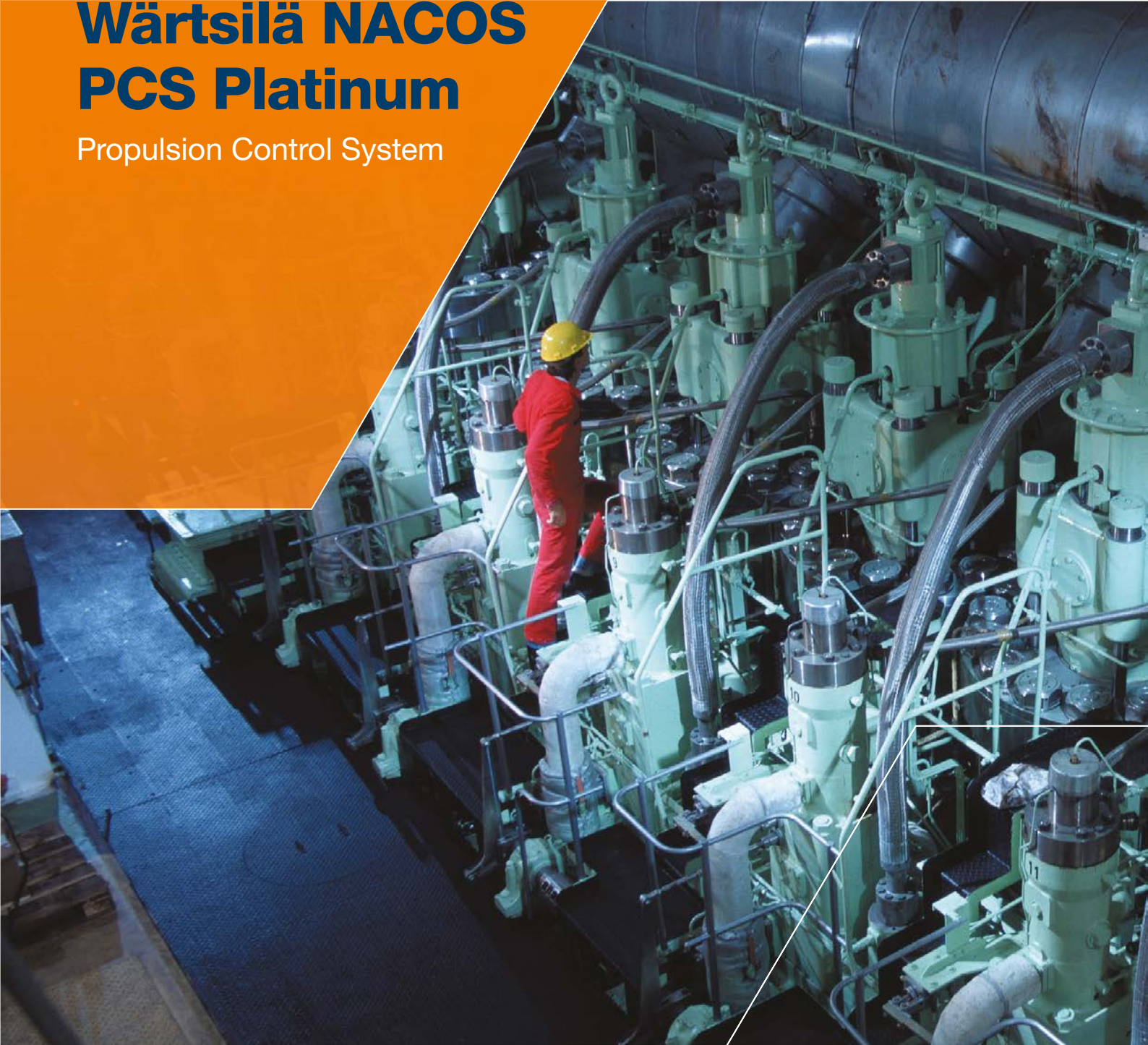


# Wärtsilä NACOS PCS Platinum

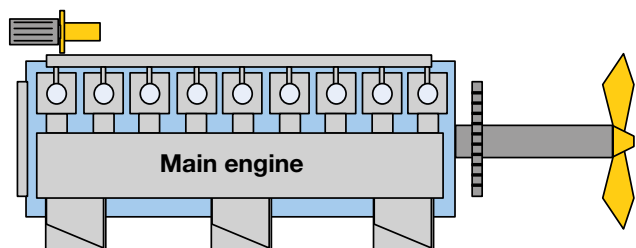
Propulsion Control System



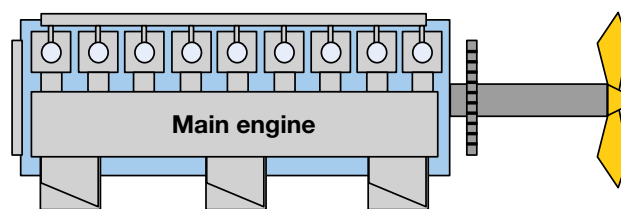
# Wärtsilä NACOS PCS Platinum Propulsion Control System

Since its initial development in the 1950s, propulsion control has been one of Wärtsilä's 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.

