



# GPM APOLLO

DP2 IMR/SUBSEA VESSEL, 1000m<sup>2</sup> Deck, ABS



### Overview / Introduction

GPM Apollo is an ABS-class IMR vessel (built 2014, Singapore flag), upgraded with a 160T lattice-boom crane (100-150T AHC Knuckle Boom Crane Optional), helideck and a gangway (optional). POB expanded from 90 to 202. Equipped with Kongsberg DP-2 (K-Pos DP-21 with cJoy), ~1,000 m<sup>2</sup> clear deck (7.5 t/m<sup>2</sup>), FiFi 1, oil recovery systems, and full hospital, the vessel delivers IMR and walk-to-work capabilities.

#### General Specifications

| Specification    | Details   |
|------------------|---|
| Length Overall   | 86.00 m   |
| Length BP        | 75.60 m   |
| Breadth          | 20.00 m   |
| Depth            | 9.00 m  |
| Draft (Max)      | 7.30 m  |
| Deadweight (DWT) | 4,900 T @ max draft   |
| GT / NT          | 4,768 / 1,430   |
| Deck Area        | 1,000 m <sup>2</sup> (7.5 t/m <sup>2</sup> strength)  |
| Classification   | ABS <sup>±</sup> A1, Offshore Support VSL, DPS-2, Oil Recovery, SPS Code. ABS Class notation: <sup>±</sup> A1, Offshore Support VSL, AMS, ACCU, DPS-2, ENVIRO, GP, BWT, FiFi VSL Class 1, Oil Recovery Capability, Supply, SPS Code, UWILD.<br>Dynamic Positioning: Kongsberg K-Pos DP-21 with cJoy joystick. |
| Flag / IMO       | Singapore / IMO 9647045   |

#### Deck Equipment & Construction Capability

| Equipment             | Specification   |
|-----------------------|---|
| Deck Crane            | 160T Lattice Boom Crane or 100-150T AHC Knuckle Boom Crane                      |
| Aux Crane             | 1 x Hydraulic 2t SWL @ 12 m Radius (Knuckle Boom)                               |
| Anchor Windlass       | 2 x Electro-Hydraulic c/w Hawser drum & Warping Head                            |
| Anchor & Chain        | 2 x HHP Anchor 3,060kg coupled to 440M x 50mm (U3) Stud Link Chain              |
| Windlass Mooring Drum | 2 off for 220m x 64mm PP Rope (18t @0~10m/min)                                  |
| Mooring Lines         | 4x180M length each of 3it breaking strength                                     |
| Tugged Winch          | 2 x Hydraulic driven 10t x 15m/min  |
| Capstan               | 2 x Hydraulic driven Vertical mount 10t x 15m/min with Mooring Drum combination |
| Gangway               | TBD   |

### Tank Capacities

| Cargo Type            | Capacity (m³) |
|-----------------------|---------------|
| Deck Strength         | 7.5/m2        |
| Clear Deck Area       | Abt. 1000 m2  |
| Fuel Oil              | Abt. 1,700 m³ |
| Fresh Water           | Abt. 1,700 m³ |
| Drill Water / Ballast | Abt. 1,700 m³ |
| Brine                 | Abt. 700 m³   |
| Base Oil              | Abt. 200 m³   |
| Recovered oil         | Abt. 900 m³   |
| Dry Bulk              | Abt. 400 m³   |
| Methanol              | Abt. 200 m³   |

### Accommodation & Facilities

|            |  |
|------------|--|
| Capacity   | 202 men  |
| Facilities | Full A/C, mess rooms, control rooms, offices, conference room, recreation room, gym. |
| Hospital   | 2 berth hospital.  |

### Propulsion & DP

| System                          | Detail   |
|---------------------------------|--|
| DP Systems Class 2              | Kongsberg K-Pos DP-21 with cJoy Independent Joystick System.   |
| DP Sensors & Position Reference | 3 x Gill Wind Sensors, 2 x MRU (MRU2 & 5), 1 x HiPAP 501, 1x DPS122, 1 x DPS112, 1x Inmarsat B/Fleet 77 demodulator, 1 x Radius 1000Q c/w Transponder 700, 1x CyScan Mk4.0, 1 x Tautwire Mk 15/500 |

