







# THE SOLUTION OF FULLY AUTOMATIC PLASTIC THERMOFORMING

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|                     |   |
|---------------------|---|
| Company Name        |  WENZHOU RAYSHAPE MACHINERY CO., LTD                 |
| Export Agency       |  WENZHOU RAYSHAPE IMPORT AND EXPORT TRADING CO., LTD |
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| Date                |    |

Shaping the Future with Cutting-edge Innovation





## **Company Brief Introduction**


Wenzhou Rayshape Machinery Co., Ltd. is a subsidiary of Elemotion Group, located in the beautiful coastal city of Pingyang County, Wenzhou, Zhejiang Province, at No. 19, East Section of Pinghai Avenue, Binhai New Area. It is a manufacturing enterprise that integrates mechanical and software R&D, production, marketing, and after-sales service.

In 2021, Elemotion invested in Wuhu Youhe Automation Technology Co., Ltd., which was officially renamed Wenzhou Rayshape Machinery Co., Ltd. in 2025 and is now wholly owned by Wenzhou Elemotion Holdings.

Wenzhou Rayshape Machinery Co., Ltd. boasts a seasoned R&D team, strong operational and after-sales service capabilities, as well as a solid financial foundation. The company is dedicated to the development and production of high-end, energy-efficient, and highly automated equipment, including positive and negative pressure plastic thermoforming machines, plastic sheet extrusion lines, and plastic roll forming machines.

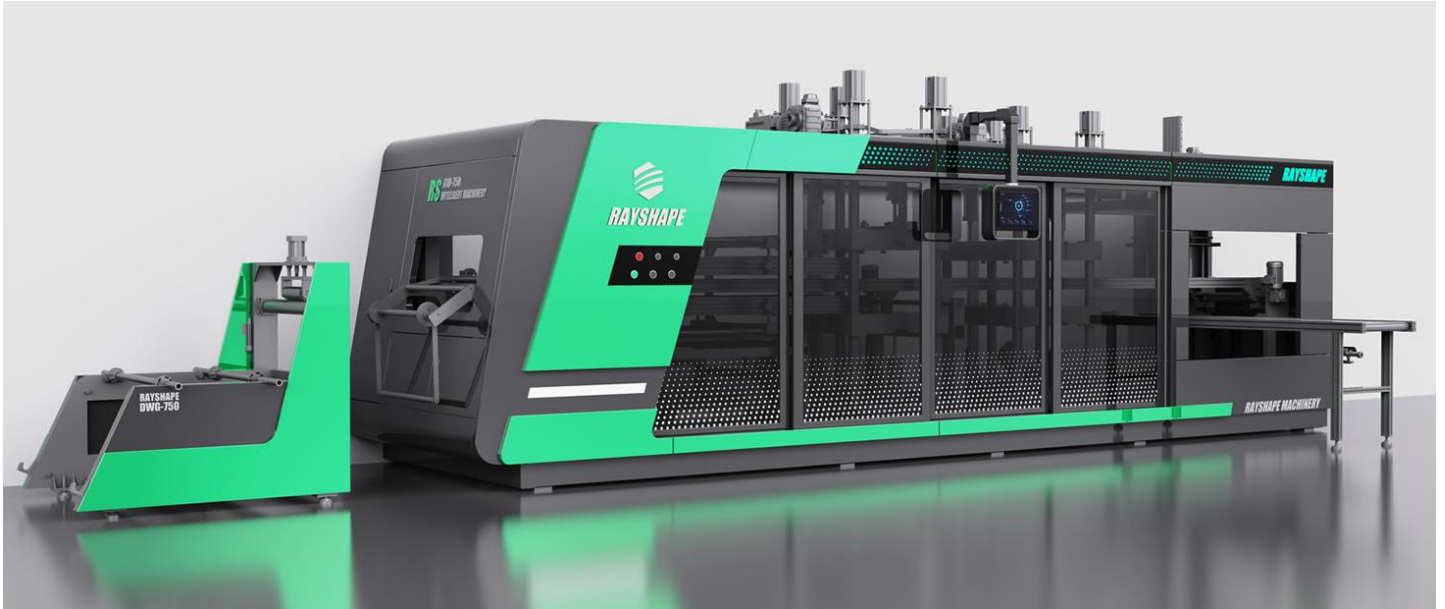
These machines are compatible with a wide range of materials such as A-PET, R-PET, C-PET, BOPS, HIPS, PP, PLA, and PVC, enabling the production of various plastic finished products. Wenzhou Rayshape Machinery Co., Ltd. carries forward Elemotion's spirit of diligence and continuous improvement, constantly striving for self-surpassing excellence. Embracing innovation, the company has successively developed high-quality automated equipment and is committed to learning from Elemotion's path toward becoming a leading enterprise in the industry.

