



Tetra Pak® In-line Blender D

Direct in-line blending of dairy products



Highlights

- World-class precision and continuous process cuts ingredient costs and operational costs significantly
- Advanced automation ensures optimized, reliable production
- Handles widest range of ingredients in the industry

Application

The Tetra Pak® In-line Blender D is a high performance unit designed for automatic in-line blending of dairy products and in-line standardization of fat, solids non-fat, total solids and protein content in finished products. It handles a wide range of liquid dairy ingredients including whole and skim milk, concentrated skim milk, cream, whey cream and concentrate, vegetable oils, chocolate and other slurries, sugar, UF permeate and retentate and more. The Tetra Pak In-line Blender D ensures high repeatability and high precision to deliver uniform product quality at a low operational cost.

Working principle

Continuously controlling ingredients in an automation control loop, achieves precise ingredient composition in formulated dairy products. Upon receiving signals from transmitters in the ingredient line, a computer calculates the ingredient composition in relation to set points and flow rates. It then transmits control signals to the flow-regulating component. This controls the ingredient composition whenever required in the formulated dairy product.

The base blending and standardization operation is based on flow measurement and an analysis of the composition in the ingredient tank.

A mass flow transmitter can be installed, for in-line measurement of the composition from the ingredient tank.

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Basic unit

The unit consists of two ingredient lines for fat standardization

Product model

- Flow and temperature transmitters
- Control panel in stainless steel with Siemens or Rockwell control system
- Software for operator Human machine interfaces (HMI)
- Unit is prepared for remote operation
- Technical documentation
- All internal wiring and piping
- All components pre-assembled on a stainless steel frame
- Mix-proof valve

Selection of options

- Additional ingredient lines
- Density transmitters
- SpotOn technology for in-line compensation
- Direct feed to pasteurizer or sterilizer
- UPS, uninterrupted power supply
- Air cooler with compressor for control panel
- Standardization of solids-non-fat, total solids and protein
- Human machine interfaces (HMIs), touchscreen mounted in control panel
- Patent pending variable dynamic turbulent blender secures quality
- Control panel air cooling
- Digital paperless recorder

Processing parameters

Final product flow rate, (l/h): 5 000 to 75 000

Ingredient temperature (C°): 4 to 90

Dimensions*

| | |
|--------------|-------|
| Height, (mm) | 2 200 |
| Width, (mm) | 1 275 |
| Length, (mm) | 1 470 |

*Options not included

Shipping data*

| | |
|--------------------|-----|
| Net weight, (kg) | 370 |
| Gross weight, (kg) | 720 |
| Volume, (m³) | 8.7 |

*Options not included

Environment

- Modular design, easy to rebuild and adapt to new duties
- Consists of parts that can be separated for recycling

