



DP5000

Dynamic Positioning Control System



Expertise in Vessel Motion Control

Since the 1980s, our founders have been pioneers in automatic control systems for hovercrafts, known for their fast dynamics. Our focus remains on mastering the control of vessel motion.

We have built a library of over 100 six-degree-of-freedom mathematical models of vessels, used worldwide in training centers as part of full-mission ship handling simulators by a leading provider in the industry.

Our expertise and fundamental knowledge in this field led to the successful launch of our first DP system in 2000. Today, over 800 DP systems serve customers on ships in major oil and gas offshore areas. We also offer DP systems for various types of ships in other segments of the marine industry.

Key Advantage

We understand the nature and complexity of your business and are here to support you with our expertise and knowledge.

We offer DP systems tailored to your specific operational needs for each type of ship in various segments of the marine industry. This approach enables us to provide reliable solutions for demanding tasks, with equipment known for its best-in-class performance.



Accurate Control for Unique Applications

Dynamic positioning is a valuable tool in various marine industry segments. Our experience extends to controlling ships performing non-typical offshore tasks, such as wind farm support vessels, fast crew boats, cruise and ferry ships, ice-going ships, and more.

Our accurate vessel mathematical models and unique algorithms enable us to maintain the position of vessels with fast dynamics or specific limitations. We provide DP systems for non-typical applications that meet your requirements for safety, reliability, functionality, and usability.

Key strengths

- Accurate vessel mathematical models
- Unique algorithms for precise control
- DP systems designed for non-typical applications
- Compliance with safety, reliability, functionality, and usability requirements.



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Fast Algorithms, No Stabilization Needed

DP5000 begins operations immediately upon turning on. No waiting time required before starting DP.

The simplest user interface

The simplest user interface with voice alerts for critical moments of operations makes our DP system accessible and easy to use for operators with limited experience.

Reliability and unique stability

Reliability and unique stability, with in-house hardware-in-the-loop testing of every single system delivered, including even DP0 systems.

Reduced fuel consumption

Fuel-saving modes for applications where lower positional accuracy results in reduced fuel consumption.

Cost of system

Cost of system ownership is transparent and predictable.



Our strength lies in our ability to customize control modes for each individual ship.

Our team works closely with captains and project managers to design vessel-specific modes and functions. No matter the complexity of your design or unique requirements, we are here to help.

Ergonomic working environment for the operator

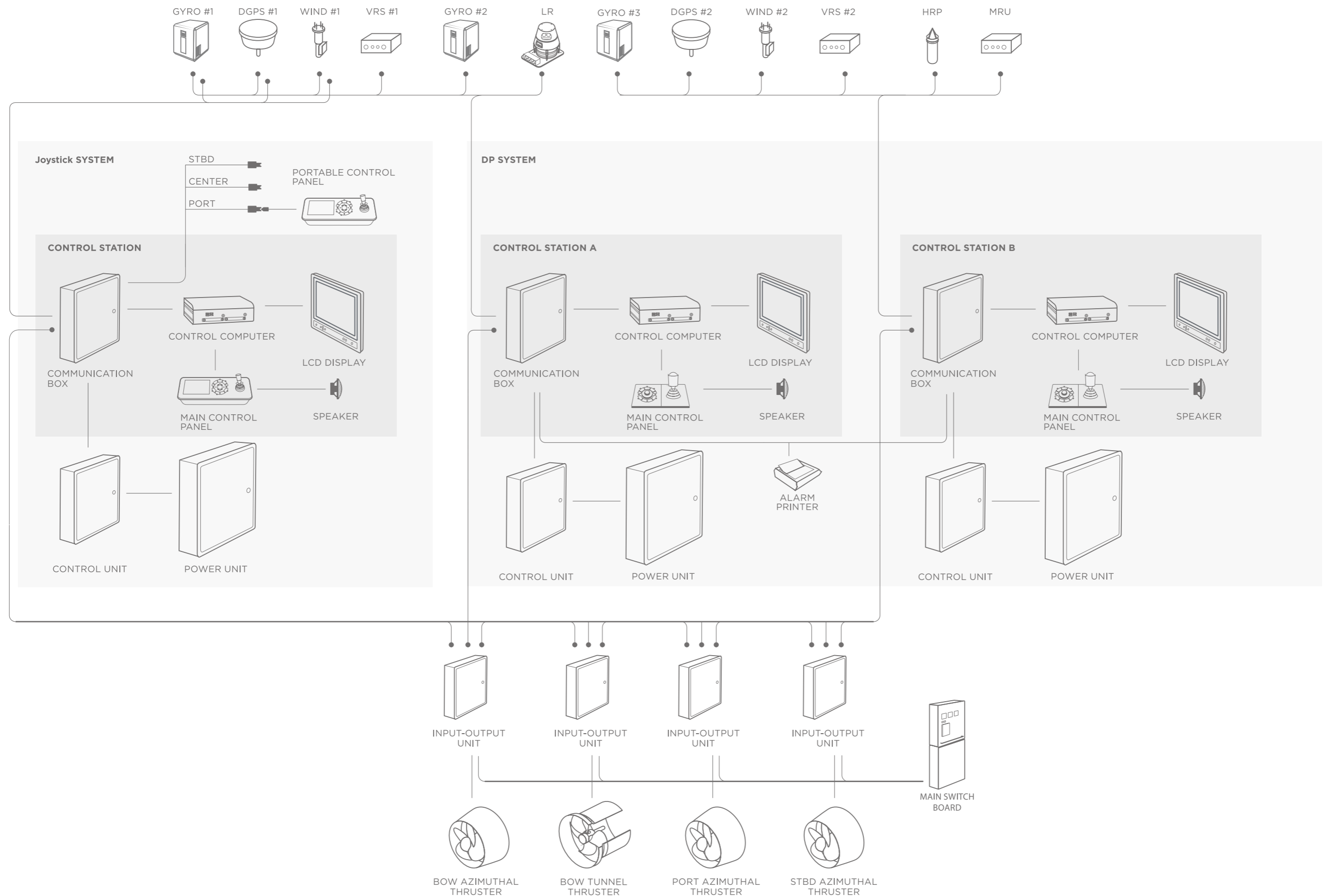
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Smooth Vessel Control in Dynamic Environments

