

YOUR PROPULSION EXPERTS



SCHOTTEL PropControl 4

Propulsion Control System

PROPULSION CONTROL SYSTEM

PropControl 4

for SCHOTTEL Controllable Propeller

A variety of subsystems has to be coordinated to automate a modern controllable pitch propeller vessel. For efficient operation, creating the optimum synergy between the individual components is vital.

A modern propulsion control system needs to be able to interact with many systems on the vessel and display various operating modes. The next-generation SCHOTTEL propulsion control system meets these requirements giving the vessel operator economical and safe control of any kind of vessel.

With its module-based architecture, PropControl 4 is highly flexible to ensure the perfect fit for each individual application.



The new lever offers optimized handling both from a technical and ergonomic perspective.

+ INTUITIVE SAFETY

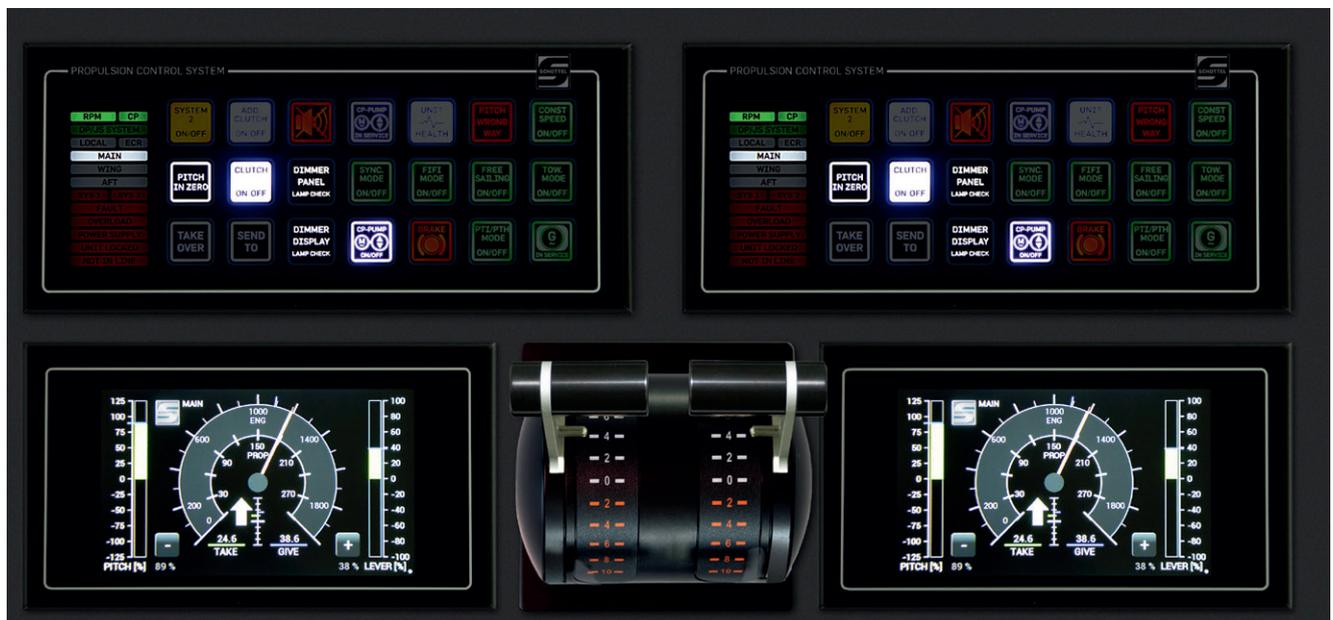
Redundant full follow up back-up system for seamless speed & pitch control take over in case of critical system failure of main control system

+ CLEAR OVERVIEW

Well-arranged control panel gives a clear overview at a glance

+ APPLICATION FOCUSED

Customizable software modules and hardware components to optimally fit each individual application



