

NACOS platinum

Navigation Automation Control System



Wärtsilä SAM Electronics

One Common Platform

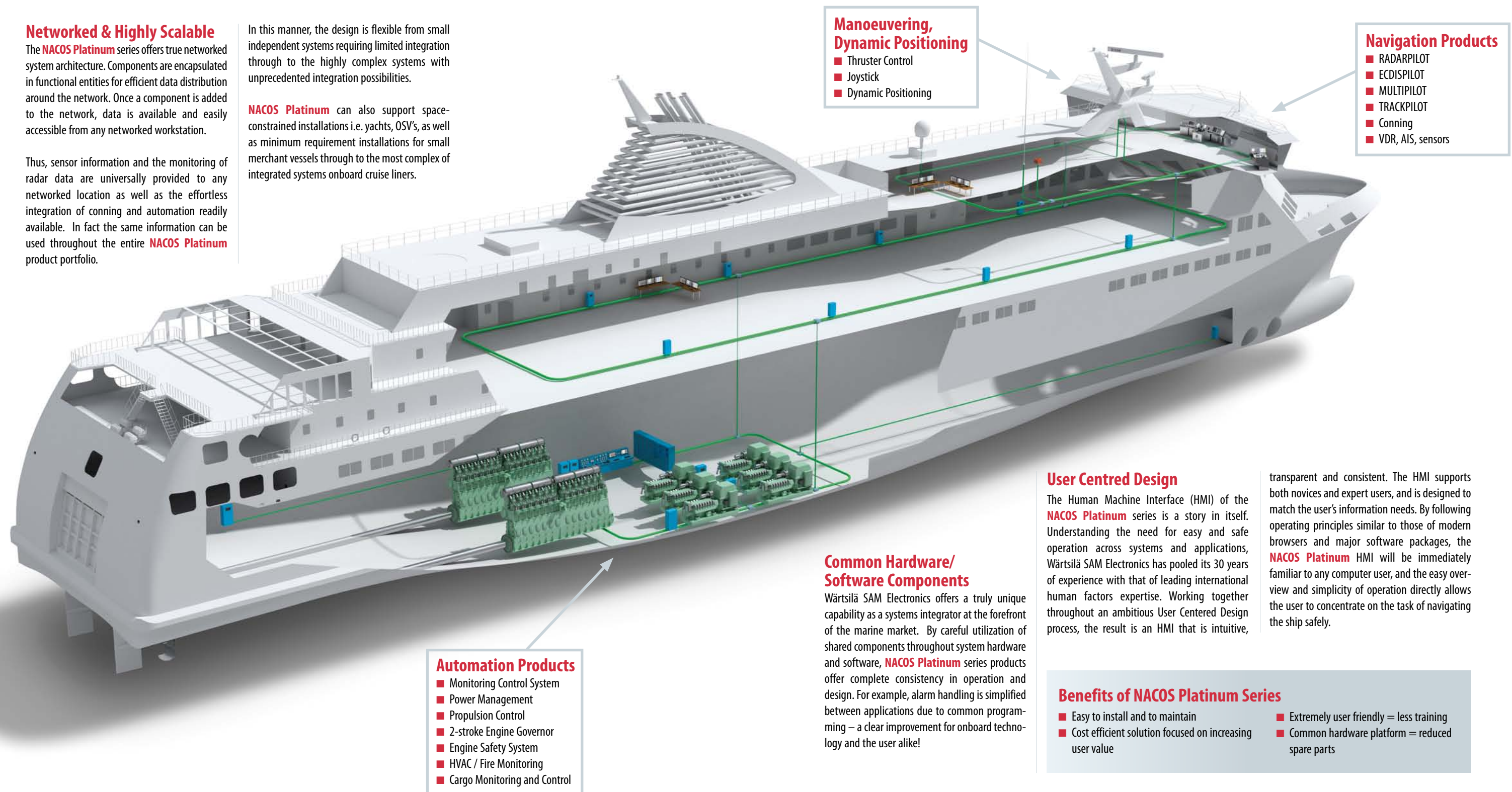
Networked & Highly Scalable

The **NACOS Platinum** series offers true networked system architecture. Components are encapsulated in functional entities for efficient data distribution around the network. Once a component is added to the network, data is available and easily accessible from any networked workstation.

Thus, sensor information and the monitoring of radar data are universally provided to any networked location as well as the effortless integration of conning and automation readily available. In fact the same information can be used throughout the entire **NACOS Platinum** product portfolio.

