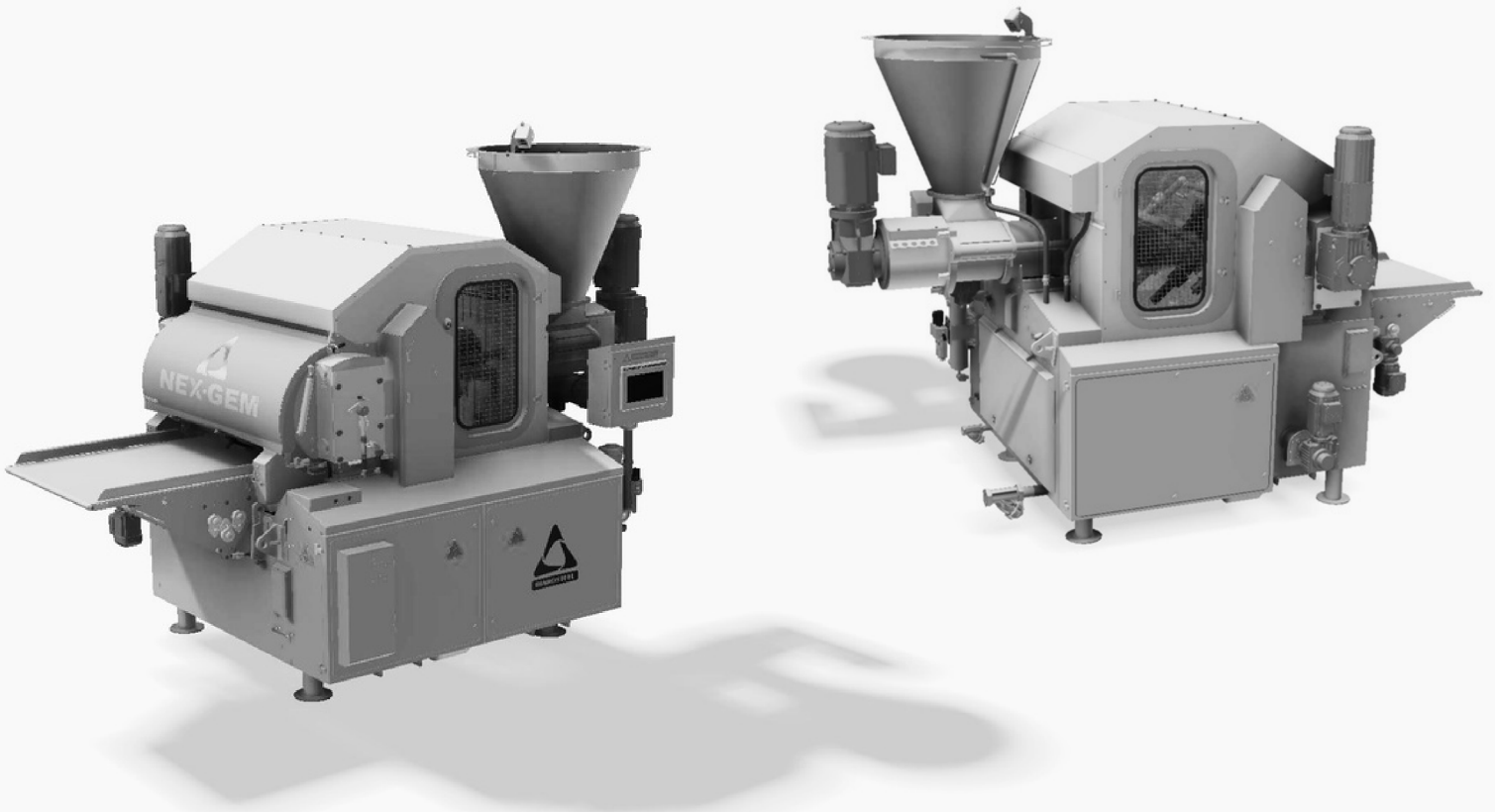


FULL PROCESS FORM LINE



NEX-GEM
Rotary Former



IDAHO STEEL

Food Processing Equipment

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Form Lines



Idaho Steel 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 chopped and formed products and other shredded specialties with the latest technologies and techniques, Idaho Steel, together with its global partners Kiremko and Reyco Systems, provides you with industry leading knowhow that goes far beyond simply specifying the necessary equipment.

