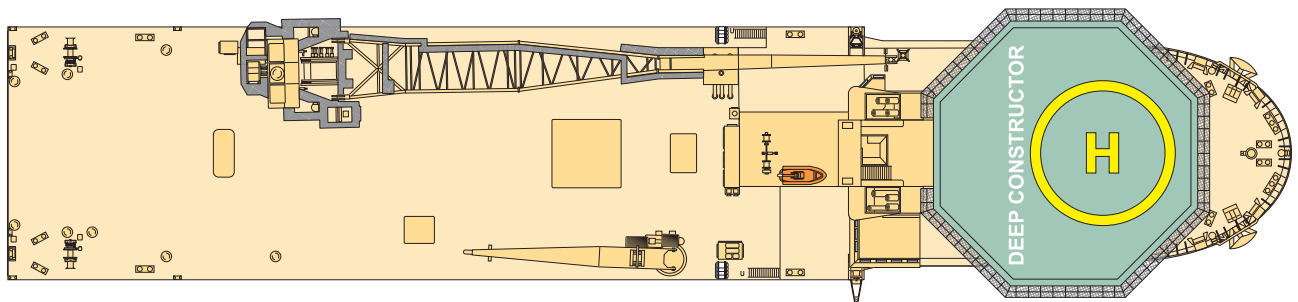
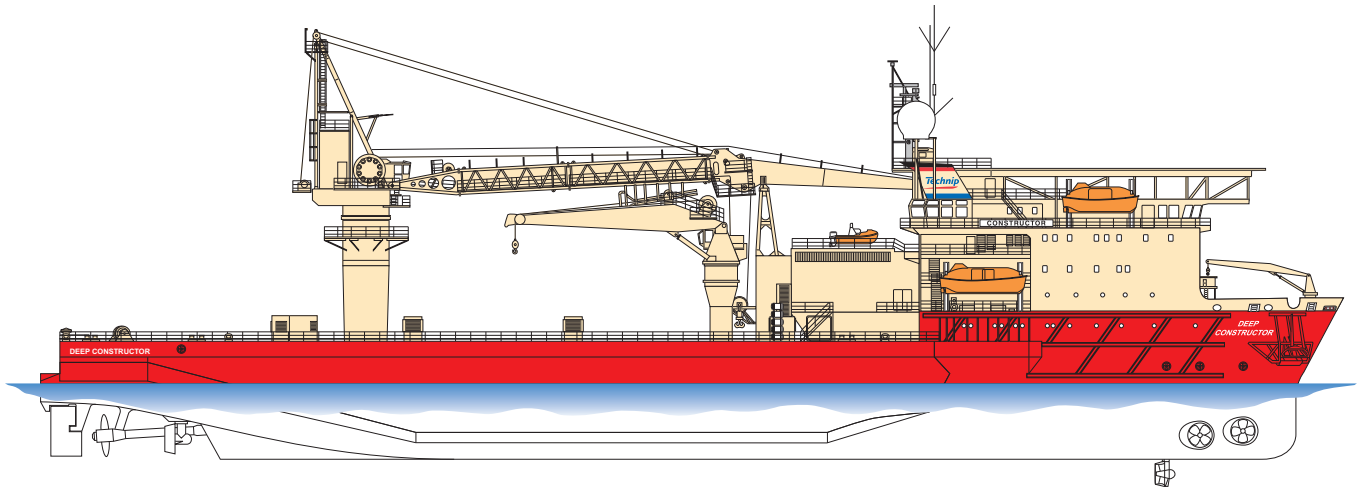


# Deep Constructor



# Deep Constructor



The Deep Constructor is a powerful deepwater pipelay and multi-purpose subsea construction vessel 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 Constructor is specially adapted to work virtually anywhere in the world, excluding Arctic areas. The vessel offers cost-effective solutions thanks to her capabilities and versatility; 3,000 Te of flexible installation and subsea construction with heavy lift capacity for deepwater repair and maintenance. She is able to install flexible lines and umbilicals, stored in a carousel under deck, using the Vertical Lay System (VLS), down to 2,375 m (7,760 feet) water depth.

### Seakeeping characteristics

The Deep Constructor is a large vessel with motion characteristics that allow

for safe working in extreme weather conditions. The vessel is fitted with a passive anti-roll tank system that provides excellent roll reduction for a large number of loading conditions. In optimum position, relative to the wind and waves, the vessel can maintain station in a Beaufort 8 seastate condition (gale force).

