

HORIZON OFFSHORE SERVICES IS PLEASED TO INTRODUCE TWO SISTER
MULTIPURPOSE 9000T LCT TYPE/ TRANSPORT SELF-PROPELLED BARGES BUILT
IN 2022 AVAILABLE FOR PRIVATE SALE



Ship's General Particulars

➤ 2 New-built 9000t LCT Type/ Transport Self Propelled Barges

These typical Vessels are suitable for transportation of heavy cargo equipment including vehicles, with capabilities to carry 276 TEU (containers) or bulk cargoes such as: coal, stone, petcoke, urea and various break-bulk goods.

- Built: 2022
- Gross tonnage: 3960
- Net tonnage: 2217
- LOA: 109.69m
- Beam: 22m
- Depth 6.25m
- Light draft: 3.214m / Loaded draft: 4.5m
- Loaded displacement: 9184.700t / Light displacement: 2266.796t max full load capacity 9000t
- Weather-tight FWD ramp for loading/ unloading vehicles in cargo area below main deck
- Main engine: NINGBO CSI diesel engines two units: 1103+1103kw
- Max. speed/ sea trials: 13kn
- Vessel is certified for manning of 12 crew

REFERENCE LEGEND

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1. Overall

1.1 General description of the ship

1.1.1 Purpose

This ship is a multi-purpose deck transport ship, mainly carrying large machine parts and cargo. It can load coal mines, stones, large industrial/construction vehicles, etc. The design load of the cargo deck is 16t/m².

1.1.2 Ship Type

The ship is made of steel, continuous single deck, double bottom in cargo and engine rooms, bulbous bow, welded steel plate stern post with stern frame bottom frame, port and starboard sides. The bilge part is provided with a bilge keel. Propulsion is through two marine diesel engines driving two fixed-pitch propellers. There are four deckhouses on the upper deck of the bow.

1.2 Classification, Rules and Regulations

The design and construction adhere to rules and regulations including:

- China Classification Society (CCS) "Code for Construction of Sea-going Ships on Domestic Voyages" (2018) and its amendments.
- China Classification Society (CCS) "Code for Materials and Welding" (2018) and its amendments.
- Maritime Safety Administration of the People's Republic of China (CHINA MSA) "Regulations on Statutory Inspection of Ships and Offshore Installations" (Domestic Seagoing Vessels Statutory inspection technical rules) (2020).
- "Guidelines for Plan Approval of Self-propelled Deck Cargo Ships at Sea" by Zhejiang Ship Inspection Bureau (2015).

1.3 Main dimensions

1.3.1 Main dimensions

- Overall length (with attachment) L: 119.80 m
- Total long LOA: 109.69 m
- Design waterline length L WL: 106.51 m
- Length between vertical lines L pp: 104.22 m
- Type width B: 22.00 m
- Type deep D: 6.25 m
- Design draft d: 4.50 m

1.3.2 Center height between decks

- Upper deck edge to the first deck edge: 3.00 m
- First deck to captain's deck: 3.00 m
- Captain's Deck to Driving Deck: 2.40 m

- Flying Deck to Compass Deck: 2.40 m
- Upper deck to canopy deck: 2.90 m

1.3.3 Beam arch

- Main hull and canopy beam arch: 0.00 m
- The rest are built on beam arches: 0.20 m

1.4 Capacity and tonnage

1.4.1 Capacity

Fresh water tank:

- Left (FR144~FR156): 67.64 m³
- Right (FR144~FR156): 67.64 m³
- *Total*: 135.28 m³

Diesel tank:

- Left (FR43~FR52): 34.72 m³
- Right (FR43~FR52): 34.72 m³
- Diesel daily cabin (left) (FR43~FR46): 7.36 m³
- Diesel daily cabin (right) (FR43~FR46): 7.36 m³
- *Total*: 84.15 m³

Ballast water tank:

- Tail ballast tank (left, right) (FR2~FR23): 499.66×2 m³ NO.1
- Bottom ballast tank (left, right) (FR113~FR144): 207.21/ 208.06 m³
- NO.2 Bottom ballast tank (left, right) (FR93~FR113): 145.35×2 m³
- NO.3 Bottom ballast tank (left, right) (FR73~FR93): 145.35×2 m³
- NO.4 Bottom ballast tank (left, right) (FR43~FR73): 217.90×2 m³
- First ballast tank (FR156~First): 296.81 m³
- NO.1 regulating water tank (left, right) (FR113~FR144): 713.64×2 m³
- NO.2 regulating water tank (left, right) (FR93~FR113): 492.09×2 m³
- NO.3 regulating water tank (left, right) (FR73~FR93): 492.09×2 m³
- NO.4 regulating water tank (left, right) (FR43~FR73): 666.04×2 m³

