KNIFE MILL GRINDOMIX GM 200

Professional Food Sample Preparation

The knife mill GRINDOMIX GM 200 is the ideal instrument for grinding and homogenizing foods and feeds. With two sharp, robust blades and a powerful 1000 W motor, it allows to process sample volumes up to 0.7 liters quickly and effectively.

The GM 200 is not only ideal for homogenizing substances with a high water, oil or fat content but is also perfectly suited for grinding dry, soft and medium-hard products. The quick homogenization process without noteworthy temperature rise ensures preservation of volatile sample components.

Thanks to reproducible setting of parameters, programs and sequences, this mill ensures analytical results with minimum standard deviation. These features plus the wide selection of lids and containers, allowing for adaptation of the mill to individual application requirements, make the GRINDOMIX GM 200 a professional device superior to any commercial household mixer.

Click to view video

Product Video

THE STANDARD IN THE FOOD INDUSTRY

- Thorough size reduction and homogenization of the entire sample material in seconds
- Pre- and fine grinding in one mill
- Variable speed up to 10,000 min^{-1} including Boost function with 14,000 min^{-1} for improved homogenization of tough and sticky samples
- Suitable for sample volumes up to 700 ml
- Cryokit for cold grinding with dry ice available
- 8 SOPs and 4 program cycles can be stored
- Optional gravity lids or volume reduction lids for automatic reduction of the grinding chamber volume
- All parts in contact with the sample material are autoclavable

KNIFE MILL GRINDOMIX GM 200

CRYOGENIC GRINDING WITH DRY ICE

To process tough or elastic materials which cannot be homogenized at room temperature, a Cryokit is available to ensure safe and efficient grinding with dry ice. It consists of three components:

Click to view video

Cryo lid

The lower part is made of stainless steel, the side openings allow for evaporation of CO_2 during cryogenic grinding; the upper part is the standard PP lid.

Stainless steel container with baffles

The baffles contribute to a thorough mixing of the sample.

Full metal knife

This knife has 4 blades and is a must for cryogenic grinding. It is also well-suited for cutting hard samples.

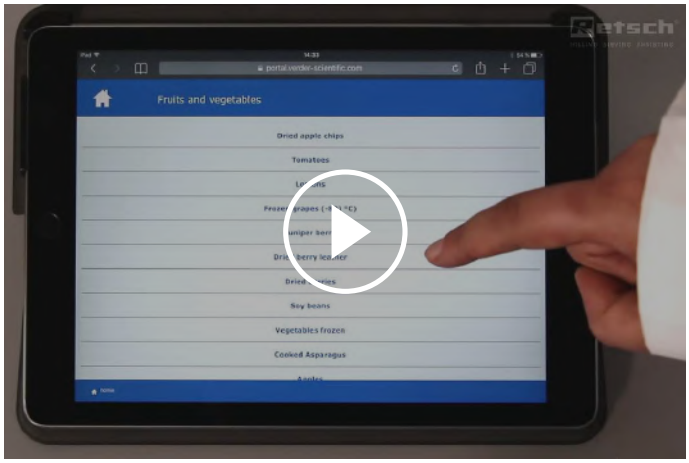
KNIFE MILL GRINDOMIX GM 200

EASY AND SAFE OPERATION

The GM 200 is equipped with a 4.3” touch display offering easy parameter setting, SOP storage and direct access to the MyRETSCH web portal via QR code. 8 Standard Operating Procedures and 4 program cycles can be stored for routine operations. Before and after the grinding process, the container with its lid, inserted knife and sample, can be installed and removed as a complete unit.

CONVENIENT 4.3“ TOUCH DISPLAY

ACCESS TO MYRETSCH WEB PORTAL

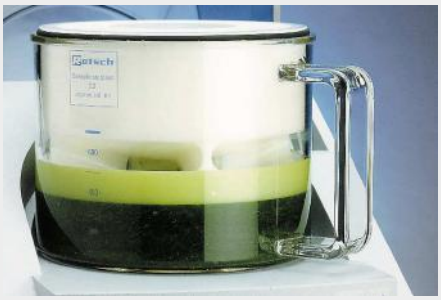


Click to view video

KNIFE MILL GRINDOMIX GM 200

GRAVITY LID ENABLES VARIABLE VOLUME OF THE GRINDING CHAMBER

RETSCH has developed a gravity lid for the GRINDOMIX knife mills which reduces the volume of the grinding container, preventing the sample from escaping the homogenization process by clinging to the container walls. The lid drops under its own weight during grinding and always rests directly on the sample. The result is thorough homogenization of the complete sample material. The gravity lid is also available with overflow channels. It ensures that the cell liquid released by the sample during grinding is returned through these channels to the center of the container, allowing for perfect homogenization.



