

# OUTLINE SPECIFICATION – eCSOV

Zero Emission Commissioning Service Operation Vessel

FIRST IN CLASS ELECTRIC CSOV



# Zero Emission Commissioning Service Operation Vessel eSOV

Bibby's new vessel will set a new benchmark in the offshore Walk to Work (W2W) market, delivering unmatched reductions in emissions and fuel consumption.

Equipped with a market leading battery system and a methanol fuel system, it will be the world's first truly zero emission SOV, capable of operating on battery power alone for extended periods.

## Designed from the ground up for zero-emission operations:

- **Large 24.4MWh battery** with a DC power system
- **DP2 capability** (with closed bus-tie qualifier)
- **Offshore charging ready**
- **Premium accommodation and outfitting**
- **Best-in-class mission equipment**
- **'Digital Ready' with AI integration**





# Key Features

**Purpose designed dual fuel methanol battery hybrid vessel, designed for maximum efficiency and redundancy**

Spacious, high-end accommodation for 120 personnel in 84 cabins, certified to DNV Comfort Class COMF (V2, C2).

Large working deck and spacious warehouse with side and top access via hydraulic doors/hatches

DP2, with closed BUS notation “DYNPOS AUTR-CB” and DC Switchboard solution

**Fully Methanol ready at delivery (installed & Commissioned)**, acc. DNV “LFL Fuelled” notation with two large Wartsila dual fuel fixed speed engines for flexible operations

**Large 24,400 kWh LFP ESS**, divided into a three-split system, with offshore and onshore charging capabilities

Full Kongsberg propulsion package, featuring Rim Drive propulsion units for optimal efficiency

Advanced Mission Equipment:

- SMST 3D Motion compensated Gangway,
- SMST 3D Motion compensated Offshore crane 10Te, upgradable to 40Te subsea AHC

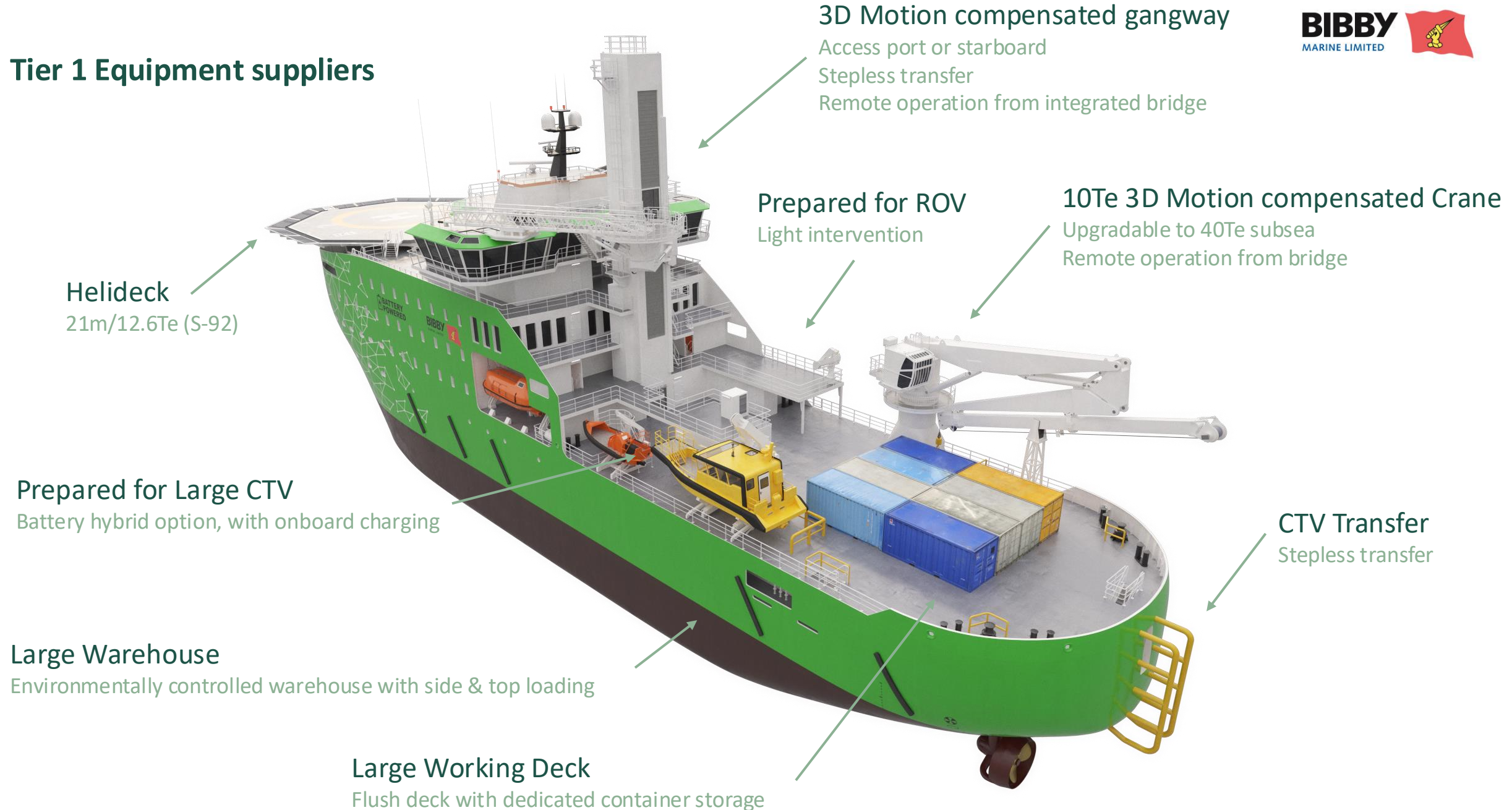
Large Helideck, “T” value - 12.6Te, “D” Value - 21.0m (Sikorsky S-92)

Future-ready, with provisions for:

- Prepared for Hybrid Daughter craft integration
- Prepared for ROV integration



## Tier 1 Equipment suppliers



# Vessel Specification

## Main Particulars

Length Overall	89.63m
Breadth Moulded	19.80m
Depth Moulded	7.55m
Draught (Design)	5.00m
Gross Tonnage	6773Te

