

Tetra Pak® Fresh Cheese Vat Paddles

Innovative fresh cheese production



Highlights

- No overheating of cheese curd
- Minimal operating cost
- High hygiene level
- Closed production environment
- Completely automated/controlled production process
- Repeatable product quality

Application

The Tetra Pak® Fresh Cheese Vat Paddles is an advanced, highly automated piece of equipment used for the preparation of fresh cheese curd in fresh and grainy cheese production lines. Such lines may include filling machines, pasteurizers, drainers, tanks, blenders, forming units, mould handling systems, etc.

Working principle

The Tetra Pak Fresh Cheese Vat Paddles is a unit used for batch production of fresh cheese curd with uneven, non-homogenous curd particles. Milk is filled into the unit from the bottom to avoid foam creation. The amount of filled milk is measured by a volumetric flow meter. After filling, additives are mixed into the milk and the coagulation process starts. The Tetra Pak Fresh Cheese Vat Paddles can be equipped with a sterile air system to ensure high hygiene levels during the coagulation and production processes.

The cheese master must decide when to start cutting the coagulum. After this, the rest of the production process is carried out automatically according to parameters set in the production recipe. Production steps include:

- Heating by means of hot water, according to set parameters.
- Mixing according to set program.

When the cheese curd is ready, the cheese master ends the heating and mixing process. Ready curd is then emptied from the Tetra Pak Fresh Cheese Vat Paddles unit. During the emptying process, the agitator works in a pendulum motion to prevent damaging the cheese curd.

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By applying the individual production parameters for a certain recipe, the Tetra Pak® Fresh Cheese Vat Paddles unit can produce different types of products with different properties. These products may include tvarog, ricotta and paneer.

A motor control cabinet is situated behind the unit but can easily be moved to a different place.

The Tetra Pak Fresh Cheese Vat Paddles is pre-programmed to communicate with Tetra Pak® PlantMaster or other supervisory systems.

Basic unit

Tetra Pak Fresh Cheese Vat Paddles is a unit that provides a wide range of flexible solutions with capacities and options suited for every customer and market. Units are pre-assembled and are factory tested with water before delivery, thus ensuring reliable installation.

Main components

- Cylindrical vat made of AISI 304 steel
- Steering tools
- Frequency-controlled motor drives for steering tools
- Heating jacket
- Pressure transmitters
- Temperature transmitters
- Whey draining system

Technical data

Control panel

The Tetra Pak Fresh Cheese Vat Paddles is controlled by an Allen Bradley or Siemens PLC. This is fitted in a cabinet located on the operating platform.

Capacity

- 60001
- 10 000 I
- 12 000 l
- 15 000 L

Consumption data

CIP	30 000 l/h
Electrical power	
3 kW	400 V, 50 Hz
Compressed air	
15 Nm/h	at 600 kPa (6 bar)



Layout



