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case study



ARLAN'S MARKET Galveston, Texas

BETA testing results show Hussmann Insight cases up to 54% more energy efficient; temperature performance up to 69% tighter

Arlan's Market, a family-owned business, with thirteen locations throughout south Texas, believes that continuous improvement is one of the keys to success. This belief is demonstrated in a variety of ways, from the renovation and remodeling of its stores to giving its customers a relaxed shopping atmosphere.

Arlan's Market also prides itself in providing customers with high-quality products throughout its stores, and in particular in the meat department, which offers select cuts of beef, fresh chicken and pork. Because Arlan's is committed to continuous improvement and providing the best for its customers, they immediately agreed to participate in a BETA test of Hussmann's new Insight display cases, scheduled to be launched and sold in Latin America.

Challenge

Like Arlan's Market, Hussmann also believes in continuous improvement. For over a hundred years, Hussmann has been introducing innovative products and services to help food retailers become more effective. Hussmann's innovative process always begins with listening, and the company began the development of its new Insight case line by doing just that. Hussmann listened to retailers to understand the challenges they were facing, the opportunities they saw for their stores, and the concerns they had about how to make their businesses more successful.

Through its research, Hussmann identified several key customer needs, with regards to display cases. Food retailers want help maintaining and improving the quality of the food in their stores. They seek display cases with improved energy efficiency and structural integrity that can be easily cleaned and maintained. They also want displays that attracted shopper attention and entice them to buy.

Solution

Applying the insights gained from customer and consumer interviews, the Hussmann new product development team went to work to develop a leading-edge display case platform that would give retailers what they needed most. The new Hussmann Insight cases were designed with the AdvantaChill™ Performance Package, a combination of breakthrough technologies working together to give retailers a competitive advantage in both energy efficiency and temperature stability. AdvantaChill includes advancements in air flow, fans, coils and lighting.

Validating laboratory results in real world conditions

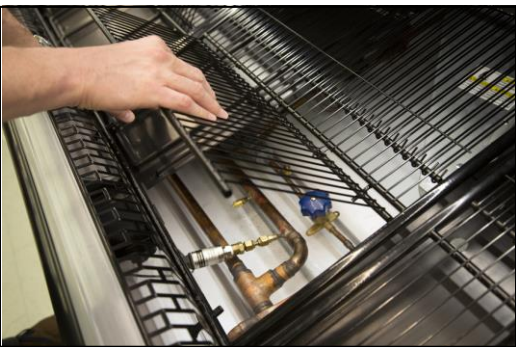
After successful completion of laboratory testing on the new Insight merchandiser, Hussmann sought locations for BETA testing to evaluate case operation in a real life environment. Since the new product line would be launched in Latin America, Hussmann engineers wanted to complete the BETA testing at a store location with ambient conditions consistent with those found in Latin America. Arlan's Market in Galveston, Texas, was selected for the testing.



The Insight case features an innovative coil design that requires 30 percent less refrigerant and will accommodate more environmentally-friendly natural refrigerants to help reduce carbon footprint.



With tighter temperature performance, meats stay fresh longer. Standard LED lighting enhances product appeal.



Folding wire racks eliminate the need to pull an entire section when servicing the case, helping to reduce service time.

BETA testing methodology

Arlan's management was agreeable to a plan to replace its aging cases with Insight cases to run a three-month BETA test, after which new Hussmann Excel cases would be installed. The plan gave Hussmann the opportunity to test the store's old cases prior to their removal, test the BETA Insight cases and then test the Hussmann Excel cases to compare energy and temperature performance of the three cases.

The existing cases, made by another manufacturer, were monitored for energy and temperature performance before they were replaced with five 12-foot Insight medium temperature, multi-deck meat cases. As with the old cases, the Insight cases were monitored for energy and temperature performance for 90 days, before being replaced with Hussmann Excel cases, which were monitored for comparison.

Results

Hussmann Insight cases outperformed older model competitor cases and Hussmann Excel cases in BETA testing at Arlan's Market. The BETA testing results showed the Insight cases to be 54% more energy efficient than the competitive cases and 31% more energy efficient than the Excel cases. The Insight cases outperformed both the older models and Excel cases on fan energy by 10%. The testing also showed the Insight cases to hold 39% - 69% tighter temperatures than the older cases and 26% - 52% tighter temperatures than Excel.

Besides energy and temperature performance, the Insight cases also offer structural and service benefits. "The structure of the case will allow less deflection, which will provide for a better finished product after cases are loaded, the bottom pan design prevents leaks at the joints and the evaporator motor system with variable speed options seems to work well," said Jeff Jenkins, of Service Refrigeration, a Hussmann distributor that provided contracting support on the project. "There are also several design features that will reduce service and maintenance time, such as the drain system which will help prevent drains from being clogged. Several of our field guys also like the folding wire racks, which eliminate the need to pull an entire section when servicing the case."

"Our red meats are lasting longer, so we are throwing less away," said Arlan's Market store manager, Robert Chazaro. "With the LEDs, the presentation of the meat was much better. The beef looked bright and red and the pork pink. It's something our customers noticed right away."