



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

CYCLONE SYSTEM

BYE-BYE DUST AND SAMPLE LOSS

Whether you're preparing samples in mining, precious metals, materials research, or environmental analysis, the RETSCH Cyclone System ensures efficiency, precision and safety like never before!

Why should you choose the RETSCH Cyclone System?

| Total Sample Recovery

Eliminate sample loss during crushing with our cyclone, ensuring accurate and reproducible results for every analysis!

| Enhanced Operator Safety

Our cyclone significantly reduces dust exposure, creating a safer and cleaner working environment for your team!

Plus: Existing instruments can be retrofitted with the cyclone system



USING THE CYCLONE SET WITH A COMBINATION OF TWO MACHINES

Beyond the general advantages of a cyclone, this combination enables pre-crushing and fine grinding in a single pass, resulting in increased process efficiency.

Existing machines BB 250 and DM 200 can be combined with a retrofitting system.



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 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