



white paper

Mastering Slow Moving Parts

Dematic Corp.
507 Plymouth Ave. NE
Grand Rapids, MI 49505

Tel: (877) 725-7500
USInfo@dematic.com
www.dematic.com

Creating Logistics Results



DEMAC



Mastering Slow Moving Parts

Introduction

Developing a strategy for storing and picking slow moving parts can have a big impact on productivity.

When it comes to inventory, we all know the rule of thumb that 80% of orders are typically driven by 20% of the SKUs. As a result, most facilities optimize their processes for storing and picking the fastest-moving items.

Fast movers, however, may account for just a few hundred SKUs in a DC with 10,000 items. Too often, the slow moving items that make up the bulk of the inventory are an afterthought. They take up valuable space, they get lost because they're not tracked and they require a disproportionate amount of labor because they aren't easy to access. Like the junk taking up space in the basement, they're kept around because some day someone might order them – even if some day never comes.

For those reasons, mastering slow moving inventory can pay big dividends through improved storage density and accessibility along with reduced travel time and the overall cost of inventory.

Just What Is A Slow Mover

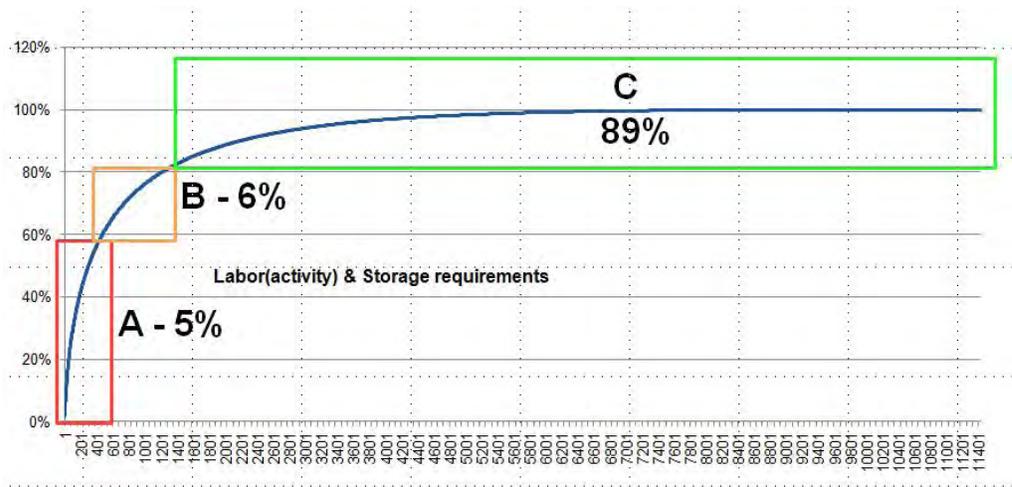
SKUs are typically classified as A, B or C movers. These classifications are based on how frequently an item is ordered and how frequently it's touched during a given period of time. Class A items are the fastest moving, Class B items are medium moving and Class C are slow moving.





Mastering Slow Moving Parts

As the chart shows, in most facilities there are far fewer fast and medium moving SKUs than slow moving SKUs.



But it's not always that simple. For example, slow movers may be defined differently from one business to the next. For some, a slow mover might be an item that's touched just once a day. For others, it might be a SKU that is ordered once a month.

SKUs are also dynamic, with activity levels that fluctuate during the year. Replacement parts for snow blowers are slow movers in the summer but they become fast movers in the winter. If they are always treated as slow movers, they may be slotted in ways that are inefficient.

Finally, slow movers may be a necessary evil. An industrial supply house stocking 100,000 SKUs may stock thousands of slow movers that are ordered in small quantities but on a regular basis. For them, slow movers might represent 80% of overall sales.





Mastering Slow Moving Parts

Know What You Have And Why You Have It

For those reasons, mastering slow moving SKUs begins with an analysis of an item master list that identifies:

- Each of the SKUs in a facility
- The size of each SKU. That provides an understanding of the storage and handling requirements for each item.
- The inventory levels for each SKU through the course of the year. That will dictate the storage space allocated for each SKU.
- The movement of each SKU throughout the year. That will identify dynamic SKUs.

Once you know what you have, in what quantities and how inventory moves through your facility, your SKUs can be classified as A, B or C movers. However, before attacking your slow moving inventory, it's important to answer several questions. You may want to ask:

- Do you have items that are no movers versus slow movers? If so, can that obsolete inventory be eliminated?
- Does your business demand that you keep every slow moving SKU that you have in inventory?
- Can slow movers be condensed to better utilize your cube and free up space?
- How much time and labor are expended to pick slow moving items?
- Do you need special equipment to store and retrieve your slow movers?
- Are you slotted correctly based on your order profiles?
- And, do your picking strategies match up with your SKU classifications?

