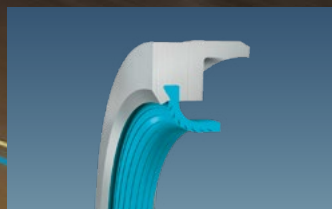
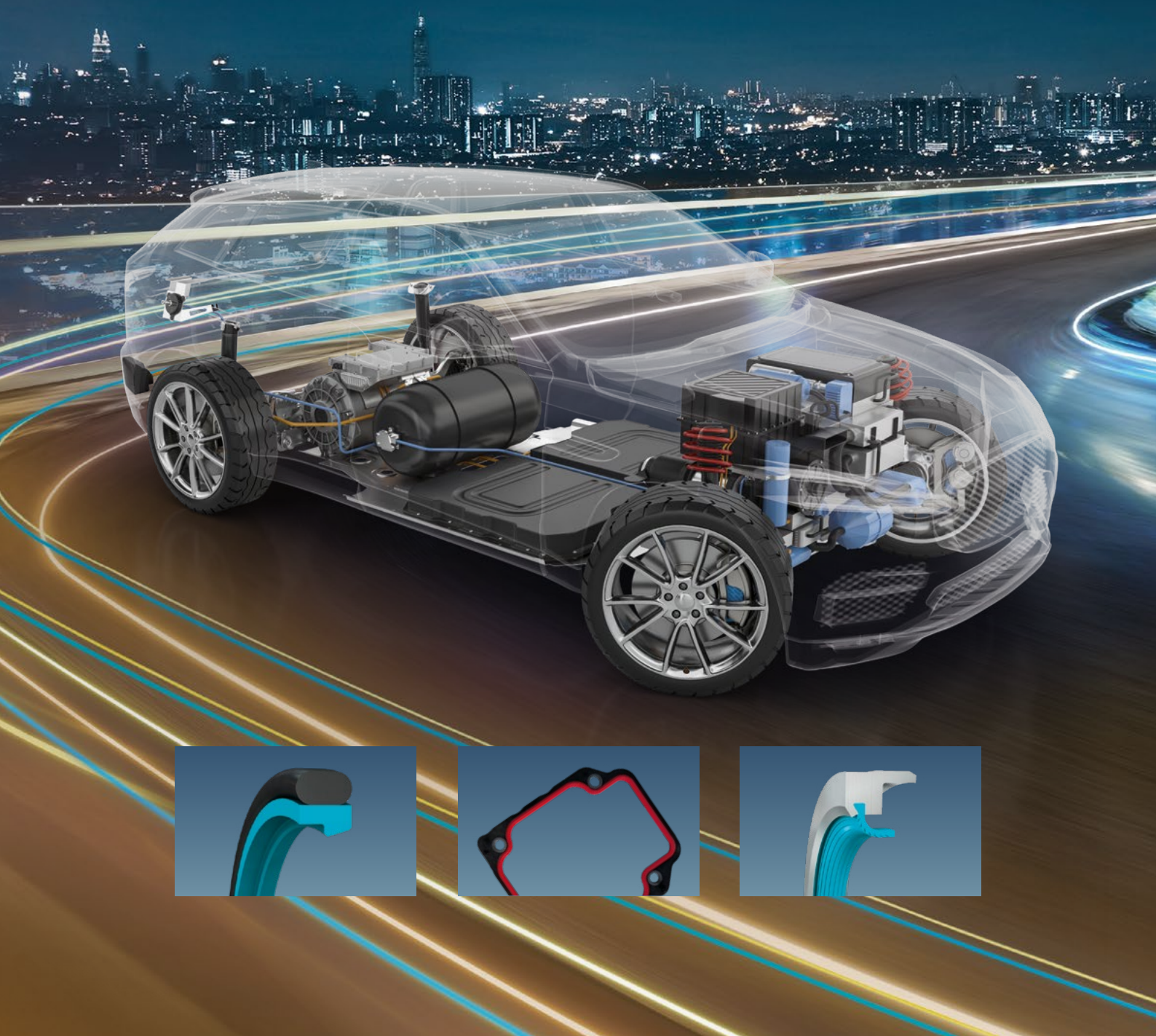


# Automotive Sealing Solutions

TECHNOLOGY-DRIVEN HIDDEN CHAMPIONS MAXIMIZE VEHICLE PERFORMANCE





# Electrification Elevates Performance

The technology landscape of the automotive industry is electrifying. The worldwide shift to electric vehicles (EVs), increased battery efficiency, and the need for more sustainable solutions are three key trends. Hydrogen powered cars offer new opportunities and unveil new challenging requirements. Reliable sealing solutions play a key role in ensuring performance at extreme temperatures and pressures, reducing friction, and enhancing sustainability.

## Meeting Priorities

These technology-driven hidden champions provide cutting-edge solutions for the entire vehicle. Our top priorities include extending vehicle lifetime with low-friction solutions and maximizing performance with a wide range of polymer components. We are a leading provider of innovative sealing solutions for original equipment manufacturers (OEMs) and their suppliers.

**Hydrogen  
and fuel cell  
solutions**

**Solutions  
for the entire  
vehicle**

**Advanced  
manufacturing  
processes  
accelerate custom  
solutions**

**Maximize  
efficiency with  
with low-friction  
solutions**

**Extend  
vehicle lifetime  
with a wide  
range of polymer  
solutions**



# ance



**Multicomponent  
Molded Parts**



**O-Rings**



**Coated  
O-Rings**



**Engineered  
Molded Parts**



**Liquid Silicone  
Rubber (LSR)**



**Rubore® Seals**



**PTFE-Based  
Seals**



**HiSpin®  
Rotary Seals**

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# Global Automotive Network

**IATF 16949**

Manufacturing sites



**Zero Defect**



5 Automotive Centers



15 Manufacturing Facilities



11 R&D Centers



4 Logistics Centers



Damping Solutions



#### Contact us

You can find your local contact partners here:

[www.trelleborg.com/seals/contact-form](http://www.trelleborg.com/seals/contact-form)

#### Automotive Center North America

Plymouth, North America



Albany, North America

River Falls, North America

Reynosa, Mexico

Fort Wayne, North America

#### Automotive Center South America

São Paulo, Brazil



#### Americas



2 Automotive Centers



3 Manufacturing Facilities



2 R&D Centers



1 Logistics Center



Damping Solutions



## Our Expertise

We partner with automotive manufacturers to develop and supply innovative polymer solutions, which maximize vehicle performance. We do this through:

- **Engineering expertise:** Our global network of interdisciplinary polymer experts offers collaborative engineering, from prototype development to serial production
- **R&D capabilities:** We develop and test the performance of seal designs and materials in-house to ensure our solutions meet customer requirements
- **Advanced manufacturing processes:** Global resources produce custom solutions using advanced technologies
- **Advanced delivery:** Our worldwide network provides a range of supply chain services to help avoid downtime



