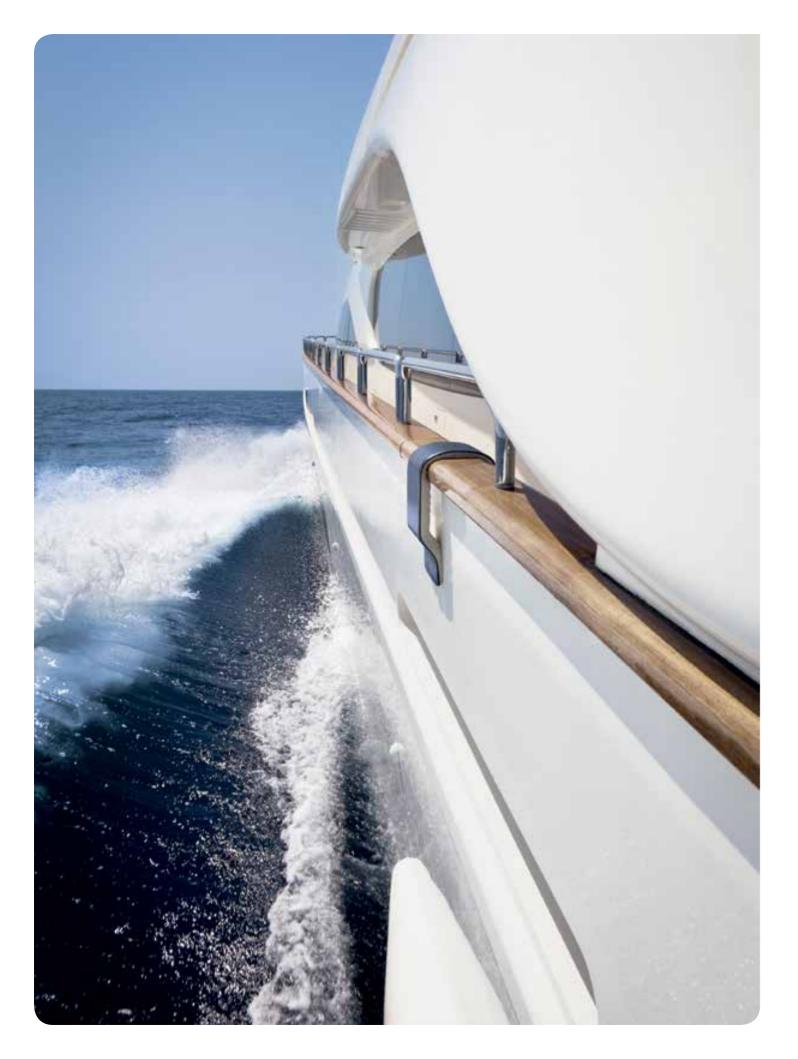


Yacht

We move you. With passion.



Power. Passion. Partnership.



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1 Technological leader

As a supplier of high-quality performance propulsion solutions, MTU stands for the highest level of technological expertise.

2 Powe

MTU meets even the most demanding propulsion requirements with powerful and reliable engines and propulsion systems.

3 Passion

MTU is passionate about fulfilling the needs of its customers with the utmost professionalism and precision.

4 Partnershi

MTU is a reliable and trend-setting partner which acts with foresight in a results-oriented manner.

A customer-oriented technological leader.

MTU supplies its customers with technologicallyadvanced products that are proven at sea. MTU's range of products and services for marine applications is extensive and includes both standard and customized solutions.

MTU is part of the Rolls-Royce Group and a world-leading provider of high- and medium-speed diesel and gas engines, complete drive systems and distributed energy systems for the most demanding requirements.

The product range of MTU is one of the widest and most modern in the sector. We offer comprehensive, powerful and reliable engine solutions for yachts, commercial ships and naval vessels, construction and industrial vehicles, agricultural machinery, mining, rail and military vehicles as well as for the oil and gas industry. We also provide a full line of service products to help you maximize uptime and performance.

For over 100 years, MTU has been known for cutting-edge innovation and technological leadership. That same spirit of innovation inspires our sustainability efforts. Today and in the future, our focus is on developing and implementing system solutions to maximize efficiency and meet emissions standards.

An expert in technology

MTU has always set standards in technological expertise for customized products and systems solutions. To deliver you maximum power density, we concentrate our innovation on the continuous advancement of our core competencies: turbo charging, exhaust aftertreatment and electronics.

A passionate engine specialist

We spend every day working together with you, our customers, to deliver engines and systems that best fit your needs. Whether a standard system or a customized solution – we are passionate about the art of engine creation.

A reliable partner

We understand the specific demands for diverse applications. In collaboration with you, we look for the solutions which are best suited to your individual requirements. Every step of the way – from the start of project planning, during the design of your integrated system solution, at the point of delivery and commissioning and continuing through the care of your product – we are there with you for the entire lifecycle.







MTU in the World of Yachts

Passion is what drives us. This is just as true today as it was 100 years ago.

MTU has 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 yacht 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.







Propulsion Systems for Sportfishing Yachts

Typically MTU supplies Series 2000 diesel mechanic propulsion systems for sportfishing yachts. A common design are two MTU Series 12V 2000 with gearbox. A perfect match to this propulsion system is our automation solution BlueVision_Basic I NewGeneration which provides complete propulsion control from MTU.

- 1 Example for Sportfishing Yacht Viking "92" with 2x 16V 2000 M96L
- 2 Typically equipped Series 12V 2000 main propulsion engines and gearbox
- 3 Example for automation solution BlueVision_Basic I NewGeneration

Propulsion Systems for Sportfishing Yachts

Performance that goes far beyond speed.

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.

A class of its own

When an angler hooks the catch of his life, the only thing on his mind is winning that battle and claiming his prize. He wants power, speed and maneuverability, and he wants it now. He wants MTU engines.

