UNIVERSITI TEKNOLOGI MARA

DESIGN AND FABRICATION OF AN ECO-FRIENDLY CLEANING MACHINE

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Dissertation submitted in partial fulfillment
of the requirements for the degree of
Diploma
(Mechanical Engineering)

College of Engineering

Feb 2024

ABSTRACT

The eco-friendly cleaning machine project is aware of the significance of consumer acceptance and market need. It considers how people, companies, and organizations are becoming more aware of and interested in sustainable cleaning options. The project aims to speed the shift to ecologically friendly cleaning practices by creating eco-friendly cleaning equipment that is affordable, user-friendly, and meets market expectations.in, eco cleaning machine can helps the cleaning staff that have the experience back pain issues because of the employment. Understanding and improving the interaction between humans and cleaning machines is another knowledge gap. Research is needed to design user-friendly interfaces and intuitive controls that make operating cleaning machines more accessible and efficient. Studying the safety and ergonomics of utilizing cleaning machines can also reduce the risk of injuries while improving the user's experience. The manually operated eco-friendly cleaning machine did not require a motor or fuel in this project. Using SolidWorks, the eco-friendly cleaning machine may be created. As suggested by the project's name, an eco-friendly cleaning machine prototype will be what is expected as a final product. The efficiency of the eco-friendly cleaning machine in sweeping the surface and its ability to avoid back pain will be evaluated.

ACKNOWLEDGEMENT

First of all, I thank Allah for allowing me to successfully complete my final year project (FYP) report on time. I would like to thank everyone who has assisted me to finish my project, whether directly or indirectly. I would like to express appreciation to my supervisor, Mohd Fadzli bin Ismail, for his moral support, direction, suggestions, and encouragement over these two semesters. His insightful feedback and suggestions for strengthening my dissertation have been really beneficial.

Furthermore, I am grateful to my family, especially my parents, who gave encouraging advice and support when I felt like giving up and feeling down, as well as moral support to complete this project. Not to mention my beloved friends, particularly Muhammad Qawiem, Amy Malissa, Puteri Nor Azwina, and others, who greatly assisted me in finishing my project; without their compassion, my project would not have been completed as it is now. Thank you to everyone so much.

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CHAPTER ONE
INTRODUCTION

1.1 Background of Study

During the years, the way that cleaning equipment is used has changed. Robots took the role of tools, and the cleaning business now places a high focus on technology. Several inventions that have become crucial components of industrial cleaning were produced because of these advances. To rapidly and effectively clean big expenses in commercial properties, professional cleaning equipment is required [1]. It may often be challenging to decide which cleaning equipment to buy because there are so many different kinds available. This article examines some of the typical commercial cleaning tool kinds, their advantages, and the proper handling, storage, and upkeep of various cleaning equipment types.

Modern cleaning machinery is both necessary and built to be manually operated without the use of an external energy source. They are the best option for cleaning both dry and wet floors because they are affordable, dependable and ecologically friendly. The performance of a mechanically powered floor cleaning equipment, which is frequently used in roads, school, homes, bus stops, malls, airports, and other commercial settings is examined in this study regarding its coverage area [2]. It is intended to save money and time while still being safe for the environment and simple to use.

The aim of this project is to help employee using eco-friendly cleaning machine that will make cleaning simple and quick and lessen employee back strain. through his project, the enhancement and redesigning the eco-friendly cleaning machine will be done by using state-of-art SolidWorks 2019. Finally, this initiative will have a significant positive impact on the neighborhood and contribute to the nation’s cleanliness.