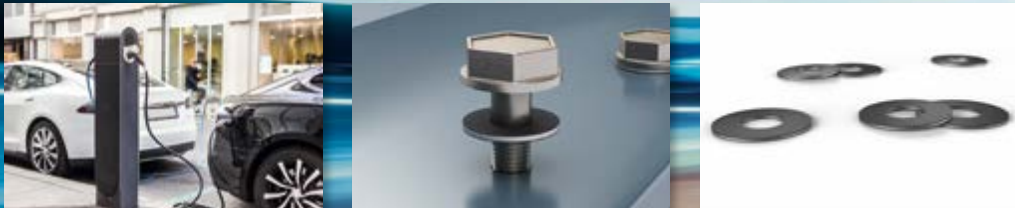




Rubore® Washer

PROTECTING SENSITIVE ELECTRICAL COMPONENTS



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

Safety is paramount in the automotive industry. Continuously evolving requirements aim to ensure vehicle reliability and passenger safety. At the same time, the industry is transforming toward electrification, which is supported by an increased presence of sensors and controllers in vehicles to ensure efficient operation.

Corrosion is a serious risk. It occurs when metals react with the environment, typically in the presence of moisture, oxygen and other corrosive agents. 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 by creating barriers that prevent moisture and contaminants from reaching sensitive electrical components.

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.



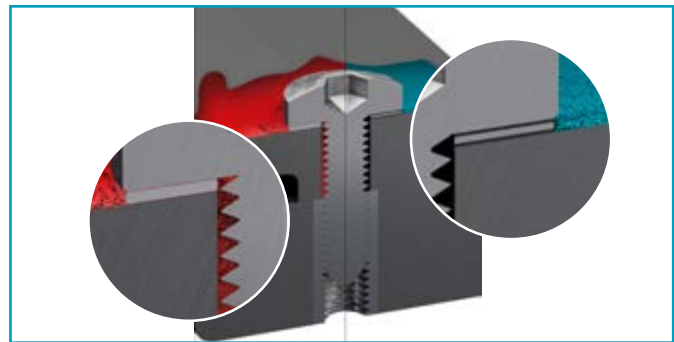
Rubore® Material Configuration

Features & Benefits

- Robust material seals for the component lifetime
- Adaptability of rubber layer enables effective sealing of surface imperfections such as scratches or cavities and prevents micro-leakage
- Very tight fit offers virtually leak-free sealing
- Fully bonded rubber-metal-rubber layers facilitate forcelocking screw connection
- Superior resistance to corrosion creep between bolthead and housing



Rubore® Washer adapts to counter surface.



Sealing Performance Comparison

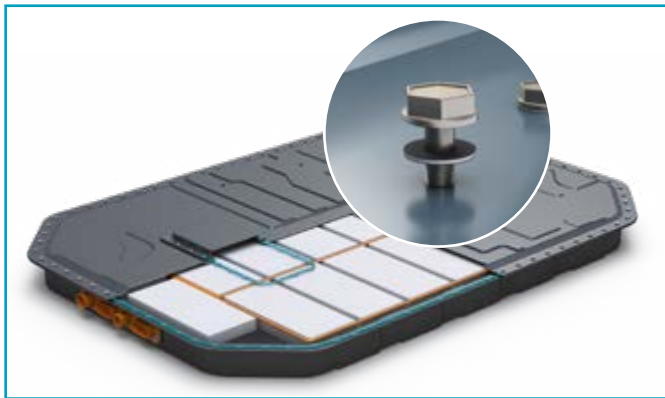
The traditional washer (left) does not prevent fluids (red) from entering the screw hole. The Rubore® Washer (right) tightly seals between the screwhead and the housing to protect components.

RUBORE® WASHER

Application Example: Battery Housing

In electric vehicles 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 and eliminating direct contact to the housing



Used with screws on battery housing, the Rubore® Washer fully seals the surface between the screwhead and the housing cover, providing maximum protection of the vehicle battery.

surface. This effectively prevents moisture, contaminants and corrosive agents from entering the battery housing, thereby maintaining 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.



Rubore® Washers demonstrate excellent resistance to corrosion compared to traditional washers.

Did you know?

The Rubore® material is so robust that it is commonly used in brake systems to insulate against vibration and noise .

The Rubore® Washer in Action



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

