

POWTEQ®



Vibratory Disc Mill VM3

◇ Vibratory Disc Mill VM3

Vibratory Disc Mill is mainly used for sample preparation of spectral analysis. The device is especially suitable for fast medium-hard, brittle and fibrous materials to analytical fineness grinding without loss.



VM3

○ Applications

- **Ceramics and glass:** oxide ceramics, glass
- **Building materials :** cement, stone, concrete
- **Environmental area:** soil, paving stone, slag
- **Minerals & Metallurgy :** coal, coke, corundum, ore, slag



○ Working principle

Vibratory Disc Mill crush sample via pressure, impact and friction. The quick-action clamping device makes the grinding set firmly attached onto the vibrating plate. Through transmission, the vibrating plate will generate drastic three dimensional vibrating so as to produce giant impacting, frictional and grinding force on the grinding set, and such forces focus on samples to make them become powder in a very short time.

○ Technical advantages



- Unique design of mobile assistance for grinding cup.
- Unique rapid fastening design facilitates secure positioning and safe operation.
- VM3 control panel has a reasonable layout, the menu display is simple and smart.

○ Features and advantages

- Extremely short grinding time.
- High final fineness($d_{95} < 75 \mu m$).
- Speed 700-1500rpm, continuous adjustable.
- Quick-action clamping device for grinding set.
- Different kinds of materials of grinding sets for choice.
- Agate recognition for automatic speed reduction to 700rpm.



○ For various applications, we can supply different material of grinding sets. Please choose the suitable material according to your requirement.

Hardened steel

The main characteristic of hardened steel is corrosion resistance and rust prevention. For processing corrosive sample, grinding set of this kind of material is a good choice.

Agate

This material is heavy-metal-free and can guarantee the grinding purity. It is suitable for processing soil and some medium-hard sample. If you want a high grinding purity, you can choose the grinding set of this kind material.

Tungsten carbide

The hardness of tungsten carbide is high and similar to that of diamond. It is suitable for processing high hardness sample.

Zirconium oxide

Zirconium oxide has excellent physical and chemical properties such as high hardness, high toughness, high abrasive and corrosion resistance. This material grinding set is the best choice for handling chemicals such as ceramics.

○ Technical data

Feed size	< 15mm	Time setting	00 : 01-99:59 (min/s)
Final fineness	< 75 μm	The volume of the grinding set	50ml, 100ml, 250ml
Speed	700-1500rpm	Grinding set material	hardened steel, agate, tungsten carbide, Zirconium oxide
Batch quantity	20-250g	Rated power	1.5KW
Instrument size	800*690*1255mm	Power supply	220V , 50/60Hz
Package size	1000*1000*1450mm	Net weight	277kg