



上海外高桥造船有限公司

SHANGHAI WAIGAOQIAO SHIPBUILDING CO.,LTD



BASSOE TECHNOLOGY

# SWS 12000

## ULTRA DEEPWATER DRILLSHIP



# SWS 12000 DP ULTRA DEEPWATER DRILLSHIP

## DRILLING FEATURES

The SWS 12000 is designed for maximum flexibility for drilling operations in water depth up to 3,650 m. Focus has been to provide a large payload capacity by high level of hull/topside integration, flexible drilling layouts and optimized operability.

The vessel is equipped with a dual derrick, with a 1,250 sh tons load path for main, and 1,000 sh tons for auxiliary hook, arranged with conventional tensioners. The fully integrated fluid handling system is designed with a segregated mud system for oil based and water based mud, as well as completion fluids. Reserve mud storage in agitated tanks increases the flexibility of operations. The vessel is equipped with four mud pumps with space for additional pumps.

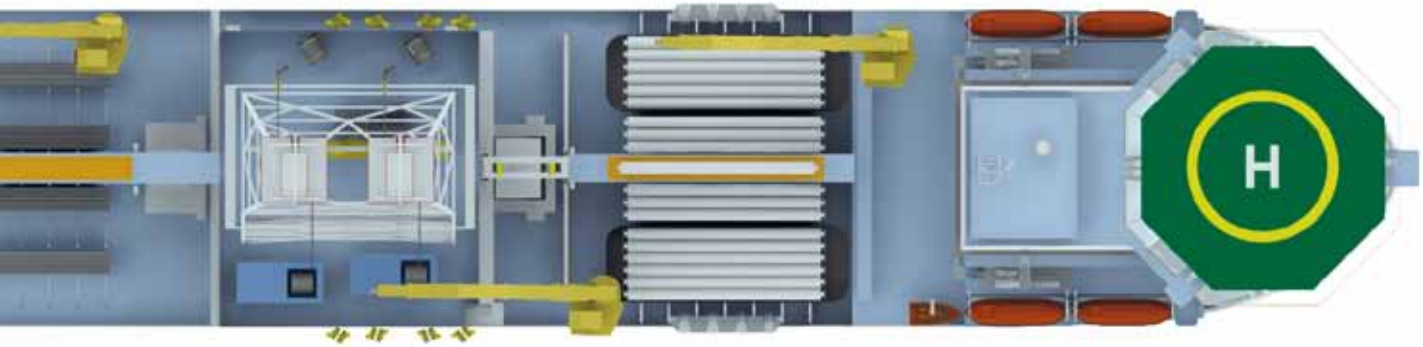
Access to the large moon pool is arranged from two sides, for handling of subsea trees from aft and BOP's from forward side of the moon pool.

The SWS 12000 has been developed as a DPS-3 system. The propulsion system is designed for a high transit speed.

Wind tunnel tests and tow tests have been performed as well as extensive moon pool tests.

The SWS 12000 has been developed by Bassoe Technology together with Shanghai Waigaoqiao Shipbuilding Co.





GENERAL	
Class	✱DNV 1A1 Ship-shaped Drilling CRANE, DRILL, DYNPOS-AUTRO, F-AM, HELIDK
Rules and Regulations	IMO MODU Code, IMO SOLAS, IMO MARPOL 73/78, IMO Load Line 1966, IMO COLREG 72 IMO DP Class 3
Operational Areas	Brazil, Gulf of Mexico, South East Asia, West of Africa
POB	220 people
Heli Deck	S-61-N/S-92/AW-101

DESIGN CRITERIA	
Water Depth	3,650 m
Drilling Depth	12,190 m
Transit Speed	13.8 knt

MAIN DIMENSIONS	
Length Over All	220.0 m
Length between Perpendiculars	207.2 m
Beam, moulded	36.0 m
Depth, moulded	18.4 m
Moon Pool	
Length of Moon Pool, Upper Deck	37.6 m
Length of Moon Pool, at Base Line	25.6 m
Beam of Moon Pool	12.8 m
Drill Floor	
Height above Main Deck	18.4 m
Height above Base Line	35.8 m
Height above Sea Level	24.8 m
Draughts	
Draughts given are measured from under side keel	
Light Transit Draught	9.0 m
Full Load Draught, moulded	11.0 m

