



EDRILL-3 is a self-erecting, semi-tender assist, drilling rig combining a high specification drilling equipment set (DES) with an upsized, deep-draft four column, semi-submersible vessel. The DES is handled in eight (8) lifts to reduce rig move times and the high capacity semi-tender rig effectively supports batch drilling and completions with offline casing, tubing, and drillpipe stand building. EDRILL-3 is "best in class" for severe metocean conditions and is well suited for deep-water production drilling from tension leg platforms, compliant towers, and trussed spars offshore South East Asia, Western Australia, West Africa, Gulf of Mexico or Brazil.

For further information call +65 6222 8370 or visit [www.edrill.com](http://www.edrill.com)

Key features that differentiate EDRILL-3 are:

- 170 person accommodation in 1 & 2-man cabins w/- own bathrooms. 10 offices with 6 dedicated to service companies.
- PC-400 main crane rated to 400MT at 20m working radius in 1.0m significant wave heights. SW ballasting to maximum draft reduces vessel motion during heavy lifts. Can also handle operator's construction heavy lifting.
- Main crane capable of self-erecting the D.E.S package onto TLP's with skid beams at 40m (130ft) above mean sea level.
- D.E.S. dry weight minimized to 860MT while maintaining a 454MT Hookload rating.
- D.E.S. heavy lifts reduced to eight (8) total for safe and efficient rig moves.
- Large 3,250m<sup>2</sup> pipe deck area eliminates DES load-out space constraints and offers ample space for drilling supplies as well as specialized well stimulation, acidization, sand control and frac pumping equipment.
- Setback rated to 545MT for 6,000m of 5-7/8" DP and 4,700m of 9-5/8" casing or other tubular combinations.
- NOV TDS-8SA top drive with 65,000 ft-lbs continuous and 92,000 ft-lbs of intermittent drilling torque.
- 186ft clear-height Aker bootstrap mast for simultaneously racking quadruples of drill pipe along with triples of casing.
- Offline Activity Cantilever handles 2-7/8" to 9-5/8" tubulars at the lower racking board while drilling or tripping.
- Four (4) each 1,600HP Lewco W1712 mud pumps rated to 7,500psi WP.
- 8,800 bbls mud & brine storage with separate mixing systems. High volume for lost returns / well control situations.
- Mooring system with 2,100m anchor wires for 350m water depths. 84mm wires have a Nominal Breaking Strength of 611MT.
- Primary and secondary hawser winches for coupling to TLP's or SPAR's with pre-laid mooring in water depths up to 2,133m (7,000ft). 76mm hawser wires have a Nominal Breaking Strength of 535MT.
- High holding power 12MT Vryhof Stevpris anchors. No piggybacks or ground tackle required. Less time with AHV's.
- Helideck rated for Sikorsky S92 and S61 helicopters in full compliance with CAP437 requirements.
- GE-Hydril 10M - DRBOP with 19" bonnets to shear 5-7/8" S-135 grade 26.3lbs/ft drill pipe.

## Specifications

- Year / Yard Built: Newbuild / COSCO (Guandong) Shipyard Co., Ltd. China
- Design: GustoMSC Ocean400-TD

## Regulatory

- Registration: Singapore
- Classification: ABS +A1 Column Stabilized Drilling Unit, Drilling Tender, CSC, Helidk, GP
- Approval: 'Statement-of-Fact' for IMO MODU Code 1989 for the Construction and Equipment, Resolution A.649 (16)  
International Convention for the Safety of Life at Sea of 1974 (SOLAS 1974) including all Amendments up to the Protocol of 1988.





## Principal Dimensions

- Length overall: 101.0m (331.38 feet)
- Length of Main Deck: 83.50m (273.96 feet)
- Width of Main Deck: 63.00m (206.70 feet)
- Depth to Main Deck: 31.0m (101.71 feet)
- D.E.S. Dry Weight: 860MT, excluding 3<sup>rd</sup> party equipment







## Power

- Main Power Plant: 6 each, Caterpillar model 3516C HD DITA diesel engines & each running a 2,150kVA Kato model 6P6.6-3200 generator. Total output 9,180kW.
- Emergency Power: 1 each, Caterpillar model 3512B turbo-charged diesel engine & running a 1,250kVA Kato model 6P6.6-2150 generator.
- Power Distribution: The LTI 600V VFD Switchboard supplies power to the AC Drawworks, Top Drive System (via the bow junction box), AC Mud Pumps and Watermaker Booster Heaters. It also supplies power to two 2,500kVA transformers which step down the voltage to 480V and feed the 480V Main Switchboard, which is the primary source of 480V power on the EDRILL-3.









