

Technical specifications

Preamble

Ship's type	38,000 m ³ LPG/NH ₃ Carrier
Owners	Exmar Shipping BVBA
Flag – Registry	Belgium - Antwerpen
Builder	HMD - Hyundai Mipo Dockyard
Delivery	2014

Hull

	Metres	Feet
LOA	174	570'09"
LBP	165	541'05"
Breadth	30	98'06"
Depth	18,2	59'09"

Max summer draft	10,3 m
Corresponding deadweight	28475 mt
TPC fully loaded	44.29

Loading condition	Even keel draft	Corresponding deadweight (mt)
NH ₃ full Cargo (basis SG: 0,68)	10 m	27502 HMD
PROPANE full Cargo (basis SG: 0,58)	9,2 m	23743 HMD
Ballast condition	TA 7/7.2 m TF 5.2/4.2 m	11768 HMD



GODMOTHER:
Baroness Patricia Vlerick

Programme

- Arrival of guests and V.I.P. naming party
- V.I.P. naming party & guests proceed to the naming platform
- Welcome speech: Mr. Nicolas Saverys
Chief Executive Officer, Exmar N.V.
- Christening of the vessel by Reverend Luc Van Meerssche
- Naming by Godmother Baroness Patricia Vlerick
- Belgian national anthem
- V.I.P. naming party vessel visit on board; guests proceed to main building for reception
- Walking dinner

Key milestones of hull n° 8121:

27 th April, 2012	Shipbuilding contract	
12 th April, 2013	15 th September, 2013	21 st November, 2013
Steel Cutting	Keel Laying	Launching



NAMING CEREMONY



EXMAR Midsize LPG/NH₃ - 38,000 m³
HULL N°: 8121

TUESDAY, 27TH MAY 2014
ZEEBRUGGE ZEESTATION, KAAI 101
WEST FLANDERS, BELGIUM



EXMAR Midsize LPG/NH₃ - cap. 38,000 m³

1 Efficient shipmanagement

The ship is designed aimed at reducing downtime and maintenance activity onboard.

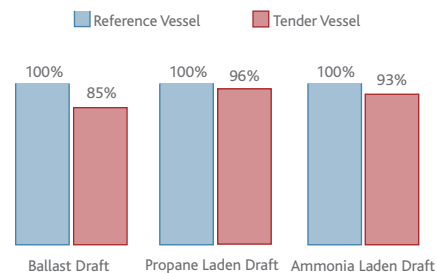
- The vessels are constructed in close cooperation with ship Captains, Chief Engineers and Superintendents, selecting **reputable equipment suppliers** to facilitate after-sales support and services.
- The continuity in design and equipment selection onboard the 12 new builds is inspired by other EXMAR vessels, and will yield **safety, reliability and shipmanagement benefits**, such as training cost and spare part savings.

2

Fuel savings

The ship is constructed to provide significant fuel savings.

- The result of **hull lines optimization and propeller design** of the new builds has been compared with a Reference Ship, built in 2006.
- Assuming a 50% ballast/25% propane laden/25% ammonia laden operational profile over the ship's lifetime, the new builds require **10% less power** at the propeller in comparison with the abovementioned Reference Ship.
- The new vessels (both HMD and HHIC) and the Reference Ship were all **tested in the same towing tank laboratory** SSPA in Göteborg, Sweden. The indicated figures represent thus a fair comparison under identical laboratory conditions.



3 Fuel flexibility

The ship can run on different combustibles, in the most sustainable way.

HEAVY FUEL OIL (HFO)

The vessels can be prepared for retrofit of

Exhaust Gas Scrubber (EGS).