### Europe

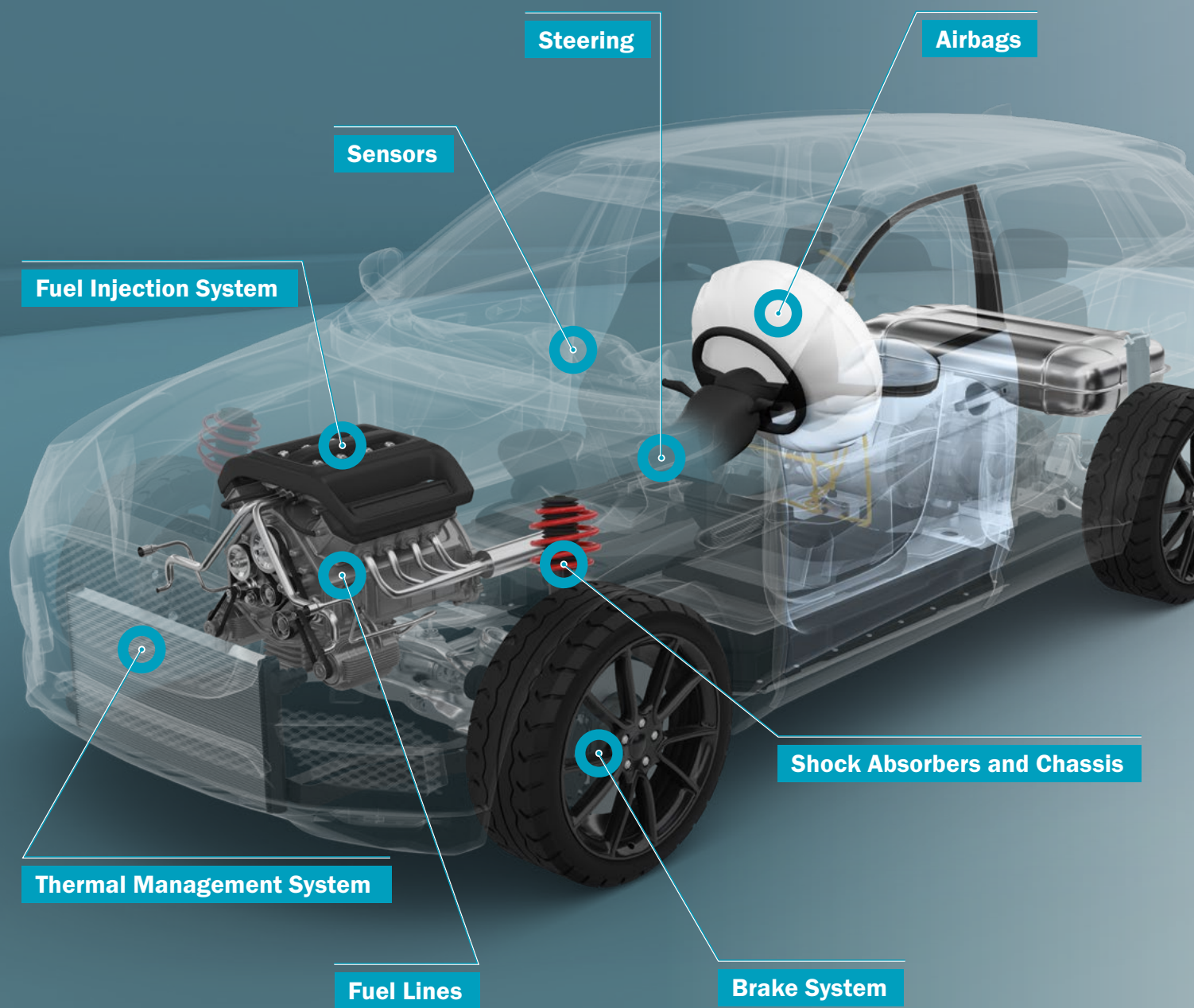
- 1 Automotive Center
- 8 Manufacturing Facilities
- 8 R&D Centers
- 1 Logistics Center
- Damping Solutions

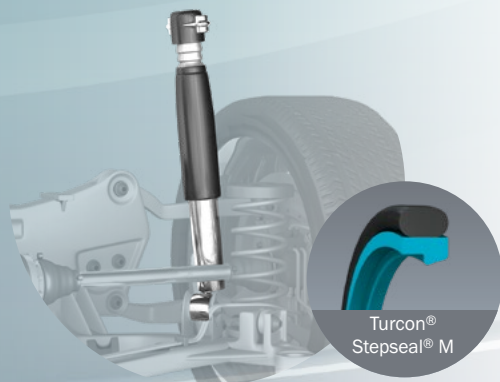
### Asia

- 2 Automotive Centers
- 4 Manufacturing Facilities
- 1 R&D Center
- 2 Logistics Centers
- Damping Solutions



# Solutions for Demanding Applications





## Chassis and Steering

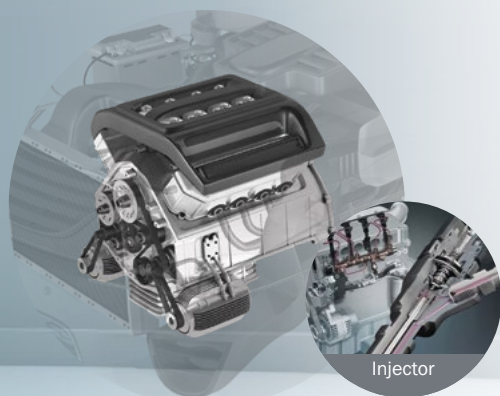
Polytetrafluoroethylene (PTFE) linear seals in the chassis optimize suspension comfort and intrusive noise.

### Requirements:

- Low friction
- No stick-slip effect
- Wear resistant

### Trelleborg Solutions:

- Turcon® PTFE seals:
  - Turcon® Twinseal
  - Turcon® Stepseal® M
  - Back-up Rings
  - Skirted Piston



## Fuel Injection System

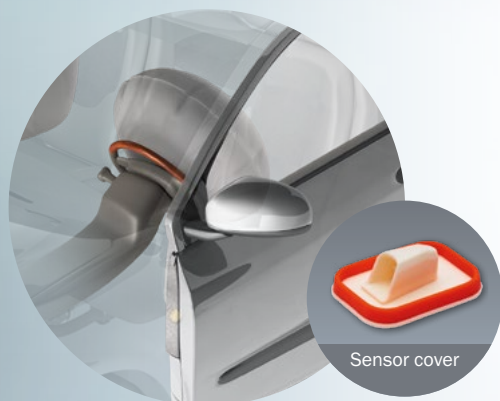
We manufacture PTFE and fluoroelastomer (FKM) seals for high-pressure applications using advanced high-volume series production technologies.

