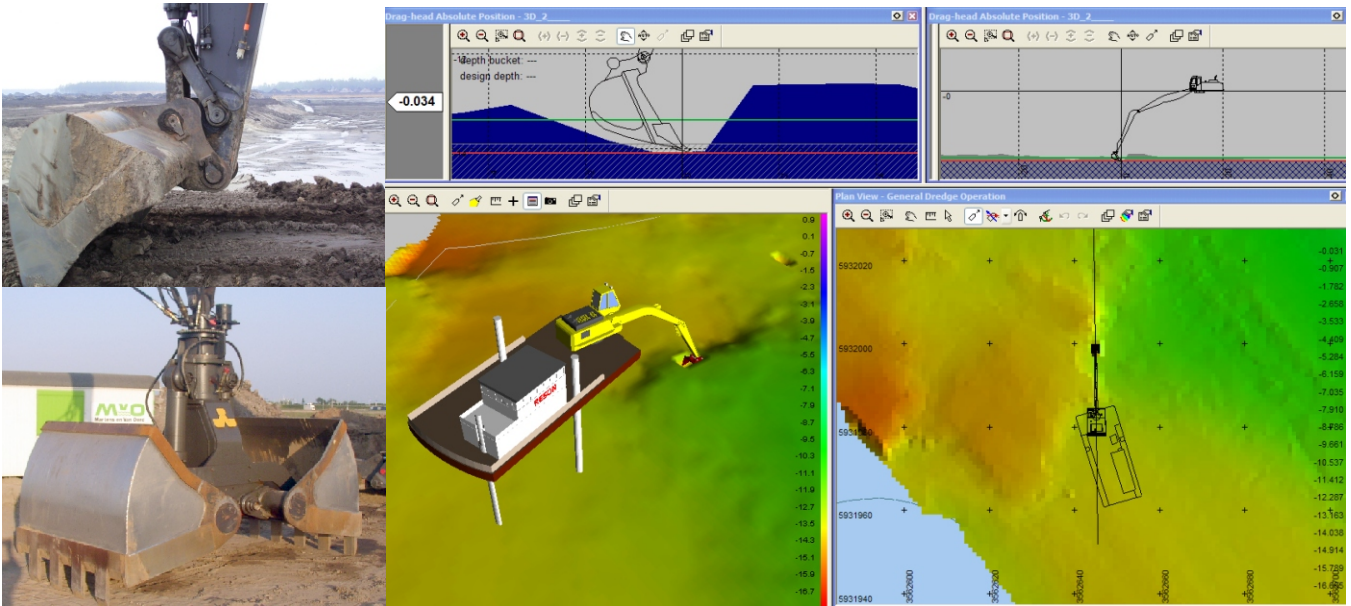


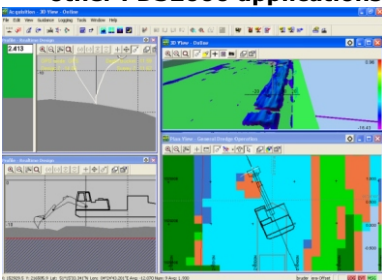


Dredge Guidance System Excavator



PDS2000-Excavator

- **RESON products for accurate, efficient dredging**
- **Visualization of excavator, boom, stick and pontoon**
- **Support of clamshell, bucket, pump and other tools**
- **Shows design profile, depth profile and updated depth**
- **Accurate depth of your dredge tool**
- **Spud position computation**
- **Real-time 3D visualization**
- **Built-in calibration**
- **Integrates seamlessly with other PDS2000 applications**



RESON is a world leader in dredge guidance systems, singlebeam and multibeam echosounders and hydrographic software. The Dredge Guidance System is designed to efficiently create high quality, fast results - whether it is for excavating, building breakwaters, wind mill parks and many more.

