

★ Knife Mill IMK60

The knife mill provides fast, reliable homogenization and crushing results for samples containing water and oil, so that any sample is representative of the typical sample. The cutting force generated by the high-speed rotation of the sharp blade of the instrument can be equipped with a guide bar to move the gravity cap up and down, so that the sample in a very short time of 10 seconds to obtain a very homogenized sample. The combination of powerful industrial motors, high safety standards and digital parameter design makes the knife grinder an essential milling device in food laboratories.

○ Application Fields

Food, agricultural and sideline products, grains, feed, fertilizer, medicine, etc.
Sample type: Soft, elastic, fibrous, water-containing, oily, fatty, dry sample
Typical sample: such as bread, fish, meat, feed, biscuits, vegetables, spices, cocoa powder, seafood, cereal bars, fruits, seeds, candy, preserves, etc



○ Working principle

The knife grinder has a two-blade cutter head, the cutter head is fixed in the center of the bottom of the milling cup, the cutter head maintains a certain height distance between the cutter heads, and starts to rotate under the motor drive of 1.1 kilowatts. The cutting effect of the sharp steel knife edge produces a reliable crushing and homogenizing effect. According to the direction of the rotation of the car, the reverse mode can be selected to use the knife back for coarse crushing of large samples. Then the sample was finely pulverized with a forward turning blade.

○ Feature

- ◆ Abrasive samples containing large amounts of water, lipid or fiber.
- ◆ Can withstand low temperatures, milling frozen samples.
- ◆ Intermittent mode, reverse mode, and point mode.
- ◆ The highest standards of safe operation and function
- ◆ The gravity cap can be manually moved up and down during milling to ensure better sample homogenization.

★ Knife Mill IMK60

○ Various milling kits

We can provide you with different milling cups and knives of different materials for different applications.

High boron glass for trace element analysis, homogeneous samples must be free from contamination

PC or PP plastic cups are also used for trace element analysis. More cost-effective.

Stainless steel rotary knife is used to crush and grind most samples.

The serrated rotary knife is suitable for frozen foods, such as frozen meat or coarse fiber vegetables.

Titanium rotary knife is suitable for the determination of heavy metal elements.



1. 1L PC container, can be high temperature autoclave.
2. 1L PP container, cost-effective.
3. 1 litre stainless steel container, suitable for harder samples.
4. Guide bar, which can be held during the milling process to move the gravity top cover up and down.
5. Two-blade stainless steel or titanium metal rotor, suitable for most samples.
6. Two-leaf serrated rotary knife, suitable for coarse fiber or frozen samples.
7. PP gravity cap, suitable for milling a small amount of samples, can be moved up and down with the guide bar to effectively compress the milling space, so that the sample homogenization effect is better.
8. PP with overflow canal gravity cover, suitable for fruit and vegetable samples with high juice content, milling process, when the water content in the milling cup gradually increased, the water will return to the bottom of the milling cup through the overflow canal.

○ Specification

Injection size	≤50 mm	Gland mode	The gravity top can be moved up and down manually during grinding
Sample size	≤300 microns	Rated power	1.1 kW
Rotational speed	2000~10000(RPM)	Rated voltage	220 V, 50 HZ
Sample throughput	300~700 ml	Instrument size	300*510*530 mm
Time frame	00:01onsaturday (UK time) ~ 09:59	Package size	466*550*630 mm
Number of blades	Two leaves	Instrument weight	26 kg