

FINAL YEAR PROJECT REPORT
DIPLOMA IN MECHANICAL ENGINEERING
MECHANICAL ENGINEERING DEPARTMENT
MARA INSTITUTE OF TECHNOLOGY
SHAH ALAM
TOPIC:
EXPERT SYSTEM FOR MOULD BASE

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MAY 1997

SYNOPSIS.

The final project report is trying to explain and clarify some of the aspects and procedures of designing and fabrication of a plastic mould. A typical product also has been design for the purpose of this project. The mould has been designed according to the standard design methodology and standard mould base is used for the purpose of the fabrication.

This design has been proved workable when it was successfully machined assembled and the mould was used to obtain the product. In addition, this mould has been injected on the plastic ejection moulding and found successfully. Apart from that, the design of the product, assembly drawing and detail of part drawing are also enclosed. Also we find, it is useful to show the end result of the project that we have been working on.

CONTENTS

ACKNOWLEDGEMENT	iii
SYNOPSIS	iv
CHAPTER 1. INTRODUCTION	
1.0 Introduction	1
1.1 Moulding process - A review	3
1.2 Procedure for Designing as injection mould	4
CHAPTER 2. PRINCIPLES OF MOULD DESIGN	
2.0 Principles of mould design	7
2.1 Types of injection moulds	9
2.1.1 Two plate moulds	9
2.1.2 Three plate moulds	12
2.2 Gating System	15
2.2.1 Runner	15
2.2.2 Runner Cross-section Shape	16
2.2.3 Runner Sizes	21
2.2.4 Runner layout	23
2.2.5 Single Impression Moulds	24
2.2.6 Two Impression Moulds	24
2.2.7 Three Impression Moulds	24
2.2.8 Other Multi-Impression Moulds	25
2.3 Types of runners and gates	27
2.3.1 Gates	27
2.3.1.1 Positioning of gates	28

2.3.1.2 Balanced gating	30
2.3.2 Solidifying systems	31
2.3.3 Hot-runner systems	38
2.3.4 Cold-runner systems	41
2.4 Temperature control in injection moulds	42
2.5 Types of ejectors	44
2.6 Types of undercuts	46
2.7 Standard mould components	47

CHAPTER 3. EXPERT SYSTEM IN INJECTION MOULDING

3.0 Expert system in injection moulding process	49
3.1 Introduction to expert system	49
3.2 Knowledge representation	51
3.3 Knowledge inference	53

CHAPTER 4. LIBRARY

4.0 Library (Thumpsup catalog)	53a
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CHAPTER 5. CONCLUSION

5.0 Conclusion	54
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CHAPTER 6. REFERENCES

6.0 References	55
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1.0 Introduction.

Nowadays, a lot of goods that we use daily are made based on plastic material. They had been widely used due to their properties such as the ductility, good impactability, strength and it also does not rust unlike the others material as steel etc. And what has made the plastic products more compared to other material is the availability of production method which allow the rapid production which is called injection moulding.

Due to those properties, the products based on plastics have been growing in usage and developing rapidly from time to time. As the complement product, plastic moulds have also developed in line with the development of plastic product.

As the level of mould parts becomes more complicated and critical and due to the products that will be produced, the designing of mould compound becomes more complex and critical too. With the advanced of computers, it is inevitable that computers will replace human task of designing complex and critical dies. Its success depends on the efficiency of translating human knowledge and experiences into the computer and this is where Artificial Intelligence (AI) techniques and tools is useful. The success of AI in the development of experts system is the current trend in industrial application around the world.

The primary object of this project is to provide an expert system on design for mould draughtsmen and designers in industry. On addition in fulfilling this function, an