

BMC P 375

Deep Driller 4



GENERAL DESCRIPTION	
Unit Name	<i>Deep Driller 4</i>
Unit Design	Baker Marine Pacific Class 375
Built	PPL Shipyard Pte. Ltd, Singapore
Delivery	3 rd Quarter 2007
Class Society	American Bureau of Shipping
Class Notation	American Bureau of Shipping, A1 Self-Elevating Drilling Unit, CDS (2001 Rules)
Flag	Singapore

MAIN PARTICULARS

Drilling Design Criteria	
Water depth, maximum	375 ft.
Wind speed	70 knots
Wave height, maximum	35 ft.
Current speed, surface	1.5 knots
Air gap	50 ft.
Dimensions	
Hull Length, Overall	239.83 ft.
Hull Breadth, Overall	224.41 ft.
Hull Depth	27.89 ft.
Leg length	506.39 ft.
Leg Spacing, transverse	155.18 ft.
Leg Spacing, longitudinal	145.34 ft.
Cantilever envelope, well center from transom	15 - 70 ft.
Cantilever envelope, well centre from centerline	+/- 15 ft.
Spud can diameter	55.45 ft.

CAPACITIES

Rated drilling depth	30,000 ft.
Static hook load	800 tons
Rotary capacity	750 tons
Setback capacity	450 tons
Conductor tension capacity	227 tons
Variable Load, maximum drilling	3,318 tons (based on above environment)
Maximum combined cantilever load	1,250 tons
Drill water capacity	4,850 bbls
Fuel oil capacity	3,900 bbls
Base oil	1,200 bbls
Brine	1,200 bbls
Potable water	3,600 bbls
Liquid mud	4,120 bbls (including slug tank)
Bulk mud	5,700 ft ³
Bulk cement	5,700 ft ³
Sack storage	5,000 sacks

DRILLING EQUIPMENT

Drawworks	National Oilwell Varco / D3000UEDB DC with 3 X 1130 HP DC electric motor with Baylor 5250 electric eddy current brake	
Top Drive	National Oilwell Varco / HPS-E-DC-2S-SG	
Mud pumps	Three National Oilwell Varco Model 14-P-220, triplex pumps	
Cranes		Whipline
	BMC 900	21.3 tons @ 25ft 5.5 tons @ 100 ft
	BMC 1600	40.8 tons @ 25ft 5.5 tons @ 100 ft
	BMC 2250	50 tons @ 25 ft 5.5 tons @ 100 ft
Power Generation	6 x Caterpillar Model 3516B HD engines (2,150 hp each, 12,900 hp total)	
Pipe Racking	National Oilwell Varco / Vertical Pipe Racking, 6T Bridge Racker, Triples Range 2 tubulars from 3 1/2" to 6 5/8" –Equipped to handle – 5-7/8" DP	

ACCOMMODATION

Total Capacity	120
Number of single cabins	6
Number of double cabins	57
Number of operator offices	2
Number of contractor offices	3
Number of meeting rooms	1

WELL CONTROL EQUIPMENT

Diverter	KDFJ-500 Diverter
Annular BOP	HYDRIL GX 18 3/4" x 10,000 psi WP Annular BOP
Ram BOP	2 x Hydril Dual compact 18 3/4" x 15,000 psi WP Dual Ram BOP's
Choke manifold	15,000 psi WP
FLUID PROCESSING	
Shale shakers	4X National Oilwell Varco DLMS-380 Linear Motion National Oilwell Varco
Mud degasser	National Oilwell Derick Vacu Flo
Desander	National Oilwell Varco DSM-3B-10CTX, 3 x 10" cones, 1,000 gpm
Desilter mud cleanser	National Oilwell Varco DSL-16GG-CTX, 16 x 4" cones, 1,000 gpm
Mud mixing pumps	Mission Magnum or equivalent centrifugal pumps
DRILL STRING	
Drill pipe	20,000 ft, 5 7/8" OD, S-135, Range 2, XT57 tool joints, 7" OD x 4.25" ID, 26.3 ppf nominal
Drill collars	Six, 9 1/2" OD x 3" ID, spiral drill collars Eighteen, 8 1/2" OD x 2 13/16" ID, spiral drill collars Eighteen, 7" OD x 2 13/16" ID, spiral drill collars
Hevi-Wate drill pipe	Thirty, 5 7/8" Heavy Weight drill pipe, XT57 tool joints