

TGE MARINE

Fuel Gas Systems

We support the industry in reaching their sustainability targets and moving towards a greener future.

We engineer safe and reliable systems for storage and conditioning of various gases used as marine fuel.

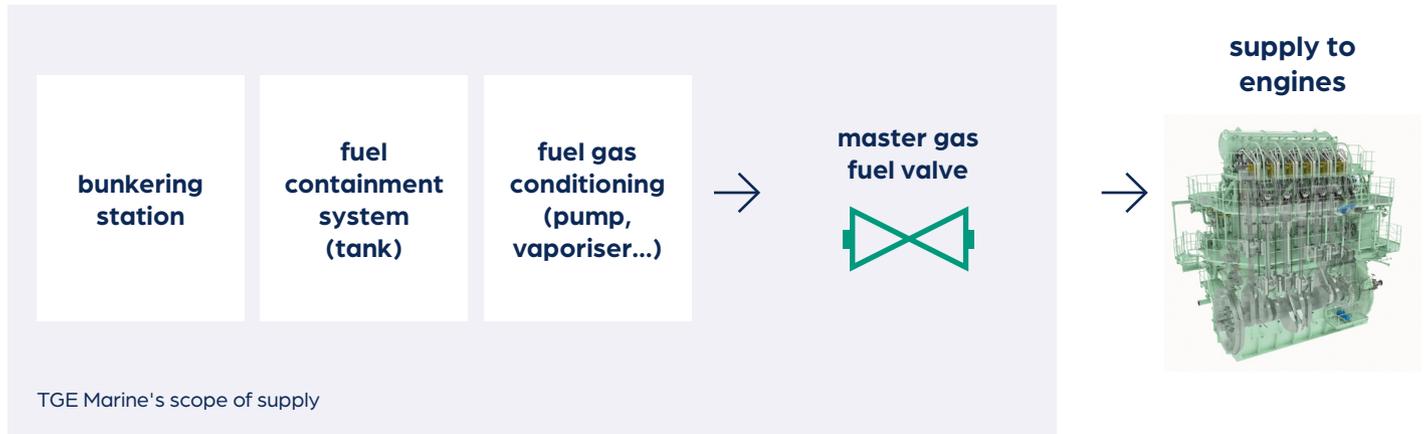


LNG Fuel Gas Systems

We provide modularised gas systems for high volume markets as well as tailor made solutions for special applications designed in close cooperation with our customers.

- 2-stroke main engines
- 4-stroke main and auxiliary engines and boilers
- bunkering
- boil off gas handling, e.g. recondensation package
- dynamic load control
- combined LNG / NH₃ tanks

We are confident that ammonia fuel gas systems and other alternative fuels will play a strong role in decarbonisation of shipping.



Key References include pioneering projects



8x 9,100 PCTC

- **Owner** Höegh Autoliner AS, Norway
- **Yard** China Merchants Heavy Industry (Jiangsu) Co. LTD., China
- **Classification** DNV
- **Completion** 2024–2026
- **Scope** High pressure fuel gas system for a 2-stroke main engine and low-pressure fuel gas system for 4-stroke auxiliary engines. 1 x 3,400 m³ bilobe fuel gas tank (type C) and TGE Marine recondenser for sustainable BOG Management.
- **Highlight** The eight multi-gas tanks, granted DNV's ammonia- and methanol-ready notations. Are the first in the PCTC segment that can be converted to zero-carbon ammonia. The AURORA Class will be world's largest PCTC vessels.



7x 16,300 DWT Chemical Tanker

- **Owner** Furetank Rederi AB, Sweden
- **Yard** China Merchants Dingheng Shipyard, China
- **Classification** BV
- **Completion** 2023–2025
- **Scope** Low pressure fuel gas system for 4–stroke main engines
- **Highlight** Vessels are part of a series of total 17 environmentally friendly vessels



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Semi Submersible Crane Vessel 'Sleipnir'

- **Owner** Heerema, The Netherlands
- **Yard** Sembcorp Marine, Singapore
- **Classification** LR
- **Completion** 2019
- **Scope** Low pressure fuel gas system for 4-stroke dual fuel engines, 8x 1,151 m³ fuel gas tanks (type C)
- **Highlight** Four independent fuel gas systems and eight vertically installed foam insulated fuel gas tanks, feeding engines with a power of 100 MW in total.

Biggest fuel gas system in the world.



provided by Crowley Maritime Corporation

2x 26,500 DWT Conro Vessel

- **Owner** Crowley Maritime Corp., USA
- **Yard** VT Halter Marine, USA
- **Classification** DNV-GL
- **Completion** 2018/2019
- **Scope** High pressure fuel gas system for a 2-stroke main engine and low pressure fuel gas system for 4-stroke auxiliary engines, 3 x 770 m³ vacuum insulated fuel gas tanks (type C)
- **Highlight** World's first vacuum insulated LNG fuel tanks in the US market



Copyright by Wessels Rederei

1,000 TEU Container Vessel 'Seaboard Blue'

- **Owner** Seaboard Marine, USA
(ex Elbdeich Reederei, ex. Wessels)
- **Yard** German Drydocks, Germany
- **Classification** BV
- **Completion** 2017
- **Scope** Low pressure fuel gas system for 4-stroke dual fuel main engines, 1x 480 m³ fuel gas tank (type C)
- **Highlight** Container ship industry-first: Seaboard Blue (formally WES Amelie) was retrofitted to LNG dual fuel



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