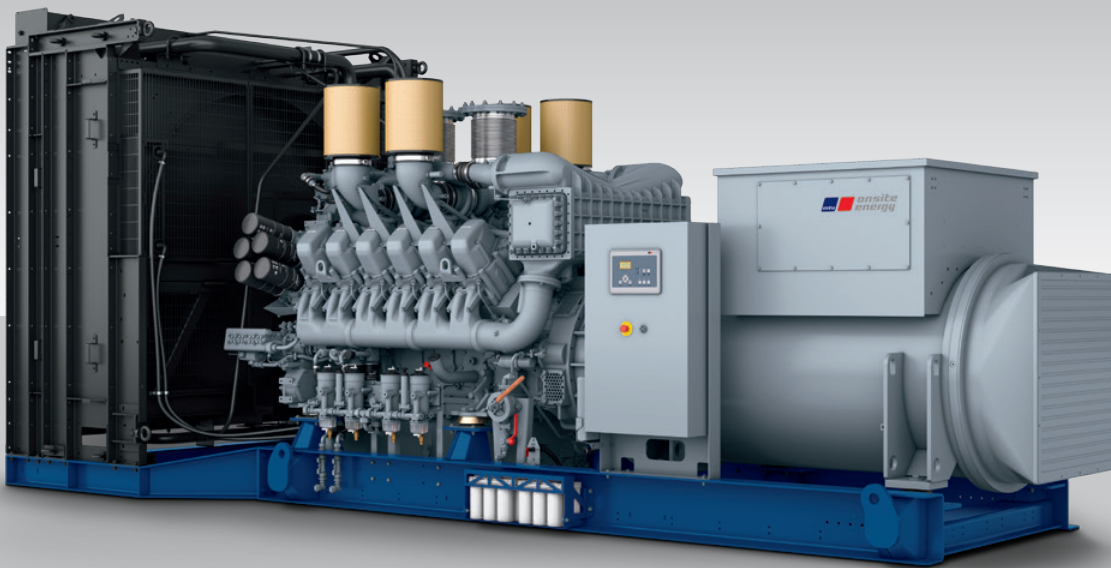


MTU ONSITE ENERGY

DIESEL GENERATOR SETS

50 Hz: 30 - 3,730 kVA
60 Hz: 30 - 3,250 kWe



COMBINING OUR RESOURCES TO SUPPLY YOU WITH DEPENDABLE ENERGY: ANYTIME. ANYWHERE.

MTU Onsite Energy is one of the core brands of Rolls-Royce Power Systems, which is a world-leading provider of high- and medium-speed diesel and gas engines, complete drive systems, distributed energy systems and fuel injection systems for the most demanding applications.



MTU Onsite Energy offers complete power system solutions: from continuous/peak, mission critical and standard backup to heating and cooling. We also provide a full line of service products to help you get the most from your equipment.

Customers around the world trust us to provide reliable power for a wide range of applications, such as healthcare, data centers, airports, farms and independent power stations. Our product portfolio covers high speed diesel generator sets up to 3,250 kWe and gas-powered cogeneration systems up to 2,500 kWe. This product offering is complemented by medium-speed engines for land-based energy solutions up to 9,300 kWe as part of the Rolls-Royce Power Systems product portfolio.

More than 60 years of power generation systems expertise and over a century of diesel engine engineering experience have enabled us to provide complete solutions all over the globe.



ALL KINDS OF SOLUTIONS FOR ALL KINDS OF APPLICATIONS.

MTU Onsite Energy provides reliable power generation solutions wherever—and whenever—reliability is needed.

MTU Onsite Energy gensets can be found in:

- // Airports
- // Communications
- // Construction and mining job sites
- // Data centers
- // Government buildings, municipalities, utilities and educational institutions
- // Healthcare facilities
- // Manufacturing, commercial and industrial facilities
- // Retail buildings, hotels and casinos
- // Water treatment plants

Continuous/Prime/Peak

Efficiency in action. Designed for continuous, prime and peak load operations, MTU Onsite Energy diesel generator sets are used purely for decentralized power generation. Whether stationary or mobile, they can be operated individually or in combination with multiple units working in parallel to meet short-term spikes in demand and generate reliable energy around the clock.

