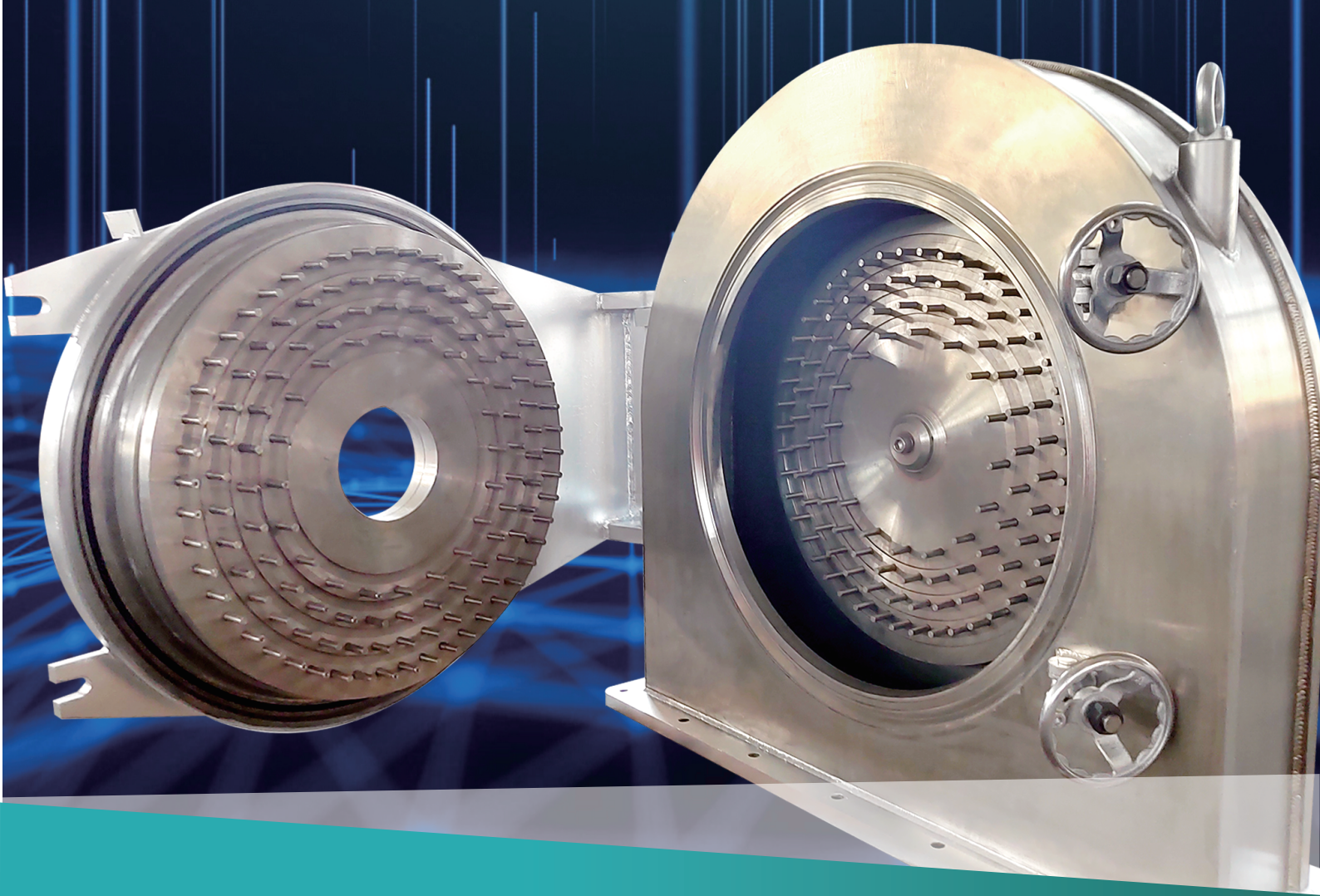




INTRODUCTION

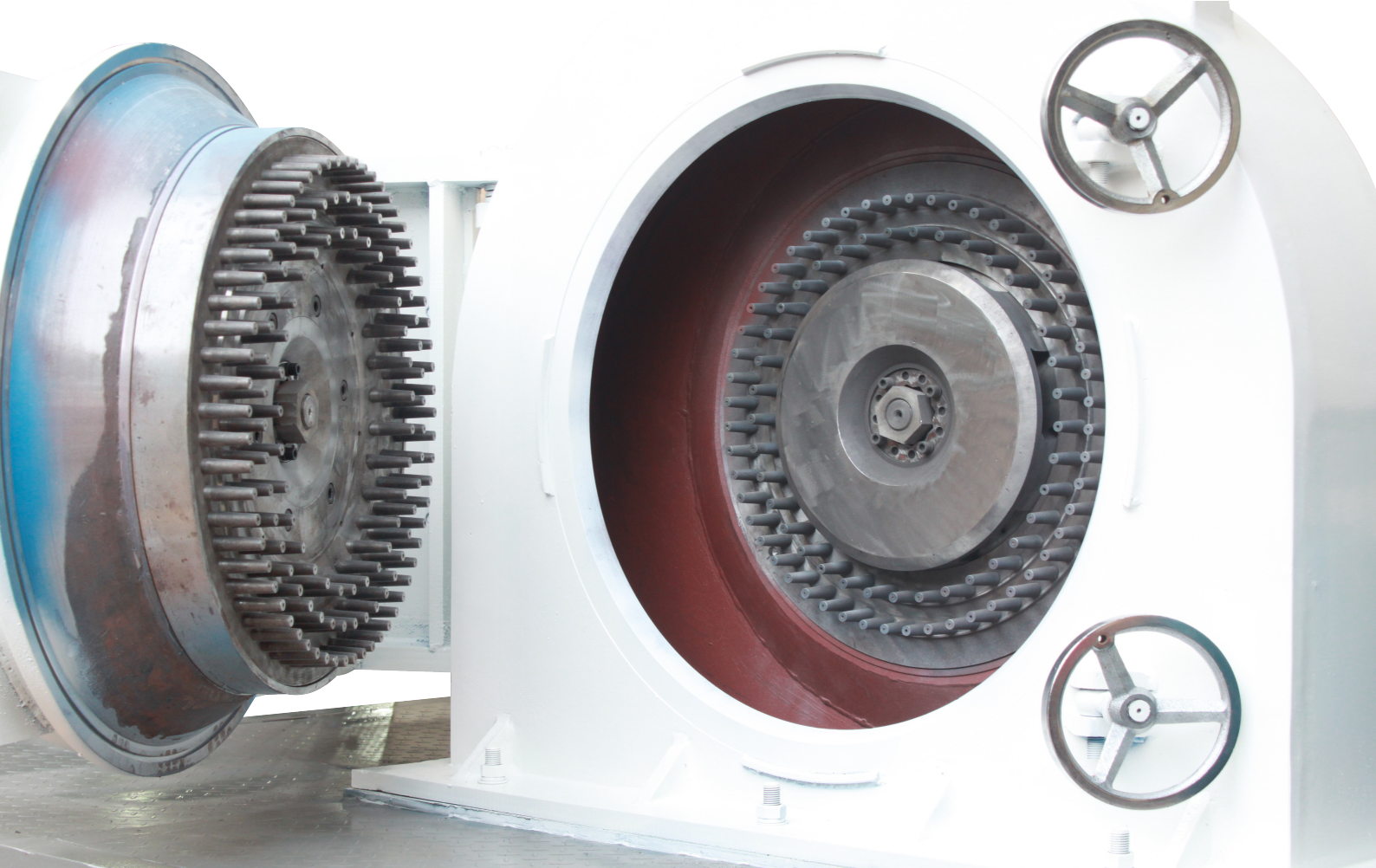
PIN MILL **PM-C/ MJL-P**

Enhanced for optimum grinding results



EPIC POWDER

Qingdao EPIC Powder Machinery Co.,Ltd.



