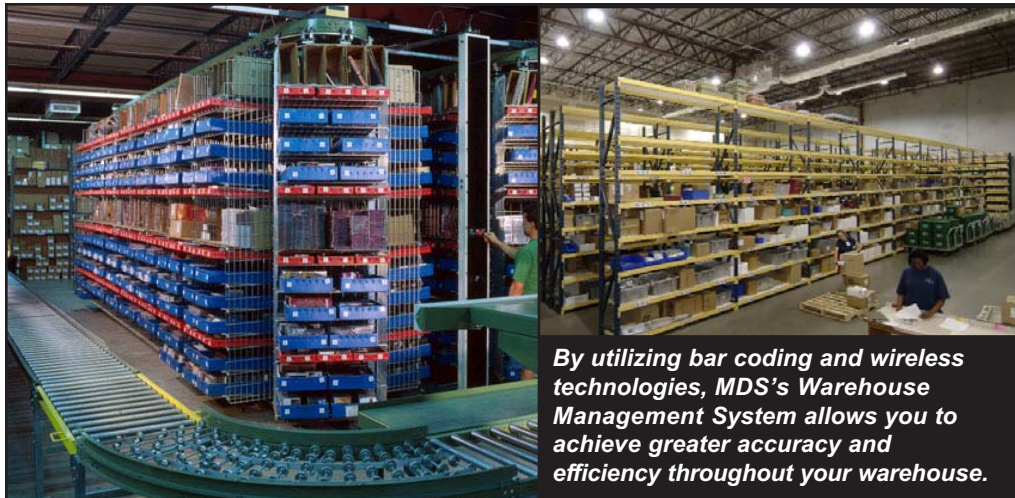# mds*Warehouse*

# Achieve greater efficiency and accuracy with MDS Warehouse from The Systems House, Inc.



*By utilizing bar coding and wireless technologies, MDS's Warehouse Management System allows you to achieve greater accuracy and efficiency throughout your warehouse.*

Inventory and warehouse expense represent the two largest investments in a distribution environment. An efficiently managed warehouse will provide the greatest financial return on investment, in addition to achieving greater levels of productivity and cost savings.

The MDS Warehouse Management System (MDS-WMS) is a powerful solution for automating the inventory handling process in your warehouse. Utilizing state-of-the-art technology and proven product management techniques, it provides a comprehensive and cost-effective warehouse management solution.

MDS-WMS works as part of a complete software solution by integrating wireless and bar-coding technologies, shipping systems and other warehouse automation equipment such as Carousels, PTL (Pick To Light), Voice directed picking, and Sortation systems.

MDS-WMS also directly integrates with MDS Order Entry, Inventory Control, and Purchase Order modules, or your existing MMIS information systems.

## Warehouse Preparation

MDS-WMS supports multiple warehouses, locations and bins within the warehouse. Areas of the warehouse can be designated as solid case storage areas or reserved for low unit of measure picking. Primary and backup locations can be selected for each item. Security and environmental considerations are specified by product and location. To compensate for a lack of uniformity in product labeling, MDS-WMS supports multiple methods of identifying products such as location and item scanning, and printing new bar code labels.

## Capacity Visibility and Forecasting

Each bin or location has a physical size in the MDS-WMS system. This allows you to see overall warehouse utilization and capacity. As products move through the warehouse the MDS-WMS system also allows for capacity planning based upon receipts information and product movement reporting.

## Receiving & Put-Away

MDS-WMS eliminates receiving errors by matching the receipt of goods with

*continued*

## MDS-WMS

**Business Benefits:**

- Achieve 99% inventory accuracy
- Leading-edge auto ID/barcode technologies
- Track inventory:
    expiration date
    lot control
    serial number control
- Ensure disciplined inventory rotation
- Reduce inventory levels
- Reduce lost stock and carrying costs
- Maximize use of warehouse space
- Optimize pick labor efficiency
- Optimize pick labor accuracy
- Increase labor productivity
- Improve order fulfillment rates
- Advanced picking techniques for pick and pack
- Decrease product returns through improved selection accuracy

**Hardware that can be integrated with MDS-WMS:**

- Horizontal carousels
- Vertical carousels
- Heavy-duty carousels
- Vertical lift modules
- Heavy-duty vertical lift modules
- Storage & retrieval machines
- Automatic inserter/extractors
- Pallet conveyor
- Tote/case conveyor
- Sortation systems
- Light-directed picking
- Voice-directed picking
- Wireless picking
- Specialty/Custom products

## The Systems House, Inc.

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the original purchase order. Upon receipt, the system can place the inventory in a holding location or deliver it directly to the predefined 'receiving location'. The system guides put-away to the most efficient location based upon pending backorders (cross-dock), space availability in the primary pick and/or backup locations, environmental considerations, and special lot and/or dating requirements.

## Replenishment
MDS-WMS allows for two different methods of replenishment.
**Just in Time Replenishment:** The replenishment (or "pull-down") process is automatically initiated by the picking process. If the system detects a stock out in the pick location, it will issue an emergency replenishment request to the primary pick location.
**Nightly Replenishment:** The MDS-WMS system reviews all primary pick locations to determine which locations have fallen below their pre-set minimum levels and are in need of restocking. A list of products needing replenishment is then generated for an operator in a logical warehouse picking sequence.

## Picking
MDS-WMS manages the picking process by providing the warehouse manager with a real-time "Scorecard" display of all orders ready for picking. The display includes the number of lines on each order and case (bulk) picks vs. the low unit picks. The warehouse manager has the ability to prioritize the picking order, and oversee picker assignment. He also has the option to choose the picking style based on what works best for your warehouse – single order picking, wave picking, batch picking or zone picking.

The system determines the location of each product. If the item is on a carousel or pick-to-light shelf or flow rack, the order data is transmitted to the picking system where the items are picked and loaded in separate totes. When the order is fully picked, the totes belonging to the order are "married" by scanning the bar codes on the individual totes.

*The Tools to help you lower the cost of your supply chain*

## Labor and Productivity Tracking
MDS-WMS provides management with statistics on the production of each picker. This information can be used for employee evaluation, or as a basis for an incentive compensation program. Key metrics include: Number of orders, number of order lines, average lines picked, and pick quantity per minute/hour/day/month.

## Shipping Systems Interface
The MDS-WMS system accommodates customers who ship with their own trucks as well as those utilizing third party shippers such as UPS, FedEx, and DHL or LTL Carriers. If you use your own trucks, *MDS Delivery Master* improves the accuracy of routing and delivery.

*The warehouse manager can:*
- Review orders ready for shipment
- Modify and arrange the truck routes

*The warehouse operator will then:*
- Generate a bar coded label for each carton
- Create a manifest for each truck
- Load and check each truck

*Drivers will then:*
- Scan the package's barcode
- Capture customer's signature electronically
- Create Electronic proof of delivery

*MDS Delivery Master records key metrics:*
- The date and time of each delivery
- Delivery discrepancies
- Elapsed time between deliveries
- Monitor driver performance

## Competitive Advantage
MDS Warehouse Management System provides you with a technological edge that maximizes the efficiency of your warehouse and supply chain personnel. This translates into a competitive advantage that provides improved customer service, greater accuracy and superior efficiency for your entire organization.