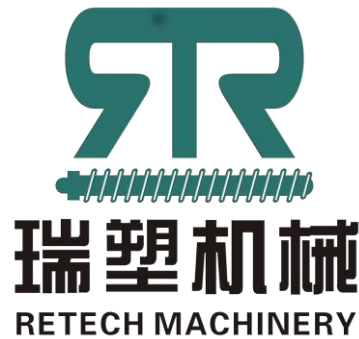


Agricultural Film Recycling Solution



Overview

- Agricultural Film Recycling Solution is a complete turnkey recycling system specially developed for heavily soiled farm waste films. The whole line includes pre-shredding, feeding, crushing, multi-stage friction washing, floating impurity separation, hot washing (optional), rinsing, squeezing and drying. It processes muddy, soil-laden agricultural films into clean semi-dry or dry plastic flakes, which can be fed directly into pelletizing lines for granulation.

Applicable Materials

- Mulching film, greenhouse film, agricultural cover film
- Waste LDPE / LLDPE farm films with heavy soil, sand, plant residues



Full Process Flow

- **Pre-shredding & Feeding** Single shaft shredder cuts bundled or rolled agricultural film into smaller pieces. Belt conveyor feeds material evenly to avoid film tangling.
- **Crushing** Special film crusher chops pre-shredded film into uniform flakes for better dirt removal.
- **High-speed Friction Washing** Multi-stage friction washers strongly scrub the film surface to remove most soil, mud, plant residues and dust.
- **Floating Washing & Heavy Impurity Separation** Plastic flakes float on water; sand, mud and heavy sediments sink to the tank bottom and are discharged continuously.
- **Hot Caustic Washing (Optional)** Hot alkaline tank (70–90°C) removes stubborn oil, aged adhesive and organic residues for higher flake purity, suitable for seriously contaminated films.
- **Multi-stage Rinsing** Fresh water rinsing removes residual alkali and fine dirt particles.
- **Squeezing & Dewatering** Squeezer squeezes wet flakes to reduce moisture from 35~45% down to 2~3%. Centrifugal dewaterer and hot air dryer are optional for lower moisture requirement.
- **Flake Collection** Clean agricultural film flakes are collected and ready for pelletizing.

Core Advantages

- **Designed for heavy mud agricultural film:** Multi-stage mud removal system handles high soil content efficiently.
- **Anti-winding rotor & tank structure:** Prevent film tangling and blockage during continuous operation.
- **Squeezer as standard configuration:** Reduce moisture sharply and save drying energy cost.
- **Circulating water system with sediment filtration:** Separate mud from washing water, realize water recycling.
- **Modular setup:** Add hot washing unit, metal detector according to raw material condition.
- **PLC automatic control:** Stable operation, low labor input, easy maintenance.
- **Customizable capacity:** 300kg/h ~ 2000kg/h available.

Key Units:

Film Shredder



Film Crusher



Key Units:

Friction washer



Washing tank



Key Units:

Squeezer Dryer Storage hopper

