

## START A NEW VOYAGE WITH OUR ECOMARINE SEPARATOR.

Discover our latest innovation in marine lube oil treatment: high uptime, easy maintenance, and reduced operating and disposal costs.



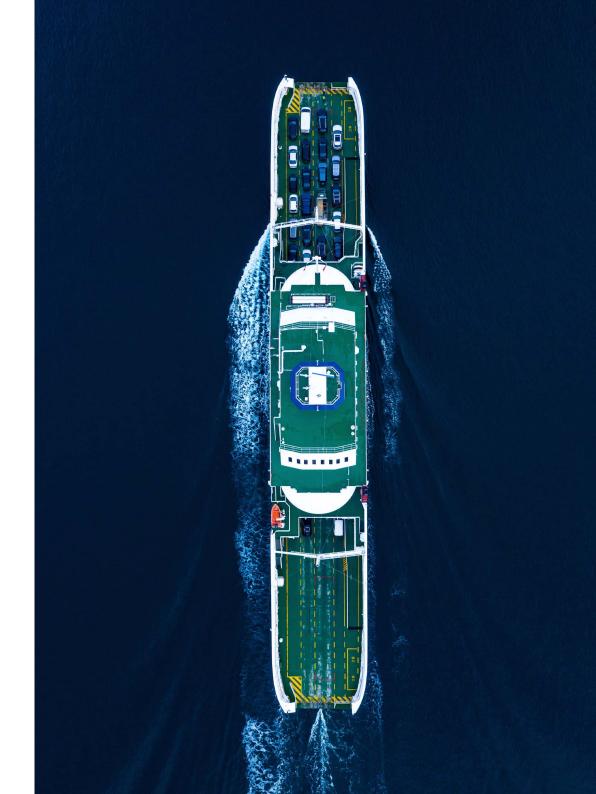


## RETHINK LUBE OIL TREATMENT.

In the maritime sector, ships of all sizes face unique challenges, but one common need is crucial: efficient cleaning of engine lubricating oil while at sea. Inadequate maintenance of this oil can severely impact engine performance and significantly affect its service life.

For smaller vessels and those with lower oil capacities, manually cleaned separators offer an effective solution. They are straightforward to install and maintain, providing reliable lubricating oil treatment.

Recognizing the need for innovation in this field, our engineers have developed a new, minimalist design to enhance efficiency. Introducing our latest advancement: the GEA ecomarine Separator.



## GO MANUAL. GO CLEAN. GO EFFICIENT.

The GEA ecomarine Separator is a streamlined and efficient adaptation of our GEA marine Separator.

#### Key highlight:

The GEA ecomarine Separator is a manual cleaning machine. The term "manual" may initially suggest outdated or labor-intensive processes. But with the GEA ecomarine Separator, manual cleaning is a hassle-free operation.

#### Comparison with self-cleaning separators:

Unlike self-cleaning separators, which automatically discharge solids when the solids content in the bowl is too high, the GEA ecomarine Separator requires manual cleaning. Self-cleaning separators necessitate a more complex installation, including operating water, a sophisticated automation system, and a connection to the sludge tank. In contrast, the manual cleaning separator offers a simpler solution.

#### **Decisive advantage:**

The GEA ecomarine Separator offers significant energy cost savings and is a more economical and environmentally friendly solution compared to self-cleaning separators and filter options.



# COST ADVANTAGE OVER FILTRATION? UP TO 50%.

The innovative design of the GEA ecomarine Separator offers several significant advantages over traditional filter options. Compared to even the most advanced lube oil filters, it delivers cost savings of up to 50% and features much lower total cost of ownership (TCO).



#### Up to 80% savings in disposal costs

One of the key advantages of the GEA ecomarine Separator is the significant reduction in disposal costs - up to 80% less compared to filter options. This is because the ecomarine Separator produces no hazardous waste, and sludge disposal costs are comparatively low. This reduction also contributes significantly to sustainability.



#### 24/7/365 operation

The ecomarine Separator operates continuously around the clock, all year round. Bowl cleaning is quick and straightforward for the crew, and the reliable separation technology effectively handles high water loads in the lubricating oil without risk of blockages. Additionally, there is no need for regular filter cartridge replacements and used catridge disposal on the shore.



#### Lower energy consumption with only 1-2 kW

The ecomarine Separator is highly energy-efficient, with power consumption of just 1-2 kW per unit. Additionally, its lower separation temperature reduces overall energy consumption and improves the Carbon Intensity Indicator (CII).



#### Easy installation and maintenance

The ecomarine Separator features an integrated direct drive and 360° accessibility, offering superior performance per unit area compared to filter technologies. It does not require a process water connection or a sludge tank connection, and the automation system is simple and robust. During maintenance, only individual seals need replacement. Additionally, drive service is streamlined with an exchange drive unit, backed by an extended GEA warranty of 2 years or 16,000 operating hours.



#### Lower operating costs (OPEX) and reduced space requirements

With its small footprint, the GEA ecomarine Separator requires less space when installed. Additionally, it demands minimal spare parts in the ship's inventory. Unlike filters that need spare cartridges and additional storage, the ecomarine Separator only requires seals, thereby reducing space requirements and operating costs.

## SUSTAINABLE TECHNOLOGY THAT MEETS THE NEEDS OF NATURE.

The path of simplification often leads to new insights, as demonstrated by the GEA ecomarine Separator. Technology doesn't always need to become more complex; what matters more is understanding which solution best fits each application.

Our separator technology has been proven over decades and boasts a first-class track record, further validated by certification from all leading ship classification societies.

We remain committed to innovation, sustainability, and a cleaner planet.





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