





Welcome to the Smart Warehouse

ZEBRA SOLUTIONS GUIDE FOR WAREHOUSE OPERATIONS

Let's face it: the role of the warehouse is changing. In today's data-centric world, warehouses need to be connected to be effective. Zebra connects people to equipment and materials for a truly smart warehouse. Our solutions maximize productivity, optimize processes, add flexibility—and offer unparalleled visibility. This is the foundation for creating transformational gains and flawless fulfillment. Now that's smart.

A Return on Investment in Just Months

While some warehouse mobility solutions require you to wait years to see a return on investment, Zebra warehouse mobility solutions provide a return on investment in as fast as six months on average.

Warehouse Operations	Process Improvements
<p>Receiving Zebra offers a series of products that allow dock workers to automatically identify and verify the accuracy of the goods received, at the exact site of receipt, with a wireless real-time connection to Warehouse Management Systems (WMS).</p>	<ul style="list-style-type: none"> • Instantly process and reconcile orders • Automatically deliver electronic processing directions for incoming shipments • Print labels on the spot to replace damaged or missing labels • Snap a photo to document indisputable proof of condition for incoming goods
 <p>Reverse Logistics Zebra supplies a full range of mobility solutions to improve the reverse logistics process.</p>	<ul style="list-style-type: none"> • With real-time access to WMS systems, a quick scan of an item's barcode, RFID tag or RMA label instantly validates and updates the status of the return, along with immediate issue of any customer credit due • Imaging allows workers to snap a photo of the returned merchandise
<p>Cross Docking Zebra offers WLAN and RFID infrastructure, label printers, wearable terminals and barcode readers, handheld computers and real-time location solutions for warehouse space optimization to ensure maximum efficiency in the cross-docking process.</p>	<ul style="list-style-type: none"> • A quick scan of the barcode on an incoming shipment enables instant identification of orders that should be cross docked, along with the dock number • Shipments bound for the same dock can be aggregated, minimizing steps and usage of materials handling equipment
<p>Put Away Zebra delivers a full range of barcode and RFID products to support the put-away process. The simple scan of a barcode or RFID rack tag ensures the item is put in the correct place and reaches the storage area in the shortest amount of time; the exact location of all inventory is known and asset utilization is improved.</p>	 <ul style="list-style-type: none"> • Scan of the barcode on items displays the right storage destination and the fastest route to the put-away location • Cross-check put-away accuracy with a scan of the shelf tag
<p>Sorting Zebra's sortation solutions combine our wearable and mobile technology to enable you to capture data in real time, communicate it to your Warehouse Management System (WMS) and use that information to reconcile order details quickly upon receipt.</p>	<ul style="list-style-type: none"> • Hands-free sorting allows workers to keep their hands on packages at all times • A quick scan of the barcode on the package displays the exact location where the package should be placed, eliminating errors and providing an audit trail for traceability

Inventory and Materials Management

Rack ID: Zebra provides a range of rack identification solutions, allowing customers to know the exact location of all inventory and the improvement of asset utilization.

Cycle Count: Zebra has the hardware and services you need to help create a robust inventory management system or cycle count to bring precision and visibility to your inventory control process.

Asset Management: Zebra's cost-effective RFID asset tracking technologies simplify the recording of changes in location and availability of an asset, ensuring timely, accurate information is available where and when you'll need it.

Replenishment: With our mobile warehouse portfolio, workers have all the tools needed to rapidly respond to line-side calls for product replenishment so production lines can stay up and running.

- Paper work orders are replaced by electronic work orders, which are sent to handheld mobile computers or vehicle-mounted mobile computers
- Replenishment orders also include the fastest route through the warehouse to the items
- A quick scan verifies the product prior to and after selection from your warehouse shelves, ensuring that the right items are being delivered
- In manufacturing plants that utilize raw materials sequencing to build different or custom products on the same production line, workers can be directed to pick items so that they can be delivered in the proper sequence



Picking

Mobile technologies from Zebra enable the creation and picking of electronic orders, generating an optimal route for this process using handheld computers and picking systems supported by voice or real-time location systems.

- Paper pick orders are replaced with electronic text or voice-directed pick orders that are delivered directly to the mobile device, easily enabling batch, wave and dynamic picking
- Mobile devices display the location of each item and the optimal route to that location for every item on the electronic pick order, minimizing the number of steps required per order
- Scanning the barcode or RFID tag on an item or case verifies that the right item has been picked
- Items picked are instantly deducted from inventory, providing real-time inventory accuracy
- Automatically capture lot numbers, serial numbers, catch weights and other item-specific information

Packing

Zebra's wearable mobile computers that can be worn on the wrist and scanners that can be worn on a finger enable your workers to sort items faster than ever.



- A scan of the barcodes on all of the items in an order provides an automatic and error-free validation that the order contains the right items
- Packing materials can be automatically calculated based on the items in the order, including carton size—reducing the amount of filler needed
- A scan of the shipping materials as they are used provides real-time inventory visibility, enabling prompt reordering and ensuring that the proper packing materials are always available

Shipping

Reliable printers, barcode/RFID label supplies and mobile computing equipment can streamline the final stages of order fulfillment by ensuring that the order contains the right products, and is shipped to the customer at the right time via the right method of shipment. With Zebra mobility in your packing, staging and shipping operations, efficiency is evident.

- A quick scan of the barcode on an outgoing shipment helps ensure that the right items are being shipped to the right address and staged for the right truck—in the right order
- Required paperwork can be instantly printed on either a printer connected to the wireless LAN or via a direct connection to a portable Bluetooth®-enabled printer
- Parcel shipments can be presorted for direct shipment to a carrier hub to reduce shipping charges

A Complete Warehouse Portfolio that Delivers Fast ROI

You need to build a lean, nimble warehouse that's ready for anything. And with Zebra's Complete Warehouse Portfolio, you can. Since Zebra offers the industry's broadest product portfolio, we can deliver the right solution for the different types of workers and environments in your warehouse operations.

Zebra's Mobile Warehouse Portfolio provides real-time information and advanced data capture features required to automate many processes, allowing your existing staff to handle a major increase in volume while still meeting order and picking accuracy requirements. By eliminating errors and extraneous operational costs from the warehouse, they can help you achieve regulatory compliance and increase profitability with solutions that include:

- Mobile and vehicle computers
- Industrial, desktop and mobile printers

- Scanners
- Services

- Supplies
- Software