



After the upgrade project, the chilled water system in Hotel Unique uses 41% less energy. That represents a 25% reduction in total energy consumption for the hotel.

"We started 2018 with a major challenge: reduce energy costs and improve reliability. The success of the project was the result of great collaboration."

Giovani Nicotra Maintenance

Manager Hotel
Unique

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Hotel Unique, Sao Paulo, Brasil

Armstrong Design Envelope 4300 Vertical In-Line (VIL) pumps offer unmatched flexibility and cost efficiencies, plus industry-leading capabilities for control and connectivity.

Background

Distinctive features, exquisite architecture and stunning views of São Paulo and Ibirapuera Park are a few of the remarkable highlights that set the Hotel Unique apart. Its 95 rooms and 10 suites boast enormous circular windows that provide a panoramic vista of the Jardins area. On the roof, the hotel features the Skye restaurant managed by the famous chef Emmanuel Bassoleil.

While beauty, service, and gastronomy are the outward hallmarks of the hotel, the owners take their environmental responsibility just as seriously and recently committed to upgrading the hotel's HVAC systems to reduce energy consumption.

Installation

Completing the Chilled Water Plant retrofit project while maintaining the uninterrupted operation of their resort was a priority for the hotel's engineering team, so they called on Star Center Solucoes en Climatizacao Ltda to implement the extensive plans designed by EPT Engenhanria.

Consulting with the hotel's engineering team, Star chose an energy-efficient system that included seven Design Envelope 4300 Vertical In-Line (VIL) pumps.

In addition to adding two new Daikin water chillers specially designed to reduce noise levels, the team replaced the primary chilled-water centrifugal pumps with 3 Design Envelope 4300 VIL pumps. Lastly, as part of retrofitting the entire hydronic circuit, another 4 Design Envelope 4300 VIL pumps were installed to replace the existing constant speed pumps in the secondary circuit.

Benefits

The combination of inspiring design ideas and energy efficient systems have elevated the status of Hotel Unique to the point where it is recognized as an impressive architectural work that is both efficient and sustainable. Leveraging Armstrong's Design Envelope technology the hotel reduced its HVAC energy consumption by 41%. This represents a 25% reduction in energy use and related carbon footprint, for the entire hotel.

Tech-info

The retrofit project involved installation of:

- 3 Design Envelope Vertical In-Line Pumps primary chilled water (2 duty and 1 stand-by)
- 4 Design Envelope Vertical In-Line Pumps secondary chilled water (1 duty and 1 stand-by for each of two circuits)