

APPLICABILITY OF RAPID TOOLING IN INJECTION MOLDING APPLICATION

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Abstract

In the field of mass production, injection molding accounts for a large percentage of the technologies used in the applied technologies. One of the main disadvantages when it comes to injection molding is the cost of tools. This can greatly affect the price of the finished product if there are multiple iterations of product development through various prototypes. For initial tools used in running production or in product design, it is necessary not only to be as cheap as possible, but also to make their production time as short as possible. The increasing application of additive technologies in the field of rapid tooling, gives a wide space in the possibility of lowering the price of the final product. The applicability of additive technologies in injection molding has not been sufficiently researched, although the possibility of application is huge. In this paper, the main emphasis is on the applicability of additive technologies in injection molding of an initial series or a smaller series of the parts. The conclusion is that not only additive technologies can be applied in the production of core and cavity or complex parts of injection molding tools, but the minimum time that is required to produce the tool is significantly reduced, which directly affects the price of the final product.

Keywords

Rapid Tooling, Additive Technologies, Injection Molding, Tools