

## VIBRATORY DISC MILL RS 200



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

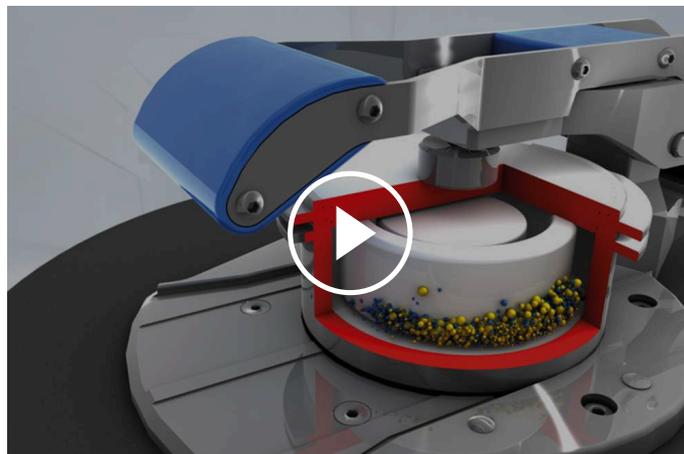
<b>Applications</b>	size reduction, mixing, triturating
<b>Field of application</b>	construction materials, environment / recycling, geology / metallurgy, glass / ceramics
<b>Feed material</b>	medium-hard, hard, brittle, fibrous
<b>Size reduction principle</b>	pressure, friction
<b>Material feed size*</b>	< 15 mm
<b>Final fineness*</b>	< 20 µm
<b>Batch size / feed quantity*</b>	15- 250 ml depending on size of grinding set
<b>Speed at 50 Hz (60 Hz)</b>	700 - 1,500 min <sup>-1</sup> , continuously adjustable
<b>Material of grinding tools</b>	hardened steel, tungsten carbide, agate, zirconium oxide, steel 1.1740 (for heavy-metal free grinding)
<b>Grinding jar sizes</b>	50 ml / 100 ml / 250 ml
<b>Setting of grinding time</b>	digital, 00:01 to 99:59
<b>Storable SOPs</b>	10
<b>Drive</b>	3-phase asynchronous motor with frequency converter
<b>Drive power</b>	1.5 kW
<b>Electrical supply data</b>	different voltages
<b>Power connection</b>	1-phase
<b>Protection code</b>	IP 40
<b>W x H x D closed</b>	836 x 1220 x 780 mm
<b>Net weight</b>	~ 210 kg (without grinding set)
<b>Standards</b>	CE

## 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.



[Click to view video](#)

[www.retsch.com/rs200](http://www.retsch.com/rs200)

## ORDER DATA

### VIBRATORY DISC MILL RS 200

**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 (for up to 1200 min<sup>-1</sup>)

01.462.0354 100 ml (for up to 1200 min<sup>-1</sup>)

01.462.0355  250 ml (for up to 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

### CARRY HANDLE AND ACCESSORIES FOR RS 200 GRINDING SETS

03.225.0086  Carry handle for all 250 ml grinding sets, for 100 ml grinding set hardened steel, agate, zirconium oxide, steel 1.1740 and for use with carry handle inserts

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

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

99.200.0035 IQ/OQ Documentation for RS 200