

RETSCHE Product Navigator

■ Milling

Jaw Crushers

Rotor Mills

- ZM 200

- SR 200

- SR 300

- SK 100

Cutting Mills

Mortar Grinders

Disc Mills

Ball Mills

■ Sieving

■ Assisting

Size reduction with rotor mills



Ultra centrifugal mill

The powerful drive of the innovative Ultra Centrifugal Mill ZM 200 ensures rapid grinding results. Together with its extremely efficient operation the ZM 200 can prepare 100 samples or more per day for analysis.

Rotor beater mills and cross beater mills

Due to their robust design and their ability to process large amounts of sample, the Rotor Beater Mills SR 200, SR 300 and SK 100 are ideal for small-scale production and are also suitable for continuous size reduction in online operations.

Retsch®

Solutions in Milling & Sieving

Superiority in detail – technology from RETSCH

The **rotor mill series** includes ultra centrifugal mills, rotor beater mills and cross beater mills. Depending on the particular instrument they are suitable for the preliminary and fine size reduction of soft, fibrous and also hard materials. A final fineness of down to 40 µm can often be achieved in the first working step. The maximum feed size depends on the mill and ranges from 10 to 15 mm. Material which is larger than this must first undergo preliminary size reduction.

Preliminary size reduction



For the coarse and preliminary size reduction of hard, brittle or hard-tough materials the RETSCH jaw crushers have proven themselves in practice. In contrast, bulky, soft, fibrous or tough materials are best processed in RETSCH cutting mills.

Sample dividers



Sample dividers, rotary tube sample dividers, sample splitters – with RETSCH sample dividers you can obtain representative part samples from pourable powders and bulk goods.

Ultra Centrifugal Mill ZM 200

Proven standard for universal use

Ultra centrifugal mills from RETSCH have been successfully used for many years in laboratories throughout the world. Since the first model, ZM 1, there has been a program to continuously develop and upgrade the product with design goals based on satisfying existing customer needs and requirements. The result is the ZM 200 which offers the ultimate in performance and operating comfort.

Ultra centrifugal mills from RETSCH are efficient, safe and intended for universal use. In many fields such as the manufacture of feeds and powder coatings, they have become the standard mill for sample preparation.



“Powerdrive” for maximum throughput



The heart of the ZM 200 is the innovative “Powerdrive”. The perfectly matched frequency converter and 3-phase motor provide a considerably higher throughput when compared with other rotor mills. Size reduction takes place extremely quickly and efficiently.

Efficient handling

The ZM 200 is designed for both demanding grinding tasks and highly efficient routine work. Collection cassette, ring sieve, push-fit rotor or labyrinth disc – everything can be removed quickly and easily for cleaning without any tools. Thus, cross-contamination from frequently changing samples is a thing of the past.



Rotor Beater Mills SR 200 and SR 300

Rotor beater mills can process large sample amounts in a very short time due to the large surface area of the 360° ring sieves.

SR 200 – the time-proven standard model

The SR 200 is a well-proven, powerful rotor beater mill that satisfies many requirements. With its reduced motor speed, the SR 200 is the ideal grinder to prepare coal for the various analyses according to international standards (ash contents, calorific value), especially when using the 180° impact insert.

SR 300 – the efficient comfort model

The SR 300 is the leader among the rotor beater mills. Its high speed in comparison to the SR 200 allows a significantly higher throughput. The ground sample also has a larger fraction of fine material. Grinding chamber, feed hopper and material inlet and outlet are completely made from high-quality stainless steel.



The newly designed hopper of the SR 300 can be removed for easy and rapid cleaning.

Cross Beater Mill SK 100 comfort



Safe and comfortable operation

Like the rotor beater mills, the Cross Beater Mill SK 100 comfort offers the highest possible degree of operating safety. For example, if the off-switch is pressed or the door is opened, the motor brake ensures that the rotor will come to a standstill in less than 0.5 seconds. The feed hopper, as well as the optimized sample outlet, is equipped with an access barrier that also prevents sample splash-back.

The SK 100 is easy to clean which reduces preparation time. The quick-action door lock allows rapid access to the grinding chamber and the high-quality sample outlet surface simplifies cleaning.

