



Single ROVAR 5Te system attached to test rig framework under lift

Smarter Subsea Handling Launches an Invitation for Collaboration at GUH Events with its Controllable Variable Buoyancy Systems

Smarter Subsea Handling promoted its ROVAR Variable and Controllable Buoyancy System at GUH events in Aberdeen and Plymouth at the end of June. At both events, with different sector audiences, the company promoted its innovative solution for executing repetitive tasks in deploying or recovering equipment and infrastructure, to and from the seabed.

“ROVAR” (Remotely Operated Vehicle for Assets Recovery) is an internationally patented cryogenic technology providing a unique load-bearing, remotely operating underwater vehicle with controllable buoyancy at its heart. The system carries objects through the water column in all axes, enabling loads to be delivered to, removed from, and between locations on the seabed.

Through discussion with the offshore energies sectors, there is acknowledgement for reducing the numbers and the sizes of vessels currently used to support repeatable subsea and seabed tasks. There is also an increasing need to manoeuvre loads unrestricted within complex or crowded locations such as around jackets and wind-farm monopile foundations. Subsea and marine operators are in addition recognising the use of variable buoyancy, for multiple point lifting and handling on extended or unevenly weight distributed loads, for seabed state compensation to large underwater vehicles such as trenchers, and in providing payload compensation for offshore wind monopiles during installation.

ROVAR meets all these needs, as it can multi-task as a subsea forklift, underwater crane and variable buoyancy, all either in autonomous or tethered modes. These modes enable reduction in the costs of deployment and recovery by reducing current vessel requirements, and by enhancing the functional capability of smaller vessels. The result is that both project developers and vessel owners can reduce the cost and duration of projects, as well as reduce carbon emissions during construction and servicing contracts.

The systems can be scaled for unitary load capabilities from 1 to 50 tonnes and can operate in multiplex and swarm modes for lifting

larger or elongated loads into the hundreds of tonnes. ROVAR technology has the versatility to operate in different configurations to move anything anywhere, with the cryogenic gasification system at the heart of any lifting and handling configuration.

End user applications span a wide spectrum from the small to the large. These include precision handling of small sub one-tonne loads in crowded fields for debris removal where conventional crane access from a surface vessel is restricted. ROVAR also operates in multiplex or swarm mode with multiple units acting in concert at a single point or in unison like aerial drones.

Richard Stevens, CEO said: “We see the huge potential ROVAR offers with different modes of operation across all maritime sectors for lifting and handling anything anywhere subsea in a smarter way, whether it be within the international offshore energies, defence or aquaculture sectors. Core to our success will be collaborative partnering, and we are working with GUH to identify marine and subsea partners to bring ROVAR to market.”
