Ultra Deepwater Semi-Submersible

General Description

Design / Generation ......................................................... Sedco Express 5th Generation
Constructing Shipyard ..................................................... DCN Brest, France
Year Entered Service / Significant Upgrades ......................... 2000
Classification ................................................................. ABS, A1 AMS, ACCU, DPS3
Flag ................................................................. Liberia
Dimensions ................................................................. 267 ft. long x 226 ft. wide x 111 ft. deep
Draffs ................................................................. 65 ft. operating / 31 ft. transit
Accommodation .............................................................. 195 persons
Displacement ................................................................. 37,998 st. operating / 27,650 st. transit
Variable Deck ................................................................. 6,614 st. operating / 5,070 st. transit
Transit Speed ................................................................. up to 12 knots
Maximum Water Depth ..................................................... 8,500 ft. designed / 7,500 ft. outfitted
Maximum Drilling Depth .................................................. 35,000 ft.

Drilling Equipment

Derrick ........................................................................... Joseph Paris TRI-Act derrick 190 ft. high x 39 ft. wide x 167 ft. deep.
Hookload Capacity ................................................................. 2,050,000 lbs. gross nominal capacity
Drawworks ................................................................. Hitec Dresco AHC-750-GE with 6 x GE electric motors GEB-22-A1 rated at 6,900 hp and pull rated with 14 x 2 inch lines to 669 ft.
Compensator ................................................................. Drawworks active heave compensation
Rotary Table ................................................................. Varco BJ RST 60-1/2 inch rated at 893 ft. at 25 rpm. Output power is 1,600 hp and 40,000 ft.-lbs. of continuous torque.
Top Drive ................................................................. CANRIG1275AC-68 electric motor with a rated capacity of 670 ft. driven by GE AC motor B20 A1 with 1,150 hp and 51,400 ft.-lbs. of continuous torque.
Tubular Handling ............................................................... Varco PRS-5R racking arm and 2 x ARER HRN 1898 Iron Roughneck.
Mud Pumps ................................................................. 4 x National 14-P-220 triplex pumps driven by 2 x GE AC 5GEB22 traction motors rated at 1,100 hp.
HP Mud System ............................................................... Rated for 7,500 psi
Solids Control ................................................................. 5 x Brandt VSM 300 shale shakers

Power & Machinery

Main Power ............................................................... 6 x Caterpillar CAT 3616 diesel engines rated at 5,900 hp at 900 rpm driving 6 x Kato C183-2382-8 generators rated at 4,400 kw at 900 rpm.
Emergency Power ........................................................... 1 x Caterpillar CAT 3512 1200 hp diesel engine driving 1 x Caterpillar CAT SR4 generator rated at 910 kW at 1200 rpm and 480 volts.
Power Distribution .......................................................... 8 x Bautell VFD GD3000 generator protection.

Storage Capacities

Fuel Oil ........................................................................ 9,623 bbls.
Liquid Mud ................................................................. 5,428 bbls. Active / 6,038 bbls. Reserve
Base Oil .......................................................................... 1,700 bbls.
Brine ............................................................................. 3,900 bbls.
Drill Water ......................................................................... 9,623 bbls.
Potable Water ................................................................. 4,025 bbls.
Bulk Material ................................................................ (mud + cement) 22,954 cu.ft.
Sack Storage ..................................................................... 10,000 sacks

BOP & Subsea Equipment

BOP Rams ...................................................................... Cameron type TL 18-3/4 inch 15,000 psi BOP with 2 x double 15,000 psi ram preventers and 1 x single 15,000 psi ram preventer (5 x rams total).
BOP Annulars .................................................................. 2 x Cameron DL 18-3/4 inch 10,000 psi annular preventers.
BOP Handling ................................................................. MOS BOP Carrier rated to 689 ft. and an Ingersoll Rand hydraulic chain hoist, rated to 98 ft.
Marine Riser ................................................................. Veto Marine riser with a 21 inch OD. And a length of 65 ft. Outfitted with 2 x 4.5 inch 15,000 psi choke and kill lines.
Tensioners ....................................................................... 6 x Retresco dual unit control flow tensioners rated to 400 st. with a stroke of 12.5 ft. with a 2 inch line travel of 50 ft.
Diverter .......................................................................... Hydri DF 21 -500 95.9 inch 500 psi diverter with 2 x 12 inch flowlines.
Tree Handling ................................................................. 2 x MOS Xmas tree trolley rated to 98 st. with a Hydra lift Xmas tree skid carts rated to 98 st. Heave compensated tree winch.
Moonpool ......................................................................... 27 ft. length x 144 ft. width.

Station Keeping / Propulsion System

Thrusters ........................................................................ 4 x Kamewa Mermaid Thrusters with 360 degree azimuthing capabilities 1 x Rolls Royce motor rated at 9,387 hp each four bladed fixed pitch and nozzled.
DP System ...................................................................... L3 NMS6000 full DP 2x Fugro DGPS and 2 x acoustic Sonardyne USBL.
Mooring System ............................................................... 4 x double units BLM Offshore MW90 310-600 electric with 1 x GE-GE-22-A1 1,150 hp motor with a rated pull of 311 ft. 2 x LWT anchors weighing 14.8 ft. with 8 x anchor lines Bridon Diamond Blue 6x7 IWRC RHO 3.5 inch rated to 21 lbs. per ft. 6,000 ft.

Cranes

Crate #1 ........................................................................ 1 x Kenz Offshore Marine pedestal crate DHC 65-3500 OS with a boom length of 141 ft. rated at 77 ft. at .75 radius.
Crate #2 ........................................................................ 1 x Kenz Offshore Marine pedestal crate DHC 65-3500 OS with a boom length of 141 ft. rated at 77 ft. at .75 radius.

Other Information

Helideck ............................................................................ Rated for Sikorsky S92 helicopters. 72 ft. x 72 ft.
Other ................................................................................ N/A

These specifications are intended for general reference purposes only, as actual equipment and specifications may vary based upon subsequent changes, the contract situation and customer needs. All equipment shall be operated and maintained at all times, in compliance with Transocean standard operating manuals, policies and procedures, and within its stated operational limits or continuous rated capacity, in order to assure maximum operational efficiency.
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