RIVERTRACE

SMARTSAFE ORB

The SMARTSAFE ORB Bilge Overboard Security System was developed to prevent the vessel from illegal discharge "Magic Pipes" and minimise discrepancies in the oil record book.

In its simplest form the Smartsafe ORB will utilise the ships GPS and records each 'event' of the bilge water discharge process. The control module will store these events for a period of three years exceeding MEPC requirements.

It is a complete interlocked system ensuring security of your discharges. This includes tamper proof electronic flow meters and secondary diverter valve with position feedback installed after the standard IMO diverter valve. The secondary diverter valve is controlled solely by the Smartsafe ORB and will immediately be closed should a malfunction or malicious act be detected.

Rivertrace's SMARTSAFE ORB can provide electronic recording of the discharges. When connected to the ship's LAN system the monitor will send automated emails at set intervals. The data is then interpreted and recorded in the Rivertrace Connected database and shown on the user-friendly dashboard interface. All data including the email report can be accessed through the dashboard providing the user with a full auditable trail of the discharges. The discharge data can also be used as an automated entry into your electronic ORB.

APPLICATIONS

- Bilge Water Discharge Security
- Integration with Electronic Oil Record Books
- Protection Against Magic Pipe
- Provides early indication of faults
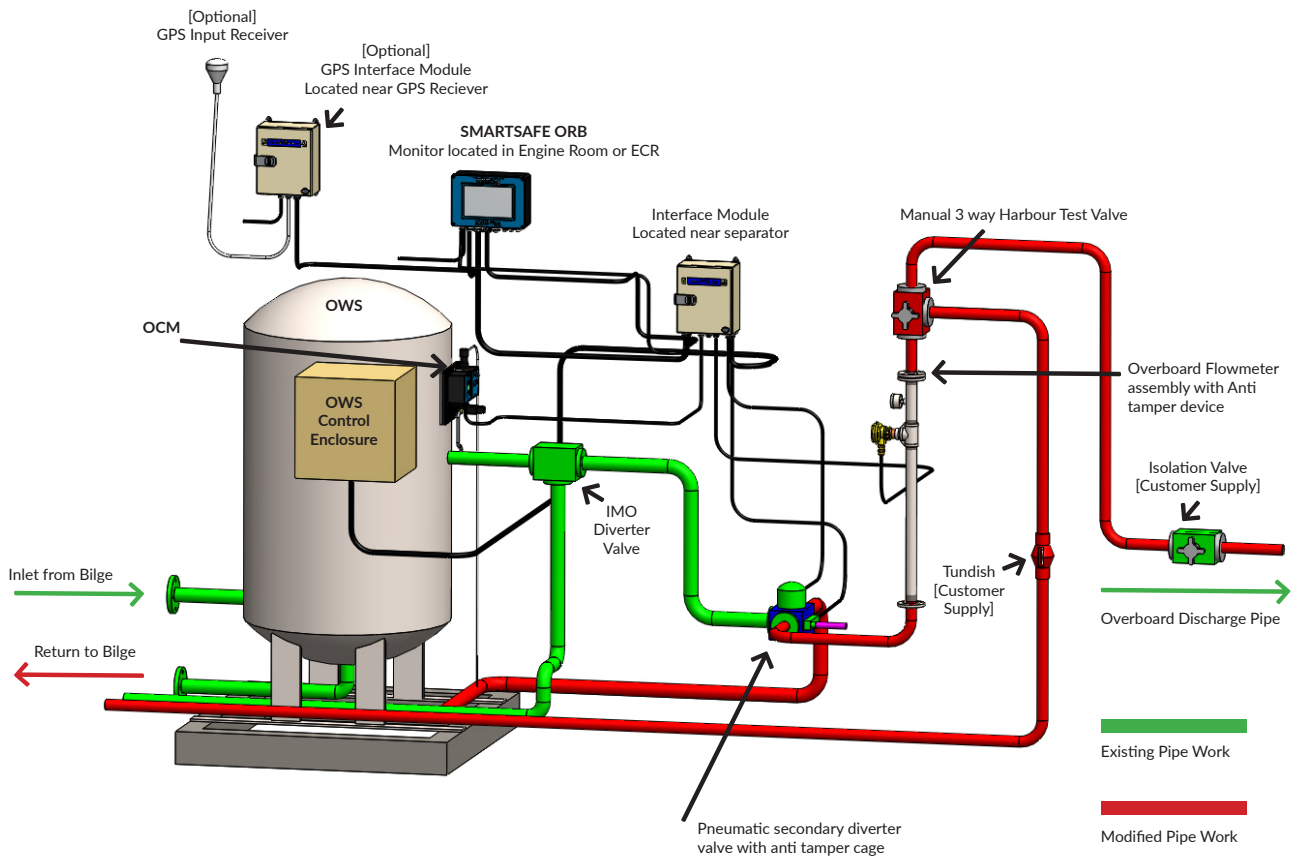
KEY FEATURES

- Rivertrace Connected Ready
- Camera integrated in seperator interface to capture tampering
- Smaller module
- Simpler installation
- Improved Security

Discharge Summary Screen

RIVERTRACE

SMARTSAFE ORB

[Optional]
GPS Input Receiver

[Optional]
GPS Interface Module
Located near GPS Reciever

SMARTSAFE ORB
Monitor located in Engine Room or ECR

Interface Module
Located near separator

Manual 3 way Harbour Test Valve

OWS

OCM

OWS
Control
Enclosure

Overboard Flowmeter
assembly with Anti
tamper device

Isolation Valve
[Customer Supply]

IMO
Diverter
Valve

Inlet from Bilge

Tundish
[Customer
Supply]

Overboard Discharge Pipe

Return to Bilge

Pneumatic secondary diverter
valve with anti tamper cage

Existing Pipe Work

Modified Pipe Work

SPECIFICATION (Main Control Enclosure)

Supply Voltage	100 – 240V ac
Supply Variation	+- 10% of norm. voltage
Supply Frequency	50/60 Hz
Consumption	30 VA Max
Control display	10" Touch Screen
Approval	ABS Type Approval (Pending)
Size	H 254 x W 330 x D 115mm
Weight	<5Kg
Outputs	Ethernet and USB

Specifications and system descriptions accurate at time of printing. These are subject to change.

OPTIONAL COMPONENTS

GPS & INTERFACE MODULE
PRINTER
RIVERTRACE CONNECTED DASHBOARD