



The most versatile processing line worldwide for formed mash potato products

Kiremko is active worldwide in designing, producing and installing complete processing lines, factory upgrades and individual machines for formed potato specialties. With over 50 years of knowledge and experience in the field of processing potatoes into formed specialty products made out of mashed and shredded potato, Kiremko, together with its partners Idaho Steel Products and Reyco Systems, provides you with industry leading know how that goes far beyond simply specifying the necessary equipment.

Formed potato specialties have been around for decades. Worldwide, these products have a place in our diets, be it in shapes that are defined as 3 dimensional, such as croquettes, pommes duchesse (crown shape), pommes dauphiné (ball shape) and pommes noisettes (hazelnut shape), as well as 2 dimensional shapes such as waffles,





letters, numbers and even certain cartoon figures. The basis of these products typically being cooked potato, cooled and mixed with specific ingredients, formed into a particular shape and then fried. Many kinds of ingredients may be introduced into the potato mixture for added flavour. The products are delivered pre-fried and frozen and then distributed into the same channels as French fry products.

Kiremko and Idaho Steel design, manufacture and integrate all the necessary components to complete this process for formed potato products, from washing and peeling lines, cutting systems, cooking equipment, mixing and mashing systems, forming, breading, frying and freezing systems, up to the final packaging solution. The machinery is designed for high capacities, ease of operation and maintenance and is in compliance with European and worldwide safety and hygiene standards.

Kiremko and Idaho Steel can also customize the processing line for mixed products involving other main components such as vegetables and cheese. In the potato processing industry, a formed potato product line can be a stand-alone unit or an addition to a French fry plant. In the latter case, rejected and off-sized potatoes from the French fry line are used to create a high-quality formed product and through this, improve the overall yield of the potato processing facility.

To make mashed potatoes, the raw product is reduced in size, cooked in a steam cooker, after which it can be processed into mashed potatoes. Using the application of steam, the cooking process is realized evenly and optimally. The steam cooker is one of the most versatile and timetested components in the mash potato line and provides high volume and an even cook for a high-quality finished product.

With the Nex-Gem+ rotary former from Idaho Steel in the heart of the process, our formed potato processing lines can be considered the most productive processing lines available. We offer complete lines from 1.000 kg/hr up to unprecedented capacities such as 5.000 kg/hr of formed products in a single line. For these high capacities, both the Nex-Gem+, and fry by wire specialty fryer, have been further developed to become the largest available in this particular segment.

The fry by wire specialty fryer is an ingenious system that maintains the frying oil level to the top level of the product. This prevents it from floating and damaging the shape or



disturbing the stacking pattern on the belt, which is essential for an optimal frying and freezing process. The fryer can be by-passed by means of a separate conveyor belt in case frying is not required, for example if the end product is to be used as a component for ready meals. After frying, the EcoMiser[™], a unique design by Recyo Systems, is installed to recover surface frying oil. The recovered oil will then be filtered to remove crumb and reintroduced into the fryer.

Process control, data-collection and self-managing functionalities in processing lines are of increasing importance. All lines can be delivered with SCADA systems for automatic control, continuous process monitoring and data recording.



Processing line for formed mash potato products









Cyclone destoner

The cyclone destoner removes stones and clay shells. The gradient of the funnel and the variable water flow determine the optimum result.

Dry brush machine

The dry brush machine will remove the peel after the steam peeling process. Rotating brushes will make sure the peeled potato remains smooth, while the peel remnants are removed.

Cutting machine FAM Tridis™ 240P

The FAM Tridis™ 240p is a new generation of tridimensional dicers designed by FAM. A wide variety of cutting tools make slicing, strip cutting and dicing possible with only one machine.



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

STRATA Invicta®

The STRATA Invicta[®] steam peeler sets the new standard in steam peeling systems, offering the highest yield at the shortest possible cycle times. It peels potatoes thinner than any machine, removing only the skin with a minimum of cooking ring.

PeelGuard®

The PeelGuard[®] is an optical measuring and weighing device to detect residual peels and green or black spots and control your steam peeler.

Hoegger separator and mash pump by Provisur Technologies®

The famous Hoegger separator separates foreign material and colour defects from the finely cooked potato. Through a special mash pump and spreading system, potatoes are gently deposited onto the belt of the spiral cooler.

Batch mixers

Given the wide variety of recipes used to make formed specialties, batch mixers are used to give the processor maximum flexibility.

Nex-Gem+

The Nex-Gem+ forming machine is an ultra-modern rotary former, which has been provided with numerous exceptional extras such as the 'Quick Change Inserts', a very swift way to exchange forming tools without the need of any special tools.

Fry by wire specialty fryer

A fryer with an extremely accurate frying technology to ensure that vulnerable products emerge from the fryer, row by row, perfectly coloured and cooked.

Steam cooker

The steam cooker is one of the most versatile and timetested components in the potato mash line and provides high volume and an even cook for a high-quality finished product. The cooker can be equipped with a single or double internal transport screw for higher capacities.

Spiral cooler

The spiral cooler is an important part of the process to cool down and solidify the product to make it suitable for forming into a consistent shape.

Primary Oil Filter The frying oil pumped out of the fryer, is fed directly to the Primary Oil Filter and filtered. Adding the Primary Oil Filter to your process enables you to volume.



Spiral freezer

Kiremko integrates custom made freezing solutions on the customer's request. Available in different belt widths to ideally match the net width of the former and fryer to accommodate the forming pattern of the product

EcoMiser™

have a simplified circulation system with reduced oil

The EcoMiser™ is the most effective and costeffective process to remove and recover surface oil after frying.