

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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e-ISBN NO 978-967-0033-18-1

First published, 29th September 2023

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PUBLISHED BY:

Universiti Teknologi MARA Cawangan Johor,

Kampus Pasir Gudang,

Jalan Purnama, Bandar Seri Alam,

81750 Masai,

Johor Darul Ta'zim.

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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 145

Development of a Clothes Folding Machine

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PROJECT DESCRIPTION

The development of a clothes folding machine aims to shorten the time-consuming and demanding task of folding clothes. As folding clothes can be a tedious chore, the machine is designed to reduce the effort and time required to complete the task. The machine will be a semi-automatic system that uses a combination of mechanical and electrical control systems. It was designed to cater to the needs of the public, particularly housewives, by replicating the manual method of folding clothes. The machine's mechanism started with folding the sleeves, followed by folding the bottom of the shirt, and flipping the shirt to its upper face. The machine was powered by the servo motors and controlled by the Arduino. The machine is expected to revolutionize the clothing industry by providing a convenient and cost-effective way to fold clothes, saving valuable time and energy. The development of the clothes folding machine has the potential to make a significant impact on people's daily lives and is a step towards advancing technological solutions for everyday problems.

Keywords: *Clothes, Folding machine*

PROTOTYPE



DESIGN PARAMETER

