mortar grinder for rotary extrusion grinding of soil

The mortar grinder is a universal, multi-functional grinding and pulverizing equipment, which is widely used in the processing of a variety of samples, including soft, hard, brittle, viscous, moist and other substances of different properties.

Mortar Mill

The mortar mill is designed for high-precision grinding, ensuring stability of the process and consistency of samples. It features anti-contamination capabilities, making it suitable for handling a wide range of materials and supporting dry, wet, and frozen grinding methods. Widely used in geological, mineral, pharmaceutical, food, chemical, and other industries, the mortar mill operates efficiently in various environments and offers a selection of anti-contamination grinding kits to preserve sample integrity.

Technical Features

1. Adjustable grinding speed: 50–150 RPM; allows flexible speed selection based on sample type and grinding needs.
2. Supports multiple grinding methods: dry, wet, and frozen grinding for diverse sample processing requirements.

3. Multiple grinding kit options: seven materials available (e.g., stainless steel, ceramic, PTFE) to prevent cross-contamination between samples.
4. Easy kit replacement: mortar and pestle can be replaced without tools, improving operational efficiency.
5. Quiet operation and easy cleaning: low noise design suitable for labs; simple structure for straightforward cleaning and maintenance.
6. Highly uniform grinding: rotating mortar and pestle provide extrusion and friction, achieving perfect homogenization of samples.

Working Principle

The mortar grinder operates on friction and squeezing between the mortar and pestle. Samples enter the mortar and are ground uniformly by the rotating pestle. Adjusting pestle position and pressure controls fineness and uniformity. During grinding, a spatula head aids mixing and homogenization, delivering rapid, consistent sample results.

Advantages

1. Wide applicability: processes soft, hard, brittle, sticky, and paste-like substances.
2. Efficient homogenization: achieves high sample uniformity for reproducible results.
3. Anti-contamination: multiple grinding kit materials avoid cross-sample contamination.
4. Easy operation: tool-free mortar and pestle replacement, simple cleaning, and reduced maintenance.
5. Flexible adjustment: customizable grinding speed and conditions for optimal results.

Application Areas

1. Geology and minerals: grinding rocks, ores, coal, and other geological samples for analysis and pretreatment.
2. Food and agriculture: grinding spices, grains, plants, and crop samples for food and agricultural analysis.
3. Pharmaceutical industry: grinding drug raw materials to ensure homogeneity and quality.
4. Chemical and ceramic industry: grinding chemicals and ceramic powders to meet production standards.
5. Construction materials: grinding and mixing cement, stone, and other materials for quality control.
6. Environmental analysis: soil sample grinding, waste treatment, and environmental testing.
7. Scientific research: high-precision sample preparation for laboratory experiments.

mortar grinder for rotary extrusion grinding of soil

Model	**RM200**
Working principle	Friction, extrusion
Feed size	less than 10mm
Discharge size	approx. 10um
Batch size	10 to 230ml

mortar grinder for rotary extrusion grinding of soil

Model	**RM200**
Lapping kit	Onyx, stainless steel, hard steel, tungsten carbide, zirconium oxide, corundum, hard porcelain, etc.
Timer	1 to 99minutes, continuously adjustable, digital display
Rotation speed	50 to 150rpm, continuously adjustable
Power	200W
Power supply	220Vac, 50Hz
Weight	41kg
Dimensions	400x480x5000mm