




Octopus LSFO Multi Purpose Skimmers

Latest Proven DESMI Technology

EnviRo-Clean

DESMI
Make life flow

DESMI is ready for today's challenging oil spills - are you?



Low-sulfur fuel oils (LSFOs) are particularly difficult to recover. Their composition ranges from light distillates to heavy oils, and many have high pour points, causing them to solidify when spilled at sea. As a result, LSFOs often exhibit poor flow characteristics toward skimmers, making them difficult to collect with conventional skimming technologies.

This highlights the need for specialised solutions to manage LSFO spills effectively—and DESMI stands at the forefront of this capability.

Introducing

Octopus LSFO - A Skimmer built for Operational Flexibility

The new Octopus LSFO from DESMI is designed to address the evolving challenges of today's oil spill recovery, including LSFO spills.

Engineered for operational flexibility, the skimmer can handle a wide spectrum of oil types from traditional lighter and heavy oils to the latest low-sulfur formulations making it a highly efficient and reliable tool for responders in diverse spill scenarios.

It has been thoroughly tested under the EU-funded IMAROS 2 project on LSFO, VLSFO, and ULSFO, demonstrating consistent and high performance even under dynamic test conditions with waves and current.



imaros₂



DESMI Ro-Clean has been selected under the EU funded IMAROS 2 project to develop and test skimmer technology for effective LSFO recovery. Want to see the skimmer in action with different committee selected oil types. Scan the QR code to watch trials footage from Norwegian Coastal Administration test facilities.

Why the Octopus LSFO sets new standards

A core strength of the Octopus LSFO lies in its unique patented brush bank, consisting of five Y-shaped brush belts. These brushes actively grab into the oil slick, forming a collection area in front of the skimmer's buoyancy wall, rather than merely skimming the surface as in conventional designs.

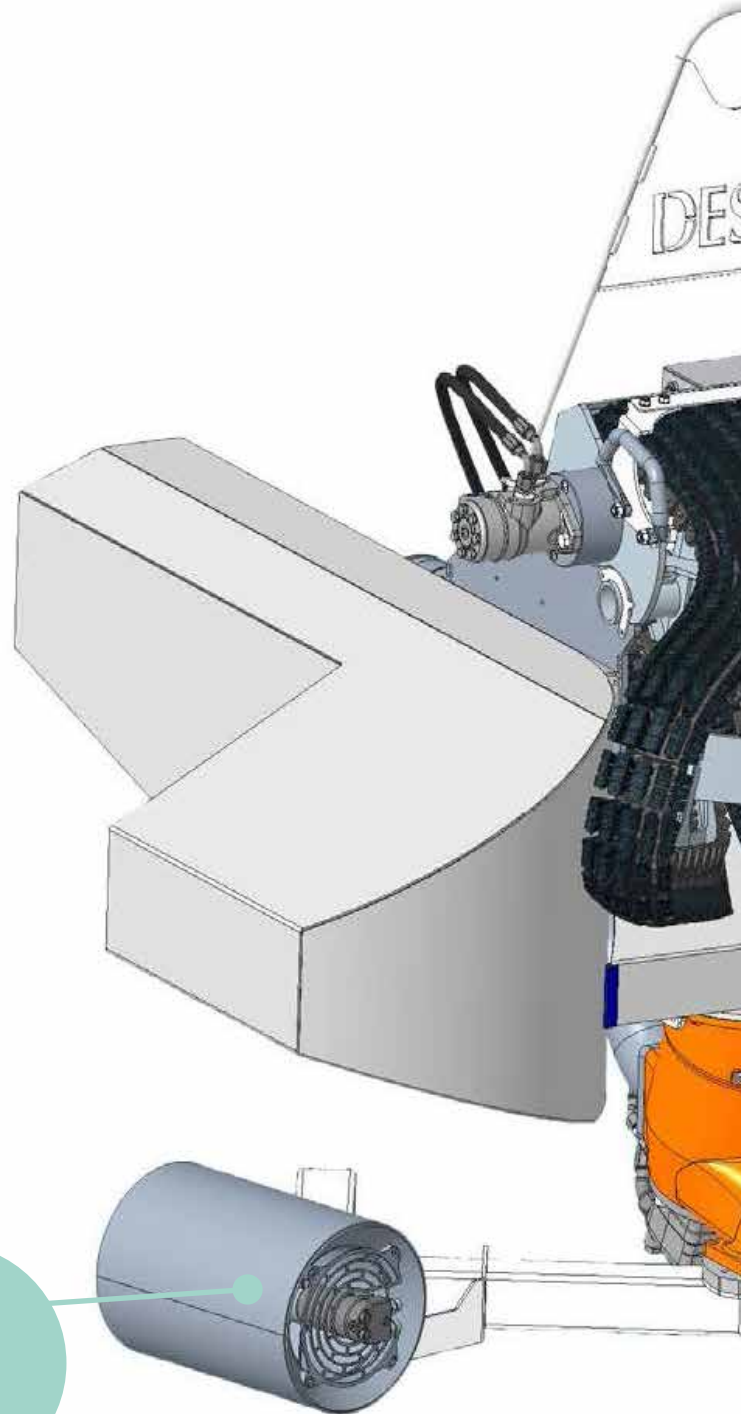
Paired with integrated powerful thrusters, this system maximizes oil access, which is essential for LSFO with poor flow and semisolid characteristics. The skimmers enhanced maneuverability makes it an agile tool for oil spill operations.

