

IKA

designed for scientists

EN



Innovative laboratory solutions for your research
PRODUCT OVERVIEW

IKA laboratory mills are ideal for grinding, pulverizing or chopping samples for routine analyses, either in batch or continuous operation. Grinding results are achieved up to 1 µm particle size or 0.25 mm defined ultimate fineness. Due to a broad spectrum of easily interchangeable beaters and cutters, IKA mills are highly effective for a variety of applications and can also be scaled up for larger volumes.

MULTIDRIVE BASIC AND CONTROL

/// The all-rounder in coarse and fine crushing

Regardless of whether samples are hard, soft, fibrous, wet or dry – the MultiDrive blender can perform a wide range of crushing tasks involving coarse and fine crushing, thanks to the variety of vessels* available. With the MultiDrive basic it is possible to mix or grind; MultiDrive control is also fitted with a dispersion vessel and an autoclavable tube. There is a USB interface available for easy actuation and documentation respectively.



MultiDrive control*

Ident. No. 0025002643

HIGH PERFORMANCE

Excellent crushing performance is guaranteed by a combination of variable rotational speeds, ranging from 3000 rpm to 20 000 rpm, and a 1000 W output.

INTERVAL OPERATION

The option of interval programming is simple to activate at the press of a button. Interval operation is an asset during the coarse crushing of hard samples or for extra thorough blending.

INTEGRATED COOLING

A cooling system is integrated in the milling cup, which allows indirect heat dissipation. Thus, coolant and sample remain separate.

ADDITIONAL CONTROL FEATURES:

TEMPERATURE MEASUREMENT

MultiDrive control offers temperature measurement and vessel recognition using RFID. A temperature limit can be set for temperature-sensitive materials, or for specific planned reactions to protect against overheating.

WEIGHING FUNCTION

The weighing function is also integrated into the user-friendly workflow of the IKA MultiDrive control. Weighing is performed before crushing using the same mixing cup, so that no transfer of contents is required.

* Vessels don't belong to the scope of delivery.

MultiDrive control MT Package

Ident. No. 0010007083

- MultiDrive control unit
- TC 1 protective housing
- MT 150.5 Autoclavable disposable, 150 ml (5 pcs.)



MultiDrive basic*

Ident. No. 0025002638

* Vessels don't belong to the scope of delivery.



MultiDrive control BT Package

Ident. No. 0010007086

- MultiDrive control unit
- TC 1 protective housing
- BT 250.5 Autoclavable disposable, 250 ml (5 pcs.)



MultiDrive basic M 20 Successor Package

Ident. No. 0010010965

- MultiDrive basic unit
- MI 250 milling chamber, 250 ml



TECHNICAL DATA	MULTIDRIVE CONTROL	MULTIDRIVE BASIC
Operating principle	Cutting / Impact / Blending / Dispersing	Cutting / Impact / Blending
Speed range	3000 – 20 000 rpm	3000 – 20 000 rpm
Useable volume max.	2000 ml	2000 ml
Feed hardness max.	9 Mohs*	9 Mohs*
Temperature measurement	Yes	–
Weighing function	Yes	–
Milling chamber can be cooled with water / dry ice	Yes / Yes	Yes / Yes
Dimensions (W x H x D)	300 x 350 x 250 mm	300 x 350 x 250 mm
Protection class according to DIN EN 60529	IP 31	IP 31

* with MI 250.3 or MI 400.3 beater, tungsten carbide

A 10 basic

Ident. No. 0004020700



A 11 basic

Ident. No. 0002900000



M 20

Ident. No. 0001603600

For dry grinding of hard and brittle substances



MF 10 basic

Ident. No. 0002836000

Two different grinding heads can be attached to the drive, see page 87



TECHNICAL DATA	A 10 BASIC	A 11 BASIC	M 20	MF 10 BASIC
Process type	Batch	Batch	Batch	Inline
Operating principle	Cutting / Impact	Cutting / Impact	Cutting / Impact	Cutting / Impact
Speed max.	25 000 rpm	28 000 rpm	20 000 rpm	3000 – 6500 rpm
Useable volume max.	50 ml	80 ml	250 ml	–
Feed hardness	5 Mohs	6 Mohs	5 Mohs	6 Mohs (MF 10.2)
Milling chamber, can be cooled with water / dry ice / liquid nitrogen	Yes / Yes / No	No / Yes / Yes	Yes / Yes / No	No / Yes / No
Dimensions (W x H x D)	130 x 250 x 145 mm	85 x 240 x 85 mm	170 x 350 x 170 mm	320 x 380 x 300 mm
Protection class according to DIN EN 60529	IP 41	IP 43	IP 21	IP 22



