



Mixing

PTS Batchmixer

- Fully contained powder mixer / blender
- Handles toxic and explosive powders
- Self-filling
- High turn down ratio
- No rotating or moving parts
- High efficient mixing < 0.1 %
- Mixes powders with various characteristics
- CIP, SIP
- Space-saving with low height requirement

PTS Batchmixer



The Batchmixer* provides the ultimate in speed and flexibility, reducing overall process time compared to traditional systems, enabling the operator to mix powders with different characteristics in a contained environment. With applications from 2 litres to 5000 litres, the system also allows the operator to vary product volumes from 10-100%.

The system is particularly appropriate for pharmaceutical applications where active substances must be handled without contamination or changes to physical properties.

This easily integrated system has a main container with an integrated central deflector and a PTS with two tangential inlets on top. The powders are automatically introduced by the PTS and circulated within the container for a predefined period of time. The deflector ensures homogenous distribution of the mixture. The mixing process is faster and more effective as a result of the two jets of powder meeting in the PTS body, but with limited circulation speed, particles are not damaged. The system operates under inert conditions for hygroscopic, oxygen sensitive or explosive powders.

Powders can be transferred automatically from drums, bags or directly from process equipment like a granulator. At the end of the mixing process the system can be emptied completely and automatically for the next stage in production.

Design

- AISI type 316L stainless steel, electro-polished
- Various materials (HC22, internal coating, plastic, etc.)

Features

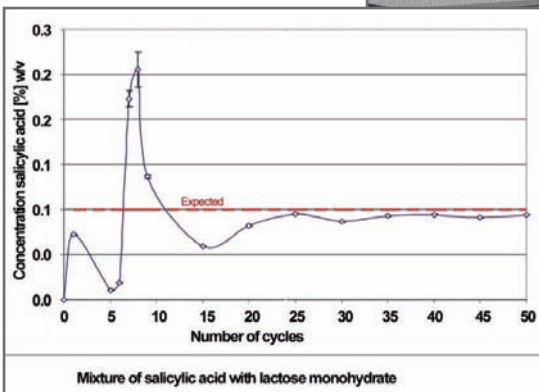
- Highly efficient mixing
- Mixes diverse powders with large differences in ratio (1/10'000)
- High level of containment
- Inert operation
- High turn down ratio < 10% - 100% product load
- Full discharge
- Introduction of additives without interruption
- Product characteristics not modified
- Extracts from different containers (drums, big-bags, silos, etc.)
- Emptying by gravity or active transfer
- Powders transferred over distances
- No moving or rotating parts
- Minimal maintenance
- Cleans in place

Options

- Hygienic, sterile unit
- Load cells
- Mobile
- Integration of high shear tools
- Discharge device for non free-flowing powders
- Sampling

* Patent pending

Application Example



PTS Batchmixer (indicative values)

PTS Batchmixer	80	100	150	200	300
Batch Size / Liters	50-100	100-250	250-500	500-1000	1000-3000