



The most flexible processing line worldwide for coated French fries

Kiremko is active worldwide in designing, producing and installing of complete potato processing lines, factory upgrades and individual machines for regular and coated French fries. With over 50 years of knowledge and experience in the field of processing potatoes into French fries with the latest technologies and techniques, Kiremko, together with its partners, provides you with industry leading knowhow that goes far beyond simply specifying the necessary equipment.

The design of processing lines for French fries is always tailor-made, meeting the highest quality requirements. A reliable and integrated concept is necessary to guarantee the continuity of your production process. A processing line contains more than 150 individual machines in the primary product stream, but also an increasing amount of secondary systems such as waste transport, starch separation and measuring and weighing systems. Integrating these machines and systems into a processing line by means of a specific project-based approach is one of the specialties of Kiremko.

an air fryer.



Coating potato products such as French fries or potato chips is an ever more popular processing step. A coating is applied for various reasons, essentially to add flavour or texture to the product. Various herbs and spices can be added to a batter, allowing different flavours to be applied to the product. Another reason to apply a coating is to keep French fries crispy for a longer time. French fries produced in this way offer great advantages for drive-in restaurants, fast-food chains with delivery options and for home preparation with

The production of coated products asks for proper management of moisture and oil levels. A complete coating system that is integrated in a French fry line consists of three main steps that include; preparation of the batter, the even application of batter to the product and an additional fryer with integrated oil filter system.

The type of batter that is used depends on the recipe developed for each product. Batter can be pre-mixed, purchased from special suppliers or made in-house completely, and is fed to the processing line in large bags. The Kiremko coating preparation system is a dispensing and weighing system. This system prepares and stores batter with great precision, at the right temperature, and keeps it stored in predefined, measured batches.

Multiple tanks ensure ripening, setting and, if necessary, re-dispensing of the batter. The temperature and viscosity are constantly measured and optimised. In addition, lump formation is avoided. Hygiene is an important aspect for coating and the realisation of a good end product. The complete system has been geared to this. The coating line is easy to clean and is equipped with various hygienic provisions. The batter application system, also known as the enrobing unit, ensures that the product is evenly coated on every side. Specialized conveyor belts with bars ensure that the product is led through and out of the coating bath, removing excess coating, which is collected for re-use. The double stage fryer is specifically made for frying coated products. This ingenious system maintains the frying oil levels in both stages to provide an optimal result with minimal oil use. Both stages have an independent, flexible retention time and a separate oil filtration systems. After frying, the Reyco EcoMiser[™] 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. These systems are built according to the



latest European safety and hygiene standards and comply with local regulations and requirements. Kiremko has installed lines for the production of French fries all over the world and can adapt the designs to local needs and conditions.

French fry processing lines with coating systems are available with an output of 5.000 kg/hr to more than 20.000 kg/hr. A processing line should be set up with the flexibility to produce various types of pre-fried potato products. Kiremko offers effective, cost-saving solutions to meet the production demands of customers. In addition, complete turnkey packages are delivered to suit all capacities and budgets.



Processing line for coated French fries





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.

QuadraFlow

The QuadraFlow hydro cutter combines excellent cutting results for French fries, slices and wedges, while guaranteeing optimum user-friendliness.

Sliver remover

The sliver remover removes 98% of all slivers of your product.



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.

Potato sorter The potato sorter is used to sort peeled potatoes according to diameter.

Visionair®

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

Product pump

The product pump has been specially developed for the potato and vegetable industry and ensures an improved efficiency of your production process and less product damage.

Dryer

Before the product is fried, it must be properly dried. This improves the result of the frying process, resulting in a crispier end product for example.

Coating preparation system

The coating preparation system is a dispensing and weighing system that prepares the batter with great precision and keeps it stored in a chilled condition.

Coating enrobing system The enrobing system ensures that the product is coated with batter. To achieve this, batter is sprayed onto the product from above, thereby enrobing the whole product.

Length sorter The length sorter will sort French fries according to a pre-set length, in one, two or three sorting streams.

Screw type blancher

The screw type blancher can be installed in French fry, potato flake and potato mash production lines. The intensive pump systems ensures an equal distribution of temperature.

Mixing and dosing system Adding additives, such as SAPP and dextrose, to the potato product ensures the potato desired colour.

Double-stage frying system

The coating fryer has been constructed from two fryers in succession. The first fryer ensures a high temperature and adjustable transportation speed in order to fry the coated layer. The second fryer will further fry the product until it has been properly cooked.



Cooling-freezing combination

With our cooling-freezing combination the potato product is cooled down in a cooling tunnel from about 90°C to -18°C.

Reyco EcoMiser™

The Reyco EcoMiser™ is the most effective and cost-effective process to remove excess oil from the fried product.