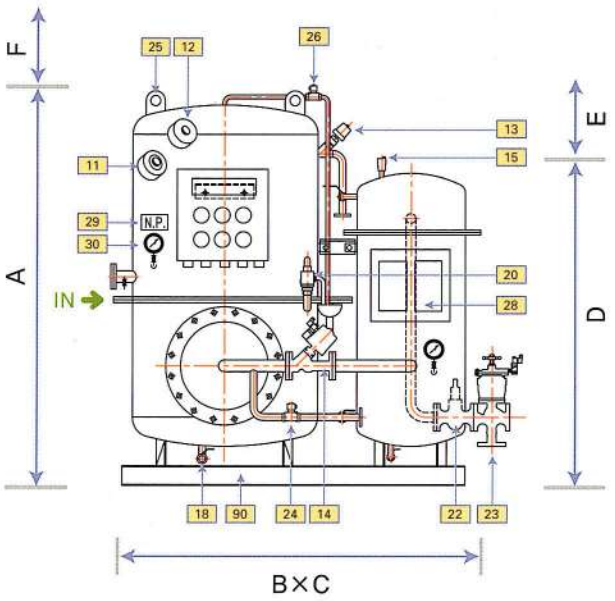
15PPM BILGE SEPARATOR

Features

To Extend the operation life of the demulsifier an automatic bypass is fitted to the separating system. The 15ppm oil content measuring device periodically checks the water quality of the HYN series separator and if below 15ppm, the demulsifer is bypassed until the 15ppm alarm is activated. This process control guarantees a considerable prolonged life cycle of the adsorber elements.



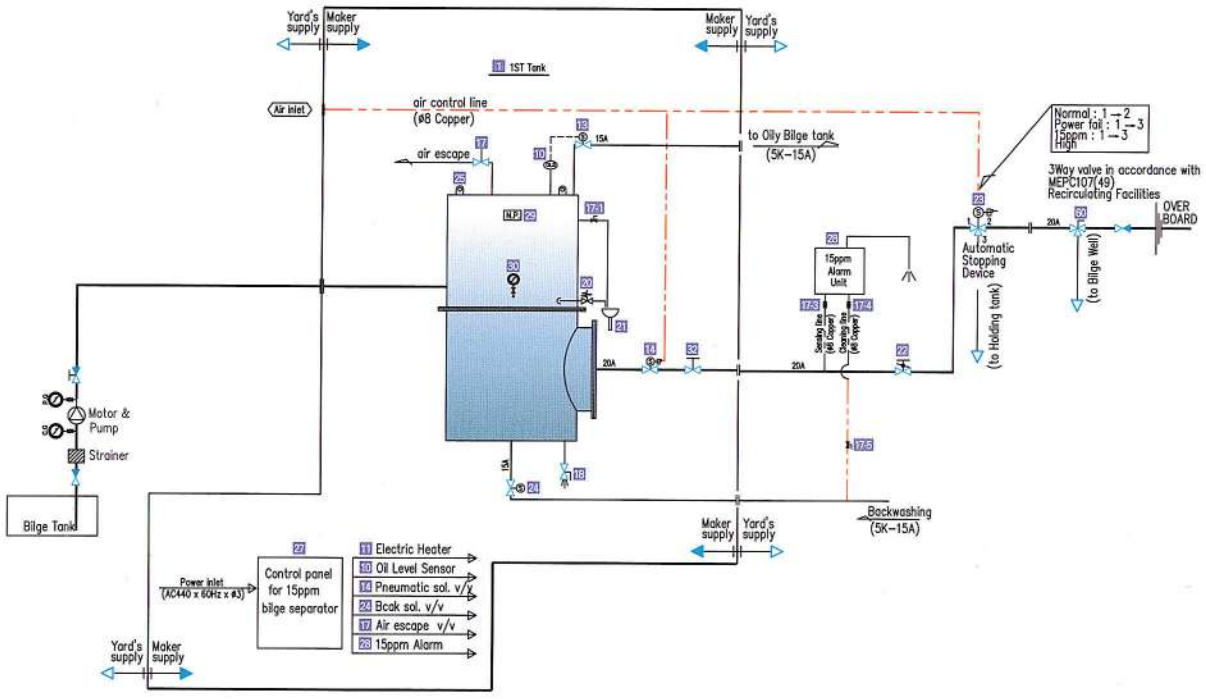
Specifications

11	Heating device	23	3way cylinder valve
12	Oil Detector	24	Backwashing valve
13	Oil out valve	25	Eye plate
14	Return valve	26	Escape vent
15	Air vent	28	15ppm bilge alarm
18	Drain	29	Name plate
20	Safety valve	30	Pressure gauge
22	Requlating valve	90	Common bed

