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#### **Falling Short**

More than a year later, the supply chain and workforce have yet to make a full recovery from the coronavirus pandemic. A variety of factors are challenging eCommerce processes to deal with ongoing disruptions that limit their ability to get products to market, including a labor shortage.

The new trends in the workforce, along with the consumer expectations of immediate wants for their purchases, are putting pressure on packaging suppliers to get products to market faster, with less manpower to do so.

In order to adapt and increase efficiency in the size and skill of the packaging industry's workforce, modifications are needed. We have been witnessing more and more companies introducing automation into their overall processes – turning out more volume at faster speeds.

And while global supply chain challenges and workforce will hopefully improve in the years ahead, these challenges have indeed resulted in valuable lessons learned. The industry has adopted to moving forward, and I think we can expect the majority of the changes in faster flow of information and the increased use of technology and automation will be here to stay.

In the July issue of *Packaging Technology Today*, you can find some more insight on technological advancements in the packaging industry, as well as how the COVID-19 vaccine distribution is changing the way we think about food packaging.

**EDITOR'S NOTE** 

Enjoy,

Joan Mantini 586.295.1888 Joanm@rdgmedia.net

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- 16 How Vaccine Distribution is Changing the way we Think about Food Packaging

Advancements in packaging, tracking technology, and cold chain efficiency are all playing a role in streamlining food and vaccine distribution processes.



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### AUTOMATION

Similar to the Smart MechatroniX function kits for pressing and sealing operations, the new generation Smart Function Kit for Handling systems will provide true "plug-and-produce" platforms for Cartesian and multi-axis systems.

### PLUG-AND-PRODUCE: NEW CONCEPT IN SMART MECHATRONICS PLATFORMS FOR PACKAGING AUTOMATION

By Richard Vaughn, Automation Engineering Manager at Bosch Rexroth Corp.

onsumer packaging companies are always looking for new technology and approaches that can lead to more productive operations, faster changeovers, reduced footprints and sustainable production. These companies are also starting to leverage the intelligence, connectivity and productivity enhancements that Industry 4.0 technologies can add from advances in cutting-edge automation.

**COVER STORY** 

As a result, many packaging automation OEMs are incorporating smart, connected components and subsystems into their next-generation machines. Built upon an array of online design tools and advances in mechatronic control, hardware and software, a new technology concept called "smart mechatronics" is becoming more widely available. Smart mechatronics focuses on intelligent ready-to-use systems that are more sophisticated, yet easier to specify, order and deploy.

This new approach in automation can be used to improve packaging machine applications such as package sealing, embossing and package forming. It also has the potential to improve the development and performance of Cartesian robot handling and pick-andplace systems, which are critical elements in many automated packaging operations.

#### Mechatronics: the value of integrated technologies

Mechatronic systems are already an essential part of this manufacturing landscape — extending and expanding the value of linear motion and automation technology. This integration of linear components, electronic controls, software, electric motors and sensors provides a versatile toolbox for machine builders to engineer and commission complete manufacturing systems for demanding applications.

Mechatronic technology suppliers like Bosch Rexroth are leveraging the advantages of intuitive interactive design tools and improvements in digital controller technologies to give packaging OEMs and end users the capabilities that let them "plug-and-produce, perform and proceed."

This outcome is driven, in part, by packagers who, more and more, seek production machinery that offers both versatility and simplicity.

The goal is to achieve quicker time to market by simplifying the engineering task for systems that can quickly shift to make different variants or add new functionality on the same production line.

To satisfy this demand, packaging machinery OEM engineers want to streamline how they specify, purchase and commission mechatronic components, using online tools that deliver complete, intelligent systems ready to operate "out of the box" with minimal or zero machine programming.

At the same time, next-level mechatronics must support transparent production processes, with features that automatically capture process data and enable real-time condition monitoring and predictive maintenance.

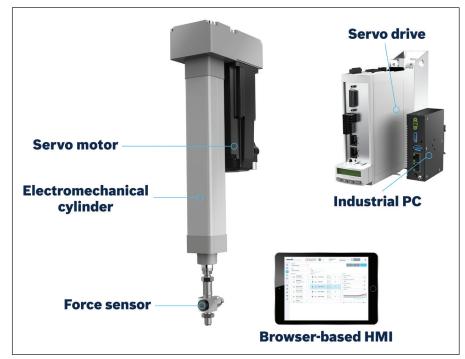
Smart mechatronics technology is now available to satisfy many of these requirements. Used widely in other applications ranging from product assembly and metal forming to single- and multi-axis robots for material handling, these systems are also particularly well-suited for packaging endof-line functions.