In this manner, the design is flexible from small independent systems requiring limited integration through to the highly complex systems with unprecedented integration possibilities.

NACOS Platinum can also support space-constrained installations i.e. yachts, OSV's, as well as minimum requirement installations for small merchant vessels through to the most complex of integrated systems onboard cruise liners.



A Captains Choice Navigation System

All Navigation Requirements

NACOS Platinum series offer the entire palette of navigation products from one supplier including DP. Consistency and tight integration between products secures a smooth installation and efficient life time support from one of the largest global suppliers in the market.

Best Performance

When **NACOS Platinum** series products are combined to a comprehensive networked system, the best possible performance at a competitive price is achieved. Integration of data, shared components and strong support from a global organization is safeguarding the investment for your vessel's lifetime.

Customised System

Data is consistently presented throughout the system, allowing flexible combinations and highly customised systems for conning and integration of machinery control system data.

The IP network enables remote connections, thus reducing maintenance costs through faster more efficient technical support from Wärtsilä SAM Electronics and its global service partner network. Optional upgrades are simple to perform, allowing for post-installation adaptation to MULTIPILOT if required; therefore, utilising the entire system capacity including monitoring and operation of automation.

Work Boats / Anchor Handling / OSV

- Compact system designs
- Multifunction use of the displays (MULTIPILOT)
- Class approvals for special requirements
- Conning display - flexible/customizable
- DP system integration (operation HMI)

Cruise Line / Yachts / Special Purpose

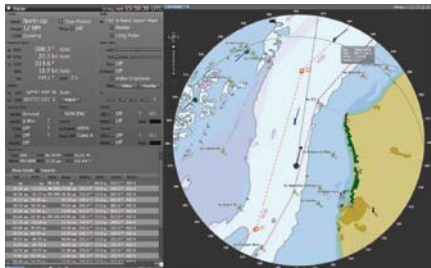
- Customizable navigation packages
- Extensible control stations, secondary bridge, safety room
- Online diagnostics / remote maintenance
- Integration of HVAC, emergency shut down, propulsion
- Flexible configurations and adaptations

Tanker / Container / General Cargo

- Standardized navigation packages
- Wing control including conning and propulsion control
- Chart updates for ECDIS
- Online diagnostics / remote maintenance

Military

- Ruggedized configurations with long lifetime support
- Extended approvals and documentation
- Online diagnostics / crew maintenance enabling features
- Special NAVY features
- Flexible configurations and features on request



