



# ACHIEVING COMPETITIVE ADVANTAGE WITH THE REAL-TIME WAREHOUSE

Maximizing your business data for maximum productivity  
in the warehouse

SOLUTION OVERVIEW

**symbol**<sup>®</sup>  
The Enterprise Mobility Company™



# THE WAREHOUSE

## THE CRITICAL CENTER OF YOUR BUSINESS OPERATIONS

The warehouse is a central operational component for manufacturers and wholesale distributors. Every minute of every day, there is constant movement of materials in, out and through this crucial business area — from raw materials waiting to be assembled or manufactured into finished goods, to finished goods awaiting shipment to distributors, retailers or end-users. The efficiency of the many warehouse functions and integration of information regarding goods in the warehouse into your business systems is critical to the health of your business — and to your ability to compete. Anything less than peak operational efficiency translates into longer cycle times, errors and higher labor costs — which translate into a higher cost of doing business. Margins are reduced, overall profitability is reduced — and so is your ability to deliver competitive pricing and service.

Today, you may have manual paper processes in your warehouse that still require manual data entry into your business systems. Or you may have basic scan-based applications that automate the collection of bar code information, which is then uploaded to your systems periodically through batch processing or in real-time via a wireless LAN. Regardless of which scenario you use in your warehouse functions today, mobility solutions can completely transform the way you do business, creating a lean warehouse where the same staff can manage goods more rapidly and more accurately — while your company grows.



The benefits of mobility extend well beyond the warehouse, providing the real-time information needed to enable strategic decisions that can save your enterprise millions - from the reduction of inventory stocking levels to a reduction in the order-to-cash cycle.



**Mobility leverages the information already in your WMS and ERP systems to drive productivity into the warehouse...and inefficiencies out.**

# The Power of the Mobile Warehouse

Enterprise mobility goes beyond simple data collection and bar code scanning, enabling you to fully leverage the information already in your WMS and ERP business systems in real time to drive productivity into warehouse operations and inefficiencies out. With enterprise mobility, you have the power to extend the information needed to help automate and error proof the sequence of work. Productivity is increased in every function — from receiving and replenishment to put-away, picking, packing, and shipping. Paper processes can be completely eliminated, exceptions can be handled on the fly, and the most efficient path to executing every task is right in the hands of your warehouse workers.

## **Receiving and Put-Away: Inventory visibility at the moment of arrival**

When advanced data capture technologies such as bar code and RFID read capabilities are implemented at the dock door, your receiving function is streamlined. Incoming shipments are instantly identified by a quick capture of either the bar code or RFID tag via handheld mobile computers; vehicle mounted mobile computers on forklifts, flexible conveyors, and other material handling equipment; or fixed readers. Shipments are automatically verified against the purchase order in seconds, and the right directions are then delivered to the worker's mobile device. If the wrong materials were received, the shipment is staged for return. In the event the shipment is fulfilling a backorder in the system, it is immediately staged for shipment. For materials bound for the warehouse shelves, the right storage location as well as the fastest path to that location are delivered to the mobile device of the forklift operator or other worker responsible for put-away.



With mobility at your dock door:

- Yard and transportation scheduling can be optimally managed.
- Receiving, put-away and cross-dock processes are streamlined.
- Inventory is instantly visible across your business systems.
- Dock-to-stock cycle times are reduced.
- Congestion at the dock door is eliminated — the same staff can handle more shipments in less time.
- Inventory is available more rapidly and is stored in the right location, promptly available for either order fulfillment or production line replenishment — eliminating delays in order processing as well as costly production line shut-downs due when materials are misplaced in the warehouse.
- Error-proofing measures are applied to processes, eliminating costly out-of-stocks due to errors in processing incoming shipments — and the associated impact on your production line and lost sales.

### Replenishment: Keep production lines up and running

When your warehouse workers are equipped with mobile computing via either a handheld or vehicle mounted device (for forklift, pallet jacks and other material handling equipment), line-side replenishment orders for forward pick locations as well as production lines are delivered seconds after the request is made, complete with the exact location of the materials and the fastest route.