The comfort flange simplifies the handling of the filter tube and ensures increased stability.

Heavy-metal-free grinding tools

Baffle plates made of steel 1.1740 and bottom sieves of St 1203 ensure reliability for the subsequent heavy metal analysis.



Ultra Centrifugal Mill ZM 200



High-speed power for excellent grinding results

With the Ultra Centrifugal Mill ZM 200 RETSCH now offers a mill with previously unmatched performance. The new "Powerdrive" ensures higher performance with increased torque. The machine even reacts to temporary overloads with a continued throughput which ensures particularly efficient grinding.

The extremely quick size reduction increases sample throughput in the laboratory and, in combination with the 2-step rotor-ring sieve system, is also extremely gentle on the material.

Soft, elastic products such as plastics, which do not process well at room temperature, can be fed into the mill after embrittlement with liquid nitrogen or dry ice.

Benefits at a glance

- Versatile in use due to wide range of accessories
- High final fineness
- Wide speed range, adjustable from 6 000 to 18 000 min⁻¹
- Considerably increased throughput due to optimally matched frequency converter and 3-phase motor
- Safety housing with automatic cover closure
- Motor compartment and electronics protected against dust and material penetration
- Safe design to CE standard
- 2-year warranty

Versatile and efficient

The RETSCH Ultra Centrifugal Mill ZM 200 is used for the rapid fine size reduction of soft to medium-hard and fibrous materials. Because of the efficient size reduction technique and the comprehensive range of accessories **the ZM 200 ensures the gentle preparation of analytical samples in a very short time.**

The suitability of the ZM 200 for **universal use** is shown by the following examples:

- **chemicals, drugs, spices, coal, synthetic resins, plastics, pharmaceutical raw materials and finished products, fertilizers**

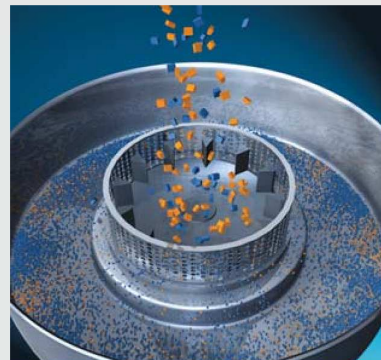
- **nitrogen and protein determination in food and feedstuffs**
- **environmental studies into plant constituents**
- **preparation of bones**
- **fossil fuels and secondary fuels**
- **sample batch production of customized powder coatings**
- **surfactant determination in washing powders**

The ultra centrifugal mill is used in both quality control and R&D.

ZM 200 technology

In the ultra centrifugal mill size reduction takes place by impact and shearing effects between the rotor and the fixed ring sieve. The feed material passes through the hopper (with splash-back protection) onto the rotor. Centrifugal acceleration throws it outward with great energy and it is pre-crushed on impact with the wedge-shaped rotor teeth moving at a high speed. It is then finely ground between the rotor and the

ring sieve. This 2-step grinding ensures particularly gentle but fast processing. The feed material only remains in the grinding chamber for a very short time, which means that the characteristic features of the sample to be determined are not altered. The ground sample is collected in the collecting cassette surrounding the grinding chamber or in the downstream cyclone or paper filter bag.



Suitable for almost any task

Its wide range of accessories and the possibility to individually select the rotor speed make the ZM 200 easily adaptable to any size reduction task.

The feed material is introduced either manually or via an optional load-controlled Vibratory Feeder DR 100. This automatic sample feed ensures **particularly uniform grinding results**. The ground sample is collected in the cassette. The innovative cassette principle ensures easy and loss-free material removal and avoids cross-contamination.

For **grinding larger amounts** we recommend the use of a paper filter bag or a cyclone with a 3 l or 5 l collecting receptacle. If a cyclone or paper filter bag is used then the sample will be cooled by the air stream and discharged more rapidly from the grinding chamber via the passage receptacle.

All parts coming into contact with the sample can be removed, cleaned and reassembled without using any tools.



