



Alfa Laval

Anti-fouling retrofit

Save on fuel and cleaning with ultrasonic anti-fouling

By retrofitting Alfa Laval Sonihull, our ultrasonic anti-fouling system, you can prevent biofouling accumulation on any hard surface exposed to raw seawater. Although any contact with water will eventually lead to biofouling, Sonihull keeps critical vessel components clean for longer. Depending where Sonihull is applied, it can lower fuel consumption and help prevent the spread of invasive species.

Our service helps you with:

- Significant fuel savings
- Lower maintenance costs through extended cleaning intervals
- Reduced coating requirements
- Reduced emissions and risk of invasive species

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. are no through-penetrations of the hull, no dry docking is required.

Sonihull provides significant benefits in a range of areas on board:

- **Propeller**
 - Up to 3% fuel savings*
 - No need for coating
 - Cleaning intervals prolonged from months up to years
- **Hull**
 - Significant fuel savings through reduced drag
 - Thinner and less expensive coating
 - Cleaning intervals prolonged from months up to years
- **Sea chest and cooling system**
 - No emergency cleaning of the sea chest in dry dock or by divers
 - No replacement of anodes
 - Secure engine cooling with positive impact on uptime and fuel efficiency

The ultrasonic system itself has low power and maintenance needs, and retrofitting it is easy. Our product experts mark up your vessel drawings with the optimal transducer positioning and frequency setting, and our Alfa Laval Marine Service engineers can install Sonihull in any of the global shipping hubs. Since there are no through-penetrations of the hull, no dry docking is required.

* Compared to an uncleaned propeller over a five-year period.
Source: Glofouling GEF-UNDP-IMO, 2022

How the service can be delivered

-  On site
-  Remotely
-  At service centres
-  On board
-  In dry dock

Eliminating cooling issues

The owner of a ten-year-old Turkish passenger ferry was frustrated by critical issues with the vessel's sea chest and box cooler. The level of biofouling was severe, and the reduced cooling capacity was causing the engines to overheat. It could be fixed through unplanned dry docking, but this was a short-term answer with a costly impact on the vessel's operation.

Eager to find a more permanent solution, the owner began looking into ultrasonic anti-fouling technology. In the end, an Alfa Laval Sonihull system was installed on both the sea chest and the box cooler. From that point on, the vessel experienced no further problems related to engine cooling.

When the vessel was finally inspected after 18 months in the water, the reason for the improvement was clear. Thanks to Sonihull, there was almost no fouling to be found. Vessel uptime was secured.

Providing rapid payback

Despite regular propeller polishing, a Greek VLCC owner was experiencing increased fuel consumption. Around six months after each polishing, the fuel consumption would go up by approximately 1.5% compared with just after cleaning.

To keep this increase from occurring, the owner fitted an Alfa Laval Sonihull anti-fouling system to the stern tube. Using ultrasound, the Sonihull system would minimize marine growth and safeguard propeller performance.

The results were immediate. The Sonihull system kept the fuel consumption stable, eliminating the 1.5% increase between cleanings. In addition, it allowed the propeller cleaning intervals to be extended by several months. When the owner made a thorough comparison with a sister vessel operating similar routes, the average in improvement in fuel consumption showed the Sonihull system had paid for itself in just four months.

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.



Related services

- Onboard Performance Assessment
- Anti-fouling upgrade for coolers

Contact Alfa Laval

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

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

