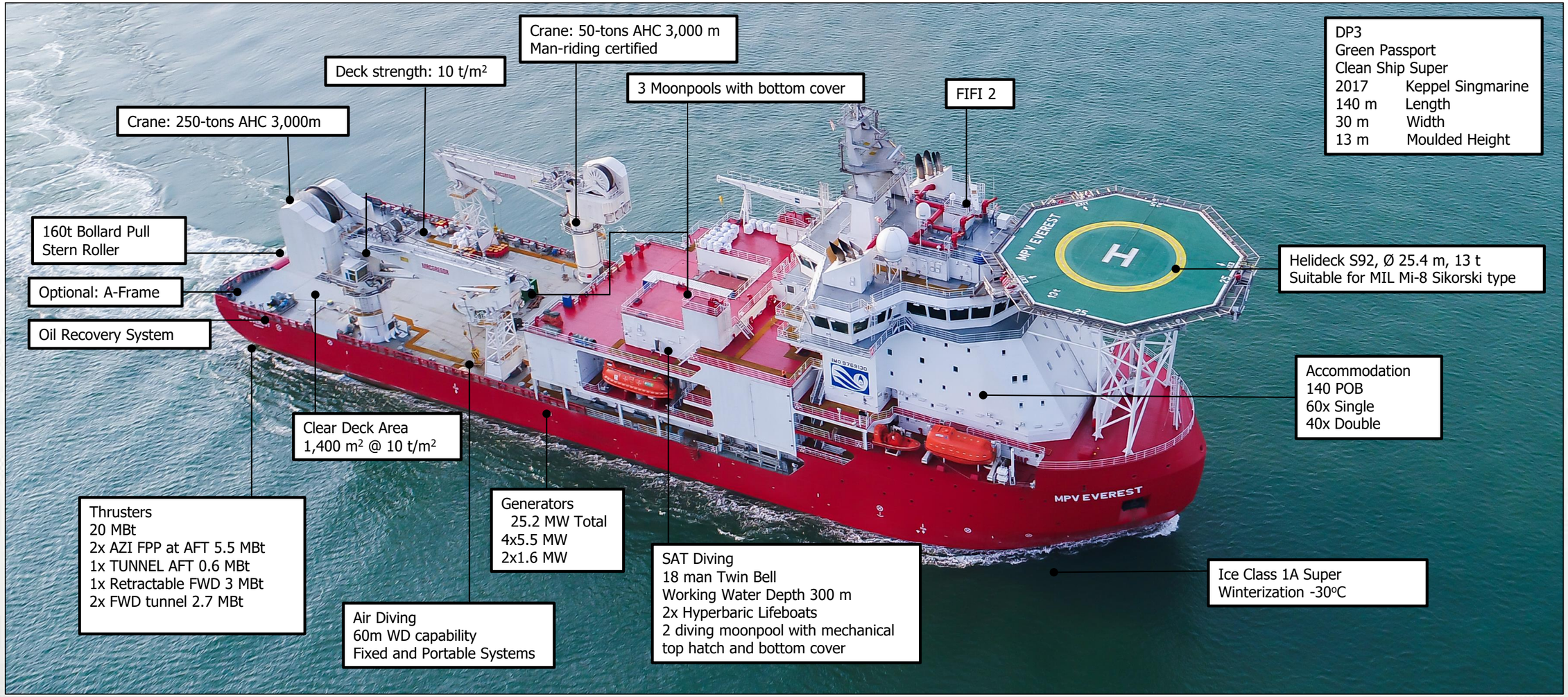
Multi-Purpose Ice Class Construction Vessel

