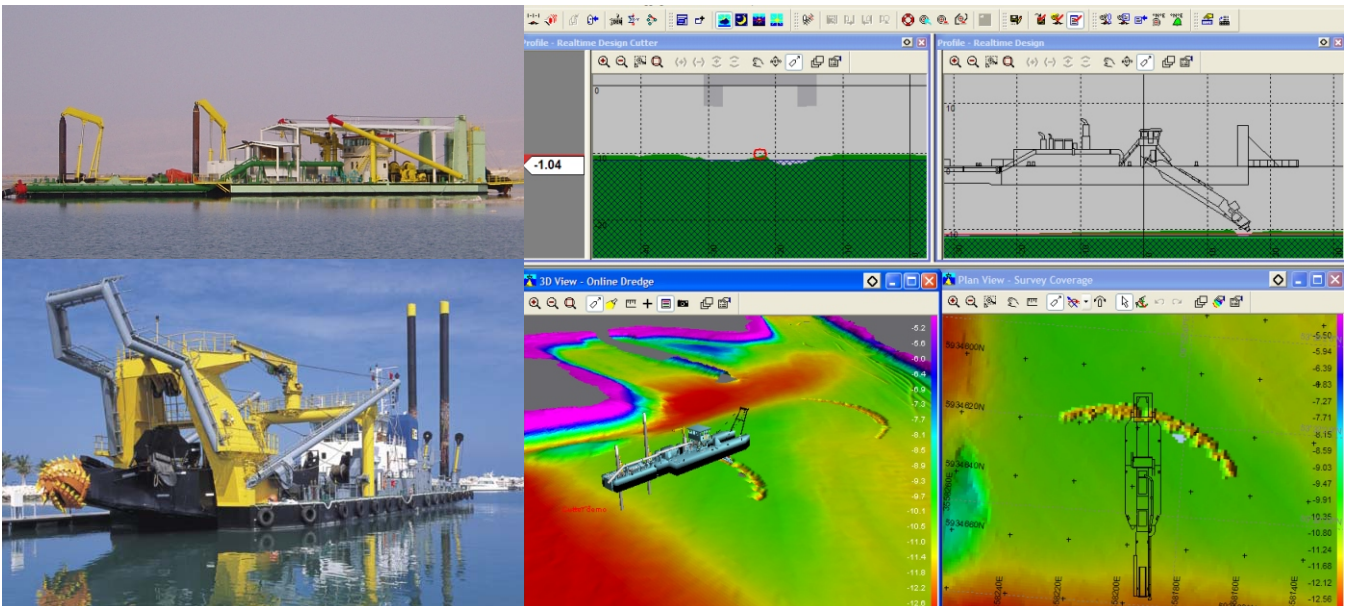


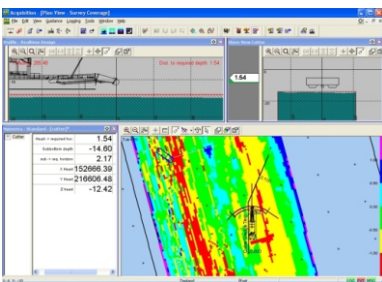


# Dredge Guidance System Cutter Dredger



## PDS2000-Cutter

- **RESON products for accurate, efficient dredging**
- **Visualization of Dredger, ladder and dredge head**
- **Shows design profile and depth profile**
- **Shows updated dredged depth and progress**
- **Real-time 3D visualization**
- **Restricted areas function**
- **Vessel placement support**
- **Velocity and Density sensors in production graph**
- **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 and fast results.

RESON's PDS2000-Cutter application provides the functionality tailored for the dredge operator to carry out his job more efficiently. The operator has an instant overview of the cutter with the top and profile views displaying the vessel outline and the cutter head. Information about the dredger, the dredge head position, the design model and dredged area are shown in various views which are updated as soon as new data is available. Multiple monitors with independent layouts are tailored to the needs of the dredge operator and helmsman.

A color-coded Digital Terrain Model (DTM) highlights the low and high spots and is updated real-time showing the progress of the dredge activities. The profile window with up/down indicator shows continuously the exact depth of the dredge head relative to design profile and the as-surveyed and as-cut profile.

A spud position computation compute the spud position using the spud carrier length.

