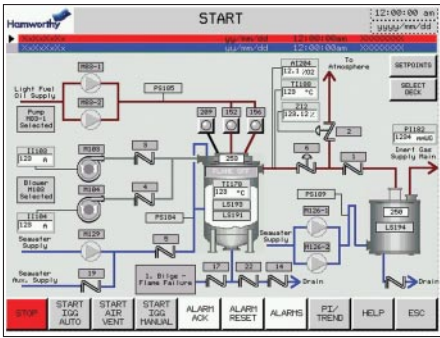


Moss Inert Gas Generator System

for Tankers

Inert Gas Systems



Typical picture of the touch screen user interface



Centrifugal fan

Moss inert gas generator system for tankers

The unique design is based on experience from thousands of installations, the first one in the 1960's. High efficiency, low maintenance costs, safe and easy operation combined with minimum space requirements are important features of the Moss design. This is reflected in the overall layout, the choice of materials/corrosion protection and the control system.

Special features

Moss Burner/Scrubber Unit

The Moss burner/scrubber unit requires less deck space than any other known design. This is due to the location of the combustion chamber concentrically inside the scrubber unit. Other benefits of this design are that the unit does not require any special direction of orientation inside the ship and that the inert gas quality will not be affected by the ship's rolling and pitching.

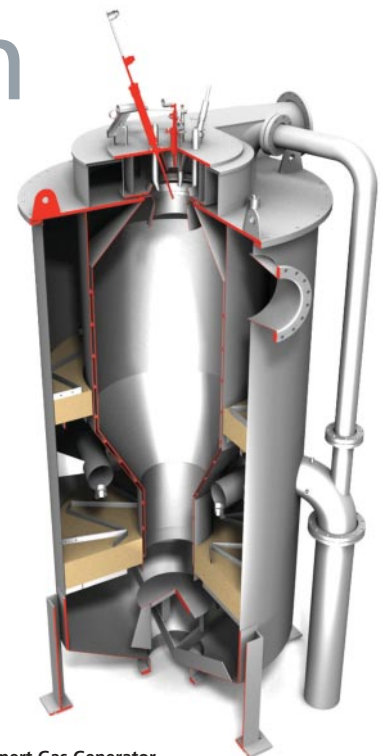
The unique Moss high turbulent burner ensures an almost complete combustion with a rugged simple design and no moving parts. Heat/corrosion resistant steel is used for all surfaces exposed to heat and/or sea water.

Blower Units

The blower units are of a single stage centrifugal type with motors and each unit is arranged on a rigid steel base frame equipped with resilient mountings.

Moss Deck Water Seal

The Moss deck water seal is of displacement semi-dry type internally GRP coated. Upon loss of positive flow, the water will immediately close the seal. The mesh demister is effectively preventing carry-over of water droplets under all flow conditions.



Moss Inert Gas Generator

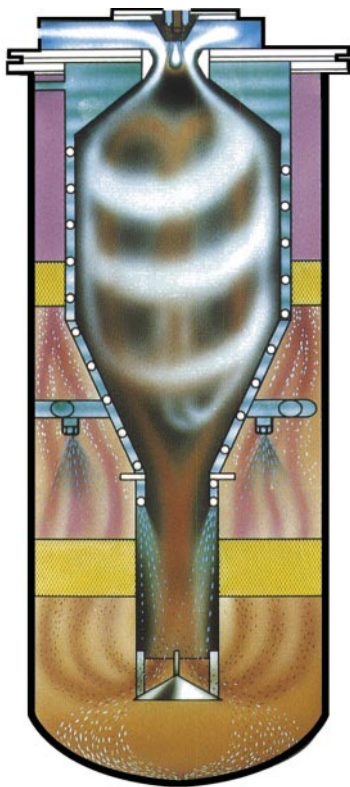
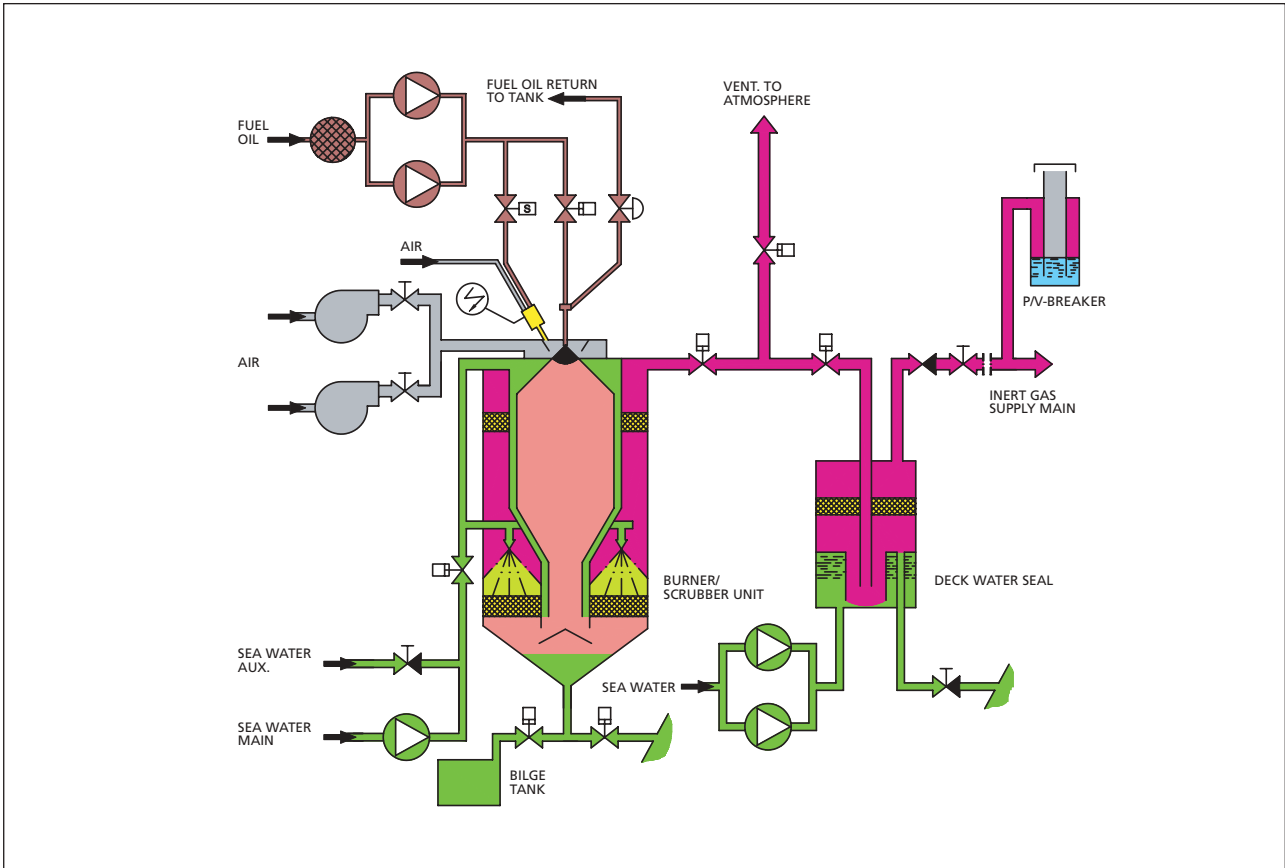
Moss Pressure/Vacuum Breaker

