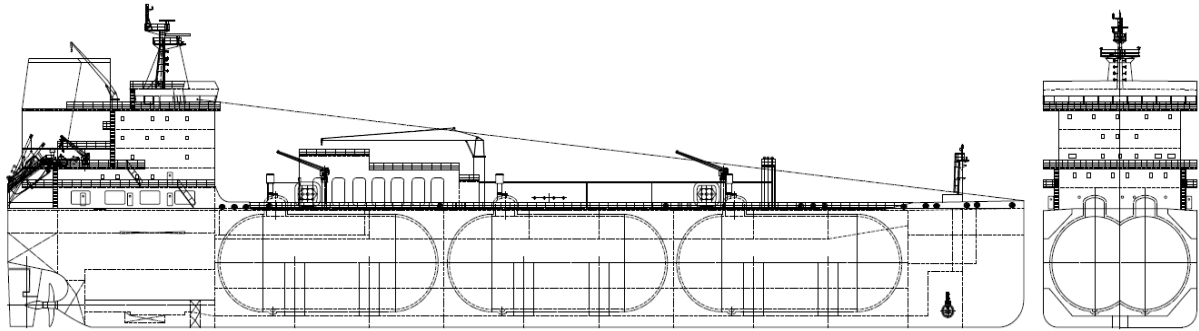




20,000CBM LNG CARRIER (SC2019, Ver.A, Jan. 2019)



GENERAL DESCRIPTION

The Vessel shall be designed for the handling and transportation operation of Liquefied Natural Gas (LNG). The cargo will be carried in three (3) independent IMO type C tanks (bi-lobe cylindrical type with spherical heads), with maximum cargo design of 0.50t/m³ for a minimum design temperature of -163°C and a maximum IMO/USCG design pressure of approx. 4.5 bar g. The Vessel should be driven by low speed, two-stroke, dual fuel (DF) engine (Oil and Methane fuel) with one (1) set FPP propeller for worldwide service. The Vessel shall be designed with efficient hull line for an excellent speed/power ratio, good EEDI, low fuel consumption and environmental excellence. One bow tunnel thruster shall be arranged.

Principal Particulars

Length overall	abt. 159.90 m
Length between perp.	157.00 m
Breadth MLD	24.00 m
Depth MLD of Main Dk	16.75 m
Design Draft (T _d)	8.00 m
Scantling Draft (T _s)	8.20 m
Deadweight at T _s	abt. 12,700 t

Tank Capacities (Approx., 100%)

Cargo Tank	20,000 m ³
Fuel Gas Deck Tk. (Option)	200 m ³
Liquid N ₂ Deck Tk. (Option)	150 m ³
MGO Tank	800 m ³
Fresh Water Tank	280 m ³
Ballast Water Tank	abt. 7,000 m ³

Service Speed (Vs)

abt. 15.5 kn at T_d, CSR, 15% sea margin

Cruising Range

> 10,000 n.m	
At fuel oil mode (MGO)	abt. 10,000 n.m
At fuel gas mode, subject to LNG loaded in cargo tanks	No restriction

Complement

24 P

EEDI Performance

Compliance with Phase 2 (at least).

Tonnage

Gross Tonnage abt. 16,000

Flag

Convenient

Propeller

One (1) set, FPP

Class Notation

DNVGL *1A, Tanker for Liquefied Gas, E0, BIS, CLEAN(Tier III), INERT, TMON, BWM (T), RECYCLEABLE
ship register information:
Ship type 2G (-163°C, 500kg/m³, 4.5 bar g), GF
Or equivalent

Cargo Tanks

Three (3) independent IMO type C tanks (bi-lobe cylindrical type with spherical heads), Low alloy 9%Ni steel.

BOG Handling System

One (1) GCU and / or one (1) sub-cooler (option) to be installed for LNG gas.

Cargo Pumps and Booster Pumps

Type Deepwell, Electrical motor driven
Capacity 300m³/h each @ 120mLC, six (6) sets

Max. Loading Rate

Max. 1,800m³/h with vapour return

Max. Discharging Rate

Max. 1,800m³/h

Bunkering Rate

180m³/h to 1,000m³/h

Main Engine

Type WinGD 5RT-flex50DF, Tier III (Tier III only at gas mode)
CMCR 5,800kW x 100rpm

Main Engine Fuel Consump.

Fuel Gas Mode: abt. 16.98mt/day + 5% tolerance
Fuel Oil Mode: abt. 20.92mt/day + 5% tolerance

Energy Saving Device

Rudder bulb and / or others

Bow Thruster

750kWe (each), CPP blade

Steam Gen. Plant

One (1) set, composite boiler
Oil fired section abt. 2,000kg/h
Exhaust gas section abt. 1,000kg/h

Ballast Pumps

Type Elec. motor driven centrifugal
Capacity Two (2) x 300m³/h

Water Ballast Treatment System

Type UV treatment and filtering
Capacity 600m³/h

N₂ Generator

Type PSA

Electric Power Supply

Main diesel generators Three (3) sets, abt. 950kWe each (dual fuel, Tier III at gas model)
Emerg diesel generator One (1) set, abt. 200kWe

Deck Machinery

Windlass elec.-hydr. driven, 2 sets
Mooring winch elec.-hydr. driven, 2 sets
Steering gear 2 x el-hyd. pump units, 4-ram type
Cargo hose crane elec.-hydr. , 1 set, 5.0t x 20.0m

Features of the Vessel

- ◆ LNG gas carrier with bunkering operation
- ◆ Efficient hull shape and propulsion plant
- ◆ Fuel economy at voyage and port operation
- ◆ Environmental excellence
- ◆ Can be fully customized to Owner's requirements