Knife Mill



Introduction:

The Knife Mill is a specialized instrument designed for grinding and homogenization. Utilizing high-speed rotation and a variety of accessories (stainless steel, PC, PP), it can pulverize samples to analytical fineness within seconds. The homogenization results are highly consistent, meeting the diverse professional requirements of laboratory operations and analytical processes. This instrument is widely used in the food industry, effectively grinding dry, soft, elastic, fibrous, and medium-hard samples, as well as homogenizing samples with high moisture, oil, and fat content.

Principle:

The blade is positioned at the center of the bottom of the grinding cup, with a certain height spacing maintained between the blades. Driven by a motor with a power of up to 2000 watts, the blade begins to rotate. Through the cutting action of the sharp steel blade, reliable grinding and homogenization effects are achieved, enabling both coarse and fine grinding of samples. Even difficult-to-process samples can be pulverized into homogenized samples suitable for analysis in just tens of seconds.

Application:

Agriculture: Plant seeds, grains, feed, etc.

Biology: Animal tissues, plant leaves, seedlings, and buds, etc.

Pharmaceuticals: Traditional Chinese herbs, tablets, etc.

Food: Melons, fruits, vegetables, frozen foods, preserved fruits, dried nuts, meat, fish, etc.

Features:

* The electronic control system is equipped with click function, program settings, method memory and storage functions, effectively ensuring the repeatability and homogenized sample preparation results.
* Simple to operate with fast startup.
* Adopts an industrial motor, delivering powerful performance (2000 watts) with controllable rotation speed.
* Features digital display for parameter settings and can store 20 groups of commonly used programs.
* Offers grinding cups made of various materials for selection, and accessories can undergo high-temperature and high-pressure sterilization.
* The instrument is equipped with a safety protection lock to ensure operator safety, ensuring safe and reliable operation.
* The serrated blade enables better homogenization of hard samples and high-fat samples, improving grinding efficiency.
* Runs at high speed for fast grinding, with forward/reverse rotation modes and an intermittent mode (interruptible).
* Can be configured with a gravity top cover and a weight-reduction top cover to compress the grinding chamber space, preventing samples from slipping and sticking to the container's inner wall due to high-speed rotation, thus avoiding incomplete sample crushing.
* Can be configured with a gravity top cover featuring an overflow channel. When processing samples with extremely high liquid content, this top cover ensures the sample is guided back to the grinding chamber's center via the overflow channel during grinding. This allows the sample to be repeatedly cut and crushed while preventing outflow.

Technical Parameters:

Model	BK-KM800
Sample Types	Dry, soft, elastic, fibrous, medium-hard, containing fat, water, or oil
Sample Volume	≤700mL
Speed	1000~15000rpm
Final Sample Size	≤300μm
Grinding Time Setting	0~9999s adjustable
Knife Head	Stainless steel knife head, stainless steel serrated knife head, titanium knife head
Rotor Material	Stainless steel, titanium
Operating Modes	Forward/reverse rotation mode, intermittent mode
Storage Parameters	20 groups
Power Supply	AC220V,50/60Hz(Standard);AC110V,60Hz(Optional, External Transformer)
Consumption	2000W
Grinding Cup	Stainless steel, PP, PC(capable of high-temperature and high-pressure sterilization)
Standard Accessories	Stainless steel grinding blade*1, plastic scraper*1, PC grinding cup with lid*1
External Size(W*D*H)mm	400*350*550
Packing Size(W*D*H)mm	410*400*590
Net Weight(kg)	23
Gross Weight(kg)	28