



OUTSTANDING PERFORMANCE.
UNIQUE COMFORT.
INSPIRING EXPERIENCES.









MTU powers

OUT OF THE TOP 10 LARGEST YACHTS WORLDWIDE.



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- 1 Yacht Fortunate Sun (ex: Perfect Prescription) 2x MTU Series 4000 12V Engines kW 3,475/bhp 4,660
- We are a reliable and trend-setting partner which acts with foresight in a results-oriented manner.
- 3 We are passionate about fulfilling the needs of its customers with the utmost professionalism and precision.
- 4 Viking 92 Sky Bridge 2 x MTU Series 2000 16V M96L Engine kW 1,965/bhp 2,635



Welcome to the Cutting Edge

PIONEERING THE POWER THAT MATTERS.

Rolls-Royce provides world-class power solutions and complete life-cycle support under our product and solution brand MTU. Through digitalization and electrification, we strive to develop drive and power generation solutions that are even cleaner and smarter and thus provide answers to the challenges posed by the rapidly growing societal demands for energy and mobility. We deliver and service comprehensive, powerful and reliable systems, based on both gas and diesel engines, as well as electrified hybrid systems. These clean and technologically-advanced solutions serve our customers in the marine and infrastructure sectors worldwide.

A solution provider

MTU systems power the largest yachts, the strongest tugboats and the biggest land vehicles and provide energy for the world's most important mission-critical applications. Through advanced solutions such as microgrids, we integrate renewable energies and manage the power needs of our customers.

Our customized service offerings help you maximize uptime and performance and are supported by our digital solutions, which enable remote monitoring, predictive maintenance and a range of other benefits that keep your systems running at their best.

For over 110 years, we have provided innovative power solutions for our customers – meeting even the most demanding drive requirements. Our products and services span a wide range of applications and power needs, with both standard and customized options.

An expert in technology

As part of Rolls-Royce, we have long been known for cutting-edge innovation and technological leadership in product development. That same spirit of innovation inspires our sustainability efforts. Our focus is on developing and implementing system solutions that both maximize efficiency and reduce emissions -- which in turn work to reduce our impact on the environment.

A passionate and reliable partner

We at Rolls-Royce spend every day working together with our customers, to deliver engines, systems and complete life-cycle solutions that best fit your needs. We understand that each application is different and has its own specific demands. Our engineers embrace the challenge of finding the perfect solution for your unique power requirements. Every step of the way – from project planning, through design, delivery and commissioning; to the lifetime care of your equipment – we are dedicated to helping you get the most from your MTU investment.







Powering the World of Yachts

INNOVATIVE THINKING. MEMORABLE PERFORMANCE.

02

We have repeatedly set new standards in the world of yachts: with a passion for technology and an unwavering commitment to the art of performance and building engines.

Your world is our world

Broad horizons. As free as the wind. Enjoyment that knows no bounds. Regardless of whether you are cruising along the most beautiful coasts of the world, coasting relaxedly into the sunset, or want to experience a rush of speed, we know and understand what keeps you moving.

Captain in the luxury class

Yachts are a world of their own: a unique combination of style and quality, comfort and speed. That's why it isn't by chance that MTU engines are highly renowned in shipyards, as well as among owners and crews. Yachts with MTU engines have a history of setting standards. For example, the ship that set the record for the fastest Atlantic crossing was powered by MTU engines. But even beyond races and competitions, MTU yacht engines are "first among equals". Through their quality and reliability, they satisfy even the most exclusive demands, and they are considered optimal engines for a wide variety of yacht types.

Bundled vacht expertise

- MTU yacht engines are not only extremely powerful and compact, but also fuel-efficient, cost-effective and reliable.
- The engines are characterized by low vibration and emissions.
 They also run extremely quiet for your best boating experience.
- We are a system supplier. That means we integrate all components into a finely tuned system based on the wishes and needs of our clients – from the engine as the heart of the system to the transmission and generators to the electronic monitoring and control systems.
- With MTU Premium Yacht Service, we offer a comprehensive portfolio of services and service products to ensure that your propulsion system retains its value and runs optimally.
 Our global service network takes care wherever you are.

Partners of the highest caliber

If you have the same high demands as we do, if we both have a passion for yachting, then this could be the start of an excellent partnership. Whenever you want to cast off: both we and our engines are ready.

- 1 Performance Yacht Logos Marine "Meya Meya", 2x 16V 2000 M93
- 2 Displacement Yacht Feadship "Trident". 2x 16V 4000 M60R
- Mega Yacht Nobiskrug "Sirene", 2x 16V 4000 M60



