



KINEMATICA

Homogenizing perfected.



MICROTRON®

LABORATORY LINE

MICROTRON® MB 550 and MB 800

Laboratory mixer, homogenizing and mixing technology for cuttable, dry or liquid samples

MICROTRON[®] MB 550 and MB 800

Laboratory mixer.

Analysis and quality control requires equipment that is flexible for preparing samples and easy to work with. These mixers are well suited for intense mixing, dispersing, homogenizing, emulsifying and mincing operations for cuttable materials. Simple handling, high user safety and efficiency are just a few advantages offered by these mixers.

PROCESSING VOLUMES

The robust design allows for high stability and a long service life, even when using high rotational speeds. There are four different attachments for the MB 550 with the volumes 125 ml, 250 ml, 500 ml and 1000 ml. Larger volumes up to 2 or 4 liters can be processed with the M800 and the associated stainless steel mixing cups.

SAFETY SYSTEM

The safety system prevents uncontrolled operation. Both models can only be operated with properly attached protective covers (MB550) or with a lid (MB800). If stones or similar materials are accidentally mixed, the user will be protected by a Plexiglas protection cover (MB550).

Both devices comply with CE regulations for industrial machines.

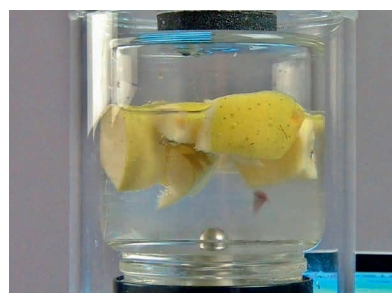
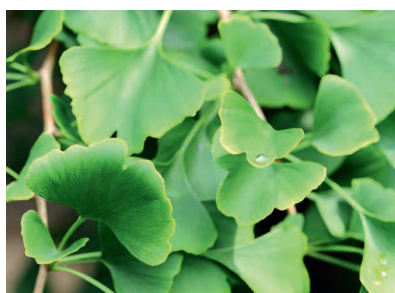
After unscrewing the blade unit, the borosilicate glass sample container can be used in its full functionality for other analysis purposes or for sample storage.

ERGONOMICS

- Smooth rotational speed adjustment with integrated on- and off switch
- Load compensated rotational speed adjustment
- Switching of mixing attachment and protection cover without tools
- Operation only possible with security cover and lid in place
- Variety of sample container designs
- Vibration dampening quick coupling
- Very quiet motor with integrated ventilation cooling
- Integrated load, heat and blockage protection

RESULTS ARE CRUCIAL

- Production of very fine particle sizes in both liquid and dry mediums: precise analyses require homogeneous samples
- Efficient sample preparation: through high rotational speeds
- Flexibility: various sample volumes with different mixing attachments
- Handling: mounting of mixing attachment and protection cover without tools
- Durability a Swiss virtue





TECHNICAL INFORMATION

| | |
|-----------------------------------|--|
| Working volumes | MB 550: 125, 250, 500, 1000 ml MB 800: 2000 or 4000 ml |
| Motor | Collector motor (Class H) Gearless direct drive Security system auto-off |
| Drive power | MB 550: 550 Watt MB 800: 800 Watt |
| Speed range | MB 550: 1000 to 15000 rpm MB 800: 1000 to 17000 rpm |
| Sound level | MB 550: ca. 72 dB(A) at 15000 rpm MB 800: ca. 79 dB(A) at 17000 rpm |
| Supply voltage | 230 V \pm 10 %, 50Hz / 60Hz 120 V \pm 10 %, 60Hz |
| Maximum relative humidity | 80 % in storage 80 % during operation |
| Operating temperature | 0 – 40 °C |
| Protection Class according to DIN | IP 20 |
| Drive dimensions (H/ø) | MB 550: 245 mm / ø 190 mm MB 800: 245 mm / ø 190 mm |
| Weight | MB 550: 4,4 kg MB 800: 5,3 kg |
| Standard EMC | EN 60335-1:1988, EN 60335-2-64:1993, EN 55014:1993, EN 55104:1995, EN 61000-3-2:1995, EN 61000-3-3:1995, EN 60335-2-64:1997 |
| Safety norm | Protection Class 1 according to EN 60335-1 |



