

## CPS 3.2E + EMB



The bilge waters generated inside the new generation of ships, fast ferries, ferries, cruise vessels and warships, originated from the maintenance of turbines, engines and so on, show many difficulties for its separation in a classic bilge water separator due to the presence of water-oil emulsions.

Anticipating the future, Facet International has developed a new Bilge Water Separator with the target of meeting the IMO MEPC.107(49). This Resolution requires that this type of equipment separate the bilge waters containing surfactant elements, in other words, emulsified hydrocarbon waters with an effluent less than 15 ppm.

### HIGH DESIGN AND CONSTRUCTION TECHNOLOGY

The combination of the classic, but highly experienced technology of Coalescent Plates used by the conventional generation of separators and the new generation of membranes has generated an innovative equipment with "stated-of-the-art design". This enabled to obtain a compact equipment with reduced dimensions, light weight, with easy and low maintenance. This equipment is totally automatic, and controls all functions through a PLC.

- CPS 3.2E + EMB is homologated for a flow rate of 0.73 m<sup>3</sup>/h (3.2 US GPM).
- This Bilge Water Separators is supplied ready to install, coming complete with pumps, valves and control panel.
- With the exception of the pumps and pneumatic valves this Bilge Water Separator have no mobile components. The level control is fixed and has no float.
- Maintenance requirements are very low, being restricted to occasional hosing down of the plate packs, and membrane cleaning. Access for hot self-cleaning is extremely simple and easy to use.

- Separated hydrocarbon does normally contain less than 5% of water and this can be burned, if required.
- Oil discharge is facilitated by a pump.
- The electrical power is at 380/440 v, 50 or 60 Hz.
- This equipment does not required chemicals for cleaning

### RESULTS

CPS 3.2E + EMB equipment remove hydrocarbons in two stages. In the first stage, free hydrocarbon is separated from water through FACET patented coalescent plate packs, in the second stage emulsions are broken by a membrane which removes emulsified hydrocarbon, reaching down an effluent with total hydrocarbon content of less than 5 ppm.

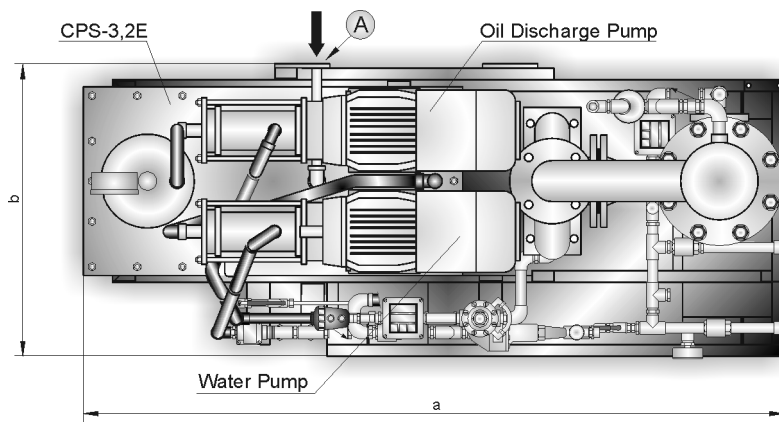
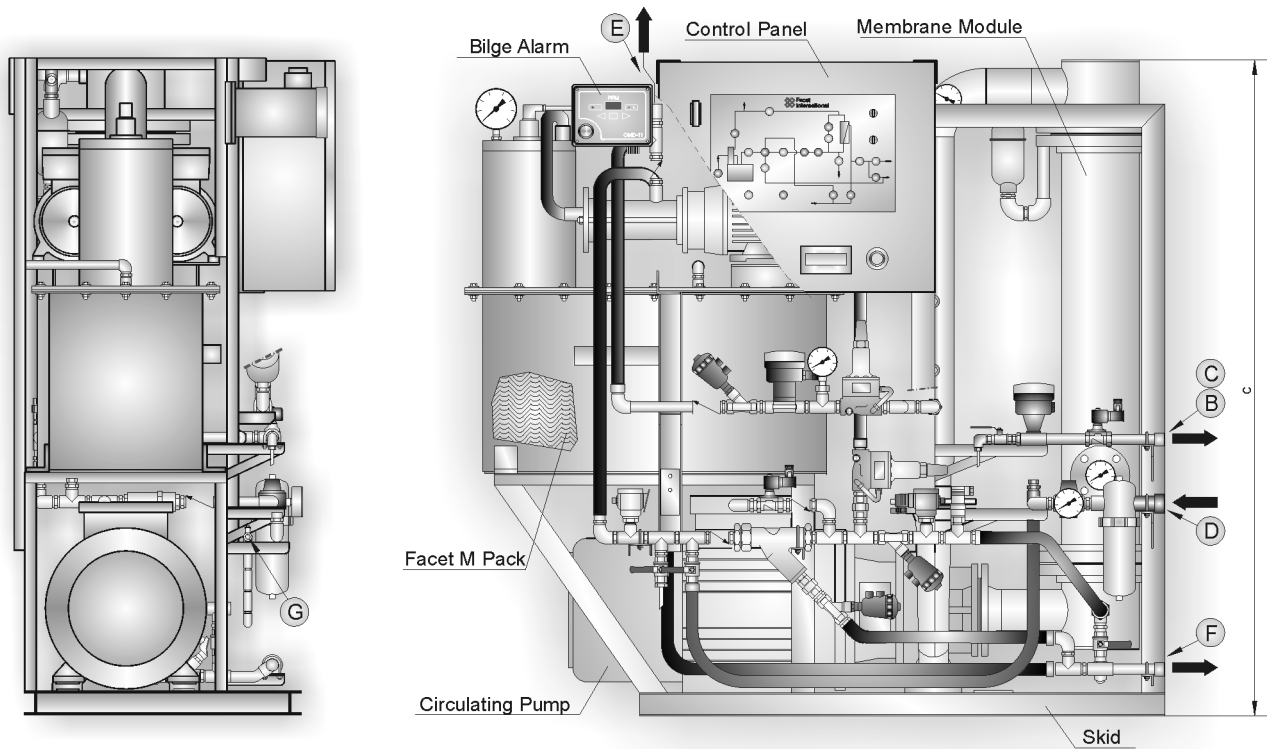
### ACCESSORIES

The equipment is supplied with the following accessories:

- Bilge alarm: as latest IMO MEPC. 107(49) resolution.