EVEREST

Continues to work safely where others have to stop

mcs
MARITIME CONSTRUCTION SERVICES

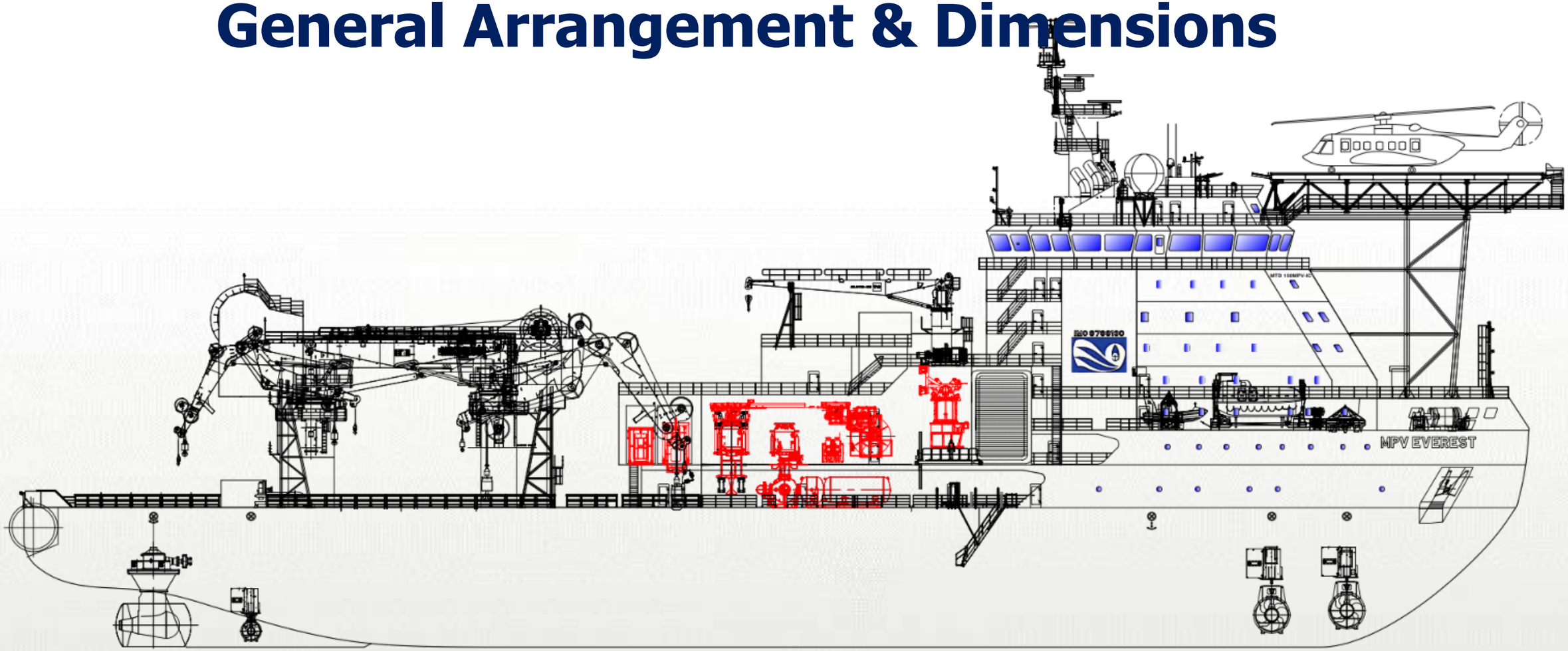
General Introduction



The DP3 1A Super ice class multipurpose vessel EVEREST is capable of handling the severest Arctic conditions. **Built to the latest standards this state-of-the-art vessel continues to work safely where other vessels have to stop.** The EVEREST has been designed to execute:

- ✓ Saturation & Air Diving
- ✓ ROV Support
- ✓ IRM / IRRM and SURF Installation
- ✓ Light & Medium Construction
- ✓ Oil Recovery
- ✓ Geophysical Survey
- ✓ Ice navigation
- ✓ Umbilical & Cable Installation
- ✓ Deepwater Intervention
- ✓ Light Well Intervention
- ✓ Trenching and burial of pipelines and cables
- ✓ Accommodation services
- ✓ Arctic and Antarctic Research
- ✓ Pipelay (Rigid/Flexibles)

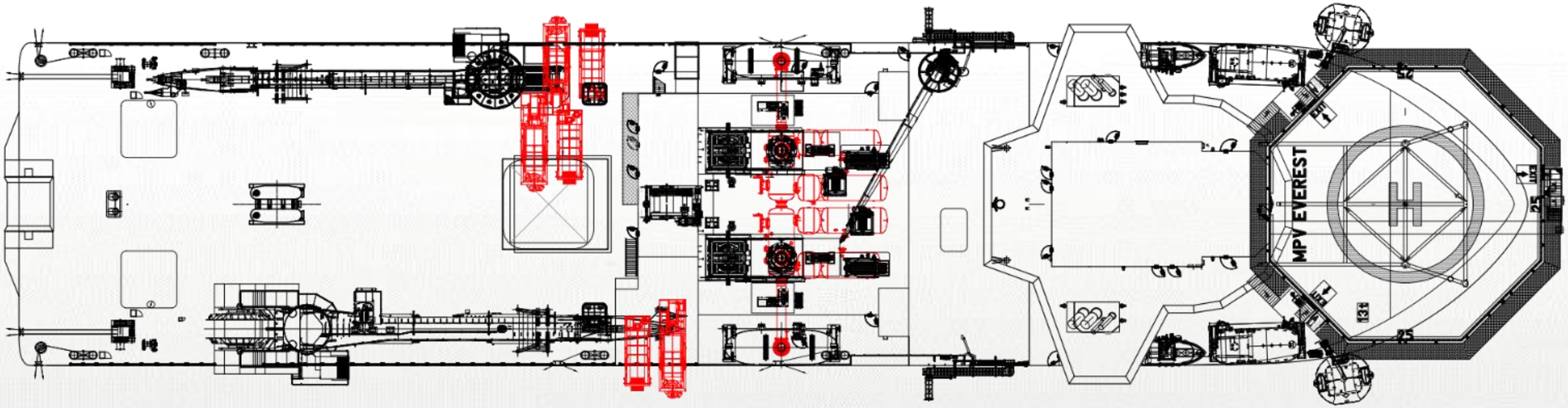
General Arrangement & Dimensions



Vessel name	MPV Everest
Type	Ice Class Multipurpose Construction Vessel
Year of production	2017
Builder	Keppel Singmarine Pte Ltd
Length x width x height	140 x 30 x 13 m
Draft summer	8.2 m
Draft scantling	8.7 m
Register tonnage	30,000 t
Fuel consumption in DP3	25 to 35 ton / day

Accommodation	140 personnel / 100 cabins
Deadweight @ 8.2m draft	7,200 t
Max design speed	13.5 knots
Economic design speed	12 knots
Bollard Pull	162 t
Endurance	50 day
Fuel Oil	4,960 m^3
Helideck	∅ 25.4 m, 13 t, Suitable for MILMi-8 Sikorski type

Class



BV
- 1✠HULL ✠MACH, Diving support-integrated DD SD, Fire fighting ship 2, Oil recovery ship, Special service Multi-Purpose Support Vessel, Multi-Purpose Support Vessel SP140 -heavycargo (main deck 98.1 kN/m2), Unrestricted Navigation, ACCOMMODATION, COMF-NOISE3, COMF-VIB3, ✠AUT-UMS, ✠SYS-NEQ-1, GREEN PASSPORT, CLEANSHIP SUPER (BWT, OWS-5ppm, NDO-15 days), ICE CLASS 1A SUPER, ✠ALM, ✠HEL, INWATERSURVEY, ✠DYNPOS AM/AT RS, SDS, COLD (H-30, E-30), SPS

RMRS
- KM ⍟, AUT1, OMBO, DYNPOS-3, ANTI-ICE, ECO-S, HELIDECK, WINTERIZATION (-30), Special Purpose Ship

