UNIVERSITI TEKNOLOGI MARA

DESIGN AND FABRICATION OF MECHANICAL FLOOR CLEANER

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ABSTRACT

Some cleaning contractors in small groups, such as school cleaning companies, suffer back pain from using only conventional mops for too long. The school also has a large area, such as a hall and a sports court, such as a badminton court and a futsal court, and they had to clean that area by only using a conventional mop. If a school cleaning company wants to make it easier, they need to buy a floor scrubber; it's too expensive and not worth it. The main purpose of our project is to create an inexpensive floor cleaner that works the same as other floor scrubbers on the market and can also replace existing conventional mops. This project uses the concept of a machine floor scrubber and realizes it in a trolley concept. This project also can be marketed at a lower price than existing floor scrubbers. This will reduce the burden of small cleaning contractors, such as in schools and, at the same time, can overcome the pain and difficulty they experience when using a conventional mop.

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INTRODUCTION

1.1 Background of Study

As a result of the observation, the situation that is often seen on the UITM floor is the difficulty of the cleaning workers to clean the dusty floor, which requires many workforces. The method currently used is to use only conventional brooms and mops. It also took a long time to do the cleaning work because of the large floor surrounding the UITM area. In addition, dust mixed with water and oil will stick to the floor and become difficult to clean using only a broom and mop. Using a mechanical floor cleaner (MFC) will be able to solve the problem well. (MFC) is based on modern floor scrubbing machines, replacing the device with a modified trolley, and placing a mop under it to save on tool manufacturing costs.

1.2 Problem Statement

After making observations and surveys, cleaning using conventional brooms and mops caused the cleaning workers to have difficulty using much energy to clean the dust attached to the floor. It will also cause workers to feel tired in the arms and pain in the waist. In addition, if using a conventional mop, it will take quite a long time to clean a large area. With a mechanical mop cleaner, it can help solve the problem. The above statement can support by statistics based on a survey that has been done for this project**.**