Confectionery

Baker Perkins

Turbofilm™ Cooker

The Turbofilm™ is a skid-mounted plate heat exchanger cooker containing everything necessary to cook jellies or hard candy. By combining continuous dissolving and cooking of syrups into a single, compact module, it brings the benefits of very low energy use for jelly cooking and provides a simple, single-stage process for hard candy. If confectioners need versatility, there is simple changeover between the two product types.

Efficient production of jellies and hard candy

Jellies: a plate heat exchanger reduces the moisture content to the required level, with minimum use of energy.

Hard candy: a plate heat exchanger is used to dissolve the sugar. It is then cooked, and a flash vessel used to attain the desired moisture level by allowing the vapour to separate from the syrup atmospherically.

Cost-effective system for low to medium outputs

In lower output situations, the Turbofilm™ is a cost-effective alternative to the Baker Perkins Microfilm™ cooking system for hard candy. The unit can be sized for production of any output between 100 kg/hr up to a maximum of 1,000 kg/hr.

Easy to install and operate

Turbofilm™ systems are designed for easy installation and maximum efficiency. As the unit combines dissolving and cooking operations in one compact machine, there is minimal cleaning and maintenance. Controls can be either stand alone or integrated with upstream and downstream systems.

innovation centre

The development work required to launch a successful new product or improve an existing process can be carried out in the Baker Perkins Innovation Centre. With a full range of pilot-scale equipment and assistance from our expert food technologists, all the necessary tests can be conducted without using valuable plant time.

Typical Installation Includes:

Industry 4.0 READY

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lifetime support

Dissolving

Sugar slurry is pumped from a stirred reservoir tank through the first zone of a plate heat exchanger.

Cooking

Dissolved syrup passes through a second plate heat exchanger zone where it is cooked.

Flexible

Additional small additive systems to meter quantities of minor ingredients in to the syrup can be added if required. There is also provision for colour/acid addition to be metered into the vacuum chamber.

Vacuum Chamber & Extraction

Vapour from the cooked syrup is flashed off under vacuum and the final product pumped to a forming system. Moisture levels down to 3.0% K.F. can be achieved for hard candy. With sugar free syrups, moisture levels down to 2% K.F. are achievable.

Options

- Dissolving section can be removed if required
- Indirect condenser can be used in place of direct system for savings on water consumption
- Automatic PLC control version

Materials of Construction

Frame	304 stainless steel
Product Contact Parts	316 stainless steel

Materials of Construction

Power	7.0 kW
Compressed Air	4.5 to 8.0 Bar max. (small consumption
Dry Steam	9.5 to 10.0 Bar, (consumption dependant on output)
Condenser Water	16 ºC (consumption dependant on output)

Hygienic

The plate heat exchanger is compact and hygienic with stainless steel plates and food quality contact parts. There is easy access to all components for cleaning and maintenance.

Cost Effective

The skid-mounted module minimises floor space requirements and installation time. Continuous, consistent cooking minimises waste.

Note

Products that can be handled include sugar & sugar free hard candy syrups, pectin, starch/gelatine, gelatine and starch based jelly syrups. The unit is not recommended for products containing milk, or any ingredient containing milk protein.

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