

Gas and Heat | G&H Shipping





FOR OVER 60 YEARS, A CONTINUOUS EVOLUTION

Gas and Heat was established in 1996 as a result of the combined experience of Officine S. Marco established in 1948, well-known company active in fabrication and erection of boilers, tanks, piping, pressure vessels and large steel structures, and of the Marine Engineering Service (MES), a ship design company skilled in chemical and gas carriers.

The company design and build cargo plants for liquefied gas carriers. When required by the customer, the company is capable to offer the entire ship building.

The main production plant is located in Tombolo (Pisa) along a canal, which allows the transport of large equipment and components to Livorno harbour.



DESIGN AND CONSTRUCTION OF CARGO SYSTEM

The company is able to supply the tanks and the liquefaction/handling system for LPG/ETH/LNG Carriers on turn-key basis, including a full integrated automation.

The manufacturing cycle of tanks is completed entirely in the Tombolo works .





G&H is a parent company established in 2004, acting as general contractor for small/medium size LPG and ETH carriers .

G&H Shipping built other n.4 sister vessels at Besiktas Shipyard (Turkey) named :

- Scali San Lorenzo
- Scali Reali
- Scali del Pontino
- Scali del Teatro

Moreover G&H Shipping established with Besiktas Group a new company, Galata Gas Shipping , that owns since 2013 an Ethylene Carrier, 9.000 cbm. Capacity, named Besiktas GH.



LNG IS THE FUTURE

Gas and Heat is strongly committed to serve the fast growing market of replacing traditional oil-based fuels in the marine transportation with LNG.

Small Scale LNG Carriers and Bunker Vessel, LNG fuel systems for LNG fuelled vessels and Small Scale LNG Storage Plants are the sectors which mark the company's present and future strong focus pursuing on customer-centricity and industry-leading quality.



