

MONNA LISA

DP3 CABLE LAYING VESSEL



DESCRIPTION

Monna Lisa 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 waters - 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 16 knots.

The accommodation for 120 people 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. The vessel is designed with an operation endurance of 90 days and max speed above 16 knots.

TECHNICAL SPECIFICATIONS



VESSEL KEY FEATURES

- Classification: C0 HULL 0 MACH, Cable laying ship, DYNAPOS-DP3, HELIDECK, COMF-NOISE CREW A, COMF-VIB CREW C, COMF-AIR, PMS, GREEN PLUS, AUT-UMS, FATIGUE LIFE (30), MANOVR, CARGO HANDLING, DANGEROUS GOODS, SPS, HYB-E (20.93 / 9.6), INWATERSURVEY, HVSC-NB
- 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:
 - DNV ST-0111 level 1 DP3 (9,7,7,6)
 - RINA SKC DP3 (STD, 7, 6, 9, 8)
- Green credentials:
 - High Voltage Shore Connection
 - Energy Storage System: 3 MW batteries
 - NOx reduction: SCR
 - Diesel Generators ready for biodiesel blends
- Propulsion system:
 - 3 x Aft Azipod® 3.2 eMW each
 - 2 x Forward Retractable Azimuth Thrusters 2.4 eMW each
 - 2 x Bow Tunnel Thrusters 2.5 eMW each
- Carousels:
 - Aft 10,000 tons load capacity
 - Fwd 7,000 tons load capacity
 - Max combined load above 14,000 tons
- Cranes:
 - 100 tons AHC offshore crane
 - 20 tons offshore crane
- A-frame assembly: 85 t A-frame with 200 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 SPECIFICATIONS



PRINCIPLE DIMENSIONS

Length overall	171 m
Breadth moulded	34 m
Summer draught moulded	8.5 m
Deadweight	18500 tons
Max Displacement	36500 tons
Gross Tonnage	27500 tons
Bollard Pull	200 tons



BURIAL TOOLS

Monna Lisa can be equipped with Prysmian's Hydroplow, IJM Plough, 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

CAROUSEL

Capacity	10000 tons 7000 tons
Core Diameter	6 m
Outer Diameter	Aft carousel 28 m Fwd carousel 24 m
Tank Height	8 m

CAROUSEL PICK UP ARM

3m MBR Pick up Arm with motorised cable engine

STATIC TANK

Static tank for Fibre Optic cables 500 tons capacity

STARBOARD LAYING LINE

DOHB machine	Caterpillar "pads" type (5 tons and 3 tons)
Capstan	6 m diameter and 100 tons max pulling tension
Stern sheave	6 m diameter fitted with dynamometer

PORTSIDE LAYING LINE

Linear machine	Caterpillar "pads" type 25 tons
Stern sheave	6 m diameter fitted with dynamometer