

# PROTOTYPE DESIGN COLLECTION

## SERIES 2





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# FOREWORD

This digital book on Prototype Design Collection Series 2 (PDC Series 2) is published as a reference design for mechanical engineering students. The designs presented experience a few phases of analysis before fabrication of prototype. Each project summarises the project description, prototype, figures, and design parameter. The design products vary in tools or equipment for household, workshop, entrepreneur, etc. Suggested material and detail of prototype dimension are also mentioned in this book.

It is hoped that this book will assist the students to have more ideas on innovation design products in the future.

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## CHAPTER 88

### Design and Fabrication of Coins Separator Machine

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#### PROJECT DESCRIPTION

Automatic coin devices are widely used in many devices, including arcade gaming machines and drinking machines. However, the current coin separation systems available in the market are often inefficient and unreliable, leading to incorrect computations and errors in the outcomes. This project aims to design and develop a coin separation machine that can accurately and reliably distinguish Malaysian coins. People often do not separate their coins, which creates problems for automatic coin devices that require specific denominations to function correctly. Existing coin separation systems are often prone to errors, leading to incorrect computations and outcomes. The primary objective of this project is to design and develop a coin separation machine capable of reliably distinguishing Malaysian coins. The machine must be user-friendly, accurate, and aesthetically pleasing. The integrated design of the coin separation machine demonstrated outstanding performance for coin sorting, with a high degree of accuracy and reliability. The prototype successfully distinguished and separated Malaysian coins with ease, making it an effective solution for the problem at hand. The user-friendly and aesthetically pleasing design also ensures that the machine can be easily operated by anyone. In conclusion, the coin separation machine developed in this project offers a reliable and accurate solution to the problem of distinguishing Malaysian coins. The machine's design ensures user-friendliness and aesthetic appeal while also providing an effective means of coin separation. This project serves as a valuable contribution to the development of automatic coin devices that can operate efficiently and reliably in modern society.

**Keywords:** *Coin separator machine, Prototype, Malaysian coins*

#### PROTOTYPE



### DESIGN PARAMETER

