

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION
OF COINS SEPERATOR
MACHINE**

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ABSTRACT

Many automatic devices, such as drinking machines and arcade gaming machines use an automatic coin device to function as a coin counter and sorter in this modern period. However, most people are too lazy to separate coins. The machine's systems that are available on the market are insufficient because they occasionally create errors while detecting the value of a coin and causing an incorrect computation in the outcome. This project entails a coin separation machine capable of reliably distinguishing Malaysian coins. The coin separator was used because it functions as a coin selector to determine the denomination of coin and prohibit the use of any invalid or undesirable coins. The coin sorting system is made up of gears and chains that hold and distribute coins to the appropriate holes. This integrated design has demonstrated outstanding performance for coin sorting in terms of user-friendliness, accuracy, and aesthetics throughout the project.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

The first coins were used in Malaysia on June 12, 1967 [1]. People continue to use coins in their daily lives. Banks, transportation companies, and philanthropic organizations all deal with coinage daily. Every day banks generate and receive coins, which they then deliver to other organizations to meet their coin needs. Charitable institutions, such as mosques, collect coins from donations made during prayer or when Muslims visit the mosque. Coins are also commonly utilized in the public transportation industry, whether as fares or change. These enterprises sort coins every day without employing machinery that can manage huge currency operations. Instead, the institution must engage any extra person simply to deal with coins or count them manually, which might accept too much of their time that could be spent on other duties.

The design was aimed to help business and trade in sorting coins more quickly and easily. It is amazing how people arrange coins, especially in vast quantities. This idea conceived of a device that would attempt to help and solve the challenge of sorting vast quantities of coins. With the design, the company can help the business by giving a simple yet effective method of dealing with enormous amounts of coinage while conserving valuable time that can be put to better use.

1.2 Problem Statement

Manually sorting and counting enormous amounts of coins takes up a lot of time and may prevent anyone from doing other things. Coin sorters and counters are also available on the market, but they are expensive. The primary goal of the research is to devise a method for sorting Malaysian coins of various values in less time and with more effectiveness.