Controlled and uniform material feed:
ZM 200 with Vibratory Feeder DR 100



Automatic size reduction of large amounts:
ZM 200 with Vibratory Feeder DR 100 and cyclone

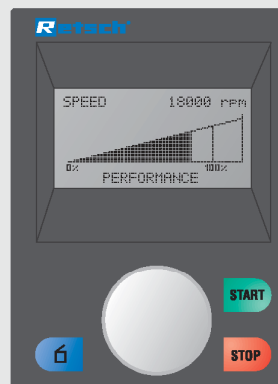
Performance data		ZM 200
Application		fine grinding
Field of application		agronomy, chemistry, biology, medicine, pharmaceuticals, plastics, foods, environment, construction materials
Feed material		soft, medium-hard, brittle, fibrous
Feed size		up to 10 mm
Final fineness*		<40 µm
Sample volume (nominal)	with standard cassette	up to 300 ml (900 ml)
	with mini-cassette	up to 20 ml (50 ml)
	with paper filter bag	up to 1000 ml (3000 ml)
	with cyclone	up to 2500 ml (3000 ml), or up to 4500 ml (5000 ml)
Speed range		6000 - 18000 min ⁻¹ , freely selectable
Rotor peripheral speed		30.9 - 92.8 m/s
*depending on feed material and instrument configuration/settings		
Technical data		
Power consumption		approx. 1300 W (VA)
W x H x D		410 x 515 x 365 mm
Weight, net		approx. 38 kg
Noise values (noise measurement according to DIN 45635-31-01-KL3)		
Emission value with regard to workplace		L _{pAeq} 77.5 dB(A)
Measuring conditions:		
Sample		burnt lime
Feed size		< 5 mm
Rotor used		12-tooth rotor
Ring sieve used		0.5 mm Conidur holes

New technology with maximum operating comfort

The ZM 200 is very simple and safe to use. The parameters are easily set via a graphics display and 1-button operation. All relevant data can be comfortably entered or called up, e.g.

- speed
- drive load factor
- operating hours
- service intervals
- clear text error messages

The multi-language menu guidance system allows the adaptation of the display to the user's requirements. The electronic safety and diagnosis system **virtually rules out operating errors**.



ZM 200 – powerful, safe, versatile

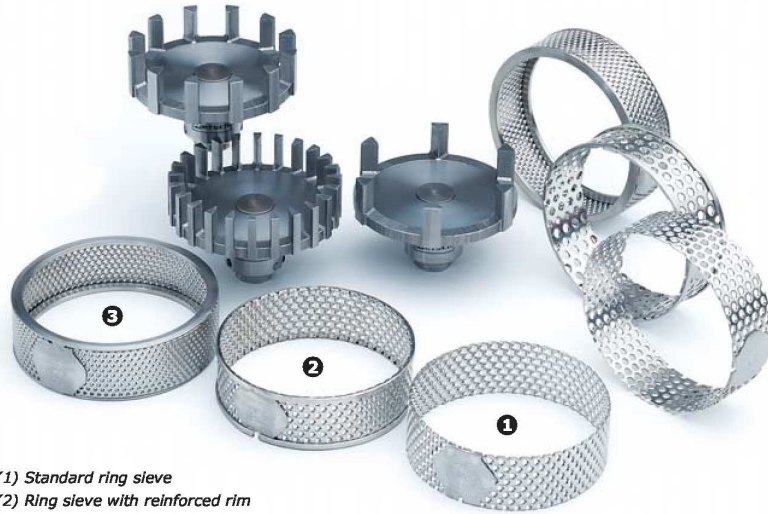
Rotors and ring sieves

The selection of the push-fit rotors and ring sieves depends on the properties of the sample, the required final fineness and the subsequent analysis.

The selection of the ring sieve aperture size depends on the required final fineness and the feed material. With most materials approx. 80% of the total sample achieves a fineness of less than half the aperture size of the ring sieve used.

Rotors and ring sieves are available in various materials and types. The reinforced rims provide the ring sieves with greater stability.

Temperature-sensitive, brittle materials such as powder coatings and resins are particularly easy to grind with the **distance sieves** that have been specially developed for this purpose.



(1) Standard ring sieve
(2) Ring sieve with reinforced rim
(3) Distance sieve

Rotors and ring sieves with an abrasion-resistant coating are used for reducing the size of abrasive substances such as fertilizers.

