

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF A
MINI PEANUT GRINDER**

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ABSTRACT

This project focuses on the development of a mini peanut grinder designed to provide convenience and efficiency for home use. The problem statement shows the limitations of existing peanut grinders, which are often bulky and inconvenient for small-scale grinding needs and would be a hard to remains on good condition. The objective is to design and create a compact and user-friendly peanut grinder that retains the grinding performance while being portable and easy to operate. The project will include a combination of product design and engineering method, including market research, prototyping, and user testing. The expected result is a mini peanut grinder that offers improved functionality, ease of use, and portability, to attend to the needs of individuals who desire freshly ground peanuts for various culinary purposes at home.

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INTRODUCTION

1.1 Background of Study

Peanuts are widely consumed and appreciated for their nutritional value and versatile use in various culinary applications. Traditionally, peanut grinding has been performed using manual methods or large-scale industrial grinders, making it challenging for individuals to achieve freshly ground peanuts conveniently at home. This context shows the significance and relevance of researching and developing a mini peanut grinder.

The importance of this research topic is to empower individuals to easily access freshly ground peanuts, enabling them to incorporate them into a variety of dishes, snacks, and spreads. Additionally, the mini peanut grinder could help with the problems faced by major user while using an industrial sized peanut grinder such as poor maintenance capability, replacement parts, too heavy and inconvenience for user to conduct, cleaning the grinder seeks time and attention as it is big and complex.

By conducting this research, the study aims to achieve the following objectives, designing and creating a mini peanut grinder that retains optimal grinding performance, ensuring user-friendliness and ease of operation for individuals of various skill levels, enhancing portability and compactness for convenient storage and assessing the overall acceptability and functionality of the mini peanut grinder through user testing.

In summary, the background study provides a rationale for the research project by highlighting the limitations of current peanut grinding methods and the importance of developing a mini peanut grinder. It emphasizes the need for a compact and user-friendly device that enables individuals to conveniently achieve freshly ground peanuts. By addressing these aspects, the study aims to contribute to the improvement of kitchen appliances and promote healthier eating habits.

1.2 Problem Statement