MTU engines have always set the standard when it comes to engine design and performance, and our latest sportfishing engines are no exception. Designed from the ground up specifically for marine applications, these engines feature an intelligent, efficient design that allows us to achieve an unprecedented power-to-weight ratio, placing them in a power class of their own and delivering outstanding acceleration characteristics.

Value beyond horsepower

But power is not the only advantage provided by MTU engines for sportfishing. Patented improvements to the common rail fuel system, sequential turbocharging and our ADEC electronic control system have allowed us to achieve this higher output with lower fuel consumption and fewer emissions.

The greatest reason for the success of MTU in sportfishing is our single-minded dedication to providing the right solution for each customer. It can be seen in our innovative MTU **Value**Care service offerings, like Customized Care contracts and Extended Propulsion Coverage. And it can be seen in the responsiveness and attention to detail of our sales and service network, which we feel is the best in the world

Whether fishing or cruising, wherever you are and whatever your engine needs, there is an MTU distributor nearby to offer personalized, professional service around the clock and a solution that's just right for you.

Propulsion Systems for Series- and Performance Yachts

Maximum yachting pleasure – consistently.

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.



Coasting along on the water, standing at the helm and taking great pleasure in the ride: performance yachts offer you this experience first hand. With our engines and propulsion systems, they will be as agile and dynamic as the owners want them to be – and still remain easy to control at all times.

Our yacht engines for performance yachts are some of the best in the world. They are renowned due to a full package of built-in advantages – above all an excellent power-to-weight ratio. MTU engines are light, compact and generate impressive amounts of power.

Their wide engine map makes optimal performance at all engine speed ranges possible. An important note for all those that love speed: your MTU engine can run for an unlimited time at full load.

Present in every harbor

MTU has not only earned its good reputation as a result of its high-quality products, but also because of its excellent service. Our engineering experts ensure that each yacht has the right propulsion system, and our service network keeps everything running smoothly, all over the world. The services and products available to you as part of the MTU Premium Yacht Service portfolio ensure that your propulsion system retains its value and runs optimally for the long term.



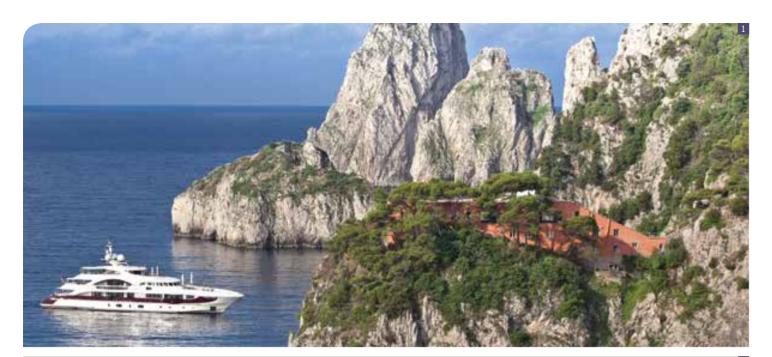


Propulsion Systems for Series- and Performance Yachts

Typically MTU supplies Series 2000 diesel mechanic propulsion systems for Series- and Performance Yachts. A common design are two MTU Series 16V 2000 with gearbox. Our exclusive pininfarina bridge component design is the automation system which matches the high design standards of your yacht. The automation system can be enhanced with our joystick solution for intuitive maneurering.

- 1 Example for Series- and Performance Yacht Rilgin "M" with 2x 16V 2000 M93
- 2 Typically equipped
 Series 16V 2000 main propulsion engines and gearbox
- 3 Example for automation solution Pininfarina bridge components









Propulsion Systems for Displacement Yachts
Our propulsion systems for displacement yachts are typically equipped with Series 4000 main propulsion engines and either Series 1600 gensets or Series 2000 gensets for onboard power. With the classifiable automation solution BlueVision_Advanced I NewGeneration you can round off your propulsion

- 1 Example for Displacement Yachts Heesen "Quinta Essentia" with 2x 20V 4000 M93
- either 6R 1600 or 12V 2000 genset for onboard power
- 3 Example for automation solution BlueVision_Advanced I New Generation

Propulsion Systems for Displacement Yachts

Experience freedom that knows no bounds.

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 MTU.

No ifs, ands or buts

Cruising with a great deal of comfort, enjoyment with responsibility, luxury with maximum reliability: displacement yachts stand for all of these things. When powered by MTU engines, these yachts meet the highest demands on performance, economy, handling, and safety.

Enjoyment with responsibility

For decades, we have been one of the world's leading suppliers of yacht engines. Excellent references in equipping a wide variety of yacht types - including highly exclusive displacement yachts - attest to our experience and unique expertise.

Their agility and outstanding torque is what really makes our engines impressive for displacement yachts. Like all MTU engines, they are also extremely reliable, economical, and a paragon of environmental friendliness. Our propulsion systems have a high level of fuel efficiency and run extremely quietly. These characteristics lay the foundation for private cruises which are thoroughly enjoyable.

And our service is just as reliable as our products. We are there for you 24 hours a day, seven days a week, all over the world, and our MTU Premium Yacht Service gives you added security. So that you can thoroughly enjoy your freedom.

Propulsion Systems for Mega Yachts

Luxury outside demands luxury inside.

"If there is a global specialist in high-power marine engines, conventional diesel, electric or gas turbines it is the German brand MTU." (Magazine Qatar Yachts, 2014)

MTU underlines its leading market position by powering 38 out of the 100 largest yachts worldwide and the top four are MTU territory. Not only the most powerful and largest yachts are MTU powered but also the seven fastest superyachts – proving the agility and performance of our diesel engines. In the class of yachts with the most exclusive demands the first choice is the only choice. MTU.



For you, compromises are out of the question – not with regard to size and design, nor for technology, materials or interiors. Your floating home is built according to your individual wishes, and it reflects your refined tastes. The ultimate luxury of your mega yacht is made perfect by a customized propulsion system from MTU. Exclusive concepts call for exclusive service: that's why we are there for you right from the beginning, and stay with you over the entire life of your MTU engines. MTU provides you with a propulsion solution individually designed for your yacht – and always embodies state-of-the-art technology.

