Cathelco®
Evac Group

Ultrasonic Antifouling

USP DragGone™



Biocide-Free Antifouling Solution

13% Reduction in Fuel Use and Emissions

40 Times More Effective Than Alternatives

Risk-Free Installation with Low Maintenance

The Problem of Biofouling in the Marine Environment

Biofouling on hulls increases vessel drag, leading to higher fuel consumption, greater greenhouse gas emissions, and the risk of transporting invasive species that disrupt local marine ecosystems.

Traditional reliance on antifouling paints is increasingly limited by environmental regulations, while manual hull cleaning is costly, potentially dangerous, and labor-intensive.

USP DragGone™ is an advanced ultrasonic fouling prevention system designed for vessels that require efficient, non-toxic biofouling control. Developed in response to the maritime industry's ongoing struggle with biofouling, USP DragGone™ addresses several critical issues.





Calculate your saving with the USP Drag-Gone™ Emission Impact Calculator

13%

Reduction in fuel use and CO_2 emissions

60%

Fewer components for full hull antifouling coverage

40x

More effective than conventional ultrasonic systems

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The Next-Generation of Ultrasonic Antifouling

USP DragGone™ functions by emitting ultrasonic vibrations that prevent marine organisms from settling on the submerged surfaces. It uses patented technologies to deliver broader and more efficient protection than conventional systems. These innovations enable DragGone™ to deliver full-coverage protection with fewer components, reducing installation complexity.

The benefits of this system are immediate and measurable. By preventing fouling from forming in the first place, DragGone™ helps vessels maintain smooth hull surfaces, which reduces drag and improves fuel efficiency. This leads to lower fuel consumption, decreased greenhouse gas emissions, and less frequent cleaning cycles. The system is non-intrusive, requiring no hull penetrations or drydocking for installation, and operates silently in the background without disrupting vessel operations. It is also virtually maintenance-free, allowing crew to focus on critical duties instead of recurring cleaning tasks.

In practical terms, this means vessel operators can cut operating costs, improve scheduling reliability, and meet strict environmental standards. It is a modern, proven system that enhances both performance and compliance in an increasingly regulated maritime environment.

Cathelco® USP DragGone™ for All Vessel Types

USP DragGone™ is suitable for a wide range of vessel types, including superyachts, ferries, patrol vessels, offshore supply ships, and commercial cargo carriers. Its effectiveness is closely linked to the vessel's hull construction, specifically, how well ultrasonic vibrations can travel through the material. Hulls made of steel and aluminum are ideal, as they efficiently transmit ultrasonic energy across the surface, allowing DragGone™ to deliver consistent and comprehensive antifouling protection.

Commercial vessels

Naval vessels

Offshore vessels and structures

Passenger vessels

Superyachts

Discover how ultrasound can benefit your vessel by exploring real-world use cases

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USP DragGone™ Provides Comprehensive Ultrasonic Protection Against Biofouling

USP DragGone™ is built on two patented technologies, **Guided Wave** and **Heterodyning**, which set it apart from standard ultrasonic antifouling systems. These innovations are designed to solve key limitations of traditional approaches, such as restricted coverage, narrow frequency targeting, and inefficiencies caused by energy loss to surrounding water. Together, these patents enable USP DragGone™ to deliver more effective, efficient, and scalable antifouling protection across a wider range of operating environments.

Guided Wave

- Guided Wave Technology directs ultrasonic energy along the hull structure rather than radiating it into the water.
- The hull material (e.g., steel or aluminum) acts as a transmission pathway, enabling each system to cover up to a 25-meter radius.
- This reduces energy loss, minimizes the number of transducers needed, and ensures more consistent protection.

Heterodyning

- Since different marine species respond to different frequencies, USP DragGone™ uses heterodyning to generate and emit multiple frequencies simultaneously.
- This wide spectrum targets a greater variety of fouling organisms, from soft slime to barnacles, adapting better to diverse water conditions.