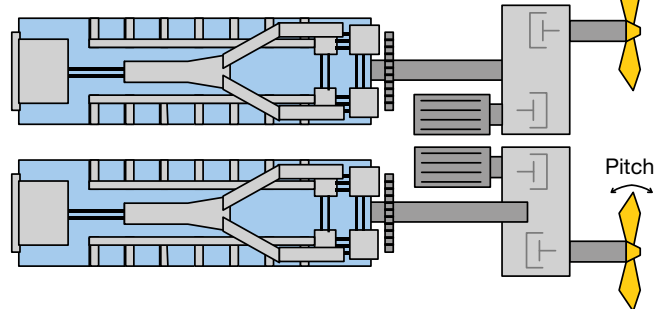
2-stroke main engine with conventional governor



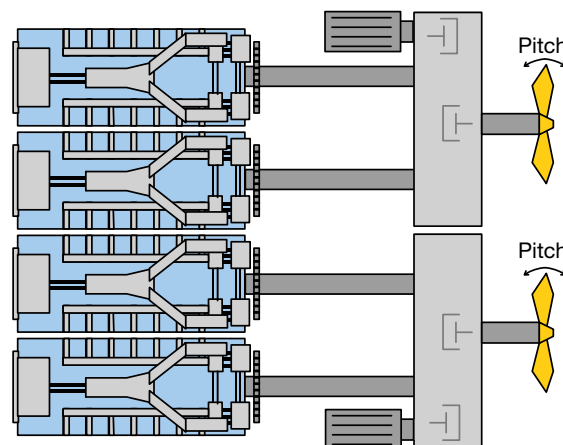
2-stroke main engine with electronic fuel injection



4-stroke dual engine, gear, PTI/PTO, CPP



Redundant 4-stroke dual-engine on 2 shaft lines with PTO, CPP, gear



Modular propulsion control system

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, EGS, EPS) are not only proven in use but also approved by main engine manufacturers (Wärtsilä and MAN Diesel), as well as by all the major IACS class societies.

## PCS – Propulsion Control System

The propulsion control system encapsulates the complete propulsion control package, and is based on Wärtsilä's 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.

## EMS – Engine Manoeuvring System

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, bumpless 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 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.



## EGS – Engine Governor System

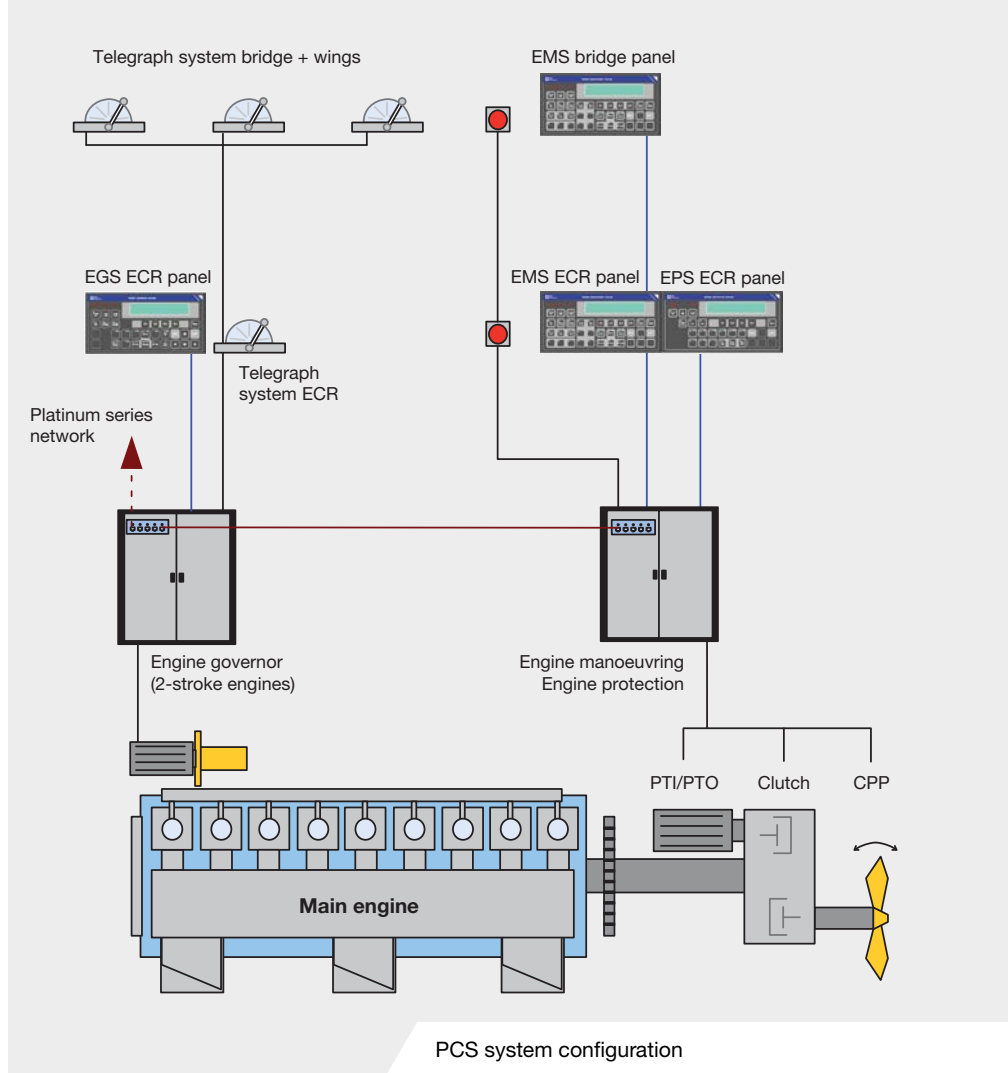
The EGS sets the marine industry standard for controlling 2-stroke engine fuel racks (MAN MC/MC-C, Wärtsilä RTA) and as a controlling set-point for the most modern electronic fuel injection engines (Wärtsilä RT-Flex). As such, our EGS is one of the major market leaders and is of course fully approved by engine makers and all the major IACS class societies.

