



# 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 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

### **APPLICATION EXAMPLES**

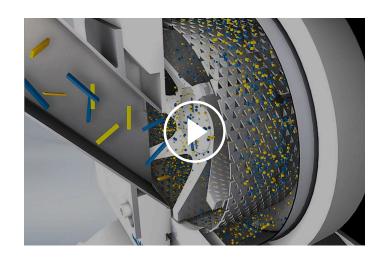
bentonite, chemical products, coal, coke, drugs, feed pellets, fertilizers, food, graphite, gypsum, herbs, pharmaceutical materials, plant materials, plastics, powder coating, resins, rice, salts, seeds, soils, spices, sugar,

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### **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**

|                            | · <u></u>  |  |
|----------------------------|--|--|
| 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 300 200–240 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                         | Round holes     | 4.00 mm |  |



| 02.407.0037 | 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°

| 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**



Distance rotor of stainless steel

22.717.0006



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 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 Spare filter hose for 02.187.0020

22.003.0015 Collecting receptacle, 26 litres, plastic, incl. filter hose and "comfort" flange

02.186.0042 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 | Y | DR 100 drive unit   | 220–240 V, 50 Hz |
|-------------|---|---|------------------|
| 70.938.0003 | Y | 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   |                  |