Scope of supply

- Product balance tank (BT) with level control
- Frequency-controlled centrifugal product feed pump
- Frequency-controlled centrifugal pump for water
- Centrifugal booster pump
- Product flow controlled by electronic flow meter
- Flow transmitters in the water circuits
- Free-standing Tetra Pak Tubular Heat Exchanger (THE)
 with floating concept; or Tetra Pak Plate Heat
 Exchanger (PHE) with cooling, regenerative and
 heating sections, including protection panels/sheets
- Hot water circuit, incl. brazed PHE, pump, steam valve and trap, expansion vessel, shut-offvalves, etc.
- Control panel in stainless steel including process controller (PLC), solenoid valves and motor starters
- Automated PLC operated sequences
- Automated process interaction with downstream equipment
- Automated fault supervision and action for pumps, temperatures
- Registration of disinfection and outlet temperatures
- Frequency converters, mounted on the frame
- Pre-wired, signal/ power cables
- Pneumatic, remote-controlled sanitary valves
- Product piping in AISI 316
- Set of pipes, bends, valves, internal signal wiring, pipes for signal wiring and fittings required for the pre-erection of the system
- Factory pre-assembled and tested before delivery
- Engineering
- Technical documentation in EEA languages

Optional features

Automation and control

- PLC control system: Siemens or Rockwell
- 21" industrial PC operator panel mounted in control cabinet
- Free standing PC as operator interface (HMI)
- Tetra Pak® PlantMaster integration
- Uninterrupted power supply (UPS)
- Control panel air cooling
- Digital paperless recorder

Production flexibility

- Variable capacity 1:3 max.
- Automatic media control

Production efficiency

- Reduced steam consumption with Eco-Heating
- Insulation of Tetra Pak Tubular Heat Exchanger
- Energy hibernation (EH) for reduced energy consumption
- Different levels of heat recovery

Special food treatment

- High temperature program
- Deaerator for product quality and long running time
- Multiple holding tubes
- Tetra Pak® Homogenizer for product quality

Production safety and convenience

- SMO254 material in tubular heat exchanger and titanium in plate heat exchanger for corrosive products
- Supervision of differential pressure
- PU control
- Coarse strainer after product feed pump

Deaerator

- Deaerator on separate skid
- Closed water loop for cooling of deaerator condenser
- Closed water loop on deaerator vacuum pump

Homogenizer

 Automatic air refill and cleaning of homogenizer dampers for increasing overall equipment effectiveness

Cleaning

- CIP from CIP station or from internal CIP system
- Internal CIP system with automated addition of CIP detergent into the balance tank via ratio dosing or header batch system
- CIP recipe editor with possibility to design unique cleaning recipes
- Conductivity switch for supervision of CIP media change
- Back-flush cleaning of heat exchanger for products containing particles or fibres

Technical documentation

- Non-European Economic Area (EEA) languages
- CE marking for countries outside EEA

Please note that most of the above options are also available as upgrades.

Tetra Pak® Pasteurizer BF

Technical data

Approx. consumption data for tubular heat exchanger-based module with product-to-product heat regeneration up to 85% with a temperature program of 15°C - 95°C - 25°C , holding time 15s.

- Steam (300/600 kPa)
 52-55 kg/1 000 litres product
 20-34 kg/1 000 litres product with Eco-Heating option
- Cooling water (300 kPa, 15°C):
 20-21 kW/1 000 litres product
 6-9 kW/1 000 litres product with Eco-Heating option
- Low consumption during pre-disinfection or hibernation mode

Environment

- Tetra Pak® Pasteurizer BF is built in a modular design, which makes it easy to rebuild and adopt for new duties
- The unit consists of parts that can be separated for recycling purposes

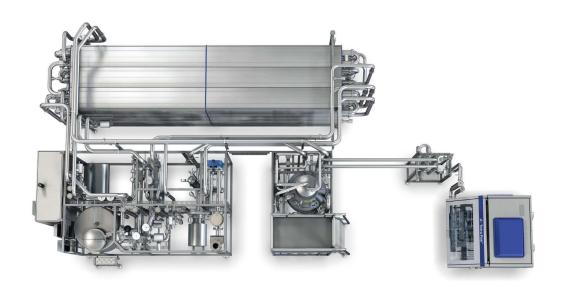
Dimensions

- Approximate measurements including required service are in mm.
- Layout drawing shows optional deaerator unit
- Specific measurements will vary depending on capacity and configuration

Model specifications

All models feature P2P heat recovery

Model	Floating Pulp/ fibres length	Sinking/ suspended pulp/ fibres	Heat exchanger	Type of filling	Option
W	<5mm, max 5%	<30% w/w	Tetra Pak® Plate Heat Exchanger CW	Aseptic, Hot	Deaerator
S	<15mm, max 10%	<30% w/w	Tetra Pak® Tubular Heat Exchanger	Aseptic, Hot	Deaerator
X	15mm, max 10%	<30% w/w	Tetra Pak® Tubular Heat Exchanger	Aseptic	Deaerator



Layout

Modules	Α	В	l I
Feed module			2600 - 3350
THE	904 - 1880		
Deaerator		1200 - 1500	3890 - 4800

I; is height of equipment. Additional free space is required for service and maintenance above.

