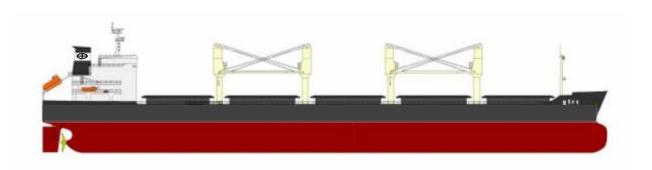
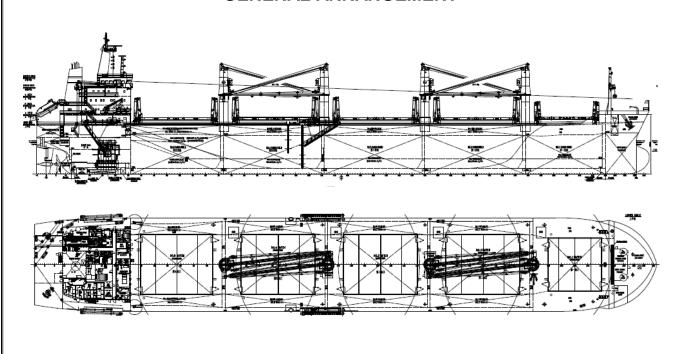
## 37300 DWT BULK CARRIER - POCKET PLAN

37,300 DWT international deep sea, 5 holds, wide hatch type multipurpose dry cargo and self trimming type, ice class 1C, double skin bulk carrier, with a service speed of 14.0 knots, equipped with environmentally friendly Tier II WARTSILA 6RTA 48 TD two stroke diesel engine, 4 sets hydraulic level luffing cranes and hydraulically operated folding type hatch covers.



OWNER: INTERLINK MARITIME CORP., BERMUDA BUILDER: HUATAI HEAVY IND. (NANTONG) CO., CHINA SUPERVISION: SCHULTE MARINE CONCEPT LTD, HONG KONG

## **GENERAL ARRANGEMENT**



# OUTLINE PARTICULARS

#### TYPE OF VESSEL

Single screw motor driven double skin bulk carrier, capable of carrying dry bulk and break bulk cargo, such as coal, bauxite, phosphates, iron ore, coke, grain including soya, soya bean meals, salt, sugar, fertilizers, steel products (sheet, rolls, coils, pipe), forest products in holds, bagged cargoes like cement and cargoes of BC code and dangerous class. [Dangerous goods class:1.4S, 2.2, 2.3, 3.3, 4.1, 5.1, 6.1 (solids), 8 (solids), 9]

#### FLAG AND HOME PORT OF VESSEL

Flag: Marshall Islands, Home Port: Majuro

#### CLASSIFICATION

Lloyds Register of Shipping LR + 100A1 Bulk Carrier, BC-A, CSR, GRAB[20], Hold Nos. 2 & 4 may be empty, ESP, LI, Ship Right (CM), Ice Class 1C FS, IWS, BWMP (S+F), ACS (B) , PSPC +LMC, UMS, SCM

#### LOADING DIMENSIONS

#### Deadweight:

At designed draft abt. 35,300 metric tons
At the scantling draft abt. 37,300 metric tons

Gross Tonnage abt. 24,125 Net Tonnage abt. 12,130

Alternate hold loading

#### Capacity:

Cargo hold (grain)	48,960 m³
Cargo hold (bale)	47,870 m <sup>3</sup>
Ballast water (w/No 3 Hold)	23,500 m³
Ballast water tanks	12,730 m³
Heavy fuel oil	1,975 m³
Diesel oil	110 m³
LSMDO/MGO	75 m³
Fresh water	310 m³
Drinking water	60 m³

### PRINCIPAL DIMENSIONS

Length O.A.	189.99 m
Length B.P.	183.00 m
Breadth Mld.	28.50 m
Depth Mld.	15.10 m
Designed Draft Mld.	10.00 m
Scantling Draft Mld.	10.40m
Air draft in full load cond.	34.20 m
•	

