

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 23

A Garden Storage Trolley with Dried Leaves & Trash Collector

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PROJECT DESCRIPTION

Fabrication of a garden and lawn storage trolley with dry leaves & trash collector was proposed for this project. The objective and main purpose of the product is to reduce the burden of housewives and gardeners transporting gardening tools while sweeping dry leaves when doing gardening or cleaning activities in their area. The addition of the dry leaves & trash collector makes them easy and less energy is used to collect the dry leaves and trash in a medium grass area. The partition and storage of gardening tools were fabricated using mild steel material. Other fabrication processes involved in this project are cutting, grinding, welding, and finishing. In conclusion, this product helps people especially gardeners and housewives to do gardening or cleaning work with less energy used and is user-friendly.

Keywords: Storage, Trolley, Trash collector

PROTOTYPE



DESIGN PARAMETER