### Requirements:

- Temperature range: -40 °C to +200 °C / -40 °F to +392 °F
- Pressures over 3,000 bar/43,511 psi
- Tested and approved compounds for all fuel blends
- Easy installation - snap-back effect

### Trelleborg Solutions:

- Extreme low-temperature FKM O-Rings and molded components
- Developed with specialized high pressure testing equipment
- PTFE sealing rings



## Sensors and Safety Systems

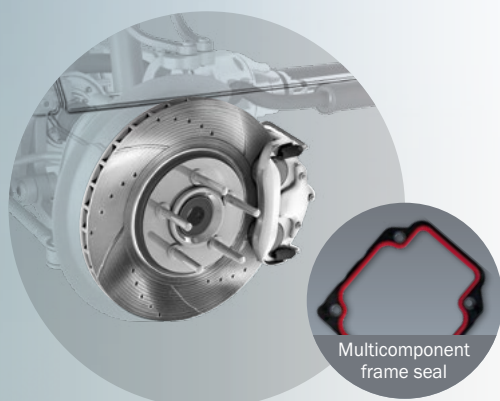
Multifunctional components combine, for instance, sealing and housing functions, reducing critical interfaces and lowering system costs.

### Requirements:

- Fully automated manufacturing and inspection
- Cleanroom production
- Multiple functions in a small space

### Trelleborg Solutions:

- Multicomponent parts
- Wide range of different material combinations:
  - Liquid Silicone Rubber (LSR) & polyamide 66 (PA66)
  - Steel, polyphthalamide (PPA), ethylene propylene diene rubber (EPDM)



## Brake System

Multicomponent parts and seal combining PTFE and elastomer materials save weight, and optimize performance, and safety.

### Requirements:

- Tested and compatible with all brake fluids
- Large number of OEM approvals
- Fully automated manufacturing and inspection
- Eliminate braking noise

### Trelleborg Solutions:

- Multicomponent parts
  - LSR + plastic + metal
  - EPDM + plastic
- Specialized PTFE seals/guides for reduced friction



# Electrifying the Future

## Charging Socket

Specific Seals ensure driver safety and efficient charging of EVs.

## Power Electronics

Pressure-activated profile seal enlarges the cooling surface and ensures better performance for power electronics.

## e-Axle

Next-generation seal designs minimize frictional torque over wide temperature ranges.

## Electric Motor

Advanced rotary seals reduce friction for better performance.

## Battery Case

Custom-designed components protect the battery to extend lifetime.

## Rubore® Washer

See page 14 for more details



eMobility is booming, and it places high demands on components. When developing high-performance seals for eMobility applications, Trelleborg combines an effective R&D organization with modern digital processes to reduce lead times to the lowest possible for initial functional prototypes.



### Hydrogen System

### Sensors

Protecting sensors in challenging environments.

### Fuel Cell Module

Durable materials prevent gas leakage.

### Thermal Management System

Multicomponent valve seals reduce friction and increase battery lifetime and range.



# eMobility Powertrain

## More Range and Better Acoustics with Our Innovations

We invest heavily in developing products for current and future challenges in the electric drivetrain.

### The e-Axle

Scan the QR code to learn all about our HiSpin® products.



### HiSpin®

HiSpin® rotary seals minimize frictional torque while offering a static and dynamic sealing function for tight sealing regardless of the direction of rotation.



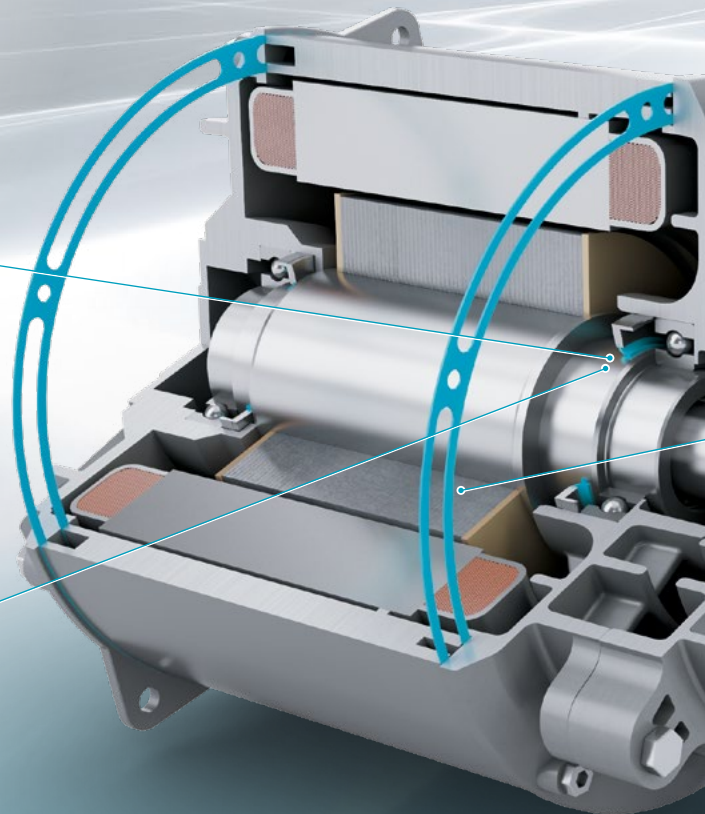
#### HiSpin® PDR RT

- Flexible for use in a wide temperature range from -200 °C to +260 °C/-328 °F to +500 °F with Turcon® materials
- Seals at top speeds of over 60 m/s / 134 mph
- Shaft grounding with conductive PTFE
- Minimum frictional torque



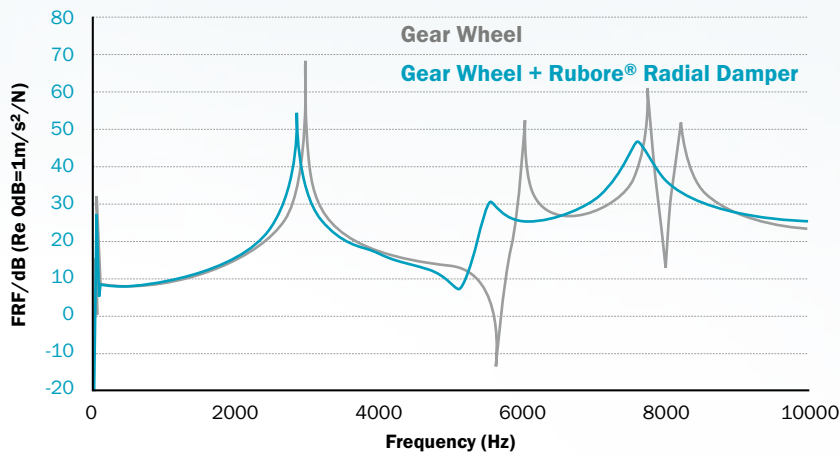
#### HiSpin® EV

- Seals for a wide range of lubrication levels
- Rubber lip with patented design
- Seal at top speeds of 30 m/s / 67 mph or 40 m/s / 89 mph





