



ROYAL COLUMBIAN HOSPITAL

Reliable backup power for Canada's healthcare system



Case Study

Royal Columbian Hospital



Where

New Westminster, BC



Supply

Qty (2) 3250kW MV gensets based on the QSK-95L engine platform, Power Command 3.3 paralleling controls, IEM switchgear, Asco Transfer Switches.



Purpose

To ensure upgraded, reliable power and equipment is functional and operational as Royal Columbian Hospital moves forward in redevelopment.

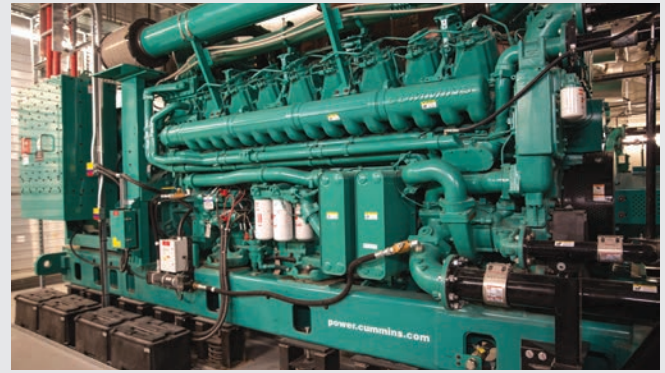
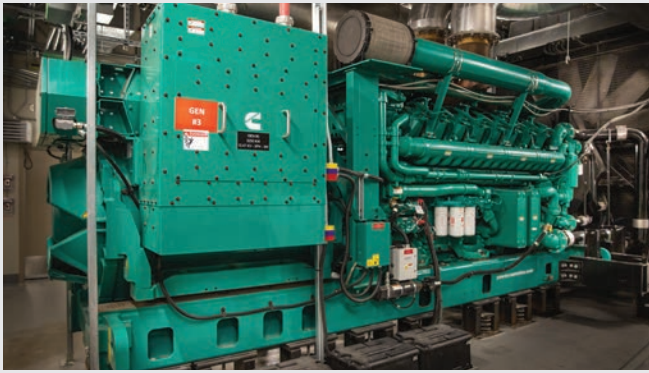
CUMMINS SUPPORTING COMMUNITY THROUGH EXPANSION OF ROYAL COLUMBIAN HOSPITAL AND ENERGY CENTRE ADDITION

Royal Columbian Hospital, founded in 1862, is the busiest in the Fraser Health Authority. It's the only hospital in British Columbia with cardiac, trauma, neurosciences, high-risk maternity, and neonatal intensive care on one site. The hospital is also designated to serve as a post-disaster healthcare facility. The need for reliable, upgraded power sources is critical to the hospital's day to day function and ability to provide critical and often life-saving care in any and all circumstances.

CUMMINS DELIVERS ON COMPLEX REQUIREMENTS

Cummins assisted through the design and build phases of the project expansion and upgrade, ensuring compatibility of all the equipment supplied, leaning on a diverse team including application engineers and electronic specialists. The first phase of this project was the addition of an energy centre along with a 75-bed mental health facility. As space was at a premium, it was necessary for units to fit into confined areas. Cummins provided two QSK-95L engines, the smallest unit in their class, to meet this need while still providing safe, dependable power. These engines were designed with aftermarket support in mind, simplifying serviceability and reducing operating costs. The 16-cylinder engines are comparable to 20-cylinder competitor engines and offer the best fuel efficiency for the rated power output.





With the support of Glenco Electric, Stantec Consulting, IEM and the Fraser Health Authority facilities team, Cummins was able to meet the needs of the client and provide a highly reliable and complete system.

These were the first QSK-95Ls to be installed and commissioned in a Canadian healthcare application. The QSK-95Ls are ready to accept the required facility load in under 10 seconds, as is the healthcare standard. Along with these gensets, Cummins provided Power Command 3.3 controllers as well as several ASCO ATSS, IEM switchgear and a master control system. The new energy centre was initially designed to house four generators, with Phase 1 including the installation of the first two. The design needed to reflect strict requirements factoring in seismic, noise and vibration levels. Emergency standby power also needed to be considered for the hospital's transition to a post disaster facility.

As the hospital is already fully operational, the installation and start-up of the system was complex, with timelines that required a continuous supply of power to the existing facility during the transition. The Cummins provided equipment features the "Power of One" capability whereby all key systems are designed and manufactured in-house, ensuring efficiency and unparalleled reliability.

The third phase of the project will consist of expanding the existing facility and by completion, the hospital will see a 50% increase in the number of available beds.

CUMMINS DELIVERS RELIABLE, DEPENDABLE BUSINESS SOLUTIONS

Superior uptime and productivity are just two of the ways Cummins generators outrun and outperform competitor products. With 25,000 hours of life to major overhaul, our generators' midlife overhaul is very minor compared to our competitors and our products are able to accept 100 percent of nameplate-rated load in a single step.

Demonstrating extensive and impressive teamwork, collaboration between the Cummins sales and service support groups is present every step of the way, from design to the final installation. The sales and service support teams worked together to ensure that this project moved forward swiftly without major disruptions. Cummins built strong, genuine relationships with everyone involved in the program—from engineers to contractors—and worked closely with the supplier of the switchgear and controls, and the client to determine requirements and ensure functionality before installation.

Meetings were held between engineers, design, contractors, consultants, and Fraser Health facilities management to ensure all design criteria were met and the entire Cummins team provided support every step of the way, promptly problem-solving any issues that arose.

POWER GENERATION SALES AND SERVICE TEAMS SUPPORT LOCAL COMMUNITY

Cummins is proud to have been able to support the Royal Columbian Hospital with the best in customer support and tools towards serving the city of New Westminster, the province, and the community that depends on it most. Cummins continues to provide customers with the solutions to keep its healthcare customers Always On.

If you would like to learn more about our team of specialists and how we can support your Healthcare facility, please visit:

cummins.com/na/sales-and-service



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