Baker Perkins

Technical Bulletin

www.bakerperkins.com

Microfilm™ Cooker Milk Injection System

Description

The milk injection system was developed by Baker Perkins to enable conventional hard candy cooking systems to produce high milk and cream candy products. The technique was developed to allow high milk solid recipes to be successfully produced without the need for extra scraped surface heat exchange processing.

The solution avoids product burn-on and allows a longer production time between wash downs while still utilising existing Microfilm™ cookers by separating the process into two stages.

Benefits of the system:

- Avoids product burn-on with high protein ingredients
- Longer production times between system wash downs
- Process reduces possible caramelisation of high cream products
- Utilises existing Microfilms™ for higher cooking duties
- Expands product range
- Retrofit onto existing lines

Operation

The pre-cook stage of the process involves using a coil or plate heat exchanger cooker as used for standard sugar and glucose candy recipes. This is installed before a Microfilm™ cooker. In the Microfilm™ high milk, cream or butter recipes can be pre-cooked without the problems of burn-on.

After the pre-cook stage, the dairy ingredients are injected into the base syrup via the vapour separator vessel, from where moisture from the pre-cook syrup is driven off. The second evaporative stage then takes place in the Baker Perkins Microfilm™ cooker where dairy solids which have now been uniformly dispersed within the candy syrup can be cooked without burn-on.

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The milk injection system can be added to existing installations as an upgrade package giving existing customers the ability to produce high milk cream and butter candies for a small investment.

The upgrade package includes:

- Vapour separator vessel
- Vapour separator pump
- Static inline mixer
- Milk/cream blend jacketed reservoir tank
- Milk/cream blend diaphragm type feed pump
- Inter-connecting pipework
- Electrical control panel

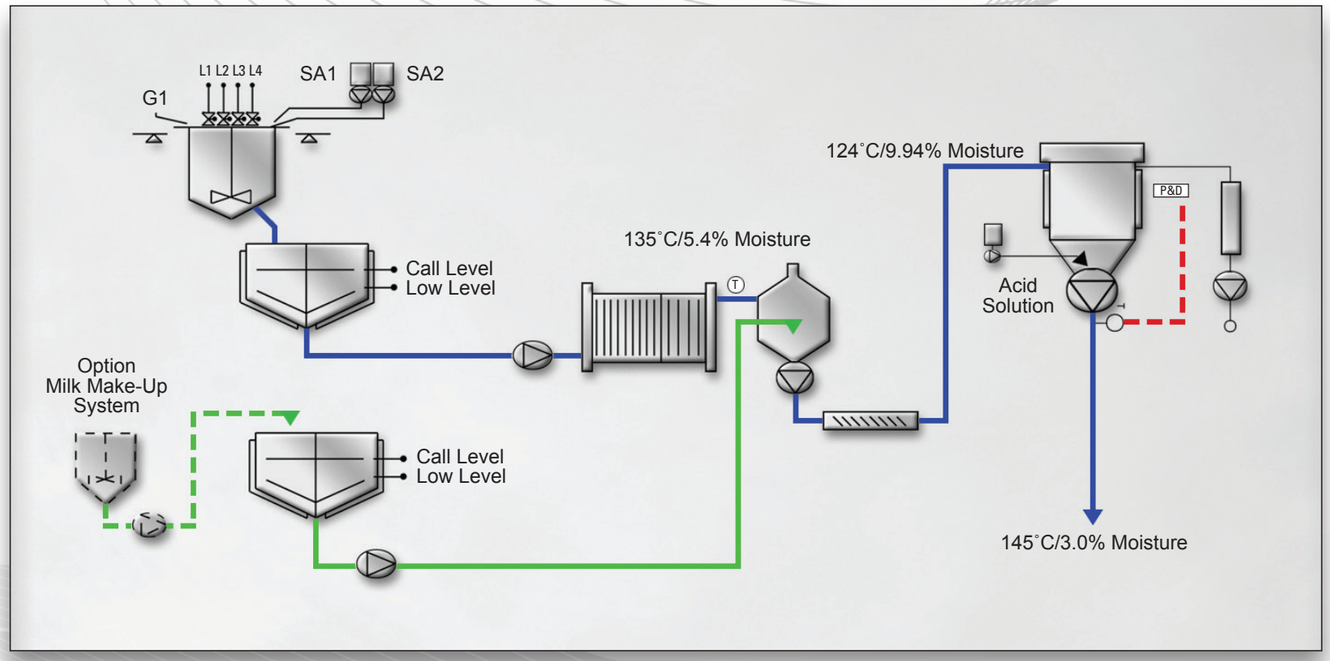
Services

Power: 4.0 Kw
Steam: 3 Bar small usage
Water: 10˚C maximum temperature
1.5 Bar maximum pressure

Shipping specifications & access requirements

Weight: 350kg
Case Dimensions: 2000mm L x 1000mm W x 2000mm H

Typical milk injection process flow chart



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