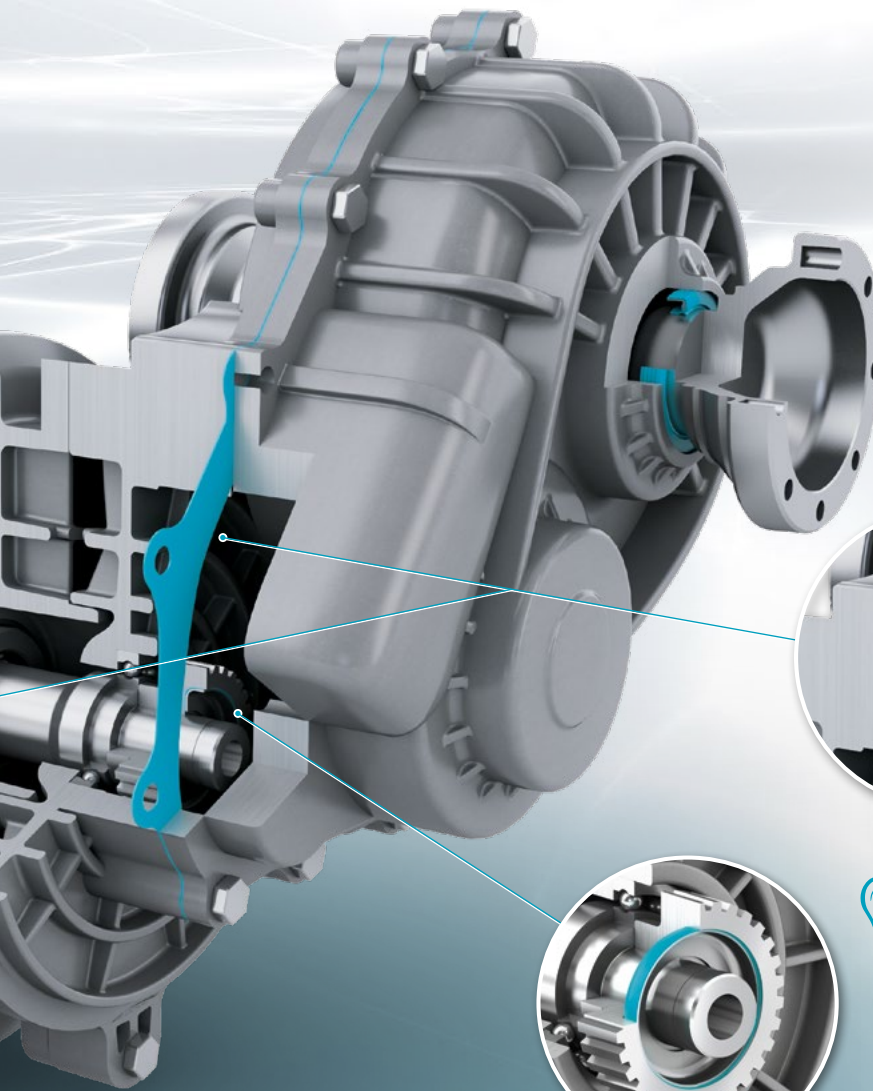
## Improved Acoustics



## Damping Solutions

With our innovative Rubore® products, vibrations are eliminated at the source.

**Vehicle acoustics are improved significantly.**



### Housing Seal

- Automated assembly thanks to form stability
- Flexible design
- Large selection of materials
- Suitable for oil- and water-based coolants
- Elastomer or multicomponent solutions



### Rubore® Radial Damper

- Damping of vibrations above 300Hz
- Designed to meet application requirements
- Large selection of materials



# eMobility Battery & Electronics



## High-Voltage Battery

### Housing Seal

High-voltage batteries are the heart of eMobility, and they require special protection. In close collaboration with customers, we develop custom sealing solutions for all cover and battery housing geometries. Our solutions facilitate efficient fully automated assembly processes and simplify battery maintenance operations.

- Supports fully automated assembly
- Easy disassembly when maintenance is required
- Tight seal prevents leakage in accordance with IPX9K & IPX7
- Meets flammability requirements according to UL94 V0 & HB
- For aluminum, steel and plastic housing
- Specialized seal designs for thin-wall covers and fewer screws

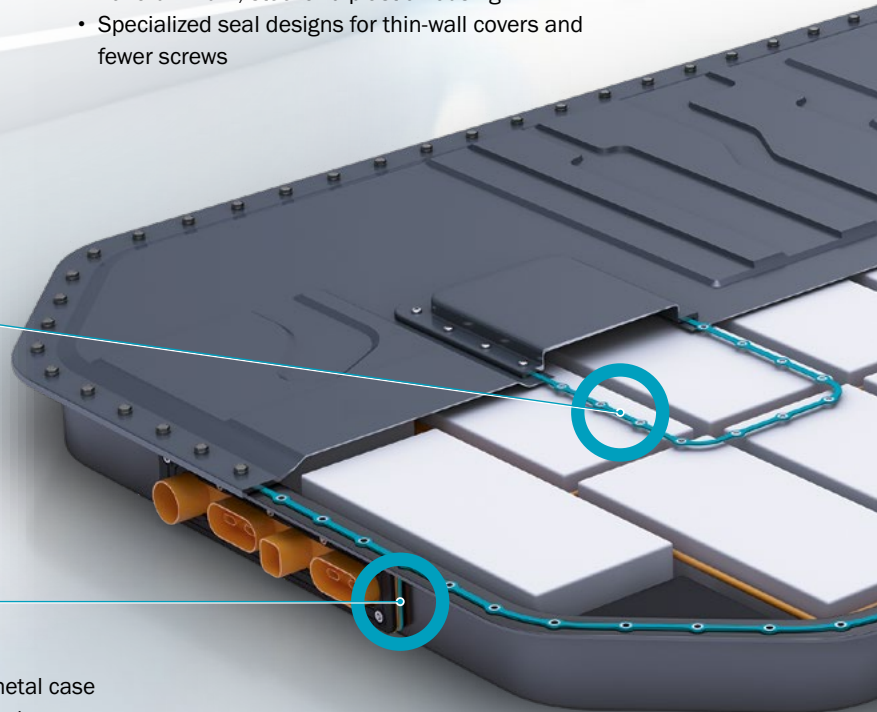


Seal for Service Flap

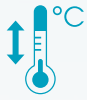


Seal for HV Plug Strip

- Tolerance compensation between plastic and metal case
- Multicomponent solutions for unique requirements (rubber-to-metal, rubber-to-plastic)
- Meets flammability requirements according to UL94 V0 & HB
- Provides electrical insulation







## Better Performance for Power Electronics

Direct liquid cooling is an innovative solution for high power densities and more compact modules.

