CASE STUDY

Tech-Savvy Carton Manufacturer Tracks Pallets in Real Time with RFID.

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Background

A third-generation, family-owned company for more than 70 years, Accord Carton produces unique folding cartons designed to help customers best showcase their products. Headquartered in Alsip, Ill., with an additional location in Grand Rapids, Mich., Accord Carton delivers quality-finished cartons to companies in a variety of industries, including food and beverage, pharmaceutical, and personal care.

Challenges

Accord Carton has always sought to invest in the latest technologies to ensure that it has the tools to fulfill its customers' packaging needs. Equipped with some of the most state-of-the-art technology, the company's facility in Alsip is a crane-served, high-density, high-storage warehouse that uses robots to move pallets to the conveyors to prepare for distribution.

Despite its existing automation technologies, Accord Carton realized it needed a more efficient method of data capture and entry. While the company was able to automatically confirm that a pallet met the dimensions of the racking system, its workers had to manually record the human-readable data off of a load tag and enter it into its warehouse database. Because this process was time-consuming and put Accord Carton at risk for errors, the company wanted to remove the manual data entry process and grab a key identifier that would allow it to seamlessly link databases. In addition, Accord Carton was unable to produce pallet-level reports and lacked valuable, real-time insight into its inventory.

AT A GLANCE

Background

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Connected

RFID pallet-tracking system from Barcoding, consisting of RFID RealView™ software and Impinj RFID readers.

System integration with existing ERP and WMS databases.

Results

Obtained the ability to track and monitor pallet movement in real time. Eliminated time-consuming manual data entry and reported the most accurate inventory levels to date.



Solution

Although Accord Carton's system was capable of producing barcodes, the nature of its product, the different pallet types, and their inability to utilize fixed tags led the company to determine that an RFID pallet tracking system would be the best-fitting solution. To help bring its plans for an RFID system to fruition, Accord Carton selected Barcoding, Inc., a leader in enterprise-wide data capture and RFID systems.

"Barcoding was very responsive to our needs and able to explain in depth everything we needed to know about implementing RFID for pallet tracking," said Robert Mintari, IT manager, Accord Carton.

Barcoding's solution incorporated RFID readers from its partner, Impinj, which were installed in three different zones in Accord Carton's Alsip facility, and Barcoding's RFID RealView™ software. RFID RealView is a comprehensive, yet customizable RFID asset tracking software solution designed to track critical assets and inventory in real time. For the final piece of the solution, Barcoding integrated the RFID system with Accord Carton's existing ERP and WMS databases, which use Open Database Connectivity (ODBC). In February 2012, Barcoding's RFID solution went live at Accord Carton's Alsip location.

Results

Since implementing Barcoding's real-time RFID asset tracking solution, Accord Carton has realized new efficiencies and enhanced its pallet-tracking capabilities. Now, as a tagged pallet moves off the production line and crosses into the receiving area, the RFID reader picks up and stores the pallet's data, creating a link between Accord Carton's two databases and automatically updating the finished goods inventory. There is no need for human intervention, thus eliminating the likelihood of errors from manual data entry, while saving time. Plus, with RFID RealView, the company can instantly locate pallets, monitor inventory levels, and access a detailed history of pallet movement.

"We've increased the accuracy of information and decreased the costs associated with obtaining the information pertaining to pallet movement," said William Codo, owner of Accord Carton. "We are recording our most accurate inventory levels to date."

— WILLIAM CODO Owner, Accord Carton

Looking forward, Accord Carton would like to expand its RFID system, conducting further database integration, and even putting readers at its dock doors so that each individual pallet is automatically identified as it rolls onto the truck. Then, this data could be converted into a bill of lading.

For all future plans, Accord Carton will be able to draw from what it learned during this initial RFID project.

"When all the components of an RFID system are properly in place, the technology does exactly what is intended," Mintari concluded. "However, one thing we learned throughout this process is the importance of securing buy-in from all the people involved in order to ensure a successful implementation."

