



BM500 — the powerful all-rounder for sample preparation

Anton Paar's BM500 ball mill enables the quick milling and homogenization of a broad range of samples from geological samples to food, biological, and environmental materials and allows you to perform dry, wet, and even cryogenic milling. Due to its simple handling principle it is the perfect instrument for routine sample preparation as well as scientific applications.

Operate without any user training

The BM500 ball mill is an easy-to-operate instrument which needs no special user training. You can easily choose frequency and time for the subsequent milling procedure by pushing and rotating a single knob. Three front display LEDs inform you about the status and the set parameters.

Prepare any kind of sample

BM500 is a real all-rounder. It can be used for the milling and homogenization of a broad range of sample materials from geological samples to food, biological, and environmental materials. Independent of the material's shape, BM500 easily manages grains, pellets, and fibers as well as voluminous samples such as wool, grass, and leaves. It can be used for dry and wet grinding or even special applications requiring liquid nitrogen.

Double your throughput

BM500 can be operated in simultaneous mode. This means that two jar holders can be filled with jars and samples in parallel, which is very useful if a high amount of sample has to be prepared at once or you need a backup sample. The milling process is very quick and reproducible. Milling times normally range from 2 to 3 minutes but can be set to any time from 5 seconds to 99 minutes.

Mill a variety of special materials

Milling under special conditions might be necessary for samples containing volatile components, soft samples, or other temperature-sensitive materials. In this case the jars can be frozen in liquid nitrogen before the milling process.



Avoid sample contamination with a variety of accessories

BM500 offers a wide selection of grinding accessories in different sizes to support different applications and sample materials. The use of the right accessory material (jars and balls) prevents contamination of the sample, which is of the highest importance, for example, in trace elemental analysis.

Benefit from the utmost safety and protect users and equipment

BM500 provides safety features such as protection against jar untightening, a stainless steel safety hood, and protection against opening during the run. It stands stable also in its highest operation mode and does not move across your lab bench due to vibrations.



Cryogenic grinding



Selection of grinding jars and balls

Specifications

Power supply	230 V \pm 10 % - 50/60 Hz 115 V \pm 10 % - 50/60 Hz
Rated power	200 W
Vibrational frequency regulation	Digital, from 3 Hz to 30 Hz (180 min ⁻¹ to 1800 min ⁻¹), in 0.1 Hz steps
Time	5 s to 99 min, timer HOLD function, in 1 s steps (below 10 min)
Final fineness	1 μ m (final fineness depends on sample material and grinding configuration)
Feed size of sample	Grain <8 mm Balls <25 mm in diameter
Max. volume of milling cups	2 x 50 mL
Ambient temperature	5 °C to 40 °C
Humidity	<85 % RH, non-condensing
Dimensions W x D x H	385 mm x 420 mm x 240 mm (465 mm with hood open)
Weight	42 kg

