# STX-MA-DREDGE



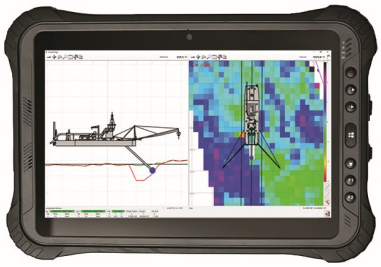

STONEX offers flexible, high-performance positioning systems to meet the unique needs of marine construction on both simple and complex projects.
Our solutions include both hardware and software, and can be easily integrated into third-party systems. Improve productivity and efficiency in underwater marine construction applications including dredging operations, crane operations, piling and hydrographic survey, canal/port development, reclamation, breakwaters and navigation systems.



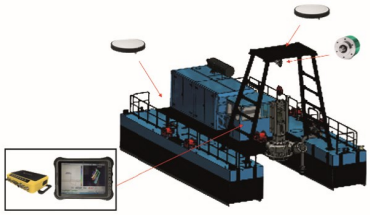




## STX-MA-DREDGECUT / STX-MA-DREDGECRA



Solution for positioning and controlling a dredge:
by entering the information regarding the dredge, the quarry and the objective of the work, the system allows the operator to have a visual support for controlling the position and the progress of the work.



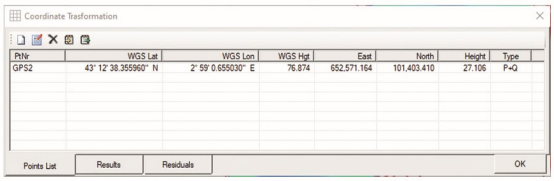
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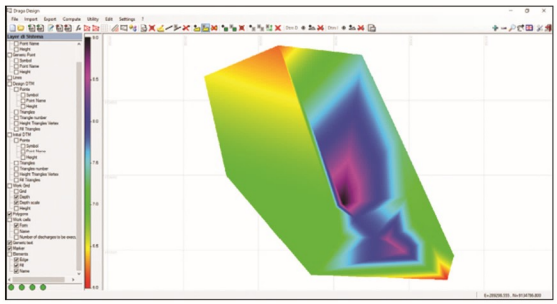
## Dredge Design (Planning)

### Office software to design the dredging project and track the work progress

Dredge Design is developed to create the depth map to import in Dredge Guide.
The simple and intuitive interface permits to create the depth map in just few steps:

1. Defining the reference system of the project
2. Defining the Design model, meaning the site model which represents the desired final state of dredging operation
3. Defining the Initial state, representing the as-built status before dredging operation. Usually these data are acquired and update through a bathymetry campaigns



The Depth Map is defined by the elevation difference between the design model and the model of the initial state.
The depth map colors indicate the thickness (in meters) of the material to be removed or deposited in the area to reach the design model.

## Dredge Guide (Control)

### Field software to monitoring the operation of the dredge

The dredge operator graphically controls the excavation phases by observing the two quadrants of the screen (section and planimetry). Dredge Guide is the field counterpart of Dredge Design; thanks to the clear and intuitive interface, the dredge operator is able to position the dredge in best operating condition and control the state of the work.

In the section view is possible to see the dredge section and the dredging height of the dredging tool in a dynamic way. The lines visible under the dredge represent excavation reference section:

① Black: represents the depth to be reached
Blue line: sea level
Red line: represent the depth actually reached
Green line: represents the initial state of the backdrop

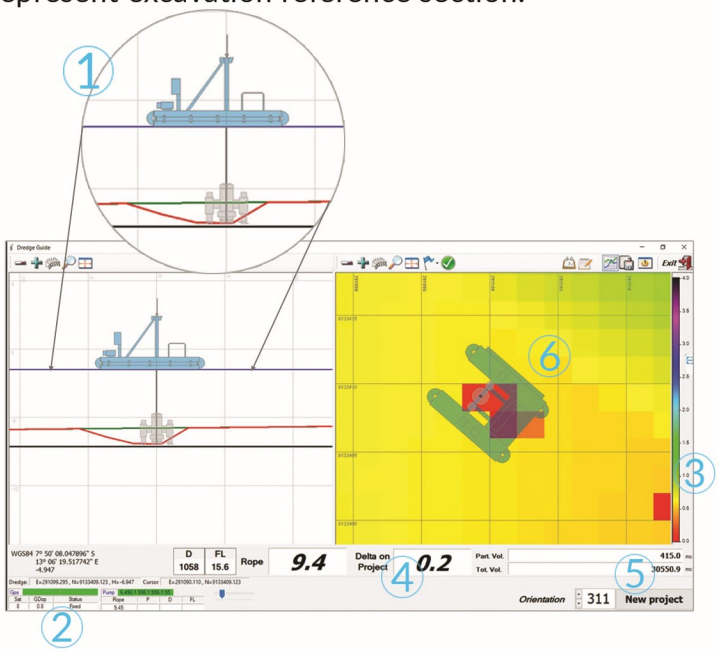
② GPS and inclinometer status

③ Each colour represents for each cell the depth reached during the excavation

④ Distance between the excavation tools and the project depth to be reached

⑤ Estimated removed material's volumes

⑥ In the planimetry view is possible to see in real time the area in which the dredge has already operated. The colors are updated according to the work





**STONEX®**
Part of **UniStrong**

Viale dell'Industria 53 - 20037 Paderno Dugnano (MI) - Italy
Phone +39 02 78619201
www.stonex.it | info@stonex.it