

ARMSTRONG 

VERTICAL PUMPS SAVE SPACE AND ENERGY

A COMMERCIAL
FACILITY INSTALLATION

An HVAC pump retrofit boosted efficiency and reduced energy consumption. The payback period for the project was less than two years.

“The performance reports and messages provided by Pump Manager are very helpful. Plus, the team at Armstrong is always available if we have questions.”

Resort 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

FRANKFURT

+49 6173 999 77 55

Caribbean Resort

Design Envelope Vertical In-Line pumps require less floor space (as much as 60%) than other pump configurations. The Pump Manager service provides alarms, alerts and performance analysis to support optimal efficiency and occupant comfort.

Background

In 2018, the HVAC system at a popular holiday resort suffered a series of failures and leaks, resulting in frequent downtime. An initial review determined that the existing pumps were the cause and had to be replaced. The review also noted that the pumps were oversized, which affected system efficiency. With the resort occupancy rates near 95% for most of the year, HVAC performance and reliability are crucial, so managers decided to go ahead with an upgrade.

Because local rates for electricity average \$0.28 per kilowatt-hour (kWh), the project represented an opportunity for the resort to reduce energy costs as well as carbon footprint. After assessing the HVAC system, Armstrong recommended Design Envelope Vertical In-Line pumps to replace the existing primary and secondary pumps.

The team at the facility was impressed by the space savings created by the Vertical In-Line design and noted that subscribing to the Pump Manager service made it easier to track equipment status and performance. “Since our hotel is located on an island, we need a system that’s easy to maintain. The performance reports and messages provided by Pump Manager are very helpful. Plus, the team at Armstrong is always available if we have any questions.”

The upgrade project provided a simple payback of less than two years and saves over \$170,000 annually. The management team at the hotel is very focused on reducing carbon footprint, so the annual energy savings of 558,000 kWh are

an important measure of success. With the reduced energy usage driving cost savings, the upgrade project generated a simple payback in less than two years.

Tech-info

- Design Envelope 4300 Vertical In-Line Pumps
- Pump Manager Subscription