

Leonardo da Vinci



DP3 CABLE LAYING VESSEL

Technical specification



DESCRIPTION

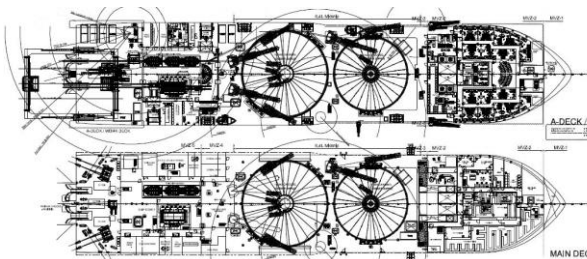
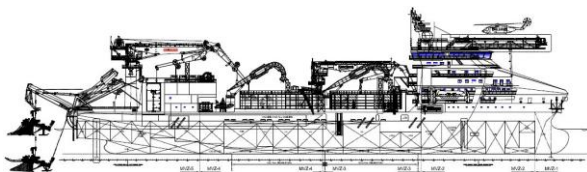
Leonardo da Vinci is a DP3 ship built for the most challenging worldwide cable installation works.

With her two carousels of 10,000 tons and 7,000 tons load capacity and her capstan able to sustain a maximum tension of 100 tons, the vessel is equipped to conduct the deepest power cable lay up to 3,000 m water depth.

Moreover, she can also be used on any kind of offshore projects – from shallow to deep water – including cable burial with a wide range of ROV vehicles.

The vessel is designed with an operation endurance of 90 days and max speed above 14 knots.

The accommodation for 120 persons is designed to offer comfort, ample working spaces and recreational areas for all personnel, including fully equipped gym, auditorium, game room, dayroom and officers lounge.



VESSEL KEY FEATURES

Classification: C*HULL *MACH, Cable laying ship, Dynapos AM/AT RS, HELIDECK, COMF-NOISE CREW A, COMF-VIB CREW C, COMF-AIR, PMS, GREEN PLUS, AUT-UMS, FATIGUELIFE (30), MANOVR, CARGO HANDLING, DANGEROUS GOODS, SPS, Battery Powered (2 x 750 kWh)

Cable Laying capabilities:

- Bundled cable laying
- Simultaneous laying and burial
- Cable jointing facilities in a covered area of about 240 m² (30x8 m).
- Designed for laying power cables up to 3000 m water depth

DP capabilities:

DP3 ADV
ERN Star 99.99.99.98 (to be confirmed)

Hybrid power system:

6 Diesel generators + 2 Energy Storage Systems

Propulsion system:

3 x Aft Azipod®
2 x Forward Retractable Azimuth Thrusters
2 x Bow Tunnel Thrusters

Carousels:

Aft 10,000 tons load capacity
Fwd 7,000 tons load capacity
Max combined load above 13,000 tons

Cranage:

100 tons AHC offshore crane
20 tons offshore crane

A-frame assembly:

80 t A-frame with 180 t AHC towing winch

Two enclosed hangars for work class ROV's.

Helideck certified for take-off and landing of Sikorsky S92 type (18 pax) and AW 101.

Technical specification



MAIN DIMENSIONS

Length overall	171 m
Breadth moulded	34 m
Summer draught moulded	8.5 m
Deadweight	18400 tons
Max Displacement	36400 tons
Gross Tonnage	27500
Bollard Pull	200 tons



BURIAL TOOLS

Leonardo da Vinci can be equipped with Prysmian’s Hydroplow, Heavy Duty Plough and Seamole, to carry out simultaneous lay and burial or post lay burial operations, dependent upon project requirements. The vessel can also be a platform for state-of-the-art jet trenching ROVs and Mass Flow Excavator tools.



CABLE OPERATIONS KEY FEATURES

CAROUSELS

Capacity	10,000 tons 7,000 tons
Core Diameter	6 m
Outer Diameter	Aft carousel 28 m Fwd carousel 25 m
Tank Height	7 m

CAROUSEL PICK UP ARM

3m MBR Pick up Arm with motorised cable engine

STATIC TANK

Static tank for Fibre Optic cables 350 tons capacity

STARBOARD LAYING LINE

DOHB machine	Caterpillar “pads” type (5 tons and 3 tons at 35m/min (laying mode))
Capstan	6 m diameter and 100 tons max pulling tension (at max speed of 35 m/min or 1,1 knots in laying mode)
Stern sheave	6 m diameter fitted with dynamometer

PORTSIDE LAYING LINE

Linear machine	Caterpillar “pads” type 25 tons max pulling tension (at max speed of 35m/min)
Stern sheave	6 m diameter fitted with dynamometer