

## Cable ship

# Raymond Croze

Efficiency and experience



**Sistership of the C/S Léon Thévenin, the C/S Raymond Croze is used primarily for maintenance, and she can also lay cable. She is able to operate in extreme conditions in economic mode.**

- More than 200 repairs, including 170 repairs in the Mediterranean agreement (MECMA).
- Max depth repair in MECMA : 3,500 m/min depth repair : 8 m
- 154 successive days at sea in ACMA in 2013, performing 21 consecutive repairs, a world record.
- C/S Croze also operates on several installation projects in the Mediterranean and Atlantic Ocean (Sea-Me- We3, Atlantis-2, and a dozen more festoons).
- The jetting ROV onboard performs Post Lay Inspection and Burial (PLIB) on large distances, in addition to cable detection, cutting and gripping operations.

### Precision and maneuverability

Measuring 107 m in length and with a maximum speed of 15 knots, the C/S Raymond Croze is a cable ship with a covered deck that provides optimal working conditions in all oceans at anytime of the year (safety, environment, protection for spares and cable work equipment). With a draft of 5.5 m, she can operate in shallow waters, up to a sounding depth of as little as 10 m.

### Operations in extreme conditions

With her high freeboard, C/S Raymond Croze may sail in deep seas with poor weather conditions. The bows – located 8 meters above the sea level – allow working in sea state 6, with waves up to 6 meters.

### 24/7 maintenance vessel main parameters are:

- Readiness of cable ship to leave port - mobilisation
- Cable loading/off-loading speed
- Ship transit speed on passage
- Cable operation repair times - depth specific
- Jointing completion times
- Ship/ROV downtime
- Demobilisation

The powerful propulsion and the Dynamic Positioning System are securing high levels of sea-keeping capabilities even with strong current and wind. The ROV Follow device allows an optimum positioning between the ship and the submarine vehicle during the diving operations.

### A fully equipped vessel

The C/S Raymond Croze is fully equipped to detect, cut, hold, retrieve and rebury submarine cables. She carries the equipment necessary (ropes, stopples, grapnels, buoys, etc.) to repair all types of cable laid in MECMA areas and she is having expanded spare cable storage capacity (three tanks with 7 independents means of access for a total cable capacity of 3,200 km). Also, she is equipped with a wood floor climate-controlled area for repeaters and BU storage. A working craft is on the ship for shore-ends operations.

# Specifications

Entering service: 1983

## Main particulars:

- **Length overall:** 107.8 m
- **Breadth:** 17.8 m
- **Design draft:** 6.2 m
- **Full load speed:** 15 knots
- **Endurance:** 12,000 NM
- **Gross tonnage:** 6,830 t
- **Deadweight:** 4,840 t

## Cable tanks: 3

- Aorage: 2 main cable tanks
- Tanks 1 and 2 - diameter 12,50 m - cable volume 700 m<sup>3</sup> - 1,000 t
- Tank 3 - cable volume 70 m<sup>3</sup>

## DP system:

- DP GE CONVERTEAM

## Propulsion:

- 2 x 1,420 kW each acting 2 shafts
- Transverse propellers: 1 bow + 1 stern (2 x 550 kW)

## Cable machinery:

- Aft: 1 x 12 wp LCE - 12 t
- Fore: 2 x 3.40 m cable drum - 40 t with DO/HB

## Equipment:

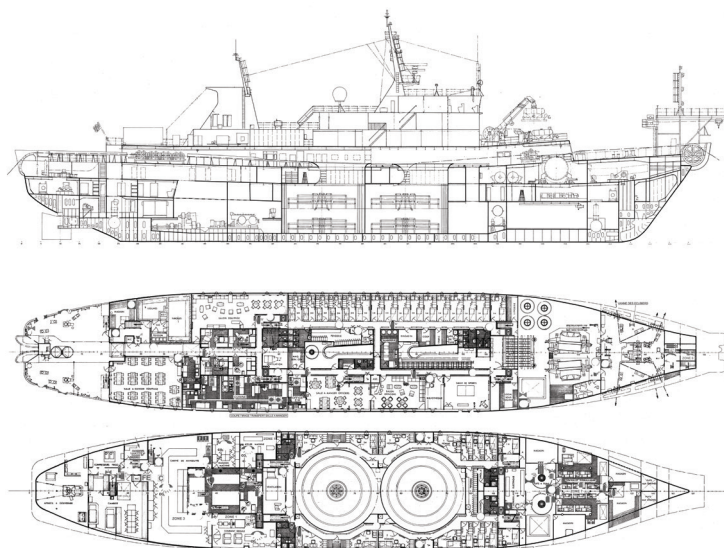
- Shallow and deep water echo-sounder 6,000 m / 10,000 m
- Acoustic positioning: sonardyne 2,000 m
- Integrated cable and navigation management: Espadon
- Test room, installation room, transmission room, jointing room

## Accommodation:

- **73 cabins:**
  - 52 single cabins
  - 21 double cabins

## Lifting capacity:

- Stern crane: 2 t - 15 m
- ROV crane: 9,5 t - 10 m sea state 6
- Sheave gantry, SWL 5 t



# Onboard equipment

## Hector 3 ROV

Hector are powerful and full customized work class ROVs dedicated for cable works. The Hector ROVs are specialized in burial by jetting after the laying of repaired cables. They can also operate surveys. Their HD video cameras allow finding cables down to 2,000 m depth.

## Capacities

- **Operations:** burial, inspection, survey, gripping and cutting
- **Power:** 300 kW
- **Operating depth:** 2,000 m
- **Trenching depth:** 1.5 m
- **Speed trenching:** 750 m/h
- **Speed free swimming:** forward 2.5 knots
- **Speed on tracks:** 2,500 m/h