Operating Modes

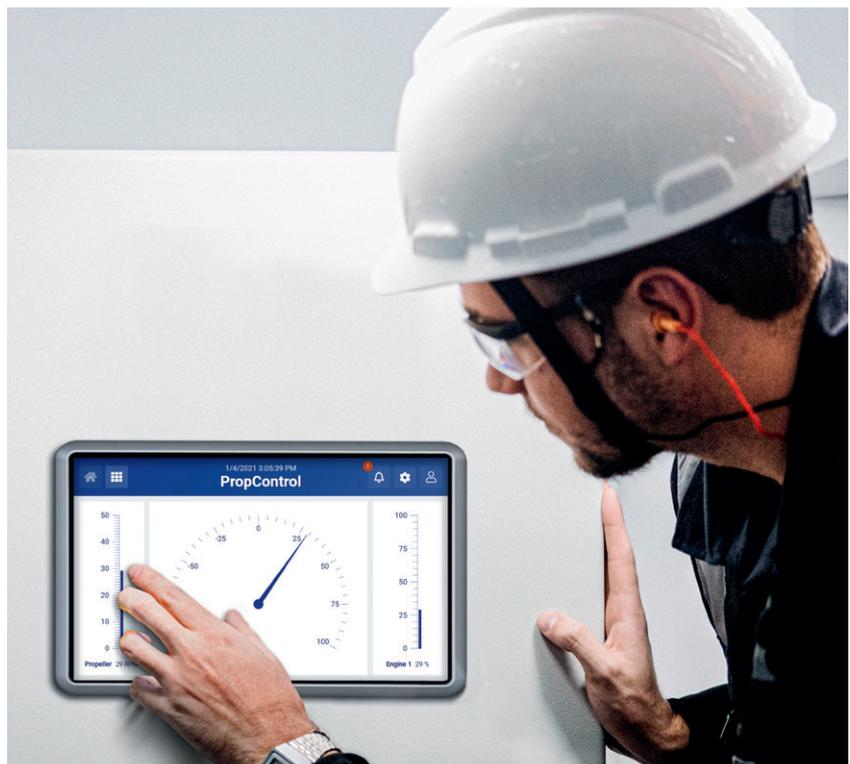
In addition to just controlling the propeller blade angle, the propulsion control system (PCS) provides sophisticated modes to operate various subsystems. If subsystems such as a gearbox, a clutch, a fire fighting pump or a generator are in the main drive train, the PCS ensures that these components work together efficiently. Particularly with hybrid propulsion concepts, it is vital that the operating modes can be flexibly adapted so that they can function with third-party systems such as PMS or EMS.



Integrated system status diagnostics

PropControl 4 features an intelligent system for monitoring the control components. A wide range of signals can be monitored, which generate an alarm in the event of a failure or if a limit value is exceeded.

The integrated monitoring system gives the user additional diagnostic information in the event of a failure.



Hydrodynamic optimized control

SCHOTTEL Controllable Propellers are operated with efficiency-optimized combinator curves based on SCHOTTEL's long-standing in-house expertise in hydrodynamics. This ensures that the propeller is always controlled at an optimum operation point of hydrodynamics and engine performance.

