



# CHARTERING A GREENER COURSE.

Introducing our biofuel treatment solution for the maritime sector.



# UNLEASH THE POTENTIAL OF BIOFUELS.

The maritime industry faces significant challenges. The pressure to reduce emissions, comply with environmental regulations and implement sustainable strategies is ever increasing.

Biofuels such as HVO (hydrogenated vegetable oil) and FAME (fatty acid methyl ester) offer a promising alternative to fossil fuels. They contribute to a significant reduction in greenhouse gas and sulphur emissions – but biofuels also bring new technical challenges. To overcome these challenges, we offer a powerful solution: the GEA bio-fuel Separator.



# OVERCOMING CHALLENGES IN ACHIEVING EXCELLENT PURIFICATION.

Biofuels are less stable than fossil fuels. This means that they are more susceptible to oxidation or biodegradation during storage. This process can result in impurities and sediments that must be removed to ensure the functionality of the ship's engines.

## **Our answer to these challenges:**

The GEA biofuel Separator. This system is based on our proven GEA marine Separator. It specializes in the reliable separation of both water and solid particles from various types of biofuels. The result: more efficient combustion and reduced deposits in the engine, which significantly improves its performance and longevity.



## Compatible with all types of biofuels

The GEA biofuel Separator is designed to efficiently purify different types of biofuels and can be easily adapted to your specific requirements. Whether it is common biofuels such as HVO (Hydrogenated Vegetable Oil), FAME (Fatty Acid Methyl Ester), SVO (Straight Vegetable Oil) or PPO (Pure Plant Oil).

## Proven expertise in biofuel treatment

With many years of experience in treating biofuels and numerous successful installations on board ships, our expertise ensures maximum performance and reliability in marine applications.

# INTELLIGENT FEATURES ON BOARD.

The GEA biofuel Separator combines all the features of our well-known GEA marine Separator and offers a number of decisive advantages.



## Compact design

Thanks to the integrated direct drive, the GEA biofuel Separator offers higher performance in a small footprint, which is particularly advantageous for vessels with limited space.



## Smart connectivity

It enables remote monitoring and control, ensuring proactive maintenance and minimizing downtime.



## Easy maintenance

The user-friendly, modular design facilitates maintenance and contributes to the longevity and reliability of the system.



## Retrofit

Separators of the OSC, OSD, OSE generations and the GEA marine Separator can be easily upgraded to be compatible with a wide range of biofuel properties.

# UNIQUE FEATURES THAT MAKE YOU SMILE.

In the biofuel purification process, other solutions often encounter problems such as an increased risk of corrosion, inaccurate measurements or the need for complicated adjustments for certain biofuels. The GEA biofuel Separator overcomes these challenges with features that are unique to the market.



## **Viton gaskets**

Biofuels can affect the life of standard gaskets. To counteract this, we use high-quality Viton gasket that significantly extend the life of the separator.

## **Water Monitoring System (WMS)**

It automatically ensures that no water is carried in the cleaned oil drain. The benefit: guaranteed accurate measurements.

## **Sludge Monitoring System (SMS)**

It ensures safe operation even with increased sludge volumes. Desludging is initiated automatically.

## **Predefined regulating rings**

These allow the separator to be flexibly adapted to the characteristics of the biofuel used.

# UPGRADE YOUR INSTALLED EQUIPMENT.

It is also possible to upgrade earlier generations of GEA separators to make them biofuel compatible. Our dedicated service team will adjust process conditions to ensure optimal performance for your equipment.



We offer a comprehensive upgrade kit designed to enhance durability and efficiency, featuring:

- **Viton gaskets:** Replace existing rubber gaskets with high-performance Viton gaskets for improved resistance and longevity.
- **Regulating ring:** Upgrade your system with a new regulating ring for better control and reliability.
- **Stainless steel components:** We provide the option to upgrade copper-containing materials to robust stainless steel, ensuring compatibility and enhanced durability.



# SETTING SAILS FOR FUTURE FUELS.

The use of biofuels is an important step towards a more sustainable maritime industry. With the GEA biofuel Separator, we want to help establish these fuels as an efficient alternative to fossil fuels. Every innovation in sustainable technology is another cog in the big wheel that is moving us towards a cleaner future. It is this vision that drives us. We are doing our bit - for our children's future.

**Join us and be part of the movement.**



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