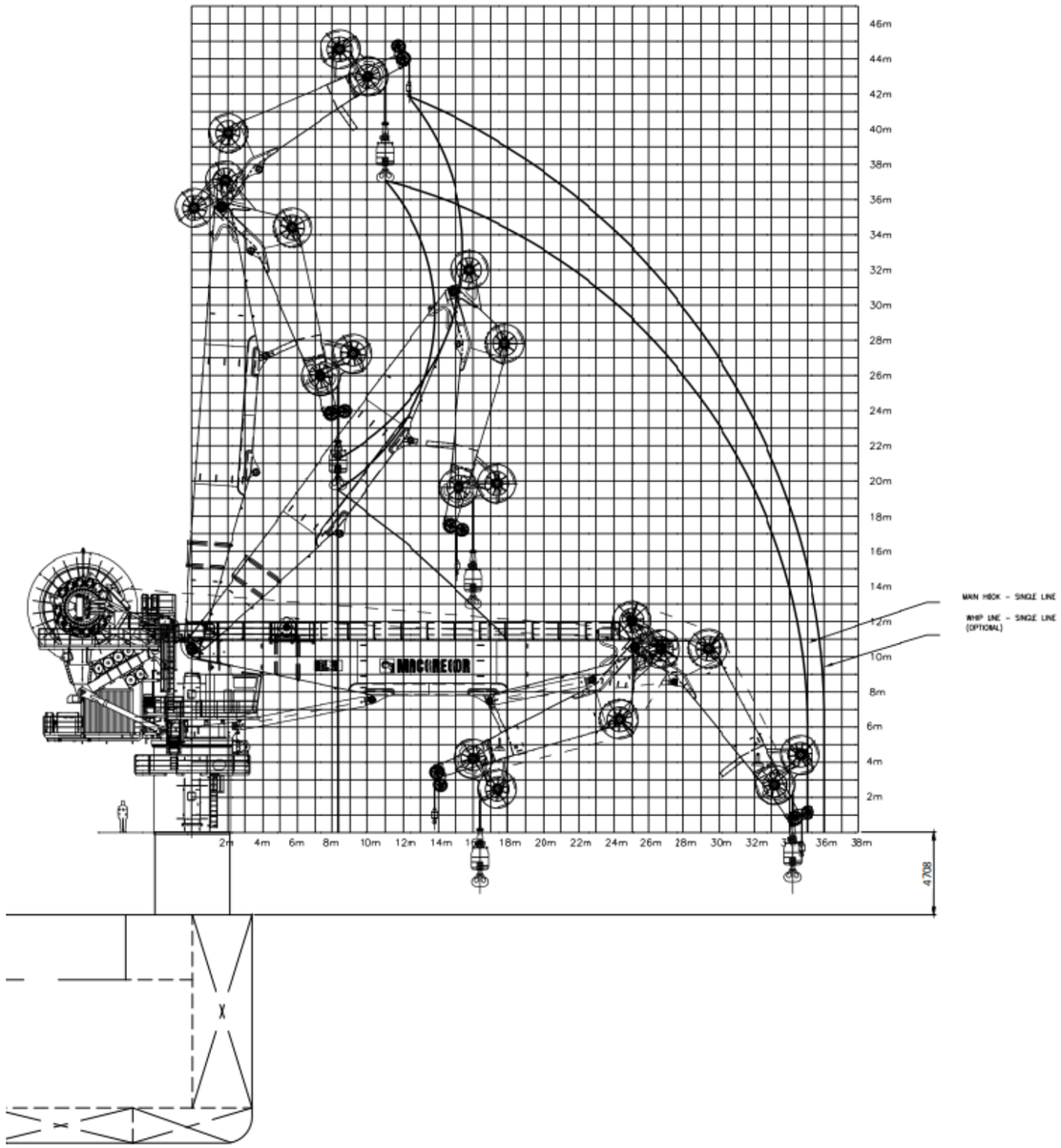
Deck Area

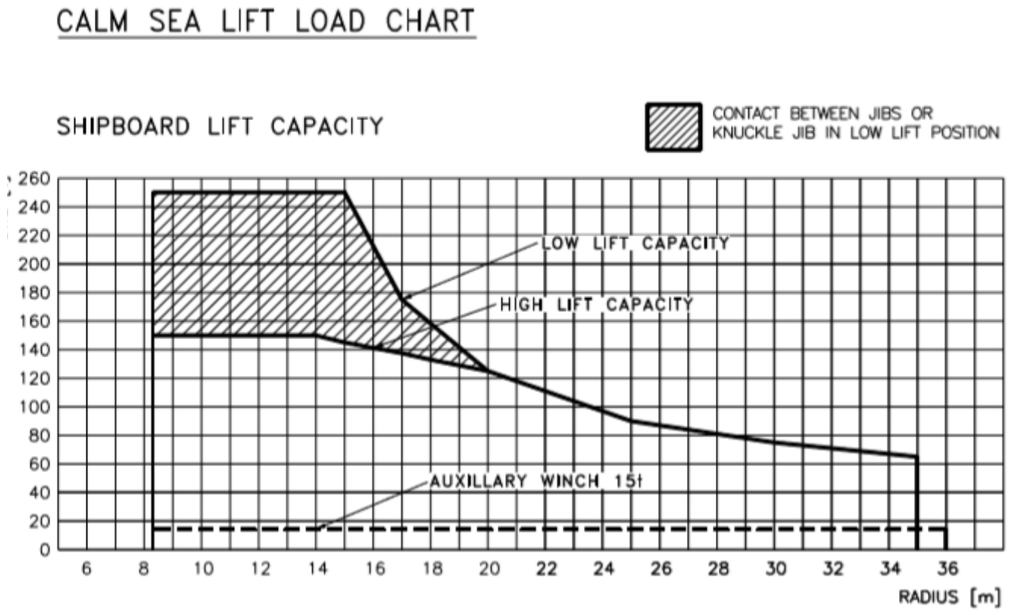
Clear Deck Area	1,400 m^2
Deck strength	10 t/m^2
Deck Cargo (VCG 2 m abovedeck)	4,500 mt
Moonpool	7.2 m x 7.2 m with hydraulic bottom cover

