## **Manual Stock Locator System**

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Often, long before Warehouse Management Systems existed, warehouses had developed effective manual methods to track merchandise placement from receiving, to reserve put away locations, to case pick locations, and through to replenish forward case pick and repack pick position locations. They recognized that they needed a method that would be simple to use, not rely on people to remember where they put an item or last saw an item, that could provide a back-up procedure to find materials when they seemed to be lost, and generally provide a sense of control and order to daily warehouse operation. When I first entered this field I had the opportunity to work for a company that had developed a manual Stock Locator method to manage inventory and storage locations, and direct and control movement of merchandise between locations, including replenishment. I have helped many clients apply this method, and seen it used effectively in many warehouses. In this column I will describe the method, the Stock Locator Tags, and how to use them.

The Manual Stock Locator System was developed to

- Direct the put-away of receipts;
- Make the inventory and location information available to aid in retrieving stored merchandise (replenishment to forward case and repack pick locations or direct the picking of full pallet loads for orders);
- Make materials in storage easier to identify, and
- Support the managing of storage locations.

This Stock Locator System assumes that pick (or forward) locations are permanently assigned to SKUs and that all other locations are not assigned to particular SKUs, or SKU types. However, the system can be modified easily to segregate SKU types by storage requirements, e.g., flammable, oversize, etc.

The primary tool for this system is a 3-Part Stock Locator tag. An Example of a Stock Locator Tag is shown at the end of this column.

## Set Up

The method requires a small card file for holding active Stock Locator Tags. We usually keep the file at the receiving dock, along with an inventory of unused Stock Locator Tags. The file is organized to hold Locator Tags in two sections. The first

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section, the Empty Locations section, will contain one Tag for each storage location that we know is available (not assigned or occupied). The second section is for Occupied Location Tags that have been assigned identify merchandise in locations that are occupied or have been assigned. When a "Storage Location" becomes empty, the process requires that we create a new Stock Locator tag including the location number, and to file it by location number or by location number grouped by location size or capacity (e.g., small, medium, pallet rack, floor storage, etc.) in an Empty Locations section of the Tag file.

### **Receipt Storage Procedure**

As a first step in the receiving - put away process, the receiving clerk should look at the receipt and determine what size or type location will be required to store the cube of the SKU receipt. Then the clerk should select the Stock Locator Tag(s) for the appropriate size location(s) from the Empty Locations file; fill in the materials information in the blanks on the selected Tags, one Tag per pallet load, or one Tag per case if the receipt is small. After entering the SKU Number, the number of cases on the pallet, the date, etc., the clerk should attach the tag to the merchandise in the receiving staging area, to signal the load is ready for storage.

For receipts with greater than one pallet load per SKU, one Stock Locator Tag should be obtained and completed for each pallet load of a SKU to be stored.

The put away operator will take the merchandise with a Tag attached, and store it into the location noted on the Tag. Before placing the load into the storage location, the operator will

- 1) Initial the Tag to indicate the person performing the task;
- 2) Remove the first and second copies of the Tag; and
- 3) Leave the third copy on the load so that it can be seen from the aisle after being stored.

The operator will then

- 1) Place the first copy (card stock) into a storage envelope at the permanently assigned pick position; and
- 2) Return the second copy for filing by SKU number in Occupied Locations section of the Tag File in the receiving office.

The put away of small numbers of cases in a Hand Stack area should use the same procedure except that the first (hard) and third copies should remain on one of the cases as it is stored so long as all the cases are stored together. If the cases are

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stored in several locations, one Tag should be used to record the storage for each location.

### **Pick Position Replenishment**

When a forward pick position is emptied, or needs replenishment, the person with the responsibility for that replenishment merchandise movement will

- 1) Remove the hard stock Tags from the storage envelope at the pick position (if any are there), select the Tag with the oldest date, replacing the remaining tags in the storage envelope;
- 2) Go to the reserve storage location noted on the Tag and
  - Verify the merchandise is correct by confirming the serial number on the Tag copy on the merchandise as the same number on the Tag copy obtained at the pick position.
  - Remove all or part of the merchandise (as required) out of the reserve storage location,
  - If all of the merchandise is moved to the pick position, remove the Tag copy from the merchandise and return both copies of the Tag to the Receiving Office. At that point all 3 copies from the original tag will be matched and destroyed, and a new Stock Tag created to indicate the reserve storage location is available for the next receipt and placed in the Empty Locations file.
  - If only a portion of the merchandise in the reserve location is removed, change the number of cases noted on both the first and second copies of the Tag, to the Case amount remaining in the Reserve Location, and return both Tags to their original locations.
- 3) Move the merchandise to be replenished to the pick position.

# **Finding Reserve Inventory**

If Stock Locator Tags stored in the envelopes at the pick position are lost or destroyed, and the inventory records indicate there is still inventory available, that stock can still be located using the second copies of the Tags kept in SKU Number sequence in the Occupied Locations Tag File in the Receiving Office. Similarly, if the Stock Locator tags on the merchandise in the Reserve Locations are missing, the Third copies of the tags filed in the Receiving Office can be examined to determine the identification of the merchandise.

# **Inventory Counting**

By completing the Stock Locator Tags and placing the third copies on the merchandise stored in reserve locations, identifying merchandise and verifying the

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identity and amount during the counting of inventory will be standardized and easier.

## **Stock Locator Tags:**

The tags are 3 part, using NCR paper, overall approximately 4-1/3" by 3-3/16." The removed pages are 4-3/16" tall. The illustration below contains the information required to use the Tag in the format we have used. The first copy is usually heavy weight or card stock. The second and third copies are light weight stock. The area for entering merchandise date is identical on all copies. Each Tag or set of three copies has the same serial number on it with the printed serial number on the second copy in large red bold characters so that it can be easily read from a distance. On the first and third copies the serial number is in a conventional size type as shown below.

ITEM NO.		PICKING LOCATION	
ITEM DESCRIPTION			
PCS/CASE	CASES	PALLETS	
RESERVE LOCATION		DATE	INITIALS
SPECIAL INSTRUCTIONS - (separate from pallet tag before writing here)			
		No	o. 123456

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You can create these tags yourself or send me a note requesting more information about locations where you might be able to purchase them.

I do not know a supplier for the plastic envelopes I have seen used for holding the copies of the tags at assigned picking positions, but they are similar in design to clear, plastic shirt pocket protectors. We usually attach the envelopes to the storage rack at the pick position with an adhesive strip or two sided tape on its back.

You can implement this Stock Locator System yourself, without the assistance of any other department in your company. The purchase cost is minimal. Of course you need to have already implemented a location numbering system and have labeled all locations with these numbers. I described this process in an earlier column titled Location Numbering you can find on the Affordable Change page at www.warehousecoach.com. Implementing this manual Stock Locator System will substantially improve the productivity and quality performance of your warehouse. If you would like to talk about your plan to implement a Manual Stock Locator program or any other change in your warehouse, you can reach me at coach@warehousecoach.com.