Thermoforming Benefits

MATERIAL USE GUIDELINES

Technology Advancements in Boltaron Sheet and Thermoforming

Innovations in thermoforming equipment, production techniques and tooling methods make possible formed parts with excellent surface and design detail. Similarly, formulation and production technology advancements in Boltaron sheet continue to expand their performance range and aesthetic options. The result is a continued growth for these high performance sheet materials in thermoformed applications ranging from sports equipment, to electrical and medical equipment housings, and interior aircraft seating and components that satisfy stringent FAA flammability criteria.

Benefits in Thermoforming

All Boltaron grades are manufactured under tightly controlled conditions for consistent behavior during thermoforming. Because of their proprietary compositions, forming temperatures differ to some degree from other materials, such as ABS and acrylics.

By following the recommended design and processing guidelines for Boltaron sheet, thermoforming companies around the world routinely realize these benefits using standard production equipment:

- Consistent forming conditions from lot to lot
- Uniform wall thickness even in deep draws
- Uniform surface appearance with excellent texture retention and detail

Thermoforming Advantages

Thermoforming offers distinct characteristics and benefits compared to injection molding, related to tooling costs, production economics, and the design configurations possible:

- Lower tooling costs, ideal for short production runs
- Short tooling development time, faster and easier tooling modifications
- Ideal for very large parts at low tooling costs
- Faster and simpler production set-up and shut-down
- Excellent design and surface detail, depending on the method chosen

Guidelines for Part Designers and Thermoformers

This guide provides information on the thermoforming conditions for Boltaron sheet, and on the part design related to the choice of thermoforming methods and mold designs. All are interlinked and must be considered for the production of high quality, cost-effective thermoforming.