Product	Description	Ident. No.
ACCESSORIES		
BL 2000	Blender vessel, 2000 ml	0025003961
BL 2000-T	Blender vessel, 2000 ml, temperature measurement	0025003962
MI 250-S	Milling chamber, 250 ml, sealed	0020112097
MI 400-S	Milling chamber, 400 ml, sealed	0020112099
MI 250-T-S	Milling chamber, 250 ml, temperature measurement, sealed	0020112098
MI 400-T-S	Milling chamber, 400 ml, temperature measurement, sealed	0020112100
CS 1	Spare filter fume for cover, 5 pcs.	0020113275
DI 2000-T	Dispersing vessel, 2000 ml, temperature measurement	0025003960
BL 2000.1	Standard blend knife, stainless steel	0020023169
MI 250.1	Standard beater, stainless steel	0020023166
MI 250.2	Star shaped cutter, stainless steel	0020023167
MI 250.3	Beater, tungsten carbide	0020023168
MI 400.1	Standard beater, stainless steel	0020023170
MI 400.2	Star shaped cutter, stainless steel	0020023171
MI 400.3	Beater, tungsten carbide	0020023172
TC 1	Protective housing for MT 150 and BT 250	0020023489
MT 150.5*	Milling tube, autoclavable, 150 ml, 5 pcs. (incl. TS 1)	0020023173
BT 250.5*	Blending tube, autoclavable, 250 ml, 5 pcs. (incl. TS 1)	0020023174
TS 1	Spare seal with reactivation code, 5 pcs.	0020023490

* TC 1 protective housing is mandatory to operate the tube



Product	Description	Ident. No.
ACCESSORIES A 10 BASIC		
A 10.1	Stainless steel cutter	0025001680
A 10.2	Star-shaped cutter	0025001162
A 10.3	Hard metal cutter	0025001161
A 10.4	Grinding chamber reduction	0025001664
ACCESSORIES A 11 BASIC		
A 11.1	Spare beater, stainless steel	0002904600
A 11.2	Cutting blade, stainless steel	0002905200
A 11.3	Beater, stainless steel, coated with chromium carbide	0002983000
A 11.4	Grinding chamber, polyamide, 250 ml	0002904100
A 11.5	Spare grinding chamber, Tefcel, 80 ml	0002983100
A 11.6	Double beater, titanium	0003302900
A 11.7	Funnel, PTFE	0003048700



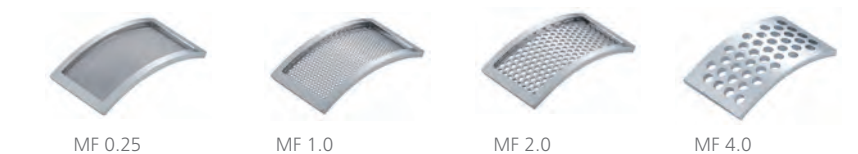
ACCESSORIES M 20		
M 21	Spare cutter, stainless steel	0000328200
M 22	Hard metal cutter, tungsten carbide	0000521800
M 23	Star-shaped cutter, stainless steel	0001443400
M 20.1	Grinding chamber, 250 ml	0008006200

ACCESSORIES MF 10 BASIC		
MF 10.1	Cutting-grinding head	0002870900
MF 10.2	Impact-grinding head	0002871000

SIEVES		
MF 0.25	Sieve, Ø 0.25 mm	0002938900
MF 0.5	Sieve, Ø 0.5 mm	0002939000
MF 1.0	Sieve, Ø 1 mm	0002939200
MF 2.0	Sieve, Ø 2 mm	0002939400
MF 3.0	Sieve, Ø 3 mm	0002939500
MF 4.0	Sieve, Ø 4 mm	0002939600



MF 10.2





designed for scientists

Everything for your Lab

IKA is your reliable partner in laboratory, analysis and process technology. When it comes to applications in the areas of stirring, mixing, tempering, distilling or grinding, market leaders rely on our proven products and technology. We are continually working to further develop our portfolio according to the needs of our customers. Building on this, we network our products and services to create holistic, application-oriented solutions and enable our customers to achieve the best possible results and step into the digital age.



BIOREACTORS



MIXING



HEATING / COOLING /
TEMPERING



LIQUID HANDLING



MEASURING VISCOSITY



VACUUM TECHNOLOGY



CRUSHING



LABORATORY SOFTWARE



SEPARATION



ELECTROCHEMISTRY
FLOW CHEMISTRY



REACTOR SYSTEMS



CALORIMETRY