# **UNIVERSITI TEKNOLOGI MARA**

## DESIGN AND FABRICATION OF CAN CRUSHER

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#### ABSTRACT

The culmination of the "Can Crusher" project has been achieved with the development of a functional and user-centric solution that enables the manual pulverising of aluminium cans for household and teenagers. By means of meticulous design and construction, the undertaking yields a manually operated can crusher that effectively facilitates the compression and disposal of beverage cans. The idea of this project come through when we realize that usually the woman as the household will throw away the aluminium cans without crush it as it can save many spaces and easy to handle it. After have some studies and research, the compact and easy to handle can crusher must be designed to help the household especially for woman. An existing manual can crusher in the market usually heavy and difficult to handle. The ergonomic crush mechanism of the device guarantees accessibility and usability for users of diverse physical capacities. For the process, the design must be made, drawing on paper, and draw the drawing in SolidWorks, select the materials, estimated cost, fabrication and testing the product. Safety is of the utmost importance, and features are incorporated to ensure operation security and reduce potential hazards during use. This concluded project addresses the environmental repercussions of disposed aluminium cans by endorsing manual recycling initiatives. So as to promote sustainable waste management practices. The conclusion is, can crusher be a practical and economical solution that prioritises environmental responsibility, simplicity, and functionality. Lastly, the expected result for this project is it will help the household to crush the cans.

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Ultimately, I am optimistic that this momentum and conduct will persist, as I am prepared to undertake any risks that may be required to complete the remaining distance. This dissertation is dedicated to my parents, who provided me with the foresight and resolve to pursue an education. This triumphant composition is being presented in your joint honour. Alhamdulillah.

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