



Technical Support in Plastic Classification

APPLIED TESTING FOR INNOVATION IN RECYCLING AND RECYCLED PLASTIC MATERIAL (RPM) PROCESSING

KEY WORDS

SHREDDING,
CLASSIFICATION,
RECYCLED PLASTIC
MATERIALS (RPM)

DESCRIPTION

Universidad Central (UC) has experience in mechanical sorting tests of plastic waste, differentiating types such as Polyethylene terephthalate (PET), High-density polyethylene (HDPE), Low-density polyethylene (LDPE), Polypropylene (PP), Polystyrene (PS), and Polyvinyl chloride (PVC). Combined with color detection using optical sensors, this optimizes the preparation of materials for subsequent processes such as melting, reprocessing, or the commercialization of recycled plastic flakes and pellets. On a small scale, mechanical separation using shredders is efficient for identifying the high variability of plastic mixtures. Furthermore, it allows for the utilization of waste from recycled plastic material (RPM) and recyclers who lack specialized equipment, enabling the reincorporation of the material or byproduct as an input.

APPLICATIONS

- Municipal Solid Waste (MSW)
- Rigid and flexible post-consumer packaging
- Industrial scrap
- Plastic films, sheets, pipes, and pipe fittings

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