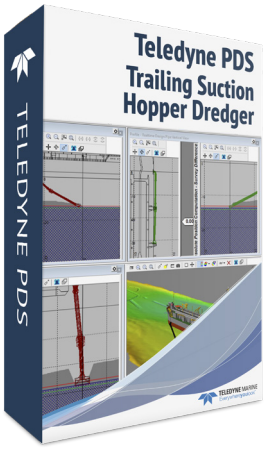
PDS Trailing Suction Hopper Dredger

a Teledyne PDS Application



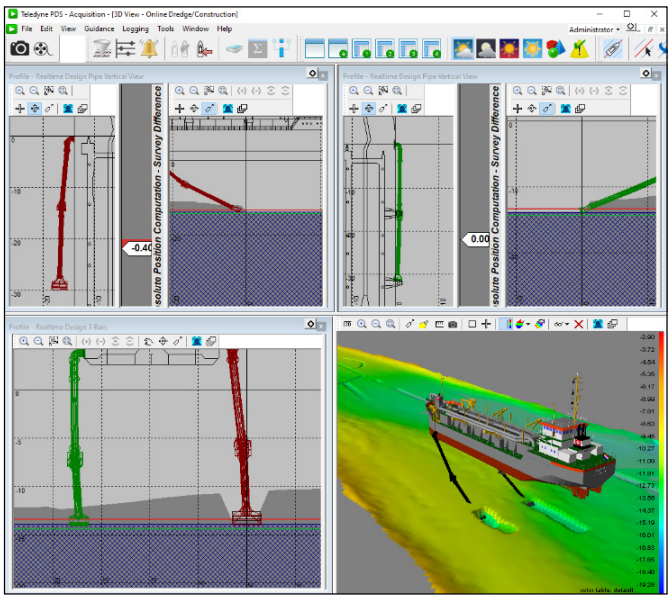
PDS Trailing Suction Hopper Dredger (TSHD) is part of the Teledyne PDS family multipurpose software platform offering a broad base of applications for the dredge and construction market. The productivity of a Trailing Suction Hopper Dredger greatly depends on the guidance and information the operator receives during any kind of project. PDS TSHD gives the operator a clear view of what is happening below the water line in real time, allowing the task to be performed as efficiently as possible.

Sensor interfaces and MARS2 data

PDS TSHD interfaces to most sensors onboard the vessel, such as angle and inclino sensors for the suction tubes, multiturn sensors on winches, a full range of switches, density, flow, draft, pressure and many more sensors. PDS TSHD is the tool to use when real-time QC data has to be supplied. PDS TSHD supplies data for systems such as RWS MARS2 system or systems used at the Port of Rotterdam, Hamburg and others.

When PDS Trailing Suction Hopper Dredger is equipped with a 'wire' crane then PDS TSHD can visualize the wire crane in the same application as well. Eliminating the need of a second software license.

Thanks to the strong combination of Teledyne Marine's dredge sensors and PDS TSHD we deliver a full solution that is reliable, robust and suitable for use in the harsh dredge environment. PDS TSHD also allows interfacing to other systems on the market like the Damen Dredging System, IHC and others.



DLS and TDS options

Draft-Load-Monitoring (DLM) and Tonns-Dry- Sediment (TDS) measurements and calculations are optional add-ons to the PDS TSHD. These can be added both during the initial purchase of the system or at any stage after the initial delivery when the need for these options arises. DLM reports are generated automatically. A trip reporting option is available.

Dredging efficiency

The combination DLM and TDS ensures that you dredge as efficiently as possible,by taking the dredged volumes per trip and transit time to deposit location into account. When PDS TSHD is interfaced to the pump, valve and hopper door-switches trip reporting can be done automatically.

Multibeam option

PDS TSHD can be expanded to allow the use of a Multibeam system. With this option enabled, the DTM is updated with both the suction head(s) and the Multibeam system, to further improve the dredging efficiency.