Formed potato specialties have been around for decades. Worldwide these products are found in our diets, be it in the shape of hash brown patties, tater tots, potato pancakes or potato gems. The basis of these products typically being a shredded, grated or riced potato, formed into a particular shape, and pan-fried.

In the potato processing industry, a Form Processing Line can be a stand-alone unit or be part of a french fry plant. In the latter case, rejected and off-sized potatoes from the primary processing lines are used to create a high quality formed product and through this, improve the overall yield of the potato processing facility. Many different products and shapes can be made, such as hash brown patties, waffles, rounds, triangles and more complex shapes like cartoon characters, letters or numbers. A formed product made with vegetables like peas and carrots mixed with potatoes, is also possible.

The products are delivered pre-fried and frozen and distributed into the same channels as french fry products.

The NEX GEM

The Heart of the Forming Process

ISP Total Control System

Quick Change Product Shapes

Fully Enclosed Unibody

Uniform Product Weights

Increased Capacity

On the Fly Weight Adjustment

Intelligent Complete Wash In

Place System

PLC Production Tracking

Larger Forming Head w/8 Rows

Ease of Operation

Our forming processing lines are considered the most productive lines available.

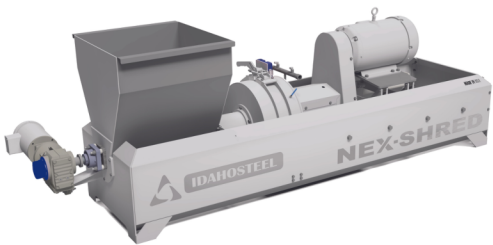


The Process

Our group designs, manufactures and integrates all the necessary components to complete this process for hash brown products. From the washing and peeling lines, optical sorters, blanchers, retro-graders, shredding and mixing units, forming and frying systems up to the spiral freezer and if required, the final packaging solutions. The machinery is designed for high capacities, ease of operation and maintenance and in compliance with worldwide safety and hygiene standards. Together with our strategic partners we have the ability to deliver small, medium, and large processing lines in all the defined market groups.

Prior to forming, the potatoes are shredded. This is done by the Nex-Shred potato shredder. The size of the shred influences the look of the product, but also the texture experienced during consumption. With a wide range of different shredding plates, the Nex-Shred is able to shred in numerous sizes; from very fine, almost mash-like, to large potato pieces.

With the Nex-Gem Rotary Former from Idaho Steel in the heart of the process, our Form Processing Lines can be considered the most productive processing lines available. We offer complete processing lines from 2,000 lb/hr up to unprecedented capacities such as 20,000 lb/hr of hash brown patties in a single line with two Nex-Gem Formers. 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.

