

**UNIVERSITI TEKNOLOGI MARA**

**DESIGN AND FABRICATION OF  
A CONSISTENT KNIFE SHARPENER**

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## **ABSTRACT**

The Consistent Knife Sharpener is the result of a survey and study online. Majority of people that took the online survey agreed that it is important to use a sharp knife before using it. The machine will help users sharpen their knives so that they are very sharp with a consistent edge. A sharp knife is necessary for one's safety while using it. This project aims to design and model a machine that will help users sharpen their knives with a consistent sharp edge for their knives using only mechanical movements. Malaysians use a combination silicon carbide whetstone which have a course grit and fine grit listed on it. These whetstones are also called as a sharpening abrasive. Angle consistency (achieved when using an angle guide) is much more important. The machine will help users sharpen their knives and ease them to acquire the main purpose of this machine which is to make sure they do not suffer from adverse effects after using it.

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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>vii</b>
<b>LIST OF FIGURES</b>	<b>ix</b>
<b>LIST OF ABBREVIATIONS</b>	<b>xi</b>
<b>CHAPTER ONE : INTRODUCTION</b>	<b>1</b>
1.1 Background of Study	1
1.2 Problem Statement	1
1.3 Objectives	2
1.4 Scope of Study	2
1.5 Significance of Study	3
<b>CHAPTER TWO : LITERATURE REVIEW</b>	<b>4</b>
2.1 Market Analysis	4
2.2 Related Manufacturing Process	12
2.3 Product Design Specification	14
2.4 Patent and Intellectual Properties	15
2.5 Summary of Literature	18
<b>CHAPTER THREE : METHODOLOGY</b>	<b>19</b>
3.1 Concept Generation	19
3.2 Detail Drawing	25
3.3 Engineering Calculation and Analysis	32
3.4 Bill of Materials	35

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of Study**

The result of a survey and study online, the development of knife skills and care will be useful and will prove a useful to mastering a professional finish [1]. Although not everyone but most people do sharp their knives at home and not everyone is able to sharp it consistently because everyone uses different types of techniques and ways to sharpen their knives at home [2]. Majority of people that took the online survey agreed that it is important to use a sharp knife before using it, while other answers maybe. The machine called as a Consistent Knife Sharpener will helps users sharpen their knives so that they are very sharp with a consistent edge at it. The Consistent Knife Sharpener is built with a knife holder, whetstone holder and a steel frame to hold everything together.

### **1.2 Problem Statement**

As we know, at least in Malaysia, every household will always have multiple knives at home and different knife will need different angle to be sharpened [3]. A sharp knife is necessary for one's safety while using it. There is a distinct difference between the results of a sharp knife and a blunt knife. Even in A well sharpen knife will effortlessly slice, producing well-defined cuts and ensure a professional and uniform result. More pressure has to be used with a blunt knife in order to gain the same level of performance. The increased pressure makes a blunt knife more likely to slip, making your knife-work sloppy and less precise, as well as dangerous. To get most of a knife, ensure it is always sharp. Even Palaeolithic people back then tend to sharp their flake stone with a sharp edge will be more efficient [4].