



Ploughshare® Mixer L 50 for laboratory, research and small scale production

- Highest quality mix in short mixing time
- Gentle treatment of the product
- Reliable scale-up to production machine sizes
- Reproduceable mix quality
- Maximum availability
- Easy accessibility to all inside parts of the mixer
- Wide range of optional equipment

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The technical parts of the mixer are cleanly separated and easily accessible



L 50 equipped with feeding funnel

Laboratory Mixer L 50

The Laboratory Batch Mixer operates according to the fluid bed principle mechanically generated by Ploughshare® Shovels and introduced by Lödige to the mixing technology. Equipped with mixing elements, the machine produces mixes of the highest quality which are reproducible at any time. The shaft is held only in the drive-end bearing, The endplate at the non-drive end is hinged and can be opened for accessibility to all inside parts of the drum. The housing in standard design allows the use of various drums and shafts. The sliding housing ensures free accessibility to all technical parts. The mixer has a total volume of 50 l and a working volume of 15 - 35 l.

Range of application

- Processing powdery, grainy and fibrous products
- Liquid addition for moistening, granulating and coating
- Processing fragile products without destruction of the structure
- Introduction of fat, lecithin and similar into the mix
- Suitable for product development and small scale production.

Mode of Operation

Ploughshare® Shovels rotate as mixing elements arranged systematically on the mixer shaft in a horizontal, cylindrical drum. The positioning, the peripheral speed and the geometric shape of the mixing elements are coordinated in such a way that these produce a three-dimensional movement of the components. The resultant mechanically generated fluid bed ensures gentle and precise mixing of the components. This achieves total involvement of all material and prevents the formation of dead or low-movement zones. The individualisation of the particles in the mix (fluid bed) allows the addition of liquids and coating of the particles with ease.

Optional Equipment

- Heating / cooling jacket
- Dust-free feeding device
- WIP / CIP system
- Mixing tools and chopper available in diverse execution
- Perfectly suited sealings for shafts and discharge doors