# Fontana IMS Inventory Management System

# Benefits

Accurate inventory management

Increases inventory turns

Reduces inventory carrying costs

Minimizes out of stock situations

Improves operational efficiency

Supports decision making

Increases productivity

Improves picking efficiency

Facilitates shipping accuracy

Document imaging

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Fontana IMS is an ideal solution for an enterprise that seeks to improve inventory accuracy, increase operational efficiency and enhance manpower productivity, which provides enhanced customer service and reduced operational cost.

The competitive manufacturing environment of today demands greater efficiencies of scale. This is especially true in the complex domain of production. With e-commerce taking center stage, it's increasingly important for companies to not only maximize supply chain efficiency, but also the manufacturing process itself. This key element in the supply chain causes major concern in most manufacturing setups.

It's at the supply chain level that inaccurate inventory levels and poor scheduling slow down the entire fulfillment process. The need to improve inventory accuracy in raw materials and finished goods is essential to reduce manufacturing cycle time. The benefits of accuracy are a direct derivative of the increasing demands of e-commerce.

Fontana includes advanced warehouse management capabilities, including sequenced picking, wave picking and cross docking. Fontana was designed with scalability in mind, which means it can comfortably handle hundreds of users and thousands of SKUs with exceptional response time. Deploy Fontana in conjunction with a RF terminal to create a complete, low-cost, real-time warehouse management solution for your business.

Fontana is a reliable, affordable, and easy-to-use warehouse management solution operating on both desktop and portable devices. Benefits of Fontana include accurate inventory, labor productivity gains and better customer relations.



# Features

Fontana IMS addresses the basic functionality of common warehouse operations and process automation, scaling to meet the needs of enterprises. We understand it is imperative for business to manage their supply chain operations in real time, controlling the flow of material to and from the warehouse is the most critical link in warehouse operations. Every business is grappling with the challenge of controlling inventory, keeping control of labor cost, optimum and efficient utilization of machinery, maximizing available space etc. By harnessing the power of mobile computing and RF, the system delivers real time warehouse transactions, plans and decisions can be made based on accurate real time data. Fontana IMS provides the ability to manage multiple warehouse operations.

### Rules Engine

Fontana IMS supports picking processes based on your diverse supply chain principles. It provides an extensive rules engine that enables the methods and priorities to be applied to any or all pick methods. Picking rules allow for the most suitable locations to be selected to pick items to and from in the warehouse. This greatly reduces manual intervention for material management and allows you to run your operations with discipline and flexibility. Rule Sets can differ from one warehouse to another warehouse, depending upon the business process and physical layout.

#### Location Management

Location is the heart of any warehouse system. Location needs proper bifurcation and identification so that it can be located easily and quickly both by the system and by the operator. Fontana IMS supports different types of locations in order to operate warehouse operations smoothly and manage stock properly. Fontana IMS has classified locations mainly into five types, prime storage location, shipping location, mobile location, staging location and receiving location. Mobile locations are the ones used for transportation of materials inside the warehouse by forklift, etc. Items with frequent transactions for picking and shipping are stored at prime locations for ease of handling and fast operations. You can simply define the flow of locations, e.g. the location which is nearest to a staging location will be farthest to a receiving location and viceversa.

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Using Fontana IMS, you can create a Goods Receipt for receiving the material from vendors or other warehouses. If Fontana IMS is integrated with your Enterprise Application, orders can be directly imported from ERP/MRP systems. Goods Receipt verifies the delivery of material. This will enable traceability of all movements and transactions of the material within the warehouse.

#### Goods Receipt Order Cancellation

Fontana IMS provides the most flexible way to cancel the receipt of orders and their return to the respective vendors. The system allows users to cancel partial order quantity, which was not received by the system or the entire order. Receiving partial order creates a back-order for outstanding order quantity.

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Using Fontana IMS, you can create a pick list for picking and shipping (respectively) the material from warehouse to different customers. If Fontana IMS is integrated with your Enterprise Application, orders can be imported from ERP/MRP systems. Once the order is made, Fontana IMS will guide user to the location to pick the material as per pre-defined rules.

### Shipping

Fontana IMS ships the material only after proper verification of material against the pick list. It also maintains the shipping details such as document ID/shipment note, carrier etc.

## Wave Picking

Wave Pick is a collection/group of orders. Fontana facilitates the creation of Wave Picking for quickly picking multiple orders, reducing the pick process time and providing an error-free operation.

### Kitting

Fontana IMS supports the creation of Kits; kitting represents a preset group of items, of varying quantities and UOMs, which will be picked from stock. Instead of creating an order for all the items separately, the operator can select the Kit(s).

#### Cycle Count (Inventory)

Fontana IMS provides one of the most important features for the internal operation of a warehouse, Cycle Counts. The user can define schedules to perform at regular intervals or on a spot check cycle. Performing Cycle Counts on a regular basis is the best methodology for achieving accurate inventory management. Fontana IMS facilitates Cycle Counting with respect to both item and location. A warehouse manager can either reconcile the Cycle Count at the end of process or use the option of re-count in case of any discrepancies.

#### Document Imaging

Utilizing the latest imaging technology, Fontana IMS supports the transformation of paper information into electronic format...Packing Slip, Bill of Laden, etc to increase information visibility.

### Palletizing

Fontana IMS supports the placing of material on a pallet and associating the pallet with a unique pallet ID for shipment. This is done for improving operational efficiency while moving large amounts of material.

