



CROSS BEATER MILL SK 300

The Cross Beater Mill SK 300 is suitable for **coarse and fine size reduction, either in batches or continuously**. It can process **medium-hard and brittle materials** and is easy to operate. 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 collection and feeding systems, rotors and sieves
- | defined final fineness due to bottom sieves with aperture sizes from 0.12 - 10 mm
- | adjustable speed for different applications
- | 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
- | easy cleaning thanks to exchangeable push-fit grinding insert, rotor and sieve
- | electric engine brake
- | central locking device

APPLICATION EXAMPLES

cement clinker, chamotte, coal, coke, glass, granite, gravel, gypsum, minerals, ores, oxide ceramics, slag, soils, ...

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

FUNCTIONAL PRINCIPLE

Size reduction in the SK 300 takes place by **impact 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 through the gravity outlet. 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. The optionally available cyclone separator enhances a cooling of the sample material and the cutting tools and improves the discharge of the sample from the grinding chamber.



[Click to view video](#)

CROSS BEATER MILL SK 300

TECHNICAL DATA

Applications	size reduction
Field of application	agriculture, chemistry / plastics, construction materials, environment / recycling, geology / metallurgy, glass / ceramics
Feed material	medium-hard, brittle
Size reduction principle	impact
Material feed size*	< 25 mm
Final fineness*	< 100 µm
Speed at 50 Hz (60 Hz)	2000 - 4000 min ⁻¹ (in steps of 200 min ⁻¹)
Speed setting	yes
Rotor peripheral speed	15.5 m/s .. 31 m/s
Types of rotors	stainless steel / cast iron
Material of grinding tools	hardened steel, stainless steel, cast iron, steel 1.1740 (for heavy-metal free grinding)
Sieve sizes	trapezoid holes 0.12 / 0.20 / 0.25 / 0.35 / 0.50 / 0.75 / 1.00 / 1.50 / 2.00 mm round holes 3.00 / 4.00 / 5.00 / 6.00 / 8.00 / 10.00 mm
Dust extraction unit	optional cyclone
Collector capacity	5 l / optional: 30 l
Drive	3-phase motor with frequency converter
Drive power	1.1 kW
Electrical supply data	200-240 V, 50/60 Hz
Power connection	1-phase
Protection code	IP 41
Power consumption	1.5 kW
W x H x D closed	600 x 1200 x 700 mm (with base frame)
Net weight	~ 60 kg (with base frame)
Remark weight (without hopper etc.)	~ 50 kg (without base frame)
Standards	CE

*depending on feed material and instrument configuration/settings

www.retsch.com/sk300

ORDER DATA

CROSS BEATER MILL SK 300

**Cross Beater Mill SK 300 with cross beater, baffle plates, 240 mm filter hose and collecting receptacle
(please order bottom sieve and optional base frame separately)**

				grinding assembly / cross beater / baffle plates
20.751.0001		SK 300	200–240 V, 50/60 Hz	cast iron / cast iron / hardened steel
20.751.0002		SK 300	200–240 V, 50/60 Hz	hardened steel / cast iron / hardened steel
20.751.0003		SK 300	200–240 V, 50/60 Hz	stainless steel / stainless steel / stainless steel
20.751.0004		SK 300	200–240 V, 50/60 Hz	cast iron / cast iron / steel 1.1740 for grinding without heavy-metal contamination
22.824.0007		Base frame with wheels		

BOTTOM SIEVES SK 300

BOTTOM SIEVES SK 300 OF STAINLESS STEEL

02.407.0098		Trapezoid holes	0.12 mm
02.407.0099		Trapezoid holes	0.20 mm
02.407.0100		Trapezoid holes	0.25 mm
02.407.0121		Trapezoid holes	0.35 mm
02.407.0101		Trapezoid holes	0.50 mm
02.407.0102		Trapezoid holes	0.75 mm
02.407.0103		Trapezoid holes	1.00 mm

02.407.0104		Trapezoid holes	1.50 mm
02.407.0105		Trapezoid holes	2.00 mm
02.407.0106		Round holes	3.00 mm
02.407.0107		Round holes	4.00 mm
02.407.0108		Round holes	5.00 mm
02.407.0109		Round holes	6.00 mm
02.407.0110		Round holes	8.00 mm
02.407.0111		Round holes	10.00 mm

BOTTOM SIEVES OF STEEL 1.0344 FOR GRINDING WITHOUT HEAVY-METAL CONTAMINATION

02.407.0112		Trapezoid holes	0.12 mm
02.407.0113		Trapezoid holes	0.20 mm
02.407.0114		Trapezoid holes	0.25 mm
02.407.0122		Trapezoid holes	0.35 mm
02.407.0115		Trapezoid holes	0.50 mm
02.407.0116		Trapezoid holes	0.75 mm
02.407.0117		Trapezoid holes	1.00 mm

02.407.0118		Trapezoid holes	1.50 mm
02.407.0119		Trapezoid holes	2.00 mm

CYCLONE-SUCTION-COMBINATION FOR SK 300

22.935.0022	Cyclone unit incl. 5 litres collection receptacle (to be used with industrial vacuum cleaner)		
22.935.0039	Cyclone unit incl. 30 litres collection receptacle (to be used with industrial vacuum cleaner). Requires 02.183.0158 cyclone outlet.		
02.183.0158	Cyclone outlet for SK 300		
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 SK 300

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
22.524.0002			Dust filters for ring-type filter, 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
05.045.0528	Collecting receptacle, 30 litres		
99.200.0023	IQ/OQ Documentation for SK 300		
22.443.0004			Grinding assembly cast iron

22.443.0005		Grinding assembly	hardened steel
22.443.0006		Grinding assembly	stainless steel
22.716.0003		Cross beater	cast iron
22.716.0004		Cross beater	stainless steel
22.526.0007		Baffle plates	hardened steel, 3 pieces
22.526.0008		Baffle plates	stainless steel, 3 pieces
22.526.0009		Baffle plates	steel 1.1740, 3 pieces for grinding without heavy-metal contamination

VIBRATORY FEEDER DR 100 FOR SK 300

DR 100 drive unit (please order feeding kit separately)

70.938.0001		DR 100 drive unit	220–240 V, 50 Hz
70.938.0003		DR 100 drive unit	220–240 V, 60 Hz
70.938.0010		DR 100 drive unit	200 V, 50 Hz
70.938.0006		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	