+ MODERN COMMUNICATION

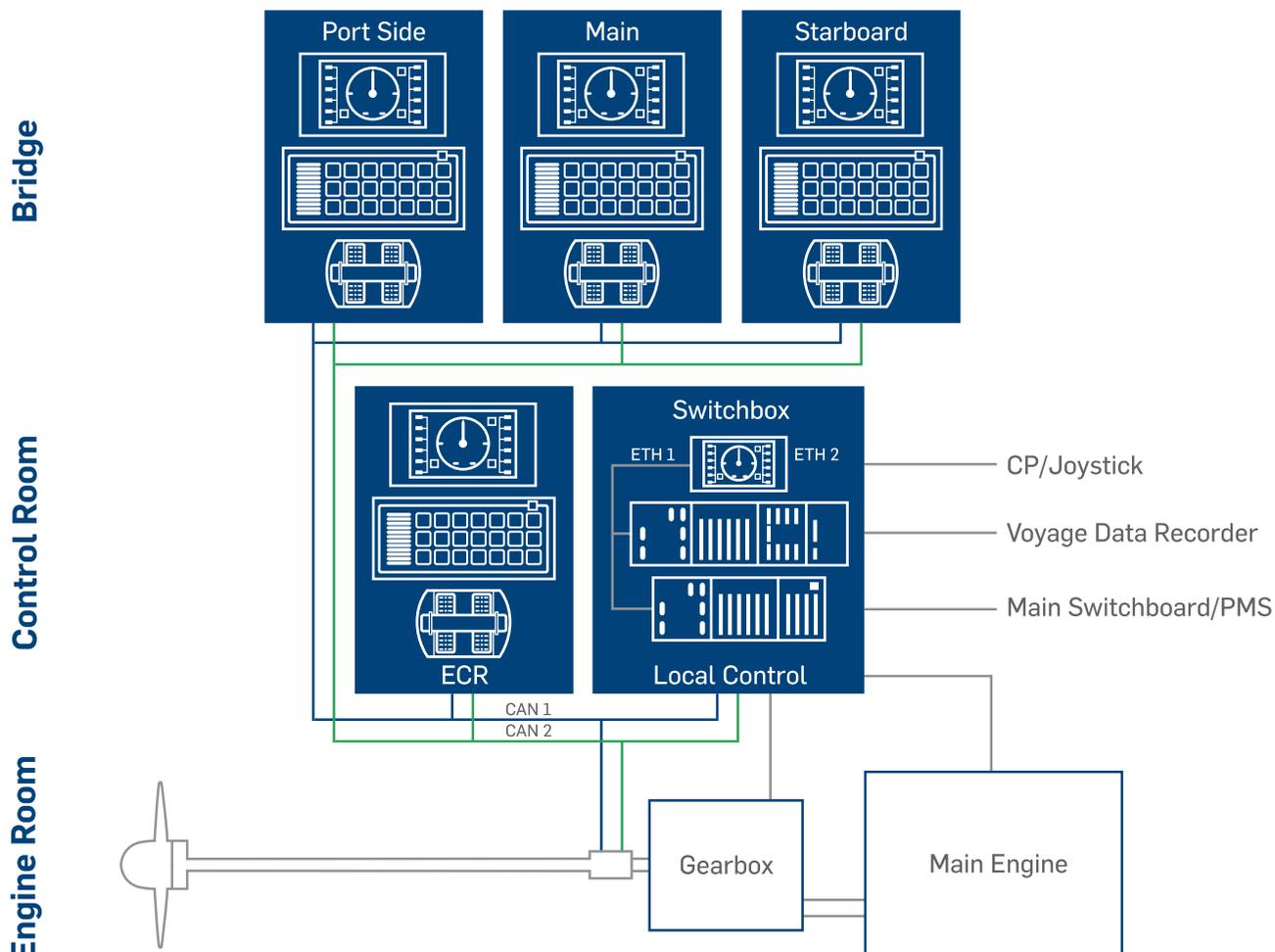
- Redundant process data transfer (dual CAN bus)
- Reduced wiring effort

