



Safe, strong,  
reliable, global.



**WORKING ON WATER NEVER FELT BETTER**

# Quality, innovation, productivity.

**FEEL THE DIFFERENCE**



Noise and vibration in machinery at sea causes damage to equipment and discomfort to people, whether they're travelling or working. A global leader in polymer engineering, Trelleborg Antivibration Solutions specializes in minimizing these effects and delivering improvements people can physically feel. Calling on over 100 years' experience in the marine sector, we work closely with manufacturers and authorities to deliver off-the-shelf products and bespoke solutions which add value to the world's marine vessels and equipment.

Found in everything from propulsion engines and exhaust systems to generator sets and auxiliary machinery, all our solutions are modelled, tested and certified in our state-of-the-art Centre of Excellence. Our reputation rests on our ability to deliver compliant and pioneering solutions which enhance equipment, comfort and safety, while reducing downtime, maintenance and long-term cost of ownership.

**It's a difference you can truly feel across your operations, and in your brand reputation.**



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# Global, local, expert.

## FEEL THE BENEFIT OF PARTNERSHIP

With over 100 years' experience in shipbuilding, dredging and offshore applications, we have an unparalleled understanding of the sector and its regulations, backed up with approvals from multiple international classification authorities including ABS, Bureau Veritas and DNV GL. In addition to manufacturing globally respected marine products such as Dredgear and Evolo® vibration mounts, we model, test and certify customized solutions in our state of the art Centre of Excellence.

The partner of choice for the sector, we improve the reliability and service life of equipment, reducing the long-term costs of ownership. We also add value throughout the entire lifecycle, whether that's for a yacht or a passenger liner. Thanks to our efforts, passengers and workers feel safer and more comfortable, and our customers feel the benefits of working for a pioneering global brand:

- **Protection.** Our solutions extend the life of your equipment and components and offer superior protection against impact, vibration and noise.
- **Value.** By helping reduce downtime, we minimize your maintenance and repair costs while lowering the long-term cost of ownership.
- **Responsibility.** We help you improve the safety and comfort of passengers, as well as the sustainability of your equipment and operations.
- **Support.** Our global support network means we're accessible in all territories. Wherever you are, you'll have access to local engineering support and a robust and reliable supply chain.
- **Peace of mind.** Fully tested and compliant with all international standards, our market-leading solutions meet the high levels of safety and reassurance that the marine industry demands.

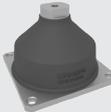
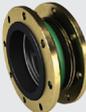
Committed to partnership working, we'll support you at every stage, from design and testing through to installation and training, helping you optimize your operations. And in terms of choice, quality and logistics, we offer a complete service – including small batch ordering - which helps you cut costs, mitigate risk and receive on time, on budget delivery.

**We don't just make life feel better. We make it feel easier, too.**



Have a look at our range of marine and energy solutions below, or get in touch to see how we could engineer a bespoke solution for your project. Further technical information can be found in our product catalogues.

DESCRIPTION	PRODUCT
<p><b>Cushyfloat HT</b>            Caters for higher trust load requirements            Excellent vibration isolation properties            Limits excessive moment under shock loading</p>	
<p><b>BA and Double U-Shear range</b>            Provides excellent isolation of low frequencies            Permits high deflections            Suitable for low speed machinery and equipment</p>	
<p><b>Buffer product range</b>            Easily fitted            Oil and nitrate resistant            Nitrile Rubber            Protects structures and equipment from impact forces</p>	
<p><b>Cushyfoot product range</b>            Robust design            Large variety up to 1.6 tonne load            Trelleborg original design</p>	
<p><b>Cushyfloat product range</b>            Trelleborg original design            Low lateral stiffness            Simple to install</p>	
<p><b>Cylindrical mount product range</b>            Simple to install            Suitable for a range of applications            Wide variety of sizes</p>	
<p><b>Cushymount product range</b>            Compact fail safe design            High capacity            Dissimilar stiffness</p>	

DESCRIPTION	PRODUCT
<p><b>D-Series product range</b>            Low frequency isolator            Compact design            Low level shock isolator</p>	
<p><b>DX mount</b>            High level vibration isolation            Modular design            Highest level shock isolator</p>	
<p><b>Metacone product range</b>            Large static deflections            Compact fail safe design</p>	
<p><b>Evolvo 600 series</b>            High level of vibration and sound isolation            Suitable for a range of application            Easily fitted</p>	
<p><b>High Deflection Mounts</b>            High level of vibration and sound isolation            Suitable for a range of application            Easily fitted</p>	
<p><b>Rubber Expansion Joint</b>            Suitable for use with cold/warm water            For water and fuel pipelines            Available in various sizes</p>	
<p><b>Wire Rope Isolators</b>            Stainless steel wire construction            Suitable for a range of application            Easily fitted</p>	

The background of the page is a photograph of several wind turbines. The turbines are white with three blades each, and they are set against a clear blue sky. The perspective is from a low angle, looking up at the turbines, which creates a sense of height and scale. The text is overlaid on the upper portion of this image.

# Quality at every stage

## **QUALITY NEVER FELT BETTER**

Trelleborg Antivibration Solutions specializes in isolation, attenuation and suspension solutions of unshakeable quality and reliability. Trelleborg's products are specified by leading shipbuilders, marine energy builders and manufacturers of ship borne equipment and machinery. We also work closely with European naval forces to supply antivibration and shock mountings for use on surface fighting ships, submarines and supply vessels.

