

# In-shore dredging with Prolec guidance

## Case Study



### In-shore dredging company GeoOcean uses Prolec's machine guidance package pcX-3D for dredging work in its different locations.

MAX is a 30 tonne scissor lift excavator owned and operated by specialist in-shore dredging company GeoOcean. MAX primarily undertakes in-shore dredging work in North Africa and Europe. The machine has a wide track base and when the cab is raised to its maximum elevation the machine can work in depths of up to 8 metres.

When deciding on which machine guidance package to use, the customer chose pcX-3D because of the ability of Prolec's software engineering team to customise the system to GeoOcean's exacting requirements. This included the actual on-screen representation of MAX.

Another major factor for choosing Prolec was their use of AS8 sensors that are manufactured in marine grade stainless steel. The AS8 is magnetically damped encoder based sensors that provides accuracies of 0.09°, which is twice the accuracy of accelerometer based sensors used in land applications.

**Who**  
GeoOcean

**Summary**  
Specialist in-shore company GeoOcean uses Prolec's pcX-3D systems and marine grade AS8 sensors for in-shore dredging work in North Africa and Europe.

- Services provided**
- Customisation of the pcX-3D system which was suited to GeoOcean's exact requirements
  - Ability to see actual on-screen representation of MAX
  - Use of AS8 sensors which provide accuracies of 0.09°, which is twice the accuracy of accelerometer based sensors used in land applications

- Benefits delivered**
- The AS8 is also fitted using hydraulic hose for cable protection to ensure that the system is able to operate reliably in the harsh marine environment