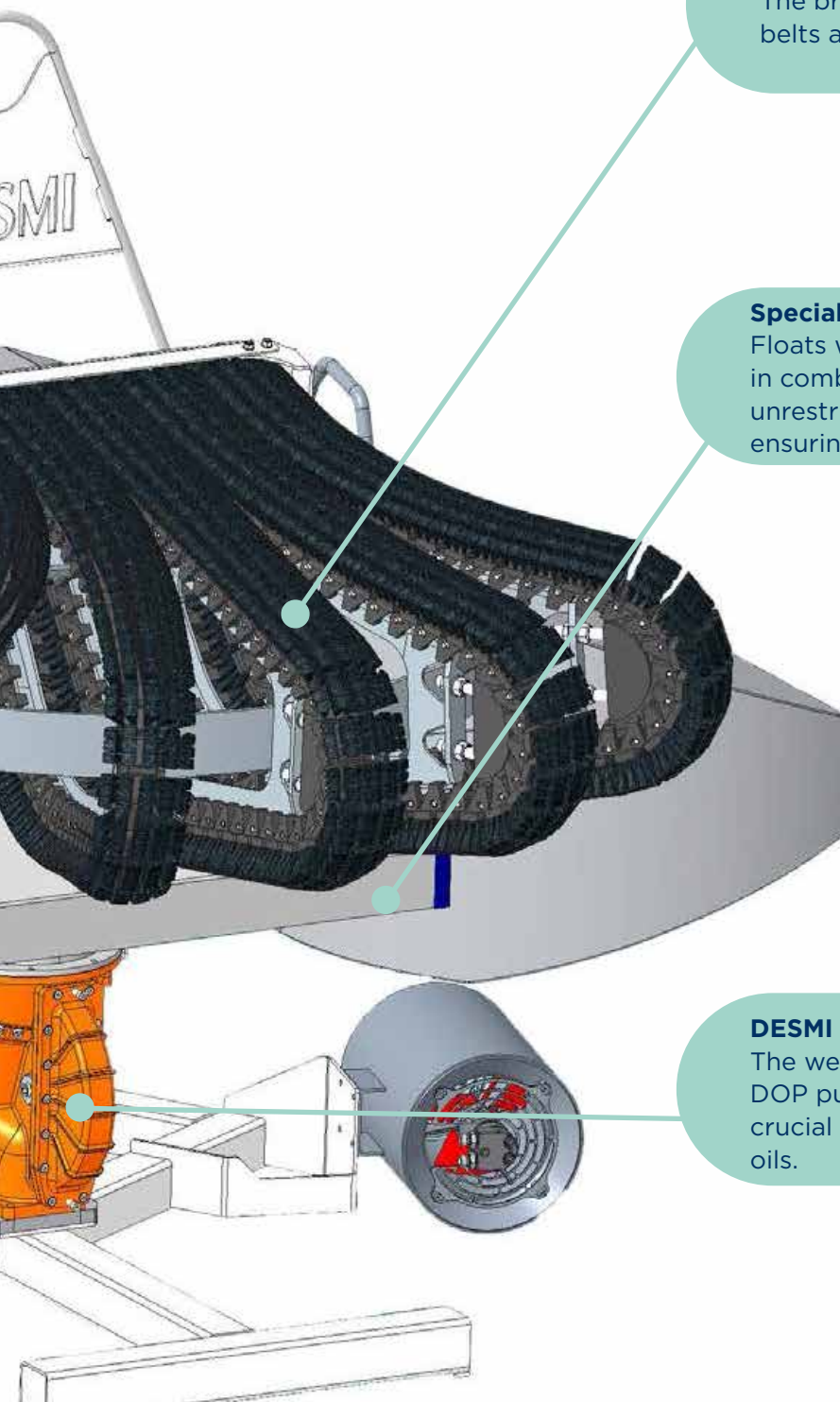
The Octopus LSFO can be supplied as an In-line skimmer, integrated in a boom, or in a Speed Sweep formation, offering flexibility for a variety of active skimming operations.

