

# Wärtsilä Voyage for Mega Yachts

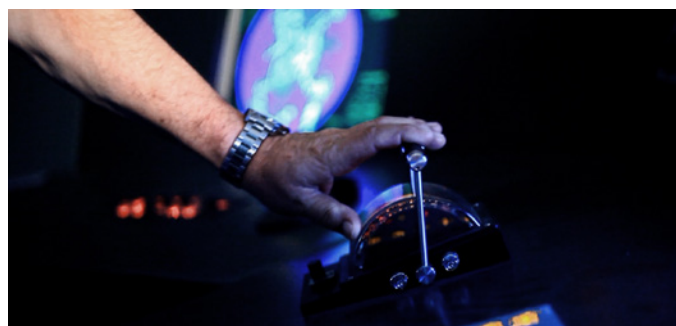




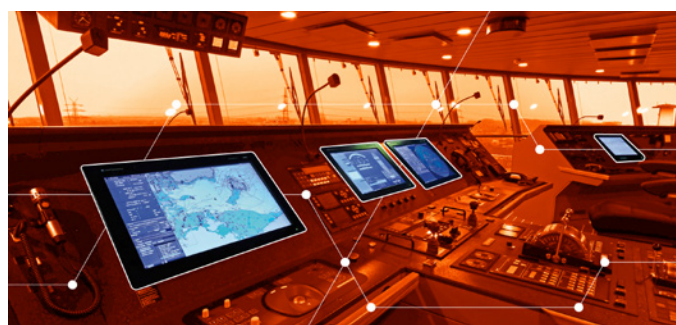
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01

# Technology to explore every spectacular adventure

Smart technology crafted for your yachting dreams

Intelligent navigation, automation, and integrated vessel control systems—

our unparalleled technology, exclusive features and bespoke solutions are designed to meet every unique yacht need, from smaller sailing crafts, super-intelligent ships to some of the world's largest luxury and explorer vessels.

Our portfolio combines bridge solutions, automated voyage planning, next-gen sensor technology and advanced dynamic positioning systems. These solutions are designed to achieve outstanding levels of safety, reliability, efficiency, and environmental compliance, giving mega and superyachts uncompromised freedom to explore the oceans and follow every adventure.





## One partner for all navigation and automation needs

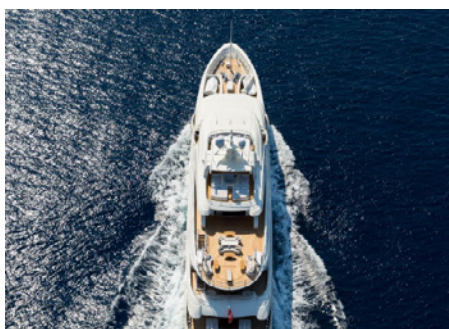
With an unmatched portfolio and product range, Wärtsilä Voyage supports the needs of both the yard and the owner. Our unique position as a single-source technology provider comes with a host of benefits:



- Single point of contact for simpler procurements.
- Co-engineered solutions with the shipyard.
- Reduced risk of incompatibilities and interface miss-matches.
- Faster decision-making with fewer coordination.
- On-site support during installation and commissioning.



## Bespoke solutions for uncompromised safety, efficiency and elegance



**Cost-effective solution.** The integrated suite covers all areas within ship automation, propulsion, navigation, power management, dynamic positioning and general alarm and control into one cost-effective system.

**Tailored to specific needs.** The system has been developed using a modular design approach and thus are fully customisable with lean console designs and full glass display options.

**Simple installation.** The system uses a common platform to perform the overwhelming majority of tasks for any particular installation—meaning, minimal hardware that requires minimal cabling. Plus, a common integrated software configuration tool means that the entire installation—across application areas—can be easily managed consistently.

**Human-centric design.** The solutions' human-machine interface (HMI) has been designed as per the ideals of the ISO standard for 'Human-Centred Design', to provide optimal interaction quality and intuitive, easy, and smooth workflows.

**Common tools and components.** The system uses many standard components, all of which are shared across the application areas, be it navigation or automation. Apart from ease of use, this significantly reduces the spare-part count and servicing and maintenance costs.