+ HIGH-PERFORMANCE PROCESSING

- For optimum control
- Suitable for standard and complex applications

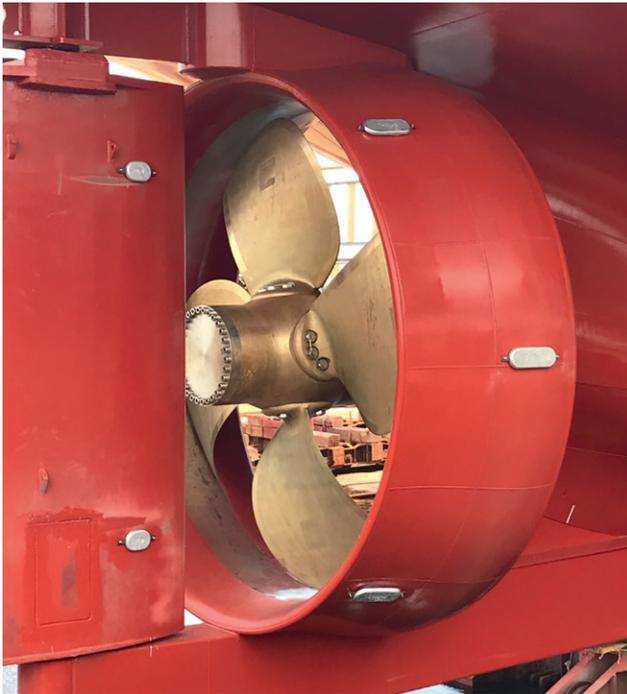
+ MULTIPLE INTERFACES

High compatibility with other systems such as AMS, PMS, EMS, VDR



Fit for the future

With increasing computing power, it is now possible to centralize the tasks on the CPU and to provide this flexibility by means of multitasking and a modular software architecture. The modules themselves are highly standardized, but their systematically structured interfaces enable them to be tailored as required to suit the situation.



+ REDUCED MAINTENANCE

Using CPU technology keeps the number of components to a minimum, which simplifies maintenance and improves reliability.

+ ONE PARTNER FOR PROPULSION

Optimum combination of automation and propulsion from a single partner for enhanced performance and service operation throughout the vessel's lifetime.

+ REDUCED COMMISSIONING TIME

Standardized software modules & pre-configurable parameter settings lead to time savings during commissioning.

+ INTELLIGENT DIAGNOSTICS

- Operating panel for system diagnostics on the vessel
- Intuitive user guidance
- Touchscreen usability



During The Vessel's Lifetime

Delivering state-of-the-art propulsion and automation solutions is not enough for us. Thanks to decades of experience in the field of propulsion technology, we are able to offer high-quality services tailored to your individual needs throughout the vessel's service life.



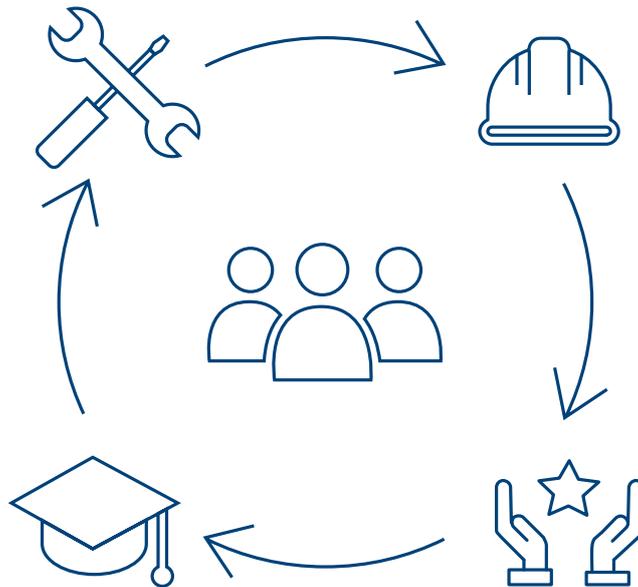
SPARE PARTS

- ▶ Fast delivery time thanks to global warehouse logistics
- ▶ Decades of documentation for clear identification of spare parts
- ▶ OEM warranty
- ▶ Original spare parts with all technical revisions known up to the time of manufacture



MAINTENANCE

- ▶ Globally standardized and proven high-quality service support
- ▶ Preventive and predictive maintenance programs
- ▶ Remote service support with augmented reality tools
- ▶ Vibration measurement with SCHOTTEL VibCheck
- ▶ More than 150 highly qualified service technicians worldwide



TRAINING

- ▶ Customer training courses in local language
- ▶ Courses on site or in one of 5 SCHOTTEL training centers (GER, USA, AUS, SGP, BRA)
- ▶ Permanent international knowledge transfer for service technicians



UPGRADES

- ▶ Increase of the shipowner's profit

UPGRADE LEVELS:

- ▶ Control systems
- ▶ Thrusters
- ▶ Systems for intelligent operative monitoring