

Design and Development of Plastic Carry Bag Crusher

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Abstract: *The use of plastic carry bags is increasing in everyday life in the current scenario, causing a serious environmental problem. To do this, we need to make the environment greener by recycling possible waste from used bags. In order to solve this problem, there are already highly powered machines, but they are too expensive. Therefore, the main purpose of our study is to design and manufacture a low-cost plastic carry bag crusher machine by using a power supply and a single-shaft mechanism, which can be useful for micro, small and medium-sized enterprises. To implement this concept, a plastic carry bag crusher machine was implemented, which consists of some mechanical and electrical components such as frame, body, electric motor, drive system and cutter. This machine is used for cutting the plastic carry bags into small pieces which are in irregular shaped flakes which can be further processed. Recycle recovers the raw material that helps create new plastic products.*

Keywords: Plastic Pollution, Mechanical Recycling, Plastic carry bag, Waste Management

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