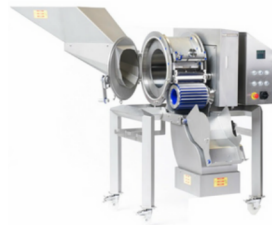


The SYSTEM

Cyclone Destoner



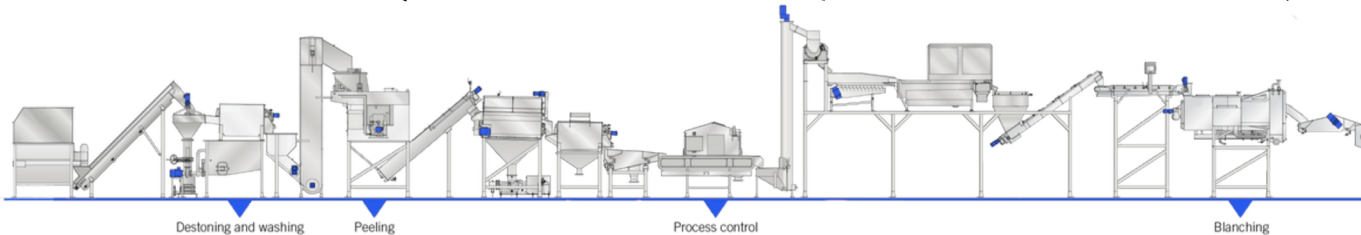
Cutting Machine
FAM Tridis 240P



STRATA Invicta



Dewatering Vibrator



Destoning and washing

Peeling

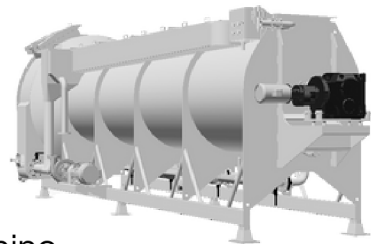
Process control

Blanching

Pre Washer



Key Hole Blancher



Receiving Bins



Dry Brush Machine

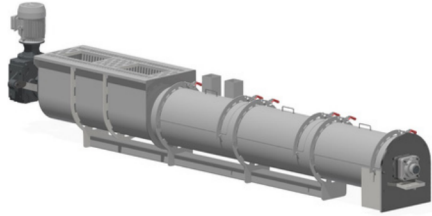




IDAHO STEEL

Food Processing Equipment

Continuous Mixer



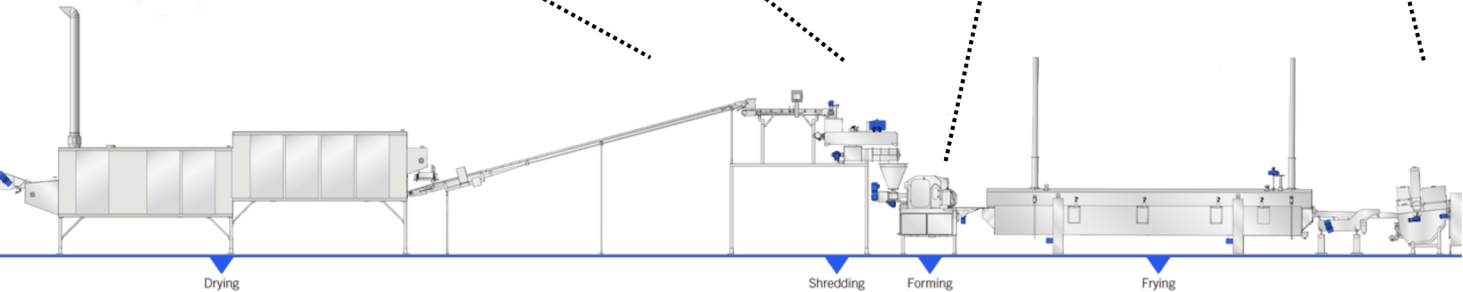
EcoMiser



Nex-Gem



Mixing and Dosing System



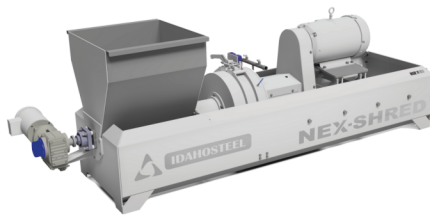
Drying

Shredding

Forming

Frying

Nex-Shred



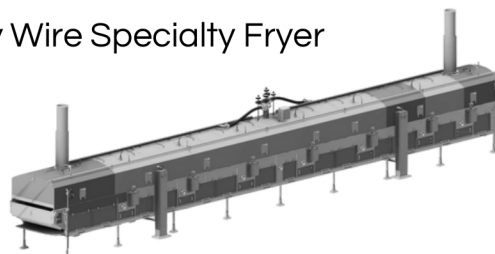
Primary Oil Filter



Retro Grader



Fry by Wire Specialty Fryer



The Application

In the forming process it is critical that the potato shreds will hold together in the correct shape. To achieve this, the product is prepared through a series of steps to remove moisture and condition the starch cells to ensure that the shreds stick together. This is done in a unique unit called the Retro Grader.



