

Case study: Integrated pile alignment and monitoring package

Overview

A client operating in the UK North Sea approached Ashtead Technology with a request for a bespoke hammered pile installation monitoring system. This had to be fully-compatible with a wind turbine generator pile installation template, which would be designed and built by the client in-house.

Solution

Ashtead Technology's Asset Integrity specialist team delivers tangible value during the construction, installation and maintenance of offshore assets.

We delivered a high precision and robust integrated attitude monitoring system with power management and subsea digital data logging. With a custom-designed integrated monitoring system, this used a range of monitoring sensors and integrated monitoring software for maximum operational versatility.



Benefits and value

- This integrated precision monitoring package met extreme shock loading requirements, and is applicable for uses in both the oil and gas and renewable energy sectors.
- The client benefited from Ashtead Technology's prior experience in using sensors for monitoring hammered pile installation. A unique measurement method was utilised to generate an accurate measurement of the template's inclination, in combination with acoustic position sensors.



Our Asset Integrity team are highly-skilled in devising solutions tailored to the unique requirements of each client.

"We were able to ensure a successful operation by providing the client with accurate, specialised and actionable data on key parameters. We have subsequently worked alongside this client and look forward to strengthening this relationship further with further shared scopes."



Ross Macleod, Technical Director