



# 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.



#### 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 5I 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

### **APPLICATION EXAMPLES**

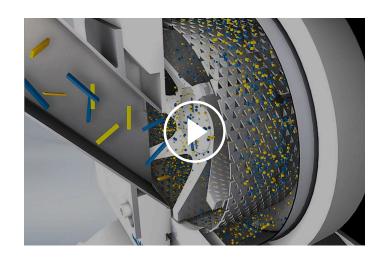
bentonite, chemical products, coal, coke, drugs, feed pellets, fertilizers, food, graphite, gypsum, herbs, pharmaceutical materials, plant materials, plastics, powder coating, resins, rice, salts, seeds, soils, spices, sugar,

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



### **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.



Click to view video



### **ROTOR BEATER MILL SR 300**

### **TECHNICAL DATA**

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	2272 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 I / optional: 30 I	
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	

<sup>\*</sup>depending on feed material and instrument configuration/settings

www.retsch.com/sr300



### ORDER DATA

# ROTOR BEATER MILL SR 300

Rotor Beater Mill SR 300 with rotor, 240 mm filter hose and collecting receptacle (please order retaining frame, sieves and optional base frame separately)

20.752.0001

SR 300 200

200-240 V, 50/60 Hz, incl. standard rotor

20.752.0002



SR 300

200-240 V, 50/60 Hz, incl. distance rotor

22.824.0007

Base frame with wheels

### RETAINING FRAMES AND RING SIEVES FOR SR 300

RETAINING FRAME 360° OF STAINLESS STEEL

22.642.0004



Retaining frame 360°

RING SIEVES 360° OF STAINLESS STEEL			
02.407.0057		Trapezoid holes	0.08 mm
02.407.0026		Trapezoid holes	0.12 mm
02.407.0028		Trapezoid holes	0.20 mm
02.407.0029		Trapezoid holes	0.25 mm
02.407.0120		Trapezoid holes	0.35 mm
02.407.0030		Trapezoid holes	0.50 mm
02.407.0031		Trapezoid holes	0.75 mm



02.407.0032		Trapezoid holes	1.00 mm	
02.407.0058		Trapezoid holes	1.25 mm	
02.407.0033		Trapezoid holes	1.50 mm	
02.407.0034		Trapezoid holes	2.00 mm	
02.407.0035		Round holes	3.00 mm	
02.407.0036	9	Round holes	4.00 mm	
02.407.0037	6	Round holes	5.00 mm	
02.407.0043		Round holes	6.00 mm	
02.407.0039		Round holes	8.00 mm	for pre-grinding
02.407.0040		Round holes	10.00 mm	

### RETAINING FRAME 180° OF STAINLESS STEEL

02.143.0066



Retaining frame with grinding insert for sieves  $180^{\circ}$ 

SIEVES 180° OF STAINLESS STEEL				
03.647.0081		Trapezoid holes	0.08 mm	
03.647.0039		Trapezoid holes	0.12 mm	
03.647.0040		Trapezoid holes	0.20 mm	



03.647.0041	Trapezoid holes	0.25 mm	
03.647.0395	Trapezoid holes	0.35 mm	
03.647.0042	Trapezoid holes	0.50 mm	
03.647.0043	Trapezoid holes	0.75 mm	
03.647.0044	Trapezoid holes	1.00 mm	
03.647.0045	Trapezoid holes	1.25 mm	
03.647.0046	Trapezoid holes	1.50 mm	
03.647.0047	Trapezoid holes	2.00 mm	
03.647.0048	Round holes	3.00 mm	
03.647.0049	Round holes	4.00 mm	
03.647.0050	Round holes	5.00 mm	
03.647.0051	Round holes	6.00 mm	
03.647.0052	Round holes	8.00 mm	
03.647.0053	Round holes	10.00 mm	for pre-grinding

# ACCESSORIES SR 300

CYCLONE-SUCTION-COMBINATION FOR SR 300



22.935.0020	Cyclone unit incl. 5 litres collection receptacle (to be used with industrial vacuum cleaner)
22.935.0021	Cyclone unit incl. 26 litres collection receptacle (to be used with industrial vacuum cleaner)
22.748.0005	Industrial vacuum cleaner for mills, 230 V, 50/60 Hz (other electrical versions and spare filter bags available upon request)

# **ADDITIONAL ITEMS SR 300**

ABBITTOTA LETTEMS SIX 500			
22.717.0007	*	Distance rotor of stainless steel	
22.717.0006	世	Standard rotor of stainless steel	
03.010.0052	•	Sieve cassette, stainless steel	
22.187.0008	•	Ring-type filter for collecting receptacle 5 litres	
22.748.0001		Dust filter clamping rings for ring-type filter, incl. 5 dust filters	
05.742.0008	•	Dust filters for ring-type filter, 1 piece (please order amount multiple of 25 pcs.)	
02.011.0038	1	Collecting receptacle, 5 litres, stainless steel	
02.187.0020	•	Filter hose for collecting receptacle 5 litres, length 240 mm, incl. "comfort" flange	
02.186.0037	0	Spare filter hose for 02.187.0020	
22.003.0015		Collecting receptacle, 26 litres, plastic, incl. filter hose and "comfort" flange	
02.186.0042	0	Spare filter hose for 22.003.0015	
99.200.0024		IQ/OQ Documentation for SR 300	

### VIBRATORY FEEDER DR 100 FOR SR 300

DR 100 drive unit (please order feeding kit separately)



70.938.0001	V	DR 100 drive unit	220–240 V, 50 Hz	
70.938.0003	V	DR 100 drive unit	220–240 V, 60 Hz	
70.938.0010	V	DR 100 drive unit	200 V, 50 Hz	
70.938.0006	Y	DR 100 drive unit	200 V, 60 Hz	
72.020.0019		Feeding kit DR 100/3.5 litres for SR 300/SK 300, incl. push-fit feed chute 75 mm, holder for push-fit feed chute, hopper 3.5 litres and holder for hopper and fixture		
72.020.0020		Feeding kit DR 100/22 litres for SR 300/SK 300, incl. push-fit feed chute 75 mm, holder for push-fit feed chute, hopper 22 litres and holder for hopper and fixture		