

Mobile Mixer Dryer HD mobile

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Examples of requirements put to a modern production in the pharmaceutical and fine chemicals industry are high flexibility, contamination-free operation, cleaning validation, gentle product handling etc. The mixer dryer with helix mixer has been specifically designed for these applications.

New:

- Dryer station, drying vessel and packing drum form one unit. The process steps of drying, emptying and cleaning take place without any additional handling at the dryer station.
- Any possible formation of bridges is avoided by the connected helix mixer.

Advantages of the MHD system:

- Contamination is ruled out, because open filling processes are completely avoided. Both the product and the operating personnel are fully protected. The filter media can be changed virtually contamination-free.
- Drying times are decisively reduced. A helix mixer ensures an effective and simultaneously gentle mixing of the product.
- The equipment is extremely flexible in use. Several different vessel sizes can be used at one dryer station alternately, also vessels of different materials. Different sizes of the individual batches is consequently no problem. The vessels can be changed over quickly and the centrifuge and the dryer station are ready for the next batch.
- The available space is optimally used. The process steps of drying, emptying and cleaning are carried out at the dryer station.

Function:

Filling

For the filling step the dryer vessel is driven to or beneath the centrifuge. The feed nozzle is connected gastight with the discharge of the centrifuge. The product to be dried falls under gravity directly into the previously inertized dryer vessel without contamination.

Transport

After filling the vessel is sealed gastight and is then driven to the dryer station. Here it is connected to the power system and the mixer drive using quick-acting couplings. To enable easy use of different sized vessels a height adjustment is provided. This is implemented by means of lifting gear integrated in the dryer station. The packing drum (e.g. a barrel) is connected gastight to the product discharge of the vessel.

Drying

The drying process is carried out with a fully automatic program. It is possible to measure the product temperature during the drying procedure and to take samples.

Emptying

At the end of the drying process the dry material is emptied into the already connected packing drum. The mixer can be connected to avoid the formation of bridges.

Cleaning

After emptying of the vessel the fully automatic cleaning (CIP) of the vessel is carried out. This is followed by the drying of the vessel which is then immediately ready for operation again.

Inspection

For inspection purposes the vessel is undocked from the dryer station and the vessel cover swings open in upward direction. The entire inner area, all seals and the mixer are now clearly visible for the inspection.