

PEAK'S RADIO FREQUENCY IMPLEMENTATION FOR SAP HELPS MEDICAL DISTRIBUTION CENTER REDUCE COSTS 6%

Application Summary



CUSTOMER: Hollister Incorporated

INDUSTRY: Medical Products Manufacturer

APPLICATION: Picking & Putaway

BENEFITS: Increased Productivity and Decreased Costs



Implementation of a Symbol radio frequency (RF) wireless network helped Hollister Incorporated, a major medical products manufacturer, reduce overall distribution center operating and labor costs by 6% and 9% respectively. Opening a new distribution facility in Nashville, Tennessee, the facility's managers felt efficiency could be improved by providing warehouse personnel with Symbol terminals linked to the company's SAP system. To ensure success, the company partnered with PEAK Technologies, a solutions integrator with extensive RF experience.



"The RF system has increased the efficiency of every aspect of the material handling process, virtually eliminating manual data entry, reducing product hunting time, and improving replenishment productivity," said Craig Hourigan, Manager of Supply Chain Logistics for Hollister. "The bottom line is that after only a few months of operation, we reduced our cost per box by 6%. In addition, we've seen a 40% reduction in shippable backlog due to the improved speed at which receiving, putaway and replenishment have been accomplished."

Hollister Incorporated is an independent, employee-owned company that develops, manufactures and markets healthcare products, primarily in ostomy care, continence care, breastfeeding, wound care, and hospital risk management.

Desire to Reduce Manual Operations

When Hollister originally migrated from plant-based distribution to a central distribu-

tion center, management sought improvements in productivity, inventory efficiency and order fulfillment accuracy.

"The biggest problem was the manual nature of the transactions," Hourigan said. "The entire system ran on paper which meant that a high proportion of our staff was dedicated to data entry. We felt that the logical sequence was first to get our ERP system running efficiently.

The next step would be utilizing radio frequency for automated data collection that would later evolve into a full-blown labor management system.

"We selected PEAK based on their experience in implementing RF systems in all sizes of distribution centers and manufacturing plants, as well as their expertise in interfacing with SAP. In addition, we felt that PEAK's strong European presence would be very useful as we expanded the implementation worldwide. PEAK's systems requirements definition process not only provided a platform for developing a very effective design but also provided the answers we needed to get approval for the investment."

RF-based Distribution Process

The process defined jointly by Hollister and PEAK begins when goods are delivered from the manufacturing lines to the plant's shipping dock. The shipping crew scans each product as it is placed on a pallet and the system automatically generates a bar coded label called a license plate that is affixed to the pallet's shrink wrap. As the forklift driver loads the pallets onto the

truck, they scan each of the license plate tags. When the truck is full, the user performs a "door close" transaction on the Symbol handheld that creates an electronic manifest. The electronic manifest automatically transfers the finished goods from manufacturing to an in-transit status for the distribution center. When the truck arrives at the distribution center, the forklift operator scans the license plate of each pallet which generates a hard copy printout, called a move ticket, for each of the different SKU's on the pallet and posts the receipt directly to SAP. The pallets, which contain between one and six SKU's, are broken down by like SKU's. The system provides authorization through the Symbol terminals to move the goods from the receiving dock to storage racks. Random put-away by like product is used so the user can select the most convenient storage rack to place the goods. As the operator puts the product into the storage rack they can scan the move ticket and the bin location, then enter the quantity of product being placed in that specific bin. The product immediately appears as being available for sale in SAP.

The Handhelds Connected to the ERP

The next step is to replenish the pick faces used to supply the goods for filling customer orders. At predetermined intervals, the ERP system runs a job that compares the amount of inventory in the pick faces to predetermined minimum and maximum levels. If the amount of inventory is below the minimum, SAP R/3 automatically generates a replenishment transfer order. When the



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material handler logs in or finishes a job, PEAK's certified PEAK S/3 Interface® searches SAP and displays the next 10 replenishment transfer orders. The orders are automatically sorted into the most efficient pick path. The forklift operator picks each item, scans the product and the bin location, which automatically updates the bin inventory in SAP.

Once all the items are picked for those 10 replenishment orders, the Symbol terminal automatically arranges the put away task in the proper order so that the last item picked will be the first item dropped off at the pick face. The operator scans the product and the pick face location as they are putting the item away and the terminal again notifies the operator if an error is made. As each item is dropped off at the pick face location, the transfer order is automatically posted and SAP is updated in real time.

Handhelds mean less hand-wringing

After the orders are picked, the product is sent to the packing areas via conveyors. The packers scan the product as they load each item into a specific carton. The terminal communicates with the ERP system to produce an advance ship notice and print a carton label with a unique ID generated by SAP R/3 for each carton. The cartons are then moved to the metering station, weighed, and the address label is applied. The handheld terminals are also used for several other transactions. A material location inquiry screen lets an operator type in a material number to list the quantity and the location of the material. This transaction is used mainly to query for like material that can be consolidated to maximize warehouse capacity.

When like material is located that can be consolidated, the user performs a "bin to bin" RF transaction. The user scans the material and bin location from



which product is removed, and then scans the bin where the product is placed. A transfer order is automatically created and confirmed in SAP. Once again the inventory is immediately updated in SAP to provide real time inventory visibility.

Project management key to success

"The success of this project can largely be attributed to the project management structure that Hollister and PEAK jointly put into place at the beginning of the project," Hourigan said. "PEAK created a technical project plan that provided the perfect complement to our internal project team. We had weekly communications meetings throughout the project where we measured our progress, talked about questions and concerns and made changes to the plan where necessary. Working closely together, we delivered the project on time and on budget. In the first two months of operation, we've already achieved our targeted cost savings. For example, we have eliminated two full time positions that were required in the past to manually enter incoming shipments and replenishment orders. The RF terminals virtually eliminate the previously common error of putting items in the wrong bins. This has removed the need for what used to be a fulltime problem resolution position and also saved a considerable amount of time that the forklift operators also spent trying to find misplaced products. With RF, we have improved the dock to order cycle by 50% from 10 to 5 hours. The near elimination of errors and the fact that product now appears in inventory as

soon as it goes on the shelf has helped to improve our fill rate to 97.8%, improved customer service and eliminated the need for double-handling. The project has been so successful that we are already in the process of rolling out the same system to our European distribution center and with PEAK's assistance are evaluating manufacturing as well."

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