

Maalmolens IKA

A 11 Basic Analytische molen - M 20 Universele molen MF 10 Basic Microfijne molen

IKA® Crushing

88 Accessories Dispensers



Ident. No.
2518000

DK 25.11 Flow chamber

For S 25 KV - 25 ... - IL dispersing elements.
Allows inline operation mode, see UTL 25 digital,
page 87.

Batch operation (see fig.):

DK 25.11 is mounted around the dispersing element. The DK 25.11 must be at a lower elevation than the surface of the liquid during operation. With this operating mode, no air is drawn in as a result of turbulence in the vessel.

General data	
Chamber volume	26 ml
Vacuum	1 mbar
Pressure	6 bar



Ident. No.
2562500

AD 25

Mounting support for DK 25.11



Ident. No.
2810000

DK 50.11 Flow chamber

For S 50 KV - G 45 ... - IL dispersing elements.
Allows operation in inline mode, see UTL 50
basic, page 87.

If used in batch mode: DK 50.11 is mounted
around the dispersing element. Additional fea-
tures as DK 25.11.

General data	
Chamber volume	94 ml
Vacuum	1 mbar
Pressure	6 bar

Technical data	
Motor rating input	160 W
Motor rating output	100 W
Speed	28.000 rpm (fixed)
Useful volume	80 ml
Duty cycle ON / OFF	1 min / 10 min
Overload protection	yes
Circumferential speed	53 m/s
Max. granularity of task	10 mm
Dimensions (W x D x H)	85 x 85 x 240 mm
Weight	1,5 kg
Permissible ambient temperature	5 - 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 43

A 11 basic Analytical mill

Batch mill for 2 different grinding procedures:
Impact grinding of hard, brittle or non-elastic
grinding materials with high-grade stainless steel
beater. This beater can be used for a Mohs hard-
ness up to 6 (incl. with delivery).

Cutting grinding for pulverizing soft, fibrous ma-
terials with a cutting blade (not incl. with delivery).

- Moist and gluey materials can be pulverized by
adding water
- Grinding chamber made of Tefcel (ETFE, glass
fiber-reinforced) with stainless steel inlet (AISI
316L), useful volume 80 ml (incl. with delivery).
For embrittlement of grinding materials with
liquid nitrogen in the grinding chamber
- Optionally, a 250 ml grinding chamber is
available (page 90)

Accessories (page):

A 11.1 Spare beater (89), A 11.2 Cutting blade
(89), A 11.3 Beater (89), A 11.4 Grinding chamber
(90), A 11.5 Spare grinding chamber (90), A 11.6
Double beater (90), A 11.7 Funnel (90)

IKA® Crushing

Analytical mill and accessories

89



Ident. No.
2900000 230 V 50/60 Hz
2900001 115 V 50/60 Hz

General data	
Material	stainl. steel (AISI 420)

A 11.1 Spare beater

For pulverizing substances with a Mohs hardness
up to 6. Included with the analytical mill A 11 basic.

Ident. No.
2904600



General data	
Material	stainl. steel (AISI 440B)

A 11.2 Cutting blade

For pulverizing soft, fibrous grinding materials.
Not included with the analytical mill A 11 basic.

Ident. No.
2905200



General data	
Material	stainl. steel (AISI 440B)

A 11.3 Beater

For pulverizing substances with a Mohs hardness
up to 9, coated with chromium carbide.
Not included with the analytical mill A 11 basic.

Ident. No.
2983000



IKA® Crushing

Accessories Analytical mill

IKA® Crushing

Universal mill and accessories

90

91



Ident. No.
2904100

A 11.4 Grinding chamber

Made of polycarbonate with stainless steel inlet. Not suitable for cooling with N₂, only applicable with double beater A 11.6. Not included with the analytical mill A 11 basic.

General data	
Useful volume	250 ml
Material	stainl. steel (AISI 316L)



Ident. No.
2983100

A 11.5 Spare grinding chamber

Made of Tefcel (ETFE, glass fibre-reinforced) with stainless steel inlet. Excellent resistance to chemicals and low temperatures (- 200 °C). Included with the analytical mill A 11 basic.

General data	
Useful volume	80 ml
Material	stainl. steel (AISI 316L)



Ident. No.
3302900

A 11.6 Double beater

For use up to Mohs hardness 3. Only applicable with grinding chamber A 11.4. Not included with the analytical mill A 11 basic.

General data	
Material	titanium, surface-hardened



Ident. No.
3048700

A 11.7 Funnel

Prevents splashing by pouring in liquid nitrogen in the grinding chamber A 11.5. Not included with the analytical mill A 11 basic.

General data	
Material jacket	PTFE
Material sieve	stainl. steel (AISI 316L)

Technical data	
Motor rating input	440 W
Motor rating output	225 W
Speed	20.000 rpm (fixed)
Circumferential speed	72 m/s
Overload protection	current limitation
Useful volume	250 ml
Material grinding chamber	stainl. steel (AISI 304)
Material cover	stainl. steel (AISI 304)
Max. granularity of task	max. 5 – 7 mm
Duty cycle ON / OFF (with cooling)	7 min / 10 min
Weight	6,6 kg
Dimensions (W x D x H)	170 x 170 x 350 mm
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 21

General data	
Material	stainl. steel (1.4122)

General data	
Material	tungsten carbide (86,5 WC 13,5 Co)

General data	
Material	stainl. steel (AISI 304)

M 20 Universal mill

Batch mill suitable for dry grinding of hard and brittle substances.
- Double-walled grinding chamber can be cooled with water through two hose adapters
- Removable grinding chamber, easy to clean
- Two grinding chambers can be alternately operated using one drive
- M 21 blade incl. with delivery

Accessories (page):

M 21 Spare cutter (91), M 22 Hard metal cutter (91), M 23 Star-shaped cutter (91), M 20.1 Grinding chamber (91)



Ident. No.
1603600 230 V 50/60 Hz
1603603 115 V 50/60 Hz

M 21 Spare cutter, stainless steel

Suitable for crushing materials up to Mohs hardness 5. Included with M 20.