System Solutions

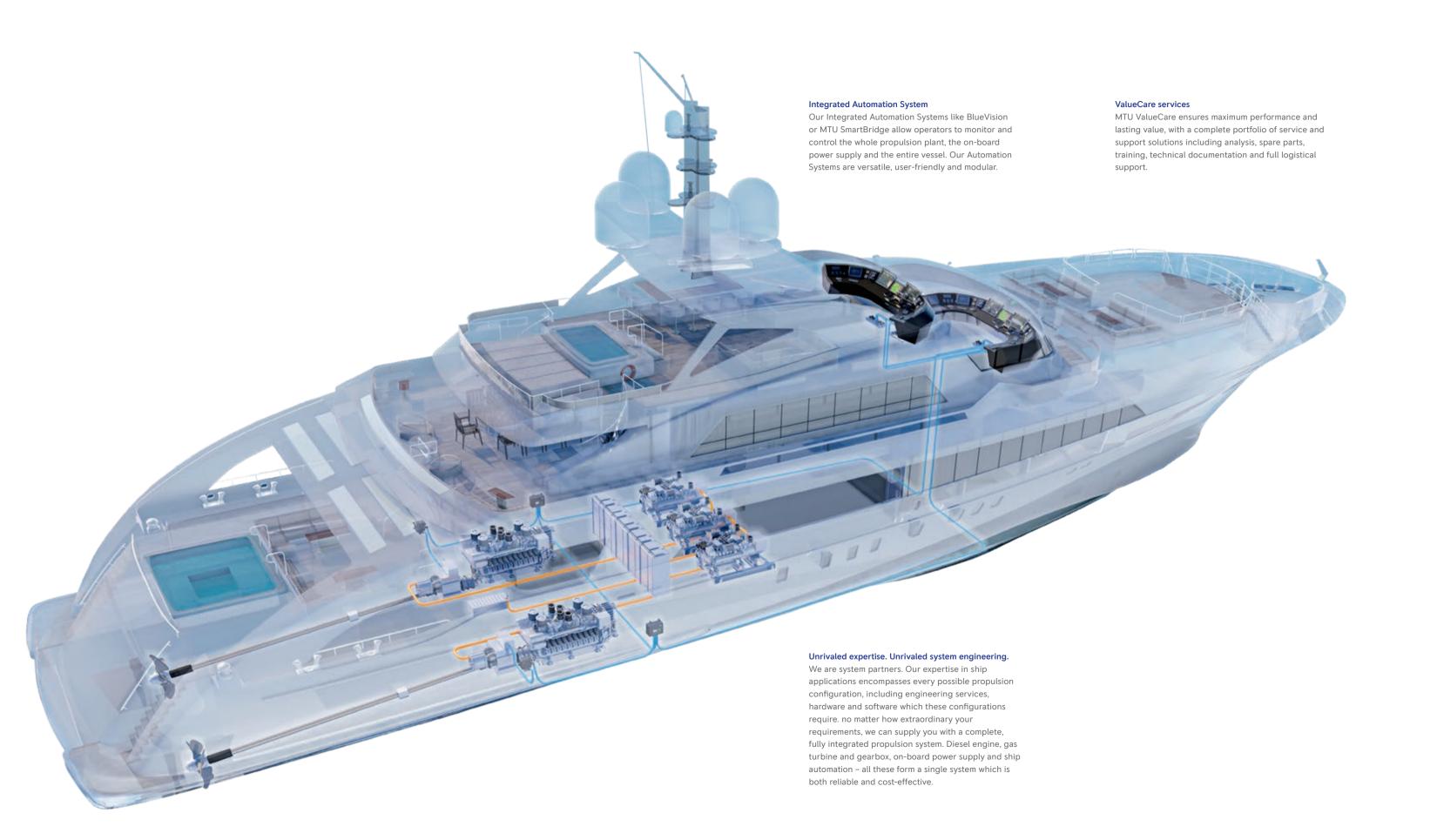
A LIFETIME OF INTELLIGENT POWER.

For minimum emissions, lower operating costs and maximum ease of use, hybrid systems - such as E-Drive systems - are the preferred solution. Conventional E-Drive systems can be upgraded using optional battery modules, enabling silent, emission-free operations in harbor areas.

We supply a complete propulsion solution. Our engineers provide extensive analysis, documentation and risk mitigation services as well as integrated mechanical, electrical and electronic interfaces.

Propulsion System Integration

We provide comprehensive engineering and technical support for the design and implementation of a vessel's propulsion system. Our application engineering team helps reduce design, installation and commissioning costs.



Modernization

The modernization of propulsion and automation systems is a cost-effective way of preserving and improving much needed vessel capacity. MTU services include the supply of equipment, planning and implementation of the entire refit.

Propulsion Systems

MTU engines and propulsion systems are characterized by their high power density, low weight, and excellent response behavior as well as simple operation, optimized maintenance and low life-cycle costs.

Applications Overview

PROPULSION SYSTEMS TAILORED TO YOUR NEEDS.

04





More than any other, sportfishing is the application that defines performance in marine diesel engines. None other is as demanding, requiring precise responsiveness, exceptional acceleration, power and unquestioned dependability.



In a class of yachts where unbridled speed reigns supreme, our engines display an overwhelming amount of power paired with an impressive level of endurance. That is what we call performance.





Mega Yachts

Our leading market position enables us to power 38 of the 100 largest yachts worldwide, including the top four. We not only power the largest yachts, but also seven of the fastest superyachts – impressive proof of the agility and performance capabilities of our diesel engines. In the class of yachts with the most exclusive demands, we are the first and maybe only choice.



Anyone who wants to stay at sea longer and go out farther needs a highly sea-worthy, robust, safe yacht, and one that at the same time offers every creature comfort imaginable. In short: a yacht that is powered by us.





Core Technologies

PROPULSION TECHNOLOGY AT A GLANCE.

