

POWTEQ Products

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



Mortar Grinder MG100



Mortar Grinder MG200



Planetary Ball Mill BM40



Planetary Ball Mill BM6Pro



Micro Ball Mill GT300



Twister TW100



Multi-functional Mill CM100M



Cutting Mill CM200



Ultra Centrifugal Mill FM200



Knife Mill HM100



Knife Mill HM300



Jaw Crusher JC5



Jaw Crusher JC6



Vibratory Disc Mill VM3



Disc Mill DP100



Vibratory Feeder VF200



Rotary Sample Divider RSD200



Vibratory Sieve Shaker SS2000



Smart Graphite Digester



3D Mixer M10

(The warranty period of the hosts is two years)



Knife Mills

—— Knife Mill HM100/300







Knife Mill HM100\300

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.



Application Examples

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

Applications

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, cocoa, candy, preserved fruit, meat

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.

Features and advantages

Strong motor power 1100W, speed adjustable

The sample volume up to 700ml

Autoclavable container for choice

Grinding container in various material

Simple operation and quick start

Coarse grinding and fine grinding can be realized in one step

Three modes optional: interval mode, reverse mode and press-and-play mode



Accessories



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.



Grinding container stainless steel

Applied for granules, shell, grain sample. Suitable for medium-hard, brittle, tough sample.



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

Knife of titanium for grinding without heavy-metal contamination

Knife Mill HM300

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



Products advantages

- 5 inch LED touch screen display, easy to operate.
- 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.
- With interval mode, regular mode and reverse mode.
- 10 SOPs can be stored.
- It allows to dry grinding and wet grinding.



Professional grinding equipment, superior to the ordinary household mixer

Ordinary laboratories use household agitators. However, it is hard for such agitators to process many samples such as meat with skin, chewing gums, zongzi, cured meat, soft sweets and soybean, and homogenized samples cannot be made by using such agitators. It is quite easy for a HM100\HM300 crusher to grind such samples; in addition, good repeatability and reproducibility can be acquired. HM100\HM300 grinder can provide quite high-level homogenization of the sample within 30 seconds, and the standard deviation of the analysis result for the sample is much lower than that use the household agitator.

Technical Data

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

Order Information

Order Information —— Knife Mill HM100

Item No.	Weight(Kg)	
Knife Mill HM100		
24.877.0001	16.00	!HM100,220V,50Hz
		incl. 1L grinding container of autoclavable plastic, standard lid and knife of stainless steel
		Grinding containers, 1L
01.877.1005	0.30	autoclavable plastic (transparent and scratch-resistant)
02.877.0002	0.45	stainless steel
		Knives
01.877.0001	0.10	knife of stainless steel
01.877.0002	0.10	knife of titanium for grinding without heavy -metal contamination
01.877.0003	!0.10	knife of stainless steel with serrated blades for grinding meat
	!	Additional item
02.877.0008	0.03	scraper
Knife Mill HM300		
24.889.0001	39.00	HM300, 220 V, 50 Hz.
		incl. 5L grinding container of autoclavable plastic, standard lid and knife of stainless steel
		Accessories of HM300 (Grinding containers, 5L
01.889.0001	1.50	autoclavable plastic,transparent and scratch-resistant, incl. knife holder

The above is only partial information of items, for more details please contact Grinder Company.