

# 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 133

### Agriculture Pump Sprayer Trolley

Muhammad Shazril Nazmi Mohd Nizam <sup>1</sup> and Abdul Hadi Abdul Rahim @ Ibrahim <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): abdulhadi@uitm.edu.my*

#### PROJECT DESCRIPTION

The agriculture sector is very important in our country. Effective methods will ease the process to produce a high-quality product. The agriculture pump sprayer trolley is used for watering and fertilizing crops. The objectives of this project are to design and analyze an Agriculture Pump Sprayer Trolley and to fabricate an affordable and functional Agriculture Pump Sprayer Trolley. The problem that users faced is most of the agriculture pump sprayer nowadays is heavy, hard to operate, and not user-friendly. Plus, most of that pump sprayer also takes time and energy to be operated because people need to bring it to their back. So, this project tries to make an affordable machine that is easy to use. The expected result is to make a functional pump sprayer for the gardener or others. In conclusion, it is hoped that this project will solve the problems that users faced.

**Keywords:** *Pump sprayer, Trolley, Agriculture*

#### PROTOTYPE



**DESIGN PARAMETER**

