

Applications:

- preparation of industrial purees; these can be produced hot or cold
- the production of fresh, pasteurised or frozen gnocchi
- the production of potato specialities
- as a thickener in the production of UHT or dehydrated soups
- as a humidity stabiliser in bakery products
- in the production of snacks (chips and savoury biscuits) or as an ingredient in biscuit products



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Exceptional
**POTATO
 FLAKES**



FOR INDUSTRY, CATERING AND WHOLESALE DISTRIBUTION

The benefits of Lutosa potato flakes are:

- ✓ Production tools spearheading progress
- ✓ Unrivalled experience and service to the Catering Industry
- ✓ Use of selected potato types
- ✓ Versatile production process and recipes designed to meet customer demand
- ✓ Large range of pack sizes
- ✓ A Quality finished product



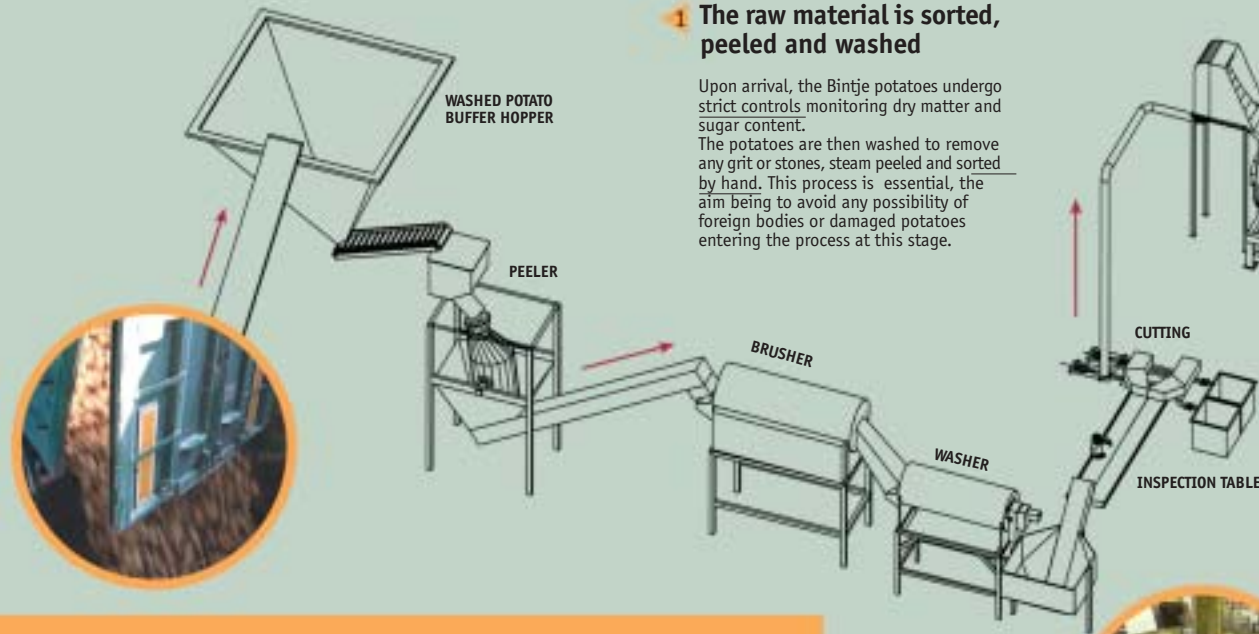
Van den Broeke - Lutosa: The potato flake specialist

Van den Broeke - Lutosa, a leader in the potato processing industry, regards flake production as an industry in its own right, on a par with the production of fresh fries and frozen specialities. With an output capacity of 3 tonnes per hour, Van den Broeke - Lutosa is one of the most important producers of potato flake.

Combining technology, experience and knowledge

1 The raw material is sorted, peeled and washed

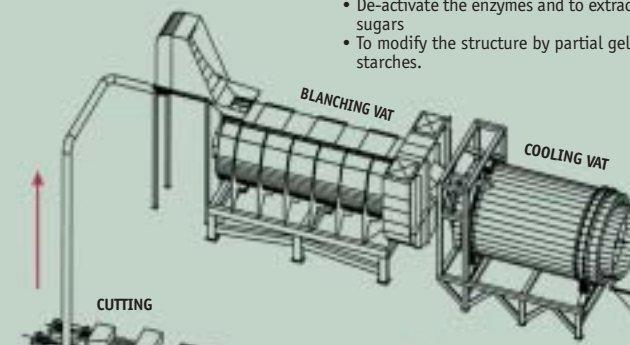
Upon arrival, the Bintje potatoes undergo strict controls monitoring dry matter and sugar content. The potatoes are then washed to remove any grit or stones, steam peeled and sorted by hand. This process is essential, the aim being to avoid any possibility of foreign bodies or damaged potatoes entering the process at this stage.



2 Blanching

The sliced potatoes are then blanched in a vat of hot water to which steam is added. The purpose of this process is to:

- De-activate the enzymes and to extract reducing sugars
- To modify the structure by partial gelling of starches.