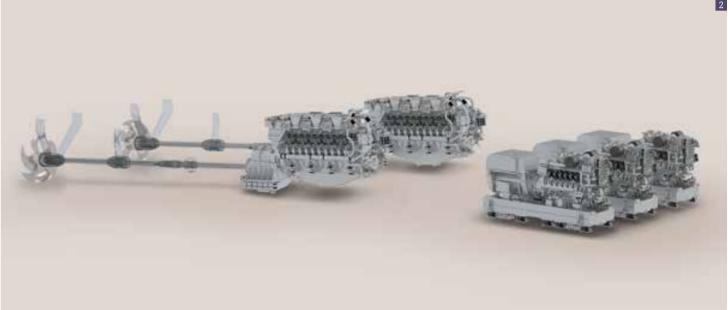
Integrated expertise

Our engines have proven their extraordinary abilities time and again – in millions of hours of operation in a wide variety of applications with a wide range of demands. The experience and expertise gained, from naval applications, for example, are incorporated into the design of our mega yacht propulsion systems. This results in engines with impressive performance, the highest degree of comfort, optimal fuel efficiency, low emission values and innovative technologies.

First class service

Wherever you are cruising, for whatever reason you need us – our global service network, with globally available and highly mobile technical specialists are there for you around the clock. Individualized service concepts, which we custom-design to fit your needs within the scope of the MTU Premium Yacht Service program, provide you with maximum security.

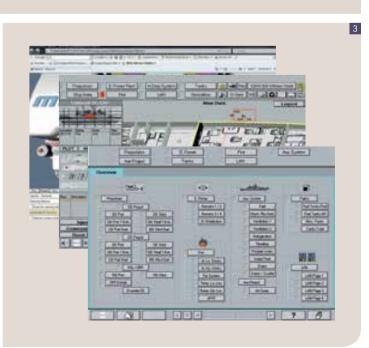




Propulsion Systems for Mega Yachts

Our propulsion systems for mega yachts are always customized and shaped exactly to the needs of each customer. In this segment our most powerful engines up to 10,000 kW come into play. Onboard power is generated by high end Series 4000 gensets. With the top of the range automation system Callosum you have everything under control.

- 1 Example for Mega Yachts
 Nobiskrug "Sirene" with 2x 16V 4000 M60
- 2 Typically equipped Series 20V 1163 main propulsion engines and 12V 4000 genset for onboard power
- 3 Example for automation solution











Systems Solutions / Advanced Technologies

A competitive edge. From MTU.

As a leader in high-quality propulsion systems innovation, we are constantly researching and working on new trendsetting technologies. We bundled all the relevant core competencies within our company right from the beginning and over the years we have continually made improvements to them. By systematically making improvements, we can provide you with a decisive competitive edge - with regard to performance, luxury and exclusivity.

Reducing noises. Raising comfort.

Squaring the circle

Everyone that spends time on the water wants to fully enjoy the power, speed and dynamics of their yacht – but at the same time, also wants relaxation, recreation and repose. That's why sound and vibrations that are inevitably caused by engines, pumps, and propellers in operation should be kept to a bare minimum.

Based e.g. on a tank towing test carried out by the shipyards and the resulting power and shaft speed, MTU configures the propulsion system for a perfect match. This also means that MTU reduces noise and vibrations to a minimum by choosing the right engine and resilient gearbox mountings, coupling systems, hoselines & compensators for all engine interfaces.

MTU has extensive experience in noise and acoustics from different applications and a library with measurement acoustic values. Based on that and combined with complex analytic capabilities, MTU is able to predict and gurantee noise values, verified on a special test bed during the FAT (factory acceptance test).

Standardized yacht propulsion concepts

Significant noise reduction can be achieved with our standardized advanced mounting systems. Generally speaking, all yacht engines are elastically mounted. Typical configurations are:

- Flange mounted gearbox, resilient mounts
- Freestanding gearbox; resilient mounts
- Standard acoustic optimized coupling systems

Customized yacht propulsion concepts

For higher acoustic demands, MTU offers complex systems that are customized for the respective yacht in order to fit the needs of the owner. Our complex systems make use of state-of-the-art technologies, utilize special concepts, and incorporate acoustic improvements:

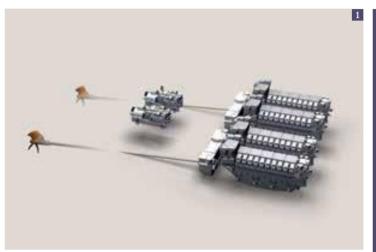
- The Active Noise Control (ANC) system constains actuators and sensors to identify disturbing frequencies and allows to reduce them to an absolute minimum to reach the maximum comfort and quietness on board. The system is flexible and powerful enough to optimize and calibrate it to the special ship characteristics to reach the optimum result. It is also able to improve and finetune the acoustic behaviour of existing installations on board.
- -With the double elastic mounts, the soundproof engine sits on a frame that is also elastic-mounted. This leads to significantly less structure-borne noise being passed into the ship's structure as it is the case with single elastic mounts.
- Integrating the entire engine into a sound-reducing capsule also reduces airborne noises to a minimum which results in maximum comfort and less insulation effort of the machine room.



Combined Mechanical Propulsion Systems

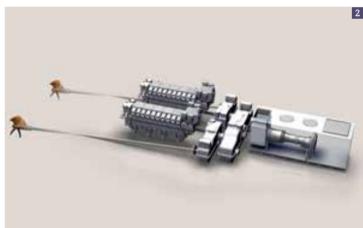
Power - customized.

