

Disc Mill DM 400

General Information

The DM 400 is the new comfort model for fine grinding of medium-hard, hard and brittle materials down to 0.05 mm. This model is based on the well-proven DM 200 but offers improved safety features due to the automatic locking of the collecting vessel and grinding chamber, as well as particularly convenient operation thanks to the motor-driven grinding gap adjustment with digital gap display. The clearly structured display shows all grinding parameters.

Thanks to its robust design, the Disc Mill DM 400 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 400 requires only a few minutes to achieve the desired grind size.



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, ...

Product Advantages

- excellent crushing performance
- convenient grinding gap adjustment in 0.05 mm steps - with digital gap display
- easy reproducible gap width setting with digital gap display
- TFT display with robust membrane keyboard
- large, removable plastic funnel with smooth inner surfaces for easy cleaning and optimum material feeding
- wear compensation of grinding disc thanks to zero point adjustment
- Smooth inner surfaces of grinding chamber allow for easy and residue-free cleaning
- additional labyrinth sealing seals the grinding chamber
- easy change of grinding discs
- optional version with polymer interior coating

Features

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
Speed at 50 Hz (60 Hz)	440 min ⁻¹ (528 min ⁻¹)



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Material of grinding tools	zirconium oxide, hardened steel, tungsten carbide, manganese steel
Gap width setting	0.05 - 12 mm
Collector capacity	2.5 l
Drive	3-phase geared motor
Drive power	1.8 kW
Electrical supply data	different voltages
Power connection	3-phase
Protection code	IP 55
W x H x D closed	520 x 630 x 1050 mm
Net weight	~ 240 kg
Standards	CE

Please note:

*depending on feed material and instrument configuration/settings

Function Principle

In the DM 400 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 incremental adjustable and can be motor-driven adjusted during operation in the range between 0.1 and 5 mm.

Order data

Disc Mills DM 200 / DM 400

20.744.0001 DM 400, 3/N~ 400 V, 50 Hz

other electrical versions available for the same price

Grinding discs DM 200 / DM 400

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

Accessories DM 200

22.481.0025 Connector for dust extraction for DM 200