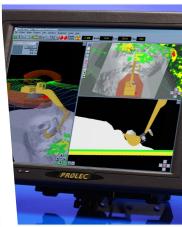


## Harbour reclamation with Prolec's pcX-3D

### Case Study





# German contractor Detlef Hegemann uses Prolec's pcX3D system on its Liebherr 984 excavator during a large scale salvage operation in Barcelona.

The operation involved removing sediment and material from within tubes, each with a diameter of 3.5m and a length of around 17m, which were housed in submerged concrete segments. For this task, the contractor, Detlef Hegemann, used a Liebherr 984 excavator equipped with a special DOP pump, which was operated from a pontoon barge.

Being submerged, the tubes were difficult to locate and the subsequent task of positioning the DOP pump within the tube without damaging the concrete segments was extremely difficult and time consuming. External guidance could make the job simpler and more efficient.

Installing pcX-3D solved this particular problem by giving the operator a 3D view of each tube relative to the tool position. This enabled the operator to accurately position the pump inside the tube and extract the material without damaging the machine, the concrete segments or the tubes.

The system was installed using high quality marine grade AS8 and AS9 sensors, and the software customised to include a DOP tool attachment. A DTM of the job site showing each concrete tube location was loaded into pcX-3D.

#### Who

Detlef Hegemann

#### **Summary**

German company Detlef Hegeman uses Prolec's pcX-3D system on its Liebherr 984 excavator, with high quality marine grade AS8 and AS9 sensors in the large scale El Prat quay salvage development

#### Services provided

- Installation of Prolec's pcX-3D system
- AS8 and AS9 sensors were also used for system installation and software was customised to include a DOP tool attachment
- To meet the customer's requirements, a 23" computer screen was installed, rather than the standard 15" screen

#### **Benefits delivered**

- Installation of pcX-3D gives the operator a 3D view of each tube relative to the tool position
- Improved operator accuracy to position the pump inside tube and extract materials without damaging equipment





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