### Working decks

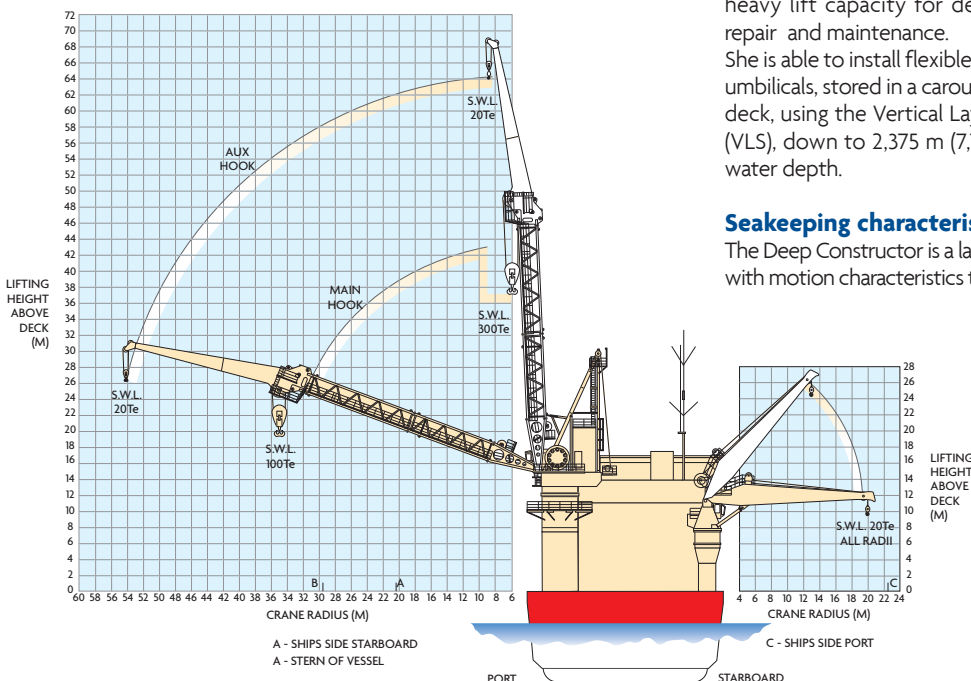
The open maindeck is 70 m x 24.5 m allowing approximately 1,650 m<sup>2</sup> working area. The working deck has a uniform loading capacity of 10 Te/m<sup>2</sup> with the exception of the area above the carousel hold which is 7.5 Te/m<sup>2</sup>. The vessel also has 2 mezzanine decks (aft).

### Workshop

The onboard workshop covers an area of 80 m<sup>2</sup> and is well equipped to support repair and maintenance operations.

### Craneage

Fitted with a main 300/150 Te, 16/27 m radius crane with 30/15 Te, 56.5 m whip line and auxiliary 25/5 Te, 20/20.5 m radius revolving pedestal cranes, the Deep Constructor is more than adequately equipped to support the



## SPECIFICATIONS

### Principal dimensions

Length overall	126.3 m
Length between pp	116.9 m
Breadth moulded	24.5 m
Depth moulded	11.3 m
Extreme breadth	28.4 m (max) (helideck)

### Operating draft

7.275 m (max hull draft) + 0.35 m  
Bilge keels = 7.625 m

### Displacement

14,390 Te at 7.275 m draft

### Gross tonnage

9,640 Te

### Pipeline payload

- Carousel 2,000 Te flexible
- On deck 1,500 Te on reels

### Cranage

#### Main lifting facility

- Main pedestal crane port aft
- 300/150 Te at 16/27 m
  - Whip line 30 at 56.5 m radius
  - Max wire length 1,570 m
  - 3 x 15 Te constant tension tagging towers

### Additional lifting facilities

- Pedestal crane starboard forward
- 25/5 Te at 20/20.5 m
  - Max wire length 420 m

### Deck space

1,650 m<sup>2</sup>

### Deck load

10/7.5 Te/m<sup>2</sup>

Maximum deck load dependent on carousel load

### Capacities

- Fuel oil 1,769 m<sup>3</sup>  
(dependent on deck cargo and carousel load-out)
- Lube oil 166.2 m<sup>3</sup>
- Fresh water (potable) 325 m<sup>3</sup>
- Ballast water 1,721 m<sup>3</sup>
- Heeling tanks 1,885 m<sup>3</sup>
- Flume tanks 835 m<sup>3</sup>

### Service air

2 x Atlas Copco Compressors  
15 m<sup>3</sup>/min FAD at 7 bar

### DP system

Kongsberg SDP22

### Reference Systems

- 1 x Kongsberg HIPAP 500/HIPAP 350 hydroacoustic system
- 3 x Dual DGPS
- 1 x Laser fan beam