Our pressure-activated profile seal ensures a reliable and efficient seal for your power electronics.

- Resistant to pressure peaks
- Narrow seal design enlarges the cooling surface and offers better performance
- Pressure-activated sealing profile
- Outstanding sealing for sealed edges

### Other applications:

- O-Rings and molded components for coolant connections
- Seals for multi-way valves made of a PTFE and rubber composite
- Seal sets for electric coolant pumps



## Quieter Drive

Just like the radial damper, the inverter cover damper acts at the point of origin, where vibration and noise are created. Our damping materials improve the acoustics of multiple vehicle components, and stand out with their unique design and light weight properties.

### Inverter Cover Damper

- Damping vibrations above 300Hz
- Custom-designed to meet unique requirements
- Large selection of materials



### Rubore® Washer

See page 14 for more details

### Battery Cell

### Housing Seal

## Watch the Film:

Join Axel and Matthias on their all-electric road trip.



# Rubore® Washer

Our Rubore® Washer offers virtually leak-free sealing protection along screws to safeguard critical electric systems.

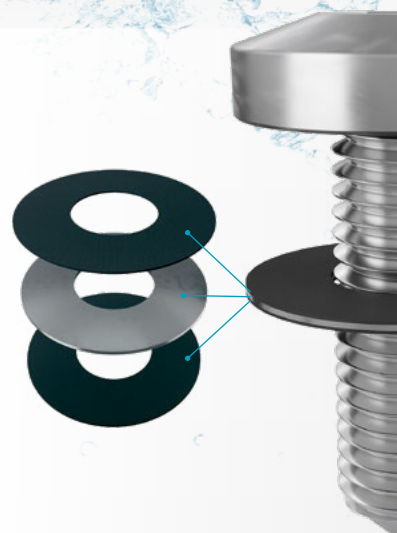
Corrosion is a serious risk. Since electric vehicles rely heavily on electronic components and wiring systems, it's essential to protect them from corrosion to ensure the vehicle's performance, safety, and longevity. Seals play a crucial role in preventing corrosion.

## Features & Benefits

- Robust material seals for extended component lifetime
- Adaptability of rubber layer enables effective sealing of surface imperfections such as scratches or cavities and prevents micro-leakage
- The rubber layers allow a continuous tightening torque increase for an improved fastening quality
- Galvanic corrosion is prevented by avoiding metal-to-metal contact
- Superior resistance to corrosion propagation between bolt head and housing

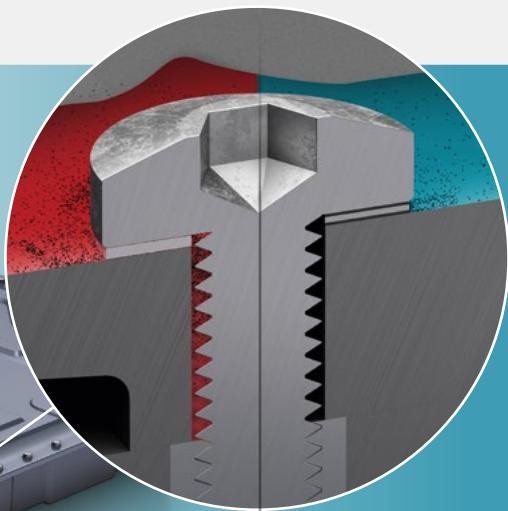
## The Smart Rubore® Solution

With its unique composite technology, the Rubore® Washer provides optimal sealing protection in systems where screws and bolts are used. Ideal for these applications, our three-layer Rubore® material consists of a metal layer between two rubber layers. Using advanced processing technologies, the rubber is vulcanized to the carrier metal to produce a strong and durable laminate.



## The Rubore® Washer in Action

Scan the QR code to watch the film and discover how the Rubore® Washer protects sensitive electrical components.



## Sealing Performance Comparison

The **traditional washer** does not prevent fluids (red) from entering the screw hole.

The **Rubore® Washer** tightly seals between the screwhead and the housing to protect components.

## Application Example: Battery Housing

The battery housing requires numerous screws or bolts. Sealing along the screws presents specific challenges due to the critical nature of the battery compartment. Screw seals must be able to operate in a wide range of environmental conditions, including extreme temperatures, rain, snow, and road salt exposure.

The Rubore® Washer seals the screws by fully covering the screwhead with a large sealing surface. This effectively prevents moisture, contaminants and corrosive agents from entering the battery housing. Thereby, it maintains performance while eliminating safety hazards and minimizing corrosion.

The Rubore® Washer is proven to perform in the harshest environments and resist corrosion, meeting the toughest original equipment manufacturer (OEM) lifetime requirements.



# Sealing Solutions for Battery Cells

At Trelleborg Sealing Solutions, we combine material expertise with advanced engineering capabilities to provide effective and efficient sealing solutions for battery cells.

Global passenger electric vehicle (EV) sales are projected to remain robust, along with sales of commercial EVs. The rising demand for electric cars is also increasing the need for battery cells.

A significant challenge for vehicle manufacturers is the customer demand for improved range and reliability. High-quality and long-lasting components in the cell housing, in particular the seal, play an important role in ensuring cell performance and longevity.

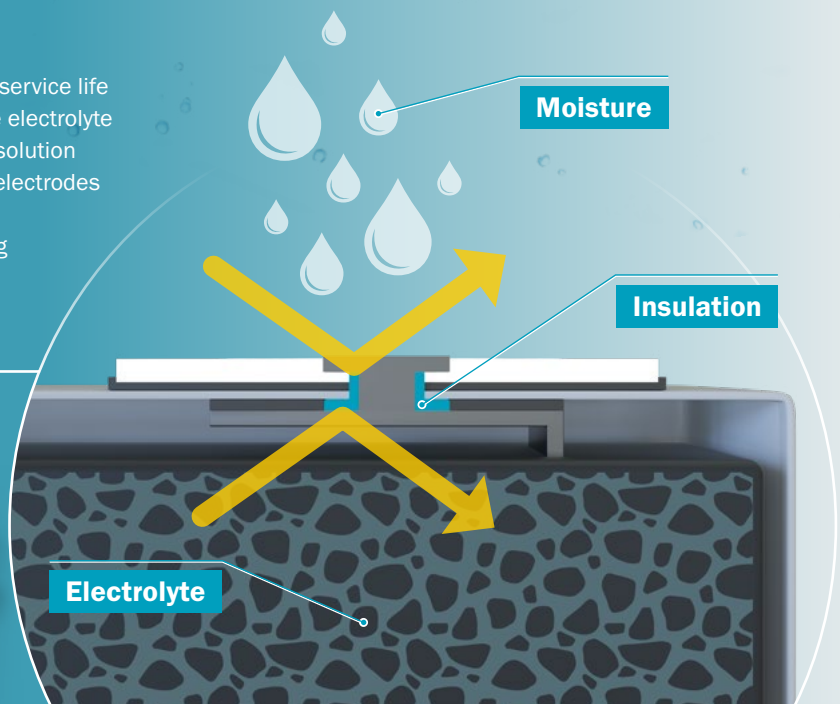
These seals are subject to high demands during operation and require excellent chemical compatibility. If the seal material is not compatible with the electrolyte solution in the battery cell, the seals can corrode, leading to leaks, which can harm hardware and the operating environment. The result is a reduction of cell performance and a shorter battery lifetime.

