



Tetra Pak® High Shear Mixer

Batch units B200-800 and B300-2000



Highlights

- No-shear and high-shear in the same mixer as an option
- Gentle blending of particles
- Handles high and low viscosity products
- Low raw material losses
- Low maintenance

Application

The batch unit enables high-shear mixing of high viscosity products, dissolving powder ingredients, such as pectin, gums and sweeteners, and mixing concentrates, such as sweetened condensed milk.

The efficient mixing system produces homogeneous, lumpfree products, ready for further processing.

Working principle

The main component is a mixing tank with a bottom mounted batch mixing unit. The mixing unit is based on a rotor/ stator principle which ensures optimal processing.

A preset amount of cold or pre-heated liquid is fed into the mixing tank. Powders and dry ingredients are added manually through the manhole. Liquid additives can be emptied out of barrels using a drum-emptying pump, while small containers are emptied and rinsed in the concentrate charging station.

The raw materials are mixed into a homogenous product. When the desired composition is obtained, the product is discharged to a buffer tank can be prepared in the mixer.

Continuous processing can be achieved using two or more buffer tanks, arranged for alternative filling and emptying. If high capacity drum-emptying is used, the concentrate is emptied directly to the buffer tank.

Recirculation mixing is also possible by choosing the optional level control. In this case, the product is pumped from the batch tank to the mixer tank and then back to the batch tank, keeping a constant level in the mixer.

Tetra Pak® High Shear Mixer

Basic unit

Main components

- Mixing vessel
- High-shear mixing unit with water-flushed seal
- Sack table
- Set of valves
- CIP

Materials

All parts in contact with the product are made from stainless steel AISI 316L. Other parts are made from AISI 304.

Technical data

Processing parameters	B200-800	B300-2000
Capacity, l/h	800-3 200	2 000-8 000
Number batches, h	1-4	1-4
Typical output capacity (recirculation), l/h	18 000	28 000
Typical capacity (recirculation), l/h	20-30 000	30-40 000
Dry matter, %	≤ 80	≤ 80
Viscosity, cP	≤ 2 000	≤ 2 000
Viscosity (recirculation), cP	≤ 1 000	≤ 1 000
Mixing temperature	≤ 90 °C	≤ 90 °C
Oil addition rate, kg/min	≤ 60	≤ 120
Powder*, kg/min	≤ 125	≤ 175
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Electricity 380-480 V, 50/60 Hz, kW	30/33.5	55/62
Seal water, l/h	10	10
Instrument air, NI/h	100	100

Dimensions

Length, mm	2 250	2 800
Width, mm	1 800	2 300
Height, mm	2 600	2 900

* All product capacities depend on viscosity and circulation flow. The amount of powder added depends on the type and quality of the powder. Milk powder, flavour, sugar, emulsifiers and stabilisers.

Options

- Dynamic stator for gentle blending of particles
- Propeller for the turbo unit
- Water heating system
- Flow meter on inlet
- Inlet pump
- Outlet pump
- Outlet pump for viscous products
- Level control for recirculation use
- Relay control panel
- Non-standard power supply, e.g. 3x200 V, 3x575 V
- Speed control of mixing unit
- Suction lance

