UNIVERSITI TEKNOLOGI MARA

FABRICATION OF CRUSHING MACHINE

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ABSTRACT

This dissertation is to explain on about the crushing machine. The reason crushing machine is being chosen as the prototype to be fabricated because of increasing production as human evolve which led to a lot of waste product such as brick, glass, cement and many other brittle materials produced. This kind of waste cause many kind of problem to arises and are affecting the population, environment and even industry. This is because lot of this waste product consume a huge amount of space, making the process of delivering the waste to recycle to be very costly. The reason for this is because there is a need of delivering the same waste twice and hired more worker to deal with a large chunk of deformed waste material that consume more space. For small contractor, the amount of money and time needed to deal with this problem is a nightmare. Thus a crushing machine which able to handle this kind of problem was fabricated . the crushing machine applied a simple mechanical concept as it foundation to operate, for example the hammer will using the principle of angular motion or piston which from the it most tops center the hammer will go up and crush the material when it reaches the bottom center move by using motor. This led to the waste material to be crush into debris, which led to the amount of space consumption reduce and reduce the cost for recycling. In conclusion crushing machine existence able to solve the problem that industrial worker facing, thus allowing it to be potentially in demand when entering the industry market.

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CHAPTER ONE
INTRODUCTION

1.1 Background of Study

As humans gradually evolve, many kinds of new construction has been created such as the pantheon from Rome that standing till this day. Nowadays we can see many kind of structure that had been built stand tall around us, however as time goes by, human become greedy and they start to only see the end product and neglect everything else including the waste material from those construction process.

Waste material such as brick, glasses, wood, and many leftover materials from construction are very hard to discard and can cause hazard to the safety of the surrounding if not being taken care. For example, the debris of brick can cause pollution toward the surrounding and also lung problem which affect human breathing because the density of the brick dust particle is more heavier than normal air and also contained element that can't be filtered by lungs.

In renovation on the other hand, the usual waste created is usually in form of brick, glasses, and wood. There is also other material such as silicon however it is a minor problem and usually can be handle easily. However, for things that are slightly bigger than your normal trash can size, the contractor needs to call lorry to pick up the leftover and deliver it to the waste managing center or recycle center.

This is usually where the problem arises, if the leftover or waste material is too much for the lorry to take, the driver will need to make a second take which consume more cost, time and energy. Considering the losses, the contractor will prefer to destroy or crush those materials beforehand. However using labor forces is inefficient and ttime-consuming thus that's where the crushing machine will come into help.