

POTATO PROCESSING

I N T E R N A T I O N A L

Supporting the potato industry worldwide

Issue 1 • Volume 30 • 2022



Technology

Gentle Washing
Preserves
Crop Value

PB Special

6 Business
Viewpoints
for 2022

Interview

Kai Mangelberger:
"You Will Be Able to
Do the Best Business!"

Spotlight

Coming
Clean About
Sanitation

PB

visit potatobusiness.com incorporating our digital magazine



20 26

Contents

04 Comment

Keeping One Foot on the Ground

06 News

Latest Industry News

10 Process

Conveyors: Maximizing Speed and Profit

PB Special

Six Business Viewpoints for 2022

14 Alan Major, Chief Sales Officer, Urschel

15 Brian Barr, Director of Sales, Heat and Control

16 Karel Van Velthoven, Product Marketing Manager,
FAM Stumabo

17 Stefan Björk, Managing Director at
Rosenqvists Food Technologies

18 Marco Azzaretti, Director of Marketing,
Key Technology

19 Stefan Toepfl, Managing Director,
Elea Technology GmbH

20 Technology

Gentle Washing Preserves Crop Value

20 Expert View - Urschel

Technology in Potato Cutting

26 Spotlight

Coming Clean About Sanitation

30 Markets

European Market Outlook for 2022

32 Products

Making the World a Healthier Place

36 Storage

Picking Favorites: Bulk vs. Boxed Storage

40 Interview - Kai Mangelberger

Fruit Logistica: "You Will Be Able to Do the Best Business!"

42 Trade Show Review

Potato Expo 2022



30



32



40

6

Business Viewpoints for 2022

2021 was a panic-filled year, during which the business environment refined its defenses and growth mechanisms in a difficult market context. In the end, the balance was a positive one, with the industry registering, in some places, spectacular growth. For 2022, representatives of some of the most important equipment manufacturing companies talk in unison about reinvention, adaptability, differentiation, and care for the needs of their customers. A new year that, on top of the ongoing health crisis, presents a series of fresh challenges - from supply chain disruptions to increased utility costs and labor force shortages. But what none of the viewpoints shared with us are missing is hope, an essential attribute for a long-term winning business.

by Tudor Vintiloiu

Alan Major, Chief Sales Officer, Urschel



Considering we've been adapting to the new normality of the market for two years, what does 2021 look like for your company when you draw the line?

The past two years have not been without challenges. In defining 2021, I would say it ended up being better than expected. Surprisingly, it mirrored the successful revenue Urschel achieved in 2019. Going into 2021, it was difficult to gauge the market due to the uncertainty we were facing because of the pandemic.

What are your expectations for this year, keeping in mind the legacy of 2021, but also the current challenges?

Our expectations for 2022 project a steady growth for our overall business. We are optimistic the success of 2021 will continue. Many projects that were originally put on hold due to the uncertain state of the pandemic are now moving forward. We are working with our customers with ongoing plant expansions and line additions that had been put on hold in 2020.

How do you estimate the market will evolve and what is your priority list for 2022?

We are anticipating a relatively strong 2022. Our priority list includes assisting our customers to build and expand on their operations - getting projects back on track which were stalled during the initial pandemic circumstances. We will continue to move forward overcoming some of the COVID challenges. As the government and businesses adapt to the existence of COVID long-term, we are very optimistic that the pent-up demand for spending over the previous two years will ease, and we will see growth in the areas that have been stagnant.

What impact has the pandemic had on your business partners and what is the most important lesson you have learned in recent times?

The greatest impact on our suppliers has been the difficulty of being reliant on the supply chain. The pandemic had an unforeseen negative impact on the supply chain of many suppliers. Moving forward, Urschel has discovered ways to adapt and adjust inventory to ease future situations. With in-house manufacturing, Urschel has limited vendors/suppliers and valuable long-standing relationships with them. Urschel suppliers went to great lengths and exceeded expectations to fill orders during these challenging times.

What are the biggest challenges you faced and where did the growth opportunities come from?

The biggest challenges we faced were projecting future sales, gauging what our manufacturing capacity needed to be, and how to continue to reach our customers during these unsure times when travel is limited and the impact this would have on the business.

Growth opportunities came from the shift in the marketplace as consumer habits changed from going out to restaurants to purchasing more and more items from supermarkets. Urschel sales shifted from restaurant suppliers to selling more parts to support food processors supplying to the supermarkets.

What are the pillars on which you have based your evolution this past year?

