

## Case History: Electronics equipment manufacturer saves 40% warehouse space while increasing pick locations

A manufacturer of equipment for the electronic industry increased warehouse capacity, and pick locations without increasing warehouse square footage



The new Milform® bins provide uniform pick facings with surfaces for labeling.

The warehouse is 15,000 square feet with approximately 30,000 part numbers in inventory. The warehoused parts are a variety of sizes and shapes including everything from fabricated metal assemblies, enclosures, and fasteners to electronic components. Many parts were stored in a variety of corrugated boxes. Other parts were wrapped in bubble pack and microfoam to protect machined, coated and painted surfaces (see picture below).



Before implementation of Milform® bins, parts were stored in a mixture of corrugated containers and molded plastic bins of many sizes.

suitable to contain them. Also, because of the irregular shape of the wrapped parts, these parts did not stack well and became entangled with other fabricated assemblies. Many parts were damaged by falling off the shelf.

For smaller parts, three sizes of standard molded plastic bins were obtained. However, the standard molded bins did not make the best use of vertical and horizontal shelf space. The standard totes did not utilize the full front to back shelf distance, leaving unused space behind the tote. Also, the standard bins were deeper than necessary, in many cases reducing the number of shelves available per vertical warehouse space (see picture below).



Stock molded bins wasted shelf space.

The standard bin had a top rim that protruded out 0.75" in all directions resulting in wasted space of 1.50" between bins. The top rim wasted a total of 567 square feet of shelf space (see picture below).



Stacked side by side stock bins wasted space, while the Milform® bin is more compact and allows additional bins per shelf.

The standard bins were not user friendly. Because bins were deeper than necessary and did not have a tapered front, the visual eliminate in part picking was hindered. The worker had to remove the bin from the shelf to look inside. This was especially difficult when working from ladders.

The solution came with custom corrugated plastic bins. Milform® bins were designed to fit the large variety of part sizes and maximize shelf space utilization. Custom designed bins yielded maximum part density per shelf and increased pick surfaces. Also, odd shaped fabricated assemblies are properly contained to give part protection.



Three sizes of Milform® bins were decided on with two different lengths to fit 36" and 48" wide shelves. Two bin widths were decided on (23.50" and 11.75") to accommodate the variety of parts sizes, yet maximize shelf length. The depth decided on was 8" in all bin sizes in order to increase the number of shelves per rack.

The Milform® bins have a cut down or hopper front to act as a visual aid in part picking. Also Milform® bins are lightweight, a help when working on ladders. For example, the largest Milform® bin which was 48" x 23.5" x 8" weighs only 5 lbs.



The results were total warehouse space savings of 40% by replacing the existing standard molded bins with custom Milform® bins. Custom Milform® bins added extra 5 shelves per rack. This addition to vertical storage consolidated warehouse space while increasing pick locations by 1,250 (see picture below).



Approximately 6,000 square feet of space was made available by Milform® bins.

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**Mills Industries**  
The Packaging Innovators

167 Water St. Laconia, NH. 03246  
Tel 603 528 4217 Fax 603 528 5686  
email [info@millsind.com](mailto:info@millsind.com) web [www.millsind.com](http://www.millsind.com)