For **heavy-metal-free size reduction** of non-abrasive materials we recommend the use of rotors and ring sieves made from titanium

covers with a titanium-niobium coating.

Thanks to the wide range of accessories with rotors, ring sieves and different types of collection systems, the ZM 200 can be easily adapted to suit a wide variety of applications.

Rotor selection guide

Rotor	Field of application
6-tooth rotor	coarse, bulky, fibrous goods such as feed pellets, hay and straw
12-tooth rotor	medium-coarse goods such as wheat, oats, corn, tablets, powder coatings and plastics
24-tooth rotor	fine goods such as chemicals, coal and sugar
8-tooth mini-rotor	specially for size reduction of small sample amounts up to 20 ml



Accessories for grinding small volumes

In many fields, e.g. in the pharmaceutical industry, the required sample amounts are very small. Therefore the ZM 200 is now available with a mini-cassette for small sample volumes of up to 20 ml which is used in combination with the 8-tooth mini-rotor. The loss-free recovery of smaller amounts of sample is made easier by the reduced cassette diameter. Suitable ring sieves are available with aperture sizes from

0.08 to 2.00 mm. If the grinding tools for small volumes are used in the ZM 200 only a small labyrinth disc is required. The necessary accessories are available as a conversion kit.

All parts coming into contact with the sample, including the cassette and ring sieves, are made from corrosion-resistant steel 1.4404 (316).

Order data for Ultra Centrifugal Mill ZM 200

Ultra Centrifugal Mill ZM 200													Item No.		
ZM 200 with cassette (900 ml) (please order push-fit rotor and ring sieve separately)															
ZM 200	for 230 V, 50/60 Hz											20.823.0001			
ZM 200	for 110 V, 50/60 Hz											20.823.0002			
ZM 200	for 120 V, 50/60 Hz											20.823.0003			
Push-fit rotors and ring sieves for normal use													Item No.		
Push-fit rotor													6-tooth	12-tooth	24-tooth
Push-fit rotor, stainless steel													02.608.0040	02.608.0041	02.608.0042
Ring sieves		Conidur holes								Round holes					
Aperture sizes in mm		0.08	0.12	0.20	0.25	0.50	0.75	1.00	1.50	2.00	3.00	4.00	5.00	6.00	
Ring sieves, stainless steel															
Item No.: 03.647...		0231	0232	0233	0234	0235	0236	0237	0238	0239	0240	0241	0242	0243	
Ring sieves, stainless steel, with reinforced rim, recommended for tough materials															
Item No.: 03.647...		0244	0245	0246	0247	0248	0249	0250	0251	0252	0272	0273	0274	0275	
Distance sieves, stainless steel, recommended for temperature-sensitive materials															
Item No.: 03.647...		0253	0254	0255	0256	0257	0258	0259	0260	-	-	0261	-	-	
Distance sieves, stainless steel, square holes, 10 mm, for pre-grinding													03.647.0298		
Push-fit rotors and ring sieves for abrasive products													Item No.		
Push-fit rotor													6-tooth	12-tooth	24-tooth
Push-fit rotor, stainless steel, with wear-resistant coating													02.608.0043	02.608.0044	02.608.0045
Ring sieves		Conidur holes								Round holes					
Aperture sizes in mm		0.08	0.12	0.20	0.25	0.50	0.75	1.00	1.50	2.00	3.00	4.00	5.00	6.00	
Ring sieves, stainless steel, with reinforced rim, wear-resistant coating															
Item No.: 03.647...		-	-	0262	0263	0264	0265	0266	0267	0268	0269	-	-	-	
Push-fit rotors and ring sieves for heavy-metal-free grinding													Item No.		
Push-fit rotor													12-tooth		
Push-fit rotor, titanium													02.608.0047		
Cassette, titanium-niobium coating, complete (base, cover and seal)													22.355.0006		
Ring sieves		Conidur holes								Round holes					
Aperture sizes in mm		0.08	0.12	0.20	0.25	0.50	0.75	1.00	1.50	2.00	3.00	4.00	5.00	6.00	
Ring sieves, titanium, with reinforced rim															
Item No.: 03.647...		0270	0271	0276	0277	0278	0279	0280	0281	0282	-	0283	-	-	
Accessories for grinding small volumes													Item No.		
Conversion set for grinding small volumes, consisting of 8-tooth push-fit rotor, labyrinth disc and cassette (50 ml)													22.786.0002		
8-tooth push-fit rotor, corrosion-resistant steel 1.4404 (316)													02.608.0057		
Labyrinth disc													02.706.0247		
Cassette (50 ml), corrosion-resistant steel 1.4404 (316), complete (base, cover and seal)													02.010.0039		
Ring sieves		Conidur holes								Round holes					
Aperture sizes in mm		0.08	0.12	0.20	0.25	0.50	0.75	1.00	1.50	2.00	3.00	4.00	5.00	6.00	
Ring sieves, corrosion-resistant steel 1.4404 (316)															
Item No.: 03.647...		0287	0288	0289	0290	0285	0291	0292	0293	0294	-	-	-	-	
Accessories for grinding large volumes													Item No.		
Cyclone for ZM 200 with passage receptacle and holder, with 5 liter collector													22.935.0009		
Cyclone for ZM 200 with passage receptacle and holder, with 3 liter collector													22.935.0010		
Paper filter bags (12 pieces) with passage receptacle and flange													22.261.0003		
Accessories for automatic material feed													Item No.		
Feeder kit DR 100, complete with feed attachment and 40 mm push-fit feed chute, length 250 mm, hopper, stand and data cable															
DR 100		for 220-240 V, 50 Hz											22.936.0001		
DR 100		for 110-120 V, 60 Hz											22.936.0002		
Other accessories / Spare parts													Item No.		
Spare cassette (900 ml), stainless steel, complete (base, cover and seal)													02.010.0037		
Spare cassette cover, stainless steel, with seal													22.355.0003		
See price list for further accessories															