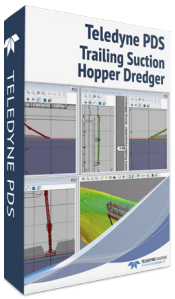
PRODUCT BENEFITS

- Hard- and software from single supplier
- Approved MARS2 and others reporting systems
- Robust sensors suitable for marine environment
- Upgradable to use with Multibeam system
- Supports DTM and TDS options

TELEDYNE MARINE
PDS
Everywhereyoulook™

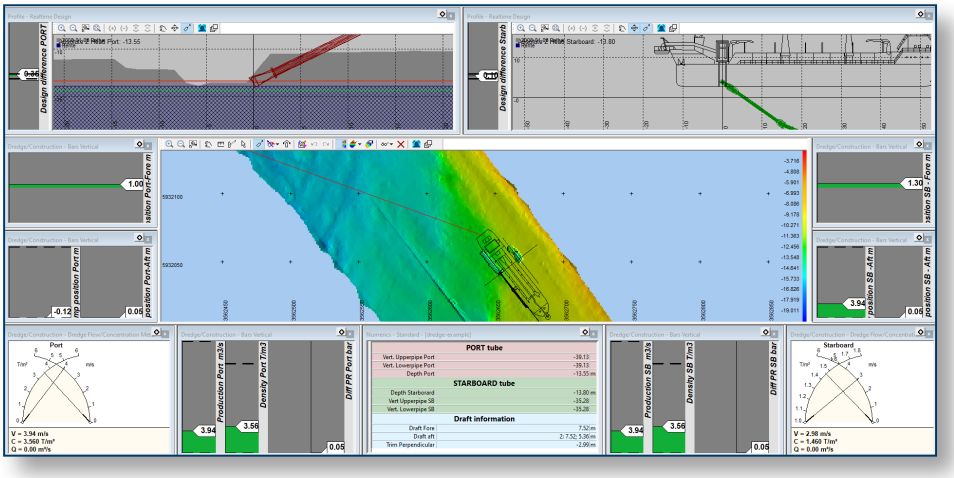
PDS Trailing Suction Hopper Dredger

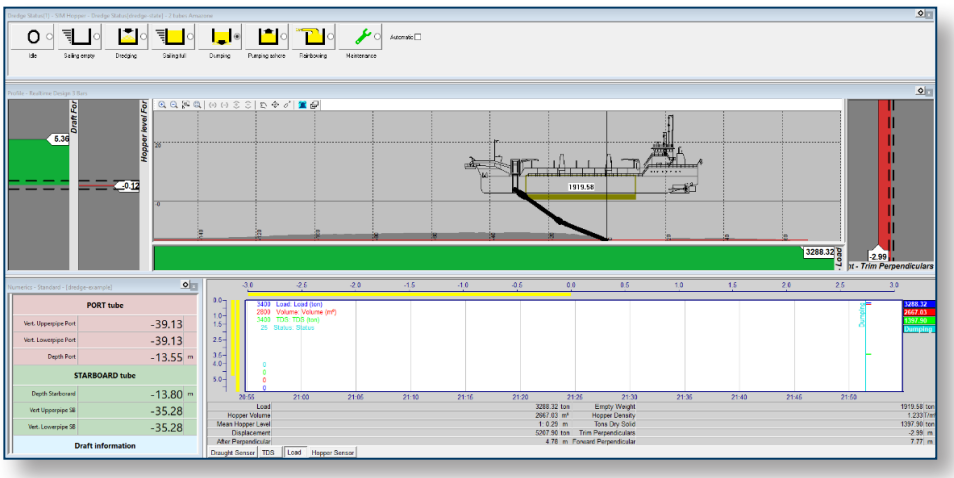
a Teledyne PDS Application



PDS TRAILING SUCTION HOPPER DREDGER SPECIFICATIONS

PDS	TSHD application	PDS	TSHD application
Project management	√	Real-Time update of DTM	√
User accounts + User access levels	√	Real-Time 3D View online	√
Configuration of equipment and offsets	√	Real-Time Profile and Side views	√
Multiple monitors	√	C-map electronic chart	√
Remote presentation at PC in network	√	S-57 data	√
Track guidance	√	Webmap service	√
GeoCalculator	√	Alarms	√
Data acquisition singlebeam echosounder	√	Multibeam add on	o
Data acquisition Multibeam echosounder	o	Production computation	√
Sensor interfacing + test	√	Draft Load monitoring	o
Support data to Mars2 and others	√	TDS system	o





TELEDYNE MARINE
PDS
Everywhereyoulook™

www.teledynemarine.com/pds
Tel. +31 (0)10 245 15 00 (Europe) • Tel: +1 805 964 6260 (USA)
Email: pds@teledyne.com

 PLD22360-1