

JUMBO VIBROCORER

With self-recovery system

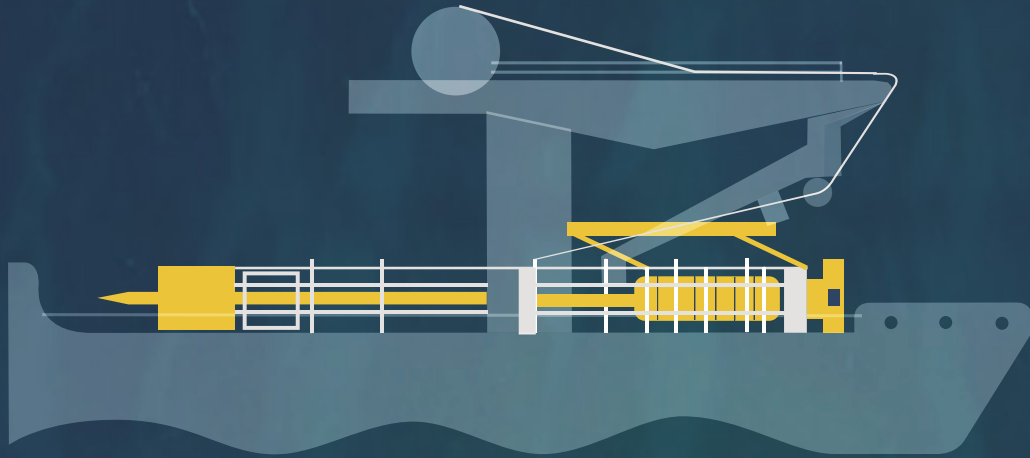


JUMBO VIBROCORER

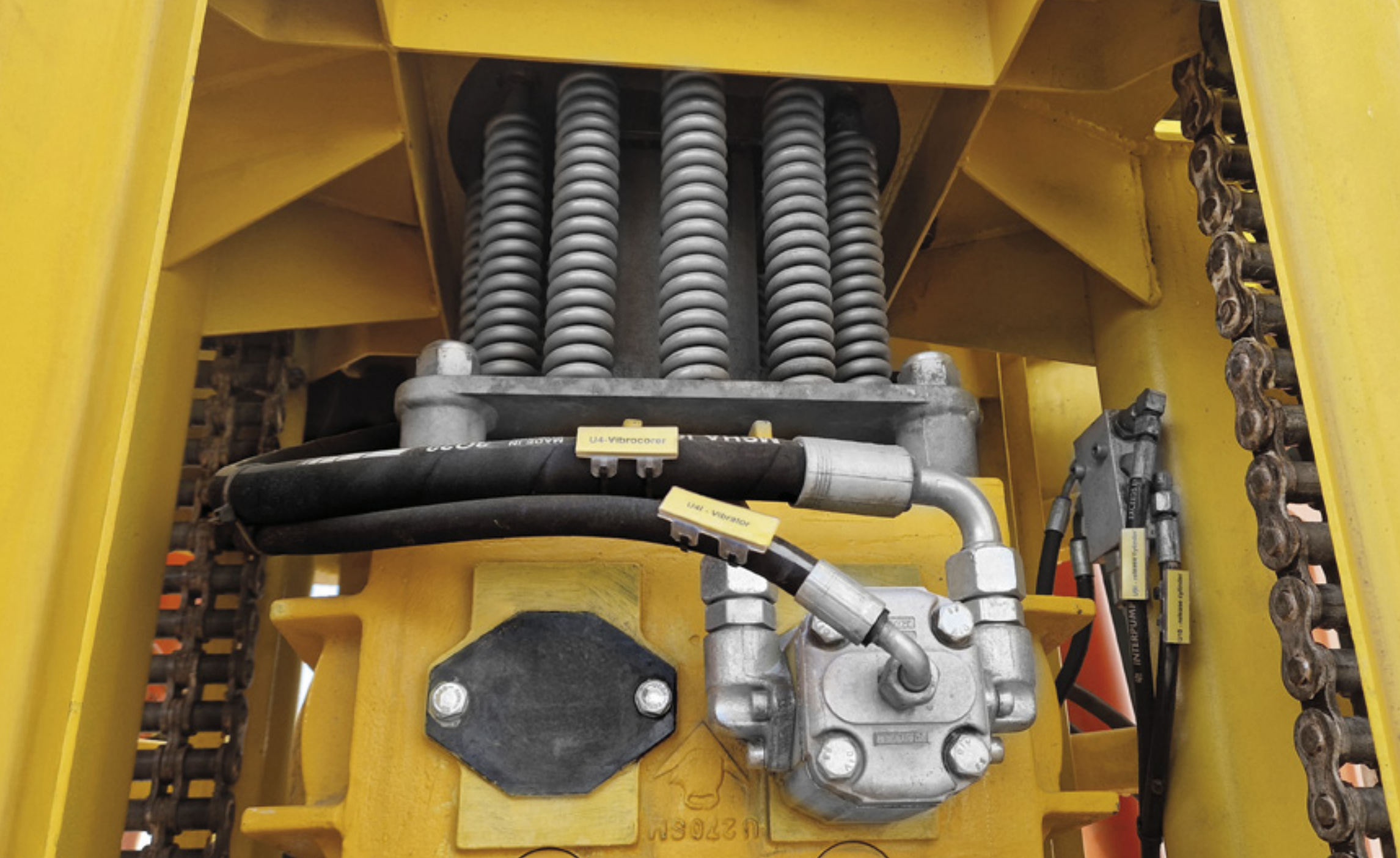
JVC is a new VibroCorer with a barrel length of 6 meters and a weight of 9.400 Kg.