### Environmental Regulatory Number

99.99.98

### Power plant

- 5 x Nohab V-16 diesel engines (2,650 kW) each
- 3 x Caterpillar 3512B (1,360 kW) each
- 5 x NEBB WAB 800 generators (2,520 kW) each
- Total power production 12,600 kW

### Propulsion

#### Forward

- 2 x Tunnel thrusters variable pitch 1,100 kW, 16 Te thrust each
- 1 x Azimuth fixed pitch 1,200 kW, 22 Te thrust

#### Aft

- 2 x Azimuth thrusters variable pitch 1,100 kW, 21 Te thrust each
- 1 x main propeller, variable pitch 4,400 kW, 56 Te thrust

### Bollard pull

96 Te

### Endurance

- FW making capacity 50 Te/24 hrs
- Fuel consumption (typical)
  - In port 10 m<sup>3</sup>/24 hrs
  - Transit 38 m<sup>3</sup>/24 hrs
  - DP 26 m<sup>3</sup>/24 hrs

### Service speed

11 knots

Economical

10 knots

### Helideck

Certified helideck for 9.3 Te take off weight

### Accommodation

119 people in 74 cabins

### Lifesaving appliances

- Lifeboats 2 x 50 person  
2 x 69 person
- Life rafts 9 x 25 person  
1 x 20 person

### Flag

Bahamas

### Call sign

C6 CP8

### Classification

DNVIA1, DYNPOS-AUTR, EO, HELDK

### Year built/builder

- 1980 by Öresundsvärvet, Landskrona, Sweden
- Converted 2001 by Cammell Laird (Tyneside) Ltd
- 2008 Life extension and accommodation upgrades by Dormac, Durban, South Africa



most demanding subsea construction work.

### Fast Winch

The vessel is also equipped with a 15 Te winch capable of reaching 2,600 m water depth.

### ROVs

The vessel is outfitted with two advanced workclass ROV systems. Both systems are rated to 2,500 msw with Triton XL42 being moonpool deployed and Triton XL32 launched over the starboard side.

### Dynamic positioning system

The vessel is fitted with a fully redundant Kongsberg SDP 22 dynamic positioning system enabling her to maintain position during pipelay or subsea operations. The system is designed to provide a high

degree of reliability and has a second computer and joystick control. There are four reference systems: Microwave, Kongsberg HIPAP 500/HIPAP 350 hydro-acoustic system, CNAV DGPS, two Verify Ultra DGPS and laser fan beam.

### Machinery/propulsion

The vessel is powered by 5 Nohab V-16 diesel generators each capable of producing 2,650 kW. The vessel's main propeller is driven by 4 x 1,100 kW electric motors and each of the two stern variable pitch azimuth thrusters are powered by 1,100 kW electric motors. Forward there is one 1,200 kW fixed pitch azimuth thruster and two 1,100 kW variable pitch tunnel thrusters, resiliently mounted to ensure low noise levels. The fully redundant power plant is monitored by a power management system for optimum

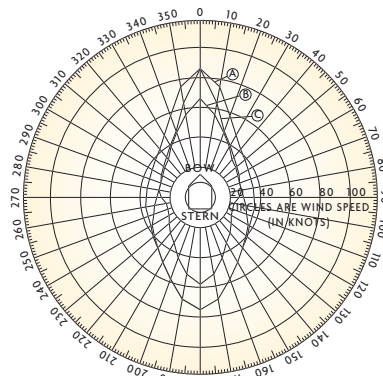
control and load sharing. The pipe-laying equipment is powered from three 1,360 kW Caterpillar generators

### Carousel

The vessel is fitted with an integral 2,000 Te capacity carousel for flexible pipe storage, dimensions 18 m x 4 m core x 5.20 m depth, that allows pipe-laying of up to 24" pipe.

### Vertical Lay System (VLS)

VLS 04 (dual tensioner) can be supplied and carried above the main moonpool for flexible and umbilical lay. A 270 Te Abandonment and Recovery (A&R) Traction and Spooling winch, with 100 mm wire and capable of reaching 2,375 m water depth, can be supplied for VLS 04 operations.



Technip is a world leader in the fields of project management, engineering and construction for the oil & gas industry, offering a comprehensive portfolio of innovative solutions and technologies.

With 23,000 employees around the world, integrated capabilities and proven expertise in underwater infrastructures (Subsea), offshore facilities (Offshore) and large processing units and plants on land (Onshore), Technip is a key contributor to the development of sustainable solutions for the energy challenges of the 21<sup>st</sup> century.

Present in 48 countries, Technip has operating centers and industrial assets (manufacturing plants, spoolbases, construction yard) on five continents, and operates its own fleet of specialized vessels for pipeline installation and subsea construction.

The Technip share is listed on Euronext Paris exchange and over the counter (OTC) in the USA.

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