

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

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

### OPERATING PARAMETERS

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

### MAIN DIMENSIONS / CAPACITIES

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

# PACIFIC MISTRAL

## UDW Drillship



### MACHINERY

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

### STATION-KEEPING

<b>Positioning:</b>	Kongsberg-Simrad System for DP-3 Operations
<b>Propulsion:</b>	6 x 5,500 kW variable speed AC drives
<b>Thrusters:</b>	6 x Rolls Royce Aquamaster fixed pitch Azimuthing in water removable thrusters
<b>Reference system:</b>	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.*

<b>Derrick:</b>	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
<b>Draw-works:</b>	1 x NOV SSGD-5750, 2000 kips single speed gear driven by 1,150 HP AC motors with 2" drill line
<b>Rotary:</b>	1 x Varco BJ RST 60.1/2" hydraulic
<b>Top drive:</b>	1 x Hydralift HPS 1000-2E-AC-KT, 2,000 kips
<b>Travelling block:</b>	1 x NOV 2,000 kips, 7 x 72" sheaves
<b>Motion compensator:</b>	1 x NOV CMC-1000-25 with 25 ft max stroke, static load 2,000 kips; compensating load 1,000 kips
<b>Mud pumps:</b>	4 x NOV 14-P-220, 7,500 psi
<b>Cementing unit:</b>	Third Party Services – Schlumberger CPS-665, remote control, LAS
<b>Shale shakers:</b>	7 each VSM 300 shale shakers
<b>Degasser:</b>	2 x NOV D-1000 vacuum degasser + Hampco inline degasser
<b>Centrifuges:</b>	2 x Brandt HS 3,400 centrifuges with 45 HP power pack and control system
<b>Drill-pipe:</b>	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
<b>Drill-collars / HWDP:</b>	12 x 9 1/2", 30 x 8 1/4", 30 x 6 3/4" / 40 x 5 7/8" HWDP, 40 x 5" HWDP
<b>Pipe handling:</b>	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

<b>BOP:</b>	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
<b>LMRP:</b>	1 x NOV-Shaffer 18 3/4" 10k annular; GE-Vetco ExF H4 18 3/4" 15k High Angle Release LMRP connector
<b>BOP / Xmas tree handling:</b>	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
<b>Control system:</b>	NOV-Shaffer 5 <sup>th</sup> Gen. Multiplex Control System (for 12,000 ft operations)
<b>Riser details:</b>	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
<b>Choke &amp; kill:</b>	3.1/16" x 15k C&K Manifold H2S Service
<b>Diverter:</b>	NOV-Shaffer 21 1/4" 500 psi CSO for 60 1/2" Rotary table
<b>Riser tensioner:</b>	8 x Dual Wireline 200 kips with 50 ft stroke