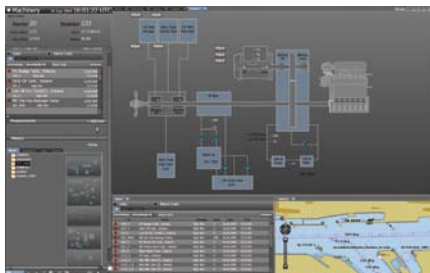
Chartradar display



MULTIPILOT display



Conning display



Automation display with ECDIS



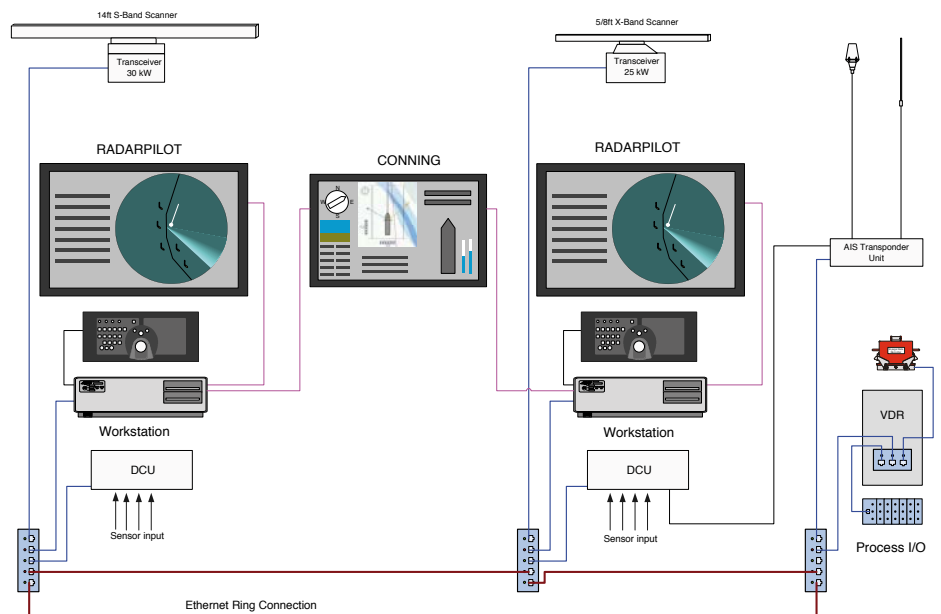
Dynamic Positioning display



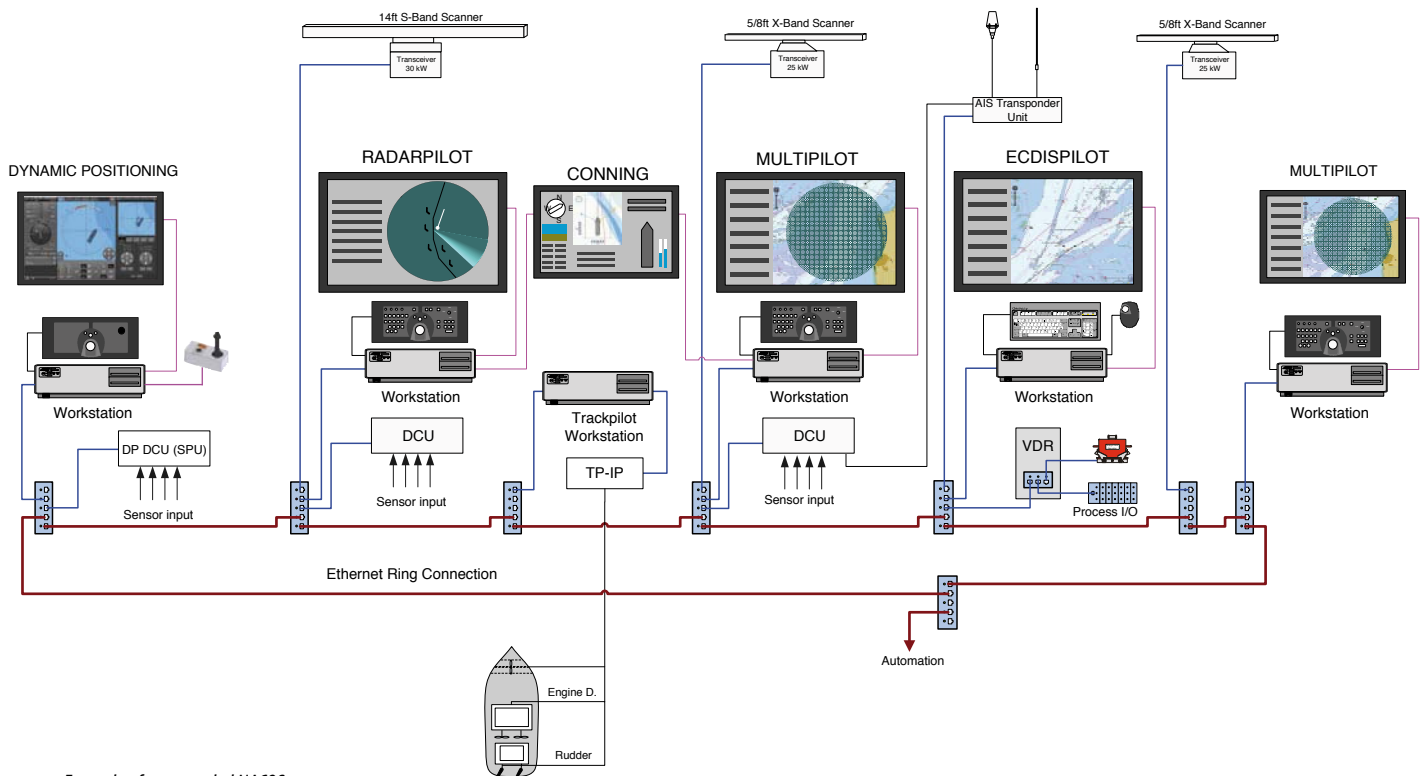
SENSORS/Navigation/Communication components

Wärtsilä SAM Electronics offers the complete package, including all periphery sensors/components such as:

- RADARPILOT
- ECDISPILOT
- MULTIPLOT
- TRACKPILOT
- Speedlogs
- Echosounder
- Position sensors
- Wind/Weather
- AIS
- VDR
- Dynamic Positioning System
- GMDSS
- Satellite communication
- Internal communication systems



Example of a basic NACOS



Example of an extended NACOS

The Most Reliable and Versatile Automation System

The Automation Solution

All Automation products are based on the same hardware and software components providing an unrivalled flexibility and consistency between systems as well as cost-effective package solutions.