#### Smart mechatronics for pressing and sealing applications

This coming-of-age for smart mechatronics is opening up more possibilities for customization in packaging equipment. One example is a recently developed compact, plug-and-produce smart "function kit" for pressing. Suitable for many different indus-



Leveraging an array of online design tools and advances in mechatronics controllers and software, a new technology concept called "smart mechatronics" is becoming more widely available. Smart mechatronics can be used to improve packaging machine applications such as package sealing, embossing, package forming and material handling.



Bosch Rexroth recently developed a compact, plug-and-produce Smart Function Kit for Pressing as part of its new Smart MechatroniX family of mechatronics solutions. Suitable for many different industries, it can be easily implemented for use in packaging applications such as bag sealing in form, fill and seal production lines.

tries, it can be easily implemented for use in packaging applications such as bag sealing in form, fill and seal (FF&S) production lines.

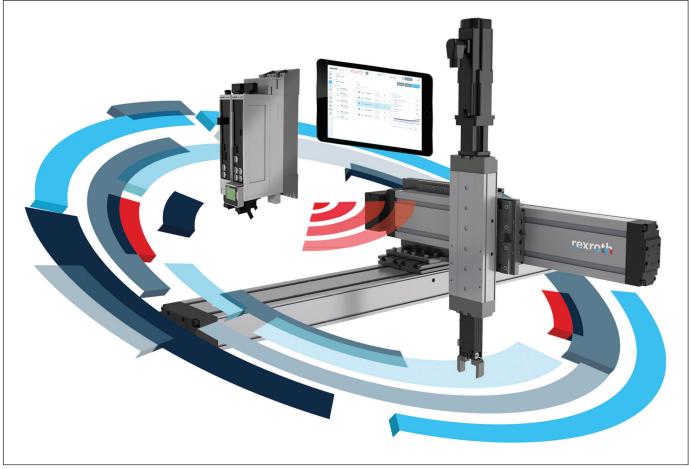
This type of smart mechatronics system can greatly reduce the time, cost and complexity of implementing new or custom FF&S capabilities. The kit is offered as a complete mechatronic system, from one supplier, that seamlessly integrates an electromechanical cylinder (EMC), electric servomotor and drive, motion controller and industrial PC, power and communications interface and browser-based HMI software compatible with standard HTML platforms.

The concept allows for versatility as needed, but it can be used, for example, to precisely control electromechanical pressure to seal filled bags or to join together multiple bags in a single group. Embossing product logos or promotional labels onto existing containers is another application. Until the advent of smart mechatronics, machine builders may have developed their own mechatronic assemblies by ordering and integrating separate components. However, this process is often cumbersome and time-consuming.

In a typical scenario, the mechanical engineering group may be responsible for

### **COVER STORY**

### AUTOMATION



Smart Function Kit for Handling will utilize intuitive, well-engineered online configuration and ordering tools that streamline the process for specifying all the components needed for a given packaging application.

specifying and ordering one set of components, while the electrical group orders its components. Not only is this more challenging for the purchasing department, but the engineering staff is then tasked to make it all fit together physically and program the functionality. Smart mechatronics can eliminate that complexity, providing a complete realization of the plug-and-produce concept.

Mechatronics suppliers have found a way to simplify the process to achieve this concept. First, they are deploying advanced, well-designed online configuration tools that make it possible to specify and order all the components as a single part from one supplier.

The engineers at a packaging OEM can enter parameters such as stroke, workpiece size and cycle time, which then generates an output that can be verified and includes a complete set of CAD drawings that can be integrated into the overall digital plan of the FF&S system. In this way, a complete bag-sealing tool or subsystem can be ordered as one part number with a single mouse click and shipped with preprogrammed motion sequences ready for implementation.

In addition, a system like this can come with preinstalled operating software and automatic parameterization of the servo drive, so no motion control programming knowledge is needed to bring it online. It features a drag-and-drop graphical user interface that lets operators build production sequences — e.g., for sealing together a set of juice bags — simply and intuitively.

The "smart" in smart mechatronics includes more than just simpli-

fying ordering, integration and startup. These systems can also incorporate force sensors that can track and report each motion sequence: was the proper force applied, for the proper length of time, to ensure a correct seal?

