

## Cable layer

# Teliri

Cable laying and associated trenching operations maintenance, cable maintenance and ROV support



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## Teliri is a cable ship dedicated to laying and maintenance operations of under water cables.

The ship is fitted with a Kongsberg Simrad 702 ADP Dynamic Positioning system thanks to which the ship can navigate automatically over a pre-established laying route.

Accommodation is provided for 68 crew, technicals and contractor personnel.

Cable ship Teliri completed the Med Nautilus laying – a link between Greece and Turkey – began in 2010. She also installed the LION2 system – 2,700 kilometers of cable extending the LION system (Lower Indian Ocean Network) to Kenya via Mayotte. This cable offers Mayotte, for the first time, access to high speed internet.

## T200 ROV

The T200 trenching ROV system provides all the features of a powerful burial system in a compact and versatile package. It is a highly flexible, lightweight, cable maintenance ROV system, offering both «free fly» and «tracked» modes of operation.

The vehicle is suitable for the following tasks:

- Cable and flowline burial
- Detection and tracking of surface laid and buried cable
- Cable burial depth determination and logging
- Auto-follow cable tracking
- Manipulation of cable product using cutters, grippers and surface recovery line
- Debris clearance

## Taurus plough system

The Plough System is a well proven, high quality burial plough, manufactured by SMD. It is operated and maintained by Elettra on board CS Teliri.

### Specification burial system:

minimum pull, passive blade temporarily lifting a soil wedge for trenchless burial with minimum soil disturbance and thus best cable protection.

### Operation:

Pulled by tow rope from surface vessel.

### Burial depth:

Maximum possible cutting depth to underside of cable 1,500 mm in favourable conditions.

# Main particulars

## Registration:

- **Flag:** Italian
- **Base port:** Catania
- **Classification:** 100 - A - 1.1 Pcv CNP; +ELI; IAQ-1; +IPD-2
- **Class status Validation:** Last survey reported: Catania 27/ Jul/09
- **Built year:** 1996

## Dimensions:

- **Lenght overall:** 111.5 m
- **Moulded length:** 95 m
- **Breadth moulded:** 19 m
- **Maximum draught:** 6.5 m
- **Gross tonnage:** 8,345

## Capacities:

- **Load capacity:** 2,400 t in 3 cable tanks
- **Tank # 1:** 665 m<sup>3</sup>
- **Tank # 2:** 1,083 m<sup>3</sup>
- **Tank # 3:** 1,083 m<sup>3</sup>
- **Spare cable tanks:** 2 x 50 m<sup>3</sup>
- **Repeaters stacks:** 2 x 50 repeaters each, fully conditioned

## Accommodations:

- **Accommodations for:** 68 persons

# Performance & machinery

## Speed and consumption:

- **Maximum speed:** 14 knots
- **Consumption:** between 15-23 t/day
- **Endurance:** about 30 days
- **Bollard pull:** 60 t
- **Dynamic Position System:** Kongsberg SIMRAD ADP 702

## Generators

- **Main engine:** 2 x Wartsila 16v25 - 3,500 KW each  
1 x Wartsila 12v25 - 2,600 KW
- **Emergency generator:** 1 x Wartsila SACM 380 KW

## Propulsion:

- **Propulsion motors:** 2 x Ansaldo MSCR 710 x 6 - 2,200 KW each
- **Main propellers:** 2 LIPS FS1510-256/1510 MO steerable thrusters with fixed pitch propeller 2,200 KW each
- **Auxiliary thrusters:** 1 x LIPS type FS1510 - LMT steerable retractable thrusters with fixed pitch propeller in nozzle 2,200 KW - 2 x bow type CT 09 H - 2 x DP LIPS tunnel contrrollable pitch propeller thrusters 450 KW each
- **Main engines diesel generators - total running hours:**  
D/G n°1: 50,140  
D/G n°2: 70,256



# Onboard equipment

## Cable machinery:

- **Linear cable engine:** 1 x Dowty 18 wheelpairs hydraulic powered
- **Cable drum:** 2 x Dowty 4 m diameter hydraulic driven
- **Draw off - hold back:** 2 x Dowty 3 wheelpairs hydraulic driven

## Plough handling & towing equipment:

- **SMD A-Frame:** plough stabilizing and docking system - lifting capacity SWL 30 t
- **SMD towing winch system:** 4,000 m of 40 mm diameter tow wire - SWL 55 t on brake - max speed 30 m/min @ 10 t, 8 m/min @ 35 t

## ROV T200 Trenching system:

- **Power:** 200 shp
- **Propulsion:** 4 x horizontal & 4 x vertical thrusters
- **Forward speed:** free flying 2.3 knots / tracked 3.3 knots
- **Height:** 2.20 m - 3.31 (tracks deployed)
- **Lenght:** 3.10 m
- **Width (excluding tracks):** 2 m
- **Weight:** free fly config. 6,000 kg/track mode config. 7,000 kg
- **Jetting system:** 2 x 90 hp hydraulic driving waters pumps
- **Cable tracking system:** TSS 340/350 dualtrack
- **Manipulators:** Orion 7 functions manipulators

## Taurus plough System:

- **Dimensions:** 9.4 m long - 4.7 m high - 4.6 m wide
- **Weight:** 16 t in air - 13 t in water (approx)
- **Operating depth:** 1,500 m max
- **Cable/repeater size:** 17 to 150 mm dia/rep up to 380 mm dia.
- **Repeater burial depth:** 500 mm
- **Bend radius:** 1.5 m/min along cable path during normal ploughing
- **Soil capabilities:** any, with good rock ripping conditions - soft mud 5 kPa min.
- **Ploughing speed:** 1 m/s depending on seabed conditions
- **Control and instrumentation:** plough and cable information
- **Surveillance equipment:** 3 monochrome SIT cameras - 1 Sonar Mesotech MS900
- **Telemetry system:** CEGELEC GEM.80