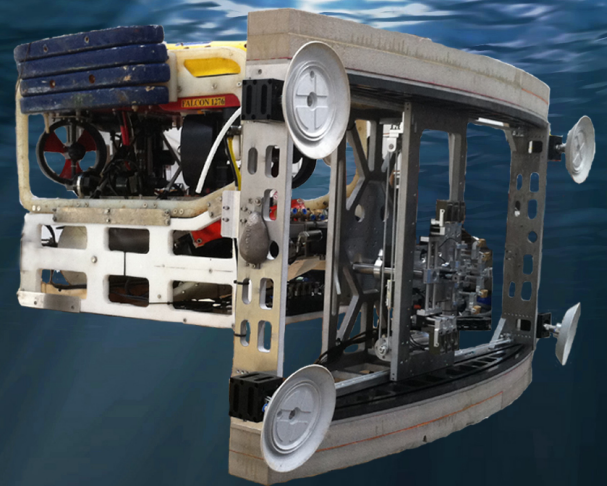


## About

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 Monopile Scanner



## Background

One of Film-Ocean's existing customers who specialised in offering advanced NDT inspections had a requirement to deploy tooling to inspect the circumferential welds in offshore wind farm monopiles. The project required an ROV to interface a phased arranged automated ultrasonic tool and deploy to the worksite. The tool developed should be standalone.

### The Challenge

- The worksite was located in the Southern North Sea which has a high tidal flow. The sub surface current and bad visibility can often make operating conditions very difficult causing project downtime.
- The process of carrying out a scan on a large circumferential weld is time consuming and it was essential to be able to have the ROV and tool on location for several hours at a time.
- The proposed tool required to carry out the inspection was larger and heavier than previously deployed tools.
- The monopile has limited services, all equipment including safety and power generation had to be supplied and mobilised to the work location.

### The Solution

- To avoid the high sub surface current and bad visibility Film-Ocean proposed to deploy equipment inside the monopile where the environmental conditions were not affected by external environmental conditions.
- A hydrostatic suction system was developed and integrated into one of Film-Ocean's inspection class ROV's to aid station keeping whilst the automated NDT was ongoing.
- Weight saving methods were used on the ROV and tooling. Project specific buoyancy was designed and integrated into the system to allow for ease of operations.