## Capacity

Fuel oil (MGO)	501 m3
Fuel oil (Methanol)	450 m3
Fresh water	270 m3
Warehouse area	535 m2
Cargo deck area3	500 m2
Deadweight	2283 t

Flag UK

## DNV Class Notations

+1A Windfarm Service, **Battery Power**, E0, **LFL Fuelled**, DYNPOS(AUTR-CB), COMF(C-2, V-2), SPS, Walk2work, Clean (Design, Tier III), Cyber Secure (Essential), LCS, BIS, Strengthened(dk), Smart(EEN), BWM(T), ER(SCR), HELDK(SH), Recyclable, Shore power, NAUT (OSV)

## Trial speed

13.0 knots at 5.0 m draft in calm weather and with clean hull  
10 knots at 5.0 m draft, eco speed

## DP Capability

Kongsberg  
DP Capability according to DNV-ST-0111  
(9,7,8,6)

## Engine & Propulsion:

Wartsila  
6L32, Dual Fuel Methanol  
Main gensets (Fixed speed)  
2 off 3480 kw @ 750rpm, 50hz  
Combined Power of 6800 kw(e)

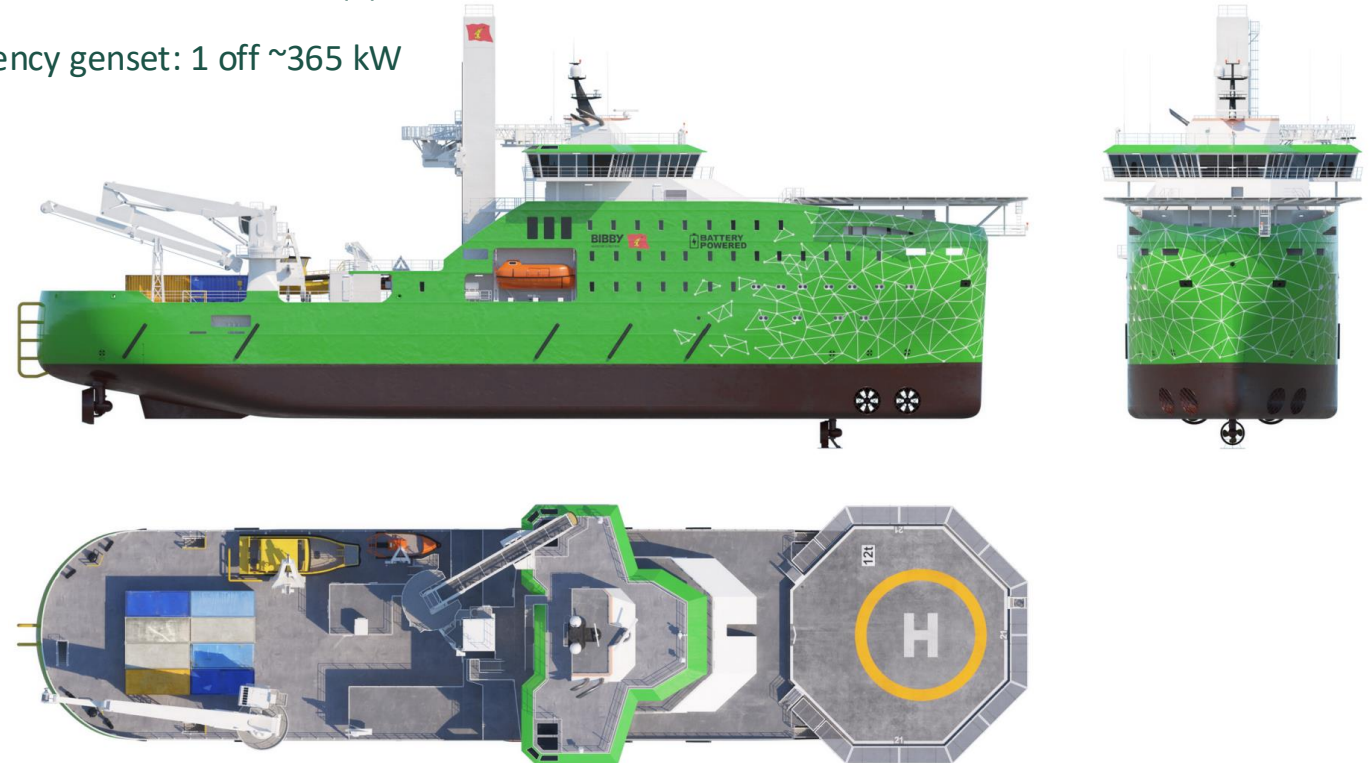
Emergency genset: 1 off ~365 kW

## Energy storage system:

Corvus Energy  
Lithium Iron Phosphate (LFP)  
24,400 kWh  
Split across 3 compartments

## Main Propulsion:

Kongsberg  
2 off 2000 kW RIM Drive Main Azimuth Units  
2 off 1500 kW RIM Drive Tunnel Units  
1 off 1200 kW Retractable Unit

