

FlakeMaster™ Flaking Roll

www.bakerperkins.com

FlakeMaster™ flaking rolls deliver consistent high quality flakes at outputs of up to 1,500kg/hr. Accurately controlled process conditions deliver optimum flaking performance, while high efficiency, hygienic design and minimum maintenance contribute to low production costs.



Traditional Cornflakes



Bran Flakes



Multi-grain Flakes



Oat Flakes



High Quality Flakes

High quality flakes are produced by the constant roll surface temperature, maintained by a high capacity water cooling system. Desired flake thickness is maintained by precise gap control and regulated product infeed across the full width of the roll.

Reduced Ownership, Servicing and Cleaning Costs

Typical life of a flaking roll before regrinding is 10,000 hours, reducing downtime for cleaning and maintenance. Acoustic drive covers and anti-vibration mounts reduce factory noise levels. Open design provides good visibility and easy access for cleaning.

Superior Productivity

Pneumatically operated scraper arrangement has a thin blade that deflects to maintain uniform contact across the full width of the roll.

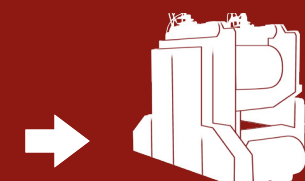
For more information on the FlakeMaster™ please click on the link: www.bakerperkins.com/FMF

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:

Cooking,
Pellet Mill +
Conditioner

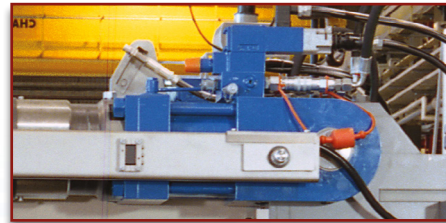


Flake Master™
Flaking Roll

Toasting
+ Syrup
Coating

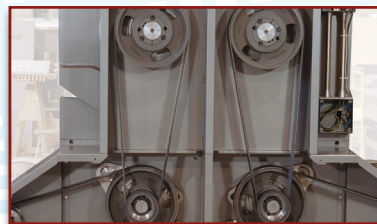
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FlakeMaster™ Flaking Roll



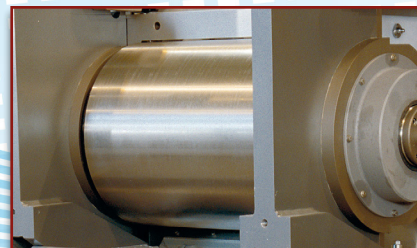
Precise Gap Control

The dynamic closed loop control system maintains the pre-set roll position: a precise gap is maintained under all load conditions. Rigid frame construction maintains a clamping force of up to 73 tonnes, side to side gap measurement and adjustment.



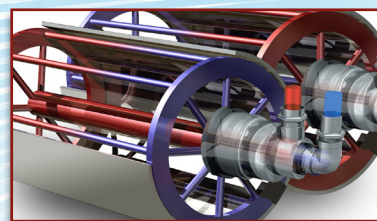
Drive Arrangement

Rolls are independently driven using timing belts. AC motors and timing belts require no routine maintenance. Outboard drives improve access and make maintenance easier.



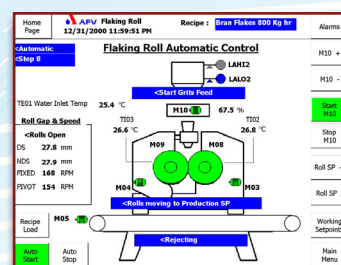
Life-Long Rolls

Roll surface comprises a weld layer of tool steel for superior abrasion resistance and long life. Can be replaced or repaired in the event of damage by stones.



