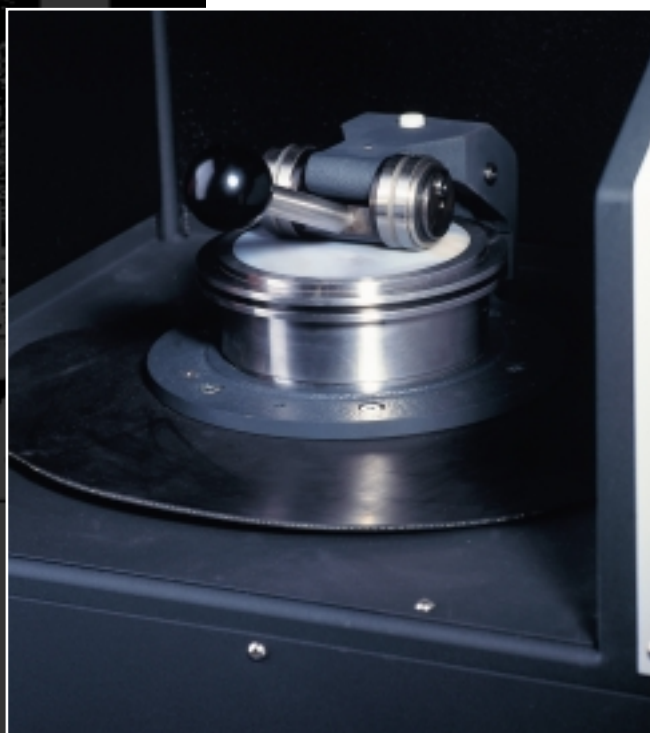


RS 100 VIBRATORY DISC MILL



FINE CRUSHING

RETSCH vibratory disc mills are specially suitable for fast, loss-free ultrafine grinding to analysis fineness. Medium-hard, hard, brittle, fibrous and soft materials can be crushed dry or wet.

With grinding dishes of hardened specialty steel, agate, tungsten carbide and zirconium oxide the use range is wide. The RS 100 devices can thus be used mainly to prepare samples for spectral analysis.

Thanks to their robust design, these mills have also proven highly useful in the construction materials sector, geology, mineralogy and metallurgy.

RETSCH vibratory disc mills also stand out by virtue of their efficiency, user-friendliness and state-of-the-art safety technology.

ADVANTAGES

- extremely short grinding time
- reproducible results
- digital timer accurate to the second
- loss-free dry and wet grinding
- grinding sets in various sizes and materials
- two speed, agate recognition
- quick-action clamping of grinding dish
- closed, noise-insulated grinding chamber
- 2-year guarantee

PERFORMANCE FEATURES

Application	Crushing by pressure and friction, dry and wet
Feed material	Soft, medium-hard, hard, brittle, fibrous
Feed grain size	< 15 mm
Final fineness	approx. 40 µm and smaller
Batch/feed quantity	10 – 250 ml

RS 100 VIBRATORY DISC MILL

RETSCH vibratory disc mills are specially suitable for preparing soils, concrete, ores, glass, ceramics, coal, coke, corundum, metal oxides, minerals, plant samples, slags, silicates, cement, cement clinker and many other similar

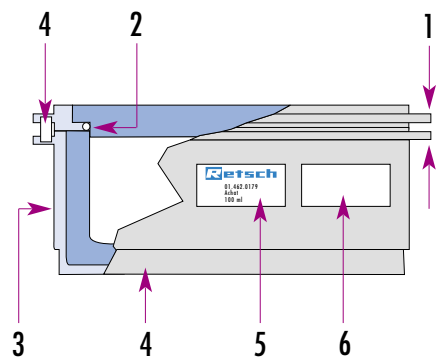
materials. The feed quantity of 250 ml max. depends on the size of the grinding set; the feed grain size depends on the feed material and the size of the grinding set.



RETSCH RS 100 disc-type vibration mill

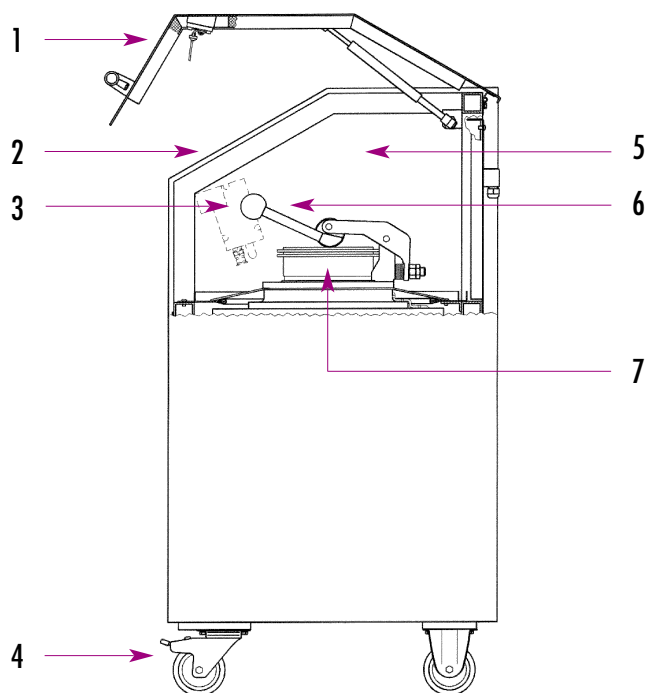
The ergonomically arranged user panel with digital timer accurate to the second and speed buttons is clearly organised and easy to operate. The key switch prevents unintentional alteration of the parameters set. A further outstanding feature of these robust, high-performance devices is the fact that they hardly move even with large grinding sets and at high rotational speed. The RETSCH vibratory disc mills are compact and safe, and they have 4 brakable rollers to facilitate a change of location.

