BASSOE TECHNOLOGY

BT-10000

ULTRA DEEPWATER HARSH ENVIRONMENT

BT-10000
HARSH ENVIRONMENT
ULTRA-DEEPWATER SEMI-SUBMERSIBLE

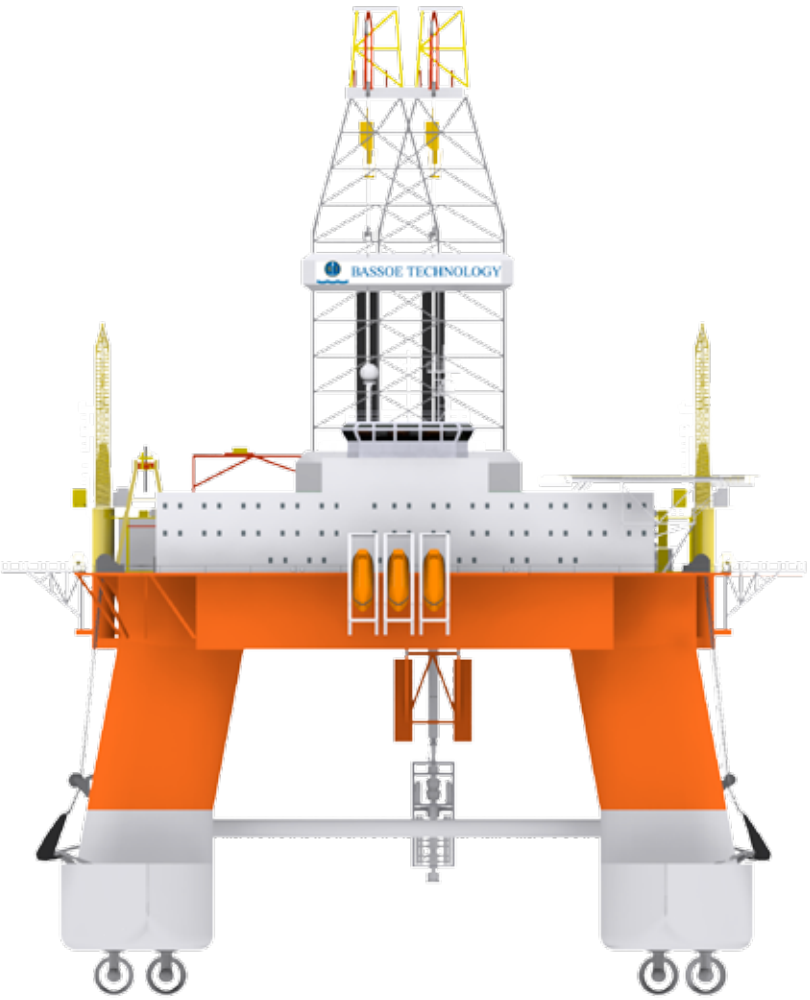
The BT-10000 is a semi-submersible for drilling in the harshest environmental conditions and/or in ultra-deepwater locations up to 12,000 ft water depth. To safeguard excellent workability in the most severe wave-conditions, such as conditions East of Canada, in the Norwegian Sea and West of Shetland, the BT-10000 has been designed with superior motion characteristics. The lower hull has been designed for low resistance to allow an exceptionally high transit speed for a semi-submersible, facilitating faster mobilization to remote drilling locations.