Standby

Standardized Backup, Standardized Backup with Overload (10%)

Reliability when power goes out. Whether it's a storm or a public grid outage, a power interruption can be costly. It is vital to have reliable backup systems that ramp up within a few seconds to restore electricity independently of the grid. MTU Onsite Energy diesel generator sets function as safeguards to supply uninterrupted power to residential buildings or entire city districts. They protect public buildings and industrial facilities where emergency backup is a legal requirement, while also exceeding relevant ISO standards.

Mission Critical Power

When failure isn't an option. A reliable emergency standby system is absolutely essential when lives and severe financial losses are at stake. Our gensets also provide the systems backbone for hospitals where vital life-saving equipment and technology couldn't otherwise function during an outage.



Power Station, Caribbean

- // 1,747 MW
- // Continuous



Mining, Teck Coal, Canada

- // 2,575 kWe
- // Prime



Türk Telekom, Istanbul, Turkey

- // 4,152 kWe
- // Standardized Backup



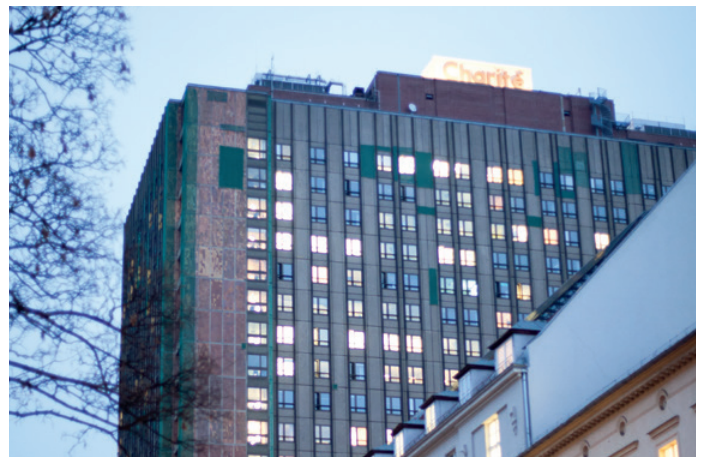
Airport, Tulsa, USA

- // 4 MW
- // Standardized Backup



Data Center, Power Loft, USA

- // 20 MW
- // Mission Critical



Hospital Charité, Berlin, Germany

- // 1,360 kWe
- // Mission Critical

TAKING RELIABILITY TO NEW LEVELS.

You can count on MTU Onsite Energy to meet your high standards. We continue to push the boundaries, bringing our vast engineering expertise from large-scale projects to a wide range of MTU Onsite Energy diesel generator sets.

Our diesel generator sets offer several advantages:

Reliability

- // Tested and optimized to run smoothly with a minimal amount of vibration, for use in demanding environments
- // Advanced monitoring and communications

Economical

- // Outstanding fuel economy
- // Optimized maintenance intervals
- // Cutting-edge emissions control

Tested Quality

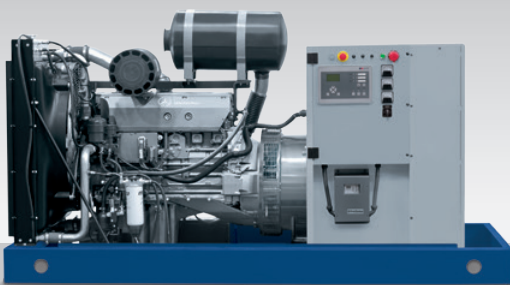
- // Designed and manufactured in facilities certified to standards ISO 9001:2008 and ISO 14001:2004
- // Designed, assembled and tested completely in-house
- // More than 100 years of engine engineering expertise
- // Proven performance under extreme conditions

Performance

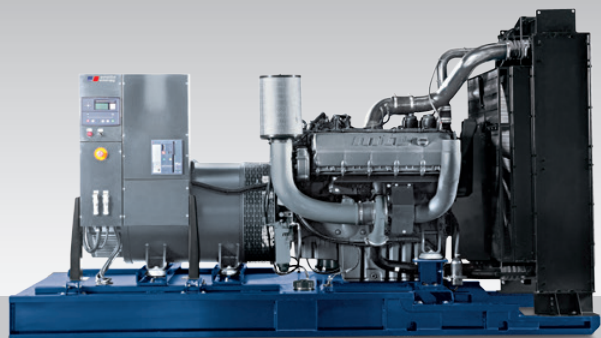
- // Industry-leading 85% load factor for standby applications and 75% load factor for prime power applications
- // Superior on-site specific de-rating behavior due to state-of-the-art engine controller with engine site condition management system
- // Unrivalled transient performance: all generator sets are tested according to performance class G3 as per ISO 8528-5; 100% load acceptance according to NFPA 110