ADVANTAGES OF THE GRINDING DISHES



1. Grip edges for ease of handling when the grinding dishes are removed and opened
2. Optimal sealing using an O ring
3. Protective shell of stainless steel
4. Anti-twist safeguards on cover and bottom
5. Identification marking on grinding dish
6. Free space for markings (e.g. material to be ground)

ANALYSIS FINENESS IN SECONDS



FEATURES OF THE RS 100

1. Hood with gas pressure springs
2. Ergonomic membrane keyboard
3. Safety interlock
4. Brakable rollers
5. Noise-insulated interior
6. Quick-acting clamping device
7. Grinding set, new version

SELECTION OF GRINDING SETS

The grinding sets are selected primarily on the basis of the feed quantity, the hardness of the material to be ground and the influence of the material on the subsequent analysis. Sets of agate or zirconium oxide are recommended for metal-free grinding, and sets of tungsten carbide for very fast, intensive crushing. The inexpensive specialty steel set should be used where Fe and Cr do not have an adverse effect.



Grinding set	Useful volume	Max. feed grain size	Hardness	Basic composition
Specialty steel	50 ml	5 mm	64 RC	85.3% Fe, 12% Cr, 2.2% C
	100 ml	10 mm		
	250 ml	15 mm		
Agate	50 ml	5 mm	7.0 acc. to Mohs	99.9% SiO ₂
	100 ml	10 mm		
Tungsten carbide	50 ml	5 mm	90 RC	94% TC, 6% Co
	100 ml	10 mm		
Zirconium oxide	50 ml	5 mm	8.5 acc. to Mohs	97% ZrO ₂ , 1.4% MgO, 1.4% CaO
	100 ml	10 mm		

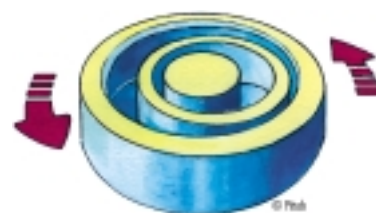
ORDER DATA

RS 100 VIBRATORY DISC MILL (without grinding set, mounted on rollers)	ARTICLE NO.
Type RS 100 for 3 x 400 V, 50 Hz, switchover between 700 and 1400 min ⁻¹	20.724.0003
Type RS 100 for 3 x 220 V, 60 Hz, switchover between 700 and 1400 min ⁻¹	20.724.0001

Grinding sets	Article No.
Specialty steel 50 ml useful volume	01.462.0170
Agate 50 ml useful volume	01.462.0178
Tungsten carbide (TC+Co) 50 ml useful volume	01.462.0177
Zirconium oxide 50 ml useful volume	01.462.0181
Specialty steel 100 ml useful volume	01.462.0171
Agate 100 ml useful volume	01.462.0179
Tungsten carbide (TC+Co) 100 ml useful volume	01.462.0176
Zirconium oxide 100 ml useful volume	01.462.0180
Specialty steel 250 ml useful volume	01.462.0172

NOISE CHARACTERISTICS (Noise measurement to DIN 45635-31-01 Class 3)

Workplace-related emission value	$L_{pA eq} = 76 \text{ dB (A)}$
Sound power level	$L_{WA} = 89 \text{ dB (A)}$
Grinding material	glass fragments < 15 mm (100 ml steel grinding set)



RS 100 TECHNOLOGY

The vibratory disc mill crushes by pressure, impact and friction. The grinding set is firmly clamped to the vibration plate using a quick-clamping lever. The plate with the grinding set goes through horizontal circular vibrations of 700 and 1400 min⁻¹ respectively. The grinding tools located in the dish exert a pressure, impact and friction effect on the grinding material by means of the centrifugal action. The circular vibrations are generated by an out-of-balance drive with polarity-reversible three-phase current 400/700 watt motor. A sensor detects the attachment of agate grinding sets and limits the speed to 700 min⁻¹ in order to prevent damage to the agate. The hood of the noise-insulated grinding chamber has a safety interlock; it can only be opened when the mill is at a standstill.

DIMENSIONS AND WEIGHTS

W x H x D	approx. 820 x 1070 x 685 mm (with hood open H = 1690 mm)
Weight	approx. 237 kg (without grinding set)

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