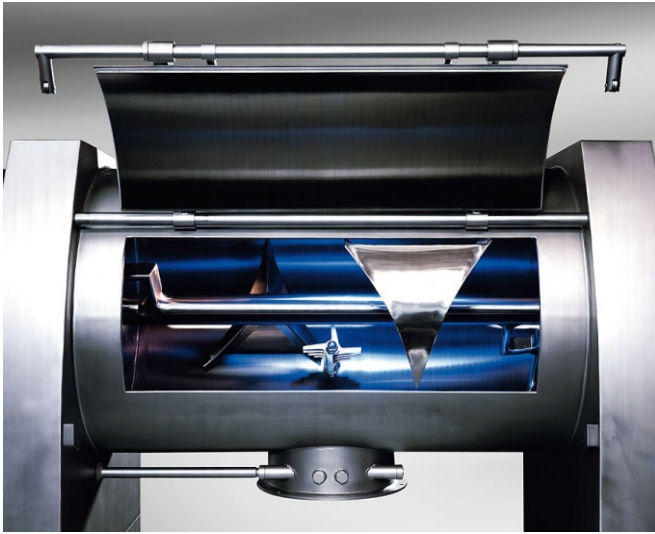


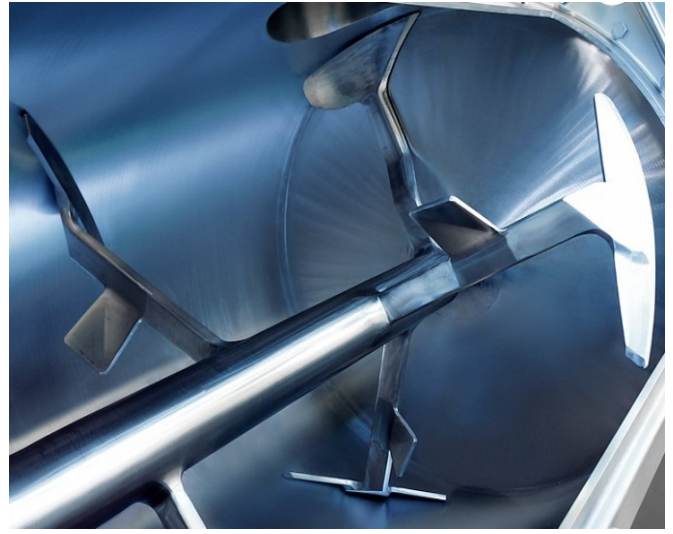
Ploughshare® GMP Batch Mixer for pharma and food applications

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

Ploughshare® GMP Batch Mixer for pharma and food applications



Ploughshare® Batch Mixer GMP 600.
The mixer can also be equipped with a heating/cooling jacket.

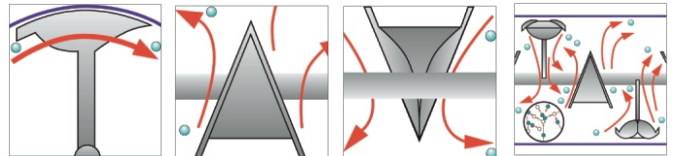


Special Ploughshare® Shovels

Mode of Operation

The Batch Mixer operates on the hurling and whirling principle introduced by Lödige to the mixing technology and technical literature.

The mixing elements ensure constant and total involvement of all product particles - preventing the formation of dead or low-movement zones. In that way, components of extremely different bulk density and structure can be mixed; even mixing in of aerosils for example is achieved homogeneously and without demixing. 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.



Schematic representation of the hurling and whirling principle

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
- Baking powder
- Dried soups
- Stock cube mixes
- Flavourings
- Spice mixes
- Table salt
- Muesli
- Tea mixes
- Soluble cocoa drinks
- Soluble fruit drinks
- Sweets ingredients
- Chocolate ingredients
- Filling ingredients
- Cheese spread ingredients
- Vitamin mixes
- Decor sugar
- Crispy coating

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

Equipment

We develop tailor-made solutions optimally adapted to each of your applications and products for a long-term production.

The individual implementation of your requirements - in terms of design too - and their technical realization are our competence and strength.

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