



MISSION CRITICAL PUMP UPGRADE

A COMMERCIAL
FACILITY INSTALLATION

Armstrong completed an overnight booster upgrade to the potable water system at a 24/7 telecom and media complex. The retrofit reduced energy use by 65%, reducing greenhouse gas emissions by 27 tons per year.

“The payback analysis is off the charts. I highly recommend this new technology.”

Clyde Stanley
Rogers' Real Estate
Specialist for Mission
Critical Infrastructure

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Rogers Mount Pleasant Retrofit

The Design Envelope 6800G Vertical Multi-stage Booster is a fully assembled, programmed, factory-tested solution with advanced variable speed controls that respond to demand in real time for superior energy savings and return on investment.

Background

In recent years, Rogers Communications has been consolidating and connecting several buildings housing television studios, data, and administration operations, around its main office in downtown Toronto. Armstrong first installed a domestic water pump system in the 17-storey tower in 1991, and by 2019, it was time for an upgrade. Given the mission-critical nature of the wireless telecom, internet, television and media operations, the building is a challenging environment in which to perform mechanical upgrades.

To prepare for the retrofit, there were five coordination meetings, a highly detailed nighttime switch-over plan, dry run tests to eliminate uncertainties, and a requirement that all equipment, tools, and supplies for the job be received and in place before the work began. Additionally, the Energy Upgrade team conducted a site audit that provided data to support sizing of the replacement booster and related equipment. The team also assisted with managing the energy upgrade process and applying for incentives.

The new low-flow, high-head, Intelligent Variable Speed booster system was well-suited to the application. For the Rogers facility, energy efficiency and low maintenance requirements are critical, installation space is at a premium, and occupant comfort is a priority.

The booster system included two 20hp vertical multi-stage pumps, which replaced three 40hp pumps. The system now responds instantly to the needs of building occupants by varying the pump speeds and sequences. The retrofit project will save tens of thousands of dollars in operating costs annually and will reduce annual greenhouse gas emissions by 27 tons. The project qualified for more than \$20,000 in government energy incentives and is expected to provide a full payback in just 2 years.

Tech-info

- Design Envelope 6800G
Vertical Multi-stage Booster system