



Case study

Harbour reclamation

Heinrich Weseloh GmbH, Germany



Scope of work

German road and civil engineering company Heinrich Weseloh GmbH use James Fisher Prolec's Digmaster Pro to aid in harbour reclamation works.

After securing a contract for in-shore harbour reclamation works in Hamburg-Moorburg, Heinrich Weseloh GmbH were required to remove the contaminants in the harbour sea bed. Without a GPS guidance system, blind excavation can be very difficult requiring a lot of guess work and wasted time. As a result Heinrich Weseloh decided to use James Fisher Prolec's Digmaster Pro guidance solution to carry out the project.

Digmaster Pro's software configuration flexibility comes to the fore in this application. The machine was equipped with a variety of attachments including a hydraulically adjustable boom and several dipper extensions of varying length.

All possible configurations were stored in the system and could be displayed on screen as needed according to the tool fitted. As a result the operator was able to select the machine type from pre-loaded configurations without further calibration work. In this example the machine required a clam shell bucket, which could be called up in Digmaster Pro from over 100 tools available.

Using James Fisher Prolec's proprietary sensor technology with a combination of AS7 and AS8 marine grade sensors, the machine was able to work in a fully subsea environment, without interruption to the signal quality or productivity.

After using the Digmaster Pro system for this project, operators were particularly impressed with its ability to excavate 'blind'. The systems Icon driven menu enabled operators to quickly and fully utilise the systems capabilities, achieving optimum productivity from the first day of installation.

Benefits delivered

- Real time progress map of harbour seabed contours
- Instant access to stored tools menu
- Icon driven menus and favourites shortcuts meant fewer key strokes to drive the system
- Significant increase in productivity
- Accurate 'blind' excavation
- Ability to export data as 'as built'
- Elimination of over excavation and rework

Equipment provided

- Digmaster Pro 3D machine guidance software
- Panasonic Toughbook display
- Special tool configuration
- Modelling machine layout
- AS7 + AS8 marine grade sensors
- Digmaster Pro CANbus interface

Summary

James Fisher Prolec's 3D guidance system installed to aid in the removal of debris, dirt and contaminants from Hamburg-Moorburg