

LMZ-5

Sigma Double Arm Kneader

The LMZ-5 Sigma Double-Arm Kneader function is based on the sigma-blade (Z) principle. It consists of a u-shaped vessel with a set of two sigma-type blades. The inward counter-rotating two sigma-shaped mixing arms rotate at differential angles, which in turn generate an effective shear kneading with anti-blocking effect.



LMZ-5 attached directly to UAM

Operation Mode

The effective kneading effect of the LMZ-5 Sigma Double-Arm Kneader is generated through a repetitive procedure of bulk movement, shearing, stretching, folding and recombining, while simultaneously the material is pulled and squeezed against the Z-Blades, against the side walls. This unique design ensures a thorough and homogeneous mixing of highly viscous materials and slurries and cuts down significantly the kneading time. All contact parts are made of GMP Compliant materials and can be sterilized in accordance with GMP.





Visual Observation

The vessel is provided with a transparent plexiglas cover, which allows the visual observation of the process. Furthermore, the sealing mechanism of the cover has an electromagnetic safety system (reed relay mechanism), which switches off the UAM Universal Motor Drive once it is opened. The LMZ-5 Sigma Double-Arm Kneader can be directly attached to the UAM Universal Motor Drive, which provides a flexible stepless speed tuning.

Advantages

- » Effective for homogenizing & folding of highly viscous blends and slurries
- » Corrosion resistant, medical & food grade contact parts

Features

- » Powerful & compact
- » GMP compliant

Standard Scope of Supply

The LMZ-5 (part. no. 40-01171) comes with the following standard scope of supply:

- » Adjustable metal frame support
- » Plexiglas cover
- » Safety guard system

Application Specifications

Parameter	Specification
Operation principle	High shear kneading folding & homogenizing
Process range	Kneading and homogenizing of highly viscous blends (solid/liquid), (liquid, liquid)
Feed characteristics	Doughs, pastes and highly viscous masses
Range of applications	Pharmaceutical, herbal & alternative medicine, chemicals & fine chemicals, food, agriculture, cosmetics and detergents, paints & pigments

Technical Specifications

Parameter	Specification
Total capacity	5 l.
Operation capacity	Up to 3.5 l Depends on feed properties, instrument and process parameters
Rotation speed	25 - 225 rpm
Instrument dimensions	Approx. 520 x 230 x 450 mm (width x depth x height)
Packaging dimensions	Approx. 480 x 620 x 600 mm (width x depth x height)
Net / Gross weight	Approx. 31 / 34 kg

We reserve the right to make technical changes without any prior notice.