

How it works

Sonihull ultrasonic anti-fouling technology is the world's leading chemical-free biofouling management solution. Backed up with over 15 years of experience in the maritime industry, it has a proven track record on thousands of commercial vessels. Due to its low level of electromagnetic interference (EMI) noise, Sonihull is also the preferred choice to minimize disturbance to instrumentation and other electronics.

On coolers, Sonihull can prolong cleaning intervals by stopping fouling from forming. Cleaning downtime may be cut by up to 50% depending on the application, and the less frequent opening helps to extend the cooler lifetime. Sonihull maintains high cooling efficiency, which may otherwise drop between one cleaning and the next.

The ultrasonic system itself has low power and maintenance needs, and installing it on the outside of coolers is easy. Using our deep knowledge of both heat exchangers and ultrasonic technology, we help you find the optimal Sonihull transducer position and frequency setting. After our product experts mark up your cooler drawings, our Alfa Laval Marine Service engineers can perform the installation in any of the global shipping hubs.

Alfa Laval

Anti-fouling upgrade

For coolers

Prevent fouling before it starts with ultrasonic technology

Improve cooler efficiency and reduce maintenance costs with Alfa Laval Sonihull. Our ultrasonic anti-fouling system prevents fouling on hard surfaces, which makes it an environmental and cost-effective way to maintain cooler performance. Since fouling decreases thermal efficiency, preventing its formation in engine coolers can have a direct and positive impact on engine fuel consumption.

Our service helps you with:

- Optimized equipment performance
- Improved energy efficiency
- Up to 30% reduction in cooler maintenance cost
- Extended lifetime of your existing cooler

How the service can be delivered



Direct comparison proves the benefit of ultrasonic anti-fouling technology

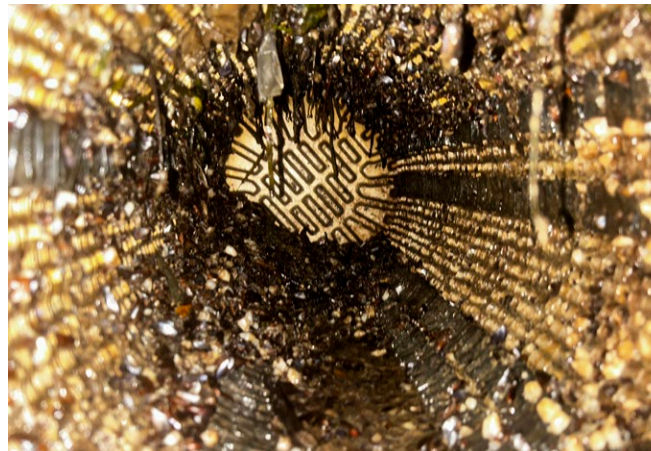
A Turkish shipping company wanted to assess the impact of Alfa Laval Sonihull on marine biofouling. So, in October 2024, the company made a test installation of the ultrasonic anti-fouling technology on a 1600 TEU container vessel. One of the vessel's two low-temperature (LT) coolers was fitted with Sonihull, while the other LT cooler was left unprotected.

Eight months after installation, the crew could see a clear reduction in biofouling on the protected LT cooler. Not only had Sonihull kept it visibly cleaner, but the performance data also confirmed better cooling efficiency. The seawater feed temperature was the same for both coolers. Yet the LT water was only cooled down by 2°C in the unprotected cooler – as opposed to 4°C for the cooler with Sonihull.

Thanks to this direct comparison, the shipping company can be certain that Sonihull reduces fouling and contamination – with improved cooling performance as a result. Using Sonihull on its coolers, the company can count on reduced cleaning and maintenance needs, along with lower operational costs.

24/7 Service & Support

With service centres, field service engineers and spare parts distribution worldwide, our Alfa Laval Marine Service network is always on the job for you. When you contact our 24/7 Service & Support, our service experts coordinate everything to solve your need – across oceans, continents and time zones.



LT cooler without Sonihull

After 8 months



LT cooler with Sonihull

After 8 months



Related services for coolers

- Onboard Performance Assessment
- Reconditioning
- Redesign
- Replacement
- Plate pack replacement

Contact Alfa Laval

Tell us your needs, and our team will make it happen.

www.alfalaval.com/contact-us/service-and-support