The Moss pressure vacuum breaker is another device of importance for the ship's safety, releasing excessive pressure or vacuum from the cargo tanks. The unit is internally coated with epoxy.

Control System

The control system is based on a Programmable Logical Control (PLC). The control panel is of the touch screen type. Several mimic flow diagrams are implemented as well as the controls required for safe and easy operation with a minimum of operator supervision. Additional functions like user manuals and condition monitoring can also be included. The capacity is remotely controlled from a panel in the cargo control room.

The **Moss Inert Gas Generator System** is designed based on compact modules, offering valuable savings in space and installation costs both for new buildings and for retrofit on existing vessels.



High inert gas quality is made possible by a purposely designed combustion chamber

Performance data

Capacity: up to 20.000 Nm³/h.

Normal discharge pressure:
0,12 bar g. Other pressures upon request.

Inert gas composition at 3% by volume of oxygen:
(based on marine distillate fuel).

CO	= Max. 100 ppm	NO _x	= Max. 150 ppm
SO ₂	= Max. 1 ppm	CO ₂	= Approx. 14%
N ₂ + Ar	= Balance		

Oxygen content adjustable down to approx. 1%.

Gas outlet temperature:
Max. 5°C above sea water temperature.

Relative humidity: 100%

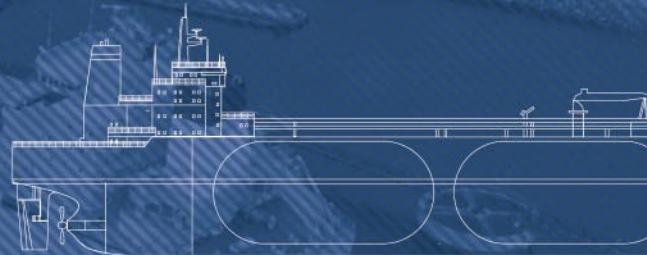
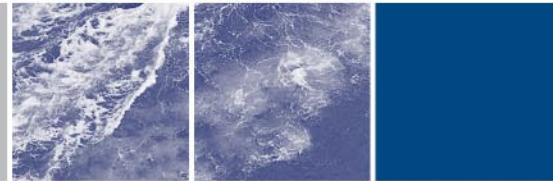
Carry over of water droplets:
Less than 1 g/kg dry gas.

Fuel:
Marine distillate according to ISO 8217 or marine residual fuels pre-heated to max. 20 cSt.

Nominal fuel consumption:
0,075 kg/Nm³ gas.

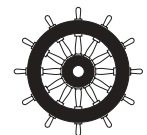
Nominal sea water consumption:
0,06 m³/Nm³ gas (sea water temp. 32°C).

Nominal el. power consumption:
0,015 (0,01 - 0,02) kW/Nm³/h gas (excluding sea water pumps).



Worldwide sales and service network

Our global network of sales and service centres ensures that we can provide first class technical, spares and service support to our customers wherever they are around the world. In addition to our sales and service locations, we are supported by agent representatives in all major shipping areas.



Main Office:
Hamworthy Moss AS
PO Box 1053
NO-1510 Moss
Norway

Hamworthy Shanghai
Room 8B, Yi Dian Plaza,
No. 746 ZhaoJiaBang Road,
Shanghai 20030

Hamworthy Marine Korea Ltd
Room 1224, Ocean Tower Bldg.
#760-3, Woo 1-Dong, Haeundae-Gu,
Busan, South Korea 612-021

tel: +47 69 27 99 00
fax: +47 69 25 45 78
e-mail: moss@hamworthy.com

tel: +86 21 644 55665
fax: +86 21 644 59875
e-mail: china@hamworthy.com

tel: +82 51 740 5544
fax: +82 51 740 5547
email: koreamarine@hamworthy.com

subsidiaries of Hamworthy plc



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