Working hard.
In all conditions.
Innovative thinking – effective performance.

MTU has been manufacturing large diesel engines for over 100 years. Our idea of partnership is focused on delivering the engines and systems that best fit your needs and making sure they perform smoothly every step of the way.

We supply the construction and industrial sectors with tough engines for excavators, dump trucks, wheel loaders, forklifts, road construction equipment, telescopic handlers, compressors, and in underground mining vehicles. MTU is the leading engine manufacturer for mobile cranes. Our engines meet the exhaust emission regulations in each of the countries in which they operate.

Partnership with Mercedes-Benz.

MTU Series 1000, 1100, 1300 and 1500 engines are based on Mercedes-Benz models customized for off-highway use by MTU. These engines range from 100-480 kW and have been specially designed for construction and industrial applications and further developed to meet EU Stage V regulations.
It takes more than power to move mountains.
MTU offers a broad range of high-performance, commercial diesel engines and a broad range of applications. Our applications range from construction equipment like excavators and dump trucks to the industrial segments like port handling, airport ground support, or waste compacting. Our engines have also proven themselves as drive systems for stationary applications and machines like pumps and compressors.

Reliable performance.
From planning to aftertreatment and beyond.

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Yours truly:
• Low life cycle costs due to low fuel and DEF consumption and long maintenance intervals
• Highest reliability due to maximum availability and minimized downtimes
• Top performance, not only in full load but also frequent load changes
• Global service network - customer support, anywhere and anytime

Planning
MTU delivers a complete engine concept. Our engineers provide extensive analysis, documentation, and risk mitigation services, as well as customer-focused support for integrated mechanical, electrical, and electronic interfaces.

Combustion and aftertreatment
Our optimized combustion and cooled exhaust gas recirculation system (EGR), supported by an efficient and well-balanced exhaust aftertreatment system consisting of SCR and DPF technology, allows our diesel engines to meet the widest range of exhaust emission requirements up to EU Stage V. It also enables compliance with worldwide emission standards including EPA, China, Japan, and Korea.

Digitalization
For over 100 years, we’ve been known for technological innovation and leadership — driving efficiency and reliability to new heights. Today, we’re applying that same spirit of innovation to digitalization. Our aim is to magnify the power of your MTU investment.

Integration
MTU provides comprehensive engineering and technical support for the design and implementation of the engines. Our application engineering team helps reduce design costs.

Power take-off options
MTU offers a wide range of power take-off options to meet the specific requirements of your application. Whether you need to power auxiliary equipment, drive pumps or compressors, or simply want to optimize your system, MTU’s power take-off options provide the flexibility you need to get the most out of your MTU investment.

Your benefits:
• Low life cycle costs due to low fuel and DEF consumption and long maintenance intervals
• Highest quality standards for maximum availability and minimal downtime
• Top performance, even under full load and with frequent load changes
• Global service network - customer support, anywhere and anytime

Reliable performance.
From planning to aftertreatment and beyond.
Overview

Engines for construction applications.

Mobile cranes
Performing at the highest level. Construction work must be carried out quickly and in a profitable manner. Reliable engines ensure safety, mobility and precision.

Loaders, dozers and excavators
Moving massive amounts of material and running at full speed and full load: operating under extreme load cycles shows what an engine really is made of.

Dump trucks
Rugged terrain, hard ground, constantly swirling dust, or pervasive dampness: all-terrain transport vehicles demand a great deal from their engines.

Road building equipment
Dust, mud, moisture, heat, multi-shift operation: engines in road construction machines must work under the most severe conditions. Our engines are built for that.

Pumps, compressors and other special applications
Our engines ensure high throughput for shredder equipment, pumps, compressors as well as driving trench excavators, augers and many other special machines.
Overview

Engines for industrial applications.

Harbour equipment
Moving goods quickly and efficiently in perfect sync with harbour logistics systems. Our engines provide a strong link in the never-stopping global supply chain.

Airport ground support
Ground power units, baggage loaders, runway sweepers, towing tractors or firefighting equipment: smooth operation demands uncompromising reliability.

Snow groomers
With MTU’s efficient, high-performance diesel engines, special-purpose vehicle drives can be optimally adjusted to meet extraordinary demands – whether preparing ski slopes or clearing snow from roads and runways – at the highest altitudes and lowest temperatures.

Specialized and public service vehicles
Versatile solutions for specific tasks. Engines and machines, applications and drives, investments and earnings are all perfectly tuned to one another.
Top performance in all conditions.

Below sea level or thousands of meters high, hot or cold, wet or dusty – top performance is always called for, even in the harshest environments. Designed for the highest level of performance, our engines prove themselves everywhere at any time.

Maximum availability – every day and everywhere

Our engines represent the best availability and reliability, low life cycle costs and maximum economy for thousand-fold proven durability and an excellent power-to-weight ratio. With our integration of know-how and numerous years of experience we ensure that our extensive product range can consistently provide the right drive solution.

Low emissions and cost-effectiveness

MTU engines are among the lowest-consumption engines on the market. Optimized, efficient combustion and exhaust aftertreatment mean that our diesel drives meet the widest range of emissions specifications up to EU Stage V. In addition to their well-known longevity, low-maintenance construction and long service intervals also ensure their cost-effectiveness.
Unleash the beast.
**Planning security**

All engines are state-of-the-art and comply with local regulations. This is achieved without making changes to the engine footprint, which means equipment manufacturers have planning security for their own designs.

