



VDL AEC Maritime



Strength through cooperation





VDL AEC Maritime

SOx scrubbing made simple

WE MAKE IT EASY FOR SHIP OWNERS

Most scrubbers are complex, use filters and require lots of energy. Not ours. A VDL AEC Maritime scrubbing system works with any engine. It's cost effective, fuel efficient and easy to use. Your crew can learn to operate it in a few hours training session.

OUR PHILOSOPHY:

Simplicity

Over the years, VDL AEC Maritime has managed to make scrubbing simple. Our scrubber is very easy to operate, hardly needs any maintenance and can be fitted into any vessel.

Inline scrubber

Small footprint, low back pressure, absolutely NO ingress of water into the engines and able to run dry.

Open tower

Our scrubber has an open structure, no rotating components or filters and because of our patented design we guarantee an optimal reaction between exhaust gas and seawater.

Reduction of SOx and PM

Compliant to the latest IMO standards and reduces SOx and Particular matters (PM) efficiently.

PROVEN AND OPERATIONAL

VDL AEC Maritime delivers a proven technology. Our installed scrubber systems comply with the IMO Marpol standards. The VDL AEC Maritime scrubbing system has been approved and certified.

VDL AEC Maritime is a scrubbing specialist. Our experience includes extensive research on reducing emissions and odors. In the last 20 years, we have created and implemented over 2300 land based scrubbers and since more than 5 years also many SOx scrubbers for the maritime industry. We are an experienced company that can handle all your scrubbing challenges.



HOW OUR SCRUBBER WORKS

A VDL AEC Maritime scrubber is always tailor-made. The size depends of the maximum capacity of your engine(s), keeping the lowest energy consumption and lowest back pressure in mind. If space is limited, we can adjust the scrubber size.

OPERATION

From the bottom of the scrubber, exhaust gases are led through the scrubber to the top, perfect divided and at the exact right speed. The process water is fed into the top of the scrubber through nozzles of a single nozzle ring. This results in an equally divided spray.

Three processes take place in the open tower structure

1. Cooling

Exhaust gases are cooled until the optimal temperature is reached.

2. Removal of particles

Almost all particles are removed because of the varied droplet size when they travel from top to bottom.

3. Removal of the Sulphur

The Sulphur in the exhaust gases dissolves in the process water and binds as a salt. The clean exhaust gases exit the scrubber, removed from Sulphur and particles, through a demister.



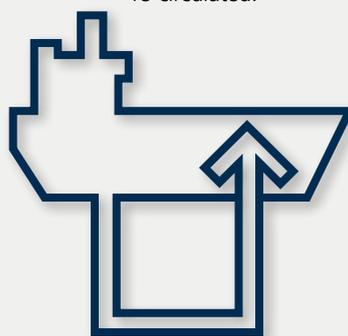
OPEN LOOP SCRUBBERS

The OPEN loop is the most frequently used system at open sea. The process water is discharged directly back to sea while complying fully with the IMO regulations.



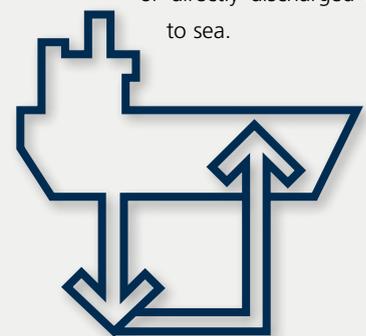
CLOSED LOOP SCRUBBERS

The CLOSED loop is used at zero discharge areas. The seawater (or fresh water) in the process is continuously re-circulated.



HYBRID SCRUBBERS

The HYBRID scrubber system can run in both OPEN or CLOSED loop mode. The process water is either re-circulated or directly discharged back to sea.



VDL Groep

VDL AEC Maritime is part of VDL Groep, an international industrial family-owned company with 97 operating companies, spread over 20 countries and with more than 17,000 employees. It is a conglomerate of flexible, independent companies, each with its own speciality. The strength of VDL Groep lies in the mutual cooperation between the companies.

VDL AEC Maritime operates in the finished products division. This division comprises suspension systems for the automotive industry, heating, cooling and air-technical systems, systems for the oil, production automation systems, gas and petrochemical industry, systems for the agricultural sector, sunbeds, roof boxes, container handling equipment, waste collection systems, cigar-making and packaging machines, components for bulkhandling and dust extraction installations and systems for explosion and fire protection.

The other divisions are subcontracting, car assembly and buses & coaches. In subcontracting, VDL specialises in metalworking, mechatronic systems and system supply, plastics processing and surface treatment. The car assembly division includes the production of passenger cars for third parties. The bus & coach division includes chassis & chassis modules, coaches, public transport buses, mini & midi buses, special projects and second-hand buses.



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