# UNIVERSITI TEKNOLOGI MARA

# **DOORGIFT PACKING MACHINE**

## SITI NURSABRINA ABDUL RAUF 2021863252

DIPLOMA

Feb 2024

### ABSTRACT

This project is an important project especially for those who are small business seller in door gift. The project title is Door gift packing machine. This project was proposed because nowadays the only method that can be used is packing the door gift manually. It will use a lot of manpower, time and tiring. Because of that, the main objective for this project are to decrease the problem occur as a door gift seller. The machine will contain three main process which are sorting, packing and sealing. Besides that, mechanical, electrical and control system mechanism will be used in this project. The result is expected to be simple, effective and affordable.

This dissertation will represent all the framework in the making of this door gift packing machine. All the manufacturing process, objective and mechanical analysis will be shown detail with a calculation, evidence and some information. This is to propose the functionality of the product with maximum effort. Furthermore, this product is a semi-automatic machine since it is not fully automatic and still have some manual process. The dissertation conclude with a discussion of upgrade recommendation, future enhancements and potential applications of the door gift packing machine. Lastly, the dissertation was written detailed as the reader can understand the context of this project easily.

### ACKNOWLEDGEMENT

Firstly, I wish to thank God for giving me the opportunity to embark on my diploma and for completing this long and challenging journey successfully. My gratitude and thanks go to my supervisor, Mr. Ahmad Najmie Bin Rusli. Finally, this dissertation is dedicated to my father and mother for the vision and determination to educate me. This piece of victory is dedicated to both of you. And lastly, to my fellow friends who always support me in any way.

### TABLE OF CONTENTS

26

CONFIRMATION BY SUPERVISOR		ii			
AUTHOR'S DECLARATION		iii			
ABSTRACT ACKNOWLEDGEMENT TABLE OF CONTENTS LIST OF TABLES LIST OF FIGURES LIST OF ABBREVIATIONS		iv v vi-vii viii ix x			
			CHA	APTER ONE : INTRODUCTION	1-3
			1.1	Background of Study	1
			1.2	Problem Statement	2
			1.3	Objectives	2
1.4	Scope of Study	3			
1.5	Significance of Study	3			
CHAPTER TWO : LITERATURE REVIEW		4-11			
2.1	Benchmarking/Comparison with Available Products	4-6			
2.2	Review of Related Manufacturing Process	7-9			
2.3	Patent and Intellectual Properties	10-11			
2.4	Summary of Literature	12-13			
<b>CHAPTER THREE : METHODOLOGY</b>		14-28			
3.1	Overall Process Flow	14-15			
3.2	Detail Drawing	16-21			
3.3	Engineering Calculation and Analysis	22-25			

Page

vi

Bill of Materials and Costing

3.4

## CHAPTER ONE INTRODUCTION

#### 1.1 Background of Study

A door gift is a must at any event such as a party or wedding. Door gifts usually contain some sweets and chocolate for kids. Door gifts usually been made around 1000 and above. It is a common tradition especially in Malaysia. The door gift will be given to all the guests who attend the event and ceremony as an appreciation for coming. As the number of door gifts required is high, there is a lot of process needed.

This project, which is door gift packing machine will be one of the solutions to manage the process and the problem during the packing process. I made this project because I had been faced with this problem with my door gift business before this. As a small business seller, it is hard to manage the door gift packing process alone.

Based on the technology nowadays, I had decided to conduct this project as a solution to my problem that I had occur for about 5 years as a small business seller. This door gift packing machine will solve a lot of problems. For example, there is no need to use all the human energy and time anymore.

This door gift packing machine that I will made have the specialization in sorting and packing the door gift itself. It will cover two main processes in making the door gift. By creating this machine also can save time in my daily life as a student and a small business seller because I do not need to do the sorting and packing process anymore. The aim of this project is to make the process of door gift easier for the seller.