



## Vibratory Disc Mill RS 200

### General Information

The Vibratory Disc Mill RS 200 is suitable for the extremely quick, loss-free and reproducible grinding of medium-hard, brittle and fibrous materials to analytical fineness. The instrument runs steadily and smoothly, even with heavy grinding sets, at maximum speed thanks to the new Stabilized-Plane-Drive.

With its robust design, the RS 200 has proven to be ideal for use in the building materials sector (cement), in geology, mineralogy, metallurgy and in power plants. Due to the high end fineness and speed the RS 200 is the perfect mill when it comes to preparing samples for spectral analysis.



### Application Examples

cement, cement clinker, ceramics, coal, coke, concrete, corundum, electronic components, glass, metal oxides, minerals, ores, plant materials, silicates, slag, soils, ...

### Product Advantages

- reproducible results due to "Stabilized-Plane-Drive" (avoids tumbling of the grinding set)
- variable speed 700 - 1,500 min<sup>-1</sup>
- extremely short grinding time
- agate and tungsten carbide recognition for automatic speed reduction
- 10 SOPs can be stored
- no sample loss thanks to optimum o-ring seal
- wide range of materials for contamination free grinding
- noise-insulated grinding chamber
- new quick-action grinding set clamping device for convenient and safe tightening
- safety interlock
- easy 1-button operation with colored graphics display
- new carry handle
- new ergonomic design, heavy grinding sets can be inserted closer to the user's body and slid into the machine, leading to less strenuous laboratory work especially for high throughput users

### Features

Applications	size reduction, mixing, trituration
Field of application	construction materials, environment / recycling, geology / metallurgy, glass / ceramics
Feed material	medium-hard, hard, brittle, fibrous
Size reduction principle	pressure, friction
Material feed size*	< 15 mm
Final fineness*	< 20 µm
Batch size / feed quantity*	15- 250 ml depending on size of grinding set



## Vibratory Disc Mill RS 200

Speed at 50 Hz (60 Hz)	700 - 1,500 min <sup>-1</sup> , continuously adjustable
Material of grinding tools	hardened steel, tungsten carbide, agate, zirconium oxide, steel 1.1740 (for heavy-metal free grinding)
Grinding jar sizes	50 ml / 100 ml / 250 ml
Setting of grinding time	digital, 00:01 to 99:59
Storable SOPs	10
Drive	3-phase asynchronous motor with frequency converter
Drive power	1.5 kW
Electrical supply data	different voltages
Power connection	1-phase
Protection code	IP 40
W x H x D closed	836 x 1220 x 780 mm
Net weight	~ 210 kg (without grinding set)
Standards	CE

**Please note:**

\*depending on feed material and instrument configuration/settings

### Videolink



<http://www.retsch.com/rs200>

### Function Principle

The Vibratory Disc Mill RS 200 comminutes by impact and friction. The grinding set is firmly attached to the vibration plate with a quick-action lever. The plate with the grinding set is subjected to circular horizontal vibrations.

The centrifugal force acting on the grinding rings in the dish results in extreme pressure, impact and frictional forces acting on the sample, producing analytical fineness in 1-3 minutes. The circular vibrations are produced by a frequency controlled 1.5 kW 3-phase motor.

A sensor recognizes the presence of agate grinding sets and automatically limits the speed to 700 min<sup>-1</sup> to avoid damaging the agate. The cover of the noiseinsulated grinding chamber has a safety interlock and can only be opened when the mill is at a standstill.



## Vibratory Disc Mill RS 200

### Order data

#### Vibratory Disc Mill RS 200

with carry handle for grinding sets, on wheels (please order grinding set and carry handle insert (if necessary) separately)

20.730.0001

RS 200, 220-230 V, 50/60 Hz

other electrical versions available for the same price

#### Grinding sets RS 200

##### Hardened steel

01.462.0170	50 ml
01.462.0171	100 ml
01.462.0263	250 ml

##### Tungsten carbide

01.462.0353	50 ml (only for 1200 min <sup>-1</sup> )
01.462.0354	100 ml (only for 1200 min <sup>-1</sup> )
01.462.0355	250 ml (only for 1200 min <sup>-1</sup> )

##### Agate

01.462.0178	50 ml (only for 700 min <sup>-1</sup> )
01.462.0179	100 ml (only for 700 min <sup>-1</sup> )

##### Zirconium oxide

01.462.0193	50 ml
01.462.0192	100 ml

##### Steel 1.1740 for grinding without heavy-metal contamination

01.462.0002	50 ml
01.462.0266	250 ml

#### Accessories RS 200

03.225.0086	Carry handle for RS 200 grinding sets
02.225.0087	Carry handle insert for 50 ml grinding set hardened steel, tungsten carbide, Steel 1.1740
02.225.0088	Carry handle insert for 50 ml grinding set agate
02.225.0089	Carry handle insert for 50 ml grinding set zirconium oxide
02.225.0090	Carry handle insert for 100 ml grinding set tungsten carbide

#### Additional items RS 200

05.114.0075	O-ring for grinding set 50 ml steel
05.114.0069	O-ring for grinding set 50 ml agate and zirconium oxide



## Vibratory Disc Mill RS 200

05.114.0068

O-ring for grinding set 50 ml tungsten carbide

05.114.0067

O-ring for grinding set 100 ml steel and zirconium oxide, 250 ml tungsten carbide

05.114.0070

O-ring for grinding set 100 ml agate and tungsten carbide

05.114.0076

O-ring for grinding set 250 ml steel