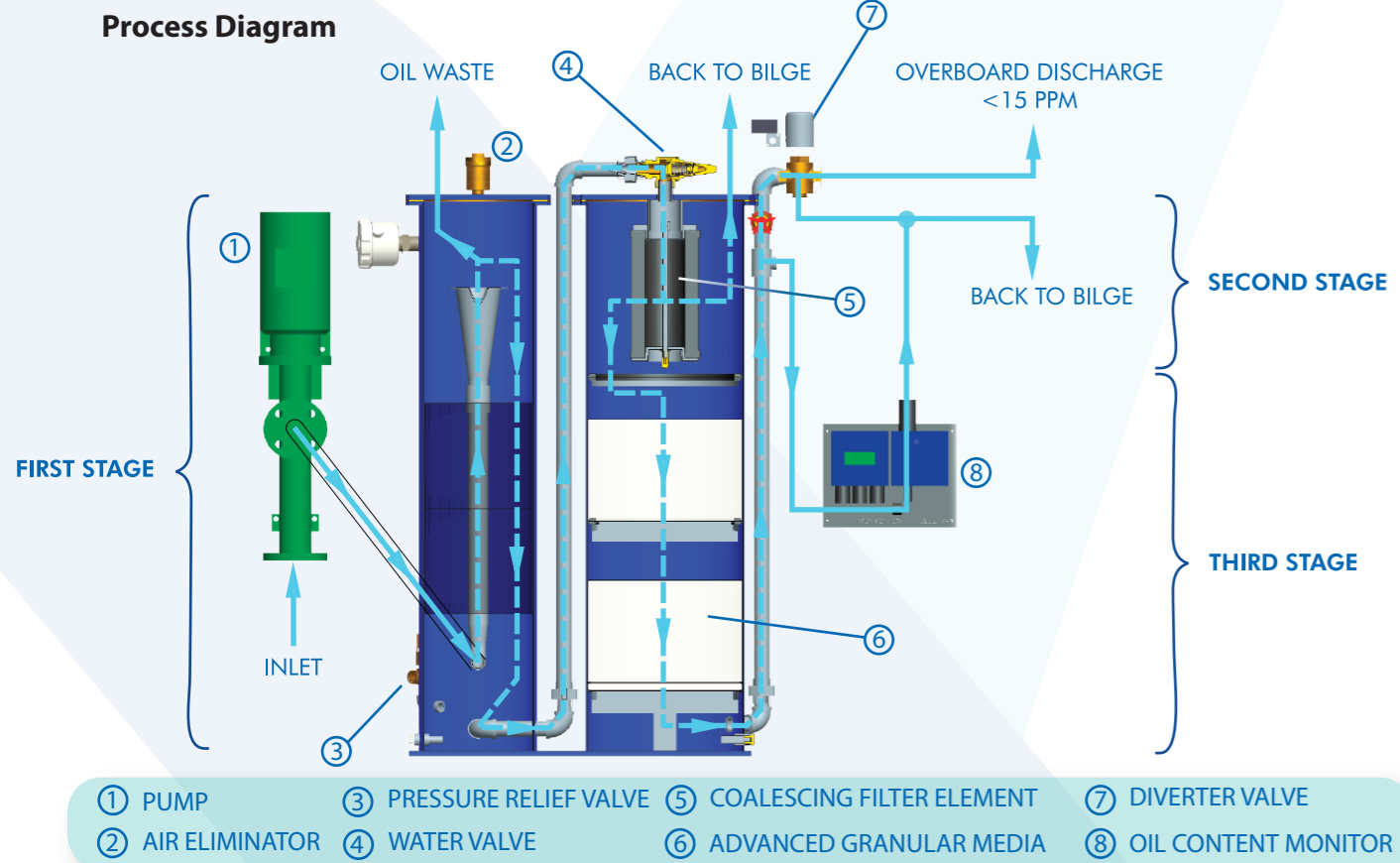


# Oily Water Separator Ancillaries



## Process Description

Bilge water is taken from the vessel bilge tank via a slow-revving positive displacement pump to prevent further emulsification. The oily bilge water is fed into the first stage High Viscosity Oil Removal (Hi-VOR) system and initial sludge oil separation takes place. Free oils are removed via a high matrix oleophilic coalescing pack which draws oil to its surface creating large globules of oils that are floated to the top of the tank. This waste oil is then discharged to the waste oil tank. The second stage 20 micron coalescer cartridge system coalesces the remaining free oils. Emulsified oils enter the final AGM stage for treatment.

Our engineered Advanced Granular Media (AGM) is a specially formulated organoclay and has extremely high adsorption properties that remove emulsified oil, grease and low soluble organic compounds from waste water streams. The AGM is very efficient due to the large surface active areas and can adsorb up to 60% of its own weight in organic contaminants, in comparison to only 2-5% for granular activated carbon. Designed to be quick acting, the AGM is both hydrophobic and oleophilic making it extremely effective. This remarkable adsorption can produce continuous and reliable effluent below 5ppm. With no cleaning cycles, no back wash discharges and no extra downtime for replacements or the use of chemicals, means running costs for our system are kept to a minimum.

**Advanced Granular Media (AGM)**



## Spares

All equipment is manufactured to the highest quality. Oily Water Separator spares are available worldwide and ex. stock. Recommended on-board spares kit includes Advanced Granular Media, Coalescer Set, Gasket Set and Pump Stator.



## Inlet Pre-Strainer

A high quality simplex strainer complete with 60 mesh Stainless Steel basket filter. This provides a cost effective method to protect the oily water separator system - includes a quick release cover mechanism for ease of maintenance.



## Manual IMO Three Way Valve

Flanged cast iron three way valve to be used for in-port servicing and inspection. Refer to IMO MEPC 107(49) Section 6.1.1.



