

# How Do You Currently Slot Product in Your Distribution Center?

Strategic slotting can drive 10% or more productivity improvement.

Like most organizations, you may find it difficult to deal with the myriad of slotting issues, which have become too complex for guesswork, paper-based calculations, spreadsheets, and outdated slotting methodologies. Many companies use a homegrown tool to determine how to locate a product, and often users don't have access to all the information to pick the best location.

To determine if the time is right for a better slotting solution, ask yourself these questions:

- Do you like touching product many times to move product through a distribution center?
- Do pickers like waiting for product to be delivered for picking?
- When a pallet reaches the shipping dock, is it ready to be loaded without restacking?
- Are all the products slotted according to weight and height to allow for easy pallet building?
- Are fast moving products in the "golden zone"?
- Are promotions incorporated into current slotting plans?
- Does your slotting tool allow for multiple item location swaps across multiple pick locations in a daisy chain set of moves to optimize multiple product placement with one pass?

Did you answer no to any of the above questions? If so, then implementing new slotting software will likely provide a solid return on investment.

# **Getting Started: Determine Your Slotting Parameters:**

Slotting optimization software are proven to improve warehouse space utilization, increase efficiency and decrease labor costs.

Results you can expect to achieve from leveraging a slotting tool include ----->

Before you start using a slotting application, you need to determine the parameters that are important to slotting products, and also carefully review all data for accuracy. Increased Picking Productivity:

- Due to reduced travel times 10%
- For break pack operations 15%

Increased Replenishment Productivity:

- Full case operations 10%
- Break pack operations 12%

Reduced Damages – 40%

Consider the following questions:

- Do products need to be re-measured?
- Are rack location dimensions on both pick and reserve locations accurate?
- Do we want to keep vendors together?
- Are similar products next to each other creating incorrect picks?
- Are there product attributes, such as hazardous materials or fragile items that need to be kept separate from other products?
  - o Are these attributes currently available as part of the existing data available or do you need to add them?
  - o Determining how to use all available data prior to starting will make for a robust analysis.
- What are the physical dimensions on the pick and reserve locations?
- Do your aisles have beams at various levels next to each other?
  - o If so, a good practice is to move rack beams so they line up with adjacent bays, which will reduce maintenance towards preserving accurate pick and reserve location dimensions.

#### 2. Biggest Benefits Achieved with Best Practices

Accurate data is one of the most important factors to successfully utilize any slotting program. Determine and validate the data you will use prior to loading the data into your tool for the first moves. Tracking sales by cases sold by item is one of the most common pieces of information needed.

In addition to accurate sales data, it is critical to have accurate dimensions on pick locations and reserve locations. Another benefit of slotting software is using it to determine the number of cases stored on a layer (TI) and the optimal height of the pallet (HI). Knowing how to efficiently store the product in the pick location will also aid in determining a TI HI that will reduce labor by reducing handling during the replenishment process.

# Before and after an optimization based on productivity from a unit movement point of view:

- ✔ Minimizes travel, picking, and replenishment costs
- ✓ Increases productivity
- ✓ Enhances service readiness
- ✓ Reduces operating and capital expenditures costs
- Improves pick line efficiency
- Reduces inventory damage
- Improves overall order quality
- ✓ Optimizes storage and retrieval
- ✓ Produces optimal move chains minimizing moves and cost
- ✓ Reduces bend and reach for employees

#### Labor Savings:

Slotting optimization can reduce labor by minimizing handling of product by creating less replenishments. New pallet TI HIs can be sent to suppliers to determine if they can send the product with the optimal TI HI to fit into both the reserve and pick slot. Slotting fast moving items nearest the dock will shorten travel time which can amount to a significant savings of travel cost. Not only will the travel time picking be shortened, but the travel to items after receiving will also be optimized.

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A slotting optimization program can reduce the slotting associate's time spent on determining the best location for an item. Many applications have built in common goal settings that can be used right out of the box to hit the ground running. Using custom goals to achieve a desired outcome is another option in slotting optimization applications.

# **Storage Type Analysis:**

In addition to using existing rack types for a slotting optimization project, the software can also recommend new rack types and storage solutions given a set of parameters. Based on forecasted sales, the slotting application can look ahead and determine layout changes that may be needed in the future to optimize warehouse cube utilization and labor.

# **Choosing the Right Slotting Software Applications:**

Standalone slotting solutions have developed integrations with all major warehouse management system providers to easily import the data into the applications. By utilizing a warehouse item master and product movement, the best slot can be chosen to minimize product handling.



Slotting applications come with a variety of different options, including some that can be used in conjunction with AutoCAD or have their own internal warehouse model that can be constructed. Choosing the right application is critical to ensure that once the program is implemented it is not too complicated to continue using.

#### Summary

Alpine can help you take the guesswork out of your slotting initiatives. By providing rapid and easy to perform multiple "what-if" slotting scenarios, Alpine allows you to compare operational goals, achievement, and financial return for each scenario. After comparing the results, you can select the optimal slot strategy to execute.

# **About Alpine Supply Chain Solutions**

Alpine Supply Chain Solutions, based in Chicago, IL is a supply chain consulting company driven to ensure their clients get the most value from their investments. Their approach to every project starts with the data and ends with a cost justifiable solution. With deep roots in industrial engineering, Alpine's approach is unique.

Alpine Supply Chain Solutions works with customers to optimize their facility operations, including location schemes. Recent projects have aided customers in facility moves / slotting / label database as well as complete facility layout rebuilding to accommodate growth within an ongoing operation/ slotting/ move management. Alpine partners with ID Labels, Inc. for their innovative products, including labels that peel and re-stick over and over.

Find out how Alpine can help with your next supply chain project! Contact us today: +1 630.886.4762 <u>marketing@AlpineSupplyChain.com</u> alpinesupplychain.com

