

Boosting Supply Chain Efficiencies with Reusable Transport Packaging

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In today's economic climate, retailers and suppliers alike are feeling the pressure to make their operations as efficient as possible to stay profitable and competitive. At the same time, environmental regulations are likely to get more stringent, and sustainable practices increasingly important for a company's reputation.

The good news is that a closer look at your shipping system may reveal opportunities to boost efficiency and decrease environmental impacts at the same time—with reusable transport packaging. Reusable totes, pallets, bins and tarps are durable, long-lasting alternatives to corrugated cardboard boxes, disposable pallets and stretch-wrap. While shipping in reusables is a common practice in some retail sectors, their potential is still underutilized in others—low hanging fruit waiting to be picked!

Modern milk runs

Reusable transport packaging lends itself best to frequent and consistent deliveries made in a closed transport loop, where goods are shipped directly from the manufacturer to the retailer, and trucks bring back the empty pallets, trays and crates on the return trip. Making these “milk runs” with reusables is standard practice for the delivery of milk, bread and soft drinks.



But any closed loop shipping systems can reap the benefits of reusable transport packaging. Because reusables last longer, they lower material costs over time and nearly eliminate packaging waste disposal costs right away. On par with these direct cost savings, reusables provide superior product protection. Perishables in particular benefit from reusable plastic containers (RPCs) that hold up against moisture and allow for ventilation. Frank Ratto, Vice President of Marketing, introduced reusables at produce supplier Ratto Bros in Modesto, CA. He says he was “reluctant at first,” then quickly won over by the dramatic reduction in spoilage observed during processing and shipping.

Closing the loop with third party poolers

But what if a closed loop system is not an option? Today's retail chains receive tens of thousands of different products from a multitude of suppliers, few of them local. It would not be feasible for any one manufacturer to ship in a closed loop using reusables. This is where third party poolers come in. These companies lease standardized pallets and containers to suppliers of retail merchandise on an as-needed basis, often as a full-service package that includes container delivery, tracking, pick-up, cleaning, maintenance and storage.



In the produce industry, for example, empty reusable plastic containers (RPCs) are delivered to growers, filled, and shipped first to the growers' cooling and processing facilities, then directly to the retailer's distribution center (DC). There, a number of different commodities are picked and stacked on pallets for delivery to individual stores. After use, the containers are returned from the stores to the DCs, then picked up, cleaned and redistributed by the pooler.

Because all growers serviced use the same RPCs, no repackaging is needed, reducing labor and product damage. Pallet loads can be mixed and stacked far more efficiently than conventional corrugated, allowing for increased labor productivity and reduced damage to produce. RPCs are often used to display produce at the point of purchase, further reducing handling, labor and spoilage at the store level. Besides RPCs for perishables, many poolers offer GMA (Grocery Manufacturers Association) pallets and bulk containers for liquids, solids and parts.



Kroger, the largest US grocery chain has used RPCs for many years, eliminating each year more than 45 million pounds of waxed and corrugated boxes that would otherwise require disposal. Says Phil Davis, Senior Perishables Supply Chain Manager for Kroger: "What started as a sustainable solution to ensure the highest quality of fruits and vegetables for our customers has grown into an impactful way for Kroger to reduce waste and improve supply chain efficiency." Safeway recently followed suit, transitioning to RPCs for much of its produce shipping system.

Reusables for less-than-caseload shipments

Another key application for reusable transport packaging materials is the redistribution of bulk shipments to individual retail locations, usually via a distribution center. Breaking the larger shipments into mixed, less-than-caseload deliveries tailored to a given store's current needs reduces the storage space and inventory-related labor that store would otherwise have to provide. With a typical payback period of less than one year, reusable totes for repacking save material and disposal costs, while offering better stability and ergonomics. The result: an overall boost in supply chain efficiency.



Pep Boys, a retail chain serving the automotive aftermarket, equipped their distribution center in Chester, NY, with 45,000 reusable plastic totes for the shipment of repacked goods to retail stores. The containers have attached lids and can be nested when empty, taking up little space at the store and on the return trip to the DC. Two different tote sizes enable DC staff to accommodate the wide variety of density in Pep Boys' products—small for heavy products, and large for lighter, bulkier items. This prevents totes

that are too heavy to lift, as well as under-filled totes that would waste space. “The better cube utilization results in better ergonomics, and that in turn improves [workers’] productivity,” explains Dave Schneider, Director of Industrial Engineering at Pep Boys. With an identical footprint, both tote sizes are designed to fit a GMA pallet without gaps or overhangs.

Ongoing innovation

In addition to “classic” reusables like pallets, produce RPCs and bulk bins, new applications are increasingly becoming available. A fairly recent addition, reusable pallet wrap is quickly gaining traction, particularly in food manufacturing and distribution. Typically made of durable plastic tarp with straps and buckles, reusable pallet wrap secures pallet loads during transit and warehousing just like plastic stretch film—without the waste. It’s well suited for closed loop applications, e.g. between manufacturer and distributor.

Straus Family Creamery in Petaluma, CA, is looking to reduce—and eventually eliminate—their use of plastic stretch film with reusable pallet wraps. The wraps will secure pallets of milk crates on trips from the creamery to the nearby warehouse, and also to one of their distributors with whom Straus will share some of the wraps. “In this first phase alone, we expect to reduce shrink wrap by 50% or 3.6 tons per year,” projects Elizabeth Romanoff, Vice President, Human Resources & Sustainability at Straus. “That’s a lot of waste not going to landfill and money saved.”



The bottom line

If you find yourself receiving a lot of disposable transport packaging materials from your suppliers or making repeat purchases of those materials for shipping, reusables may hold the key to increased efficiency!

Many resources are available to help you assess and optimize the transport packaging materials used in your shipping system, including the *Use Reusables* campaign. *Use Reusables* is a joint project of public agency Stopwaste.Org and the Reusable Packaging Association, with financial support from the U.S. EPA’s Climate Showcase Communities program. The campaign offers training workshops, financial assistance, expert advice and educational materials. For more information and to sign up for email notifications, visit www.UseReusables.com.



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