



NATURAL FOOD PRODUCTS NUTRITIONALS & INGREDIENTS FINE & AGRO CHEMICALS

PROCESS:

Solids mixing and homogenizing, drying, heat treatment & sterilization

TYPE OF PRODUCT:

Coffee, cocoa, vitamins, enzymes, aromas, fibers, plastics, resins, nutritionals/food additives, dietary ingredients, bio-actives, agro-chemicals

APPLICATION:

Heat treatment and/or sterilization of natural products such as cocoa, coffee, nuts or spices, blending of various solid ingredients, heating/cooling of bulk solids, drying under vacuum

We offer a solid design, proven quality, maximum reliability

Process description

JONGIA's single shaft mixers, type CCM, work according to a new, but already well-proven principle of a partly open mixing helix with special paddle design, guided along the wall of a cylindro-conical vessel at constant close distance by means of a central shaft. The mixing helix type agitator moves through the product and transports it from the bottom of the vessel towards to top on the outer diameter. The product is constantly moved upwards along the vessel wall by the Archimedes-Screw principle with optimized product flow and particle movement. At the same time gravity drives the product gently down along the agitator shaft in the center, outside the effective range of the mixing helix (convective gravity mixing). As the mixer shaft rotates the sloped helix agitator blades along the wall, a slightly horizontal movement of the entire batch results, and thus three-dimensional product flow, giving intense yet gentle mixing. As an option flow disturbers may intensify the mixing upon need.

The gentle mixing is maintained by a displacement of particles against each other by lifting of product by the helix blades, the imbalanced continuous descending of product in the center by gravity and the slow radial movement of the shaft.

As only a selected part of the entire batch is mechanically agitated and lifted by the mixing helix, shear applied to the product particles, the resulting wear and attrition, as well as finally the drive power required, are comparatively low and energy saving.



References

A vast majority international players in the industry use our equipment in their production facilities.



Members of HEINKEL Drying and Separation Group
heinkel.com



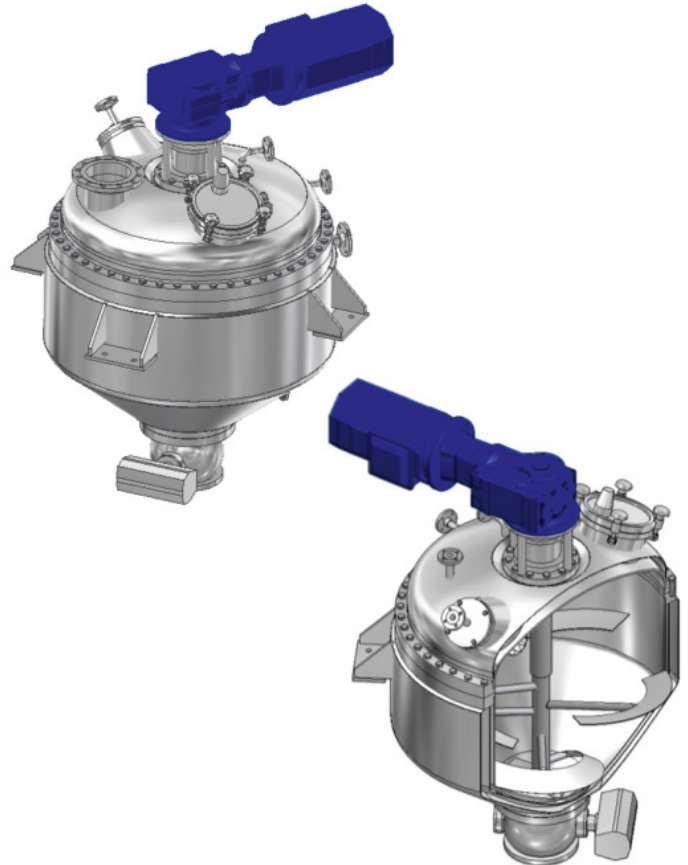
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Product information

Jongia's CCM for solid products was developed under the guidance of our sister company BOLZ-SUMMIX, a leading manufacturer of machinery and systems solutions in the fields of mixing and drying, mainly in conical vessels. The new development is intended to be used for products demanding lower mixing accuracy and a simplified agitation system than that of the conventional cone-screw mixer/dryer with independent twin-shaft rotation of orbit arm and mixing screw. We now can offer our clients an alternative specifically with respect to better mixing efficiency and shorter process times compared to other industrial single or double ribbon systems. The machines can be supplied with working volumes from 50 to 8000 liters in a variety of materials.

Gentle yet intense mixing can be achieved and a complete & residue free discharge in combination with a comprehensive sanitary design is the perfect solution for the requirements of our clients.



Process consultancy & testing

In synergy with you, our client, we envision the most efficient solution for your mixing application. Mixing techniques are put to the test in our in-house laboratory by our processing experts or on site with our rental test units.

Engineering, manufacturing & quality

Our engineering team is dedicated to designing robust and reliable, leading edge mixing equipment. The equipment is manufactured by skilled craftsmen on state of the art machinery. Every step is controlled by international quality standards.

Installation & global service

Installation, supervision and commissioning are performed by experienced field engineers. Rely on Jongia's 24/7 global service to assist you.

Jongia N.V.

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