



INTELLI-HOOD®

KEY SAVINGS



Total Energy Savings

\$25,081/Year



Carbon Dioxide

112,507 lbs/Year



Simple Payback Period

2.8 Years



Operating Expense Reduction

52%

Overview

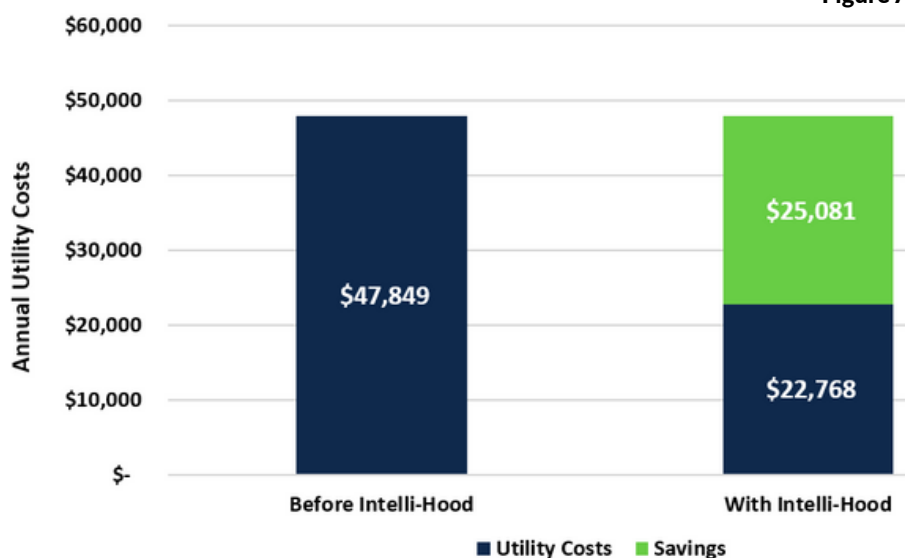
Iberostar Royal Andalus Hotel, situated in the picturesque city of Cadiz, Spain, sought to enhance energy efficiency and sustainability in its commercial kitchen operations. In pursuit of this goal, the hotel management decided to install Intelli-Hood's Demand Control Kitchen Ventilation (DCKV) system. This case study delves into the optimized installation process and evaluates the outstanding performance results achieved post-implementation.

Implementation

The installation of Intelli-Hood's DCKV control system was meticulously planned to ensure minimal disruption to the hotel's daily operations. Recognizing the importance of avoiding peak hours, the installation team strategically executed the project during non-operational periods. This approach not only prevented interference with staff routines but also guaranteed a seamless experience for customers, ensuring their comfort and satisfaction.

Annual Kitchen Hood Utility Costs (USD)

Figure A



Iberostar Royal Andalus Buffet & Dining Area

Figure A compares the annual utility costs prior to Intelli-Hood's installation vs. after. The graph highlights the savings achieved by Intelli-Hood's DCKV installation.

Performance Results

The presented performance results illustrate Intelli-Hood's effectiveness and the positive impact of the installation of DCKV controls.

Utility Cost Savings: Before the implementation, the hotel faced an annual utility cost of \$47,849 for kitchen ventilation. With the integration of Intelli-Hood, the new utility cost significantly decreased to \$22,768. This substantial reduction resulted in an annual savings of \$25,081. The cost-effective influence of Intelli-Hood on utility expenses highlights its efficacy in optimizing energy consumption and fostering financial efficiency for the hotel.

Operational Savings: Iberostar Royal Andalus Hotel achieved an impressive 52% reduction in operational expenses through the implementation of Intelli-Hood, demonstrating a significant cost-savings. With a simple payback period of 2.8 years for the project's installation, the hotel swiftly recouped its investment, thereby affirming its value as a sound investment.

Fan Speed Profile: The hotel maintained an average fan speed of 61%, enabling the fan to minimize wasted energy. Intelli-Hood's system increased fan speed in response to

heightened cooking demand and decreased it when the demand subsided, showcasing an intelligent and responsive approach to energy consumption tailored to the kitchen's needs.

CO2 Annual Savings: The adoption of Intelli-Hood enabled the hotel to achieve a noteworthy reduction in its annual carbon dioxide emissions by an impressive 112,507 lbs/year. This substantial decrease serves as a testament to Iberostar Royal Andalus's commitment to environmental stewardship.

Conclusion

The installation of Intelli-Hood's DCKV control system at Iberostar Royal Andalus Hotel, stands as a testament to the transformative impact of cutting-edge technology on energy efficiency and sustainability. With substantial utility cost savings, a swift payback period, and a remarkable reduction in carbon emissions, Iberostar Royal Andalus has not only enhanced its operational efficiency but also demonstrated a commitment to environmental responsibility. The success of this project serves as an inspiring model for other hospitality establishments seeking to balance operational excellence with environmental consciousness.

Iberostar Royal Andalus - Average Fan Speed

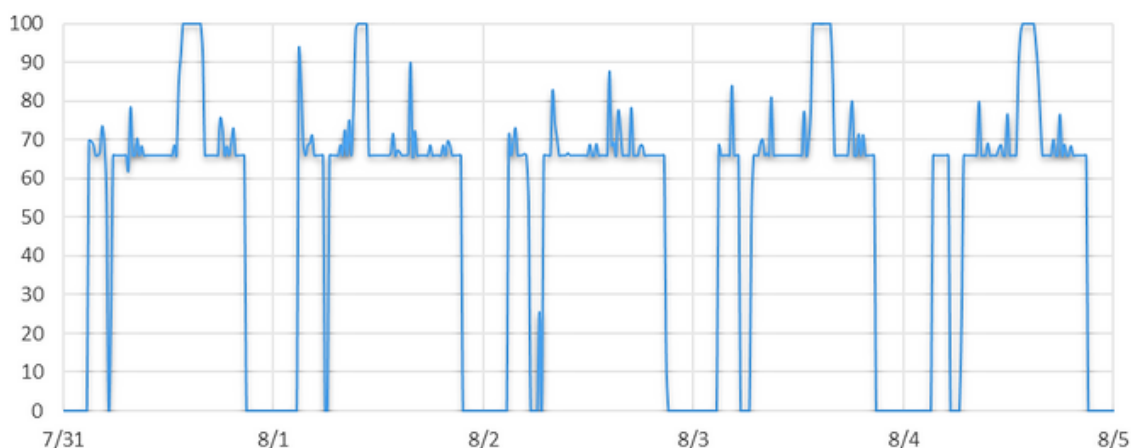


Figure B depicts the hotel's commercial fan speed profile over the course of six days. The average was 61%. The spikes in the fan speed represent the increase of cooking demand and the dips represent the decrease of cooking demand.