

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

CHIEF EDITOR:

Ahmad Najmie Rusli

CONTENT EDITORS:

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Norhisyam Jenal

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Radzi Abdul Rasih

PUBLISHED BY:

Universiti Teknologi MARA Cawangan Johor,

Kampus Pasir Gudang,

Jalan Purnama, Bandar Seri Alam,

81750 Masai,

Johor Darul Ta'zim.

Tel: +60 7-381 8493

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 51

Conceptual Automatic Rempeyek Making Machine

Ahmad Nor Aafif bin Saharrudin ¹ and Siti Khadijah binti Alias ^{2*}

^{1,2}*Mechanical Engineering Studies, College of Engineering, Universiti Teknologi MARA
Johor Branch, Pasir Gudang Campus, 81750 Masai, Bandar Seri Alam, Johor Darul Ta'zim.*

**Corresponding author (e-mail): khadijah_alias@uitm.edu.my*

PROJECT DESCRIPTION

Rempeyek is a common traditional cake that are origin from Indonesia and are now widely eaten by people from Malaysia. *Rempeyek* are usually make by people at home to serve the guest during any feast or celebration. The problem occur by this *Rempeyek* is that it usually served in a large quantity since it gets a good response from the guest. People like *Rempeyek* so much. However, due to this, it requires many efforts, time, and energy to make *Rempeyek* in a large quantity. So, it requires a machine that can produce *Rempeyek* in a large quantity in a short period of time. The objective of this project is to design a machine that can produce *Rempeyek* with higher productivity and to develop a fully automatic *Rempeyek* machine that can operate without using a lot of time and energy. The results are expected should be stable to carry the load of the flour, anchovies, and peanuts. The material of the machine must withstand heat so that the heat process can be conduct efficiently. The time of the machine to put the ingredient should be accurate with the position of the molding tray so that the ingredient can be put to the baking tray with the right amount of flour, anchovies, and peanuts. The machine should be running smoothly during the process of making the *Rempeyek* so that it can be use in the industry and helps people in making a good *Rempeyek*.

Keywords: *Rempeyek, SME, Innovation*

PROTOTYPE



DESIGN PARAMETER

