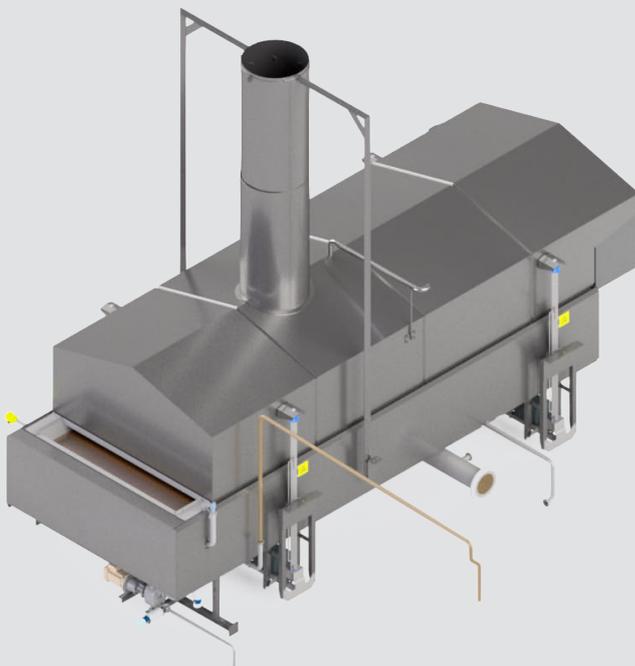
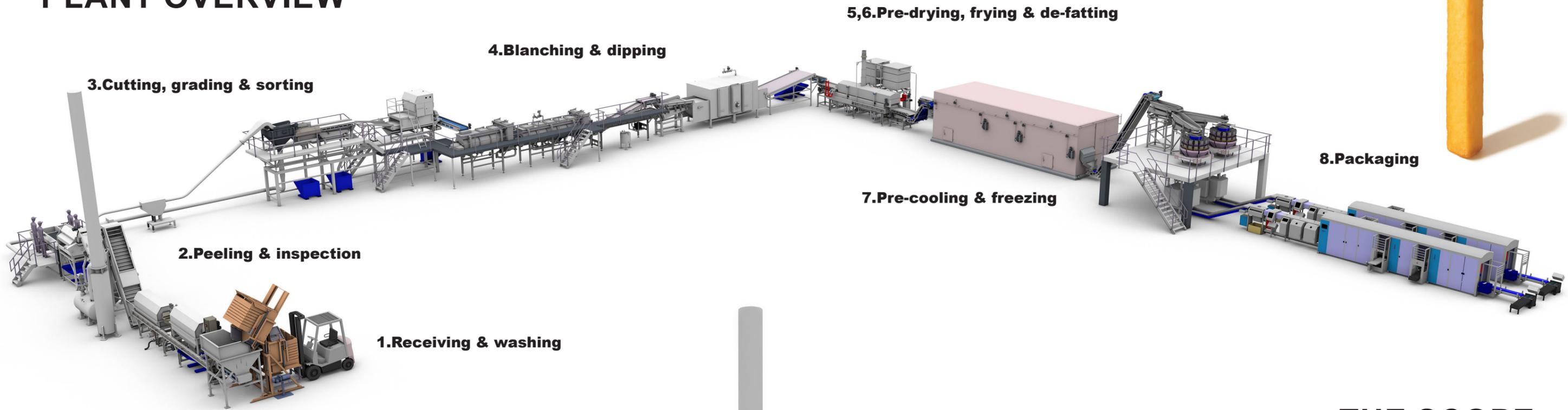


FRENCH FRIES PLANT

Processing Excellence
For Every Type of Fry.