MTU yacht engines are the "first among equals". Their quality and reliability meet the most demanding client's requirements:

- High reliability and availability
- A broad engine characteristic map and unlimited low load capability
- High power concentration at low weight
- Excellent maneuverability and acceleration
- Low acoustic, no visible smoke at all conditions
- lowest vibrations & highest comfort
- Low fuel consumption over the entire operating range
- Long maintenance intervals

We use the most diverse analysis and simulation tools to develop state-of-the-art propulsion solutions. That includes vibration analysis, component strength verification and dynamic response simulations of entire propulsion systems.

Electronics

The latest generation of MTU's electronic management system, Advanced Diesel Engine Control (ADEC), controls key systems such as fuel injection and turbocharging that affect both fuel consumption and emission levels as well as vessel performance.

Fuel injection

We optimize fuel combustion in the cylinder by means of its electronically controlled common rail fuel injection system in combination with other technologies such as exhaust gas recirculation.

Power range

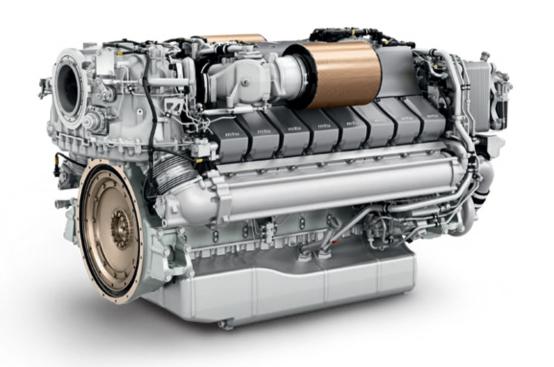
The wide range of MTU engines has answers to the most extreme demands that can be made of a propulsion system. Solutions include the highest performance, greatest reliability and availability as well as superior agility.

MTU engines are installed on special rubber mountings to reduce the transmission of structureborne noise to the ship's hull. New active mountings support the passive rubber mountings and make their noise reduction far more effective.

We offer exhaust gas aftertreatment systems such as selective catalytic reduction to meet IMO Tier 3 emission limits over lifetime.

Turbocharging

We develop and produces its own turbochargers for high-performance applications. Turbocharging helps achieve low fuel consumption and high performance across a broad range of operating



Series 2000 MTU Series 2000 combines best in class power-toweight ratio with effortless unfolding of power and bottom end torque.



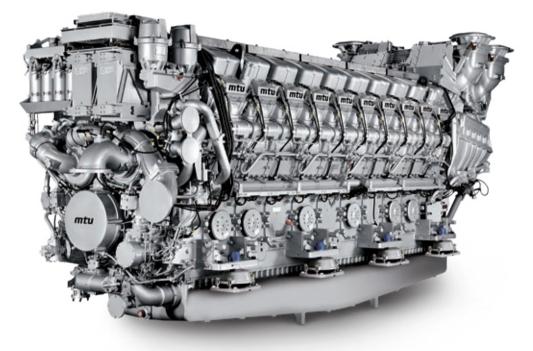
Series 4000

If trend-setting performance in terms of speed, agility and safety are needed, MTU Series 4000 offers unsurpassed power density in terms of volume-topower ratio and power-to-weight ratio combined with the effortless unfolding of power and bottom end torque due to MTU's unique sequential turbo charging



Series 1163

MTU Series 1163 combines industry leading safety features with the durability and reliability of the global market leader of high performance marine engines.



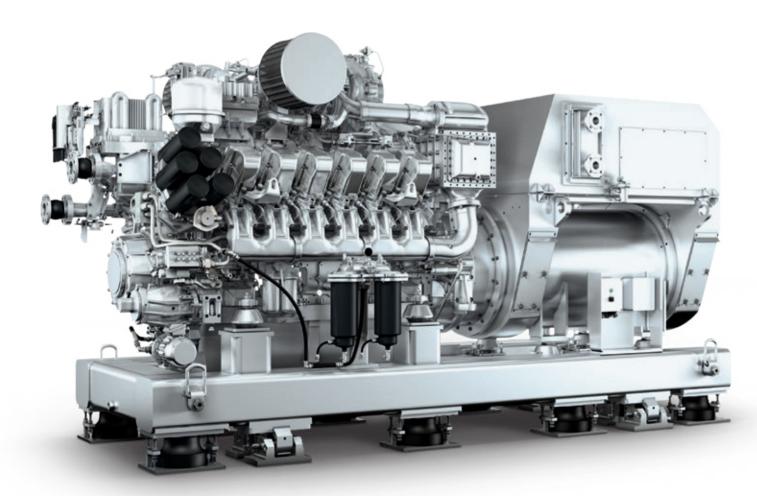
Series 8000

MTU Series 8000 is dedicated to the marine industry with leading safety features, durability and reliability in its class.

Gensets

FOR ON-BOARD SERVICE POWER AND PROPULSION.

Our gensets are based on Series 60, 2000 and 4000 engines. Whether you are looking for onboard power, dieselelectric or hybrid propulsion, our gensets meet the full spectrum of your requirements.



Our advanced and premium gensets are available as a constant speed version in 50 or 60 Hz or as a variable speed configuration with added electronics. The sound enclosure and base frame can be specifically tailored to meet your acoustic needs, and the integrated plug-and-play media plate ensures convenient mounting.

We are provide emergency gensets for critical situations at sea, when absolute reliability is essential. In addition to gensets for main propulsion and onboard power, We also supply lower-power gensets which can be installed as separate power units in the engine room. Our genset portfolio covers power outputs from 5 to 3,480 kWe.