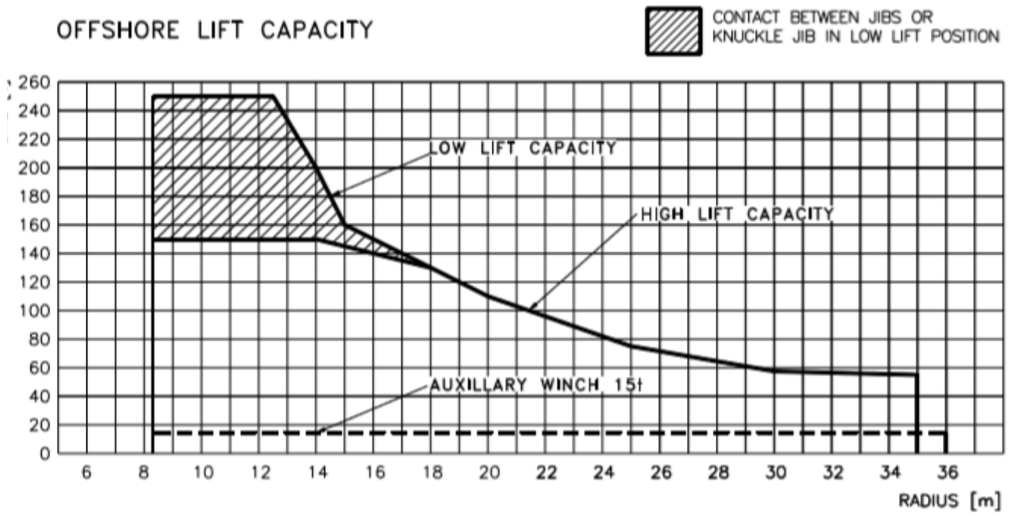
Cranes

250-tons	MacGregor Offshore Knuckle Jib Crane HMC 4240 LKO 650-35 (2500-15) knuckle boom crane for 3,000 m with Active Heave Compensation (AHC), 250 mT @ 12,5m, 55 mT @ 35m
50-tons	MacGregor Offshore Knuckle Jib Crane HMC 3293 LKO 250-30 (500-18) AHC 3,000 m, 50 mT @ 16 m, 20 mT @ 30 m, man-riding certified
Provision crane	Deck-loaded marine crane, 10 mT under the safe working capacity with the boom length 15 m
Travelling bridge crane	2 traveling bridge cranes, 1 mT under the safe working capacity with the boom length 15 m