## Quotation

| No.  | photo   | DESCRIPTION OF GOODS                                | Qty. | Unit Price (USD) | Amount (USD) |
|--|---|---|------|------------------|--------------|
| 1  |  | Three-Station thermoforming machine model 750-800-3 | 1    |                  |              |
| <b>Total</b>   |   |   |      |                  |              |
| <b>ATTN Pls:</b><br>1. FOB NINGBO/SHANGHAI PORT, CHINA;<br>2. Voltage: 380V/50HZ/3P;<br>3. The quotation is valid within one month.  |   |   |      |                  |              |
| <b>Payment term:</b><br>4. By T/T. 30% as deposit<br>5. 70% balance should be paid before shipment   |   |   |      |                  |              |
| <b>Delivery time:</b><br>6. Within 45 working days since the deposit received and the drawing confirmed.   |   |   |      |                  |              |
| <b>Packing:</b><br>7. Standard packaging   |   |   |      |                  |              |
| <b>Warranty period:</b><br>8. 12 months since date of the buyer receive the machine. Within this guarantee, if parts damaged or destroyed not caused by human factors, seller will provide it free of charge, freight will be on buyer's account.  |   |   |      |                  |              |
| <b>Installation, Adjusting &amp; Commissioning:</b><br>9. The supplier must arrange for installation technicians to install and commission the machine in the buyer's country. But the buyer should pay for the charges covering round-trip tickets of engineer, VISA, accommodations, meal, translator and any other charges happened in Buyer's country. Technicians are free of charge within 7 days, and the buyer should pay 150USD per day more than 7 days. |   |   |      |                  |              |

# All Servo Motor Multi-Stations Thermoforming Machine

**Model: RS-750-800-3 With Double Moving System**



## INTRODUCTION

RS-750-800-3 positive and negative pressure multi-station plastic thermoforming machine, uses internationally advanced plastic sheet forming technology. It is a plastic sheet forming equipment with mechanical, pneumatic and electrical integrated design. It can automatically complete all actions such as loading, feeding, heating, forming, punching, cutting, stacking, finished product transportation, and edge material winding.

It is suitable for processing different materials, such as A-PET, R-PET, C-PET, BOPS, HIPS, PP, PLA, PVC and barrier materials, processing high transparency, high stretch, shallow stretch, round, square, upper and lower two-way stretch, flanged and other products, including trays, lids, fruit and vegetable boxes, flower pots, shells, seedling trays and plates, etc.

It can make some products which unable to be made in one station thermoforming machine, like for example: PLA products, plastic lids or containers which has holes, the packing containers (fruit box, egg trays) with body and cover connected etc.

## FEATURES AND ADVANTAGES

1. High degree of standardization, complete functions, safe, efficient, energy-saving and hygienic.
2. It integrates mechanical, pneumatic and electrical integration, and is controlled by microcomputer and programmable controller (PLC).
3. Easy-to-operate human-machine interface, and has the function of remote connection.
4. Electric lifting, double-station large-diameter unwinding, allowing a single person to load coils weighing up to 600KG.
5. Servo feeding, stepless adjustment of sheet length, high speed, accuracy and stability.
6. The upper and lower electric heating furnaces are used for four-stage heating and protection to reduce

the impact of air convection on temperature, so that the product molding is stable, from 0-400 degrees in just 3 minutes, improving production efficiency. The electric heating furnace can automatically remove the device.

7. A new real-time distributed digital dynamic hot forming temperature control system is used to control the temperature of the tile at a single point, and it has automatic compensation control, with an accuracy of  $\pm 1^{\circ}\text{C}$ . Energy saving of about 15% and extended furnace plate service life.

8. The quick mold change system can conveniently, quickly, accurately and safely change molds, reduce machine downtime, reduce labor waste, and improve production efficiency.