Learn how ultrasonic antifouling systems operate

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USP DragGone™ delivers wider hull coverage with fewer components, cutting installation and maintenance costs. It adapts to different fouling conditions, helping operators reduce fuel use, avoid frequent cleanings, and stay compliant, without extra effort.

Aligning Operations with Sustainable Maritime Objectives

Biofouling has become a growing regulatory concern, not just for its impact on vessel efficiency but also for its environmental consequences. Fouled hulls contribute significantly to higher fuel consumption and CO_2 emissions, with increases of up to 40 percent in severe cases. This directly affects a vessel's Carbon Intensity Indicator (CII) rating. Poor CII scores can reduce charter appeal, raise operational costs, and lead to penalties under carbon pricing schemes such as the EU ETS.

- By improving hull performance, the USP DragGone™ system supports consistent fuel efficiency and helps maintain stronger CII performance.
- The system also addresses the ecological risks of invasive species, which are commonly introduced through hull fouling. More than 87 non-native marine species have been confirmed as transferred via ship hulls.
- USP DragGone™ disrupts early-stage organism settlement, reducing the risk of species transfer and protecting local ecosystems, particularly in high-sensitivity areas such as the Baltic Sea and coastal regions of New Zealand.
- The IMO is now moving from voluntary to mandatory biofouling regulation. Following MEPC 83, a new legally binding instrument is under development, with full implementation expected before the end of the decade. This will likely include requirements for Biofouling Management Plans, Record Books, and restrictions on in-water cleaning.



USP DragGone™ gives vessel operators a proactive and future-ready tool that supports compliance, simplifies inspection readiness, and reduces the risk of delays or penalties linked to hull condition.

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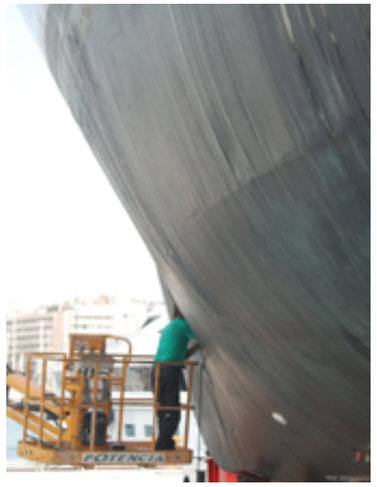
Customer Stories
Superyacht MMM





A 46-meter superyacht built for global exploration. Eight months after the installation, the Chief Engineer reported that the hull remained virtually spotless, even after extensive Mediterranean cruising and prolonged stationary periods in biofouling-prone marinas. The system's eco-friendly operation and reliability made it an ideal choice for this luxury vessel focused on guest comfort and environmental compliance

USP DragGone™ Details
- Install Date: 2024
- Installation Area: Hull
- Installation Type: Retrofit
- System Installed: 2 Quad System

Vessel Details
- Vessel Type: Expedition Yacht
- Vessel Length: 46 Meters
- Built: 1993, Extensive refit in 2014

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Customer Stories
Bulk Carrier African Griffon





Eight months after installing Cathelco's USP DragGone™ system, MUR Shipping and Dockendale are monitoring its role as part of a broader antifouling strategy on African Griffon. The vessel has operated across various climates without extended idle periods. Early diver inspections have shown clean hull areas, offering initial insight into how ultrasonic technology may complement traditional coatings under real-world conditions.

USP DragGone™ Details
- Install Date: 2024
- Installation Area: Hull
- Installation Type: Retrofit
- System Installed: 2 Quad System

Vessel Details
- Vessel Type: Bulk Carrier
- Vessel Length: 200 Meters
- Built: 2014
- Company: MUR Shipping

Customer Stories
Superyacht N2H





Superyacht N2H has operated with the USP DragGone™ ultrasonic antifouling system for five years. According to the chief engineer, the hull has remained consistently clean, with no visible slime or grass, despite prior experience with less effective ultrasonic solutions. The system's performance has made it a reliable part of the vessel's hull maintenance strategy.