#### Multiple Warehouses

Fontana IMS allows you to manage multiple warehouses across different geographical locations, or within the same geographical location. The system can maintain separate or common supply chain rules and parameters for each warehouse. Common data such as vendor, customer, carrier and units of measure etc can be used and kept common between the warehouses.

#### Multiple UOM

Fontana IMS supports multiple units of measure for one item. Fontana IMS maintains unit quantity and all relevant information of each item separately.

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The strength of Fontana IMS lies in maintaining all the transactions in the form of an order. One operator can have multiple orders at a time. Fontana IMS provides a feature to set the priority of orders by which the operator can process the transactions.

#### Order Cancellation

Fontana IMS provides the most flexible way to cancel Picking or Receiving Order either entirely or partially even after initiation of processes.

#### User Management

Fontana IMS has a powerful user management tool by which users can be classified as Manager, PC user, Picker, Receiver etc. Administrator can also assign the session-wide rights to each individual user.

#### Auto Notification by E-mail

Whenever stock of any item goes below minimum quantity limits, Fontana IMS has the ability to send e-mails automatically to the Warehouse Management providing information about the current stock status of an item, allowing for prompt and appropriate action.

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Fontana IMS has a wide range of reports with various filters. Reports execution is user interactive and wizard based. Report can be exported to MS-Excel, PDF, and Text etc.

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Another strength of Fontana IMS is the ability to transform paper documents to electronic media. With Document Imaging, inbound packing lists, bills of laden etc. can be stored as electronic files and shared within the system for fast retrieval.

#### nventory Imaging

Fontana IMS makes use of the latest technology from the mobile computer suppliers by enabling picture taking with the scanners. Pictures can be taken of damaged pallets received, damaged inventory moved to QA, packing of trailers etc.

## **Benefits**

**Company Inventory**: These figures contain the distribution and warehouse facility metrics under consideration for the automated inventory system. It also includes annual inventory write-off associated with warehouses under consideration.

Material Handling Equipment: It tracks the average cost of material handling equipment per warehouse worker involved in picking, receiving, putaway, shipping, etc. Costs include lease or ownership payments, repairs and maintenance.

**Inventory counting hours saved**: This improvement comes from the inherent accuracy of bar code scanning of each operation. It can also come from a cycle count program if physical inventories are being used.

Warehouse hours saved: A number of efficiency improvements can be expected through implementation of an automated inventory system. The elimination of search time is provided through the directing of an employee to where the product is stored. Some experts have placed this search time at 20% of a forklift driver's time in a manual system. Additional efficiencies can be achieved by actions such as combining put-always with picks (otherwise known as task interleaving), crossdocking receipts directly to the shipping dock, or integrating bar code labeling into the process.

The following graph shows a typical time study of a forklift driver's time in a manual warehouse.



Customer service hours saved: Information regarding the warehouse operation is immediately available to the people who need it most, such as customer service personnel. As soon as an operation occurs on the floor, information can be fed to a business system (i.e. ERP, MRP, Accounting, etc.) for immediate use. The inherent accuracy of bar code ensures that the information quality is high. This information is also available through the automated inventory system to the inventory management personnel who can easily determine inventory levels, employee productivity and other key measures. In some systems this information is available over the web, so people with the proper security clearance can view data from any Internet connection. Consider cost of calls currently made to the warehouse from customer service.

Management time saved: Consider the timely and accurate data that can be compiled into reports, reduction in errors because of bar code scanning, and best practices compliance due to operation verification.

Shipping error reduction: With an automated inventory system, items are scanned before picking to verify that the correct item is being picked. This can greatly reduce the incidents of shipping the wrong product to customers. A automated inventory system can also use a number of techniques to increase the accuracy of the quantity picked of a certain item.

**Reduction in total inventory**: With an automated inventory system, every action is verified through bar code scanning. This can significantly increase inventory accuracy, which can then be used to lower inventory levels. The reduction in inventory levels can yield significant payback given inventory carrying costs. Many people estimate annual inventory carrying costs as 25 cents for every dollar of inventory.

# System Architecture



Server	
Processor	Туре
	-Pentium III-compatible processor or faster
	Processor speed
	-Minimum: 1.0 GHz
	-Recommended: 2.0 GHz or faster dual core
OS	Windows Server 2000 SP4 Standard
	Windows Server 2000 SP4 Advanced
	Windows Server 2003 SP2 Standard
	Windows Server 2003 SP2 Enterprise
	Windows Server 2003 SP2 64-bit x64 Standard
	Windows Server 2003 SP2 64-bit x64 Enterprise
Memory	Minimum: 1 GB
	Recommended: 4 GB or more

Desktop		
Processor	Туре	
	-Pentium III-compatible processor or faster	
	Processor speed	
	-Minimum: 1.0 GHz	
	-Recommended: 2.0 GHz or faster	
OS	Windows 2000	
	Windows XP	
Memory	Minimum: 1 GB	
	Recommended: 2 GB or more	

Mobile Computer		
Manufacturer and Model	Honeywell 7850 Honeywell 7900	
unumouer	Honeywell 9500, 9501, 9550, 9551	
	Intermec CK61 Intermec CN3	
OS	Windows Mobile 5.0	
Memory	Minimum: 64 MB	
	Recommended: 128 MB or more	



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