



PLASTIC RECYCLING PULVERIZER MACHINE TT-PM300

The Plastic Recycling Pulverizer Machine TT-PM300 operates by feeding particles sized between 6 and 8 millimeters through a vibrating screen into a rotating high-speed sawtooth disc.

This process yields a powdered product within the targeted range of 300-1000 microns, adjustable by modifying the disc spacing. Pulverizers are commonly utilized for shredding LDPE, HDPE, UPVC, PC, and various other types of plastics.

APPLICATIONS

- **PVC Profile & Pipe Recycling** – Pulverizes H-PVC profiles and pipes into fine powders.
- **Plastic Recycling Plants** – Processes semi-rigid, brittle, and impact-resistant plastic scraps.
- **Powder Production** – Produces 300–1000 micron powders from 6–8 mm particles.
- **Material Reuse** – Recycles LDPE, HDPE, UPVC, PC, and similar plastics.
- **Compounding & Masterbatch** – Supplies fine powders for blending in compounding applications.
- **Film, Sheet & Pipe Manufacturing** – Provides consistent powder feedstock for extrusion processes.
- **Injection & Rotomolding** – Delivers uniform powder for molding applications requiring fine particle control.

FEATURES

TT-PM300 Series Industrial Pulverizer Machine for Plastic Recycling

Applications

The TT-PM300 Series Industrial Pulverizer Machine is designed to reduce semi-rigid, brittle, and impact-resistant plastics into fine powders. Particles sized 6–8 mm are processed through a vibrating screen into a high-speed sawtooth disc, producing

powders in the 300–1000 micron range. Final size is controlled by adjusting the disc spacing.

Common applications include shredding and pulverizing:

- LDPE
- HDPE
- UPVC
- PC
- Various other plastics

Design

The TT-PM300 series are ultra-high-output pulverizers with optional automatic temperature control. Material is centrally fed between fixed and high-speed rotating discs, creating a centrifugal effect that moves material through the grinding zone before pneumatic discharge.

Advantages

- Extended disc lifespan between regrinds
- Quick and easy disc replacement and adjustment
- Reduced residence time lowers thermal stress
- High throughput capacity
- Efficient and cost-effective operation

Technical Features

- Dosing channel with vibratory feeder
- Channel width: 100–250 mm
- Storage container capacity: 50–100 liters

- Feeding regulated by high-current controller monitoring the pulverizer motor
- Integrated mounting bracket and control device

Pulverizer Housing

- Disc pulverizer with fixed and high-speed toothed discs mounted on precision bearings
- Material enters via the central opening of the fixed disc
- Particle size determined by disc teeth and adjustable clearance
- Clearance checked through inspection hole; external adjustments possible with feeler gauge
- Screenless operation for continuous performance
- Fracture-resistant welded steel housing with hinged door for cleaning and disc replacement
- Compact grinding chamber with nearly vertical grinding disc ensures immediate clamping and reduction

Pulverizer Discs

- Specially designed for high-speed peripheral operation
- Efficient impact reduction with low energy demand
- Disc diameter: 300 mm

Temperature Control

The automated cooling system includes a water-spray nozzle, regulating devices, solenoid valves, thermostats, an automatic control unit, and a feeding switch to maintain consistent operating temperature.

Drive and Mounting Frame

Pulverizer and suction box are mounted on a flat steel frame with pre-installed anti-vibration pads. The drive motor uses a V-belt drive with protective belt guard.

Safety Devices

Integrated safety interlock prevents access until the rotor is fully stopped, ensuring operator protection.

TECHNICAL SPECIFICATIONS

Raw material	H-PVC-Profile ,H-PVC-Pine ,LDPE(MFI70) and etc.
Final product & capacity	120~200kg/h, depends on condition of client's material.
400~1000kg/h, depends on condition of client's material.	3×380V, 50Hz; control current 220V, 50Hz (110V is also available. Please specify when ordering)
Model	TT-PM300
Profile- H-PVC	200 kg/h
Pipe- H-PVC	250 kg/h
PE	120 kg/h
Rotor speed	9000 rmp
Disc diameter	300 mm
Tooth grooves	2.62
Drive motor	22 kw
Blower capacity Q	3500 cbm/h
Blower motor N	7.5 kw



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 🇨🇦

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 🇺🇸

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 🇦🇪

Phone: +971 488 19252
Email: me@torontech.com

