

Oily water separator

OWS-15 series

PRODUCT LEAFLET



The Wärtsilä oily water separator combines decades of experience and innovative engineering to ensure the reliable and cost-effective treatment of oily water to the latest quality standards. Fully compliant with the latest legislation, this separator produces uninterrupted discharge below 5ppm. The small footprint makes the unit easy to install and the automatic operation ensures that man-hours are kept to a minimum.



The Wärtsilä OWS-15 series is an economical and easy to operate solution to treat ship's bilge water in compliance to MEPC.107(49).

The system comprises 3 stages - a hydrophobic high viscosity removal system, an oleophilic coalescing filter element and a high adsorption media which adsorbs more than 60% of its weight in oil contaminants.

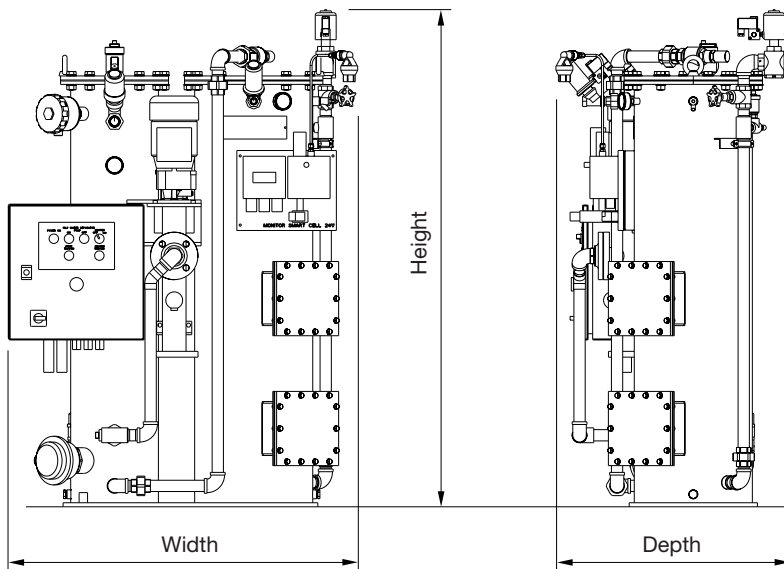
Fitted with a 15ppm oil content monitor, the OWS-15 series guarantees that the treated water is safe to discharge overboard.

The unit does not require backwashing or the use of chemicals, lowering the running costs and maximising efficiency.

SYSTEM BENEFITS

- No backwashing or cleaning cycle required.
- Easy to operate.
- Economical to run.
- Treats bilge water to 5ppm oil content or lower without the need for additional emulsion breaking equipment.
- Our separators are approved by BV to IMO MEPC.107(49) and the Marine Equipment Directive 96/98/EC.

Fig.1 Detailed elevation drawings



TECHNICAL SPECIFICATION

- Operating temperature
 - Minimum: 10°C
 - Maximum: 55°C
- Operating pressure
 - Normal: 1.38 bar
 - Maximum: 3.45 bar
- Air supply
 - Required pressure: 5-7 bar
- Pump performance
 - Maximum suction: 6 meters
 - Maximum discharge: 30 meters
- IMO tested parameters
 - Maximum oil flow: 100%
 - Maximum oil density: 0.989 s.g. @ 15°C
 - Maximum oil viscosity: RMG 35
 - Maximum emulsions: 3000 ppm

WEIGHTS & DIMENSIONS

Model No.	Capacity (m ³ /hr)	Dimensions (mm)			Weight (kg)	
		Width (inc. maint)	Depth (inc. maint)	Height (inc. maint)	Dry	Wet
OWS-05-15-LITE	0.5	1031 (1655)	672 (1080)	1474 (1700)	170	270
OWS-05-15	0.5	1031 (1655)	672 (1080)	1474 (1700)	250	350
OWS-10-15	1	1370 (2075)	861 (1300)	1474 (1750)	540	990
OWS-20-15	2	1370 (2075)	861 (1300)	1474 (1750)	540	990
OWS-30-15	3	1519 (2300)	985 (1560)	1547 (1750)	700	1430
OWS-50-15	5	1675 (2452)	1060 (1715)	1547 (2000)	800	1680

PROCESS DESCRIPTION

A slow-running positive displacement pump feeds bilge water into the first stage oil removal system. An oleophilic coalescing matrix causes free oils to consolidate and float to the surface, where it is then discharged into a waste oil tank.

In the second stage, free oils are passed through a 20 micron coalescing cartridge filter system, further refining the water, and leaving only emulsified oils, grease and low soluble organic compounds.

The final stage passes the water through a high adsorption media especially developed to adsorb the remaining contaminants efficiently. The unique characteristics of the third stage media mean that it is four times as effective as granular activated carbon. Both hydrophobic and oleophilic, the properties of the media ensure that the discharge is below 5ppm.

AFTERSALES, SERVICE & SUPPORT

Wärtsilä supports its customers throughout the lifecycle of their installations by optimising efficiency and performance. We offer expertise, proximity and responsiveness for all our customers in the most environmentally sound way.

We deliver aftersales support through our network of service centres in more than 70 countries worldwide and provide original spare parts for all of our waste, oil and fresh water management systems, ensuring prompt service and delivery to minimise downtime.