USERS / APPLICATION RANGES

- Mixing, dispersing, homogenizing, emulsifying with liquids
- Mixing of cuttable materials
- Sample preparation for content analysis in quality control and/or quality assurance
- Prevention of excessive aeration due to closed system (MB 550)
- Pollutant analysis (e.g. foodstuffs)

Mixing attachments and blade heads.

Your requirements are our standard.

The solution for processing of your cuttable materials. You have diverse vessels to choose from. The integrated safety system prevents start-up in open condition.



BOROSILICATE GLASS MIXING ATTACHMENTS AND PROTECTION COVERS (MICROTRON® MB 550)

Mixing attachments

After sample preparation the mixing attachments from heat resistant borosilicate glass MBA 125 to MBA 1000 can be used for further laboratory tasks without the need to transfer contents. The vessels are simply screwed to the blade head with a glass thread and spacer ring.

Protection cover

The protection covers are for the various MBA mixing attachments. For safety reasons, it is not possible to start the MB 550 mixer without a protection cover. The 5mm thick Plexiglas cover also protects the operator in case of glass breakage when stones or similar solid materials are accidentally mixed.

These mixing attachments and protection covers can only be used with the MB 550.



MIXING ATTACHMENTS OF STAINLESS STEEL (MICROTRON® MB 800)

Mixing attachments

MBA 2000 and MBA 4000, made of stainless steel, allow processing of larger amounts. Due to safety reasons, it is not possible to start the machine when the lid is open or open the machine when it is running. Additional sample material can be added during operation only via the integrated opening in the lid.

The blade head can be easily unscrewed for cleaning purposes.

These mixing attachments can only be used with the MB 800.



HIGH-PERFORMANCE STAINLESS STEEL CUTTING BLADE ASSEMBLY (MICROTRON® MB 550 AND MB 800)

The cutting blade assembly

The six polished premium steel rotor blades have been optimized for intense and quick processing for all types of samples. All parts that touch the product are made from stainless steel and can be easily detached and cleaned. Integrated stainless steel ball bearings ensure ease of movement and a perfectly true run. Power transmission occurs via a rubber cushioned plug coupling.

Gaskets

The standard gaskets are made from NBR material. Upon request, gaskets from EPDM, or viton are also available.

Order information and accessories.

Authorized extension of your system.

The laboratory mixers MB 550 and MB 800 can be expanded with functional accessories according to your wishes and requirements. Our experts will gladly assist you if you have any application related questions.

LABORATORY MIXER

| Sales No. | Product | Description |
|---|---------------------|----------------|
| MICROTRON® MB 550 without mixing attachment and protective cover | | |
| 36010005 | MB 550, 230 V | EU-power cable |
| 36010006 | MB 550, 230 V | CH-power cable |
| 36010007 | MB 550, 230 V | UK-power cable |
| 36010010 | MB 550, 100 – 120 V | Power cable |
| MICROTRON® MB 800 without mixing attachment | | |
| 36010003 | MB 800, 230 V | EU-power cable |
| 36010011 | MB 800, 230 V | CH-power cable |
| 36010012 | MB 800, 230 V | UK-power cable |
| 36010004 | MB 800, 100 – 120 V | Power cable |



MIXING ATTACHMENTS (MICROTRON® MB 550)

Mixing attachments MBA 125 to MBA 1000 consist of borosilicate glass, gasket and blade head.

| Sales No. | Product | Description |
|-----------|----------|--------------------------|
| 36050005 | MBA 125 | Working volumes: 125 ml |
| 36050010 | MBA 250 | Working volumes: 250 ml |
| 36050015 | MBA 500 | Working volumes: 500 ml |
| 36050020 | MBA 1000 | Working volumes: 1000 ml |



