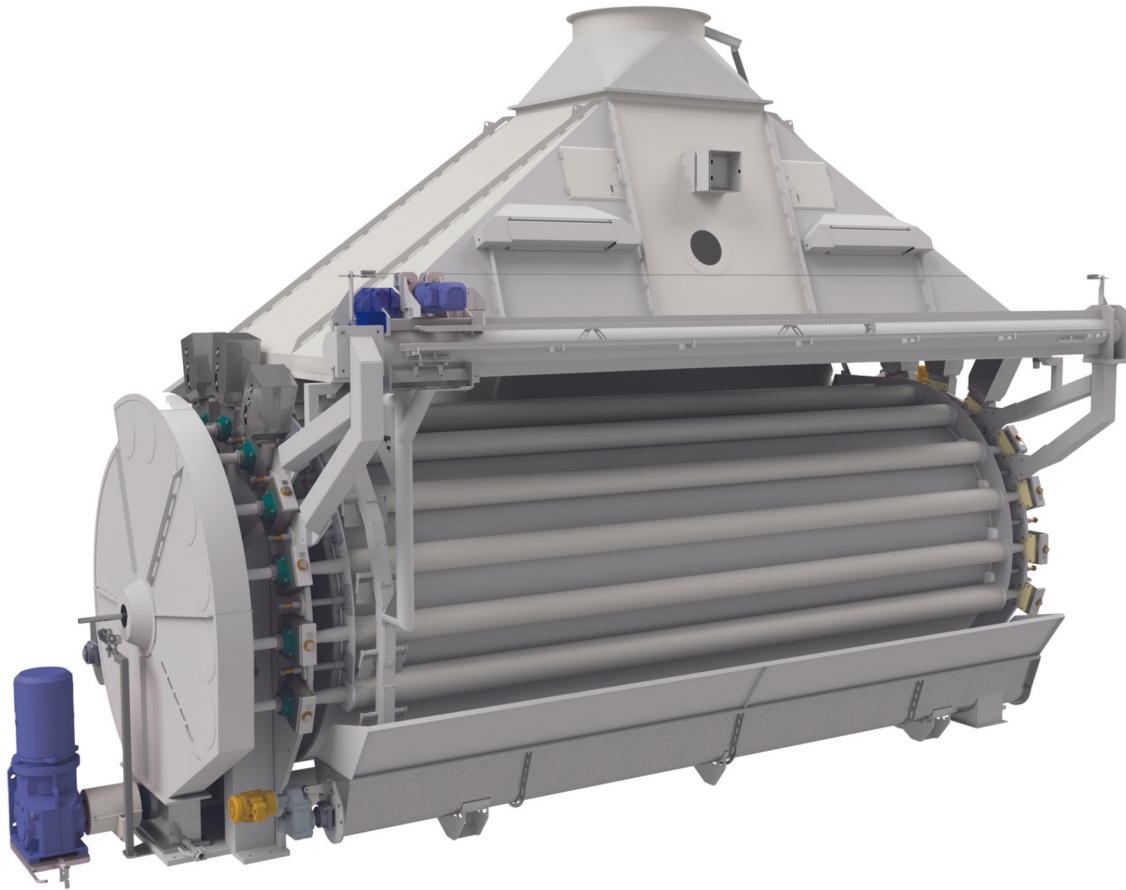


# FULL PROCESS FLAKE LINE



# IDAHO STEEL

*Drum Dryer*



**IDAHO STEEL**

**Food Processing Equipment**

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## Flake Lines

High flexibility is what makes the Idaho Steel Potato Flake Lines stand out. Together with our partner Kiremko, we design, produce, and install complete potato flake lines all over the world. Combining the latest technologies, constant innovation and experience within this partnership, we provide a tailor made solution, able to process all different varieties, sizes, and of varying qualities. This highly flexible line makes potato flakes in the most cost efficient way. We are the authority when it comes to Potato Flake Lines, stand alone or combined with your French fry line.

Potato flakes are processed into a food ingredient of massive importance with countless applications and are now an extremely cost efficient part of recipes for end products such as stackable chips, extruded snacks, baby food, bread and pancake mixes, formed meat products, and even non-food applications such as plastics. Idaho Steel Potato Flake Lines offer maximum efficiency, cleanliness and durability.

