



## Main areas of application

Alloys, ceramics, chemicals, glass, minerals, ores, plant materials, sewage sludge, soils, household and industrial waste



# Planetary Ball Mills

The innovative Planetary Ball Mills meet and exceed all requirements for fast and reproducible grinding down to the nano range. They are used for the most demanding tasks, from routine sample processing to colloidal grinding and mechanical alloying. The grinding parameters are easily selected and stored with one single button. All planetary mills feature programmable starting time, power failure backup with storage of remaining grinding time and a built-in fan which cools the grinding jars during operation.

The comfort grinding jars are dust-tight and unusually simple and safe to handle.

- Extreme speed, final fineness down to the nano range
- Reproducible results due to energy and speed control
- 1-button operation with graphics display
- 10 parameter combinations can be stored
- Smooth and stable operation
- Automatic grinding chamber ventilation
- Suitable for long-term trials and continuous use

## Planetary Ball Mill PM 100

This single station ball mill pulverizes and mixes a wide range of materials and can be operated with grinding jars from 12 ml to 500 ml. It is especially safe to operate on a laboratory bench thanks to the new FFCS technology which helps to compensate vibrations.



PM 100

## Planetary Ball Mill PM 100 CM

This ball mill offers all the performance and convenience of the classic PM 100, only the speed ratio of sun wheel to grinding jar is 1:-1 instead of 1:-2. This results in a different ball movement so that the sample is not so much crushed by impact effects but more gently ground by pressure and friction. This not only leads to less abrasion but also reduces the heat build-up inside the jar.



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### Planetary Ball Mill PM 200

The PM 200 is equipped with two grinding stations and accepts grinding jars up to 125 ml. It is used for the pulverization and mixing of smaller sample volumes.



PM 200

### Planetary Ball Mill PM 400

The robust floor model features four grinding stations and accepts jars from 12 ml to 500 ml. It can process up to 8 samples simultaneously thus generating a high sample throughput. The PM 400 is also available with 2 grinding stations and different speed ratios. The model "MA-type" was especially developed for mechanical alloying of hard-brittle materials.



PM 400

Performance data	PM 100	PM 100 CM	PM 200	PM 400
Application:	Size reduction, mixing, homogenization, colloidal grinding, mechanical alloying			
Type of material:	soft, medium-hard, hard, brittle, fibrous, dry and wet			
Feed size*:	< 10 mm	< 10 mm	< 4 mm	< 10 mm
Final fineness*:	< 0.1 $\mu\text{m}$	< 0.1 $\mu\text{m}$	< 0.1 $\mu\text{m}$	< 0.1 $\mu\text{m}$

\* depending on feed material and instrument configuration/settings



# WolfLabs

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The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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