PROTECTIVE COVERS (MICROTRON® MB 550)

Plexiglas protection glass is absolutely required when using MBA mixing attachment.

| Sales No. | Product | Description |
|-----------|----------|----------------|
| 36050025 | MBH 125 | Height: 86 mm |
| 36050030 | MBH 250 | Height: 128 mm |
| 36050035 | MBH 500 | Height: 149 mm |
| 36050040 | MBH 1000 | Height: 228 mm |



LABORATORY MIXER (MICROTRON® MB 800)

Mixing attachment consists of stainless steel, gasket and blade head as well as lid with opening for material addition.

| Sales No. | Product | Description |
|-----------|----------|--------------------------|
| 36050050 | MBA 2000 | Working volumes: 2000 ml |
| 36050055 | MBA 4000 | Working volumes: 4000 ml |

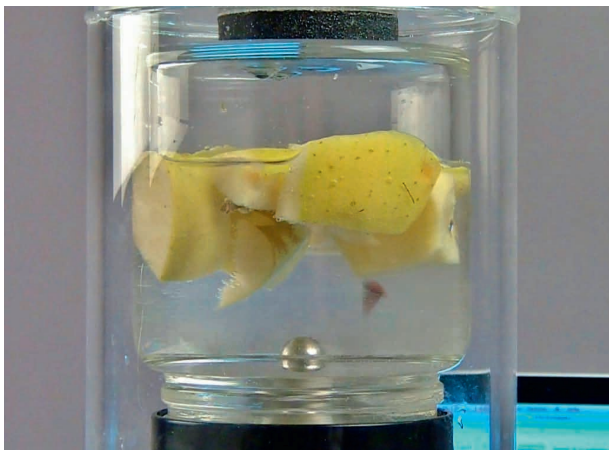
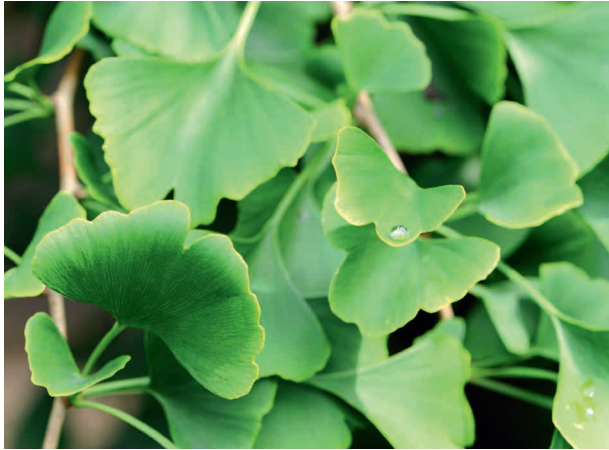


Users / application ranges.

Best solution for every application.

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Since 1962 we are a leading supplier of dispersing solutions for applications in the chemical, biotechnology, pharmaceutical, cosmetics and food industries. Due to our close relationships with our customers we detect new trends early and we always look for ways to find an ideal solution for you.





Our mission. Your solution.

Homogenizing perfected: for every industry.

Kinematica's broad portfolio of solutions can address almost every dispersing application for the pharmaceutical, cosmetic, chemical, food, and biotech industry. Innovative powder-induction systems, solutions for completely sterile environments, or fully-compliant ATEX architecture are just some examples of the broad portfolio that Kinematica can offer with true scalability from pilot-plant to large plant configurations.

Our state-of-the-art technology, in addition to a professional consulting and engineering suite of services, can address a variety of processes such as blending / mixing / stirring, emulsifying, deagglomerating, foaming, crushing, and homogenizing with particle size reduction from a few micrometers down to nanometers in size: the proprietary design and innovative geometry of our aggregates / generators can downsize and provide perfect statistical particle distribution for the finest emulsions / suspensions and foam dispersions.



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PHARMA



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