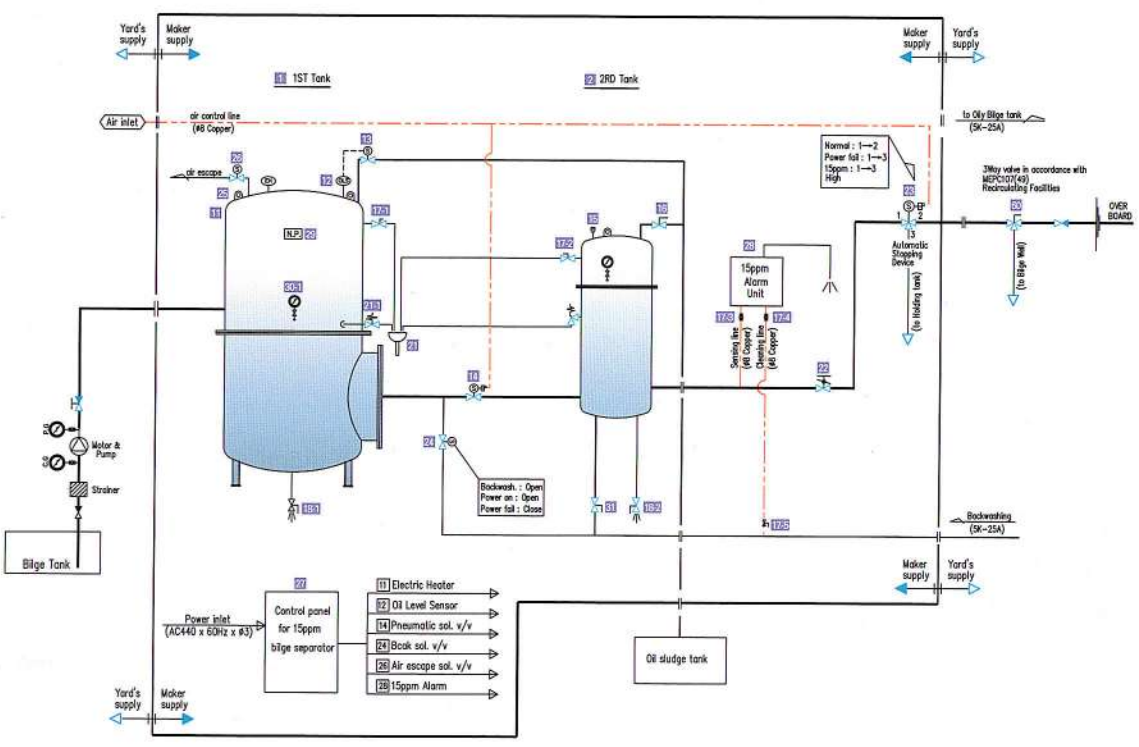
LAYOUT DIMENSIONS

MODEL	CAPACITY (m³/h)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	INLET (A)	OUTLET (A)	OILOUT (A)	WEIGHT(kg)	
											EMPTY	FULL
HYN00201	0.2	850	400	250	–	300	–	20	15	15	98	165
HYN00301	0.3	850	500	400	–	300	–	20	20	15	120	190
HYN00501	0.5	1000	600	500	–	300	–	20	20	15	140	280
HYN01001	1.0	1400	900	1000	1200	100	300	25	25	20	290	650
HYN02001	2.0	1900	1200	1400	1650	100	300	32	25	20	480	1250
HYN03001	3.0	1900	1300	1500	1650	100	300	40	32	25	580	1450
HYN05001	5.0	1950	1900	1700	1700	100	300	50	40	25	800	2300
HYN10001	10.0	1950	2400	1750	1700	100	300	50	50	25	1200	3400

Piping & Installation (Application: HYN 00201, 00301,00501 Type)

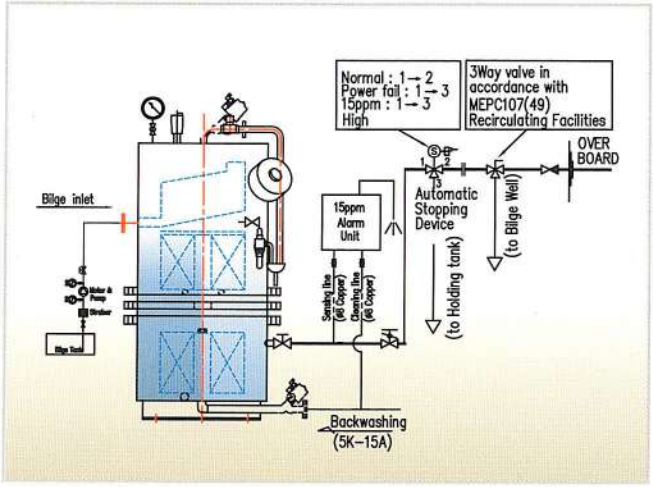


Piping & Installation (Application: HYN 02001, 03001, 05001, 10001 Type)

