

## **Shredder machine for plastic recycling: A review paper**

### **ABSTRACT**

Plastic pollution has become a global concern due to poor plastic waste disposal management. As an alternative, independent recycling efforts are necessary. A Plastic shredder machine is a preliminary machine used to cut plastic waste into small pieces before turning it into useful products. The concept design of the shredder machine that is currently available is fairly similar. The shaft and blades are the critical components in the shredder machine that determines its performance. The geometry and orientation of the blades that were fitted into the single or double shafts were found to directly affect the shredding performance. Therefore, this article aims to review the various geometry and orientations of the blades that give direct effect on the shredding performance, as well as identifying the research gaps related to the shredder machine for plastic waste materials.