

Destoning  
Washing  
Peeling  
Cutting  
Blanching  
Cooking  
Drying  
Forming  
Frying  
Cooling  
Freezing  
Pasteurising  
Sorting  
Packaging  
Handling

## One of the most flexible processing lines worldwide for potato chips

Kiremko has built potato chips fryers since the early seventies and in all these years, created one of the most flexible processing lines available on the market. Our potato chips lines are specially designed for the production of the best quality potato chips, using the latest innovations regarding dosing and flavouring, frying and process control. Constant innovation and listening to our customers' wishes, allows us to provide the best solution for manufacturing potato chips.



Potato chips are the world's favourite type of savoury snack. The basic recipe has changed little over the decades but different cuts, flavours and presentation offer great variety. Our processing lines are specially designed for the production of top quality potato chips complying with the strictest possible quality requirements. The latest innovations in manufacturing, line control, automation and process monitoring are included in our designs.

Because the requirements of our customers are continually developing, we are putting a lot of effort into optimizing the design of the machines in our lines to improve production efficiency, sanitation and uptime. The built-in flexibility with regard to processing varying qualities of raw material and the ability to make a standardized quality of a number of end product, makes the Kiremko potato chips line one of the most versatile lines available in the market.

A processing line for potato chips starts with a potato reception system where the raw material is unloaded, washed and gently separated from stones. The product is lightly peeled using our very successful double stage abrasive peeler, which ensures the lowest possible peel loss.

Oversized potatoes can be separated using our proven potato sorter and halved with the halving machine, allowing

for more flexibility, reducing losses and ensuring that the cut product is small enough to fit into, for example, bags of 50/40 gram content.

Using a singulator/feeding vibrator, potatoes are fed one by one into the slicer in order to optimize the cutting result. After slicing, the product is thoroughly washed in a turbulent flow of water in order to remove the free starch coming from the slicing process. Water and small potato pieces are separated in a dewatering/sorting vibrator. As a standard Kiremko supplies an effective starch separation system to minimize the amount of fresh water used in the process.

If required, and when the raw material has a high percentage of sugars that affect the colour of the potato chips after frying, the potato slices are carefully blanched in our unique Hi-Flow chips blancher. This will produce the perfect slice before it is dried and fed evenly into a continuous fryer to make the perfect potato chips.

Kiremko potato chips fryers are reliable workhorses executed with single flow or multi-flow oil injection systems. The most important characteristic of the multi-flow fryer is that, independently of the frying oil infeed temperature, the product can be finish-fried at a higher or lower temperature giving an increased level of control of the frying process.

Oil circulation, heating and filtration are designed and developed to customer specifications. Heating can be specified for either steam or thermal fluid boilers.

Additionally, a so-called LTFF system ("Low Temperature Finish Fry") has been introduced specifically to tackle the formation of acrylamide in the final part of the frying process. This fryer is equipped with two frying oil circulation systems, one multi-flow frying system running on high oil temperature in the flow wheels sections and a second frying oil circulation system in the immersion belt section, running on a lower frying oil temperature. As acrylamide is formed at higher temperatures at the end of the frying process, we are able to effectively reduce the finish frying temperature and counter the formation process.

After frying, we deliver complete and integrated dosing, flavouring and, if required, packing solutions in cooperation with strategic partners, meaning that we are one of the few companies in the world that can truly deliver a total solution.

The flavouring and dosing system can be equipped with the WeighGuard®. This innovative system guarantees the extremely accurate dosing of flavouring powders, even with a fluctuating line flow.



To complement our proposition of a total solution provider, we can deliver Visionair® optical sorters to remove foreign objects from raw material, for quality control of the final product or removal of colour defects when necessary.

All the processing lines can be automated with centralized control systems, optionally available with SCADA software for automatic control and continuous process monitoring and data logging. Kiremko's equipment is built according to the latest European safety and hygiene standards and complies with local regulations and requirements.

Our processing lines are suitable for producing flat chips, crinkle cut and v-cut chips, as well as potato sticks, in a capacity range of 300 to over 3.000 kg/hr with customised designs available to suit all requirements. ■



## Processing line for potato chips





#### Abrasive type peeler

The abrasive peeler excels in its simplicity, efficiency and minimum footprint, guaranteeing smooth and clean results every time. Ideal for potato chips lines and other small scale potato processing lines.

#### FAM Centris™ slicer

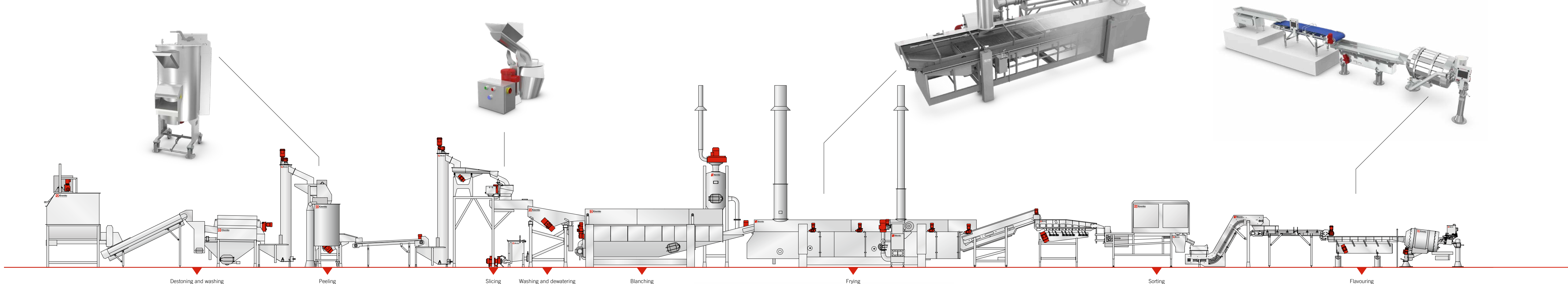
The FAM Centris™ is perfect for centrifugal slicing of potato and vegetable chips. Tested and in production since 2015, the line has an ever-expanding range of blades in all shapes and sizes.

#### Potato chips fryer

The potato chips fryer has been provided with a well-balanced oil supply system ensuring the transit of potato chips.

#### WeighGuard®

The WeighGuard® is an advanced system that ensures the accurate dosing of salt, dextrose or other flavourings as an addition to your product.



#### Drum washer

Based on mutual friction, the drum washer will remove clay, sand and soil from the potatoes.

#### Dewatering vibrator

The dewatering vibrator combines the transport of the product with an effective dewatering step. The direct drive of the vibrator will ensure optimum removal of any moisture adhering to the product, while minimally disrupting the process.

#### Hi-Flow blancher

The Hi-Flow potato chips blancher will ensure accurate handling of your product. An ingenious system will ensure a warm water flow that will blanch the potato slices separately from each other.

#### Visionair®

The Visionair® optical sorter will sort the flow of potato products on the basis of visual deviations.