

About

Film-Ocean is an independent subsea contractor providing ROV inspection and intervention services. We specialise in providing innovative, cost effective subsea solutions to the global oil and gas industry and have an extensive track record in performing subsea integrity inspections on floating and fixed structures from the asset or support vessel with a fleet of high specification ROV's.

Case Study Fly out Micro ROV System



Background

During several inspection campaigns a requirement was noted for a micro class ROV to be used to access areas of subsea infrastructure that an observation class ROV was too large to safely manoeuvre into. Having years of experience of operating both observation and micro class ROV's we initially performed a technical feasibility study to interface a micro ROV onto a larger observation class ROV.

- The larger observation class ROV would deploy the micro ROV system to the worksite and provide power and communications through the main lift and TMS to provide a safe, efficient deployment solution.
- If deployed as a standalone solution the micro ROV system would have the ability to access the restricted areas but would not have the power to reach the worksite.

The Challenge

- To identify a suitable micro ROV to interface into our range of observation class ROV's.
- Providing sufficient power, communications and camera feeds for two ROV's through one observation class ROV system telemetry.
- Producing a reliable, capable tether management system to allow spooling of the micro ROV tether that would be small enough to integrate onto the observation class ROV.

The Solution

- Marine the surface control unit of a micro ROV system for installation onto an observation class system.
- Design and configure the observation class ROV to provide the power supply with a surface on/off control feature to the marine surface control unit.
- Upgrade and configure the observation class ROV telemetry system to provide all required communications and video channels.
- Utilise a tether that is capable of not only running the micro ROV but provide a cat5 ethernet connection for advanced NDT tooling.
- The end product is a fly out LBV 300-5 system that is capable of being interfaced to any of our larger observation class ROV systems.