

HAMMER MILL HM 200

Rugged design meets fine particles



Hammer mills are used for crushing, pulverizing and deagglomeration of medium-hard, hard, brittle, tough and fibrous samples.

The rugged RETSCH Hammer Mill HM 200 accepts large feed sizes up to 100 mm which can be reduced to less than 0.8 mm, depending on the sample properties.

The mill is ideally suited for processing large volumes batchwise or continuously which ensures high sample throughput. Thanks to features like rugged design, easy handling and quick cleaning, the HM 200 is equally suitable for use in laboratories or pilot plants.

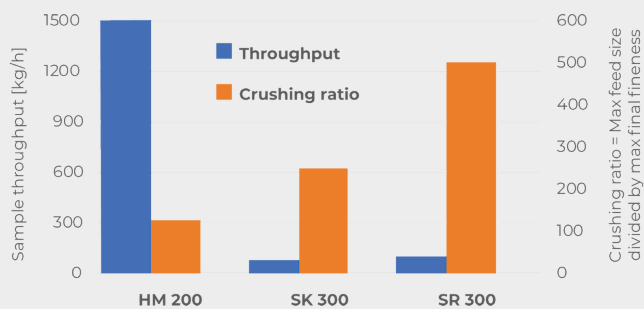


[Haga clic para mirar el video](#)

HAMMER MILL HM 200

HIGH THROUGHPUT & DEFINED FINAL FINENESS

This diagram shows a comparison of the Hammer Mill HM 200 with two rotor mills. The extremely high sample throughput of the HM 200 is clearly visible. The HM 200 shows a good crushing efficiency of 125, which is the value of the maximum feed size divided by the finest achievable grind size. The SR 300 and SK 300 accept a maximum feed size of 25 mm (unlike the HM 200 which accepts sizes up to 100 mm) and crush particles to a size below 0.05 mm or 0.1 mm respectively - resulting in a higher crushing ratio.



Ventajas

- | Excellent crushing performance
- | Very high throughput of up to 1500 kg/h
- | Fixed speed of 3000 min⁻¹
- | Sieve range from 2 - 40 mm
- | Feed size up to 100 mm, grind size < 0.8 mm
- | Easy access to crushing chamber facilitates cleaning
- | For batchwise or continuous grinding
- | Connector for dust extraction

HAMMER MILL HM 200

USER CONVENIENCE COMBINED WITH MAXIMUM SAFETY

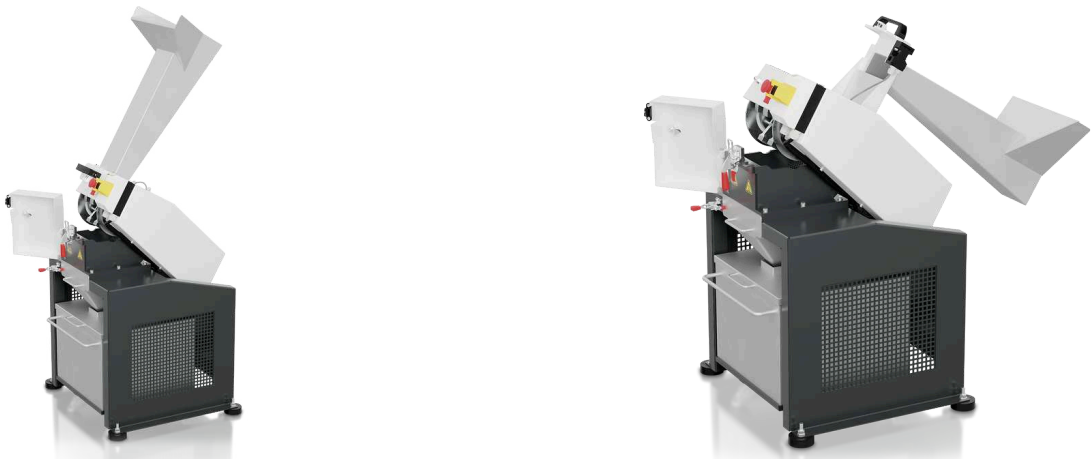
Easy cleaning of the rotor and the hammers thanks to

- | Fold-back hopper to gain access to the crushing chamber from above
- | Additional fold back option in the middle part of the machine allows easy cleaning of rotor and hammers from below

To ensure a long service life of the machine, even when mostly used for tough crushing tasks, the following parts can be exchanged by the user:

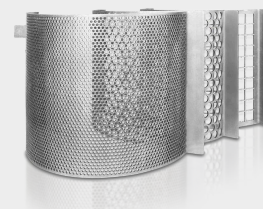
- | Wear plates inside the mill
- | Rotor with the swing hammers

A safety switch and the brake motor ensure that the unit comes to an immediate stop, e.g. if the door is opened unintentionally.



