

BENCHMARK BRIEFINGS

kardexremstar

SITE

Coty Inc.
Sanford, NC

APPLICATION

Order picking for cosmetics distribution in a pick & pass operation

EQUIPMENT

Two horizontal carousels, one workstation, pick-light system

SUMMARY

System reduced shipping time and floor space by 50% while dramatically reducing labor



A single operator uses two 65 - foot long, five shelf carousels to store and select orders from 700 - 900 SKUs.

Horizontal Carousel System Helps Cut Shipping Time In Half With One Worker and Minimal Floor Space

When Coty Inc. made major modifications to its central distribution center in Sanford, N.C., the company's goal was to handle unit volume that had increased 135% in the last 5 years, accommodate the anticipated requirements of new business, and improve its customer service to its distribution channels. The Coty line of fragrances, bath products, and personal care items sold through department stores, mass merchandisers, national drug chains, specialty retailers and, most recently, food outlets.

The DC evolved from a paper based order-picking system to a computer directed order fulfillment solution that handles 4,900 SKUs and ships over 3,000 orders per day. Coty's distribution methods changed from full-case shipping to retail distribution centers to split-case picking of individual orders for shipment either directly to stores or to retailer DCs. The consolidated store orders are sorted to an individual location with a cross-docking technology.

Order picking is a pick-and-pass process utilizing "intelligent zone routing" where the shipping container is carried only to those zones that hold products for the order. For example, if an order carries a pick stored in the A-frame it is diverted to that section. If not, it passes that section and proceeds to the next area.

Order selection hardware includes an A-frame package dispensing unit, pick-to-light flow rack modules to handle fast and medium volume SKUs, and two Kardex Remstar horizontal carousels with light directed Pick Towers to handle slower moving items.

"Our strategy is to be able to quickly fill every item in a customer order," says Mark Newberry, VP of logistics at Coty, "but we would typically pick the slow movers from our finished goods warehouse. If we had 18 fast movers and only one slow mover to pick," explains Newberry, "the order would be set aside until someone went to the warehouse to find the slow mover. It required labor to retrieve the item and often the order would be delayed."

Coty found that it had hundreds of slower moving SKUs and installed one workstation consisting of two 65-ft long, five shelf Kardex Remstar horizontal carousels to handle these items. The carousels also satisfy conditions typical of the cosmetics industry.

- High order frequency, a large number of SKUs, and small order quantities.
- Distribution flexibility to handle seasonal variations in product mix and volume.



The economies of highly efficient order picking allow Coty to carry a diverse product mix including slow movers that might not otherwise be included.

- Adaptability to the distribution pressures occasioned by advertising campaigns and customer promotions at retail.

In addition to the flexibility they provide, "the carousels allow us to put a lot of stock in a very small footprint. . . we have 700 - 900 SKUs in them at any given time," says Newberry. "Now we are able to fill an order for a product such as Ruby Red lipstick that people don't order much anymore. A single worker can pick these products from the carousels so we save on our workforce and we can access these products much easier than we used to." The carousel workstation averages 100 - 150 orders per shift.

In the pick-and-pass process at Coty the carousels are third in the picking sequence. Eight containers can be staged at the carousel station where scanning a container label initiates carousel activity to present the location of the assigned pick. Indicator lights identify the carousel shelf and pick quantity. Lights also indicate which order/container is to receive the picked items.

Training is greatly simplified using pick-to-light technology, points out Mike DiCosola, Coty's manager of North American distribution. Many temporary workers at Coty speak other languages, and are brought on to handle increased seasonal volume. Though English language skills of these workers may be limited, they must only be able to read numerals to efficiently and effectively pick-to-light.

Intelligence for the carousels is provided by a Warehouse Control System (WCS). Scanning a UCC 128 label on the container (1.) activates the carousels, (2.) activates the lights, (3.) tracks inventory and (4.) provides indication to the WCS of the need for restocking.

Coty can derive trending analysis from the WCS and is adding a simulation module to it, as well. The company wants to look at a batch of orders and "test" the system before it releases that batch for picking to make sure it doesn't starve one area and overload another. "Currently, there's no way to tell if you are creating bottlenecks at a low velocity point in the system," points out DiCosola.

When the order has been picked a "complete" signal is illuminated at the carousel workstation that indicates the carton can be moved to the takeaway conveyor. The containers rejoin other orders traveling to checkweighers, audit stations, or the value added stations where special labeling, the addition of company literature, or seasonal stickers are added to the shipping container.

Workers at audit stations receive an average of 8% rejects, usually caused by weight variances or scanning inconsistencies, and randomly sample about 10% - 12% of the remaining containers. Either as a result of automatic processes such as check-weighing or scanning, or following human intervention, every container is run through an audit process.

"In addition to picking efficiencies and capacity gains, the new system gives us the ability to provide 100% audit functionality for everything that leaves the building," explains DiCosola.

"The system gives us a lot more capacity and provides us with better labor efficiencies," DiCosola continues. "In the past, it took us two to four days to process an order. Now we are confident that 90-plus percent go out within 24 - 48 hours."

Reaching for a larger portion of the US\$25 billion cosmetics market in North America, Coty placed fast, accurate order fulfillment at the top of its priority list to satisfy customer service goals and demands of retailers in the cosmetics industry. "The system not only accomplished this," concludes DiCosola, "but it also gives corporate the ability to seize more opportunities."



Scanning the order number on staged containers activates a carousel to present the selected item. Lights indicate location of the item to be picked, a numeric indicator signals order quantity.