

**MICROTRON® MB 550 / MB 800**



**Laboratory mixer**

**HOMOGENIZING AND MIXING TECHNOLOGY  
FOR CUTTABLE, DRY OR LIQUID SAMPLES  
IN THE LABORATORY**



**KINEMATICA**  
DISPERSING AND MIXING TECHNOLOGY

# MICROTRON® - 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 mills.

## TECHNICAL DATA

### 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: 1'000 to 15'000 rpm  
MB 800: 1'000 to 17'000 rpm

### Sound level

MB 550: ca. 72 dB(A) at 15'000 rpm  
MB 800: ca. 79 dB(A) at 17'000 rpm

### Supply voltage

230 V ± 10%, 50Hz / 60Hz  
120 V ± 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: 245mm / ø 190mm  
MB 800: 245mm / ø 190mm

### 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,  
prEN 60335-2-64:1997

### Safety norm

Protection Class 1 according to EN 60335-1

## 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 plexiglass protection cover (MB550). 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.

Both devices comply with CE regulations for industrial machines.

## ERGONOMICS

- Smooth rotational speed adjustment with integrated on- and off switch
- Load compensated rotational speed adjustment
- Switching of mixing- and protection cover attachment without tools
- Mixing attachment made from dishwasher compatible materials
- 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

### CLEANING

Dishwasher compatible attachments

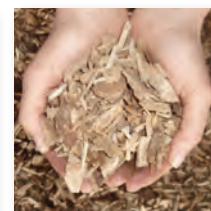
### HANDLING

Mounting of mixing attachment and protection cover without tools

**LONGEVITY**, a Swiss virtue



## Applications/Operating range



Mixing, dispersing, homogenizing, emulsifying with liquids

Mincing of cuttable materials

Dust-free processing of dry samples such as hay

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)

*This list represents a selection of possible applications.*

# Order information and accessories

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.



MB 550

MB 800

## LABORATORY MIXER

Order no.	Designation
	<b>MICROTRON® MB 550 without mixing attachment and protective cover</b>
36010005	MICROTRON® MB 550, <b>230 V / EU-plug</b> CH- or UK plug can be mounted upon request; please indicate this when ordering.
36010010	MICROTRON® MB 550, <b>100-120 V / US-plug</b>
	<b>MICROTRON® MB 800 without mixing attachment</b>
36010003	MICROTRON® MB 800, <b>230 V / EU-plug</b> CH- or UK plug can be mounted upon request; please indicate this when ordering.
36010004	MICROTRON® MB 800, <b>100-120 V / US-plug</b>

### MIXING ATTACHMENTS (MICROTRON® MB 550)

Designation	MBA 125	MBA 250	MBA 500	MBA 1000
Arbeitsvolumen	125 ml	250 ml	500 ml	1000 ml
Order no.	36050005	36050010	36050015	36050020

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



### PROTECTIVE COVERS (MICROTRON® MB 550)

Designation	MBH 125	MBH 250	MBH 500	MBH 1000
Height	86 mm	128 mm	149 mm	228 mm
Order no.	36050025	36050030	36050035	36050040

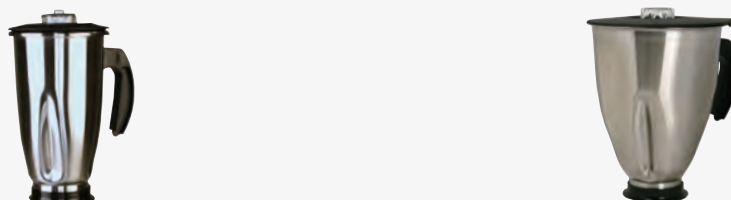
Description: Plexiglass protection glass is absolutely required when using MBA mixing attachment.



### MIXING ATTACHMENTS (MICROTRON® MB 800)

Designation	MBA 2000	MBA 4000
Working volumes	2'000 ml	4'000 ml
Order no.	36050050	36050055

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



# Mixing attachments and blade heads

## 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.

All parts are dishwasher compatible and made from stainless materials.

### PROTECTION COVER

The protection covers are for the various MBA mixing attachments. For safety reasons, it is not possible to start the MB550 mixer without a protection cover. The 5mm thick plexiglass 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 ATTACHMENT

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.

All parts are made from dishwasher compatible and stainless materials. 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, silicone or viton are also available.



## YOUR APPLICATION IS OUR FOCUS!

KINEMATICA is a leading manufacturer of dispersing and mixing technology for standard and customized applications in the lab, pilot plant and production areas of pharmaceutical, chemical, food, cosmetic and biotech or life science companies worldwide.

Our POLYTRON® batch and MEGATRON® In-line Homogenizers are suitable for many applications:

- Dispersing of non-soluble liquids or solids into liquids to finest emulsions/multiple emulsions or suspensions
- Induction and dispersion of powders into liquids
- Foaming by gas induction into liquids
- Disintegration of tissue samples for preparation in further analysis
- Dispersing of various samples for quality control

We also deliver POLYMIX® Micro Dry Grinding Mills and a variety of POLYMIX® and MICROTRON® Overhead Stirrers and Mixers.

Whatever your application, we are confident that our team of specialists, with over 60 years of experience, will provide the best solution for you.

## YOUR SATISFACTION IS OUR GOAL!



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DISPERSING AND MIXING TECHNOLOGY



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## BRAND NAMES WITH HISTORY



Batch dispersing/homogenizing units



High turbulent mixing



Inline dispersing/homogenizing units



Dispersing/homogenizing Reactors



Stirrers and dry Mills



Mixer/Blender



Viscometers