

CPS B MKIII + EBM 14x



Facet International has been globally recognized as the leading filtration & separation company in the marine and petrochemical industry, refineries and in the handling of aviation fuels. Its leadership in liquid/liquid separation has been acknowledged since more than 50 years.

Facet International's leadership dates back to 1978 when developed its first Coalescent Plates Separator (CPS); since then, their equipments have been at the forefront of oil-water separation of bilge water, complying with the IMO and Coast Guard resolutions.

Bilge water from new generation ships (such as ferries, cruises, military ships) has new components that difficult hydrocarbon separation. The current oily water composition is variable in free hydrocarbon, with a substantial increment in chemical and mechanical emulsified oil that new pollution prevention equipments have to treat.

HIGH DESIGN AND CONSTRUCTION TECHNOLOGY

Through a continuous research and development programs and designs based on easy maintenance and maximum efficiency, Facet International has developed the new series of CPS BMKIII + EBM 14x. This series combines the classic Coalescing Plates FACET Mpak[®] technology with innovative membranes that accomplish high efficiency in chemical and mechanical emulsion breaking, being ahead Facet's competitors in complying the regulations in force on the treatment subject: IMO MEPC.107(49)

The equipments developed are compact, adaptable to the available space onboard, light and with low and easy maintenance. The functioning is very easy and completely automatic, with all its functions controlled through a PLC.

- CPS BMKIII + EBM 14x series flow rates range goes from 0.5 m³/h (2.2 US GPM) up to 10 m³/h (44 US GPM).
- These Bilge Water Separators are supplied ready to install, coming complete with pump, valves and control panel.
- With the exception of the pumps and pneumatic valves these Bilge

Water Separators 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 disposable membrane replacement. Access for 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 connection to the ship's pressurized clear water system.
- The electrical power is at 380/440 v, 50 or 60 Hz.

RESULTS

CPS BMKIII + EBM 14x equipments 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 15 ppm.

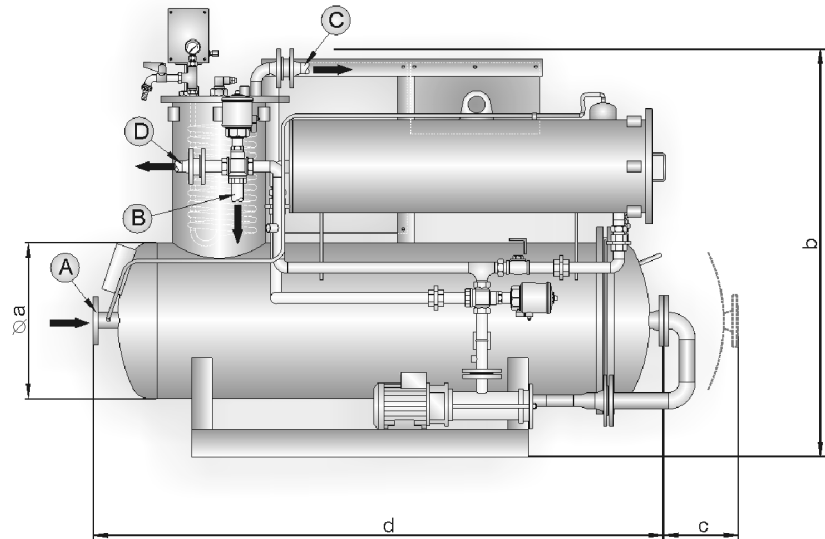
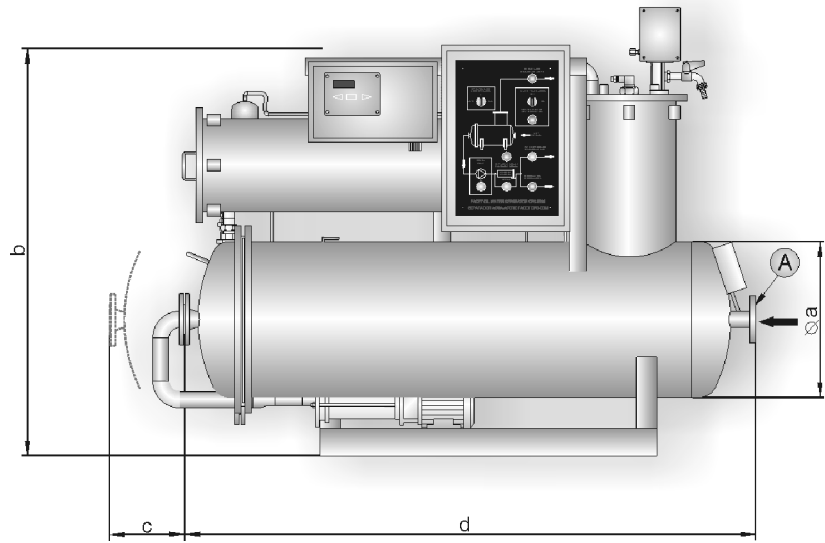
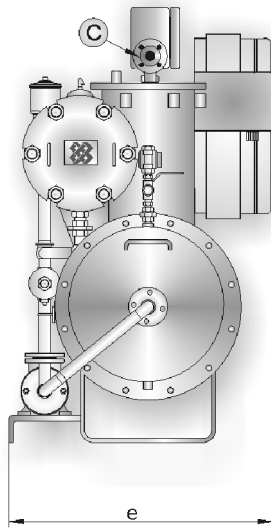
ACCESSORIES

The equipment is supplied with the following accessories:

