

Case History: Automotive part manufacturer reduces cost with Milform® totes

Milform® corrugated plastic automotive returnable containers are custom designed to eliminate expendable packaging cost, reduce handling time and provide part protection. Existing “stock” molded totes are not an alternative in many cases since they do not provide effective use of space. Tooling costs to customize molded plastic totes can be cost prohibitive or add additional lead-time. Tooling cost for Milform® totes is \$300 to \$500 with no additional lead-time.



These returnable totes were designed to protect sensitive cosmetic or “class A” surfaces on vinyl automotive interior parts. In the previous expendable packaging, the parts had to be individually poly bagged to protect class surfaces from the abrasive corrugated packaging. While Milform’s® corrugated plastic is non-abrasive to cosmetic surfaces, foam can still be added to the dunnage to act as a buffer to the part surfaces.



Economic savings are two fold. Milform® totes eliminate the need to procure and inventory expendable packaging materials. Also, Milform® totes reduce handling time by eliminating the assembly of corrugated boxes, dunnage, and the time it takes to individually bag parts.



In one project, Milform® totes saved \$700 per day in expendable packaging costs at point of origin. In addition assembly plants save time and money in not having to de-bag parts, disassemble, and knock flat and dispose of expendable packaging. The end user enjoys a reduction in waste stream plus having a positive environmental impact.

Milform® totes improve material handling by maximizing part density per container, while fitting existing pallet footprints and other constraints. High part density per tote reduces storage space and transportation costs to the assembly plants.

Ergonomically Milform® totes are a plus. These totes only weigh 6 lbs. each. Much lighter than a molded tote of comparable size and strength. Handholds are strategically placed, depending on load, to make manual handling easier.

To maximize tote life these Milform® totes were made with heavy-duty 8mm corrugated plastic. Previous experience in the automotive industry has shown the need of heavy duty 8mm wall to help totes endure rough handling and provide good stacking strength.

The Milform® process adds rigidity to the container, thereby eliminating the need for external wire or other reinforcement common with corrugated plastic totes. Eliminating the reinforcements also increases usable space and eliminates surfaces that can interfere with parts.

The Milform® process allows prototype and small runs to be manufactured without large capital investment or long leadtimes. Because Milform® totes can be made in small runs, containers can be thoroughly tested and evaluated.

Milform® “pallet caps” enclose a pallet load eliminating the need for strapping or stretch wrapping. Also pallet caps allow skids to be double stacked (see picture below).



Milform® totes have a proven track record for durability. This returnable cycles once every 12 days making approximately 50 trips so far (see picture below).



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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 web www.millsind.com