

Automatic Metal, Glass and Plastic Waste Sorter

Abstract:-

The nation and world is facing a huge problem today of disposal, segregation and recycling of solid waste, and improper management of these wastes are hazardous and dangerous to human health and ecological system. There is a rapid increase in capacity and categories of solid waste as a result of urbanization, constant economic growth, and industrialization. Global Waste Management Market reported that the amount of waste generated worldwide produced is 2.02 billion tones.

“Wastes are not always waste if it is segregated as it was”. To properly manage the waste it has to be handled, segregated, transported and disposed so as to reduce the risks to the public lives and sustainable environmental. The economic value of waste is best comprehended when it is segregated. Currently there is no such system employed of segregation of glass, plastic and metallic wastes at industrial level. Here we propose an Automation of Waste material Segregation in scrap industry.

This method is easy and simple solution of segregation of three types of wastes glass, metal and plastic. It is designed to sort the trash into metallic waste, plastic waste and glass waste ready to be processed separately for the next process of operation. The method uses inductive sensors for metallic items, and capacitive sensors to distinguish between and plastic and glass waste. Experimental results show that the segregation of waste into metallic, plastic and glass

waste has been successfully implemented using the Automation of material segregation (AMS) method

Block Diagram:-

