



NACOS Platinum

Dynamic Positioning For Wind Farm Development and Service

Designed with extensive operator input the system offers an intuitive interface, reducing training and transition times. The dynamic positioning system (DP) features unparalleled application flexibility for any vessel type providing owners with the most cost effective solution available.

Designed with the help of ergonomics professionals, DP captains and ship controls experts, the NACOS Platinum DP user interface represents a leap forward in intuitive ship controls. Full touch operation and screen layout engages the user while ensuring safer and more efficient operation. Only necessary and required information is presented, preventing confusion during critical operations.

A common interface design and multi-function displays for all NACOS Platinum DP products ensure consistent operating principles across the bridge. Common components complete the integration

of the NACOS Platinum DP with other NACOS Platinum series systems such as automation, power management, and navigation and conning.

With more than 50 years in the industry, NACOS Marine specialises in the design, development, manufacture, and supply of state-of-the-art vessel manoeuvring, navigation and control systems for offshore, commercial and military markets around the globe.

Key Benefits

- User interface and applications designed for and by the operator; flexible configurations
- User interface shortens training cycle and reduces transition time from other systems
- Integrates with all NACOS Platinum products including automation, navigation/conning, power management, and thruster control
- Reduced lifecycle costs due to use of common components across all Platinum products
- Advanced remote diagnostics with available interfaces to multiple vessel systems.



Wind Farm Support Features

DP VESSELS

Guard Circles - create warning and alarming guard zones around each turbine.

- Warning issued when yellow outer turbine Guard Circle is breached.
- Alarm issued when red inner turbine Guard Circle is breached.
- Turbine locations and Guard Circles can be saved to a library for later reuse.
- Library can be copied to other NACOS Platinum DP Systems.

Remote Center of Rotation (CoR)

- changes the DP system center of rotation for the vessel to a user selectable location on or off the vessel.

- Used when operating on DP during piling or lifting operations.
- Remote CoR can be set to the location of the center of the work area (monopile or structure).

Gangway Operation – DP mode governing operation with gangway

when close to a turbine.

- DP receives data from gangway.
- Turbine library includes data for each turbine including landing points (including bearing).
- RangeGuard can be used during initial approach to provide relative position measurements.
- COR of gangway must be inside approach cone for approach and landing operation to continue.
- Once landed gangway status, extension, elevation angle, slew angle, and co-linear force are monitored and alarmed.
- Gangway can be used as a position reference sensor once landed.
- Force compensation option included to compensate for gangway forces.

Heavy Lift mode - DP System adjusts controller gains and wave filter frequency to account for the new dynamics when connected to a load that is initially Earth-fixed. Requires real time data feed from crane:

- Cable tension.
- Cable payout.
- Crane boom angle.

JACKUP TYPE VESSELS

Freeze Integral (model)

- Option to freeze the dynamic model calculation when the first jackup leg makes contact with the sea floor.
- Calculation resumes when all legs are no longer making contact with the sea floor.

Quick Integral (model)

- Option to build the model (integral) faster when the vessel is in a fast-changing environment such as transitioning from the legs back to DP.

Jackup Compensation - feed forward forces augmented by aero and hydro-dynamic forces associated with the size and position of the jackup legs.

ALL VESSEL TYPES

History of working with customers to add custom DP features supporting monopile installation, interface and cooperative operation with motion compensated pile grippers, mooring systems, crane operation, and other requested capabilities.

At NACOS Marine, we are redefining control at sea.

Born from decades of maritime expertise, NACOS Marine delivers fully integrated automation, navigation, and dynamic positioning solutions, built on one intuitive platform. We empower vessel operators with precision, situational awareness, and confidence in the most demanding marine environments.



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