

Knife Mill GRINDOMIX GM 300

General Information

The new knife mill GRINDOMIX GM 300 is the ideal instrument for the grinding and homogenization of foodstuffs. It allows to process sample volumes up to 4.5 liters quickly and reproducibly.

With four sharp, robust blades and a powerful motor which can reach temporary peaks of 3 kW, it is ideal for homogenizing substances with a high water, oil or fat content as well as for grinding dry, soft and medium-hard products. The GRINDOMIX GM 300 meets and exceeds all special laboratory and analytical requirements and is a professional device superior to any commercial household mixer.



Application Examples

candy, cereal bars, cereals, cheese, coated tablets, cocoa nibs, deep-frozen products, dietary supplements, dried and fresh fruit, feed pellets, fish, ham, lettuce, meat, nuts, oil seeds, pharmaceutical materials, plant materials, sausages, soap, spices, vegetables, ...

Product Advantages

- 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
- all parts which come into contact with the sample material are autoclavable
- perfect adaptation to application requirements by variable speed from 500 to 4000 min⁻¹ with an increment of 100 min⁻¹
- optional gravitation lid for automatic reduction of the grinding chamber volume
- 10 SOPs can be stored
- grinding jar in plastic and stainless steel available

Features

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*	~ 130 mm
Final fineness*	< 300 µm
Batch size / feed quantity*	with standard lid 4500 ml with gravity lid 4000 ml
Grinding chamber volume	5000 ml, reduction with gravity lid

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Speed setting	digital, 500 - 4000 min ⁻¹
Dry grinding	yes
Wet grinding	yes
Material of grinding tools	grinding container: autoclavable plastic PC, stainless steel 1.4435 blade: stainless steel 1.4034 holder for blade: PVDF sealings: EPDM, FKM
Setting of grinding time	digital, 5 s - 3 min
Interval operation	yes
Interval time	adjustable
Storable SOPs	10
Drive	3-phase asynchronous motor with frequency converter
Drive power	continuously 1.1 kW, short term 3 kW
Electrical supply data	different voltages
Power connection	1-phase
Protection code	IP 20
W x H x D closed	440 mm x 340 mm x 440 mm
Net weight	~ 30 kg
Standards	CE

Please note:

*depending on feed material and instrument configuration/settings

Videolink

<http://www.retsch.com/gm300>

Function Principle

Four 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 knives are protected with a counterblade from damages by hard sample materials. The knife is indirectly driven by a powerful motor of 1,1 kW which can reach temporary peaks of 3 kW. A pre-selectable speed which is maintained electronically ensures reproducible grinding results.