



DESIGN OF AN ALUMINUM CAN CRUSHER

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“I declared that this thesis is the result of my own work except the ideas and summaries which I clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in the candidature of any degree.”

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ABSTRACT

This thesis is about to design aluminum can crusher for home purpose usage. By referring to the invention of aluminum can crusher, there is a fact that cannot be denied that recyclable products such as aluminum cans have become popular in the beverage industry. But, there is a problem when aluminum cans become too much and when returning to the recycling station, consumers usually send in a bulk and inconvenience condition. Nowadays, the home-based consumer typically enjoys the cans or beverages from a recyclable can but they are not aware about the recycling processes and disposing the empty cans. For some of the consumer, the task of crushing cans for disposal in the recycling bin can be time consuming for them. In order to cope with this problem, the design of this simple and portable can crusher is used to solve this problem. In designing stage, the author used the high technology design software CATIA to design it virtually before fabricate the desired design. Besides that, this device also friendly user because the user did not have to worry about the spaced required and it is easily to carry anywhere. It is only need a space about 300 mm x 200 mm area. The material used to fabricate its prototype is made from aluminum. So the weight of this device is not too heavy to remove and can avoid corrosion. Furthermore, all the parts involved are assembling by using screws to make it easy to resemble and dissemble. Besides that, this device is fully mechanical operated and can be operated in any condition. By the design of this device, it is hoping that the consumer can save their time, money and also can increase their awareness about the environment.

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