**Optional parts**

Valid for all engines. Make each engine adaptable to specific demands.

**Electronics**

The MCM engine control unit and the ACM aftertreatment control unit control key systems such as fuel injection and turbocharging as well as the emission management system – ensuring high torque, full power and lowest fuel consumption.

The CPC4 vehicle control unit provides an extensive set of functions to the vehicle and its operator.

**Analytics**

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

**Fuel injection**

MTU optimizes fuel combustion in the cylinder by means of its electronically controlled common rail fuel injection system in combination with other technologies such as turbocharging.

**One-box solution for exhaust gas aftertreatment**

Combined “one-box” not only adds value to the engine, but also reduces the overall costs. The “one-box” solution is a cost-effective and high-quality exhaust gas aftertreatment system. It includes a combined SCR, DPF, and integrated dosing unit, providing a complete solution for emission reductions.

**Internal emission reduction**

With exhaust gas recirculation (EGR), the amount of nitrogen oxide can be significantly reduced using internal emission technology alone, resulting in a positive impact on the overall system consumption (fuel and urea).

Combustion can be further optimized to lower emissions and consumption by common rail fuel injection. Single-stage and two-stage turbocharging also raise engine efficiency.

**Turbocharging**

Single-stage turbochargers compress the air so that more oxygen flows into the combustion chamber. In this way, more fuel is burned and the power output of the engine increases accordingly. Two-stage controlled turbocharging assures low fuel consumption across a wide speed range, exceptionally high torque at low speeds, and clean combustion. On our Series 1500 engines, a turbo compound unit recovers energy from the exhaust gases and increases efficiency even further – with a 5% fuel saving over similar engines.

**Series 1100/OM 470**

More efficient than ever. Save up to 3% in fuel in comparison to EU Stage IV/EPA Tier 4 Final fuel and emission rates. Operation: 207 – 384 kW (276 – 519 hp)

**Series 1300/OM 471**

The toughest ever. With improved peak torque. Operation: 300 – 425 kW (403 – 573 hp)

**Series 2000**

A powerful heart for maximum agility. Operation: 567 – 970 kW (760 – 1301 hp)

**Series 900**

Maximum efficiency and availability. Operation: 75 – 240 kW (101 – 322 hp)

**Series 6R1000/OM 936**

Uncompromising availability. Operation: 100 – 280 kW (134 – 375 hp)

**Series 460**

The proven, evolved engine. Operation: 220 – 375 kW (295 – 503 hp)

**Series 4R1000/OM 934**

Increased rated power. One of the most successful heavy-duty engines ever. Operation: 100 – 280 kW (134 – 375 hp)

**Series 1500/OM 473**


**Series 1000, 1100, 1300 and 1500 engines**

Are based on Mercedes-Benz models customized by MTU.

**Core technology**

All engines at a glance.

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Green technology

Engineering today what you’ll need tomorrow.
The increasingly stringent emissions limits are fast approaching the ideal ‘zero emissions’ target for diesel engines. The statistics speak for themselves: Over the course of 19 years, EU emissions Stages have been tightened four times and EPA Tier regulations have been created to govern industrial engines. EU Stage V will be the fifth time since Stage I (1996) that emissions limits have been tightened representing a cut of more than 94% in nitrogen oxides. At 97.8%, reductions in soot particulate emissions have been even greater.

Emission reduction technologies
97.8% reduction in soot emissions over 19 years.

Emission forecast 2028.
Solutions for smart service.
MTU ValueCare

Take care of your investment.

MTU engines and systems are built to deliver robust, reliable performance. But our commitment to your success doesn’t end there. For maximum uptime, longer life and optimized costs, rely on MTU ValueCare - the only service portfolio designed specifically with your equipment in mind.

Maximize uptime
Avoid the unexpected with professional service from MTU-certified technicians. Preventive maintenance services can be planned around your schedule, so your equipment is available when you need it most.

Save time
When it’s time for an overhaul, count on factory remanufactured engines and systems to put your equipment back to work even faster. They also help reduce downtime, service time and indirect costs such as storage.

Empower your operators
Ensure long, reliable equipment life by empowering your staff. MTU hands-on training provides all of the knowledge they’ll need to operate and care for your MTU equipment. And with MTU digital solutions, you can monitor equipment health and activity from afar, helping you be more proactive.

Reduce lifecycle costs
Count on a wide range of factory remanufactured parts to help optimize the lifecycle costs of your equipment.

Keep everything running smoothly
Genuine parts, filters, oils and coolants from MTU work in perfect harmony with your equipment to maximize its performance, prolong its life and protect it – making them an essential part of your preventive maintenance program.
MTU Service Network

Our global 24/7 promise.

Whenever and wherever you need expert support, MTU specialists are available. Our global service network of more than 1,200 locations – backed by our cutting-edge Parts Logistics and Customer Care Centers – provides you this assurance.

To find your local MTU distributor, visit www.mtu-online.com.

Always on call, 24/7

Whether it’s connecting you with a local service partner or assigning an urgent problem to a dedicated team of MTU experts, we’re ready to assist you – wherever you are, whatever you need.

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