



# James Fisher Prolec supports major Aberdeen Harbour expansion project

Aberdeen Harbour's South Harbour expansion began onsite in 2017 – a project development worth an estimated £350m - and will allow vessels up to 300m in length to berth, while enabling the transfer of 6,000 tonne cargo loads per vessel. On completion, the harbour will feature 1.3km of protective breakwater, 1,400m of deep-water quays, and over 125,000m<sup>2</sup> of lay-down area to meet the demands of Scotland's growing marine and shipping industry.

## Challenge

- Ashleigh Contracts – a leading UK marine civil engineering specialist – required a positioning solution to enable the split hopper barge to accurately deposit caisson bedding material onto the harbour's seabed.
- The solution needed to interface seamlessly with the pre-existing digital terrain model (DTM) in place, record the as-dumped material as well as integrating with the split hopper barge's existing navigation systems.
- System installation and commissioning had to adhere to onsite COVID-19 regulations – to help maintain a safe working environment in accordance with local guidelines.

## Solution

- The team supplied and fitted its market-leading PCX guidance system, which combines DTMs and GNSS technology to monitor the progress of the deposited material in real time, helping to ensure the bedding material was placed in the correct location first time and to minimise the subsequent spreading and levelling of this material.
- PCX's simple in-cab display features cut and fill indicators, allowing operators to rapidly backfill with precision – even in low-visibility, underwater environments.
- The system displays and logs work, which can be easily sent to the project principle's client as evidence of job completion.

## Results and benefits

- By visualising project progression, PCX helped to increase the accuracy of Ashleigh Contract's operations, ensuring all work was completed to the required standard.
- The accuracy benefits of PCX mitigated the risk of having to excessively rework out of section rock on the seabed and saving costs.
- Overcoming the travel challenges of the COVID-19 pandemic, the system was installed and commissioned swiftly to keep to demanding project timescales.

### Greg Brown, contracts manager at Ashleigh Contracts:

“ Ashleigh Contracts once again partnered with James Fisher Prolec in developing and implementing another 3D GPS machine control system – this time a PCX-Pro installation on a splithopper barge for the accurate bottom dumping of material on a prestigious marine project in NE Scotland. We would have no hesitation in recommending James Fisher Prolec for the supply and installation of their market leading 3D-machine control systems coupled with top class installation and after sales support. ”