

Welcome to the World of trelleborg

AICOSS Project Presentation

05.02.2024 | Dr.-Ing. Dominik Martin

Trelleborg Group – A world leader in engineered polymer solutions

 Focused
**polymer
group**

 founded
1905

 Annual sales
SEK ~30 billion
EUR ~2.83 billion
USD ~2.97 billion



~16,700
employees



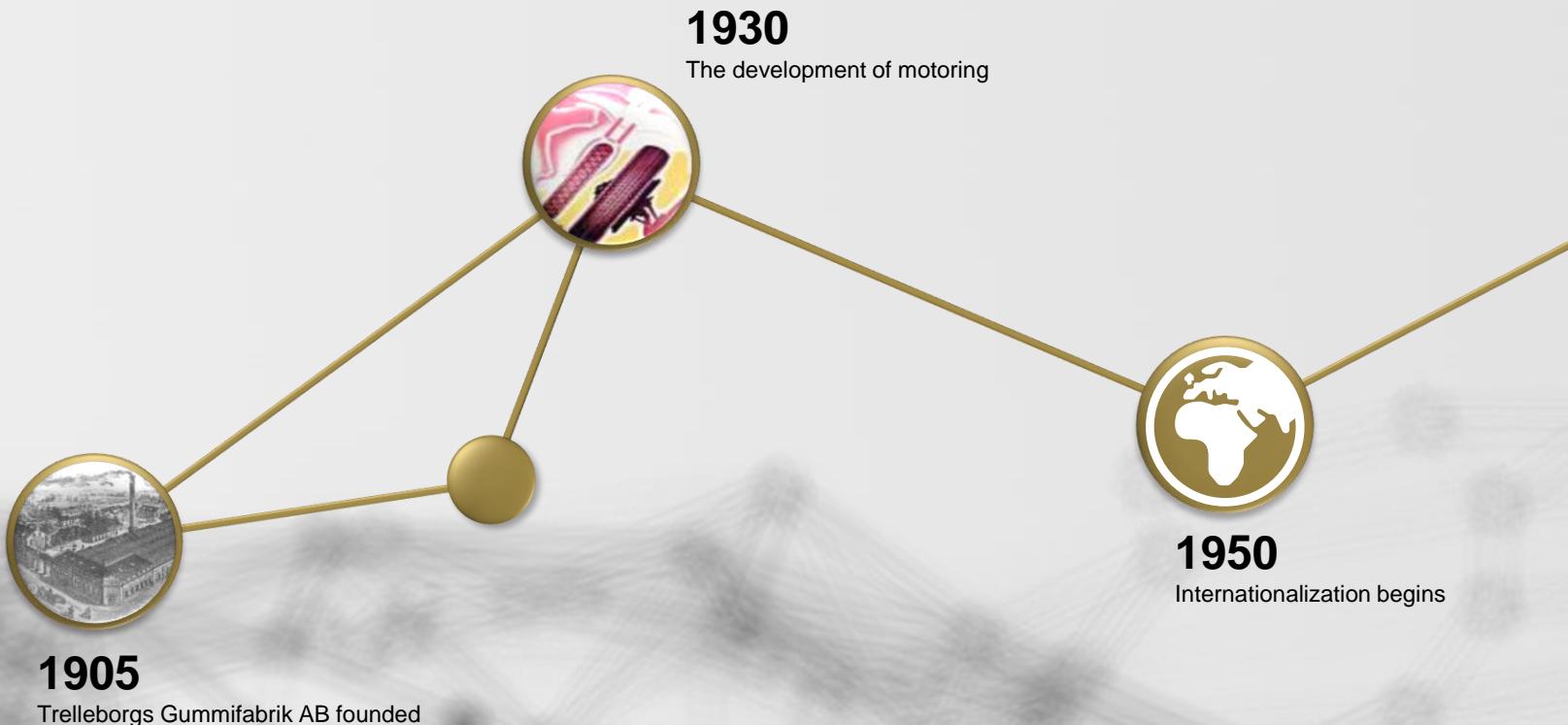
~40
countries



~100
manufacturing
facilities

Year 2022

Our history in brief



1970

Industrial rubber products increases.
Car and truck tires is phased out in 1975

1999

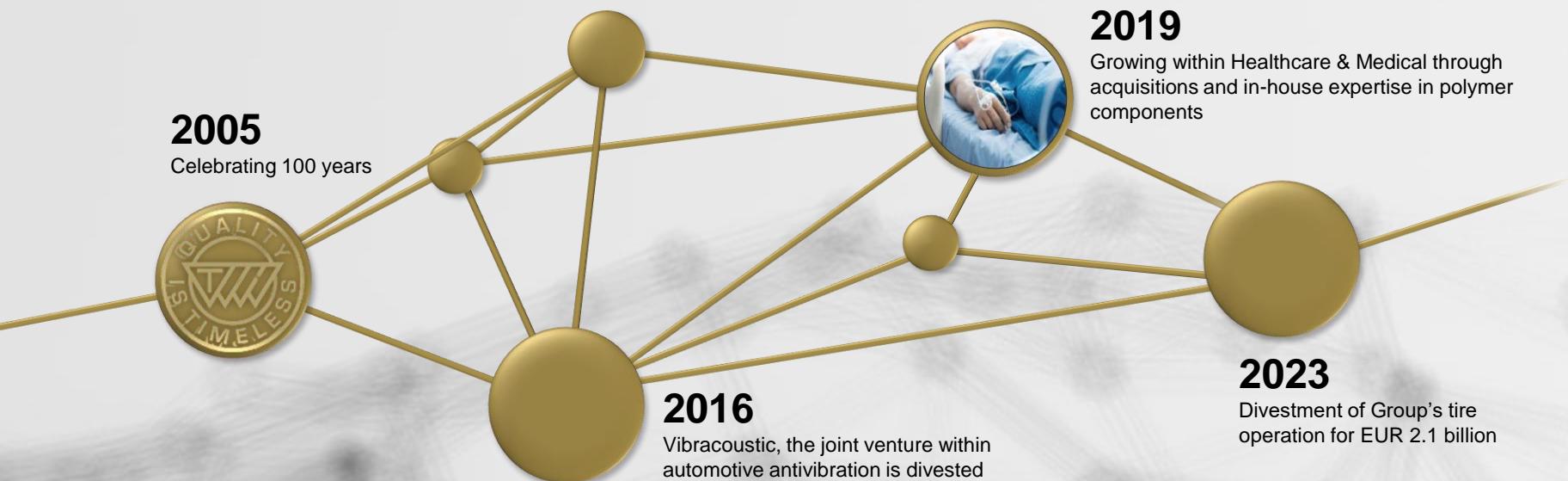
Focus on the industrial sector

1990