As this sequence is typically repeated hundreds or even thousands of times per hour, the system's controller can measure and record each motion cycle for quality control purposes. This kind of information can give warning about malfunctions or other issues, which can be used to drive preventive maintenance programs, as well as incorporated into overall equipment effectiveness (OEE) analysis.

This is the kind of critical, real-time data that's essential to Industry 4.0 production systems — and it is as easy to implement and utilize as the rest of the smart mechatronics kit operating software.

#### Smart mechatronics enables new handling solutions

Many packaging lines use automated mechatronic handling systems extensively, both Cartesian robots and multi-axis systems. Whether for transferring material from one part of a production line to another, or for end-of-line applications such as case packing and palletizing, Cartesian and multi-axis mechatronic systems provide high performance and reliability.

They are commonly built in similar fashion to other mechatronic systems: linear modules, servomotors, drives and controllers ordered separately, along with individual orders for items such as power and communications cabling and the HMI (often pieced together from different vendors at the best cost for each item).

Then the systems need to be integrated. One common challenge for handling systems is connecting the X, Y and Z axis linear modules, especially if their physical connections don't incorporate well-engineered physical interfaces. Another time-consuming engineering step is planning and implementing the cable runs in the system — including all the engineering drawings that document these steps.

This new generation of smart mechatronic handling systems will also provide true "plug-and-produce" platforms for Cartesian and multi-axis systems.

Smart mechatronic handling systems will utilize intuitive, well-engineered online configuration and ordering tools that streamline the process for specifying all the components needed for a given packaging application. This is particularly useful when multiple linear modules of different sizes and weight-bearing capacities need to be ordered and integrated.

Without smart mechatronics commissioning systems, it can be time-consuming to capture all of these key specification details when ordering linear modules and servomotors separately. Equally valuable, smart mechatronics for handling systems will come with preinstalled operating software and automatic parameterization of the servo drives. Drag-and-drop programming of motion sequences to configure a range of common pick-and-place functions can also be provided.

This will make it possible for packaging system OEMs to quickly design and integrate single-axis or multi-axis handling systems as part of a new installation. They will also be able to rapidly update existing packaging end-of-line systems when changes in production or product mix call for Cartesian functionality.

And as with other smart mechatronics solutions, these smart

mechatronic handling systems will support real-time data capture and integration with higher-level machine controls, as well as the ability to export data via interfaces such as OPC UA to provide valuable productivity and quality information.

#### Mechatronics enters the plug-and-produce era

Smart mechatronics offers a new, Industry 4.0-ready way to simplify the effort required to configure, order, integrate and begin using high-value mechatronics systems in packaging machine applications. Complete solutions, delivered in a single package or "kit" that's ready to plug-and-produce, has the potential to reduce the time and cost required to build packaging machines.

For packaging companies, as well as the OEMs supplying their production systems, there are advantages to working with a single mechatronics supplier with a complete portfolio of products and components, easy-to-use online configuration tools and a proven record of creating high-performance smart mechatronic solutions specifically for the demands of today's packaging industry.

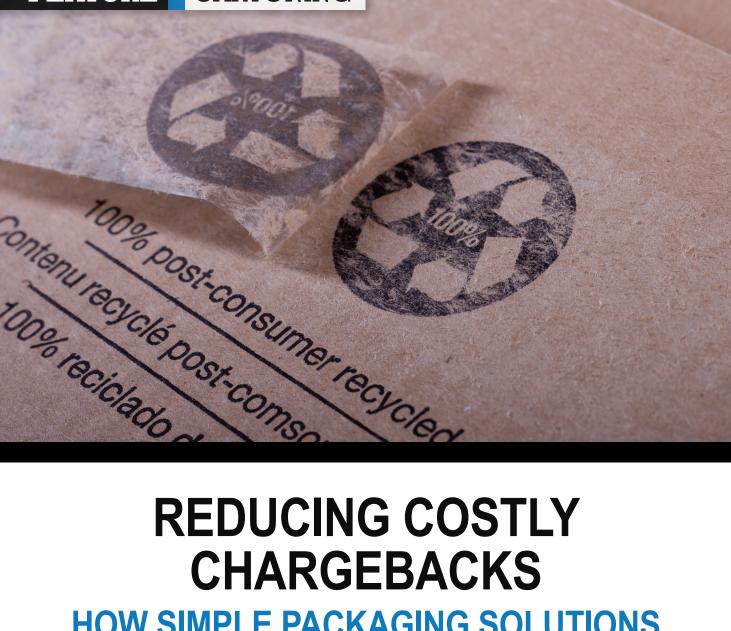
#### **About the Author**

Richard Vaughn is the automation engineering manager at Bosch Rexroth Corp. For more information visit www.boschrexroth-us.com.



