



Data Sheet for BITS Barcode Inventory, Materials, and Asset Tracking System

Overview

BellHawk Systems' Barcode Inventory Tracking System (BITS) uses barcode scanning and mobile computing technology, combined with license-plate container tracking methods, to perform inventory, warehouse, stock room, material and asset tracking.



BITS is designed for use in manufacturing, engineering, construction, laboratory, medical, and repair organizations as well as in warehouses and distribution centers.

BITS gives a real-time view of the status of inventory as well as the status of assets such as tools, jigs, and fixtures. Management users can also print out reports or obtain Excel exports giving the status of inventory and which items have fallen below planned minimum quantities.

BITS can also be used to track work-in-progress of serialized parts as they travel from one manufacturing, test, or repair operation to another. It can also be used to perform simple "Julian Date" materials traceability for food processors and distributors.

One major benefit of BITS is that materials can be tracked in real-time at multiple geographic locations including in warehouses, stock rooms, construction sites, manufacturing plants, and field maintenance sites.

BITS can be used on a subscription basis in the Cloud over the Internet at a secure data center in the USA. It can also be used on a subscription basis or purchased on a one-time payment basis for use on a client's own Windows Server.

What does BITS track?

The base BITS system tracks the following:

- Entry into inventory and withdrawal of materials by part number, lot number, serial number, and expiration date.
- Real-time tracking of the location and movement of materials, including the movement of inventory between facilities and movement of materials to construction sites and return from site.
- Receipt and tracking of materials in barcoded bins or shelves, and in/on barcoded boxes, reels, rolls, barrels, and pallets.
- Receipt and tracking of serial numbered assets such as tools, jigs, and fixtures.
- Issuance of materials for production, assembly, or for installation and the return of unused materials to stock.
- Issuance of tools, jigs and fixtures and other assets to people or jobs and their return to stock.



- Barcoded tracking of nested containers such as boxes on pallets.
- Packing and shipping of materials to customers.
- Tracking the work-in-process status of serialized items as they travel through a sequence of manufacturing, repair, or test operations.
- Performing simple materials traceability data capture for food processors and other organizations subject to FDA, USDA, and HACCP regulations.
- Tracking Government Furnished Equipment (GFE) or customer owned materials.
- Expiration dates of materials or retest dates of equipment

BellHawk BITS Technology



The BellHawk BITS software is comprised of a special website and a SQL database. It can be used on a SaaS (Software as a Service) subscription basis on a Windows Server at a secure data center in the USA. Alternately the software can be installed on a client's own Windows Server on a subscription basis or purchased for a one-time payment.

All data capture is carried out using web-browser based devices, equipped with barcode scanners. These include PCs and Android tablets with external barcode scanners as well as ruggedized PDAs and mobile computers with integral barcode scanners. Information stored in the BellHawk SQL Server database can be viewed on similar devices as well as on smart phones.

BITS can track materials using rolls of pre-printed "license-plate" tracking barcode labels. This makes it easy to track inventory and assets without the cost or complexity of using a barcode label printer. Alternately then rules-based barcode label printing can be added to the base BITS system using the TAG option.



Also the Bell-Connector automated data exchange software can be used to implement automated data exchange between BellHawk and a wide variety of ERP, accounting, computer aided design (CAD) and other systems. This tool is available for clients to develop their own interfaces or BellHawk Systems staff can assist in the development of these interfaces.

BITS can be accessed over the Internet using any modern web-browser on a wide variety of devices including Windows, Android, Linux, and IOS based PCs, tablets, PDAs and smart phones. This makes it ideal for tracking inventory at multiple geographic locations, including in the field, such as at construction and maintenance sites.

BITS tracks materials that have "license-plate" tracking barcodes on individually tracked items and assets, as well as materials in barcoded containers such as boxes, barrels, and pallets. This tracking can be performed using pre-printed rolls of license-plate tracking barcodes. BITS can also track "loose" material by location and by barcoded bin.

Initial setup and configuration, such as setting up parts lists and inventory locations can be performed using Excel spreadsheets or comma delimited files. This enables the easy use of data exported from other systems and can avoid duplicate data entry.

Other Features of BITS

BITS does not track inventory directly. Instead it tracks materials in containers, which may be nested inside other containers. It then tracks the movement of these containers as they move from location to location, which may be in different geographic locations.

BITS can use "Dynamic Binning" methods to minimize the stockroom space needed to store materials. In this, it automatically records where every container of materials is stored. Then, when materials need to be retrieved, the operator is informed (on their mobile computer screen) where the materials are located in age-first order. In this way, materials can be placed wherever there is space without the problem of trying to find the materials.

BITS can inform material handlers as to the preferred location to put materials away but always gives the choice of putting materials away where there is space. This avoids having some bins and shelves overflowing when there is space elsewhere. It also enables stock rooms to dynamically cope with short and long term changes in requirements for storage.

BITS can be used for validating inventory quantities, either as part of periodic "cycle counting" operations or for spot checks.

BITS can be used for tracking maintenance inventory, including pre-positioned parts at various locations throughout a facility, and their use on maintenance jobs. It can also track the receipt, disbursement, and return of assets, including tracking those that need maintenance or inspection at regular intervals.

BITS software can produce a report showing those items that have fallen below minimum required inventory as well as a report showing those items that are past their expiration date or need inspecting or maintaining. This latter feature makes BITS ideal for use in food processing and laboratory applications.



BITS can also be used to track when materials are loaded onto trucks and when delivered or used. This can make BellHawk ideal for "warehouse-on-wheels" applications as well as for construction activities where recording delivery to site can be a critical part of project management.

Optional Modules

There are a number of optional modules and bundles of modules that can be used with BITS to expand its capabilities.

These options include the WMS warehouse management system option, which adds the capability to enter or import POs and then receive materials against these POs. WMS includes the ability to enter or import ship orders and to generate barcoded picking sheets for order picking from the ship order or to use the zone picking capabilities of the Pick module.

WMS also enables BITS to record the packing and shipment of materials against the ship order and, with the Shipping Dock Option, to monitor the loading of trucks/trailers.

For More Details

Please see www.BellHawk.com.