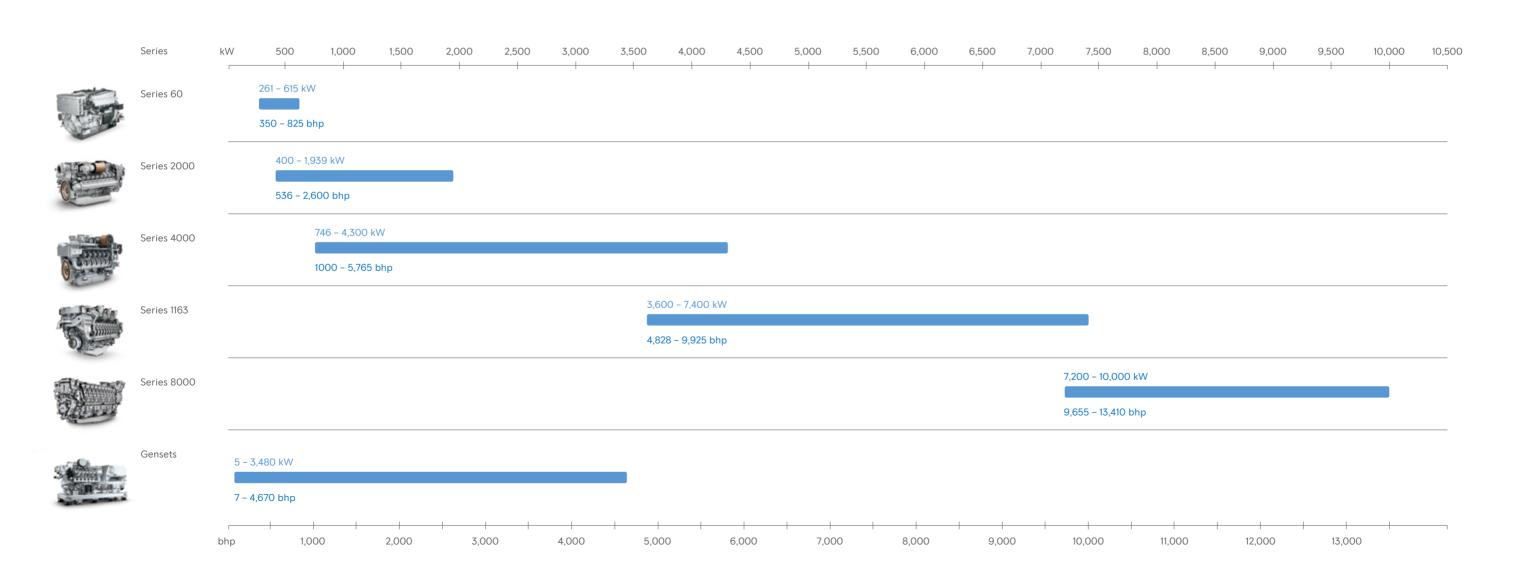
Your benefits are:

- Various available configurations, including full customization, tailored to meet your specific needs.
- Overall system responsibility by us based on its engineering and development expertise.
- Outstanding acoustic optimization for best-in-class comfort (noise and vibration levels can be contractually guaranteed, with all values proven on MTU test benches to minimize risk).
- Featuring special plug-and-play technology such as media plate and integrated piping for very easy installation.
- Backed up by decades of experience in customer-specific solutions.
- Proven by the highest number of references in yacht industry.
- All of our gensets are classifiable according to e.g. DNV-GL, LRS.
- Gensets with high quality finishing and painting dedicated for the yacht market.

Power Range

OUTSTANDING ENGINE AND GENSET OTO OUTPUT AT EVERY LEVEL.

We are your global full-line partner offering solutions for all emissions requirements as well as the full power range from 261 to 10,000 kW (350 to 13,410 bhp). Our engines set the benchmark for what diesel engines must deliver in yacht applications. Their uncompromising power-to-weight ratio the outstanding drive dynamics and operational availability provides peace of mind.





Emission Reduction Technologies

SETTING NEW BENCHMARKS FOR CLEAN PERFORMANCE.

Operating on the water means working in a sensitive environment. Assuming responsibility for protecting the water and air and keeping them clean is second nature to us. We have always played a leading role in developing environmentally friendly engines and, in particular, solutions for reducing emissions. Since we have all the relevant key technologies bundled within our company in addition to our core business of building engines, we have been and will always be leaders in this field. Our engines are an embodiment of the most state-of-the-art technology available.

Our SCR solution

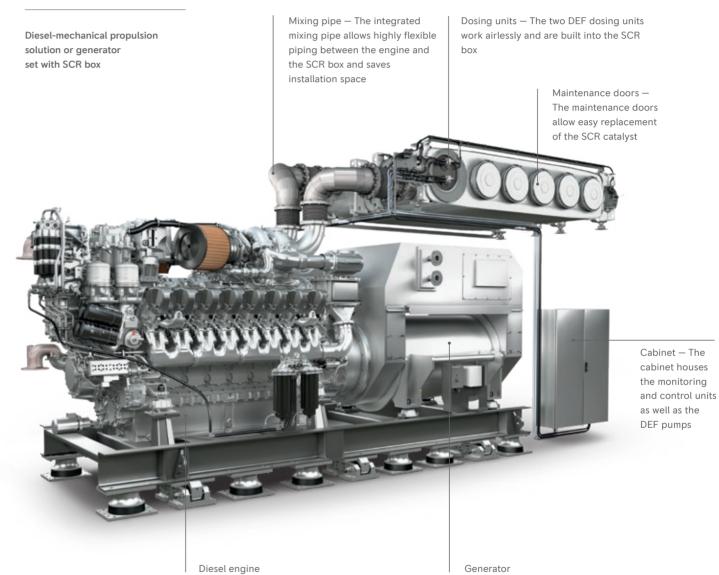
As installation space is always restricted inside the engine room, the inhouse developed airless SCR (Selective Catalytic Reduction) solution from us is compact and maintenance friendly. Besides easily accessible doors for replacement of the SCR catalysts, the system also features an integrated mixing pipe and dosing units.

