Hybrid ROV



Sperre, Norway, is developing a new ROV concept (H-ROV) that is expected to make remotely controlled underwater operations more efficient. The concept distinguishes from ordinary ROVs is that its thrusters can swivel round their own axes to provide optimal driving power in the direction of travel as well as compensate efficiently for current and cable drag. This offers an improvement in performance of anything from 30 to 50% compared to all conventional ROVs currently in production.

High Efficiency

It means that the H-ROV will be particularly suitable for subsea dynamic positioning and autotraction operations. The buoyancy element with its thruster(s) will also be capable of rotating independently of the H-ROV's main chassis and the thrusters platform, allowing the H-ROV to simply redefine "forward" and "aft", and thus enabling more equipment to be mounted and employed on operational tasks, as well as providing a 360° view.

More power: more tools to carry

The H-ROV can be fitted with a tooling skid that can also be rotated vis-à-vis the forward edge that has been defined for it. This means that the H-ROV can carry four times as many interface tools and sensors as a conventional ROV. A simple comparison might be with a manual lathe vs. a CNC machining centre.

The H-ROV will meet future needs for extra sensors and tools, and will be more cost-effective at great depths since it will not be necessary to bring it to the surface for reconfiguration. It will be operating as a tool for the offshore industry, research, marine biology and archaeology, environmental studies, etc.

"All subsea entrepreneurs, particularly those engaged in deepwater operations will be able to save time and money by using the new H-ROV," says Wenche Haugerud, marketing manager in Sperre AS. The company has had its trade-mark and patent application for the H-ROV approved.

Development

Sperre is currently on the look-out for a heavyweight partner in the subsea sector to push forward development and market launch.

https://www.hydro-international.com/content/news/hybrid-rov