

SAVINGS AND SERENITY

A DISTRICT HVAC
INSTALLATION

The energy consumption of the plant was reduced by 10%, for a savings of over 1.2 million kWh per year. Operating efficiencies are 30% better than the levels commonly seen in traditional air conditioning systems

Improved pump energy efficiency reduces the overall carbon footprint of this district-scale mechanical system.

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

South American Urban City

The Armstrong Integrated Chilled Water Plant Control System (IPC) boosts the energy efficiency of new and existing chiller plants. The IPS 4000 is an advanced multi-zone control that can be directly integrated with pumping units to optimize energy performance, system handling, and installation.

Background

When administrators of an urban community in South America wanted to increase energy savings and minimize CO₂ emissions, Armstrong was invited to contribute to the project. The team recommended installing a Design Envelope IPC 11550, a Design Envelope IPS 4000, and Design Envelope Vertical In-Line 4300 pumps.

The energy consumption of the plant was reduced by 10%, for a savings of over 1.2 million kWh per year. Operating efficiencies are 30% better than the levels commonly seen in traditional air conditioning systems. The use of Design Envelope Vertical In-Line 4300 pumps also reduced space requirements in the mechanical room, making maintenance easier.

The community is expected to see significant growth in the years to come. Current plans call for an additional 9000 housing units, and the hospital is expected to grow to over 400 rooms from the current 150. Building an expansion plant is also in the plans to supply the energy demands of the growing city, and Armstrong will be there to optimize the HVAC systems.

The real estate management firm behind building the urban city states "The Thermal District is a system that provides efficient air conditioning for buildings and spaces. Heating, cooling or hot water services are provided in a sustainable manner that also lowers costs for users."

Tech Info

- Design Envelope 11550 Integrated Plant Control System
- Design Envelope Integrated Pumping System 4000 (2)
- Design Envelope 4300 Pumps (25)
- Expansion Tanks
- Suction Guides
- Flo-Trex Valves