Rotor Beater Mills

SR 200 and SR 300



Size reduction, deagglomeration

RETSCH rotor beater mills are suitable for coarse and fine size reduction, either in batches or continuously, as well as for the deagglomeration of dry, soft and medium-hard organic and inorganic substances. The mills can be used for sample preparation in the laboratory or in pilot plants for large sample quantities.

Grinding large volumes in no time

The range of applications of the RETSCH beater mills is just as versatile as the wide range of accessories. They crush:

- chemicals
- coal
- construction materials
- drugs /spices
- rare earths
- feed pellets
- fertilizers
- flue ash
- grains /seeds
- pharmaceuticals
- soils

and many other materials.

The **SR 200** with a speed of 2850 min⁻¹ (at 50 Hz) is available in gray cast iron. The mill can be attached to a bench or a wall bracket; however, it is preferable to mount it on the optional base frame.

The **SR 300** is the powerful "comfort" model. Due to the higher rotor speed (8100 min⁻¹ at 50 Hz) and drive performance higher throughputs with a usually higher fine material fraction are obtained. Grinding chamber, feed hopper and the material inlet and outlet are completely made from stainless steel. The hopper can be removed for easy cleaning. The mill is supplied complete with base frame.

Benefits at a glance

- High throughput
- High final fineness
- Versatile in use
- Easy cleaning
- Exchangeable grinding and sieve inserts
- Quick-action door lock and motor brake
- Safe design to CE standard
- 2-year warranty

SR 200, SR 300 technology

Size reduction and deagglomeration in rotor mills are achieved by hammering, 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.

The quick-acting door lock ensures easy access to the grinding chamber for quick cleaning. With their motor brake (braking time < 0.5 s), safety switch, splash-back and access barrier in the inlet and outlet areas, rotor beater mills offer the highest degree of operating safety.



Ideal for laboratory and small-scale production

Selection of accessories

For soft materials we recommend the **sieve frame with ring sieve 360°**. The **grinding insert 180°** with the corresponding sieve combines impact and shear effects and has proven itself with hard, brittle substances, especially on the low-speed SR 200.

The final fineness depends on the aperture size of the sieve, the breaking behavior of the feed material and the rotor speed. With many materials approx. 80% of the ground material is smaller than half the aperture size.

