

VIBRATORY DISC MILL RS 300



The Vibratory Disc Mill RS 300 is suitable for the **extremely quick, loss-free and reproducible grinding** of medium-hard, brittle and fibrous materials to analytical fineness. It is possible to process 1, 2, 3 or 4 samples simultaneously. Thanks to the robust universal drive shaft, which sets the grinding jar into a 3-D motion, this mill accepts grinding set weights of up to 30 kg. The closed grinding system guarantees complete processing of the sample.

Just like the RS 200, the RS 300 with its **robust design** has proven to be ideally suitable for applications in geology, mineralogy, metallurgy, as well as in the building materials sector (cement) and in power plants.

Due to the **high end fineness** and speed the RETSCH Vibratory Disc Mills are the perfect choice 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 and homogeneous samples thanks to universal drive shaft (3D vibration of grinding sets)
- | speed: 912 min⁻¹
- | short grinding times
- | autoreverse function (left/right rotation)
- | programmable interval function (start/ stop automatic)
- | wide range of materials for contamination-free grinding
- | grinding jar volumes from 100 ml up to 2,000 ml
- | closed and noise-insulated grinding chamber
- | pneumatic grinding-jar clamping (with air-pressure) for convenient and safe handling
- | additional security feature: mill only starts if the pneumatic pressure is correct
- | optional Autolifter for ergonomic lifting of heavy grinding sets

FEATURES

Applications	size reduction, mixing, trituration
Field of application	construction materials, environment / recycling, geology / metallurgy, glass / ceramics
Feed material	medium-hard, hard, brittle, fibrous
Size reduction principle	pressure, friction
Material feed size*	< 20 mm
Final fineness*	< 20 µm
Batch size / feed quantity*	35 - 2,000 ml
Speed at 50 Hz (60 Hz)	912 min ⁻¹
Material of grinding tools	chrome steel, hardened steel, tungsten carbide, zirconium oxide, steel 1.1740 (for heavy-metal free grinding)
Grinding jar sizes	100 ml / 800 ml / 1,000 ml / 2,000 ml
Setting of grinding time	digital, 00:00 to 59:59
Drive	3-phase motor
Drive power	2.2 kW
Electrical supply data	different voltages
Power connection	3-phase
Protection code	IP 40
W x H x D closed	1150 x 1400 x 810 mm
Net weight	~ 415 kg (without grinding set)
Standards	CE

*depending on feed material and instrument configuration/settings

FUNCTIONAL PRINCIPLE

The vibratory disc mill comminutes by impact and friction. The grinding set is firmly attached to the vibration plate with a pneumatic quick clamping device. The plate with the grinding set is subjected to 3-D vibrations.

The sample is crushed by **extreme pressure, impact and friction generated by centrifugal forces acting on the grinding rings in the dish.** The vibrations are produced by a frequency controlled 2.2 kW 3-phase motor.

www.retsch.com/rs300