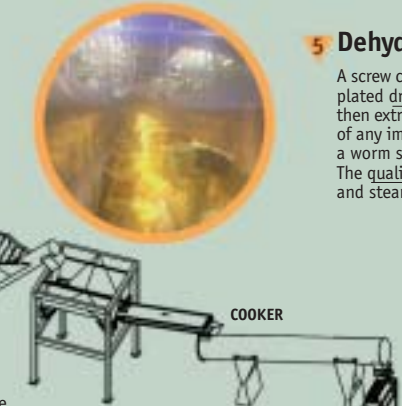


3 Cooling

The product is then cooled in a vat of cold water. The purpose of this operation is to retrograde starch in order to further improve the structure of the product.

4 Cooking

Having been blanched and cooled, the sliced potatoes are then conveyed hydraulically and cooked in steam before being put through the potato press. At this stage, preservative and colouring are added to the product in order to enhance appearance and stability.



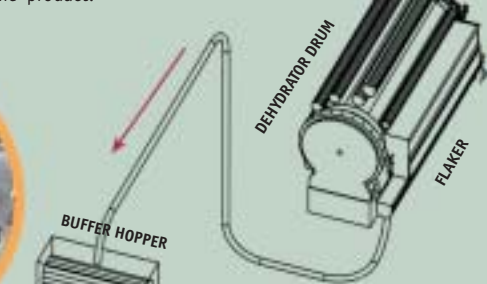
5 Dehydration

A screw conveyor system is used to transfer and distribute the puree onto chrome-plated dryer drums through which steam is fed. The product is dehydrated and then extruded to obtain a thin, uniform film of suitable density. Due to the density of any impurities they will not adhere to the drum and are therefore removed by a worm screw system. The quality of the flakes can only be guaranteed by expert control of drum speed and steam pressure.



6 Flaking

The dehydrated potato film is then recovered from the dryer drum before being cut in order to obtain an end product in the form of flakes. The product then undergoes a visual inspection using an optical camera in order to eliminate any further impurities. The flake product can then be cut further, in order to obtain a range of particle size.



A wide range of packaging options available

Before being packed, the product is inspected to ensure that it complies with the specifications. Flake packaging is fully automatic.

- **Small packs:** packs containing 1, 2, 3, 4 or 8 cellophane or aluminium sachets, packed in a normal or modified (nitrogen) environment, in weights of 75 g to 125 g
- 1, 2 and 5 kg **bags**, packed in a normal or modified (nitrogen) environment,
- 5, 10, 15, 20 and 25 kg **bags**,
- **larger packs** 750, 900 and 1,100 kg **bags**.

Quality control is carried out at each stage of the production process

- ▼ Humidity control, monitored hourly
- ▼ Microbiological checks carried out every 8 hours
- ▼ Colour of the different formulations monitored hourly

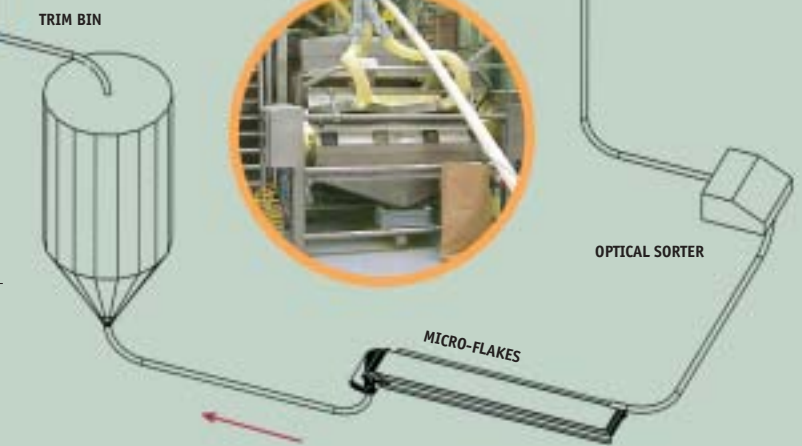


In order to maintain the superior quality of our flakes, they are inspected throughout their production procedure by our quality department. Van den Broeke - Lutosa uses an accredited Beltest laboratory that complies to the EN45001 standard. A further guarantee of quality!

The laboratory analyses the physical and chemical nature of the product (colour, granulometry, density, humidity, reducing sugars, additives) and microbiological content (total flora, coliformes, yeasts, moulds, staphylococcus aureus and B. cereus).

7 Storage

The potato flakes are stored on pallets in warehouses, at ambient temperature. Shelf life for the product is 12 months.



Finished product

The stringent quality controls carried out throughout the production process guarantee an exceptional finished product. With its wealth of experience, Van den Broeke - Lutosa can also offer its clients "customised flakes" by adapting existing recipes to a specific application (instant purée, production of pasta, biscuits, snacks,...) or by developing specific recipes (milk, cheese, butter, spice flakes).

