SWIRE PACIFIC OFFSHORE



M/V Pacific Petrel

- ▶ Bollard Pull 53-66 tonnes
- ▶ Brake Horsepower 4826-5147 BHP
- ▶ Clear Deck Space 275-330 m2
- ▶ Winch Line Pull 150 tonnes





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General Information

Built: Qingdao Qianjin Shipyard, China, June 2011

Flag: Singapore Call Sign: 9V7611 IMO No.: 9503407

Classification: DNV-GL +1A Fire fighter(I) Offshore service vessel(Anchor handling, Towing)

DPS(1)

Dimensions

Length, overall: 57.50 metres
Length, BP: 50.50 metres
Breadth, moulded: 14.00 metres
Depth, main deck: 6.00 metres
Design draft: 4.55 metres
Maximum draft midship: 5.10 metres
GT: 1329

GT: 1329 NT: 484

Length between P.P.: 50.50 metres
Breadth: 14.0 metres
Draft minimum: 3.10 metres
Draft maximum: 5.10 metres

Capacities

Deadweight (maximum): 1545.82 tonnes
Clear Deck Area: 30m x 11m = 330 m2
Deck Strength: General deck - 5 t/m2

Aft AH deck - 19 mm steel plate

Deck Cargo: 500 tonnes

Fuel: 566.286 m3 (dedicated)

Potable Water: 400.746 m3 Ballast Water: 371.866 m3

Brine / DMA / Glycol / Liquid

Mud: 147.264 m3 or 5200 ft3 (2 tanks dual-use Brine/Mud/DMA)

Liquid Mud: 184.432 m3 or 6513 ft3 (4 dedicated tanks)

331.696 m3 or 11713 ft3 (including 2 dual-use tanks) 135 m3 or 4750 ft3 in 2 x 2 tank independent systems.

Dry Bulk: 135 m3 or 4750 ft3 in 2 x 2 tank independent systems. Cement density max 2.35 t/m3 and fineness 4,000 Blaine.

Machinery

Main Engines: 2 x 1,920 kW = 3,840 kW (5,147 BHP) Yanmar 6EY26

Propulsion: 2 x CPP propellers in Kort nozzles 2 x Electric-hydraulic steering gear

Bow Thrusters: 1 x 500 kW (670 BHP) producing 7.9 tonnes (77.5 kN) thrust Stern Thrusters: 1 x 500 kW (670 BHP) producing 7.9 tonnes (77.5 kN) thrust





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Shaft Generators: 2 x 1250 kVA, 440 V, 60 Hz

Auxiliary Generators: 1 x 320 kW Caterpillar 3406 C with spark arrestor Emergency Generators: 1 x 315 kW Caterpillar 3406 C with spark arrestor

Towing and Anchor Handling

Bollard Pull: 63.78 MT, continuous

65.60 MT, maximum

Main Winch: 1 x MacGregor-Plimsoll double drum, low pressure winch

Load Capacity: Towing / A/H drums 1st layer

150 tonnes at 7.2 m/min 100 tonnes at 10.8 m/min 50 tonnes at 22 m/min

Brake Capacity: 250 tonnes (static) on towing drum 1st layer

250 tonnes (static) on AH drum 1st layer

Tow Drum Dimension: 820 mm, flange dia, 2800 mm & drum length 1500 mm

Tow Drum Wire Capacity: 1100 m x 64 mm (2.5 inch) diameter

AH Drum Dimension: 820 mm, flange dia, 2800 mm & drum length 1500 mm

Work Drum Capacity: 1200 m x 64 mm (2.5 inch) diameter Secondary Winch Dimension: 100 m x 64 mm with spelter socket 1 x 76 mm (3 inch) diameter chain

Stern Roller: 1 x 2 m diameter x 4 m width, SWL 250 tonnes Tow Pins / Guide Pins: 1 x set hydraulic Karmoy, remotely controlled

Wire Chain Stopper: 1 x retractable Karmoy, SWL 250 tonnes, controlled from wheelhouse (32 - 76

mm chain)

Spare Reel Capacity: 1200 m x 64 mm (2.5 inch) diameter

Deck Machinery

Tuggers: 2 x 10 tonnes MacGregor-Plimsoll

Capstans: 8 x tonnes x 15 m/min MacGregor-Plimsoll; Drum - 10 tonnes x 10 m/min Windlass: 2 x 1440 Kg. high holding Anchor 2 x 328.8M x 30mm dia. U3 Chain

Bow Mooring: 1 x mooring drum capacity 220 m x 38 mm synthetic rope

Smit Towing Bracket: Smit-type, 1 x 120 tonnes SWL

Crane Capacity: SWL 1500 kg @ 8 m radius, make: Helia, model: HM25-8F

Electronics

Main Radar: 1 x Furuno X-band, 21 inch colour LCD, ARPA Auxiliary Radar: 1 x Furuno S-band, 21 inch colour LCD, ARPA

