



# 12 Simple Steps to Perfect Accuracy for Order Picking & Packing

**By Integrated Systems Design**



Nothing drives profitability out of operations faster than mis-picks, mis-packs and general errors within your warehouse. Problems begin to show up with unhappy customers questioning why they ever started doing business with you in the first place (and who might never do business with you again). As a result, you decide to attempt to quickly to fix the problem(s) and their associated costs.

The fixes are holistic and have to touch many facets of your warehouse. First you'll need to start with the processes and culture of your organization. Then, decide which equipment and physical tools can be used to drive your warehouse to order picking and packing perfection.

## **Building Perfection in the Process and Culture?**

Begin by making sure your order picking and packing processes are well documented and free of discrepancies and gaps which can force diligent workers, who follow the processes, to make errors. This may sound like common sense, but unfortunately this mistake occurs more often than you would imagine.

To assure you don't fall into this trap, first interview your workers. You'll need to encourage an environment of honesty and good will. You may be amazed to find how many times processes call for one method, and your workers do another because they are aware that the processes are broken, not effective or missing.

It's important to have an open and honest relationship with everyone on your staff. Everyone from your temp workers, full time operators, managers, directors all the way up VPs, need the ability to communicate IN BOTH DIRECTIONS! Lack of this relationship will create failure... GUARANTEED!

Schedule regular meetings and times to discuss problems and errors, why they happened and how to fix them. To generate the right level of openness and participation, "oiling" everyone up with pizza or another company provided lunch item is an outstanding tool. With a little bit of "free" food, everyone is in the right frame of mind to help and participate. It's critical that this exchange of opinions and information is free of cynicism or negativity and full of positive reinforcement. (It only takes one "That won't work." to stifle their enthusiasm.) Commit to an investigation of each idea and I assure you, your employees will not only tell you about problems that you don't know exist, but may solve them just as quickly and often in the same meeting.

### **It's All About the Money**

If only I had a nickel for every time a double bar code verification process is totally ignored (correct item SKU goes to the RF gun and the operator is supposed to scan the product SKU label and then the pallet SKU label for 100% accuracy). The operator often double scans the pallet SKU label... its faster...but it defeats the purpose of improving accuracy.

Why does this happen? Usually because operators have no knowledge as to why it's important to scan both labels and/or they are compensated for productivity and throughput levels that are not obtainable without "cheating" the system.

Aligning compensation to reinforce positive actions benefiting your organization's short, medium and long term goals are vital. My favorite alignment compensation policy is a weekly "all or nothing" bonus. Achievable levels of throughput, accuracy, safety and attendance needs to be achieved to hit bonus. It's an all or nothing bonus based on obtainable levels that benefit the employee and the company.

### **A Little Stick to Go With Those Carrots**

Certainly hitting a day's numbers is important, but if you aren't in the 98% to 99.99%+ striving for perfection you need to evaluate policies and also technologies to achieve 100% accuracy.

Do the math on the cost of your mis-picks. You'll often discover that increasing accuracy 0.02% quickly adds up to quite a bit of money, not to mention when you factor in the soft costs of customer satisfaction and lost sales.

Working our way up from simple, easy tools and technologies, let's look at some ideas that provide a fast return on investment, low acquisition cost and are easily implemented.

- 1. Posting individual and/or group error rates.** This can be as simple as posting a list on a bulletin board or as complicated as a large display or monitor showing real time accuracy levels. This usually requires data from a simple report generated by the **WMS** or WCS software system. Posting errors and picking rates can also foster good proctoring practices if it's built into your culture. Allow the individual who is setting the bar to teach and tutor those who "don't get it." The outcome is often a great win-win scenario for everyone. Everyone wants to do a good job (if not, you should talk to HR and find out why they are working for you). Showing everyone where their numbers are and what they need do to achieve improvement often brings out the best in people. Having individuals and teams competing against each other drives enthusiasm up and is extremely contagious (in a good way). Once again, the devil in the detail is to do this in a positive, fun way and not a punitive and negative way.
- 2. Posting employee throughput levels.** People like to be the best at what they do and they enjoy satisfaction by being the best. Showing real time picking rates certainly helps foster competition and sets the bar so others know what they should be striving for
- 3. The pursuit of perfection is a chosen path.** The trick is to divide and conquer. Allow your process, staff, tools and technologies to incrementally get you closer to 100% accuracy.
- 4. Remember, weigh everything!** I'm not suggesting that every order and SKU should be weighed to measure the accuracy. I'm telling you that a large percentage of your orders should be weighed and that implementing a weigh scale and **software** verification system requires very few resources and will verify that percentage of orders in split seconds. Even if this eliminates only half the orders that can be verified this way, imagine the burden you have taken off your checkers and QC people with very little effort

and investment. We build this process into almost every system we design and implement.

