



# NACOS Propulsion Control System (PCS)

Efficient propulsion control system for sustainable shipping, reducing carbon emissions with reliable and versatile solutions.

Since its initial development in the 1950s, propulsion control has been one of our core automation products.

The new PCS Platinum propulsion control system draws upon all our experience in the marine market and the know-how derived from thousands of installations. The result is a highly flexible system, comprising proven and variable software control functions designed to meet the demands of the modern sea-going vessel.

Both the hardware and software are tailored to meet the marine sector's demanding environmental and operational requirements, with lifelong support engineered into every component.

Of course, the respective PCS components (EMS, EPS, PTS) are not only proven in use but also approved by main engine manufacturers (Wärtsilä, WinGD and MAN Diesel), as well as by all the major IACS class societies.

# NACOS Platinum PCS

The propulsion control system encapsulates the complete propulsion control package and is based on our years of experience in this field. The PCS not only includes several functions from individual systems to fulfil class requirements but is also expandable into a shared network using the combined Platinum series hardware and software platform.

There are naturally stand-alone variants also, such as the stand-alone engine safety system for use in combination with 3rd party telegraph systems, governors etc.

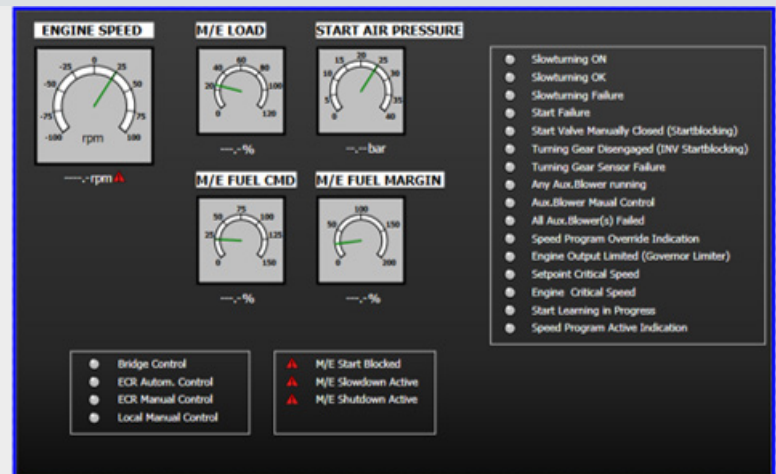
## Engine Manouvering System (EMS)

The EMS can be configured from the smallest telegraph system and can include bridge wing capability and even electric propulsion. The start/stop system, loading up/down bump-less transfer and PTI/PTO mode are included as standard. The EMS is suitable for the complete range of engine configurations, ranging from a 2-stroke single shaft with a fixed propeller to 4-stroke diesel-electric propulsion and highly sophisticated gear/propeller arrangements. With the EMS we even offer a closed-loop controller for pitch control.

## Engine Protection System (EPS)

The EPS is a solid and reliable safety system designed for stand-alone operations as required by class societies. The hardware and necessary functionality is also designed to precisely meet the engine makers and class requirements.

Thus, this robust and well-trusted system offers absolute quality in safety-critical functions such as engine stopping, lube-oil pressure, and emergency stop push button. Furthermore, the installation and commissioning process of this product is exceptionally effortless. It requires only a single module designed for standard engine types.



## Propulsion Telegraph System (PTS)

PTS is our Type Approved telegraph system. It can communicate the requested speed from the telegraphs to the Engine Maneuvering System or directly to the Engine Control System. Other core functionalities are:

- Electric shaft for lever synchronization
- Light indications for actual ship propulsion setpoint
- Take-over button to take control of setpoint
- Dimmer button for adjusting light intensity
- Emergency stop button

## Efficient and Cost-Effective

Thanks to the design and technology used, our PTS levers are extremely robust, and long-term performance deviations are minimal, thus reducing the need for recalibration.

Our new design combines the electronic and processing unit into a single body which lowers commissioning and ownership costs for the customer over time.