Auto Pilot: 1 x Tokyo Keiki PR-6000-e

Gyro Compass: 1 x Tokimec TG-8000 with 4 repeaters

Magnetic Compass:1 x Saura Keiki SR165MEcho Sounder:1 x Furuno FE-700DGPS:1 x Veripos LD5 1U-H27Anemometer:1 x Young Wind TrackerSpeed Log:1 x Furuno Doppler DS-80





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Communications: G.M.D.S.S. (Global Maritime Distress & Safety System)

Area A3 2 x VHF

2 x Inmarsat C 3 x VHF (portable) 1 x McMurdo E5 EPIRB 1 x Navtex Nx700

2 x Mcmurdo Rescue SART

Navtex Receiver: 1 x Furuno NX-700
Weather Fax: Furuno FAX 408
Satellite Communication: FBB: Sailor 500
AIS: Furuno FA 150

VHF: 2 x Furuno FM-8800 D/S BNWAS: 1 x Martek Marine

Discharge Pumps

 Fuel Oil:
 1 x 100 m3/hr - 7.0 bar

 Dirty Oil:
 1 x 10 m3/hr - 2.0 bar

 Potable Water:
 1 x 150 m3/hr - 7.0 bar

 Drill Water:
 1 x 150 m3/hr - 7.0 bar

 Liquid Mud:
 1 x 75 m3/hr - 18 bar

 Brine / Mud:
 1 x 75 m3/hr - 18 bar

Dry Bulk: 2 x 78 m3/hr - 5.6 bar, 80 psi

Cargo Flow Meters : Fuel oil & Fresh water Hose Connections : Fuel - 4" Camlock

Potable Water - 4" Camlock Drill Water - 4" Camlock Liquid Mud - 5" Camlock Dry Bulk - 4" Camlock

Performance

Speed / Fuel Consumption: Maximum speed 13.5 knots free running at 100% MCR - approximate fuel

consumption 19 m3 per day

Economical speed 10 knots - approximate fuel consumption 10.5 m3 per day

Idle at sea - approximate fuel consumption 2.3 m3 per day Idle in port - approximate fuel consumption 0.8 m3 per day

Dynamic Positioning

Type: Converteam C Series DP1 System Reference Systems: Veripos DGPS, MDL Fanbeam5 Control Modes: Manual, DP, JSAH, JSMH

Joystick: 1 x Converteam IJS





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External Fire Fighting

Capacity: $2 \times 1200 \text{ m}3/\text{hr} = 2400 \text{ m}3/\text{hr}$

Monitors: 2 x 1200 m3/hr mounted on wheelhouse top, remotely controlled from

wheelhouse

Throw Length: 120 m

Throw Height: 50 m at 70 m distance

Standby Rescue Equipment

1. 1 x Vanguard VG 6.0 FRW, 15 persons, SOLAS approved FRB with inboard diesel waterjet propulsion.

2. Rescue Zones on both Port and Starboard side, main deck, with scrambling net and personnel transfer swing ropes.

Anti-Pollution

Dispersant Tank: 9.190 m3

Spray Nozzles: 4 x spray nozzles (2 at each side), outreach: 12 m

Accommodation

Berths: 4 x 1 berths

5 x 2 berths 2 x 4 berths 22 berths in Total

1 x combined messroom/recreation room

1 x galley

All living space fully air-conditioned, design 45 deg C / 70% RH outside, 25 deg

C / 50% RH inside

Environmental Features

- 1. Real time main engine fuel consumption monitoring, ensuring maximum fuel efficiency and emissions reduction
- 2. Coffin 5 ppm oily water separator, effluent quality exceeds the 15 ppm current legislation requirements
- 3. 1 x Omnipure sewage plant, complies with latest 2010 IMO Resolution MEPC 159(55)
- 4. Cargo load / discharge stations with saveall to inboard tank
- 5. Low residue design bulk tanks
- 6. Mud tanks with dedicated recirculation pumps
- 7. Macerator fitted in galley. Provision for recycling of waste

Miscellaneous

- Design complies to latest rules and regulations from SOLAS 1974, and IMO 469 (XII) "Guidelines for the design and construction of offshore supply vessel"
- 2. Bulk systems remotely controlled from wheelhouse





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- Fitted with 3 halogen searchlights (1 fwd, 2 aft), each 2000 W, on wheelhouse top and electrically operated from inside wheelhouse, 8 x 1000 W floodlights for cargo deck
- 4. Deck power supplies:
 - 4 x 250A, 440V, 3phase
 - 1 x 63A, 440V, 3 phase
 - 1 x 32A, 220V, single phase
- 5. Wood sheathed main deck for aft area, which is steel plated for anchor handling. Supplied with anchor grapnel
- 6. Welding / cutting equipment and lathe in workshop
- 7. Fresh water ultra violet steriliser
- 8. CO2 fire extinguishing system fitted in the engine room / paint locker / hydraulic pump room / emergency generator room. Independent CO2 system for Galley.
- 9. Fire detection system fitted to the accommodation, engine room and throughout the vessel
- 10. Statutory liferafts, life-jackets, pyrotechnics
- 11. Removable crash rail sections on main deck (PS & SB) to facilitate R.O.V. operation