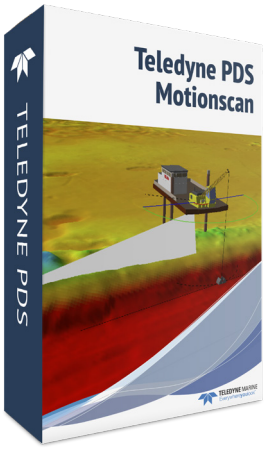
PDS Motionscan

a Teledyne PDS Application



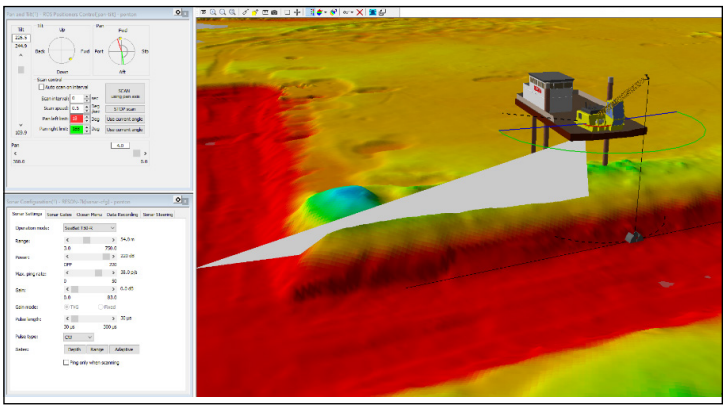
Motionscan is part of the Teledyne PDS family of applications which is a multipurpose platform that offer a broad base of functionality for the dredge and construction market. PDS Motionscan combines the best of the Teledyne products in one application providing the user real-time update of their DTM model during dredge or construction operations. Motionscan are your "eyes under water" in real-time!

Motionscan combinations

PDS Motionscan is available in different configurations, based on Teledyne RESON's T20 multibeam system, Teledyne Blueview's MB1350 or Teledyne Blueview M900 sonar. Main difference between the variants are the range and resolution performance.

System configuration

PDS Motionscan application forms the basis for all Motionscan configurations. PDS MotionScan is either a stand alone solution, or an add-on to your dredge or construction application like our PDS wirecrane, excavator, cutter Dredger or block placement application. The system comprises a Pan/Tilt unit and one of the sonars described earlier. all of these are fully integrated in and controlled through the PDS software. During dredge work, your DTM is updated via measurements of the dredge tool and additionally by the sonar after a scan is taken. All Multibeam data of the scan is checked and processed prior to be used to update the DTM. The setup is made user friendly so the dredge operator only presses the scan button and the DTM will be updates in the set sector. This eliminates the need for dedicated surveyor onboard.



PDS Motionscan and controls

Usages of PDS Motionscan

For placement projects, for example stone placement close to bridge pillars, PDS motionscan is used to ensure the correct level of stone is placed as per design/contract before moving the crane installation to the next worklocation. It eliminates the need for a dedicated survey vessel for interim surveys to monitor progress. For Cutter dredge operations PDS motionscan verifies that prior to moving to the next cutting line, the previous cutting line was as per design. On projects with interlocking blocks, PDS Motionscan is the right tool to verify the block is placed per design.

Other sensors required

As with any sonar survey the total accuracy depends on the total solution. This means that an accurate positioning and attitude sensor are required. The exact accuracy required depends on the MotionScan configuration selected. PDS MotionScan using a T20-R Multibeam echosounder will benefit most from the integrated INS-20 option, whereas MotionScan using M900 may suffice with a lower accuracy motion sensor is sufficient.