PAYLOAD AND DISPLACEMENT	
Total Payload, Operation	22,000 MT
Displacement, Operation	67,400 MT

CAPACITIES		
Active Mud Tanks, Water Based	1,120 m <sup>3</sup>	7,050 bbls
Active Mud Tanks, Base Oil	1,120 m <sup>3</sup>	7,050 bbls
Reserve Mud Tanks,	1,170 m <sup>3</sup>	7,350 bbls
Brine	1,400 m <sup>3</sup>	8,800 bbls
Base Oil	1,000 m <sup>3</sup>	6,200 bbls
Drill Water	3,300 m <sup>3</sup>	20,750 bbls
Bulk Barite/Bentonite	625 m <sup>3</sup>	22,060 cu ft
Bulk Cement	430 m <sup>3</sup>	15,190 cu ft
Fresh Water	1,450 m <sup>3</sup>	9,100 bbls
Fuel Oil	11,250 m <sup>3</sup>	70,750 bbls

MARINE SYSTEMS	
Power Generation	6 x 7.3 MWe
Thrusters	6 x 4.5 MW

DRILLING EQUIPMENT	
Derrick Height	Dual, 210 ft
Derrick Hook Load	1,250 / 1,000 sh tons
Top Drive	1,250 / 1,000 sh tons
Rotary	75½ / 60 ½ "
Set Back	1,210 sh tons
Drawworks	6,000 / 4,500 HP
Riser Tensioners	4,000 kips
Mud Pumps	4 x 2,200 HP, 7,500 psi
BOP	8 ram, 18 ¾", 15,000 psi
Subsea Trees	3 trees
Deck Cranes	4 x 85 MT@18 m/ 18 MT@42 m



BASSOE TECHNOLOGY

# A RECOGNISED DESIGN FORCE FOR THE OFFSHORE INDUSTRY

Bassoe Technology focuses on marine and offshore engineering services including development of designs for floating and mobile offshore units, such as semi-submersibles, drillships, tender drilling units and FP(D)SOs.

With a background from the shipbuilding and offshore engineering industry in Gothenburg, Sweden, Bassoe Technology's employees have a long experience of design and construction of offshore units, which include key-roles in the design of some of the most prominent 6th generation drilling units.

Bassoe Technology has developed a portfolio of concepts which among other includes:

- Semi-submersibles for
  - Accomodation
  - Drilling
  - Floating Production
  - Tender Assist Drilling
  - Well Intervention
- Drill Ships
- Tender Barges
- FP(D)SOs
- Arctic Drilling Units

Bassoe Technology has long-term relations with some of the world's leading offshore construction yards and has developed exclusive concepts for DSIC Offshore (China), DSME (Korea), MHI (Japan) and SWS (China).

Bassoe Technology provides a strong multidiscipline engineering force with vast experience in development of purpose designed floating units and "hands-on" experience from project, construction and commissioning management.



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Bassoe Technology is a design and project management company within the Bassoe Group, a rig-broker and project venture group with focus on offshore units.



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SHANGHAI WAIGAOQIAO SHIPBUILDING CO.,LTD

# A NEW LEADING FORCE IN THE WORLD SHIPBUILDING INDUSTRY

Shanghai Waigaoqiao Shipbuilding (SWS) is located along the Yangtze River in Shanghai Pudong District, on a 2.1 million m<sup>2</sup> land area with a water front of 1,500 m. Annual production is over 6 million dwt.

Relying on advanced facilities and highly efficient production flow system, as well as state-of-the-art design software TRIBON and the fully integrated CIMS production system, SWS has successfully developed five ship production lines – the Capesize bulk carrier series, the Aframax product / crude oil tanker series, the VLCC series, the large FPSO series and the 3,000 m deepwater MODU series. SWS holds the ISO9001 Quality Management and the ISO14001 Environmental Management certificates and has also won the OH-SAS18001 Safety and Health Management award.

Within the company, an internal system integrates marketing, research and production to encourage technical innovation and advancement. This has resulted in a steady increase in SWS competitiveness and productivity, confirming the SWS company motto, "Learning, Innovation, Utility and Excellence".



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