



NORSE

Viking Merlin - Timecharter Description

Ship Name : Viking Merlin
Built : April 2014 Guangzhou Wenchong Shipyard Co. Ltd., China
Type : Self-sustained Cellular Container Vessel, 1700TEU-B.N-01
Class : GL class No 116469
IMO No. : 9596313
Owners : Tiree Shipping Pte. Ltd.
Comm Mgr : Norse
Tech Mgr : Goodwood Ship Management Pte. Ltd.
Flag : Singapore

Classification Society and Notation:

GERMANISCHER LLOYD +100 A5 E; IW NAV-O BWM (D2) DG Container Ship, +MC E AUT EP-D

Dimensions and Tonnage:

LOA 176.88 M
LBP 167.45 M
Breadth 27.40 M
Deadweight 23,559.82 MT (scantling)
Design Draft 9.50 M
Summer Draft 10.90 M (scantling)
Displacement 32,589.4 MT
Gross Tonnage 18,485 MT
Net Tonnage 10,282 MT
Light Ship 9,029.565 MT
Free Board 3.434 M
Height Max 51.78 M , After folding radar mast 48.7 M
Distance Bow-Bridge 157.42 M
Distance Bridge-Aft 19.46 M

Endurance : About 13,400 nm (at design draft without reefers)
Main Engine : MAN/B&W 7S60MC-C of 16,660 kW at 105 rpm
Auxiliaries : 3 x 1520 KW auxiliary engines 6DK-26e 720 RPM
Fittings : Suez, Panama, Bow-thruster 900kW, Satellite communication (phone/telex/fax)

Speed/Consumption:

About 20.6 knots on about 61 MT IFO for Main Engine, without reefers at design draft of 9.50m basis clean/smooth bottom, even keel, deep water/sea with a temperature of Max 28 Degrees Celsius, Wind max BF scale 2, sea not exceeding 1M significant wave height. Normal consumption for auxiliary engines is about 3.5 MT IFO; Charterers to provide sufficient quantity of MDO during sea passages for operating the auxiliary engines under emergency situation.

Following ship speed and main engine HFO fuel consumption for reference (all about):

Design draft 9.5 m

20.6 KN / 61.0 MT per day
19.0 KN / 45.0 MT per day
18.0 KN / 37.0 MT per day
17.0 KN / 29.0 MT per day
16.0 KN / 25.0 MT per day
15.0 KN / 21.0 MT per day

Scantling draft 10.5 m

19.0 KN / 55.0 MT per day
18.0 KN / 45.0 MT per day
17.0 KN / 35.0 MT per day
16.0 KN / 30.0 MT per day
15.0 KN / 24.0 MT per day

For speed below 40% MCR of main engine, the low load operation shall be carried out in accordance with engine maker's guidelines including bringing up the speed up above 75% MCR periodically, to carry out soot blowing and turbine washing operations.

Lowest low load operation can be carried out at about 10 % MCR with M.E. minimum speed of 48 RPM and exhaust gas economizer outlet temperatures of above 180 degrees Celsius.

Estimated low load operation fuel consumption of about 11.0 MT at about 9.5 knot speed with sea conditions below Beaufort scale 4.

In Port consumption:

Consumption is about 3.5 MT daily when idle, about 5.5 MT daily when working cranes, always excluding reefers and ventilation, plus some IFO for heating fuel oil tanks.

Fuel specification:

Fuel consumption figures are based on ISO reference conditions and fuel oil with lower calorific value of 42700 kJ/kg. Vessel can operate on single fuel system using marine fuel oil; sufficient quantity of marine diesel shall be provided for emergency operation. Fuel oil specification shall comply with ISO 8217:2010 or any subsequent amendment, the marine fuel oil shall equal to RMG or better, and the marine diesel oil shall equal to DMB or better. Charterers shall only supply suitable fuels to enable main propulsion and auxiliary machinery to operate efficiently and without harmful effects. Fuels to be mineral based products, stable and homogeneous and shall not contain waste lubricants, chemicals or any other harmful substances; sludge removal, if any, to be always for Charterers' account and time. Supplied fuels shall comply with the requirement imposed by IMO and respective region/country.