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### **REDUCING COSTLY CHARGEBACKS**

### **HOW SIMPLE PACKAGING SOLUTIONS** SAVE TIME AND MONEY

#### By Bradley Dunlap, Product Manager for Packaging at Shurtape Technologies

n the shipping process, cartons go through rough conditions as they travel to their end destinations. They bump and shimmy along miles of conveyors before they even reach a shipping trailer. It's no surprise that mishaps occur frequently: tape comes loose, cartons pop open and goods inside become lost or damaged. Unfortunately, that means chargebacks to the manufacturer.

Preventing missed case seals, poor tape adhesion, flagging or failing tape and broken tape will ensure that cartons stay sealed and the contents arrive safely, reducing significant costs in rework, returns and reshipping. Here are three tips to help your business achieve better carton seals to save time and money.

#### **Tip #1: Use Greater Wipe-Down Pressure**

Both automated and manual tape applicators are capable of delivering superior wipe-down force, which is important as many packaging tapes are pressure-sensitive. When selecting an applicator, choose one that is designed with multiple, flexible wipe-down points. This is crucial because the applicator drives the tape's adhesive into the substrate of the carton for maximum bond, yielding full utilization of the tape's adhesive for more reliable carton seals.

Sealing cartons thoroughly and securely reduces the chance of product theft, contamination, and damage throughout the supply chain. Improved wipe-down pressure and adhesive utilization results



Sealing cartons thoroughly and securely reduces the chance of product theft, contamination, and damage throughout the supply chain.

in tamper-evident seals which provide an additional element of security through visible fiber tear.

#### **Tip #2: Improve Durability**

Folding a tape's edges along the length of the tape joins the adhesive together and doubles the thickness of the tape. This gives the tape a stronger, more uniform edge that improves the reliability of the seal.

Tape stretches as the carton is being sealed. Over time, it tries to go back to its original shape, much like an elastic band. As the tape pulls back to its pre-stretched state, the adhesive pulls away from the carton, causing tape flagging and lifting. A folded edge limits the chances that the tape will be stretched too far, meaning less stress on the adhesive and less risk of seal failure.

A more uniform edge is also necessary to improve a tape's reliability during processing and application. Frequently, during the manufacturing process, the edge of the tape sustains microscopic nicks. Folding the edge of the tape eliminates the occurrence of these microfractures or imperfections, which results in more uptime, fewer breakouts and less material waste.

#### **Tip #3: Increase Safety**

Tape removal also is easier and safer with a folded edge. It eliminates the need for a knife, box cutter or other sharp object when opening the carton by allowing the recipient to simply grip the edge of the tape and tear it away from the carton. Removing a sharp object from the opening process reduces the likelihood of personal injury or damage to the carton's contents. Plus, improving safety results in significant cost savings to healthcare and chargebacks on damaged goods.

#### Save money without compromise

Incorporating greater wipe-down force and technologies into the packaging process also enables users to right-size tape, while still receiving the same or better case seal performance. By taking time to select the right tape that suits specific packaging, manufacturers can rely on safer, more secure seals throughout the supply chain, creating additional cost savings.

By making a few simple adjustments, users create more robust packaging that endures all the rigors of the shipping process. When

manufacturers experience less downtime, less material waste and safer packaging, the results positively contribute to the bottom line – from a reduction in costs to greater client satisfaction.





### STILL HAND WRAPPING YOUR PALLETS? THREE REASONS FOR AUTOMATING YOUR STRETCH WRAPPING CAPABILITIES

#### By Pat Pownall, Director of Sales at Orion

tretch wrapping is an area of the packaging process that tends to get overlooked at times...and it's easy to see why.

Applying stretch wrap is literally the last step before those pallets are loaded onto tractor-trailers for delivery. For some, just getting stretch wrap around the product a few times is good enough. But is it?

When it comes to stretch wrapping, there is a much better method. Automating your stretch wrapping processes will not only save you money in the long run, but will help get your loads from Point A to Point B safely and securely. There's no reason to settle for good enough when better, more cost-effective options are available.

