

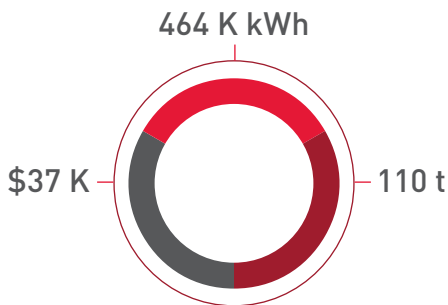
▶ Grand Hyatt Tampa, USA

GRAND | HYATT™

Savings

3.5 Year ROI

Through the energy savings realized, the entire project will be paid for in three and a half years



Every year, this renovation will save 464,000 kWh of electricity, and reduces CO₂ emissions by 110 tons. All of this adds up to an annual savings of \$37,000.

Partner



Since 1995, Advanced Automation Systems, Inc. (AAS) has been assisting schools, hospitals, cities, counties, airports, private developers, churches and the military with the automation of all the various systems within the buildings they manage. AAS is a full service building automation contractor serving the West Coast of Florida and a factory authorized representative for Delta Controls.

Overview

Vertical
Hospitality

Site build
Retrofit

Site size
226, 700 sq. ft.

The 13 story Grand Hyatt Tampa Bay hotel is located inside a 35 acre nature preserve just outside downtown Tampa, Florida. Recently, a \$16 million dollar renovation was completed that has ensured the Grand Hyatt's reputation for being one of Tampa's premiere luxury hotels.



The Challenge

Advanced Automation was given a challenge by Stewart Engineering Consultants Ltd. of Sarasota Florida and the owner, UBS; provide the hotel occupants complete temperature control of their rooms while still maintain humidity control in all 400 rooms without using supplemental heat.

The Hyatt was having difficulty with providing a completely hypo-allergenic sleeping environment due to elevated humidity levels.

The tropical environment on the West Coast of Florida can overtax most BMS systems. Hotels always present an added complexity by needing to satisfy the hundreds of different environmental needs for each guest room independently while still maintaining overall control of the building's central systems and reducing overall energy expenses as much as possible.

With a yearly average 74% relative humidity, traditionally the only option was a reheat dehumidification system.

While effective, the energy cost is prohibitive through over-cooling then reheating air back to the user's setpoint rather than simply being able to control the temperature directly. There had to be a better way.

To find out how Delta overcame this challenge, please turn over. →

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We've been really impressed with how Advanced Automation Systems were able to solve our problems using Delta Controls, and are happy we made the switch. We are looking forward to similar success through our next renovation phase.

Timothy Hotter

Senior Director of Engineering,
Grand Hyatt

Tampa, Florida, USA

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The Solution

A two-part plan was implemented both to deal with each room individually as well as centrally dehumidify at the main rooftop air handlers. In the guest rooms, the fan coil cooling coils were replaced allowing more capacity to remove more moisture while new HPT heat pipe systems were added to the existing air handling units. AAS provided a complete control package including modulating chilled water valves and humidity sensing via Delta's DNS-H24 space sensors, DAC-322 controllers installed in each room's fan coil unit and eBCON modular controllers within the central plant. All hardware comes back to a new ORCAview operator workstation located in facilities complete with a dynamic 3-D graphic package.

eBCON

- Modular central system controller

DNS-H24

- Network thermostat with on-board RH

DAC-322

- Small form-factor programmable controller

ORCAview

- Powerful local operator workstation

The Benefits

Simply being able to enter a guest room without feeling moisture in the soft furnishings was of course the primary goal. What was delivered exceeded this goal by a wide margin.

\$37,000 will be saved yearly. Even when the humidity is above 75% and temperatures are soaring the guest rooms at the Grand Hyatt are always a comfortable 60% RH. The only way this could be achieved is through the new control strategy implemented by AAS.

One of the key selling feature for Grand Hyatt hotels is their PURE - Hypoallergenic Rooms. Through PURE's filtration processes coupled with the complete BMS control package by AAS, 99% of pollutants are removed from the guest rooms and can provide the highest air qualities to their guests. Without the ability to control the humidity within the guest rooms, there is no way that the hotel would be able to achieve the high standards that PURE sets out.

The Results

From the first three test rooms, AAS has been granted not only the guest rooms, but all ongoing renovation phases throughout the entire facility and associated private suites. The next phases at the Tampa Grand Hyatt will be common areas and conference room air handlers. From there, work has also been scheduled for extensive BMS renovations at the neighbouring Bayport Plaza.

By the numbers, this has been an astonishing success:

- 464,000 Kilowatt hours saved each year
- \$37,000 in yearly savings
- 110 ton reduction in CO₂ emissions
- 3.5 year ROI



To find out about our purchasing models

Contact us now on 1-604-574-9444

Alternatively visit our website at www.deltacontrols.com

