

FINELITE *Better Lighting*

FINELITE Reduced Costs, Storage Space, and Material Handling in Manufacturing and Assembly

Finelite designs and manufactures high performance, environmentally sustainable lighting solutions and products for commercial, educational, and healthcare facilities. The company makes pervasive use of many types of reusables for storing and handling parts, and for shipping materials between its factory in Union City, CA and its strategic partners in Livermore, CA and China. The reusable solutions include tarps, straight-wall stackable plastic crates, plastic collapsible containers, and trays. In addition, racking systems are used throughout its warehouse. All of the company's reusable products have been carefully designed to reduce waste and support lean manufacturing. Finelite produces more than 25 product lines, and the longest light fixture is 144 in. x 12 in. x 4 in. and weighs 18 pounds. By using reusables, Finelite has achieved the following results:

Annual cost savings

- 53% (\$9,100) cost savings by replacing shrink-wrap with reusable tarps
- 40% (\$8,400) material cost savings and 130 hours of labor by replacing corrugated boxes with reusable/collapsible bulk containers and straight-wall crates.
- \$10,800 cost savings in LED packaging material (bubble wrap and anti-static wrap) and 350 hours of labor saved by eliminating un-wrapping the packaging material.

Annual environmental savings

- Eliminated 436 miles/6,000 pounds of plastic shrink-wrap
- Eliminated 14,700 pounds of corrugated cartons
- Eliminated 4,200 pounds of bubble wrap



Ongoing benefits:

Both the containers and crates are stackable, allowing vertical storage of material and freeing up valuable real estate. The volume of each straight wall crate is used to its entirety and enables 20% more material to be packaged when compared to the previous corrugated box packaging.

Crates are easily fed into the assembly lines for operators to consume. Operators can work with the material from their own crate supply.

Capacity for materials in the collapsible containers is 10% more than corrugated boxes.

Empty containers are collapsed, allowing for efficient storage.

“We use reusables because they deliver cost savings in materials and labor. In our experience, we break even on our initial investment of reusable systems within 2 years, and then the savings continue to accrue long after that,” said Ana Koo, industrial engineer, Finelite, Inc. “In contrast, disposable packaging materials have a short life span and represent an ongoing expense. We are honored to be recognized for our efforts, and we applaud the RPA for creating this award program to bring more attention to the value of reusables.”

Finelite’s first reusable initiative replaced pallets and shrink wrap with stackable racks throughout Finelite’s factory and at two strategic-partner facilities in Livermore, CA. The light fixture components are manufactured in Livermore, and packaged into the racks. The racks are then transported to the paint supplier (also in Livermore). After painting, the components are re-packaged into the same racks, and shipped to Finelite for final assembly. The racks are transferred into Finelite’s inventory system. As inventory is used up, racks become available and they are backhauled, empty, to Livermore, ready for the next cycle.

“Finelite is a great example of a company that recognizes the hard savings enabled by reusables, and continually looks for new applications within its manufacturing and assembly areas,” said Robert Engle, Chairman of the RPA Board and CEO of Otto Environmental Systems North America. “They also demonstrate the innovation of reusable suppliers. No matter what the size, complexity, or material of the product being handled, reusable suppliers can develop right-fit reusable systems that protect products, enable efficiencies in material handling, and deliver cost savings.”