

Candle Corp. of America

Client Overview

Candle Corporation of America (CCA) is a leading manufacturer of candles, candle accessories, and potpourri. CCA has distribution centers (DCs) located in Elkin, North Carolina; Chicago, Illinois; and Fontana, California.

The Challenge

Due to rapid growth, two of CCA's three DCs were over capacity. CCA wanted to relieve the demands of the two warehouses, while improving customer satisfaction and minimizing freight and system costs.

After observing operations at the Elkin DC, Tompkins Associates determined that the warehouse was over capacity by 110 percent. Typically, a warehouse has 85 percent utilization so that empty slots are available to store received goods. In similar cases, Tompkins Associates observed that when a warehouse reaches 95 to 100 percent capacity, excessive inventory handling occurs, internal inventory accuracy decreases, housekeeping goes sour, morale is low, and overtime is high. CCA was in gridlock and the situation needed to be remedied quickly.

The Solution

Tompkins Associates began by:

- Establishing the best site for the new facility through distribution network planning
- Designing the DC
- Writing specifications for equipment and the building proper
- Implementing the plan

Through careful study of an order profile database provided by CCA's representatives, Tompkins Associates engineers developed a central point that reflected the most efficient area from which the company could ship products to its customers. This analysis acted as a springboard for determining optimal specific locations, and further quantifying issues important to Candle Corporation's management.

The collection of order profiles and SKU data allowed the Tompkins project team to develop a series of alternative DC designs. After careful analysis of quantifiable factors such as return on investment, the team then recommended a specific layout.

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To determine the best site for the new DC, Tompkins developed a list of viable candidates within the recommended area. The list was narrowed to facilitate evaluations and a specific site was recommended based on a comprehensive list of physical characteristics, location reputation, and culture issues.

Following the careful pre-qualification of potential bidders, the project team began writing bid specifications for both the construction phase and equipment implementation phase. After reviewing bids and conducting vendor meetings, contracts were awarded.

Implementation of the project consisted of:

- Physical construction of the building proper
- Installation of rack, the pick-to-light system, the Warehouse Management System (WMS), and the conveyor
- Acceptance testing and debugging of all systems
- Training of managers, supervisors, and operators through competency-based development testing

The Results

The goals of Tompkins' effort were to improve Candle Corporation's customer satisfaction and to make a steadily and fast-growing company more efficient. The following operational enhancements helped meet these objectives:

- All receipts, whether palletized or floor stacked, transported to random storage using radio frequency (RF) terminals and directed putaway
- All restocking performed used RF and directed tasking
- Full case pick area for A-class movers
- Broken case picks made in carton flow rack with pick-to-light technology
- Operators placed license plates on full case pulls requiring pre-ticketing and shipped labels on cartons requiring no pre-ticketing
- Small orders conveyed to shipping sorter and slip sheets utilized to create unit load
- Full truck load orders staged in drive-in rack; less-than-truck-load orders staged in selective pallet rack
- Sortation conveyor provided for all current day, fluid-load shipments