The answers will dictate how you store and pick your slow moving SKUs.





Mastering Slow Moving Parts

Storing Slow Moving SKUs

Many facilities store their A, B and C movers using just one storage technique. However, making the best use of storage space may involve multiple storage techniques. What's more, items should be stored in technologies that are appropriate to the size of the item and match the velocity of the SKU.

Full pallet in and out: In a full pallet system, the golden zone should be reserved for high activity items. Slow moving items may be stored on upper levels or in the back of the warehouse. Similarly, you may require different storage depths for various SKUs based on volume. High volume items may be stored in double-deep or deep-lane pallet racks while low volume items are stored in single-deep pallet rack.

Cartons and eaches: To avoid storing partial pallets, slow moving items may be broken down in layers that are stored in case level rack, flow rack or shelving. Cartons, meanwhile, can be broken down into eaches that are stored on shelves, totes and pans. With dividers, for instance, multiple SKUs can be placed in one container or pan that also lends itself to automation. Mezzanines for rack or shelving areas make better use of the cube.

Automated storage: When it comes to automated storage, the price point will drive the technology. Horizontal and vertical carousels provide dense storage for cases and eaches at a lower price point than other technologies. However, they may not be appropriate in facilities with a large number of slow moving SKUs or high order volumes. Machine rates and picking efficiency need to be matched to the operation.

Mini-load automated storage and retrieval systems, on the other hand, provide very dense storage for a large number of SKUs. In a 300-foot long, 35-foot clear warehouse, a one aisle mini-load system provides over 1,000 pick slots along a side port and 5,400 reserve storage locations. For even denser storage, a tote can hold multiple SKUs and a storage pan can be divided into different segments with in the pan. Medium movers can be added to a mini-load AS/RS if a project can't be justified on slow moving items alone.





Mastering Slow Moving Parts

Picking Slow Moving Inventory

While slow moving inventory represents a small number of picks, it can easily represent 30-to-40% of the labor in a facility. That's because the A movers are typically located in slots nearest the packing area and shipping docks to make the best use of labor.

There are, however, several technologies and strategies to get the most productivity out of each associate by minimizing the travel time associated with each slow moving pick. They include:

Reslotting: This is especially useful in facilities with dynamic SKUs. Seasonal items should be reslotted to the front of the building when they are fast moving and moved to less prominent locations when they are no longer in high demand.

Pick-to-voice: Voice-directed picking improves productivity and accuracy because it is hands free case. In smaller warehouses without a WMS, a voice system can easily bolt onto an ERP to provide tools for labor management, slotting and cycle counting.

Conveyor: In a typical operation, a conveyor reduces travel time by routing totes to a shelving area. The operator picks from the shelf to a tote or a cart. When the operator completes the pick, the tote is rerouted back into the conveyor system to complete the order.

Laser truck: Like an automatic guided vehicle, a laser truck is automatically delivered to a picking location. This allows the order selector to remain in the zone. After the order selector completes the picks, the laser truck is automatically directed to the next pick location for that order. When the order is complete, the truck is directed to a pack station or the shipping area. A laser truck works well with a pick-to-voice or RF system.





Mastering Slow Moving Parts

Goods-to-person: In a goods-to-person picking strategy, pallets, totes, containers or pans are delivered from a high-density automated storage system, such as a pallet-handling or mini-load AS/RS. The order selector picks a carton from a pallet or individual SKUs from a container and places them in a shipping carton. The storage unit is then automatically returned to the automated storage system. A multishuttle mini-load system is ideal in an environment with a high volume of very small orders from a large number of SKUs.

As with storage solutions, order volumes and price points will determine the best picking strategy for a facility.





Mastering Slow Moving Parts

About Dematic

Dematic provides logistics solutions that optimize material and information flow from receiving to shipping within the four walls of the factory, warehouse, or distribution center. These solutions, built around automated material handling technologies, process improvements, and software, are engineered to improve overall supply chain and business performance.

Dematic's integrated systems are supported by a seamless, one source, implementation capability that reduces time, cost, and risk. This is accomplished by owning and controlling data driven design services, real time WMCS software, proven material flow technologies, and best in class engineering, project management, and life cycle support services.

Dematic is dedicated to customer satisfaction & guarantees successful system performance. For more information, visit: www.dematic.com

If you are interested in learning more about this topic and how we can help, please contact Dematic at (877) 725-7500.