

Positioning Visualisation



PICTURE OF SIMILAR VESSEL

GENERAL

The positioning visualisation system gives the dredge master a real-time view of the exact location of the cutter or draghead for increased efficiency and production. The system keeps track of the already dredged soil on the survey map and prevents unnecessary under and over dredging.

Damen offers the Teledyne PDS positioning visualisation system optimized for our standard CSD and TSHD range. Teledyne is an experienced party in the industry for positioning visualisation software. Damen can also offer the positioning visualisation system as a retrofit package for existing dredgers.

SYSTEM DESCRIPTION

The positioning visualisation software package PDS runs on an industrial PC with Windows OS. The software is fed with data from inclinometers, angle transmitters and/or draught transmitters to measure, calculate and present the exact 3D dredging position of the dredger. Due to the connection to a DGNSS or a DGNSS-RTK positioning receiver, the exact location of the dredger on the dredge area is shown.

The configuration of PDS with its various sensors can be optimized to suit your type of dredger. PDS can be used for dredging activities, as well as dumping and ground levelling jobs.

EASY JOB PREPARATION

The work preparation at the office comprises of generating of the colour-depth map with the available hydrographic survey information and designed profile parameters. This is a partly automated process through the PDS software. PDS supports a number of standard data exchange formats, such as DXF, Micro station Design, XYZ txt files etc.

VISUALISATION

The position of the dredger is presented clearly in relation to the defined dredging area as well as the area topography. The operator can monitor the dredging process very accurately on the screen and adjust the views to the specific type of work. Area boundaries can be drawn in the survey data to assist the operator during dredging. PDS has the possibility to "dredge" colours. With this function, the colour map is updated real-time with the position and dredging depth.

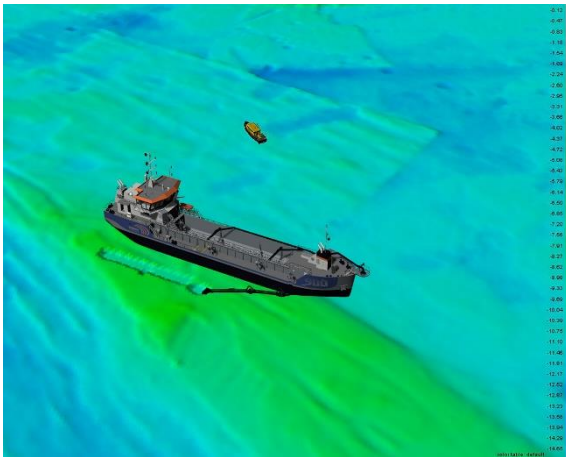
RTK REFERENCE SIGNALS

The positioning system can use a RTK reference signals to increase the accuracy of the dredger position. This correction signal improves the accuracy level from sub-metre to 10 cm or better. Several existing reference signals can be used by the system to increase the accuracy. Damen can supply an optional mobile RTK station for creating locally extra RTK correction signals.

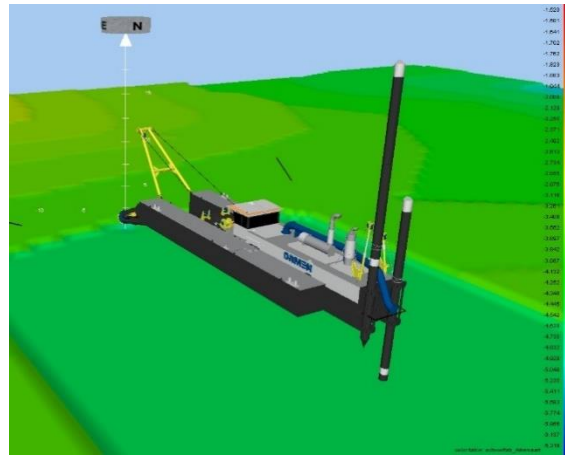
REMARKABLE FEATURES

- Positioning monitoring of the dredger, relative to the reference level
- Real time update during dredging activities
- Teledyne technical support, the first year is included
- Multiple languages are available
- Suitable for GPS, GLONASS and Galileo
- System is ready for mounting on new-builds and for retrofit on existing vessels

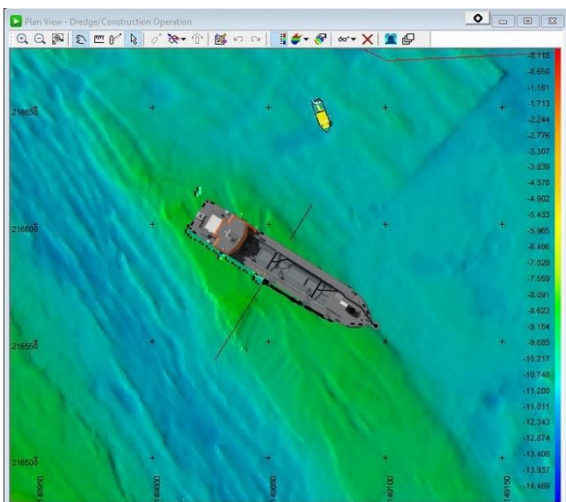
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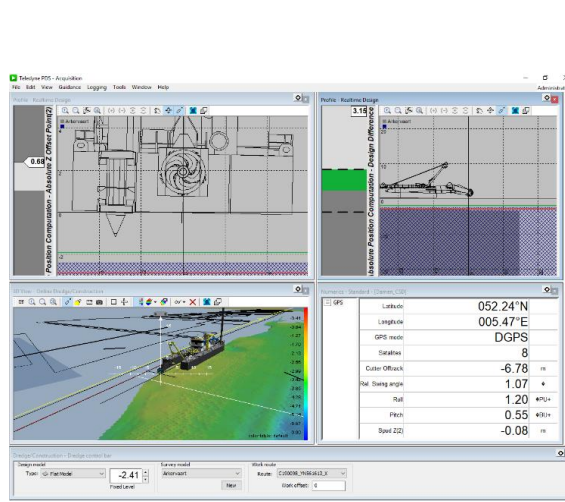
3D VIEW TRAILING SUCTION HOPPER DREDGER



3D VIEW CUTTER SUCTION DREDGER



TOP VIEW TRAILING SUCTION HOPPER DREDGER



POSITION VISUALISATION OVERVIEW