Urschel pillars of evolution included extensive live remote meetings with customers including test cutting of their products. Technology played a key role in overcoming the obstacles of lack of direct person-to-person contact. We relied heavily on our IT department and were very fortunate to have had installed many state-of-the-art infrastructure, bandwidth, and systems when our facility was constructed in 2015. These systems were important in maintaining customer contact.

Another pillar of importance is the fact that we engineer and manufacture our own components, so we did not have to rely on third-party agents to maintain parts inventory. With the supply chain crisis faced around the world, this was crucial in the success of our company. With engineers and skilled manufacturing professionals dedicated to producing quality parts, we were not as reliant as other companies who outsource their parts.

What is the most important asset you have in 2022 as a company?

The most important asset in 2022 we have as a company is our strength across the globe. Building direct offices in key locations around the world increases our effectiveness. We have direct, local people. Our distribution is an important aspect of our business. Investing locally and building offices is an investment in establishing relationships with food processors in the different areas of the world. Local contact has been very important in these COVID times of limited travel. The strong, direct network of sales, support, and service has been a huge asset to take care of customer needs directly. ●



Technology in Potato Cutting

The Model CC Slicer continues to be the go-to slicer for chips/crisps. The operating principle could not be more proven in the industry. Product is delivered to the feed hopper assembly and enters the rotating impeller. Centrifugal force holds the product against the inner surfaces of the each cutting station. As product passes each cutting station, slices, shreds, or strips are produced. The machine may be equipped with a 2, 5, or 10 HP (1.5, 3.7, or 7.5 kW) motor.

by Mike Jacko, Vice President of Applications & New Product Innovation at Urschel

Urschel is continuing to expand on the machine's capabilities. It's amazing how a machine could capture such a strong market, but the CC has evolved with the crisp/chip industry. We have developed a wide spectrum of slice shapes including Crinkle, V, Flat-V®, and Z.

POTATO SLICING VERSATILITY

Widely known for slices, the CC provides even more versatility in the many shred shapes including Full, Reduced-V, Full Flat-V, Reduced Flat-V, Oval, Reduced Oval (Crescent), Strips, Julienne, and even grating options. Customers continue to push Urschel to explore even more shapes, and this remains an active project. The development of the SH-14 (Shredding) and SL-14 (Slicing) MicroAdjustable® Heads has made a huge impact on increasing capacities. The advantages of implementing one of these heads don't end with the increased capacity due to the 14 cutting stations. Processors are experiencing longer run times between knife changes. Operator interaction is minimized. Both heads are more user friendly versus the

standard 8-station heads. Urschel is continuing to expand on the 14-station line of cutting heads. Notably, the SlideLocc™ .212V Slice, which offers three simple steps of slide, lock in place, and tighten. I cannot disclose too much information about our research and development strategy because R&D takes time, but processors are continuing to ask Urschel to manufacture even more machines like the CC with higher capacities, larger throughputs, and a few more options. Urschel is willing to take on this challenge. Urschel partners with customers around the world. We have invested in the infrastructure to strongly support customer initiatives. Direct offices offer customers direct assistance with their specific objectives. Some of our customers have shown a strong interest expanding on the capabilities of the CCL. The CCL is a member of the CC series. It offers unique lattice slices with a distinct operating principle. Rotating potato holding tubes allow the potato to be rotated in a vertical axis while being revolved in a radial direction. Centrifugal force holds the

potatoes tightly against the inside surface of the spherical-shaped slicing head. As the potatoes rotate inside the slicing head, they make an approximate one-quarter turn between each of the four crinkle knife stations. This results in intersecting crinkles on each side of the slice.

DICING ADVANTAGES

Salty snack manufacturers, including the growing potato snack market, look to the DiversaCut series. In addition to salty snack potato products, the pet food industry's use of sweet potatoes as an ingredient in their products is also on the rise. Hopper fed, the series produces one-, two-, or three-dimensional cuts. Product delivered to a feed hopper enters a rotating impeller. Centrifugal force holds the product against the inside of the case. Impeller paddles carry the product past the slicing knife. An adjustable slice gate at the top of the case determines the slice thickness. Slices pass between the slicing knife and stripper plate, and then enter the circular knives where they are cut into strips. The strips pass directly into the crosscut knives where the final cut is made. Strip cuts