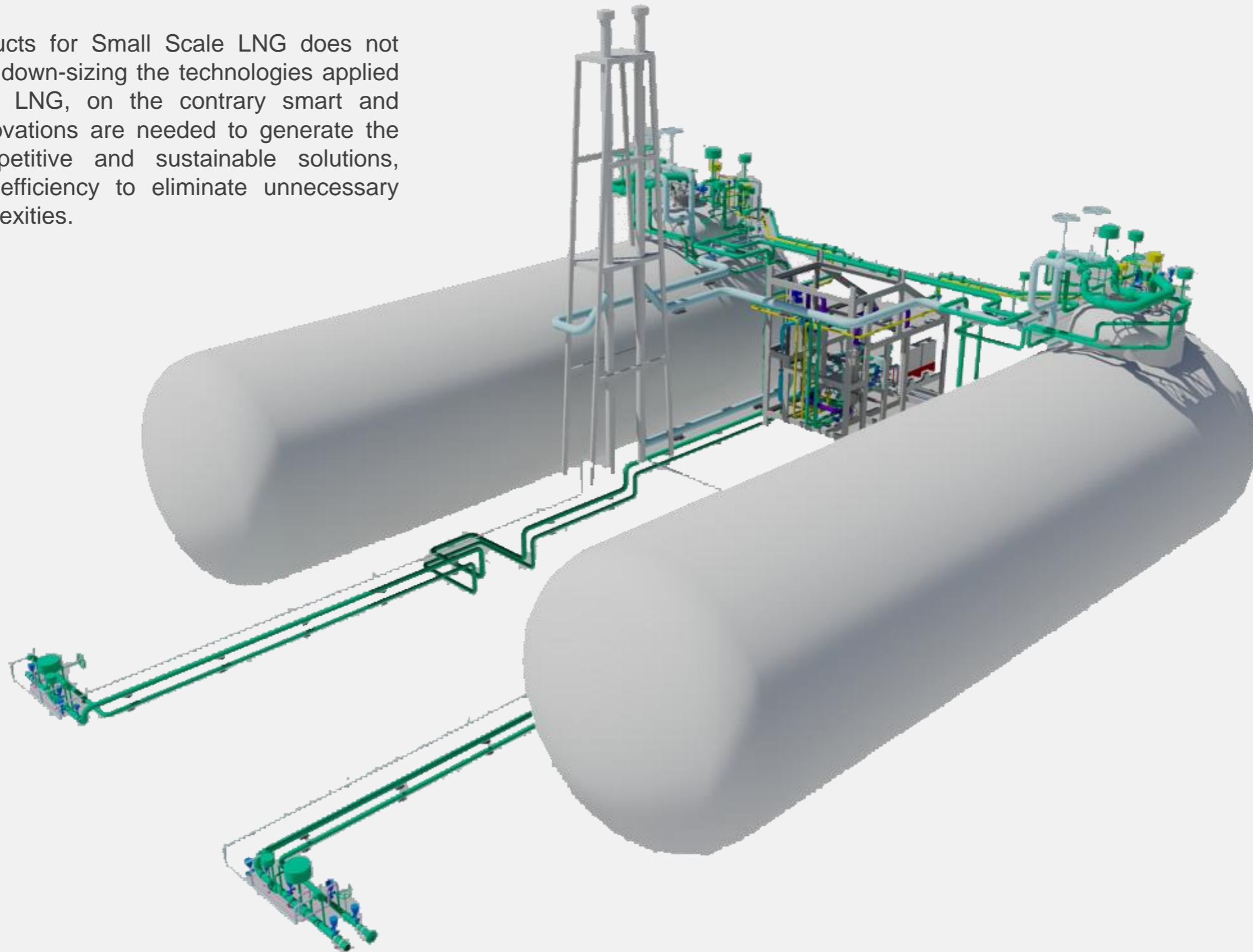
Our know how to serve the LNG sector

Using modern technology and our experience about marine transport of LNG, the society propose its own products in this specific branch, offering to potential customers three different type of plant:

- Containment and conditioning of LNG used as fuel in vessel
- LNG carrier and bunker vessel
- Small scale LNG storage plant (1000-10.000 cbm)



Supplying products for Small Scale LNG does not mean to simply down-sizing the technologies applied in Large Scale LNG, on the contrary smart and engineered innovations are needed to generate the most cost-competitive and sustainable solutions, increasing the efficiency to eliminate unnecessary costs and complexities.