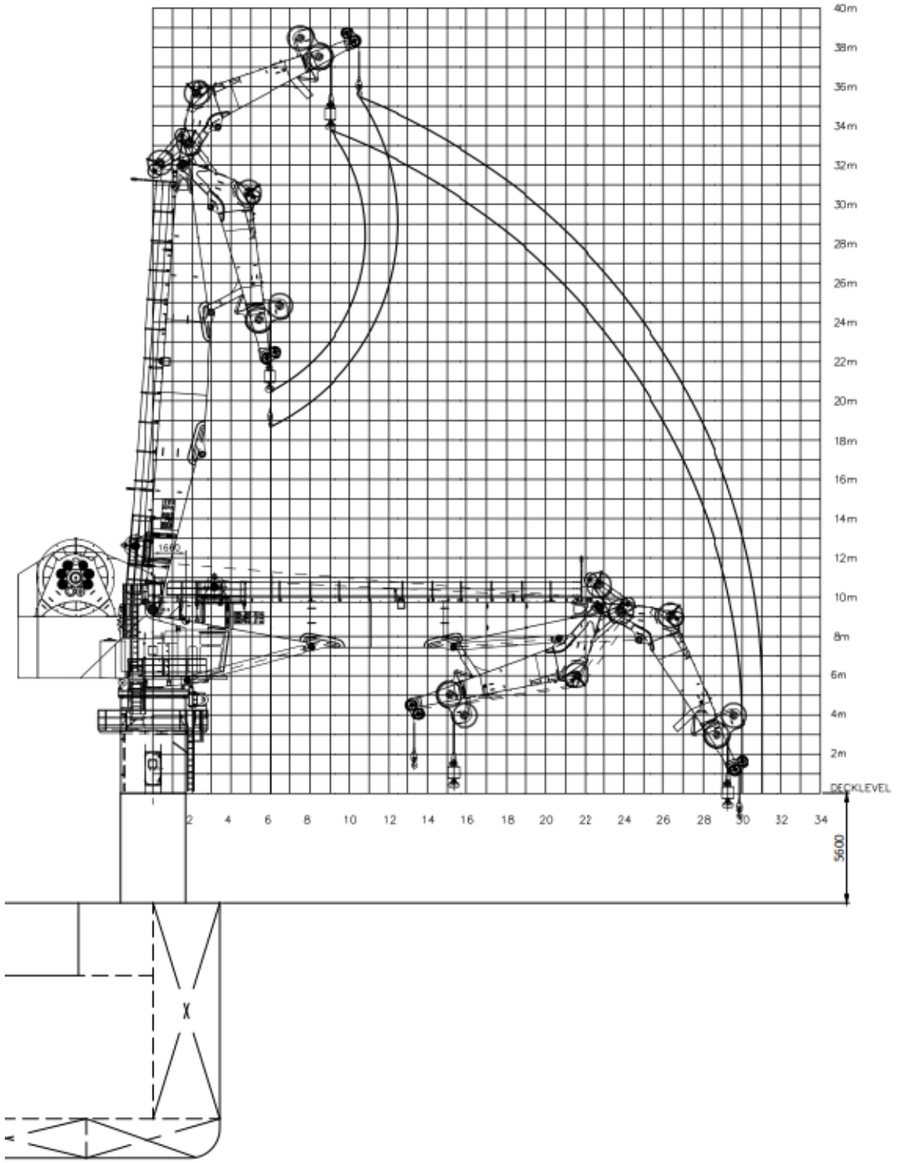
250 mT Main Crane Capacity Chart

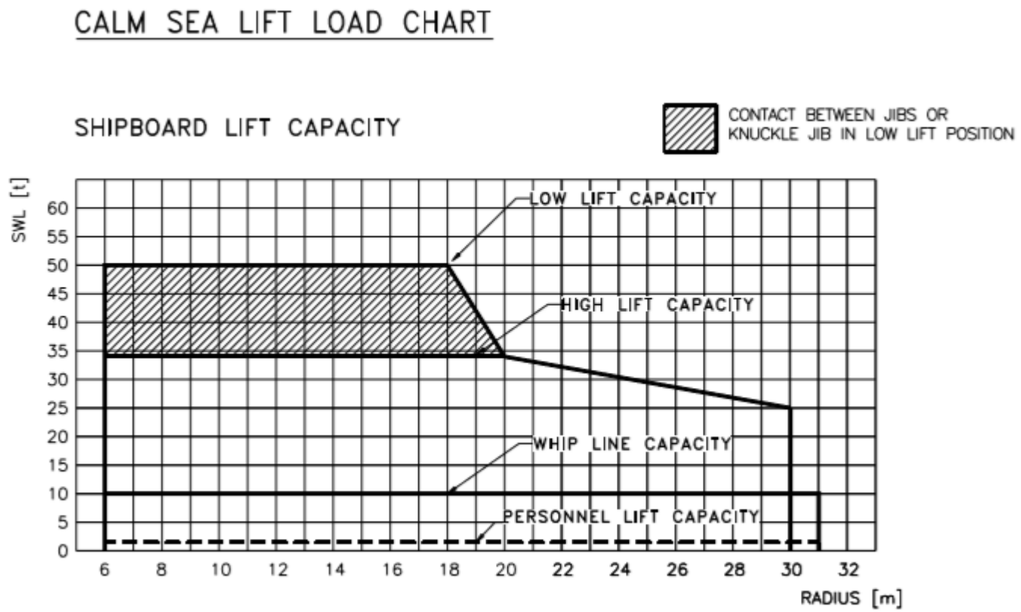


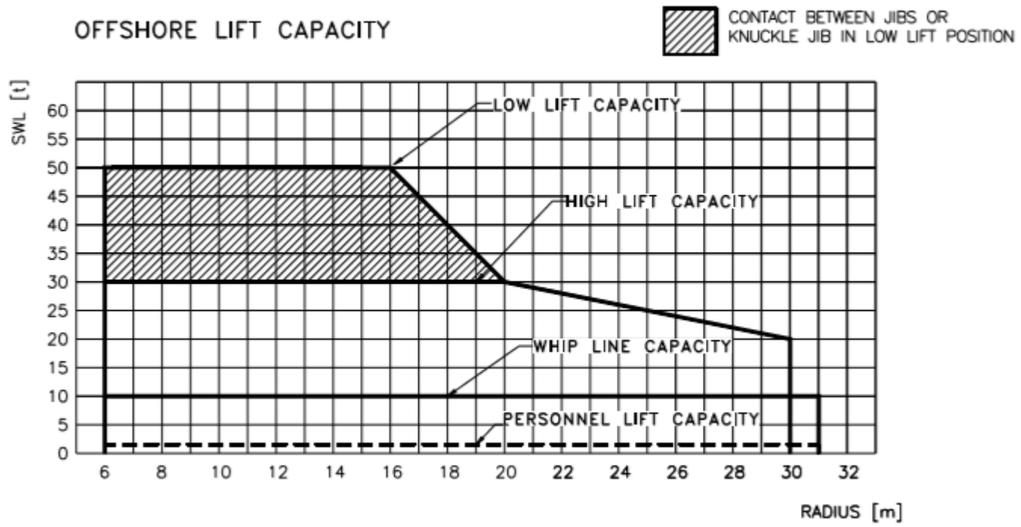




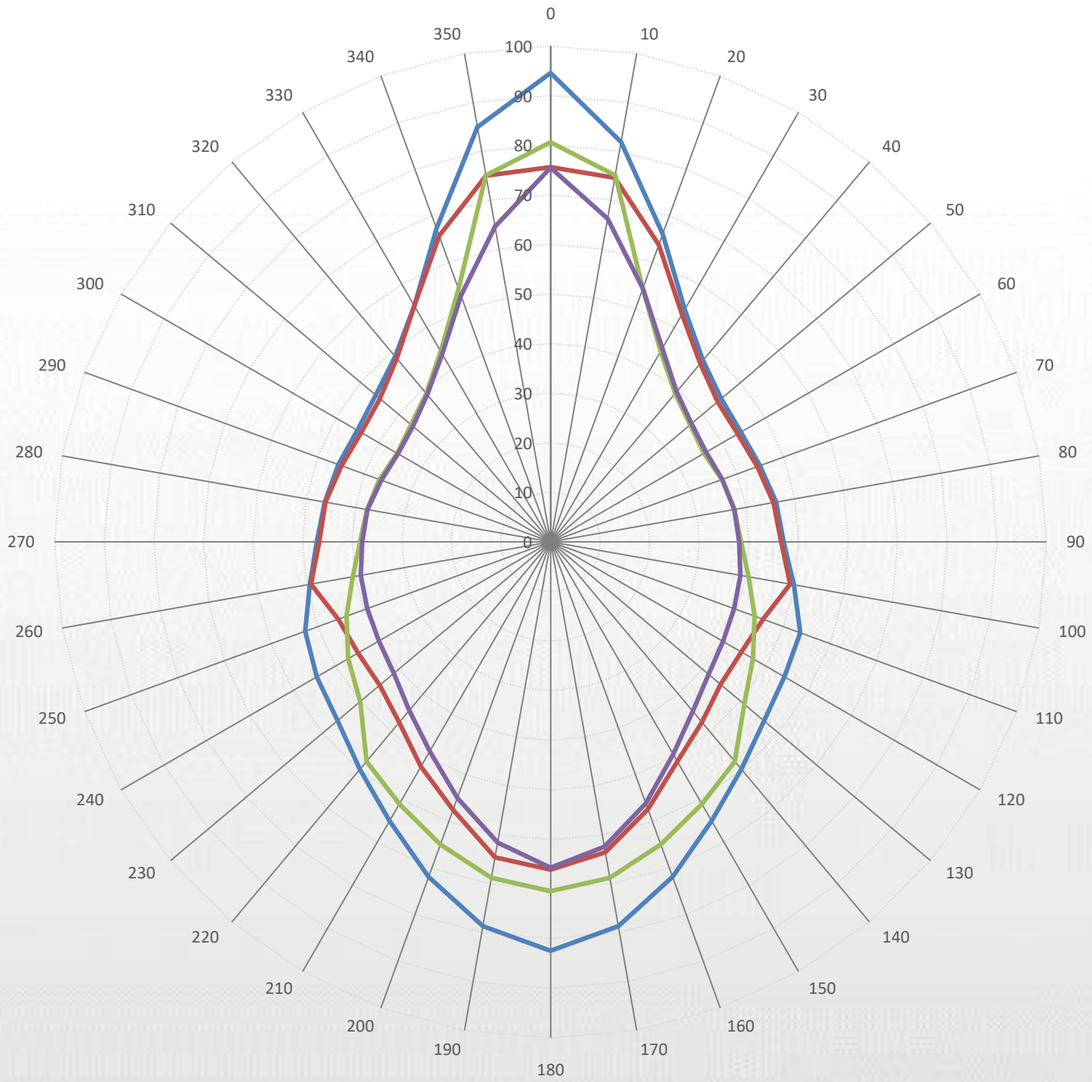
50 mT Main Crane Capacity Chart







DP3 System



Case 1: Optimum use of all thrusters
Thrusters Active: T1-T6

Case 2: Minimum effect single-thruster failure
Thrusters Active: T1-T4, T6

Case 3: Maximum effect single-thruster failure
Thrusters Active: T1-T2, T4-T6

Case 4: Worst Case Failure
Thrusters Active: T1, T3-T5

Limiting 1 minute mean wind speed in knots
Variable wind and waves
Wind speed: Automatic
Significant wave height: DNV (ERN)
Mean zero up-crossing period: DNV (ERN)