Ident. No.
0328200



M 22 Hard metal cutter

Made of tungsten carbide for hard materials up to Mohs hardness 9. Not included with M 20.

Ident. No.
0521800



M 23 Star-shaped cutter

Used to crush fibrous substances such as paper and vegetation, but also for plastics and material with a low specific weight. Not included with M 20.

Ident. No.
1443400



M 20.1 Grinding chamber

A second grinding chamber ensures effective processing. The grinding chambers can be placed on the drive alternately. One chamber is cleaned and filled while the other is being processed. Cutters are not included with M 20.

Accessories (page):

M 21 Spare cutter (91), M 22 Hard metal cutter (91), M 23 Star-shaped cutter (91)



Ident. No.
8006200

IKA® Crushing

Microfine grinder and accessories

IKA® Crushing

Microfine grinder



Ident. No.
2836000 230 V 50/60 Hz
2836001 115 V 50/60 Hz

MF 10 basic Microfine grinder drive

- Continuously operating universal grinder.
- Powerful drive
- Easy to clean working surface made of stainless steel
- Two different grinding heads can be attached to the drive
- Heads are easily changeable
- Grinding heads not incl. with delivery

Accessories (page):

MF 10.1 Cutting-grinding head (92), MF 10.2, Impact grinding head (92)

* Values depend on material and desired ultimate fineness. We would be happy to perform a sample milling process in our Technical Application Laboratory.



Ident. No.
2870900

MF 10.1 Cutting-grinding head

For crushing fibrous substances such as paper and vegetation, but also for plastics and material with a low volume weight. Before being discharged, the ground material passes through a sieve. This sieve is interchangeable and available in different hole sizes (not incl. with delivery). The ground material can then be collected using an NS 29 standard ground vessel.

Accessories (page):
MF Sieve (92)



Ident. No.
2871000

MF 10.2 Impact grinding head

For crushing brittle, hard materials such as minerals, building materials up to Mohs hardness 6. Before being discharged, the ground material passes through a sieve. This sieve is interchangeable and available in different hole sizes (not incl. with delivery). The ground material can then be collected using an NS 29 standard ground vessel.

Accessories (page):
MF Sieve (92)

MF Sieve

Interchangeable sieves for insertion into the grinding heads ensure maximum particle size filtering.

Ident. No.
2938900 MF 0.25
2939000 MF 0.5
2939200 MF 1.0
2939400 MF 2.0
2939500 MF 3.0
2939600 MF 4.0

Technical data	
Motor rating input	1.000 W
Motor rating output	500 W
Speed range	3.000 – 6.500 rpm
Circumferential speed	
Cutting-grinding head	22,5 m/s
Impact grinding head	31,4 m/s
Materials in contact with medium	stainl. steel (AISI 316L)
Duty cycle* ON / OFF	120 / 30 min
Overload protection	yes
Weight	320 x 300 x 380 mm
Dimensions (W x D x H)	9,7 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 22

Technical data	
Circumferential speed	22,5 m/s
Max. granularity of task	max. 15 mm
Dimensions including MF 10 basic	320 x 300 x 560 mm
Weight incl. MF 10 basic	10,5 kg
Materials in contact with medium	stainl. steel
Grinding channel and cover	(AISI 304)
Blades	(AISI 440B)
Shaft, rotor, screws	(AISI 316L)

Technical data	
Circumferential speed	31,4 m/s
Max. granularity of task	max. 10 mm
Dimensions including MF 10 basic	320 x 300 x 450 mm
Weight incl. MF 10 basic	11 kg
Materials in contact with medium	stainl. steel
Grinding channel and cover	(AISI 304)
Hammer beater	(AISI 304)
Shaft, rotor, screws	(AISI 316L)

General data			
Material		stainl. steel (AISI 304)	
Hole size (diameter)			
MF 0.25	0,25 mm	MF 2.0	2,0 mm
MF 0.5	0,5 mm	MF 3.0	3,0 mm
MF 1.0	1,0 mm	MF 4.0	4,0 mm
Wider holes on request			

MF 10 basic

Drive for inline microfine grinder. Grinding head and sieves not incl. with delivery, **page 92**

Ident. No. 2836000

MF 10.1

Cutting-grinding head, interchangeable with impact grinding head MF 10.2, **page 92**

Ident. No. 2870900

MF 10.2

Impact grinding head, interchangeable with cutting-grinding head MF 10.1, **page 92**

Ident. No. 2871000



MF 0.5

Sieve for insertion into cutting-grinding head MF 10.1 or impact grinding head MF 10.2, with hole size 0.5 mm, **page 92**

Ident. No. 2939000

MF 2.0

Sieve for insertion into cutting-grinding head MF 10.1 or impact grinding head MF 10.2, with hole size 2,0 mm, **page 92**

Ident. No. 2939400