Potato Flake Lines are usually set up in one of two ways; the first is a stand-alone line, the second being a line that uses reject potatoes from another primary process line such as a French fry line.



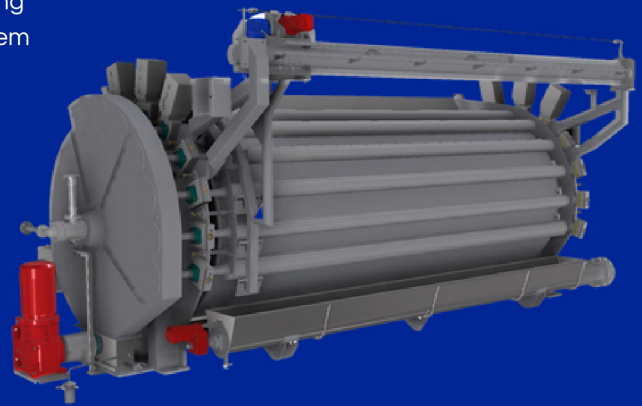
# The DRUM DRYER

## The Idaho Steel Signature Machine

Increased Production  
Optional Automation  
Pressure up to 175 psi  
Increased Sanitation  
Range of Sizes Available

Stainless Steel Construction  
Pneumatic Applicator Adjustment  
Meets ASME Code  
Clearances for Cleaning  
ISP Total Control System

*"We are producing the very best, largest dryer on the planet."*



## The Process

The first set up is designed to convert lower quality potatoes that have been specifically sourced for manufacturing flakes. In this case, potatoes are washed, and stones are automatically removed before the product is peeled, by steam or abrasive peeling, using the most suitable technique depending on capacity. The product is then size reduced using custom built cutters before it goes on to the thermal part of the potato flake process.

The second set up is usually installed alongside a French fry line. The rejects from the French fry line, typically off-grade potatoes, slivers, nubbins and strips with color defects, are used as a raw material to convert the product into a specific quality of flakes. This method is a very good way of improving the overall yield of the processing facility in terms of potato usage.

Previously what would have been discarded as waste, is now converted into a product.

The cut product or rejects from another process line is either blanched, cooled and cooked or simply just cooked depending on the type of flake required. The cooked potato is converted to a mash which is transported to and evenly distributed over the flake drum.

# The SYSTEM

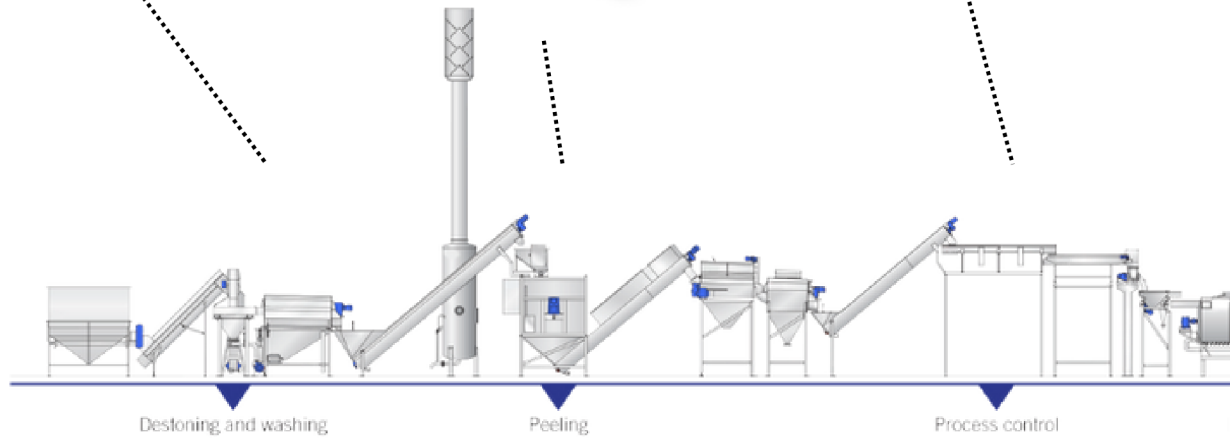
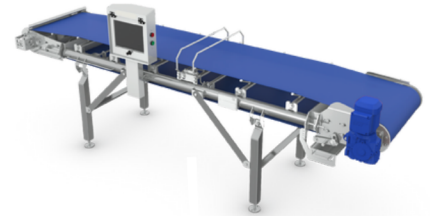
Cyclone Destoner