A conglomerate with sales of
SEK 25.2 billion. Mines and
metals dominated (Boliden)

2003

Acquisition of Smiths Group Plc's
formed the Trelleborg Sealing
Solutions business area



Seal, damp, protect

Seal

To seal is to fill a gap when joining two static or moving (dynamic) surfaces, thereby separating different media from each other.



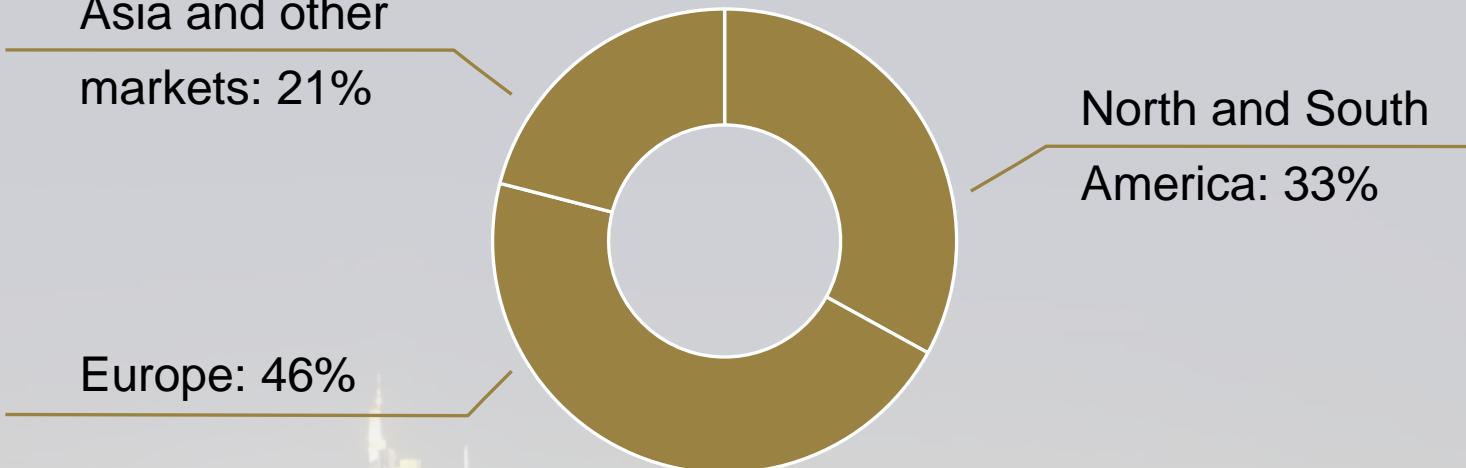
Protect

To protect is to help the environment, people, infrastructure and other assets to manage the impact from natural and man-made forces.

Damp

To damp is to absorb energy, thereby reducing vibration and noise.