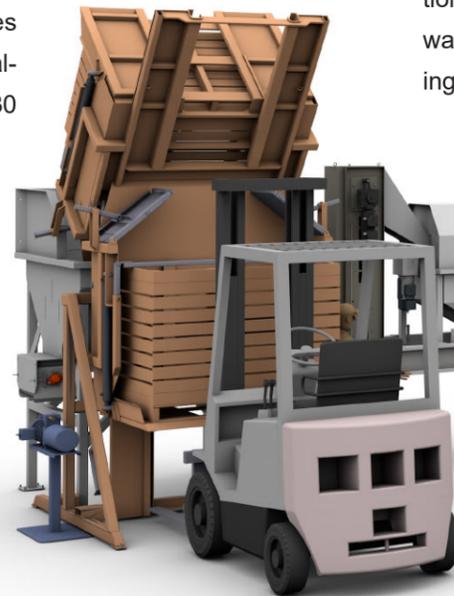


PLANT OVERVIEW



1. Crate tipper and hopper

The crate tipper will be designed for the specific crate dimensions used. Alternatively, Kuipers can quote you for a discharge hopper for potatoes in bulk. The receiving hopper will allow the processor to run at least 30 minutes continuously.



2. Dry cleaner

Equipped with a rotating cage, it will separate sand, soil and sprouts from the potatoes by friction, in order to effectively save water consumed in the wet washing system.

3. Cyclone destoner

The most effective way of separating stones and clay caps, fully adjustable by varying the water flow. A de-stoner is a must-have in the process line to avoid stones creating damages downstream.

5. Steam peeler

Efficient peeling by means of high pressure steam ensures a healthy balance between the lowest possible product losses and the optimum peel removal.

4. Rod washer

Through a combination of friction and water, the potatoes are effectively washed, to avoid mud polluting the process. Optionally, a rotary filter can be added to reduce water consumption.

6. Brusher

Mechanical way of separating the peels from the potatoes without the use of water by means of rotating nylon brushes. For smaller throughputs, a combined brusher/washer is quoted instead of a separate washer.

7. Roller inspection

Facilitates a visual revision of the peeled product and if required, manual trimming of defects and rotten parts. Optionally, the belt can be replaced by an optical sorter for automated inspection of the peeled potatoes.

THE SCOPE



12. Two-stage blanching system

Blanching is an essential step in the entire process. In the first step, the product is heated up and the enzymatic inactivation is ensured. Second stage blanching is for completing gelatinization until the required texture and further removing reducing sugars. Excess sugars will be removed via intensive recirculation of hot water guaranteeing homogenous colour after frying.

11. Optical sorter

The optical sorter guarantees a quick and effective separation of strips with colour defects based on absolute or relative size compared to the product as well as shape recognition and length.

10. Length grader

The vibratory grader removes very short strips and so-called nubbins from the product flow. The grading decks are exchangeable according to the end product specification.

9. Sliver sorter

The sliver sorter is designed to separate the thinnest cut strips from the product flow, the so-called slivers. The distance between the rollers is easily adjustable according to the allowance of slivers in the end product.

8. Hydro-cutter

To obtain the longest potential strip out of the potato with a minimum of grading loss downstream, a hydro-cutter is a must-have in a French fries line. A large variety of cut sizes is available and the change-over from one size to another is quick. A centrifugal type cutter is optionally available to make crinkle-cut or diced product.

13. Dip system

The dryer feed shaker is equipped with an additional section for the spraying of the SAPP solution onto the product. A volumetric dosing system ensures the correct concentration of the SAPP in the water loop.

14. Dryer

Pre-drying of the potato strips is essential for proper product texture and lower oil absorption during frying. Optionally, the system can be equipped with water-heating instead of steam, for example using recovered energy from the fryer.

