Tetra Pak® Powder Mixer B3500
Twin-shaft paddle mixer for powder products

Highlights
• Accurate, quick and gentle mixing with low deviation
• Achieves homogenous mix while preserving powder properties
• Secures food safety with high hygiene
• Fast cleaning and low downtime
• Reliable, robust design – low maintenance, complies with safety regulations

Application
The Tetra Pak® Powder Mixer B3500 is a batch paddle mixer for very accurate, quick and gentle mixing of all kinds of powders in food production. It achieves good homogeneity without damaging powder. It also enables ingredient flexibility since it handles a large variety of powders.

Moreover, the Tetra Pak Powder Mixer B3500 is designed to offer the highest level of safety for operators. It also secures food safety with high hygiene. It complies with all European safety regulations, enabling use in an ATEX environment, and its sanitary design is fully approved for food contact according to the EC1935-2004 regulation. It ensures traceability of all materials and is designed according to EHEDG guidelines.

Working principle
The Tetra Pak Powder Mixer B3500 uses convection technology. The specific speed of the rotor shafts, combined with the exact positioning and angle of the paddles, allows powder particle projection in the air and enables effective powder circulation that leads to precise mixing. Because the product is fluidized, treatment of the product is very gentle and homogeneous mixing is achieved very quickly. The shaft, with its paddles at special angles, is more gentle and precise in distribution than plough or ribbon mixers.

Reliability and robustness have been key drivers for all design choices. The unique power transmission with gear motor and gear coupling is robust, reducing maintenance requirements. The equipment comes with its own junction box, fully wired and tested in-house.
**Tetra Pak® Powder Mixer B3500**

The mixing vessel is mounted next to a trolley that carries the motor and the paddles shafts so that they slide away. This, combined with a large door on the opposite side, allows full access for cleaning the mixing vessel from the outside. Furthermore, a patented, fully dismountable discharge valve opens outwards and for free powder flow, preventing friction and de-mixing. It twists away and out from under, giving operators easy access to dismantle it for maintenance and cleaning. This minimizes downtime for cleaning. An inspection hatch also allows quick assessment of cleaning needs.

The Tetra Pak® Powder Mixer B3500 features a manual and ergonomic design for fast and full accessibility to the mixing vessel, thanks to large doors with ergonomic handles and quick dismantling with cantilevered shaft.

**Main components**

- Fully welded mixing vessel with customized inlets
- Twin paddle shaft with sliding system
- Large side door
- Inspection hatches
- Dismountable discharge valve
- Supporting main frame
- Pneumatic and electrical junction box

**Options**

- Framework and trolley in stainless steel 304
- Empty or full indication (weighing)
- Vibration monitoring
- I/O Siemens or I/O Rockwell (wiring included)
- Wet sand-blasting surface treatment

**Services**

- Maintenance contract
- On site performance audit
- Training

**Technical data**

**Capacity**

- Air volume 3 500 litres
- Nominal capacity 1 750 litres
- High mixing performance within 80-120% nominal filling ratio
- Possible to be used between 50-130% but require specific trials to validate possible performances

**Additional data**

- Electrical power, 37 kW
- Weight, 7 400 kg