

# PLOUGHSHARE® MIXER FOR BATCH OPERATION TYPE FKM



- Highest quality mixes in short mixing times
- Flexible use for almost all applications
- Gentle treatment of the product
- Reliable reproducibility of the mix quality
- Combined processes in one single machine
- Maintenance-friendly and easy to clean design
- Easy accessibility to all inside parts of the mixer
- Automated wet cleaning (WIP)

## Lödige Ploughshare® Mixer type FKM for Food Production

The heart of the mixer is a special systematic arrangement of Ploughshare® shovels on a horizontal shaft. They rotate in a horizontally fitted, cylindrical mixing vessel. The size, number, positioning, shape and circumferential speed of the elements are adapted to each other such that they cause a three-dimensional movement of the components during the mixing process. During this process, the product mix is continuously gripped by the mixing tools.



Ploughshare® Mixer for batch production type FKM 6000

In this way, dead space or low-movement zones are prevented. This guarantees quick, precise and reproducible mixing. Thanks to the special shape of the mixing elements, the mixture is removed from the drum wall during the radial movement.



Ploughshare® Mixer for batch production type FKM 1200

The mixing and fluidisation process is perfect for particularly gentle product handling when fragile and heat-sensitive substances are concerned. Optionally there are also shovels similar to the ploughshare available for special requirements and component properties. With these, optimum results are achieved even for the most sensitive products.

Some mixing tasks – especially with combined processes – require additional support for the mixing effect of the mixing element. For this purpose, separately driven choppers rotating at high speed are installed. The resulting short mixing time combined with an optimally adapted drive power minimises the amount of energy used.

Lödige mixers are characterised by minimal maintenance and high availability. Their sophisticated design makes it possible: All interior components of the mixer are readily accessible and can be inspected and cleaned easily. Where particularly high hygiene standards are required, such as in the case of microbiologically critical mixing components, the mixers can optionally be outfitted with automated cleaning systems (WIP/CIP).

Due to its flexibility, the range of applications for the Lödige Ploughshare® Mixer in the food industry is virtually unlimited. All work steps and product forms – from powdered mixes with or without the addition of liquid, to pastes and to the whole area of liquids – can be realised with a single machine. Just another reason why the Ploughshare® Mixer represents an efficient, space- and cost-saving solution for small and medium-sized companies or contract manufacturers.

The design of all Lödige Ploughshare® Mixers for the food sector is based on the guidelines of EHEDG.

### Sizes

Mixer type	Total volume in litres	Working volume in litres
FKM 130	130	35 – 95
FKM 300	300	75 – 225
FKM 600	600	150 – 450
FKM 1200	1200	300 – 900
FKM 1600	1600	400 – 1200
FKM 2000	2000	500 – 1500
FKM 3000	3000	750 – 2250
FKM 4200	4200	1050 – 3100
FKM 6000	6000	1500 – 4500
FKM 8000	8000	2000 – 6000
FKM 10000	10000	2500 – 7500

Basically the Lödige Ploughshare® Mixer of type FKM for batch production has a filling degree of approx. 25 - approx. 75 % of the total volume. The optimal filling degree depends on the application and can therefore vary according to the product mixed.