

**UNIVERSITI TEKNOLOGI MARA**

**DEVELOPMENT OF A PAPER  
SHREDDER MACHINE**

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## **ABSTRACT**

Even though we live in a technological age where anything may be done in a softcopy, hard copies of A4 paper. Confidential papers also must dispose of immediately because of the important information that cannot everyone read. Moreover, some papers are top-secret or classified papers (read & destroy) and shall not be leaked or read by people who are not involved. The problem that to make a paper shredder machine is that confidential papers cannot dispose of easily. It is because the confidential paper is the important thing and information that cannot to give anyone to read and just only the writer and the person concerned. This machine uses motor direct current(DC) for easily to bring and portability. The motor will be supplied with the battery as the power supply. The motor also will connect with gear that will rotate the shredder. This project will easier for the user to dispose of any paper and confidential paper. This project also targets workers that always use confidential paper.

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# TABLE OF CONTENTS

	<b>Page</b>
<b>CONFIRMATION BY SUPERVISOR</b>	<b>ii</b>
<b>AUTHOR'S DECLARATION</b>	<b>iii</b>
<b>ABSTRACT</b>	<b>iv</b>
<b>ACKNOWLEDGEMENT</b>	<b>v</b>
<b>TABLE OF CONTENTS</b>	<b>vi</b>
<b>LIST OF TABLES</b>	<b>xx</b>
<b>LIST OF FIGURES</b>	<b>xx</b>
<b>LIST OF ABBREVIATIONS</b>	<b>xx</b>
<b>CHAPTER ONE : INTRODUCTION</b>	<b>1</b>
1.1 Background of Study	1
1.2 Problem Statement	1-2
1.3 Objectives	2
1.4 Scope of Study	2-3
1.5 Significance of Study	3
<b>CHAPTER TWO : LITERATURE REVIEW</b>	<b>4</b>
2.1 Benchmarking/Comparison with Available Products	4-6
2.2 Related Manufacturing Process	7-9
2.3 Sustainability/Ergonomic Related Items	9-10
2.4 Patent and Intellectual Properties	10-12
2.5 Summary of Literature	13-14
<b>CHAPTER THREE : METHODOLOGY</b>	<b>15</b>
3.1 Overall Process Flow	15-18
3.2 Detail Drawing	19-49
3.3 Engineering Calculation and Analysis	50-53
3.4 Bill of Materials	54

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of Study

Nowadays, online education is more accessible to many students in primary schools, secondary schools, and universities that must print any home works or notes on paper. So many paper disposals are done as throwing away used papers. That will affect residents living near landfills and could suffer major consequences as a result of chemical reactions that release harmful particles such as heavy metals and organic pollutants into the air. Paper disposal must decrease our environment because the paper is made from wood so the wood gets from the trees. So from that environment must be protected by people. Although recycling paper requires 40 percent less energy than making it from scratch, modern paper mills normally generate their energy from burning waste wood whereas recycling plants often rely on electricity from fossil fuels. So this project will make a paper shredder machine that can easily dispose of and recycle paper or confidential paper[1].

A new design of the paper shredder machine makes it easy for students and workers to dispose of or shred their paper and the most important is the machine's portability. The product is aimed at people that usually have a problem with paper or disposable paper to operate easier and faster. This paper shredder machine is easy to use and handle this machine. So, the user will not need to learn to operate it.

### 1.2 Problem Statement

From this project, there are some problems that want to make the paper shredder machine solve this problem. This problem also gets from surrounding that take for the problem and create a solution.

The first problem is that confidential paper cannot dispose of easily or according to pleasure. It is because the confidential papers have sensitive data on