

Mobile Winch rental for R/V Pourquoi Pas?

Technical specification



Summary : Technical specification for a mobile oceanographic winch

Key Words : Oceanographic Winch

Revision history

Revision	Date of issue	Revision details
01	23_05_2025	First revision

Content

1. General	3
2. Appendices	3
3. Requirements	3
4. Scope of supply.....	3
5. Operations	4
5.1. Float recovery.....	4
5.2. Launch of artificial reefs	5
6. Technical specification	5
6.1. Mobile winch	5
6.2. Wire Rope	6
6.3. Winch location and rope routing	6
6.4. Options	6
7. Rental duration.....	6
8. Service engineer	7
9. Maintenance.....	7
10. Transportation.....	7
11. Documentation.....	7

1. General

The Vessel R/V POURQUOI PAS ? is a French oceanographic vessel operating overseas for the French Oceanographic Institute IFREMER. The vessel is owned by IFREMER and managed by its subsidiary GENAVIR.

This document is detailing all functionalities and constraints involved in the rental and installation of an oceanographic winch which shall be operated on R/V POURQUOI PAS? from July 2025 until September 2025.

2. Appendices

All appendices are provided as a separate file

[1]_ A01DGA1-I - PLAN D'ENSEMBLE (General Arrangement)

[2]_ D13T102-G- IMPLANTATION RAILS - FONTAINES - TWIST-LOCKS (Deck/container sockets location)

[3]_ D13T103-H- SITUATION, FIXATION ET SAISISSEMENT DES CONTAINERS. (Container sockets details)

[4]_ d13t1040-G- IMPLANTATION TRACAGE ET PERÇAGE DES FONTAINES (Deck sockets details)

3. Requirements

The main requirement is to rent a oceanographic winch able to launch and recover scientific equipment (reefs and float) from vessel main deck via vessel A-Frame at sea.

The winch will be used in offshore condition (H_s max= 5m).

4. Scope of supply

The manufacturer shall supply **Ifremer** with the following items:

- Rental of complete oceanographic winch with control cabinet included,
- Rental of Steel rope with termination
- Rental of Winch foundations suitable with vessel main deck sockets,
- Recommended spare parts for 3 months operation
- One set of specific tools if necessary,
- Technical files including calculation to confirm that winch efforts are suitable with deck / winch foundations.
- Attendance of Service Engineer for winch commissioning and crew training

Rates for all rented items shall be provided including insurance fees.

Anything in this specification that is not expressly stated as being **Ifremer** supplying and which is specific and required for using the winch shall be supplied by the **Manufacturer**.

