INVENTORY BEST PRACTISES SERIES:

PUT AWAY

PICKING

REPLENISHMENT

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On our first issue, we went over some of the best practices of managing your inventory in order to increase effectiveness, save money and maximize profits. True to the spirit of proper inventory practices, we will be going into put away, picking and replenishment in our current instalment.

As the old saying goes, time is money and so is inventory. We find a lot of our customers and clients are a little wary when it comes to this topic and we want to ensure that you will have all the tools necessary to unravel the secrets behind all the boxes, racks and barcodes in your warehouse.

8 BEST PRACTISES FOR REPLENISHMENT OF PICK LOCATIONS

Replenishment is the physical act of moving product from a bulk or storage location to a pick location where the product is selected for shipment to a customer. Some call this process a forward pick or letdown but almost always involves breaking down a full pallet into the selling unit of measurement such as cases or batches as part of the re-stocking process.

This function is critical to getting proper inventory turnover. How and when you replenish will have a direct bearing on the quality of those turns and keep inventory obsolescence to a minimum.

Here are some best practises to consider:

1. ## Advance Replenishment

Triggers for replenishment of pick locations are typically based on minimum-maximum quantities in a location. Adding the day's order flow to your replenishment quantity allows you to do advance replenishment. If the day's picks exceed available spaces in the pick locations, create a temporary pick face at the end of an aisle. Always aim to have enough stock on the floor to support that day's picking activity.

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2. FIFO Replenishment

Have your material handlers pull stock from bulk locations that contain the oldest stock. This is often easier said than done as it requires some sort of pallet identifier like license plating, lot number, or even an arrival date in order to differentiate which pallets to select for replenishment. Also, if you're like many warehouses that use double deep storage racking that is only accessible only from the front you're going to use a modified form of FIFO replenishment for the sake of efficiency.

3. Directed Put Away

When stock in the pick faces are low or empty, your put away logic should support receiving to pick location replenishment. This may include have the capability to break down pallets in the receiving area into units of measurement acceptable for the pick locations.

4. Prioritize Replenishment

Ensure pick faces that need to stock up in support of the day's picking activities are prioritized ahead of min-max or what can fit into a pick face. Constantly monitor picking backlogs and add additional manpower as needed if replenishment is falling behind.

5. Multitask the Replenisher

The person doing the replenishment have him perform cycle counts when a location is zero or near zero, make him/her responsible for ensuring stock is properly arranged, location labels are visible or present, replace damaged stock, and neatly arrange inventory making it is easy to pick.

6. Replenishment Direct to a Staging Location

If a picker couldn't find what he wanted, don't make him circle back to the warehouse instead send the replenisher direct to the pallet in the staging area. One of our customers designated a person to this function and nicknamed him 'Shorty'; his job is to fill all orders 100% by drawing stock from other locations in the warehouse.

7. Replenishment by Zone

As with picking over 50% of that activity is spent in transit moving from location to location. Economize that movement by organizing replenishment by zone or close groupings of locations in the warehouse.

In summary replenishment is a balancing act; too much replenish activity and you're wasting resources while too little causes fill rates to suffer. You know you've achieved the right balance when you've scheduled just enough replenishment activity to support that day's picking.

5 BEST WAYS TO DO PICKING

Arguably the most important function of any warehouse is fast and accurate picking of customer orders and where we've been asked to deploy the most automation. Here's our take on picking practices used today and the increasing amount of technologies used in each of those pick methods described below.

1. Order Picking

The most common method we encounter in manual pick processes. In support of this pick we've seen: pick ticket/sheets, shipping labels, RF terminals, and voice driven terminals. The process involves giving the entire order to an individual to work this way through the warehouse. Sometimes the pick sequencing may be designated in the pick sheet but in most cases the worker is left to his/her own discretion how to build their pick based on experience. With this process, there is typically a wide discrepancy in pick results and is heavily dependent upon the skill and experience of the warehouse worker.

2. Batch or Wave Picking

In this scenario, a batch or group of orders are released simultaneously and you may have one or more pickers simultaneously picking multiple customer orders. The trick is keeping all the orders separate. We've seen specially designed carts with multiple totes on them with each row representing an order. Due to the potential confusion, we've

never seen this as a paper driven process, rather real-time technology is used to keep a running tally of what you're picking.