Fuel Tank Capacities

All above HFO consumptions are based on 380cst

IFO : 1,829.8 CBM
MDO : 194.17 CBM
Ballast : 8,247.51 CBM

Containers stowage:

All container intakes are always subject to vessel's stability, trim, deadweight, permissible weights, permissible lashing gear break loads, container lashing plan, ranges of visibility, Panama Canal regulations and OSHA rules, in which case intakes and stack weights can be considerably reduced.

	Tier	Max. 20'	Alternative 40'	Alternative 45'	Reefer Plugs
OnDeck	94	11FEU	11		
	92	110 + 11 FEU	66	38	-
	90	132	66	46	-
	88	176	88	57	-
	86	194	97	73	-
	84	194	97	55	-
	82	190	95	0	-
Sum		996+22 FEU	520^^^	269	225

InHold	12	56	28	-	-
	10	152	74	-	-
	08	146	72	-	-
	06	132	62	-	-
	04	114	52	-	-
	02	88	40	-	-
	Sum		688	328***	0

Total	1684+22 FEU	848	269	345
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^^^:When loading maximum 40 foot containers allowance is to be made for stowage of 2x20 foot ,“lashing bins” that will have to be stowed on deck thus using one FEU space, thus effective loadable FEU will be 519 units. Total FEU loadable in Hold & on Deck in such case will be 847 FEU

***: In order to load 328 FEU in holds, vessel must also load 32 TEU to provide requisite UNDERSTOW support for the FEU to be loaded above.

Homogeneous intake basis 14mt is about 1,270 TEU at scantling draft and about 1058 TEU at design draft,

Up to 269 units of 45' containers may be stowed on deck. (subject to following condition that for Bays 14/26/30, when tier 84 is planned for loading 45' container, then tier 82 must be loaded with 40' container of height 9'6”).

Up to 304 TEU high cubes can be stowed in holds (top two tiers allowed for 9'6”), high cubes stowage on deck available subject to visibility requirement.

Cell guides in holds for 20'/40' containers; lashing fittings on deck for 20'/40'/45' containers.

Reefer sockets: 3 phase/440V/60Hz, 3P+E, ISO1496/2, CEE 17, 32Ax3h. Maximum 225 FEU reefers based 70/30 (frozen/chilled).

Stack loads:	20'units	40'units	45'units	48'units
In Holds:	125t	150t	---	---
Main Deck:	65t	95t	---	---
Hatches 8-3:	65t	95t	---	---
Hatches 2-1:	54t	90t	---	---

Distribution of container weights within a single 20'/40' stack on deck to comply with the on board manual for stowage and lashing of containers approved by class.

Hatch covers: 5 Holds/8 Hatches, pontoon open type hatch covers each divided into two panels with split at longitudinal centreline, which can be opened in unconstrained sequence.

Hold 1:	No.1 hatch about 12680x10152mm (p/s), 28 mt/piece
	No.2 hatch about 12840x12610mm (p/s), 37 mt/piece
Hold 2:	No.3 hatch about 12840x12610mm (p/s), 37 mt/piece
Hold 3:	No.4 hatch about 12930x12610mm (p/s), 36 mt/piece
	No.5 hatch about 12930x12610mm (p/s), 36 mt/piece
Hold 4:	No.6 hatch about 12930x12610mm (p/s), 36 mt/piece
	No.7 hatch about 13090x12610mm (p/s), 36 mt/piece
Hold 5:	No.8 hatch about 12930x12610mm (p/s), 36 mt/piece

Capable of carrying IMDG cargo under deck:

Cargo hold 1: IMDG code 1.1., 1.2., 2.1., 2.2., 2.3., 3, 4.1., 4.2., 5.1, 6.1. & 8.

Carho holds 2 &3: IMDG code 2.1., 2.2., 2.3., 3, 4.1., 4.2., 5.1, 6.1. & 8.

Cargo holds are fitted with CO2 fire extinguishing system.

Cargo holds ventilation:

- Cargo holds No.1, 2 & 3: electrical driven explosion-proof exhaust & supply ventilation.
- Cargo hold No.4: electrical driven exhaust & supply ventilation.
- Cargo hold No.5: natural ventilation.
- The electrical driven exhaust & supply fans for cargo holds No.3 & No.4 are also to be operated as the reefer containers ventilation fans.

Cargo Gear

2 x 45 tons single cranes, between holds 2 & 3 and holds 4 & 5, electro-hydraulic driven, outreach 28m.

All details about and without guarantee