Ensure Smooth Vessel Control in Dynamic Environments and Fault Situations. Our unique Thrust Allocation Logic algorithms manage single and multiple actuator faults by dynamically allocating the best thruster layout and optimizing power and propulsion usage.



An illustration of DP5000 system setup



DP system Milestones:

- ◆ 2012 - First Navis DP2 system for fast support intervention vessel with two-step gearbox;
- ◆ 2014 - First fast support intervention vessel with hybrid propulsion equipped by Navis DP system;
- ◆ 2015 - First ship built with oblique hull and asymmetrically located thrusters fitted with Navis DP system;
- ◆ 2016 - Navis DP system installed on world's most technologically advanced tug boat with revolutionary propulsion;
- ◆ 2017 - Successful commissioning of Navis DP system on new dual fuel icebreaker;
- ◆ 2018 - The Navis DP system with an integrated remote control system Navis RTCS for propulsion devices is installed on board a premium cruise liner;
- ◆ 2020 - DP system installed on the world's biggest diesel-electric icebreaker;
- ◆ 2022 - Production launched in Dubai, United Arab Emirates;

Our commissioning process

Our commissioning process involves thorough testing and validation of the DP 5000 system before delivery to ensure reliable and smooth operation. Our team also provides on-site training to familiarize the crew with the system and its capabilities. Sea trials are conducted to verify the performance of the system in real-world conditions and make any necessary adjustments. This guarantees a seamless integration of DP 5000 into your vessel's operations.

Our comprehensive service

Our comprehensive service offerings ensure fast response and resolution to any service needs.

We have:

- a highly professional service team;
- a network of trusted partners to support you in remote locations;
- remote diagnostic capabilities;
- the ability to upgrade software and calibrate the system remotely;
- extensive data logging capabilities.

With well-tuned systems and thorough documentation, we provide efficient commissioning and ensure a stable system for the owner. Our low failure rate, thanks to extensive testing at our manufacturing facility, allows us to maintain a lean service team compared to others in the industry.



Training

We offer comprehensive DP training based on the latest IMCA recommendations to deepen knowledge of our system.

Our training resources include:

- DP maintenance for on-board personnel;
- familiarization courses for DP operators;
- portable DP Tutor for onboard or office use;
- DP simulators, standalone or integrated into full mission bridge simulators.

On-site vessel-specific training is also available at your desired location or onboard the vessel.

Reliable On-Site Service

Comprehensive Technical Support from Start to Finish

Our technical support covers every stage of your project, including:

- Pre-inspection of the vessel;
- Pre-project services;
- Vessel-specific system design;
- Project services;
- Class approval assistance;
- Commissioning;
- Sea trials;
- Post-trial development;
- Crew training;
- Global service.

We have a global presence through our own offices in key locations and a network of service partners to provide support in remote locations.

Our offers

We offer a customizable user interface in any language on demand.

Cost-effective reactivation and refit of vessels for low expenses during life time of vessel.

We offer cost-effective reactivation and refit services to modernize existing vessels, helping to reduce expenses during the vessel's lifetime. Our solutions are designed to improve the vessel's performance and efficiency while minimizing the financial impact on the owner. Whether you need to upgrade an existing system or install a new one, our team will work closely with you to ensure a smooth and successful project outcome.

As much capability plots as you want and full support during ship design.

We provide customizable capability plots to match your specific DP requirements, and offer full support during ship design to ensure a smooth and effective integration of our system into your vessel.



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