I Set yoghurt production procedure

The milk, having been thermised and cooled and containing the adequate fat content, has its solids standardised in a mixing line in which powdered milk along with other necessary dairy ingredients and required additives are added. It must be mixed slowly, always avoiding the introduction of air into the mixture.

Once the mix is obtained, air is removed and the mix is heated to 65-70°C followed by homogenisation at 200/250 bar over one or two stages. It is then pasteurised at 95°C for 300 seconds, after which it is cooled to between 4-6°C and stored.

Next, the culture and flavourings are added to the storage tank and are agitated until correctly mixed.

The mix is pumped through a plate heat exchanger which heats the milk to 45°C and immediately packaged. The product is subsequently sent to the fermentation chamber where it remains for between 2.5 hours and 3 hours, depending on the final pH. It is then quickly cooled by forced air to 15°C in another chamber before finally entering the final storage tank at 4°C where it remains until the following day to be removed.

I Whipped yoghurt production process

The milk, having been thermised and cooled and containing the adequate fat content, has its solids standardised in a mixing line in which powdered milk along with other necessary dairy ingredients and required additives are added. It must be mixed slowly, always avoiding the introduction of air into the mixture.

Once the mix is obtained, air is removed and the mix is heated to 65-70°C followed by homogenisation at 200/250 bar over one or two stages. It is then pasteurised at 95°C for 300 seconds, after which it is cooled to 38-42°C and moved to the fermentation tanks where the culture is added. It is agitated well to obtain a complete mix (This may also be done with an in-line mixer)

Once obtained, the agitation ceases in order to allow the milk to rest during the fermentation period. This period will vary according to the culture used – between 6 and 8 hours.

At the end of fermentation, which is measured by pH, the formed coagulant is gently agitated and moved, via a positive displacement pump with progressive cavity, to a plate cooler in order to be quickly cooled to 20°C and then stored in a new tank before being transported to the packager

Prior to packaging, the fruit, pulp and/or marmalade is, continuously and in line, added. Once packaged, the product is placed in a chamber where it is cooled quickly to 12-15°C with forced air before passing to another chamber to be cooled to 4°C.
Set yoghurt production process

- Raw milk collection
- Air removal
- Cooling 4°C

- Raw milk stock tanks / Standardisation / Thermisation
- Powdered milk
- Sugar/additive

- Pasteurisation 95°C / 5 min
- 4°C

- Storage tanks and ferment mix
- PH 4.6

- Fermentation chamber
- Packager
- Air remover
- Homogenizer
- Heat exchanger 42°C

- Thermisation 65°C / 68°C
- Clarifier / Standardiser

- Powdered milk
- Sugar/additive

- Raw milk stock tanks / Standardisation / Thermisation
- Powdered milk
- Sugar/additive

- Pasteurisation 95°C / 5 min
- 4°C

- Storage tanks and ferment mix
- PH 4.6

- Fermentation chamber
- Packager
- Air remover
- Homogenizer
- Heat exchanger 42°C

- Thermisation 65°C / 68°C
- Clarifier / Standardiser

- Powdered milk
- Sugar/additive

- Raw milk stock tanks / Standardisation / Thermisation
- Powdered milk
- Sugar/additive

- Pasteurisation 95°C / 5 min
- 4°C

- Storage tanks and ferment mix
- PH 4.6

- Fermentation chamber
- Packager
- Air remover
- Homogenizer
- Heat exchanger 42°C

- Thermisation 65°C / 68°C
- Clarifier / Standardiser

- Powdered milk
- Sugar/additive

- Raw milk stock tanks / Standardisation / Thermisation
- Powdered milk
- Sugar/additive

- Pasteurisation 95°C / 5 min
- 4°C

- Storage tanks and ferment mix
- PH 4.6

- Fermentation chamber
- Packager
- Air remover
- Homogenizer
- Heat exchanger 42°C

- Thermisation 65°C / 68°C
- Clarifier / Standardiser

- Powdered milk
- Sugar/additive
Whipped yoghurt production process

Raw milk collection
Air removal
Cooling 4°C

4°C

Raw milk stock tanks / Standardisation / Thermisation

Powdered milk
Sugar/additive

Thermisation
65°C/68°C

Clarifier / Standardiser

Pasteurisation
95°C / 5 min

4°C

Packagers

Fruit tank

Static mixer

Stock tank

Air remover

Homogenizer

Heat exchanger
15º/20C

PH 4,6

Fermenters

42° / 32°C

PH 4,6

PH 4,6

PH 4,6