User centred design and extensive online diagnosis systems make the MCS Platinum an easy and preferred choice for the crew. With strong supported products in terms of both hardware/spares and support for your vessel, the lifetime costs are reduced to a minimum.

The Best Alarm Management

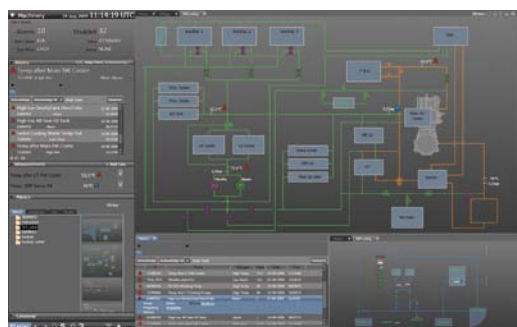
Alarm management across any system is achieved through the networked system architecture of the MCS Platinum.

Alarms are consolidated centrally by the alarm management system, except where required by rules to be independent. All alarms are consistently presented across alarm panels and PC screens throughout the vessel. Detailed access control is possible to all locations permitted to adjust channels, acknowledge alarms etc. – and

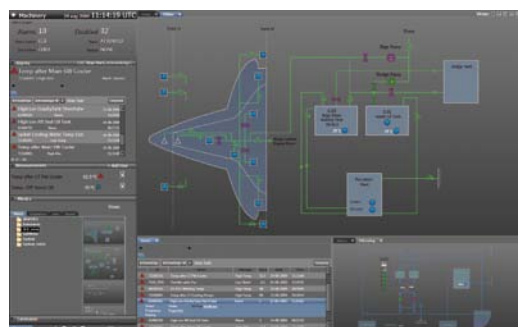
all fulfilling class society regulations. Advanced features are supported, like alarm state synchronisation and acknowledgement from 3rd party systems and more.

Standardized Open-Architecture

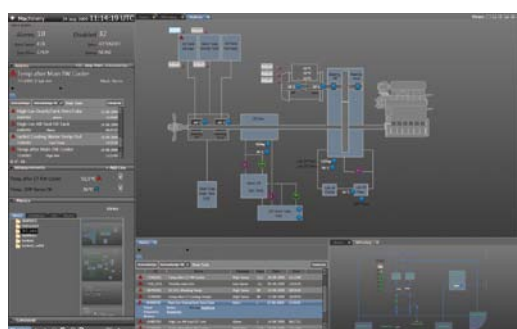
Through an extensive library of standardised function blocks, Wärtsilä SAM provides dedicated automation systems according to the vessel requirements. All function blocks have been thoroughly tested and verified through 20 years of continued development and employment.



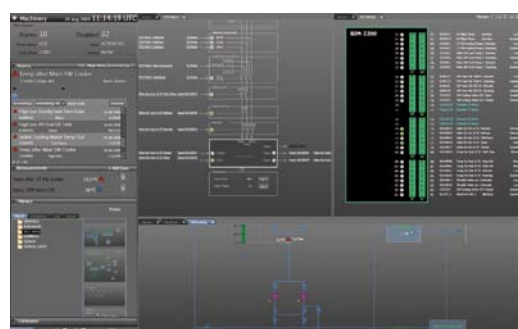
Automation display for FW. Cooling system



Automation display for E.R. Bilge system



Automation display for shaft line



Automation display for Standard Function Block type: Single acting valve



Integration to almost all components required in today's maritime market is available; from throttle vales, pumps and fans through to tank measuring, PID regulators and similar.

For custom-built functionality, Wärtsilä SAM Electronics provides complete flexibility, offering sequence control, cargo control and monitoring on a project specific basis.

Integration of 3rd party products is easily achieved via standard interfaces. Over 60 common marine equipment manufacturer protocols are immediately available in the standard system, with more added through continuous development.

