

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 71

Sand Sieve Machine

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PROJECT DESCRIPTION

The construction site needs sand that has been sieved. Previously, when workers wanted to separate the types of sand, they use a hoe to separate sand types. In this situation, workers need extra time and required significant manpower leading to fatigue. The main objective of this project is to separate the fine sand and isolated sand from the rocks. Other than that, the separation of sand can become more efficient and take a short time to separate it. The methodology that has been used is based on the research method. Based on the observation, most hardware did not have the specific tools for sand separation. This product can meet high expectations by making sand separation easier for workers. Through this product, fine sand will fall to the bottom and large sand particles will be left on the net. The cost for this product is affordable as the materials and equipment required are readily available in the market.

Keywords: *Sand sieved machine*

PROTOTYPE



DESIGN PARAMETER

