

FRIGSTAD D90 SEMI-SUBMERSIBLE DRILLING UNIT



Frigstad D90 is an ultra deepwater drilling unit built by CIMC Raffles. It is able to operate in water depth of 3,658m, and drilling depth up to 15,250m. It is designed with dual hoisting tower and facilities with DP3 system and preliminary mooring

position system. It will provide accommodation for 200 POB. D90 can operate in 95% deepwater areas all over the world, including the Gulf of Mexico, West Africa, South Atlantic, Asia, Australia, etc.

FRIGSTAD D90

SEMI-SUBMERSIBLE DRILLING UNIT

GENERAL

Class:DNV
 Notation: ✖1A1,Column Stabilized Drilling Unit,
 DYNPOS AUTRO(DP3),POSMOOR
 ATA,CRANE,HELDK-SH,ECO,F-AM,DRILL,BWM-T

PRINCIPAL DIMENSIONS

| | |
|-------------------------|----------------|
| Overall | |
| LOA(pontoon) | :117m |
| Beam overfall | :92.7m |
| Height(BL to main deck) | :36.3m |
| Main pontoon (2 off) | |
| Length | :117m |
| Width | :18.5m |
| Depth | :12.5m |
| Column (4 off) | :18.5*18.5*22m |
| Deck box | |
| Length | :81m |
| Width | :89m |
| Draft | |
| Operation draft | :24m |
| Survival draft | :18m |
| Transit draft | :12.1m |

DESIGN ENVIRONMENT

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|--------------------------------|--------------|
| Survival condition wind speed | :54.5m/s |
| Operation condition wind speed | :36m/s |
| Damaged condition wind speed | :25.7m/s |
| Sea water temperature | :0°C to 32°C |
| Outside air temperature | :0°C to 40°C |
| Structure design temperature | :-20°C |

OPERATION AREA

World wide area exclude winter of North Sea

DRILLING CAPACITY

| | |
|----------------|--------------|
| Water depth | :3658m(Max.) |
| Drilling depth | :15250m |

VARIABLE DECK LOADS

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| Operation | :10000Tonnes |
| Transit | :6700Tonnes |

TANK CAPACITY

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|----------------------------|---------------------|
| Bulk barite/ tank | :440m ³ |
| Bulk cement tank | :440m ³ |
| Liquid mud/brine | :3866m ³ |
| Base oil tank | :640m ³ |
| Drilling water tank | :4795m ³ |
| Potable water storage tank | :1256m ³ |
| Fuel oil tank | :4924m ³ |

DRILLING PACKAG (NOV)

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|------------------------|--|
| Derrick | :Dual Hoisting Tower (DHT),type HLR-1250/48,1250/48 |
| Rotary table | :2×RST 75 1/2" Rotary Support Table |
| Top drive | :2×TDX-1250,2×1340 HP motor |
| Hoisting | :2×CHR 1250-48 |
| Catwalk | :2×CWM-PR45-50-HS |
| Fingerboards | :drill pipe stands 135 ft,casing stands of 120 ft |
| Bellyboard | :Foldable Manual Bellyboard with 111 stands of 3 1/2" production string |
| Vertical column racker | :2×HR-LV ER Gripper head for 3 1/2" - 13 5/8" Lower guide head for 2 7/8" -14" |
| Diverter | :2×75.38" Diverter |
| BOP handling | :2×275m SWL BOP Crane 660mT SWL BOP Trolley |
| XMT handling | :120mT SWL X-Mas Tree Trolley 2×60mT SWL X-Mas Crane |
| Iron roughneck | :2×Type MPT-200 for handing of 2 7/8 "to 9 3/4" ,max break out 200.000Nm, make up 140,000Nm |
| Riser tensioner | :Model:N-line Riser tensioner, 6 midstroke of 4800 kips,15.2m |
| Knuckleboom crane | :2×model PC2201KCE(6-14)-(29-17)(17) |
| Riser gantry crane | :Model:GC40 Riser Gantry |
| Crane(SWL50mT) | |
| Hp mud pump | :4 off 14-P-220 HP Mud Pump AC |

BOP/WELL CONTROL (NOV)

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|-----|-----------------------------|
| Bop | :Shaffer 18-3/4" 15,000 psi |
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HELIDECK (Aluminum Offshore)

1×Helideck suitable for sikotsky s-61n,super puma , sikorsky s92

ACCOMMODATION (Staco)

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| LQ capacity | :200 persons |
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MAIN POWER SYSTEM (Wartsila)

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| Main generator set | :8×5530kWe@720rpm |
| Emergency generator | :2×5530kWe(act by two Main generator set) |

THRUSTER (Wartsila-Lips)

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| Thruster | :8×4500kW azimuth thruster |
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MAIN CRANE (Liebherr)

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|-----------------|---|
| Main deck crane | :2-100T SWL with 57m Max.Radius and Auxiliary hoist with 62m outreach @15 |
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ANCHOR & Mooring SYSTEM (NOV-BLM)

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| Mooring lines | :8*83mm with MBL600T |
| Mooring winches | :4xdouble drum winches |