DESIGN AND FABRICATION OF AUTOMATIC CAN CRUSHER

MUQRI AZFAR BIN MOHD FAIZAR

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ABSTRACT

A mechanical can crusher has been used for a very long time. Since, that many design and fabrication can crusher have been invented. The design of the can crusher will be operated automatically. This project mainly about generating a new concept of a can crusher that can crush two cans simultaneously. To put one can after one can that had been crushed in the machine it can be dangerous for the hands and the timing has to be perfect. Therefore, the users can face injury and take times of compression. Arrangement of the cans will be horizontally when placed in the slider and take turn to be compressed. The cans will be crushed automatically by a pneumatic piston when users push the button. Once the cans are compressed, they will fall into the box. This machine will reduce time of compression. Besides, it is inexpensive than the market price.

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INTRODUCTION

1.1 Background of Study

A mechanical can crusher has been used for a very time. It is one of the most useful machines available. Because of the invention, it contributes to the world's lees polluted environment. Aluminum cans are knowns to be completely recyclable material and they are the most recycled item in Malaysia. Recycling aluminum can result in more pocket money. Storing full-size aluminum cans for recycling can take up a lot of room when stored. So that they may be stored and transported in smaller locations. Several methods can be used to crush these cans. Some can crushers crush the can by pressing vertically, while others smash it horizontally.

In this project, the design of the can crusher will be operated automatically. This project mainly about generating a new concept of a can crusher that can crush two cans simultaneously. Arrangement of the cans will be horizontally when placed in the slider and take turn to be compressed. The cans will be crushed automatically by a pneumatic piston when users push the button. Once the cans are compressed, they will fall into the box.

1.2 Problem Statement

Users of automatic can crusher can face some problems when using it. When users have to put one can at a time in an automatic can crusher, it can be difficult and dangerous. To put one can after one can that had been crushed in the machine it can be dangerous for the hands and the timing must be perfect. Therefore, the users can face injury and take times of compression. Hence, this design is used to help the users reduce the time, cost consuming and avoid injury.