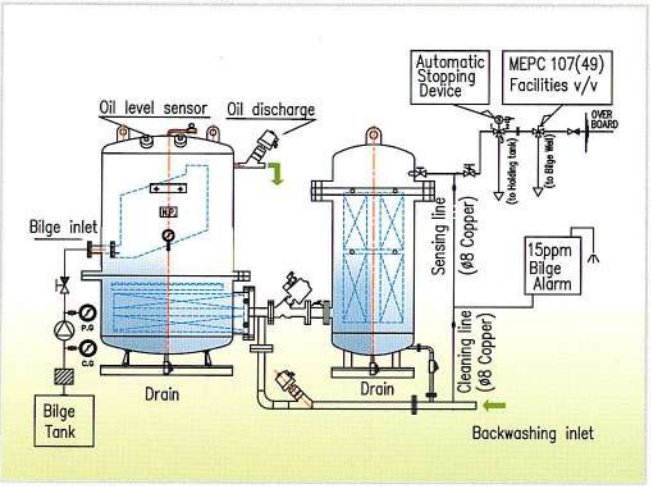


Description of Process for 15ppm bilge Separator (Application: HYN 00201, 00301,00501 Type)

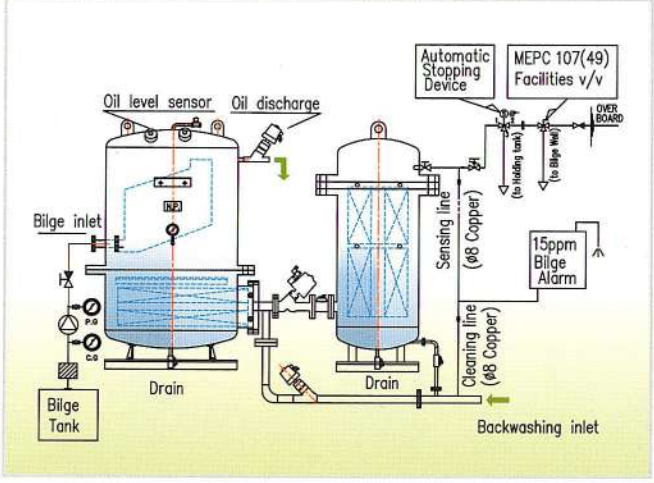
Flg. 1 Oily water separation



Flg. 2 Oil Discharge



Flg. 3 Backwashing



Flg. 1 Separation of oil and water

15PPM Bilge Separator separates oil and water by difference of their specific gravity.

The oily water is commenced to be separated when passing 4-way distributing device, and the floated and accumulated oil are collecting into the upper part of 1st chamberl of the 1st vessel and also the remains including minute oil particles of oily water passes through the Pallring & Urethane Coalescer equipped in the 2nd chamber of the 1st vessel. During this process, the size of oily particle become great and floating speed of the particles are increased, thus the oil floats easily. As the emulsified oil is removed by Coalescer equipped in the 3rd chamber of the 1st vessel and 2nd vessel(Emulsion Treatment Unit),and then water is discharged under the condition of below 15ppm(or 5ppm) of oil density.

Flg. 2 Oil Discharge

When the collected oil in the upper part of the 1st chamber is detected by the oil level detector, the oil discharging valves is opened and then oil is discharged automatically by the Backwashing system.

Flg. 3 Backwashing

(1st chamber of the 1st vessel)

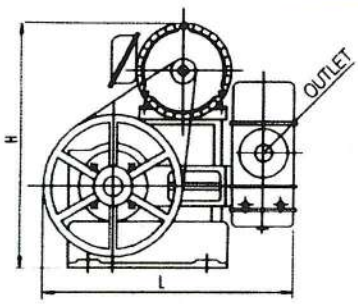
When the oil level detector detects oil, the bilge pump is stopped and the oil discharge valve is opened and direction 2-way backwashing vlave is changed for backwashing at the same time. The coalescer filter in the 3rd chamber and Pallring & Urethane Coalescer in the 2nd Chamber are cleaned by Backwashing water automatically, and the floating objects with oil are discharged .