**Draft / Displacement**

 Operating Draft:	13.0m to 18.0m	(42.65ft and 59.06ft)
 Operating Displacement:	26,800 to 31,100MT	
 Transit / Survival Draft:	7.2m / 11.0m	(23.6ft / 36.09ft)
 Lightship Draft:	2.6m	(8.5ft)



















**Operating Parameter**

 Water depth:	9m to 350m - 2,000m w/ pre-laid mooring	(29.5ft to 1,150ft)
 Drilling depth:	9,000m	(29,500ft)
 Towing speed:	5knots with tugboat	
 Survival condition:	70knots wind, 8.6m wave height and 4.0knots surface current	
 Operating condition:	50knots wind, 5.6m wave height and 3.3knots surface current	
 Design temperature:	Range between 0°C and 40°C	(32°F and 104°F)






**Capacities**

 Variable Load:	6,300MT		
 Pipe Rack Area:	1,800m <sup>2</sup>	(19,377ft <sup>2</sup> )	– 1,600 metric tons
 Mud Tanks Total Capacity:	1,400m <sup>3</sup>	(8,800bbls)	– total for active, reserve & slug pits (16 tanks)
 Active / Reserve Mud Pits:	955m <sup>3</sup>	(6,000bbls)	– 10 tanks consisting of active (4) & reserve (6) pits
 Active / Reserve Brine Pits:	382m <sup>3</sup>	(2,400bbls)	– 4 tanks consisting of active (2) & reserve (2) pits
 Slug Pits:	63m <sup>3</sup>	(395bbls)	– consisting of two Slug pits
 Trip Tank:	12.7m <sup>3</sup>	(80bbls)	– partitioned into 2 x 40bbls compartments
 Brine Storage:	382m <sup>3</sup>	(2,400bbls)	
 Drilling Fluid Base Oil:	616m <sup>3</sup>	(3,868bbls)	
 Bulk Mud / Bentonite:	198.30m <sup>3</sup>	(7,000ft <sup>3</sup> )	– consisting of four P-tanks
 Bulk Cement:	226.63m <sup>3</sup>	(8,000ft <sup>3</sup> )	– consisting of four P-tanks
 Sack Materials:	9,000 sacks plus 100 drums of chemical		
 Drilling Water:	2,286m <sup>3</sup>	(14,400bbls)	
 Potable Water:	1,040m <sup>3</sup>	(6,540bbls)	
 Fuel Oil:	1,700m <sup>3</sup>	(10,706bbls)	

**Drilling Equipment**






 Derrick:	1 each, Aker Solutions Quad Bootstrap Mast, 186ft clear height & 1,330,000lbs GNC.
 Substructure:	1 lot, Aker Solutions combined 1,000,000lbs static hookload and 1,200,000lbs setback. (Masterskids accommodate WHP with cap beams spacing of 30ft to 65ft)
 Crown Block:	1 each, Aker 500MT, 6 x 60" Cluster, 1 x 60" Fastline and 1 x 42" Deadline sheaves.
 Drawworks:	1 each, LTI model LDW-1000k 3,000HP. Dynamic brake system for ROP of 4,000ft/hr.
 Drilling Line:	1 drum, 1.1/2" diameter x 7,500ft, 6x19 IWRC, EIPS.
 Top Drive System:	1 each, AC Top Drive System NOV model TDS-8SA rated 750MT.
 Travelling Block:	1 each, LTI model TB-500 with 6 x 60" Sheaves rated 500MT.
 Power Tong For Rig Floor:	1 each, Hawk Ind. model 100K-2GSR Power Tong, 100,000lbs torque.
 Rotary Table:	1 each, LTI model LH495 with 49-1/2" opening and rated 650MT, with 49-1/2" - 37-1/2" adapter and bushing.
 Cement Unit:	Operator supplied. Space and services provided.
 Mud Pump:	4 each, Lewco model W-1712, Triplex, 1,600Hp, 120SPM and 7,500psi WP.
 Shale Shakers:	5 each, Brandt VSM300 Shale Shaker with Integral Scalping Deck.
 Degasser:	1 each, M-I Swaco model CD-1400 Hurricane with 25Hp Blower, 1400GPM.
 Desilter:	1 each, Brandt SE-24 w/- 24 x 4" Hydro-cyclones, rated at 1,440 GPM.
 Mud Centrifuge:	Operator supplied. Space and services provided for 3 units.
 Drill Collar:	10jts x 8" OD x 150lb/ft, DCs and 15jts x 7" OD x 110lb/ft. DCs.
 Heavy Weight Drill Pipe:	45jts of 5-7/8" OD, 61.6lb/ft with 7" OD X 4" ID Tool Joint and DS-55 conn.
 Drill Pipe:	20,000ft of 5-7/8" OD, S-135, 23.4lb/ft, with 7" OD X 4" ID Tool Joint and DS-55 conn, R2.

