



MEC 332

MECHANICAL ENGINEERING DESIGN

FINAL YEAR PROJECT

TITTLE:

GERM FREE DOOR HANDLE

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1.0 OVERVIEW OF THE PROJECT

Door handle is used for opening and closing of doors. Hence, it is used by every individual as the only way to cross from another room or space. Because of that, door handles are famous for bacterioto built up, especially public handles. In public areas, various people had touched the handle which could not have known if their hands are clean or not. Even though some people are sure their hands are clean before touching it, the possibility of the handle itself is free of germs is low. As COVID- 19 pandemic is affecting millions of people throughout the world, keeping a healthy and clean lifestyle is a must these days. In addition to that, people must always carry sanitizer as to avoid germs spreading into the body when touching or going to public places. Bacteria or germs are often present at door handles because of frequent and inevitable use of it. Therefore, people should always sanitize after touching a door.

Since it is a hassle for people to sanitize their hands every time, they touch a handle, an idea to combine sanitizer at the door handle has been created for this project. A door that can sanitize by itself after been touched by people. After the door closes, a ring shape attach on the handle would sanitize the whole handle by using liquid sanitizer. In this pandemic, there is still a group of people would be ignorant towards health issue by not sanitizing their hands after touching object at public places because they take this issue lightly. As a result, many have been affected. For that reason, producing a self-sanitized door handle can prevent from germ spreading and would decrease of people getting effected.

1.1 DESIGN OBJECTIVE

1. To design and innovate convenient sterilize door handle.
2. To prepare details drawing and specifications for the door handle.
3. To stimulate analysis of sterilizer door handle based on stress strain analysis.