#### The downside of hand wrapping

For most manufacturers, packagers and distributors, keeping costs down is a major concern, and one of the more significant unplanned costs is returned products. Unfortunately, their stretch wrapping can be contributing to that problem.

For example, you've just loaded several poorly wrapped pallets onto a tractor-trailer for delivery. Miles down the road that semi swerves on the interstate to avoid an accident, and dumps the entire load inside the truck. The driver doesn't realize the damage until they raise the cargo door; that load cannot be delivered and now needs to head back to your facility. Your customer isn't going to pay for that – you are.

Another way poor stretch wrapping practices could be costing you money is through injuries. Many companies still hand wrap pallets, but this is a very inefficient method of wrapping. Repeatedly bending over or twisting to hand wrap pallets can lead to painful back strain injuries; that employee is now off the job and costing you money in lost production, medical bills and workers compensation claims. For employees hand wrapping, it's not a question of if they're going to get injured, it's when.

In addition to injuries, hand wrapping pallets leads to inconsistent wraps due to individual strength or fatigue. An employee at the start of their shift will likely wrap a pallet a bit tighter than at the end of their shift, especially if they've been doing it all day. That person has been bending over all day, going around pallets and getting dizzy – it stands to reason that their wraps simply won't be as safe and secure as they need to be.

#### **Automatic stretch wrapping**

Upgrading your stretch wrapping capabilities through automation gives you safer and more secure loads, while also reducing the risk of injuries. These two factors alone will save you money in the long run. But, so will film reduction, which is another benefit of automatic stretch wrapping equipment.

Film is designed to be stretched when wrapped around a load. By stretching the film and applying it to the load, it acts as a rubber band keeping the product tight and secure. When film is applied by hand, a person at the beginning of their shift may be applying 100% stretch to the film (that percentage drops as fatigue sets in). While that percentage may seem impressive, it doesn't compare well to automatic units that typically wrap with pre-stretching film at 250%. A pallet that's wrapped with film pre-stretched to 250% uses less film than a pallet hand-wrapped at 100%; the film savings is even greater as that pre-stretched percentage is even lower. Being able to achieve a consistent 250% pre-stretch film on each and every load, month after month, uses less film, saving more money in the long run.

Further demonstrating film savings is seen through reducing **ce** what's called the neck down effect. As film is stretched, it tends to narrow; this action is called neck down. For instance, when automatically applying a 20-inch-wide film, by the time the film comes in contact with product on the pallet, it's been narrowed on average to about 16 1/2 inches. You've paid for 20 inches, but you've lost 3.5 inches. This is now going to take extra film to properly wrap the pallet.

However, the design of some automatic stretch wrapper machines works to reduce the amount of neck down to about 18 1/2 inches on a 20-inch-wide roll of film. The benefit here is that it gives you more coverage and contact with the pallet, reducing the amount of film needed to wrap it.

#### **Getting started: End-of-line audit**

Deciding to automate your stretch wrapping capabilities is a great way to begin saving money. However, this is just one specific area. There may be more opportunities to upgrade other sections of your end-of-line packaging as well. A reputable OEM supplier can come in and perform an audit of your entire packaging line. An audit not only analyzes your current stretch wrapping processes, but also examines how product arrives to, and travels through your end-of-line system.

A key component of a packaging line audit is asking why. Being able to uncover reasons why something is done the way it is can



Machine applied stretch wrap applies 200 percent to 300 percent to the stretch length, consistently.

> be very telling in learning not only about their packaging line and the rationale of how things accomplished, but also a company's culture. Sometimes an audit can uncover an area of inefficiency upstream that's affecting productivity at the stretch wrapping cell. The goal is to review the entire end-of-line system and based on a company's sales and production goals, recommend the best course of action to meet those benchmarks.

> Automation is lending a helping hand to many areas of packaging, and stretch wrapping is certainly one of them. The decision to upgrade to an automatic stretch wrapper will provide you with safer and more secure loads, reduce potential injuries and give a quality

return on investment that's noticeable to the bottom line – three factors that are hard to overlook. ■

#### About the Author

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### MARKET TOPIC | PHARMACEUTICAL



### HOW VACCINE DISTRIBUTION IS CHANGING THE WAY WE THINK ABOUT FOOD PACKAGING

Gary Barter, Project Director, Food Division at VAI

he distribution of the COVID-19 vaccine has highlighted the importance of efficient packaging technology, especially where cold chain logistics are involved. The high demand for vaccines has brought unique challenges for packaging experts, from sand and glass shortages to the need for cold chain-appropriate packaging. These hurdles have put packaging technology to the test, but have also spurred the development of efficiencies and advances that will continue to impact the packaging industry for a long time to come.