9. The mold opening and closing of the forming, punching and cutting stations are controlled by servo motors, with high precision, low wear, fast speed and low noise. Each station is supported by four columns, combined with a five-point structural connecting rod, which has good stability.

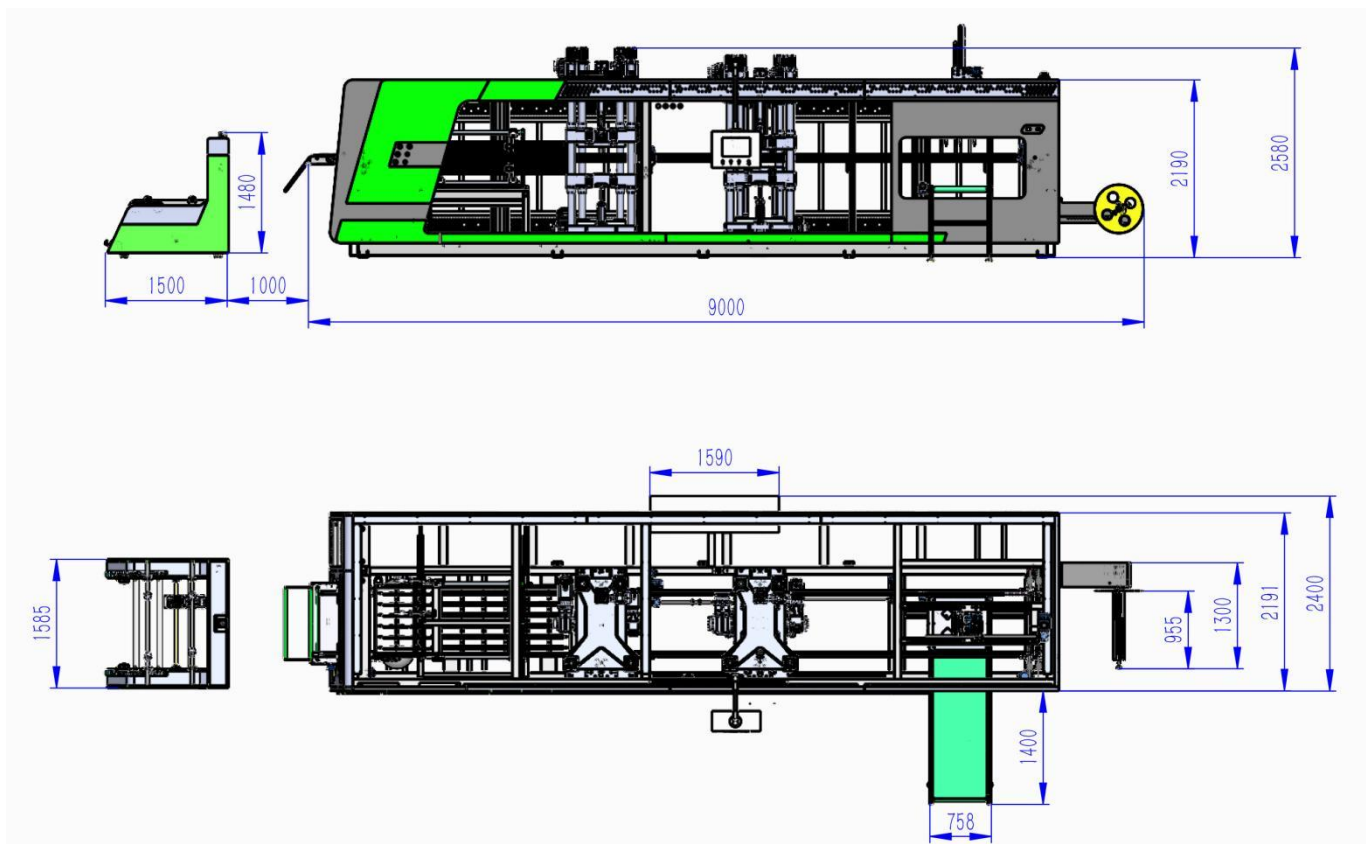
10. The unique vertical stacking concept ensures continuous stacking of products.

11. Automatic counting of finished product output, with production data memory function, can store 90 sets of operating data.

