



Innovation Empowers Sample Preparation,
Intelligence Achieves Simplicity



AM950 Vibratory Disc Mill



蚂蚁源科学仪器（北京）有限公司
ANTS SCIENTIFIC INSTRUMENTS (BEIJING) CO., LTD.



AM950 Vibratory Disc Mill

AM950 Vibratory Disc Mill is suitable for the extremely quick, loss-free grinding of hard, medium-hard, brittle and fibrous materials to analytical fineness. The largest grinding sets can be 2000ml, according to the size of grinding sets, can prepare 1-4 samples at the same time. The mill has proven to be ideal for use in geology, metallurgy and building materials sector and is the perfect mill when it comes to preparing samples for spectral analysis.



Working Principle



The grinding kit is fixed to the vibrating chassis by means of a quick locking device. The vibratory plate and the grinding kit move in a horizontal plane in a circular vibratory motion. The vibratory movement of the grinding elements in the grinding jar generates considerable squeezing, impact and friction forces on the sample, which results in a fine grinding of the sample in a short period of time.

Performance Advantages

- ◎ To analytical fineness of XRF and spectral analysis with extremely short grinding time
- ◎ 10 SOPs can be stored. Good reproducibility
- ◎ Ergonomic design: Vertical design without bending; pneumatic lifting device to pick up labor-saving; grinding kit easy to carry handles to facilitate the installation; grinding kit has a positioning marking, along the track pushed into the grinding platform can be
- ◎ Grinding kits are available in different sizes and materials; grinding jars of up to 2000 ml in volume provide high sample volumes; up to 4 x 250 ml can be processed at the same time, which improves the efficiency of sample preparation
- ◎ LCD display, easy to operate, can be set with positive and negative, intermittent functions
- ◎ The motor is connected through a universal shaft to provide power for the grinding platform, which improves the reliability of the mechanism and increases the service life of the motor; the cylinder provides pneumatic lifting power, which is safe and has a long service life; the product does not require special maintenance
- ◎ Pneumatic grinding kit fastening device, safe and reliable, easy to operate
- ◎ Pneumatic lifting device and main machine integrated design, easy to extract large mass grinding jar, save labor, reliable operation
- ◎ Air pressure detection device, safety locking device, to ensure the safety of equipment operation
- ◎ Grinding room acoustic design reduces noise pollution

Technical Information

Technical parameter	AM950 Vibratory Disc Mill
Feed material	medium-hard, hard, brittle, fibrous
Material feed size	≤20mm (Depends on the nature of the sample and the grinding environment)
Final fineness	approx. 20μm (Depends on the nature of the sample and the grinding environment)
Batch size / feed quantity	35 ~ 2000 ml
Rotary speed	910rpm
Setting of grinding time	1s ~ 99h59min59s, continuously adjustable
Grinding way	dry, wet
Container volume	100ml/250ml/500ml/800ml/1000ml/2000ml available
Material of grinding sets	hardened steel, zirconium oxide, tungsten carbide
Storable SOPs	10 groups
Operation mode	Forward and reverse, as well as intermission
Accessories	Pneumatic autolifter, Adapter of three-in-one for grinding sets, Adapter of four-in-one for grinding sets, Adapter for single grinding set
W × H × D	1000mm × 1450mm × 800mm
Net weight	Approx. 430Kg
Electrical supply data	AC380V, 50Hz/60Hz, 2200W

Application



Ceramics



Glass



Soil



Coke



Mineral
metallurgy



Coals



Soapstone



Electronic product



Concretes



Furnace slag



Cements



Plant materials

Optional Guide

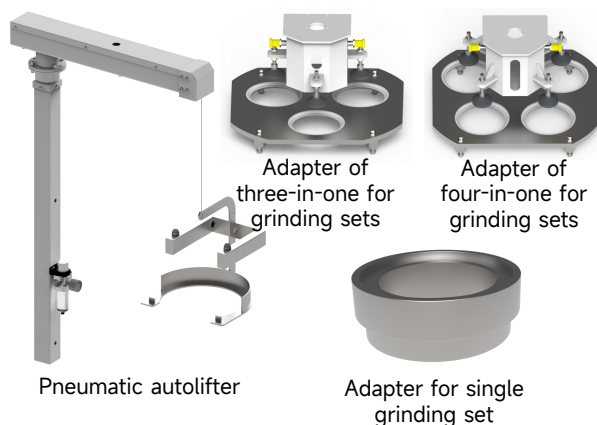
There are 6 different materials grinding tools with 6 size for your reference. Satisfy different application and pollution free test.