A vessel placement feature guides the dredger to return to its former position and heading. 3D-Design models allows the use of complex designs. The "restricted areas" function prevents the dredger from entering restricted areas accidentally. The density and the velocity can be shown in crosspoint graphs.

A cumulative production calculation and reporting feature is implemented. RESON supplies fully integrated Cutter Dredger Monitoring Packages, which includes a range of sensors and our PDS2000 Software.



# Dredge Guidance System Cutter Dredger

## Cutter Guidance and Monitoring

- PDS2000 Cutter Guidance System consists of:
  - PDS2000 Cutter Dredge software
  - Cabinet with RESON interface and PC
  - Sensors to monitor Cutter performance and ladder
    - Vertical angle sensor
    - Spud pole carrier length sensor
    - Positioning system and Heading
    - Draft sensors
    - List/Trim sensor
    - Density sensor
    - Flow sensors
    - Others on request
- All equipment, software and installation supplied by RESON

## PDS2000 Cutter Dredge software

- What you see, is what you've dredged
- Easy to learn
- Integrates seamlessly with other PDS software for multibeam and singlebeam survey
- High Screen update rate, updates as sensor values arrive
- Digital Terrain Model color-coded for high and low spots
- Updated real-time, registering the progress of the dredging work
- Height correction from RTK GPS or tidal correction from tide station and draft sensor
- Creation of design models from 3D DXF file
- Alarm on the sensors and sensor readings
- Alarm for zones with access restriction
- Placement functionality to return to the dredge area
- Monitors vertical of the ladder
- Shows the horizontal movement of the dredger
- Shows Production graphs

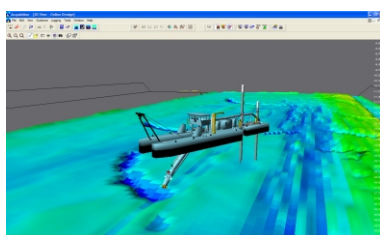
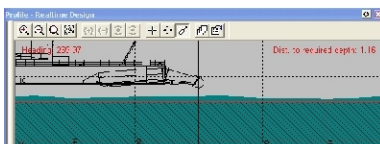
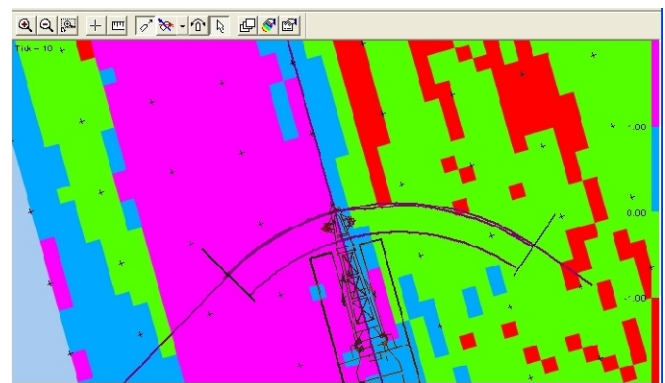
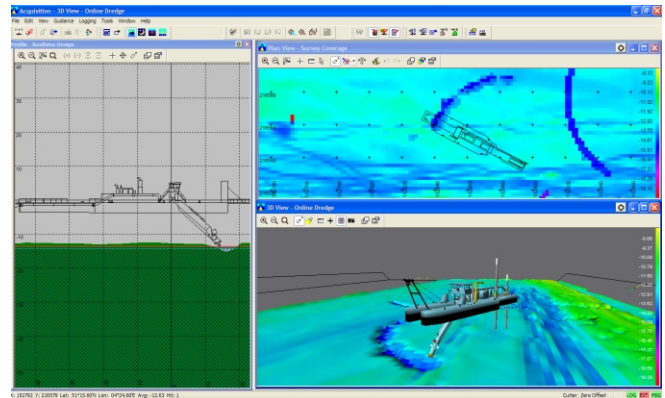
**RESON One supplier for your project solution**

## REPORTING and PROCESSING

- Entire dredge operation can be reviewed through a replay of the data set
- Quick profile plots can be made using the offline plot module
- Full DTM editor functions as part of cutter package
- Easy reporting of all production parameters
- Reports and online graphs are an aid for better efficiency

## OPTIONS

- Anchor Handling Option
- Multibeam sensor combined with Cutter dredger
- Cumulative production calculation with reporting



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