
# DISC MILL DM 200

Thanks to its robust design, the Disc Mill DM 200 can be used under **rough conditions in laboratories and pilot plants, as well as online for the quality control of raw materials.** The powerful DM 200 requires **only a few minutes to achieve the desired grind size.**

## PRODUCT ADVANTAGES

- excellent crushing performance
- reproducible results due to accurate gap setting
- hinged grinding chamber for easy cleaning
- grinding discs with long working life
- wide range of materials for contamination free grinding
- connector for dust extraction
- can be operated together with Jaw Crusher BB 200

DISC MILL DM 200 & JAW CRUSHER BB 250

# TWO-STAGE SAMPLE PREPARATION IN ONE STEP

The combi unit, featuring the Jaw Crusher BB 250 and the Disc Mill DM 200 connected via a cyclone separator, enables automated, continuous sample preparation. Material is directly transported from the jaw crusher to the disk mill, allowing large feed sizes to be processed in one step to a defined final fineness of small particles. This two-step grinding process is necessary for hard or brittle materials that require initial coarse reduction followed by fine grinding. The combi unit streamlines workflows, eliminates manual sample transfer, and significantly reduces processing time. It minimizes dust emissions and ensures efficient, reproducible results, making it an ideal solution for applications in agriculture, cement production, mining, precious metal analysis, materials research, and environmental analysis.

### APPLICATION EXAMPLE OF THE COMBI UNIT

- Gap setting jaw crusher: 2 mm
- Gap setting disc mill: 0.2 mm
- Feed size: 60 mm
- Final fineness: 200 µm
- Sample amount: 1 kg

## APPLICATION EXAMPLES

bauxit, cement clinker, chalk, chamotte, coal, coke, concrete, construction waste, dental ceramics, dried soil samples, drilling cores, electrotechnical porcelain, ferro alloys, glass, granite, gypsum, hydroxyapatite, ores, quartz, sewage sludge, sintered ceramics, slag, soils, steatite, ...

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

# FUNCTIONAL PRINCIPLE

In the DM 200 the feed material enters the dustproof chamber from the filling hopper and is fed centrally between two vertical grinding discs. A moving grinding disc rotates against a fixed one and draws in the feed material. The necessary comminution effects are generated by pressure and frictional forces. The progressively arranged grinding disc meshing first subjects the sample to preliminary crushing; centrifugal force then moves it to the outer regions of the grinding discs where fine comminution takes place. The processed sample exits through the grinding gap and is collected in a receiver. The gap width between the grinding discs is continuously adjustable and can be adjusted during operation in the range between 0.1 and 5 mm; an additional observation window is provided for checking the gap setting.

DISC MILL DM 200

# TECHNICAL DATA

| | |
|---|---|
| **Applications** | preliminary and fine grinding |
| **Field of application** | chemistry / plastics, construction materials, engineering / electronics, geology / metallurgy, glass / ceramics |
| **Feed material** | medium-hard, hard, brittle |
| **Size reduction principle** | pressure, friction |
| **Material feed size*** | < 20 mm |
| **Final fineness*** | 50 µm for hardened steel discs<br>100 µm for tungsten carbide or zirconium oxide discs |
| **Speed at 50 Hz (60 Hz)** | 440 min-1 (528 min-1) |
| **Material of grinding tools** | zirconium oxide, hardened steel, tungsten carbide, manganese steel |
| **Gap width setting** | continuous, 0.05 - 5 mm |
| **Rotating direction** | doubling the life time of the discs by changing the direction of rotation |
| **Collector capacity** | 2.5 l |
| **Drive** | 3-phase geared motor |
| **Drive power** | 1.5 kW |
| **Electrical supply data** | different voltages |
| **Power connection** | 3-phase |
| **Protection code** | IP 55 |
| **W x H x D closed** | 440 x 400 x 870 mm |
| **Net weight** | ~ 140 kg |
| **Standards** | CE |

*depending on feed material and instrument configuration/settings

**www.retsch.com/dm200**

# ORDER DATA

## DISC MILL DM 200

**Disc Mill DM 200 complete with grinding discs**

| | | | | Grinding discs |
|---|---|---|---|---|
| 20.740.0013 |  | DM 200 | 3/N~ 400 V, 50 Hz | manganese steel |
| 20.740.0012 |  | DM 200 | 3/N~ 400 V, 50 Hz | hardened steel |
| 20.740.0014 |  | DM 200 | 3/N~ 400 V, 50 Hz | tungsten carbide |
| 20.740.0015 |  | DM 200 | 3/N~ 400 V, 50 Hz | zirconium oxide |

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

## GRINDING DISCS DM 200

| | | | | |
|---|---|---|---|---|
| 22.456.0002 |  | Grinding discs | manganese steel | 1 pair |
| 22.456.0001 |  | Grinding discs | hardened steel | 1 pair |
| 22.456.0003 |  | Grinding discs | tungsten carbide | 1 pair |
| 22.456.0004 |  | Grinding discs | zirconium oxide | 1 pair |

## CYCLONE FOR DM 200

CYCLONE SET WITH HOLDER, CONNECTING ELEMENT, LID WITH CONNECTOR FOR VACCUUM CLEANER AND SAMPLE OUTLET
(PLEASE ORDER CASSETTE WITH OUTLET SEPERATELY)

| | |
|---|---|
| 22.935.0038 | Cyclone set with sample bottles 0.25 and 0.5 liters |
| 02.183.0143 | Cassette with outlet for use with cyclone |
| 02.605.0420 | Adjustable steel connection tubing (316L) for cyclone set |

| | | |
|---|---|---|
| 05.707.0208 | | FDA certified hose, 1.5 m |
| 22.748.0017 | | Industrial vacuum cleaner Attix, 230 V, 50/60 Hz |

## ACCESSORIES DM 200

| | | |
|---|---|---|
| 22.481.0025 |  | Connector for dust extraction for DM 200 |
| 02.824.0054 | | Frame for combination DM 200/Jaw Crusher BB 200 |
| 22.523.0001 |  | Sample bottles, 250 ml, 10 pieces |
| 22.523.0002 |  | Sample bottles, 500 ml, 10 pieces |