

Pilotina – The universal 2 in 1 mill for dry products

IKA®



IKA® German technology
made in the USA

IKA® Pilotina MU

The ideal combination of cutting mill and impact mill

IKA® Pilotina MU

The universal 2 in 1 mill for dry products

If you have a wide variety of milling tasks and therefore need cutting as well as an impact mill, the IKA Pilotina MU is the optimal solution for all your milling applications. The modular design allows an easy modification from impact to cutting mill and vice versa within the shortest possible time. Your advantages: one machine, two milling principles, all this without making any compromises with regards to disintegration quality. Due to the powerful, frequency controlled 3 kW drive with digital indication, the circumferential speed of the tool can be adjusted to the required milling process in a way that is optimal for your particular application needs.

IKA® Pilotina MC

The cutting mill system

The dry mill IKA Pilotina MC is the preeminent choice for the disintegration of smooth, sticky, elastic or fibrous materials such as parts of plants, plastics, food pellets and much more. The design guarantees an excellent milling quality, a precisely defined final particle fineness, as well as an easy and quick cleaning process after milling. The powerful 1.5 kW drive makes the Pilotina MC the ideal pilot plant machine. The counter bearing that is conically borne into the milling chamber door supports the rotor and thus enables a precise cutting quality, even under high load.



- 1 Universal funnel**
- > Double door system (protection against reaching in/splashing)
 - > Vertical/diagonal slider for feeding of the product to be milled
 - > High-quality surface

IKA® Pilotina MI

The impact milling system

The dry mill IKA® Pilotina MI is the foremost option for the disintegration of hard and brittle materials e.g. coal, glass, ore and/or seeds. The product is disintegrated quickly due to the geometry of the milling space and the fast rotating impact rotor. The final particle fineness can be precisely adjusted via the sieve that is inserted into the milling chamber. In addition, high-quality surfaces make cleaning easier after the milling process.



- 2 Impact mill funnel**
- > Easy feeding of bulk material
 - > Integrated protection against reaching in and splashing
 - > Easily cleaned

rotor

stator

sieve

filter



IKA®+

Special safety features

- > The mill will only start with the door closed
- > It cannot be opened until the rotor reaches a standstill
- > Safe design of inlet and outlet ensures that milling tools will not come into contact with the operator

NEW!!



Cutting mill stator

- > Adjustable milling gap
- > High-quality surface
- > Excellent cutting quality



Parallel cut rotor

- > Suitable for sliceable products
- > Long lifetime due to reversible cutting knives



Counter bearing

- > Guarantees precise cutting quality, even under high load



Funnel for long particles, alternative

- > Suitable for long particles
- > Vertical slider for feeding of the product to be milled



Rotor with indexable inserts

- > Suitable for difficult products
- > Enormous cutting force due to the geometry of the knives
- > Long service life due to extremely wear resistant cutting plates



Impact milling stator

- > Excellent wear resistance
- > Optimum tooth geometry



Impact mill rotor

- > Wear resistant, hardened impact plates
- > Easily cleaned surfaces

Universal accessories



3 Filter

- > Optional textile filter between outlet and collecting container
- > Increases the capacity and cools the milling product



Sieve

- > Different hole sizes for different final finenesses
- > Hole sizes from 0.12 mm – 20 mm



Fields of application

The IKA® Pilotina MI is equipped with an impact mill module and the IKA Pilotina MC with a cutting mill module, so you will always get the optimum mill for each respective milling task. The IKA Pilotina MU is delivered with both milling modules, thus covering both processes: milling by cutting as well as milling by impact. The milling area is easily accessible for cleaning due to the large milling chamber door. The door can only be opened when the rotor is standing still, thus enhancing safety by preventing any unintended opening of the milling chamber door while the machine is running. Furthermore, the funnels, as well as the outlet of the milling chamber, are also designed in a way that makes it impossible to reach into the milling chamber while the machine is in operation.



The IKA Pilotina can be used for a great variety of milling functions in a diverse range of industrial tasks. Hereafter you will find some examples of applications:

Product to be milled	Industrial branch	Pilotina MU	Pilotina MC	Pilotina MI
Seeds, roots, cereals	Agriculture	■	■	–
Hops, malt, spices, animal food, salt	Food industry	■	■	–
Stone, gypsum, construction material	Construction materials	■	–	■
Ceramics, clay	Ceramics industry	■	–	■
Bees wax, collagen	Cosmetics	■	■	–
Detergents	Chemical industry	■	■	■
Coal, coke	Production of energy	■	■	■
Tablets, coated tablets	Pharmacy	■	–	■
Ore, drill cores	Metal production	■	–	■
Colour pigments, granules	Varnish, paints and inks	■	■	■
Paper, filters, cellulose	Paper industry	■	■	–
Plastics, rubber, resins, foils	Polymer industry	■	■	–



Technical data	Pilotina MU	Pilotina MC	Pilotina MI
Motor power	3 kW	1.5 kW	1.5 kW
Speed range	1500 – 4500 rpm	1500 rpm	3000 rpm
Speed indication	digital	no	no
Capacity (depending on the final fineness)	approx. 60 – 80 kg/h	approx. 60 kg/h	approx. 80 kg/h
Overload protection	yes	yes	yes
Circumferential speed	9 – 34 m/s	9 m/s	22 m/s
Max. charging hardness	3 or 6 Mohs	3 Mohs	6 Mohs
Approx. max. charging size	65 x 60 or 25 mm	65 x 60 mm	25 mm
Dimensions, approx. (L x W x H)	485 x 575 x 700 mm	485 x 575 x 700 mm	485 x 575 x 630 mm
Weight, approx.	80 kg	70 kg	70 kg
Admissible surrounding temperature	5 – 35 °C	5 – 35 °C	5 – 35 °C
Admissible air humidity	80 %	80 %	80 %
Protection type	IP 55	IP 55	IP 55