

NOVEL SOLUTIONS FOR THE TRANSPORT OF COMPRESSED NATURAL GAS



GASVESSEL project provides a novel system for compressed natural gas (CNG) transportation for multiple routes scenarios. CNG ships are the optimal solution for gas delivery on medium-short leg routes where offshore pipelines or LNG carriers are un-economic or impracticable. CNG Ships need not expensive liquefaction and re-gasification plants. The GASVESSEL ship is a risk based designed to carry natural gas (min. methane number 70) in the compressed gaseous form inside composite material high-capacity cylinders up to 335 bar installed inside inert holds. Transported cargo can be directly delivered to shore gas distribution net or gas storage. The GASVESSEL A-Ship shall be a CNG Ship suitable for year-round world-wide operativity (no ice).

SHIP MAIN CHARACTERISTICS

Ship Type	CNG carrier
Class and Class Notation	A1 Compressed Natural Gas Carrier
Length Over All	205.0 m
Length B.P.	190.9 m
Breadth (mld)	36.0 m
Depth (mld)	22.0 m
Freeboard deck height	15.5 m
Design Draught / Summer Freeboard	7.5 m
Speed	16.5 knots

CAPACITIES

CNG cargo	abt. 15 million Nm ³ at 20°C
Crew	22
Fuel (MDO)	300 m ³
Fresh water	150 m ³
Technical fresh water	1250 m ³
Sewage	3 m ³
Endurance	abt. 1 month

POWER GENERATION

Generator set	4x Wartsila 8V31DF
Power	4070 kW, each
Fuel	Dual fuelled: Gas/MDO
Gas consumption at 85% MCR (1 month)	abt. 1.6 million Nm ³

COMPRESSION STATION

Generator set	4x Wartsila 8V31DF
Power	4070 kW, each

LOADING AND UNLOADING FACILITIES – CARGO SAFETY

Loading/unloading area	Midship, both sides
Emergency release system	MIB quick connect / disconnect coupler
Gas metering unit	2
Gas quality control unit	2
Gas cooling system	4x chillers, abt. 2.2 MW each
Gas heating system	2x boiler, abt. 3 MW each
Dome deluge cooling system	Sea / fresh water, 3500 m ³ /h