POTATO PROCESSING

Supporting the potato industry worldwide

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Product - Extruded Potato Snacks Suitable for Busy Lifestyles **Process - Forming and Extrusion** Developing Cutting Edge Technology VFFS Packaging Innovation Category Is: Versatility



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Urschel continues to lead the way with new cutting technology with the Model CC series for slicing chips/crisps, shredding hash browns, other vegetables, and cheese with their new SL-14 and SH14 MicroAdjustable® Slicing and Shredding Heads.

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



Cutting It to Perfection - Latest Technologies for Potato Processors

hese new all stainless heads deliver maximum cutting action with 14 cutting stations, almost doubling the capacity. Special features include quick-change knives and improved thickness setting to maintain strict tolerances and offer longer knife life. In these times of COVID-19 when companies are running with minimal essential employees, these heads do not require expert experienced operators to get the perfect slices. Capital purchases are a serious investment. When a company looks into upgrading, replacing, or starting a new line with what appears to be the latest technology, a closer examination is advised. A machine may make the necessary cut with the parts supplied with the initial new machine, but tolerances of change parts and replacement parts are critical in the long-term performance of the machine. Urschel stresses quality in manufacturing, not only in the fit and finish of the initial investment, but in every part manufactured. Urschel continually invests in new production technology, in order to provide that same quality to customers. Cost of ownership for the long-term should be stressed such as wear-and-tear parts, machine durability, and meeting customer support needs. Downtime can exponentially disrupt processing from an illadvised capital investment. During this COVID time, exploring new technology may be difficult due to travel restrictions. In person, cutting tests may not be practical. Live test cutting appointments via 'ZOOM' and other avenues are growing in popularity. Videotaping or photos of cut products and machinery are also readily available to assess abilities.

MOST EFFICIENT TYPES OF CUTTING MACHINERY Urschel has been fortunate to grow alongside the potato processing industry to continue to meet the needs of this constantly changing market. In the strip cutting/French fry/dicing area, many Urschel dicers are available depending on customer objectives. The DiversaCut 2110A® Dicer (DCA), by Urschel, is primarily the go-to machine for dices and crinkle french fries. The machine provides exacting cuts at high capacity. The DCA is manufactured for rugged production environments. Customers appreciate the long runtimes the machine delivers. Ease of use is another feature, noted by many processors. Handled, built-in circular knife carriage, removeable, slide-in slicing knife, and dial-in slicing contribute to a smooth flow of operation. Processors view this as a reliable, dependable machine that fits their production requirements. The DCA may be outfitted with either a 5 or 10 HP (3.7 or 7.5 kW) motor up to 90 hertz with supported heavy-duty components/gearing to obtain unsurpassed capacities. Most potato processors will not need to run at such high speeds/capacities because the rest of the line may not be able to keep up with the product coming off of the Urschel machine, but this option is available for some of our leading, 'super processors.' For efficiency in terms of price point, small-to-medium processors may benefit from the DiversaCut Sprint® or Sprint 2® Dicers. Both offer smart, compact cutting zones for optimal dices and strips as lower cost alternatives for processors with one-, two-, or three-dimensional cutting options, along with many of the same added benefit built-ins as

the larger volume DiversaCut

2110A. Oftentimes, processing houses begin with smaller machines, such as one of these, to deliver volumes of precise cuts to their customers. As the processing house gains a positive reputation it either continues to build a number of small lines, or upgrades to larger equipment via trade-in opportunities. The Model CC remains the preferred potato chip slicer among processors worldwide, outselling all competitor brands by a substantial margin. In many countries, this slicer is responsible for the largest percentage of the market of all high capacity volume, commercially processed potato chips. Introduced by Urschel in 1959, the original has undergone vast improvements throughout its history, while the operating principle has withstood the test of time. This slicer was created specifically for the commercial potato chip industry. The 'CC' originally stood for 'Chip Cutter'. The machine also shreds potatoes for hash browns, slices for thicker potato products, and julienne strips/sticks. The CC is viewed as an integral part of the potato chipping processing line. Processors prefer this slicer because of the precision slices that equate to even fry times to maximize profits. Both regional chippers and the bigger, global companies purchase this slicer for ease of use to efficiently process quality cuts with minimal maintenance.

