



ROTOR BEATER MILL SR 300

The Rotor Beater Mill SR 300 is suitable for **coarse and fine size reduction**. It can process **dry, soft, medium-hard, organic and inorganic substances**. For increased sample discharge and for processing heat-sensitive samples, an optionally available cyclone unit can be used instead of the gravity outlet.

APPLICATION EXAMPLES

bentonite, chemical products, coal, coke, drugs, feed pellets, fertilizers, food, graphite, gypsum, herbs, pharmaceutical materials, plant materials, plastics, powder coating, resins, rice, salts, seeds, soils, spices, sugar, ...

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

PRODUCT ADVANTAGES

- | wide range of accessories including various feeding systems, rotors and sieves
- | defined final fineness due to bottom sieves with aperture sizes from 0.08 - 10 mm
- | optional grinding inserts 180° for grinding of hard-brittle materials by additional impact
- | gravity outlet with 5l or 30 L collecting vessel for batchwise collection of larger sample quantities
- | optionally available cyclone unit with 0.25 - 0.5 - 1 - 2 - 5 or 30 liters collecting vessel
- | optional distance rotor to reduce frictional heat
- | adjustable speed for different applications
- | removable hopper for easy cleaning
- | easy cleaning thanks to exchangeable push-fit grinding insert, rotor and cassette
- | central locking device
- | grinding chamber, feed hopper and material inlet and outlet made of stainless steel
- | electric engine brake

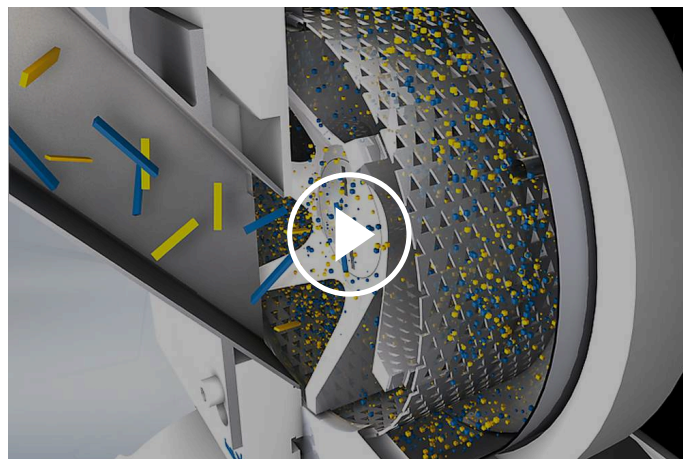
FEATURES

Applications	size reduction, deagglomeration
Field of application	agriculture, chemistry / plastics, construction materials, environment / recycling, food, geology / metallurgy, medicine / pharmaceuticals
Feed material	soft, medium-hard
Material feed size*	< 25 mm
Final fineness*	< 50 µm
Speed at 50 Hz (60 Hz)	3,000 - 10,000 min ⁻¹ (in steps of 500 min ⁻¹)
Rotor peripheral speed	22 ..72 m/s
Types of rotors	standard / distance
Material of grinding tools	rotor and sieves of stainless steel
Sieve sizes	trapezoid holes 0.08 / 0.12 / 0.20 / 0.25 / 0.35 / 0.50 / 0.75 / 1.00 / 1.25 / 1.50 / 2.00 mm round holes 3.00 / 4.00 / 10.00 mm
Hinged hopper	removeable hopper
Dust extraction unit	optional cyclone
Collector capacity	5 l / optional: 30 l
Drive	3-phase motor
Electrical supply data	200-240 V, 50/60 Hz
Power connection	1-phase
Engine brake	yes, electric
Protection code	IP 41
Power consumption	2.5 kW
W x H x D closed	600 x 1200 x 700 mm (with base frame)
Net weight	~ 60 kg (with base frame)
Standards	CE

*depending on feed material and instrument configuration/settings

FUNCTIONAL PRINCIPLE

Size reduction and deagglomeration in the SR 300 are achieved by **impact and shear effects**. The feed material passes from the hopper into the center of the grinding chamber where it is crushed between the rotor, sieve and grinding inserts. As soon as the material is smaller than the aperture size of the sieve it enters the collecting receptacle through the gravity outlet. The airborne fine fraction is separated off by a downstream filter system. The optionally available cyclone separator ensures a cooling of the sample material and the cutting tools and improves the discharge of the sample from the grinding chamber. The quick-acting door lock ensures easy access to the grinding chamber for quick cleaning. With their safety switch, splashback and access barrier in the inlet and outlet areas, Rotor Beater Mills offer the highest degree of operating safety.



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