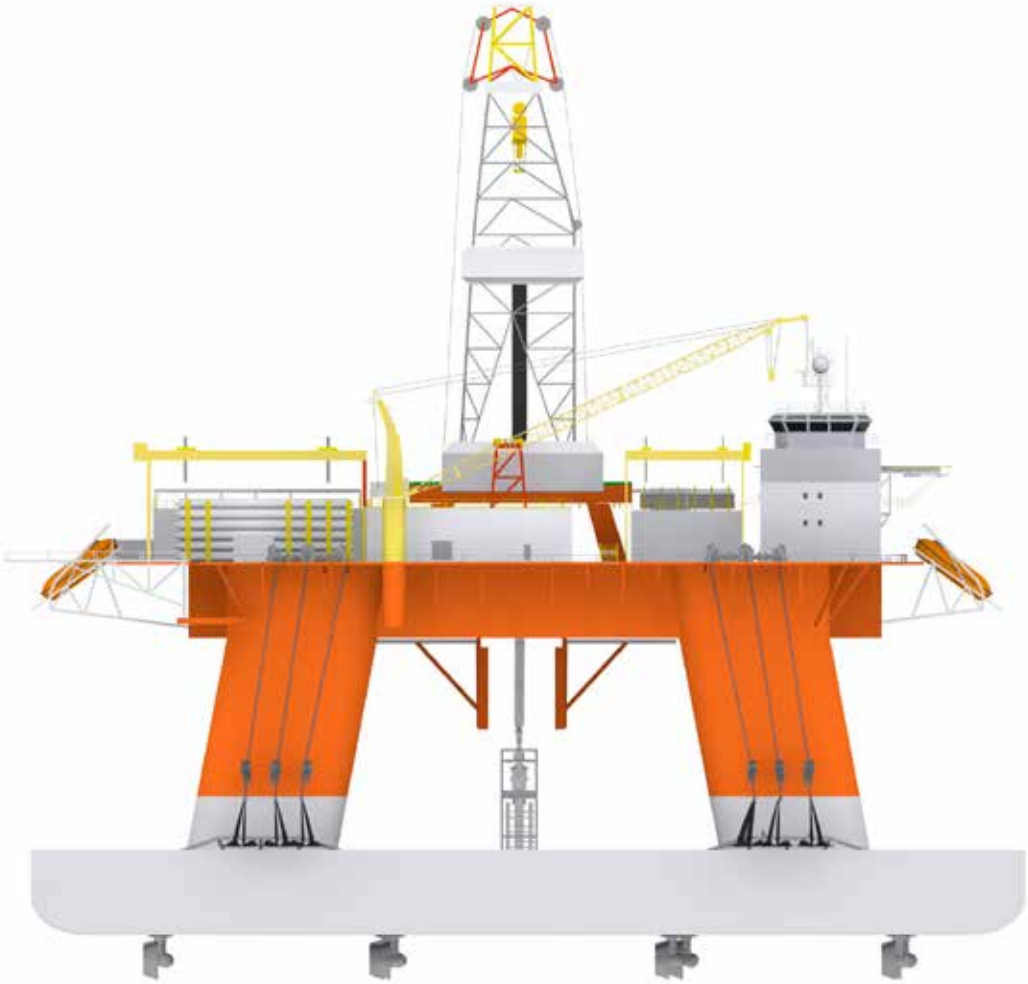
For station keeping the BT-10000 is arranged with 8 thrusters and a DP Class 3 system as well as a 12-point chain mooring system, which may also be connected to a pre-set deepwater mooring system.

