The Study of Injection Mould Feature Design Based on Geometric Modeling

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ABSTRACT

In recent years,mould design and development is still depeended on experience .As the mould features are getting complicated ,more labor,materials,money is consumed. How to solve the problem in injection mould design is the main topic in recent years. The main topic of this research is to create the 3D geometric m odel. By using the influence of parting line location and parting direct ion, the undercut of the mould design can be checked. If there is no undercut conditions,then the mould parts can be moved in vari ous direction. All the algorithms are setting to solve this problem. The mould then can be confirmed in the very short time.This research is built in AutoCAD software. First, 3D solid mod el is created. The algorithms are written in AutoLISP language which include parting surface, undercut, parting direction…etc. Especia lly in undercut, which is the main topic for the mould design, whi ch can influence the mould design and shape

Keywords : Geometric Model ; Parting Line ; Parting Direction ; Undercut ; Parting Surface ; Edge Loop ; Parting Depth

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