16. Fryer

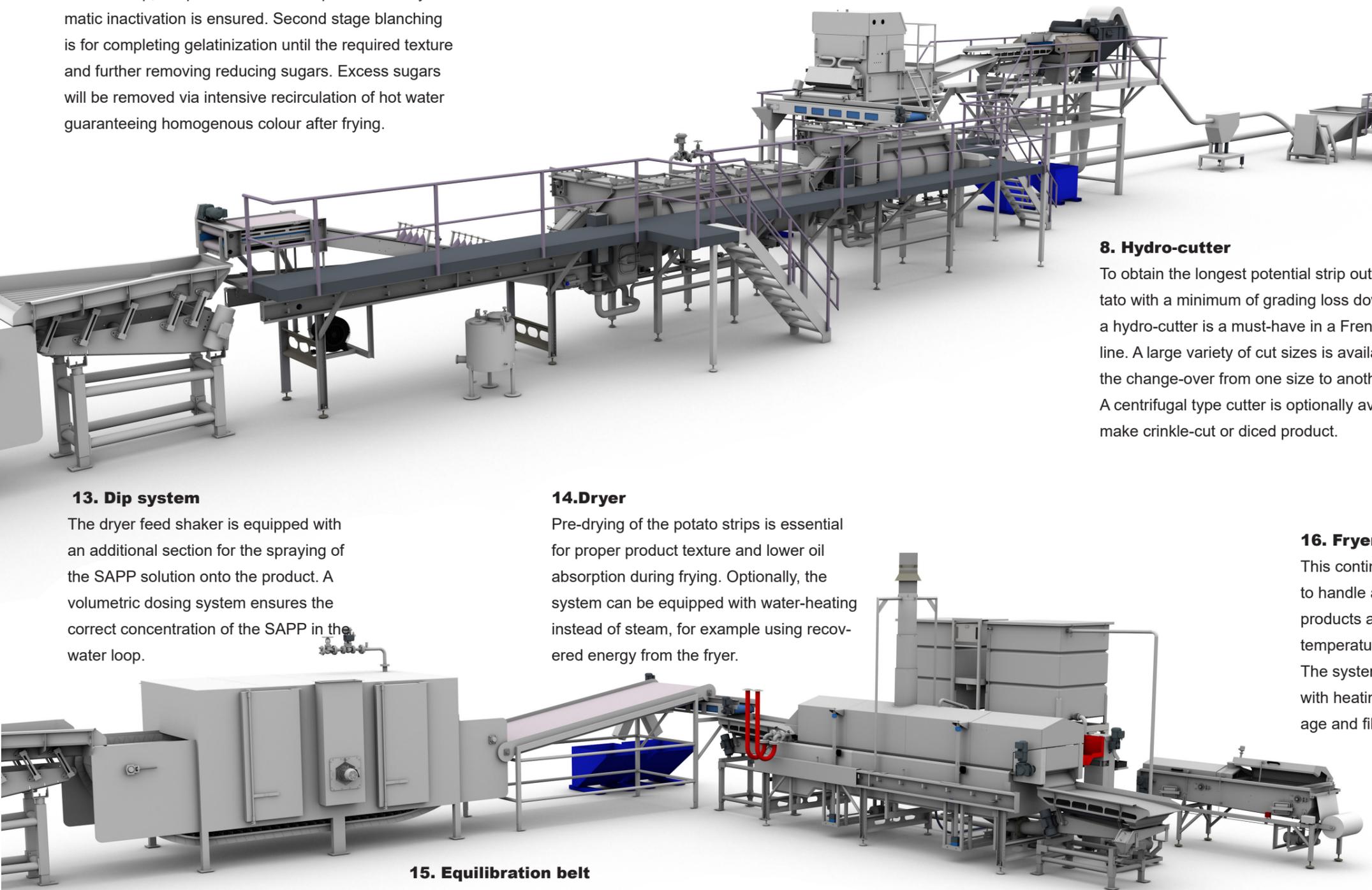
This continuous fryer is designed to handle a variety of different products and adjustable frying temperatures and retention times. The system is quoted complete with heating, oil circulation, storage and filter systems.

15. Equilibration belt

On this conveyor the product will be allowed ample time to have internal moisture transfer from the core to the outside thus creating a homogenous moisture distribution across the strip.

17. De-fatting shaker

By a specific vibrating movement, a significant part of surface frying oil is separated from the product. The bottom pan of the shaker is heated, so that the frying oil stays liquid and can be recovered by transferring it back to the frying system.



