

PRES·VAC

VOCON & MARVOC SYSTEM

Protect your cargo, crew and the environment
while reporting log emissions



G&O MARITIME GROUP

MARINE LIFE WITHOUT FOOTPRINTS

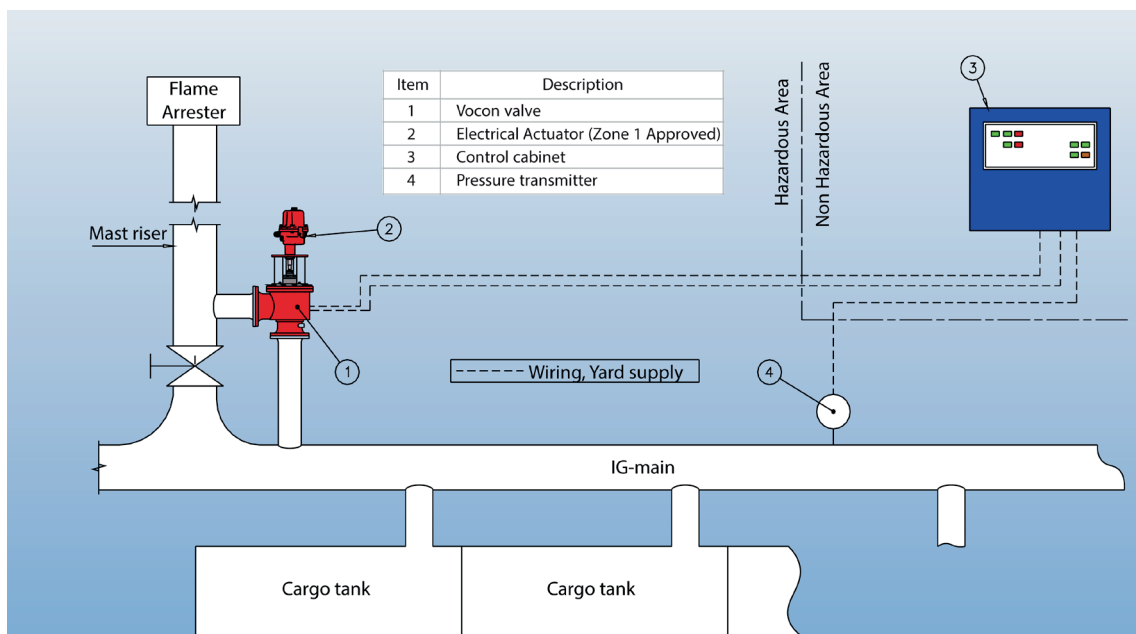
INTRO

Our VOCON valve and reporting system is the most advanced inline configurable VOCON system on the market today

VOCON is designed to comply with the latest known rules and regulations and is equipped with the most advanced reporting system available.

VOCON has the following key points which makes it highly suitable for the oil carrier market being conventional tankers, offshore applications or onshore activities.

- The Vocon system is developed in accordance with the guidance IMO/MSC/Circ. 680 requirement of controlling the VOC emissions from cargo tanks on a COT.
- The Vocon system is developed in accordance with IMO Resolution MEPC.185(59) guidelines for the development of a VOC management plan to ensure that the operational procedure is optimized to minimize the release of VOC emissions.
- The Vocon system is designed and sized in accordance with API 2000 requirements for breathing purposes to minimize emission of VOC for COT/VLCC size vessels. DN 150 connecting flange size is the correct size. If a smaller pipe size is required, a reducer/expander can be provided.
- The Vocon system is equipped with the advanced reporting system MARVOC, which is a reporting system that exceeds the requirements of today and is forming the future of VOCON reporting devices.



DESIGN

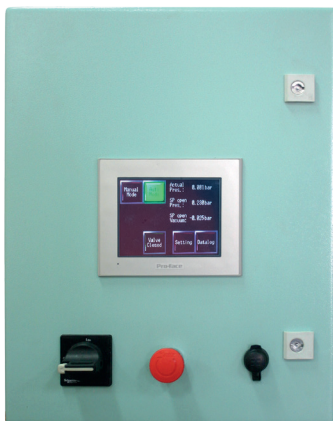
PRES-VAC VOCON features an automated system capable of maintaining a constant pressure span during voyage

The VOCON venting system is controlled by an electrical actuator maintaining the tank pressure between the set-pressure and the re-seating pressure.

The VOCON system is installed on the mast riser's bypass line, and controls the vapor pressure in all the cargo tanks during voyage for direct emission control, in order to reduce VOC loss from the tanks during voyage.

By controlling the pressure in the venting system, it is possible to fully control the VOC emissions.

The VOCON system can be programmed to enable adjustment of the opening setting on the valve, according to what is optimal for the specific cargo.



Electrical actuator

The valve actuator is analog controlled, and can be set to open partly instead of full. This feature can be used to reduce the flow rate for measuring more accurately, and keep pressure on the cargo avoiding boil off. Approved for hazardous area installation.

VOCON valve

A built up piston controlled inline pressure vacuum valve in stainless steel for breathing purposes and full flow capacity performance. Covering a range from 2.400 Nm³/h to 26.000 Nm³/h.

Control Cabinet

The VOCON System is operated from a touch screen (Human Machine Interface (HMI)) in the front of the cabinet. It is possible to run automatic or manual. Settings can be adjusted inside the max and min limitation for safe operation. The control cabinet must be placed in-doors in a non-hazardous area, e.g. in the Cargo Control Room.

Pressure transmitter

The relative pressure transmitter (gauge pressure) is placed on the Main IG-line. The transmitter is used to measure the pressure in the tank venting system and reports wback to the control cabinet for action. Approved for hazardous area installation.



MARVOC

New generation of user friendly software

With our new and innovative MARVOC software linked to the VOCON valve and the venting system we monitor and generate the reports required in accordance with IMO/MSC/Circ.680



- 1 Emission reports in accordance with IMO/MSC/Circ.680.
- 2 Reporting current tank pressure, opening and closing settings and emission duration.
- 3 Report log and cause of emissions.
- 4 Report on current emission, causes, air temperature and duration.
- 5 Report on tank temperature, air temperature and gas expansion.
- 6 Reporting vapour gas mixture emitted per emission and in total.
- 7 Logging VOC and non-VOC emissions.



PART OF G&O MARITIME GROUP ■

Pres-Vac Engineering A/S | Svanevang 3-5 | DK-3450 Allerød | T: (+45) 4817 4055 | W: www.pres-vac.com
G&O Maritime Group | Solvang 22 | DK-3450 Allerød | T: (+45) 4817 4055 | W: www.gomaritimegroup.com

G&O Maritime Group provide value, safety and reliability to the global maritime industry through green, innovative quality solutions.