

# 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 depended 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 model. By using the influence of parting line location and parting direction, the undercut of the mould design can be checked. If there is no undercut conditions, then the mould parts can be moved in various 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 model is created. The algorithms are written in AutoLISP language which include parting surface, undercut, parting direction...etc. Especially in undercut, which is the main topic for the mould design, which can influence the mould design and shape

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

## Table of Contents

封面內頁 簽名頁 授權書 .....	iii	摘要 .....	iii
..... v	ABSTRACT .....	..... vi	誌謝 .....
..... vii	目錄 .....	..... viii	圖目錄 .....
..... xii	表目錄 .....	..... xix	符號說明 .....
..... xx	第一章 緒論 1.1 研究動機 .....	1	1.2
研究目的 .....	2	1.3 文獻回顧 .....	4
1.4 現有相關軟體之分析探討 .....	5	1.5 研究方法 .....	6
6 1.5.1 研究方法之流程圖 .....	8	1.6 研究範圍與限制 .....	9
1.7 論文之結構 .....	10	第二章 分模線與死角特徵之形成及其相關探討 2.1 射出成型	11
模具相關之定義 .....	11	2.1.1 射出成型模具之公母模與分模面之定義 .....	12
產生之探討 .....	13	2.2 塑件分模線	13
置之相關因素 .....	14	2.2.1 分模線之定義 .....	13
探討 .....	24	2.2.2 影響分模線位	13
..... 28	2.5 塑件死角之探討 .....	27	2.5.1 死角之定義
..... 28	2.5.2 死角形成之原因及解決方法 .....	28	2.6 塑件幾何模型之建立
及其相關之定義 .....	31	2.7 可見圖之基本定義與應用 .....	34
部可見性之定義與應用 .....	34	2.7.1 完全可見性與局	34
係 .....	38	2.8 投影圖之定義與分類 .....	35
..... 38	2.10 高斯曲面圖之定義與應用 .....	39	2.9 投影圖與線架構之關
建立之法則 3.1 塑件模型之建立 .....	40	3.2 塑件面之邊緣迴路與法向量之定義 .....	40
..... 41	3.3 塑件凹凸面之判別 .....	42	第四章 分模線與分模面相關法則之建立 4.1 自行
建構分模面法則 .....	45	4.1.1 凸邊對於分模面之影響 .....	45
對於分模面之影響 .....	47	4.1.2 凹邊	45
之死角面法則 .....	50	4.2 修正式之脫模深度評估法則 .....	48
..... 55	4.3.1 凹槽死角面法則 .....	51	4.3 自行建構
..... 55	4.3.2 倒角死角面	51	4.3.1 凹槽死角面法則 .....
..... 64	4.3.3 倒圓角死角面法則 .....	59	4.3.2 倒角死角面
..... 64	4.4 自行建構之整體塑件評估之脫模法則 .....	68	4.3.3 圓孔死角面法則 .....
介紹 .....	75	5.2 系統環境視窗之介紹 .....	75
AutoCAD控制視窗之介紹 .....	77	5.3 實例探討 .....	79
用小型麥克風置架之實例探討 .....	79	5.3.1 電腦	79
6.1 結論 .....	99	5.3.2 書報架之實例探討 .....	92
參考文獻 .....	101	5.3.3 書報架之實例探討 .....	92
		第六章 結論與展望	99
		6.2 未來展望 .....	100

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