Nowadays, combined systems with diesel engines and/or gas turbines are the preferred propulsion systems for fast mega yachts. We configure the propulsion systems that best fits your needs, be it CODOG, CODAG or CODAD. All the components – engines, gearboxes including auxiliary power units – come from one source and are combined into an integrated complete system.



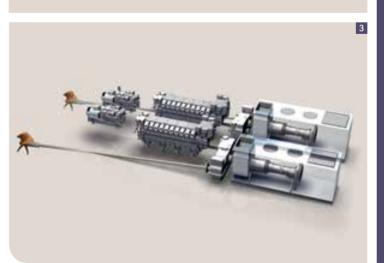


The basic idea: four diesel engines power two controllable pitch propellers (CPP) through two main gearboxes. In cruising operation, one diesel engine powers one shaft; for maximum speed the other two diesel engines are also switched on.



2 CODAG (Combined Diesel And Gas Turbine) with controllable pitch propellers

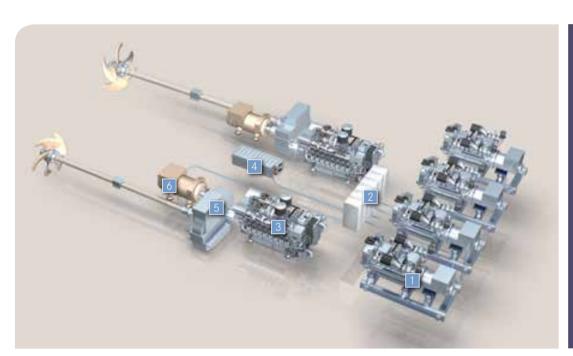
The basic idea: two diesel engines and a gas turbine power both CPP through two main gearboxes and a crossconnect gearbox. If only the diesel engine or the gas turbine is running, both CPP are equally powered through the cross-connect gearbox. If both diesel engines are running, this gearbox can be declutched. Through the use of a two-stage gearbox, one diesel engine can bring the ship to cruising speed.



3 CODOG (Combined Diesel Or Gas Turbine) with controllable pitch propellers

The basic idea: two diesel engines and two gas turbines alternately power two controllable pitch propellers through two main gearboxes. The gas turbines are connected via self-synchronizing clutches. The diesel engines power the ship in cruising mode; both gas turbines bring the ship to top speed.

Higher performance. Fewer emissions.



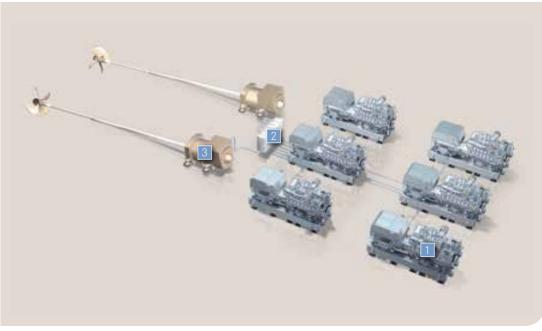
Possible design for MTU E-Drive hybrid system

- 1 Gensets
- Main diesel engines
- 4 Energy storage

6 Electric motor

Possible design for diesel-electric propulsion system with MTU gensets

- 3 Electric motor



Innovative E-Drive systems

For minimal emissions, reduced operating costs and maximum comfort, combined systems – such as E-Drive systems – are the preferred solution. Conventional E-Drive systems can be enhanced with optional battery modules, enabling emission-free silent running in harbor areas.

Due to the added complexity of E-Drive systems in comparison to conventional propulsion systems, it is essential to:

- Choose the right basic components (engine, electric motors, power electronics, controls and optional battery system)
- Seamlessly integrate them into a working system

MTU MELT Engineering (mechanical, electrical, logical and thermal system integration) helps to manage the complexity of E-Drive systems. We design and supply customer-specific E-Drive systems based on the proven Series 2000 and Series 4000 marine diesel engines. With MTU MELT engineering your customized propulsion system is just one step away.

Together with our strategic partners – and backed up by decades of success developing customer-specific solutions - MTU has the know-how and engineering expertise to design and integrate customer-specific E-Drive propulsion systems that include:

- Diesel engines
- Transmission, gearbox and gensets
- Electric motors
- Switchboards, including power electronics
- Battery modules
- Automation systems

Benefits of MTU MELT engineering:

- Perfectly integrated components provide your cutting-edge propulsion system with the same reliability as conventional propulsion solutions
- Shorter project times
- Customer specific propulsion design matched to individual requirements of each application

While E-Drive propulsion systems require a higher initial investment than standard diesel-mechanic propulsion systems, they offer a number of advantages that provide an overwhelming return on investment.

Benefits of E-Drive systems:

- Enhanced drive dynamics (faster acceleration, with optimum torque available at the propulsor by combining the load characteristics of diesel engines and electric motors)
- Low environmental impact thanks to green technology
- Improved comfort (e.g. hotel load at night supplied by batteries no need to run gensets)

Gensets for diesel-electric propulsion systems

In addition to diesel engines for diesel-mechanic propulsion and E-Drive systems, MTU also offers complete genset solutions for connection to your power supply to provide both: marine propulsion and electrical power for onboard consumers. Our combination of propulsion and onboard power guarantees cost efficient crusing and an enjoyable life

> Find more information on our genset portfolio on page 38.

Exhaust aftertreatment systems.

MTU - a leader in assuming responsibility

Yachting is a pleasure in a sensitive environment - and it is especially engaging as a result of directly experiencing the elements. Assuming responsibility for protecting the water and air and keeping them clean is second nature to us. MTU has 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 space. Whether with regard to turbocharging, injection, or combustion, MTU engines are an embodiment of the most state-of-the-art technology available. High-speed diesel engines are in comparison to engines with lower rpm ranges, generally more environmentally friendly and emit less nitrogen oxides.

