



Technical resources

agate grinder with three working stations

Model: MNY

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09.10.2026 / TENCAN

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Metal-free dry grinding for analytical samples. Delivers ultra-fine, uniform results with quiet, easy operation. Ideal for labs.

Technical specifications

Mortar diameter	Φ120mm
Feed particle size	-1.5
Output particle size	-0.074

These specifications describe the series. Confirm the selected model, power supply and configuration before ordering.



The three-head agate grinder is a device for dry grinding and analysis of samples. It has no metal contamination to the ground sample, the grinding material is uniform and ultra-fine, the operation is simple, and the equipment operates with low noise. It is mainly used in laboratories of geology, coal, mining, metallurgy, chemical industry, building materials, hydropower and other departments as well as universities and scientific research units. It is a standard equipment for various types of analysis, sorting, inspection and testing. It can also be used for quality inspection, environmental testing or for grinding small amounts of general materials.

研磨系列

产品细节



- **Geology and Mining** : Crush and homogenize rock and ore samples to facilitate subsequent component analysis.
- **Materials Science** : Preparation of nanomaterials and ceramic powders to improve material dispersion and uniformity.
- **Chemistry and Pharmaceuticals** : Grinding and mixing of high-purity chemical reagents and pharmaceutical ingredients to ensure bioavailability.
- **Environmental monitoring** : Pretreatment of environmental samples such as soil and water samples to remove impurities and refine particles.
- **Quality inspection and scientific research** : Rapid grinding of a small amount of samples in the laboratory to meet the needs of sorting, inspection, etc.

Technical parameters

project	unit	MNY-Φ120×3 three-head agate grinder
Mortar diameter	mm	Φ120
Number of grinding heads	indivual	3
Rotation speed of grinding rod	r/min	220
Mortar speed	r/min	9
Feeding particle size	mm	-1.5
Discharge particle size	mm	-0.074
Reference weight	kg	105
Overall dimensions	mm	770×740×470

- **power transmission** : The motor drives the grinding head and mortar to rotate through the pulley and gear shaft, and the clutch controls the power on and off to start and stop grinding.
- **grinding action** : The grinding head exerts shear, friction and impact force on the sample in the mortar under the action of centrifugal force. The co-rotation of the mortar and the grinding head enhances the crushing effect.
- **pressure regulation** : Adjust the grinding head pressure through the disc spring to adapt to the processing needs of materials with different hardness.
- **Unloading and transposition** : After grinding is completed, operate the handle to rotate the mortar to the discharging position, and brush the powder to the receiving container.; The transposition function supports the alternate use of three sets of mortars.

- **Pollution-free grinding** : Agate material avoids metal contamination, ensures sample purity, and is suitable for high-precision analysis.
- **Efficient three-head design** : Three sets of independent grinding heads can work simultaneously or individually to improve processing efficiency and support multi-batch continuous operations.
- **Fine-grained control** : The discharge particle size can reach 0.074mm (about 200 mesh), and some models support micron-level or even nano-level crushing.
- **Ease of operation** : Equipped with digital time display and multi-stage speed adjustment function to support precise control of grinding time and speed.
- **low maintenance cost** : Agate parts have strong wear resistance, the equipment structure is modular, and wearing parts (such as friction plates, gear shafts) are easy to replace.
- **Safety and environmental protection** : Dry grinding does not require solvent, and it can be used with an exhaust dust removal device to reduce dust pollution.

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Before operation, review the selected model's instructions and the material requirements.