



# United Medco Doubles Warehouse Productivity and Reduces Labor Costs by 60% with Numina Group Warehouse Automation Solution

# Company Profile

United Medco is a national wholesaler and distributor specializing in support and full-service warehouse order fulfillment deliveries of over the counter (OTC) pharmaceutical and wellness products to major medical insurance companies.

## Challenge

Growth and an expanded product offering had obsoleted United Medco's paper-based picking operation. In addition to a larger order volume, its product catalog had grown from 500 to 1,200+ SKUs – all stored and fulfilled through its Florida-based warehouse.



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*Our sales growth had greatly surpassed our operational throughput. We were bursting at the seams and could no longer keep up with our daily order volume.*

—Richard Langnas, founder and CEO.

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## Solution – Pick-to-Light for Maximum Efficiency

United Medco selected the Numina Group to design an optimized zone routing pick to conveyor system incorporating a pick-to-light system with hands-free barcode scan validation, increasing pick rates to 300 lines per hour while boosting picking accuracy to 99.8%.

To begin, Numina and United Medco’s teams performed a warehouse operations audit and engineering study to determine the best layout, software, and hardware combination for current and future growth.

Based on the study results, the team determined a pick-to-light system managed by Numina’s Real-time Distribution Software (RDS™) Warehouse Execution and Control System (WES-WCS) would deliver the most efficiency and rapid return on investment.

## Faster Picking, Fewer Steps

Previously, orders were individually picked and packed as a discrete order by operators who walked throughout the warehouse to pick products. The Numina pick-to-light system has minimized extra walking and accelerated order fulfillment by bringing all the products together in one location. All picking, packing, shipping, and quality control activities occur along an automated conveyORIZED system, with all work directed by RDS™ WES-WCS and the pick-to-light process.

Employees now work as a team with assigned tasks in zones along the conveyor to pick and pack orders, walking far less than they previously did to individually pick orders.

“Before we had the Numina system, our staff was walking 10 to 15 miles a day to pick orders,” said Kyle Tuers, Warehouse Manager. “Now they work within a ten-foot space, and they’re much happier. Their feet thank them every day.”



# Identifying High Movers to Improve Product Placement

The engineering study also provided the optimal product slotting layout to further speed up fulfillment.

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*We worked with Numina to analyze our product mix and identify the top movers, how many orders contained these products, and the frequency of those orders that would come in. We determined that 78% of our orders included high movers, which comprised 132 SKUs out of 822 total SKUs.*

—William Cuervo, CFO

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The new workflow placed the high-movers in a fast-picking zone at the front of the conveyor system, with multiple picking zones on dual sides of it to increase productivity.

## Easy to Learn, Minimal Employee Training Required

According to Cuervo, the pick-to-light system has dramatically boosted productivity and simplified employee training, which is a big plus when dealing with a tight labor market.

“RDS™ Pick to Light, combined with barcode scanning, eliminates the need for employees to read pick tickets, which has dramatically sped up the onboarding of our multilingual workforce,” he said. “We can now train people in half an hour or less, and they are productive on Day One.”



# How the RDS™ Solution Works:

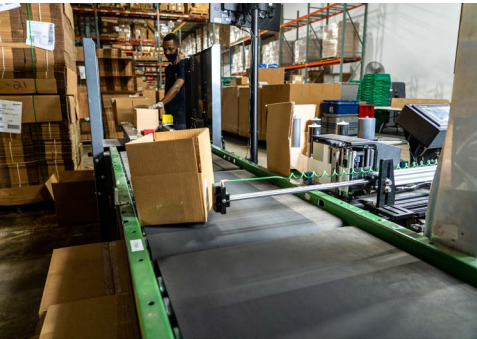
Numina's RDS™ warehouse automation software manages and controls the entire system from order start, picking, packing, labeling and final carrier sorting.

Picking activities take place along an automated zone routing conveyor system that routes orders through different pick zones based on the items required for each order.

Each zone has a pick-to-light unit with color-coded lights attached to the product bins, which flash on and off to guide workers' picking activities. Orders are processed as follows:

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RDS™ receives orders, which can have 15 or more line items from the ERP order management system. RDS™ selects the orders, determines the ideal carton size to start, and directs the operator and carton erector to build the right-size cartons for cost-effective shipping.



A label applicator prints and applies a unique barcode ID to each carton which contains order picking details such as SKUs, quantities, etc.

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The cartons advance along the conveyor to the required pick zones and RDS™ manages operator picking tasks using an RDS workstation display, hands-free ring scanner and pick to light displays to direct and validate picking activities.



Operators scan the carton barcode, and if items in that zone need to be picked, the pick-to-light system lights up the location for each specific item.

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Once picking is complete in a zone, the staff pushes the carton to advance to the subsequent zones until the order picking is complete.



The carton advances to an in-line verification station that weighs and compares the actual weight to the expected weight sent by the WMS/ERP system. If correct, the carton advances to the automated pack and ship stations.

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If the order fails the weight audit, it is diverted to a QC station.



Two automated pack-and-ship stations print packing slips and direct the operators to add documentation and void fill. An inline high-speed automatic taper machine seals the cartons.

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Cartons then convey to the dual print-and-apply label applicators where the shipping label is printed and applied to the carton.



# Benefits

Numina's RDS™ solution has delivered a rapid ROI by reducing labor costs by 60%, allowing United Medco to meet peak order volume spikes while keeping order fulfillment costs down. Benefits include:



**2X Boost in Productivity:** “We’ve doubled order throughput with our permanent staff and have been able to reallocate some workers to other areas,” said Richard Langnas.



**60% Reduction in Temporary Labor Costs:** “With the efficiencies gained with the Numina solution, we’ve eliminated the need to hire roughly 100 temporary workers,” he added.



**99.8+% Picking and Total Order Accuracy:** This is achieved due to a two-step process:  
1) the addition of hands-free bar code scanning validation by the picker to verify that the correct items and quantities are picked.  
2) orders are weight verified at the end of the process to detect weight discrepancies due to incorrectly picked products or quantities in the package.



**Scalability:** Flexibility for peak shipping volumes. According to Cuervo, the company is currently processing 5,500 orders a day and is capable of 24,000 orders across three shifts. The new system can quickly scale up for even greater capacity. “For example, in the fast mover area, we have ten sections and one person per section with 44 products,” Cuervo said. “The Numina system is flexible enough that if the volume is heavy, we could have two people, each working with 22 products in a section.”



**60% Faster Order Fulfillment:** United Medco’s goal is to ship orders on the same day received, which is easily achievable with the Numina system. “We’ve sped up the process by locating products along the pick and pack conveyor line. We have also eliminated repetitive manual handling tasks with the new conveyor system to minimize operator movement. It’s much faster when pick completed orders travel directly to the packers,” said Cuervo.



**Real-time Inventory Tracking:** “RDS™ operates in real-time. As the carton is created, RDS™ prints and applies the barcode ID license plate for the order and the picked items are sent instantly to the ERP for managing replenishment of inventory,” said Cuervo. “We immediately know the actual number of products in storage and going out the door, which is an immense help to minimize inventory shortages.”



## Summary – A Responsive Fulfillment Solution to Meet and Exceed Customers’ Delivery Needs

Langnas foresees that the managed care market will continue to grow for the foreseeable future as medical insurance providers continue to expand the OTC program to their members. He is confident that United Medco can readily respond as demand grows.

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*The manner and speed in which the Numina system works to pick, pack, and ship orders is clean, neat, and efficient. I am still like a kid in a candy store when I walk out there, because that is the heart of the company – getting the product out.*

—Richard Langnas, founder and CEO.

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