

Songa Offshore AS



Songa Dee **Column stabilized Semi-Submersible** **Rig and Equipment Overview**

The SONGA Dee is a Mitsubishi type MD-602 enhanced design stabilized, semi-submersible drilling unit, capable of operating in water depths up to 1,800 feet and is winterized for work in arctic conditions.

EQUIPMENT SPECIFICATIONS

General

Rig: SONGA DEE
Flag: Marshall Island
Owner: Songa Offshore AS
Previous names: Stena Dee, Dyvi Stena
Year Built: 1984
Year Upgraded: 2004
Design: Mitsubishi type MD-602 enhanced design
Builder: Mitsubishi Heavy Industries, Ltd.
Classification: DnV Class A1 Column Stabilized

Main Dimensions/Draft/Displacement

Length: 112.0m
Breadth: 68.0m
Depth: 34m
Columns: 4 ea Corner columns 10.0m diameter & 4 ea Intermediate Columns 7.0m diameter
Pontoons: 2 ea 112m x 13m x 7m
Operating Draft: 20.0m
Ocean Transit draft: 6.8m
Storm Draft: 16.0m
Operating Disp: 28,865 tonnes
Ocean Transit Disp: 21,448 tonnes

Machinery

Main Power: 2 x 3060 BHP Nohab diesel (2,100 kw) max cont load. And 2 x 4080 BHP Nohab diesel (2,800kw) max cont load.
Power Dist.: 10 x SCR
Emerg. Power: Hedemora V12A/12 diesel coupled to a NEBB type emergency generator
Propulsion: 4 x NEBB 2960 BHP motor supply.
 4 x 2400 BHP controllable azimuthing thrusters (integral part of SDPM)
Cranage: Port crane Liebherr BOS 60/900 electro hydraulic w/ 40m boom, whip line 15 tonnes at 32m and Starboard crane National Oilwell series 4000 electro hydraulic knuckle boom, whip line 15 tonnes at 45m, Main line 30 tonnes at 30m (two falls), Main line 75 ton

Operating Parameters

Max Water Depth: 1800 ft
Max Drilling Depth: 30,000 ft
Transit Speed: 6 knots
Operating Conditions: Drilling maximum heave 4.5m with riser connected.
Storm Conditions: Unlatched 8m
Design Conditions: Rig is designed to operate year round in the North Sea

Drilling Equipment

Derrick: Maritime Hydraulics 48.8m (160 ft) high, 46 ft x 46 ft base, 1.25m lbs load capacity
Drawworks: 3000HP Continental Emsco, C311 driven by 3 x NEBB DC motors, fitted with Elmagco brake and MH Crown and Floor Saver System
Rotary: Continental Emsco 49 1/2" Rotary Table
Top Drive: Maritime Hydraulics DDM 650, hydraulic driven. Max. continuous output torque 50,000 ft/lbs.
Traveling Block: Maritime Hydraulics 650 ton, 7 x 60"
Hook: n/a
Swivel: n/a
Drillpipe: 15,500 ft. 5", 2500 ft. 5 1/2", 25 jts 5" heviwate
Drill Collars: 9-1/2", 8", 6-1/2", 4-3/4"
Pipe Handling: Maritime Hydraulics 3-arm pipe handling/racking system
Motion Compensator: Maritime Hydraulic 270/20 crown mounted 20 ft. stroke 600,000 lbs heave compensator
Cementing Unit: to be determined by client
Mud Pumps: 3 X Continental Emsco FB-1600, 1600 HP Triplex Pumps
Shale Shakers: 4 x Thule

Capacities

VDL - Operating: 4,300 tonnes
VDL - Storm: 4,300 tonnes
VDL - Ocean Transit: 3,350 tonnes

Liquid Mud: 3296 bbls (524m³)
Bulk Mud: 303 m³

Bulk Cement: 303 m³
Sack Material: 7200 sxs (110m²)
Drillwater: 10611 bbls (1687m³)
Potable Water: 2503 bbls (398m³)

Fuel Oil: 8227 bbls (1308m³)

Subsea Systems

BOP: CIW 18-3/4" 15 ksi H2S Service. 2 x CIW Ull double rams preventers, 2 x 10,000 psi WP annular preventers

LMRP: Cooper 18-3/4" hydraulic connector
BOP Handling: 1 x 220 ton SWL BOP transporter

EQUIPMENT SPECIFICATIONS**Mooring****Winches:** 4 x Norwinch, double windlasses**Wire/Chain:** 8 x 76mm dia K4 x 1,700. Breaking strain 613 tor**Anchors:** 8 ea x 15 tonne Stevpris**Positioning:****Other****Moonpool:** 80 x 23.5 ft. (24.4m x 7.16m)**Helideck:** Certified for Boeing BV 234 Chinook/S61
Sikorsky**Accommodations:** 116 persons w/ 2 berth sick bay**Control System:** Hydraulic with acoustic back up**Riser Details:** 36 x 50 ft Riser Joints 15,000 psi WP Type FCH-8 connectors. Riser Joints fitted with buoyancy elements.**Choke & Kill** 15,000 psi WP choke and kill lines. All primary control valves are hydraulically**Diverter:** Regan KFDS with 16" flowline and 10" overboard lines.**Riser Tensioners:** 12 x 80K NL Shaffer, 60 ft. line travel**Guideline Tensioner:** 4 x 16,000 lb, 40 ft. travel**Pod Tensioner:** 2 x 16,000 lb, 40 ft. travel

Kongsberg Simrad sub-sea TV

TV System: