



DYNAMICS / JAN DE NUL

Dynamics controls Jan De Nul's first plug-in hybrid dredger with TIA Portal automation

TIA Portal

Win CC
Unified

Integrated
Monitoring &
Control-
system (IMC)

Customer Challenge

- Jan De Nul wanted to advance sustainability in dredging by developing its **first plug-in hybrid dredging vessel** — lowering emissions, noise and fuel consumption compared with conventional dredgers. To operate complex hybrid propulsion, energy management and dredging systems reliably and efficiently, a powerful, integrated control platform was required.

Solution

- Dynamics delivered the **control centre and automation solution** for Jan De Nul's hybrid dredger using **Siemens TIA Portal** as the engineering framework. TIA Portal enabled unified programming, visualization and coordination of the vessel's control logic, drives and safety systems, serving as the "brain" of the hybrid ship's automation.

Customer benefit

- **Lower emissions & noise:** Hybrid control via TIA Portal optimizes energy use, contributing to quieter, cleaner dredging operations.
- **Greater operational efficiency:** Integrated control logic and visualization improve responsiveness and energy management across ship systems.
- **Future-ready automation platform:** The TIA Portal-based system provides a scalable, unified automation foundation for advanced marine applications.

SIEMENS