

# GROW MILL (GRINDER)

Dry Wet Fine grinding

Fine crushing, de-agglomeration, sizing, dispersion

Versatility unique to stone mill grinders.  
High-density grindstone for an unparalleled cutting edge and processing capacity.  
Decomposition time of about one minute.

## From tableware to industrial usage

The Grow Mill utilizes the principle of a stone mill. Ever since the first prototype of the Grow Mill was made about 30 years ago, it has evolved into its current style over many years of unique technology improvements by our company. The Grow Mill is characterized by its ability to simultaneously perform a wide range processes for all types of materials from foods to industrial materials. The Grow Mill can shear, grind, atomize, disperse, emulsify, and fibrillate. The superior cutting edge and processing ability of the Grow Mill has been recognized by countless users, all of whom rely on the Grow Mill to perform various kinds of processing.



GMU-30

GM6-36

Grinder Cross-Section **Patented**  
Patent No.: 2046209

**GROW ENGINEERING's**  
high-density/poreless grinder



- Outstanding cutting edge and processing ability.
- No occurrence of bacteria.

Conventional poreless grinder

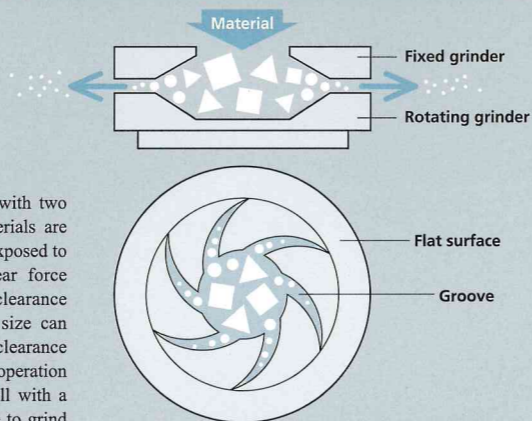


Conventional porous grinder



## Principle

The Grow Mill is a stone mill grinder with two upper and lower grindstones. Raw materials are pulverized into ultrafine particles when exposed to the impact, centrifugal force, and shear force generated by passing through the clearance between the grindstones. The particle size can freely adjusted simply by setting the clearance (the gap between grindstones). Contact operation is possible by using a ceramic stone mill with a special structure, thus making it possible to grind ultrafine particles under the size of a micron.



Clearance (one graduation) = 0.005 mm  
Rotating grinder rises and lowers.

- Continuous processing enables mass production.
- Simple structure for easy operation and cleaning.
- Use for grinding film (polyimide).
- Mousse can also be created in a short period of time.
- Also achieves an optimal mixing effect for dressings.

**Absolutely no need to strain corn soups, etc.**  
**100% of ingredients can be utilized.**

For example, if you were making three liters of corn soup, it would take sixty minutes to strain the soup by hand. The Grow Mill completely eliminates this troublesome task. The ingredients are ground without any residue in just three minutes, so you can use 100% of the ingredients.

## Stable atomization for high yield.

The stone mill achieves extremely sharp particle size distribution. The Grow Mill enables you to use 100% of ingredients, even those ingredients which were wasted with conventional mills.

## Particle size distribution



**Clearance (the gap between grindstones) can be easily adjusted in graduations of 0.005 mm.**

This provides peace of mind when setting the granularity which determines product quality. Also, clearance can be adjusted during operation.

## Also supports custom grinders

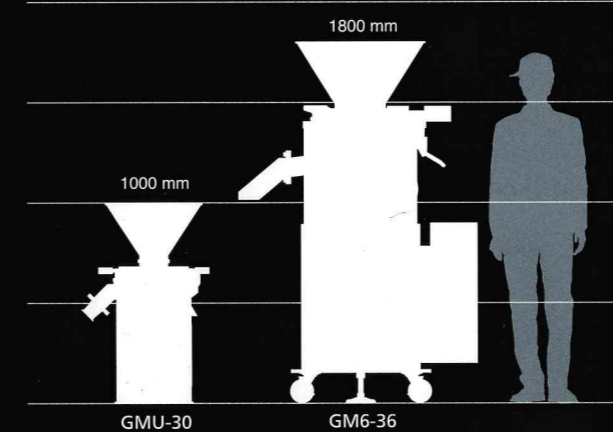
Regardless of whether you are using a GROW ENGINEERING product or another company's product, if your current grinder fails to satisfy your expectations, we will utilize our experience and know-how to manufacture the optimal grinder for your needs.

**Wide range of variations** — Processing capacity changes depending on the grinder diameter.

## Specifications

Model	Grinder size (diameter)	RPM	Processing capacity	Machine dimensions	Weight	Power source
GMU-30	ø30cm	MAX1800rpm	360~500 kg/Hr	ø400mm H1000mm	105kg	AC200 V 3.7/5.5 kW 3-phase
GM2-20	ø20cm	MAX1800rpm	50~700 kg/Hr	ø300mm H1100mm	133kg	AC200 V 3.7 kW 3-phase
GM4-25	ø25cm	MAX1800rpm	100~1000 kg/Hr	ø400mm H1300mm	230kg	AC200 V 7.5/11 kW 3-phase
GM4-25CF	ø25cm	MAX3000rpm	200~2000 kg/Hr	ø400mm H1300mm	250kg	AC200 V 7.5/11 kW 3-phase
GM5-30	ø30cm	MAX1800rpm	200~1800 kg/Hr	ø400mm H1600mm	290kg	AC200 V 11/15 kW 3-phase
GM6-36	ø36cm	MAX1800rpm	300~2500 kg/Hr	ø460mm H1800mm	400kg	AC200 V 22/30 kW 3-phase

\* Processing capacity is a reference value. (The value may vary depending on factors such as the flat surface area, peripheral speed, clearance, material fluidity, and material size/hardness.)  
\* Please contact us for custom specifications.



## Example Usage

- Food products** Demi-glace sauce, corn soup, sesame paste, soy pulp, soybeans, red beans, rice flour, vegetable paste, mousse, cheese, butter, mayonnaise, peanut butter, plums, various salts
- Spices** Chili bean sauce, ginger paste, garlic paste, sauce ingredients, sake lees, moromi (raw unrefined sake or soy sauce), miso
- Medicine/cosmetics** Various medicinal creams, ingredients for various traditional herbal medicine (lingzhi mushroom)
- Industrial materials** Grinding and dispersion of activated carbon, metal oxide, lithium hydroxide, polyimide, film, carbon, glass, resin, water-soluble paint, nickel oxide, and grease



We offer a wide range of diverse grinders. We can also manufacture original grinders depending on the intended usage.