Rotating tidal current: 1.46 knots
Rotating wind induced current: 0.000*Uwi knots

DYNPOS	DPS 3
ERN	99, 99, 98, 97
Reference Systems	3 x Gyrocompass (also used for navigation), 2 x Differential GPS, 3 x Motion Reference Unit (MRU), 3 x Ultrasonic Wind Sensors, 1 x RADius unit with omni-directional capability (4 sensor heads), 1 x omni-directional laser-based relative position sensor, 2 x HiPAP, Bandak Light weight tautwire (starboard side)

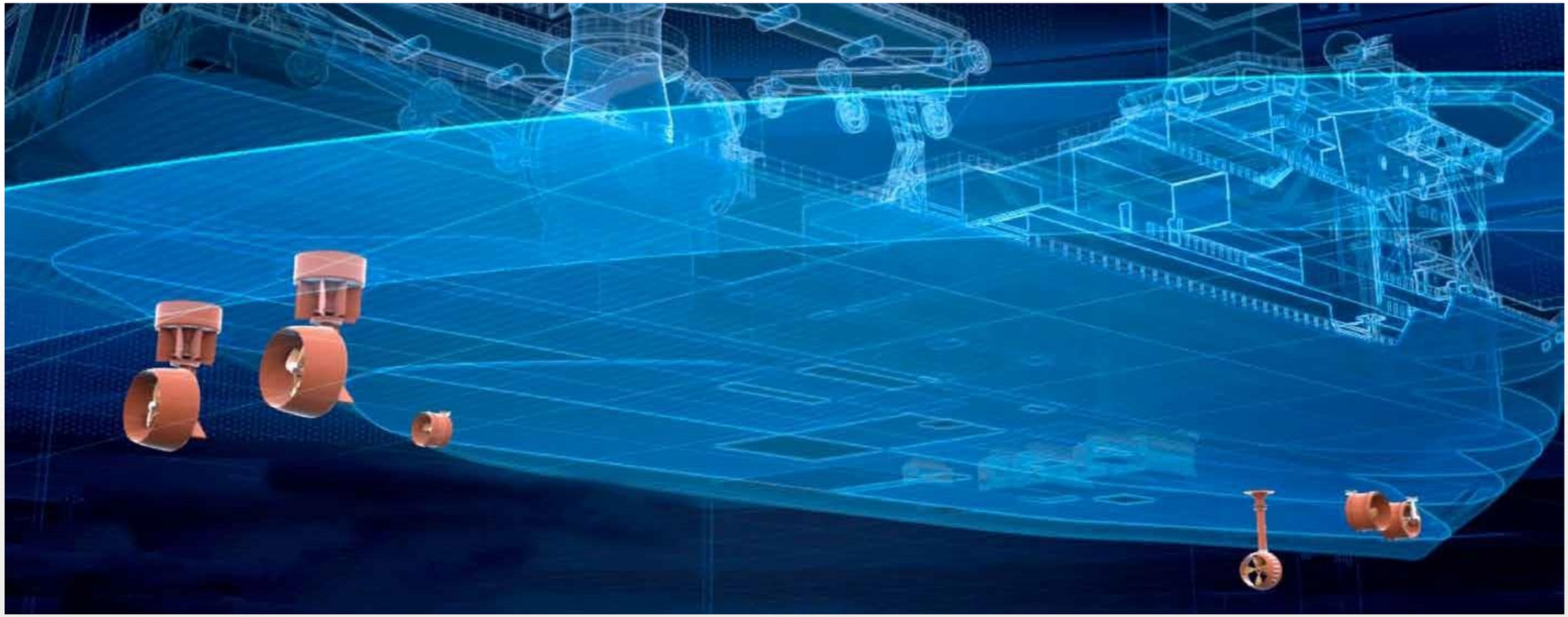
Accommodation

Personnel	▸	140
Cabin	▸	Single cabin: 60 Double cabin: 40 All cabins are fully airconditioned with ensuite bathroom MLC Compliant
Facilities	▸	Recreation Room Meeting Rooms Gymnasium