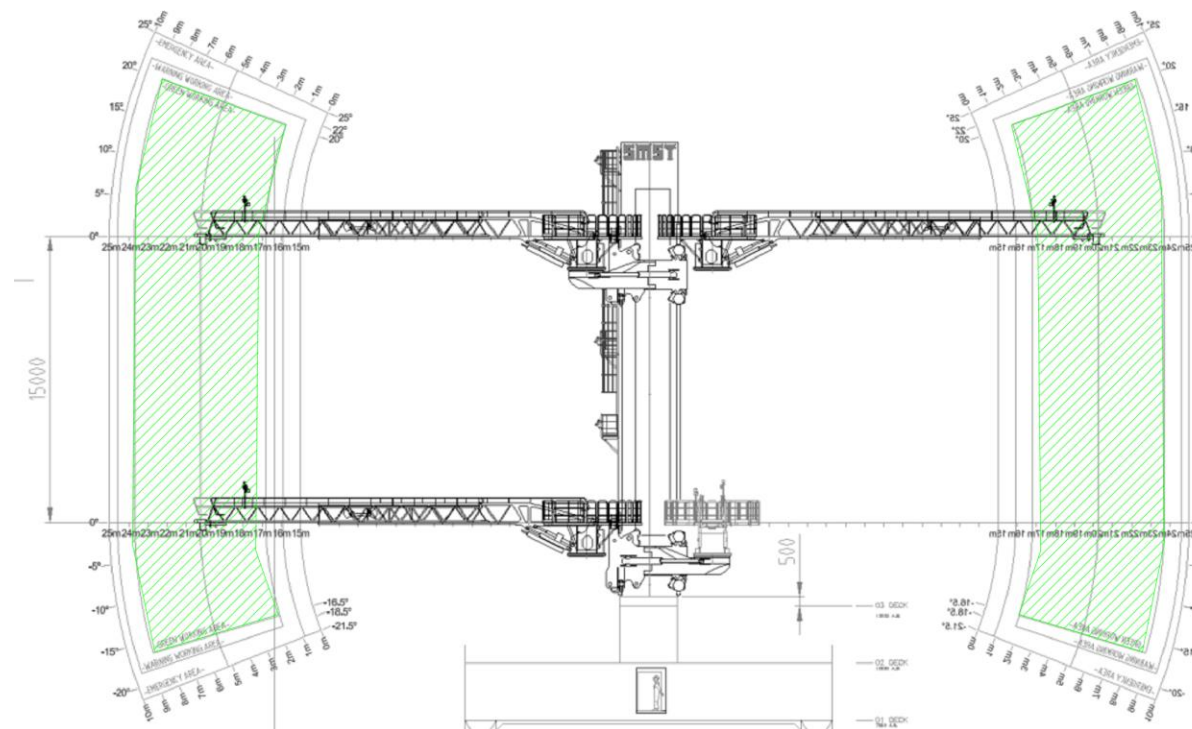
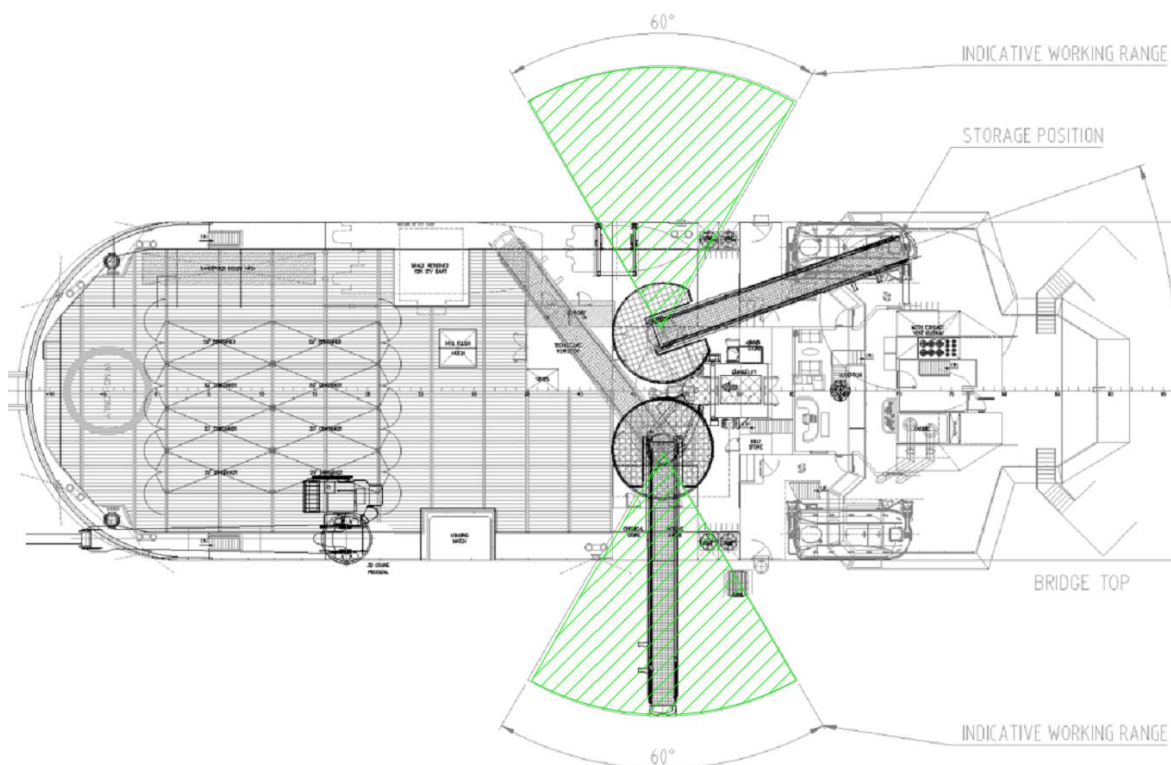




