



THE NEXT GENERATION SERIES 4000 FOR NATURAL GAS

The next generation Series 4000 natural gas genset offers the highest power density in its class. Designed with cutting-edge technology, the latest Series 4000 natural gas genset is optimized for maximum performance and low emissions to deliver an economical, reliable, and sustainable source of power. Discover how its performance and flexibility exceed expectations.



Achieve Up To 44,4 % El. Efficiency

- An advanced, proven Series 4000 engine optimized for natural gas operation



Extended Time Between Overhaul (TBO)

- Designed with a TBO of 84,000 hours, that is unique to the market, for prolonged preventive maintenance and overhaul intervals for maximum productivity and reliability



Improve Operations With Low Lifecycle Costs

- Good serviceability
- 15% less part costs for preventive maintenance (compared to L32)
- 40% less oil consumption (compared to L32)
- Components designed to deliver maximum uptime



Best-in-class Power Density

- The natural gas genset has 30% increased performance, withstanding hot and humid conditions and highly robust against derating



Gain Operational Flexibility

- Quick ramp-up and ramp-down plus a wide range of partial load operation makes this product a perfect match for grid stabilization applications as well as complete offsite microgrid solutions
- Widest range of continuous allowed load operation in the market and partial load operation down to 35% of continuous operation



A Rolls-Royce
solution

KEY FEATURES

Efficient Ignition System

Ignition systems for individual cylinders allow for the most efficient level of operation for all cylinders, even with variable CH₄ content. The ignition voltage display gives customers information on the state of the spark plugs.

Optimized Heat Recovery Unit

Well-proven design perfectly suits the genset and provides the basis for optimized auxiliary efficiencies. The unit is fully integrated in the automation concept and is both safe and certified (CE).

High Quality Generator

Perfectly tuned to the engine and made by renowned manufacturers, the generator ensures a high level of reliability and optimum efficiency.

Environmentally Friendly

Series 4000 fulfills even the highest emission standards worldwide (NO_x, THC).

Digital Connected System

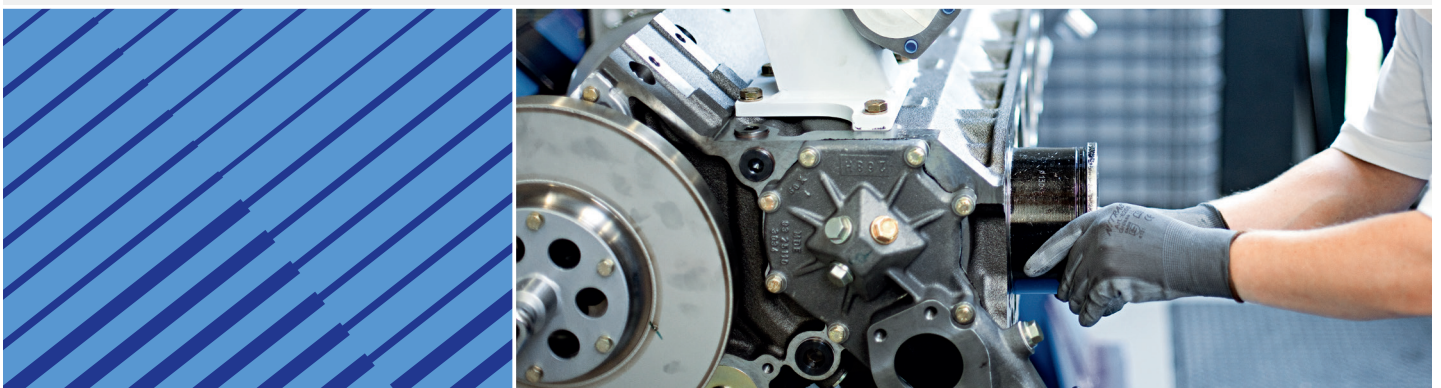
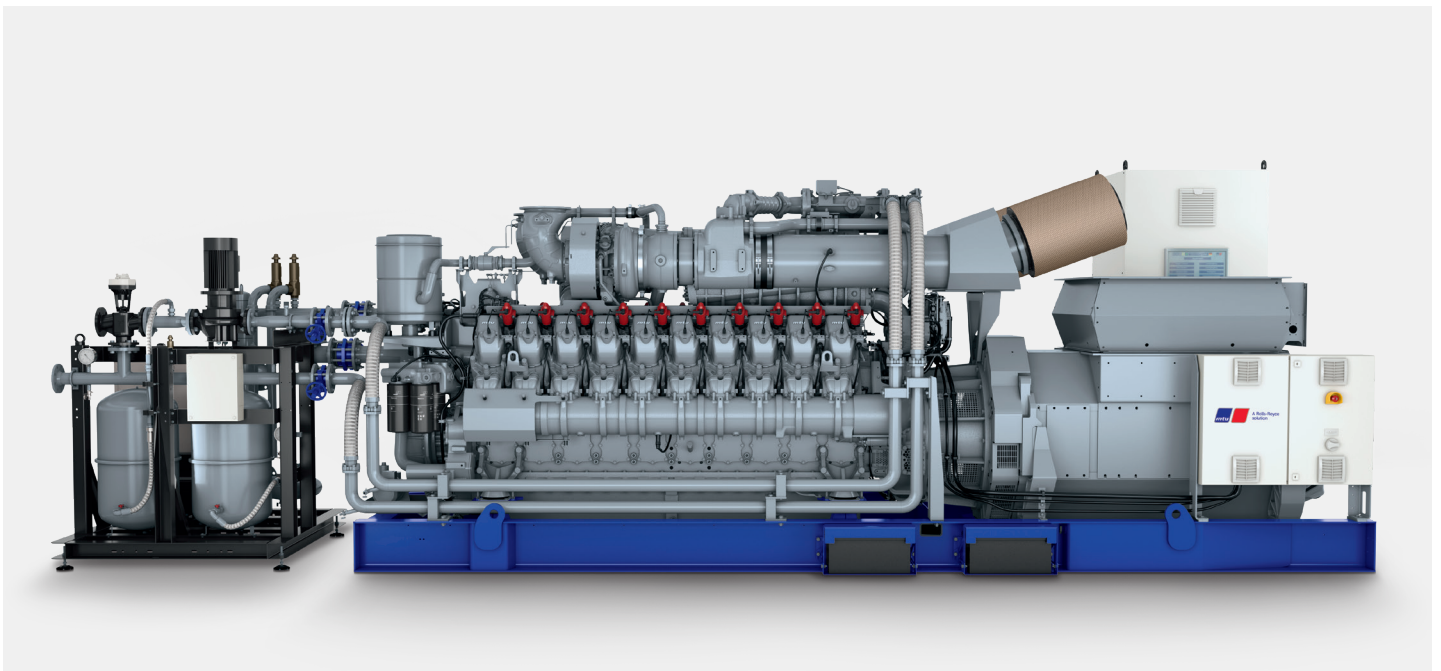
The system is equipped with a data logger providing access to digital solutions from MTU, including remote monitoring, fast and reliable service support and other features that are underway such as predictive failure prevention and operational optimization.