### Performance & Consumption

|  |                         |
|--|-------------------------|
| Maximum speed                            | 14 knots                |
| Service speed                            | 12.5 knots              |
| Fuel Consumption - Full speed            | Abt. 21.6 Tonne MDO/day |
| Fuel Consumption - Service Speed         | Abt. 21.4 Tonne MDO/day |
| Fuel Consumption - In DP mode            | Abt. 15.0 Tonne MDO/day |
| Fuel Consumption - In Port or at Anchors | Abt. 1.40 Tonne MDO/day |

### Machinery

|                                      |   |
|--------------------------------------|---|
| <b>Main Generator</b>                | 4 x Wartsila 6L.26 - 1,870kW 690V/60Hz, 900 RPM   |
| <b>Power Drive - Main Propulsion</b> | 2 x Wartsila 2,200kW Electric Steerable Thrusters |
| <b>Bow Thruster - Retractable</b>    | 1 x Wartsila 900KW Electric Drive                 |
| <b>Bow Thruster - Tunnel</b>         | 1x Wartsila 995kW Electric Drive                  |
| <b>Harbour Generator</b>             | 1 x 450kW "Cummins" or equivalent                 |
| <b>Emergency Generator</b>           | 1x 150kW "Cummins" or equivalent                  |

### Radio & Navigation Equipment

|  |   |
|--|---|
| <b>Gyro Compass</b>  | 3 Master x Tokimec - TG - 8000 or equivalent                                    |
| <b>Auto Pilot</b>  | Anschutz Pilot Star -D or equivalent  |
| <b>GPS</b>   | Furuno DGP - 150 Navigator or equivalent  |
| <b>Echo Sounder &amp; Speed</b>                                | Furuno FE -700 or equivalent  |
| <b>Radar</b>   | Furuno - FR- 2117 & FR21375 or equivalent                                       |
| <b>GMDSS Sea Area 3</b>  | Furuno RC - 1800T or equivalent   |
| <b>Public Addressor</b>  | Vingtor CTB/SBA Talkback & PA system  |
| <b>Telephone</b>   | Vingtor ACM-AlphaCom Marine Integrated Telephone / Command System or equivalent |
| <b>BNWAS</b>   | PANASIA Co Ltd  |
| <b>Gyro Compass 3 Master x Tokimec - TG-8000 or equivalent</b> | Gyro Compass 3 Master x Tokimec - TG -8000 or equivalent                        |

