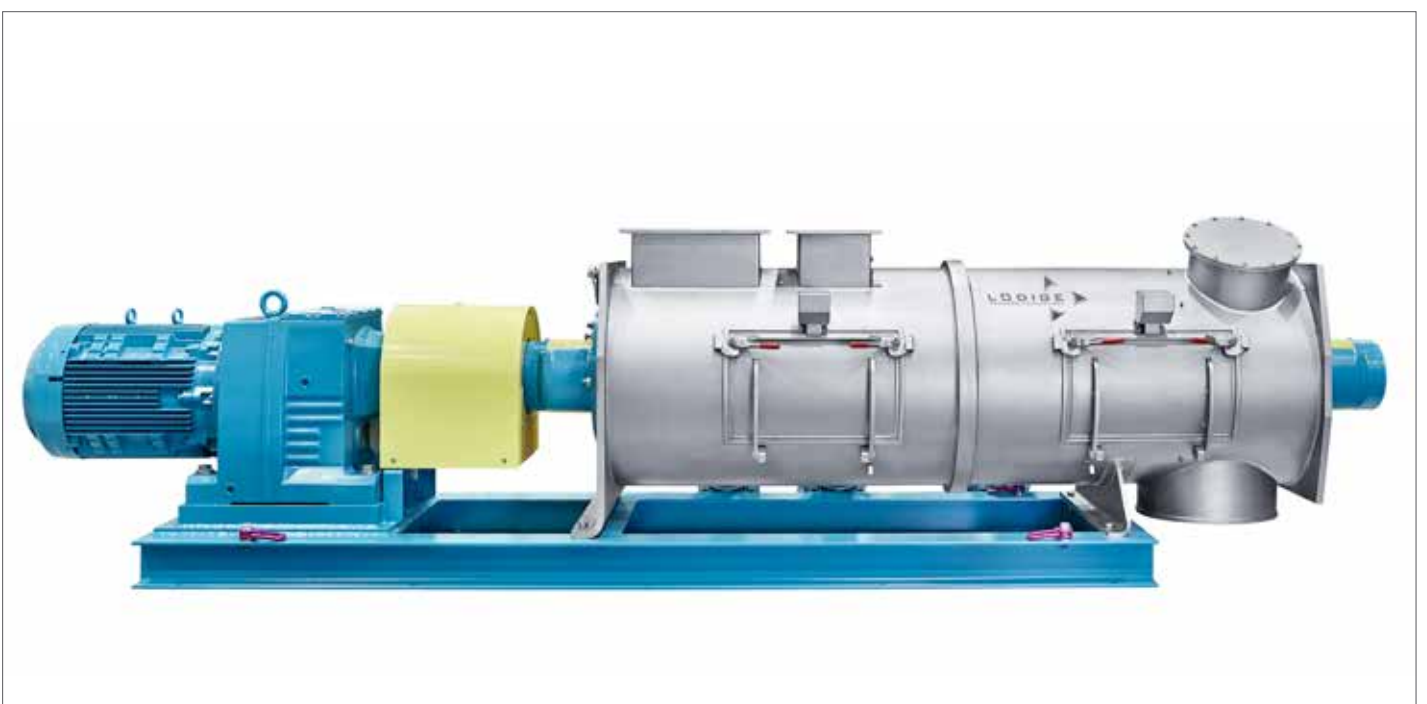


PLOUGHSHARE® MIXER FOR CONTINUOUS OPERATION TYPE KM-DW



- Excellent product homogeneity
- High throughput rates with short mixing times
- Granulation possible even with short retention times
- Gentle treatment of products
- Consistent reproducibility
- Maximum availability
- Low maintenance mixer concept





Ploughshare® Mixer for continuous operation type KM 1200 with view of chopper motor side

Ploughshare® Mixer for continuous operation type KM-DW

Mode of Operation

Ploughshare® Shovels arranged on a shaft rotate in a horizontal drum close to the wall. Their position, peripheral speed and geometrical shape are adapted to each other so that they cause a three-dimensional movement of the product to be mixed. This generates a mechanical fluid bed in which the entire product is constantly gripped, resulting in gentle yet extremely thorough mixing of the components. The separation of the particles in the fluid bed makes adding liquids and coating the particles very easy.

The continuous process can be performed at filling levels between 25 % and 50 % without any impact on the mixing quality. The mixing tools are set so that there is constant remixing for the duration of the retention time, before the mixed product is guided toward further processing steps through the discharge opening. An outlet modification has been developed especially for treatment of materials with poor flow. The outlet consists of a discharge opening in the bottom of the drum and an overflow weir arranged in front of it.



Opening in the drum with overflow weir arranged in front of it



View inside mixing drum

Range of Application

- Dry bulk materials (powdery, granular, fibrous)
- Dry bulk materials and liquids (moistening + granulating)
- Materials with poor flow properties
- Liquids and pastes with low viscosities

Optional Equipment

- Highly wear resistant materials
- Wear protection by means of linings and carbide metal sections welded to the mixing tools
- Chopper units
- Equipment for liquid supply

Sizes

Mixer type	Total volume in litres	Throughput in m ³ /h (Filling level 50 % and dwell time 1 minute)	Dimensions l x w in mm
KM 150 Dw	150	4,5	2000 x 1000
KM 300 DW	300	9	3000 x 1000
KM 600 DW	600	18	4000 x 1500
KM 1200 DW	1200	36	4000 x 1500
KM 2000 DW	2000	60	5000 x 1500
KM 3000 DW	3000	90	6000 x 1500
KM 4200 DW	4200	126	7000 x 2000
KM 6000 DW	6000	180	8000 x 2500
KM 8000 DW	8000	240	8000 x 2500
KM 10000 DW	10000	300	9000 x 3000
KM 13500 DW	13500	405	10000 x 3000
KM 15000 DW	15000	450	11000 x 3000
KM 20000 DW	20000	600	12000 x 3000
KM 30000 DW	30000	900	14000 x 3500

Basically, the Lödige Ploughshare® Mixer of type KM for continuous operation has a filling degree of approx. 25 to approx. 50 % of the total volume. The optimal filling degree depends on the application and can therefore vary according to the product mixed.