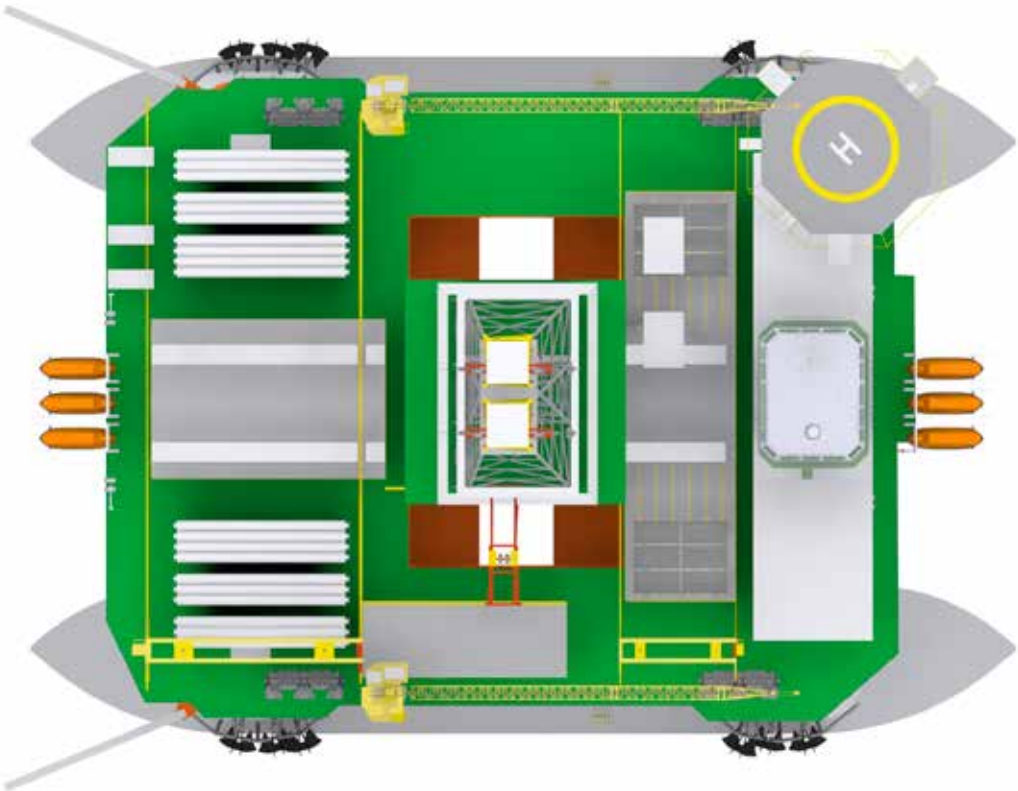
The BT-10000 is designed for both exploration and production drilling with a special focus on completion operations through the inclusion of large open areas around the moon-pool for handling of various subsea related equipment, such as X-mas trees, various umbilical reels, etc. and an upper deck layout designed to include ample space for various third party equipment. The BT-10000 is arranged for handling and storage of two BOP-stacks.

The drilling facilities can be based on a single or dual activity derrick to meet specific owner preferences. In both cases the unit is arranged with an effective drill-floor layout to facilitate preparation of various operations off “critical path”.

The mud system features large mud-pit capacity and is separated into three segregated systems with dedicated pits, tanks and pumps for water-based mud, oil-based mud and completion fluids. There is also additional lower hull storage for mud and brine.







GENERAL	
Class	✠1A1 Column Stabilized Drilling Unit, CRANE, DRILL N, DYNPOS-AUTRO, ECO, F-AM, HELIDK, POSMOOR ATA, CLEAN, ICE-T
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	World Wide including Norway and UK sector and Southern part of Arctic
POB	210
Heli deck	S-61-N/S-92/AW-101

DESIGN CRITERIA	
Water depth	3,650 m
Drilling depth	13,700 m
Transit speed	up to 10+ knots

PARTICULARS	
Pontoons, length	130.0 m
Pontoons, width outside pontoons	88.4 m
Columns slantered long and transv	11 deg
Upper deck height above base line	48.0 m
Box bottom height above base line	38.5 m
Deck box, length	96.0 m
Deck box, width	67.0 m
Moon Pool	
Opening in upper deck, LxB	46.4 x 27.7 m
Drill Floor	
Height above sea level	34.2 m
Draughts	
Operational	24.0 m
Survival	20.0 m
Air gaps	
Operational	14.5 m
Survival	18.5 m

PAYLOAD AND DISPLACEMENT	
VDL, operations and survival	10,000 tonnes
Displacement, operation	63,500 tonnes
Displacement, transit	44,850 tonnes