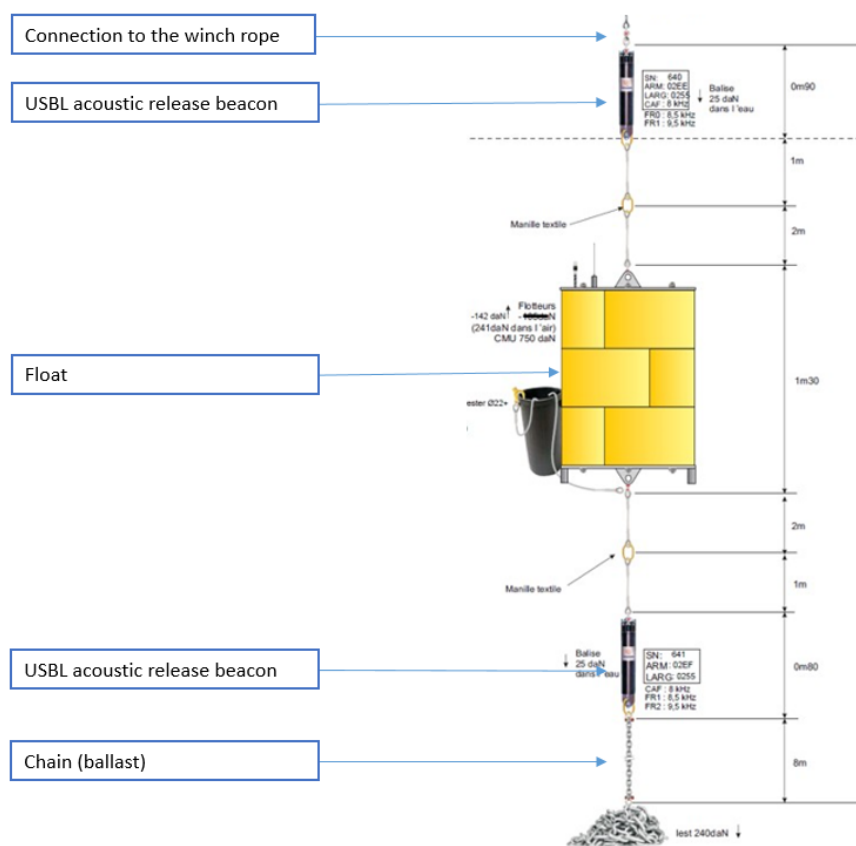
5. Operations

The winch shall be able to perform the following operations:

5.1. Float recovery

The winch shall be able to launch and recover a float located at 800 m depth and kept close to the seabed with a chain (acting as a ballast). As soon as the winch rope is connected to the equipment, the chain will be disconnected from the float thanks to an USBL acoustic release beacon.

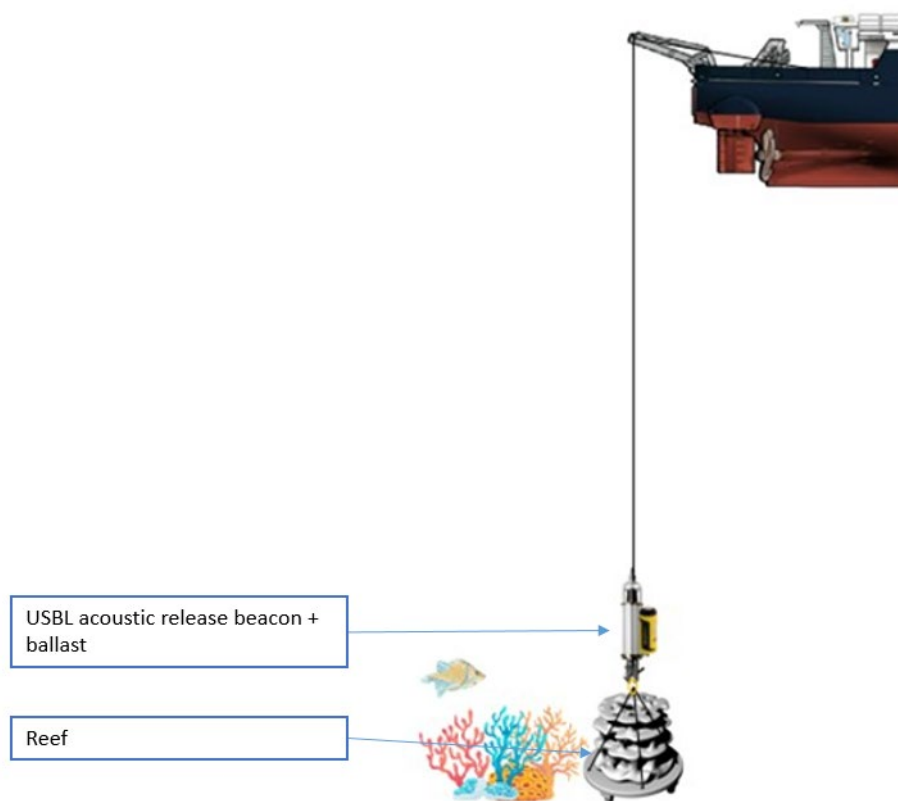
- Equipment's weight in the air: 1 ton
- Working depth: 850m



5.2. Launch of artificial reefs

The winch shall be able to drop artificial reefs off in the seabed. 17 reefs in total. Reefs will be connected to the winches cable via a USBL acoustic release beacon with ballast and drop off in the seabed. Disconnection will be done by acoustic ping.

