

LARGE-SCALE PILE DRIVING VESSEL

Non-Self-Propelled Offshore Pile Driving Platform |



Representative vessel photography — asset identity redacted for brokerage circulation

I. VESSEL OVERVIEW

Vessel Type	Non-self-propelled large-scale pile driving vessel, purpose-built for offshore engineering
Delivery Date	July 2014
Classification Society	China Classification Society (CCS)
Navigation Area	Unlimited navigation area (tow-supported, non self-propelled)
Construction Origin	Built at a Chinese shipyard to a Chinese-flag design institute's approved design

II. PRINCIPAL DIMENSIONS & CORE TECHNICAL PARAMETERS

1. Principal Dimensions

Length Overall (LOA)	78.0 m (hull only, excluding pile frame)
Moulded Breadth	36.0 m
Moulded Depth	6.0 m (main deck to keel)
Structural Draft	4.8 m (operating load)
Gross Tonnage (GT)	Approx. 8,500 tons (CCS registered)

2. Core Construction Parameters

Pile Frame Height	128 m — among the tallest pile frames in the Asian market at time of build
Lifting Capacity	450 tons (main hook of the pile frame)
Maximum Pile Diameter	5.0 m (steel pipe pile)
Maximum Pile Driving Length	132 m (one-time driving, no segmentation required)
Inclined Pile Construction	0° – 18° (two-way adjustable)

3. Power & Positioning System

Power System	4 x main generators (CAT 3516-equivalent), 7,200 kW total installed capacity
Positioning System	8-point mooring positioning + dual RTK-GPS differential positioning (no DP system)
Construction Accuracy	Positioning error ≤ 5 cm (centimeter-level precision)
Wind Resistance	Beaufort Scale 8 (stable berthing in sea state 5)

III. CORE CONSTRUCTION CAPABILITIES

Equipped with a large-scale hydraulic impact hammer, this vessel is purpose-built for large-diameter steel pipe pile driving, with the following core capabilities:

- **Super-Large Pile Construction** — one-time driving of 130-metre-class extra-long steel pipe piles, with no segmental construction required, greatly improving construction efficiency.
- **Complex Geological Adaptation** — adaptable to weathered rock, strongly weathered granite, and other complex strata, maintaining stable pile-driving quality.
- **High-Precision Control** — centimeter-level positioning accuracy via dual GPS differential positioning and wave compensation, ensuring pile-driving perpendicularity.



Vessel underway — identifying marks and metadata redacted

IV. REPRESENTATIVE PROJECT ACHIEVEMENTS

International Cross-Sea Bridge Project (Europe, 2018–2020)

Served as the core pile-driving asset on a major European cross-sea bridge project, completing the driving of extra-long steel pipe piles (130-metre class) and setting a world record for one-time driving of super-long piles — highly recognized by the project's government and construction stakeholders.

Domestic Offshore Wind Power Projects

Participated in offshore wind power projects across multiple coastal regions, completing large-diameter pile driving for wind turbine foundations at a daily construction efficiency of up to 9 piles.

Cross-Sea Bridge Projects

Participated in pile foundation construction for multiple cross-sea bridge projects, effectively solving pile-driving challenges in deep water and complex strata.

This document is provided by Horizon Offshore Services (HOS) for preliminary brokerage and commercial evaluation purposes only. Vessel identity has been redacted; particulars are believed accurate but are not warranted and remain subject to inspection, verification, and owner confirmation. This document is confidential and may not be reproduced or distributed without prior written consent.