

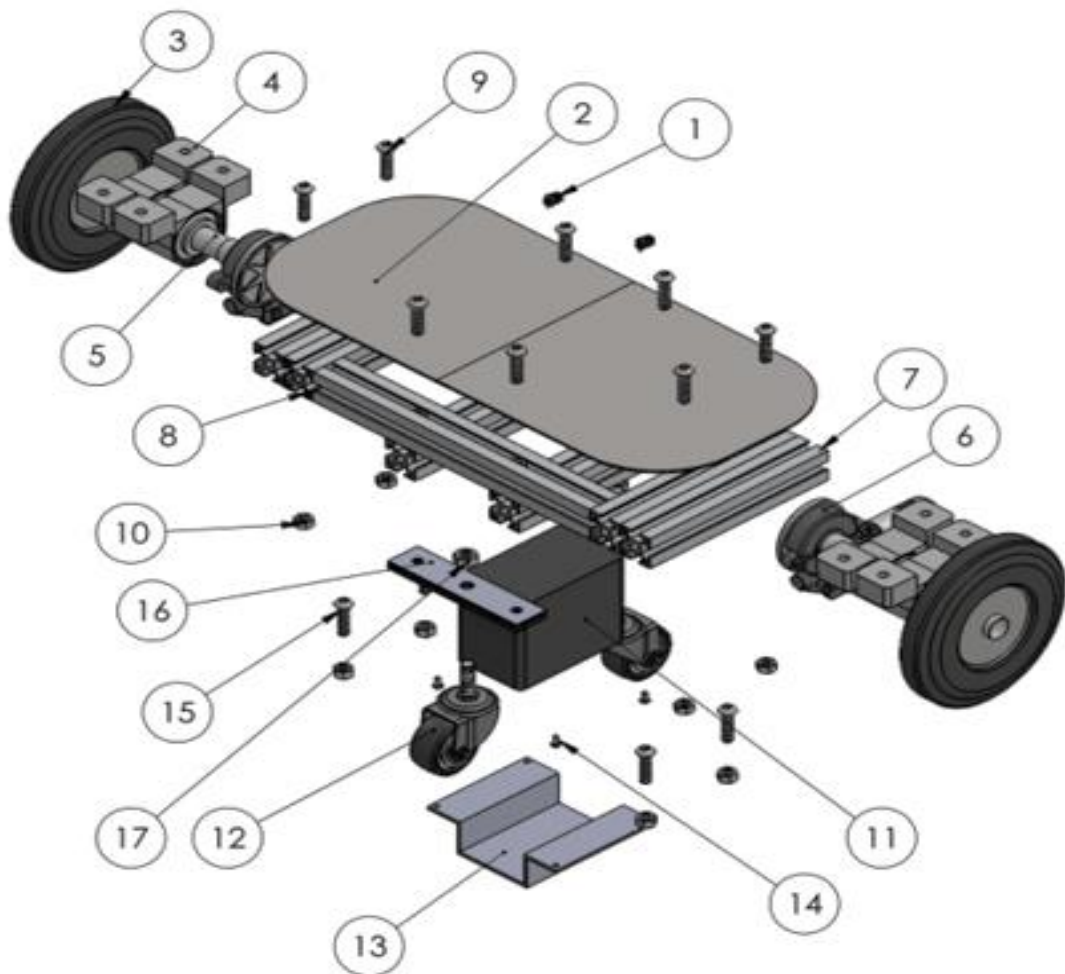
# PROTOTYPE DESIGN COLLECTION

## SERIES 2



# Prototype Design Collection

## Series 2



AHMAD NAJMIE RUSLI

UNIVERSITI TEKNOLOGI MARA CAWANGAN JOHOR  
KAMPUS PASIR GUDANG

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**CHIEF EDITOR:**

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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 61

### Design And Fabrication of Dough Roller Machine

Muhammad Haziq Bin Mohd Zahir <sup>1</sup> and Miqdad Bin Khairulmaini <sup>2\*</sup>

<sup>1,2</sup>Mechanical Engineering Studies, College of Engineering, Universiti Teknologi MARA  
Johor Branch, Pasir Gudang Campus, 81750 Masai, Bandar Seri Alam, Johor Darul Ta'zim.

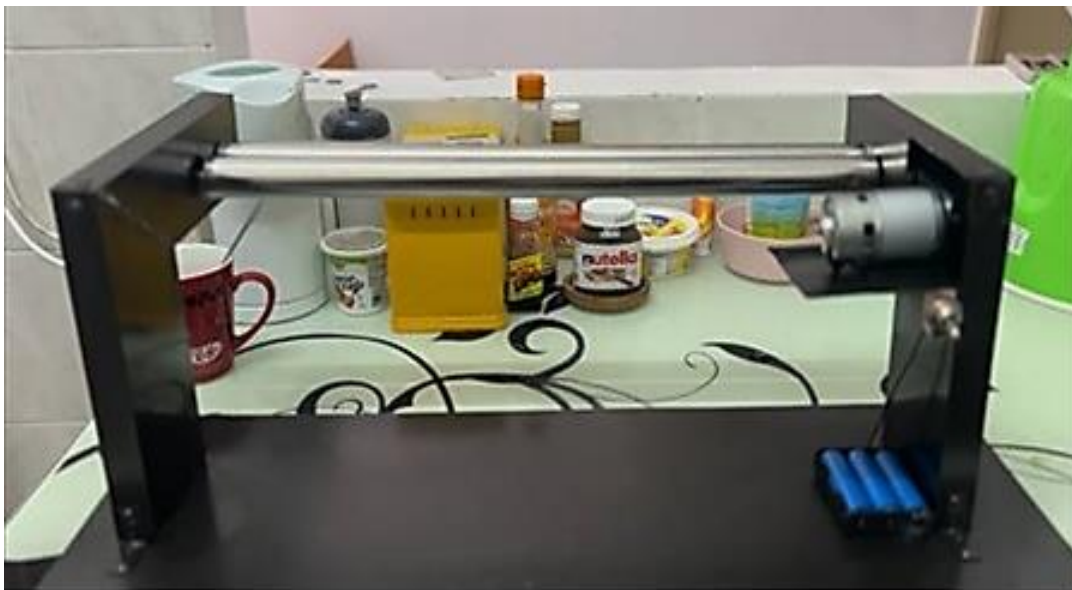
\*Corresponding author (e-mail): miqdadkos@uitm.edu.my

#### PROJECT DESCRIPTION

The Automatic Dough Roller Machine is an innovative product that aims to increase the effectiveness of flattening dough. The current process of manually flattening dough using a rolling pin can be slow and tedious, and this project presents an improvised version of the dough roller machine with new features to speed up the process. The objective of this project is to create a more user-friendly and efficient dough roller that can produce a clean and smooth surface on the entire surface of the dough. The methodology involves the use of electrical power to supply energy to the motor, which moves the gears that rotate the two rollers, providing a one-way movement for the dough. The resulting product is an automatic dough roller machine that is easy to use and can be marketed to small and medium industries. The significance of this project is that it can help reduce the manpower and time consumption required for flattening dough, thereby increasing productivity and efficiency for small and medium industries. The Automatic Dough Roller Machine, with its longer roller length and improved technology, offers a perfect solution for producing dough with a uniform thickness, reducing the need for manual intervention, and increasing overall quality control.

**Keywords:** *Automatic dough roller machine, User friendly, Small and medium industries*

#### PROTOTYPE



**DESIGN PARAMETER**

