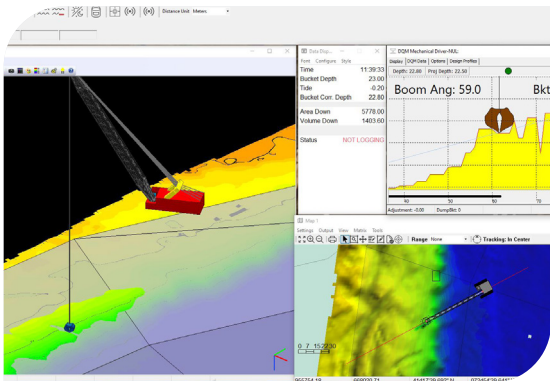


# xylem



# DREDGEPACK®

## SOFTWARE FOR DREDGING OPERATIONS

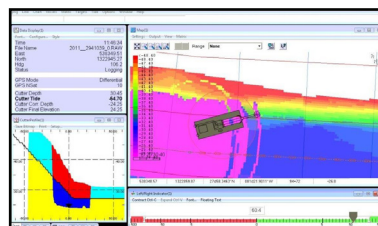


DREDGEPACK® is a comprehensive dredging control solution for cutter suction, trailing suction hopper, excavator, and bucket dredges. It enhances operational accuracy through a combination of high-precision sensors and advanced software, allowing operators to position dredges with pinpoint accuracy. This ensures precise material removal while preventing over-dredging or under-dredging, reducing the possibility of costly fines and rework.

Beyond assisting the operator, DREDGEPACK® serves as a crucial monitoring and compliance tool for project managers and engineers. It continuously tracks progress, providing supervisors with real-time oversight to ensure dredging meets design specifications and regulatory requirements. This proactive approach helps identify inefficiencies early, preventing costly delays while maintaining environmental and contractual compliance. By minimizing over-dredging, the system also reduces material displacement costs and fuel consumption, making dredging operations both cost-effective and environmentally responsible.

## FEATURES

- Fast and reliable customer support
- Single platform to streamline surveying and dredging operations
- Supports sensors for dredge operations
- Ready-built interfaces to the USACE dredge quality management system's Real-time 2D and 3D displays



## BENEFITS

As dredge plans grow increasingly complex, precise modeling and data-driven execution are more critical than ever. DREDGEPACK® provides powerful design capabilities that allow companies to calculate, simulate, and refine dredging plans before execution. Its real-time cross-sectional profiles offer an instant visual comparison of 'As Dredged' and 'As Surveyed' surfaces, ensuring operators work within the planned design. For hopper dredges, these profiles can be viewed along track or across track, while cutter suction dredges and excavators benefit from a cross-sectional display along the arc of rotation, improving navigation and excavation accuracy.

To streamline operations, DREDGEPACK® seamlessly integrates with multiple file formats (DXF, DWG, SHP, KMZ, GeoTIFF), allowing teams to import and analyze survey data effortlessly. This enables better pre-dredge planning and post-dredge reporting, reducing redundancy and rework. Additionally, the system features an intuitive calibration process and simplified hardware setup, ensuring a hassle-free implementation that minimizes downtime. By optimizing data integration, modeling, and execution, DREDGEPACK® enhances efficiency not just during dredging, but throughout the entire project lifecycle.

## Included in DREDGEPACK®

### PLANNING TOOLS

- Advanced Channel Design to generate complex plans for digging or capping.
- Line and border editors to design and organize dredging projects.
- Specific programs convert the bathymetry into a matrix file for use as a reference of the pre-dredged area.

### OPERATION TOOLS

- **2D and 3D Bucket Patterns:** Generate bucket patterns prior to digging for optimal placement.
- **Dredging progression:** Visual tracking of dredge advancement to monitor excavation accuracy and ensure alignment with project plans.
- **Real-time information:** Instant display of current dredging conditions, including depth, position, and material removal for informed decision making.
- **Performance Metrics:** Quantitative data on dredging efficiency and compliance, aiding in project evaluation and operational optimization.

### REPORTING TOOLS

- **Dredge Statistics:** View the depth distribution to monitor over-digging.
- **MTX Reporter:** Produce a graphic that shows dredging progress based on each shift or day.
- **Bucket Log Reports:** Keep a history of each bucket drop or placement location, and export it to your CAD/GIS package.
- **TIN model:** Perform volume calculations to determine the volume of removed materials.

### INDUSTRY LEADING SUPPORT

The HYPACK Technical Support team is always ready to assist with any issues and maintains phone, email, and online support. A HYPACK Support Team member can log into your computer through an Internet connection and remotely troubleshoot software issues as they arise.

### USACE DREDGE QUALITY MANAGEMENT

DREDGEPACK® also allows you to meet your reporting requirements. The software is compliant with the USACE Silent Inspector requirements for hopper dredges, as well as proposed Silent Inspector requirements for cutter suction dredges and excavators.