RESON's in-house developed PDS2000 Excavator is tailored to the requirements of the dredge operator to carry out his job more efficiently. The operator has real time an overview of the excavator and pontoon in top and profile views displaying the excavator outline, the boom, stick and bucket along with the surveyed depth and design depth. The position of the dredge-tool relative to the design is constantly monitored and displayed. A color-coded Digital Terrain Model (DTM) highlights the high and low spots. The DTM is updated real-time for the shape of the bucket or clamshell, thus registering the progress of the dredging work. The update is immediately visible in the top and side views. 3D-Design models allow the user to define complex designs. PDS2000 supports a wide range of dredge tools. Next to the standard bucket also clamshells, dredge pumps, drills and any other dredge tool can be used.

RESON supplies a fully integrated Excavator Guidance system, which includes a range of inclinometers, PC systems, positioning systems and other sensors and our PDS2000 Software.

PDS2000 Excavator Monitoring packages has been supplied and installed on a large number of excavators with various clients for various type of projects. RESON has proven that RESON's Excavator Guidance System is an aid for projects demanding centimetre accuracy.



Dredge Guidance System Excavator

Excavator Guidance and monitoring System

- System consists of:
- PDS2000 Excavator Software
- Cabinet including Interfaces and PC
- Sensors and Positioning system

PDS2000 Excavator Software

- What you see is what you've dredged
- High Screen update rate, updates as sensor values arrive
- Height correction real time from RTK GPS
- Digital Terrain Model (DTM) color-coded for high and low spots
- Updated real-time registering the progress of the dredging work
- Shows excavator and pontoon in top, profile and 3D views
- Open/close of bucket
- Creation of design models from 3D DXF file
- Background charts e.g. DXF, Geotiff
- Alarm on the sensors and sensor readings
- Alarm for zones with access restriction
- Vessel protection alarm
- Monitors all movements from excavator
- Uses the following equipment:
 - RTK Positioning system
 - Compass
 - List/trim sensor
 - Angle sensor for boom, stick and bucket
 - Spud pole carrier length sensor
- Presentation of data in excavator on vessel bridge which can also be used for navigation
- Built-in easy calibration tool
- Accurate depth measurement of bucket-tool
- Short learning curve
- Integrates seamlessly with other PDS software for multibeam and Singlebeam survey
- Data exchange between PDS2000 packages is very easy

EQUIPMENT supplied by RESON

- Cabinet with PC and interface
- RTK Positioning system
- Compass
- Angle sensors
- Draft sensors
- List/Trim sensor
- Spud pole carrier length
- Others on request

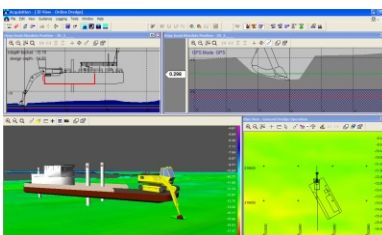
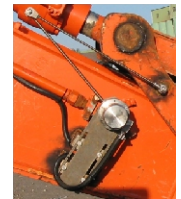
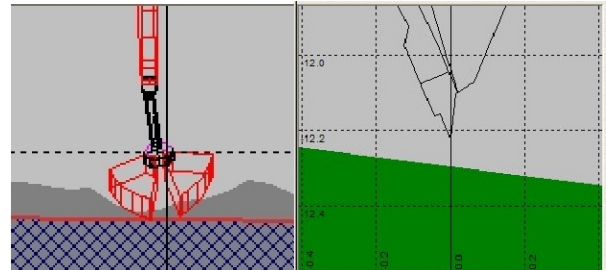
SUPPORTED TOOLS

- Standard Backhoe bucket
- Drill tool
- Dredge Pump
- Shows rotation speed of excavator
- Density of sludge
- Indication for rotation speed
- Stick extension
- Rotation of Stick extension
- List and Trim of stick extension
- Open/Close of hydraulic opened buckets

ALSO AVAILABLE

- PDS2000 for Cutter dredger, Clamshell, Suction Hopper, Rockdump
- PDS2000 for singlebeam surveys
- PDS2000 for multibeam surveys

RESON One supplier for your project solution



PDS2000 Excavator Leaflet 2.0



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