DP Pulveriser
since 1962

PerMix
Perfect Mixing Technologies

DP® Universal Mill

Size Reduction Mill

Description

Our Universal Mill is a high-performance grinding machine designed to reduce the size of a wide range of materials, including powders, granules, and viscous substances. It is a versatile machine that can be used in a variety of industries, including food, chemical, and pharmaceutical processing.

With a high-speed rotor, our Universal Mill is capable of rapidly reducing the size of materials, resulting in a uniform particle size distribution. This makes it ideal for applications where consistent product quality is essential. The Universal Mill is also designed to handle a variety of materials, from soft and sticky to hard and abrasive, which makes it a valuable tool in many processing applications.

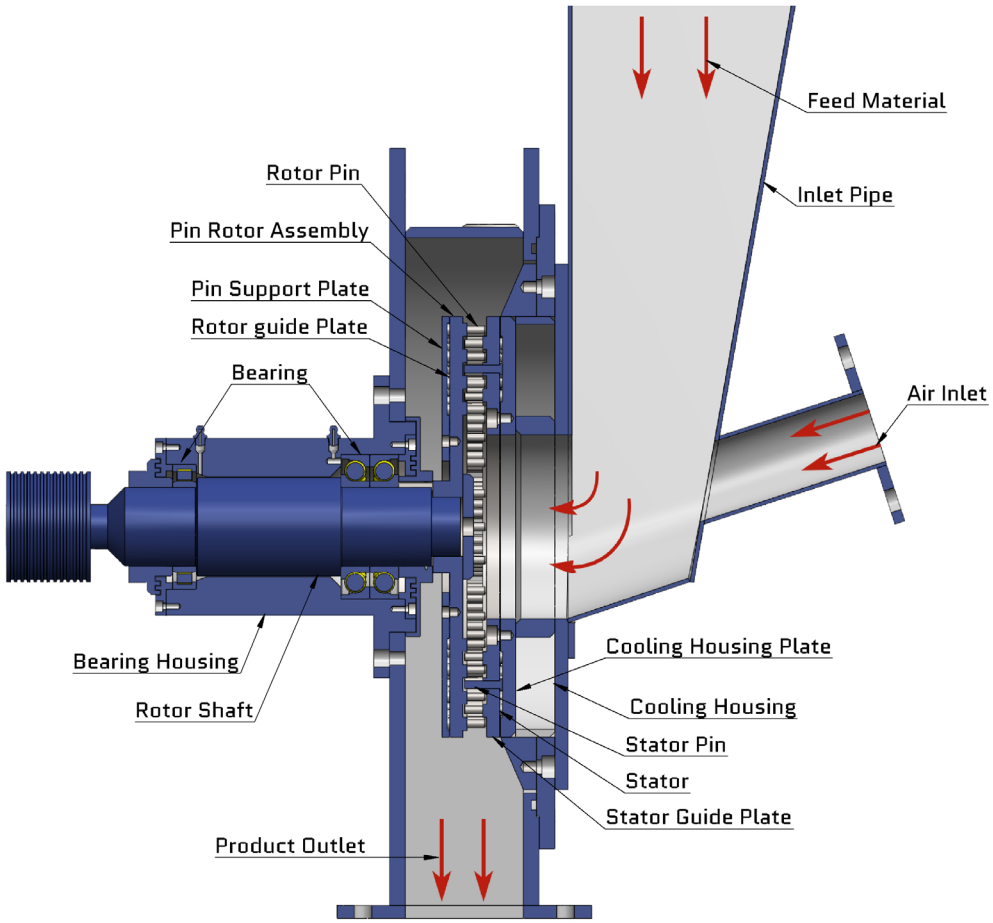
Universal Mills are capable of achieving a high degree of fineness while also ensuring controlled size reduction of materials. Universal mills can effectively reduce the size of a wide range of materials, including both soft and hard materials, having the capability to grind materials with a hardness of up to 3 Mohs.

Principle of Operation

The material to be ground is fed into the vibratory feeder through a Feed hopper. The vibration of the feeder causes the material to move along the tray, allowing for precise and consistent feeding. Universal mills can be equipped with different types of feeders, including vibratory feeders and screw feeders. Materials falls into the inlet pipe and enters into the grinding chamber.