Materials	100ml	250ml	500ml	800ml	1000ml	2000ml
Hardened steel	✓	✓	✓	✓	✓	✓
Stainless steel	✓	✓	✓	✓	✓	✓
Standard steel	✓	✓	✓	✓	✓	✓
Tungsten carbide	✓	✓	✓	-	-	-
Zirconium oxide	✓	✓	-	-	-	-
Manganese steel	✓	✓	-	-	-	-

100 ml, 250 ml, 500 ml grinding sets include grinding jars and lids, grinding rings and grinding discs.

The 800 ml, 1000 ml and 2000 ml grinding sets include grinding jars and lids, as well as open-hole grinding discs to ensure homogeneous mixing of samples during grinding.



- ◎ The Pneumatic autolifter is driven by a cylinder, not by an airbag. It is bolted directly to the cabinet and does not require a separate base plate. A pneumatic autolifter is recommended for grinding kits larger than 250 ml.
- ◎ Adapter of three-in-one for grinding sets allows simultaneous grinding of three 100 ml / 250 ml grinding jars, Adapter of four-in-one for grinding sets allows simultaneous grinding of four 100 ml / 250 ml grinding jars; after grinding, no need to remove adapter and press device, the grinding sets can be easily to be removed.
- ◎ Adapter for single grinding set: Used to match individual grinding jars to the equipment mounting plate, configuration required for grinding jars under 2L.

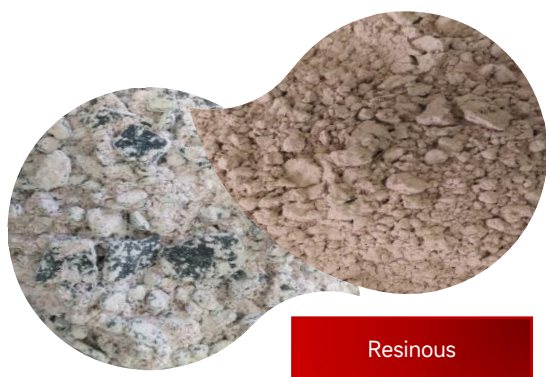
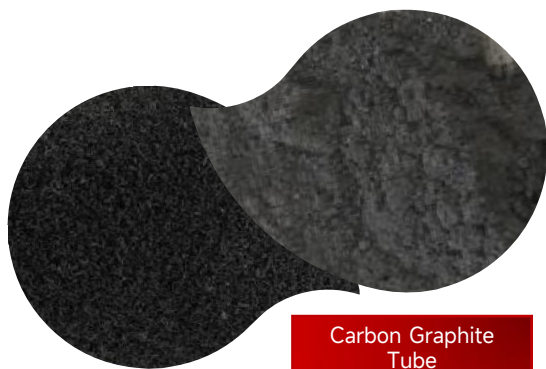
Capacity Reference

The filling level of the grinding set has a great influence on the grinding results, the table below shows the reference values given, an average filling level will give a good grinding efficiency and at the same time increase the service life of the grinding assembly.

Grinding sets volume	Sample volume	Maximum feed size
100ml	35 ~ 100ml	< 10mm
250ml	80 ~ 250ml	< 15mm
500ml	175 ~ 500ml	< 15mm
800ml	280 ~ 800ml	< 15mm
1000ml	350 ~ 1000ml	< 15mm
2000ml	700 ~ 2000ml	< 20mm



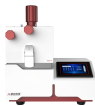
***A**pplication Examples*





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Milling Series

 AM100S Vibratory Ball Mill	 AM200S Mortar Grinder	 AM300 Cutting Mill	 AM300S Cutting Mill	 AM350 Beater Mill	 AM360 Turbo Mill	 AM400S Planetary Ball Mill
 AM410 Planetary Ball Mill	 AM420 Planetary Ball Mill	 AM500S High Speed Rotary Mill	 AM600S Knife Mill	 AM700 Jaw Crusher	 AM710 Extrusion Crusher	 AM750S Bench Jaw Crusher
 AM800 Disc Mill	 AM800CC Disc Mill	 AM810 Disc Mill	 AM900 Vibratory Disc Mill	 AM950 Vibratory Disc Mill		

Assisting Series

 AF100S 3D Vibratory Sieve Shaker	 AF150 Horizontal Sieve Shaker	 AF200S Sample Automatic Divider	 AF300 Vibratory Feeder
 AF400 Rotating Tube Divider	 AF450 Rotating Sample Divider	 AF500 3D Sample Mixer	 AF510 3D Sample Mixer

Intelligent Series

 AISP1678 / AISP1700 Intelligence Soil Preparation System	
 ADVM1001 / ADVM1001CS Vacuum Microwave Drying Series	

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