

FRIGSTAD D90™

Mk3



GREEN RIG / HYBRID / DP + MOORED / 14,000 FT WD / 20K BOP

FRIGSTAD D90 Mk3**REGULATORY BODY APPROVALS**

SOLAS 2008, MARPOL 1973/78, IMO MODU CODE 2009, all with latest amendments

CLASSIFICATION

DNVGL ✱ 1A1 COLUMN STABILIZED DRILLING UNIT, DYNPOS AUTRO ER, POSMOR ATA, R, CRANE OFFSHORE (N), HELDK SH (N), ECO, WINTERIZED BASIC -15°C, BWM T, DRILL (N), DRILL (US), BIS, CLEAN DESIGN, VIBR, COMF-MOU, RECYCLABLE, ISDS, F AM, BATTERY (POWER), (OTG13&14 Compliant)

ENVIRONMENTAL OPERATING LIMITS

Maximum Wind Velocity (Op./Surv.)	70 knots/100 knots	Air Gap (Operational Min/Max)	12/15m (39.37/49.21 ft)
Wave height Hs / Hmax	17.4 m/36.89 m (57.09/121.03 ft)	Air Gap (Survival)	16.5 m (54.13 ft)

PRINCIPAL PARTICULARS

Length of pontoons	130 m (426.51 ft)	Displacement (Operational)	113,301 t (124,893 st)
Breadth & Length, Pipe Rack deck	99.5x93.0 m (326.4 x 305.1ft)	Displacement (Survival)	105,027 t (115,773 st)
Height to Pipe Rack Deck (ABL)	50.3 m (165.02 ft)	Displacement (Transit)	86,592 t (95,451 st)
Draft (Operational Min/Max)	25.3/28.3 m (83.0/92.85 ft)	Water depth (max)	14,000 ft (4,267 m)
Draft (Survival)	23.8m (78.1ft)	Drilling depth (max)	70,000 ft (21,336 m)

STORAGE CAPACITIES

Bulk Mud	706.4m³ (24,946 ft³)	Drill Water	6,135 m³ (38,588 bbls)
Bulk Cement	706.4m³ (24,946 ft³)	Potable Water	2,147 m³ (13,504 bbls)
Sack Material	9,000 sacks	Open Pipe Rack Deck Area	4,916 m² (52,915 ft²)
Base Oil	1,062 m³ (6,680 bbls)	Cuttings	600 m³ (21,188 ft³)
Liquid Mud / Brine, Upper Hull	1,862 m³ (11,712 bbls)	Variable Deck Load (max oper.)	13,700 t (15,102 st)
Liquid Mud / Brine, Pontoon	2,946 m³ (18,530 bbls)	Variable Deck Load (max transit)	9,500 t (10,472 st)
Diesel Fuel Oil / Urea	10,180/510 m³ (64,030/3,208 bbls)	Payload (max operational)	25,238 t (27,820 st)

ACCOMODATION / OFFICE

Total capacity of 200 person with all single person bedrooms with daylight windows. Large office spaces and service facilities.

MATERIAL HANDLING

Cranes	Two (2) 150 t Deck Cranes. w/62m (203ft) Booms. Two (2) 70 t Gantry Cranes for handling tubulars, marine risers and slipjoints.
Cargo Handling and Logistics	Two (2) 6 t cargo elevators & several forklifts to service all deck levels. Forklift "Highways" on / inside all deck levels.

MARITIME SYSTEMS

Power Generation / Hybrid	Eight (8) Main Engines, (Fixed or Variable speed) each with 11,25 kW output capacity. Total installed power is approx. 90,00 kW, (128,000 BHP) excluding battery. Battery Bank for power, peak shaving and emergency use 9 MW(2X4,5MW - 10 min)
Power Distribution	MV DC 4,4 kV or 11 kV AC main switchboards 60 Hz. Closed Ring, Hybrid system.
Thrusters	Ten (10) 7.5 MW Fixed Pitch VFD Azimuth Thrusters, tilted.
Dynamic positioning	Dynamic positioning DYNPOS AUTRO with ER. (Kongsberg DP4, dual redundancy)
Mooring System	Four (4) triple drum wire mooring winches with 600 meters of 83 mm wire and twelve (12) fairleads for connecting to preset mooring system (POSMOOR-ATA,R)

DRILLING SYSTEMS

Drilling Rig	2x1,500 st Dual Drilling Cylinder Rig with full handling capabilities. Each rig have 1,500 st in elevator. Vertical setback for 70,000 ft quadruple drill string / casing in triple stands and 12,000 ft of Riser (130 ft stands).
Rotary Table	Two (2) 75.5" rotary with independent drive.
Top Drives	Two (2) top drives, each with 1,500 st Hook load. Continuous drilling torque 105,000 ft lbs
Riser Tensioning System	Six (6) hydraulic cylinders riser tensioner mounted on skid system 4,800,000 lbs tensioning capacity. Skidable w/ full hook load.
BOP and Riser	BOP: Two (2) 18 3/4" 20K, 8 cavities capable 65 ft Riser Joints. 12,000 ft (93x130 ft stands) in vertical setback + 2,000 ft in piperack.
Drill String	Wired drill strings with subs, drill collars, heavy weight drill pipes. (Owner spec.)

DRILLING FLUID SYSTEMS

Mud Pumps and Treatment System	Five (5) Main Mud Pumps, Triplex, 2,200 HP, 10,000 psi wp. Eight (8) triple deck multi-screen shakers, two (2) desilters, two (2) centrifuges, one (1) gumbo conveyer, two (2) degasser units and two (2) 60 bbls trip tanks. Storage of 600 m³ cuttings in columns with direct off-loading to supply vessels through dedicated bulk hoses.
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OTHER

Helicopter Deck Capacity	Designed for Sikorsky S61/S92, M18 and EH 101 aircraft. (15.6 t) Latest CAP 437 regulations. Parking area for 2nd Helicopter.
Life Saving Equipment	Six (6) free-fall lifeboats with total capacity of 420 person (98 kg, 21" seats). Sixteen (16) inflatable life rafts with capacity of 25 persons each. One (1) fast rescue boat.

Note: The details included in this specification are subject to change without notification. Options available.

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FRIGSTAD ENGINEERING LTD, Airanthi Court, 50 Ayias Zonis Street, Limassol CY-3090, Cyprus, Phone: +357 2534 4245

FRIGSTAD ENGINEERING (SINGAPORE) PTE LTD, 15 Queen Street, Tan Chong Tower #04-01, 188537 Singapore, Phone: +65 6349 0082

FRIGSTAD ENGINEERING (NORWAY) AS, Rådhusgata 3, 4611 Kristiansand, Norway, Phone: +47 38 70 83 40

FRIGSTAD ENGINEERING BRAZIL LTDA, Praia de Botafogo 501, Sala 202A, Rio de Janeiro 22250-040, Brasil, Phone: +55 21 25 46 99 79