

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF
WASTE COMPACTOR TRASH CAN**

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ABSTRACT

Dustbin is a common product that people often use in their daily life. It is a place for rubbish, so that people can throw into it. Hence, when the dustbin is full, the user must clean their plastic rubbish and replace with a new plastic. The problem occurred is that people did not use the space in the dustbin to the fullest that make the waste in the trash always spill and overflow. Because of that reason, it is necessary to make a dustbin that can compact all the waste that contained in the rubbish so we can use all the space left in the dustbin completely. The objective of doing this project is to analyses and design a waste compactor dustbin so and fabricate a waste compactor trash can. The expected result is that the product can work functionally to compact all the waste in the dustbin. In a nutshell, this project can help people to ease their routine in their daily life.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

A trash can, also known as a dustbin or a rubbish can, is an essential product. It is a container that temporarily holds your trash. For that reason, every person should have at least one at their places. That way, your safety, as well as health, will be guaranteed. In most cases, germs and bacteria thrive well in areas full of garbage. For that reason, you need great dustbins that will cover them well to avoid such incidences [1]. This piece highlights the importance of a dustbin. In the past, people not used trash can to throw out the rubbish. But they use a method that called as trash dumping which is they have to dig a hole and throw the trash inside it. Since there are not many non-disposable items such as plastic and chemical stuff, it is still relevant to use this method. As time goes on, the method has been developed until the trash can is introduced. In 1875 the first garbage receptacle was introduced. This container was used for the ashes of burnt garbage [2]. On a weekly basis this receptacle was emptied, and the lorry that carries the plastic trash will send the waste at the incinerators to dispose the waste. This makes the dustbin play main important role in helping for a healthy and clean environment.

1.2 Problem Statement

Usually, people have to clean their dustbin whenever their plastic rubbish in the dustbin is full. However, the plastic in the dustbin is not actually full due to the space left inside the trash can. Yet people must clear it up and have to replace it with a new plastic trash. It will make a lot of work to do when you want to clear the waste many time.

Normally, people will clear their plastic trash can and throw it at main trash can. Then, they will pick up the plastic trash and put it at their lorry. These workers will pick up the trash regularly, but at certain day the workers have a day to take day off. At that time, the probability for the main trash can be full are higher and it will make the trash