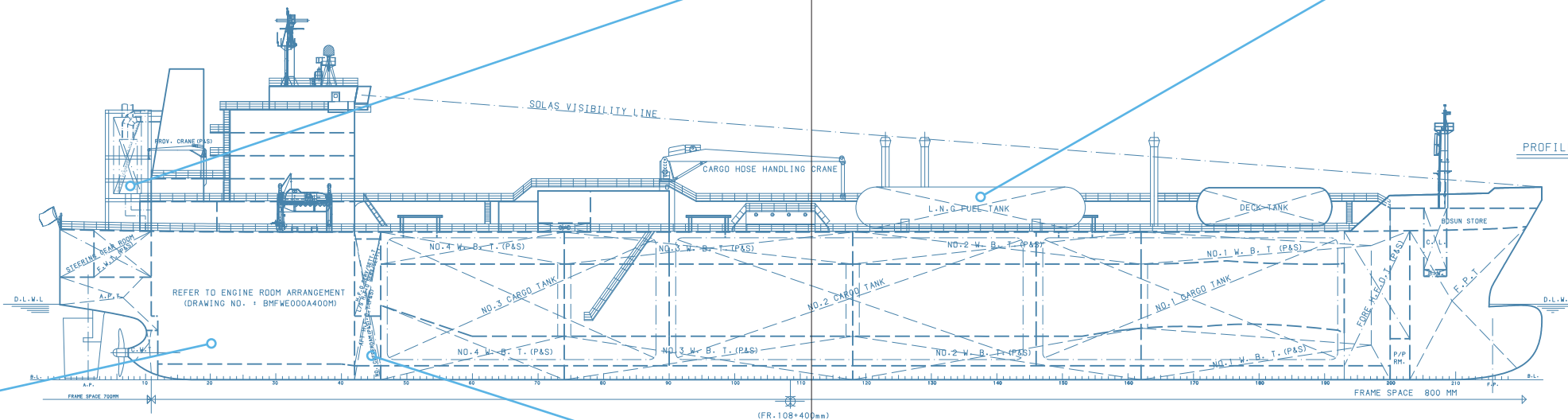
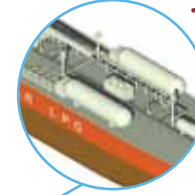
- HFO at the market price
- The EGS reduces more than **95% of SO_x** emission in air.
- The EGS reduces more than **60% of particulates** emission in air.



GAS (LNG/LPG)

The vessels can be prepared for retrofit of 'GAS as fuel'.

- **GAS fuel** reduces more than **99% of SO_x** emission in air.
- **LNG as fuel** reduces more than **20% of CO₂** compared to HFO; for **LPG as fuel: 17%**.
- **GAS fuel** reduces more than **80% of particulates** emission in air.



4 Green shipping

The ship is equipped with extra sustainable features.



- An innovative **ballast water treatment** is installed onboard. The system is of the direct electrolysis type. The equipment technology has been selected after a thorough, in-house, comparison of all systems available on the market today.

Next to the mandatory IMO certificates, the selected equipment has also passed US Coast Guard approval.

- An integrated **Vessel Performance Monitoring (VPM)** system in the centralized AMS system reports automatically to shore.
- The measured **fuel consumption and torque/RPM measurements** on the main engine/shafting give a clear view on the main engine performance. The fuel consumption and performance of the auxiliary engines is, next to other parameters included in the VPM as well.

Technical specifications

Machinery	
Main Engine	B&W 6S50 ME-B9.3
Grade fuel used	HFO 380CST – RMG35

Auxiliaries	
Number	3
Maker	HHI HIMSEN Engine
Grade fuel used	HFO 380CST – RMG35

NOTES:

- 1) Provision for an easy retrofit of exhaust gas scrubber for main and auxiliary engines.
- 2) Provision for an easy retrofit of gas fuel handling system (LNG) including deck service tank(s) for the main engine.
- 3) Provision for an easy retrofit of gas fuel handling system (LPG) for the main engine.

Bunker capacity	
HFO	2070 m ³
MGO	150 m ³
MDO	150 m ³

Other Capacities	
Water Ballast	12100 m ³
Fresh Water	500 m ³

Water ballast treatment compliant to: IMO D2/USCG AMS