Intelligent Power Management

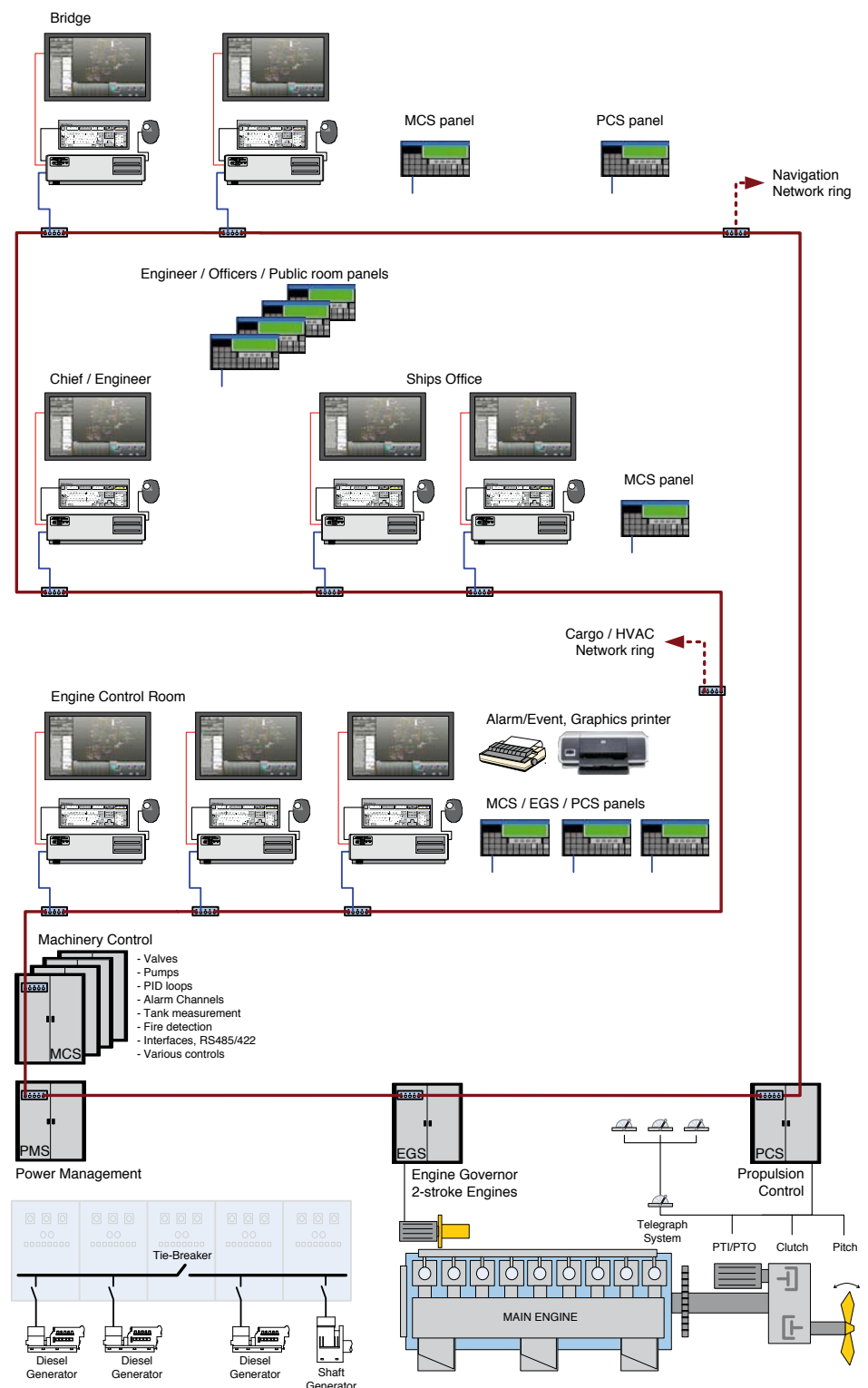
Power management functions and diesel generator safety requirements are controlled by either stand-alone systems or complete integration to the MCS Platinum.

Both standard systems and complex customized systems are offered, including redundant switchboard configurations, shore connection, load-sharing, heavy consumers and more.

Modern Propulsion Control

PCS Platinum offers complete support for the propulsion control requirement of modern ships. Ranging from 2-stroke heavy fuel engines to diesel-electrical propulsion systems with gear, pitch and clutch configurations.

If the PCS Platinum is combined with an MCS Platinum, PC screens are used for extensive monitoring of system status and process views, load limitations, setpoints, deviations, exhaust gas monitoring for slow-down and more.



NACOS platinum

The Home Page Concept



Empowering Crew - Extending Capabilities - Exceeding Expectations

platinum

Detailed technical information is available from:

Wärtsilä SAM Electronics GmbH
Automation, Navigation, Communication
Behringstrasse 120
22763 Hamburg · Germany

Phone: +49 (0)40 - 88 25 - 28 41
Fax: +49 (0)40 - 88 25 - 41 16
ANC@sam-electronics.de
www.sam-electronics.de