**Spare parts availability.** Lifecycle support is available via strategically located global service points along with a ship-to-shore data link, remote monitoring, and remote maintenance solutions.

**Easy future upgrades.** The modular design allows flexible upgrades to cater to specific customer requirements whenever wished. Also, having a standard configuration for all applications enables easy service interventions, at any location, throughout the lifecycle of the ship, with continued system integrity and reliability and without having to worry about quality issues.

**Full regulatory compliance.** All systems are as per relevant international rules and with the regulations of all major classification societies, including DNV GL, ABS and Lloyd's Register.

**Crew training.** The Wärtsilä Customer Training Centre in Hamburg is specifically equipped for high-end yachts with state-of-the-art simulation technology to provide the latest and highest quality training to your crew members.

02

# Integrated Bridge Systems

User-centric vessel control systems for voyage planning, optimisation, and collision avoidance.

Using BRIDGEPILOT technology, the Wärtsilä NACOS Platinum combines all main bridge functions—

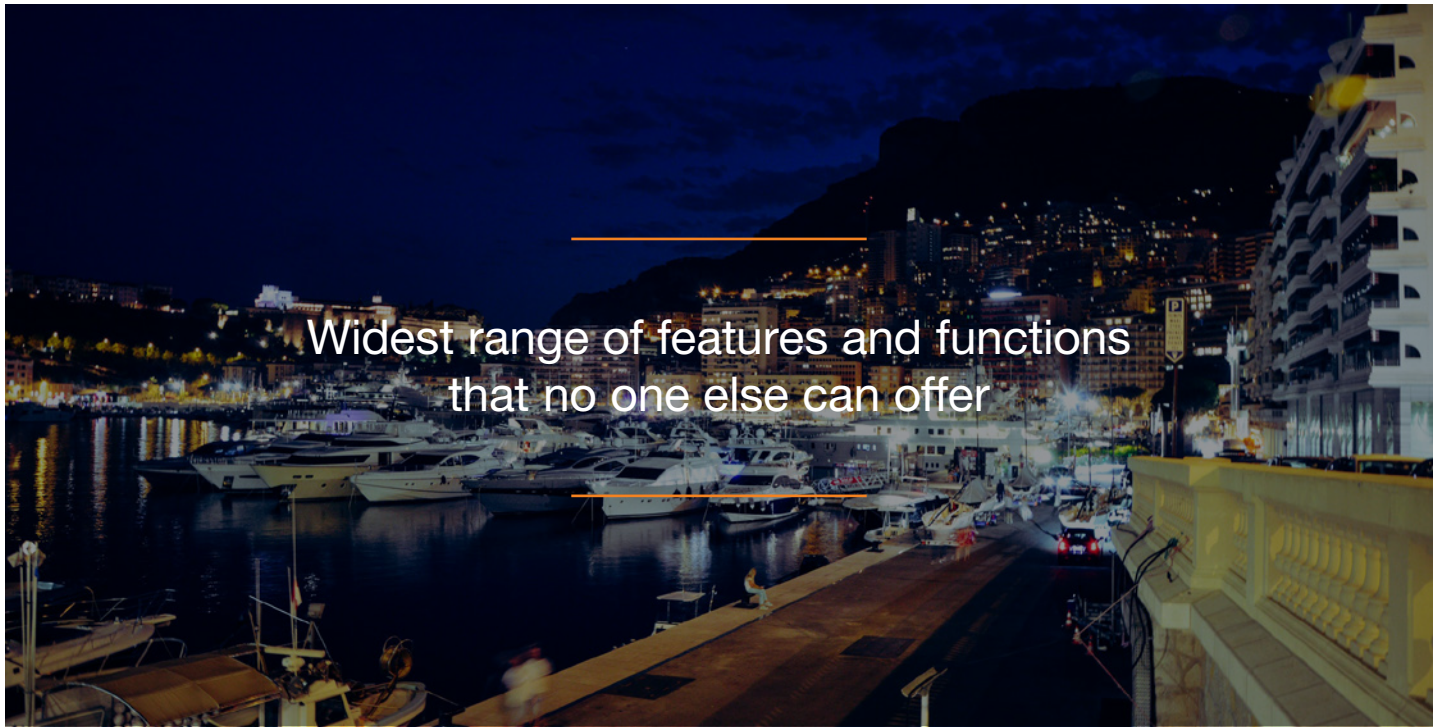
navigation, automation, dynamic positioning, as well as power and propulsion systems—into a single, integrated and ultracompact hardware, creating more space for comfort and leisure onboard.





