

## GRINDOMIX – The Industrial Standard for Food Samples

The Knife Mills GRINDOMIX GM 200 and GM 300 set standards in the preparation of food samples for subsequent analysis. They provide completely homogeneous and reproducible size reduction results in seconds so that representative samples can be taken from any location in the grinding container.

### GRINDOMIX GM 200 – Perfect Homogenization with High Reproducibility

**The Knife Mill GRINDOMIX GM 200 is designed for quick and reproducible pulverization of up to 700 ml sample material. Thanks to features like the powerful 1,000 W drive and the innovative Boost function, the GM 200 homogenizes even difficult samples like tough meat with skin or fibrous plants very quickly and efficiently.**

The GM 200 is equipped with a user-friendly 4.3" touch display with direct access to the MyRETSCH web portal and allows for storage of 8 SOPs and 4 program sequences (combination of two process steps).

A wide selection of grinding containers and lids makes the mill easily adaptable to individual application requirements.

As the GRINDOMIX GM 200 is designed for professional use in industry and research, it is highly superior to any household mixer when it comes to safety and stability.



Perfect Homogenization within Seconds

40 mm  
300 µm\*



Knife Mill  
GRINDOMIX GM 200

### Benefits

- Pre- and fine grinding in one mill
- Variable speed up to 10,000 min<sup>-1</sup>
- Touch display with direct access to the MyRETSCH web portal with product- and application-related information
- Boost function allows for short-term speed increase to 14,000 min<sup>-1</sup>
- Interval mode for better mixing of the sample
- Control and advanced functionalities provided by optional Retsch App
- Storage of 8 SOPs and 4 program sequences possible

Video on [www.retsch.com/gm](http://www.retsch.com/gm)

### Gravity Lid Enables Variable Volumes



The gravity lid reduces the volume of the grinding container, thus allowing for thorough homogenization of the complete sample.

## GRINDOMIX GM 300 – For Sample Volumes up to 4.5 Liters

**The Knife Mill GRINDOMIX GM 300 is the model for quick and reproducible pulverization and homogenization of larger sample volumes up to 4,500 ml.**


With four sharp and robust blades and a powerful drive with a peak performance of 3 kW, the GM 300 is ideally suited to homogenize substances with a high water, oil or fat content as well as for the pulverization of dry, soft, medium-hard and fibrous products.

### Benefits

- Efficient size reduction of up to 4,500 ml feed quantity due to a powerful 1.1 kW motor (peak power input >3 kW)
- Pre- and fine-grinding in one mill: cutting action in regular mode, grinding by impact in reverse mode, pre-grinding in interval mode
- Perfect adaptation to application requirements by variable speed from 500 to 4,000 min<sup>-1</sup> with an increment of 100 min<sup>-1</sup>
- 10 Standard Operating Procedures can be stored
- Cryogenic sample preparation possible by using stainless steel container, full-metal knife and special lid

Video on [www.retsch.com/gm](http://www.retsch.com/gm)



 For Sample Volumes up to 4,500 ml

Knife Mill GRINDOMIX GM 300



## Accessories and Options

A range of different containers and lids is available for the GRINDOMIX GM 200 and GM 300 for optimum adaptation to a particular application. These include:

- **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.
- **Reduction lid**  
Reduces the chamber volume of the GM 200.
- **Serrated blade knife**  
Used for particularly tough samples such as fatty, streaky meat.
- **Accessories for cryogenic grinding**  
Applications with dry ice are carried out in the GM 300 with a full metal knife and a special lid.





Accessories  
GRINDOMIX GM 200



Accessories  
GRINDOMIX GM 300

## Knife Mills at a Glance

Knife Mills	
	
Model GRINDOMIX GM 200	GRINDOMIX GM 300

<b>Application</b>	size reduction, homogenization and mixing
<b>Fields of application</b>	agriculture, biology, food, medicine / pharmaceuticals
<b>Feed material</b>	soft, medium-hard, elastic, fibrous, containing water / fat / oil, dry

### Performance data

<b>Feed size*</b>	< 40 mm	< 130 mm
<b>Final fineness*</b>	$d_{90} < 300 \mu\text{m}$	$d_{90} < 300 \mu\text{m}$
<b>Batch size / sample volume*</b>	< 700 ml	< 4,500 ml
<b>Speed setting</b>	digital, 2,000 – 10,000 min <sup>-1</sup>	digital, 500 – 4,000 min <sup>-1</sup>
<b>Knife diameter</b>	118 mm	180 mm
<b>Knife peripheral speed</b>	12.4 – 62 m/s	4.8 – 38 m/s
<b>Number of blades</b>	2	4
<b>Grinding time setting</b>	digital, 1 s – 3 min	digital, 5 s – 3 min
<b>Interval and reverse mode possible</b>	✓	✓
<b>Boost function</b>	✓	-
<b>Program sequences</b>	✓	-
<b>Standard Operating Procedures (SOPs)</b>	memory for 8 plus Quick Start	memory for 10

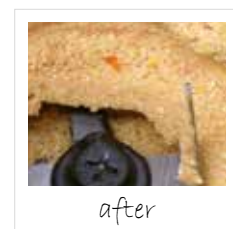
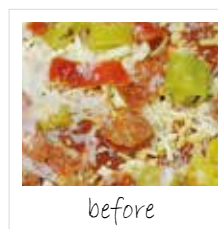
### Technical data

<b>Drive power</b>	1,000 W	1,100 W (short-term peak 3,000 W)
<b>W x H x D</b>	approx. 350 x 275 x 392 mm	approx. 440 x 340 x 440 mm
<b>Net weight</b>	approx. 10 kg	approx. 30 kg
<b>More information on</b>	<a href="http://www.retsch.com/gm200">www.retsch.com/gm200</a>	<a href="http://www.retsch.com/gm300">www.retsch.com/gm300</a>

\*depending on feed material and instrument configuration

## Typical Sample Materials

The GRINDOMIX Knife Mills GM 200 and GM 300 provide perfect homogenization of samples such as bread, fish, meat, feed pellets, cookies, vegetables, spices, cocoa nibs, seafood, cereal bars, fruit, seeds, deep-frozen food, sausages, etc.



Application example:  
Frozen pizza