



ENSCO 106

GENERAL INFORMATION

Flag: Republic of Indonesia
Previous Name(s): N/A
Year Built: 2005
Builder: Keppel FELS, Singapore
Upgrade: N/A
Design: Keppel FELS KFELS MOD V B Class "Bigfoot"
Classification: A.B.S. A-1 self-elevating mobile offshore drilling unit

MAIN DIMENSIONS

Length: 234ft
Breadth: 208ft
Depth: 25ft
Legs: 3 x triangular 517ft
Leg Spacing: Longitudinal leg center 129ft, transverse leg center 142ft.
Cantilever: Minimum 19ft rotary displacement to stbd and 15ft to port of longitudinal centerline; 50'6" x 34ft live drilling area aft of hull.
Spud Cans: 53ft diameter x 19ft high.
Deck Area: Main deck storage capacity 6,100ft²

DRAFT AND DISPLACEMENT

Transit Draft: 16ft
Displacement: 32,312 kips (Transit)

MACHINERY

Main Power: 5 x Cat 3516-B diesel engine rated at 1,855 HP each driving 1 x Cat SR4B 1,383 KW generator; total 9,275 HP
Power Distribution: 4 x M&I 600 V, 2,200 amps SCR system for mud pumps; 4 x M&I variable frequency drives for AC top drive and AC dwks
Emergency Power: 1 x Cat 3508-B diesel engine rated at (914 HP) driving 1 x Leroy Somer 600 KW generator

OPERATING PARAMETERS

Water Depth: 350ft – 400ft max; 16ft Min under risk assessment
Drilling Depth: 30,000ft (Maximum)
Leg Penetration: 25ft
Air Gap: 120ft
Transit Speed: 4.5kt - 5kt historical average
Survival Conditions: 5689 kips: At 350ft water depth: 100kt wind; 43ft waves; 15s period (with fixation system)
Criteria Design: 70kt; 40ft waves; -10°C

DRILLING EQUIPMENT

Derrick: MIL/Varco 160ft x 32ft x 35ft, rated 1,500,000 lb
Drawworks: Varco/ADS-10DT, 3,000 HP disc brakes with joystick control
Rotary: Varco/BJ RST 495, (49-1/2' max opening)
Top Drive: Varco TDS-8SA, 750t
Travelling: Varco 750t rating
Handling: Varco PH 100 hydraulic; Varco AR-3200 Iron Roughneck; Varco PS-21 power slips
Cementing: SLB Double Cement Pumper, Model CPS 679 15,000 psi (Free placement only)
Mud Pumps: 3 x Lewco W-2215, 2,200 HP; 7,500Psi
Drill Pipe: 30,000ft 5 1/2" 24.7lb/ft S-135 R2 HT-55 tool jts.; 5,000ft 3-1/2" 13.3lb/ft S-135 R2 HT38; 2,000ft 2-7/8" 10.4lb/ft S-135 R2 2-7/8PAVC jts

Drill Collars: 24 x 9 1/2"; 36 x 8 1/4"; 48 x 6 3/4"; 30 x 4 3/4"; 18 x 3-1/8"

HOISTING EQUIPMENT

Crane: 3 x Favco Model 7.5/10K 10 ton, whip line 45.4Mt main line; diesel hydraulic.

CAPACITIES

Variable Deck Load: 8,350Kips (drilling)
Cantilever Load: 2,300Kips
Total Drilling Load: 2,300Kips
Tubulars in Pipe Rack: 28,644' 5 1/2" DP plus BHA
Liquid Mud: 3,891bbl
Bulk Mud/Cement: 11,100ft³
Sacks: 5,000sacks
Drill water: 20,089bbl
Potable Water: 2,052bbl
Brine Storage: 1,002bbl
Base Oil Capacity: 1,002bbl
Fuel Oil: 3,315bbl
Others: Trip Tank 2 x 36.5bbl

WELL CONTROL SYSTEMS

BOP: 18 3/4" 10,000Psi (2 double ram); Shaffer Spherical 18 3/4" 5,000 psi annular
BOP Handling: 2 x Patriot Hoist 75 ton tandem chain hoists
Control System: Koomey model T60360-3S, 3,000 psi, 42 bottles x 11 gal capacity: Additional Emergency Shearing Capability in event of total power loss and loss on primary accumulators.
Diverter: ABB Vetco KFJD 49 1/2" 2,000 psi with 2 x 12" remote controlled valves & 1 x 14" remote controlled valve.
Choke and Kill: Shaffer 3 1/16" x 15,000 psi.

MOORING

Winches: 4 x LeTourneau, Electric, Model W-1500; holding capacity 75t.
Wire: Wire 1-3/8", 2,500 length.
Anchors: 4 x FFT5 MK4, 10,000 kg.

HELIDECK

S-61 type helicopters, 74ft diameter; max weight of 20,500lbs; S-92 type helicopters.

JACKING AND SKIDDING SYSTEM

Keppel FELS with self-positioning fixation system.

ACCOMMODATION

120 berths (16 x 2 man staterooms with private T&S, 39 x 2 man staterooms with shared T&S, 2 x 4 man staterooms with private T&S, 2 x 1 man staterooms with T&S)

ADDITIONAL DATA

Shale Shaker: 5 x VSM 300;
DG-10 1000gpm vacuum degasser, 200 MT conductor tensioning system; Varco "Phantom Mouse" rotating Mousehole; Varco Foxhole Spider Mousehole; MDT/Varco flex chair drilling controls and instrumentation; single point discharge
TV System: Top side remote quad explosion proof camera system. Automatic Tank Cleaning (MI-SWACO ATC Lite)

CANTILEVER CAPACITY (kips)

	Reach	+19.5'	0	-15'
Max combined load & setback	70'	359	1509	643
	38'	1795	2300	2300