For thermally sensitive, slightly fatty or oily or particularly soft sample materials, size reduction with **distance rotors** is ideal. The larger grinding gap ensures a reduction in frictional heat, which prevents the sieve or the rotor from being blocked. This configuration is particularly efficient with the high-speed SR 300.

Among the standard accessories supplied with the rotor beater mills are a collecting receptacle (5 l)

Performance data	SR 200	SR 300
Applications	size reduction, deagglomeration	
Field of application	soft to medium-hard	
Feed size*	<15 mm	<15 mm
Final fineness*	<80 µm	<50 µm
Vessel capacity	5 or 30 l	5 or 30 l
Throughput*	up to 120 kg/h	up to 360 kg/h
Grinding chamber material	gray cast iron	stainless steel

Technical data		
Drive	3-phase and 1-phase motors	
Brake motor	yes	yes
Drive performance	1.1 kW	2.2 kW
Motor speed at 50 Hz (60 Hz)	2850 min ⁻¹ (3420 min ⁻¹)	8100 min ⁻¹ (9700 min ⁻¹)
Rotor peripheral speed at 50 Hz (60 Hz)	20.5 m/s (24.5 m/s)	58 m/s (69.5 m/s)
W x H x D (with base frame)	560 x 1200 x 700 mm	560 x 1200 x 700 mm
Weight (with base frame)	approx. 57 kg	approx. 95 kg

Noise values (noise measurement according to DIN 45635-31-01-KL3)		
Emission value with regard to workplace	L _{pAeq} 81 dB(A)	L _{pAeq} 91 dB(A)
Measuring conditions:		
Ring sieve	0.5 mm Conidur	0.5 mm Conidur
Feed material	rye, grain size up to 15 mm	artificial fertilizer up to 3 mm

*depending on feed material and instrument configuration/settings

made from stainless steel and a textile filter hose. Further useful accessories can be found on page 12.



Order data for Rotor Beater Mills SR 200, SR 300

Rotor Beater Mills SR 200, SR 300		Item No.
Rotor Beater Mill SR 200, supplied with rotor beater, filter hose (240 mm), collecting receptacle (5 l) (Please order sieve frame or grinding insert, sieves and, if required, base frame separately)		
SR 200	for 3/N~400 V, 50 Hz, rotor speed 2850 min ⁻¹ , gray cast iron	20.732.0001
SR 200	for 230 V, 50 Hz, rotor speed 2850 min ⁻¹ , gray cast iron	20.732.0003
Rotor Beater Mill SR 300, supplied with rotor beater, filter hose (240 mm), collecting receptacle (5 l) and base frame (Please order sieve frame or grinding insert and sieves separately)		
SR 300	for 3/N~400 V, 50 Hz, rotor speed 8100 min ⁻¹ , stainless steel	20.733.1002

Sieve frames and ring sieves for SR 200, SR 300	Item No.	Item No.
Sieve frame 360°, grinding insert 180°		
Sieve frame 360°	chrome-plated: 22.642.0002	stainless steel: 22.642.0001
Grinding insert 180° with frame	-	stainless steel: 02.143.0014
	Conidur holes	Round holes
Aperture sizes in mm	0.08 0.12 0.20 0.25 0.50 0.75 1.00 1.25 1.50 2.00 3.00 4.00 5.00 6.00 8.00 10.00	
Ring sieve 360°, stainless steel, for sieve frame 360°		
Item No.: 02.407...	0057 0026 0028 0029 0030 0031 0032 0058 0033 0034 0035 0036 0037 0043 0039 0040	
Sieve inserts 180°, stainless steel, for grinding insert 180°		
Item No.: 03.647...	0081 0039 0040 0041 0042 0043 0044 0045 0046 0047 0048 0049 0050 0051 0052 0053	

Accessories for SR 200, SR 300	Item No.	Item No.
	for SR 200	for SR 300
Base frame	01.824.0028	
Distance rotor, stainless steel	22.717.0003	22.717.0004
Beater rotor, stainless steel	22.717.0001	22.717.0002

Cross Beater Mill

SK 100 comfort



Benefits at a glance

- High throughput
- High final fineness
- Versatile in use
- Easily changeable bottom sieves
- Wide range of accessories
- Maintenance-free direct drive
- Safe design to CE standard
- 2-year warranty

Hard-to-beat size reduction

The RETSCH Cross Beater Mill SK 100 comfort is suitable for coarse and fine size reduction, either in batches or continuously. It can process medium-hard and brittle materials with a hardness of up to approx. 6 on Mohs' scale. The SK 100 is intended for universal use: from sample preparation in laboratories and industrial plant, through pilot installations up to preparing batches in production facilities.

