



BellHawk Data Sheet Material Tracking System (MTS)

Overview

The BellHawk Materials Tracking System (MTS) uses barcode scanning and mobile computing technology, combined with License-Plate-Number (LPN) container tracking methods, to perform inventory, warehouse, stock room, material, work-in-process, and asset tracking.

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

MTS gives a real-time view of the status of inventory. 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. MTS can also be used to track work-in-progress of batches of parts or serialized parts as they travel from one manufacturing, test, or repair operation to another.

One major benefit of MTS 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.

What does MTS track?

The MTS 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 parts.
- Issuance of materials for production, assembly, or for installation and the return of unused materials to stock.
- Barcoded tracking of nested containers such as boxes on pallets.
- 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.
- Tracking of assets, such as tools, in stock rooms, on vehicles, as well as issued to departments or individual people.



Features of MTS

MTS 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, which are available at low cost from our partners. MTS can also track "loose" material by location and by barcoded bin.



MTS 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.

MTS 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.

MTS 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.

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

MTS 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.



MTS 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 MTS ideal for use in food processing and laboratory applications.

MTS 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.

One of the biggest benefits of MTS is the ability to maintain materials traceability as materials are moved between multiple geographic locations including manufacturing plants, warehouses, yards, and field locations such as building sites. This includes tracking materials by lot and serial number, as well as by expiration date.

MTS also has a variety of interfaces through which it can automatically exchange data with a wide-variety of other systems, including ERP and accounting systems, thereby adding LPN container tracking capabilities to these systems.