

Autofeed Weighing & Mixing System

A compact, fully automatic weighing and mixing system for up to eight dry and liquid confectionery ingredients. It produces consistent batches of pre-mix or slurry and provides a continuous feed to any cooker in Baker Perkins' range. There is full batch reporting for tight cost control.



Accurate weighing for quality and cost control

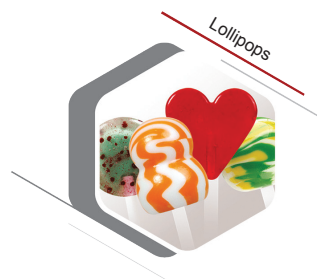
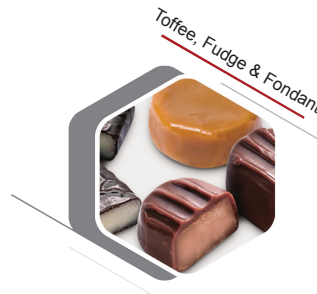
Ingredients are fed sequentially into a gravimetric weighing and mixing tank. This delivers +/- 0.1% accuracy and ensures correct proportioning, regardless of calibration.

Batch-continuous for accuracy and consistency

Batch weighing and mixing followed by a reservoir tank provides accuracy and a continuous feed to the cooker. Automatic recirculation keeps the slurry usable in the event of a plant stoppage.

Automatic control for flexibility and ease of use

Product contact parts are stainless steel and are accessible for Weighing and mixing cycle is fully automatic with recipe-driven set-up. Batch reporting records usage of every ingredient enabling daily, weekly or monthly totals to be accurately calculated.



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:



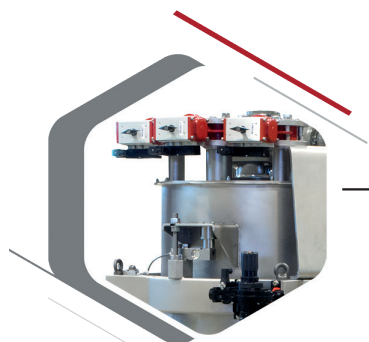
Autofeed



Cooker



Depositor

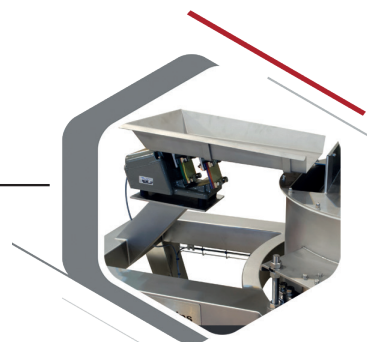


Weighing and mixing tank

Mounted on three load cells calibrated by integrated flow meter. Includes variable speed mixer with soft start. Can accommodate up to eight different ingredients.

Control system

Fully automatic control by PLC/HMI including process visualisation, 100 recipe memory, alarm handling, data trending and batch reporting. Remote I/O avoids the cost, complexity and hygiene hazard of on-machine wiring.

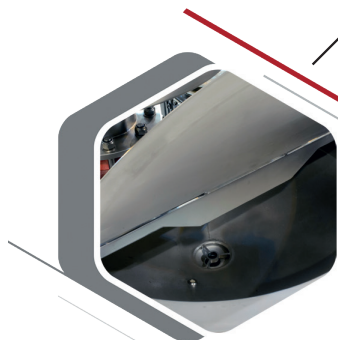


Weighing accuracy is enhanced and sustained by

- Automatic in-flight correction
- Automatic tare for each ingredient
- Programmable weight tolerance for each ingredient
- Programmable ingredient settle time
- Programmable mixer start and duration
- Under- and over-limit alarms

Hygienic construction

Welded stainless steel frame with good access for cleaning. Parts and wiring have been minimised and exposed surfaces angled where possible to reduce accumulation.



150L Reservoir tank

Stainless steel tank with fixed speed stirrer, water-jacketed base and insulated sides to keep product in optimum condition. Automatic level control linked to weigh tank ensures continuous operation.

Specialist confectionery transfer pump

Variable speed lobe pump with stainless steel chamber, hygienic IDF connections and an integrated pressure relief valve. Front plate is removable for maintenance access.

Range & Specifications

Capacity

Output	Up to 3,000 kg/hr
Batch size	180kg (200l tank)
Reservoir tank	150l
Cycle time	8 Minutes

Accuracy

Normal accuracy is +/- 0.1% in a typical 180kg batch

Ingredient Inlets

- One vibratory chute for granulated sugar
- One solenoid operated water valve
- Three electro-pneumatic valves for liquid ingredients e.g. glucose, liquid sugar, condensed milk and melted fat or oil

Materials of Construction

Frame	304 stainless steel
Weigh tank	316 stainless steel
Reservoir tank	316 stainless steel
Product contact parts	316 stainless steel

Options

- Fully jacketed weigh and reservoir tanks for low water recipes
- 400l or 600l reservoir tanks
- Tank and metering pump modules for brine and lecithin
- Powder feeder
- Polyol dissolving unit for sugar-free syrups
- Automatic clean-in-place - improved cleaning with less water
- Heavy-duty mixer for high-viscosity slurries and high outputs
- Multiple outlets
- Twin tanks to avoid cross-contamination