

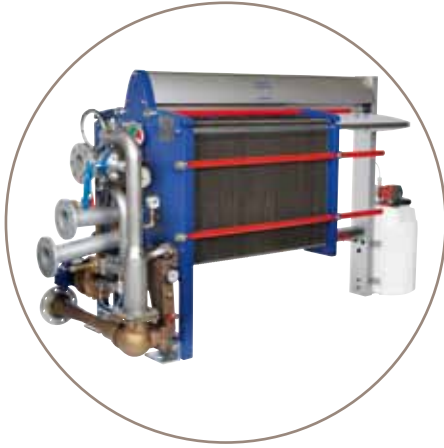


# Sea possibilities – explore reality

The Alfa Laval Test & Training Centre



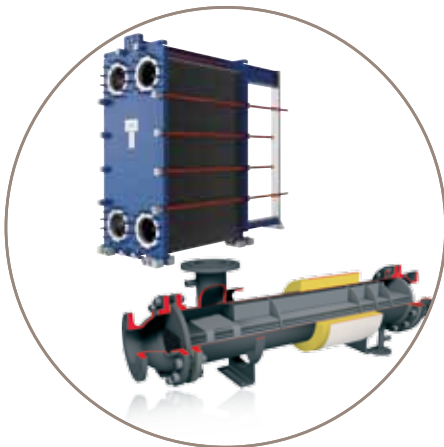
# Innovation in full scale



**AQUA Blue**  
Freshwater generation



**PureVent**  
Crankcase gas cleaning



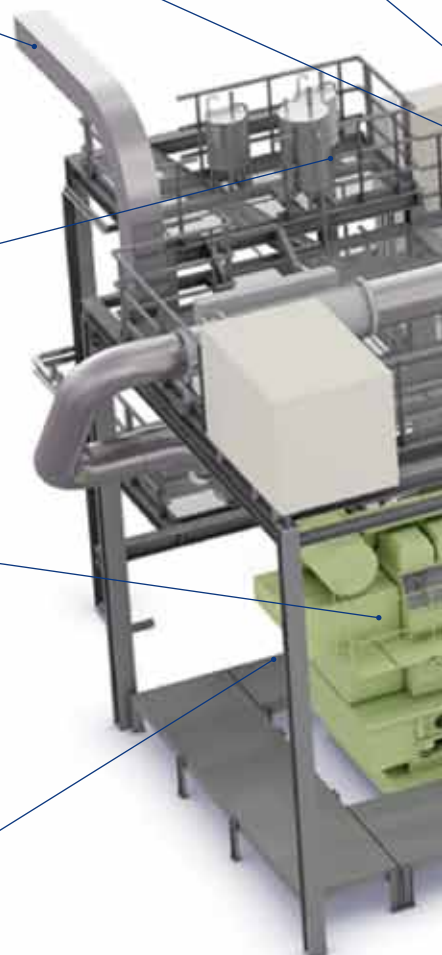
**Heat exchangers**  
General heating  
Scrubber cooling  
Water cooling  
Steam dump condensing  
Oil preheating

