Cryogenic Grinder CBCL-24

Product Introduction

The cryogenic grinding mill is a multi-functional instrument developed specifically for the analysis of small quantities of samples in laboratories. Its main applications include tissue homogenization, grinding, cell disruption, homogenizing, material dispersion, preparation, sample mixing and oscillation. It is widely used in fields such as agriculture, biology, ceramics and glass, plastics and chemical products, forensic identification, food, medicine, mineral metallurgy, ecological environment and materials science.

Advantages of the Cryogenic Grinding Mill

1. It can process up to 24 samples simultaneously within 15 seconds, and is compatible with 12-position and 24-position liquid nitrogen cryogenic adapters.
2. Equipped with a touch screen display for intuitive and easy operation.

3. Accessible sample volumes: 24*(0.2-0.5mL) / 24*2mL* / *8*(5-15)mL / 2*25mL* / *2*50mL. Custom grinding tubes of various specifications are available.
4. Capable of storing 10 sets of experimental data, with pre-set modes for animal heart, spleen, lung, kidney, bone, skin, hair and other sample types.
5. Features a fastening device with automatic centering and a safety lock during operation for full-process protection.
6. Built-in mode circulation function: it can cycle continuously among several pre-set parameters according to the configured experimental settings, further reducing interference from human factors.

Product Features of the Cryogenic Grinding Mill

1.Adjustable refrigeration with fast cooling speed.

2.Large grinding throughput and excellent grinding effect.

3.Fully enclosed grinding, stable repeatability and storable programs.

4.Time and labor saving, high-speed and convenient, high-throughput sample processing with good experimental repeatability.

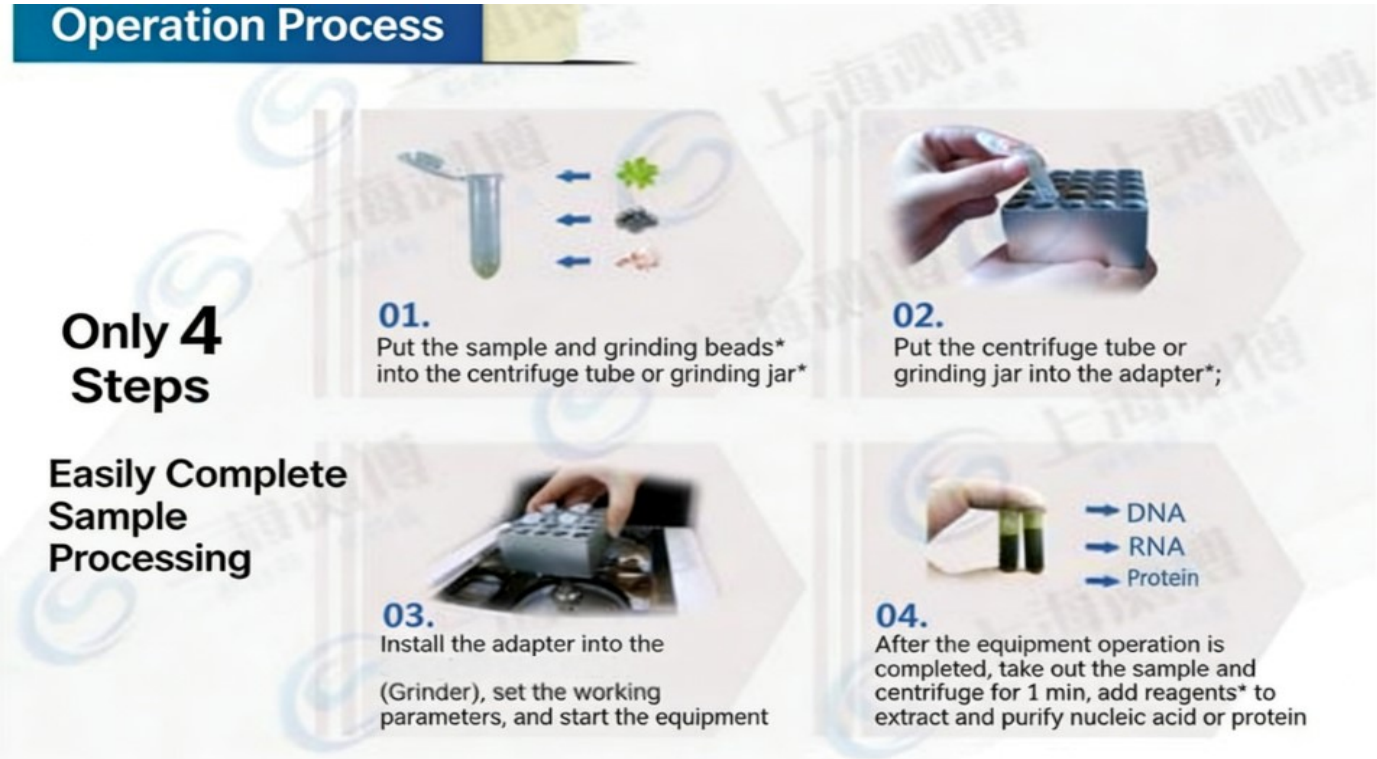
5.Samples are in a fully enclosed state with no cross-contamination.

6.Low noise (≤55dB) with a brushless variable frequency motor adopted.

7.No liquid nitrogen operation required, ensuring high safety.

8.No wearing parts design with electromagnetic locking protection.

9.Stainless steel inner cavity for easy cleaning and disinfection, no regular maintenance needed.



Technical Parameters

Instrument Weight: 58 kg

Instrument Dimensions: 630 mm * 300 mm * 480 mm

Grinding Methods: Wet grinding, dry grinding, and low-temperature grinding are all available

Grinding Kit Materials: Hard steel, polytetrafluoroethylene (Teflon), zirconia

Noise Level: <55 dB

Adapter Materials: Polytetrafluoroethylene or alloy steel

Acceleration: Reaches the target speed within 2 seconds, adjustable in the range of 0-70 Hz. For example, if 60 Hz is required, the machine will reach this speed within 2 seconds.

Deceleration: Reduces to the minimum speed within 2 seconds and stops within the same range.

Feed Size: No specific requirement, adjustable according to the adapter

Refrigeration Function: Yes, adjustable from -50°C to 37°C

Refrigeration Capacity: Capable of being upgraded to ultra-low temperature liquid nitrogen freezing or air-cooled refrigeration

Temperature Control Accuracy: ±0.5°C

Open Lid Operation Protection: Electromagnetic locking

Output Particle Size: μm

Number of Grinding Platforms (Acceptable Grinding Jars): >2

Fastening Device with Automatic Centering: Yes

Homogenization Speed and Time: 0–70 Hz, working time: 0 seconds–9999 minutes, user-adjustable

Grinding Ball Diameter: 0.1–30 mm

Grinding Ball Materials: Alloy steel, chrome steel, zirconia, tungsten carbide, quartz sand