1.8 Propulsion system

1.8.1 Main engine

1.8.1.1 Engine information

- Engine model: ZH4105D
- Manufacturer: Weichai Power Co., Ltd.
- Rated power: 75 kW
- Rated speed: 1500 r/min

1.8.1.2 Reduction gear

- Reduction ratio: 2.95:1

1.8.1.3 Thrusters

- Propeller type: Fixed pitch propeller
- Paddle type and number of blades: MAU type 4 leaves
- Spin: Towards external rotation
- Straight path: 3.05 m
- Material: Cu3
- Connection with propeller shaft: Flat key connection

1.8.2 Generator set

1.8.2.1 Main generator set

- Genset model and quantity: CCFJ200J-Y 2 sets
- Diesel model: WP12CD235E201
- Output power and speed: 235 kW×1500 r/min
- Generator model: SB-HW4(.D)-200
- Rated power: 200 kW

1.8.2.2 Parking diesel generator sets

- Genset model and quantity: CCFJ64J-Y 1 set
- Diesel model: WP4CD100E200
- Output power and speed: 90 kW×1500 r/min
- Generator model: SB-HW4(.D)-64
- Rated power: 64 kW

1.9 Speed and endurance

1.9.1 Speed

Under the design draft of 4.50 m and the following conditions, the design speed of the ship is about 12 kn:

- Under design
- The main engine runs at 90% rated power and has a 5% offshore wind and wave margin

- The hull is clean and free of fouling

2. Below deck arrangement

2.1 Below deck of the first floor

- FR144~FR156 rib: Galley, dining room, and entertainment area on the port side. 3 crew rooms on the starboard side.
- FR156 ~ Bow: One toilet and one chain locker provided on the starboard and starboard sides.

2.2 First-floor deck

- FR144~FR156: Chief engineer room and storage area on the port side, chief officer room and storage area on the starboard side.
- FR156~Shoujia: Anchoring and mooring equipment arranged on the deck.

2.3 Captain's deck

- Captain's room and its reception room, chief engineer's room and its reception room, second officer's room, third engineer's room, and toilet.

2.4 Driving deck

- From port side to starboard side: Chart area, crew room, toilet, battery room, and wheelhouse.

Refer to the "General Arrangement Plan" for the specific layout of the ship's architectural features and cabins, equipment, machinery, and traffic routes (WUT4837A-100-02).

2. Hull structure and painting

2.1 Hull structure

2.1.1 Overview

2.1.1.1 Design basis

- The ship's hull structural material, structural form, frame spacing, member size, connection method, and welding specifications are in accordance with the "Sea Code" and the relevant requirements for offshore cargo ships.
- Designed according to Chapter 4, PART TWO of the Rules for Classification of Sea-going Steel Ships.
- Bow and side shells undergo Class B ice reinforcement.

2.1.1.2 Structure type

- Main hull, superstructure, and deckhouse are all welded steel structures.
- Hull structure adopts a hybrid skeleton type.

2.1.1.3 Aggregate spacing

- **Rib spacing**
 - Tail-FR8: 600mm
 - FR8-FR144: 640mm
 - FR144-first: 600mm
- **Longitudinal spacing**
 - Double bottom and upper deck: 615mm
 - Side and longitudinal walls: 625/530mm
- **Spacing of deck girder**
 - Deck stringer: 1230/2460mm
- **Spacing between side keels**
 - Side keel: 1230/2460mm

2.1.1.4 Construction Materials

2. Hull structure and painting (Continued)

2.1.1.4 Construction Materials

- The material shall comply with the relevant provisions of the "Code for Construction of Sea-going Ships on Domestic Voyages" by China Classification Society (CCS).

3.6 Escalators, Railings, and Handrails

3.6.1 Stairways and Escalators

- **Main stairway:**
 - Surrounds each deckhouse.
 - Provides access to each upper deckhouse.
 - Steel structure inclined ladder.
 - Inclination angle not more than 50°.
 - Net width not less than 700mm.
 - Equipped with steel pipe handrails.
- **Traffic escalator:**
 - Accesses the steering gear from the upper deck.
 - Steel straight ladder.
 - Width of 400mm.

3.6.2 Bulwarks and Railings

- **Bulwarks:**
 - Provided around the ship.
- **Railings:**
 - Installed on the outer walls of the upper deckhouse.
 - Height of the sill is 600mm.