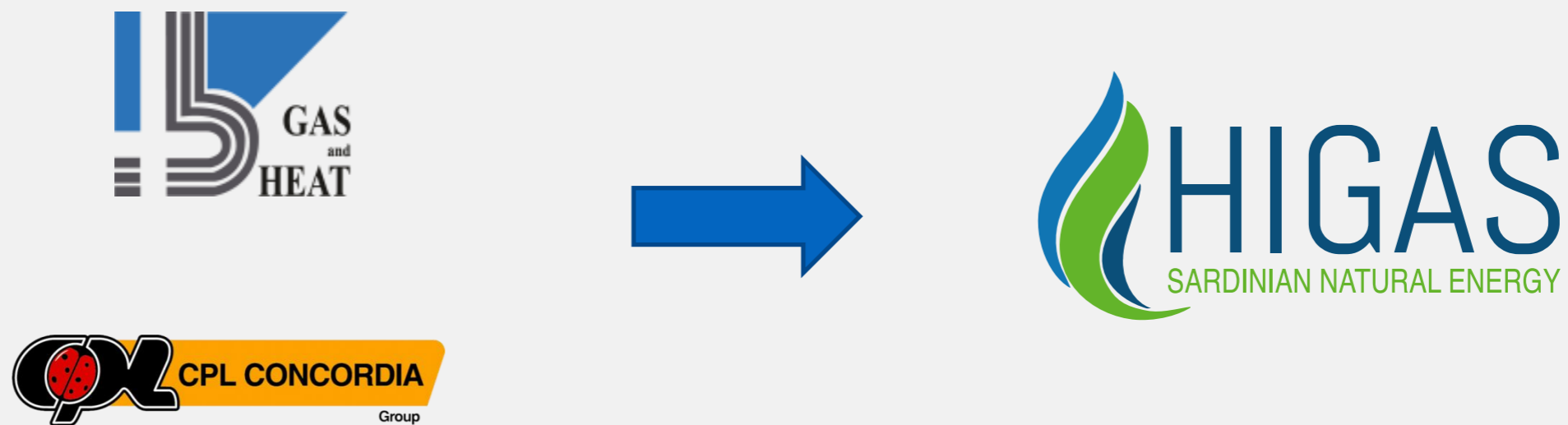






The solution:

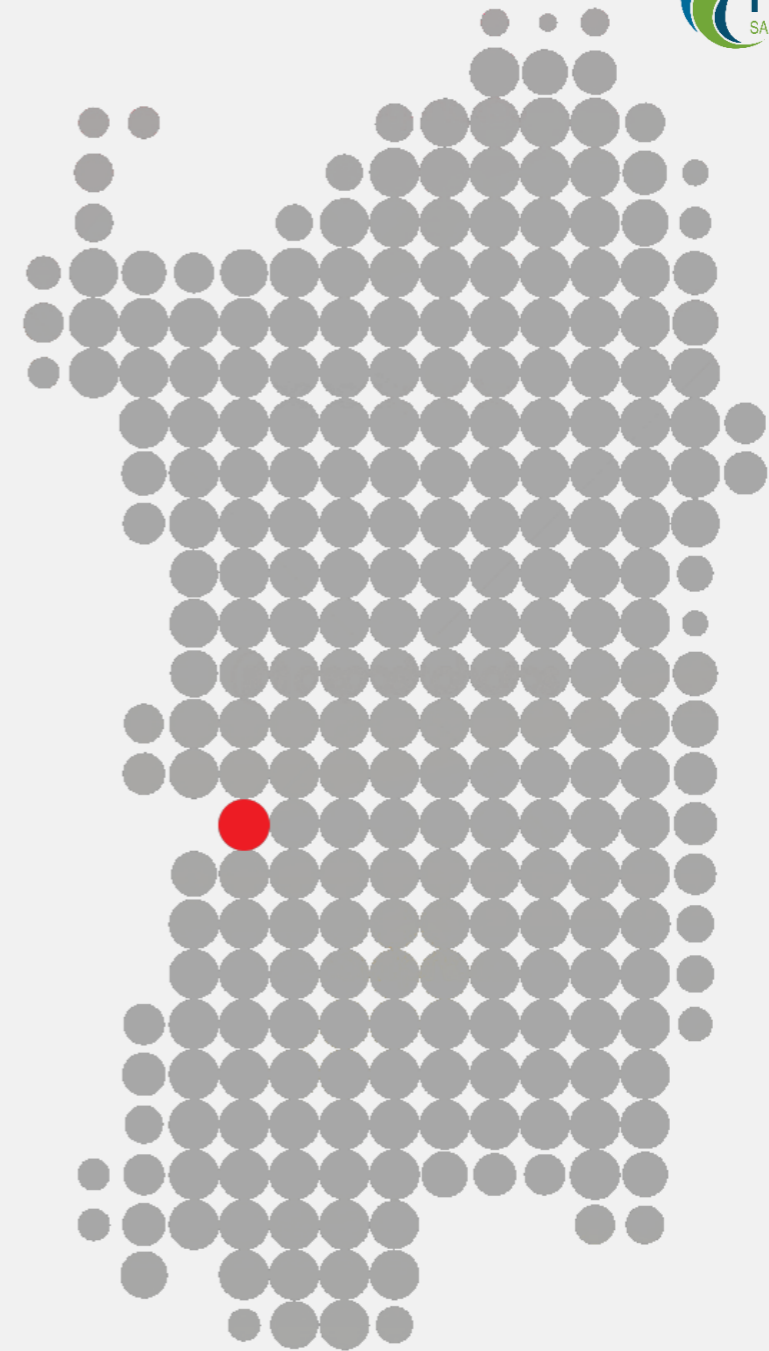
in 2014, Gas and Heat and CPL Concordia established Higas, a Joint S.V.P. aiming to the construction of a Small Scale Storage Terminal in Sardinia, suitable to receive, store and supply LNG/NG to the inland users.