## HOLD DIMENSIONS(Footprint) (LxB)

No.1:  $14.2 \times 10.3 \text{ m}$  Breadth tapered 9.6 x 18.5 m Breadth tapered

No.2: 28.8 x 20.2 m No.3: 28.8 x 20.2 m No.4: 28.8 x 20.2 m

 $\begin{array}{ccc} \text{No.5:} & 9.6 \times 18.9 \text{ m} \\ & 16.8 \times 7.5 \text{ m} \end{array} \qquad \begin{array}{c} \text{Breadth tapered} \\ \text{Breadth tapered} \end{array}$ 

## HATCH SIZES

No.1 Hatch: 16.0 m (I)  $\times$  16.0 m (w) No.2-4 Hatches: 22.4 m (I)  $\times$  18.0 m (w) No.5 Hatch: 21.6 m (I)  $\times$  18.0 m (w) Dist. From WL to top of hatch coaming: 16.8 m

## DESIGN CONDITION

Upper deck hatch cover:
Uniform Load 2.5 t/m²

Upper deck:

Outside line of opening  $2.5 \text{ t/m}^2$ Inside line of opening  $2.5 \text{ t/m}^2$ 

Tank Top:

Uniform Load 25 t/m<sup>2</sup> Hold 1,3,5

22 t/m<sup>2</sup> Hold 2,4

Strengthened for forklift 10 T SWL

Steel Coil Loading:

Load 50 t (two tiers each of 25 t)

Length 1500 mm

Dunnage 6

Grab weight:

Un-laden grab weight 20T

#### SPEED AND ENDURANCE

Service speed at CSR power of M/E (6263 kW, 85% MCR) at scantling draft of 10.40 m, abt. 14.0 knots.

Endurance at scantling draft moulded of 10.40 m, based on fuel (HFO 380 cst) daily consumption of about 25.5 t, fuel tank capacity of 1935 t and sea speed of 14 knots is abt. 20,000 nautical miles.

#### Fuel Consumption (HFO 380 cst grade):

Main Engine: abt. 25.5 t/day @14.0 knots

abt. 22.5 t/day @13.5 knots abt. 20.0 t/day @13.0 knots abt. 17.5 t/day @12.5 knots

1 Elec. Gen: abt. 2.3 t/day @sea load of 460 kW

\*using MDO abt. 4.5 t/day\* @port, cranes working

abt. 2.0 t/day\* @port, w/o cranes

#### PROPULSION & AUX. MACHINERY

#### Main engine:

Make and model Wartsila 6RTA 48 TD - 1 set (IMO NOx Tier II compliant)
MCR 7,368 kW at 118.0 rpm
CSR 6,263 kW at 111.8 rpm

Propeller: Four (4) blades, solid fixed pitch,

aerofoil section keyless, nickel aluminium bronze casting

#### Electric generator:

Main D. Generator (HFO) 3 sets x abt. 600 kW each Emergency DG (MGO) 1 set  $\,$  x abt. 120 kW

## Boiler (Smoke tube type):

Oil fired section 1.8 t/hr EGE 1.0 t/hr

#### CARGO HANDLING

#### Cargo gear:

Four (4) sets single electro-hydraulic wire luffing type jib cranes with provision for grab handling.

Hoisting load 30 t
Hoisting speed 18 m/min

Working radius About 4 m to 28 m

Outreach beyond half 14.75 m

breadth, maximum

Luffing time 60 seconds
Slewing speed 1.2 rpm

#### Cargo hatch cover:

Steel folding type, weather tight double skin construction, hydraulically operated, grain and cement openings.

Pump unit 100% x 2 sets

#### Cargo hold ventilation:

Explosion proof exhaust fans at 6 air changes per hour.

#### Bilge and Ballast system:

Dry duct, ring main with remote hydraulically operated valves & stripping eductor of  $60 \text{ m}^3/\text{ h} \times 0.06 \text{ MPa}$ .