Net sales per geographic market



Year 2022

Net sales per industry

AEROSPACE

9%



AUTOMOTIVE

16%



HEALTHCARE
& MEDICAL

8%



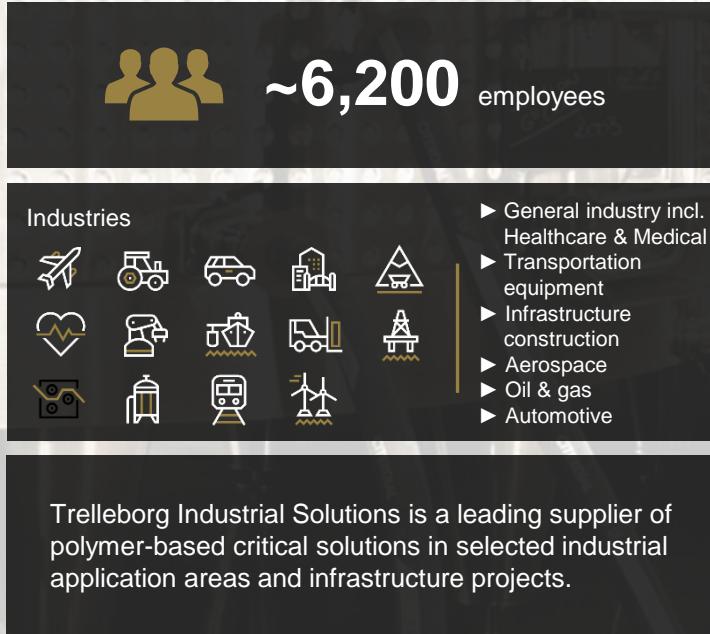
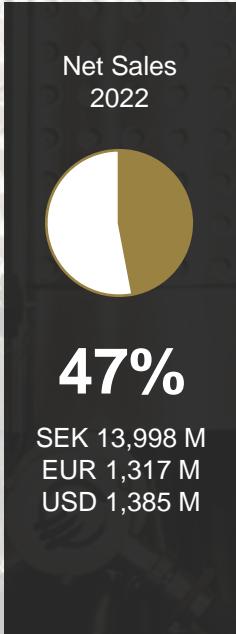
GENERAL
INDUSTRY

67%

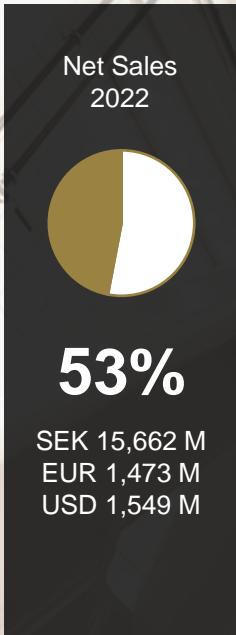


Year 2022

Trelleborg Industrial Solutions



Trelleborg Sealing Solutions



 ~9,500 employees

Industries



- General industry incl. Healthcare & Medical
- Transportation equipment
- Agriculture
- Aerospace
- Oil & gas
- Automotive

Trelleborg Sealing Solutions is a leading global supplier of polymer-based critical sealing solutions and components deployed in aerospace, automotive general industry and healthcare & medical.





About Trelleborg Sealing Solutions

Global Resources



Trelleborg Sealing Solutions Profile

Leading global supplier of polymer-based critical sealing solutions, components and services deployed in general industry, mobility, aerospace and healthcare & medical.



Employees 2022*
~9,500 (globally)

North & South America
34%

Europe
50%

Asia & other markets
16%

* At year-end, including insourced staff and temporary employees.



Global Net sales 2022**
€ 1,473 M (USD 1,549 M; SEK 15,662 M)

