

ABSTRACT

In the new normal era during the Covid-19 pandemic, the application of health protocols is so necessary that humans must use personal protective equipment, one of which is medical masks. As a result, there has been an increase in the use of disposable medical masks which is directly proportional to the increase in waste of medical masks. With this phenomenon, ITS Student Group has designed the concept of Zero Mask Waste product to process medical mask waste into sterile waste ready to be processed on a small scale. However, there are still some shortcomings, including in terms of dimensions and product operations that are not by the application of product design science. By using the product simulation method, it becomes a data input used as an analytical material for the redesign of Zero Mask Waste products. In addition, the design uses comparative methods to align the results of simulation methods with related literature, such as anthropometry and product operations. By obtaining the results of the data analysis, it can be a guideline and a reference in redesigning zero mask waste products. Several updates and improvements were applied to the design of medical mask waste treatment plant products whose use is specific to small-scale public health facilities, covering the overall product dimensions by the dimensions of the Indonesian community body, built-in touchless hand sanitizer, informative displays, and changes in component layout on the inside of the product. With the changes and feature improvements in the product design Zero Mask Waste can provide effectiveness and productivity for users in long-term use. Thus, the redesign of Zero Mask Waste products became a solution and innovation to the phenomenon of the use of medical masks in small-scale public health facilities.

Keywords : *Covid-19, Waste Masks, Health Facilities*