The innovation of this Vibro corer is the **self-recovery system**: once penetration is complete, a command from the deck returns the iron barrel to its original position. This greatly reduces the possibility of bending the barrels during extraction. With this feature, a ship with **DP is not mandatory**.





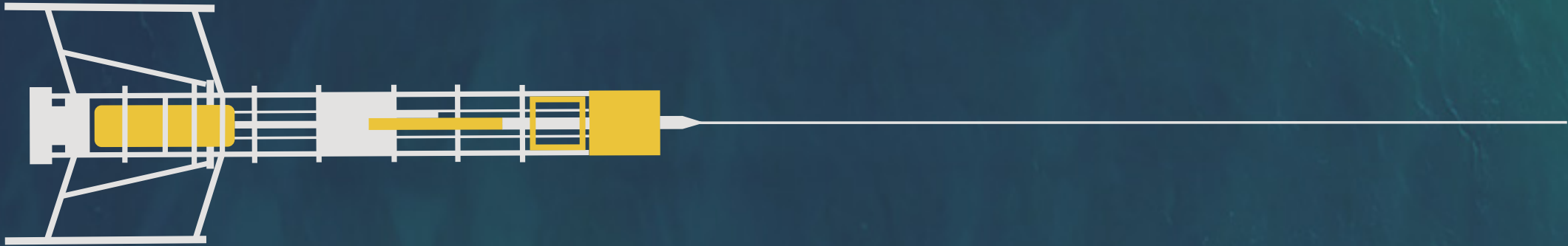
The Jumbo VibroCorer will arrive **horizontally** on board: the **patented** tilting system allows for the instrument to be positioned horizontally when close to the water surface through the action of two hydraulic cylinders. This tilting system enables the tube and structure to be positioned horizontally and readied to start the liner extrusion operation (diameter 110mm in transparent polycarbonate).



