

BLANKING DIE PROCESS FOR PRODUCTION PRODUCT

Prepared By :
Marwan Bin Hasan
Kamarul Baharin Bin Mansor

Submitted to the School of Engineering
Mara Institute of Technology
in partial fulfilment for
Diploma in Mechanical Engineering

May 1996

INTRODUCTION

1.1 PRODUCT AND FUNCTION

The product that will be produced is a steel plate used at sos machine, it function is to hold the machine from power of effective action .

1.2 PRODUCT SPECIFICATION

This steel plate is square shape and the actual dimension as shown in figure 1. It is made by mild steel which having 0.1 % carbon . Because low carbon , this plate very easy to cut and besides that it cheap and easily obtained in market.

1.3 PRODUCTION PROCESS

There are several methods to produce this plate and the suitable method known as blanking die. The latter name is used because of its ability to produce the plate in high amount and precise shape and dimension. The most important factor is the low cost needed in producing the plate.

CONTENTS

ACKNOWLEDGMENT

CHAPTER 1

1.0	INTRODUCTION	1
1.1	PRODUCT AND FUNCTION	1
1.2	PRODUCT SPECIFICATION	1
1.3	PRODUCTION PROCESS	3

CHAPTER 2

2.0	BLANKING AND PIERCING DIE	4
2.1	BLANKING OR PIERCING DIE	4
2.2	BLANKING DIE COMPONENT	12
2.3	ANALYSIS OF COMPONENT	13

CHAPTER 3

3.1	MILLING	44
3.2	DRILLS AND DRILLING	49
3.3	GRINDING	53
3.4	HONING	54
3.5	SUPERFINISHING	55
3.6	HARDENING METALS	56
3.7	HEAT TREATMENT STEEL	58

CHAPTER 4

4.1	COSTING	60
-----	---------	----

CHAPTER 5

5.0	DRAWING OF COMPONENT	62
5.1	ASSEMBLY DRAWING	
5.2	DETAIL DRAWING	
5.2.1	SHANK	
5.2.3	PUNCH PLATE	
5.2.4	BACKING PLATE	
5.2.5	BLANKING PUNCH	
5.2.6	STRIPPER	
5.2.7	DIE BLOCK	
5.2.8	DIE PLATE	
5.2.9	STOPPER	

CONCLUSION	63
APPENDIX	64
REFERENCES	74