## Battery Cell Sealing Solutions

Building on our experience in high-performance materials and material processing, we offer a range of battery sealing solutions for cylindrical and prismatic cells. The sealing solutions are customized to your unique needs, and made from specialized materials, including high-performance elastomers and thermoplastics.

## Features & Benefits:

- Hermetically seals the battery cell housing for its entire service life
- Prevents the penetration of moisture and leakage of the electrolyte
- Outstanding chemical compatibility with the electrolyte solution
- Acts as an insulator between the positive and negative electrodes to prevent a short circuit
- Global manufacturing capabilities support local sourcing with cutting-edge solutions



# New Generation of Damping Materials

Optimized for electric vehicles having weight, performance and temperatures in mind.

**While quieter than internal combustion engines, electric drivelines have their own noise and vibration challenges, such as inverter covers, valve covers, chain covers, oil pans, transmissions, electric motors and gearboxes.**

Trelleborg's next-generation Applied Damping Materials (ADM) lowers vibration levels in the vehicle's structure, reducing transmission of vibration into airborne noise.

## Benefits

- Significant reduction in noise and vibration
- Compliance with all industry standards for brake noise
- Superior durability
- Excellent performance over a wide range of temperatures
- High resistance to aging

## ADM can be:

- Applied to surfaces that radiate excessive noise
- Formed and cut to part using conventional press operations such as press forming and die cutting
- Produced made-to-measure for customer specific components

Typical applications include housings and covers where damping is needed, e.g. inverters, power electronic units, engine covers, valve covers, chain covers, oil pans, transmissions and electric motors.

SOURCE OF VIBRATION

WITH DAMPING

ADM is a constrained layered damping material that consists of metal layers that have been vulcanized together with various damping materials to produce a strong and durable laminate.



# Hydrogen Systems

Hydrogen is considered the fuel of the future for heavy duty trucks and long-range buses. Green hydrogen is a sustainable way to transport goods and will play a major role in the future energy mix. In partnership with customers, we develop sealing solutions that are precisely tailored to the demanding requirements of hydrogen.

## H<sub>2</sub>Pro™ Materials

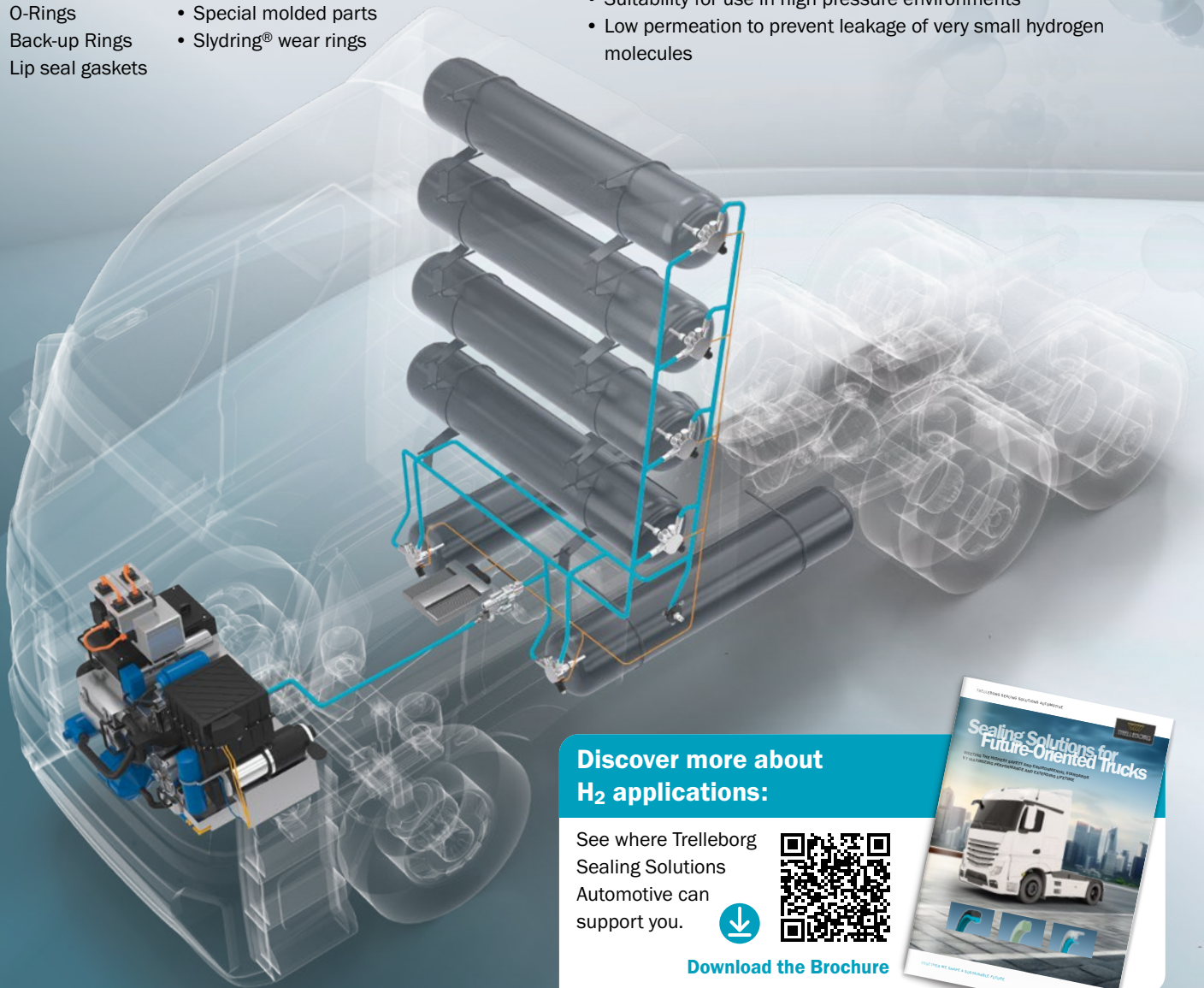
Our H<sub>2</sub>Pro™ range offers validated, reliable solutions for a wide array of applications including pumps, valves, connectors, and numerous other devices in the hydrogen supply chain.

