

# Customer Success Stories

Starwood's Sheraton Hotel Stamford

## The Customer: Starwood's Sheraton Hotel Stamford



Sheraton operates over 400 hotels and resorts in 70 countries around the globe and is the largest of the Starwood brands. Keeping its guests comfortable and serving the freshest food and beverages are essential elements of the Sheraton customer experience. Controlling energy costs helps Sheraton maintain its high standards of excellence while ensuring the continued profitability of its hotels.

## The Challenge:

Starwood wondered how it could reduce overall energy consumption, while maintaining Sheraton's high standards for guest comfort. Predictable temperature performance was essential. Intellidyne® suggested that it consider a pilot program at a single property to prove whether or not the *IntelliCon*® could have a material impact on its operation and uphold its standards for customer excellence.

**Facility:** Hotel.

**Location:** Stamford, Connecticut.

## The Products Used:

*IntelliCon-RU* - Light-Refrigeration Unit Electrical Consumption Economizer

*IntelliCon-HW* - Hot Water Heating System Fuel Economizer

Two (2) *IntelliCon-RU* controls were installed on two (2) different Copeland water-cooled refrigeration systems including one (1) walk-in refrigerator for produce and fresh meat and one

(1) walk-in freezer for frozen foods. 14 *IntelliCon-HW* controls were installed on three (3) banks of multi-purpose HydroTherm® hot water boilers responsible for the generation of domestic hot water for the facility. These 14 boilers generated 4.2 million BTU in heating capacity.

All systems were operational on a 24x7 basis throughout the testing period. The *IntelliCon-RUs* were tested over a 32-day period from November 11, 2003 until December 21, 2003. The boiler testing ran from January 9, 2004 through March 2, 2004, for a total of 54 test days. There were a number of boiler problems observed during the test period. These problems were attributed to factors external to the installation and use of the *IntelliCon* controls. In spite of these problems, the *IntelliCon-HW* continued to perform as designed.

## The Results:



**Energy Savings:** In all cases, the *IntelliCon* controls provided tangible energy savings with no change to the maintained temperatures and comfort levels in the hotel. Hotel staff confirmed that there was no noticeable difference in the water temperature maintenance. Furthermore, they confirmed that there was no degradation of temperature maintenance in the refrigerator and the freezer.

In addition, the *IntelliCon* controller reduced on/off cycling by 58.1% on the 14 domestic hot water boilers. This large reduction in boiler cycles will extend the operational life for these systems, while also reducing their attendant maintenance costs.

Customer Unit	<i>IntelliCon</i> Control	Measured Reduction in Energy/Fuel Consumption
---------------	---------------------------	---

HydroTherm Boilers	HW	10.78%
--------------------	----	--------

Customer Unit	<i>IntelliCon</i> Control	Measured Reduction in Cycle Time
---------------	---------------------------	----------------------------------

Copeland Walk-in Refrigerator	RU	12.59%
-------------------------------	----	--------

Copeland Walk-in Freezer	RU	11.20%
--------------------------	----	--------

**Payback Period:** Based on these test results, Starwood can expect a payback on its *IntelliCon* control investment (ROI) in less than 12 months.

**Final Notes:** Prior to, and throughout, the testing period, the hotel had experienced intermittent domestic hot water availability problems. These tests proved conclusively that *IntelliCon* controls continue to save energy even when the system is hampered by a mechanical problem.