USP DragGone™ Details
- Install Date: 2018
- Installation Area: Hull
- Installation Type: Retrofit
- System Installed: 2 Quad System

Vessel Details
- Vessel Type: Superyacht
- Vessel Length: 50 Meters
- Built: 2017

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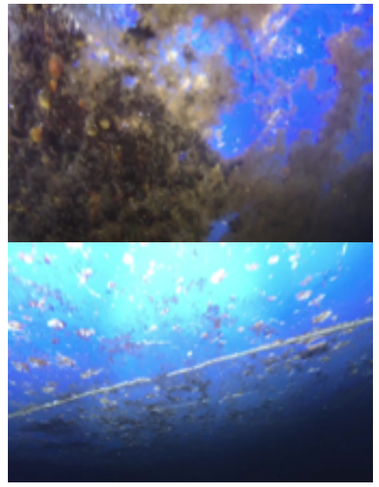
Customer Stories
Ferry Baynes Sound Connector





In August 2023, the Baynes Sound Connector, a BC Ferries cable ferry in Buckley Bay, was facing significant hard fouling that affected transit efficiency. After a January 2024 manual cleaning caused coating damage, the vessel was fitted with Cathelco's USP DragGone™ system. Five months later, inspections showed no mussel settlement or hard fouling on treated areas, indicating ultrasonic protection may reduce the need for aggressive manual cleaning.

USP DragGone™ Details
- Install Date: 2024
- Installation Area: Hull
- Installation Type: Retrofit
- System Installed: 2 Quad System

Vessel Details
- Vessel Type: Cable Ferry
- Vessel Length: 70 Meters
- Built: 2015
- Company: BC Ferries



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Why Choose Cathelco®?

Unmatched protection, proven performance

Cathelco® is a leader in vessel protection, offering cutting-edge solutions for corrosion prevention and biofouling control. With decades of experience and thousands of installations worldwide, we ensure your fleet operates efficiently and reliably in even the harshest marine environments.

Complete vessel protection

Impressed Current Cathodic Protection (ICCP) systems extend hull lifespan with advanced cathodic protection technology.

Marine Growth Prevention Systems (MGPS) prevent biofouling in seawater systems and niche areas, reducing maintenance and operational costs.

Ultrasonic Antifouling Systems prevent biofouling on vessels. Our patented USP DragGone™ system keeps hulls cleaner for longer. Improving hull performance, reducing fuel use, CO^2 emissions, and cleaning requirements.

Global reach, local expertise

Our extensive service network ensures support wherever your operations take you. With local production and a worldwide presence, we provide rapid assistance, minimizing downtime and keeping your fleet in peak condition.

Log sheet analysis service

We provide expert analysis of customer log sheets, delivering performance reports and timely intervention recommendations to ensure optimal system operation.

Tailored solutions for every vessel

We deliver corrosion and biofouling protection systems tailored to your fleet, engineered to meet the highest standards for lasting performance and regulatory compliance.

Protect your fleet with confidence.
Choose Cathelco.

Global Innovation, Local Expertise

Through a combination of trusted distributors and direct Cathelco regional teams, we ensure the fastest, most reliable support wherever our systems are installed.

For immediate assistance, please contact us through our online service form: **evac.com/cathelco**

Our global team will connect you with the appropriate regional expert to meet your specific needs.

IMPRESSED CURRENT CATHODIC PROTECTION

ULTRASONIC ANTIFOULING

MARINE GROWTH PREVENTION

Cathelco Head Office
Cathelco Ltd
Marine House, Dunston Road,
Chesterfield, S41 8NY, United Kingdom

Telephone: +44 (0) 1246 457900
Email: sales@cathelco.com
Web: www.evac.com/cathelco

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