Material is subjected to grinding by the high-speed rotating pin disc of the rotor. A pin mill with one rotating disc and one stationary disc is a type of grinder that consists of two discs, one of which is stationary and the other is rotated at high speed. The rotating disc is equipped with a series of pins or studs that project radially from its surface. The particles are also subjected to frictional forces and attrition, which reduce their size. Universal mills can be equipped with various types of rotors, including pin, disc, and plate beater rotors. The type of rotor used depends on the application and the desired particle size.

The universal mill is versatile and can be used to grind a wide variety of materials, including spices, grains, and chemicals. It is commonly used in the pharmaceutical, food, and chemical industries.



Features & Benefits

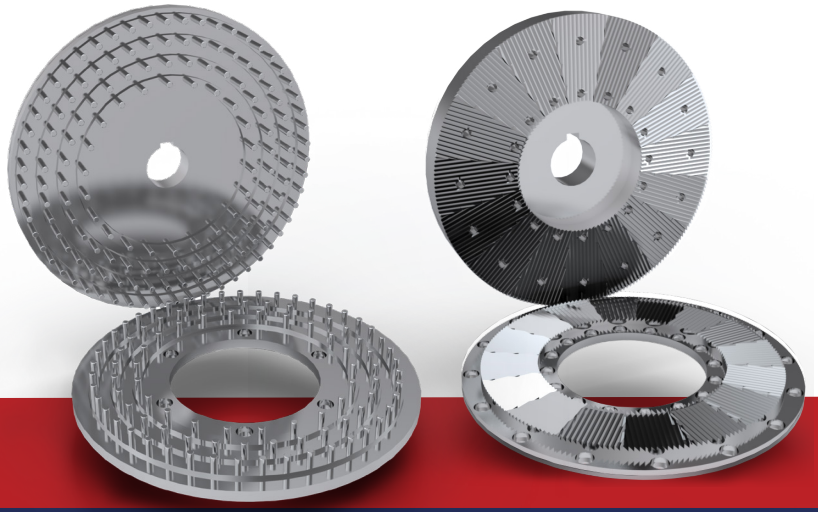
- High fineness upto 35 µm
- Lab & Production models
- Capacity ranges from 5gms/batch to 3000 lbs/hr.
- Energy efficient & economical to operate
- Can grind materials upto Mohs hardness 4 or less
- Constructed in stainless steel
- Varaible speed rotor drive
- Designed for easy access and cleaning.

Options & Accessories

- Gravity or penumatic conveying discharge
- Various option for feeding and system configuration
- Containment design options avaiable for isolator installations
- Cryogenic operation available

Material of Construction

Cone mills are manufactured and available in stainless steel, as it is commonly used in the food, pharmaceutical, and chemical industries, where the material is required to be hygienic and corrosion-resistant.
Other option for material of contruction is carbon steel, when processing materials that are not corrosive or hygienic requirements are not as stringent.



