

## The first truly automated electronic oil record book.

The SMARTSAFE ε-ORB has been developed under a newly formed joint venture SENSEAS, in which both companies are exclusively working together to develop sensor technology with maritime software to provide the industry with a smarter, simpler way to improve processes and recording data.



## SMARTSAFE Equipment

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

It is a complete interlocked system ensuring security of your discharges utilising the ships GPS and records each 'event' of the bilge water discharge process. The SMARTSAFE system 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 and will immediately be closed should a malfunction or malicious act be detected.

The intuitive touchscreen control module will store the event data for a period of three years exceeding MEPC requirements. This discharge data can then be automatically entered into the electronic oil record book.



## MARPOL E-ORB Software

The Prevention at Sea's  $\epsilon$ -ORB (MARPOL electronic oil record book) is a software application designed to replace the traditional paper oil record book (ORB Part I & Part II) and facilitate accurate ORB entries into an efficient electronic format.

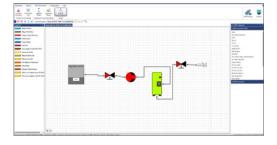
Prevention at Sea  $\epsilon$ -ORB guards against practical ORB issues such as:

- Missing oil record books
- Failure to document entries in the ORB of internal transfer of oily mixtures
- Discrepancies between entry into the ORB and actual capacity of the oily water separator
- Falsification of log entries

The SMARTSAFE  $\epsilon$ -ORB provides a physical security system against tampering, an approved Electronic Oil Record Book with automated data entry from the Oily Water Separator. Together the system promotes security, credibility, and traceability in accordance with the MARPOL, IMO Circ. 736/Circ. 2 and MEPC 312(74) requirements.

## **FEATURES AND BENEFITS**





- ① Peace of mind knowing your vessel maintains accurate information
- ① Data security —reduce risk of lawsuits and criminal charges
- Mitigate detentions and port delays
- Increased Security against Magic Pipes
- ③ ε-ORB cloud portal—ability to monitor fleet ORB ashore
- Automated data entry from Oily Water Separator removing risk of manual errors
- ① Reduce administrative burden on crew and overtime costs
- ② ε-ORB Signature Pad Functionality

- ① Maintenance and support plan—timely software updates to ensure compliance with regulatory changes and IT technical support
- Worldwide Sales and Service Support
- Annual Calibration Checks Kits and Calibration Exchange Schemes