North & South America
33%

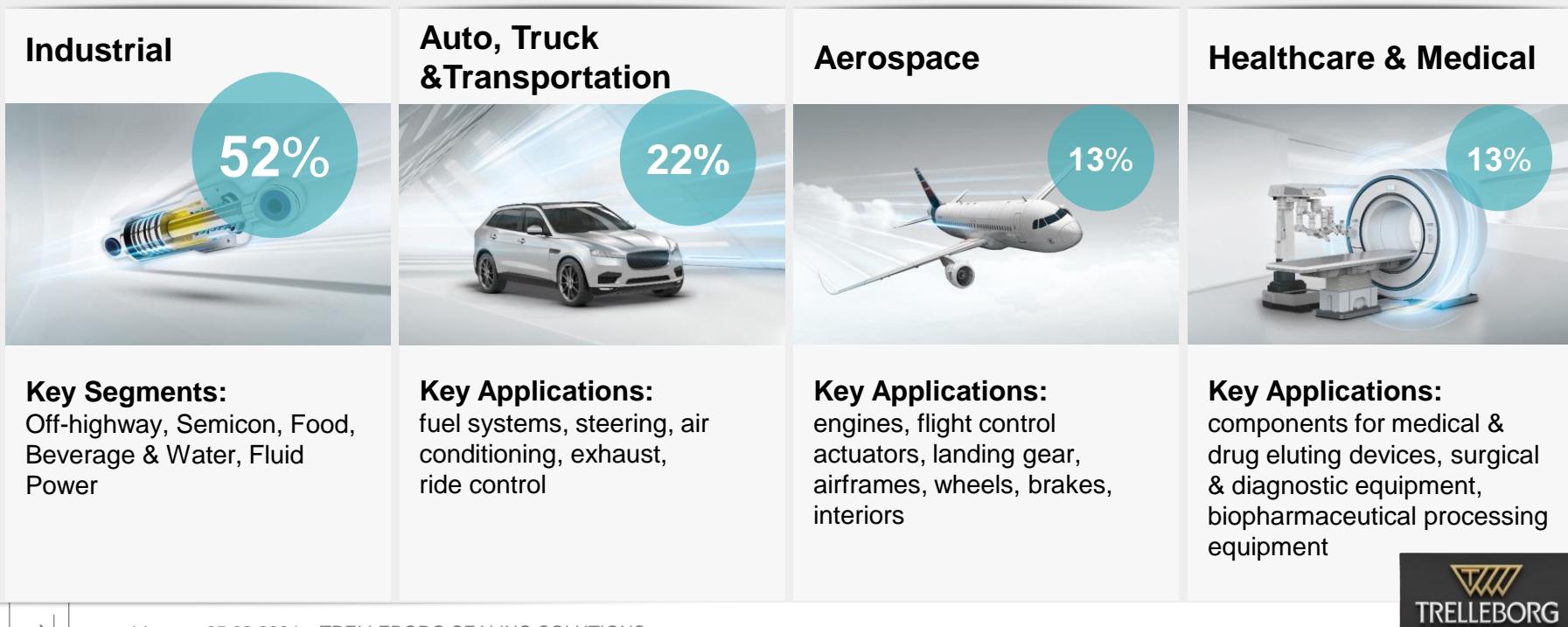
Europe
46%

Asia & other markets
21%

** Excluding items affecting comparability.



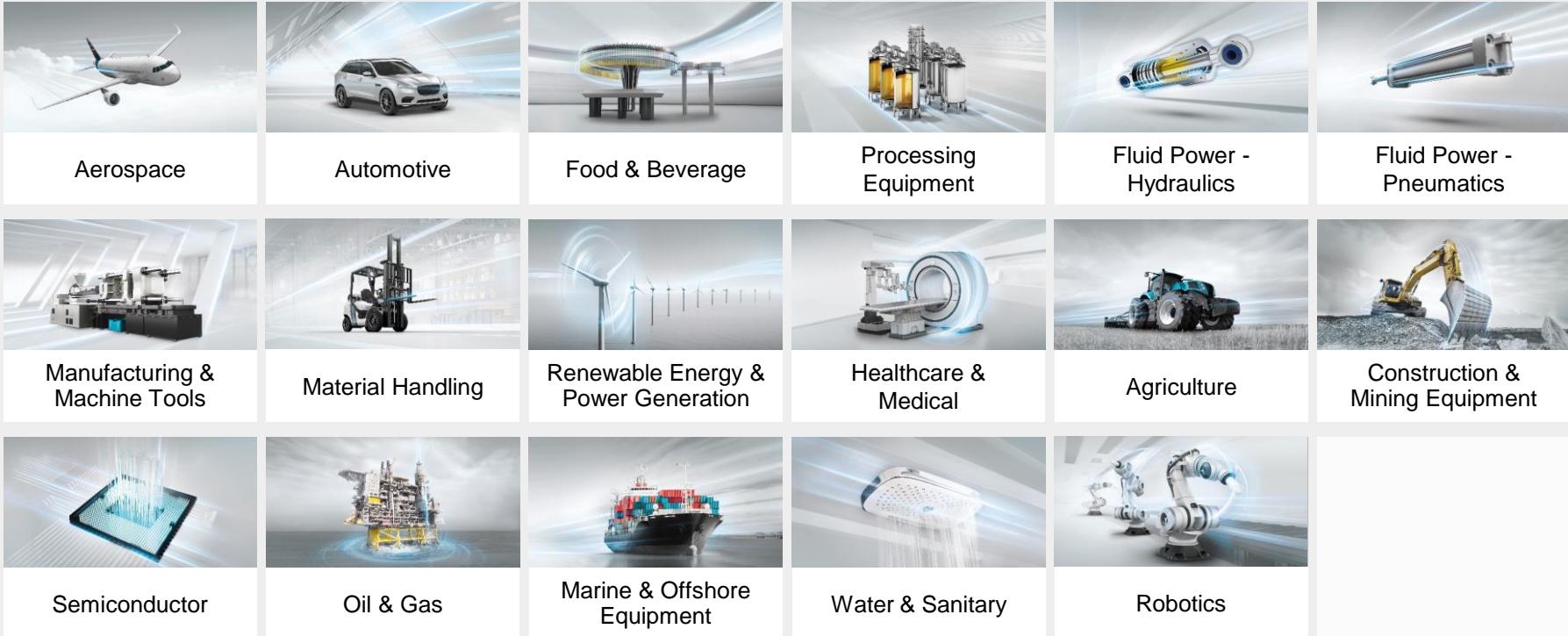
Leading global supplier of Sealing Solutions