The integrated mixing pipe and DEF (Diesel Exhaust Fluid) dosing allows the shipyard highly flexible pipework between the engine and the SCR box. Additional space to fit the exhaust gas aftertreatment is reduced to a bare minimum. Amonia slip is prevented under all operating conditions by a closed loop regulated control system. Besides the exhaust emissions related features, our SCR system also reduces noise.

SCR - the ideal solution for the marine world

When using EGR (Exhaust Gas Recirculation) technology, the quality of the fuel is essential. Fuel with more than 15 ppm sulfur will lead to the formation of sulfur acid in the EGR cooling process. Sulfur acid will cause substantial engine failures over time. As many vessels operate worldwide, especially in the offshore service and supply business, we evaluate SCR as the preferred solution to maintain reliability of our engines and the safety of your vessel and crew. SCR technology allows operation with lower fuel quality.

Developing all major key technologies inhouse like, SCR, EGR, turbocharging and common rail fuel injection, means we are able to shape the ideal solution to meet IMO III and EPA Tier 4 emissions regulations. We treat EGR as the ideal solution for applications like mining or oil&gas onshore, but within the marine world we are convinced that SCR technology grants much higher availability and component lifetime.





E-Drive Solutions

HYBRID INNOVATION FOR MAXIMUM COMFORT.

Drop anchor and turn off the engines. The smart MTU hybrid system takes care of all your onboard power needs – without noise, vibrations or emissions.

- Electric propulsion silent but highly efficient
- Exhaust emission-free anchoring no smell, no smoke, no noise
- Emission-free maneuvering, for example, in harbour area
- Environmentally friendly system solution

Intelligent drive for intuitive handling.

The combination of diesel and electric propulsion provides the highest flexibility with increased efficiency during maneuvers and transit operations. The intuitive handling and low fuel consumption make the hybrid system a clever investment.

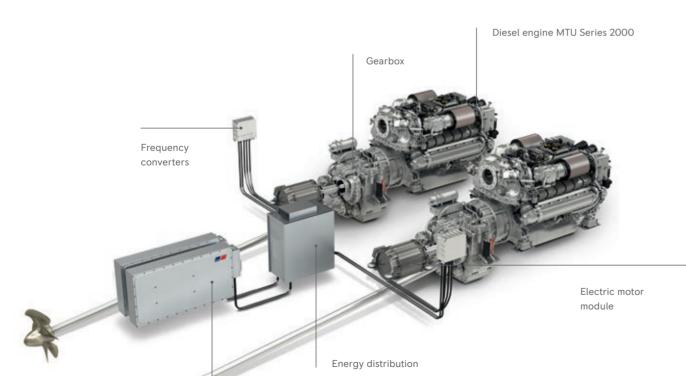
- Diesel engine power range: up to 4,300 kW (536-5,766 bhp)
- Additional electric power range: 41-840 kW
- Fully integrated, easy-to-operate smart management system
- Perfectly matched BlueVision I NewGeneration Hybrid standard automation system
- Low lifecycle costs due to long lifetime design

Hybrid Propulsion

THE FIRST SERIAL HYBRID FOR YACHTS.

The high-torque performance of the proven Series 2000 and Series 4000 diesel engines is enhanced by the small electric motors adding up to 840 kW (largest e-machine in MTU scope). Our unique feature ensures maximum performance and agility.

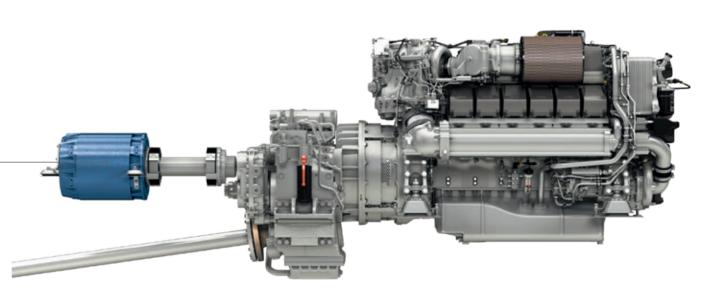
- Market bench electric motors for optimized system usage
- Agile propulsion reaction for improved maneuverability
- Exceptionally rugged design for optimum durability through entire lifecycle



System energy storage MTU EnergyPack

Standardized modules for individual needs.

Each hybrid system provides maximum flexibility and can be individually configured to meet customer requirements. The components for onboard power and propulsion are standardized, modular and scalable.





SmartBridge

PIONEERING NEXT GEN BRIDGE SYSTEMS.