Optimizing the combined package

In addition to low emission diesel engines, MTU offers customized exhaust aftertreatment systems such as:

- Selective catalytic reduction (SCR) units
- Diesel particle filters (DPF) with active or passive regeneration
- Combined DPF+SCR

- Selective catalytic reduction (SCR) units:

- Reduction of NOx emissions of diesel engines
- Enables customers to achieve IMO Tier 3 emission levels
- Diesel particulate filters (DPF) with active regeneration:
- Active filter regeneration via burner
- Enabled for low load operation
- Optimum in system reliabilty
- PM-reduction higher than 95 %
- Typical usage: yachts with significant low load operation
- Diesel particulate filters (DPF) with passive regeneration:
- Passive filter regeneration via DOC
- PM-reduction higher than 95 %
- Typical usage: yachts with mainly high load operation

For customers having the need to reduce both NOx and soot/particular matter (PM), MTU offers combined SCR/DPF systems.



- 2 Dosing unit3 MTU Cubical-Box4 Gearbox



MTU Ship Automation Systems

Visionary simple. Simply visionary.

As a system supplier, MTU not only provides you with the perfect yacht engine, but also with an automation system exactly adjusted to it. Most of our customers enjoy the benefits of getting a complete package where everything is just right: not only powerful engine performance, but also maximum efficiency, uncompromising reliability and environmental compatibility. For many years, sophisticated MTU automation systems controlled, regulated and monitored the engine functions – always doing a perfect job!













Pininfarina Bridge Components

Emotional design meets engineering proficiency.

designed by

pininfanina

A breath of fresh air in the yachting business – MTU now maintains 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

BlueVision_Basic | NewGeneration

Entry level, already a step ahead.

BlueVision_Basic | NewGeneration is an MTU "non-classifiable" monitoring and propulsion remote control system for MTU Series 2000 and 4000 engines. It incorporates a deliberately simple design and provides a complete basic functionality.

An elementary feature of BlueVision_Basic | NewGeneration is its hardware compactness. As the central system component, the Local Operational Panel (LOP) integrates all basic functions available in this version, simplifying installation, operation and diagnostics significantly.

This version is delivered with the Color Graphic Display Basic DIS as standard. Besides a dashboard page, the Basic DIS also offers an overview of all relevant measured values as well as an alarm page.

The scope of supply also includes a Portable Operator Unit, enabling the captain to control the ship from up to 4 selected connection points (e.g. for berthing from the stern if the view from the bridge is limited).

BlueVision_Basic | NewGeneration is primarily used on yachts not requiring classification society approval.

Key features:

- Compact hardware for easy installation and commissioning
- Local Operating Panels (LOP) with basic functionality like 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 LOP via CAN bus

BlueVision | NewGeneration

Joystick Control.

With the new MTU Joystick Control we introduce now a system extension for the Remote Control System (RCS) of BlueVision | NewGeneration. The MTU Joystick system makes complex maneuvers more convenient than ever before and allows the captain to perform every maneuver just moving the joystick lever in the preferred direction.

The MTU Joystick System automatically and cleverly manages all the propulsion and thruster systems and allows the captain to perform every maneuver just moving the joystick lever in the preferred direction. The system, developed in collaboration with XENTA Systems, is based on proprietary operation methods and algorithms patent-protected at international level. The system also performs combined maneuvers (e.g. translation and rotation at the same time) modulating engine RPM and managing the trolling-valve if fitted. While the captain is focused on the desired movements from the boat, the electronic system deals with the modulation of the propulsion system with a precision and promptness of response that only a sophisticated control system can achieve. In order to keep, the yacht position fixed during particular conditions (e.g. waiting refuelling, waiting bridges opening, etc.) the system can be also requested with our feature GPS-Hold in combination with a high performance GPS.

Your benefits are:

- Maneuverability in an easy and intuitive way
- Easy docking, anchoring and manoeuvring
- Controls vessel direction and speed including rotations
- Simultaneous engine, transmission and thruster control or thruster only
- Single or multi stations possible
- $-% \left(-\right) =\left(-\right) \left(-\right) =\left(-\right) \left(-\right) \left($





Operating Panel (PAN)
 Control Lever (CL)

 Display Basic (DIS)





BlueVision_Advanced | NewGeneration

Demanding more. Getting more.

BlueVision_Advanced | NewGeneration is an MTU "classifiable" monitoring and remote control system for yachts, offering a comprehensive standard automation system solution. It is available for MTU Series 2000 and 4000 engines.

An elementary feature of BlueVision_Advanced | NewGeneration is the system bus. The data transmission between the LOP and the commanding control stands is carried out via a redundant Ethernet based field bus. This ensures an absolutely secure communication on the one hand and highest flexibility of the overall system – also with regard to future upgrading – on the other.

This version is delivered with the Color Graphic Display MFD as standard, which has been optimized for the operation in classifiable ships. Besides various dashboard pages, the MFD also offers the possibility to show all of the propulsion system's relevant measured values. All active alarms are comprehensively displayed on a separate page.

BlueVision_Advanced | NewGeneration is a classifiable system in line with major classification societies.

BlueVision_Advanced | NewGeneration is primarily used in performance and displacement yachts.

Key features:

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

MTU Callosum - Integrated Ship Automation System

Your yacht's nervous system.

Integrated. Intelligent. Intuitive.

With MTU Callosum, MTU delivers the automation system of the future. Developed on the basis of many years of extensive experience and through the constant exchange of information with users, MTU Callosum ensures that the technology works reliably in every situation.

The complete modular system integrates various self-sufficient subsystems into an intelligent overall structure. With "Integration. Intelligence.

It's all in the name: The corpus callosum refers to an important bridge between both halves of the human brain. As an "integrator", the corpus callosum enables the reception, correct analysis, and the subsequent suitable response to the variety of information processed through the central nervous system. The electronic equivalent MTU Callosum works similarly. The system links the sensors that cover your entire system. By means of the specially designed visualization technology of MTU Callosum, the complex running of onboard ships systems is handled in a competent and understandable fashion.