**Air outlet**



**MAN engine**  
(L28/32, 9 cylinders)

**Eliminator (Combined Cleaning Unit)**  
Lube oil filtration



Alfa Laval

## Test & Training Centre



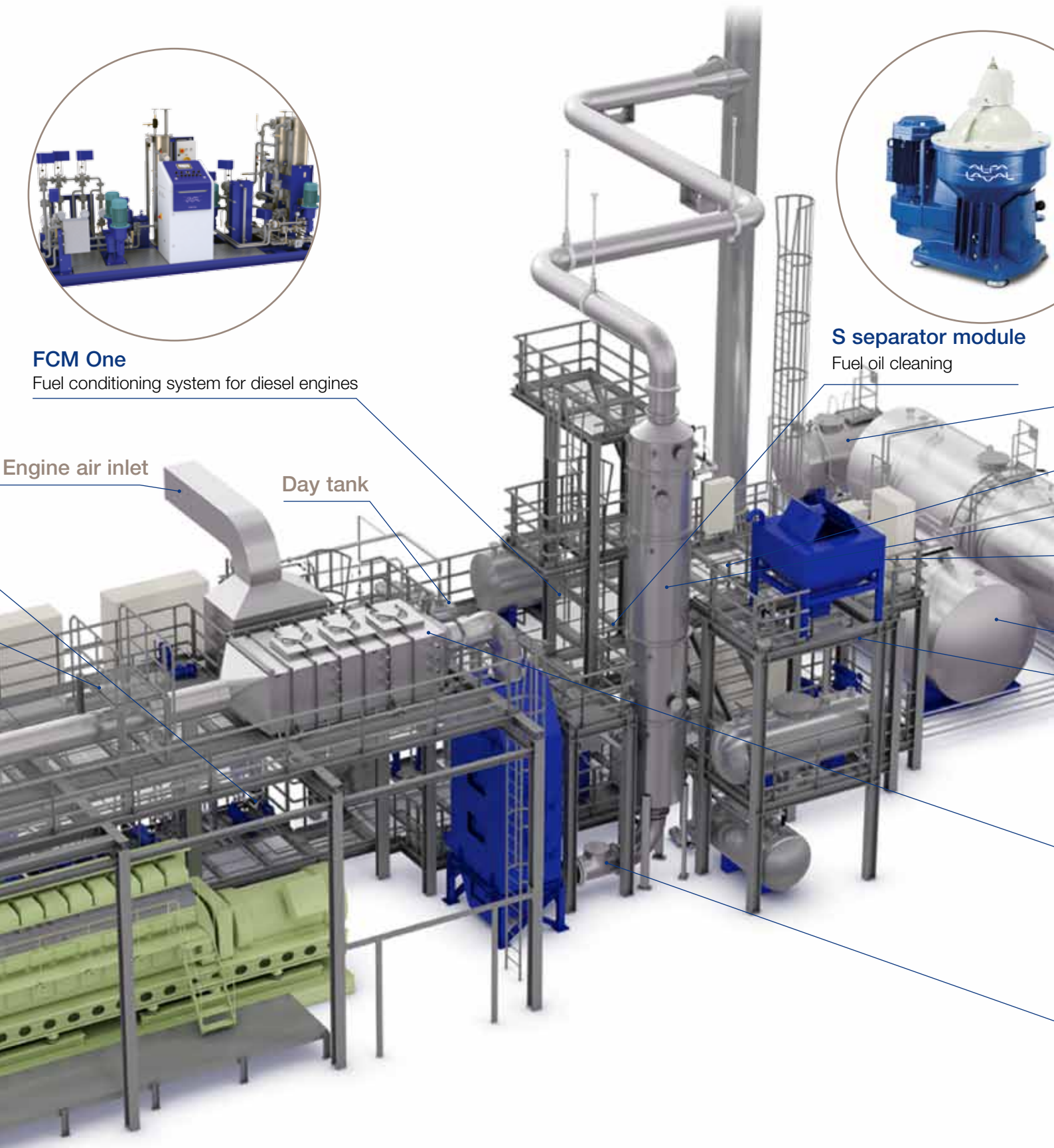
### FCM One

Fuel conditioning system for diesel engines



### S separator module

Fuel oil cleaning



Engine air inlet

Day tank

S separator module

Fuel oil cleaning



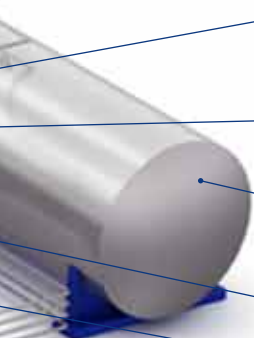
**Diesel tank**



**Gunclean Toftejorg i40 S/D**  
Cargo tank cleaning



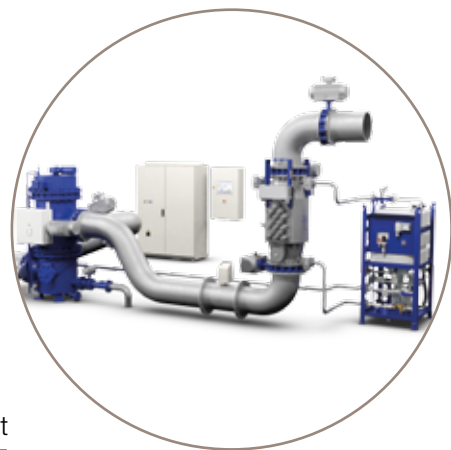
**PureSO<sub>x</sub>**  
Exhaust gas cleaning (SO<sub>x</sub>)



**Scrubber dosing tank**  
Exhaust gas cleaning (SO<sub>x</sub>)

**HFO tank**

**Wastewater tank**



**PureBallast 3.0**  
Ballast water treatment

**Haldor Topsøe SCR unit**  
Exhaust gas cleaning (NO<sub>x</sub>)



**Exhaust gas boiler**  
Waste heat recovery  
with drum and deaerator

Located in Aalborg, Denmark, the Alfa Laval Test & Training Centre is the closest thing on land to the machinery room of a full-sized commercial vessel. Here equipment and applications can be tested on the scale of an oceangoing ship – but with the control and convenience that cannot exist at sea.

The testing space of 250 m<sup>2</sup> is a springboard for faster, more effective R&D. Tests are conducted under actual operating conditions, using a large 2 MW marine diesel engine and seawater from the Limfjord, a body of water connecting the Kattegat Strait with the North Sea. The centre incorporates the broad range of Alfa Laval equipment and solutions, which are organized into major process lines: fuel line, steam line, exhaust line and ballast line.

The equipment is overseen by a unified control system, which is steered from a dedicated control room. In addition, the centre features a well-equipped learning complex, where visitors who come to observe new technologies can also receive training in their use.

For more information, please visit [www.alfalaval.com/marine](http://www.alfalaval.com/marine)



Alfa Laval

Test & Training  
Centre



### **Alfa Laval in brief**

Alfa Laval is a leading global provider of specialized products and engineering solutions.

Our equipment, systems and services are dedicated to helping customers to optimize the performance of their processes. Time and time again.

We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

### **How to contact Alfa Laval**

Contact details for all countries are continually updated on our web site. Please visit [www.alfalaval.com](http://www.alfalaval.com) to access the information.

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