In July 2015, Stolt-Nielsen LNG Holdings Ltd. acquired a 10% stake in HIGAS with the option to increase this percentage. Moreover Stolt would procure a ship/ships to supply LNG transportation to the Sardinia terminal.

Sardinia is the only area in Italy not reached by the Natural Gas National Distribution Grid. The generation of energy is mainly produced from traditional fossil fuels such as coal and oil and from LPG

The HIGAS Terminal is located in the Santa Giusta port, near Oristano, and able to receive 9.000 cbm of LNG. The storage will be fed by a 7500 cbm LNG Carriers, built on purpose by Stolt Nielsen. Once built, it aims to be the first link of Natural Gas distribution chain in Sardinia

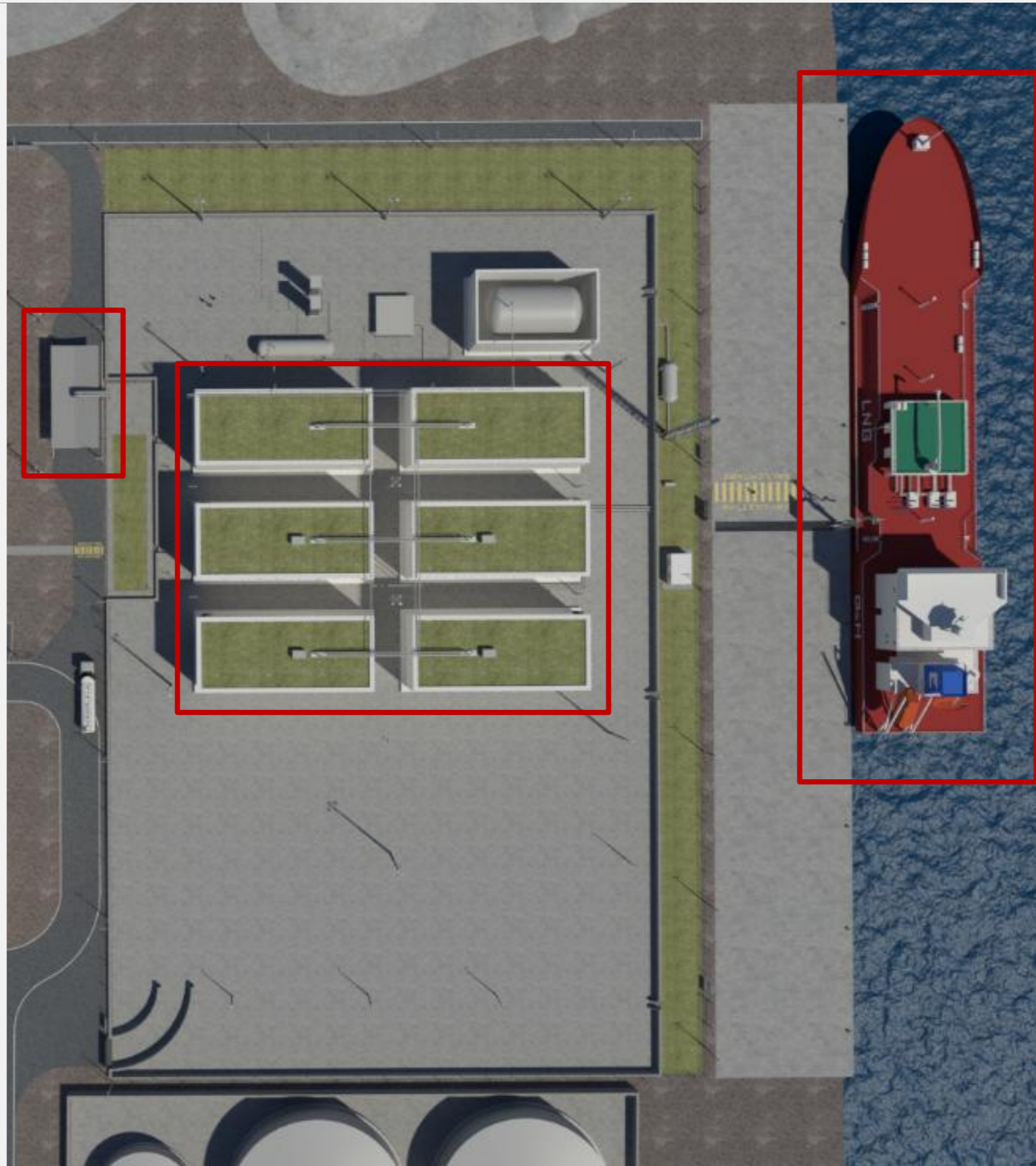


