

Data Sheet

Conical Mixer CM 4000



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IKA Conical Mixers type CM enable a gentle and efficient mixing of bulk materials. The Conical Mixers are suitable for mixing all free-flowing solids, including products with different bulk densities.

Products are gently mixed with a specially designed spiral agitator. Because the agitator is over-mounted in the vessel cover, no shaft seals come in contact with the product. The agitator has an aerodynamically efficient shape for low friction and improved vertical lifting power. The product is intensively mixed in both radial and tangential directions. Additional turbulences are created in the product area by the top-mounted flow breaker. The speed of the spiral agitator is infinitely adjustable and can thus be flexibly adapted to the product behavior.

The conical shape of the vessel enables a complete emptying of the product and an easy cleaning of the vessel. Optionally, the vessel cover can be equipped with three self-rotating CIP spray nozzles for precise cleaning without dead spots and shadow zones.

Another unique option for the CM plant is the innovative combined tilting and slewing mechanism. The vessel cover together with the agitator can be electronically tilted 90°, thus enabling a thorough inspection of the product area.

Alternatively, this mechanism allows for the entire vessel to be inclined when the cover is closed. The inclination offers important advantages when mixing the entire product, as gravitation additionally affects the products to be mixed. The slewing drive also enables the entire mixer to be positioned anywhere between 0° and 45°.

The standard version mixer vessel stands on sturdy pipe feet with a base designed to be ground-mounted.

The tilting and slewing mechanism is integrated into a mounting frame. In this option, the vessel comes equipped with rollers which allow it to be moved out of the frame. By request, the Conical Mixer can be outfitted with several identical moveable vessels to serve as exchangeable, storage or reaction vessels.

The expandability of the scope of supply practically has no limits:

- Mounting of mixing vessel on load cells for dosing of components

- Mounting of a lump breaker for reliable disintegration of any agglomerates

The Conical Mixer can be equipped with a dead spot-free sample valve which enables very representative samples even when the agitator is being operated or the mixing vessel is under vacuum or pressure

Technical Data

Total volume	5200 l
Useful volume	4000 l
Motor power of the spiral agitator	37 kW
Speed from	4.8 rpm
Speed to	18 rpm
Ident. No.	000CM4000

Electric control for operating the agitator and the discharge valve as well as an indication of the process parameters

IKA conical mixers are available in nine sizes ranging from 10 to 4,000 liters (useful volume).