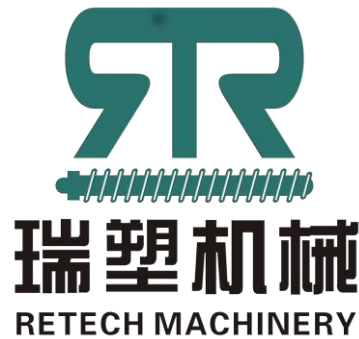


Mixed Plastic Waste Recycling Solution

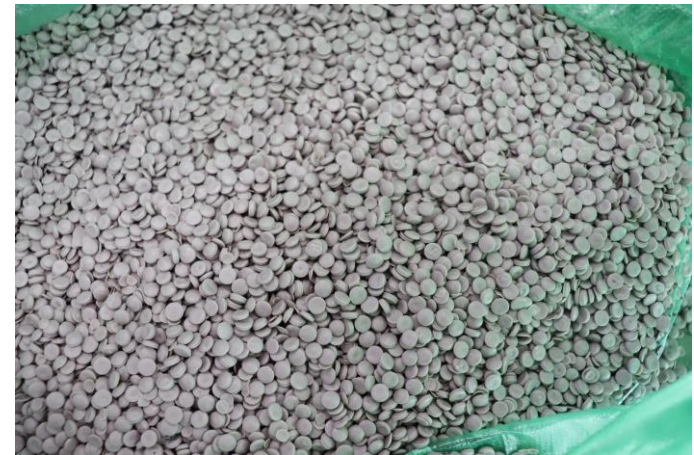


Overview

- This complete recycling system is engineered for unsorted mixed plastic waste from household, industrial and commercial sources. It separates different polymer types, removes contaminants, and delivers clean regrind or pellets. It handles multi-plastic mixtures which are normally hard to recycle, solving the pain point of mixed waste with complicated impurities.

Applicable Materials

- Mixed post-consumer & post-industrial plastics: PP, PE, PET, HDPE, LDPE, ABS, PS rigid scraps. Typical feedstock: mixed plastic packaging, mixed rigid containers, mixed film & rigid scrap, sorted refuse-derived plastic fractions.



Full Process Flow

- Pre-sorting & manual picking: Remove big foreign objects, wood, stones, large metal, PVC and non-plastic waste
- Primary shredding: Single shaft shredder reduces bulky mixed plastics into chunks
- Metal separation: Magnetic separator + metal detector to extract ferrous & non-ferrous metals
- Granulating: Granulator makes uniform small plastic flakes / regrind
- Air classification: Blow away light impurities like paper, dust, labels and foam
- Float-sink density separation tank: Separate plastics according to different specific gravity
- Friction & hot washing: Clean oil, glue, ink, sticker residue and surface dirt
- Dewatering: High-speed centrifugal dewaterer to cut moisture
- Advanced sorting (optional): Color sorter, electrostatic separator for high-grade polymer separation
- Pelletizing (optional): Extruder pelletizing line to produce finished plastic pellets

Core Advantages

- Multi-stage separation technology to sort mixed polymers, greatly upgrade raw material value
- Powerful washing system for heavy dirt, adhesive and ink contamination
- Modular design, flexible configuration: washing only, or washing + pelletizing full line
- Multi-protection metal removal system to safeguard downstream crushing and extruder equipment
- Closed-loop water circulation system, lower water consumption and meet emission requirements
- Customizable separation targets: PE/PP separation, PET/HDPE separation, ABS/PS separation

Key Units:

Shredder



Crusher



Key Units:

Friction washer



Hot Washing



Key Units:

Dewatering Dryer

Pelletizing Machine