Business Concept Structure



Overview market segments



Product Range



Fluid Sealing Systems



Static Seals



Bearings and Bushings



Rotary Seals



Medical Products



Pneumatic Seals



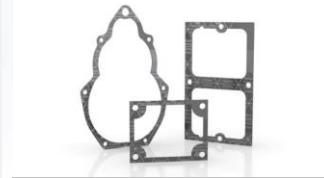
O-Rings



Engineered Molded Parts



Mechanical Face Seals
(Heavy Duty Seals)



HMF FlatSeal™



Brake Shims, Tuned Absorbers,
Rubore® Seals



Assembly Units



Liquid Silicone 0,25
Rubber (LSR)



Customized Aerospace Sealing

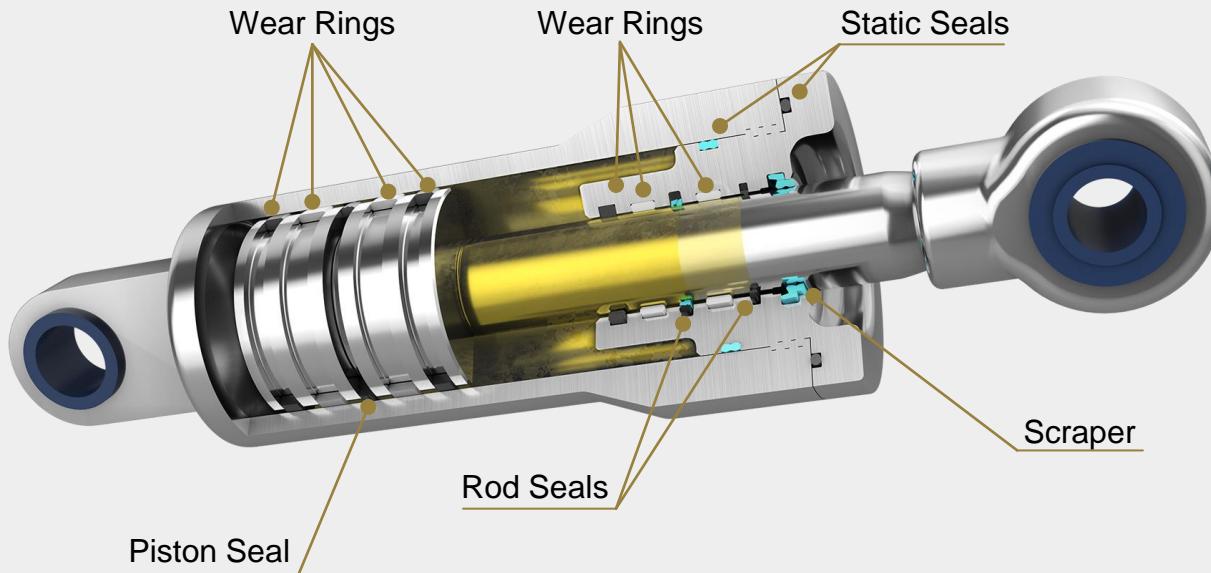


Extrusion

Application Highlight – Linear Hydraulic

Overview

Cylinder & Lubrication Management



Fluid Sealing Systems

Overview

Hydraulic Seals

Rod & Piston Seals

Slipper Seal



Scrapers/Excluder

Wear Rings



Delivering global value through strong core capabilities

Overview



Engineered
molded parts



Drug-eluting and
combination products



Extrusion



Microparts



Integrated solutions



Silicone tubing
and hose



Dipping and coating



Precision tooling
and machined parts



Silicone sheet
and thin film

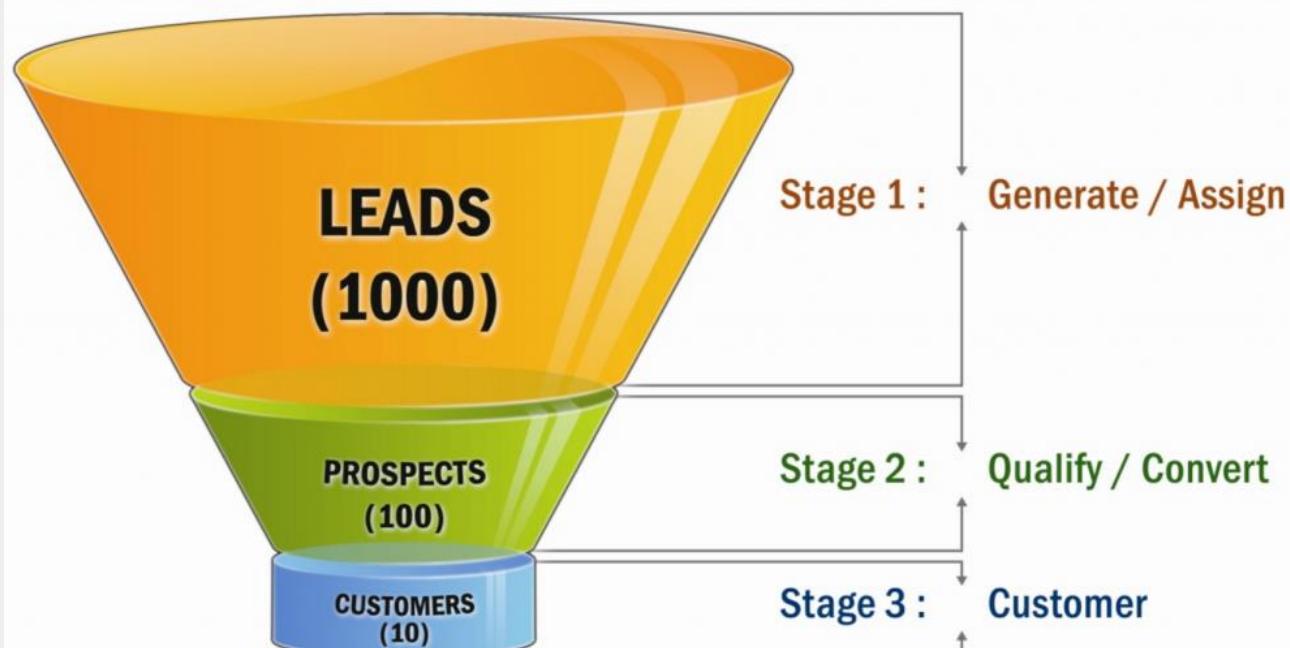


Finished medical
devices



Lead Management

Sales Funnel: Converting Leads into Business



Lead Management Process

The Different Lead Sources:

- Website Contact form requests
- Web Member Registration leads
- Event leads
- Webinar leads
- Whitepaper Downloads / Webinar Recording Downloads from social media and e-mail marketing campaigns

Website Contact Form Request Leads

Requests coming from one of our TSS websites, like: <https://www.trelleborg.com/en/seals/contact-form>

Home Your Industry Products & Solutions News & Events Tools & Resources About Us Careers Contact Us Shop

Contact Us

Please note: If you are a registered member please login. Your contact details will then automatically be filled into the contact form.

First name* Last name*
