



Cornerstone Research and Development Improves Operation Efficiency and Accuracy in Inventory Control and Manufacturing with RFgen.

The JD Edward Certified RFgen Solution Reduced Administrative Overhead, Improved Accuracy, and Cut Operational Costs

Business Challenge

- Bring tighter controls to the manufacturing process
- Capture real-time JD Edwards inventory transactions throughout the manufacturing process
- Control the movement of inventory between the warehouse and manufacturing facilities
- Reduce the time required to pick raw materials for a manufacturing work order
- Eliminate errors from manual processes
- Design and implement a series of quality checks throughout the manufacturing process

Results

- Reduced time spent on work order picking by 50%
- Eliminated errors of manual data entry
- Enabled better inventory control and less picking errors
- Eliminated hand-writing during component weighing and issuing
- Streamlined quality checks with digital verification

Cornerstone Research and Development Overview

Cornerstone Research & Development specializes in developing nutritional and herbal formulations in capsules and tablets. Operating from a high-volume manufacturing and packaging facility with over 100,000 square feet of space, and growing, they produce the world's highest quality natural healthcare supplements and food products to meet their customer's standards. Cornerstone Research & Development formulates and manufactures hundreds of dietary supplement products, including single herb and herbal formulas, vitamins, mineral,

homeopathy, and specialty formulas. Their packaging capabilities include bottles, capsules, tablets, blister cards, pillow-packs, and bulk packaging.

Situation and Challenge

Cornerstone runs a fast paced, high volume manufacturing environment. Finished goods are produced using a four step manufacturing process. During the first step, components for work orders are picked and weighed. During the second step, the weighed components are moved to the manufacturing facility and are blended together to create the bulk. The bulk product is then used to manufacture tablets or capsules during the third step. Finally, the fourth step packages the tablets or capsules into bottles and outer packaging. Once complete, the product is ready to be picked and shipped to the customer.

Because of the inventory movement involved in the manufacturing steps, it was challenging for Cornerstone to organize the picking of components, to record the movement of inventory in a timely manner, and to control the overall process. Cornerstone wanted to be able to capture real-time inventory movement and to enforce tight controls when it came to picking and weighing components. Prior to the implementation, all inventory transactions for a work order were not recorded until some days after the components had been physically consumed and the finished goods physically completed. At the same time, they wanted to intelligently direct the inventory pickers through the warehouse rather than the picker having to decide what location to pick from.

There was a lot of hand writing involved in the weighing process and in the quality checking process that Cornerstone wanted to eliminate. Additionally, Cornerstone had a lot of excess inventory after weighing that needed to be returned to inventory. The time required to move the excess back into warehouse locations was taking away from time available to pick.

Improving Quality

Since implementing RFgen on the shop floor, several tasks have been automated using the solutions provided by RFgen. It has been advantageous to utilize RFgen to check quantities in between each manufacturing step in order to get a digital "signoff" from quality control. If the signoff is not obtained from the previous step, the user is unable to process the next step. This has increased quality control accountability, and improved accuracy and process time substantially.

Reducing Costs, Improving Inventory Control

Through the design of the manufacturing solution and the re-engineering of shop floor processes, Cornerstone has experienced a 50% improvement in productivity during component picking. RFgen *component picking* is a directed process, which prompts the user with the next picking location and lot number. It enforces FIFO lot control and naturally helps to consolidate inventory by consuming locations with the least quantity of inventory first. This has also reduced the amount of excess inventory moving from the weight rooms to the warehouse.

Real-time inventory transactions have provided inventory control, planning and purchasing with a better picture of what is being consumed and produced. Costing is also now a real-time activity. The amount of time required by inventory control to manually enter component issue and finished good completions has been eliminated. Digital quantity checks throughout the process have improved inventory control overall.

Looking Toward the Future

The next phase of implementation for RFgen is the picking and shipping of sales orders. It is also planned in 2010 to implement equipment and plant maintenance to help with preventative maintenance, the management of maintenance labor, and the management of spare parts.

This Phase II implementation of RFgen in Cornerstone's manufacturing operations was handled differently than the previous RFgen implementation in receiving and inventory. It was an initiative driven from the top, where buy-in approval from the process owners and management was gained early on. This contributed to the overall success of the project. The RFgen JD Edward solutions implemented during this project have enabled Cornerstone to reduce errors, streamline processes, improve accuracy, increase productivity, and drive better business practices.

About RFgen Software and the DataMAX Software Group, Inc.

El Dorado Hills, California-based DataMAX Software Group, Inc. allows organizations to reduce supply chain implementation costs with the industry's most elegant and flexible mobile and wireless automated data collection (ADC) technology. In business since 1983, software from the DataMAX Group has a proven track record of success when it comes to designing, implementing, and deploying wireless and mobile solutions.

DataMAX's flagship product, the RFgen Framework, is a horizontal system for delivering wireless and mobile automated data capture solutions. RFgen-enabled solutions can be found in over half of all Fortune 100 manufacturing companies as well as in numerous mid-level and smaller enterprises.

Whether the target is distribution, manufacturing, retail, agriculture, pharmaceuticals, healthcare, or something else, RFgen is flexible enough to meet each customer's unique requirements; a fact to which the company's 2000+ customers and over 30,000 daily users can readily attest. For more information, please visit www.rfgen.com or contact your nearest sales representative at 916.939.4065.