## EPS – Engine Protection System

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.

## System Architecture

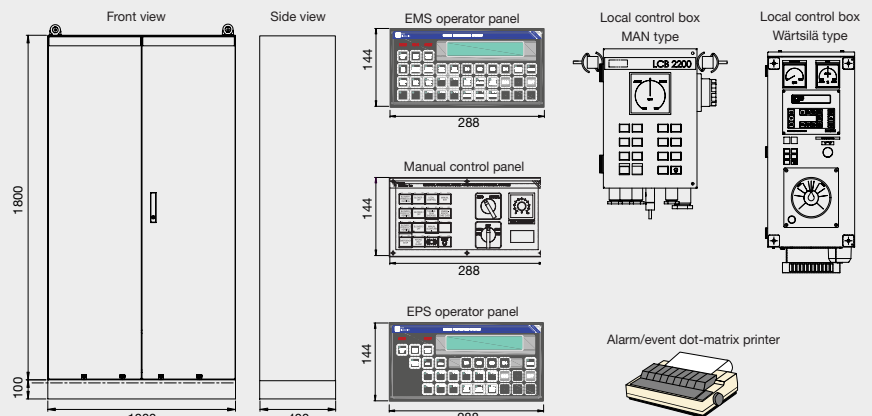
PCS Platinum is based on individual products deliverable as stand-alone variants or as part of an integrated system within the Platinum series redundant LAN network. When combined with the Platinum series monitoring and control system, the network system topology offers significant benefits. This provides extended operator interfaces via PC screens and graphical process overviews of the internal operations of the PCS, including sequence monitoring, the start/stop system, and the load-limiters.



PCS system configuration

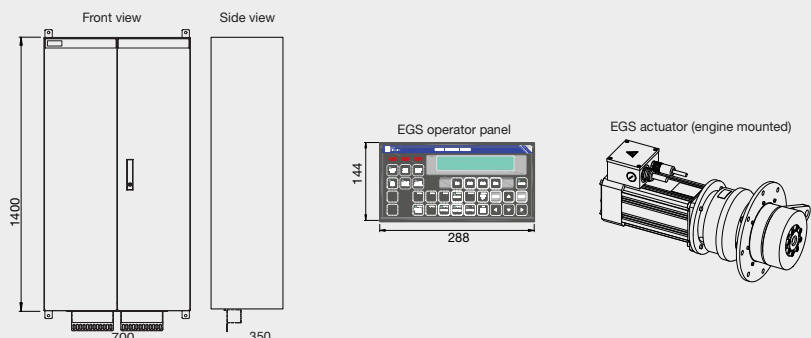
## Technical Data

### EGS/EMS main cabinet (floor mounted)



Supported engine types (2-stroke): MAN MC/MC-C, MAN ME/ME-C, MAN ME-B, Wärtsilä RT/RTA, Wärtsilä RT-flex  
Supported engine types (4-stroke): various makers supported, depending on engine interface

### EGS main cabinet (wall mounted)



Supported engine types (2-stroke): MAN MC/MC-C, Wärtsilä RT/RTA

## PCS Features

- Complete propulsion package from one supplier
- Type approved by all major class societies within IACS
- Extensive alarm information
- Stand-alone or can be integrated with other Platinum series products
- Redundant LAN network or fieldbus for long distance
- Simple or complex set-point system, including 3rd party set-point
- Variety of telegraph system options, including electric shaft



Wärtsilä is a global leader in complete lifecycle power solutions for the marine and energy markets. By emphasising technological innovation and total efficiency, Wärtsilä maximises the environmental and economic performance of the vessels and power plants of its customers.

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