IMR / TSV VESSEL
POLAR KING
1) GENERAL
Classification and society: DNV +1A1, ICE-C, COMP-V(3)(C), HELDK-SH, E0, DYNOPOS-AUTR, NAUT-OSV(A), CLEAN DESIGN, DK(+)
Flag: Cyprus (CY)
Design / Type: ST-254 LCD
Built: 2011 / Freire Shipyard - Spain.
Next planned dry-docking: April 2021
SPS Code 2008
IMO: 9523366

2) MAIN DIMENSIONS
LOA 110.6m
Breadth 20.0m
Depth 9.8m
Max draught 7.6m
Design draft 6.0m
Deadweight abt. 4358 mt
Tank capacity MDO 1 722 m³
Tank capacity FW 1 200 m³

3) MACHINERY
Main engines: 6x 1800kW / Total 10.8MW
Main propulsion: 2x Voith Schneider 3800 Kw
Thrusters:
   i. Tunnel thruster: 2 x 1 350 kW
   ii. Azimuth thruster: 1 x 1 400 kW
Voith Roll Stabilization (VRS) System

4) PERFORMANCE
Speed / Consumption (fair weather):
   i. Service speed: abt. 14,5 kts., abt. 39 mt / day
   ii. ECO speed: abt. 11 kts., abt. 27 mt / day
   iii. DP Operations: abt. 8 – 13 mt / day
      (weather & sea state dependent)

5) DP SYSTEM
Dual redundant DP-System (AUTR/DP2), Kongsberg
Reference system
   i. 2 x HiPAP 500, Kongsberg
   ii. One Seapath 200, Kongsberg
   iii. One DGPS 122
   iv. 1 x Seapath 300
   v. 3 x SeaStar diff. modulator
   vi. Three MRU’s
One Radius 1000 QUAD System

6) LIFTING EQUIPMENT
TTS 150t AHC / 3000m wire
   i. Max lifting capacity: 150 mt, radius 7-10m
   ii. Max lifting capacity: 25 mt, radius 35m
   iii. Active lifting capacity at 2000m: abt. 100 mt
   iv. Aux hook: 12.5 mt, 1 fall, radius 7-36m, 550m
2 x ODIM LARS (AHC) for deployment of (W)ROVs through moonpool
   and starboard side, SWL 12t
Deck crane: 2 x foldable cranes, capacity 1,1 mt each
Provisions store crane: Foldable crane, max lifting capacity 1,1 mt

7) DECK
Open deck area: 960m²
Deck strength: 10t/m²
Tugger winches: 2 x 5t
Main Moonpool: 7.2m x 7.2m
Power Supply: 2 x 2.5MW
   i. 1 Power supply connection cabinet is installed on the Main Deck in the ROV Hangar at Frame 82, port
   ii. 1 Power supply connection cabinet is installed on the Main Deck by the main crane pedestal at Frame 35Work ROV
Moonpool in hangar: 5.4m x 5.4m Both Moonpools have Flush Deck Covers

8) ACCOMMODATION
Maritime crew:
   i. Single cabins: 31
   ii. Double cabins: 81
Charterers’ personnel:
   i. Single cabins: 7
   ii. Double cabins: 37
Facilities: On-line room, Off-line room, client offices (3), conference room, lounges (3), hospital, fitness room, Sauna, Solarium

9) NAVIGATION, SURVEY AND COMMUNICATION
Equipment according to GMDSS regulations, Area 3 and Naut-OSV notation
VSAT high speed, broadband satellite communications
2x 10cm LRTK GNSS positioning systems (GPS / GLONASS)
2x HiPAP 501 USBL subsea positioning systems, 1 upgraded to Cymbal wideband technology
2x Seapath GNSS heading and motion systems
Navisuite Online control, logging and processing software
Options and visualsoft video logging software, complete geophysical survey suite on the ROVs.

10) HELICOPTER LANDING DECK
Designed for: Sikorsky S-92
Certified according to: CAA CAP437 / DNV
Helideck diameter: 20.88m
Max weight: 12,8 mt

11) SAFETY EQUIPMENT
MOB/Rescue boat: Maritime Partner Weedo 700
   2 x enclosed lifeboats, 80 pax each.
   4 x 20DKF Davit Launch life rafts.
   4 x 35DK+Throw overboard life rafts

12) ROV Equipment
Both ROVs are located in enclosed hangar with workshop
1 x Triton XLX 57 / Perry Top Hat Type V
   i. Available power: 150BHP / 130 kW
   ii. Ops depth: 3000m
   iii. Umbilical length 3100m
   iv. Tether length 650m
1 x Triton XLR 02 / Perry Top Hat Type IV
   i. Available power: 125BHP / 145 kW
   ii. Ops depth: 3000m
   iii. Umbilical length 3450m
   iv. Tether length 370m

13) Trenching Equipment
One or optionally two powerful Capjet 1000kW jet trenching systems for cable, umbilical and pipeline trenching.
Fully integrated control rooms in vessel
High seastate LARS systems
Operating depth 1000m (deeper optional)
Back fill plough optional
As-trenched survey
Polar King is a multipurpose subsea vessel specially designed for operation under severe weather conditions with high maneuverability and station keeping capabilities. The vessel provides services including inspection, maintenance and repair (IMR) operations, and trenching support (TSV). The vessel is complete with a 150 ton Active Heave Compensated (AHC) offshore crane, two WROVs, accommodation for 112 persons and offers a flexible deck space of 960 sqm for a range of operations.

Currently the vessel is mobilised with 2 trenching spreads. It is designed with environmental features for worldwide service, compliant with SPS 2008 and with a Clean-Design and a Green Passport.