

# CMX Solid-Liquid Mixing System

**IKA**

With 2 dispersing stages



# CMX | Solid-Liquid Mixing in Batch Processes

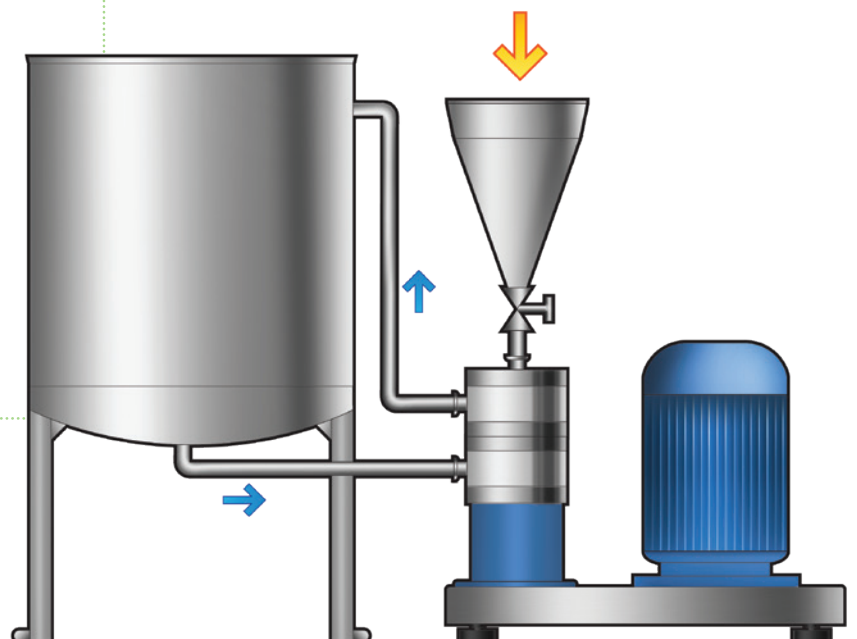
The IKA CMX 2000 is an inline mixer for rapid and homogeneous incorporation of powders into liquids. The circulation of fluid creates a powerful vacuum in the machine that draws in the powder. This ensures an agglomerate free integration of problematic powders that are not easily incorporated into the 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.



## 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.



## 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.



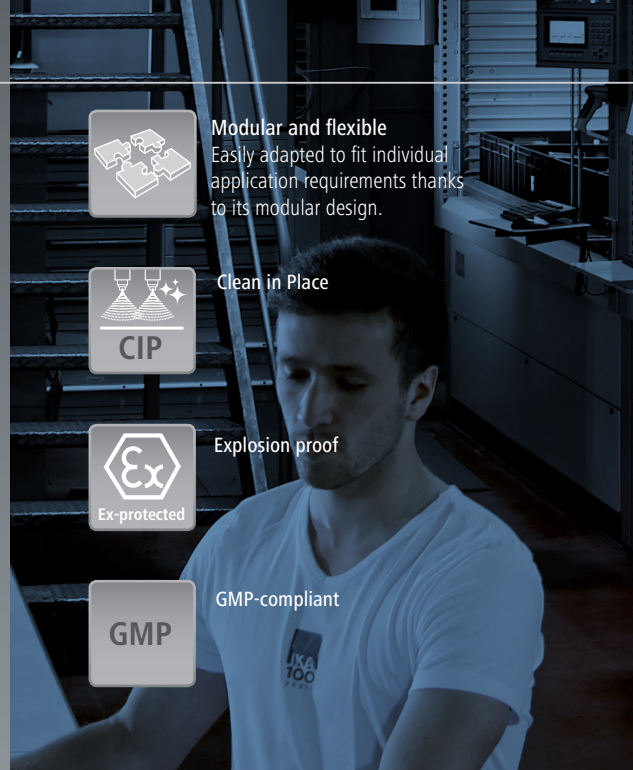
**Clean in Place**



**Explosion proof**



**GMP-compliant**



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]
CMS 2000/03 (magic LAB)	2 – 15	1,500	250	0.9	1 – 1,000, up to 10,000 with additional discharge pump
CMX 2000/04 (PROCESS-Pilot)	20 – 250	5,000	2,300	4	1 – 5,000, up to 200,000 with additional discharge pump
CMX 2000/05	100 – 2,000	17,000	6,300	15	1 – 10,000, up to 200,000 with additional discharge pump
CMX 2000/10	300 – 5,000	32,000	15,700	30	1 – 10,000, up to 200,000 with additional discharge pump
CMX 2000/20	1,000 – 10,000	65,000	24,000	55	1 – 10,000, up to 200,000 with additional discharge pump
CMX 2000/30	3,000 – 20,000	110,000	38,000	110	1 – 10,000, up to 200,000 with additional discharge pump
CMX 2000/50	> 5,000	200,000	70,000	200	1 – 10,000, up to 200,000 with additional discharge pump

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