- Equipment's weight in the air: 1.5 tons
- Working depth: 1000m



6. Technical specification

6.1. Mobile winch

Winch shall have to be supplied with the following:

- Minimum Safe working load: 2.5 tons
- Integrated spooling system suitable with wire rope
- Medium: winch powered by an electric motor would be preferred, directly from the vessel's AC-power supply.
However a possible alternative would be to use a package, composed of an electric HPU connected to the vessel AC-power supply, with an associated hydraulic winch powered by the HPU.
- Power supply: 400V, 50Hz, 3ph

- Control cabinet shall be fitted on the winch casing
- Winch foundations (foundation drawing has to be include in the offer)
- All safety devices required by rules (in particular emergency stop).

Max Winch efforts on deck foundations during operation are to be detailed in the offer.

6.2. Wire Rope

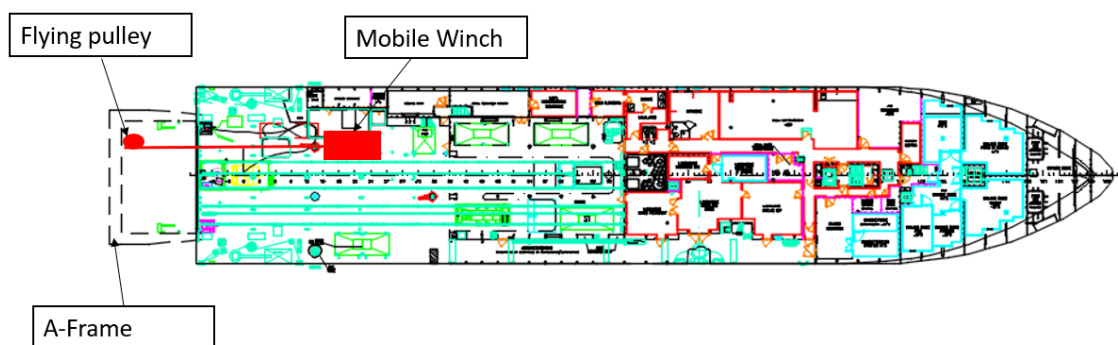
Wire rope shall have the following capacities

- Type: Non rotating steel wire rope
- Minimum Breaking Load: 12.5 tons
- Length: 1500m
- Rope termination: spliced on thimble or fitted with socket. With breaking load not less than $0.9 \times \text{MBL} = 11.25$ tons
- Wire rope has to be spooled on the winch before delivery.
- Wire rope shall not exceed 21 mm.

6.3. Winch location and rope routing

Winch foundations will be fixed on vessel Main deck (open deck) on the existing container sockets or screwed deck sockets (M30_ SWL 2.5 tons). See details in appendices.

Rope will be routed from winch to equipment via a flying pulley installed on the A Frame.



6.4. Options

Manufacturer shall include in the offer the rental of the following equipment as an option:

- Remote controller (wired or radio)
- A flying pulley suitable with the wire rope shall be included in the offer as an option.

7. Rental duration

Winch shall be installed on board on 14th of July 2025 and will be removed on 30th of September 2025

8. Service engineer

The offer shall include service engineer attendance for commissioning of the winch on board and training of the crew. All travel costs (flight tickets, hotel, food, taxis...) shall be included in the offer

The offer shall detailed the hours needed for commissioning (vessel alongside) and for training.

During sea operations, crew shall be fully autonomous without any service engineer on board.

9. Maintenance

Offer shall include recommended spare parts for 3 months operation and set of specific tools if necessary,

10. Transportation

Offer shall include following transport costs:

- From Supplier warehouse to vessel in Brest Port
- From vessel in Brest Port to Supplier warehouse.

11. Documentation

Winch shall be supplied with all needed documentation for a smooth use of the winch in particular:

- Winch drawings
- Operation and maintenance manual.
- Technical review to confirm that winch efforts are suitable with deck / winch foundations.