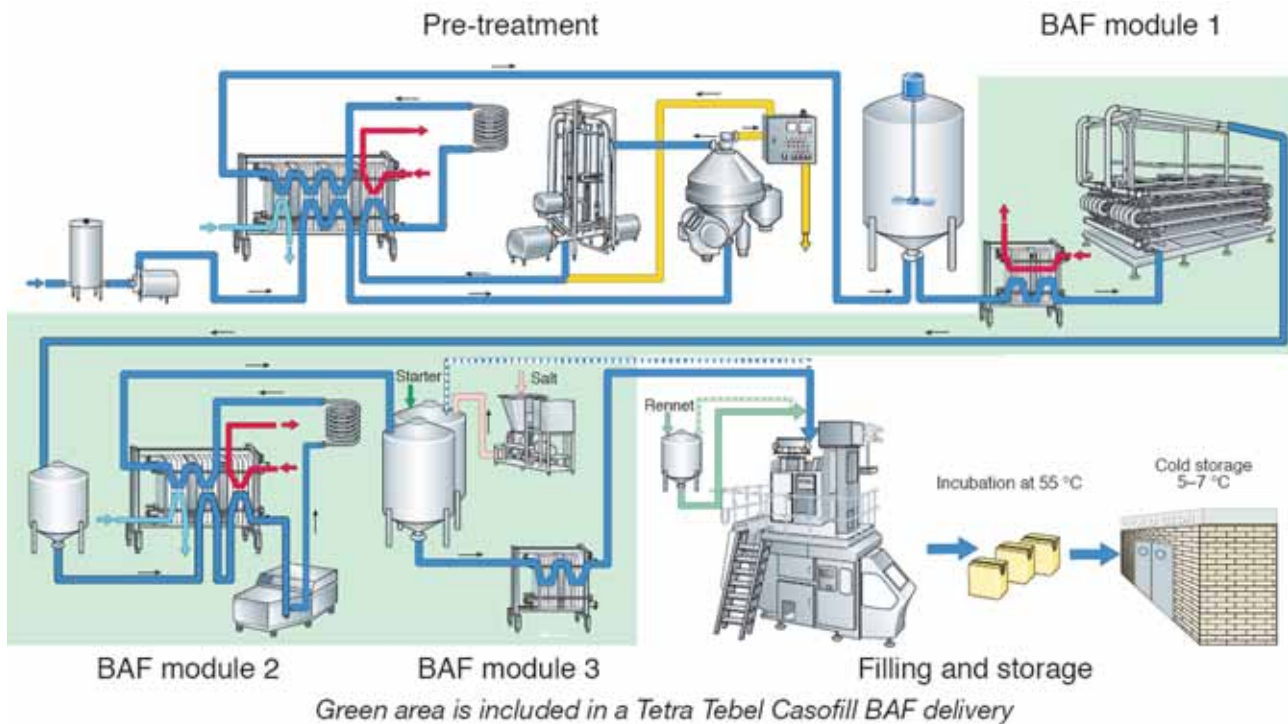




Tetra Tebel Casofill® BAF

Process line for white cheese types



Highlights:

- Long shelf life due to hygienic process
- Higher yield compared to traditional Feta process
- Cheese ready after final cooling
- Only natural ingredients
- Multiple packaging options

Application

The Tetra Tebel Casofill BAF is a process line for the semi-automatic production of Bacteriologically Acidified Feta.

The process line consists of three basic modules:

Module 1 Ultrafiltration

Module 2 Pasteurisation and homogenisation

Module 3 Fermentation and filling

The process line will be delivered with a basic recipe for the production of the Bacteriologically Acidified Feta.

Working principle

Standardised and pre-treated milk is pumped to the plate heat exchanger in the Tetra Alcross ultrafiltration module. The milk is heated to 50–52°C, before entering the UF loop. The milk is concentrated approx. 5,5 times to a final total solids content of 36–39%, hereafter called retentate.

The permeate is used in the regenerative section of the plate heat exchanger for heating the incoming milk from 7°C to UF temperature. At the same time the permeate is cooled down to below 7°C, for possible further processing.

The retentate is pasteurised and homogenised at 75–80°C in a specially designed pasteurisation module.

After pasteurisation the retentate is cooled down to the fermentation temperature and pumped to one of the fermentation tanks. A DVS-starter is added during filling as well as the first amount of salt.

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The fermentation from pH 6,7 to < 5,0 takes up to 12 hours. When the pH has reached its final value the rest of the amount of salt is mixed into the fermented retentate.

When the total amount of salt is well mixed into the retentate, the filling starts. During filling, rennet is dosed in-line.

The pre-cheese is filled in a liquid state in the Tetra Brik Aseptic packages and coagulates in the package within 20 minutes. The cheese is stored at room temperature over night. The next day the firm packages are transported to a well ventilated cool store and are cooled down to below 7°C.

The cheese can be consumed right after final cooling.

Capacity

Standard milk inlet capacities to the ultrafiltration plant are 6.500 and 10.000 l/h. Other capacities on request.

Standard scope of supply

- Tetra Alcross US Ultrafiltration plant
- Siemens-based PLC control system for UF
- Tetra Therm Lacta BAF pasteuriser
- Tetra Alex plate heat exchanger
- Valve cluster and piping for filling line
- In-line rennet dosing equipment
- Documentation

Options

- Platform for salt dosing unit
- Platform for incubation tanks
- Refractometer
- Automatic CIP dosing for module 1
- Container with dosing pim for CIP of module 2

Technical data

Consumption data valid for Tetra Tebel Casofill BAF for 6.500 l/h milk inlet.

	Nom-max kg/h at 3 bar
Steam	
Module 1 Tetra Alcross	150-900
Module 2 Tetra Therm Lacta	20-50
Module 3 Fermentation and filling	75-200
Electric power	Main 230/400 V, 50 Hz
Module 1 Tetra Alcross	68-96,5
Module 2 Tetra Therm Lacta + Tetra Alex	8 + 5,5
Module 3 Fermentation and filling	22
Instrument air	NI/h
Module 1 Tetra Alcross	5.000
Module 2 Tetra Therm Lacta	500
Module 3 Fermentation and filling	600
Cooling/ice water	l/h
Module 1 Tetra Alcross	up to 1.900
Module 2 Tetra Therm Lacta + Tetra Alex	2.250 + 80
Module 3 Fermentation and filling	15.000
CIP water supply	l/h
Module 1 Tetra Alcross	40.000
Module 2 Tetra Therm Lacta + Tetra Alex	2.000
Module 3 Fermentation and filling	20.000
Sealing water	l/h
Module 1 Tetra Alcross	160
Module 2 Tetra Therm Lacta	100
Module 3 Fermentation and filling	100

Connections, inch	Module 1	Module 2	Module 3
Inlet milk/retentate	2,5	1,5	1,5
Outlet retentate	2	1,5	2
Outlet permeate	2	1,5	1,5
Inlet salt	1,5	1,5	2
Supply CIP	2,5	1,5	2,5
Supply steam	2	DN25	DN25
Supply water	2,5	1,5	1,5
Supply ice/cooling water	1,5	1,5	2
Outlet condensate	1	DN20	DN20

Dimensions for installation

Required floor space is 225 m²

Required maximum height is 7 metres