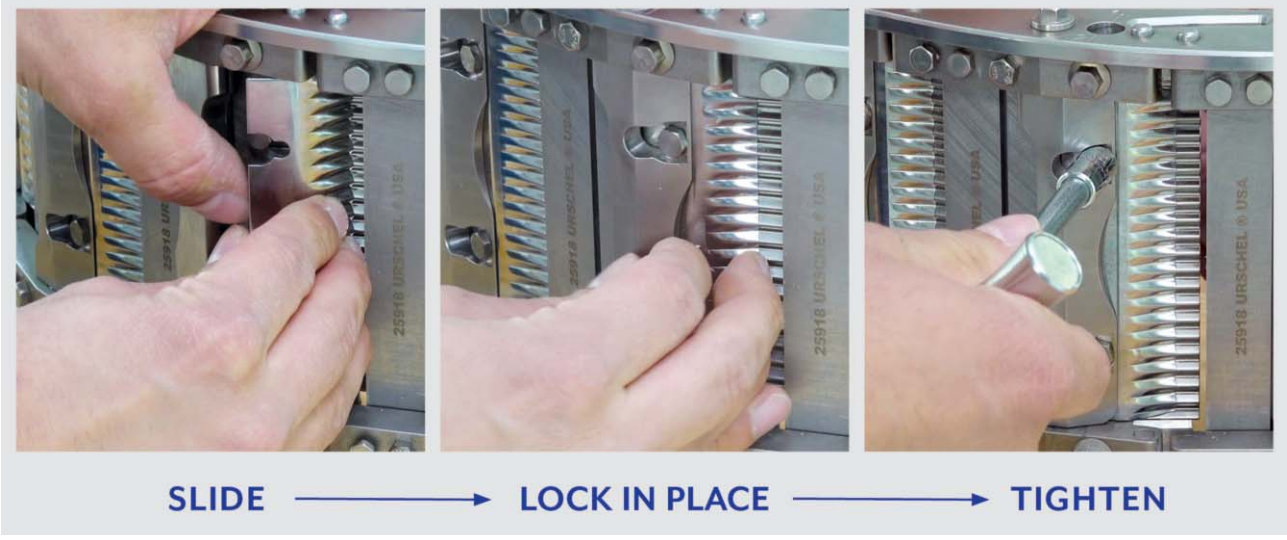
are produced by removing either the circular or the crosscut knife spindle.

Slices are produced by removing both of these spindles. Shreds are produced with shredding discs in place of the crosscut knives. The DiversaCut series is made up of several models. Notably, the DiversaCut 2110A® Dicer (DCA) and Sprint 2® Dicer (SPR2). The DCA is one of our larger dicers and accepts input products up to 10" (254 mm) in any dimension, whereas the SPR2 possesses a smaller footprint and accepts products up to 6.5" (165 mm). The DCA may be outfitted with either a 5 or 10 HP (3.7 or 7.5 kW) and be able to run up to 90 hertz with supported heavy-duty components/gearing to obtain unsurpassed capacities. The SPR may be equipped with a 1.5 or 3 HP (1.1 or 2.2 kW) to offer flexibility to small to moderate size processors. The DiversaCut technology and the growing number of salty snack applications and growing pet food sweet potato uses complement each other. The DiversaCut series will produce slices, strips, granulations,

shreds, or dices in flat/straight or a variety of crinkle and V shapes. Deep crinkle, granulation, and strip cuts have shown to be the most popular in the last two years. Customers appreciate the versatility in the ability to switch from one cut to another as they add SKU's to their product lines. Ease of maintenance and operation with limited operator involvement is a key feature. Attention to detail in construction, for example built-ins such as the circular knife spindle carriage to expedite changeovers, is part of the intuitive design. Other elements include a slide-in, removable slicing knife, which offers cost-savings and a dial-in slice adjustment knob. Swing away panels throughout the machines offer full access without having to rest any panels on the plant floor. New to both the DCA and SPR, a built-in conveyor discharge. This feature enables full discharge of cut product and is preferred among batch processors dispensing into totes. The conveyor discharge is designed to be at the most optimum height specifically for totes.

COST-SAVING, VALUE ADDED OPPORTUNITIES

A number of processors are already building SKU's instead of 'scrap' product. Processors recognize the costs associated with disposal or third-party processing service fees, and they have developed value added products to actively benefit their bottom line. Cost-savings associated with this may also reduce water, overall power usage, and positively impact environmental aspects. Further reduction to produce value-added opportunities may be accomplished with a number of Urschel customer may choose to examine additional capabilities for a machine the company has on-site. For example, a potato customer who is already running a CC with a shredding head may opt to purchase one or more grating heads to develop a further reduction. Incorporating a DiversaCut or one or more models from the Comitrol® Processor line are both popular options. A DiversaCut dicer may be to create smaller cuts from products such as fries, patties, or other preformed potato products. It may



Expert View Urschel



also be used as a precutter in conjunction with one of the Comitrol Processor models.

