PEAK TECHNOLOGIES

YORK INTERNATIONAL – PAPERLESS INVENTORY MOVEMENTS PROVIDE REAL-TIME VISIBILITY

CASE STUDY

ABOUT THE COMPANY

YORK International is one of the largest independent suppliers of heating, ventilating, air conditioning and refrigeration (HVAC&R) equipment in the United States and a leading competitor in the industry internationally. The company's residential and light commercial division operates plants in Wichita, Kansas; Norman, Oklahoma; and Apadoca, Mexico.

BUSINESS CHALLENGE

Several years ago, YORK International implemented a first-generation RF system at three plants that interfaced with a legacy ERP system. With the company's move to SAP, they decided to upgrade the RF system with the goal of improving transaction efficiency and taking full advantage of SAP capabilities. The company's three plants originally ran a legacy ERP system on a host computer. Several years ago, the plants implemented an RF system based on older technology. The system provided substantial improvements in productivity by allowing the finished goods department to scan in the product as it was picked to ship. An expeditor was assigned to each production line and spent most of their time checking the bins and writing requisitions as the bins were depleted. The written requisitions were dropped into a box and collected by replenishers from time to time. Purchasing was unable to see that an item was running short until it was nearly out and, as a result, sometimes had to scramble to arrange rush shipments. When YORK made the decision to move to SAP, they decided to upgrade the wireless RF system at the same time. They looked for a systems integrator with the ability to handle site planning, RF infrastructure design, hardware

INDUSTRY:
Manufacturing/Industrial Equipment

BUSINESS CHALLENGE:
- Upgrading a legacy ERP system to support three plants
- SAP configuration

SOLUTION:
- SAP RF transactions

KEY BENEFITS:
- Increased transaction efficiency

ADDITIONAL KEY BENEFITS:
- Reduced labor expenses
- Reduced inventory levels

installation, training and support, and SAP integration at all three facilities. YORK selected Peak Technologies because Peak was capable of providing simultaneous installation, training and support at all three locations, making it possible for all three sites to go live on the same day as SAP. Peak's SAP expertise was useful not only in the development and integration of RF transactions but also in providing SAP transaction customization and resolving SAP configuration issues during go-live. Peak's process encompasses the development of a full systems requirements definition, mutual agreement on project goals and the development of an integrated solution designed to meet those goals with the least amount of risk.

THE SOLUTION

Peak installed an RF infrastructure and vehicle-mount computers that conveniently convert between handheld and vehiclemount usage. The units are mounted on forklifts most of the time but can be taken off and run on battery power if the driver needs to get off their trucks for a receiving operation.

In developing the RF transactions, the Peak team took advantage of the built-in functionality within the SAP development environment whenever possible. Some of the SAP transactions, such as putaway and picking, simply needed to be modified to handle movements of consignment inventory to increase their efficiency. Other transactions, such as purchase order receiving, did not exist within SAP and had to be created. Every transaction updates the SAP database in real time, providing enterprise-wide verification and visibility. If a driver scans in six items when they were only asked to pick five, the system immediately notifies them of the error.

For example, the manufacturer's staff originally didn't realize that the SAP Lean Warehouse Management (Lean WM) module had been installed for finished goods warehouses. Peak consultants not only pointed out its existence but also took advantage of its capabilities to upgrade several existing processes.

The new RF-enabled process begins when material is received from suppliers. Employees now use LXE MX1 and MX5 mobile computers to scan barcodes on inbound crates or manually enter the information on the handheld, thereby updating inventory information in SAP immediately. A nearby printer then automatically prints a barcoded label based on the receipt of material, thereby eliminating the time and risk of errors involved in producing the label by hand. The putaway transaction allows the user to scan the product off the receiving dock and into the storage bin which provides location tracking of every item in the warehouse. This allows workers the ability to query the system to find the location of any item from their mobile computers in both the Inventory Management (IM) maintained raw material warehouses or the Warehouse Management (WM) maintained finished goods warehouses.

When the material is correctly scanned into the putaway bin, the product immediately appears as being available in SAP. The RF user scans each item during the picking process and the transaction is programmed to validate that the worker has picked the right quantity of the correct item. In case an error is made, the operator receives a message explaining what is wrong and is asked to correct the erroneous data.

The transaction has also been enhanced to automatically alert the user that they are picking consignment material and allow them to automatically process the consignment transaction on the RF unit at the exact same time they are picking the product. This has totally eliminated the need for manual tracking of consignment material.

BENEFITS AND RESULTS

The RF system provides major gains in productivity by eliminating paper forms and manual data entry. Product now moves from the loading dock into inventory in about an hour, compared to one day in the past, reducing labor expenses and making it possible to reduce inventory levels. The multiple validation features incorporated into the RF transactions have eliminated the delivery of incorrect parts to the assembly line, increasing manufacturing productivity and quality while minimizing assembly shutdowns. The RF system distinguishes items that have been delivered on consignment and, when they are delivered to the assembly area, automatically generates an accounts receivable transaction so the consignment vendor can be paid in a timely manner. The RF system also automates the process of tracking items that are removed from inventory for destructive testing.

> *"The new RF system's seamless integration with SAP means that we know exactly what we have on hand at any instant, making it possible to reduce inventory levels."*
>
> *– Linda Dexter,*
> *Materials Supervisor,*
> *YORK International*

Peak Technologies, Inc.
10330 Old Columbia Road, Suite 200, Columbia, MD 21046, 1-888-492-6346 | info@peaktech.com | www.peaktech.com