

ALERTS PROTECT SAVINGS

AN EDUCATIONAL
FACILITY INSTALLATION

Pump Manager helped to quickly identify the cause of a potential motor overload, saving energy and safeguarding the system. Design Envelope pumps contributed to electricity savings of 40,000 kWh per month

Brant Haldimand Norfolk Catholic District School Board

Design Envelope technology is an intelligent, connected solution that tracks actual system conditions, and dynamically adjusts equipment operation. Pump Manager, a cloud-based service that leverages the intelligence of Design Envelope pumps, allows operators and managers to actively manage the performance of an HVAC system.

“We can really get a good view of how the system is performing by reviewing the data from Pump Manager”.

Andrew Kirkbride

Supervisor of Capital & Sustainability

Background

The Brant Haldimand Norfolk Catholic District School Board, in Brantford, Ontario wanted to upgrade twelve 28-year-old Armstrong pumps as part of an energy savings program to update their heat pump system. The School Board accepted the recommendation to use Design Envelope pumps, plus a subscription to the Pump Manager performance tracking service.

With the installation completed, the School Board's Supervisor of Capital & Sustainability, Andrew Kirkbride, was able to receive real-time notifications regarding pump operations and energy usage. Not long after the installation, Pump Manager identified unusual behavior in the pumps and sent a notification to Andrew, who then reached out to Armstrong for support. The data in Pump Manager showed that the pumps were handling much higher flow rates than the system design called for – a system condition that might have quickly led to an overload, and equipment damage.

Andrew visited the site to find the cause and discovered a bypass line had been mistakenly left open. Thanks to the timely notification provided by Pump Manager, normal operation was quickly restored. This simple act alone saved the School Board \$1000/month in energy costs.

Commenting on the energy upgrade project, Andrew noted, “We knew the existing pumps were outdated, and it was time to replace them with more efficient technology. The new Design Envelope pumps have exceeded our expectations for energy savings, and I've also been able to troubleshoot issues remotely. We can really get a good view of how well the system is performing, just by reviewing the data provided through Pump Manager”. Upgrading the pumps helped to improve HVAC comfort in the facility and made a key contribution towards reducing overall energy consumption by 40,000 kWh per month.

Tech-facts

Equipment list

- 6 x Design Envelope 4300 15-40 HP Pumps
- 6 x Design Envelope Permanent Magnet 4380 5-7.5 HP Pumps
- Pump Manager

TORONTO

+1 416 755 2291

BUFFALO

+1 716 693 8813

DROITWICH SPA

+44 121 550 5333

MANCHESTER

+44 161 223 2223

BANGALORE

+91 80 4906 3555

SHANGHAI

+86 21 5237 0909

BEIJING

+86 21 5237 0909

SÃO PAULO

+55 11 4785 1330

LYON

+33 4 26 83 78 74

DUBAI

+971 4 887 6775

JIMBOLIA

+40 256 360 030