Flexibility

- // Proven for a wide range of applications
- // Compliant with industry codes and standards
- // Wide range of options and accessories (generator set controls, enclosures, diesel fuel tanks, remote annunciators, silencers and circuit breakers)



MTU 6R0120 DS (60Hz)



MTU 10V1600 DS (50 Hz)





Optional equipment and finishing shown. Standard may vary.




WE'VE GOT YOU COVERED.

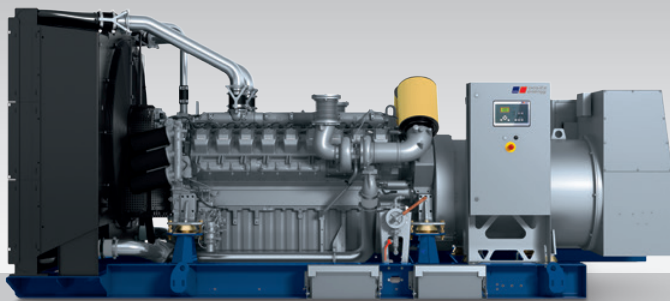
Our full lineup of generator sets enables us to cover a variety of power nodes and applications. Offered across a wide power range for continuous/prime/peak, mission critical and standardized backup applications, they cover common industry rating points.

Our broad power portfolio: MTU 0080-4000 DS

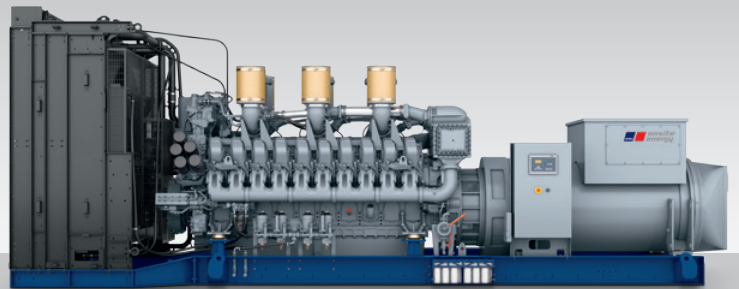
- // Verified product design, quality and performance integrity
- // Best-in-class reliability and availability
- // Cutting-edge emissions control
- // Optimized maintenance intervals

Diesel Genset Type	Power Ranges	
	50 Hz (kVA)	60 Hz (kWe)
MTU 0080-0120 DS 	30-94	27-200
MTU 1600 DS 	280-730	210-600
MTU 2000 DS 	750-1,400	615-1,250
MTU 4000 DS 	1,550-3,730	1,125-3,250

-  Continuous/Prime/Peak
-  Standardized Backup
-  Mission Critical



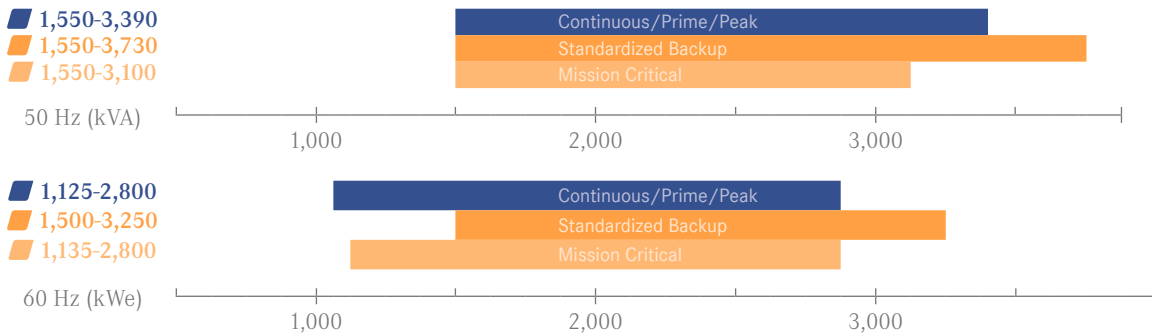
MTU 18V2000 DS (50 Hz)



MTU 20V4000 DS (50Hz)

MTU 4000 DS

MTU 4000 DS series generator sets perform at the highest level and cover the power range from 1,125 to 3,250 kWe (1,550 to 3,730 kVA). With a robust design and optimal fuel consumption, our diesel generator sets are trusted by customers around the world.