5. **The wrong documentation going into the wrong order.** Today, most organizations have employees handling piles of documents to look at an order, match it up to the document they have in their pile and place the document in the order before sealing and shipping. Wow! The errors and waste of labor in this process is dramatic. Using an automated document **printer and inserter system** (that start at about \$40,000 and can insert up to 3,000 documents an hour) solves this problem. This type of system provides a double bar code verification that the right document is going into the right order... in seconds. I can discuss the way to generate revenue for the warehouse using these technologies, but I'll save that article for another day. Let's just say this system provides 100% accuracy and often has a 6-month ROI (fast and easy).
6. **Often the number one source of errors is the counting of small items.** We covered the use of weigh scales which can eliminate a large number of these mis-picks after the fact, but how about during the picking process? Using counting scales while picking can make sense if you are picking small components and especially if they are costly.
7. **Parts images and photos on the PC monitor when directing the picker.** Many of today's WMS, WCS and inventory management and picking software solutions allow organizations to include images of items in their database. On some parts, common sense might rule, but when dealing with inner packs, custom packaging and proprietary parts with unique configurations, a simple image helps an operator confirm in milli-seconds what they are seeing and picking. This is especially helpful in organizations that use temporary labor to fill in for or supplement their full-time operators.
8. **The use of pick-to-light and put-to-light indicators can be implemented in many processes to minimize errors.** To make this very cost effective, the integration of goods-to-person technologies (such as **carousels, VLMs, shuttle technologies, ASRS**, etc) should be used. Items are delivered to the operator at an ergonomic height, and the lights tell the operator where and how many items to pick and put into the correct container. The reason goods-to-person technologies are important to integrate with pick lights is that you are not lighting up every possible pick position like you do with football fields of flow rack. The number of displays are few and very effective.
9. **Creating active light grids on shelving or goods-to-person pick faces.** This practice is used more frequently on SKUs in smaller totes or boxes across wide spans of shelving or trays. By building an XY grid of lights on the center of each shelf level and column, you can set an audible and light alarm to indicate the operator is in the wrong cell/SKU location.

- 10. Voice picking comes into play when you have a large number of SKUs in shelving or rack not using goods to person technologies.** The audio directs the picker to the correct location and quantity. The picker then verbally verifies the SKU and quantity. The throughput levels often increase slightly with this technology, but your accuracy will often increase much more. This is especially true for operations that require the picker's hands to be used for picking and counting. The voice picking method frees up the worker's hands.
- 11. Slotting your inventory will provide great benefits by increasing throughput and providing increased accuracy levels.** Slotting is the process of keeping similar types of inventory items together. The similarity of the inventory can be categorized by velocity, physical size, frequency of picking the same items together, seasonality or other characteristics which lend themselves to some intelligent grouping. One example of slotting would be having ignition coils, spark plugs and plug wires located on the same shelf since customers often order all these parts to complete a project. Kitting could be another option, but in some cases, while knitting does increase inventory levels, the variables may create too many kit options. Slotting increases your accuracy by reducing operator walk and search time selecting SKUs from various parts of your warehouse.
- 12. Visual scanning of items within an order** (I saved the best for last). This technology has been around for a while, but the cost has decreased and accuracy has increased dramatically over the past couple of years. The vision system simply looks inside totes or boxes of picked items and identifies each SKU in the order. It then verifies the accuracy and routes suspect / incorrect / incomplete orders, via **conveyor**, to quality checkers. This allows your checkers to review far fewer orders (requiring far less labor), but positively impacts overall accuracy levels dramatically with each error found. If you haven't reviewed and investigated this technology in the past two years, you owe it to yourself to check it out again.

So, these 12 steps and ideas, ranging the gamut from simple to complex, should be investigated and analyzed to help your organization not only hit the 100% accuracy mark, but to improve productivity and system throughput and create a dramatic financial return on investment. Organizations such as ISD can provide valuable resources for determining the feasibility of your warehouse improvement process. Call or **email** today for a **free space and labor survey** to begin the drive to picking and packing perfection.