

Inefficient custom-packaging processes were creating excess waste and limiting agility for one of the world's leading manufacturers of consumer cleaning supplies.

DHL Supply Chain worked with the manufacturer's R&D group and third-party equipment vendors to create a solution that allows packaging to be relabeled and reused rather than discarded and transported to a recycling center. This also eliminated the need to unpack product from the original manufacturing process and re-package it in specially-printed custom displays. While the company set out to eliminate corrugated waste, the DHL Supply Chain solution did that and much more – cutting costs, reducing production times and increasing process visibility.

CUSTOMER CHALLENGE

Custom product displays were a proven way to drive retail sales, but because manufacturing was most efficient when product runs were maximized, it was not feasible to integrate custom display production into manufacturing.

Instead, the manufacturer produced displays using a specialty vendor. Product packaged in the manufacturing phase was unpacked from the original corrugated packaging and repacked into a custom-corrugated display that was designed to promote special offers. Then the original packaging was discarded and recycled, which was neither cost-effective nor environmentally responsible. In addition, preprinted promotional displays had to be stored in the warehouse, sometimes for weeks, before they were used, consuming valuable space. These process inefficiencies created waste and increased the time and cost required to produce custom displays.

CUSTOMER CHALLENGE:

- Excess waste due to custom packaging requirements
- Long lead times required to produce custom displays
- Inefficient processes led to increased custom display costs
- Valuable warehouse space wasted for product display storage

DHL SUPPLY CHAIN SOLUTION:

- Co-developed custom labeling solution
- Implemented new equipment and processes to support labeling process in two regional DCs
- Managed production and transportation of custom displays on just-in-time basis to retailers
- Provided daily visibility into custom packaging operations

CUSTOMER BENEFITS:

- Eliminated corrugated waste from custom packaging
- Reduced custom display costs with enhanced efficiencies
- Cut custom display production time from 14 to two days
- Freed up valuable warehouse space

DHL SUPPLY CHAIN SOLUTION

DHL Supply Chain serviced all six of the manufacturer's distribution centers in the U.S., receiving product packaged in custom displays from the manufacturer and the vendor which managed these processes for distribution to retail outlets.

When the manufacturer began investigating ways to reduce waste in the co-packing process, they turned to DHL for the solution.

DHL determined one way to eliminate waste would be to create custom displays by applying labels to the standard packaging, reusing rather than recycling the original packaging. Another approach was to eliminate the need to unpack and repack product. However, there were questions about whether this was a viable method.

- Would the resulting displays be aesthetically pleasing and as effective as pre-printed displays?
- Could the labeling process be automated?
- How would the displays hold up through shipping?

To address these questions, DHL worked with the company's R&D group to understand the custom display requirements in terms of size, aesthetics and durability, and then worked with equipment vendors to design a custom labeling system that allows packaging from manufacturing to be transformed into custom retail displays. DHL Supply Chain acquired the necessary labeling equipment and set up special production lines in two of the six regional distribution centers capable of transforming standard packaging into custom displays.

Conveyors for reusing cartons

New equipment to support this solution included:

- Conveyers for taking cartons that fail inspection to the overhead trash conveyor
- 3. Case labeler

With these additions, the two automated lines were capable of delivering enough capacity to serve retail outlets throughout the U.S.

DHL oversaw a smooth transition to the new approach and now manages all custom display production through the two distribution centers.

CUSTOMER BENEFITS

The program has accomplished the objective of reducing waste, as 100 percent of the corrugated packaging that had been recycled due to retail packaging requirements is now being reused. The solution was implemented on time and within the estimated costs. The company anticipates saving \$365,000 in corrugate purchases annually. Additional savings were achieved by eliminating the labor costs involved with unpacking and repacking product and in eliminating recycling costs.

The time required to create custom displays was reduced from 14 days from manufacturing to retail to two days. This was accomplished by eliminating the need to pre-print displays and unpack and repack product, allowing the company to react more quickly to market shifts. It also eliminated the need to warehouse displays, freeing up critical square footage. The original time of labor per case was 2.17 minutes and is now 1.87 minutes, an improvement of 13.8 percent. With higher productivity in labor, efficiency increased from 84 to 91 percent allowing the company to produce more custom displays.

The increased efficiency, visibility and agility enabled the manufacturer to increase its use of custom displays. One of the two co-packing locations is producing 27 percent more volume than forecasted while the other is exceeding volume forecasts by eight percent.

QUOTE

"This innovative, custom co-packing solution from DHL Supply Chain accomplished the customer's objective of reducing waste and did much more. With increased efficiency and visibility, they are now able to make more effective use of a valuable retail sales tool."

Larry Worth, Senior Director Operations, NORAM, DHL Supply Chain



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