- Doors on the outer walls open outboard.
- Doors on the side walls of the deck outside open forward.
- Height of the sill of the peripheral wall of the driving deck is 250mm.
- Height of the sill of other deckhouses is 380mm.

3.7 Metal Doors, Windows, Covers

3.7.1 Metal Doors

- **Entrances and exits:**
 - All cabins communicating with the outside.
- **Windows:**
 - Used as lighting or ventilation.
- **Type:**
 - Weathertight single-leaf steel doors and windows.
- **Operation:**
 - Doors on the outside open outboard.
 - Doors on the side walls of the deck outside open forward.
 - Hydraulic sliding watertight door for safety passage area on the bottom plate.
- **Height of Sill:**
 - 600mm for outer walls on upper deck and forecastle deckhouses.
 - 250mm for the peripheral wall of the driving deck.
 - 380mm for other deckhouses.
- **Fire Doors:**
 - Installed for fire integrity.
 - Compliance with fire rating requirements.

3.7.2 Metal Windows

- **Type:**
 - 350 light-transmitting marine portholes on the outer wall of the upper deckhouse.
 - Openable steel marine ordinary rectangular windows with bolts.
 - Fixed steel marine rectangular windows with rotating windows on two of the windows in the front wall.

3.7.3 Hatch Covers and Manhole Covers

- **Type:**
 - Small hatch covers of steel for access to the steering gear room from

- the upper deck.
- Manhole covers.

3.8 Specific Plans and Arrangements

- **Refer to:**
- "Whole Ship Doors and Windows Layout Plan" (WUT4837A-260-01) for metal doors and windows.
- "Arrangement of Small Hatch Covers and Manhole Covers" (WUT4837-260-02) for hatch covers and manhole covers.

3.9 Bulwarks and Railings

- **Front of forecastle, upper deck, captain's deck, driving deck, compass deck, and rear of forecastle:**
 - Equipped with a 1000mm high bulwark.
 - Railing with a height of 1000mm.
 - Railing pillars made of 60×16 flat steel.
 - Horizontal bars made of $\phi 20 \times 3$ steel pipe with handrails $\phi 42.3 \times 3.25$ galvanized steel pipe.
- **Refer to:**
 - "Arrangement of Railings and Handrails of the Whole Ship and Structural Drawings of Bulwarks" (WUT4837-260-03) for specific structure type, specification, material, and arrangement.

3.10 Crew Safe Passage

- **Description:**
- Cabin passage from bow to stern.
- Inclined ladder on the starboard main deck in the forecastle.
- Access to the engine room through FR45 with a wire rope and sliding watertight door.
- Upper deck surrounded by wire ropes around the cargo area.
- Wire rope larger than 600mm for a wide safe passage.

3.11 Navigation and Signaling Equipment

- **Requirements:**
 - Provided in accordance with Chapter 5 and Chapter 8 of Part 4 of the Regulations for cargo ships in offshore areas.
- **Equipment:**
 - ◆ **Radar Mast:**
 - ◆ Two steel pipe structure radar masts on the compass deck.
 - ◆ Equipped with radar antennas, lights, whistles, signal equipment,

and lightning rods.

- ◆ **Models, Flags, and Sound Signal Devices:**
- ◆ Shapes, flags, and sound signal devices required by regulations.
- ◆ Refer to "Layout Plan of Sound and Light Signal Equipment" (WUT4837A-240-01) for details.
- ◆ **Electronic Navigation Equipment:**
- ◆ Refer to "Order Details of Electrical Equipment" (WUT4837A-608-01MX) for specific configuration.

4. Cabin Outfitting Part

4.1 Fireproof Structure

- **Implementation:**
- According to Chapter 2-2, PART 4 of the Regulations for offshore cargo ships.

- **Dividing Bulkheads:**
- Non-combustible B- or C-class divisions in accommodation and service spaces.
- Class A-60 fire resistance for bulkheads and decks adjacent to machinery spaces of category A and service spaces.

- **Material:**
- All linings, ceilings, and associated linings in accommodation spaces, service spaces, and control stations to be of non-combustible materials.

4.2 Wood Insulation

- **Insulation Material:**
- Ceramic wool for fire insulation of bulkheads and/or decks with fire integrity grades above A-0.
- Glass wool insulation for coamings and/or decks used as interior partitions of accommodation spaces and service spaces above B-0.

*Vessel(s) Class/ Flag: China. As per Buyers requirements, upon vessel delivery (before leaving China territorial waters), Owners will be committed to change ship's Class/ Flag.
