



The Remotely Operated Vehicle (ROV) Genesis is an underwater robot that is deployed internationally from research vessels for deep sea investigation.

Genesis is used to film and take samples from eg. deep sea canyons, cold-water coral reefs, carbonate mounds, mud volcanoes, and cold seeps.

Also nationally the ROV Genesis is deployed from the RV Simon Stevin to observe ship wrecks, biodiversity & bottom features of the shallow North Sea.

TRAVELLER

Our ROV has participated in over 20 campaigns worldwide.

Exploring from the Belgian part of the North Sea over the Atlantic Ocean, Mediterranean Sea up to the Antarctic peninsula and even the Indian Ocean and the Pacific Ocean



Remotely Operated Vehicle

- RRS Discovery
- RV Belgica RV Maria S. MERIAN
- **RV** Meteor
- **RV** Pelagia
- RV S. Surveyor
- RV Simon Stevin **V** RV Sonne
- RVIB Nathaneil B. Palmer

TIVIS

Tether Management System The ROV is compact, it fits inside a

> The TMS conveys the ROV to the seabed and there the unmanned underwater vehicle starts to explore.

'Tether Management System'

a kind of underwater garage.

Can explore both deep sea and shallow waters

Hydraulic working arm to perform simple samplings

Can dive up to a depth of 1300m

THE TECHNICAL ROOM



Remotely controlled by a pilot who follows every action on screens from a container mounted on the research vessel.

Continuously registers depth, course, height, swell, slope, temperature and salinity of the water.

Has an accurate positioning system used for real-time positioning of the research vessel, the ROV, the TMS and, if needed, other sampling devices during a ROV dive.

Powered by six propulsion motors.

(forward, vertical and lateral motion)

ROV FUNCTIONS

1.VIDEO

The ROV Genesis's main task is video-surveying, to film and take pictures of the underwater world

simple sampling activities (as collecting a piece of coral, taking a bottom core, etc.)

2.SAMPLES

The ROV's working arm

is able to perform

3.ASSISTANCE

The ROV assists other sampling devices and moorings during underwater operations