12. Combined with the edge material winding device, the entire production process is clean, without burrs and waste.

13. The design of the electrical cabinet is simple and refreshing, simplifying the machine assembly and wiring installation process.

## MACHINE STRUCTURE



## SPECIFICATION

|                         |                           |  |                                    |
|-------------------------|---------------------------|--|------------------------------------|
| Sheet Materials         | PP/PS/PET/PLA/PE/CP<br>ET | Air Consumption                            | 4m <sup>3</sup> /min<br>0.5-0.8bar |
| Sheet Thickness         | 0.2-1.5mm                 | Weight                                     | 14500kg                            |
| Forming Area            | 750*800mm                 | Total Installed Power                      | 185Kw                              |
| Width Of Sheet          | 400-800mm                 | Heating Power                              | 140kw                              |
| Upper Forming Depth     | 100mm                     | Feeding Motor                              | 4.4kw                              |
| Bottom Forming Depth    | 130mm                     | Control Forming Plug Motor<br>Power        | 4.4kw                              |
| Max Speed               | 48moulds/min              | Stacking Motor                             | 2.9kw                              |
| The Longest Knife       | 12m                       | Winding Waste Of Edge Sheet<br>Motor Power | 0.4kw                              |
| Dimension               | 11500*2350*2700mm         | Forming Motor                              | 7.5kw*2                            |
| Forming clamping force  | 750kn                     | Cutting Motor                              | 7.5kw*1, 11kw*1                    |
| Punching clamping force | 900kn                     |  |                                    |

## CONFIGURATION LIST

|                        |                |                                |                 |
|------------------------|----------------|--------------------------------|-----------------|
| Motor Reducer          | Guangdong      | Temperature Module             | Taiwan Delta    |
| Molding Solenoid valve | Japan SMC      | Heating Brick                  | Jiangsu Tianbao |
| Solenoid Valve         | Japan SMC      | Contactora                     | America Eaton   |
| Cylinder               | Taiwan AirTac  | Low Voltage Apparatus          | America Eaton   |
| Servo Motor            | China Inovance | Other Electrical<br>Appliances | Germany Phoenix |



  
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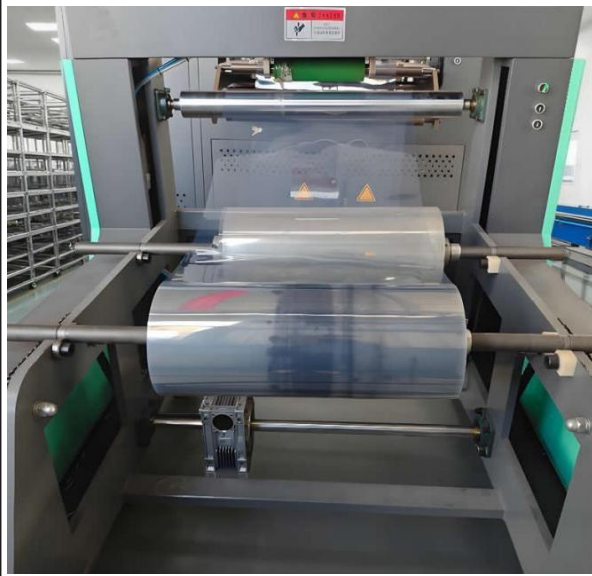




  
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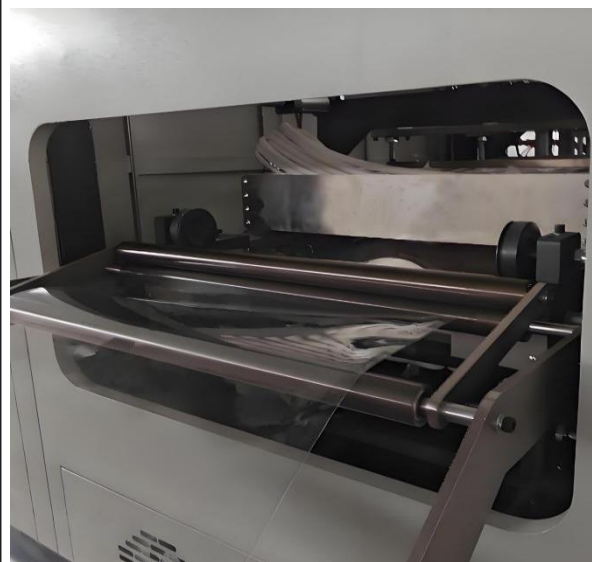
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## ESSENTIAL COMPONENT



### Loading sheet part:

Load automatically, lower human resource cost.  
Proximity switch clever control, getting the rid of falling down of the sheet by conveying too fast.  
Double stations, big diameter, reduce the frequency of changing sheet coil, improve the the production efficiency.  
Max undertake roll of sheet  
Weight:600kg, Diameter 800mm.



