

## DELIVERING INNOVATIVE SOLUTIONS FOR OVER SIXTY YEARS

Trelleborg Marine and Infrastructure has been at the forefront of designing engineered solutions for Omega Seals for a diverse range of applications including immersed tunnels, water infrastructure, underground construction, and offshore wind foundations since the 1960s.

Backed by a dedicated team of designers, engineers, and polymer experts, we continue to power vital infrastructure across the globe with our reliable and tailor-made solutions. From the initial consultation to thoroughly understanding your specific needs to final installation and maintenance, we will partner with you at every step of the way to deliver solutions that stand the test of time.

Using proven design methods and dedicated quality control, we guarantee products that don't cut corners.

- Over sixty years of track record
- Time-tested concept
- Designed to withstand high pressure
- Suitable for a variety of applications
- Replaceable during refurbishment
- Custom engineering options, including water pressure test valves

# Proven expertise in seal design and elastomer technology

Using high-quality engineered materials, Trelleborg's Omega Seals are manufactured to ensure durability and resilience under even the harshest conditions. These seals are designed to withstand high water pressures, accommodate large movements, and maintain their flexibility over extended periods of use. With the longest proven track record in the industry of designing reliable polymer solutions for infrastructure projects including immersed tunnels, water infrastructure, underground construction, and offshore wind foundations, our expertise in material application engineering is what sets us apart. Beyond the standard product range available, we are well-equipped to custom-designed seals that meet the specific requirements of a project.

#### **Global expertise localized support**

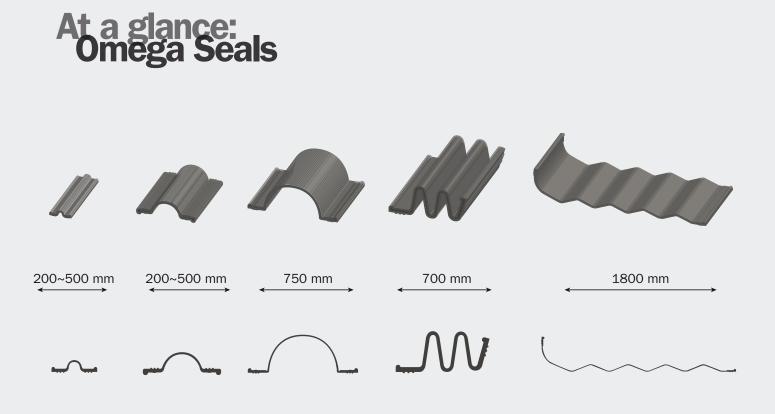
- Production Facility
- Sales & Project Engineering
- Service & Aftersales Support





The range of movement an Omega seal can accommodate is largely dependent on the geometry of the seal, strength of the integrated reinforcement plies and the differential pressure acting over the seal. While designing an Omega seal, we carefully study the required performance, environmental constraints and intended functionality of the seal. Doing so helps us to identify whether the seal will adequately meet these requirements:

- I It can withstand differential pressure and accommodate expected movements in all directions.
- The steel clamping construction can hold the Omega flange in place and is correctly integrated in the structure.
- The design of the clamping and sealing function considers the expected lifetime of the structure.



### Your trusted partner at every stage

When you partner with Trelleborg, you can count on our experienced team of experts dedicated to delivering sealing systems that meet your project's unique requirements. From using fully tested materials in manufacturing, to providing unwavering support in on-site inspection and maintenance services, we go the extra mile to ensure that you receive a comprehensive, end-toend engineered solution that you can rely on.

## ENSURING PERFORMANCE THROUGH REGOROUS TESTING

Having a rigorous testing protocol in place is critical to guaranteeing performance of the sealing systems to ensure the long-term stability and security of the structures that they are designed to protect.

At Trelleborg, the Omega Seals we design are subjected to the following tests to guarantee they perform as intended:

- Customized product verification to validate the design's efficiency and reliability before
- i integrating it into a project
- Independent 3rd party testing to verify that our product exceeds the projected 100-year lifespan
- Onsite pressure test to guarantee durability and that the solution is fit for purpose

#### TAILORED TO YOUR NEEDS

Whether you require a conventional seal or a tailored solution, our extensive engineering expertise ensures the delivery of a comprehensive range of Omega Seals meticulously crafted to meet your exacting specifications.

#### ON HAND WHEREVER YOU NEED US

With our extensive network of experts present across the globe, you can rely on Trelleborg to provide feet on the ground, local support, wherever and whenever you need us. Rooted in our rich history of craftsmanship, we take pride in helping you resolve the most complex requirements.

**GET IN TOUCH** 

Website | trelleborg.com/marineandinfrastructure Email | marine\_infra@trelleborg.com LEARN MORE ABOUT OMEGA SEALS