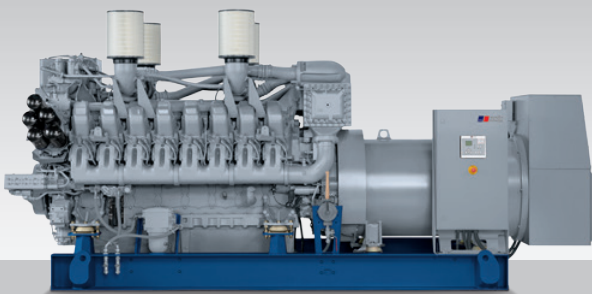
Highlights of series MTU 4000 DS

- // Full range (Class leading range) of application groups to fulfill even most specific customer requirements
- // State-of-the-art (engine) design/technology
- // Wide power range covered by only one product family/engine type. Minimized efforts to train staff for service and installation
- // Wide range of factory installed optional accessories and custom options available

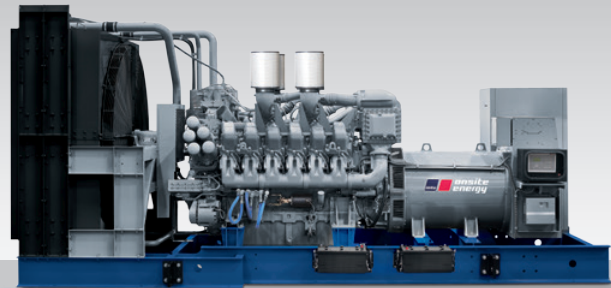
- // Permanent magnet excitation system as standard for improved transient response
- // Load profile based matrix maintenance schedule for maximum TBO

Special Options:

- // Different alternators and controllers available
- // Power station optimized 40' container available



MTU 16V4000 DS (50 Hz)

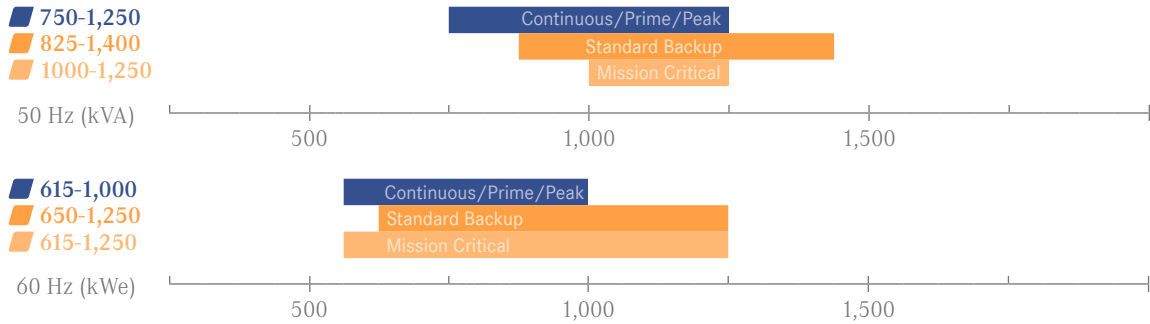


MTU 12V4000 DS (60 Hz)

Optional equipment and finishing shown. Standard may vary.

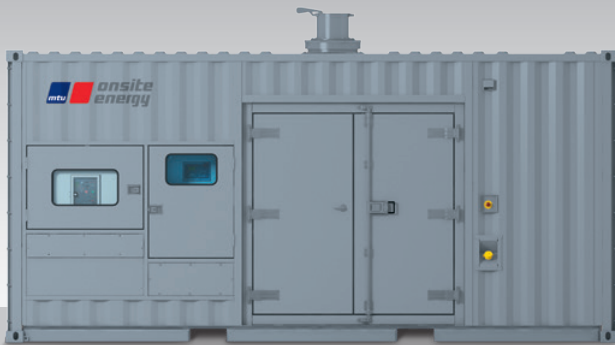
MTU 2000 DS

With the comprehensive choice of power outputs from 615 to 1,250 kWe (750 to 1,400 kVA) MTU 2000 DS generator sets offer the optimum solution for various applications.



