

POWTEQ PRODUCTS

Please keep contact with POWTEQ if you have any further questions.



Cryo Grinder LM200



Micro Ball Mill GT300



Planetary Ball Mill BM40



Planetary Ball Mill BM6Pro



Mortar Grinder MG200



Twister TW100



Multi-functional Mill CM100M



Portable Cutting Mill CM50



Cutting Mill CM200



Ultra Centrifugal Mill FM200



Knife Mill HM100



Knife Mill HM300



Jaw Crusher JC5



Jaw Crusher JC6



Disc Mill DP100



Vibratory Disc Mill VM3



Sample Divider RD200



Vibratory Sieve Shaker SS2000



3D Mixer M10



Smart Graphite Digester

* Technical improvements will be made without prior notice
* The warranty period of the hosts is two years

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Knife Mill HM100&HM300

◇ Knife Mill HM100

The knife mill HM100 is used to process the soft, medium-hard, brittle and fibrous sample. It is special for high water, oil or fat content sample.



HM100

○ Sample type :

Soft, elastic, fibrous, water-bearing, oily, fatty, dry sample

○ Application example :

Agriculture: grain, feed, etc

Biology: mouse tissue, plant leaves, seeds, seedling and germ

Medicine: Chinese medicine, pills, etc

Food: dried melon, vegetables, frozen food, candy, preserved fruit, meat

Application Examples

Before grinding	After grinding	Parameter	
		Sample	pork
		Speed setting	6000rpm
		Sample characteristic	high oil and fat
		Remarks	the feed size must be less than 2-3cm
		Time	30s
		Sample	chives
		Speed setting	5000rpm
		Sample characteristic	tough , fibrous
		Remarks	the feed size must be less than 4-5cm; use the gravity lid
		Time	1min

○ Working principle

The HM100 has two-blade knives at the center of the bottom of a grinding cup. A certain height gap is kept between the blades. Driven by a motor of 1,100W, the knives start rotating. Reliable crushing and homogeneous phase effects are generated via the cutting of the sharp steel knife edges. The blunt side can be selected for coarse grinding of bulk samples or the tough side for fine grinding of samples. The motor speed is electronically controlled and can be preset. The constant speed guarantees efficient and high-quality grinding homogenization. You just need 10 to 30 seconds to process samples that are usually hard to crush and get homogenized samples for analysis.

○ Accessories



① **Grinding container autoclavable plastic:** High temperature and high pressure sterilization containers, meet strict hygiene standards of food and drugs. Suitable for soft, oily, water, fat and fibrous sample.

② **Grinding container stainless steel:** Applied for granules, shell, grain sample. Suitable for medium-hard, brittle, tough sample.

③ **Gravity lid:** for grinding small amount of samples with oil ,fat,less water content.

④ **Gravity lid with overflow channels:** for grinding some fresh vegetables and fruits with a high water content.

⑤ **Knife of titanium alloy** —— for grinding without heavy-metal contamination

⑥ **Knife** —— 2 blades, stainless steel ; serrated blade, for tough frozen meat

○ Features and advantages

- The sample volume up to 700ml
- Autoclavable container for choice
- Grinding container in various material
- Simple operation and quick start
- Strong motor power 1.1KW, speed adjustable
- Coarse grinding and fine grinding can be realized in one step
- Three modes optional: interval mode, reverse mode and press-and-play mode



◇ Knife Mill HM300

The knife mill HM300 is a newly designed product, which is especially suitable for grinding and homogenizing large amount of samples to the analysis level in a short time.

○ Sample type:

Soft, elastic, fibrous, water-bearing, oily, fatty, dry sample

○ Application fields

Agriculture: grain, feed, etc

Biology: mouse tissue, plant leaves, seeds, seedling and germ

Medicine: Chinese medicine, pills, etc





Food: dried melon, vegetables, frozen food, cocoa, candy, preserved fruit, meat



HM300

***Especially suitable for large amount sample, such as: chicken bones, fresh fish, seafood, hazels, etc.**

Application Examples

Before grinding	After grinding	Parameter	
		Sample	apple
		Speed setting	2000rpm
		Sample characteristic	water
		Remarks	use the gravity lid with overflow channels
		Time	40s
		Sample	fish
		Speed setting	1500rpm
		Sample characteristic	soft
		Remarks	the feed size must be less than 10 cm; use the gravity lid
		Time	2 mins

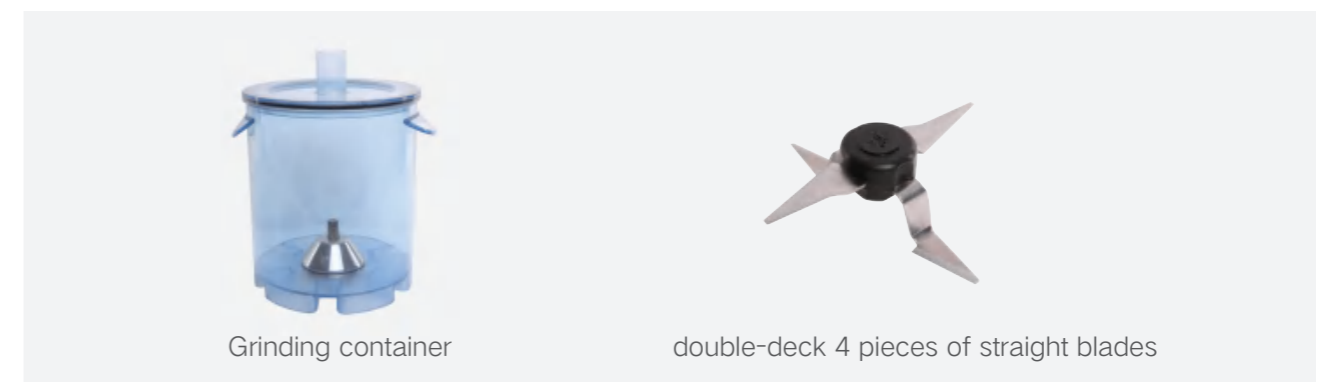
○ Working Principle

The HM300 has four-blade knives at the center of the bottom of a grinding cup. A certain height gap is kept between the blades. Driven by a motor of 1.1KW, the knives start rotating. Reliable crushing and homogeneous phase effects are generated via the cutting of the sharp steel knife edges. The blunt side can be selected for coarse grinding of bulk samples or the tough side for fine grinding of samples.

○ Features and advantages

- 10 SOPs can be stored.
- It allows to dry grinding and wet grinding.
- 5 inch LED touch screen display, easy to operate.
- With interval mode, regular mode and reverse mode.
- Powerful brushless motor, the speed can be adjusted at the range of 500- 4000 rpm.
- Designed with double-deck 4 pieces of straight blades to ensure higher grinding efficiency.
- The mill designed with electromagnetic lock. It's safe and reliable. The cover can not be opened during grinding process.

○ Accessories



Grinding container

double-deck 4 pieces of straight blades

○ Technical data

	HM100	HM300
Feed size	< 40mm	< 130mm
Final fineness	< 300 μ m	< 300 μ m
Speed	2000-10000rpm	500~4000rpm
Time setting	0: 01-9: 59 (min/s)	0: 01-5: 59 (min/s)
Batch quantity	150-700ml	1-4L
Interval mode	Yes	Yes
Knives	stainless steel, titanium alloy	stainless steel, titanium coating
Number of blades	2	4
Rated power	1.1KW	1.5KW
Power supply	220V, 50/60Hz	220V, 50/60Hz
Instrument size	260*343*454mm	303*575*485mm
Package size	466*516*630mm	705*475*600mm
Net weight	16kg	39kg