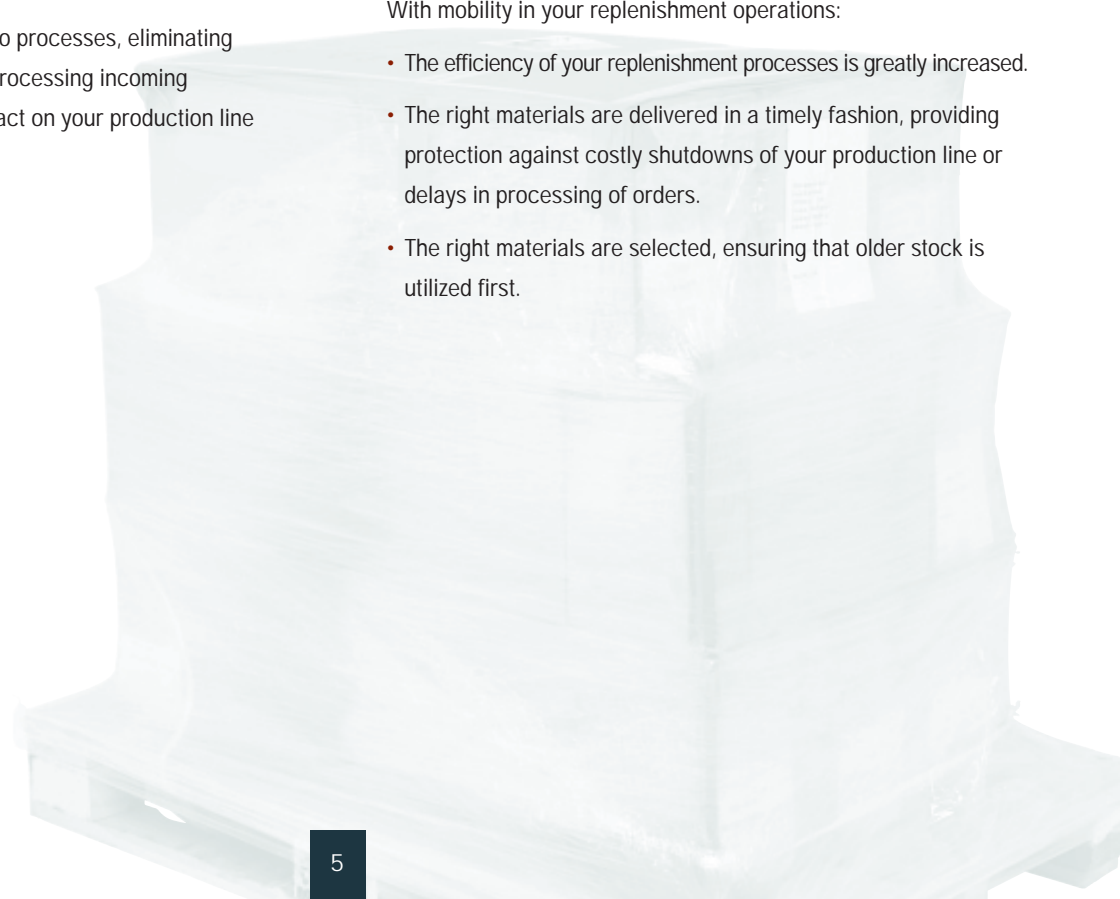


With mobility in your replenishment operations:

- The efficiency of your replenishment processes is greatly increased.
- The right materials are delivered in a timely fashion, providing protection against costly shutdowns of your production line or delays in processing of orders.
- The right materials are selected, ensuring that older stock is utilized first.



Mobility improves the productivity of all your warehouse workers, allowing you to process more orders, more rapidly and more accurately —with the same staff.





## Mobility streamlines operations, reducing cycle times - and improving your margins.

### Picking: Faster and error-free order fulfillment



Pickers can be armed with a handheld mobile computer that has bar code scanning and a real-time wireless connection to your business systems to dramatically streamline the picking process. Wearable models offer workers the convenience of hands-free picking, while providing enterprises with

maximum application freedom, able to support voice only applications (such as voice-directed picking), text only applications, or the best of both worlds with a combination of voice and text functionality. For example, a pharmaceutical manufacturer might deploy voice-based hands-free picking while enabling workers to utilize the wearable's keypad to capture additional information on drugs that require a pedigree.

But regardless of the style of device you choose to deploy, the need to print and distribute pick tickets is eliminated, along with the need to enter and reconcile the data after the pick is complete. Pick orders are now delivered right to the picker's mobile device, along with the location and most optimal route to the products. And since workers now scan items as they are selected, they receive instant verification that the right item was selected, enabling the immediate correction of any picking errors.

