

Mini-Symposium proposal

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Computer Modeling of Injection Molding Tools and Processes

Injection molding is regarded as the most important process used to manufacture plastic products. Today, more than one third of all thermoplastic materials are injection molded and more than half of all polymer processing equipment is used for injection molding.

The main concern in injection molding is to produce parts with the desired quality, which is usually related to the mechanical performance, dimensional conformity, and appearance. The major factors affecting part quality are part and mold design and process variables.

Research on numerical methods to simulate the behavior of the injection molding process, injection molding materials, mold tools, and produced parts is a current and active multidisciplinary research field.