



## MORTAR GRINDER RM 200

The Mortar Grinder RM 200 can **mix and homogenize powders, suspension and pastes, even for samples with high viscosity**. The RM 200 is suitable for the **proper and reproducible sample preparation to analytical fineness**.

The sample grinder **substitutes cumbersome hand mortars** by a high performance drive with electronic control. The grinding set can be **cooled and heated** and is **very easy to clean**. Grinding sets of various material qualities are available which can be exchanged easily for optimum adaptation to various grinding tasks.



## PRODUCT ADVANTAGES

- | dry, wet and cryogenic grinding
- | reproducible results due to adjustable pestle and scraper pressure
- | closed, dust tight grinding chamber with windows
- | easy exchange of mortar and pestle without tools
- | performance display for load control
- | adjustable pestle and scraper pressure
- | wide range of materials for contamination free grinding
- | 3 scraper materials (PU, beech wood, PTFE)
- | Pestle speed 100 rpm

[Click to view video](#)

## APPLICATION EXAMPLES

ashes, cement clinker, chemical products, coal, cocoa nibs, coke, drugs, food, homeopathic materials, nuts, pharmaceutical materials, plant materials, salts, oil seeds, silicates, slag, soils, spices, tiles, yeast cells

To find the best solution for your sample preparation task, visit our application database.

## FUNCTIONAL PRINCIPLE

The Mortar Grinder RM 200 comminutes, mixes and triturates by pressure and friction. The function of the scraper is to feed the sample material into the area between the mortar and pestle. This forced feed ensures that the whole of the sample is continuously subjected to the grinding and trituration process and is also intensively mixed.

The grinder pestle is not located in the center of the mortar but is offset; contact with the rotating mortar and the sample causes it to rotate automatically. The necessary grinding pressure is achieved by the weight of the pestle itself combined with the adjustable spring pressure acting on its axis.



[Click to view video](#)

## MORTAR GRINDER RM 200

## TECHNICAL DATA

<b>Applications</b>	grinding, mixing and triturating, dry and wet
<b>Field of application</b>	agriculture, biology, chemistry / plastics, construction materials, food, geology / metallurgy, glass / ceramics, medicine / pharmaceuticals
<b>Feed material</b>	soft, hard, brittle, pasty
<b>Size reduction principle</b>	pressure, friction
<b>Material feed size*</b>	< 8 mm
<b>Final fineness*</b>	< 10 µm
<b>Batch size / feed quantity*</b>	10 - 190 ml
<b>Grinding chamber volume</b>	700 ml
<b>Speed at 50 Hz (60 Hz)</b>	100 min-1
<b>Speed setting</b>	no
<b>Setting of pestle pressure</b>	vertical by adjusting knob + scale, horizontal by adjusting knob + visual/acoustic control
<b>Setting of scraper pressure</b>	by adjusting knob + visual control
<b>Material of grinding tools</b>	hardened steel, stainless steel, tungsten carbide, agate, sintered aluminum oxide, zirconium oxide, hard porcelain
<b>Setting of grinding time</b>	digital, 1 - 99 min / continuous operation
<b>Drive</b>	1-phase motor with auxiliary capacitor
<b>Electrical supply data</b>	different voltages
<b>Power connection</b>	1-phase
<b>Protection code</b>	IP 53
<b>Power consumption</b>	250 W (230 V, 50 Hz) / 290 W (120 V, 60 Hz)
<b>W x H x D closed</b>	400 x 480 x 370 mm (opened 400 x 550 x 510 mm )
<b>Net weight</b>	~ 24.2 kg
<b>Standards</b>	CE

\*depending on feed material and instrument configuration/settings

[www.retsch.com/rm200](http://www.retsch.com/rm200)

## ORDER DATA

### MORTAR GRINDER RM 200

**Mortar Grinder RM 200 complete with scraper of PU**  
(please order mortar and pestle separately)

20.455.0001



RM 230 V, 50 Hz  
200

**other electrical versions available for the same price**

### MORTAR AND PESTLE RM 200

#### HARDENED STEEL

02.460.0018



Mortar

02.461.0112



Pestle

#### STAINLESS STEEL

02.460.0057



Mortar

02.461.0113



Pestle

#### TUNGSTEN CARBIDE

02.460.0021



Mortar

02.461.0114



Pestle

#### AGATE

02.460.0098



Mortar

02.461.0115



Pestle

#### SINTERED ALUMINUM OXIDE

02.460.0017



Mortar

02.461.0116



Pestle

#### ZIRCONIUM OXIDE

02.460.0086



Mortar

02.461.0117



Pestle

#### HARD PORCELAIN

02.460.0016



Mortar

02.461.0118



Pestle

## ACCESSORIES RM 200

#### SCRAPERS RM 200

22.862.0012



Scraper, PU

22.008.0025



Scraper, beech wood

22.008.0024



Scraper, PTFE (e.g. for cryogenic grinding)

## ADDITIONAL ITEMS RM 200

99.200.0012



IQ/OQ Documentation for RM 200