### Feeding sheet part:

Automatic feeding reduces human resource costs.  
Actively transport the sheet and reduce the load on the conveying servo motor.  
Cleverly control the proximity switch to prevent the sheet from falling too quickly during transportation.



### Human-machine interface:

Controlled by microcomputer and programmable controller (PLC), all action programs can be operated through the human-machine interface, simple and convenient, 15-inch touch screen.

**Heater:**

1. Vacuum insulation cotton is installed in the heater, which has a fast reaction speed, short processing time and energy saving.
2. The furnace body is divided into two layers, the layout of the heating tiles is optimized, so that the plate is heated evenly.

**Molding station:**

1. Mold changing auxiliary mechanism, using sliding guide rails and support rods to achieve fast mold change, saving time and effort.
2. Adopting high-power servo motor drive, high precision, high efficiency and low noise.

**Molding mold:**

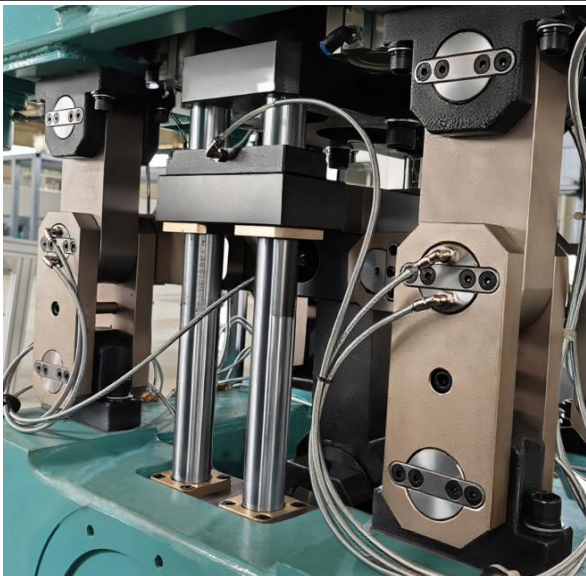
The working principle is a combination of positive and negative pressure, and some nylon plugs are used to assist stretching in the mold to make it have stronger molding ability. There is cooling water in the mold cavity to speed up the cooling speed and make demolding easier.



**Guide head structure:**

The workstation is supported by four columns (45# steel, hard chrome plated).

The integrated mold table (QT-600 steel) is made by a high-precision CNC milling machine. Therefore, it is wear-resistant, stable, and accurate, which prolongs the service life of the equipment.



**A five-point-connecting-rod structure:**

This structure design provides more stable operation and faster speed.



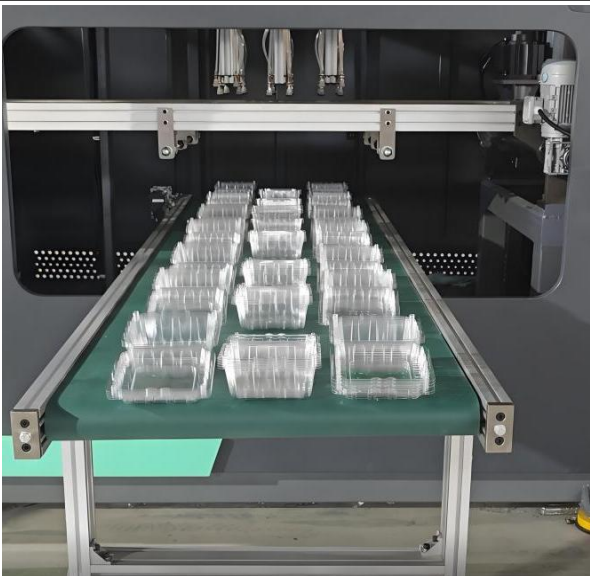
**Mold change structure:**

The punching hole station has the same mold changing structure as the cutting station. Greatly reduce mold change time and labor costs, improve production efficiency and safety factor, and provide convenience for your diversified product chain.