Electric Plant

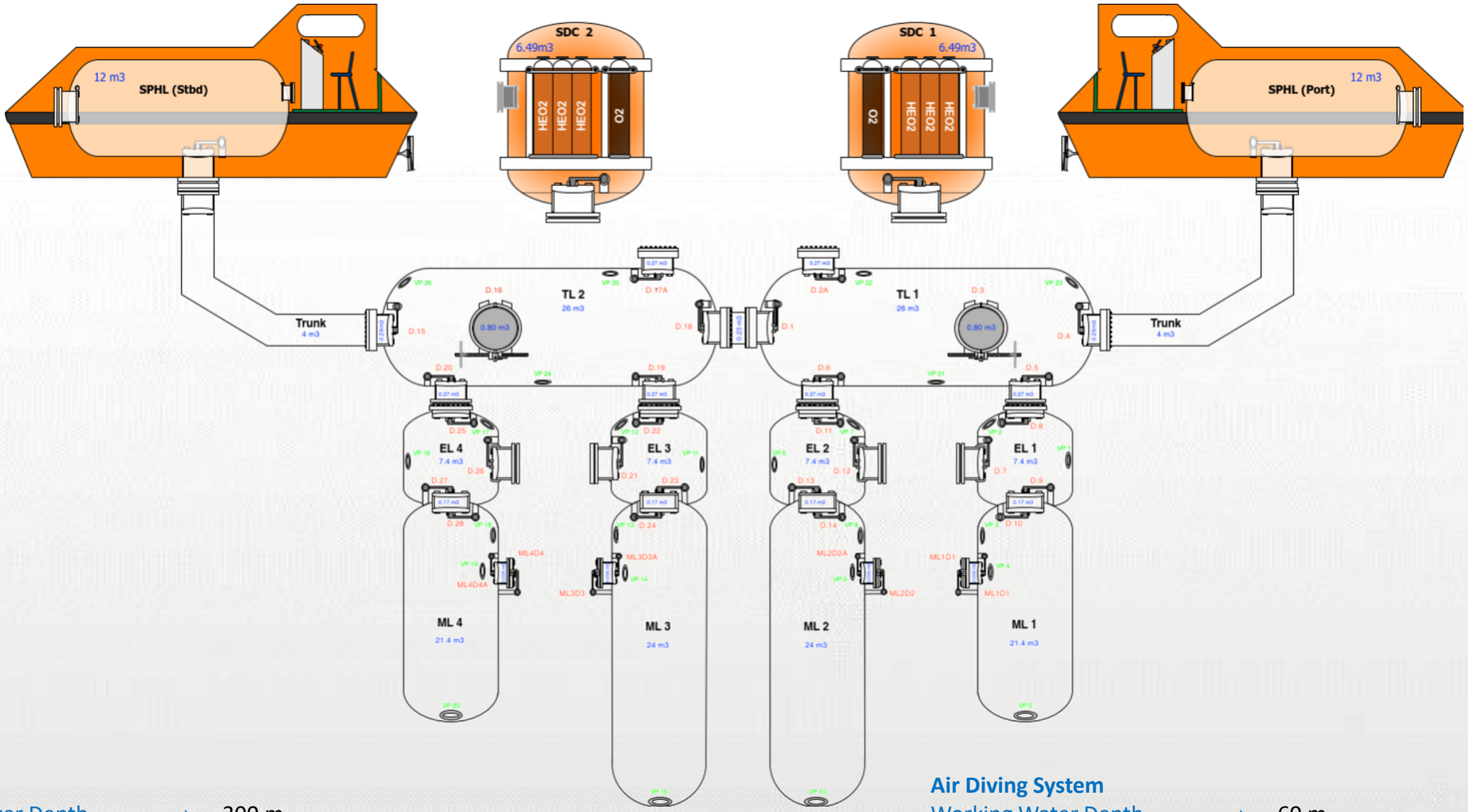
Main diesel generators	▸ Total output power ~ 25 200 ekWt, comprising: 4 x diesel-generators, each 5500 ekWt @ 720 r/min 2 x diesel-generators, each 1600 ekWt @ 900 r/min
Emergency diesel generator	▸ 800 ekWt x 440Vx 3 phase x 60 Hz x 1800 r/min 1300 ekWt x 440V x 3 phase x 60 Hz x 1800 r/min

Propulsion Plant



Number of Thrusters	6
Total Thruster Power	20 000 kW
Main Propulsion (Aft)	2 Azimuth FPP at stern, each 5,500 kW @ 600 rpm
Retractable Thruster (Fwd)	1 Azimuth FPP, 3000 kW @ 1200 rpm
Tunnel Thruster (Fwd) Tunnel	2 CPP at bow, each 2700 kW @ 900 rpm
Thruster (Aft)	1 CPP at stern, each 600 kW @ 1200 rpm

SAT & Air Diving



SAT System

Working Water Depth	300 m
Depth System	Twin Bell
Lifeboat	2 Hyperbaric Lifeboat
Dedicated Diving Moonpools	2 Diving Moon pools 4.2 m x 4.2 m with mechanical bottom cover and heading indication system
Capacity	18 man

Air Diving System

Working Water Depth	60 m
Deployment	Port / Starboard or through moonpool
Hot water units	3 divers
Depth System	2 LARS with 3 man Wet bell and 2 man basket on each

ROV & Survey

4,000 m waterdepth
3,000 m water depth
Heave compensated LARS
Moonpool with mechanical top hatch

- 2 heavy duty work class 200HP systems Triton XLX EVO 139
- 1 light work/inspection class system Comanche
- 2 Heave compensated LARS by A frame over the side
- Dedicated 5.6 m x 4.2 m ROV Moonpool with mechanical top hatch, bottom cover and heading indication system

Add. Capabilities: Oil Recovery

MPV Everest is fitted with an Oil Recovery System for First Response in case of Offshore oil spillage and has a class annotation “OIL RECOVERY SHIP”. The system can be hooked up to external hoses and a skimmer system at both Portside and Starboard side.

