Molding, Thermoforming, and Compounding

Manufacturing Technologies

The Manufacturing Science and Technology Center helps customers choose the best materials and techniques for their product by providing a variety of conformal coatings, thermoforming, and compounding materials using established or custom designed processes. The department provides consulting services for injection molding and rubber compounding projects.

Capabilities

- *Thermoforming:* Processing thermoplastics such as polycarbonate, polymethyl methacrylate, polypropylene, polystyrene, and ABS; producing holding trays, protective caps, and custom covers
- *Injection Molding Consultation:* Designing your part to be injection molded, helping you choose the best material for your application, and supporting your interface with injection molding companies
- *Tooling:* Design and development of the tooling used on your project; experienced with the use of everything from hardened tool steel to stereolithography for tooling
- *Material Compounding:* Customized rubber, thermoplastic, and thermoset materials can be created by mixing fillers and additives into the stock material using 2 and 3 roll mills

Resources

- 2 Roll mill
- 3 Roll mill
- Vacuum thermoformer
- Vacuum laminating press: 50 ton

Vacuum/pressure assist thermoforming process

Accomplishments

- Conformal coating process developed to protect sensitive surfaces of BDYE submodules
- Stereolithography used to custom generate molds for customers

Contact

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