

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 65

Design and Fabrication of Iron Board

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PROJECT DESCRIPTION

Many households, particularly apartments, hostels, and flats, face a common challenge of limited storage space for items such as clothes, hangers, and ironing boards. Typically, consumers, particularly housewives, have to retrieve clothes from hangers before ironing them, which can be a time-consuming task. To address this issue, a combined clothes hanger and ironing board can be introduced, offering convenience and efficiency. By integrating the hanger alongside the ironing board, users can streamline the process and reduce their workload, making ironing clothes a more enjoyable experience. The primary objective of this project is to optimize space utilization within the house and alleviate the burden on users. Existing ironing boards often lack user-friendliness and have limited functionality. Therefore, the successful implementation of this project will eliminate the need for users to juggle clothes while ironing.

Keywords: Cooler box, Peltier cooling effect, Outdoor applications

PROTOTYPE



DESIGN PARAMETER