Integrated Automation Systems MIP & MMC

Motor interface panel (MIP) with stand-alone MTU Module Control (MMC). The MMC provides all the functions necessary for controlling the system. All the auxiliary drives required for the CHP system can be operated from here. The integrated power circuitry minimizes the customer's need for cabling on site.

Knock Detection & Regulation

Cylinder-specific knock detection and regulation protect the engine from abnormal operating conditions, and guarantee safe operation even with natural gas containing low levels of methane.



READY TO GO: CONTAINERIZED SOLUTIONS

As a system supplier, we offer a wide variety of solutions. Besides our gas engine systems for buildings, we provide containerized turnkey units. Compact, complete, flexible and autonomous, they are suitable for mobile power generation or applications that do not offer enough space to accommodate a complete gas engine system. When producing power from natural gas, installing the generator set in a container is an ideal alternative to the more common option—permanently installing a static system in a generator room. Our standardized container generator set is designed to meet the requirements of a variety of applications.

The container includes:

- The generator set
- The switchgear, including control and monitoring system
- All necessary connection and supply systems (ventilation, lubricant supply, heat recovery, etc.)

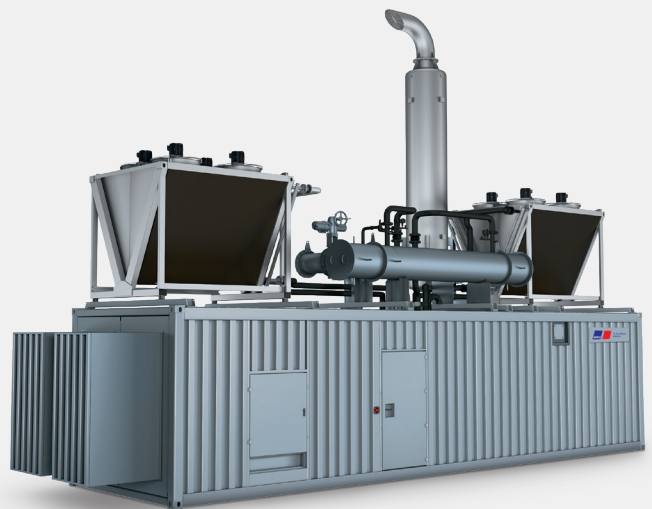
Like all power generation systems, the standard container gensets are capable of fully automatic and continuous operation.

We offer two types of containers:

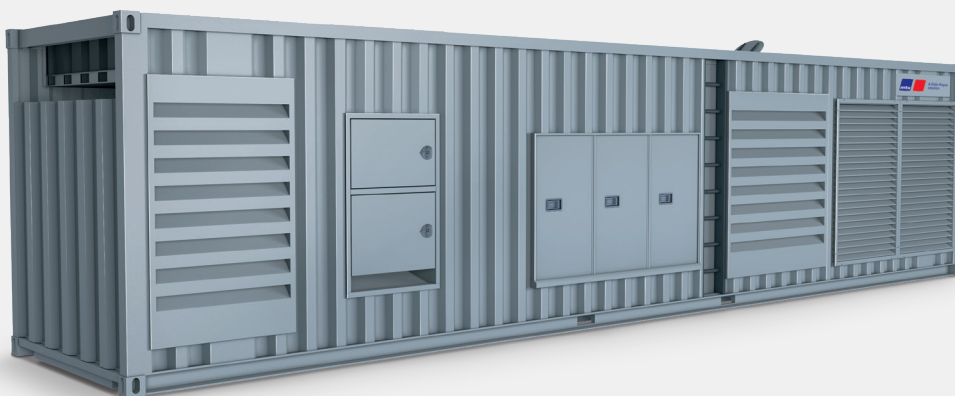
- Power containers generate electrical power only and are ideal for remote locations or areas with unreliable power supplies. They are often deployed in power stations
- Combined heat and power units (CHP) generate electricity and thermal energy for operators whose processes require both heat and power

Advantages of container units:

- Technically mature, proven and eco-friendly gas engine technology for maximum efficiency and reliability
- Completely autonomous design that does not require an additional building
- Flexible unit assembly system based on standardized modules and synchronized components
- Readily available, compact turnkey plug & play solutions
- Optimum support thanks to a worldwide service network
- Quality certified to ISO 9001 and DIN EN ISO 14001



CHP/CCHP-container



Power-container

