

The "PACIFIC MISTRAL" is an upgraded Samsung 10,000 design dynamically-positioned drillship capable of operating in moderate to harsh environments and water depths up to 3,657 m (12,000 ft) using 18¾" BOP and 21" OD marine drilling riser.



PACIFIC MISTRAL UDW Drillship

GENERAL

Flag:	Liberia
Owner:	Pacific Mistral Ltd.
Year built:	2011
Design:	Samsung 10000 Double Hull
Builder:	Samsung Heavy Industries, South Korea
Classification:	ABS classed: A1, Drilling Unit, AMS, ACCU, DPS-3

OPERATING PARAMETERS

Maximum transit speed:	12 knots
Operating conditions:	Wave: 22 ft Wind: 52 knots
Station-keeping conditions:	Wave: 28 ft Wind: 60 knots
Storm conditions:	Wave: 47 ft Wind: 100 knots
Water depth:	Equipped: 12,000 ft (3,657 m) Maximum: 12,000 ft (3,657 m)
Drilling depth:	Equipped: 35,000 ft (10,668 m) Maximum: 37,500 ft (11,430 m)

MAIN DIMENSIONS / CAPACITIES

Length:	748 ft	228 m
Breadth:	137 ft	42 m
Depth:	62 ft	19 m
Transit draft:	28 ft	8.5 m
Operating draft:	39 ft	12 m
Maximum load displacement:	105,800 ST	96,000 MT
Variable deck load – Operating:	22,046 ST	20,000 MT
Variable deck load – Transit:	18,188 ST	16,500 MT
Variable deck load – Survival:	22,046 ST	20,000 MT
Brine:	5,030 bbls	800 m ³
Base oil:	5,030 bbls	800 m ³
Active mud:	6,290 bbls	1,000 m ³
Reserve mud:	6,290 bbls	1,000 m ³
Liquid (riser) mud:	-	-
Waste mud / reserve mud:	3,000 bbls	478 m ³
Sacks:	10,000 sacks	-
Drill water:	17,612 bbls	2,800 m ³
Potable water:	8,176 bbls	1,300 m ³
HFO / diesel:	47,758 bbls / 3,145 bbls	7,500 m ³ / 500 m ³
Pipe racks:	Storage for 3,000 MT of drill pipe and casing	
Riser storage:	Storage for 134 joints of 90 ft length, with 54" buoyancy	
Well test area:	Storage area aft designed for up to 2,500 MT of well test equipment.	
Helideck:	89 ft Aluminium Pancake Octagon, rated for Chinook	
ROV:	ROV deployed over side, space for one port and one starboard full spreads	
Moonpool:	94 ft x 41 ft (28.8 m x 12.5 m)	
Accommodation:	200 berths	
Burner boom:	1 Each 80 ft Swan neck burner boom installed on aft ship, ship will weather vane	

PACIFIC MISTRAL

UDW Drillship



MACHINERY

Main power:	6 x 7,000 kW Wartsila 16V32/40 720 RPM, each driving one 7,000 kW 11,000 V generators
Power distribution:	11 kV, 440 V, 60 Hz, 3-Phase Drilling Drive System
Emergency power:	1 x 1,350 kW driving 1 x 1,350 kW generator 440 V system
Cranage:	4 x 85 MT electro-hydraulic knuckle-boom cranes at 59 ft radius

STATION-KEEPING

Positioning:	Kongsberg-Simrad System for DP-3 Operations
Propulsion:	6 x 5,500 kW variable speed AC drives
Thrusters:	6 x Rolls Royce Aquamaster fixed pitch Azimuthing in water removable thrusters
Reference system:	Triple redundant DGPS or equivalent; Dual HiPAP hydro acoustic position reference system

DRILLING EQUIPMENT

Note:

Derrick & drilling equipment are outfitted for single drilling activity plus stand-building in auxiliary derrick; 1,000 m tons trip-saver cart installed.

Derrick:	200 ft x 60 ft x 80 ft derrick to handle 135 ft-tubular with 1 x NOV 2,000 kips compensating crown block plus Active Heave Compensator
Draw-works:	1 x NOV SSGD-5750, 2000 kips single speed gear driven by 1,150 HP AC motors with 2" drill line
Rotary:	1 x Varco BJ RST 60.1/2" hydraulic
Top drive:	1 x Hydralift HPS 1000-2E-AC-KT, 2,000 kips
Travelling block:	1 x NOV 2,000 kips, 7 x 72" sheaves
Motion compensator:	1 x NOV CMC-1000-25 with 25 ft max stroke, static load 2,000 kips; compensating load 1,000 kips
Mud pumps:	4 x NOV 14-P-220, 7,500 psi
Cementing unit:	Third Party Services – Schlumberger CPS-665, remote control, LAS
Shale shakers:	7 each VSM 300 shale shakers
Degasser:	2 x NOV D-1000 vacuum degasser + Hampco inline degasser
Centrifuges:	2 x Brandt HS 3,400 centrifuges with 45 HP power pack and control system
Drill-pipe:	10,000 ft 6.5/8" Casing landing string with 6.5/8" FH connections, V-150, 50.41lbs/ft 25,000 ft 5.7/8" Drill string with 585 Turbotorque connections, S-135, 26.30 lbs/ft 10,000 ft 5" Drill string with GPDS50 connections, S-135, 19.50 lbs/ft
Drill-collars / HWDP:	12 x 9 1/2", 30 x 8 1/2", 30 x 6 3/4" / 40 x 5 7/8" HWDP, 40 x 5" HWDP
Pipe handling:	Outfitted to facilitate offline tubular handling with system consisting of: Dual Hydro-Racker System HR-IV (for 3.1/2" to 16" tubulars) 2 x Hydratong MPT-200 (for 3.1/2" to 9.3/4" tool-joints) 1 x NOV MHP-10-15 x 90 Power Mousehole (for max tubular size 15" x 90 ft)

SUBSEA SYSTEMS

BOP:	6 Ram cavities; 2 x NOV-Shaffer NXT 18 3/4" 15k triple; 1 x NOV-Shaffer 18 3/4" 10k annular, GE-Vetco SHD H4 18 3/4" 15k wellhead connector
LMRP:	1 x NOV-Shaffer 18 3/4" 10k annular; GE-Vetco ExF H4 18 3/4" 15k High Angle Release LMRP connector
BOP / Xmas tree handling:	1 x BOP trolley cart rated 420 tons; 2x220 ton BOP gantry crane with dual lifting hoists 2 x Xmas Tree storage skid rated 120 tons; 1x Multipurpose X-mas tree cart and riser hang-off
Control system:	NOV-Shaffer 5 th Gen. Multiplex Control System (for 12,000 ft operations)
Riser details:	NOV-Shaffer 21" OD, 90 ft joints with Class H 3 1/2 M. lbs couplings & 15k 4.1/2" ID C&K lines – 12,000 ft; 54" buoyancy
Choke & kill:	3.1/16" x 15k C&K Manifold H2S Service
Diverter:	NOV-Shaffer 21 1/4" 500 psi CSO for 60 1/2" Rotary table
Riser tensioner:	8 x Dual Wireline 200 kips with 50 ft stroke