Entering the sea for a new era of user experience in yachting business: with strong experience and deep knowledge in ship automation, we are now offering a fully integrated bridge solution by joining forces with Team Italia - the MTU SmartBridge. All necessary subsystems to monitor, control and navigate the entire vessel are seamlessly concluded into one platform. Premium MTU quality, a modern design as well as unique and innovative features – like equipment health monitoring – harmonize into a new generation of bridge solutions. An outstanding ensemble, that increases overall ship performance, safety and offers a new level of customer experience.

Strong partnership for strong solutions.

For over 20 years, TEAM Italia has been operating globally within the field of mega yachts – specializing in the integration and functional optimization of navigation, telecommunications, security and data transmission equipment to simplify their use.

The combination with the accustomed reliable MTU technology makes it possible to offer highly integrated bridge solutions for series yachts up to fully customized solutions for the mega yacht segment.

Renefits

- Fully integrated offering from bridge to engine room
- $\,-\,$ One face to the customer for complete vessel operating system
- Global MTU service support anywhere, anytime
- Scalable to integrate additional functions
- Seamless product & technology integration
- Unique and innovative featuresCustomized, innovative design

Intelligent!

- Right information at the right time
- Connectivity & remote diagnostic of equipment condition
- Equipment health monitoring and vessel optimization

Innovative

- Total Navigation Control, simplified management
- highly functional and perfect balanced technology
- Innovative design and functionality

Intuitive!

- Easy to use
- Multicontrol system full control through a single device
- Seamless user interface across all integrated subsystems

Integrated!

- Safe and user friendly
- Optional installing of several identical control stations
- Integration of all onboard systems
- In depth integration of propulsion system





AS COMPREHENSIVE AS NECESSARY. AS SIMPLE AS POSSIBLE.

Our standard automation systems are delivered ready for installation, perfectly matched to your propulsion system, giving you a complete package where everything is fine-tuned to your requirements: powerful engine performance, maximum efficiency, uncompromising reliability and green credentials.







BlueVision_Basic | NewGeneration

Our non-classifiable monitoring and propulsion remote control system for Series 2000 and 4000 engines incorporates a deliberately simple design offering full basic functionality. An elementary feature of BlueVision_Basic | NewGeneration is the compactness of its hardware. As the central system component, the Local Operating Panel (LOP) pulls together all basic functions available in this version, really simplifying installation, operation and diagnostics.

Key Features:

- Compact hardware for easy installation and commissioning
- Local Operating Panels (LOPs) with basic functionality such as start, stop, combined alarm/horn off, for installation in the engine room
- All control stand components installed throughout the ship are connected to the associated LOPs via CAN bus

BlueVision_Advanced | NewGeneration

Our classifiable monitoring and remote control system comprising a comprehensive standard automation system solution is available for Series 2000 and 4000 engines. An elementary feature of BlueVision_Advanced | NewGeneration is the system bus. Data transmission between the LOP and the commanding control stands is performed via a redundant Ethernet-based field bus. This ensures totally secure communication and maximum flexibility of the overall system, also with an eye to future upgrades.

- Type-approved components such as LOP, control lever, display
- Designed to standards approved by all major classification
- Local Operating Panels (LOP) with color displays and advanced functionalities such as clutch and speed control
- Data communication via redundant Ethernet ring bus

- 1 Operating Panel (PAN)
- 2 Control Lever (CL)
- 3 Multi Function Display (MFD)



Pininfarina Bridge Components

EMOTIONAL DESIGN MEETS ENGINEERING PROFICIENCY.

designed by

pininfarina

A breath of fresh air in the yachting business – We maintain a cooperation with the Italian designer Pininfarina. The new design line concentrates on four bridge components: A control lever for clutch- and engine speed control which is shaped like an engine rod. A tableau panel for engine control, a high resolution touch display for monitoring of the propulsion plant as well as analog instruments for engine speed, pressure and temperature.

All components can be integrated in our current automation product line BlueVision_Basic|NewGeneration. Additionally, MTU cooperates with experienced partners to guarantee premium quality.

Your benefits are:

- Premium supplier with designer co-branding Pininfarina
- Unique design in the market
- Clear design line for bridge components
- Especially designed with a focus on yacht applications