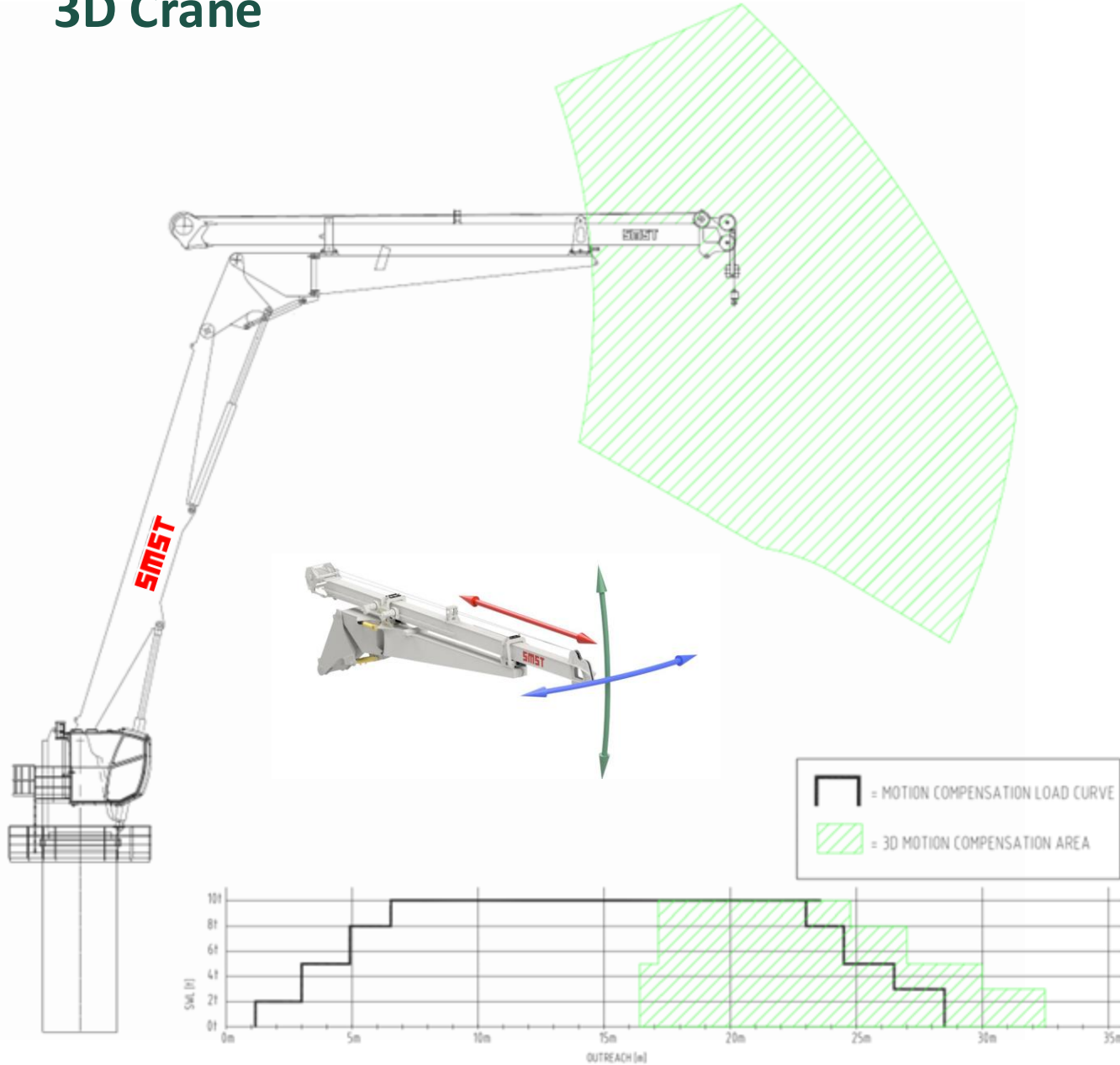
# Walk 2 Work Gangway

- **Maker:** SMST TAB-L1 + Access & Cargo Tower
- **Internal Width:** 1,200mm
- **Load Capacity:** 850kg
- **Elevator Capacity:** 2,000kg
- **Parking Location:** Wheelhouse Top
- **Winch at Tip:** 1,000kg , 3D Motion Compensated

- **Operation Side:** Port and Stbd Side
- **Control Positions:** Port BW (W2W), Stbd BW (W2W & Crane)
- **Cursor Height:** 13 – 28m (horizontal from waterline)
- **Gangway Tip Height:** @+/- 5degrees 30m & 11m
- **Gangway Length:** 28.9m from Centreline
- **Slewing Range:** + 240 degrees (with articulating cursor)
- **Luffing Range:** +25 / -21.5degrees