Callosum_MC - Integrated Monitoring and Control System

While the ship in operation, Callosum_MC monitors and controls the entire drive system, the onboard power supply, and all general areas of the ship platform while ensuring its optimal and safe operation at all times

Callosum_DC - Damage Control System

Callosum_DC ensures the precise localization of any type of damage caused by fire, flood, collision, grounding. Decisive in emergency situations: The MTU 3-click technology enables quick and assured navigation tools.

Callosum_MT - Maintenance Support System

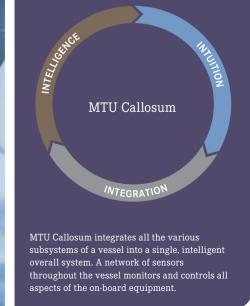
Callosum_MT provides support for the maintenance and upkeep onboard – 24 hours a day, 7 days a week – and thus contributes to the operational availability of the ship. The intelligent system guides the user reliably and intuitively while using support tools (e.g. alarm system, trending).

Callosum_TS - Onboard and Land-Based Training System

Callosum_TS allows training and further education of the crew during ship operation. A guided tour, documentation, and a multi-level onboard and land-based training program are included. The training system simulates real operating conditions, since it is based on original images (true graphics) and intelligent models linked to the automation (model-based). Callosum_TS is adapted individually to the ship on which it is used.











Premium Yacht Service

Leave your worries on shore. Global support, 24/7.

When you choose MTU, 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, MTU engines come with a best-in-class warranty and several complementary MTU **Value**Care products and services.

Customer Assistance Center

One call is all it takes.

Agents are available 24/7 to respond to your inquiries and any service needs

Europe, Middle East, Africa +49 7541 90-77777

Asia/Pacific +65 6860 966

North and Latin America

E-mail

premium.yacht.service@mtu-online.com



Your new MTU 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

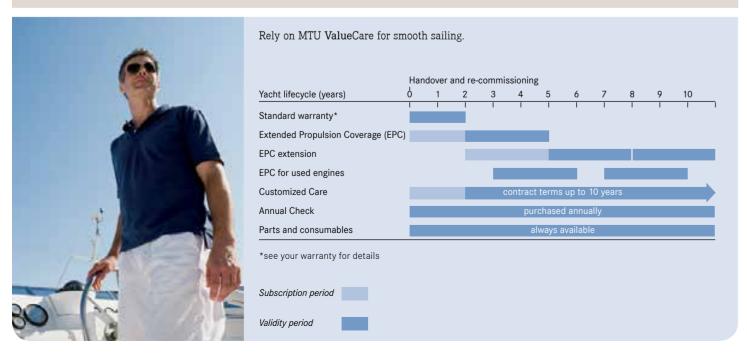
Premium power deserves premium service.

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 **Value**Care premium products and services are the perfect complement to your MTU yacht engines.







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 MTU engines and continues with MTU **Value**Care 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.

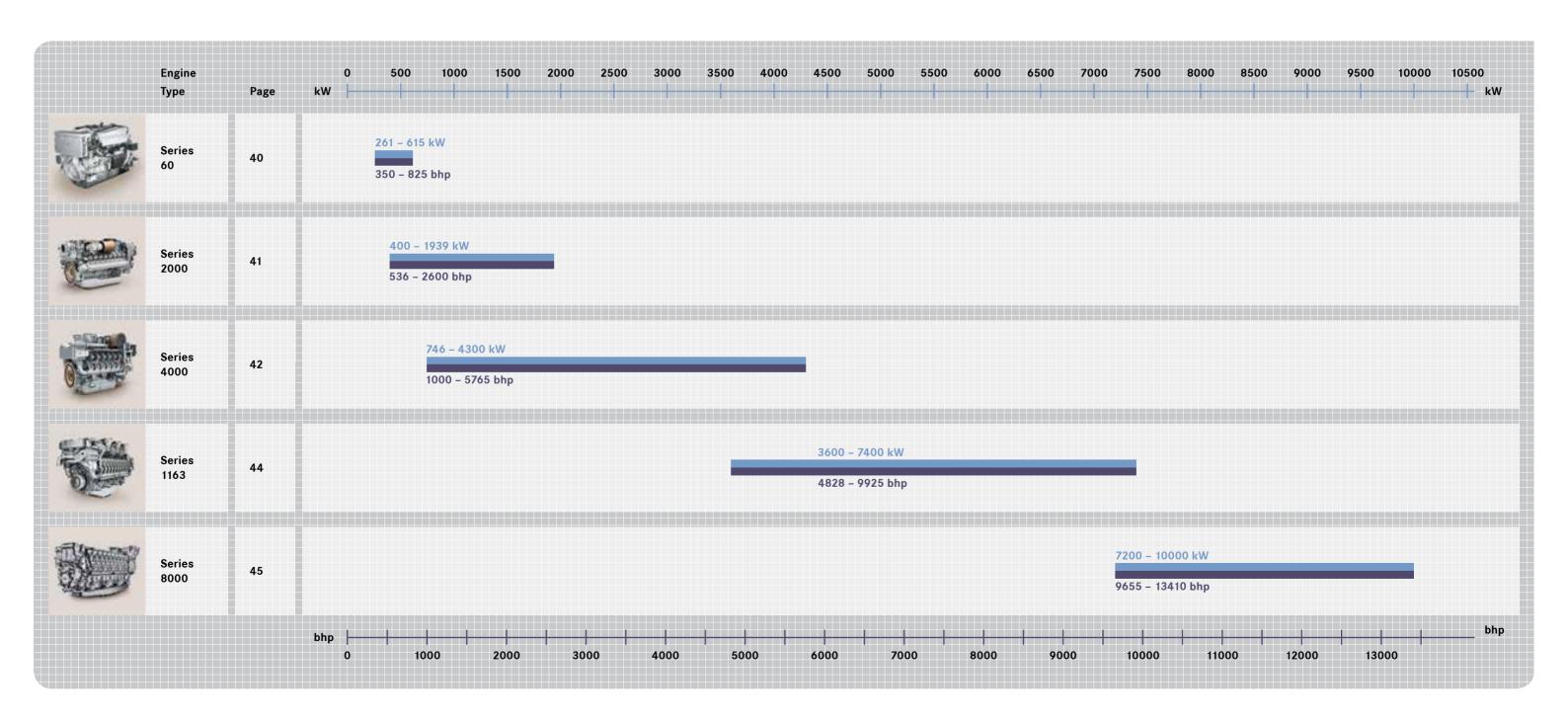
Extend equipment life.