#### Ballast pump:

Electric motor driven centrifugal, bronze casting and phosphor bronze impeller, 750  $m^3/h \times 0.30$  MPa – 2 sets

#### Bilge system:

Dry duct, bilge main with hydraulically operated remote control valves & stripping eductor of capacity abt. 60 m<sup>3</sup>/h.

Centralized control for ballast, bilge and stripping valves in ship office.

#### ACCOMMODATION

European type –	Private shower	lavatory	with
Complement:	Captain class		2
	Senior Of	ficer class	2
	Junior Of	ficer class	5
	Rating cla	ass	12
	Cadets		2
	Spare Cre	ew	2
	Owner, F	Pilot	3
	Total		28
Gymnasium fitted	for 6 Sue	z Crew	
Life saving equipn	nent for pe	rsons	30

#### AIR CONDITIONING SYSTEM

Medium pr., medium velocity, single duct system

Design condition

summer outside 35°C, 70% rel. humidity (RH)

inside 26°C, about 50% RH

winter outside -20°C

inside 22°C, about 50% RH

#### CORROSION PROTECTION

(PSPC COMPLIANCE FOR WBT)

Vertical & flat bottom SPC antifouling paint, Tin Free, 60 month guarantee

Top side Pure Epoxy/Polyurethane
Deck Pure Epoxy/Polyurethane

Cargo holds Pure Epoxy paint

Hatch covers

Pure Epoxy/Polyurethane

Superstructure

Pure Epoxy/Polyurethane

Rollagt water tanks

Medified Epoxy/ point

Ballast water tanks Modified Epoxy paint 36 month quarantee

External hull Impressed current cathodic protection & anodes in stern

## **CHARACTERISTICS**

The following major characteristics shall be applied:

- Worldwide transportation including Panama and Suez Canals
- Ice Class 1C
- Embodies anticipated future legislation requirements
- Five (5) Cargo holds all double skinned and corrugated bulkheads
- Four (4) wide open hatches ( > 60% of beam) for easy spotting of cargoes
- Dangerous cargo carriage facility in holds
- Self trimming grain loading
- Flexibility of carrying various cargoes including:
  - Dry bulk and break bulk such as grain, metal concentrates, coal, iron ore, bauxite, salt, sugar, cement in bags and scrap metal General cargoes such as steel products, forest
  - products, packaged freight and palletized cargo
  - Long cargoes such as pipes, packaged lumber and deck cargoes
- Strengthened for heavy cargoes cargo hold tank top is strengthened for grab handling and fork lift op.
- Strengthened against slamming at light ballast draft which means less frequent use of ballast hold
- "B" type freeboard Drier decks in loaded condition
- Tank top strength 22 to 25 t/m²
- Cargo hatch cover uniform load of 2.5 tons/m<sup>2</sup>
- Alternate loading in holds 1, 3 and 5
- Prov. & engine room parts handling crane 7t SWL (P) and 3t SWL(S)
- Rudder with bulb for improved propulsion efficiency

- Cunifer pipes for E/R sea water systems. Steel Sch. 80 for bilge & ballast systems
- EU & CARB compliance- MGO burning facility for main engine, generators, boiler at Port.
- Adaptability of fuel system on board for main engine & generators to be able to burn HFO grade 700 cst
- Heavy fuel oil generators eliminating diesel oil consumption at sea
- Centralized fresh water cooling system in engine room
- Independent gravity filling and discharge for No.3 hold
- Independent shower and toilet units for officers and semiprivate units for ratings
- Maintenance free refrigeration units for provision cabinets
- CO2 fire extinguishing system for cargo holds
- Cargo temperature measurement facilities
- Topside tanks used to carry HFO (with cofferdam)
- Pipe tunnel extending from engine room to no.1 hold. Deck pipe/cable trunks in top side void tanks
- Corrosion-prevention features: IMO PSPC compliance for water ballast tanks
- User friendly bridge design
- Inmarsat C and F and full GMDSS application
- Fuel efficient hull form
- Designed and constructed for long reliable service and optimum life-cycle cost
- Good level of redundancy of critical equipment