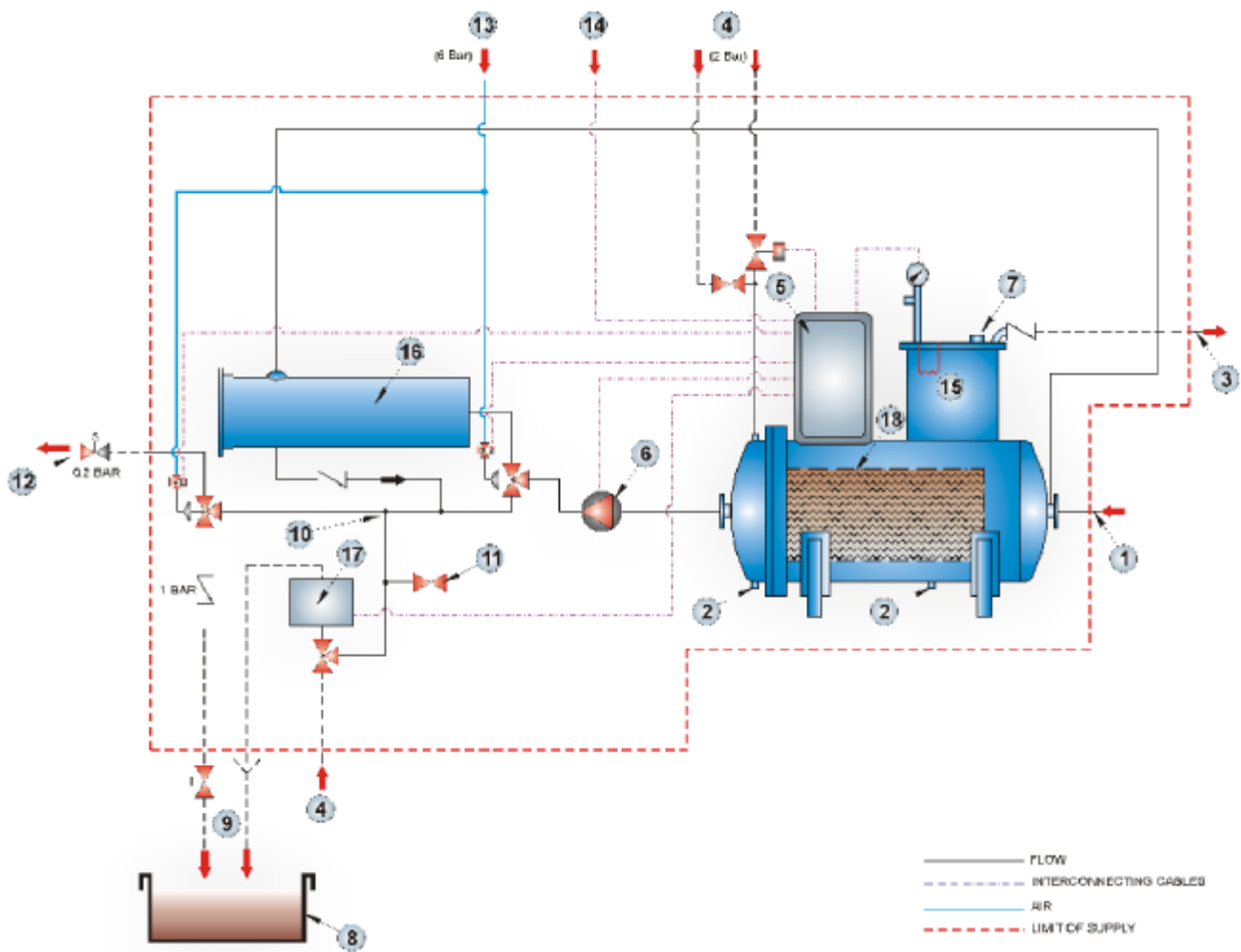
- Bilge alarm: as latest IMO MEPC. 107(49) resolution.
- Electric heater in the oil dome to facilitate heavy oil discharge (if it is required).

CERTIFICATION AND OPERATIONAL EXPERIENCE

Facet International CPS BMKIII + EBM 14x 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)	MODEL				
	CPS 2.5B MKIII + EBM 14x1	CPS 5B MKIII + EBM 14x1	CPS 10B MKIII + EBM 14x2	CPS 25B MKIII + EBM 3 14x2	CPS 50B MKIII + EBM 3 14x3
ø a	457	457	457	900	900
b	1031	1198	1198	1748	2013
c	266	418	933	206	752
d	874	1142	1747	1544	2198
e	763	763	710	1365	1305
m ³ /h	0.5	1	2.5	5	10
kg. (full)	390	490	740	1720	2805
kg. (empty)	225	280	425	990	1610
NOZZLES					
A (INLET)	DN32 PN10/16	DN32 PN10/16	DN32 PN10/16	DN65 PN10/16	DN65 PN10/16
B (DISCHARGE TO SEA)	1" BSP	1" BSP	1" BSP	1 1/4" BSP	2" BSP
C (OIL DISCHARGE)	DN25 PN10	DN25 PN10	DN25 PN10	DN50 PN10	DN50 PN10
D (DISCHARGE TO BILGE)	DN25 PN10	DN25 PN10	DN25 PN10	DN50 PN10	DN50 PN10



ITEM	DESCRIPTION
1.	OILY WATER INLET LINE FROM BILGE
2.	DRAIN
3.	OIL OUTLET
4.	CLEAN WATER INLET
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.	SAMPLE POINT
12.	OVERBOARD WATER OUTLET LINE
13.	AIR LINE (CUSTOMER SUPPLY)
14.	ELECTRICAL LINE (CUSTOMER SUPPLY)
15.	HEATER (OPTIONAL)
16.	EBM 14X SEPARATOR MODULE
17.	PPM ALARM & SENSOR
18.	FACET Mpak®