Additional improvements include a redesigned hopper system, optimized for the unique flow characteristics of LSFOs, and the integration of the original DESMI's proven DOP pumps, which efficiently handles solids and viscous oils at high discharge pressure.

Powerful integrated thrusters

Enable easy positioning of the skimmer toward the oil slick, which is important for recovery of oils with poor flow characteristics. This makes the skimmer an agile and highly maneuverable tool for oil spill recovery.





Unique quick detachable brush module

The brush module consisting of 5 brush belts actively collects the oil.

Special designed high buoyancy floats

Floats with no protrusion beyond the brush width, in combination with the skimmer design allow unrestricted oil flow into the brush bank, ensuring high recovery efficiency..

DESMI DOP pump

The well-known positive-displacement screw DESMI DOP pump with discharge pressure up to 13 bar is crucial for handling LSFO and other high-viscosity oils.

Octopus LSFO with thrusters

In-line Octopus LSFO

Recovery of Low, Very Low and Ultra Low sulphur fuels oils and traditional oils



Efficiency

98.4% on Oil Type I-II (Ohmsett)
98% recovery efficiency on LSFOs (IMAROS2)



Capacity

- Up to 100 m³/h (DNV certified)
- DOP 200 and 250 dual pumps available
- Cutting knife on pump inlet
- Stainless steel casing protection
- Discharge pressure bar up to 13 bar
- Pump viscosity range: 0 - > 1 million cSt



Easy Service & Maintenance

- Pump double outlet
- Quick-removable brush module
- Easy to clean



Wide array of features & functionalities

- High-Performance DESMI DOP screw pumps available in different sizes
- Powerful integrated thrusters for optimum maneuverability
- Remotely controlled via control panel or radio control
- Available as In-line skimmer for integration in Sweep systems
- Diesel or Electric Power Packs available
- Compatibility with existing Power Packs or ships hydraulics
- Easy shipment and storage in standard marine container or DNV container
- Available with DESMI Zipper Umbilical Hose system and with hydraulic driven hose reel



Ready for Today's Oil Spills

As marine fuel compositions continue to evolve, DESMI remains at the forefront with reliable, tested, and efficient skimmer systems. Whether for ULSFO, VLSFO, or conventional fuels, DESMI's technology ensures you're ready for the next spill — anywhere, anytime.

No matter which flow challenges you are facing, we can help you overcome them with class-leading equipment, solutions, and services designed specifically for your applications and environment. At DESMI, our focus has never been on discovering what we can do — it's about pushing the boundaries of what we can do for you.

Founded in Denmark in 1834, we have provided the expertise, solutions, and aftermarket support our customers need for nearly two centuries. We help you operate more efficiently and reliably, enabling your ambitions for performance, compliance, and growth whilst helping you reduce your climate impact.

Together, we can make a difference, whatever the future holds. Because we, like you, are here to make life flow. For more information, visit desmiro-clean.com

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