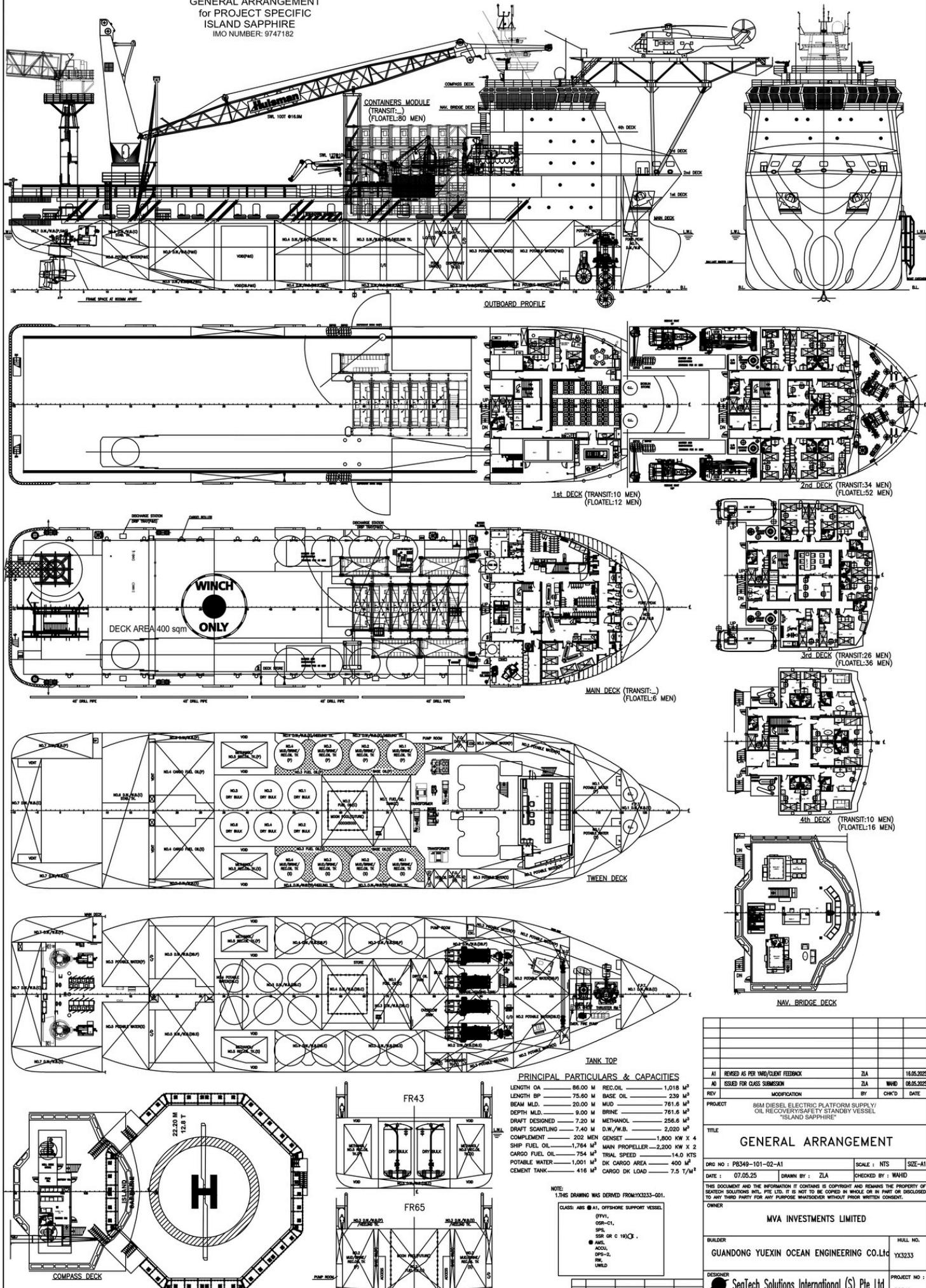
### Fire fighting equipment

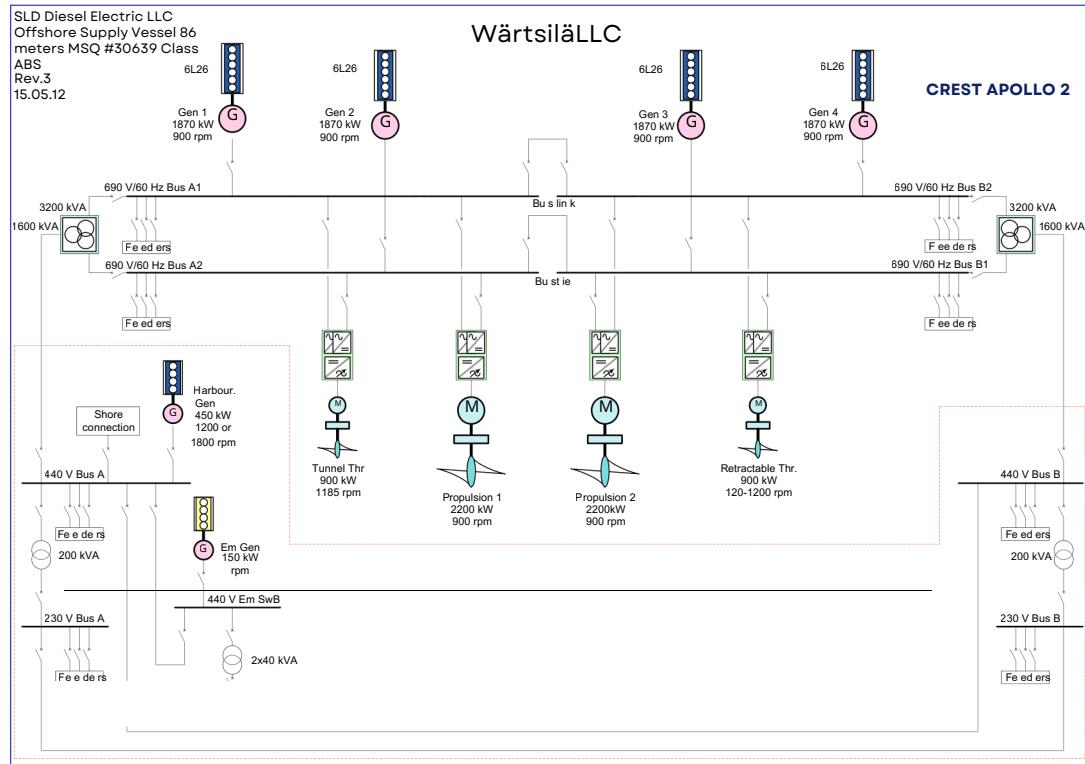
|  |  |
|--|--|
| <b>Firemain</b>                          | Firelines with 2" bronze hydrants                |
| <b>Fireman outfit</b>                    | 6 complete fireman's outfit to SOLAS requirement |
| <b>Portable Fire Extinguisher</b>        | As per SOLAS Requirement                         |
| <b>Fixed CO2 &amp; Flexi - fog water</b> | To be installed in Category A Machinery space    |
| <b>Extinguishing System</b>              | As per SOLAS and class requirement               |
| <b>Emergency Fire Pump</b>               | 1x70m3/hr @ 70m Head                             |
| <b>External Fifi 1</b>                   | 2 x front PTO driven Pump @1,880m%/hr            |