## **PERFORMANCE NEVER FELT BETTER**

Marine design is constantly evolving, as is the technology used to reduce excessive vibration and noise. Trelleborg Antivibration Solutions is continuing to lead the way in this crucial area of marine engineering.

Our marine product range is extensive and expanding. It includes mounting systems for use with main propulsion engines of all weights, generator sets, auxiliary machinery and exhaust systems. Metalastik® mounts isolate deckhouses and cabins from the hull on cruise liners, ferries, workboats and luxury yachts, ensuring comfort and noise isolation in accommodation areas. For defense applications, our mounting systems are used to protect sensitive equipment and improve safety and comfort levels for all crew members.

## **SUPPORT NEVER FELT BETTER**

In the marine industry, logistics can be a challenge, especially as project locations get more remote. What's more, minimum order values and quantities can be restrictive and make it difficult for you to get exactly what you need, which is not the case with Trelleborg. Our strong, global supply chain and dedicated service can adapt to and support your logistics, making us a supplier you can rely on.



# Customized, compliant, complete.

## DRIVING INNOVATION INTO THE MARINE INDUSTRY

**Trelleborg Antivibration Solutions has a long history of product innovation, including the Metalastik® brand. First introduced almost 100 years ago, Metalastik® has evolved to become one of the world's most respected and successful antivibration products, and is still widely used in the marine industry today. We are also the name behind pioneering marine products including Dredgear and Evolo® vibration mounts.**

This innovation continues today, and we remain at the forefront of marine design. Investing significantly in R&D, we work closely with commercial and military customers - including European naval forces - to develop new solutions which anticipate and meet future needs. At the heart of this lies our Centre of Excellence in Dordrecht, The Netherlands. Using advanced analytical and simulation capability – including our own VibrationLab™ – our multi-disciplinary teams have earned a global reputation for researching and solving complex engineering challenges. As a result, we offer one of the most complete portfolios of marine sector solutions – and one we're adding to continuously.

We can apply this innovation to your unique needs, developing a bespoke and cost-effective solution for your application. Give us the challenge, and our specialist teams will work with you at every stage - from concept, design and manufacturing, to modelling, testing and installation. You can be sure that the solution will meet your needs and be fully compliant with international standards, ensuring you feel the full power of our innovation.

# Tested, trusted, proven.

## QUALITY IN TESTING, MANUFACTURE AND SUPPORT

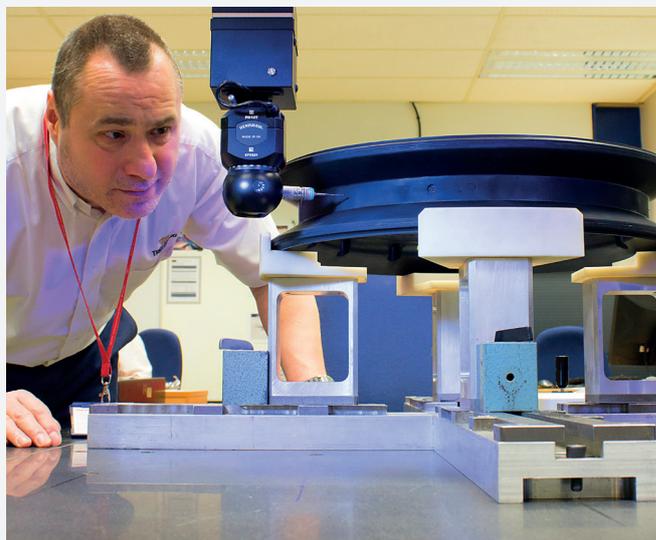
**With over 100 years' experience serving the marine industry, we're fully aware of the issues and the need for quality at best cost.**

While the safety and comfort of passengers and crew are always key considerations, you're also facing specific operational challenges – not least a need for small batch orders and on-time delivery at worldwide locations. Equally, there's the need to improve productivity and your cost base by extending the life and performance of equipment. With our global supply chain and proven quality, we are able to meet these demands reliably and effectively.

Our high-quality products are the result of over 100 years' experience in the marine sector. They're manufactured in world-class plants with superior materials and technology, and they're tested using sophisticated software and technology at our global Centre of Excellence.

What's more, as part of a major international group, Trelleborg Antivibration Solutions offers you the reassurance of financial strength, global support and on-going investment in quality and testing.

You will feel the advantages today, and throughout the lifecycle of your product.







Using advanced polymer technology, Trelleborg's Antivibration Solutions (AVS) operation specializes in the field of rubber-to-metal bonding for the removal of unwanted noise and vibration. Part of the Industrial Solutions division of Trelleborg Group, we harness over 100 years of experience to solve a wide range of application and environmental challenges in sectors including rail, marine, industrial and off-highway. Focused on isolation, attenuation and suspension solutions of unrivalled quality and reliability, we have a reputation for high quality, outstanding performance and long service life. Our commitment and expert polymer technologies optimize comfort, health and safety while creating maximum business value through improved longevity, productivity and cost effectiveness.

[WWW.TRELLEBORG.COM/ANTI-VIBRATION-SOLUTIONS](http://WWW.TRELLEBORG.COM/ANTI-VIBRATION-SOLUTIONS)

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