Highlights of series MTU 2000 DS

- // Best in class fuel consumption
 - // Most compact design—Best power to size ratio
 - // Highest flexibility due to cylinder platform concept
 - // Latest engine technology
 - // Permanent magnet excitation system as standard for improved transient response
 - // Wide range of factory installed optional accessories and custom options available
 - // Outstanding transient response due to optimized turbo charger arrangement
- Special Options:
- // Different alternators and controllers available
 - // 20' standard container available
 - // Full range of sound insulated enclosures and fuel tanks available



20' container for MTU 2000 DS

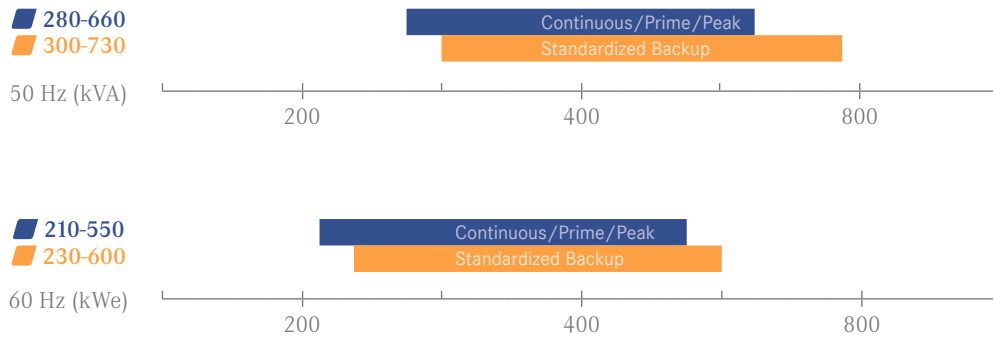


MTU 18V2000 DS (60 Hz)

Optional equipment and finishing shown. Standard may vary.

MTU 1600 DS

MTU Series 1600 generator sets bring MTU Onsite Energy power, technology and reliability to the power range from 210 to 600 kWe (280 to 730 kVA).



Highlights of series MTU 1600 DS

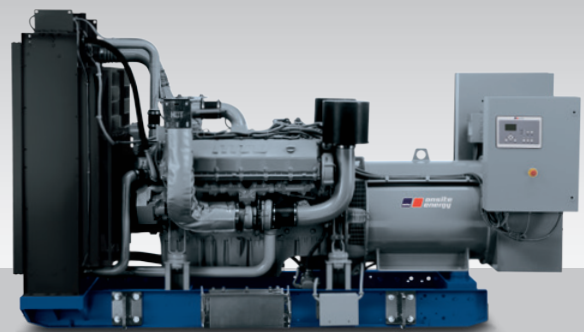
- // Most robust and stiff engine in this power range. Engine especially developed for genset application
- // Fully equipped and ready-to-use units
- // Outstanding transient response due to optimized turbo charger arrangement
- // Outstanding (engine) derating behaviour
- // Wide range of factory installed optional accessories and custom options available

Special Options:

- // Full range of sound insulated enclosures and fuel tanks available



MTU 10V 1600 DS (50 Hz)

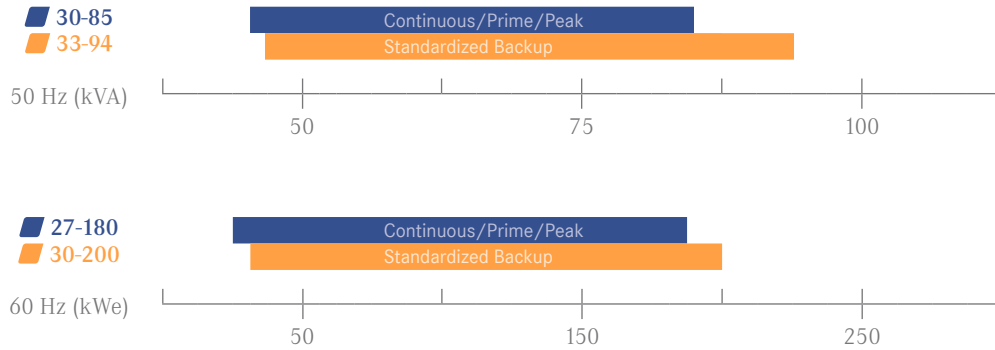


MTU 12V 1600 DS (60 Hz)

Optional equipment and finishing shown. Standard may vary.

