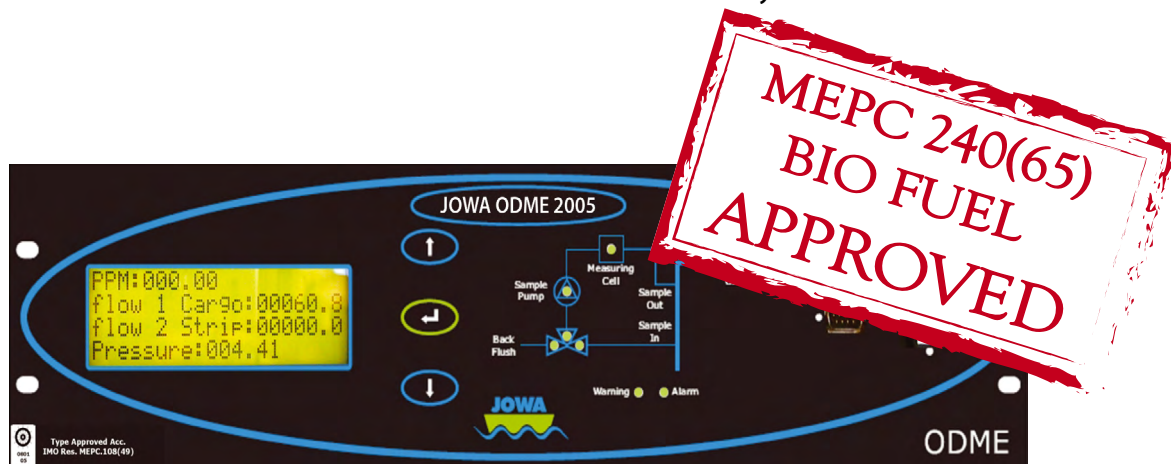


# ODME 2005 BIO FUEL OIL DISCHARGE MONITOR

## MONITORING AND CONTROL SYSTEMS

The JOWA ODME 2005 Oil Discharge Monitor is approved in accordance with the test and performance requirements for "third generation" monitors, according to IMO resolution MEPC 108(49) and MEPC 240(65).

The requirements of the MARPOL Convention are that all oil tankers with a gross tonnage of 150 GRT and above must have an oil discharge monitoring and control system installed, incorporating an approved oil content meter, with a starting interlock and an automatic overboard valve control system.



### Main Features

- » Oil content meter is certified to meet the requirements of IMO MEPC108(49) and MEPC 240(65)
- » The measuring range is 0-1000 ppm
- » Easy to operate as it is a minimum of buttons to press and self explanatory menus
- » Robust, easy to install and easy to maintain
- » A unique self-cleaning feature, making manual cleaning virtually unnecessary
- » A high quality product. The components are designed for obtaining long lifetime in a rough environment
- » Approvals: DNVGL, USCG, RMRS, NK and CCS

# OIL DISCHARGE MONITOR CONSISTS OF THE FOLLOWING MAIN PARTS:

## A computer unit

Intended to be installed in the cargo control room or in an equivalent non-hazardous area. The computer unit controls and receives data from the other ODME components. This information is treated for computing and control purposes and is stored into a flash memory, which could be displayed or printed out an external computer or printer, according to the requirements of the IMO resolutions.

## A Zener barrier unit

Intended to be installed in the engine room or equivalent safe area. The Zener barrier module converts electrical control signals from the computer unit to pneumatic or electrical supply signals for operation of the components that are a part of the ODME 2005 equipment. The Zener barrier module contains electrical power supply and zener barriers for the analysing unit and for up to two 4-20mA loop powered flow meters.

## An Analysing unit

Intended to be installed in the hazardous area. The analysing cabinet contains the oil content measuring unit, a sample feed pump of shear type, a fresh water valve for cleaning purposes and a pressure transmitter that monitors the sample flow through the measuring cell. This compact design makes it possible to install the unit close to the sampling point, which make the sampling pipes distance between the sampling probes and the analysing cabinet as short as possible.

## SCHEMATIC ARRANGEMENTS OF SYSTEM