Victor Marine's in-house engineering and testing facilities help us to advise our customers on the best solution for their vessels. Oily water separators can be supplied with a range of certification and process options. Victor Marine maintains a worldwide network of agents who can provide our customers with a comprehensive after-sales services, for example, installation, commissioning, technical support, servicing and spares.



Victor Marine Ltd,  
Eurocourt,  
Cosgrove Road,  
West Thurrock, Essex,  
United Kingdom,  
RM20 3EE

The manufacturers reserve the right to alter the specification and data to incorporate improvements in design.  
© Copyright Victor Marine, Sept 2013

Sales +44 (0) 1708 899 780  
Fax +44 (0) 1708 890 599  
Web [www.victormarine.com](http://www.victormarine.com)  
Email [info@victormarine.com](mailto:info@victormarine.com)  
[sales@victormarine.com](mailto:sales@victormarine.com)



# Oily Water Separators

globally focused on cleaner solutions

Victor Marine's bilge oily water separators are specifically engineered for the marine environment. Victor Marine have been supplying systems for over 80 years and have installed over 7000 units. Combining the long experience and the latest technologies, Victor Marine have developed oily water separators that ensure reliability, maintainability, affordability and compliance with the latest IMO regulation MEPC 107(49).

The compact **CS Series** is designed to fit the smallest engine rooms and is easy to install. Its unique three-stage separation system is effective and reliable. Its simple design and fully automatic operation make it easy to use and maintain.

### System Benefits

- Fully compliant with IMO regulation MEPC 107(49)
- Easy to operate  
No special training required  
Supplied as a complete turnkey package
- Economical to run
- No backwashing or cleaning cycle required
- Reliable discharges below 5ppm oil content
- Worldwide support and service
- Our separators are approved by ABS, BV, CCS, USCG, RMRS, MED, and comply with DNV's CLEAN-DESIGN notation.
- High quality separation is achieved with a three-stage separation process. This involves a hydrophobic high viscosity removal system (Hi-VOR system), an oleophilic coalescing filter element and an adsorption granular media polishing unit (AGM filtration)



### Military, Offshore and Special Editions

Victor Marine has an in-house design team that can develop bespoke systems, for example, systems tailored for aircraft carriers, minesweepers, offshore rigs and superyachts. The **CS Lite** is specifically engineered to be lightweight for use on vessels where the weight of a standard separator would be an issue e.g. fast attack craft. Constructed from marine-grade aluminium, this model offers a 30% weight saving over the standard CS Series model. Please contact us for further details.

### CS Series

	CS0250	CS0500	CS1000	CS2000	CS3000	CS4000	CS5000	CS0500 Lite	
<b>Capacity</b>	m <sup>3</sup> /hr	0.25	0.5	1.00	2.00	3.00	4.00	5.00	0.5
	US gal/hr	66	132	264	528	792	1056	1320	132
<b>Dimensions (mm)</b>	Width (Inc. Maint.)	1031 (1655)	1031 (1655)	1370 (2075)	1370 (2075)	1519 (2300)	1519 (2300)	1675 (2452)	1031 (1655)
	Depth (Inc. Maint.)	672 (1080)	672 (1080)	861 (1300)	861 (1300)	985 (1560)	985 (1560)	1060 (1715)	672 (1080)
	Height (Inc. Maint.)	1474 (1700)	1474 (1700)	1474 (1750)	1474 (1750)	1547 (1750)	1547 (1750)	1547 (2000)	1474 (1700)
<b>Weight (kg)</b>	Dry	250	250	540	540	700	700	800	170
	Wet	350	350	990	990	1430	1430	1680	270
<b>Power (kW)</b>	50Hz (60Hz)	0.55 (0.55)	0.55 (0.55)	0.75 (0.75)	1.1 (1.1)	1.1 (1.3)	1.5 (1.5)	1.5 (1.8)	0.55 (0.55)
	inc. heater	1.55 (1.55)	1.55 (1.55)	1.75 (1.75)	2.1 (2.1)	2.1 (2.3)	2.5 (2.5)	2.5 (2.8)	1.55 (1.55)
<b>Connections (mm/inch)</b>	Inlet Suction	32 (1 1/4")	32 (1 1/4")	50 (2")	50 (2")	50 (2")	50 (2")	50 (2")	32 (1-1/4")
	Overboard	25 (1")	25 (1")	25 (1")	25 (1")	40 (1 1/2")	40 (1 1/2")	40 (1 1/2")	25 (1")
	Return to Bilge	25 (1")	25 (1")	25 (1")	25 (1")	40 (1 1/2")	40 (1 1/2")	40 (1 1/2")	25 (1")
	Recovered oil	25 (1")	25 (1")	40 (1 1/2")	40 (1 1/2")	40 (1 1/2")	40 (1 1/2")	40 (1 1/2")	25 (1")
	Flush Valve	15 (1/2")	15 (1/2")	15 (1/2")	15 (1/2")	15 (1/2")	15 (1/2")	15 (1/2")	15 (1/2")
	Pressure Relief	15 (1/2")	15 (1/2")	15 (1/2")	15 (1/2")	20 (3/4")	20 (3/4")	25 (1")	15 (1/2")
<b>Pressure (Bar/psi)</b>	Operating:	1.38 bar (20psi)						1.38 Bar (20psi)	
	Maximum:	3.45 Bar (50psi)						3.45 Bar (50psi)	
<b>Water Requirement</b>	No back-washing required. Clean water required for oil content monitor and commissioning. Recommended pressure 0.5 - 4 bar.								
<b>Air Requirement</b>	Air Pressure of 4-7 bar for operation of pneumatic valves only.								