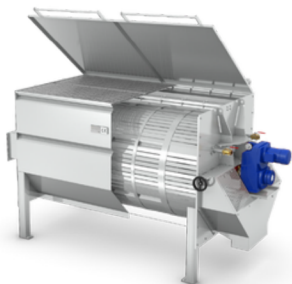
STRATA Invicta



Weigh Belt



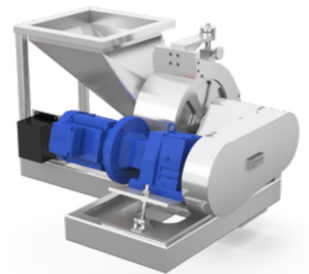
Pre Washer



Dry Brush Machine



Slabber

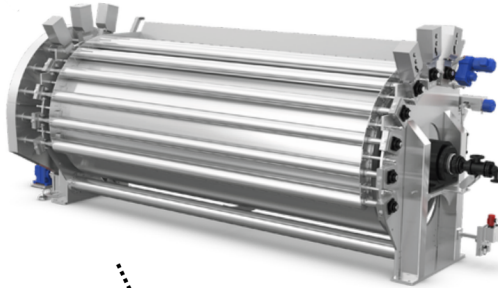




**IDAHO STEEL**

Food Processing Equipment

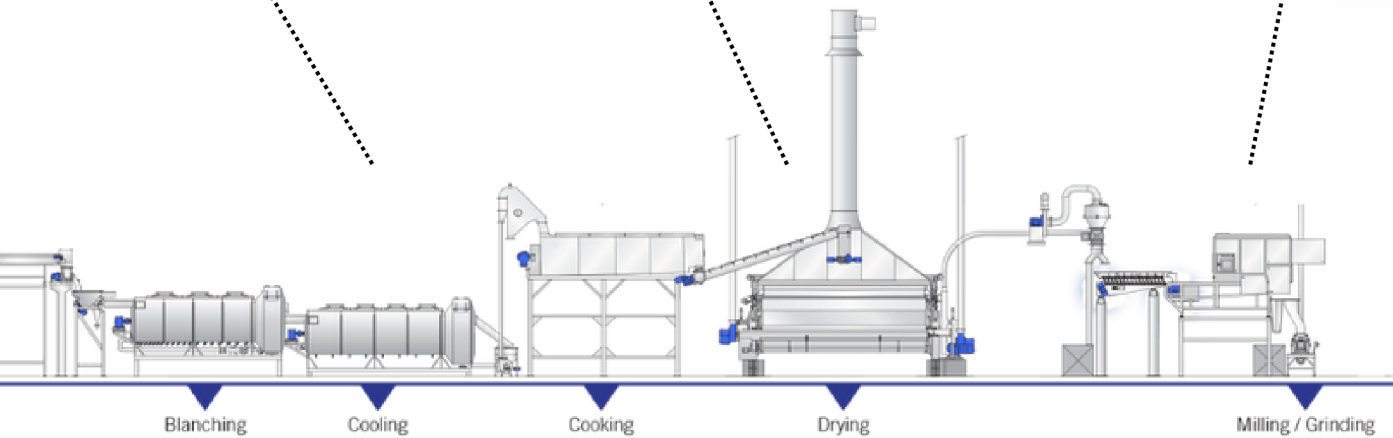
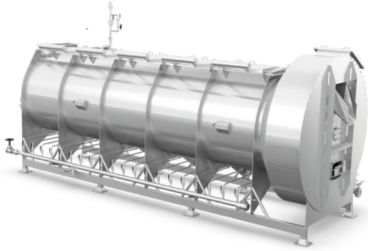
Drum Dryer