### BRIDGE AND CONTROL ROOM TELEGRAPH

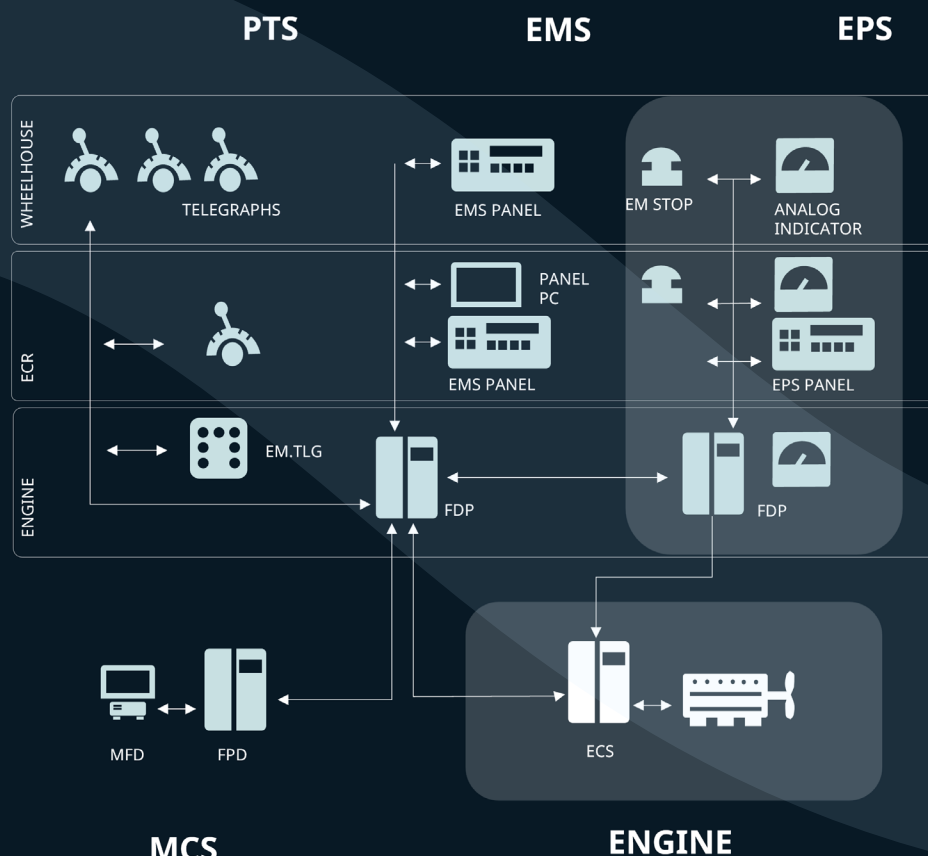


## PCS Features

- Complete propulsion package from one supplier
- Type approved by all major class societies within IACS
- Stand-alone or can be integrated with other Platinum series products
- Simple or complex set-point system, including 3rd party set-point
- Support of input from fuel optimizing system
- Can be integrated with a variety of telegraph system options, including electric shaft
- Support of most common industry protocol, such as modbus, CANbus and more
- Redundant LAN network or fieldbus for long-distance
- Single fuel and dual fuel support
- Support of emission reducer systems
- Main engine start & stop
- Slowdown and shutdown
- Exhaust gas temperature deviation alarms
- Bearing temperature deviation alarms
- Propulsion mode selection with engine mode & clutch display
- Propeller pitch & RPM combinator control
- Thruster control
- Extensive alarm information
- Ruggedized levers for indoor and outdoor usage

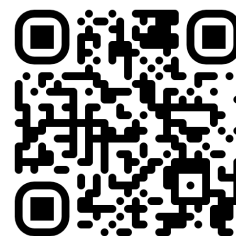
Pioneering Maritime Excellence for Over 80 Years:  
Setting the Standard in Marine Automation, DP,  
and Navigation with a Legacy of 13,000+ Vessels  
and Unmatched Customer Collaboration.

## PCS System Layout



## NACOS Marine in brief

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.



[www.nacosmarine.com](http://www.nacosmarine.com)

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