

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF A
POTATO PEELING MACHINE**

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ABSTRACT

Since most peeling is now done by hand, which is very convenient for housewives, skin removal is still an important unit activity in potato processing. The idea of fully automatic potato peeling equipment is the main objective of this project. The initiative focuses on small and medium potatoes, portable machines, and affordable manufacturing costs. It is intended for housewives and small businesses such as hawkers. The rotating disc, the peeling blade, and the drive connection to turn the rotating disc with the motor shaft are all included in the basic components of the machine. The protrusions on the inner surface of the rotating disc cause the potato to operate into the peeling blade as it rotates. During the process, a little water is needed to wash the potatoes and facilitate the peeling process. As a result, this machine can reduce the amount of time and labor required to process potatoes.

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At first, change can be scary, and it can also be unpleasant. We may not like it, but change is a necessary part of progress, just like the seasons. We may not be ready, but change, like the seasons, is necessary for progress. I generate this dissertation as a tribute to my passion in pursuing a Mechanical Diploma Engineering Award after my schooling, the season after my studies. Undoubtedly, the path is from the Almighty God, who has blessed me throughout my journey to complete this project successfully.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Peeling potatoes is a common job in the catering industry, restaurants, and at home. Peeling large quantities of potatoes will take time and energy for small business owners and housewives. Furthermore, users will use their own abilities to peel using a knife. By doing this, the owner will spend a lot of time and using so much energy to peel potatoes quickly and the risk of injury increases. The goal of this project is to develop and build a portable machine that will overcome the difficulties encountered during the peeling process especially for housewives and small traders. The market offer is not enough to meet the needs of consumers, especially housewives and small companies. This is because existing products require a large amount of manpower and a long period of time.

1.2 Problem Statement

This project problem statement consumes energy and time. This is because consumers need a lot of energy and time to peel potatoes, especially in large quantities. In addition, safety during the peeling process. When peeling with a knife, the location of the hand may be close to the blade of the knife. This will harm the user's hands and increase the risk of accidents.

1.3 Objectives

The main objectives of this project are:

- a) To design a portable automatic potato peeling machine product to reduce manpower while peeling potatoes.
- b) To fabricate a potato peeling machine that can ensure the safety of users while using it.