RETSCH cross beater mills are mainly used for reducing the size of:

- cement clinker
- coke
- glass
- gravel
- minerals
- ores
- oxide ceramics
- slags
- soils

and many other similar materials.

The maximum feed size for bulk goods is 15 mm, for single-piece feed 20 mm. The final fineness and throughput depend on the breaking behavior of the feed material and the aperture size of the bottom sieve. Due to the powerful drive it is possible to achieve a fineness <math><100 \mu\text{m}</math> in a single working step in many cases.

The SK 100 comfort is distinguished by its extra operating comfort and standard of safety. The grinding chamber door can be opened and closed quickly and simply with its quick-action lock. This means that changing the bottom sieves and cleaning the grinding chamber hardly take any time at all. If the quick-action lock is accidentally opened then a safety switch activates the motor brake, so that the rotor comes to a standstill in less than 0.5 seconds. The feed hopper is equipped with access barrier and splash-back protection.

RETSCH cross beater mills are robust and maintenance-free and comply with the CE guidelines. Their high-quality finish also guarantees that the mills will have a long working life.

SK 100 comfort technology

Size reduction in cross beater mills takes place by hammering, impact and shearing effects. The feed material passes from the hopper directly into the center of the grinding chamber, where it is caught by the cross beater and ground between the baffle plates of the cross beater and the toothed grinding insert. As soon as the material is smaller than the aperture size of the bottom sieve

used, it passes through the sieve and enters the collecting receptacle. The air drawn in through the hopper by the cross beater accelerates the discharge of the ground material. The airborne fine fraction is separated off by a downstream filter system.



Robust and efficient



Mill versions

The mill housing is made from cast aluminum. Depending on the particular version (see table) the grinding insert and grinding tools are made from different materials. The choice of version depends primarily on the feed material. Chrome steel is recommended for hard feed materials, stainless steel for corrosive ones. Baffle plates made from steel 1.1740 can be used for heavy-metal-free grinding.

Bottom sieves made from Conidur or round hole sheet are available in 14 aperture sizes. For heavy-metal-free grinding Conidur bottom sieves made from steel St 1203 are available in 6 aperture sizes.

The standard equipment supplied with the cross beater mills includes a stainless steel collecting receptacle (5 l) and a textile filter hose. The mill can be attached to a bench or a wall bracket; however, it is preferable to mount it on the optional base frame. Other useful accessories can be found on page 12.

Performance data	SK 100 comfort
Application	size reduction
Feed material	medium-hard, brittle
Feed size*	<15 mm
Final fineness*	<100 µm
Collector volume	5 or 30 l
Throughput*	up to 80 kg/h
Technical data	
Drive	3-phase and 1-phase motors
Motor brake	yes
Drive performance	1.1 kW
Motor speed at 50 Hz	2 850 min ⁻¹
Motor speed at 60 Hz	3 420 min ⁻¹
W x H x D (with base frame)	560 x 1200 x 700 mm
Weight (with base frame)	approx. 58 kg
Noise values (noise measurement according to DIN 45635-31-01-KL3)	
Emission value with regard to workplace	L _{pAeq} 86 dB(A)
Measuring conditions:	
Feed material	quartz gravel, grain size <3 mm
*depending on feed material and instrument configuration/settings	

Versions	Grinding insert	Cross beater	Baffle plates
SK 100, cast iron	cast iron	cast iron	chrome steel
SK 100, chrome steel	chrome steel	cast iron	chrome steel
SK 100, stainless steel	stainless steel	stainless steel	stainless steel
SK 100, heavy-metal-free	cast iron	cast iron	steel 1.1740