Pin Rotor Stator

Disc Rotor Stator

Plate beater with screen options

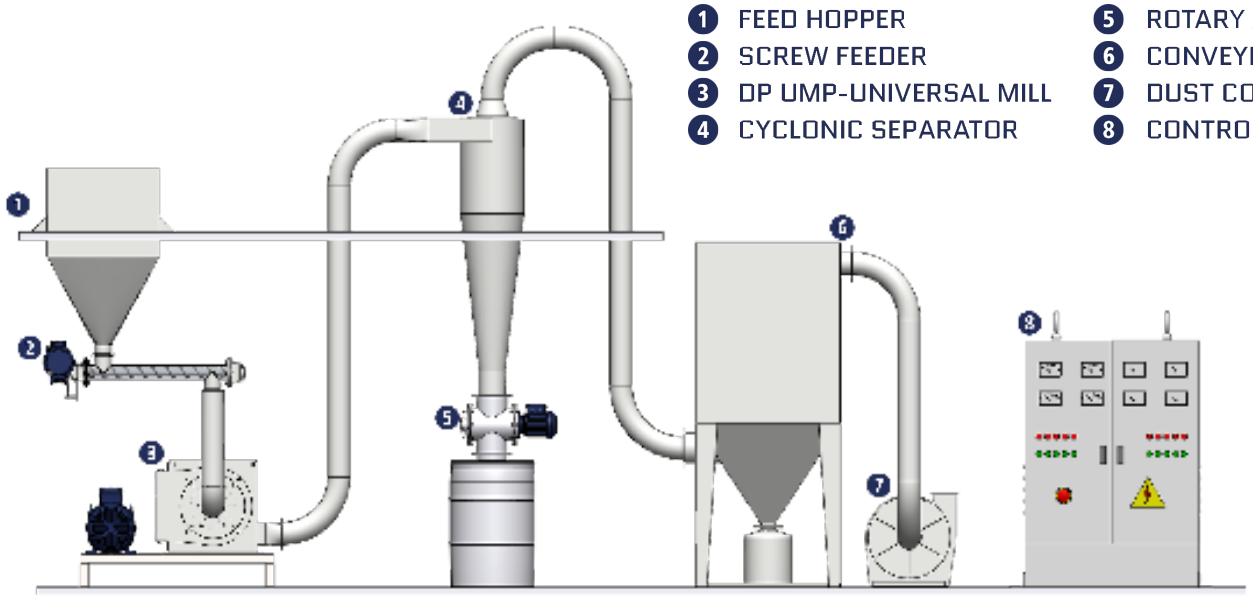
Rotor Options

- Universal mills can be equipped with various types of rotors, including pin, disc, and plate beater rotors.

Universal mills with pnematic conveying including cyclonic separator and dust collector.

Universal Mill with pneumatic conveying system

Mill Can be provided with Pneumatic Conveying System as a Continuous grinding system. System consists of Mill with Pneumatic Conveying System, Cyclone Separator, Blower, Rotary Air Lock, vibro sifter and Dust Collector.



1. FEED HOPPER
2. SCREW FEEDER
3. DP UMP-UNIVERSAL MILL
4. CYCLONIC SEPARATOR
5. ROTARY AIR VLAVE
6. CONVEYING FAN
7. DUST COLLECTOR
8. CONTROL PANEL

DP Universal Pin Mill - Sizes

Model	UM	100	160	250	320	500	630
Motor [kW]	kW [HP]	1.5	5.5	11	18.5	37	75
Rotor Speed [rpm]	RPM	22000	18000	11000	9000	5910	4920
Scale-up factor	kg/hr	0.06	0.25	0.5	1	2	3.6
Max. air flow rate	m^3/h	-	-	870	1600	3200	5700

Who are WE?

We are DP Pulveriser Industries and have been designing and building size reduction equipment in India since 1962. We believe in using the materials of the highest grade to build our equipment because we understand your need for a machine that will perform - without breakdown - day in and day out. 58 years, 7000 installations and 32 countries later we now hold the reputation of being one of India's finest manufacturers of size reduction equipment. Regardless of the industry you operate in, DP can optimize, innovate and automate your entire process with tailor made solutions and expertise that is backed by 58+ years of experience. We are a young bunch of passionate engineers excited to work on your next challenging project.

What do we DO?

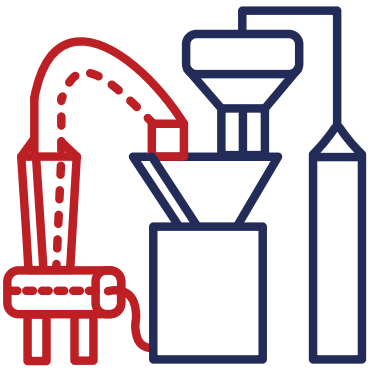
DP Pulveriser Industries' offerings are broadly classified under 3 segments:

Powder Processing Equipment

DP Pulveriser's machines are widely known for their rugged, tough built and low maintenance even after years of service. Our major forte is Size Reduction and Air Classification. We have a wide range of machines to cater to all your particle size requirements.

Testing and Other Services

We offer various services such as material trials of our equipment, grinding and air classification of your material on a contract basis and even particle testing and analysis at a fully equipped laboratory on the campus of our partner IIT Gandhinagar.



Turnkey Systems & Plant Automation

Thanks to our decades of experience, we understand what processing technologies and equipment are best suited for your application and industry. This means we can be your one stop solution for setting up complete powder processing plants carefully tailored to your needs.

Our Global Footprint

Australia	Bahrain	Bangladesh	Bhutan	Canada	China	Estonia	Bremen	Ghana
Hongkong	Iran	Indonesia	Kenya	Mauritius	Mexico	Malaysia	Newzealand	Nepal
Nigeria	Oman	Philippines	Qatar	Saudi Arabia	South Africa	Singapore	Sri Lanka	Tanzania
			Uruguay	U.A.E	Zambia			

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