



Product News

Retsch: Mixer Mill achieves Grind Sizes in the Nanometer Range

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According to Retsch, the newly developed Mixer Mill MM 500 is the first ball mill with a frequency of 35 Hz which produces enough energy for efficient wet grinding of samples down to the nanometer range.



The benchtop Mixer Mill MM 500 by Retsch is suitable for dry, wet and cryogenic grinding of sample volumes up to 2 x 45 ml in one run.

Based on performance, operation, application fields and design the MM 500 is a unique combination of a classic mixer mill and a planetary ball mill! Hence, it is perfectly suited for long-term grindings of several hours with high energy input to obtain particles sizes $<1 \mu\text{m}$, e. g. for mechanical alloying or chemical reactions. Thanks to only moderate warming effects, no cooling breaks are required when using the MM 500. On top of that, operation and handling are more comfortable than with planetary ball mills. The benchtop unit is also suitable for dry, wet and

cryogenic grinding of sample volumes up to 2 x 45 ml in one working run. It mixes and pulverizes powders and suspensions in only a few seconds. The MM 500 can be controlled via the new optional Retsch App which provides functionalities like creation of application routines, access to the Retsch database or direct contact to the Retsch service team.

Benefits at a glance:

- Powerful pulverization down to the nanometer range with up to 35 Hz
- For long-term grinding up to 99 h
- Great flexibility due to grinding jar volumes of 50 ml, 80 ml, 125 ml and 4 different materials
- New jar design allows for full use of volume, also for wet grinding
- Grinding jars may remain clamped in the mill for taking a sub-sample
- Screw-Lock, jars pressure-tight up to 5 bar