The LNG will be stored in six cryogenic tanks aiming to create a modular containment system which can easily subdivided, when the users initial demand might be lower than total capacity in use, or expanded, when bunkering might become a solid opportunity

The storage plant will also have the capacity of reloading the LNG to a transport vessel, for bunkering LNG fueled ships as well as loading satellite tanks located elsewhere

According to the envisaged consumption of the potential users, the carrier vessel will discharge the cargo to the Terminal twice a month, for annual total of 100.000.000 SCM

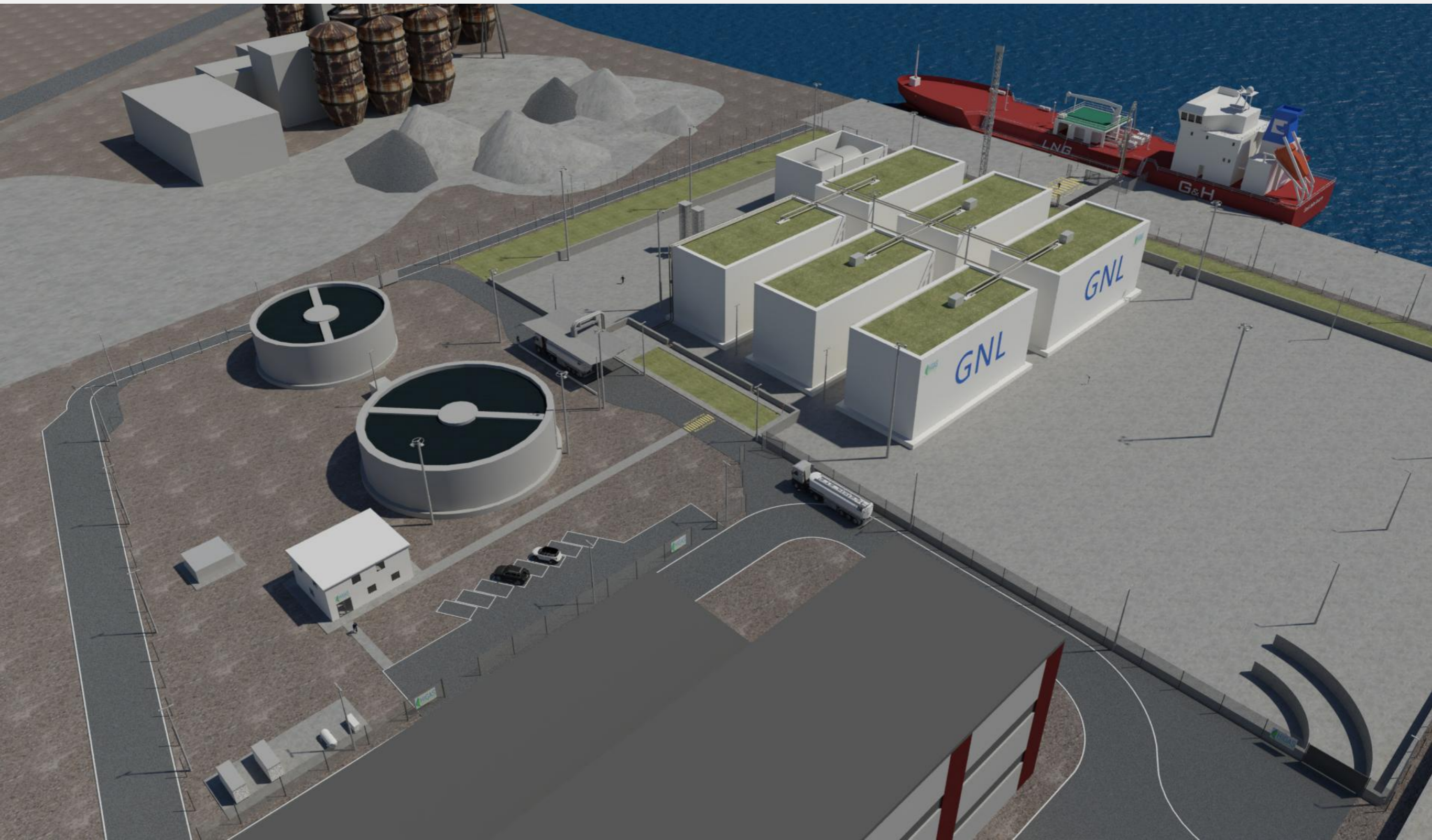
The LNG will be loaded on tank trucks for inward distribution to civil and industrial users as well as to micro gas network with Medium Pressure users in the nearby area



