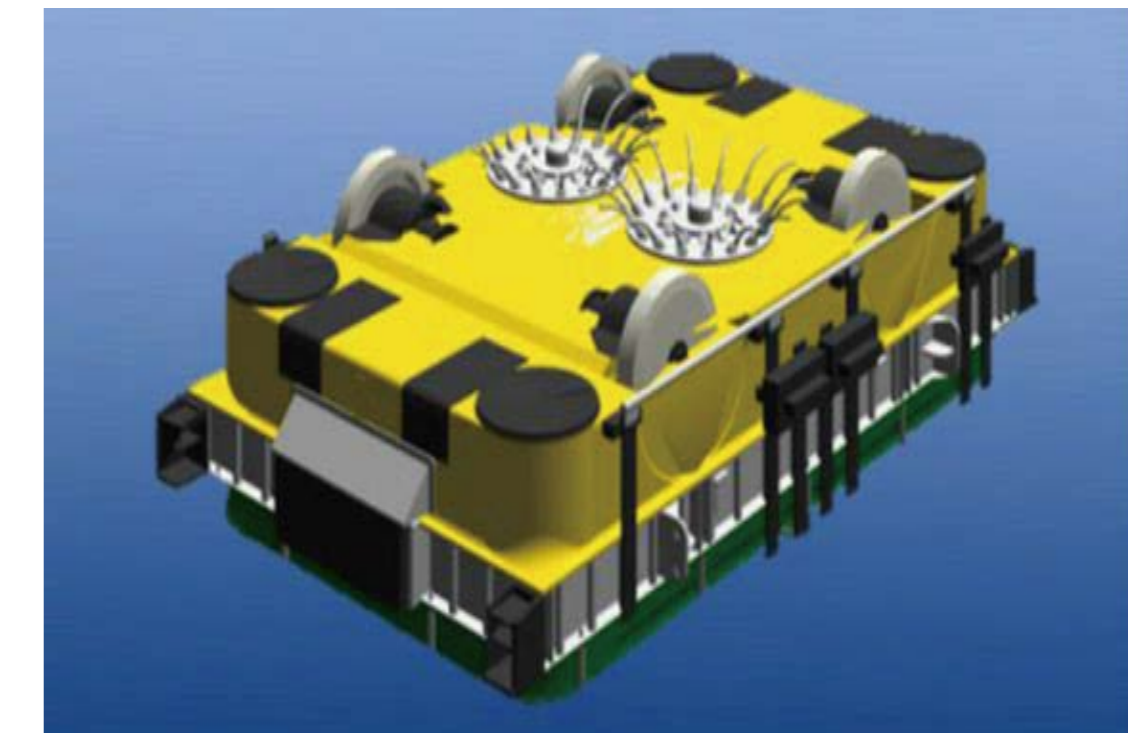


# Floating Storage System - Robot technologies

## Marine Bio-Fouling Remove Robot

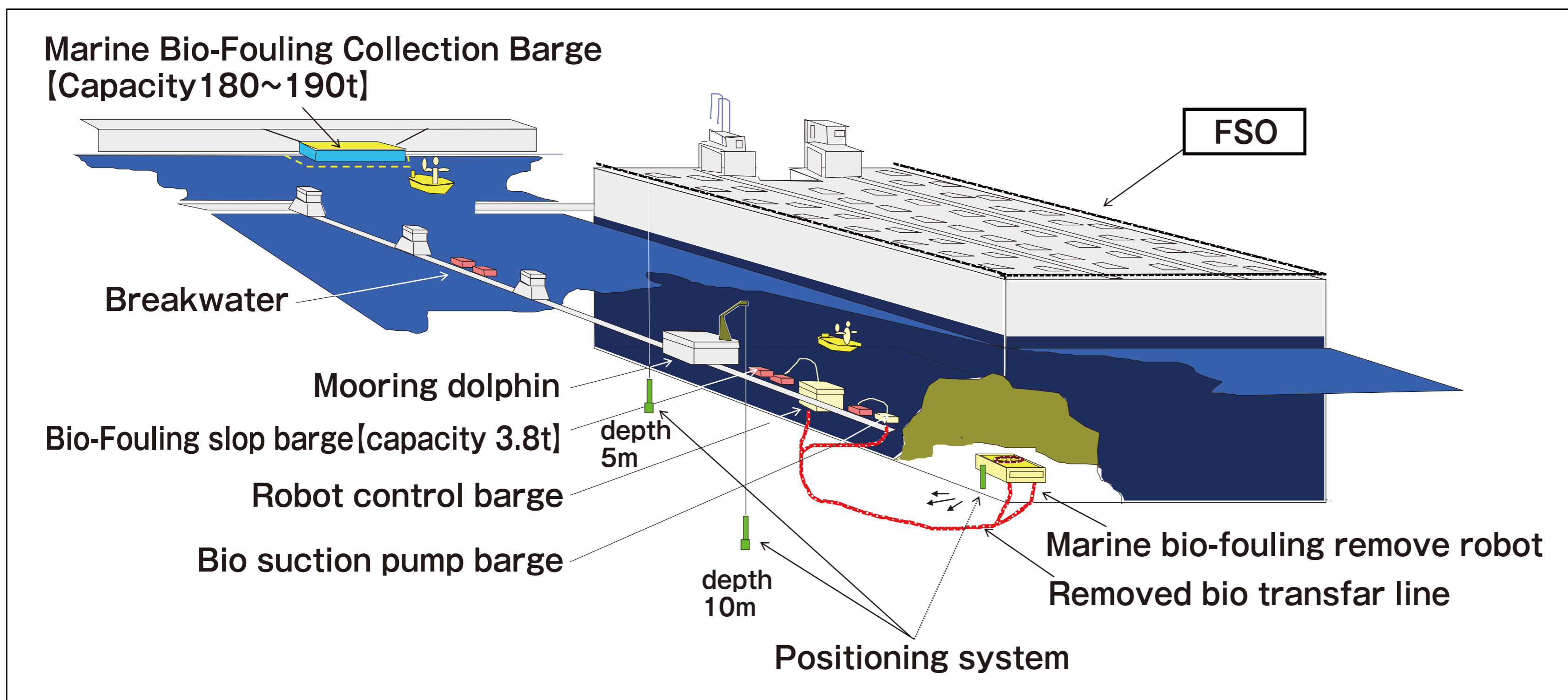
During the long term operation, various kinds of shells may attach to the outside and bottom of storage barges.

At Kamigoto, when the barge moves to dry-dock for overhaul inspection, the robot can remove the shells safely.



Bio-fouling remove robot system

Length	2.8m
Breadth	1.7m
Depth	1.4m
Dry weight	2.5t
Max Depth	20m



Kamigoto site



Operating robot under the oil tank

## ROV measuring corrosion potential

Shirashima implements the overhaul inspection for a representative barge every 5 years on site.

Instead of diver, ROV (Remote Operated Vehicle) could measure shells' corrosion potential of the ship bottom and aluminum anodes in submergible part of the ship.



ROV equipped with measuring kit



Measuring aluminum anode and shell's corrosion potential

Type	VideoRayPro3 GTO
Size	L: 368mm
	W: 270mm
	H: 240mm
Weight	4.5kg (Air)
Measuring distance	165m
Max depth	152m
Speed	0.4 knots
Azimuth meter	magnetic compass
Accuracy	±1°