With mobility in your picking operations:

- Productivity is dramatically increased — the same staff can now fulfill more orders per day.
- Workers no longer need to search through the aisles for products or complete time consuming manual paperwork. And pick processes are no longer linear since orders can be now be batched together for more efficient picking.
- Accuracy is greatly improved, ensuring selection of the right product.
- Customer orders are always correct, improving customer service and satisfaction, and eliminating costly returns when the wrong item is shipped.
- The new level of granularity in picking instructions enables FIFO/LIFO picking for better inventory management.
- Out-of-stocks are sent in real time for immediate replenishment, eliminating the cost associated with incomplete picks.
- Integration with your warehouse management system provides the real-time inventory visibility for your purchasing function, ensuring that product low in stock is promptly noted and orders placed in a timely fashion to eliminate stock-outs — and lost sales.

### Packing: Reduce packing materials — and costs



When your packers are equipped with bar code scanning capabilities and a wireless connection to your business systems, the packing process is greatly streamlined. Quality control is simple and fast. Manual checking of pick tickets is replaced with the rapid scanning of items,

enabling an automatic and error-free validation that the right items were selected for the order. Packers no longer need to take a best guess on selection of carton size. Based on the items in the order, the proper carton size for this order is automatically identified and sent to the mobile device. The box is scanned when it is selected, enabling verification that the right box was chosen as well as real-time inventory status of packing materials.

With mobility in your packing operations:

- Productivity is dramatically increased — the same staff can now pack more orders per day.
- Order verification takes place in seconds, and the selection of the right carton size enables rapid packing.
- Improved accuracy of shipments eliminates the costs associated with re-ships — also improving customer satisfaction.
- The right packing materials are always available, ensuring rapid packing.
- Packing material costs are reduced — the right size carton is always selected, eliminating the need to use excessive amounts of filler.

### Shipping: Deliver more shipments in less time

When workers in shipping are armed with a mobile computer with bar code scanning, a wireless connection to your business systems and a wireless printer, this typical time-consuming function is transformed.

A quick scan of the shipment ensures the right items are being shipped to the right address and provides the information needed to stage the shipment for the proper truck — the proper order within the truck — and all the required paperwork is automatically printed. The use of RFID — either in the mobile handheld computer, a fixed reader or a mobile reader on a skate wheel — can further automate the shipping process as well as provide increased granularity of information. With RFID, shipped goods are automatically identified, providing an additional automated level of quality control and supply chain visibility.



With mobility in your shipping operations:

- Productivity is increased — the same staff can now ship more orders per day.
- Shipping times are improved — the same staff can now ship more orders per day.
- Delivery times are improved.
- Customer service and satisfaction are improved — customers receive orders when promised, promoting higher customer retention levels.
- Vehicle utilization is improved — trucks are fully loaded with the right shipments.
- Driver productivity is increased — staging in the correct order enables drivers to spend less time at each stop.

Mobility expedites  
and error-proofs the  
receiving process —  
incoming shipments  
reach your  
warehouse shelves  
more rapidly,  
providing valuable  
protection against  
costly delays in  
order fulfillment  
and production line  
shutdowns.



**Mobility reduces costs and improves customer service levels, increasing your ability to deliver competitive pricing and service.**

# THE FAR REACHING BENEFITS OF ENTERPRISE MOBILITY...

## THE WAREHOUSE AND BEYOND

Enterprise mobility is a highly strategic investment that not only delivers quantifiable benefits in the warehouse — but also high-level business benefits that improve your competitive positioning.

### **Benefits in the warehouse**

The power of real-time data in the warehouse function minimizes the time spent on every task, while providing crosschecks for accuracy at every step of every procedure. While the many benefits for each of the warehouse functions are outlined above, the typical customer often achieves a 30 percent or greater overall productivity increase.

### **Benefits beyond the warehouse**

While mobility unlocks clear benefits for the individual functions throughout the warehouse, its value extends well beyond the warehouse. The real-time visibility of inventory enables proactive management and scheduling of goods, therefore:



- Inventory stocking levels can be reduced offering significant savings in capital as well as in labor to manage the materials.
- The ability to react faster to low inventory levels helps prevent out-of-stocks, potentially delivering an increase of 15 percent or greater in sales.
- The reduction in stocking levels frees warehouse space for allocation to other areas of the business — for example, an expansion of the production line to increase manufacturing capacity.
- Transportation costs can be reduced through tighter scheduling and better control over the management of goods in transit.
- Mobility in the warehouse provides support for other core manufacturing applications that enhance profitability, such as raw materials sequencing and vendor managed inventory (VMI).

