecting equipment from corrosion, or maintaining process safety, we provide sealing systems that can withstand even the most demanding process flows—both as standard and custom—made.

Our expertise spans from oil and gas to the food industry, where our technical knowledge and innovative approach ensure solutions that guarantee high reliability and performance. Haagensen is your partner in ensuring that your processes run smoothly and efficiently.



#### Oil and Gas

Our solutions made from durable materials ensure reliability and longevity in aggressive downhole environments, where extreme conditions demand maximum chemical resistance.



#### Food and Pharma

With a focus on documentation and traceability, we provide solutions that comply with regulatory requirements and support hygienic production.



#### Machine-building

With a focus on competitive pricing and delivery reliability, we are the ideal partner for stable production that efficiently meets your operational requirements.



#### Valves and Pumps

Effective leakage control and low friction make our solutions ideal for maximizing operational reliability and minimizing energy loss in valves and pumps.



#### Maritime

Focusing on high performance and long lifespan, we deliver solutions that meet the need for reliability and prevent downtime at sea.



#### Sutainable energy

Long lifespan and durability are at the core of our sealing solutions, minimizing maintenance needs and maximizing operational efficiency.

Industries 13

## Our products and services

## Sealing solutions and consulting tailored to the challenges of your industry

At Haagensen, we offer a comprehensive range of standard and custom-manufactured sealing solutions in elastomers, thermoplastic materials, and metals. We also provide kit production, where we assemble complete sets of sealing solutions tailored to our customers' needs. This allows our customers to receive all necessary components in one delivery, simplifying their logistics and saving time.

When standard solutions don't meet the requirements, Haagensen develops custom sealing solutions. Our engineers and technical specialists work closely with customers to develop solutions that meet even the strictest demands. We also offer advanced quality control of materials, durability, and sizing with our in-house measuring equipment, ensuring that all solutions meet the highest standards.

Below is a selection of our certifications.











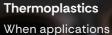






#### Elastomers

We offer a wide range of sealing solutions in both standard and specialized synthetic rubber types, selected for each specific application.



require handling extreme temperatures, aggressive chemicals, or high friction, thermoplastic seals are ideal. They are designed to withstand these conditions and ensure reliable performance in demanding environments.

### Metal seals

When extreme pressures and temperatures rule out other materials, we offer metallic solutions that ensure reliability and durability under the most demanding conditions.

#### Kits

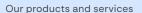
Haagensen provides customized kits that contain all the relevant sealing solutions for your needs, simplifying handling and increasing efficiency in the assembly process.

## Development, simulation, and testing

When a standard seal isn't sufficient, our engineers offer expertise in consulting and developing customized solutions tailored to your specific needs.

#### **Quality control**

We provide inspection and control of items in accordance with industry standards, assisting in troubleshooting and identifying components using our in-house measuring equipment.



### Our elastomer solutions

## Standard and specialized elastomers for demanding applications

At Gunnar Haagensen, we provide sealing solutions and technical components in a wide range of elastomers, selected based on the specific operational parameters of the application. We offer both standard and custom-made solutions in common and specialized elastomers, ensuring the right solution for every need. Our product portfolio includes both standard and specialized sealing types. Learn more about these in our product catalogs.

- O-rings
- O-ring cords
- X-rings
- V-rings
- Tri-clamps
- Flat gaskets
- · Radiale lip seals
- · Custom moulded parts



#### Standard - always in stock

Day-to-day delivery of standard items.



#### **Special production**

Customer-specific production adapted to design and functional requirements.



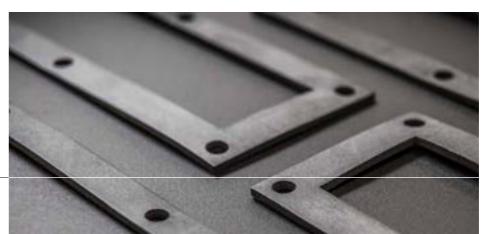
#### **Custom elastomers**

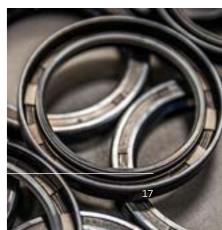
Elastomers adapted to special needs when standard doesn't cut it.











## Our thermoplastic solutions

## Thermoplastic solutions for demanding applications

Our thermoplastic sealing solutions are used when applications require higher temperature resistance, lower friction and/or improved chemical resistance. Polymers are ideal for situations where elastomers cannot withstand the extreme operating conditions, such as high pressure and aggressive environments. With their high mechanical strength and stability under pressure, thermoplastic seals ensure long-term performance in challenging applications.

- Scraper rings
- Guide rings
- Backup-rings
- Flat gaskets
- Encapsulated O-rings
- · Rotary shaft seals
- · Reciprocating piston and rod seals
- Static flange seals
- Custom produced parts



#### Simulation & test

Performance evaluation of seals via simulation and test-rigs.



#### Versatile materials

Extensive selection of thermoplastic materials.



#### **Express production**

Fast production of custom parts.