Once built, this storage will be the first in the Mediterranean in terms of innovative solutions, capacity and peculiarities of end users.



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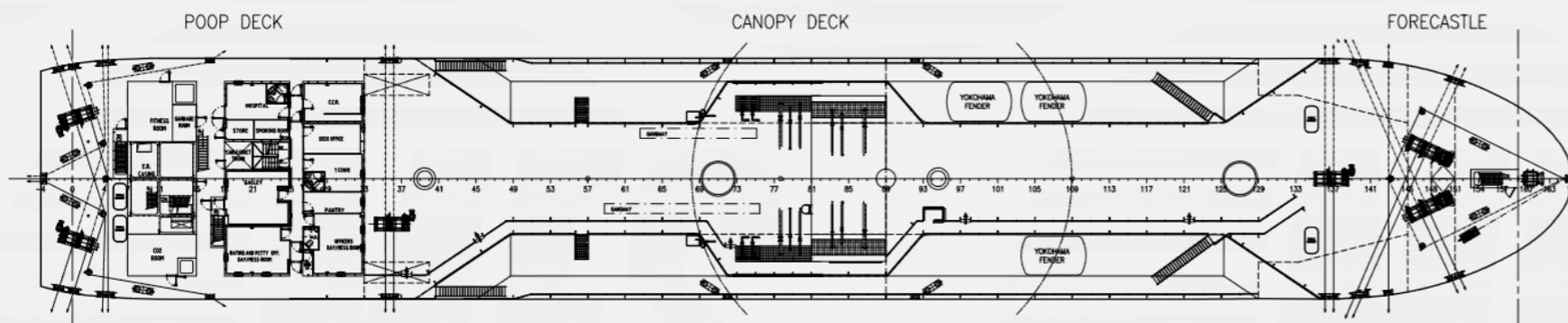
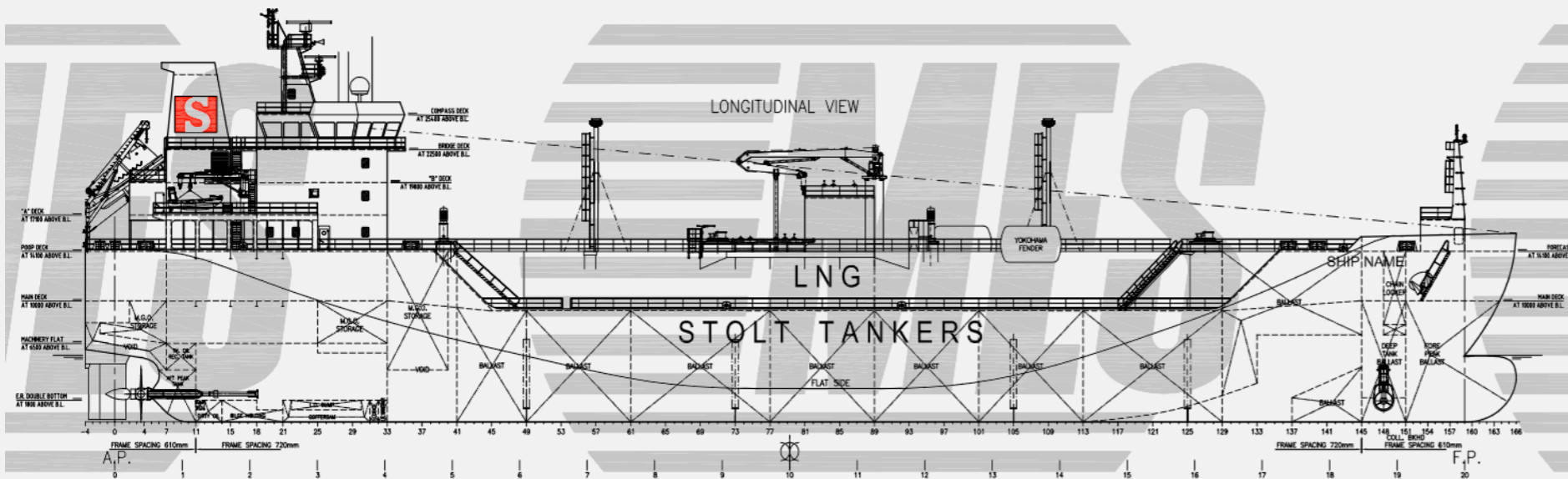


7500 m³ LNG carrier/bunkering vessel



MAIN CHARACTERISTICS

LENGTH O.A. :	118.40 m	abt.
LENGTH B.P. :	111.70 m	abt.
MOULDED BREADTH :	18.60 m	abt.
DEPTH TO MAIN DECK :	9.20 m	abt.
DEPTH TO CANOPY DECK :	14.10 m	abt.
DESIGN DRAFT :	5.50 m	abt.
CORRESPONDING D.W.T. :	3800 Tonn.	abt.
CARGO NET VOLUME (100%) :	7500 m ³	abt.
MCR :	3000 Kw	abt.
SERVICE SPEED :	13.5 Kn	abt.
CREW :	18	





Company introduction

VELA academy is a newco established thanks to a recent collaboration agreement signed by Gas and Heat and Bureau Veritas.

The mission of the company is to provide high qualified training for liquefied gas fuel system operators. Services will be specifically designed to Shipping Industry, Shipping Companies, Maritime Associations, Maritime Flag State Administrations and Land Based Industry.

For the first time in the shipping industry the Classification Society competencies come together with the competencies of a Gas Small Scale Designer, Manufacturer and Manager.



Training Course

VELA will provide the first training course at the beginning of November, 2016.

The course will be compliant with the STCW requirements for LNG fuel system operators on board on ships classified under the IGF Code (January 2017).

The course (Basic and Advanced Level) will train around 20 seafarers.

The final client is a Canadian Ship Owner and the crew will operate on a bitumere carrier with LNG propulsion system.

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