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DESIGN AND FABRICATION OF SLIDING PLATFORM COMPONENT OF SPD (SMART PARCEL DROPBOX)

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ABSTRACT

This project is about the design and fabrication of the sliding platform components of the smart parcel dropbox. Nowadays, the delivery service provides face-to-face delivery to avoid unexpected accidents such as loss and damage. The interaction or physical contact between customer and delivery man may occur the infection of covid-19 during the Covid-19 season. The purpose of this project is to design the sliding platform and make an analysis of the platform using FEA. Using Solidworks 2019, the cad modelling of the sliding platform was created based on the selected design. All the components involved in the sliding platform were designed in cad modelling. The analysis was made for the main components of the structure of the sliding platform by using Finite Element Analysis to test the durability of the sliding platform. The result will be compared the differences between the minimum and maximum load that the sliding platform can support. The expected result be able to know and found the area that receives the high pressure and has the critical point when the load act on it.

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