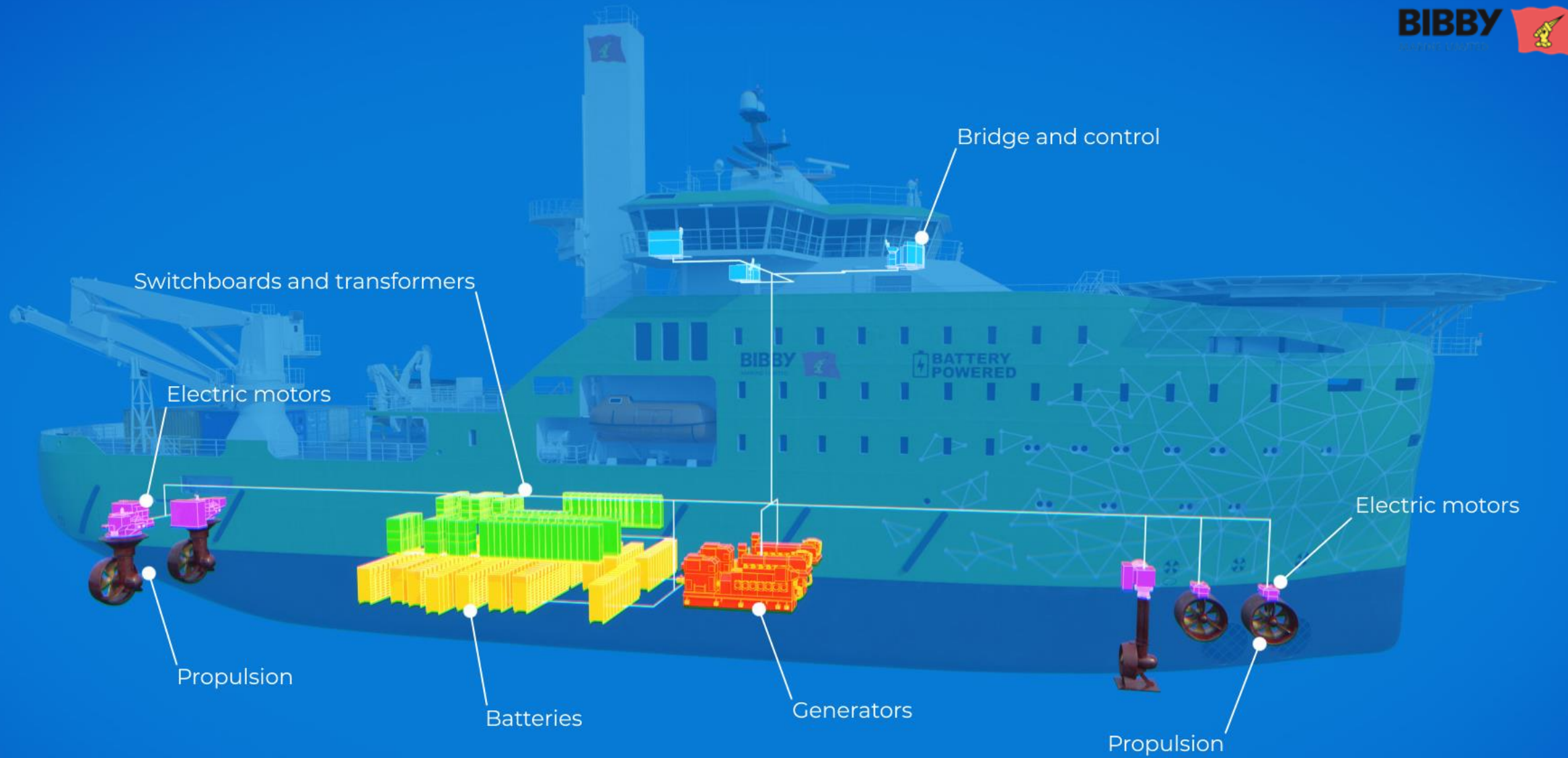


# 3D Crane



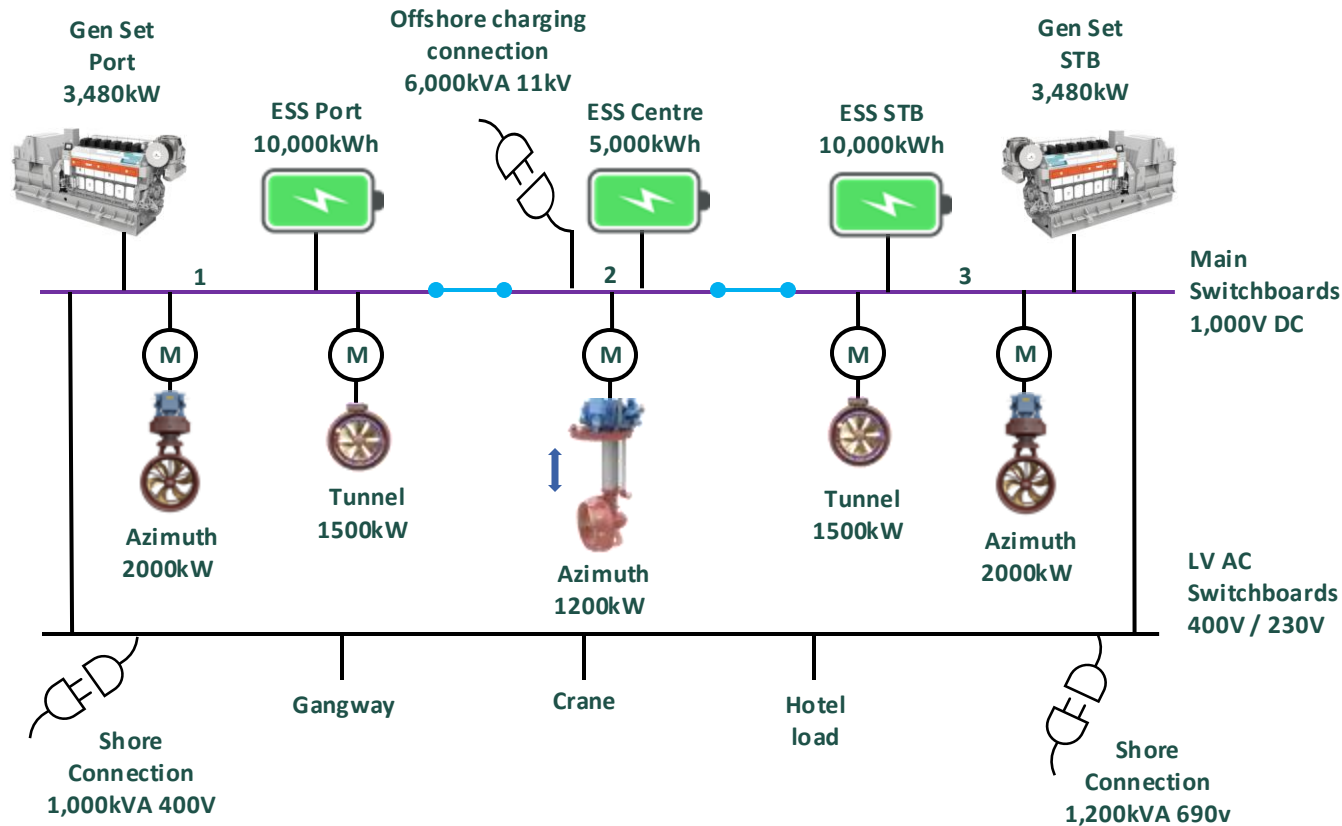
- **Maker:** SMST L Type Knuckle Boom
- **3D Comp Load Capacity:** 1,000kg - 10,000kg
- **3D Comp Working Radius:** 10,000kg @ 24.7m, 5,000kg @ 30m, 3,000kg @ 32.5m
- **Harbour Load Capacity:** 20,000kg
- **Harbour Working Radius:** 20,000kg @ 19.5m, 6,000kg @ 34.5
- **Hook Travel:** 70m
- **Location:** Starboard
- **Control:** Remote from Stb Bridge Wing station (W2W & Crane)  
Operators Cabin  
Remote Control
- **Other:** MOPS & AOPS
- **Option:** Crane upgradable to 40,000kg subsea AHC







# Electrical distribution



## Configuration

- Purpose designed power system for maximum flexibility and efficiency
- ESS designed as primary power source
- Dual Fuel Methanol Gen sets operate at constant speed/load to charge ESS
- Designed to operate in closed Bus-tie configuration
- Open Bus-tie operation possible with no loss of capability or fuel consumption
- Battery packs are electrically and physically divided into a three-way split for enhanced redundancy and safety.



