Deep Pioneer

A multipurpose deepwater support vessel well suited to the requirements of the offshore industry worldwide
The Deep Pioneer is a multipurpose deepwater support vessel that is well suited to the current and future requirements of the offshore industry worldwide.

**Capabilities**

Offering versatility, stability and the ability to work in deepwater locations, the Deep Pioneer provides cost-effective solutions for a variety of offshore activities. The large aft deck enables the vessel to add modular components to suit clients needs, from a Portable Pipelay System (PPS) through a moonpool, to laying mooring chains under tension over the stern roller.

**Seakeeping characteristics**
The Deep Pioneer is a large vessel with motion characteristics, which allow for safe working in most weather conditions. The high freeboard and dock walls almost eliminate the potential of water on deck, therefore protecting the crew and cargo in adverse weather conditions.

**Working decks**
The main deck has an exceptionally large working area of 2,230 m² and offers a uniform loading capacity of 10 Te/m². The stern area is additionally strengthened and therefore able to support a J-Lay spread or other heavy equipment. The vessel is equipped with two KARM Fork Chain Stopper Units, rated to 500 Te and two Towing Pins rated to 240 Te.

**Cranage**
Fitted with a 300 Te offshore heave-compensated crane supported by a 3 Te Stores Crane and Fast Winch capable of lifting 8 Te from 1500 m water depth, the Deep Pioneer is more than adequately equipped to support the most demanding of ultra deepwater support and construction work. In harbour conditions the main 300 Te crane can allow the loading of flexible reels.

**ROV**
The vessel is fitted with one moonpool launched “heavy duty” work class Triton-MRV® and one overside A-frame launched “heavy duty” work class Triton MRV®. Both systems are heave-compensated and rated for operation to a working depth of 3,000 m in conditions up to sea state 6.

**Dynamic positioning system**
The Deep Pioneer is fitted with a fully redundant Kongsberg SDP21 Dynamic Positioning System with six
Specifications

**Principal dimensions**
- Length overall: 156.75 m
- Length between pp: 140.03 m
- Breadth moulded: 29.00 m
- Depth moulded: 7.79 m
- Extreme breadth: 29.40 m
- Length extreme: 158.60 m

**Displacement**
- 18,129 te at 5.36 m draft
- Gross tonnage: 11,806 Te

**Cranage**
- **Main lifting facility**
  - Kenz main pedestal crane (heave-compensated)
  - Offshore: 250 Te
  - Calm water/harbour: 300 Te

**Additional lifting facilities**
- 2 x hydraulic anchor winches fwd 10 Te
- 1 x hydraulic mooring winch SB aft 10 Te
- 1 x capstan winch PS aft 10 Te
- 1 x fast winch 8 Te @ 1,500 m
- 1 stores crane on stbd side forward of 3 Te SWL at 16m radius in single fall
- A stern roller (diameter 2.20 m, length 3.0 m) with conical fairings is fitted to allow anchor-handling activities. The SWL is 350 Te

**Deck space**
- 2,220 m²

**Deck load**
- 10-15 Te/m²

**Capacities**
- Marine diesel oil: 2,700 m³
- Lube and hydraulic oil: 97 m³
- Fresh water (portable): 1,000 m³
- Ballast water: 13,000 m³

**Service air**
- 2 x compressors 1,600 N m³/hr at 7.5 bar each

**Endurance**
- Max period on DP: 100 days
- Max period between port calls: 90 days

**Bollard pull**
- Max: 120 Te
- Operational in DP: 80 Te

**Service speed**
- Transit average: 10.5 knots
- Economical: 8 knots

**Helideck**
- Certified helideck for 9.3 Te take off weight (Super Puma class helicopters)

**Accommodation**
- 106 people in 65 cabins

**Lifesaving Appliances**
- Lifeboats: 2 x 70 person
- 155 Immersion Suits
- Life rafts: 4 x 20 person
- 2 x 12 person

**ROV Systems**
- Construction/Pipelay operations are supported by two dedicated work class TMRV 5 and TMRV 6 ROV’s

**Flag**
- Marshall Islands

**Classification**
- DNV 1A1 DYNPOS-AUTR, HELDK-SH CRANE, DK (+)

**Year built/builder**
- 1984 Cantiere Navale Breda, Italy
- Converted 1999 by A&P Tyne, Newcastle, UK
- Accommodation/ROV upgrade: June 2003

**DP system**
- Kongsberg SDP21

**Reference Systems**
- 1 x Sercel 203 DGPS
- 2 x Veripos Verify DGPS
- 1 x Laser fan beam
- 2 x HiPAP Kongsberg - APC 10

**Power plant**
- 3 x Caterpillar diesel generators (2 x 1,200 kW, 1 x 380 kW)
- 3 x Caterpillar diesel generators (440 v, 60 Hz, 1,300 kW)
- 1 x Ansaldo shaft generator (680 kW)
- 1 x Ansaldo emergency generator (96 kW)

**Propulsion**
- 2 x Main propellers 40 Te total
- 2 x Azimuth propellers 88 Te total
- 3 x Transverse tunnel thrusters 42 Te total

**Machinery/propulsion**
- The Deep Pioneer is powered by four GMT engines (2 x 8L230.12P and 2 x 8L230.8P) with a total power of 4,118 kW. These main propellers are not used in normal DP operations but can be used to provide a constant pulling tension as required.
- Additionally, there are two azimuthing thrusters aft, each powered by a 2,600 kW, Wartsila 8L26 engine. At the fore end, the transverse thrust for DP is provided by three tunnel thrusters directly driven by 3 x Caterpillar 2516B engines, each producing 1,566 kW power.

**ROV/Deck electrical supplies**
- Provided by three x 1,300 kW, 440 V, 60 Hz Caterpillar 3512B diesel generators.

**Accommodation**
- Accommodation is available for 106 people in 65 one and two-berth, modern, air-conditioned cabins.

**Flexible pipe payload**
- Carousel: 2,000 Te
- Reels: 3,000 Te

**Portable Pipelay System PPS01**
- Holding capacity: 350 Te
- Working water depth: 2,500 m

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