

A leap forward in power independence for mining operations – Wärtsilä Modular Block

Having a power supply serving only the mine, fully independent of the grid, to provide the company with reliable and economic electricity has not always been a viable solution. Remote locations with a minimal on-site infrastructure, or mining operations where the power requirements are likely to vary, are just two examples of sites where normal fixed power plants are not always a feasible investment. By launching Modular Block, Wärtsilä offers a solution that gives all mining sites, wherever they are and whatever their short- or long-term needs are, the opportunity to have their own captive power generating capacity.

The Wärtsilä Modular Block concept comprises a highly pre-fabricated, modularly configured and expandable enclosure. It incorporates proven high-efficiency medium-speed engine technology with fast-starting and excellent load-taking capabilities, and is able to handle a mine's large motor starts. Furthermore, it provides a viable opportunity to use power from renewable sources, such as wind and solar, for both environmental and economic gains.

Easily installed and simple to re-locate

The Modular Block concept includes most of the process equipment needed for converting a simple generating set into a compact power station. Its pre-fabricated, modular design means that it can be quickly and easily installed in just a few weeks. Similarly, it can be disassembled and re-installed at an alternative location should it be necessary, or expanded with additional modular blocks to adapt the power supply should the mine capacity increase. Incremental expansion allows the investment costs to be cascaded accordingly. Its rapid deployment from delivery to start-up minimises possible loss of revenues for the mine. This flexibility provides energy independence and predictability with access to a reliable supply of electricity 24/7. Its re-deployable design means the block can be moved to another mine site when needed. This enables effective management of commodity price volatility, and the changing circumstances of a mine's operations. Thanks to the engines' adaptability to liquid fuel, gas or multi-fuel use, fuel availability will not become an issue.

"The Wärtsilä Modular Block really does represent a leap forward in providing power supply independence for the mining industry, the key being its unprecedented flexibility. The overriding advantage is that it is fully supported by Wärtsilä's comprehensive understanding of energy systems. Our advanced software and value-adding lifecycle solutions allow the mine operator to concentrate on mining, without having to worry about whether or not the electric supply is sufficient," says Antti Kämi, Vice President, Engine Power Plants, Wärtsilä Energy Business.

A digital future

The flexible power source enables the fast and seamless integration of renewable energy to deliver significant cost and sustainability benefits. This is made possible by Wärtsilä's highly advanced [GEMS](#) power management software. The hybrid plant can also be operated and monitored remotely, in effect becoming an integral part of a digitalised mining operation.

Mining continues to modernise and power supply capabilities need to change accordingly. The Modular Block concept is designed to support the use of energy from renewable sources. It is in line with Wärtsilä's role as energy system integrator and enabler of the transition towards a 100 percent renewable energy future.

Read more on website [Wärtsilä Modular Block](#)