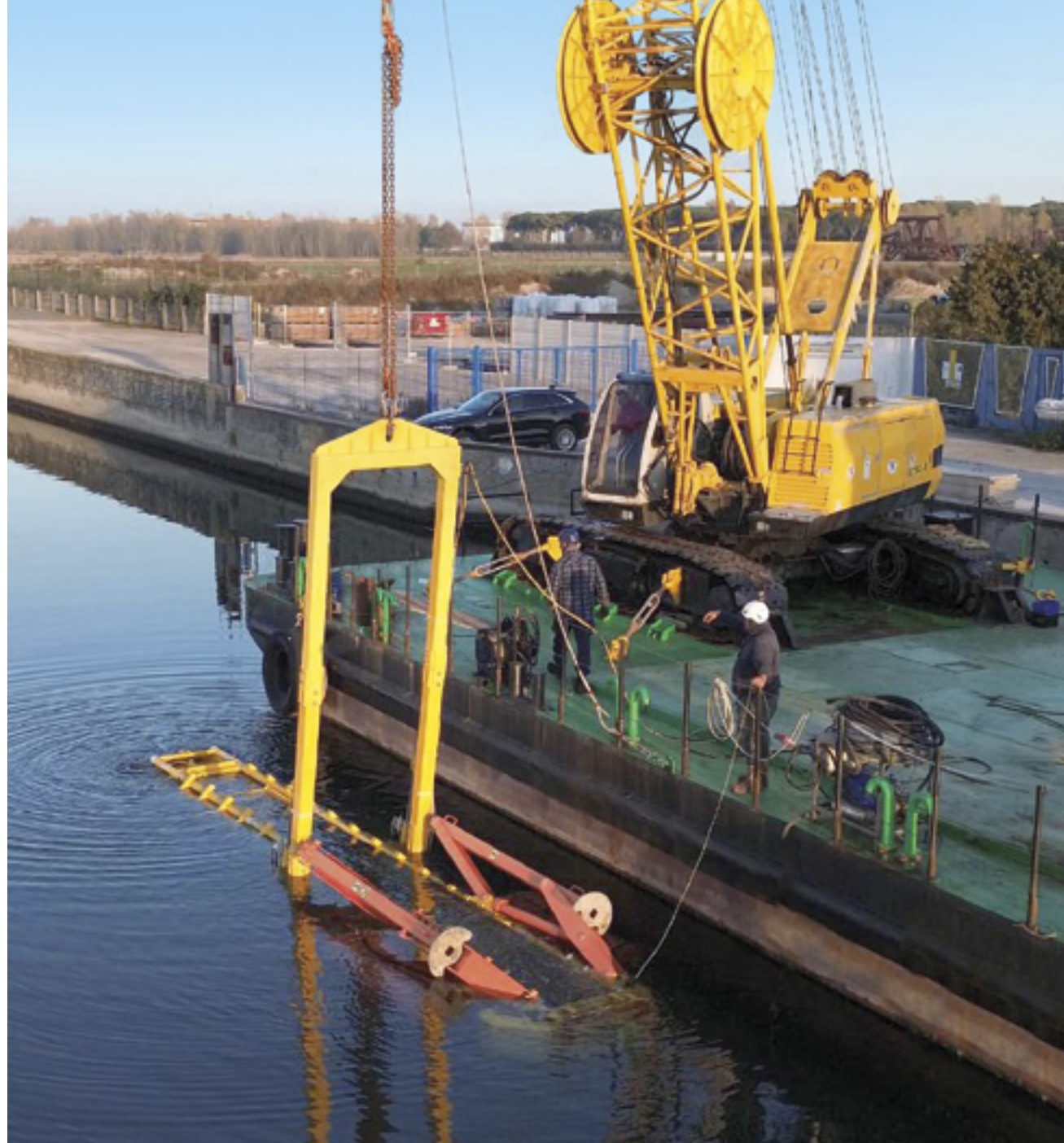


Furthermore, it is possible to **interrupt the penetration at the desired depth** thanks to the dedicated software used by technicians on deck and chain drive; that is why **the measure of penetration is a sure data**. The Client can monitor the performance of the instrument in real-time from his office, on board, or on land, displaying the same screen as the operators on board.

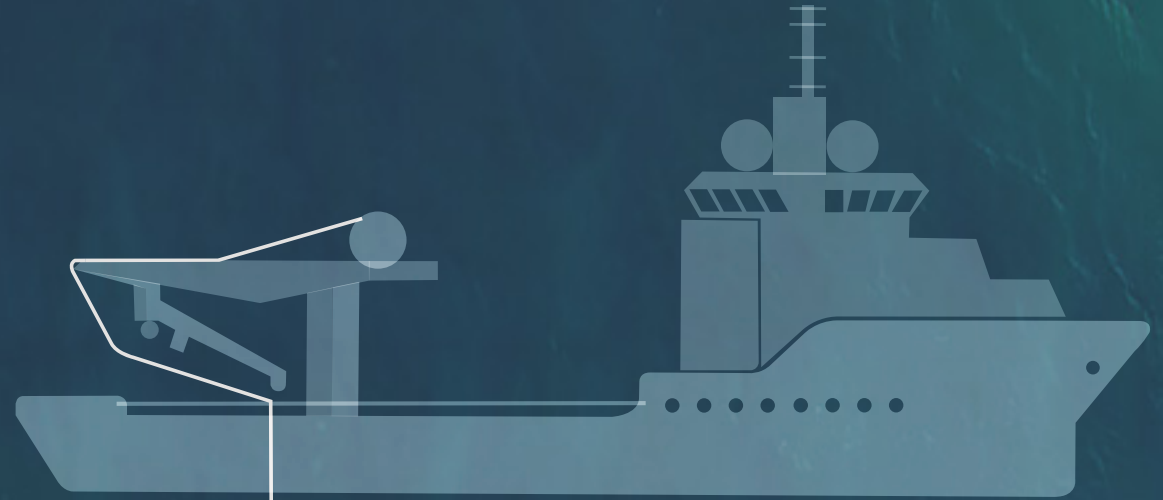




The Corer is equipped with **4 retractable stabilizers**, independently hydraulically operated and equipped with a transducer, to always know the instantaneous position of each support foot with respect to the structure; the leveling function is provided by an inclinometer connected to the dedicated software. The features of the stabilizers allow to **sample bottoms with slopes up to 34°!** For seabeds with limited strength and bearing capacity, it is possible to equip the four stabilizers with the increased support area.