The Comitrol® Processor series offers several different models from which to choose, products may be reduced to coarse or fine particles down to micro-dimensions. Every model features continuous single pass operation with no operator adjustments.

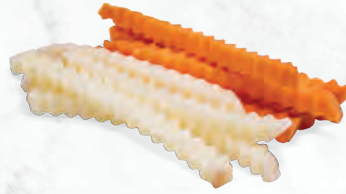
The line focuses on particle size reduction. A reduction head in a fixed position works with a high-speed impeller that precisely and incrementally shears the product to a specified target size. Standard operations include granulating, flaking, slicing, dispersing, blending, homogenizing, milling, shredding, liquefying, emulsifying, and pureeing. Comitrol versatility processes various consistencies from dry to paste to liquids. Different styles of impellers are paired with reduction heads depending on reduction application. Comitrol models vary in feeding method, horsepower, and style and size of reduction heads. Oftentimes, two models may be used in tandem in a line depending on customer goals. There are 3 main styles of reduction heads: the Cutting Head, Microcut Head, and Slicing Head. The Cutting

Head is comprised of uniformly spaced, vertical knife columns arranged in a circular fashion and held in place by thin horizontal separators. The leading edge of each vertical knife is a sharp knife edge. Cutting heads are constructed of special wear and abrasion resistant alloys and can usually be resharpened for extended use. The distance between the horizontal separators and the vertical knife columns defines the opening through which the product must pass and helps determine the final particle size and shape. The Microcut Head offers the smallest degree of particle reduction and is comprised of a ring of closely spaced blades. When product is revolved inside this ring of blades at very high speed, centrifugal force causes pressure against the blades equal to several thousand times the weight of the product. The leading edge of each blade is a sharp shear edge for cutting accuracy, and the blades are carefully positioned to effectively reduce products down to micro-dimensions. The Slicing Head is a precise, miniaturized version of other Urschel centrifugal slicers. It consists of a ring of stationary slicing knives held in place by adjustable knife holders. Centrifugal force created by the rotating impeller causes the

product to press firmly against the inner surface of the knife holders to produce uniform slices at each knife location. Designed for applications where the final dimension is a specific slice thickness from .020 to .060" (.5 to 1.5 mm).

The Comitrol Processor Model 1700 accommodates all three styles of reduction heads for maximum versatility. Sealed enclosure deters escape of dust, vapor, and liquid when installed in conjunction with a collection system. The Comitrol Processor Model 3600F is another widely sold machine. The compact size is ideal for small volume to high-capacity users. The 3600F is equipped with the Cutting Head style of reduction heads and offers positive feed assistance via a screw feeder. Urschel has free-of-charge test cutting available in offices around the world. As customers look to expand their SKU's and build their lines, test cutting is a great first step. Urschel lab technicians have experience with thousands of cutting applications to assist with individual goals. Test cutting is available in-person, live remotely, or via video. Test cuts may be scheduled through their local Urschel contact. •





Explore
**Intelligent
 Cutting Solutions**



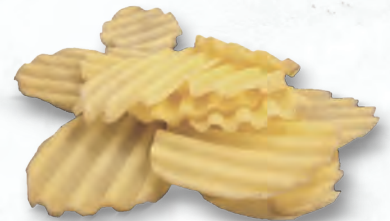
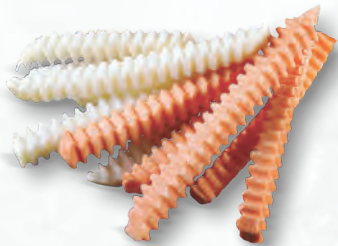
Urschel manufactures intelligent, sanitary food cutting machinery responsive to your processing needs and environment. Rugged design withstands harsh production conditions while maintaining precision cuts. Limited maintenance with the ability to run continuously for uninterrupted production presents significant cost-savings.



As The Global Leader in Food Cutting Technology, Urschel provides cutting solutions for all types of potato applications.



**Contact Urschel to achieve
 your processing goals.**



#1 Best selling provider of industrial cutting machinery throughout the world.

URSCHEL[®]
 The Global Leader in Food Cutting Technology

Set up a free test-cut of your product.
www.urschel.com



Like our page and join our online community:
www.facebook.com/Potatobusiness



Follow us on Twitter:
<http://twitter.com/potatobusiness>
We will update regularly on our activities,
upcoming features and show attendance.



Join our group on LinkedIn search for:
**Potato Processing
International News**

POTATOBUSINESS

on social media