MTU 0080 DS-0120 DS

Our 27-200 kWe generator sets are built with the same engineering and systems expertise as our larger gensets.



Highlights of series MTU 0080 DS-0120 DS

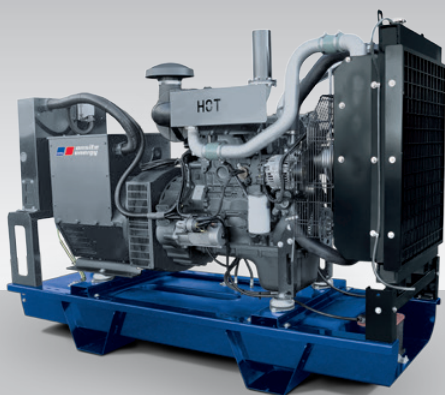
- // Highly mobile, plug-and-play design
- // Most compact size
- // Reliably even in the most extreme conditions
- // Wide range of factory installed optional accessories and custom options available

Customizable control unit:

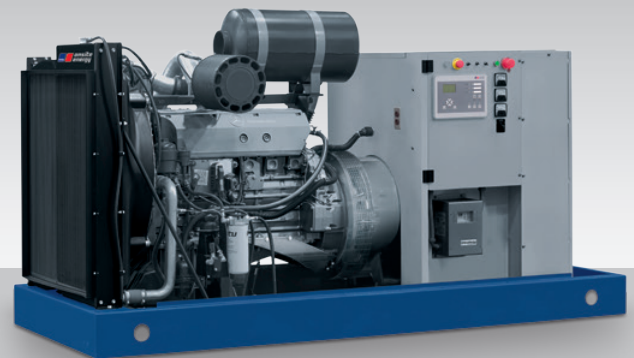
- // Flexible configuration for a full range of applications

Special Options:

- // Full range of sound insulated enclosures and fuel tanks available



MTU 4R0013 DS (50Hz)



MTU 6R0120 DS (60Hz)

Optional equipment and finishing shown. Standard may vary.

READY FOR ANYTHING, ANYWHERE. POWER MODULES.

Mobile and stationary Power Modules provide unique flexibility wherever power is needed. From a construction site, a single factory or an entire community, Power Modules are an ideal solution. Perfectly suited for rental fleets, continuous, prime, and standby use, we have a range of products to fit your needs.

Reliable

MTU Onsite Energy generator sets are engineered for confidence and built to last, powered by the most advanced diesel engines in the world today.

Stationary Power Modules are specifically designed to meet the requirements of mid- and long-term power supply projects. Delivered with the proven performance of the MTU 16V 4000 engine, stationary Power Modules deliver on-site power when you need it the most.

Flexible

Power Modules are flexible, featuring easy setup and maintenance. The sound-attenuated package is fully self-contained for convenient transport, setup and use. Its robust design facilitates operation and service, with easy to read digital controls and convenient enclosure access points. Centrally located connection points make it easy to integrate the unit with other generator sets when serving larger loads and digital controls simplify synchronization.

Wherever work takes you

The Power Module's high-strength steel containers are CSC certified and built to ISO standards. Each generator set is designed for extreme temperatures and they are stackable for easy transport and storage.

In the wake of natural disasters, there is a pressing need to restore electricity as soon as possible. A quick recovery is also needed when local power consumption has unexpectedly overtaken supply and created high peak demands. All over the world, including remote locations such as mines, oil and gas sites and rural areas, MTU Onsite Energy can quickly deliver solutions for your site.

Package highlights

- // Plug and play paralleling capabilities
- // Advanced digital controls
- // Easy installation and maintenance
- // Designed for harsh conditions
- // Easy to transport

