

## Onsite Review & Recap

Purpose of this on-site review was to understand Customer's business environment and operational practices in order to provide experienced, third-party opinion on the following topics:

- Potential short-term improvement opportunities
- Warehouse strategy and priority of operational improvements
- Longer term warehouse strategy and design thoughts

### *ON-SITE MEETINGS & OPERATIONAL REVIEW RECAP*

As general background to the recommendations contained in this document, below is a recap of the discussions and operational review activity conducted while onsite at Customer's distribution operation. It is worth noting that some of these recommendations deserve deeper discussion within the Customer's organization. In some cases, the recommendations may also deserve a data-driven evaluation of their value and additional operationally planning.

#### **DAY 1**

- Quick operational overview and facility tour
- General business overview
  - Company history
  - Current operational state and challenges
  - Current initiatives and business forecasts
- Operational walkthrough by warehouse process
  - Receiving
  - Replenishment process
  - Pick location slotting
  - Pick ticket production / distribution
  - Picking
  - Audit / Pack / Pack slip insertion
  - Outbound staging / shipping

#### **DAY 2**

- Recap of prior day / close major gaps on process understanding
  - Review of current staff and process for pick ticket distribution and management
- Warehouse opportunity / strategy discussion
  - Short term / Current opportunities
  - Longer term / larger scale improvement opportunities

## Operational Review & Current State Recommendations

### *SUMMARY OF PRIMARY RECOMMENDATIONS*

1. Revise pick ticket distribution system
2. Reduce orders to single order per bin (except for batch picking)
3. Further assess options to relayout the pick areas to relieve congestion
4. Reduce amount of work at the pack stations by moving work upstream or into parallel processes

The following section highlights key warehouse process details observed while on-site. Where appropriate, commentary and recommendations are included relating to the current processes and operational setup.

### *PICKING*

#### Current process highlights

- Picking is generally for orders received the prior day. In the evening, frequently the following days shipment are picked and packed to help spread volumes and meet service.
- Batch picking of same-sku single-item orders is handled by aggregating the pick tickets prior to distribution to the warehouse associate.
- Non-batch pick tickets are distributed to the pickers via a single work-stream generally twice per day (once in the morning and once after lunch).
- Priority / expedite orders, often those awaiting back-ordered product or other customer instruction, are managed and distributed throughout the day by a designated manager
- Pickers utilize industrial carts loaded with empty picking totes to pick multiple orders during a trip into the storage area.

#### Process comments / recommendations

- **Limit of one order to bin:** We recommend eliminating the practice of picking multiple orders into the same tote except for the current batch picking process. This appears to be slowing down the packing process and likely forces Customer to staff some of its highest quality personnel at the pack station to essentially re-pick the product and increase the total audit effort. It would be preferable to drive order accuracy through the pick process and substantially reduce or eliminate the audit during the packing process.
- **Deploy a revised pick ticket distribution process.** The key of any revised system should be focused on the following:
  - Shorten cycle time of picking as measured from when picker gets the pick sheet to their delivery of the completed pick to the packing station. It is important that any future system reduce the packets of work given to the picker for a single cycle. It is suggested that the work taken to the floor not represent more than 1 hour of work and perhaps as little as 20-30 minutes (or single picking cart's worth if that is less)
  - Improve visual management on daily picking activity

- Additional segregation of order types to drive productivity and enable better management of the operational flows
  - For example:
    - Single item orders
    - Multi-line single-aisle orders
    - Multi-aisle orders

One approach to this would be to deploy a revised pick ticket distribution system for increased control of pick task assignments and a more fluid distribution of smaller pick ticket packets. There are several approaches to this solution and further discussion about how to best deploy it into Customer’s environment would be needed before moving forward.

**Simplified Pick Distribution Box**

The below is another example of how to distribute pick ticket work packets to the warehouse floor in a more controlled manner. In the example below, the tickets are similarly organized into work packets representing a quantity of work (an expected time or potentially one picking cart worth of orders). Based on expected work for the day, pickers are assigned to work on one of the work stream of tickets. Supervisors are able to monitor progress and move pickers from one order type to another as needed during the shift to adjust for downstream activity (pack stations, icing, packaging). This approach can also be done simply with a pick ticket outboxes (stacks) where each picker is expected to take the pack off the top of the stack after completing their previous pack.

*Simplified Pick Ticket Example Diagram (Conceptual purposes only)*