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

MTU Diesel Engines and Gensets

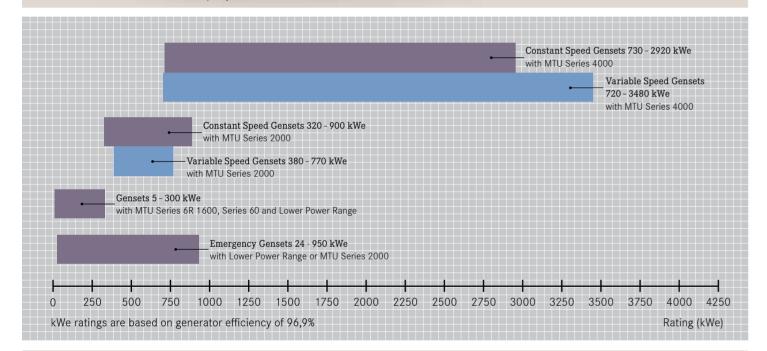
All engines at a glance.

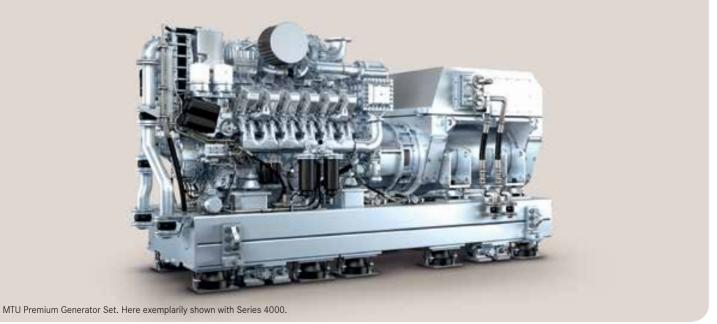
MTU is your global full-line partner offering solutions for all emissions requirements as well as the full power range from 261 to 10000 kW (350 to 13410 bhp). Our engines set the benchmark for what diesel engines must deliver in yacht applications. Their uncompromising power-to-weight ratio the outstanding drive dynamics and operational availability provides peace of mind.





MTU Advanced Generator Set. Here exemplarily shown with Series 4000.





MTU Gensets Overview

Solutions for your power at sea.

MTU gensets are based on MTU Series 60, 1600, 2000 and 4000 engines. Whether you are looking for onboard power, dieselelectric or hybrid propulsion, MTU gensets meet the full spectrum of your requirements.

MTU's 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.

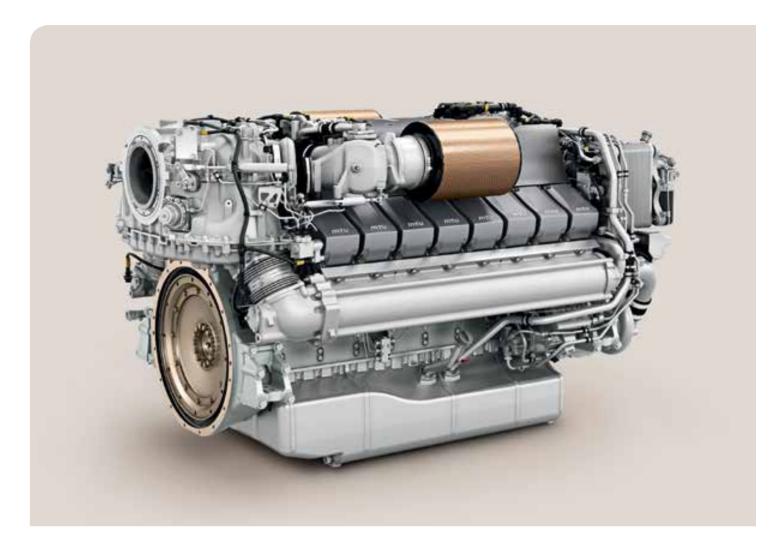
MTU also provides emergency gensets for critical situations at sea, when absolute reliability is essential. In addition to gensets for main propulsion and onboard power, MTU also supplies lower-power gensets which can be installed as separate power units in the engine room.

MTU's genset portfolio covers power outputs from 5 to 3,480 kWe.

Your benefits are:

- Gensets based on proven Series 2000 and 4000 engines of which over 60,000 have been sold worldwide
- 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
- All MTU gensets are classifiable according to e.g. DNV-GL, LRS
- Gensets with high quality finishing and painting dedicated for the yacht market
- > Find more detailed information about our genset solutions in our MTU Generator Sets brochure.





Series 60

Series 60 6R		for mechanical main propulsion
Power output	kW	261 - 615
	(bhp)	(350 - 825)
Speed	rpm	1500 - 2300
Emissions		All engines comply with emissions regulations in accordance with IMO II and EPA 2 compl.

Series 60		for onboard power generation/ diesel-electric drives		
6R		50 Hz	60 Hz	
Power output	kW	271 - 322	271 - 370	
	(bhp)	(363 - 432)	(363 - 496)	
Speed	rpm	1500	1800	
Emissions		All engines com	ply with emissions	
		regulations in accordance with		
		IMO I; IMO II	IMO II and	
		on request	EPA 2 compl.	

