

IntelliPack Shipping Cost Optimization System

(US Patents 6,775,588 / 8,019,463)

Enables carton selection from a large number of carton sizes without carrying a large inventory of pre-made cartons



Using Artificial Intelligence to reduce shipping costs by selecting fewer and better carton sizes

Pick cartons from LED illuminated locations and replenish consumed cartons using FastFetch[®] conventional lighted carts

Benefits

- **Reduces labor costs.** LED segments illuminate to call attention to the best carton for packing. No more repacking for having selected the wrong size carton. Different colors enable multiple packers to share a carton rack.
- **Reduces shipping costs.** Shipping fewer and smaller cartons with reduce dim-weight greatly lowers small parcel carrier charges.
- **Reduces material costs.** Smaller cartons use less corrugated material and less dunnage.

Features

- **Selects cartons from a large set of sizes.** Use 40 or more carton sizes with small inventory.
- **Best cartons are determined before or after picking.** Best carton size is calculated by the FastFetch[®]'s AI-based cartonization algorithm when order starts or arrives at the pack station.
- **Cartons are available at load or pack station.** One or more "carton racks", with a full array of carton sizes, are located near cart/order setup points, pack stations or put walls.
- **Analyzes Historical Orders to Determine Optimal Carton Sizes:** Analyzes historical order data, including cartons used, to recommend best "N" (e.g. 40, 50, ... 100) carton sizes for future packing. Reports savings if the recommended carton sizes had been used.
- **LED Lights Used to Indicate Carton for Retrieval:** After scanning order barcode, a segment of LED lights is illuminated under the carton rack partition containing best size carton.
- **LED Lights Used to Indicate Location for Carton Replenishment:** After scanning a carton barcode on a delivery cart, an LED segment on the back of the carton rack is illuminated, indicating where the replenishment cartons of that size should be placed.
- **Allows Multiple Pack Stations to Share a Carton Rack:** LED segments illuminate with different colors for different packers at shared pack stations.
- **Integrates with Carton Creation Machines:** Sends instructions to a machine to make exact sized or replenishment cartons.
- **Integrates with FastFetch[®] Replenishment System:** Sends transactions the FastFetch[®] batch cart picking system to retrieve and deliver replenishment cartons to carton racks.
- **Places Orders to Carton Supplier:** Sends carton consumption totals to carton supplier to frequently deliver replacement cartons using Vendor Managed Inventory (VMI) without traveling to the site.
- **Fast:** FastFetch[®]'s cartonization algorithm computes the best carton size in less than 1 second.
- **Accurate:** LED lights make carton retrieval virtually error free.
- **Simple:** Easy installation and interface to and warehouse management system.
- **Affordable:** ROI payback period is usually less than 3 months.

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Different Size Cartons from Carton Supplier

