



**STUDY DEVELOPMENT OF MICRO MOLD FOR INJECTION MOLDING
PROCESS**

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ABSTRACT

Microinjection molding is usually to produce the micro part product. This type of injection is well on the way to becoming a special variant of the industrially established injection molding technology. One of the most promising fields of application is medicine and biotechnology. The design for their micro mold is not same with the conventional mold. We can look the different from the size of runner design. We need to create the size, the suitable arrangement for the gate and runner. The mold also has a different design. We need to create and contribute more idea to produce the drawing design for this mold.

After completing the runner design, we need where the design is analyzed in mold flow software. This software helps us to get the successful or unsuccessful design. This analysis is very important to know the performance and parameter of runner design. Analysis methodology can be divided into three parts. There are analysis aims, analysis approach and filling analysis. The purpose of analysis aims is to predict the flow behavior and mouldability of the component using the given runner gate design in a four-cavity mould layout. The purpose of analysis approach is to conduct the filling analysis with an assumption that efficient cooling was achieved and the purpose of filling analysis is to predict filling pattern of the part, temperature distribution of the flowing plastics and etc.

Lastly, that runner design will attach in mold design as a cavity. The micro machining needs to be used to fabricate that cavity. All elements for mold design must be considered before we create the complete mold.

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