Company*
Job title*
Country*
Address*
Postal code* City*
Business E-mail*
Enter VAT number (if available)
Telephone*
Request type*
 Products and Solutions
 Industry
 Automation
 Free member account? You can benefit from our useful services and tools. Check the box and add some extra information and you're all set.
Message*
When submitting this form, you are aware of that we will store the personal data that you give us in order to fulfill our request. We will only process your personal data if it is necessary in order to fulfill our legitimate interest to provide you with the subscription or user subscription and/or information you have requested. For further details, please read our Privacy Notice.

Lead created automatically in C4C
→ Notification sent



Leads Lead Web Request

Web Request ★ | + | Actions ▾ Create Lead

Overview Activities Attachments ORBIS Document Flow Approval Internal > ▾

08/04/2021 11:04 AM TSS Integration

Dear Mr. or Mrs.,

I would like to inquire whether your company offers foils or sheets of PTFE that are electronically conductive and porous.

Respectfully yours,
Manuel Gliech.

External Notes

External Notes

Conversion (0)

Name	Type
------	------

Web Member Registration Leads

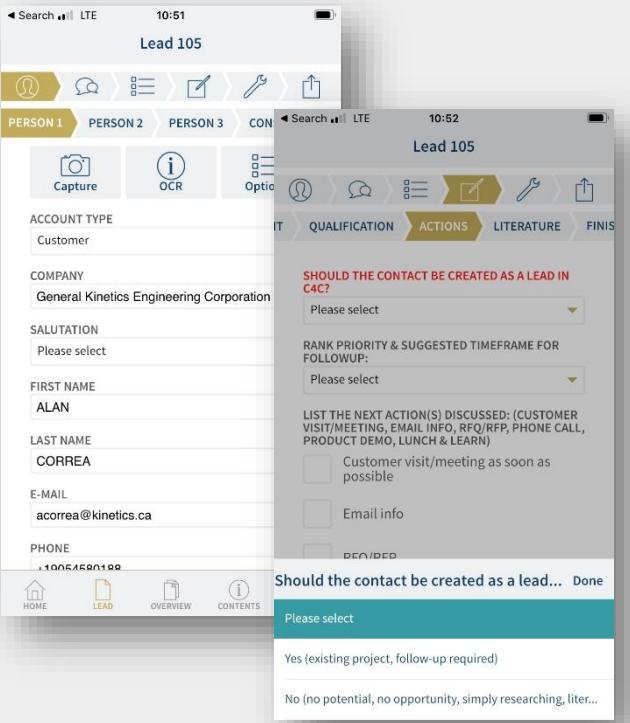
- **Web Member Registrations:** New contacts from G, A, B Customer or Prospect accounts or from Segment Target Accounts that have registered as Web Members are created as leads in C4C:

Lead created automatically in C4C

Role	Name	E-Mail	Phone
Employee Responsible	TSS Integration		
Inside Sales / Customer Success Advocate	Sam Mills	sam.mills@trelleborg.com	+44 121 746 3647
(Outside) Sales Engineer	Sam Mills	sam.mills@trelleborg.com	+44 121 746 3647

Event leads from Tradeshows & Roadshows

Contacts and projects captured with the Entergon app at the booth at an event:



