

Dosing systems for solids, liquids and semi-solids



Powder the centerpoint of consideration:

The behavior of powders is determined by numerous parameters such as grain size distribution, particle shape, particle density, melting temperature, hygroscopicity, tendency to electrostatic charging etc. This explains the very differing behavior of the different powders – for example during feeding and dosing – and requires knowledge as exact as possible about the material to be handled.

As an entry into a common project Harro Höfliger therefore initially offers its customers a powder analysis of the material, which is then invoked as a basis for selection of the most suitable dosing system.

At the same time this analysis already provides valuable indications as to which environmental conditions, e.g. temperature and relative humidity, have to be ensured during the later processing of the powder in the machine or in the production rooms.

The adhesive behavior can also already be investigated at this stage on various materials. This has a decisive influence on the material selection of all parts in contact with the product.

For the dosing of thixotropic and hotmelting media through to pure liquid dosing Höfliger uses various systems. These are integrated into the production line as required.



Drum filler for dosing powder with smallest particle size



Tamping pin system with compaction



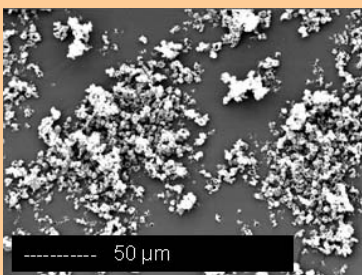
Dosator dosing system with vacuum – for dosing powders with different characteristics

Performance range of various powder dosing systems for inhalable powders (lactose blends) / by way of the example of a dosing volume of 10 mm³:

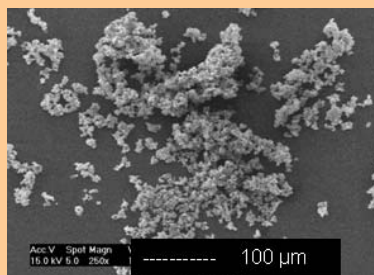
Comparison / accuracy
dosator / roller-type filler



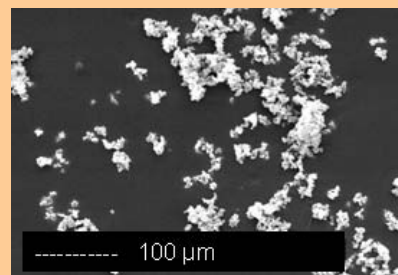
Average particle size of X₅₀: 5 µm / 10 µm / 20 µm / 35 µm / 40 µm



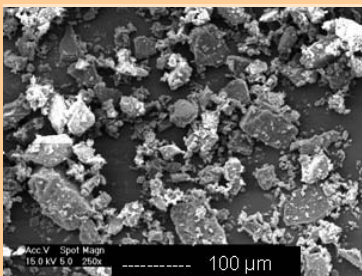
X₅₀ = 2,3 µm



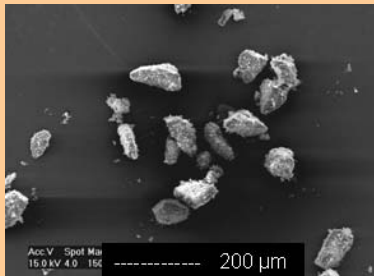
X₅₀ = 3,5 µm



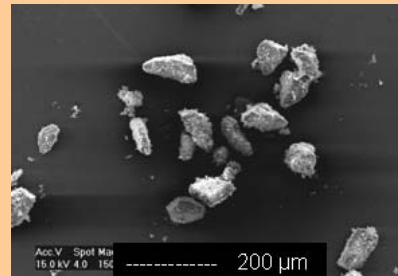
X₅₀ = 4,3 µm



X₅₀ = 11,3 µm



X₅₀ = 18,5 µm



X₅₀ = 50 µm