

METAL SEPARATOR

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ABSTRACT

The main objectives of this design is to separate the metal pieces from the garbage or trash. When the garbage goes through the rotating drum the metal pieces within the trash will stick on the electromagnet while the rubbish will flow into a box. The whole structure consists if a drum, winding and a support stand. They key is the separation of the ferrous materials from the trash. The principle of electromagnet is being applied into my project. When the power supply is being turned on, ferrous materials will be struck on the iron rod at the center of the drum from the garbage. This is due to the iron rod will become a temporary magnet which will attract the ferrous materials. While the power supply is being turned off, they will released and flow into a prepared box. In a nutshell, there are 2 stages of the removal. The first stag is to remove the garbage while the second stage is t o remove the ferrous materials such as iron or metal pieces.