**Offline Activities Cantilever**




 OAC Crane:	1 each, X-Y Gantry, 12,000lbs SWL.
 Power Tong For OAC:	1 each, Hawk Ind. model 100K-2GSR Power Tong, 100,000lbs torque.
 Offline Cementing:	Yes.
 Offline E-line Logging:	Available.
 Offline Coiled Tubing:	Available.

**B.O.P. Equipment**












BOP's manufactured to API 16A and NACE standard MR-01-75

	Annular BOPs:	1 each, 21-1/4" 2,000psi WP, GE-Hydril Style 'MSP', API 6A with H <sub>2</sub> S trim. 1 each, 13-5/8" 5,000psi WP, GE-Hydril Style 'GX', API 16A, NACE.
	RAM BOPs:	2 each, 21-1/4" 2,000psi WP, GE-Hydril, Single, API 16A with H <sub>2</sub> S trim. 1 each, 13-5/8" 10,000psi WP, GE-Hydril Single, API 16A, NACE. 1 each, 13-5/8" 10,000psi WP, GE-Hydril Double, API 16A, NACE. (4 RAMs 13-5/8" BOP configuration can be provided at request)
	BOP Handling System:	1 lot, Under rig floor mounted BOP handling trolley with 75MT SWL. (Capable of handling 13.5/8", 16.3/4" 18.3/4", 21.1/4" & 29.1/2" BOP stacks)
	BOP Control System:	1 each, CAD Controls hydraulic control unit. Unit can upsize capacity for a 18-3/4" 10K BOP stack.
	Mud / Gas Separator:	1 each, 48" OD x 22ft high with 14ft mud seal and 8" vent line discharge above crown.

**Station Keeping**

	Anchor Winches:	4 each, Skagit Smatco Model TMW-331 electrically powered Traction Winches, with storage drums for storing 2,100m wire rope each.
	Anchor Wires:	8 each, 84mm OD x 2,100m 6 x 36(WS), IWRC, XTC Compacted, RHRL/LHRL, galvanized steel wire rope. One spare anchor wire provided.
	Anchors:	8 each, 12MT, MK5 Vryhof Stevpris type. One spare anchor provided.

**Auxiliary Equipment & Features**

	Accommodation:	170 man in 1-man and 2-man cabins and each with their own bathroom.
	Main Crane:	1 each, Favelle Favco Crane model PC-400, diesel powered, pedestal mounted with 170ft boom and rated 400MT at 20m working radius at 1.0m significant wave height.
	Deck Crane:	1 each, Favelle Favco Crane model 7.5/10K, diesel powered, pedestal mounted with 135ft boom and rated 44MT at 12m working radius.
	Helideck:	1 each, Designed for Sikorsky S-92A and S-61 helicopters. CAP-437 compliant.
	External Communication:	1 set, Sailor 250 FleetBroadBand multi-station, voice and data transmission. 1 lot, HF/SSB, VHF AM Ground Air, and VHF FM Marine radio transceivers.
	Internal Communication:	1 lot, Gaitronics Page/Multi Party Communication System.
	Drilling Instrumentation:	1 lot, M/D Totco RigSense System with purged control/monitoring display consoles.
	Lifesaving Equipment:	4 each, 85man, Neptune Fully Enclosed Survival Craft for 200% POB capacity.
	Maintenance System:	1 lot, Computerised SIS 'Star PMS' maintenance, inventory and purchasing system.
	Platform Transfer Bridge:	1 each, Forum Personnel Transfer Bridge between the semi-tender and drilling platform.
	Fresh Water Generators:	1 each, Alfa-Laval Dolphin 70, rated capacity 70m <sup>3</sup> /day. 1 each, Alfa Laval VVC Orca 50, rated capacity 50m <sup>3</sup> /day.