

UNIVERSITI TEKNOLOGI MARA

**PORTABLE FRESH COCONUT
MILK EXTRACTOR FOR SMALL
AND MEDIUM INDUSTRIES (SMI)**

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ABSTRACT

A coconut milk extractor is a machine that extracts coconut milk from fresh coconuts. In today's world, it's becoming a viable alternative to the traditional extraction process. This approach is more dependable in terms of processing time, hygiene, and safety, and it needs fewer processing steps. The process of designing, fabricating, and analyzing a portable mockup model coconut milk extractor is presented in this thesis. Busy urban society, particularly working women, and Small and Medium Industries are the target population and prospective clients (SMI). The project's goal is to make a machine that is smaller and less expensive than those already in use in this sector. The machine prototype is built with material availability and fabrication utilities in mind. The prototype's final testing and performance, such as the amount of coconut milk that can be extracted and the prototype's efficiency, are measured. The design is believed to be able to extract a substantial volume of coconut milk while also acting as a user-friendly kitchen gadget, therefore competing with other devices currently on the market.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Coconut is a versatile plant that is extremely beneficial to humans. Coconut milk is one of its advantages. Milk is a creamy liquid that is used to season meals. Coconut milk is often used in Malaysian foods such as curry and laksa.

Coconut milk is in increasing demand, particularly among home users. Some people want to know how to extract coconut milk as quickly as possible at home. The conventional method of obtaining coconut milk entails a number of steps, including shredding, grinding, and squeezing.

This procedure appears to be time and energy intensive. Furthermore, because this approach involves several separate processes, it needs a large number of instruments, such as a knife, grater, and containers. Furthermore, having too many tools will make the environment dirty, requiring the user to perform a lot of cleaning afterwards. In addition, most of household users are busy especially for those who live in the city.

The traditional approach, as previously described, involves a significant amount of manual labour. Because bacteria from the hands will infect the milk, hygiene is a major problem. Bacteria will degrade the quality of the milk, making it difficult to store it for an extended period of time. The use of gloves is cleaner, but this way is not practical and quite fussy to be implemented.

This study is conducted to overcome the problems faced by household users regarding on the fastest way to extract fresh coconut milk. The next few chapters consist of Literature Review, Methodology, Results and Analysis will explain further on the process of developing the coconut extracting machine. It is hoped that, the findings will benefit this community so that they will be able to have a fast, easy and reliable way of extracting coconut milk at their own house.