## Workstations where form meets function

- Fully customisable and lean console designs with full glass display options.
- Radar, ECDIS and conning data integrated into a single and simple interface for maximum situational awareness.
- AI-based digital co-pilot that automatically steers the vessel even in the most demanding navigational situation for safe, optimised vessel movements.
- Latest security systems such as onboard intruder alerts, thermal imaging cameras, fast track radars, diver detection and more.
- Alarm, monitoring, Propulsion Control System, HVAC and cargo monitoring and control add robustness and reliability throughout the entire system.
- User-centric interfaces for intuitive and smooth workflows.
- Direct ship-to-shore data link, remote monitoring, and remote maintenance solutions.



## NACOS MULTIPILOT Platinum

ECDIS, Radars, Autopilot and Track Control, Conning and Docking display and VDR—all integrated into a single screen with a simple interface for ultimate 360° situational awareness and available from a single device, flexibly configured to meet the requirements of the individual wheelhouse arrangement. Standard features include:

- ECDISPILOT: Enables system-wide charts and routes with real-time updates and data exchange via the network. Also provides overlays with AIS and ARPA targets, along with a true scale own-vessel outline.
- RADARPILOT: Provides navigators with the right information at the right time to ensure safe voyage monitoring and collision avoidance with a built-in radar inter-switch and system-wide access to all radars of the system. Tracks up to 40 actively tracked targets (ARPA /AIS), and 200 sleeping AIS targets.
- CONNINGPILOT: Customised conning page with flexible display layout with multi-view mode, clear presentation of navigation and sensor data and optional display of rudder and propulsion data.
- TRACKPILOT: An AI-based reliable co-pilot that automatically steers the vessel in the most demanding situations, providing safe, optimised vessel navigation and reduced crew workload. It allows pre-setting heading, course, automatic execution of the speed pattern of a pre-planned route, and much more.
- FARSOUNDER: Forward-looking Sonar integration.
- Dynamic Environmental Data overlays such as ocean current, wind, air pressure and wave height for the timeline of predicted data.
- FLIR camera (daylight and infrared camera) integration.
- FUGRO Docking System integration.



## NACOS Platinum Radars

World's first IP Radar solutions that you can simply plug, play, and integrate directly into vessel control systems. Comes with the benefit of more than 60 years of experience in in-house radar development and manufacturing capabilities. Key features include:

- SOLAS compliant S-Band and X-Band Radar options.
- Radar Merging capabilities.
- integrated Ice and Wave Radars
- RADARPILOT : Provides navigators with the right information at the right time to ensure safe voyage monitoring and collision avoidance with a built-in radar inter-switch and system-wide access to all radars of the system. Tracks up to 40 actively tracked targets (ARPA /AIS), and 200 sleeping AIS targets.



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Since delivering the first Wärtsilä NACOS Platinum systems in 2010, more than 1000 systems are currently in global operation, with truly multi-functional workstations customised to match the exact needs of each vessel.

03

# Auto-routing and voyage planning

Automated safe route planning  
and fuel efficiency for every  
voyage you take.

Automatically improve the performance, safety, and sustainability factor of your every journey by digitally connecting your yacht to the cloud. Wärtsilä FOS (Fleet Operations Solution) is a simple software solution that connects your ECDIS and combines cloud-based analytics, together with intelligent automation to monitor, manage and optimise every movement on your entire route for a safer, more fuel-efficient yachting experience, while reducing environmental impact, no matter where you are sailing in the world.





Make the most of every voyage  
you take with Wärtsilä FOS.