# Zero Emission Operation

Average Power Required/day 17MWh

- >20 Hour battery endurance in good weather (1.5Hs),
- >18 Hours @ 2.5HS
- >15 Hours @ 3.5HS

Full charge = Transits over 100NM @10kts

Dual Fuel Engines ready to come online for safety/emergencies

Connected to charger at night





# Offshore Charging

## Fully prepared for offshore charging

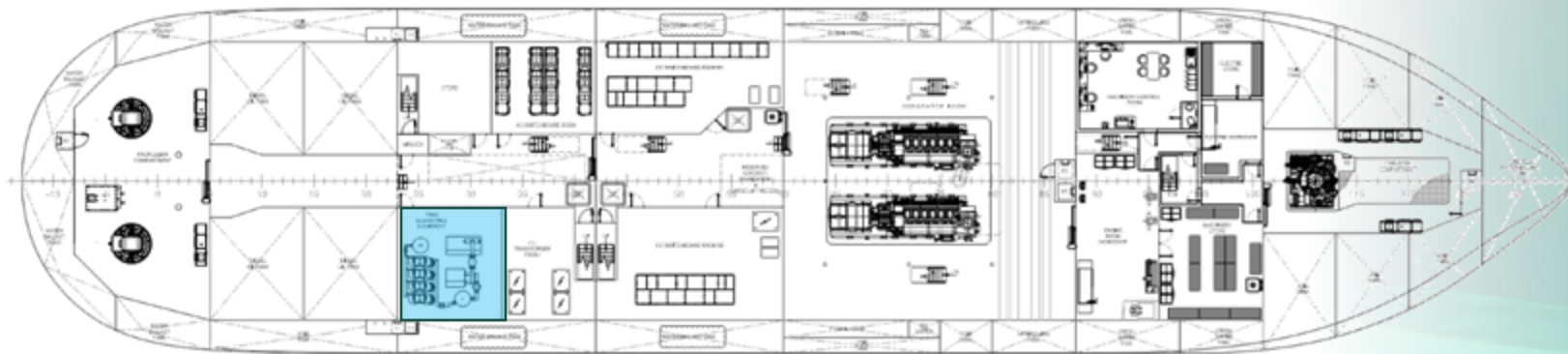
- All hardware installed for **11kv AC charging at up to 6MVA, 50Hz**
- PMS mode for offshore charging (**full State of Charge achievable in 4-5 hours**)
- Specialised **DP mode for offshore charging**



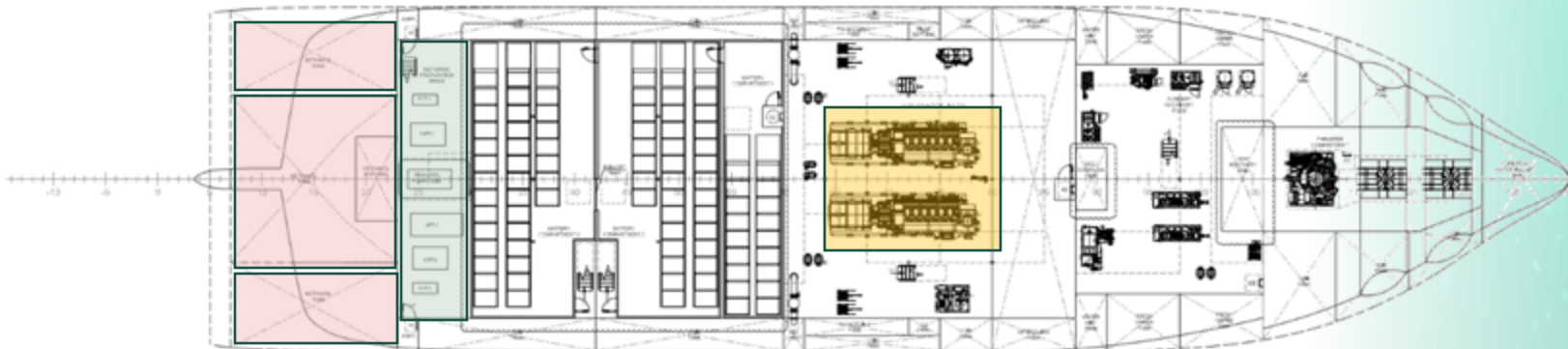
- All vessel services provided for charging skid and connection (Fwd and Aft locations)
- Option ready for future upgrade to DC charging (floating installations)

# Methanol Fuel

- Separate Methanol Fuel tanks with 30 days endurance
- Dedicated Fuel Preparation Room
- Nitrogen generator
- Methanol Engines
- Fixed foam firefighting systems (Bilges etc)
- Fire & Gas detection
- Atex areas with double walled pipe







TWEEN DECK  
450-450 mm x 30 BUL



TANK TOP  
200-200 mm x 30 BUL



# Power Arrangement & Batteries

- DC Switchboard Rooms Port & Starboard 
- AC Switchboards 
- Transformers 
- 3x Battery Compartments 
- Dedicated Battery Fire Fighting (CO2 total flooding & Water Mist)



TWEEN DECK  
4000-4500 mm (13-15m)

TANK TOP  
2000-2500 mm (6-8m)