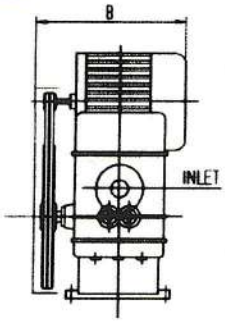
(2nd vessel(Emulsion Treatment Unit))

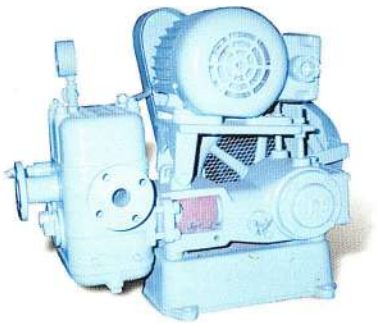
The emulsified oil is removed by the Coalescer and the euipment is cleaned by Backwashing after opening the Air vent valve, with manual Backwashing valve thus the performance and efficiency of the system are improved.

BILGE PUMP(Piston type) & SLUDGE PUMP(Mono type)

Layout Arrangement



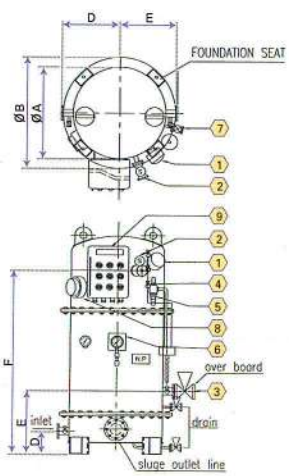




Layout Dimensions

MODEL	UNIT	1015C	1015	1015B	101A	101B	101	102	103
CAPACITY	m³/hr	0.15	0.2	0.3	0.5	1.0	2.0	5.0	10.0
MOTOR	KW	0.4×4P	0.4×4P	0.4×4P	0.4×4P	0.4×4P	0.75×4P	1.5×4P	2.2×4P
PUMP	R,P,M	420	420	420	280	280	280	220	240
L	mm	510	510	510	450	450	450	745	770
B	mm	300	300	300	284	284	284	410	430
H	mm	420	420	420	480	480	480	570	570
IN/OUTLET	5K	15A	15A	20A	20A	25A	40A	40A	50A
WEIGTH	KG	39	39	39	66	66	75	145	175

PRE-TREATMENT



Sepecifications

NO	Description	Contents
1	level sensor	LSOS(LSC-80)
2	2way air v/v	AP-25/SV210
3	dischage	25A, 40A, 50A
4	test v/v	PT1/4", 3/8"
5	safety v/v	0-7kg/㎠
6	press, gauge	0-6kg/㎠
7	drain v/v	25A, 40A, 50A
8	heating system	steam/electric
9	control panel	standard

Layout Dimensions

	TYPE(HYPUS)			
	1.0㎥/hr	2.0㎥/hr	5.0㎥/hr	10.0㎥/hr
ΦA	459	659	809	909
ΦB	540	780	930	1040
C	310	500	570	630
D	280	450	480	530
E	200	450	350	530
F	920	550	1550	1650
H	1000	1600	1750	1850
Dry weight	210	550	580	610

15PPM BILGE ALARM

Type OMD-2005

SMART CELL-BILGE

The oily water separating system is equipped with the 15ppm Bilpe alarm device OMD & FOCAS-1800 type tested and approved in accordance with IMO Resolution MEPC. 107(49)
The 3-way cock for flushing is fitted with acontact to ensure that during flushing of the alarm device, and the 3-way diverting valve is in recirculation mode(automatic stopping device).
According to IMO Resolution MEPC. 107(49)a 3-way valve is installed downstream of the oily water sepaator in the overboard line to recirculate the water to the bilge whenever required during port state control.

Specifications

Range : 0-30ppm, Trend up to 50ppm	Output signal : 0-20mA for 0-30ppm
Accaracy : According IMO MEPC. 107(49)	Sample water pressure : 0.1-10 bar
Linearit : Up to 30ppm better than ±2%	Sample Flow : Approx x 0.1-4 ℓ /min
Display : Gree Graphic Display	Alarm Inkication : Red LED's
Power supply : 24V AC or DC	Size(over all) : 360×240×100(mm)
Consumption : 15VA	Degree of protection : 1P 44
Alarm points 1+2 : Adjustable between 1-15	Weight : 7.3kg ±2
System fault Alarm : Red LED	Pip fitting : R1/4" Female

Piping & installation