And error-proofing processes and increased productivity deliver still more benefits:

- The real-time visibility in shipping enables faster invoicing and faster payment, with some customers achieving a 30 percent or greater reduction in the order-to-cash cycle.
- Six sigma quality in order fulfillment and the ability to provide the customer with real-time order status greatly improves customer satisfaction and retention.

When you choose enterprise mobility for your warehouse, you can expect reduced costs, improved quality, better customer service, higher margins and greater profitability — a real business advantage.

#### **Return on investment in just months**

When you invest in a Symbol warehouse mobility solution, you enjoy a rapid payback, a low total cost of ownership and investment protection. Due to the very high level of benefits and bottom line impact, the return on investment (ROI) for warehouse enterprise mobility solutions can often be measured in months instead of years. Symbol's mobility platform strategy provides protection for your technology investment, ensuring that the system you invest in today will serve your needs of tomorrow. The integrated platform of the standards-based wireless infrastructure maximizes your application dollars — the common platform enables easy porting of applications between various devices. The ROI for other technology investments is improved due to the ability to easily integrate telephony equipment for voice solutions and the open platform, which is designed to support future standards and devices.

You also enjoy a low total cost of ownership through manageability, simplicity, product quality, and industry leading service options.



The power of mobility  
improves overall  
warehouse productivity  
by 30 percent or greater  
for the typical customer.



**Mobility frees the profitability trapped in the inefficiencies of your warehouse, delivering real business advantage.**

## **Symbol — your complete enterprise mobility provider**

When it comes to enterprise mobility in the warehouse, Symbol delivers. Through the worldwide reach of our highly collaborative, award-winning partner ecosystem, we can deliver what you need when you need it — from hardware to an unmatched array of industry-specific applications to assistance with design and implementation, and ongoing maintenance and support, including seamless integration with your front- and back-end systems.

Our complete array of rugged industrial mobile devices is designed for the rigors of everyday warehouse use, including handheld, vehicle mount and wearable mobile computers that are capable of voice-directed and text-based applications. Our award-winning next generation wireless LANS are built to manage the unique challenges of mobility, delivering outstanding dependable wireless connectivity as well as high-quality voice — and can meet the needs of the largest enterprise to the small and midsize business. Our solutions also offer the ultimate in cost-efficient manageability by providing a centralized command center that significantly reduces the time and effort required to provision, monitor, troubleshoot and update your mobile devices and infrastructure — regardless of where in the world they may be. And support for all the latest security protocols and an end-to-end layered strategy enables you to deploy the right level of security for various applications throughout your enterprise.

## **The technology leadership you need to untap the hidden profitability in your warehouse**

When it comes to selecting a provider for your enterprise mobility solutions, put your organization in the hands of an industry leader whose mobility solutions have led the way in performance, durability, and functionality — Symbol Technologies. When you choose Symbol, you choose innovation — with over 900 patents to date in mobile technology, Symbol is recognized for the development of the bar code scanning market, first and second generation wireless networking, and a key driver in the development of wireless networking standards.

You've made a major investment in your business systems — let mobility free the untapped value. To get the most out of the data in your WMS and ERP systems, call Symbol today at +1.800.722.6234 or +1.631.738.2400 or visit [www.symbol.com](http://www.symbol.com)



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## About Symbol Technologies

Symbol Technologies, Inc., The Enterprise Mobility Company™, is a recognized worldwide leader in enterprise mobility, delivering products and solutions that capture, move and manage information in real time to and from the point of business activity. Symbol enterprise mobility solutions integrate advanced data capture technology, mobile computing platforms, wireless infrastructure, mobility software and world-class services programs. Symbol enterprise mobility products and solutions are proven to increase workforce productivity, reduce operating costs, drive operational efficiencies and realize competitive advantages for the world's leading retailers, transportation and logistics companies, manufacturers, wholesale and distribution centers, government agencies and healthcare facilities. More information is available at [www.symbol.com](http://www.symbol.com)

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