Lead created automatically in C4C



The image shows a screenshot of the SAP CRM 'Leads' module. The main view is for a lead titled 'MD&M West 2020'. The lead is associated with the contact 'Alex Xing'. The status is '03 - Converted' and the channel is 'Event'. Below this, a table lists the 'Sales & Marketing Team' (1) with one entry: 'Employee Responsible' (Nader Namdar), 'Name' (Nader.Namdar@trelleborg.com), 'Phone' (+1 415-306-6839), and 'Primary' checked. A 'NOTES' section contains a note from '02/18/2020 5:00 AM' with the subject 'TSS Integration'. The note discusses primary interest in Trelleborg's silicone sheeting, conversation details, and specific needs related to 4mm sheeting and die cutting. At the bottom right is the Trelleborg logo.

Webinar Leads

- Selected contacts who registered or participated in a webinar

Live Webinar "Counter Surfaces" (maximizing performance of hydraulic systems) with Dr. Mandy Wilke

This webinar is offered several times. Select the date and time that works best for you.

Fri, Jan 24, 2020 9:30 AM - 10:00 AM CET
Show in My Time Zone

Join our Webinar "Counter Surfaces". Discover how you can maximize the performance of your hydraulic systems.

Join Technical Manager Fluid Power, Dr. Mandy Wilke, in one of her live webinar sessions on Counter Surfaces on 24 January, 09:30 CET and 27 January, 14:00 CET. Discover how you can optimize performance of your hydraulic system!

Learn why tribology is the key to optimizing sealing performance in any hydraulic system and which crucial role Lubrication Management plays in extending performance limits considerably.

This extended approach for the description of mating surfaces for dynamic seals takes into account the trend toward alternative coating processes with regard to the necessary substitution of chrome.

Mandy will present comprehensive test results that show how it's possible to achieve more robustness with the right specification of counter surfaces, reduce wear, down time and maintenance costs. Explore new possibilities to increase seal lifetime for the efficiency of your fluid power applications!

Don't miss out on participating in this live webinar - ask Mandy all your questions in the Q&A session.

In case you are not in the CET-time zone please click the "show in my time zone"-link.

Required field

First Name:

Last Name:

Email Address:

Country:

Job Title:

Company Name:

By clicking this button, you submit your information to the webinar organizer, who will use it to communicate with you regarding this event and their other services.

Register

Lead created automatically in C4C



Leads

Lead FoodPro webinar registrant/attendee - May 2021

Overview Activities Attachments ORBIS Document Flow Approval Internal Campaign

Lead ID: 47345
Name: FoodPro webinar registrant/attendee - May 2021
Company: Metalquimia
Contact First Name: Bartolome
Contact Last Name: Jose
Status: 05 - Closed

Sales & Marketing Team (0)

Role Name E-Mail Phone Primary Action

No items to show

NOTES

Expand All

E-Mail Marketing Leads

- Selected contacts who submitted a form



Maximize the lifetime of your hydraulic systems now.

Dear Soafars,

As an engineer, you value the importance of performance, efficiency and longevity in application design. These are also the things that an effective sealing and lubrication system safeguards.

In today's demanding hydraulic applications, seals and lubricant must work together. Our Lubrication Management technology approaches hydraulic sealing and lubrication systems from a comprehensive perspective. It uses adequate lubrication to reduce the load on each sealing element, thereby optimizing the performance of the hydraulic system in terms of friction, wear and lifetime.

We have composed a whitepaper An Introduction to Lubrication Management and recorded a webinar to give you a look into this technology and how it can benefit your applications.

- How and why hydraulic sealing systems have developed over time into the state-of-the-art systems we use today.
- What benefits Lubrication Management technology offers various applications
- About testing and results proving the effectiveness of Lubrication Management

Exclusive Webinar

This expertly written whitepaper provides a useful overview of Lubrication Management as well as a solid "jumping-off point" in tribology.

[Download now](#)

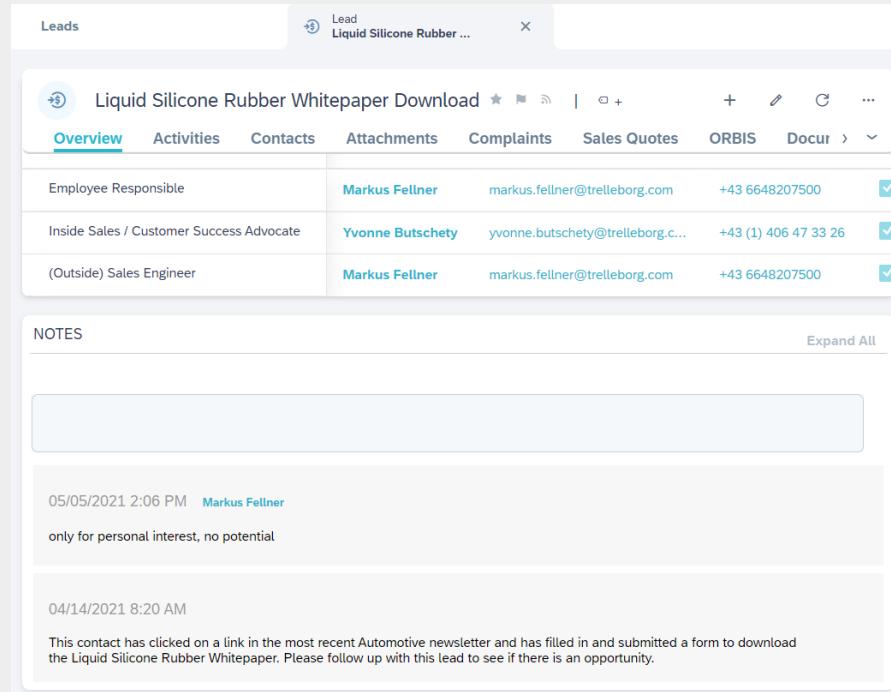
If you have any questions about Lubrication Management technology or would like to discuss sealing solutions for your fluid power application, please don't hesitate to [contact us](#).