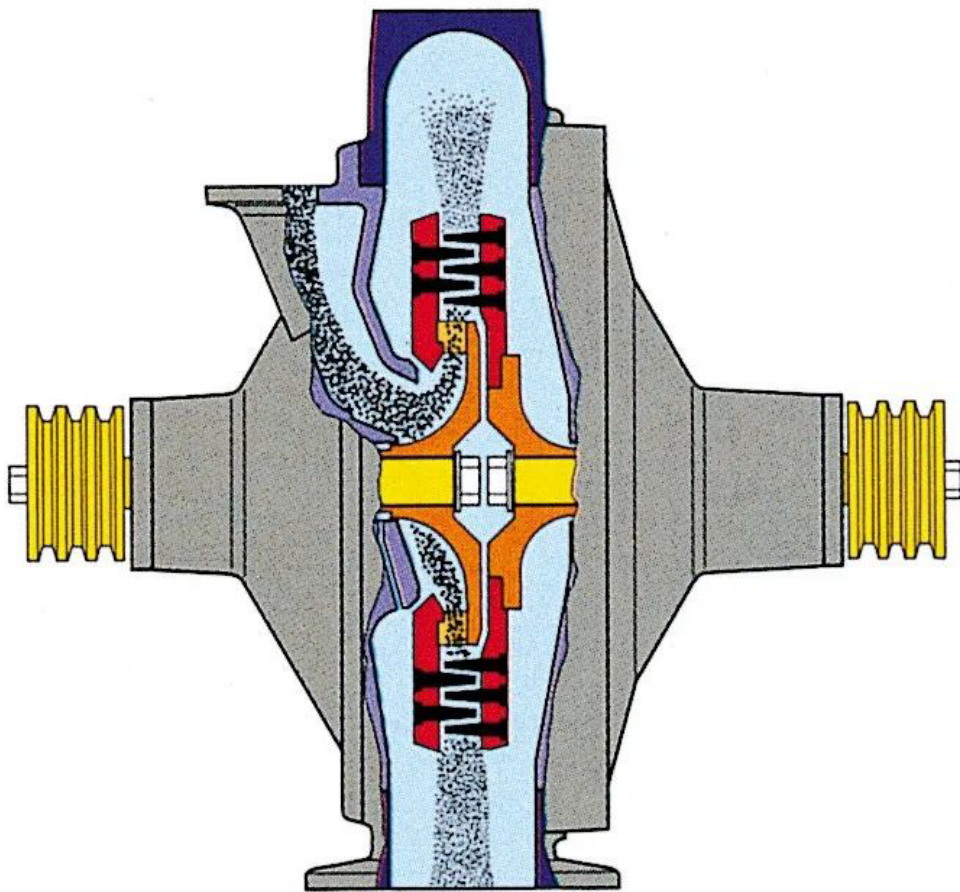
Product Introduction

Pin mill is a high-speed impact mill, also known as pin disc mill, which can be used for coarse and fine crushing, grinding, dispersion, deagglomeration, mixing and homogenization. The Mohs hardness of the material generally below 3. It is not only suitable for brittle materials, but also for materials with high humidity, high oil content, easy moisture absorption, sticky and heat-sensitive materials. Our pin mills are designed under the guidance of our German experts. There are two pin discs in the grinding chamber of the pin mill, and the two pin discs are inserted together. We have made 2 designs: Single-motor (moving disc + static disc) and Dual-motor (moving disc + moving disc). In the single-motor, the disc on the housing side is a moving disc, the disc on the door side is a static disc, and the feeding port is on the door side. In the dual-motor type, the dial on the housing side is a moving disc, and the dial on the door

Working Principle

The material is evenly fed into the feeding port of the pin mill by the feeder, which is located in the center of the pin disc; the high-speed rotation of the pin disc generates strong centrifugal force, and under the action of centrifugal force, the material flows from the center of the pin disc to the surroundings. , rapidly passing through layers of pins; the high-speed rotating pins strongly impact, shear, and rub the material; the material passing through layers of pins hits the inner wall of the grinding cavity, and then falls into the outlet. The airflow is sucked into a cyclone collector or pulse collector, or into an airflow classifier system for classification.



