

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF
AUTOMATIC ANTISEPTIC SPRAY
OF SMART PARCEL DROPBOX**

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ABSTRACT

Nowadays, the world has been exposed to the virus that called as a Covid-19 and it is effecting many people and the industries in this world. It has also affected the parcel delivery industry because, during the parcel delivery process, both the owner and the delivery person need to have contact, posing a significant potential for Covid-19 infection. So, one of the solution to prevent from the infection of Covid-19 is parcel delivery method needs to be improved due to this crisis. The issue arises when the courier attempts to deliver a non-infectious package, increasing the risk of contracting COVID-19 . The goal is to design a CAD model for a machine that safely disinfects packages during delivery without owner contact. The project aims to find the best design for the Automatic Antiseptic Spray, ensuring it covers around 80% of the parcel to enhance safety throughout the delivery process. The methodology of the study includes creating a project flowchart, brainstorming ideas and collecting information for the design of the Automatic Antiseptic Spray. The CAD modeling for the Automatic Antiseptic Spray is generated using Solidworks 2021, based on the created design idea and the selected design that meets the criteria for this project. This also includes the collection of data from the Pugh table, Morphological table, and the survey to gather information about this project. The project aims to produce a complete CAD modelling of the Automatic Antiseptic Spray using Solidworks 2021 software, including detailed design, assembly drawing, exploded drawing, BOM and cost analysis. The potential outcome for this project is the fabrication of an Automatic Antiseptic Spray that can overcome issues occurring during the delivery process. In conclusion, this project aims to design and fabricate a machine capable of disinfecting parcels to ensure community safety.

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