- With automated weather-optimised routing, reduce voyage planning time to minutes.
- Execute the safest and most fuel-efficient route, utilising the latest navigational charts, built-in weather optimisation and advanced fuel efficiency algorithms.
- Receive alerts to respond to unusual ship behaviour or anomalies quickly.
- No more cueing for berths; share ETA information with connected ports for just in time arrivals..

04

# NEXT-GEN Sensor Technology

Safe and precise sailing,  
through advanced assistance  
systems.

When the situation demands precise manoeuvres, relying on GNSS (Global Navigation Satellite System) alone is not enough. Alternative ultra-reliable positioning technologies have become a necessity. Wärtsilä Smart Sensors are the digital outlook that you can always depend on. We use advanced laser, radar, and camera technology to provide both local position information (where the vessel is relative to its surroundings) as well as situational awareness (what is around the close vicinity of the vessel).







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Our Smart Sensor technologies can assist with demanding manoeuvres, even at high speed and in shallow waters, such as aut docking, provide precise position, situational awareness, and hazard detection, improving safety in increasingly crowded ports and harbours

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- Wärtsilä's patented laser sensors provide precise positioning information for aut docking and DP operations. Technologically, they are the most advanced and innovative solution available, making them the industry's number one choice.
- Wärtsilä Radar Sensors provide both position information and situational awareness. With 9GHz (RadarScan and RadaScan View) and 24GHz (RangeGuard and RS24) options, there is a radar sensor to meet the requirements of every critical manoeuvre, whether it is detecting small objects in proximity or measuring the distance to another ship or DP operations.
- Wärtsilä is the only company to provide a complete targetless sensor solution. With these, targets are no longer required, eliminating safety issues associated with poor target placement, low-quality targets, and false reflections. We offer both laser (Wärtsilä SceneScan) and radar (Wärtsilä RangeGuard) sensors—different modes of operation to ensure optimum redundancy.
- Wärtsilä Voyage's camera systems provide real-time video images to provide situational awareness around the vessel and are designed for the harshest marine environments. Whether installed on cruising the locks of the Panama Canal, crossing the Pacific Ocean, or sailing in the North Sea, the Birds Eye View, SmartQuay and Augmented Reality applications assist during the voyage, while approaching the port, and during docking.



05

# Advanced Dynamic Positioning

Perfect positioning and heading in all weather and conditions.

Practical, well-engineered and cost-effective DP system offering precision, reliability, and confidence, whether you are chasing the sun, enjoying shallow harbours or on an adventure traversing the harshest routes and waters.

Beginning with the very first DP systems in the 1960s, our experience and expertise go into designing, manufacturing, and supplying state-of-the-art vessel control systems with proven fourth, fifth and sixth-generation systems still in operation.

Designed with extensive operator input, our solutions offer an intuitive interface, reducing training and transition times. Its unparalleled application flexibility for any vessel type provides owners with the most cost-effective solution available.





Complete and steady grip at all times to make the toughest manoeuvres with perfect precision.

- A common hardware and software platform.
- User-centred design (UCD) to deliver the best HMI design in the market.
- Class-compliant simple joystick to fully integrated DP3 system references, including drilling vessels.
- Application-specific operating modes for all vessel types.
- Networked and highly scalable architecture.
- Advanced remote diagnostics with available interfaces to multiple vessel systems
- Integrates with all Wärtsilä Platinum products, including automation, navigation and conning, power management, and thruster control.

## Global Service and Remote Maintenance

Our special technicians are specifically trained to cater to superyachts and luxury vessels' unique needs and environment. Round-the-clock service and maintenance are available globally through Wärtsilä's worldwide network to provide technical support at short notice, on-site and even virtually via remote connection.

- Present in strategic locations worldwide
- Minimal downtime
- 24/7 remote technician support



## Lifecycle Support and management

We remain with you through all phases of the system's lifecycle, providing continuous hardware and software support to keep your yacht operating at maximum efficiency and ensure you have the latest systems onboard always.

- Auto software updates for safety
- Reliability for spare parts
- Improved operational life with timely solutions
- Easy upgrades and extension solutions





WÄRTSILÄ

[wartsila.com/voyage](https://www.wartsila.com/voyage)