

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF
VEGETABLES DICER**

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Dissertation submitted in partial fulfillment
of the requirements for the degree of
Diploma
(Mechanical Engineering)

College of Engineering

Feb 2023

ABSTRACT

Technology-enabled automation has significantly reduced human labour and time. In our hectic lives, slicing vegetables is a risky and time-consuming task. The related obstacles, such as time constraints, contamination, and so on, make the work challenging for anyone in charge. Vegetables must be chopped by hand. It is still widespread at hostels and restaurants that cater to a wide range of customer tastes and preferences. The primary goal of this technology is to reduce human effort and time. The goal of this initiative is to create a specific product called an automated vegetable cutting system to solve the concerns indicated above.

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. Zeno Michael. Her guidance and advice carried me through all the stages of writing my project.

Without my classmate's help, it would not have been feasible to complete this assignment. I appreciate your kind words and suggestions, as well as the fact that you made my defence enjoyable.

I would also like to express my gratitude to the staff of the Mechanical Laboratory for allowing me to use the machine as well as the lab tools and for allowing me to utilise all the necessary lab supplies.

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. Alhamdulillah.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

A machine or apparatus for cutting vegetables and fruits for direct consumption or canning. Some vegetable cutters are made to be used at home. Restaurants and industry both employ commercial vegetable cutters. A metal screen with blades and two handles is the most basic sort of vegetable cutter. A more complex type is made for shredding, grating, and juicing in addition to cutting. Interchangeable (typically disc) blades are attached to a shaft that can be spun manually or electrically in such a device. Electricity is used to power commercial vegetable cutters, which may produce 200 to 3,500 kg per hour. Commercial vegetable cutters come in a variety of styles, each designed to chop a certain vegetable.

1.2 Problem Statement

Over time, vegetable production has increased. The rise is largely due to continuous technical improvement. Vegetables are grown on a big scale for supermarkets and various food companies, as well as for roadside cafes. The main issue is reducing the size of the vegetable so that it may be consumed easily by the customer. Vegetables have been reduced in size using a variety of approaches. Knives and other specially designed machines were used in traditional procedures. These techniques have proven to be time-consuming, particularly in our fast-paced lives. The dishes are consistently higher than what is actually consumed.

Previously manual operations are gradually being changed to semi-automated and automated nature. Automated machines have increasingly become a fundamental component of daily human existence during the industrial revolution. When compared to its manual counterparts, automated machines have consistently saved the majority of people's time when performing a work, and this improvement has considerably contributed to a more competitive and faster manner of doing things.