

# *Warehouse Efficiencies*

## **Warehouse Efficiencies**

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## **Introduction**

When laying out your warehouse, you can be more efficient and increase the number of lines pulled per person, per hour. Create a specific pick path that places the most active items near the picking path or packing table. Then, assign bin locations in the system and label the aisles and shelves in the warehouse so that the bin numbers ascend along the picking path. Tickets and reports print in bin order so even new employees can pull orders with few mistakes.

In addition, you can improve picking efficiency by printing and using a picking manifest to pull your orders. This enables you to pick more than one order at a time.

After you have pulled your orders, you should organize your staging area according to delivery truck and stop sequence. This will make it easier to load your trucks. To accomplish this, assign route codes for each customer in the database. Routes print on provided pick tickets and invoices.

Finally, use shipping labels — they save time and look more professional. The following information is printed on each label: the number of packages in the order, the delivery address, the purchase order number, and the end line specials.

The remaining pages in this handout offer several examples of efficient warehouse layouts.

## Section 1: Warehouse Layout for a Large Dealer

Figure 1 shows one possible warehouse layout for a large dealer. The principle features of this layout are:

1. The picking pattern flows around the perimeter of the warehouse. The most frequently picked items are located at the end of the shelves so that pickers can avoid going up and down the aisles as much as possible.
2. Pickers wind up at the packing table where orders are packed and staged by route.
3. The minimum hardware requirements for the packing area should be one of each of the following:

CRT  
Manifest Printer  
Invoice/Pick Ticket Printer  
Label Printer

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**Note:** If you flush your backorders directly to invoices, the pick ticket printer should be placed at the beginning of the A bins (our example places the printer near the end of the picking path).

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4. The center of the warehouse is used as a restocking area. This allows restocking to be done during the day without disrupting picking operations.
5. Picking recommendations:
  - a. Pick whatever stock is possible and stage all -0 tickets.
  - b. Keep accurate inventory counts, and print tickets (on-line or batch) to status 6 in the warehouse.
  - c. Print Picking Manifests for up to ten orders at a time, if your picker is qualified.
  - d. Print the Short-Buy Report and purchase out-of-stock items or use the Automated Short-Buy program to run the report.
  - e. When flushing backorders, flush to either invoices (status B) or to a status 8.

If you flush straight to a status B, marry the flushed items to a staged ticket and deliver. Items flushed incorrectly must be credited.

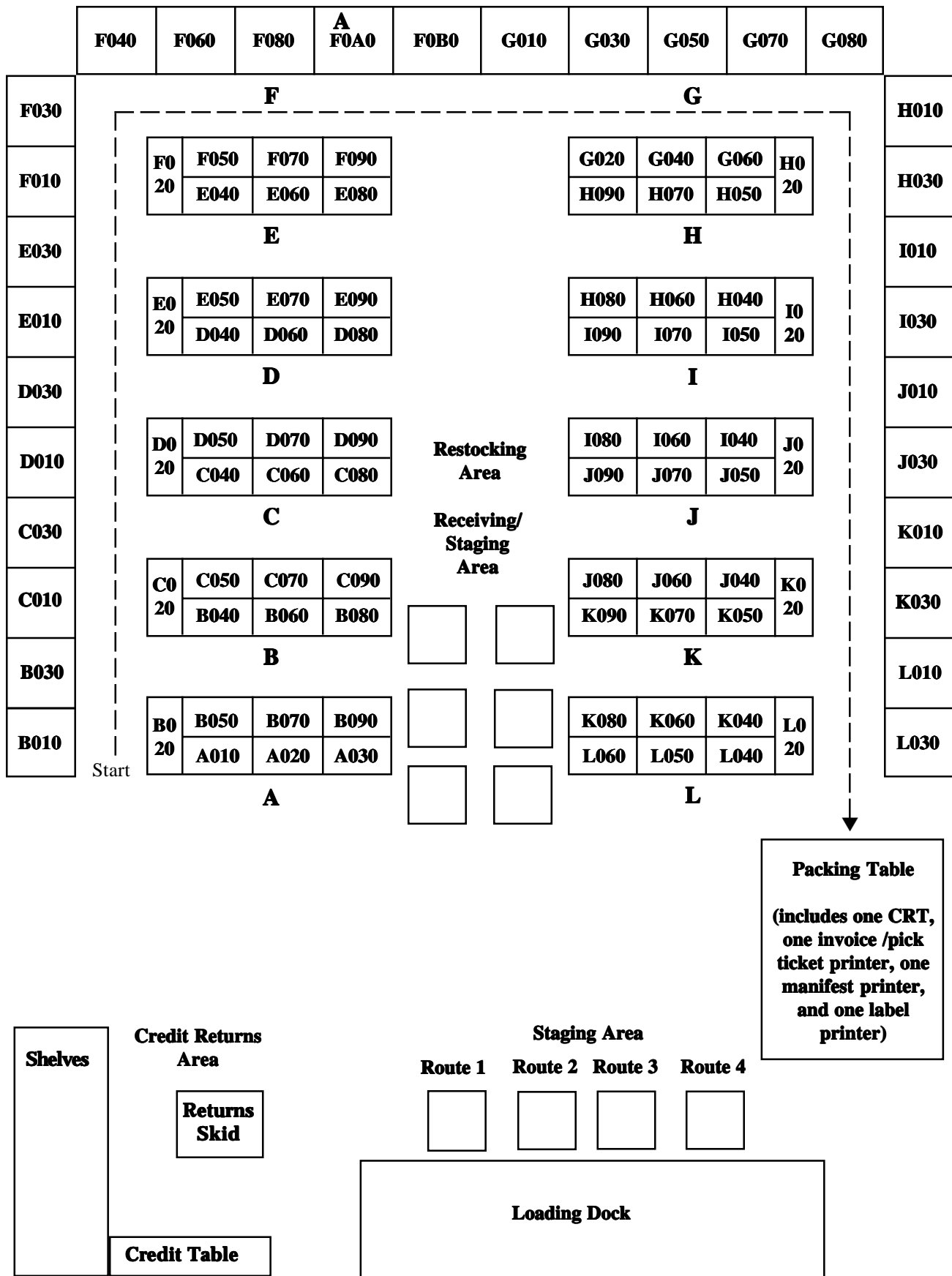
If you flush to a status 8, you may then final verify any items flushed incorrectly, and then print invoices.