# Accommodation Design

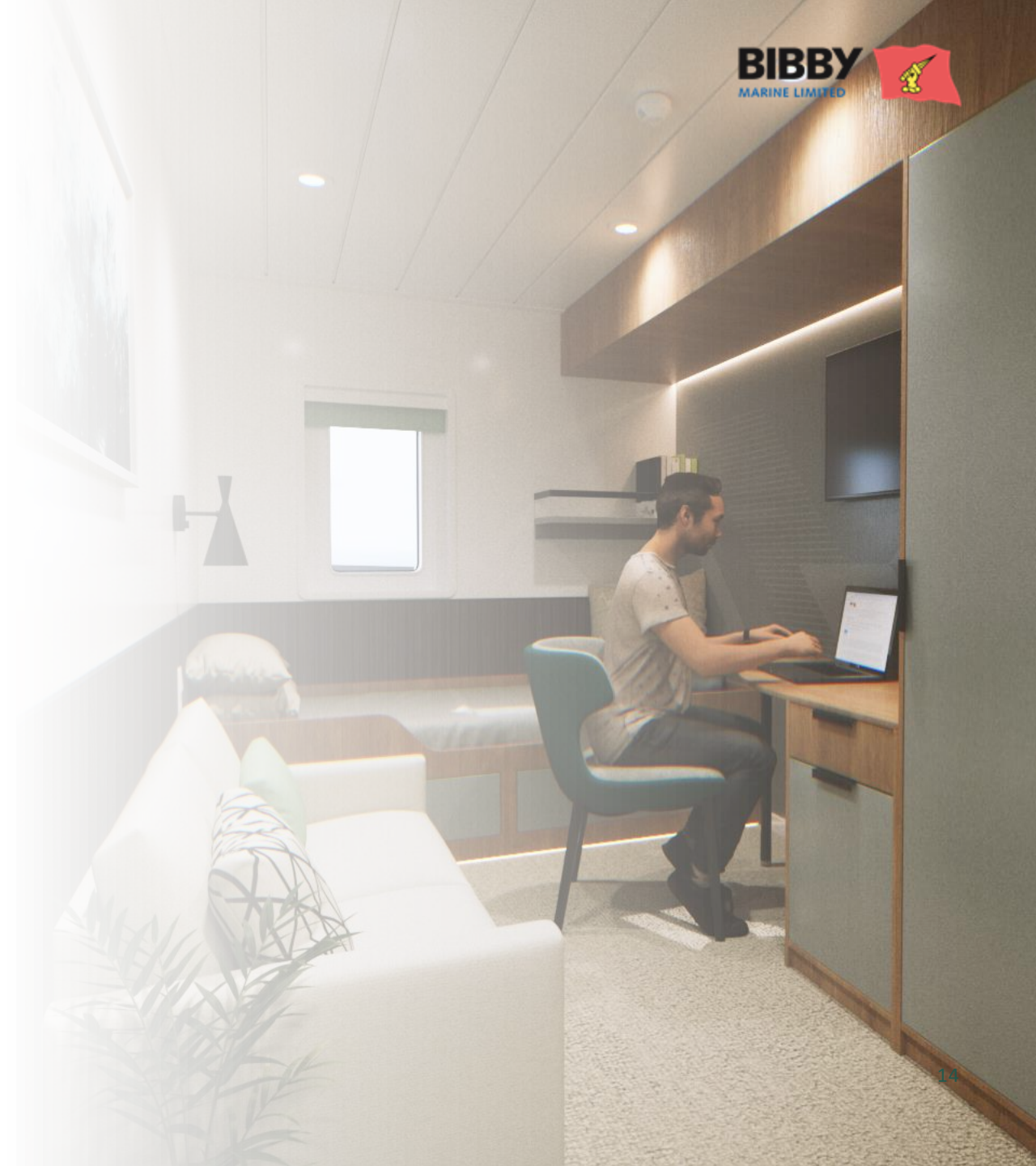
## Design Focus comfort for crew and passengers

- High end outfitting standard
- Open and bright spaces and recreation
- Ergonomics and flow
- Minimising Noise & Vibration Comf C(2)V(2)
- Separation of working areas from sleeping and social spaces
- High Speed internet & Cabin Entertainment system

## Persons On Board (POB)

Max 120 Persons onboard with maximum flexibility in configuration:

- Single occupancy - 84 Persons
- Single and Double occupancy - 120 Persons
- **Crew Capacity – 24**
  - 2 x Single Senior Officer Suites
  - 22 x Single Crew
- **Client Capacity – 60/96**
  - 2 x Single Client Rep Suites
  - 58 x Single Client CabinsOR
  - 2 x Single Client Rep Suites
  - 22 x Single Client Cabins
  - 36 x Double Occupancy Cabins (Pullman bunk style)









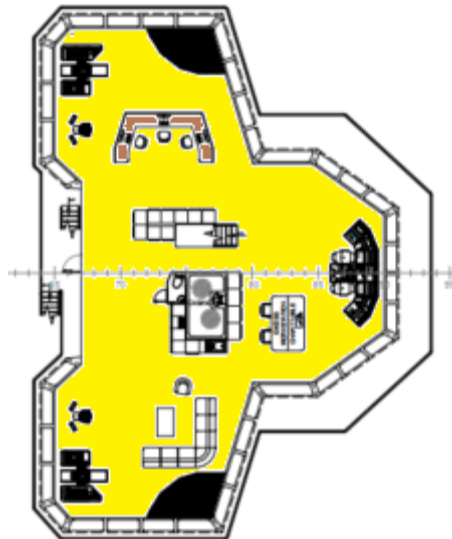


# Accommodation Design

## Bridge Deck

- Fwd Nav + DP Console
- Pt & Stbd Bridge Wing DP Consoles
- Pt Side W2W Workstation
- Stbd Side Combined W2W & 3D Crane Workstation
- Client Workspace
- Comfortable Lounge Area
- Coffee Area

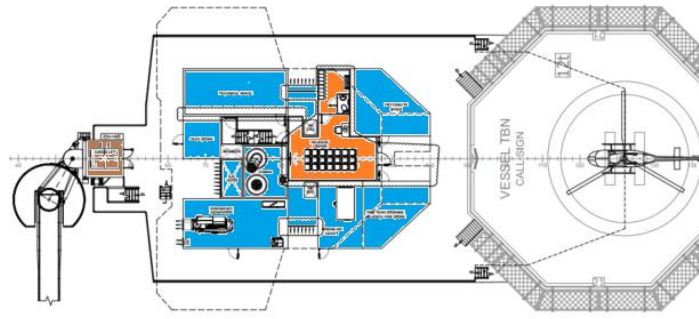
-  Recreational Area
-  Technical Spaces
-  Client Defined Areas
-  Vessel Operational Areas
-  Medical Areas
-  Accommodation Cabins