DEFINED PARTICLE SIZE THANKS TO DIFFERENT SIEVES

The achievable final fineness of the sample depends on the material's properties. Hard and brittle materials can be easily crushed in the HM 200 down to particle sizes below 0.8 mm. The range of sieves with aperture sizes from 2 mm to 40 mm allows for perfect adaption to application requirements.



Tough, fibrous, or moist samples like plastic toys, wood or humid coal can be successfully crushed in the hammer mill when choosing a sieve with medium to large aperture size.

HAMMER MILL HM 200

HOPPERS AND COLLECTING SYSTEMS

The HM 200 is suitable for batchwise as well as continuous grinding and can be equipped with different hoppers and collecting systems.

- | Standard hopper for quick and easy feeding of large sample amounts
- | Batch hopper for feeding approximately 600 ml in one go with very little dust development
- | Standard collector for size reduction of sample amounts up to 10 l
- | For large volumes a collector is available which accommodates up to 30 l
- | Continuous operation: Use the continuous outlet and a customer specific collecting system



Standard hopper



Hopper for batch operation



**Collecting receptacle
10 l**



**Collecting receptacle
30 l**



**Outlet for
continuous
operation**

HAMMER MILL HM 200

MUESTRAS TÍPICAS

RETSCH's powerful hammer mill is ideally suited for preliminary crushing and fine grinding of ores, granite, ceramics, quartz, slag, soil, coal, glass, cement clinker, wood, plastics, feed pellets, dry animal feed, dried herbs etc.



vidrio



carbón



forrajes



hierbas

Para encontrar la mejor solución para su tarea de preparación de muestras, visite nuestra base de datos de aplicaciones.

HAMMER MILL HM 200

DATOS TÉCNICOS

Aplicación	coarse and pre-crushing, desagglomeration
Campos de aplicación	agricultura, carbón, food / feed, geología / metalurgia, ingeniería / electrónica, materiales de construcción, medio ambiente / reciclaje, química / plásticos, vidrio / cerámica
Tipo de material	semiduro, duro, frágil, tenaz, fibroso
Principio de molienda	impacto, cizalla
Granulometría inicial*	< 100 mm
Granulometría final*	< 0.8 mm
Carga / cant. material alimentado*	< 0.6 l with batch hopper; 30 l with standard hopper
Velocidad a 50 Hz (60 Hz)	3000 min ⁻¹ (3500 min ⁻¹)
Rendimiento	1500 kg/h
Velocidad periférica del rotor	31.4 m/s
Diámetro del rotor	200 mm
Tipos de rotor	10 swing hammer
Molienda por vía seca	sí
Molienda por vía húmeda	-
Molienda criogénica	-
Material de las herramientas de molienda	hardened steel 1.0503 (hammers); steel 1.4301 (sieves)
Tamaños de tamiz	2 / 3 / 4 / 5 / 6 / 8 / 10 / 15 / 40 mm
Conexión de aspiradora	sí
Suministrable como versión para montaje	sí
Recipiente colector	10 l, 30 l, continuous outlet
Motor	motor trifásico
Potencia motriz	1.5 kW
Conexión eléctrica	voltajes diferentes
Alimentación de red	trifásica
Tipo de protección	IP 55
A x H x F cerrado	320 x 960 x 800 mm
Peso neto	~ 150 kg
Normas	CE

*Dependiendo del material introducido y de la configuración/ajuste del equipo

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PRINCIPIO DE FUNCIONAMIENTO

A hopper leads the sample material into the grinding chamber of the hammer mill.

The HM 200 is equipped with a horizontal rotating shaft on which 10 freely swinging hammers are mounted.

Those hammers crush the material at high speed inside the grinding chamber. With the swing hammers in contrast to fixed hammers, the risk of blocking the machine as well as the wear is minimized. The material is crushed by impact when hit by each hammer and while bouncing inside the grinding chamber. As soon as the sample is fine enough to pass through the sieve, it falls into a collecting vessel.

www.retsch.es/hm200