



EAGLE BARENTS: DP2 shuttle tanker

Shipbuilder: **Samsung Heavy Industries Co., Ltd.**
Vessel's name: **Eagle Barents**
Hull No: **SN2065**
Owner/Operator: **AET Sea Shuttle**
Country: **Singapore**
Designer: **Samsung Heavy Industries Co., Ltd.**
Country: **Republic of Korea**
Model test establishment used: **SSMB (Samsung Ship Model Basin)**
Flag: **Bahamas**
IMO number: **9676125**
Total number of sister ships already completed (excluding ship presented): **1**
Total number of sister ships still on order: ... **NIL**

This vessel is to operate on a long-term contract with energy company Statoil, in the harsh conditions of Barents and North Sea oil fields, including the Goliat field 85km (53 miles) off the coast of Finnmark. This is the first oilfield to be developed off northern Norway and that meant the vessel has particular design and operational requirements that include NORSOK requirements for outside work environments, a weather-tight bow loading area, and trunk access to a free-fall lifeboat.

The EAGLE BARENTS is twin skeg, twin engine, fitted with a new generation bow-loading system for cold climate operations, and fully winterised in accordance with DNV's winterisation cold notation. In addition, it is fitted with a range of eco-innovations, including a fully fitted ballast water treatment system, VOC emission reduction system, and a hybrid-type SOx scrubber that can operate in both open and closed loops.

The hull has a wave optimised bow and aerodynamic deckhouse design to enhance efficiency. Among the environmental features added to the main machinery to reduce emissions are the G-type electronically controlled engines with controllable pitch propeller, and variable frequency drive for all the Azimuth thrusters.

TECHNICAL PARTICULARS

Length oa: Approx. 273m
Length bp: 259m
Breadth moulded: 46.0m
Depth moulded
To main deck: 23.6m
To upper deck: 23.6m
Width of double skin
Side: 3m
Bottom: 3m
Draught
Scantling: 15.1m
Design: 15.1m
Gross: 88,000gt
Deadweight
Design: Approx. 120,000dwt
Scantling: Approx. 120,000dwt
Speed, service (90 %MCR output): ... 14.5 knots

Cargo capacity (m³)
Liquid volume: 142,500m³
Bunkers (m³)
Heavy oil: 2,700m³
Diesel oil: 600m³
Water ballast (m³): 57,000m³
Tankers - percentage segregated ballast: 40%
Daily fuel consumption
Main engine only: 50.3tonnes/day
Classification society and notations: Det Norske Veritas, ✱1A1, "Tanker for Oil ESP", E0, DYNPOS-AUTR, ESV-DP(HIL), F-AMC, OPP-F, BOW LOADING, HELDK-SH, NAUT-AW, TMON, CLEAN DESIGN, RECYCLABLE, COMF-V(3)C(3), CSR, PLUS, CSA-FLS2, COAT-PSPC(B), CCO, VCS-2, BWM-T, WINTERIZED COLD(-15 , -35)

% high-tensile steel used in construction: Apprx. 70%
Main engine(s) x 2
Design: 2 stroke, diesel engine
Model: 6G50ME-B9.3
Manufacturer: MDT Licensee
Number: 2
Type of fuel: HFO/MDO
Output of each engine: 7,250kW
Propeller(s) x 2
Material: Ni-Al Bronze
Designer/Manufacturer: Rolls-Royce
Fixed/Controllable pitch: Controllable pitch
Diameter: 6,900mm
Diesel-driven alternators x 5
Engine make/type: HHI / 8H32/40 x 3sets & 6H32/40 x 2sets
Type of fuel : HFO/MDO
Output/speed of each set: 4000kW, 3000kW / 720rpm
Alternator make/type: Hyundai/ HSJ7 809-10P & HSJ7 805-10P
Output/speed of each set: 4,625 KVA (3,700 kW) / 720rpm x 2sets 3,500KVA (2,800kW) / 720rpm x 3sets
Exhaust-gas scrubbing equipment
Manufacturer: Clean Marine
Type: Open and closed loop (multi stream connected to ME, AE and Boiler)
Boilers x 2
Type: OL 25,000kg
Make: Alfa Laval
Output, each boiler: 25,000kg/h
Cargo cranes/cargo gear
Number: Cargo Hose Handling Crane, 2
Make: TTS Marine
Type: Electro-hydraulic cylinder luffing, single jib

Performance: 15 @ 18m, 10/12M/min
Other cranes
Number: Provision crane (2), BLS Crane (1)
Make: TTS Marine (for provision and BLS crane)
Type: Electro-hydraulic cylinder luffing(for provision and BLS crane)
Tasks: Provision crane
Performance: ..Provision crane - 5@15m, 7M/min, 5@13m, 7M/min , BLS Crane - 5@10m 10M/min
Mooring equipment
Number: Hydraulic Deck Machinery, (6) drums(except combined windlasses)
Make: PUSNES
Type (electric/hydraulic/steam): Electric -driven type, 20 tonnes, 12M/min
Special lifesaving equipment x 2
Make: Norsafe
Type: Free-fall lifeboat, 1, 40, Included Heating device
Cargo tanks x 12 + 2 slop tanks
Product range: Crude oil
Coated tanks – make and type of coating: Chugoku, Epoxy A/C
Cargo pumps x 4
Type: Vertical, Single stage, Centrifugal, electric motor driven
Make: Hyundai
Stainless steel: Impeller shaft, etc.
Capacity (each): 3,000m³/h x 135m
Cargo control system
Make: Kongsberg
Type: K-CHIEF 600
Ballast control system
Make: Kongsberg
Type: K-CHIEF 600
Water ballast Treatment System
Make: Samsung
Capacity: 4,000m³/h
Complement
Officers: 19
Crew: 16
Suez/Repair Crew: 6
Single/double/other rooms: 31/4/1
Stern appendages/special rudders: Fish tail type rudder
Bow thruster(s)
Make: Kawasaki Heavy Industry
Number: 2, FPP type
Output (each): 2,500kW, Vertical retractable azimuth type
Stern thruster(s) x 2 FPP Type
Make: Kawasaki Heavy Industry
Output (each): 2,200kW, Vertical retractable azimuth type
Bridge control system
Make: Rolls-Royce
Is bridge fitted for one-man operation? ..Yes
Fire detection system
Make: Consilium
Type: SALWICO Cargo
Fire extinguishing systems
Engine room: Make/Type: High pressure CO₂ system / NK , Water mist system / NK
Cabin: Make/Type: Sea water fire fighting system
Public spaces: Make/Type: Sea water fire fighting system
Radars x 3
Make: Furuno
Model(s): FCR-2839S & FCR-2829
Integrated bridge system: Yes (ECDIS/Conning Display /Route Planning)
Make: Furuno
Model: FMD-3300 and etc.
Waste disposal plant
Incinerator
Make: Teamtec
Model: GS500C
Sewage plant
Make: Ilseung
Model: ISS-85N
Contract date: 8 October 2012
Launch/float-out date: 19 July 2014
Delivery date: 9 March 2015