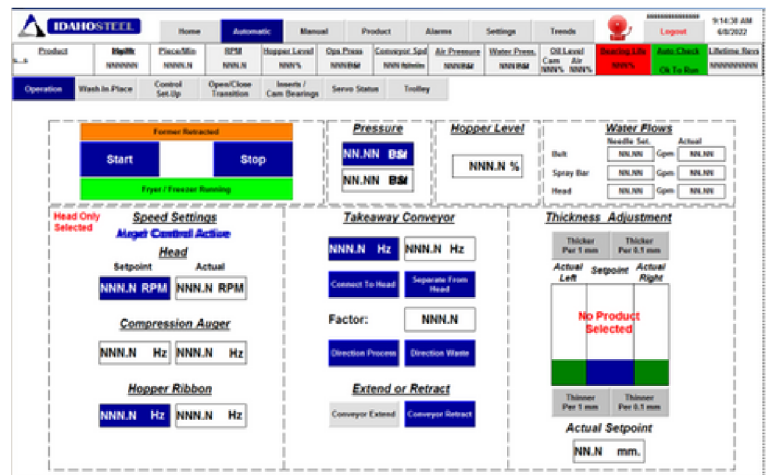
The Fry by Wire specialty fryer is an ingenious system that maintains the frying oil level to the top level of the product. This prevents it from floating and damaging the shape or disturbing the stacking pattern on the belt, which is essential for a proper frying and freezing process.



After frying, the EcoMiser™, a unique design by Reyco Systems, is installed to recover surface frying oil. The recovered oil will then be filtered to remove crumb and reintroduced into the fryer. During this process, from the moment the formed product touches the oil, during the oil filtering process and afterwards, the freezing, the shape, consistency and color of the product will never be compromised.

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 and continuous process monitoring and data recording.



Our STORY



Idaho Steel began in 1918 as a small fabrication shop in downtown Idaho Falls, Idaho and has been transformed over its 100-year history into a leader in the potato processing equipment industry.

Now, an internationally recognized expert in stainless steel fabrication and machining of food processing equipment, Idaho Steel serves customers around the world with its state-of-the-art machines including the largest drum dryers ever created. We credit our success to the talented people on our diverse team of professionals including engineers, machinists, and welders.

Family is an important word to our company. In 1991, Lynn Bradshaw bought Idaho Steel and in 2008, sold it to his sons Delynn and Alan, and his son-in-law, Davis Christensen. The family atmosphere of our culture is due not only to ownership ties that have spanned generations, but because we consider our employees and customers family, too.

Our Strategic Partners

Idaho Steel would not be the success it is without their strategic partners Kiremko and Reyco who combined, help our organization succeed on the world stage.

These crucial partnerships benefit our customers by providing more efficiencies, the latest technology, and a hands-on approach to the creation, installation, and maintenance of our equipment.

Our Mission

Through dedication to the highest quality, safety, and solid craftsmanship, we create an environment that inspires loyalty and innovation. With gratitude for our past, we will always serve our industry with pride and integrity. By investing in our people, with their families in mind, we continually improve our products and processes to exceed the expectations of every customer.

Our Vision

Be the premier supplier of potato processing equipment to the world.



IDAHOSTEEL

Food Processing Equipment



REYCO[®]



Kiremko

let's get in touch

Idaho Steel Products, Inc
255 E Anderson Street
Idaho Falls, ID 83401 USA
+01 208 522 1275
sales@idahosteel.com
www.idahosteel.com



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