KNIFE MILL GRINDOMIX GM 200

ACCESSORIES & OPTIONS

A range of different containers, lids and knives makes the GRINDOMIX GM 200 a truly universal device, suitable not only for processing food and feed samples but a wide range of materials.

Patented gravity lid

Automatically adjusts the grinding chamber volume to the changing sample volume.

Gravity lid with overflow channels

Ideally suited to homogenize samples with a high water content.

Stainless steel container

Minimum wear when hard sample materials are processed.

Stainless steel container with baffles

The baffles contribute to a thorough mixing of the sample.

Reduction lid

Reduces the chamber volume to 0.5 or 0.3 liter for optimum homogenization of small sample volumes.

Serrated blade knife

Used for particularly tough samples such as fatty, streaky meat.

Full metal knife

With 4 blades, it is suitable for cold grinding and cutting hard samples.

Cryokit

For homogenizing sticky samples with dry ice

TYPICAL SAMPLE MATERIALS

RETSCH knife mills are suitable for a vast range of applications. Typical materials include candy, cereals, cheese, coated tablets, cocoa nibs, dietary supplements, dried and fresh fruit, feed pellets, fish, frozen products, ham, lettuce, meat, nuts, oil seeds, pharmaceutical products, plant materials, sausages, soap, spices, vegetables etc.

bacon

candy

tomatoes

raisins

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

KNIFE MILL GRINDOMIX GM 200

TECHNICAL DATA

Applications	size reduction, homogenization and mixing
Field of application	agriculture, biology, food, medicine / pharmaceuticals
Feed material	soft, medium-hard, elastic, containing water / fat / oil, dry, fibrous
Size reduction principle	cutting
Material feed size*	40 mm
Final fineness*	< 300 µm
Batch size / feed quantity*	with standard lid 700 ml with reduction lid 150-300 ml with gravity lid 300 - 600 ml
Grinding chamber volume	with standard lid 1000 ml with reduction lid 250 ml/500 ml with gravity lid 400 - 800 ml
Speed setting	digital, 2,000 - 10,000 min-1 (14,000 min-1 BOOST)
Material of grinding tools	blade: stainless steel / titanium fixation of blade: PVDF / stainless steel container: autoclavable plastic / plastic PP / stainless steel
Setting of grinding time	digital, 1 s - 3 min
Interval operation	yes
Storable SOPs	8 programms / 4 sequences
Drive	series-characteristic motor
Drive power	~ 1000 W
Electrical supply data	different voltages
Power connection	1-phase
Protection code	grinding chamber and keypad IP 42
Power consumption	~ 1000 W
W x H x D closed	350 x 275 x 392 mm (opened: 350 x 410 x 553)
Net weight	~ 10 kg
Standards	CE

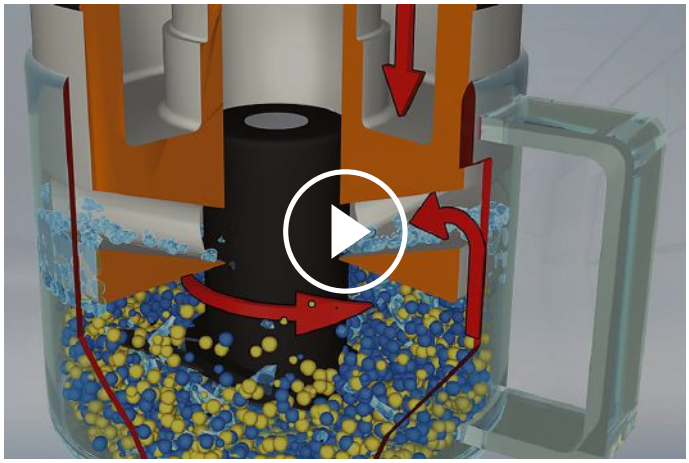
*depending on feed material and instrument configuration/settings

KNIFE MILL GRINDOMIX GM 200

FUNCTIONAL PRINCIPLE

Two sharp, robust blades rotate in the center of the grinding container. Depending on the rotational direction, size reduction is effected with the blunt side (preliminary size reduction) or the sharp side (fine grinding).

The knife is directly driven by a powerful motor of 1000 W. A pre-selectable speed which is maintained electronically ensures optimum adaptation to individual application requirements as well as reproducible grinding results.



Click to view video

www.retsch.com/gm200