

**UNIVERSITI TEKNOLOGI MARA**

**DESIGN AND FABRICATION OF  
TARMAC MAKER.**

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## **ABSTRACT**

A tarmac maker is a machine that can produce tarmac that is frequently used on the road. Tarmac is chosen as the material to build road because the strength of the material is strong. As tarmac is the only material that is suitable to use in making a road, it is important for us. Unfortunately, tarmac now has become expensive in order to use it on a big scale. The use of plastic in our daily life has increased and plastic waste generated in each country has also increased. Plastic can be used as a mixture mechanism if it is melted and after a few moments it will be hard as originally. With these two problems, an idea to make an tarmac maker by using small rocks and plastic waste as the mechanism to produce a tarmac. It will solve these two problems and help people in this world.

## **ACKNOWLEDGEMENT**

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Ultimately, I dedicate this dissertation to my parents for their vision and unwavering commitment to my education. I dedicate this small success to you both.  
Alhamdulillah.

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of Study**

Tarmac is material used for surfacing roads or other outdoor areas, consisting of broken stone mixed with tar. Machines played an important role in the process of making a tarmac. Without a machine, it is very difficult to make the tarmac especially on a large scale. Plastic is a synthetic material made from a wide range of organic polymers such as polyethylene, PVC, that can be molded into shape while soft, and then set into rigid or slightly elastic form. Because plastic is made from many chemical properties, it is difficult to decompose.

Nowadays, tarmac is still the number one choice for making roads. By using tarmac to make roads, governments have to spend a lot of money in order to make new roads or repair the damaged roads. Plastic waste has increased year by year in every country because of the usage of plastic every day and it took a long time to decompose. As a solution now, people reduce the usage of plastic. The problem of this solution is there are some people that did not want to reduce their usage of plastic because lack of awareness.

With these two problems, I came up with one idea that can help to solve these problems. I am going to make a machine to make a tarmac by using plastic as the mixture mechanism. With this machine we can reduce plastic waste and people can use plastic as freely as they want without think about the effect of the plastic to the world.

The aim of this study is to make a tarmac maker and use plastic as the mixture mechanism to solve plastic waste problems in this world.