3. Zone Picking

A group of orders (typically by shipping geography) are released simultaneously and broken down into the zones where the products are stored. This is used when you have products that are stored under different conditions (mezzanine, freezer, high racking, etc.) and/or you have a warehouse over 50,000 sq. ft. This requires a consolidation of the order and real time tracking such individual orders are staged together and inspected all at the same time. The technology is the most variable ranging from handheld computer, truck mount units, to voice enabled equipment.

4. Pick to Tote or Box

Travel time is often cited the biggest use of a pickers times. In this method, the tote or box travels along assembly line like via a conveyor to the picker who is waiting at a 'station' containing a set number of SKUs. Technology used includes pick to light systems, voice, robot, or terminal screen output. The challenge with this process is like rush hour; totes must travel the length of the conveyor before they reach the correct station which means workers along the line become the bottleneck as their work may be holding up other totes further upstream. Complex algorithms on the technology side must be able to resize stations based on each day's pick volume, support multiple induction points for case/totes to limit bottlenecks on the line, and continually monitor inventory levels in the pick faces.

5. Part to Pickers

This is a slight variation of the previous method with the product coming to the worker who 'picks' his product from their designated area. This is the warehouses of the future – the "Lights out Facility". AS/RS (automated storage and retrieval systems) will bring cases, pallets and even piece picks to the designated picking-packing locations. This creates by far the most predictable and reliable output as much the 'heavy lifting' has been automated by robots or AGV (automatic guided vehicles) and the skill or experience level of the warehouse worker needed to operate in this environment is sharply reduced.

Your choice of automation is heavily dependent upon your budget, warehouse volume, and customer service levels. However as more

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companies embrace e-commerce and 24/7 operations, there will be a growing need for companies to deploy more technology to the point in the near future, human output is no longer a factor in picker productivity.

8 IDEAS FOR PUT AWAY SUCCESS

Put away happens to be one of those functions that is put on the back-burner when there is a lot of picking, loading or replenishment to do. As a result, aisles become full, pick rates fall, and the warehouse starts to look like a maze of products.

Here are 8 great ideas for put away success – warning discipline required!

1. Take the OHIO approach.

Only Handle It Once in other words do a put away on the same day product arrives.

2. Use ASNs.

Advance Ship Notices requires a certain amount of trust from your vendor but it will dramatically speed the receiving process and allow your WMS to identify a put away location for the product while it is enroute to your warehouse.

3. Receiving Sortation

If you are receiving mixed pallets of product, break them down into individual license plates sorted by zone or single product. This will greatly reduce travel time and get product into pick or reserve locations that much faster.

4. Put away Fast Movers to Pick Locations or Close to Pick Locations

You'll need to do some calculations taking into account velocity and frequency of orders to determine which put away locations to use but generally speaking reserve locations should be close to the pick locations.

5. Put away to Empty Locations

When you do this, you get a free cycle count of that location and if in fact the location is not supposed to be empty you just flagged an issue for immediate follow-up.

6. Cross Dock

This actually eliminates put away tasks and if your WMS supports this function, it should alert pickers to go directly to the put away staging area to eliminate any potential pick shortages and any open backorders.

7. Plan your Put away

Several of our customers will not accept product before its expected arrival date. The reason is simple they schedule just enough resources and identify expected put away locations for each day's anticipated product arrivals.

8. Track and Analyze

What's your put away rate by pallet, by case, or by loose pieces (Eaches)? And when compared to expected product arrivals that day, this will give you the total number of expected put away tasks to be performed. Your WMS can then provide you the actual number of put away tasks performed that day and in term allow you to analyze the efficiency of your put away function and fine tune your metrics.

Put away while not considered one of the 'glamour' functions of the warehouse is a process worth mastering. Studies have shown that those who master this function are typically benchmark leaders in their respective industries. We hope these best practices help you to increase your warehouse productivity and efficiency with reducing costs at the same time.

About Portable Intelligence

Portable Intelligence offers RF Plus™, a WMS specifically designed to integrate with and help you collect the data that you need. RF Plus™ allows for wireless, real-time inventory, from the receipt of purchased goods at the dock doors, to issuing raw materials, transfers in the warehouse and back to the dock doors for shipping. RF Plus™ provides this in one configurable package.