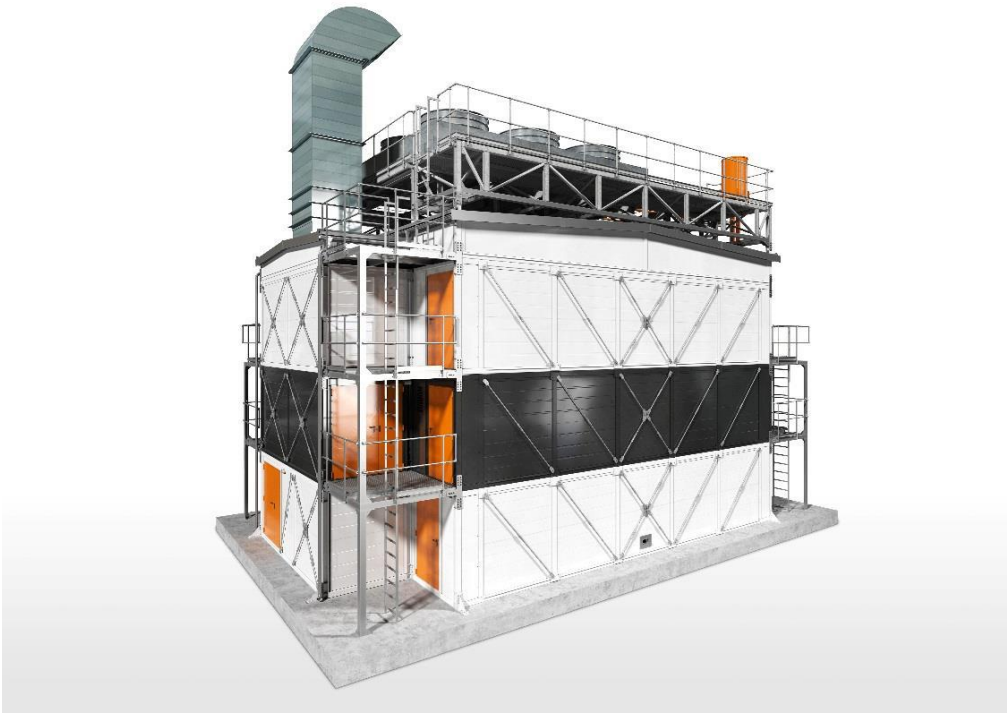


Image1: Wärtsilä Modular Block is a scalable and redeployable power generation solution with fast delivery and installation.

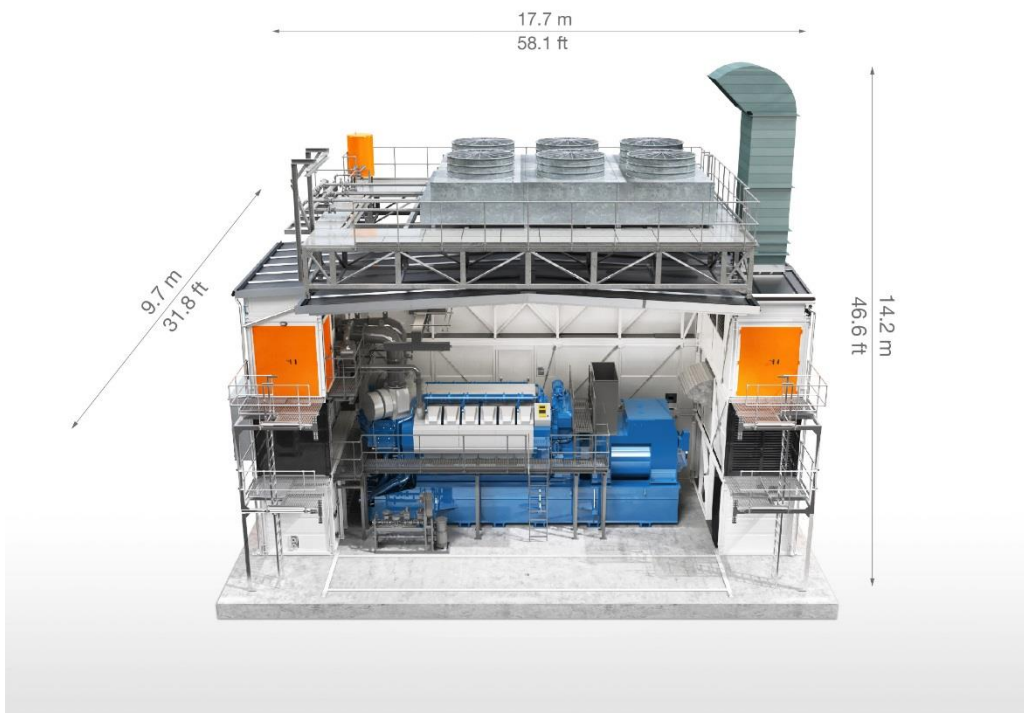


Image2: Wärtsilä Modular Block features pre-fabricated, expandable enclosures for sustainable power generation.

For additional information on the Wärtsilä Modular Block solution, please contact:

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Wärtsilä in brief

Wärtsilä is a global leader in smart technologies and complete lifecycle solutions for the marine and energy markets. By emphasising sustainable innovation, total efficiency and data analytics, Wärtsilä maximises the environmental and economic performance of the vessels and power plants of its customers. In 2018, Wärtsilä's net sales totalled EUR 5.2 billion with approximately 19,000 employees. The company has operations in over 200 locations in more than 80 countries around the world. Wärtsilä is listed on Nasdaq Helsinki.

www.wartsila.com

Wärtsilä Energy Business in brief

Wärtsilä Energy Business is leading the transition towards a 100% renewable energy future. As an energy system integrator, we understand, design, build and serve optimal power systems for future generations. Wärtsilä's solutions provide the needed flexibility to integrate renewables and secure power system reliability. Our offering comprises engine-based flexible power plants – including liquid gas systems – hybrid solar power plants, energy management systems and storage and integration solutions. We support our customers over the lifecycle of their installations with services that enable increased efficiency and guaranteed performance. Wärtsilä has 70 GW of installed power plant capacity in 177 countries around the world.

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