Optical Sorter



Screw Type Cooler



Blanching

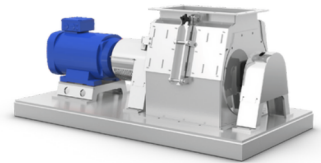
Cooling

Cooking

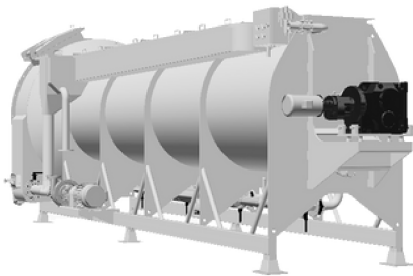
Drying

Milling / Grinding

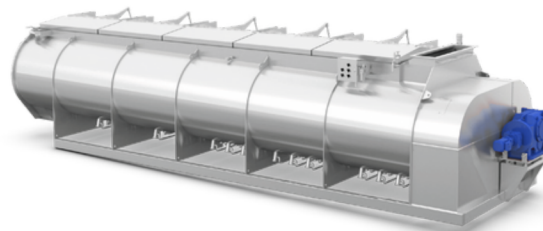
Flake Grinder



Key Hole Blancher



Steam Cooker

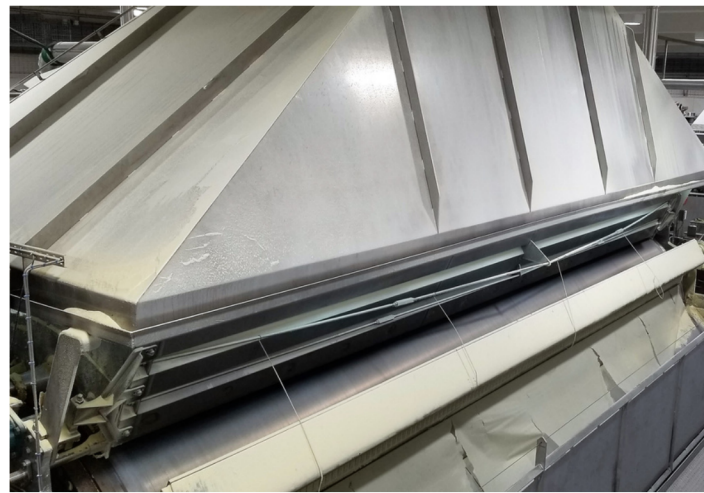


## The Application

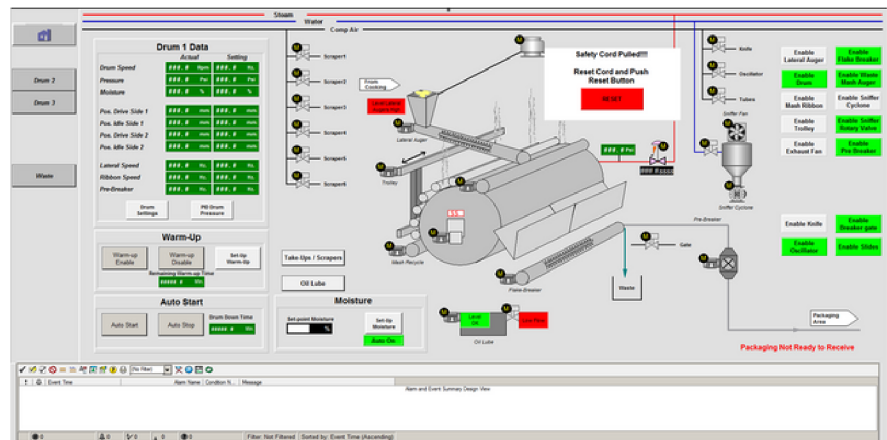
Applicator rollers on the drum allow the mash to be spread evenly over the hot surface of the drum where the moisture from the potato is quickly and efficiently driven off leaving an almost dry sheet of flake. The moisture is carried away as vapor by extraction fans while the flake is pre-broken into transportable pieces and conveyed to the packing area. The flake is milled down to the correct size for your needs before it is packed in a number of different ways, once again depending on the end user's requirements. Idaho Steel supplies individual components to enhance existing lines or complete state of the art new lines to meet the challenges of the marketplace.

The Drum Dryers, which are at the heart of this process, are a well proven design manufactured by Idaho Steel Products in the USA for more than 40 years. As a unique feature they are equipped with a stainless steel surface which has brought an essential improvement to industry standards. These 'Super Drums' have been installed in many flake plants across the globe.

Idaho Steel and Kiremko work closely together, creating one of the only partnerships in the world capable of designing, manufacturing and installation of complete potato flake processing lines.



Process control, data-collection and self-managing functionalities in processing lines are of increasing importance.



# *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**<sup>®</sup>



**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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brochure here*