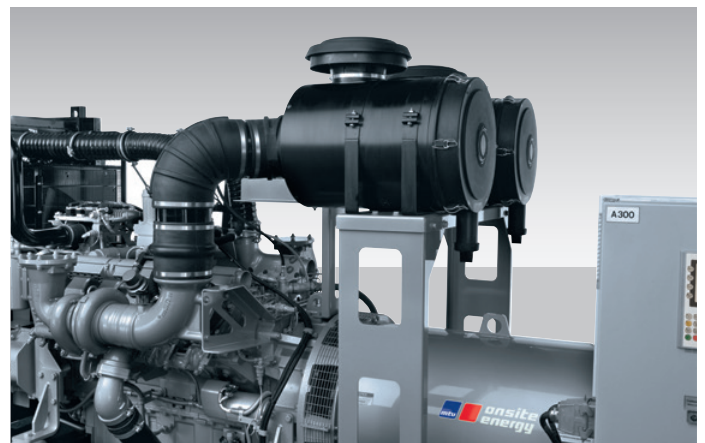


CUSTOMIZE YOUR SYSTEM WITH COMPONENTS AND ACCESSORIES.

From hospitals and construction sites to telecommunications and remote sites, different jobs have different needs. With a full line of components and accessories, MTU Onsite Energy can customize a power system to fit your exact requirements. All our products meet the highest standards for quality and safety. Available from a single source, they are also production-tested to work together as integrated systems, ensuring exceptional reliability and performance.

MTU Onsite Energy components and accessories include:

- // Sound enclosures
- // Weather housings
- // Sub-base diesel fuel tanks
- // Day tank systems
- // Generator set controls
- // System monitoring and control
- // Float/equalizing battery chargers
- // Remote annunciators
- // Silencers
- // Circuit breakers
- // Optional cooling packages
- // Master control panel
- // Paralleling controls



COMPLETE SUPPORT FOR RELIABLE PERFORMANCE AND LASTING VALUE.

To get the most out of your MTU Onsite Energy systems, rely on MTU ValueCare. From maintenance to spare parts and consumables to remanufactured products, MTU ValueCare is a full portfolio of products and services designed to maximize the performance, reliability and longevity of your MTU investment.

ValueService

To keep your equipment working reliably throughout its useful life, count on ValueService—our full line of service solutions from the professionals who know your equipment best. ValueService provides a wide range of support, with packages customized to meet your needs, including:

// **Maintenance, Repair & Overhaul**—Rely on the experts. Our staff of trained professionals knows all about your equipment, and provides the necessary preventive maintenance services to optimize availability and help you avoid unexpected problems.

// **Annual Check**—Solve problems before they start with professional inspections and preventive maintenance recommendations from MTU. The process includes visual inspection, test run and leak check, on-site oil and coolant analysis, diagnostic evaluation and reporting.

// **Technical Documentation**—Get all the details you need to install, commission, operate and maintain your system effectively for maximum performance and equipment life. Includes fluids and lubricants specifications, suggested preventive maintenance schedules and safety requirements.

// **Training**—Empower your equipment operators and maintenance staff with world-class training. MTU Training Centers are equipped with engines, sub-assemblies and electronics systems for a hands-on learning experience, and expert trainers who know how to pass along their invaluable product knowledge.



FOR MAXIMUM PERFORMANCE AND UPTIME: NEVER COMPROMISE.

ValueSpares and ValueExchange

MTU Onsite Energy systems are built with legendary high standards. When it's time for replacement parts and consumables, don't settle for anything less. Enhance the life of your engine with **ValueSpares** and **ValueExchange**—the only genuine new parts, consumables and remanufactured products that live up to MTU standards for craftsmanship, quality and performance.

// **Genuine parts**—Only MTU can guarantee parts that are tested and approved specifically your system. **ValueSpares** parts maximize performance, prolong the life of your engine and meet today's strict requirements. They are the result of years of intense research and development, based on current MTU engine specifications, quality audits and progressive modifications, making them the best possible match for your equipment. In addition to new spare parts, we offer a cost-effective alternative—a full line of **ValueExchange** remanufactured parts. And for added peace of mind, all MTU parts are backed with a full factory warranty.

// **Consumables**—Top-quality filters, oil and coolants from MTU are designed to work in perfect harmony with your equipment. An essential part of your preventive maintenance program, **ValueSpares** consumables are available from a single source to maximize engine and system performance, protect your investment and prolong its life.

// **Remanufactured products—ValueExchange** remanufactured parts, engines and systems deliver the same high standards of performance, service life and quality as new MTU products, along with identical warranty coverage—at a fraction of the cost. And with design and model-related updates made during the remanufacturing process, they also feature similar technological advancements.



MTU Onsite Energy
Part of the Rolls-Royce Group

www.mtuonsiteenergy.com