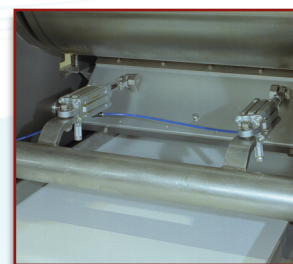
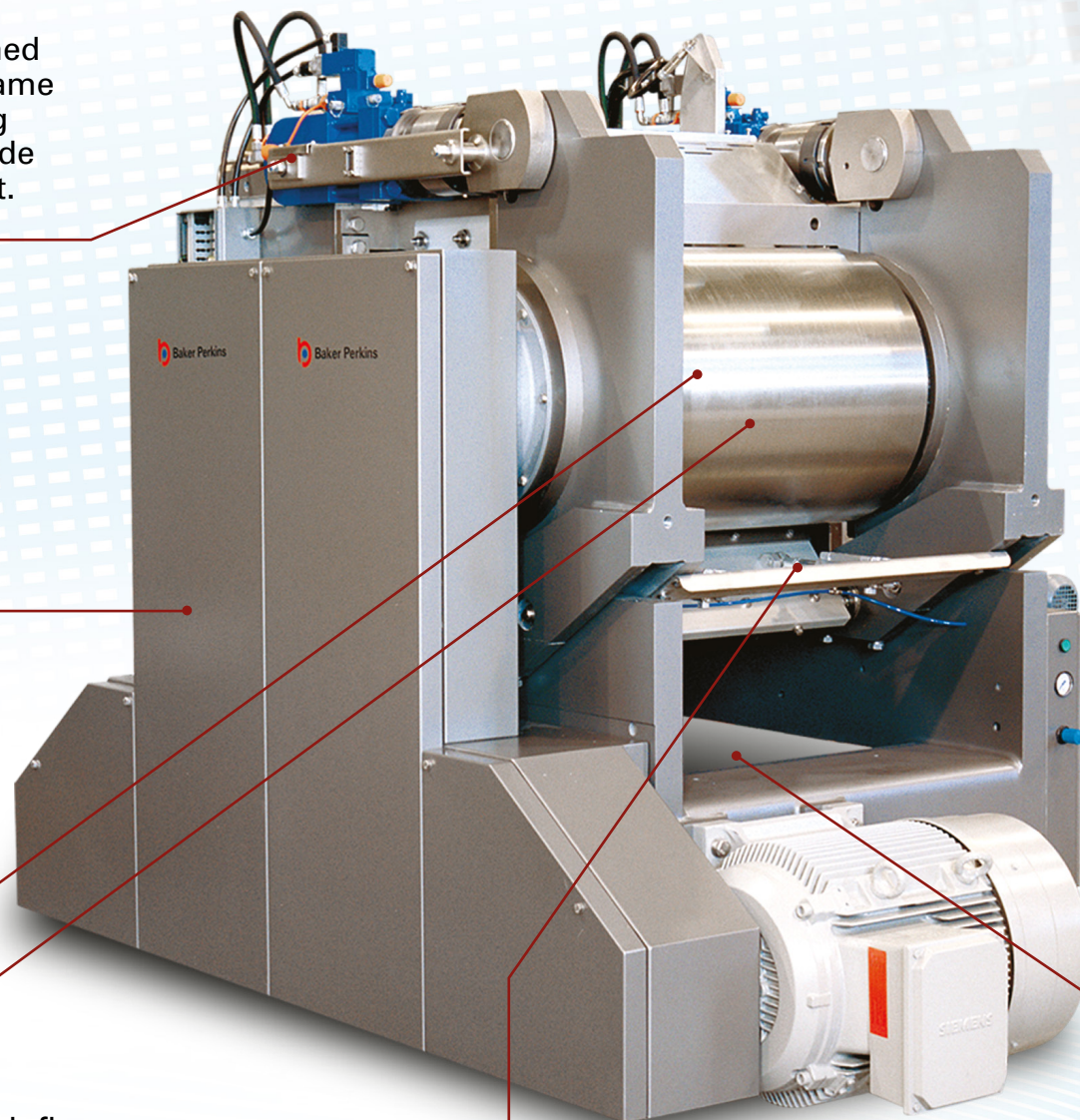
Accurate Roll Surface Temperature Control

Even cooling over roll surface using high flow rate contra flow water cooling system. For maximum cooling effect water chambers are close to the surface. Closed loop control system maintains water temperature within 0.2°C.



Easy to use controls with touch-screen HMI providing clear process visualisation

Full PLC control for intuitive operation. Recipe driven setup facility. Comprehensive alarm functions, maintenance prompts and history.

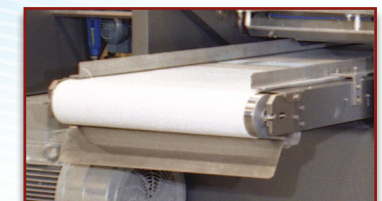


Wear-Resistant Scraper

Oscillating movement improves scraping action and uniform scraping over the roll. The reversible blades are positioned by a variable pneumatic pressure system to maximise service life. Blades can be reground several times.



Sample Tray and Vacuum Take-off System



Removeable Discharge Conveyor

Range & Specifications

	780mm Width	1,120mm Width
Nominal Output	1,000kg/hr	1,480kg/hr
Roll Drive (Each)	37 kW	45 kW
Roll Clamping Force	Up to 73 tonnes	Up to 73 tonnes
Roll Speed	160 rpm	160 rpm
Gap Control Resolution	10 Microns	10 Microns
Min Cooling Water Flow Rate (Per Roll)	10,000 Litre/hr	10,000 Litre/hr

Options

- Optional product feed sensors to prevent touching rolls
- Differential roll speeds
- Oscillating roll scrapers

Infeed Options

- Grooved roll - typically for corn grits
- Vibratory infeed - typically for extruded pellets
- Distribution box - typically for whole grain wheat

Discharge Options

- Reversible discharge conveyor
- Vibratory discharge conveyor
- Vacuum take-off system with sampling tray