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**Note:** If merchandise for a ticket does not come in, invoice the items that you have or keep the ticket staged until more items are flushed.

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**Figure 1. Warehouse Layout for a Large Dealer**

## **Section 2: Warehouse Layout For a Large Dealer Using a Conveyor Belt**

The warehouse layout shown in Figure 2 is similar to that in Figure 1 in many ways. The principle difference between the two layouts are:

1. The pickers walk in a semi-circle, placing pulled merchandise on the conveyor belt as they pick it.
2. The most frequently picked items are located closest to the conveyor.
3. Restocking is done from the perimeter of the warehouse rather than from the center, or is done during off-hours.



## Section 3: Warehouse Design For a Smaller Dealer

Figure 3 shows one type of warehouse layout for a smaller dealer. The principle features of this layout are:

1. The packing table is centered in the warehouse. The most frequently picked items are located closest to the packing table.
2. The staging area is organized according to the last digit of the pick ticket number. For instance, pick ticket number 1005-0 would be staged in lane 5. This system makes it easier to marry flushed backorders with staged pick tickets.

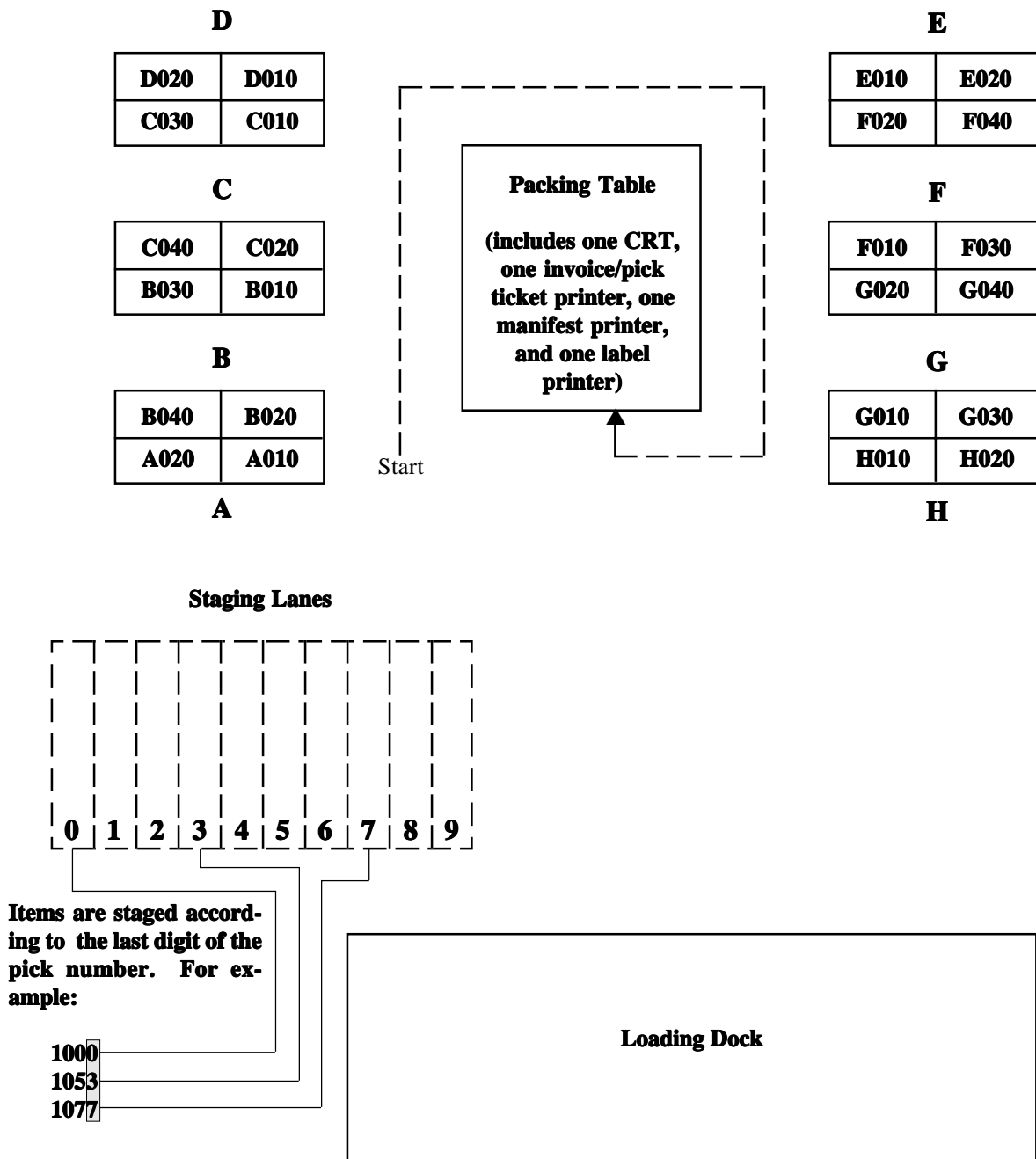


Figure 3. Warehouse Layout for a Smaller Dealer