# Accommodation Design

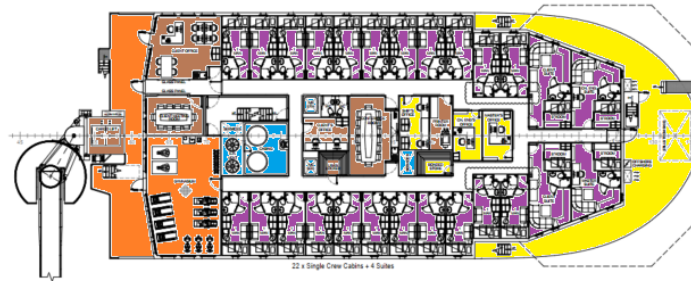
## 05 – Deck

- Heli-Reception Lounge
- Electronic Equipment Rm
- Heli-Deck Stores
- Heli-Suit Storage
- Technical Spaces



## 04 – Deck

- 4 Cabin Suites
- 22 Single Cabins
- 1 Capt & C/E Office
- 1 Conference Room
- 1 Client Printer Room
- 2 Client Office (1 with Panoramic view)
- 1 Client Meeting Rm
- 1 Gymnasium (with Panoramic view)
- Clients Lockers and Store Rooms



- Recreational Area
- Technical Spaces
- Client Defined Areas
- Vessel Operational Areas
- Medical Areas
- Accommodation Cabins



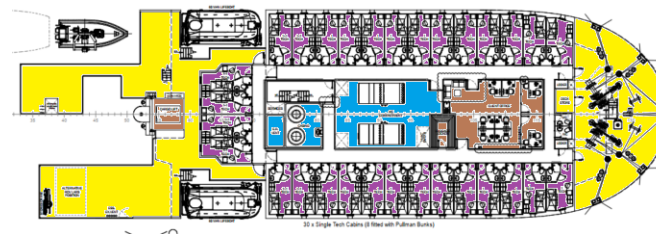


# Accommodation Design

- Recreational Area
- Technical Spaces
- Client Defined Areas
- Vessel Operational Areas
- Medical Areas
- Accommodation Cabins

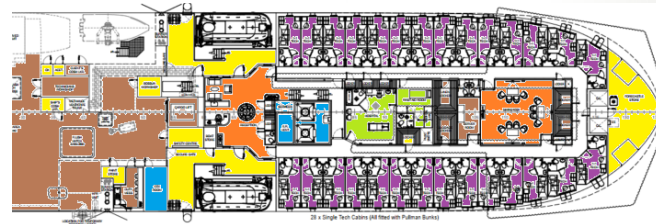
## 03 – Deck

- 22 Single Cabins
- 8 Pullman Berth Cabins (1+1)
- 3 Client Office Spaces
- Vessel Operational Areas
- Clients Lockers & Stores
- Technical Spaces (HVAC)

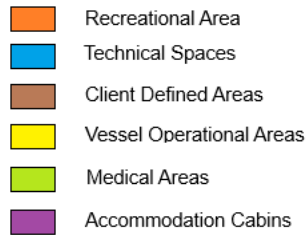


## 02 – Deck

- 28 Pulman Berth Cabins (1+1)
- Large Games Rm
- Hospital and Treatment Rm
- Client Lockers & Stores
- Main Reception Area
- Client's Duty Mess / Technicians Workshop / COSH locker
- Main Working Deck (500m<sup>2</sup>)
- Pain Store / Bosin Workshop / CO2 Rm / Safety Centre
- Boat Store
- ROV Mezz Deck / Daughter Craft landing Area

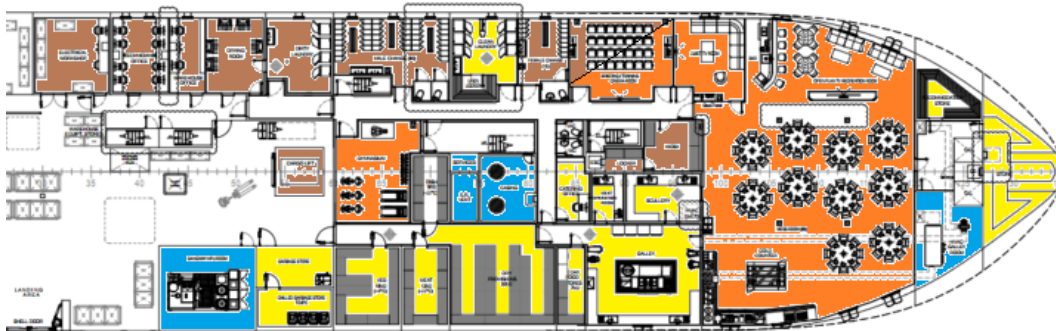


# Accommodation Design



## 01 – Deck

- Mess Rm (seating for 80)
- Galley / Scullery / Meat Prep Rm
- Day Provision Store and Dry Store
- Meat Freezer / Fish Freezer / Veg Cold Rm
- Catering Office / Shop / Locker
- 1 Hotel Stores
- 1 Bar and Open Plan Lounge
- 1 Quiet Day TV Room
- Client Warehouse Office
- Technicians Office
- Main Warehouse (535m<sup>2</sup>)
- 1 Cinema / Briefing Rm (seating for 30)
- Female Wardrobe (16)
- Male Wardrobe (80)
- Clean Laundry / Dirty Laundry / Dry Rm
- Gymnasium
- Garbage Store / Chilled Garbage Rm
- Electrical Workshop
- Electronic Stores (Climate controlled)





# Accommodation Design

## Design Focus on workflow for Technicians and Crew

### Focus on:

- Transfer of Technicians to/from CTV
- Transfer of Technicians to/from gangway
- Flow through accommodation
- Handling of cargo onboard, side and top loading into warehouse via hydraulic hatches
- Separated working and living zones, minimising noise









*'Innovation is no longer an option it is a moral imperative'*

*Bloomberg 2024*

