Case Study

Royal Farms Cuts Product Loss and Power Consumption with Hillphoenix's AdaptaPac Parallel Refrigeration System

Convenience store chain saves money and boosts sustainability with supermarket-style refrigeration system scaled for small formats

Background: Freshness is a hallmark of Royal Farms, a business that began in 1918 as a milk delivery service and today is a convenience store chain with more than 160 stores throughout Delaware, Maryland, Pennsylvania and Virginia. The Baltimore-based company prides itself on

the quality of the "Good to Go" foods it provides to busy customers. Royal Farms' motto is Real Fresh...Real Fast...Real Green.

Challenge: Company leaders were frustrated when chronic refrigeration equipment failures increased costs because of product losses and frequent repairs. In addition, a hodgepodge of refrigeration equipment from different vendors complicated maintenance. In its newest stores, Royal Farms wanted to standardize refrigeration equipment using a single, reliable vendor.

"Since we installed AdaptaPac, our electricity costs have dropped by about 38% in those stores.

Most importantly, we haven't had any product loss from refrigeration failures."

— Christian Ritchie, Royal Farms Facilities and IT Leader

After exploring several options, the company chose to partner with Hillphoenix and became the first convenience store chain to install the AdaptaPac commercial refrigeration system. It's a scaled-down version of the parallel refrigeration systems Hillphoenix provides to supermarkets.

Solution: By choosing a single refrigeration system with two compressors, Royal Farms reduced its risk of product loss. If one compressor goes out, the second one takes over — keeping foods chilled or frozen for a few hours so repairs can be made and product won't be ruined.

The new refrigeration system furthered another Royal Farms goal: sustainability. The company uses green-building materials and methods for construction. (A section of Royal Farms' website spotlights Royal Farms' LEED-certified projects.) It sells and uses alternative fuels and is adding electric-vehicle charging stations to several stores around metro Baltimore. AdaptaPac's ability to reduce refrigeration-related energy consumption and costs by at least 30% aligned with Royal Farms' environmentally friendly business practices.

In addition, Royal Farms liked the fact that the small-format refrigeration system used space efficiently and offered design flexibility. Royal Farms' newest stores follow a standard layout, but some are "left hand" stores, and some are "right hand" stores. Adatapac could be configured to fit both designs.

Results: "Hillphoenix accommodated our design and responded quickly to project changes," said Christian Ritchie, Facilities and IT Leader for Royal Farms. "Since we installed AdaptaPac, our

electricity costs have dropped by about 38% in those stores. Most importantly, we haven't had any product loss from refrigeration failures in those stores."

About Hillphoenix

Hillphoenix Inc., a Dover Company, is based in Conyers, Georgia. The company designs and manufactures commercial refrigerated display cases and specialty products, refrigeration systems, integrated power distribution systems and walk-in coolers and freezers. Visit www.hillphoenix.com or call 800-283-1109 for more information.