### Others

|                                       |  |
|---------------------------------------|--|
| <b>Dynamic Positioning System</b>     | Kongsberg - K-Pos DP-21 with c Joy Independent Joystick System               |
| <b>Ballast Water Treatment System</b> | Minimum 120m%/hr   |
| <b>Oily Water Separator</b>           | 1x HYN 15ppm c/w Alarm or equivalent   |
| <b>Sewage Treatment Plant</b>         | Sewage Treatment Plant: as per flag and international regulation requirement |
| <b>Water Maker</b>                    | 2 x RO systems – 40m3/day  |
| <b>Helideck</b>                       | MTOM 9.3 T, D-VALUE 22M  |

GENERAL ARRANGEMENT  
for PROJECT SPECIFIC  
ISLAND SAPPHIRE  
IMO NUMBER: 9747182





## Case 1 CREST APOLLO 1

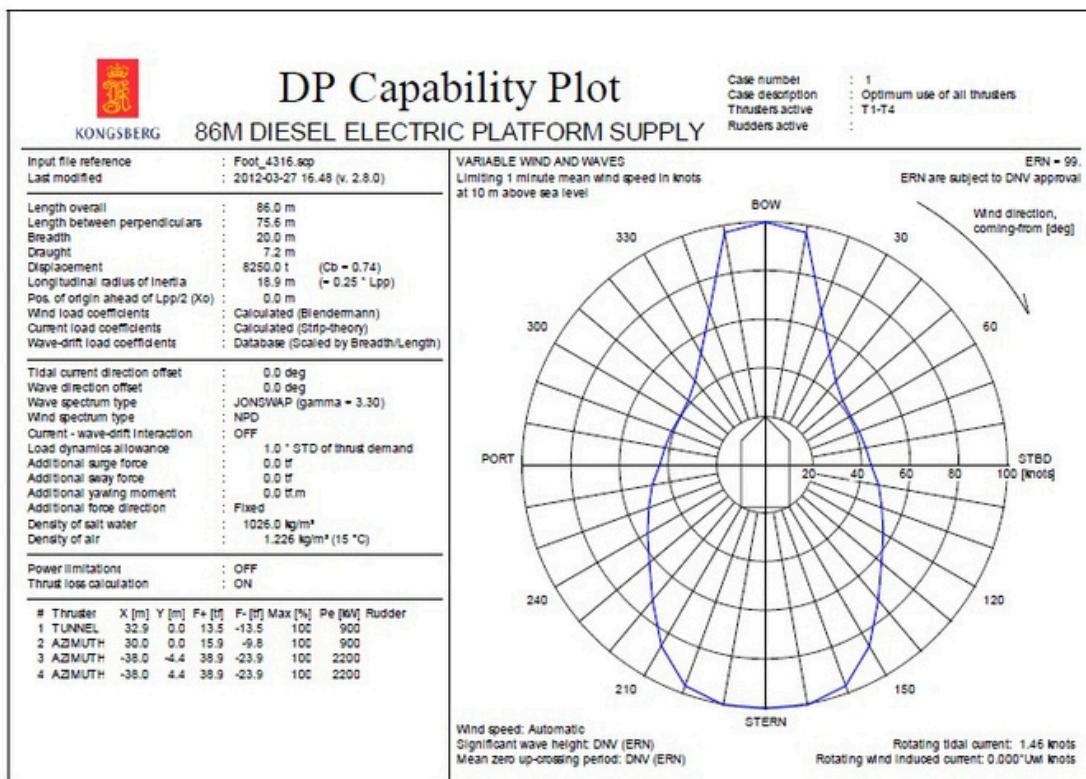


Figure 10: DP capability envelope for case 1.

Particulars are believed to be correct but not guaranteed.

Owners reserve the right to amend the specifications without notification