



## Pack to Light Solution Supports Fast Flow-Through Store Order Fulfillment for Close-Out Merchandise Retailer

### Features and Benefits

Effectively manage SKU proliferation.

Turn SKUs with greater speed.

Support growing number of store locations with existing facility.

Reduced labor costs.

Improved order accuracy levels (99.9%)

**Industry Group:** Order Fulfillment Solutions (OFS)



### The Challenge

A dynamic retail chain specializing in selling deeply discounted, closeout home accessories and gifts faced some unique order fulfillment challenges in supplying their nearly 800 stores across the United States.

That's because each time you enter one of their stores, you find completely different merchandise than during a previous visit. In fact, products vary greatly from one store to another. The company sells closeout and overstock department store quality merchandise at 50-80% off retail prices. Items include cookware, linens, lamps, furniture, luggage and other upscale household goods. Its closeout business model means that it has limited quantities of most SKUs, but must turn them very quickly.

The company was also annually adding 10-15% new store locations. For most retailers, this is not a major problem; you simply order more of an item. But for a closeout retailer dealing with limited quantities, it means adding exponentially more SKUs. The distribution center actually processed 30% more SKUs per year to accommodate each 15% increase in new store growth, putting a major strain on the DC's capacity.

### The Solution

In 2004, the closeout retailer moved forward with a new material handling design to better leverage the current facility. This design featured a new Warehouse Control System to improve material flow throughout the DC.

A new Pack to Light solution was also added to boost performance in their store sortation process. Sometimes also referred to as a Put to Light or Put-to-Store solution, Pack to Light is ideal for retail store replenishment order distribution and optimizes any break pack fast flowthrough approach.

The light-directed solution addresses the entire unit handling process, from price marking through store sortation. First, all items allocated to stores are taken to a ticketing area on the DC's lower level. Each operator in ticketing receives bar-coded sheets of price tickets. As items are ticketed, they are placed into bar-coded totes. A scan of the tote ensures the system knows the contents. This information is relayed by the Pack to Light system to the conveyor control system. Upon arrival on the mezzanine, each tote is scanned and automatically sorted to a pack zone where shipping cartons assigned to specific stores are staged.

A worker next scans the tote, causing lights and quantity displays to illuminate adjacent to cartons that need that SKU. The correct items are placed into the carton and a button is hit to confirm the action. Full cartons are pushed off onto a takeaway conveyor for transport to sealing stations and shipping.

### **The Benefits**

At peak, the facility processes 500,000 units each day, with the Pack to Light system handling over 85% of them. The system is also extremely flexible. Zones in the pack-to-light can be expanded or reduced depending on workload. Locations can also be dynamically assigned to match the volume requirements of each store. The system can eventually handle 1,000 stores.

The Pack to Light method minimizes the number of touches performed on each SKU and has increased processing accuracies to over 99.9%, even though the retailer is processing over 100,000 different SKUs annually. The light-directed system has easily accommodated increased volumes and growth

without adding labor.

Built to eventually handle 1,000 stores, the new Pack to Light solution and optimized facility design allows the retailer to remain in their current DC for several more years.



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