

Brochure



SonicShield



Sustainable  
anti-fouling

Commercial shipping  
[www.h2o-marine.com](http://www.h2o-marine.com)

# SonicShield, Ultrasonic Anti-Fouling by H2O Marine.

SonicShield is a state-of-the-art ultrasonic anti-fouling technology that is engineered, designed, and manufactured in the Netherlands that offers an alternative to traditional Impressed Current Anti-Fouling (ICAF) systems. Unlike ICAF, which uses copper anodes to prevent marine fouling, Sonicshield uses high-frequency sound waves to disrupt the adhesion of marine organisms. This non-toxic and environmentally friendly technology is gaining popularity as a sustainable solution to prevent biofouling, without the need for chemicals or heavy metals. SonicShield also requires less maintenance than ICAF systems, as there are no costly anodes to replace.

As a result, SonicShield is becoming an attractive option for shipowners and operators who seek a more sustainable and cost-effective anti-fouling solution.

Our fundamental principles engineering and designing SonicShield are based on three key pillars:



Functionality



Sustainability



Economics



The design of SonicShield is sleek and compact, making it easy to install and operate.

The system is made from high-quality materials and components, ensuring its durability and reliability in the harsh marine environment. Additionally, SonicShield is manufactured to meet the highest industry standards and undergoes rigorous quality control checks to ensure optimal performance.

Our research and development team is dedicated to ensure that our products are the most innovative and efficient solution available in the market. We focus on three elementary areas: **biology, acoustics** and **electronics**, to ensure that our system is highly effective and eco-friendly.

### **Environmentally friendly and economically feasible**

We believe that a product should not only work but should also be environmentally friendly and economically feasible for all our clients.

### **Sound waves**

Our ultrasonic technology works by emitting sound waves that create an inhospitable surface which works as a barrier against marine fouling organisms. This process is achieved through our cutting-edge electronics, which convert the energy of the sound waves into a highly effective anti-fouling mechanism.

### **Highly eco-friendly solution**

We take pride in our commitment to sustainability. Our system is designed to operate without the need for any

chemicals, making it a highly eco-friendly solution. In addition, our product is easy to install and maintain, resulting in lower maintenance costs and reduced environmental impact.

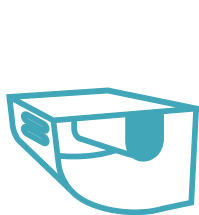
### **Provide significant cost savings**

We understand that economics are a crucial factor in any business decision. Our system is designed to provide significant cost savings over traditional anti-fouling methods. By reducing the need for maintenance and avoiding the expense of harmful chemicals, looking at Capex as well as Opex our solution is an excellent investment for any vessel owner.

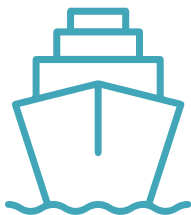


SonicShield is designed to replace Impressed Current Anti-Fouling Systems (ICAF) that use copper anode consumables and are harmful to the environment.

Main application areas are protecting internal cooling- and sea-water systems like box-coolers, plate-coolers, sea-chests, water-inlets, strainers, piping and hulls.



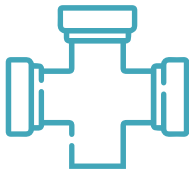
Sea-chest / Box-cooler



Hull



Piping



Strainer

## SonicShield is the trusted solution for marine operators

The Dutch have a strong maritime industry, with world-class shipbuilding, port infrastructure, maritime technology companies and with our commitment to functionality, sustainability, and economics, as a result making SonicShield the trusted solution for marine operators worldwide.

### Highly effective

It is suitable for all types of vessels, from work boats to cruise vessels, offshore platforms, and more. Our system have been rigorously tested and have been proven to be highly effective in preventing the growth of fouling organisms like barnacles and mussels.

### Products

SonicShield control units have from 2 up to 10 transducer connections and are 240v AC powered.

The high-power transducers are fixed by a proprietary mounting system and can be fixed on flat and curved surfaces. Standard they are IP67 classified but can on request also be supplied with IP68 classification.

**If you want to ensure your vessel is always running at peak performance, contact us today to learn more about how SonicShield can benefit you.**

# H2O Marine BV



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