The **vibrator** is unidirectional with hydraulic drive, and its **Force and Frequency are adjustable** (0 – 54 KN and 0 – 2200 rpm/1° RPM, respectively)



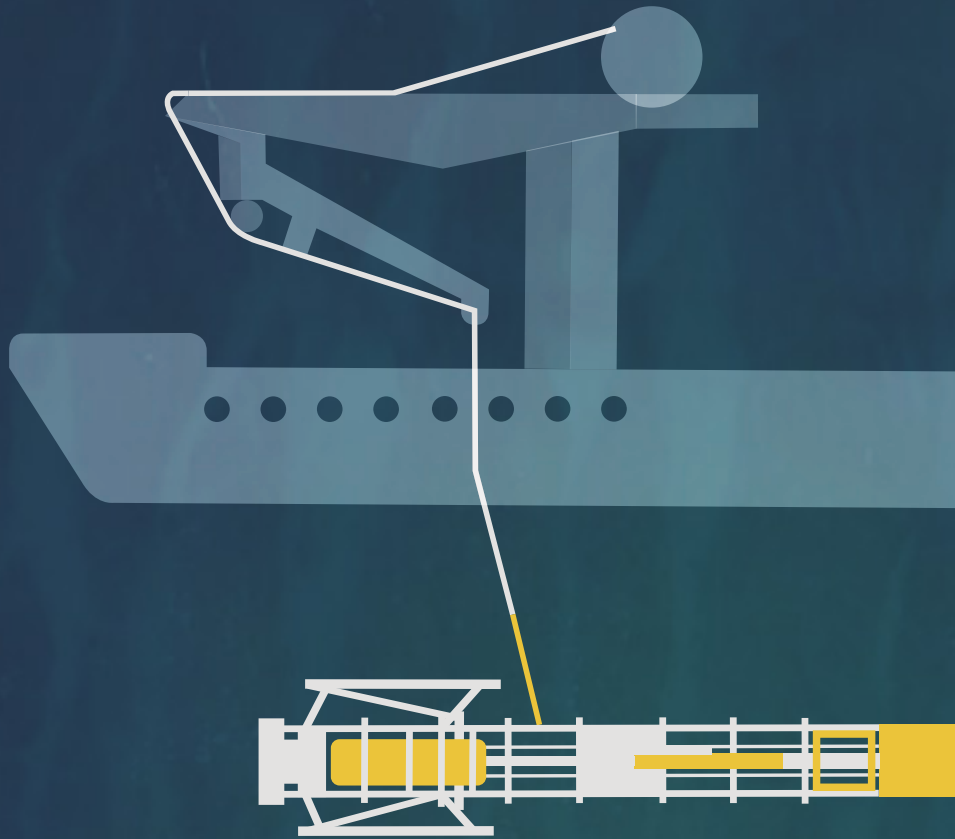
There is also a quick release **plier** on the tube which enables **quick attachment/release** of the core barrel: in an extreme emergency it is possible to free the machine and abandon the barrel stuck in the seabed. This possibility is not likely, as the **extraction thrust** exerted with the four stabilizers reaches **200 KN** in total.





The VibroCorer is controlled via a **touchscreen** with an umbilical cable connected to the general electrical panel and equipped with an output port for downloading data: the various working parameters and machine settings will be shown in real time on the display. The telemetry data that can be seen online from the remote-control monitor. In addition to the inclinometer and frequency, the **altimeter** and **real-time penetration** are visible online through graphs.





The JVC is moved with two cables to a maximum depth of 250 meters: the dedicated winch has a 20-ton load-bearing cable. The second cable is a constant tension winch and is used for data and power transmission. In case of work in shallow water there is the capability of using the on-board crane wire and our power/data cable in place of the winch.

	Jumbo VibroCorer®	Other conventional Vibrocorer	Other conventional Vibrocorer	Other conventional Vibrocorer
Thrust	100 kN	0	0	0
Vibration force	54 kN	70 kN	30 kN	89 Kn
Frequency	from 0 to 36 Hz	from 10 to 50 Hz	28 Hz	from 25 to 30 Hz
Mobilisation with plug and play setup	yes	yes	no	no
Change barrels with the frame laid horizontally or vertically	yes	yes	no	no
Core sample diameter (mm)	110	100	110	100
Depth Rating (m)	up to 250	up to 300	up to 300	up to 250
Quick release barrel system	yes	yes	no	no
Ability to monitor parameters and penetration in real time	yes	yes	no	yes
Ability to operate remotely in real time on coring configuration parameters (thrust, speed, etc.)	yes	no	no	no
Download graphs and sampling data	yes	no	no	no
Possibility of increasing the size of the feet to distribute the weight of the vibrocorer on soft sediments	yes	yes	no	no
Ability to work on sloping seabeds	yes	no	no	no
Automatic leveling function	yes (up to a maximum of 34°)	no	no	no
Tilting system (patented)	yes	no	no	no
Self-recovery system of the barrel	yes	no	no	no
Emergency barrel release system	yes	no	no	no



Poseidon s.r.l.
Tel. +39 392 492 1930
Via Bonvicini, 8, 48123
Ravenna - Italy

www.poseidoncoring.com
info@poseidoncoring.com

