



# Tetra Pak® Preparation System B-ES

One production island serving your filler line



## Application

Tetra Pak® Preparation System B-ES combines a complete final syrup preparation unit in one compact modular plant isle to serve one filler production line.

The solution is ideal for companies intending to transfer part of their business to the beverage industry and where budget spend is limited. Tetra Pak Preparation System B-ES has an excellent cost to benefit ratio and contains all the necessary functions to provide an agile production capability for your filler line, regardless of capacity.

The solution is capable of covering a wide range of applications within the beverage industry and even allows the handling of difficult ingredients containing fibres or with progressive viscosities like stabilisers, thickeners or gums.

## Working principle

Tetra Pak Preparation System B-ES comes with equipment for ingredient feeding, such as powder hoppers including a drum unloading function with suction spear and supply lines for liquid sugar, concentrates or water. These are linked together by one flexible flow plate that distributes the ingredients to the mixing tanks.

Tetra Pak Preparation System B-ES is defined by two large batch vessels equipped with our radial jet mixer technology driven by independent recirculation loops to mix the individual product precisely according to the recipe specifications. The solution has a modular design and can be extended with different features stated in the options section. It can also be combined with other units for ingredient feed or even a continuous carbonated soft drink blender, carbonator or deaerator depending on individual product requirements.

## Highlights

### Perfect fit

Modular design allows exceptional recipe flexibility and enables upgrade investments whenever a recipe requires them.

### Optimised in every aspect

Having everything in one place reduces transfer piping and ultimately product losses, energy and overall preparation time.

### Unrivalled efficiency

Tetra Pak Preparation System B-ES is so efficient that it can in many cases eliminate a mixing tank without losing line capacity.

### Treats groundspace with care

A highly compact design facilitates integration into the plant.

### Enhanced ingredient feeding

Unloading of concentrate drums without using expensive aspirating pumps. The system is driven by the vacuum of our patented injector technology. The injector also allows the aspiration of dry powders with a suction lance.

### No need for shear pump

A specially designed Auto Mixing Device (AMD) allows hard-to-dissolve powders like CMC or pectin to be fed up to 1% at 20 °C dissolving temperature without lumps remaining. All achieved without energy-intensive or product-shearing mixers.

## Options

### 1. Tank sizes

- 10 000 litre tank
- 16 500 litre tank
- 25 000 litre tank
- 45 000 litre tank

### 2. Mixing

- Auto Mixing Device (AMD) for dissolving gums, stabilisers or thickeners 1%.
- Tetra Pak® Radial Jet Mixer T upgrade

### 3. Ingredient intake

- Additional ingredients line (serial intake, only one ingredient can be dosed at the same time).

### 4. Additionals

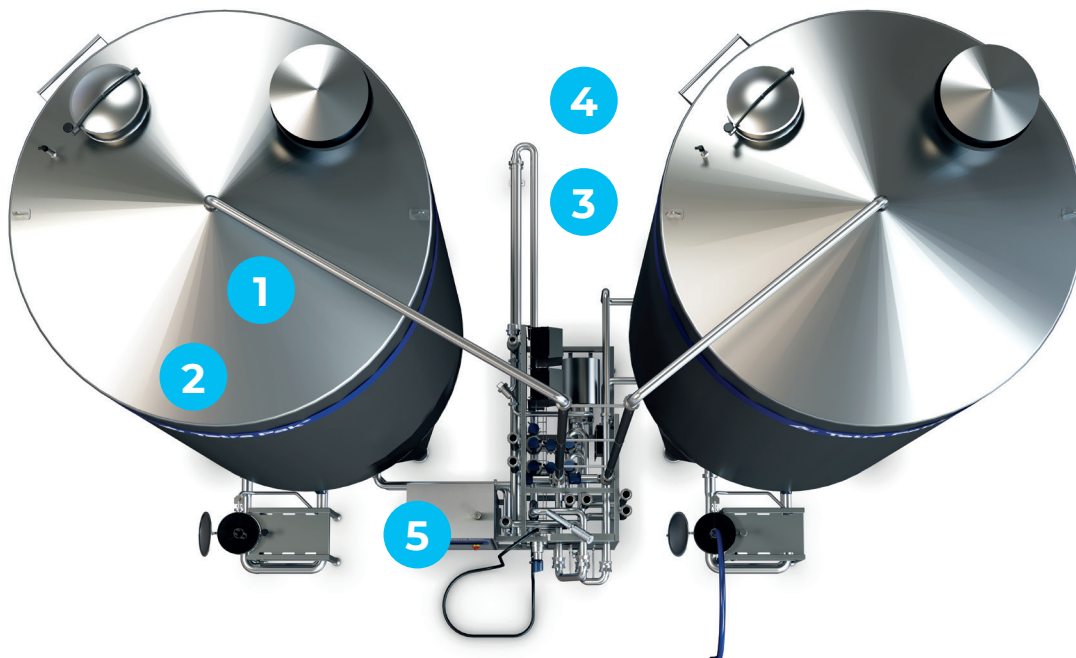
- Flow measuring in production line for water purge
- Water spray gun including recipe-linked flow measuring

### 5. Automation

- Feedback for valves
- Human machine interface (HMI) 22" TFT Siemens
- Air conditioning system for control panel

### On request the feeding hoppers can be upgraded

- With a bigger dumping hopper to feed higher volumes, for example to prepare sugar solutions.



## Main components

- Two mixing tanks
- Ingredient feeding streams
- Recirculation loops
- Feeding hoppers
- Ingredient measuring line
- Distribution flow plate
- Operating panel

## Control panel

Tetra Pak Preparation System B-ES is controlled by a Siemens PLC fitted in a control cabinet located on the main module. Optionally, the control cabinet can be equipped with an HMI screen or air conditioning system.

We can deliver the PLC with Allen Bradley code on request.

## Technical data

All parts in contact with the product are made of AISI 316L. The frame is made of AISI 304L. Fittings are executed in DIN 11853 or DIN 11684.

### Electrical power

Control cabinet supply	400 V, 50 Hz
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Other supply voltage or frequency available on request

Recirculation and discharge lines	max. 49.5 kW*
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\*for tank sizes < 45 000 litres, max. 27.5 kW

Compressed air	600 kPa (6 bar)
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## Layout

Measurements on request.