### The role of packaging in reducing waste

Packaging experts have played a key role in the global accessibility of the COVID-19 vaccine. But they have also faced challenges at every stage of the process. For example,



The high demand for vaccines has brought unique challenges for packaging experts.

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### MARKET TOPIC | PHARMACEUTICAL



Many vaccine doses must be stored at varying blow-freezing temperatures, requiring different types of storage packaging for the vaccines.

many vaccine doses must be stored at varying below-freezing temperatures, requiring different types of storage packaging for the vaccines. Although thousands of vaccine doses have gone to waste, perfecting the packaging of vaccine doses has helped improve outcomes and ensure vaccine safety and efficacy throughout the process.

Packaging plays an equally important role in the food industry, where it is essential in preventing spoilage and reducing waste. Approximately 30-40 percent of the U.S. food supply goes to waste every year. The USDA Economic Research Service estimates that nearly 40 percent of this loss occurs in the supply chain — and unfortunately, packaging plays a role in some of this loss.

At every stage of the supply chain after a food product is processed or harvested, issues like damaged or improper packaging contribute to food waste. Applying packaging best practices developed during vaccine distribution can help ensure appropriate packaging that keeps products fresh and clarifies care instructions. This requires robust information technology, including an enterprise resource planning (ERP) system to properly trace and track the movement of products throughout the supply chain with barcode scanning, labeling, or radio-frequency identification (RFID) tags.

#### **Innovations in packaging**

A product's packaging directly impacts supply chain considerations: The right packaging and shipping containers can preserve food quality while offering convenience to consumers. Throughout the pandemic, packaging experts have modernized their practices for creating efficient packaging for vaccine distribution. Below are a few insights that carry over to food packaging.

#### Cold chain packaging improvements

During the vaccine distribution process, a major glass shortage forced packaging companies to create dynamic materials that could withstand freezing temperatures in the cold chain. SiO2 Materials Science was a pioneer in creating vials from a fusion of plastic and glass that offered the same protection as glass without the threat of breakage.

Packaging experts also constructed functional packaging that allowed air flow to vaccine doses to maintain certain temperatures, which is equally important in the distribution of food. Products stored on tertiary packaging like pallets help air reach products, reducing bacteria growth and keeping food fresh longer.

#### Importance of nanotechnology

Scientists who explored the use of antimicrobial nanomaterials to reduce the spread of COVID-19 are shining a spotlight on the use of nanotechnology in textiles, sanitizers, and coatings — and the food packaging industry should take note. While nanomaterials are already being used at multiple stages of the packaging supply chain, their use in the pandemic demonstrated the additional integration in the food supply chain.

Nanomaterials in antibacterial packaging, barrier films and coatings, temperature-controlled packaging, and food sensors act as a barrier to moisture and gases. They also offer UV protection. Enhancing packaging with nanomaterials helps extend product shelf life, improves packaging security, increases the strength and flexibility of the packaging, and in many instances speeds up biodegradability. Its use will help reduce food waste and ensure product safety and traceability going forward.

#### Advanced monitoring

Advances in tracking technology have enabled easier and more accessible traceability for both food and vaccine distribution, helping reduce contamination and spoilage by identifying risks before faulty products arrive at their end market.

Technology such as RFID transmitters can be embedded in packaging to track a product throughout the supply chain, from its manufacture or grow date to its arrival at a final location. Highly accurate sensors that provide real-time data are resulting in more reliable traceability and optimized operations, which is just as important in vaccine distribution as it is in the food industry. The integration of cold chain monitoring technology in packaging is improving, and it ensures products maintain certain temperatures and stay fresh. As 5G and IoT technology progresses, tracking in the cold chain will only become easier.

#### More functional labels

Labeling is just as important as the packaging itself because it serves as an interface between brands and consumers. Labels provide essential information like expiration dates, agricultural information and manufacturing locations. Tracking technology makes this information more accessible and reliable so consumers know exactly what they are getting.

