IMPROVEMENT OF AUTOMATIC HAND WASHER FOR ELEMENTARY SCHOOL CHILDREN WITH ADJUSTABLE SINK

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BACHELOR'S DEGREE in

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January 2023 Revision after Thesis Defense on 18 January 2023 Benediktus Marshal Cristoval Wijaya

STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

Improvement of Automatic Hand Washer for Elementary School Children with Adjustable Sink

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To control the spread of COVID—19, schools were closed in March 2020. To prepare for their reopening, hand hygiene is considered important for people to protect themselves against COVID-19. While this all seems like common sense, not every school seems to focus on significantly improving their hygiene facilities (Silitonga, A, 2021). COVID-19 spreads mainly through direct or indirect contact. Washing hands with soap and water is of critical importance. While adults have repeatedly told children to wash their hands, children often don't obey because of reluctance and/or impatience. The lack of awareness also seems to play a part in this, as children often forget to use soap. (Sharma, 2020). The importance of this Automatic Hand Washer is that children can wash their hands without direct contact with the washer, because the tap and soap dispenser are operated automatically. This research will also improve the existing Automatic Hand Washer iteration previously made. The past thesis by Patrick Perdana shows some elements which need to be improved especially regarding the design and efficiency. This thesis will help increase the efficiency and overall functionality of the previous Automatic Hand Washer.

Keywords: Adjustable sink, DC motors, Lead screw, Linear guide rails, Automatic hand washer.



DEDICATION

I dedicate this thesis work for this country



ACKNOWLEDGEMENTS

I want to thank my advisor and the staffs that helped me to work on this thesis by guiding me however small it seems. I also want to thank my friends who supported me in their own ways.



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