

Optricity Service Options

The facility survey service is a practical choice for any client with the need to configure or reconfigure racking slot types for a warehouse.

Project Scope:

A typical Project Scope will encompass the analysis and alternative reconfiguration of one or more facility areas (e.g. dry grocery, break-pack module, HBC, etc.). These areas are specified in the project scope. The Deliverable is the metric output as described in Phase 4.

Facility Survey Service

As technology, business environments, product mix, and shipment volumes change over time, it is frequently advantageous to review the racking configuration of the distribution center. Oftentimes, a reconfiguration of existing racking can yield significant gain in productivity through improvements in ergonomics, pick/velocity densities, etc. While completely re-laying the entire distribution center is the ideal long-term solution, it is typically not cost effective in the near-term due to the disruption to Operations and the capital expense incurred. By reviewing the configuration of existing racking (such as shelf heights, beam-pair elevations, pick levels per rack bay, etc.), significant improvement can be achieved by making modifications to configurations without significantly modifying the rack footprint.

Optricity offers a Facility Survey using OptiSlot's Optimal Slot Type Analysis tool. Our analysis incorporates many slot and item attributes as well as user defined rules that are considered in a full Slotting Optimization. We consider ergonomics, slot attributes (item weight/height per individual level, max facings per slot type, shelf/beam-pair loading, etc), item attributes (max stacking, allowable facings, case orientation, dimensions/weights, etc), client defined rules (allowable case rotation, pallet pattern changes, etc), client desired SKU velocity (averages, seasonality, etc), and other factors (such as technology constraints including paired light pick-to-light systems) to determine the optimal quantity of racks by slot type. Quite simply, using our OptiSlot tool, we can take a basic item file provided by the client, create the theoretical slot types that we want to analyze, and run the analysis. The resultant output is an extremely accurate calculation of how many racks of each slot type are actually needed to slot the items based on the defined criteria. This is not simply a capacity calculation based on matching the item cube and cubic velocity to rack capacities... it is the baseline of a true optimal slotting solution.

Phase 1 – Operational Review and General Slotting Requirements

1. Optricity meets at the Customer site to:
 - a. review the Operations in the warehouse area(s) to be analyzed
 - b. discuss the Client's perception of the operational issues that are to be resolved
2. Optricity to make initial comments regarding high level modifications to the existing slotting strategy and racking configuration which will likely generate immediate improvement
3. Optricity and Customer thoroughly discuss slotting requirements (e.g. goals, constraints, etc.).

Phase 2 – Facility Set-up

1. If available, Customer provides AutoCAD drawings of the facility in electronic format including:
 - a. scaled plan view including slot numbers and annotation of slot configuration for each Aisle/Bay as well as general facility dimensional data.
 - b. rack elevations with cross referenced slot configurations including rack dimensional data.

2. Customer provides slot numbering scheme for the facility.
3. Customer provides slot data in electronic format in either the form of:
 - a. spreadsheet template (in Optricity standard format).
 - b. data file in XML format (Optricity standard format).
4. Optricity sets up each area within the facility and physically validates configuration via conference with Customer.
5. Discrepancies between transferred file data and physical facility configuration will be:
 - a. identified jointly by Customer and Optricity.
 - b. corrected in Host System (by Customer) and re-transmitted to Optricity in aforementioned format and re-validated.

Phase 3 – Validate Item File Data

1. Customer provides item data in electronic format in either the form of:
 - a. spreadsheet template (in Optricity standard format).
 - b. data file in XML format (Optricity standard format).
2. Customer provides description of any coding to be used in slotting strategy including listing of parent groups and sub-groups of items.
3. Customer provides item velocity history (unit movement and/or hits, 52-78 weeks preferred) or calculated forecast velocity (unit movement and/or hits) in electronic format either in the form of:
 - a. spreadsheet template (in Optricity standard format).
 - b. data file in XML format (Optricity standard format).
4. Potential item data inaccuracies will be:
 - a. jointly identified using tools within OptiSlot.
 - b. corrected in Host System (by Customer) and re-transmitted to Optricity in aforementioned format and re-validated.

Phase 4 – Develop Alternative Racking Configuration Plan

1. Optricity to develop alternative racking configuration plan within the OptiSlot application
2. Optricity to demonstrate improvement to be gained through proposed alternative racking configuration using metrics such as:
 - a. Slotting configuration scoring including score by individual Customer desired goal
 - b. Distribution densities (pick density, unit movement density, cube movement density, etc)
 - c. Current goals violated by Customer using existing configuration
 - d. Financial calculators (net picking operation improvement)
3. Optricity to provide Customer with resultant slot book listing each item and the assigned optimal slot type.

For additional information contact Optricity Services at 919.806.4303 or

email: Services@Optricity.com