Order data for Cross Beater Mill SK 100

Cross Beater Mill SK 100				Item No.
Supplied with grinding insert, cross beater, baffle plates, filter hose (240 mm) and collecting receptacle (5 l) (Please order base frame and bottom sieve separately)				
Cross Beater Mill SK 100 comfort, version:	cast iron	chrome steel	stainless steel	heavy-metal-free
SK 100 comfort for 3/N~400 V, 50 Hz	20.735.0001	20.735.0002	20.735.0003	20.735.1001
SK 100 comfort for 230 V, 50 Hz	20.735.0007	20.735.0008	20.735.0009	20.735.1007
SK 100 comfort for 110 V, 60 Hz	20.735.0010	20.735.0011	20.735.0012	20.735.1010

Bottom sieves for SK 100													Item No.		
Aperture sizes in mm	Conidur holes						Round holes								
	0.12	0.20	0.25	0.50	0.75	1.00	1.50	2.00	3.00	4.00	5.00	6.00	8.00	10.00	
Bottom sieves, stainless steel															
Item No.: 02.407...	0059	0013	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	
Bottom sieves, steel St 1203 for heavy-metal-free grinding															
Item No.: 02.407...	0083	0084	0085	0086	-	0087	-	0088	-	-	-	-	-	-	

Accessories for SK 100				Item No.
Base frame for SK 100				01.824.0028
Grinding tools, material:	cast iron	chrome steel	stainless steel	steel 1.1740
Grinding inserts	22.443.0001	22.443.0002	22.443.0003	-
Cross beater	22.716.0001	-	22.716.0002	-
Baffle plates (3 pieces)	-	22.526.0001	22.526.0002	22.526.0006

Accessories for SR 200, SR 300 and SK 100 comfort



Ring-type filter made from stainless Conidur perforated sheet

The standard equipment supplied with the SR 200, SR 300 and SK 100 comfort includes a 5 l stainless steel collecting receptacle and a textile filter hose. By using the filter hose between the mill and collecting receptacle the flow of air produced by the rotating rotor is led away and back-pressure is avoided. It also accelerates the material throughput and ensures a gentle size reduction process. Instead of the textile tube a ring-type filter made from stainless Conidur perforated sheet (aperture size 63 µm) can be used with or without a dust filter unit; this is easier to clean, particularly with fine dusts, and ensures a higher stability for the collecting receptacle.

If larger amounts are to be processed we recommend the use of the electromagnetic Vibratory Feeder DR 100 for uniform material feed and the 30 l collecting receptacle with the corresponding filter hose.

Mills SR 200 and SK 100 can be mounted on a workbench. However, it is preferable to mount them on the optional base frame.



Vibratory Feeder DR 100

Filter hose

30 l collecting receptacle

Order data for accessories

Accessories for SR 200, SR 300 and SK 100 comfort	Item No.
Base frame for SR 200, SK 100	01.824.0028
Set of rollers for base frame	22.609.0003
Vibratory Feeders*	
Vibratory Feeder DR 100 for 220 -240 V, 50 Hz, complete with feeding kit, 75 mm feed chute, hopper and holder	70.937.0056
Vibratory Feeder DR 100 for 110 -120 V, 60 Hz, complete with feeding kit, 75 mm feed chute, hopper and holder	70.937.0057
Stand for using DR 100 with SR 200, SR 300, SK 100	22.742.0003
Filter and collecting receptacles	
Ring-type filter with Conidur sheet for 5 liter collecting receptacle	22.187.0001
Dust filter clamping rings for ring-type filter, with 5 dust filters	22.748.0001
Dust filter for ring-type filter, 25 pieces	22.524.0002
Stainless steel collecting receptacle, 5 liter	01.011.0023
Filter hose for 5 liter collecting receptacle, length 240 mm, with comfort flange	22.187.0003
Spare filter hose for 22.187.0003	02.186.0027
Plastic collecting receptacle, 30 liter	22.003.0001
Filter hose for 30 liter collecting receptacle, length 490 mm, for SR 200, SR 300 and SK 100	01.186.0013
Dirt collecting pan of plastic	22.704.0001
*accessories for vibratory feeders: please refer to "Assisting" leaflet	

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