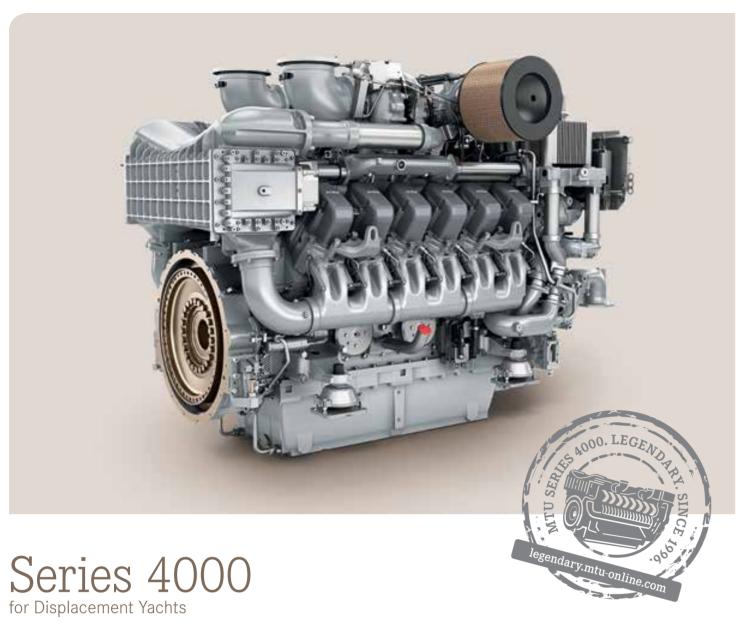
Series 2000

Series 2000		for mechanical main propulsion
8V, 10V, 12V, 16V		
Power output	kW	400 - 1939
	(bhp)	(536 – 2600)
Speed	rpm	1800 - 2450
Emissions		All engines comply with emissions regulations in accordance with IMO II and in part also EPA 3 recreational, EU III A (including RheinSchUO II) and EU recreational crafts 94/25

Series 2000		for onboard power generation/ dieselelectric drives	
		50 Hz	60 Hz
Power output	kW	332 - 770	400 - 930
	(bhp)	(445 - 1033)	(536 - 1247)
Speed	rpm	1500	1800
Emissions		IMO II	IMO II

Some engines for onboard power generation are also available with interface automation **genoline**

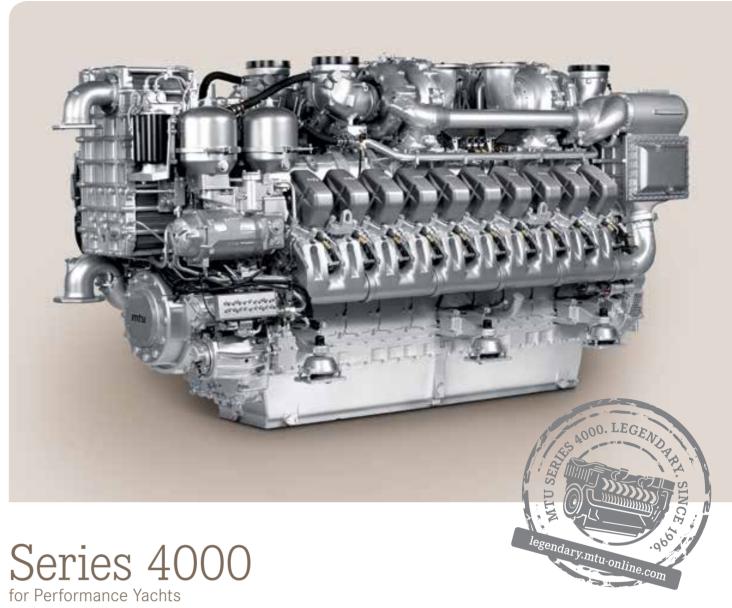
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Series 4000 8V, 12V, 16V, 20V		for mechanical main propulsion
Power output	kW	746 - 3600
***************************************	(bhp)	(1000 – 4830)
Speed	rpm	1600 - 2050
Emissions		All engines comply with emissions regulations in accordance with IMO II, and in part also EPA 3 and EU III A (including RheinSchUO II)

Series 4000		for onboard power generation/ diesel-electric drives		
		50 Hz	60 Hz	
Power output	kW	760 - 2600	920 - 3015	
	(bhp)	(1019 - 3487)	(1234 - 4043)	
Speed	rpm	1500	1800	
Emissions		All engines comply with emissions		
		regulations in accordance with		
		IMO II and in part also EPA 3 and		
		EU III A (including RheinSchUO II)		

Some engines for onboard power generation are also available with interface automation **geno**line



Series 4000 12V, 16V, 20V		for mechanical main propulsion	Series 4000		for onboard power generation/ diesel-electric drives	
	kW	2040 - 4300			50 Hz	60 Hz
Power output	(bhp)	(2736 - 5765)	Power output	kW	760 - 2600	920 - 3015
Speed	rpm	1500 - 2100	i	(bhp)	(1019 - 3487)	(1234 - 4043)
Emissions		All engines comply with emissions	Speed	rpm	1500	1800
		regulations in accordance with IMO I/II, and in part also EPA 2 compl. and EU III A (including RheinSchUO II)	Emissions		regulations in ac	

Some engines for onboard power generation are also available with interface automation **geno**line

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Series 1163

Series 1163 12V, 16V, 20V		for mechanical main propulsion
Power output	kW	3600 - 7400
	(bhp)	(4828 - 9925)
Speed	rpm	1200 – 1250
Emissions		All engines comply with emissions
		regulations in accordance with
		IMO I or IMO II

Series 8000

Series 8000 20V		for mechanical main propulsion
Power output	kW	7200 - 10000
	(bhp)	(9655 – 13410)
Speed	rpm	1150
Emissions		All engines comply with emissions regulations in accordance with IMO II and in part also EPA 2 compl.

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Notes	

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Subject to change. | 3061581 | Edition 01/18 | EPC 2018-07 CM | Printed in Germany on chlorine-free bleached paper.