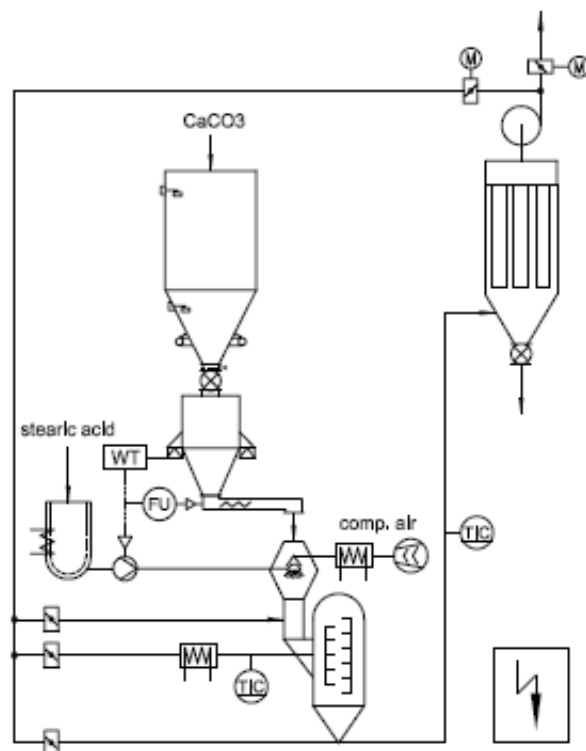


Product Feature

- ▶ Fast processing speed;
There is no screen in the grinding chamber, so the materials stay inside the grinding chamber for a very short time and will not be repeatedly impacted or crushed. The heat generated by the friction between the material and the pins is quickly taken out of the grinding chamber, and the temperature rise in the grinding chamber is small. This feature makes the pin mill very suitable for materials with high humidity, high oil content, viscosity, and heat sensitivity.
- ▶ Wide cavity design;
Both single-power and dual-power types can be made into wide-cavity designs. The wide cavity design expands the space between the outer circle of the pin disc and the inner wall of the grinding cavity to avoid or reduce material sticking to the wall and clogging.
- ▶ Fast impact speed;
The relative linear speed of the dual-power type can reach up to 240 m/s, which is unmatched by other types of impact mills. This feature makes the pin mill very suitable for the grinding of brittle materials and crystalline materials. It is also very suitable for the uniform mixing of ultra-fine dry powder and dry powder, and the uniform mixing of ultra-fine dry powder and liquid additives, such as d97 8 micron ground calcium carbonate powder, add 1% stearic acid or paraffin wax to coat and modify the calcium carbonate particle surface, reducing the particle agglomerations.
- ▶ Many pin disc designs;
The speed of the pin mill is adjustable, and the number of pins, pins shape, and pin gap can also be designed according to project. This feature makes the pin mill very suitable for micro-grinding or micro-shaping of ultra-fine powder surface, reducing the particle agglomerations.

Special design

- ▶ Low temperature design, suitable for applications that require cooling or grinding after cryogenic embrittlement.
- ▶ Pharmaceutical grade design, suitable for processing pharmaceutical powders with high cleanliness requirements.
- ▶ Explosion-proof and pressure-resistant design can withstand pressure shock PSR11.
- ▶ Nitrogen cycle protection, anti-oxidation, anti-explosion, and avoid moisture intake in the air.
- ▶ Special materials can be provided, such as stainless steel 316L, tungsten alloy steel, alumina ceramics, and zirconia ceramics.



Specifications & Parameters

TYPES	MODEL	250	400	500	630	800
Coarse powder type	FINENESS (MESH)	20 - 200	20 - 200	20 - 200	20 - 200	20 - 200
	SPEED (M/S)	75 - 85	75 - 85	75 - 85	75 - 85	75 - 85
	POWER (KW)	7.5	18.5	22	37	55
Fine powder type	FINENESS (MESH)	60 - 300	60 - 300	60 - 300	60 - 300	60 - 300
	SPEED (M/S)	100 - 120	100 - 120	100 - 120	100 - 120	100 - 120
	POWER (KW)	15	30	37	55	110
Ultra fine type	FINENESS (MESH)	100-2500	100-2500	-	100-2500	100-2500
	SPEED (M/S)	200-240	200-240	-	200-240	200-240
	POWER (KW)	15 X 2	30 X 2	-	55 X 2	110 X 2

Note: The production capacity is closely related to the particle size, specific gravity, hardness, moisture and other indicators of the raw materials. The above is only for selection reference.

Applicable Materials

• Cellulose	• TV material recycling	• Fumaric Acid
• Pigment	• Wax	• Gelatin
• Dye	• Stearic acid	• Pea
• Explosive	• Nutraceuticals	• Seaweed
• Methyl Cellulose	• Protein	• Sesame
• Natural rubber	• Vitamin	• Potato Starch
• PEEK	• Animal feed	• Soy protein
• Phosphate	• Barley	• Soya bean
• Polyethylene	• Chocolate	• Tea
• Polypropylene	• Coffee Bean	• Curd Powder
• Polyurethane	• Collagen Protein	• Zinc Oxide
• Polyvinyl	• Corn Starch	• Lactose
• PVC	• Fish Meal	• Celluloid
• Synthetic resin	• Food seasoning powder	• Plastics
• Synthetic rubber	• Calcium Ammoniate/Limestone	
• Thermal cracking tire	• Kaolin	

EPIC POWDER

Finer Material For Better World

Take professional technology as the
foundation of the enterprise,
Combining technology with experience,
Customized solutions for product users,
Hand in hand with users,
Create a better future!

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