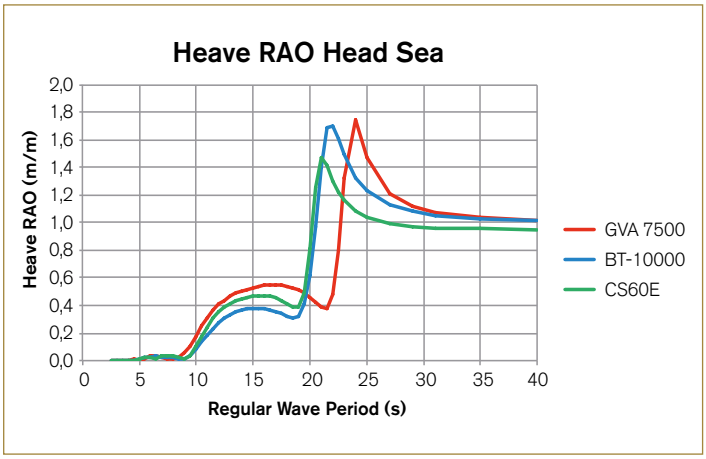
CAPACITIES		
Liquids		
Active mud pits, deck box	1,270 m^3	8,000 bbls
Secondary mud tanks, lower hulls	1,530-1,860 m^3	9,620-11,700 bbls
Brine	665-1,000 m^3	4,180-6,290 bbls
Base oil	665-1,000 m^3	4,180-6,290 bbls
Drill water	2,000 m^3	12,580 bbls
Fresh water	675 m^3	4,250 bbls
Fuel oil	4,230 m^3	26,600 bbls
Bulk		
Bulk barite / bensonite	780 m^3	27,550 cu.ft
Bulk cement	420 m^3	14,830 cu.ft
Total bulk storage	1,200 m^3	42,380 cu.ft

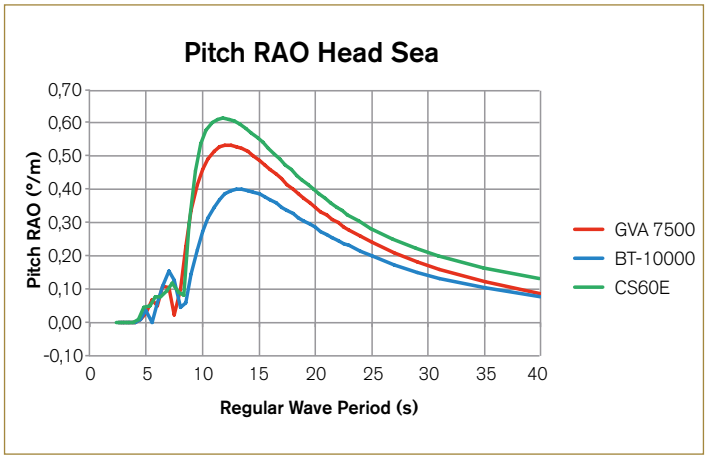
MARINE SYSTEMS	
Power generation	53.2 MWe
Thrusters	8 x 4.5 MW
Mooring	12 x 84 mm R5

DRILLING EQUIPMENT	
Derrick type	Single or dual Activity
Derrick height	210 ft
Derrick hook load, main	1,250 sh tons
Derrick hook load, aux	1,000 sh tons
Rotary	75½/ 60½"
Set back	1,210 sh tons
Drawworks	9,200 HP Active Heave/ 6,000 HP
Riser tensioners	4,000 kips
Mud pumps	5 x 2,200 HP, 7,500 psi (space for 1 future)
BOP	two 7 ram, 18 ¾", 15,000 psi
Subsea trees	Handle and store multiple subsea trees
Cranes	2 x 100 tonnes

