

CMX Solid-Liquid Mixing System

IKA®



designed
to work perfectly

CMX | Solid-Liquid Mixing in Batch Processes

The IKA® CMX 2000 is an inline mixer for rapid and homogeneous incorporation of powders into liquids. The circulation of fluid creates a powerful vacuum in the machine that draws in the powder. This ensures an agglomerate free integration of problematic powders that are not easily incorporated into the liquid phase. The multi-level design also enables a stable level of functionality even when working with high viscosities. Specific tools can be used to achieve the optimum dispersing quality.



Benefits

- > Considerable reduction of manufacturing times
- > Prevention of dust and solvent emissions due to enclosed system
- > Reliable prevention of agglomerates
- > Reduced raw material addition time through improved break down of raw materials
- > Prevention of deposits in the container
- > Self-regulating input of solids and liquids



Modular and flexible
Easily adapted to fit individual application requirements thanks to its modular design.



Clean in Place



Explosion proof

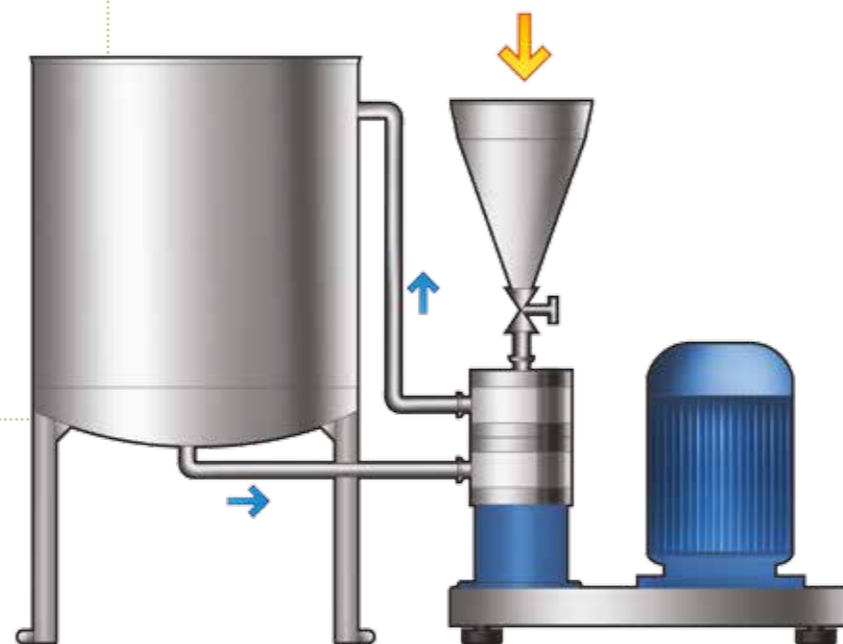


GMP-certified

One of a Kind

- > The 2-stage execution with pump and dispersion stage guarantees stable, high-level circulation, even when working with increasing viscosity. This enables extreme suction rates and minimal production times to be achieved.
- > The CMX is easily adapted to fit installation and process requirements, can be installed horizontally or vertically, has a low installation height, and has constant circumferential speeds at varying power frequencies
- > Intelligent accessory components, such as a piston valve for isolating solids with a cleaning function and ability to automate the solid feed quantity

The CMX is commonly used in a recirculation process. An appropriate quantity of solids is incorporated into a fixed volume of liquid using the inline device. The CMX offers a simple, functional and cost-efficient method of incorporating solids into liquids, without the need for additional powder dosing systems or pumps. In a highly efficient inline process, small volumes of powder are dispersed into a highly turbulent area free of agglomerates.



Depending on requirements, the solid material can be fed via a bulk bag unloader, a funnel, a bag emptying station or directly from the bag via a suction wand.



CMX | Technical Data

Type	Typical batch sizes [l]	Circulation rate [l/h]	Max. diffusion of solids [kg/h]	Motor power [kW]	Max. viscosity of end product [mPas]
CMX 2000/03 (magic LAB®)	2 – 15	1,500	250	0.9	1 – 3,000, up to 200,000 with additional discharge pump
CMX 2000/04 (PROCESS-Pilot)	10 – 250	5,000	1,300	4	1 – 5,000, up to 200,000 with additional discharge pump
CMX 2000/05	100 – 1,000	14,000	4,700	15	1 – 10,000, up to 200,000 with additional discharge pump
CMX 2000/10	200 – 2,500	32,000	8,900	30	1 – 10,000, up to 200,000 with additional discharge pump
CMX 2000/20	800 – 8,000	70,000	16,200	55	1 – 10,000, up to 200,000 with additional discharge pump
CMX 2000/30	3,000 – 15,000	110,000	25,500	110	1 – 10,000, up to 200,000 with additional discharge pump
CMX 2000/50	> 5,000	200,000	46,000	200	1 – 10,000, up to 200,000 with additional discharge pump

All figures are based on water and depend on the product attribute

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