Xaloy® Twinshot® Multi-Material Molding

Do you want to...

- Reduce your resin costs by 35% or more?
- Save on labor and maintenance costs? The Xaloy® Twinshot® Multi-Material Molding process may be for you!

The Xaloy® Twinshot® Multi-Material Molding is a cost-effective process that can give you a distinct competitive advantage within your marketplace by significantly reducing part cost while improving product quality. It’s a single injection unit, multi-material system that can be easily retrofit to your current screw/barrel injection molding machine.

Advantages

- Full flexibility with change to a single material molding machine over from two materials on-the-fly
- Lower cost through encapsulation of off spec, regrind or recycled materials
- Improved quality with encapsulation of foamed material to reduce sink, warpage and improved strength-to-weight ratio
- Enhanced cosmetic appearance through use of high quality material over reinforced material
- Reduced maintenance cost with easy retrofit and easy maintenance
- Easier operation with simple set-up, low operational complexity, ease to learn
- Wide range of part designs are feasible with expansive range of material combinations to combine technical with cosmetic product aspects to meet end customer requirements

Available only from Nordson, Xaloy® Twinshot® enables a conventional machine with a single barrel and screw to inject two materials in one operation, with one material totally enclosing the other.

This new multi-material molding technology removes the obstacles to widespread co-injection utilization while preserving all of the traditional benefits. Simplicity and low cost differentiate this innovative technology from other co-injection processes. With this new system, virtually any custom or proprietary molder can afford multi-material molding equipment.

- Single screw, single barrel, single recovery, single shot, single cycle, two materials
- Two independent melting sections (one for the skin material and the other for the core material) with multi-zone temperature control
- Single shot mold fill. The first part of the shot is skin; the second part is core
- Mold fill follows fountain flow principles causing skin material to fill the outer geometry of the part and cool as the inner material flows through the molten core
- Volume is controlled by varying primary or auger feeder screw speeds
- Result is a three-layer or “sandwich” construction A-B-A

Joint for Building Construction Core:
Glass-filled ABS Skin: ABS

Core Material (Recycled Resin)  
Skin Material (Virgin Resin)

Twinshot® is a registered trademark of Community Enterprises LLC covered by U.S. & foreign patents

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