## Trelleborg Solutions:

- O-Rings
- Back-up Rings
- Lip seal gaskets
- Special molded parts
- Slydring® wear rings

**Hydrogen has very special properties and requires innovative, tailor made sealing solutions. Seal materials must demonstrate:**

- Low temperature capabilities
- Ability to withstand rapid gas decompression
- Suitability for use in high pressure environments
- Low permeation to prevent leakage of very small hydrogen molecules



## Discover more about H<sub>2</sub> applications:

See where Trelleborg Sealing Solutions Automotive can support you.



[Download the Brochure](#)












# Material Expertise

## Elastomers

Elastomers are one of the most important groups of materials for seals. When specified in line with requirements, they have outstanding elasticity and resistance properties.

External influences such as media, oxygen, ozone, pressure and temperature need to be taken into consideration when choosing a material.

Material	Typical media encountered	Example applications	Temperature*
<b>NBR</b> Acrylonitrile butadiene rubber	Engine oil, hydraulic oil, greases	O-Rings as a pre-tension element for PTFE seals	
<b>EPDM</b> Ethylene propylene diene rubber	Brake fluid, cooling water, coolants	Seals in the coolant circuit, O-Rings for air conditioning and heating systems, brakes, housing seals for high voltage batteries	
<b>AEM</b> Ethylene acrylate rubber	Engine oil, transmission oil, AdBlue	Static seals in the engine, transmissions and e-axle, sealing the AdBlue injection valve	
<b>HNBR</b> Hydrogenated nitrile butadiene rubber	Oil, cooling water, coolants, AdBlue	Radial oil seals, actuators in the transmission, O-Rings for air conditioning and heating systems and AdBlue injection valves	
<b>VMQ/LSR</b> Silicone rubber	Air, (cooling) water, (oil)	Sealing electronic components and plugs against ambient conditions	
<b>FVMQ</b> Fluorosilicon rubber	Fuel, CNG	Seals in the fuel system at low temperatures, CNG injection valve	
<b>FKM</b> Fluoroelastomers	Fuel	Seals throughout the fuel system, such as injection valves and lines	

 Temperature range  
 For specialized compounds




°C -100 -50 0 +50 +100 +150 +200 +250  
 °F -148 -58 32 +122 +212 +302 +392 +482



\*Temperature ranges only apply in conjunction with media compatible with the elastomers in question.

## Polyurethane

Zurcon® is the brand name for our polyurethane (PU) material range that includes unique and exclusive compounds developed and produced in-house. They have excellent elastic properties and wear resistance, combined with outstanding mechanical

characteristics and a low compression set. Because of this, they offer multiple options for hydraulic and pneumatic sealing applications.

Material	Special features	Example applications	Temperature*
<b>Zurcon® Z25</b>	Specialized high-temperature compound	Static and dynamic seals for hydraulic applications	
<b>Zurcon® Z13</b>	60ShD-PUR with outstanding chemical compatibility and seals in a broad temperature range	Rubber-energized seals (pistons, rods, scrapers and rotary transmission) for hydraulic applications and high pressures and temperatures	
<b>Zurcon® Z22</b>	Specialized low-temperature PUR that seals in a broad temperature range	Static and dynamic seals for gas (CNG, H <sub>2</sub> etc.) and hydraulic applications	

 Temperature range  
 Minimum working temperature for gas applications limited to -40 °C/-40 °F

°C -100 -50 0 +50 +100 +150 +200 +250  
 °F -148 -58 32 +122 +212 +302 +392 +482

\*Temperature ranges only apply in conjunction with media compatible with the Zurcon® materials in question.



## PTFE

Turcon® and Turcite® are the brand names for our range of PTFE materials. PTFE is an exceptional material due to its very low coefficient of friction combined with wide-ranging chemical compatibility. These materials are developed at our R&D Centers to specifically meet our customers' unique demands, such as

increased extrusion stability, maximum wear resistance and improved thermal conductivity.

The compounds listed below are a small selection of the broad range of proprietary PTFE materials we offer.

Material	Special features	Example applications
<b>Turcon® M04</b>	Medium fill level, high extrusion and wear resistance	Sealing ring for high-pressure injection valve, universal material
<b>Turcon® X9218/X9214</b>	Low fill level, with or without snap back properties	Sealing ring for high-pressure injection valve, special design for easy assembly and calibration
<b>Turcon® X9616</b>	Medium fill level, high extrusion and wear resistance, high thermal conductivity	Sealing ring for high-pressure injection valve, special design based on specific customer requirements
<b>Turcon® M12</b>	Low friction, high wear resistance	Universal material for hydraulic applications, such as shock absorbers, convertible roof systems, CO <sub>2</sub> air conditioning systems
<b>Turcon® MC2</b>	Electrically conductive	eMobility, avoiding electric charge build-up and spark production
<b>Turcon® QD1</b>	Self-lubricating for very low friction	eMobility, used for HiSpin® rotary seals for extremely high speeds
<b>Turcite® T47</b>	Low friction, high wear resistance	Universal material for bearings and Slydring® wear rings
<b>Turcite® T51</b>	Very high extrusion resistance	Bearings and Slydring® wear rings

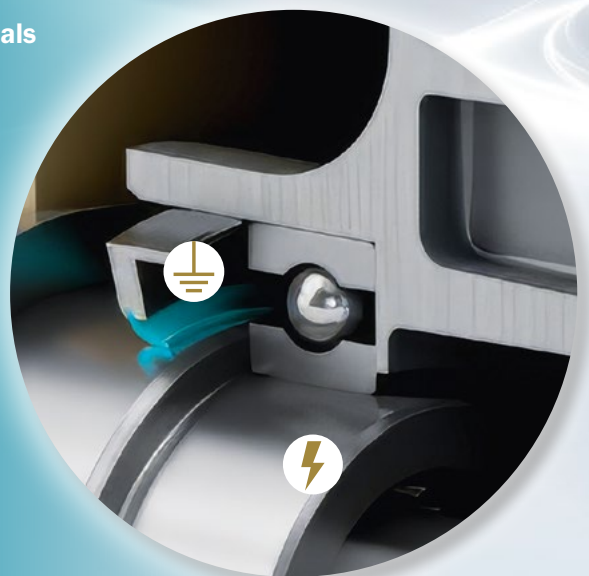
## Unique electrically conductive

### **Turcon® MC1 and Turcon® MC2 – specially developed PTFE materials combine high conductivity with very good sealing properties.**

An insulated-gate bipolar transistor (IGBT) is a power semiconductor device that primarily functions as an electronic switch. It combines high efficiency with fast switching. Since it is designed to turn on and off quickly, this can result in electric discharge machining (EDM) bearing currents. The consequence is a flashover, once the electronic charge built up in the bearing exceeds the breakdown voltage of the lubricant. This is where Turcon® MC1 and Turcon® MC2 come into play and take over the shaft grounding function in electric engines. Thereby they prevent corrugation damage and craters on the bearing, significantly increasing the service life of the electric engine.

