



Data Sheet for the BellHawk Industrial Warehouse Management System (WMS)

The discounted BellHawk WMS bundle adds the Purchase Order, Ship Order, and Picking modules to a base BellHawk Barcode Inventory Tracking System (BITS) and the Job and Materials Tracking System (JMTS) to convert these systems into a fully featured warehouse management system for industrial warehouses.

The resultant BellHawk Warehouse Management System (WMS) is an affordable warehouse management solution that is suitable for use in manufacturing, industrial, food, pharmaceutical, construction, laboratory, medical, and distribution applications.

The BellHawk WMS can be used stand-alone or can be used to add warehouse management capabilities to a wide range of accounting and ERP systems, as well as supply chain, shipping, and logistics systems, through the use of BellHawk Systems' Bell-Connector software.

The BellHawk WMS is based on the use of license-plate container tracking principles. This makes it suitable for warehouse applications where:

1. Secondary operation such as kitting, repacking and relabeling are required to be tracked.
2. Materials traceability needs to be preserved.
3. License-plate labeling, such as the application of SSCC standard supply-chain tracking barcodes, need to be applied to nested containers.
4. ASN (Advanced Shipment Data needs to be gathered) for transmission to DCs, 3PLs, and 4 PLs by EDI as part of supply chain integration.
5. The recipients of the materials are Distribution Centers (DCs), manufacturing plants, and engineering and construction sites.

The BellHawk WMS is not suitable for those applications in which products are picked, packed and shipped in large volume for direct shipment to consumers.

The BellHawk WMS uses barcode and wireless mobile computing technology to perform the following functions:

- Recording the receipt and put-away of materials.
- Tracking raw, intermediate and finished goods.
- Tracking materials by location or container or bin.
- Tracking withdrawal of materials from containers or locations for production or secondary operations.
- Recording production of materials by production or secondary warehouse operations.
- Recording return of unused materials from production operations.
- Recording the picking, packing and shipping of materials in nested containers.



- Tracks materials by lot and serial number as well as by expiration date.
- Tracks materials in nested containers.
- Generates barcoded pick sheets and also performs directed zone picking.
- Performs “Cycle Counting” of inventory.
- Records inventory adjustments and reason codes.
- Provides real-time reports and Excel exports for inventory status.
- Can produce custom reports from SQL database using Access, Crystal Reports, or SSRS.
- Tracks who entered, moved or withdrew inventory and when.
- Can track materials in multiple stock rooms and warehouses, including off-site warehouses as well as floor stock in manufacturing plants.

The BellHawk WMS uses a web-browser interface that is simple for material handlers to use with a wide range of mobile devices including Android tablets and ruggedized mobile computers with integral barcode scanners. It can also be used with fork-lift truck mounted barcode tracking systems which use touch screens as well as with fixed station PCs.

The BellHawk WMS can be installed on a Windows Server within the warehouse facility or can be installed at a remote data center and accessed over the Internet. Because it uses a web-browser interface, managers and sales people can see the amount of material in stock and the processing status of customer orders, in real-time, from anywhere there is an Internet connection on a wide variety of devices including tablets and smart phones.

The BellHawk WMS software bundle includes the following BellHawk modules:

- Purchase Order Receiving (PO). This enable purchase orders to be entered into BellHawk or imported from an external ERP, accounting, or supply chain management system. This module then tracks the receipt and put-away of raw materials against these purchase orders, including optionally sending back receipts to an ERP or accounting system. This module also includes the translation between supplier and internal part numbers as well as handling the receipt of customer owned materials.
- Ship Order (SO). This enables sales orders to be entered into BellHawk or imported from an external accounting, ERP, or E-Commerce system. Records the shipment of items to customers against the sales orders and optionally can export these shipments, or invoices based on these shipments, to accounting or ERP systems.
- Picking (PICK). Generates barcoded pick sheets to aid in picking and packing items for customer orders and for kitting and similar ancillary operations. Also assists in picking items in FIFO order as well as in preventing order picking mistakes. Now includes directed zone picking for high volume picking of smaller parts.

The capabilities of the BellHawk WMS include:

1. Enabling users to specify their own data capture parameters without the need to customize the software. This enables a single part number to be used for different widths, lengths, and thicknesses of material, as well as for attributes such as size, grade, and color.
2. Enabling capture of traceability data for food manufacturers, including capturing data such as harvester, where harvested and when, and temperature on a container-by-container basis.
3. Tracking the quality control inspection of incoming materials, including those that go through statistical process control and a material review process. This includes tracking the return of failed materials to suppliers (requires QC option).
4. Generating Advanced Shipment Notice (ASNs) data, including the needed nested container data in electronic format as well as the capture of ancillary data needed to be included in the ASN for delivery by an third party EDI system.
5. Automatically printing barcode labels on demand for containers of raw materials as well as cartons and pallets of materials coming off the production line. This can include printing shipping labels for pallets and other containers. This label printing can be done using data from the BellHawk database in user specified and end-customer specified formats (requires TAG option).
6. Integration with weighing scales to capture weights automatically, including tracking of net and tare weights on each container and the handling of issues such as catch weight and piece count weighing. This enables simple and older weighing scales to be integrated into the WMS system without needing to invest in expensive new weighing systems.
7. Integration with inbound and outbound logistics and delivery systems as well as integration with shipping systems. This includes integration with cold-chain monitoring systems as well as handling private-label shipments under different trade-dress.
8. Can perform full “blind” inventory auditing for financial purposes, including tracking subsequent adjustments made to inventory (requires inventory auditing option).

With the Bell-Connector interface, which is included with the base BITS and JMTS systems, the BellHawk WMS can be configured to automatically exchange data with a wide range of accounting and ERP systems.

The BellHawk WMS fully meets FDA, USDA, and HACCP traceability requirements as well as those of standards organizations such as ISO. In addition the BellHawk WMS is fully compliant with CFR 21 Part 11 requirements and so can be used in Pharmaceutical, Biotechnology and Medical Device applications.

With the use of the BellHawk Real-Time Alerting (RTX) software (which is included with Bell-Connector), the WMS software can be customized to automatically alert:

- Material handlers when inventory needs to be replenished or moved and their supervisors when this replenishment does not happen within a specified time.
- Warehouse managers when picking, packing and shipping of customer orders is not happening in a timely manner.

- Purchasing and supply chain managers when inventory needs ordering.
- Supply chain managers when materials from suppliers are not received on time.

These alerts can be delivered by Email or Text Message to the mobile phones or other devices of the appropriate people to take the needed action.

This alerting mechanism can save operations managers from needing to watch computer screens and “walk-the-floor” to find out what is going wrong or even worse from finding out what went wrong yesterday from after-the-fact reports or calls from unhappy customers.

Clients can start with a base BellHawk WMS system and then add optional modules incrementally as their needs expand. Clients can also start by deploying BellHawk in one area, such as receiving and put-away and then expand its deployment to picking, packing and shipping.

The BellHawk WMS solution is very affordable, bringing real-time warehouse operations management software within the reach of small to mid-sized industrial organizations. The software is designed such that clients can save money by doing as much of the deployment work as possible themselves but with the knowledge that the BellHawk professional services team is there to assist with the deployment whenever needed.

For more information, please see www.BellHawk.com.