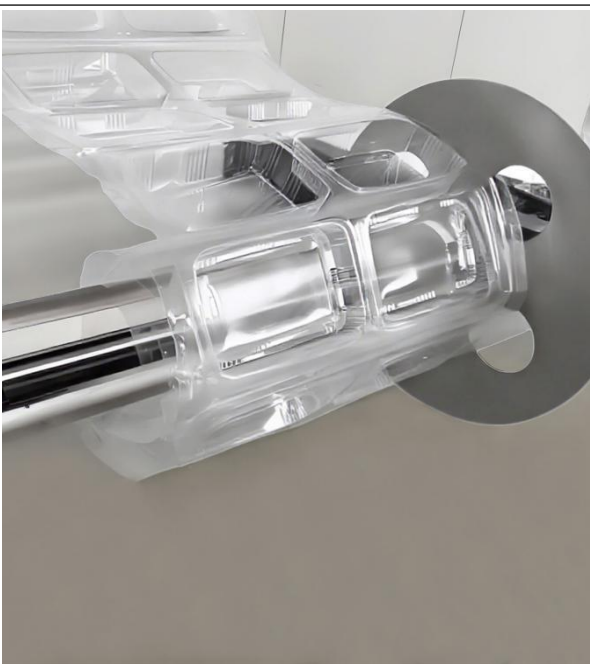
**Servo motor:**

The station mold closing, forming auxiliary stretching, and pull-tab parts are all driven by servo motors, which have fast speed, low noise, high precision, and high efficiency.



**Servo-controlled conveyor belt:**

Set conveyor belt parameters directly on the operation screen. Freely adjust and control conveying length and speed.



**Rewinding waste of edge sheet:**




Our multi-station thermoformers feature a winding unit with torque motor to efficiently collect the offcuts and wind them into a roll with one side retractable, which can be conveniently removed at the end of production.

This advanced waste management system improves operating efficiency and cleanliness, making multi-station thermoformers ideal for high-quality and sustainable production.

**PRODUCTS RANGE**



## AUXILIARY EQUIPMENT:

| PHOTO   | SPECIFICAITON                                      |
|---|--|
|    | Name: Air Compressor                               |
|   | Motor Power: 22kw                                  |
|   | Capacity: 3.8m <sup>3</sup> / 0.8/mpa              |
|   | Dimension: 1200mm*880mm*1550mm                     |
|   | Weight: 600kg                                      |
|   | Air tank: 1000L                                    |
| <p>With a unique coating design, it features high strength, sturdiness and durability, a long service life, low energy consumption, and low noise. High-efficiency oil/gas separation design with high efficiency. There is also a good shock absorption design, enabling smooth and silent operation. It adopts cyclone air intake, with a filtration precision of 99.9%, and still ensures reliability even in harsh environments</p> |  |
|   | Name: Chiller 10P                                  |
|   | Cooling capacity: 29.8kw/50hz    25628 Kcal/h/50Hz |
|   | Compressor power: 7.5kw                            |
|   | Cooling water flow: 10m <sup>3</sup> /h            |
|   | Pipe Diameter: DN50                                |
|   | Water pump power: 1.5kw                            |
|   | Weight: 400kg                                      |
|   | Dimension: 1400mm*800mm*1630mm                     |
| <p>Chiller is a kind of cooling water equipment that can provide constant temperature, constant flow and constant pressure. It is mainly used for cooling and process cooling of precision instruments and industrial equipment. Chiller is mainly used for cooling and process cooling of precision instruments and industrial equipment.</p>  |  |
|    | Name: Online crusher                               |
|   | Blade material: DC53                               |
|   | Feed port size: 800mm                              |
|   | Crushing motor: 11KW                               |
|   | Fan motor: 4KW                                     |
|   | Traction motor: 0.75KW                             |
|   | Traction system: 1000W servo motor                 |
|   | Dimension: 1200mm*1700mm*1800mm                    |
| <p>It is used for grinding the skeleton of sheet to flakes, then transporting by the blower through pipe to extrusion hopper, ensure continuously production or can be customized according customer different requirements.</p>  |  |