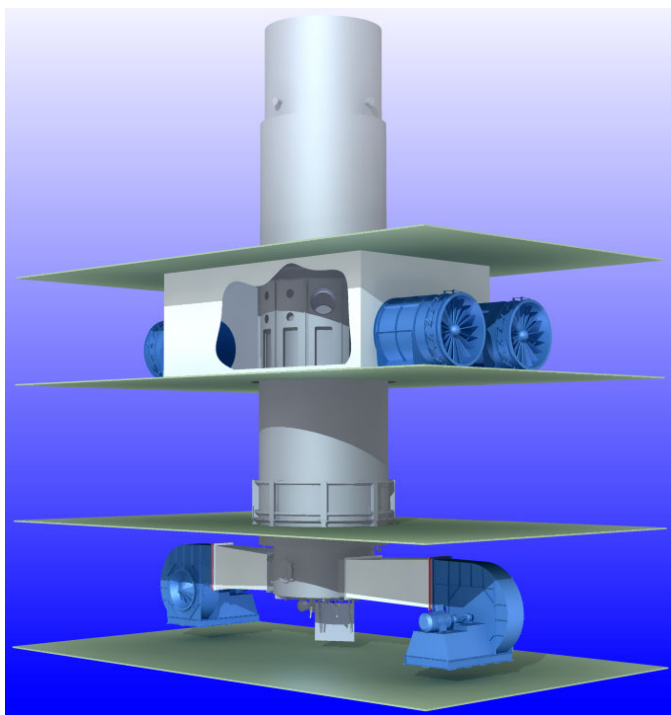


DATASHEET

AMOXsafe® Gas Combustion Unit for LNG Carriers



Hamworthy Combustion's AMOXsafe® Gas Combustion Unit for LNG Carriers has been developed using combined combustion experience in marine systems, land based thermal oxidisers, the latest CFD modelling techniques and a full size demonstration unit.



Key Features

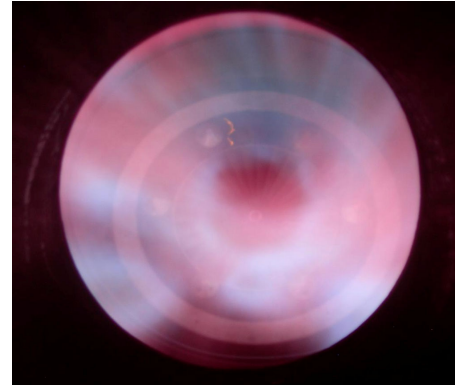
- Patented all metal design *
- Proven design and performance
- AMOXsafe® GCU has been fully tested to 100MW
- Open flame path
- Low noise, low power and low emissions
- Unique air jet system for mixing
- No refractory
- Superior flame stability
- Simultaneous total fuel and combustion air control
- Incineration of hydrocarbons in BOG with 100% inert gas using oil pilot for safety
- Extended warranty available
- Classification society approval
- Worldwide marine service and spares network
- Long term service agreements available
- Hands on ship crew training on full size demonstration unit
- Hamworthy Combustion is an established marine supplier with an existing reputation and brand
- Hamworthy Combustion has nearly 100 years experience in combustion technology



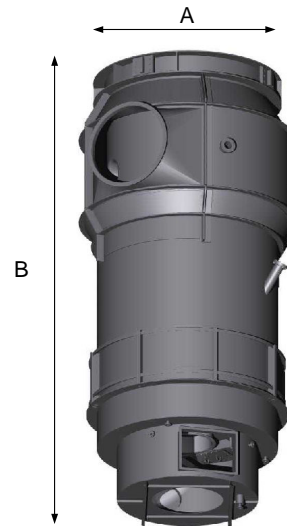
Combustion chamber showing patented air nozzles for mixing

Standard Supply

- GCU Incineration Section
- DF Register Burner
- Windbox
- Diesel Oil Pilot
- Combustion Air Fans
- Dilution Air Fans
- Oil / Air Valve Skid
- Diesel Oil Pump Set
- Instrumentation
- Control Panel
- Motor Starter Panels
- Gas Valve Skid



View of burner firing at 100% load



Standard Questions When Quoting

- What is the maximum BOG flowrate based on 100% methane?
- What classification is the ship?
- What is the ship propulsion type?

| AMOXsafe® size | 800 | 3000 | 4500 | 5600 | 6500 |
|-----------------------------|---|-------------------------|-------------------------|-------------------------|-----------------------|
| Max duty (kg/hr 100% CH4) | 800 | 3000 | 4500 | 5657 | 6500 |
| Gross thermal rating (MW) | 12.35 | 46.3 | 69.5 | 87.3 | 100.4 |
| GCU diameter A (m) | 2.2 | 3.2 | 4.0 | 4.5 | 5.0 |
| GCU height B (m) | 4.9 | 8.0 | 9.5 | 11.4 | 13.0 |
| GCU weight (approx kg) | 6,000 | 16,500 | 24,500 | 28,500 | 32,000 |
| Combustion air fans | 1 x 100% or 2 x 100% | 1 x 100% or 2 x 100% | 1 x 100% or 2 x 100% | 1 x 100% or 2 x 100% | 2 x 50% or 3 x 50% |
| Dilution air fans | 1 x 100% or 2 x 100% | 2 x 50% or 3 x 50% | 2 x 50% or 3 x 50% | 2 x 50% or 3 x 50% | 2 x 50% or 3 x 50% |
| Ignition | Hamworthy Combustion Chentronics Direct High Energy Spark Igniter or diesel pilot | | | | |
| High inert gas incineration | Option with diesel pilot | | | | |
| Burner type | Hamworthy Combustion DF register | | | | |
| Flame monitor | Hamworthy Combustion Smartscan 1-2-1 | | | | |
| Controls | Hamworthy Combustion standard or full integration with ship IAS | | | | |
| Fuel gas valve skid | ✓ | ✓ | ✓ | ✓ | ✓ |
| Fuel gas valve enclosure | ✓ | ✓ | ✓ | ✓ | ✓ |

For further information on combustion equipment please contact the head office:

Hamworthy Combustion Engineering Limited
 Fleets Corner
 Poole Dorset BH17 0LA
 Tel: +44 1202 662700
 Fax: +44 1202 665333
 Email: info@hamworthy-combustion.com
 Website: <http://www.hamworthy-combustion.com>

©2008 Hamworthy Combustion Engineering Limited – All rights reserved

Marine/AMOXsafe/March 2008/Rev. 2

Hamworthy Combustion Engineering Limited reserve the right to make changes and improvements which may necessitate alteration to the specification without prior notice

HAMWORTHY
 COMBUSTION

Incorporating:

PEABODY ENGINEERING
 AIROIL - FLAREGAS
 CHENTRONICS

*UK and International Patents applied for – GB0424967.8
 AMOXsafe® is a trademark registered in various countries