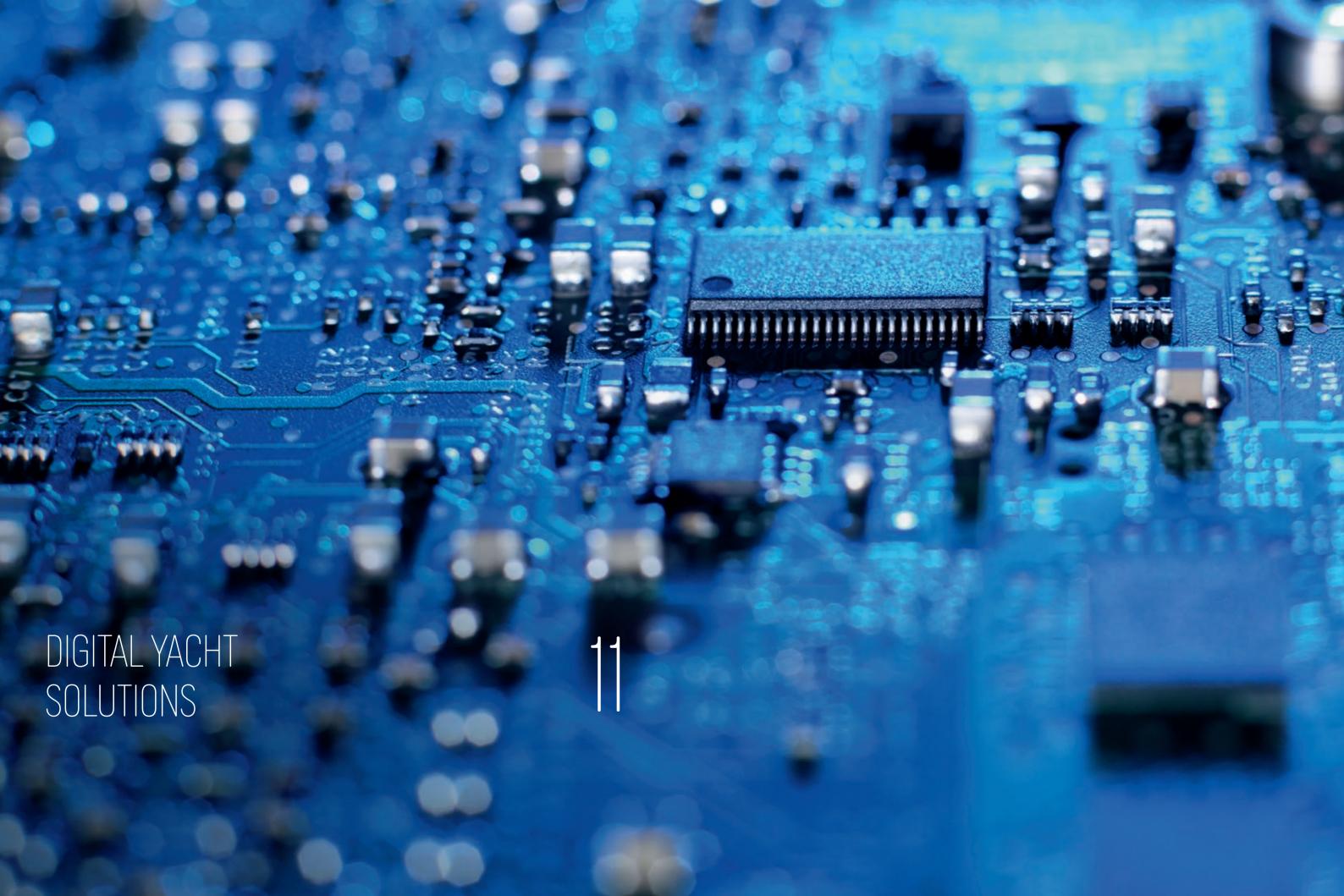












Digital Yacht Solutions

MAXIMIZE WITH US THE AVAILABILITY AND PERFORMANCE OF YOUR YACHT.

Outstanding performance. Unique comfort. Inspiring experiences.

Our Go! Platform is a web-based solution for the optimized management of your yacht. It makes comprehensive, real-time engine data available for analysis by owner, crew, yacht manager and engine service providers. The platform will also be able to process data from 3rd party ship systems. The key functions of this integrated solution are preventing incidents, solving alarms efficiently and scheduling maintenance pro-actively. Your benefits are fewer unexpected downtimes and lower operating costs.





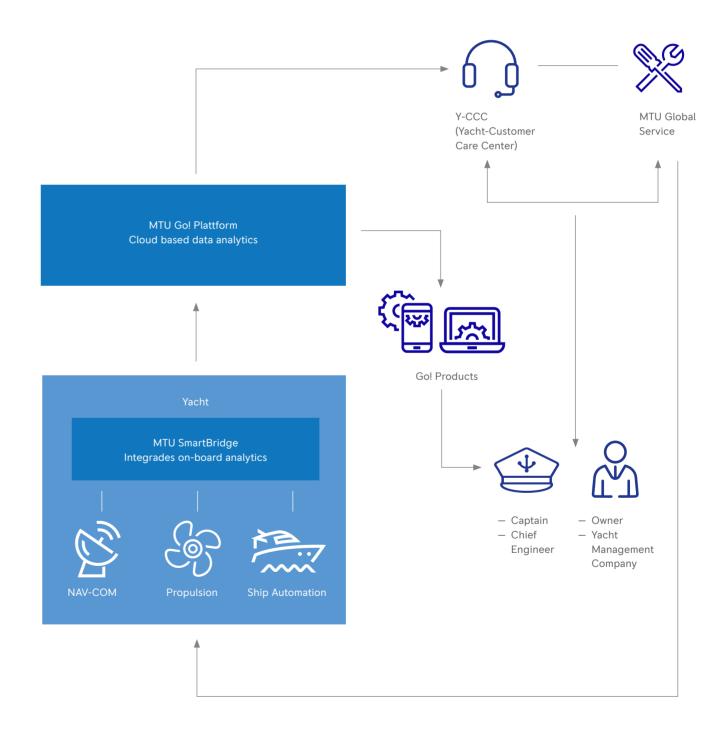
Your advantages at a glance:

- The user-friendly dashboard in Go! Manage allows a comprehensive overview of system relevant basis data, like oil pressure and temperature or operating hours. Visual graphs of parameters of the propulsion system, enriched with analytics, shall allow in future individualized condition-based maintenance.
- Real-time alarm system via push notifications for the smartphone version Go! Act offers information on reason codes and urgency of alarms as well as recommended actions for efficient solution.
- The synchronization of MTU Go! Act and Manage gives all involved parties the ability to access latest data simultanously and get the same level of information. This faciliates efficient communication in case of any incident. In case needed, our Service network with the new Customer Assistance Center in La Spezia supports you in addition 24/7 all year around.

