



## **Ploughshare® Food Mixer for batch operation (Hygienic Design)**

- Highest quality mixes in short mixing times
- Gentle treatment of the product
- Reliable reproducibility of the mix quality
- Combined processes in one single machine
- Maximum availability
- Low maintenance design
- Easy accessibility to all inside parts of the mixer

# Ploughshare® Food Mixer for batch operation (Hygienic Design)



Ploughshare® Batch Mixer with special shovels



Specific solution according to customer's requirements



Ploughshare® Mixer FKM 4200

## Sizes

Type	Drum Volume (l)	Working Capacity (l)	Type	Drum Volume (l)	Working Capacity (l)
FKM 130	130	50-90	FKM 2000	2000	800-1400
FKM 300	300	100-210	FKM 3000	3000	1200-2100
FKM 600	600	200-420	FKM 4200	4200	1500-3000
FKM 1200	1200	400-850	FKM 6000	6000	2100-4200
FKM 1600	1600	550-1100	FKM 8000	8000	3000-5600

Further sizes available on demand up to a total volume of 30000 l.

## Mode of Operation

The Batch Mixer operates on the principle of a mechanically generated fluid bed introduced by Lödige to the mixing technology and technical literature.

Ploughshare® Shovels rotate as mixing elements arranged systematically on the mixer shaft in a horizontal, cylindrical drum. The size, number and positioning, geometric shape and peripheral speed of the mixing elements are coordinated in such a way that they produce a three-dimensional movement of the components.

The mechanically generated fluid bed prevents the formation of dead or low-movement zones and ensures quick, gentle and precise mixing. The resultant individualisation of the particles in the mix (fluid bed) allows the addition of liquids and coating of the particles with ease. If necessary, high-speed choppers provide additional support of the mixing process.

Ploughshare® Shovels can be modified for intensive and gentle mixing of fragile components even at low speeds. Reducing the peripheral speed to <math>< 1\text{m/sec}</math> is possible, depending on the product properties. Pastes and pumpable mixtures can be processed with suitably adjusted mixing elements.

## Range of Application

Lödige Ploughshare® Mixers are used in almost every branch of industry for all types of applications. We have supplied more than 30000 machines worldwide in the last 70 years. Here is a short extract from applications in the food industry:

- Oven-ready flour mixes and baking powder
- Dried soups and stock cube mixes
- Flavourings, spice mixes and table salt
- Muesli and vitamin mixes
- Fruit tea mixes and classical tea mixes
- Soluble cocoa and fruit drinks
- Sweets, fillings and chocolate ingredients
- Cheese spread ingredients
- Decor sugar and crispy coating

## Equipment

We develop tailor-made solutions optimally adapted to each of your applications and products. Options available among others:

- High-quality surface finishes
- Heavy duty steels, stainless steels and alloy steels
- Chopper units
- Heated/cooled drum, endplates and shaft
- Dosing devices for liquids, fats, lecithin, etc.
- Doors sealed metal to metal

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