



#### This is Alfa Laval

Alfa Laval is active in the areas of Energy, Marine, and Food & Water, offering its expertise, products, and service to a wide range of industries in some 100 countries. The company is committed to optimizing processes, creating responsible growth, and driving progress – always going the extra mile to support customers in achieving their business goals and sustainability targets.

Alfa Laval's innovative technologies are dedicated to purifying, refining, and reusing materials, promoting more responsible use of natural resources. They contribute to improved energy efficiency and heat recovery, better water treatment, and reduced emissions. Thereby, Alfa Laval is not only accelerating success for its customers, but also for people and the planet. Making the world better, every day. It's all about Advancing better.™

#### How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at [www.alfalaval.com](http://www.alfalaval.com)

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# Together for sustainable shipping

Whether you sail ships or build them, we can help you meet the challenges of today and tomorrow. In this era of decarbonization and compliance, protecting the environment and strengthening your operations go hand in hand.

As fuels, systems and operations evolve, Alfa Laval is delivering the innovation to ensure your efficiency. From the fuel shift to digitalization and beyond, our technologies and insights safeguard your business interests and enable you to navigate new energy pathways, optimize performance, and stay future-ready.

Through reliable solutions, worldwide service and connected expertise, we're fulfilling the promise we made over 100 years ago. At sea or in port, on board or online – Alfa Laval is your constant partner.

## Marine essentials

Equipment and services for marine applications



# Solutions to keep you ahead

In a changing industry, count on Alfa Laval for solutions – from bow to stern, above deck and below, as well as far beyond.

## Oil cleaning

Alfa Laval separators opened the door for the fuels in common use today, giving us more oil treatment experience than any other marine supplier. Worldwide and on many types of vessels, our compact and cybersecure separators provide highly efficient cleaning of fuel (including biofuels) and lubrication oils. Centrifugal separation is not only the most reliable treatment technology but also the most cost-effective.



## Oil filtration

Alfa Laval offers automatic filters for fuel (including biofuels) and lubricating oil, as well as MAN E.S. approved hydraulic oil filters. Their compact design enables flexible installation and requires minimal space in the engine room. They combine high filtration efficiency for reliable engine protection with low maintenance costs.



## Fuel supply

Alfa Laval's outstanding experience in fuel supply systems secures peace of mind with both established fuels and newer fuel alternatives. Using cutting-edge automation, Alfa Laval fuel supply solutions ensure smooth changeover between traditional fuels and safe handling of more challenging fuels like LPG, methanol and ammonia.



## Sludge dewatering

Minimizing sludge volumes leads to lower costs for waste handling. Alfa Laval PureDry™ is an automated system that removes water content, concentrating the solids into a super-dry sludge. Its efficiency allows you to reduce holding tank volumes, freeing up space. You can even achieve fuel savings of up to 0.4% if fuel oil and lube oil waste are stored separately.



## Oily water separation

Alfa Laval PureBilge™ is a fully automated and cybersecure centrifugal separation system for cleaning oily water. By effectively removing oil pollution to a level well below 15 ppm, it sets a new standard in making water safe and compliant for discharge overboard. PureBilge operates continuously and is unaffected by feed variations, oil shocks and rough weather conditions.



## Crankcase gas cleaning

The oil and particles in crankcase gas are a threat to the environment and human health. Alfa Laval PureVent™ is a compact solution for removing them, developed in cooperation with a major engine manufacturer. Using centrifugal separation instead of filters, PureVent returns virtually oil-free air while allowing collected oil to be recirculated as lubrication.



## Exhaust gas cleaning

By scrubbing harmful SOx from their exhaust gas, vessels can continue to use economical high-sulphur fuel. Alfa Laval PureSOx® is the proven and trusted scrubber solution, backed up by experience and a comprehensive service offering. Available in open-loop, closed-loop and hybrid configurations, it provides reliable compliance with both sulphur limits and water discharge regulations.



## EGR water treatment

In Exhaust Gas Recirculation (EGR), cleaned exhaust gas is used to reduce the engine's combustion temperature and the formation of NOx. To safeguard EGR operation and ensure discharge compliance, the process requires water treatment. Alfa Laval PureNOx™ technology offers an effective solution with more time at sea than any other, built on Alfa Laval's centrifugal separation expertise.



## Power from waste heat

Sustainability requirements put saving energy in focus. With the Alfa Laval E-PowerPack, vessels have a convenient upgrade that makes a measurable difference to energy efficiency. The E-PowerPack uses Organic Rankine Cycle (ORC) technology to convert waste heat streams into free electrical power. That leads to lower fuel costs, reduced emissions and improved vessel ratings.



## Waste heat recovery

Half the energy from combusted fuel is released as heat, so it makes sense to reclaim as much of it as possible. Alfa Laval has a full portfolio of waste heat recovery solutions, not only for main engines but also for auxiliary engines. Alfa Laval Aalborg® economizers are available with smoke tubes or water tubes, and with single or multiple inlets, to suit every retrofit need.



LNG as fuel



LPG as fuel



Methanol as fuel



Biofuel



Ammonia

Waste heat recovery

Power from waste heat

EGR water treatment

Exhaust gas cleaning

Crankcase gas cleaning

Oily water separation

Sludge dewatering

Fuel supply

Oil filtration

Oil cleaning

Steam and hot water production

Thermal fluid heating

Heating and cooling

Freshwater generation

Ballast water management

Air lubrication

Biofouling management

Gas combustion

Cargo pumping

Tank management

# Enabling the future today



## Wind propulsion

Through Oceanbird, a joint venture with Wallenius, Alfa Laval is enabling wind-assisted and wind propulsion.

## StormGeo

## Voyage optimization

Part of Alfa Laval, StormGeo is reducing fuel use and carbon emissions through digital services for optimized routing.

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