

PROTOTYPE DESIGN COLLECTION

SERIES 2



Prototype Design Collection

Series 2



AHMAD NAJMIE RUSLI

**UNIVERSITI TEKNOLOGI MARA CAWANGAN JOHOR
KAMPUS PASIR GUDANG**

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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 2

Portable Wrapping Machine

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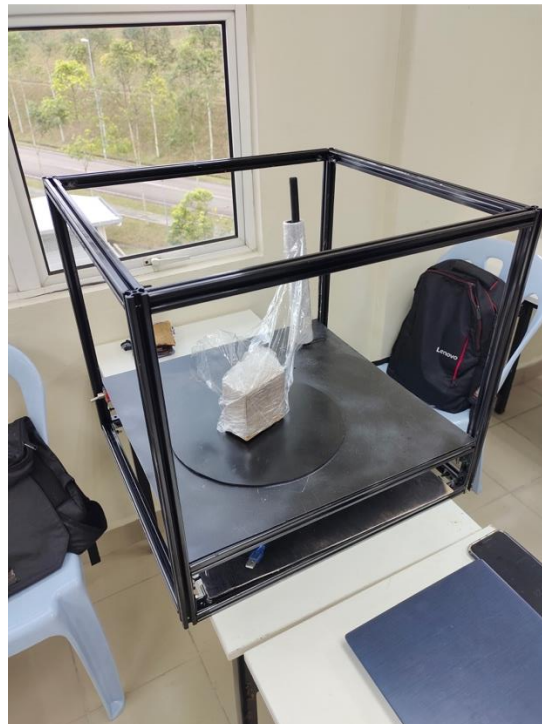
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PROJECT DESCRIPTION

The lack of well-established portable wrapping machines in the market has led to a need for innovation in this field. Due to the limited availability of portable wrapping machines and their lack of features for easy operation and user-friendliness, this project aims to increase the production rate for small home businesses by presenting an improvised portable wrapping machine to ease the wrapping process. The product design incorporates the installation of a motor to wrap small cylinders or boxes within the machine's size. A power supply is used to convert AC current to DC current to supply electricity to the motor. The outcome of this project is a portable wrapping machine that is easy to operate, user-friendly, and capable of increasing production rates for small home businesses. This improvised portable bubble wrapping machine has the potential for commercial success as it provides an efficient solution to small home businesses by potentially increasing revenue for their businesses.

Keywords: *Portable wrapping machine, Small home businesses, User friendly, Production rate*

PROTOTYPE



DESIGN PARAMETER