■ Go! Manage



SERVICE SOLUTIONS WITH OUR SMARTBRIDGE SOLUTIONS



Premium upgrade for yacht engines

AESTHETIC REFINING FOR PERFECT EXPERIENCES

Combining sleek profiles with luxurious interiors, yachts reflect the distinguished taste of their owners. Our engines have always set the standard for engine performance. And with the Premium Upgrade,

you can set your engine apart even further than the rest -

Why upgrade?

Our Premium Upgrade is ideal for those who demand the very best in life. Several premium finishes are available to meet your exclusive demands and leave a lasting impression to whoever visits your engine room. It's a great way to show off your pride in your yacht and MTU engines, while building resale value.

with a dramatic transformation in appearance.

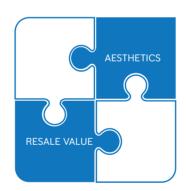
What's involved?

Upgrading existing rocker covers with new premium covers is a simple process performed by a MTU technician. A cylinder head cover, also called a rocker or valve cover, sits atop each cylinder head of the engine. Since it is not a wear part, an aesthetic upgrade is possible and will last a lifetime.

What's next?

Contact your local MTU distributor for details. You can count on prompt, expert support from more than 1,200 locations worldwide.

Benefits at a glance







Premium Yacht Service

LEAVE YOUR WORRIES ON SHORE. GLOBAL SUPPORT, 24/7.

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When you choose us, you join an elite class of yacht owners, designers, builders and marine engineers who demand only the most powerful, reliable and sophisticated engines. To keep those engines performing optimally for years to come, our engines come with a best-in-class warranty and several complementary MTU ValueCare products and services.

Your new engines already include*

- Prompt, expert support from more than 1,200 locations worldwide
 Immediate attention 24/7 from our Customer Assistance Center
- Free re-commissioning inspection, familiarization, orientation and performance sea trial
- A global inventory of genuine parts to maximize availability
 Comprehensive 24-48 month warranty
 *see your warranty for details

Training sessions for captains and crew

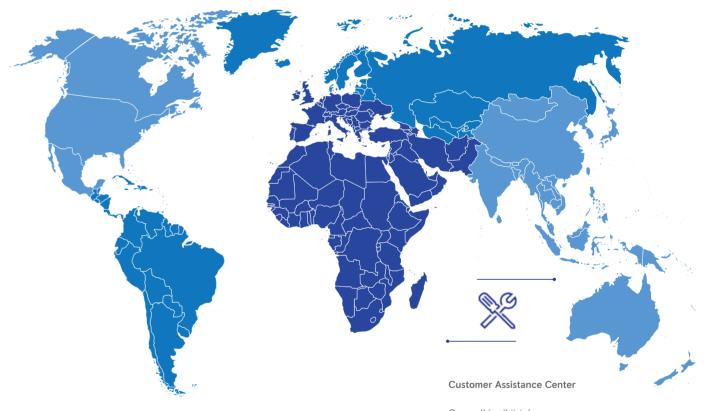
Our captain and crew training — a free-of-charge training module for captains and shipyard personnel — is a great way to get maximum efficiency from your equipment.

Premium power deserves premium service.

It's more than a yacht. It's a symbol of your sense of adventure and your freedom from an ordinary life. A personal dream fulfilled.

Our job is to make sure you can live that dream anytime, anywhere, confident that we're ready when and where you need us. That's why MTU ValueCare products and services are the perfect complement to your MTU yacht engines.





One call is all it takes. Agents are available 24/7 to respond to your inquiries and any service needs.

Customer Assistance Center +49 7541 90-77777

Asia/Pacific +65 6860 9669

North and Latin America +1 248 560 8888

premium.yacht.service@mtu-online.com

Premium Yacht Service

ONE SMART INVESTMENT DESERVES ANOTHER.

You're justifiably proud of your yacht. From her powerful performance and unmatched beauty to her handpicked décor, she reflects your individuality and passion. Your yacht is also a substantial investment. You should be able to cruise confidently, enjoying every moment along the way. That confidence starts with reliable engines and continues with MTU ValueCare premium products and services.

The only service portfolio designed with your propulsion system in mind to:

Protect your investment.

- Extended Propulsion Coverage (EPC) provides added protection beyond the standard warranty and is fully transferrable, enhancing resale value. Extendable up to 11 years, it's also available for used MTU equipment.
- MTU-certified technicians keep your equipment performing optimally and help you avoid the unexpected.
- Annual Check provides yearly inspections and maintenance recommendations from the experts who know your engines best.

Optimize ownership.

- Long-term Service Agreements maximize equipment reliability and optimize lifecycle costs.
- Remote Services helps you monitor activity from afar so you can identify faults early and make informed decisions quickly.
- Remanufactured products keep your costs down without compromising quality.
- Training empowers your captains and crew with invaluable hands-on experience.

Extend equipment life.

- Genuine parts and consumables keep everything running
- Reman and Rebuild solutions turn back the clock, giving your equipment a powerful new life.

Rely on MTU ValueCare for smooth sailing.