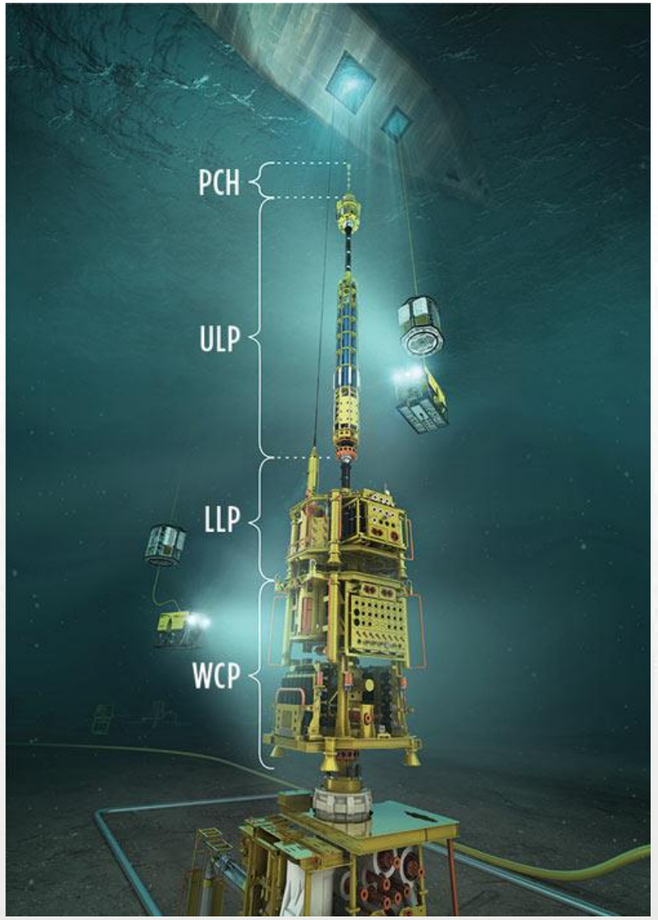
Oil Recovery Tank Capacity
Pump Capacities
Additional Pumps

- Portside 649 m^3, Starboard side 523 m^3, Total Storage: 1055 m^3
- 2x 70m^3/hr @ 10b, Total pump capacity: 140 m^3/hr @ 10b
- GTA Heavy Oil Transfer pump which can be fitted with skimmer unit

Add. Capabilities: Umbilical and Flexible Pipe lay

Deck Capacity	4,500 MT
Available deck layouts	Carousel, Reel Hub Drive, VLS vertical lay system, HLS horizontal system
Pre-Engineering	completed

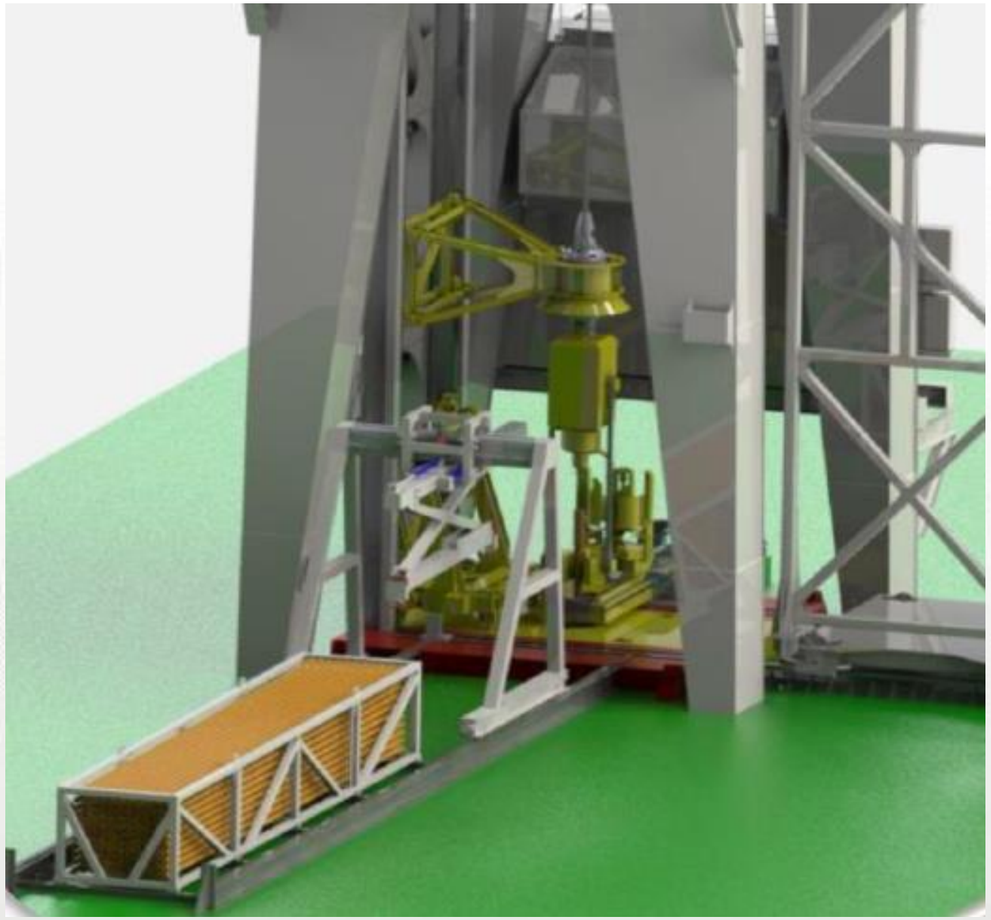
Add. Capabilities: Light Well Intervention



Systems
Available deck layouts
Pre-Engineering
Class

- Module handling tower and AHC hoisting systems, Skidding system, Central & local control HPU & PVU
- Riserless Well intervention tower, Well intervention Equipment, Chemical Tanks and Storage
- Completed
- DNV-GL classed and certified to WELL-1 and WIU-1
  DNV-GL OS-E101, Drilling ship & 2.22 Lifting appliance

Add. Capabilities: Geotechnical Drilling



Water depth	3000m
Drilling depth	500m
Hook load	200 MT
Pre-Engineering	Completed
Systems	Dual Option for hoisting System – Telescopic Mast / Ram Rig, Heave compensator 6m twin system for shallow and deep waters, Liquid Mud & Bulk system on deck, Drilling fluid processing and storage modular system(more that 80m3), Drilling fluid delivery system 6500 psi, Automatic storage and delivery of drill equipment and pipes, Downhole geotechnical tool Wison EP, XP, CPT & TCPT, 20T Seabed frame with hydraulic drive and AHC

Contact

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