### CERTIFICATION AND OPERATIONAL EXPERIENCE

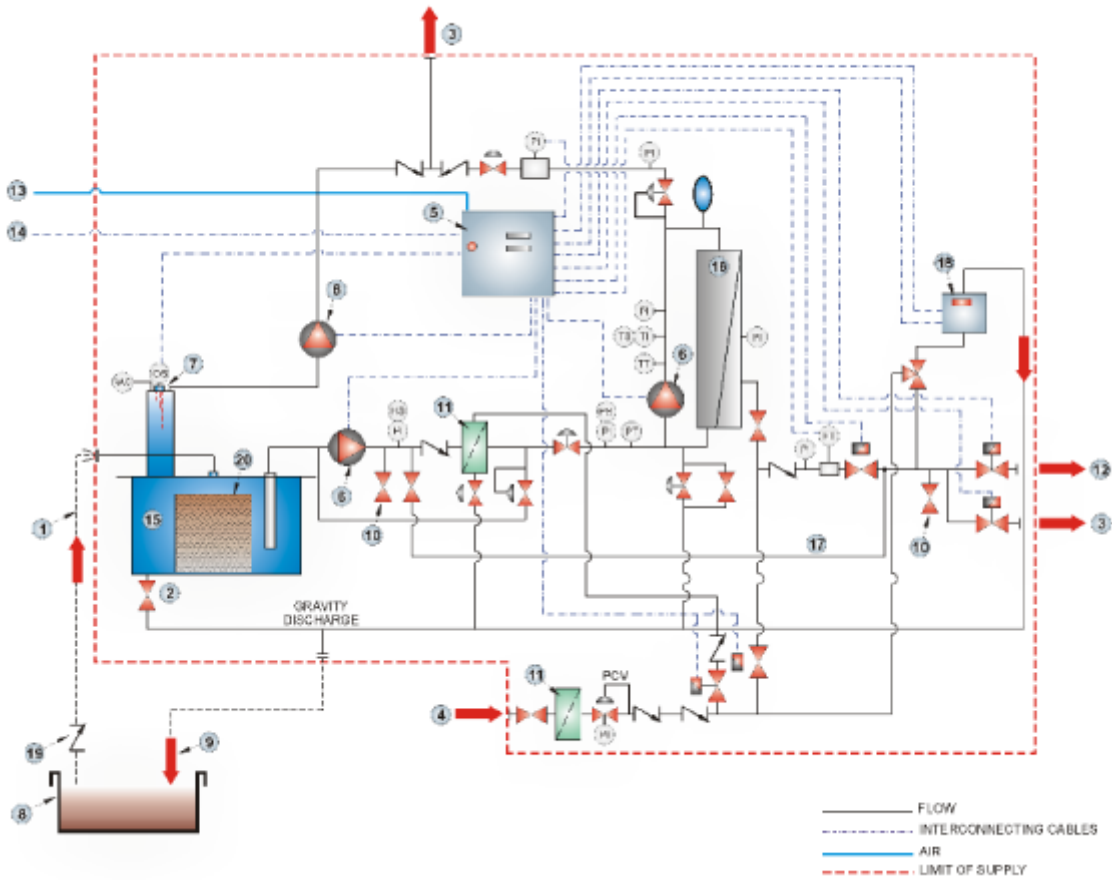
Facet International CPS 3.2E + EMB has been tested, approved and certified according to the requirements of IMO MEPC.107(49). Facet International's experience assures cost efficiency and working reliability.



DIMENSIONS (mm)		
a	b	c
1280	625	1800

Empty Weight 475 Kg.  
Working Weight 600 Kg.

SCHEDULE OF NOZZLES	
MARK	SERVICE
A	Oil/Water from Bilge Tank
B	Overboard Discharge
C	Bilge Back
D	Potable Water Inlet
E	Oil Discharge
F	Common Drain to Bilge
G	Air Inlet



ITEM	DESCRIPTION
1.	OILY WATER INLET LINE FROM BILGE
2.	DRAIN
3.	OIL OUTLET
4.	PRESSURE POTABLE WATER
5.	CONTROL PANEL
6.	PUMP
7.	LEVEL CONTROL
8.	OILY / WATER TANK OR BILGE (CUSTOMER SUPPLY)
9.	BACK TO BILGE LINE
10.	SAMPLE PROBE
11.	FILTER
12.	OVERBOARD WATER OUTLET LINE
13.	AIR LINE (CUSTOMER SUPPLY)
14.	ELECTRICAL LINE (CUSTOMER SUPPLY)
15.	FACET CPS-3.2E
16.	POLISHING MODULE
17.	MEMBRANE BY-PASS
18.	BILGE ALARM
19.	CHECK VALVE WITH COARSE FILTER
20.	FACET Mpak®