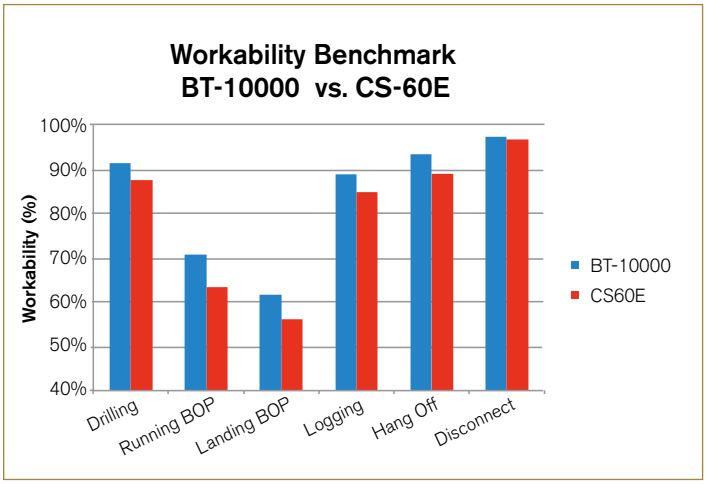
SUPERIOR MOTION PERFORMANCE

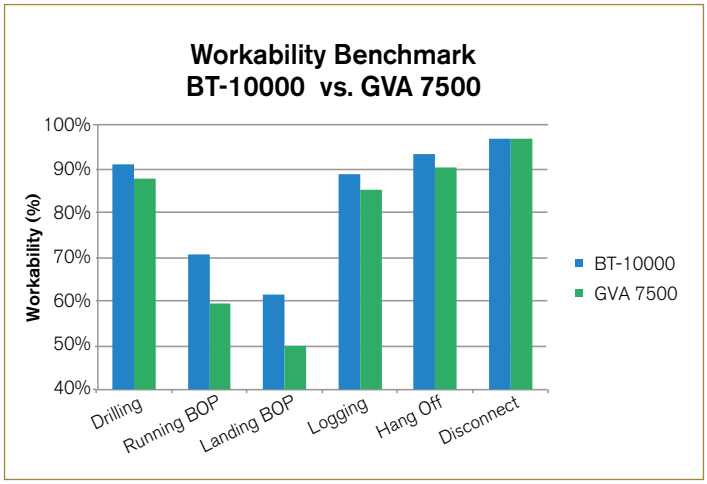
Motion workability benchmark study for West of Shetland in 1,500 m water depth





Motion heave and pitch RAO comparison with other 6th generation large drilling semis





Workability comparison with other 6th generation large drilling semis for various drilling operations

BASSOE TECHNOLOGY

A LEADING DESIGNER OF
ADVANCED MOBILE OFFSHORE UNITS

www.logiken.se April 2014

Bassoe Technology focuses on marine and offshore engineering services including development and design of floating and mobile offshore units, such as semis, drill ships, tender drilling units and accommodation units.

Bassoe Technology has developed a large portfolio of innovative floating and mobile offshore units characterized by an emphasis on operational performance, efficiency and capacities while at the same time challenging size.

With a background from the shipbuilding and offshore engineering industry in Gothenburg, Sweden, our engineers have long experience in design and construction of offshore drilling units for harsh environment and floating production semis for both North Sea and GOM operations.

Bassoe Technology has designed for construction four semi-submersible units, two tender assist drilling barges and one ultra deep water drill ship.

Designs also include wind energy applications for offshore locations. The wind measurement mast located on the Bassoe Technology designed jack-up platform is an example of utilizing existing experience for new applications.

BassDrill Alpha delivered 2010

BassDrill Beta delivered 2014

Etesco IX to be delivered Q2-2016


Helix ESG Q5000 to be delivered Q1-2015


BT-UDS designed for Sigma Drilling Ltd

Atlantica Gamma to be delivered Q3-2014

Jack-up for offshore wind power industry delivered 2012

Atlantica Delta to be delivered mid 2015

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Bassoe Technology is an independent designer of advanced mobile offshore units. Since 2013 owned by CIMC Offshore, with the largest semi-submersible drilling rig manufacturing center in China – Yantai CIMC Raffles Shipyard.

CIMC MEMBER OF CIMC GROUP