



اَوْنُوْرَسِيْتِي تِي كُونُوْمَا رَا
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MARA

MEC332 - MECHANICAL ENGINEERING DESIGN

TITLE: TRASH COMPACTOR

GROUP: J4EM1105C

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ABSTRACT

Based on statistics in Malaysia, the second largest source of waste is plastic that is about RM163 million in value. In fact, plastic bags take 500 years to decompose completely. So, we built this prototype to overcome the problem in reducing the usage of garbage plastic bags in the Malaysian households for domestic waste. It would certainly help to reduce the second largest source of waste in Malaysia. The aim of this project is to help in reducing the usage of garbage plastic bags and to gain profit in a respectable way. The objective is to reduce the usage of plastic bags by compacting the garbage and to avoid overflow of garbage bin. In addition, it will help to save time by reducing the frequency of taking the garbage out. At the same time, the prototype will encourage the recycling activity by providing separate sections for recyclable waste. Our target is for the housewives that can help them to save their time in throwing the trash in the big bin.

PROJECT OBJECTIVES

The objective in developing this trash compactor is:

- To reduce the usage of plastic garbage bags by compacting the garbage
- To avoid overflow of garbage bin
- To prove the use of non-environmentally friendly materials can be utilized and have the value to reuse with a safer method compared to being dumped.

Problem statement in producing trash compactor is:

- According to statistics, the second largest source of waste is plastic that is 9% or RM163 million.
- Based on facts, plastic bags take 500 years to decompose completely.

In one study, it was concluded that 36 percent of those interviewed admitted to throwing plastic bags after use once.