Case Study | Critical Power Generators

Electric Power Generator Sets

Marapco

Perkins and Marapco
keep a Belfast hospital running

There are places in the world that cannot afford to lose power. The Royal Victoria Hospital in Belfast, Northern Ireland, is one of them. The biggest and busiest healthcare site in the region serves hundreds of thousands of patients every year, and 16 fixed generators are needed to ensure power is maintained. Generators kick in when there's a local fault on the power network, like a fallen cable, if there's a network outage from a malfunctioning substation, or if they experience a power blip from a storm.

AC Automation is the company in charge of maintaining, repairing and replacing the hospital's generators, and they've relied on Marapco to supply those generators for 20 years. Recently, AC Automation chose to replace a 30-year-old container with the MP1100E 1100 kVA Marapco generator, powered by a Perkins® 5008 Series engine. "Standby power is critical in hospital applications," says AC Automation director David Callaghan. "In the unlikely event of a power failure, power must kick in immediately so there's no disruption. Lives depend on it."

"A Perkins® 3000 Series engine that had run reliably for 30 years was approaching the end of its lifecycle," says Jonny Ravey, the estates divisional manager for the Royal Victoria Hospital. "Now, the Perkins® 5008 Series engine powers the generator set backing up the centralised boiler house, which maintains the heat and power for the site. It also provides standby power for a central decontamination unit, which sterilises all operating instruments for the site, so the generator is critical."

Key Facts

Customer
Marapco

Project Location
Belfast, Northern Ireland

Engine model
Perkins® 5008

Engine series
750-2500 kVA

Application
Critical Power

OEM website
marapco.com

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Perkins®

Electric Power Generator Sets

The engine behind the generator

The Marapco generator set offers several features that will ensure the Royal Victoria Hospital remains fully operational. With an 1100 kVA Perkins 5008 Series engine, the generator has increased capacity to suit energy needs. The engine is electrical instead of mechanical, giving it better impact loads and transient response. The Perkins 5008 Series is also hydrotreated vegetable oil (HVO) compatible, making it possible to be more sustainable without sacrificing power.

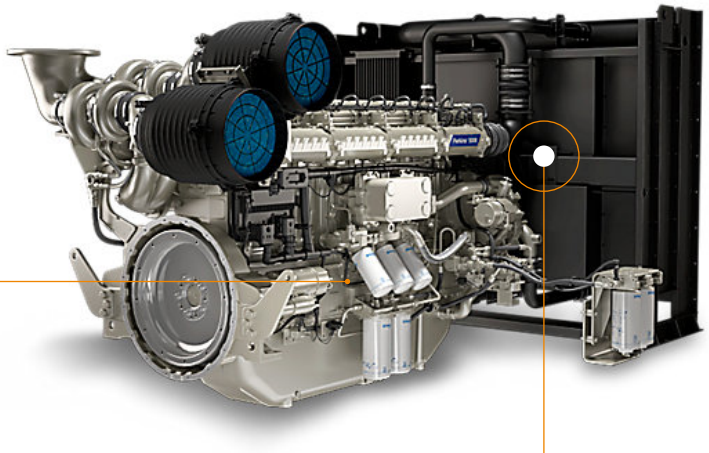
Perkins® 5000 Series engines are ISO 8528-5 G3 compliant, meeting the international standard for excellent power quality and rapid load acceptance. "More and more, we're seeing consultants asking for G3 governing on generators," says David. "There are some projects where G3 governing is mandatory." With extended service intervals and lower fuel and oil consumption, the Perkins 5008 Series engine represents a lower overall cost to the hospital.

The power of a strong collaboration

All three companies, Marapco, AC Automation and Perkins, bring decades of skill and expertise to the Belfast Royal Victoria Hospital project. The years of continued collaboration helped make this project a success.

Marapco wouldn't risk using anything but a Perkins engine. "Our relationship with Perkins goes back 40 years," says Marapco director Keith Johnston. "Perkins engines have proven to be reliable in all applications. Perkins knows our capabilities and limitations, and we know we can rely on them with all the technical applications of their product."

Together, we power ahead.



"Our relationship with Perkins goes back 40 years, and they've proven to be reliable in all applications."

— Marapco director, Keith Johnston

The **1100 kVA Perkins® 5008 Series engine** provides essential power to the Marapco generator, keeping the patients of the Royal Victoria Hospital in Belfast, Northern Ireland, protected. The dependable Perkins 5008 Series engine is HVO compatible, which can lead to better fuel efficiency.

Perkins®