Best Regards,

Your Trelleborg Sealing Solutions Team

[Contact us](#)

Lead created automatically in C4C



Liquid Silicone Rubber Whitepaper Download

Lead
Liquid Silicone Rubber ...

Overview Activities Contacts Attachments Complaints Sales Quotes ORBIS Docur >

Employee Responsible	Markus Fellner	markus.fellner@trelleborg.com	+43 6648207500	<input checked="" type="checkbox"/>
Inside Sales / Customer Success Advocate	Yvonne Butschety	yvonne.butschety@trelleborg.c...	+43 (1) 406 47 33 26	<input checked="" type="checkbox"/>
(Outside) Sales Engineer	Markus Fellner	markus.fellner@trelleborg.com	+43 6648207500	<input checked="" type="checkbox"/>

NOTES

Expand All

05/05/2021 2:06 PM Markus Fellner

only for personal interest, no potential

04/14/2021 8:20 AM

This contact has clicked on a link in the most recent Automotive newsletter and has filled in and submitted a form to download the Liquid Silicone Rubber Whitepaper. Please follow up with this lead to see if there is an opportunity.

LinkedIn Ads Leads

- Selected contacts who submitted a form

Trelleborg Sealing Solutions
10,401 followers
1yr+ Edited

How can APIs be added to silicone to create effective drug-eluting medical devices? Download this whitepaper to find out about the various methods.

Supporting the Advancement of Drug-Eluting Devices
WHITEPAPER

Like Comment Share

Lead created automatically in C4C



Leads

Lead
Whitepaper Download - ...

Overview Activities Attachments ORBIS Document Flow Approval Internal Campaign

Lead ID: 37675
Name: Whitepaper Download - Drug-Eluting Devices
Company: Spirotronic

Contact First Name: Fabian
Contact Last Name: Larhed
Status: Unqualified

Sales & Marketing Team (1)

Role	Name	E-Mail	Phone	Primary
Employee ...	TSS Integration			<input checked="" type="checkbox"/>

NOTES

12/06/2021 2:38 PM Soafara Menke

This contact has downloaded the Drug-Eluting Whitepaper. Please follow up with this lead to see if there is an opportunity.

Lead Routing Principles

Four factors are considered to determine the routing of the leads:

1. Lead from existing C4C account vs. lead from an unknown account
2. Lead source: from which website? Which event?
3. Industry / segment declared by the customer
4. Country / region

AICOSS Project: Task Description

- Explorative data analysis + Feature engineering (ideally already using LLM) + **Lead conversion/scoring model** (classification)
 - Focus is on the development of a robust model for predicting lead conversions. A Large Language Model (LLM) can be used here primarily for feature engineering. The LLM analyses the text data of the leads (such as enquiries, notes, etc.) and extracts relevant features that could be decisive for the probability of conversion (e.g. key points of interest, urgency).
 - Additional suggestion (optional): Integration of a feedback loop that enables the model to be continuously trained and adapted with new data.
- Extension option A: User-friendly **interface**
 - Development of an intuitive, user-centered interface that enables the user (target group: sales) to easily enter data, analyze results and adjust settings.
 - Additional suggestion (optional): Implement dashboard functionalities that allow users to monitor and visualize the results of lead analyses in real time.

AICOSS Project: Task Description

- Extension option B: Generation of **personalized response** messages
 - LLM is used to generate personalized response messages for the leads. These messages should be based on the individual characteristics and interests of the leads in order to achieve the highest possible engagement rate.
 - Additional suggestion (optional): Include or simulate A/B testing methods to evaluate the effectiveness of different message variations and continuously optimize the approach.
- Extension option C: **XAI** (Explainable Artificial Intelligence)
 - Integration of Explainable AI to make the system's decision-making processes transparent. This not only helps users to understand the system's assessments and recommendations, but also promotes confidence in the AI-based decisions.
 - Additional suggestion (optional): Develop tools or interfaces that allow users to perform "what-if" analyses to understand how changes in the data affect lead scores.

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