"Evaluating commonly replaced parts, determining proper vendor support initiatives, and continuing to examine new technology will have customers on their way to achieving the perfect cut."

Related to other types of potato processing, elongated potatoes are commonly sliced by the E TranSlicer® Cutter for final or precut product and all types of particle size reduction applications via the Comitrol® Processor line, including potato flake applications. The abundance of reduction heads and impellers, provided by the Comitrol, contributes to the success of many processors with the ability to reduce down to micro-dimensions. Customers appreciate ease of use and refined cutting principle.

ADVANTAGES OF CUTTING MACHINES IN TODAY'S MARKET

Things are changing rapidly in the world. Adapting to the marketplace is vital. Customers are always looking for an advantage, whether qualitywise, a unique product, ease of operation for workers, and the comfort level that the supplier will be there when things are not going as planned. Urschel has been working diligently through the entire Coronavirus pandemic to supply the needed parts for our machines to keep plants up and running around the globe. Urschel machines are already robust long lasting, easy to clean, versatile easy to run machines that run the gamut on what they can slice, strip cut, and dice. We are proud to be the size reduction specialists that kept commercial food processors going strong. A staunch supply chain is a major advantage in today's market. Customers choose to partner with companies that support their every effort. These tough COVID times have put us all to the test in one way or another and have definitely strengthened relationships in the process.

MOST COMMON DEMANDS

Customers are demanding more in a design than ever before. Customers are always looking to improve sanitation and time efficiencies. Cutting principles are more precise to produce tighter, increased in-spec results, dedicated to increasing usable product. Components are constructed with ease of use elements, such as







built-in handles, while also being able to withstand rugged production environments. Tools that accompany machines are also designed to expedite routine procedures. It all relates to time savings and cost savings. Today's cutting equipment is designed with greater flexibility. Oftentimes, one machine has the capability to deliver one-, two-, or three-dimensional cutting. This way, as customer SKUs increase, a customer can simply purchase additional parts for an existing machine, expanding the spectrum of cutting abilities.

MOST COMMON CHALLENGES CUSTOMERS FACE AND OVERCOMING OBSTACLES Cutting efficiencies, yields, cost per pound of product is what processors are looking to improve as well as product quality, sanitary aspects, the manpower and technical expertise required to run the processes and machines for cutting. Sometimes additional auxiliary sizing equipment or defect removal equipment is required to go with the slicer, French fry cutters, and dicers, so that's a

"Customers look for responsiveness from vendors. Service or support contracts with vendors, such as Urschel, may result in overcoming hurdles related to manpower and technical expertise."

potential added cost. More complicated machines may require higher paid workers, but the trend is to make things easier to set-up and run with lower labor costs. It's all a trade-off. A brand-new machine with worn out knives damaged by rocks will not make a good product. Feeding methods, when to change out parts, gauging cut quality versus getting the highest volume of useable product are all challenges processors must work to overcome. Customers are looking for a machine with components that work with their fast-paced line. Small and large companies, regional and global, want a robust machine that will hold precision slice tolerances throughout production runs with guarantees of



parts and service when they need them. The ability to make changes 'on the fly' to be responsive to the needs of their environment. Customers look for responsiveness from vendors. Service or support contracts with vendors, such as Urschel, may result in overcoming hurdles related to manpower and technical expertise. Support overthe-phone and via video technology also offer valuable assistance. 'Readyto-ship' parts for quick turnaround is also advantageous. Procedures for swapping out parts should be easily understood with simple steps to follow succinctly.

IN SUMMARY

While every food processor seeks the 'perfect cut' and the highest level of efficiency, evaluating current line inefficiencies may go a long way in perfecting the line and increasing inspec. product. Something as simple as examining knife changeover intervals or feeding methods, may lead to significantly improved product and overall cost-savings. Evaluating commonly replaced parts, determining proper vendor support initiatives, and continuing to examine new technology will have customers on their way to achieving the perfect cut. •