DATA SHEET

Oil turnover	10 – 12 hours
Line yield	50-55%
Final product consistency	68% humidity 5-6 % oil 26-27% potato solids Other specifications available on request
Capacities	1, 2, 3, 5 and 10 ton
Advised raw material specifications	Size graded potatoes diameter minimum 20 mm and maximum 80mm >19% solid content <0.025% reducing sugar content 12-15 °C core temperature

These data refer to frozen French fries. Specifications will differ for other products.



APPLICATIONS

- Standard cut 7x7, 10x10, 12x12
- Steak-house
- Crinkle cut
- Skin-on wedges
- Shoestring cut
- Clear-coated fries
- Diced
- Pommies Parisiennes



QUALITY AND EFFICIENCY

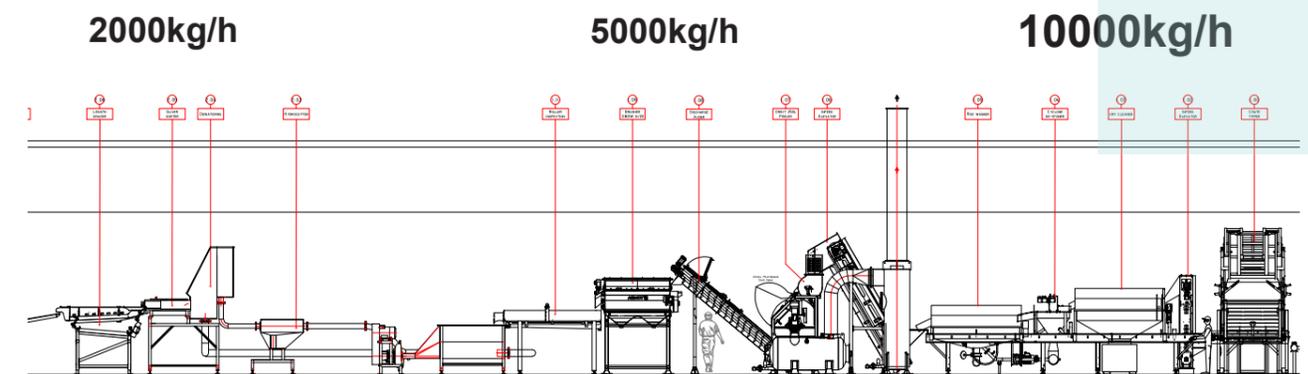
Kuipers supports food manufacturers worldwide in producing high-quality French fries tailored to their market needs, combining efficiency, flexibility, and long-term reliability. Our processing solutions are designed to deliver consistent product quality while optimizing operational performance and cost efficiency. With extensive experience in potato processing, Kuipers develops and manufactures French fries lines with capacities of up to 10 tons per hour, fully adapted to the client's desired level of automation, product range, and production scope.

From the very first step, the process begins with careful raw material selection. The quality of the potato is fundamental to the final product, and our team works closely with customers to define the right specifications. The line is then engineered step by step, integrating advanced cleaning and destoning systems followed by efficient steam peeling technology that minimizes product loss while ensuring optimal peel removal.

Flexibility is a key advantage of Kuipers processing lines. By combining hydro-cutting and mechanical cutting technologies within one integrated system, producers can manufacture a wide variety of products on a single line. This includes classic straight-cut fries, crinkle-cut, oven fries, as well as specialty products such as wedges, pommies Parisiennes, and other potato-based variations.

At the core of the process lies our advanced frying system, featuring a streamlined fryer design with efficient oil filtration and precise process control. This enables low oil turnover times, stable frying conditions, and reduced operational costs while maintaining consistent product quality.

All equipment is manufactured using high-grade stainless steel and premium components, ensuring durability, hygiene, and long service life. Combined with Kuipers' engineering expertise and customer-focused approach, this results in reliable processing solutions that support consistent production and sustainable performance over time.



** Pre-cooling and IQF freezing systems can be quoted upon specific request.*



FF2000 frying system in our workshop - 2024

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