

Restaurant upgrades to high efficiency walk-in refrigeration solution

Summary

Bertucci's Italian Restaurant, a full-service restaurant operating over 80 locations, chooses Emerson Climate Technologies to lower energy bills and earn a utility rebate covering up to 50% of project costs.

Customer

Medford Wellington, a leading New England specialty HVAC/R and facilities contractor since 1967.

Application

Refrigeration systems for walk-in coolers and freezers.

Challenge

With aging refrigeration systems, Bertucci's shifted its attention toward planning to improve critical operating systems, with a focus on more efficient and sustainable solutions. Bertucci's turned to Medford-Wellington, who helped identify several key opportunities:

- Walk-in refrigeration systems employed traditional, less efficient technologies, while electricity rates had climbed to their highest levels, averaging \$0.16 or more per kWh
- Though capital budgets for equipment upgrades were constrained, utility companies offered valuable rebate incentives for proven energy-efficient technologies
- Some walk-ins required an increasing number of service calls, raising annual service maintenance expenses above average at certain locations
- While existing systems were generally reliable, when a failure did occur, repairs would take longer to perform than normal due to system design, adding to service costs



“Medford Wellington and Emerson have helped us start saving on our energy costs, and the new systems are operating virtually maintenance-free.”

Kevin Bakas, Sr. Director of Construction
Bertucci's Italian Restaurant

Solution

New energy-efficient refrigeration equipment is available for walk-in systems, but even with a two-year payback or less for the price premium, many operators remain reluctant to make the added upgrade investments. In order to demonstrate expected savings and ROI to their customer, Medford Wellington enlisted Emerson Climate Technologies for assistance on a field trial study of the new Copeland Scroll® Outdoor Condensing Unit (XJ Series) at Bertucci's restaurants. The XJ unit's performance and energy savings were measured for nearly a year in comparison to existing standard equipment.

In addition to the XJ unit upgrade, Medford replaced the hot gas defrost with a more suitable defrost scheme, and installed evaporator fan units with more efficient ECM motors. Energy efficiency of the entire system was improved beyond initial expectations, allowing for application to the regional utility company for a valuable custom energy rebate incentive toward future upgrade investments.

Result

- The Copeland Scroll Outdoor Condensing Unit accounted for approximately 35% annual energy savings when compared to legacy technology units
- Built-in CoreSense™ Diagnostics will allow Medford's technicians information to quickly and accurately troubleshoot any issues, avoid unneeded service calls, and protect the system from premature failure
- Bertucci's anticipates 50% or more in energy savings from each system upgrade
- A custom utility rebate was approved for up to 50% of total installation costs, significantly improving projected ROI for subsequent equipment upgrades
- Bertucci's is working toward a planned phase-in of the Copeland Scroll XJ units to accelerate improvements in bottom-line financial performance

Resources

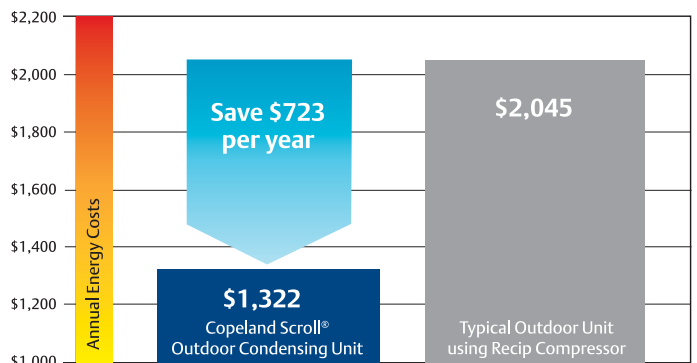
Learn more about the Copeland Scroll Outdoor Condensing Unit at: EmersonClimate.com



"The Copeland Scroll XJ enabled us to earn up to a 50% rebate through our local utility because of its high energy efficiency."

Jay Annarelli, General Manager
Medford Wellington Service Co. Inc

Annual Savings with Copeland Scroll® Outdoor Condensing Unit



* Source of savings estimate – lab testing and AEER analysis of 1.5HP medium temperature units in Climate Zone 2 at \$0.16/kWh. Results may vary depending on system and location. Complete details and energy calculator available at EmersonClimate.com/copelandoutdoorunit

EmersonClimate.com