PRODUCT BENEFITS

- Combines the best of Teledyne marine sensors and software
- Survey can be done by crane operators
- Real-time updated DTM
- Cost saving survey tool

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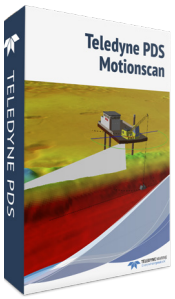
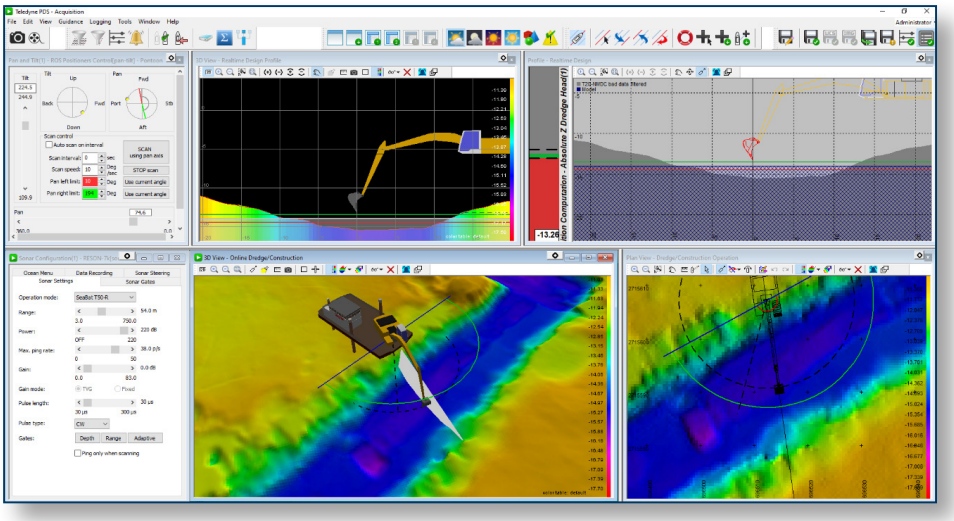
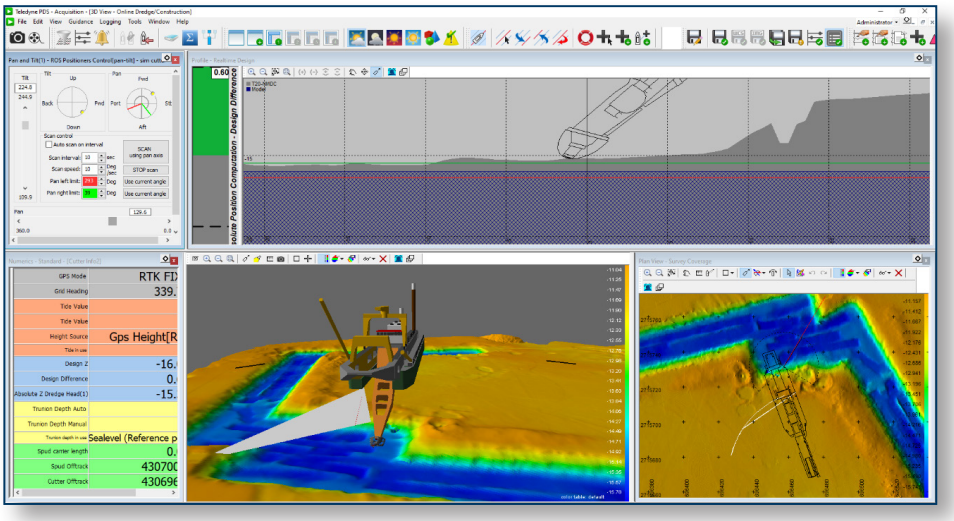


PDS MOTIONSCAN SPECIFICATIONS

PDS	Motionscan application	PDS	Motionscan appli-
Project management	√	Real-Time update of DTM by dredger and MBES	√
Control for Pan/Tilt units	√	Real-Time 3D View online	√
Control for Teledyne Multibeam systems	√	Real-Time Profile and Side views	√
Suitable for use with block placement application	√	Various electronic charts	√
Suitable for use with wirecrane application	√	Suitable for use with Cutter dredge monitoring	√
Suitable for use with Excavators application	√	Suitable for use with Matrasses placement	√



PDS Motionscan on Excavator pontoon



PDS Motionscan on Cutter Dredger

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