### Our metal solutions

## Robust metal components for extreme temperatures, pressure, and chemicals

Metal seals and technical components are designed to meet the needs where elastomers or thermoplastics are not sufficient. They withstand extremely high pressures and temperatures, making them ideal for applications in demanding conditions. Their superior chemical resistance and long lifespan ensure performance in aggressive environments. With minimal leakage risk, metal seals are the preferred choice when safety and efficiency are critical.

- C-rings
- Metal O-rings
- Bonded Seals
- Spiral Wound Gaskets
- · Ring Type Joint Gasket
- Circlips
- Koenig Expanders
- Shims and support washers
- Spring tension pins



#### Standard & custom

Standard as well as custom sizes tailored to your needs.



#### Wide alloy selection

A wide selection of metal alloys available.



#### Metal-to-rubber bonding

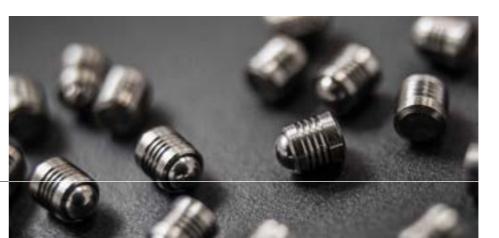
Metal-to-rubber bonding is also offered.











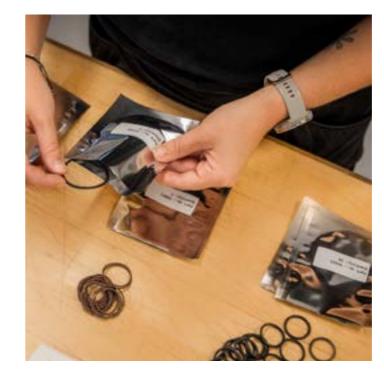


## Our kit production

#### Simplify your C-parts and your supply chain

Haagensen offers customer-specific kits containing all necessary sealing solutions for your specific applications. By gathering all relevant components into one complete set, we simplify our customers' logistics and significantly reduce assembly time. Our kits are carefully designed to optimize handling, increase efficiency, and ensure that customers always have the right parts available, resulting in a smoother and more seamless handling process.

- Assembly kits
- · Spare parts kits
- · Cleanroom kits







#### **Customized solutions**

Assemble kits with quantities, types, and sizes tailored to your needs.



#### Your logo & labels

Customize kits with your logo and labels, exactly as desired.



#### Fewer suppliers

Reduce the number of suppliers by consolidating all components into one kit.



## Consulting & development

Expertise in sealing technology with a focus on efficient and reliable solutions.

With our skilled team of engineers and technical designers, we offer specialized consulting in sealing technology. We work closely with our customers to identify their needs and find the best solution, whether it be standard or custom-designed. We also offer performance simulations for critical applications to optimize the design before production. Our inhouse test facilities allow us to evaluate reciprocating and rotary seals, focusing on leakage, wear, and friction.

- · Consulting on solution and material selection
- Development and design of customized solutions
- · Simulation and analysis via COMSOL Multiphysics
- CAD via Autodesk Inventor & Vault
- Performance testing of seals
- Failure analysis and optimization of existing seals
- On-site technical support & consulting during seal implementation







#### Consultation & design

Selection or development of the right solution for your specific application.



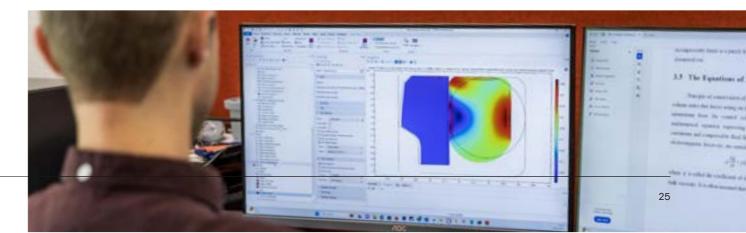
#### Performance simulation

Simulation of solution designs and their performance before production begins.



#### Verification in test-rig

Measurement of leakage, friction, and wear of components in our hydraulic test stands.



## Quality control and inspection

## Ensuring reliability and quality through precise inspection

At Haagensen, we use advanced in-house equipment to ensure that our products and components meet relevant industrial standards. Our optical measurement systems ensure precise inspection of dimensions, while microscopic technology detects even the smallest signs of wear. We offer sampling inspection, 100% inspection, or inspection according to agreed AQL levels. Additionally, we measure the hardness and chemical composition of materials when needed to identify the material type of a given component.

- Hardness measurement via Bareiss IRHD Micro Compact III
- Surface inspection via Leica DMS300 microscope
- Dimensional inspection via UTP Vision Kalix 155
- Material type identification via Nicolet iS5 FTIR spectrometer



#### **Control & documentation**

Inspection of components with accompanying documentation.



#### Identification

Unknown sealing items are identified.

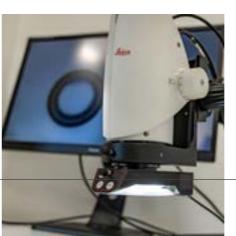


#### Troubleshooting

Identification of the underlying cause of functional failures.









# The best sealing solution?

You shouldn't have to worry about that. Choose a supplier who takes responsibility. Exactly as you need it.

#### Contact us

Tel: +45 48 17 65 00 E-mail: sales@haagensenseals.com

www.haagensenseals.com

