

Byford Dolphin

GENERAL

Name: Byford Dolphin
Flag: Singapore
Owner: Fred. Olsen Energy ASA
Manager: Dolphin Drilling Ltd.
Year Built: 1974
Design: Aker H3
Classification: DNV + 1A1, Column Stabilised Drilling Unit

MAIN DIMENSIONS

Length: 355 ft (108,2 m)
Breadth: 221 ft (67,4 m)
Depth: 120 ft (36,6 m)

OPERATING PARAMETERS

Water Depth: 1500 ft (458 m)
Maximum Drilling Depth: 20,000 ft (6096 m)
Transit Speed: Approx. 4,5 knots
Design Conditions:
Wind speed: 169 ft/s (100 knots),
Max wave height: 102 ft (31 m)

CAPACITIES

Variable Deck Load: 3,021 mt
Liquid Mud: 3,981 bbls (534 m³)
Bulk Mud/Cement: 547 mt / 270 mt

DRILLING EQUIPMENT

Derrick: Continental Emsco 22 BDD 168 x 40 x 40 ft with retrofit 10 ft extension in 1996; 1,200,000 lbs static
Drawworks: National 1625 DE (3 x 800 hp)
Rotary: Continental Emsco T-4950, 49 ½", 800 hp
Topdrive: Varco TDS-4
Riser Tensioners: 8 x Rucker Shaffer 80,000 lbs (Total 640,000 lbs capacity)
Motion Compensators: Crown Mounted Compensator, Shaffer CMC-25-600-DA; 25 ft stroke; 600,000lbs capacity
Mud Pumps: 3 x National 12-P-160 Triplex

MACHINERY

Main Power: 4 x Rolls Royce (Bergen) kVGB-12 (4 x 1,910 kVA)
Emergency Power: 1 x MTU (1 x 844 kVA)
Propulsion: In-line Propulsion, 2 x 1700 bhp



SUBSEA SYSTEMS

BOP: Hydril 18 ¾", 15,000 psi
Control System: Shaffer direct hydraulic system retrofitted in 2000
Diverter: Regan KFDS 3
Choke and Kill: McEvoy 3 1/16" 15,000 psi, H2S

MOORING

Winches: 8 x National + 4 x Brattvaag
Wire/Chain: 12 x 4,400 ft 3" ORQ and K4 chain
Anchors: 11 x 15 mt Stevshark and 1 x 15 mt Stevpris

CRANAGE

2 x National OS 435, 120 ft boom, 49 mt capacity

ACCOMMODATION

102 berths