#### **Advantages:**

- HiSpin® 2-in-1 solution: dynamic sealing function and shaft grounding
- Reduces the number of components
- Easier assembly
- Potential cost reduction



# Multicomponent Technology

Maximizing performance, streamlining assembly processes, and combining multiple functions in one part. These three benefits are the core assets that characterize innovative multicomponent technology capabilities.

Our multicomponent technology strongly bonds a range of polymers, chosen to meet your specific requirements. Unique seal geometries, combining

multiple features or seals, can be customized to your application. This can improve performance, facilitate assembly and reduce part handling. The seals produced are leak-free and need less space and assembly effort, making them a cost-effective sealing solution.

## Multicomponent Development Center

**To better support the development of new and custom components, Trelleborg Sealing Solutions has a dedicated Multicomponent Development Center with testing and processes set-up specifically for multicomponent solutions.**

### Specific testing capabilities include:

- Bonding strength testing of a wide range of polymer combinations including elastomers, thermoplastics and thermoplastic elastomers
- Process parameter optimization for specific material combinations
- Development of micro multicomponent products

In addition, the development center offers customers a dedicated resource for producing prototypes, which is a key aspect of the product design and manufacturing feasibility phase.

### Explore Multicomponent Technology in our Virtual Showroom

Discover this advance processing technology in an interactive 3D experience.

[www.trelleborg.com/seals/showroom](http://www.trelleborg.com/seals/showroom)





The Multicomponent Development Center works hand in hand with the full global R&D network to coordinate other activities such as:

- Material performance testing, evaluation and validation
- Automation, camera inspection and other in-line testing capabilities
- Finite Element Analysis (FEA)
- Moldflow analysis



Dedicated Multicomponent Development Center for testing and engineering support

Trelleborg Sealing Solutions offers a full suite of testing, quality and validation services to prove the performance of our products:

- In-house laboratories: testing of material combinations and key performance metrics
- Quick prototyping and sampling services using additive manufacturing
- Camera inspection
- Functionality checks into fully-automated manufacturing process
- Different material combinations
- Process parameter window
- Prototype samples in quasi production conditions
- Full FEA service and material evaluation

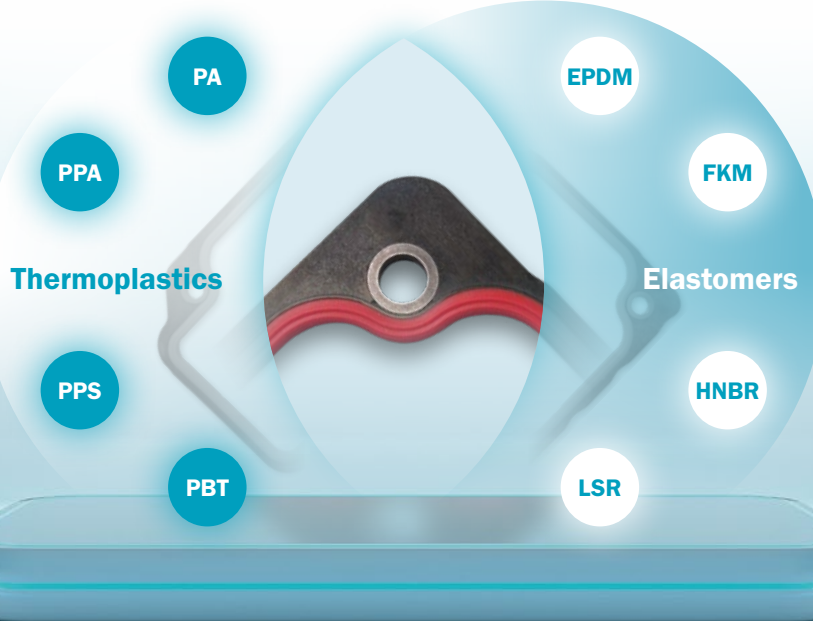


Full service suite including prototyping, sampling and camera inspection

## Multicomponent Production

### Advantages:

- Customized to application requirements
- Leak-free
- Easier installation and assembly
- Integrate multiple functions in a single part
- High volume output with maximum quality and consistency
- Simplified logistics by reducing handling and article management
- Reduce weight
- New design opportunities, such as more compact forms and multiple sealing positions
- Reduced Total Cost of Ownership (TCO)



# ServicePLUS

When you partner with Trelleborg through our ServicePLUS program, you can focus on your core business while we focus on ensuring all of your value chain needs are covered.



## Overview of our services



### Engineering

Trelleborg engineers and application experts collaborate with you to reduce development time and improve the overall performance and longevity of your products.

**Benefit from services including:**

- QuickSeal production technology
- Customized product design
- Traceability and performance monitoring



### Aftermarket

Our ServicePLUS solutions support your aftermarket requirements, helping you get your customer up and running again when a repair is needed.

**Benefit from services including:**

- Customized aftermarket packaging & kitting
- Easy re-ordering capabilities
- Installation tools and handling aids



### Manufacturing

Our experts can help your business increase production throughput without increasing manufacturing costs.

**Benefit from services including:**

- Sub-component assemblies
- Surface technologies to reduce friction and stickiness
- Part identification



### Enhanced Supply Chain

Trelleborg ServicePLUS services are uniquely designed to streamline our customers' procurement, inventory and replenishment processes. We partner with you to develop a customized program which frees up capital and labor so you can focus on your "Class A" parts and suppliers.

**Benefit from services including:**

- Kanban solutions based on automated replenishment system
- RFID technology to enhance your product logistics
- Customized packaging and labeling



# Mobile Tools & Apps

To find our mobile tools and apps, search for “Trelleborg” in the App Store or Google Play. These tools are designed to optimize your everyday productivity.

Discover our large selection of mobile tools and apps at

[www.trelleborg.com/seals/resources/mobile-tools-and-apps](http://www.trelleborg.com/seals/resources/mobile-tools-and-apps)



## Apps available

Android App on  
Google Play



In the  
AppStore



## Versatile CAD service

Convenient online access to our drawings in 2D and 3D - in all common CAD formats.

## Useful apps for automotive applications



### O-Ring Selector

O-Ring and housing dimensions in millimeters or inches.



### ISO Fits and Tolerances

Offers results based on DIN ISO 286 systems for tolerances and fits.



### Universal Converter

Large range of technical and scientific units for any dimension. Select the appropriate material overview table for hardness conversion. Enter a value to convert it into another hardness scale.



### Sealing Materials Selector

Enter the material specifications in combination with your required parameters, such as temperature or hardness and the app will immediately suggest suitable materials to meet your needs.

Trelleborg is a world leader in engineered polymer solutions that protect essential applications in demanding environments. Its innovative solutions accelerate performance for customers in a sustainable way.

Trelleborg Sealing Solutions is a leading developer, manufacturer and supplier of precision seals, bearings and custom-molded polymer components. It focuses on meeting the most demanding needs of aerospace, automotive and general industrial customers with innovative solutions.

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