Similar to the detailed instructions provided on vaccine packaging, many restaurants that offered carry-out during the pandemic have started providing detailed care instructions on their labels. Labels with information like how long food can sit out or how long it is safe to eat after being refrigerated help protect consumers, prevent spoilage and reduce waste.

Advancements in packaging, tracking technology, and cold chain efficiency are all playing a role in streamlining food and vaccine distribution processes. And just as importantly, improvements in traceability are allowing for more transparency on products while helping companies optimize their operations.

Electronic Article Surveillance **RFID-Labels** Airline-Tickets Inmould-Labels

Development and design of machines, modules and spare parts for the production of Labels

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if you are interested in Die Cutting, Punching, Cutting, Perforating, Creasing, Scoring, Embossing, Sealing, Ultrasonic Welding, Dispensing, Cut & Place, Collating, Folding, Gluing/Bonding or Laser Applications... Please contact us, we can assist you!

#### SCHOBER USA

4690 Industry Dr., Fairfield, OH 45014 Ph: 513-489-7393 Fx: 513-489-7485 solutions@schoberusa.com



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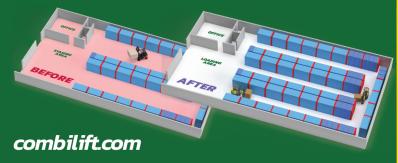
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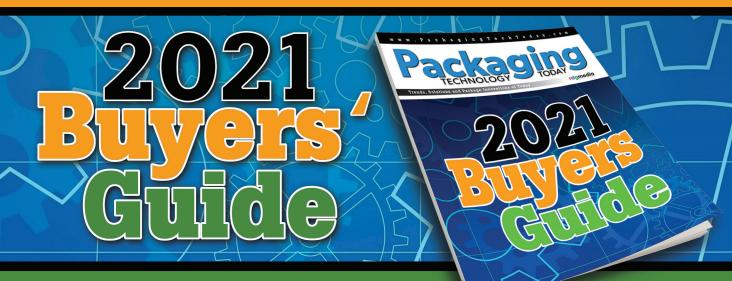
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ACE Controls Inc. 23435 Industrial Park DR Farmington Hills, MI 48335 800-521-3320 shocks@acecontrols.com www.acecontrols.com



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Emerson Industrial Automation 8000 West Florissant Avenue Saint Louis, Missouri 63136 314-553-2000 www.emerson.com/en-us/automation-solutions



Emerson (Branson Ultrasonics Corp) 120 Park Ridge Rd. Brookfield, CT 06804 203-796-0400 branson.info@emerson.com www.emerson.com/branson

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Cello Wrapping Brisar Industries

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Clear Boxes for Automated Assembly Printex Transparent Packaging

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#### Club Packs

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Continuous Band Sealers All Packaging Machinery

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Label Maker

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Lidding Films Charter Next Generation

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Printex Transparent Packaging Texwrap

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Rotary Cutters AZCO Corporation Rotary Indexing Tables Handheld Inkjet Printer Inkjet Coding & Marking

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Tools & Fasteners BECK America

Tote Fillers/Filling Crandall Filling Machinery



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Vertical Form, Fill, Seal Charter Next Generation Matrix Packaging Triangle Package Machinery

#### Vertical Sealers

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Vibratory Scales Logical Machines

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#### HexcelPack Develops Protective Paper-Based Wrapping System

HexcelPack has developed a cost-effective and sustainable wrapping system for an array of product shipping needs.

HexcelWrap<sup>™</sup> cushioning paper delivers product protection and packing simplicity for eCommerce, retail catalogue, pharmaceutical and nutraceutical products, as well as third-party logistics (3PL) and contract packaging applications.

Utilizing slit paper technology, HexcelPack converts extensible paper into a three-dimensional, internationally patented cushioning product by making precise cuts at specific angles. This method makes the paper "flex," expanding its volume while maximizing the strength and stiffness of its fibers. The result is a superior cushioning product proven to outperform environmentally-harmful product protection alternatives – including plastic-based bubble wraps and pillows.

HexcelPack protective cushioning is dispensed through the company's compact options, including a standalone and completely recyclable tabletop dispensing station.

For more information, visit www.hexcelpack.com.

#### Labatt USA Transitions to More Sustainable Packaging with Ring Carriers

Labatt Blue and Labatt Blue Light recently rolled out new recycled and photodegradable green plastic carrier rings – Hi-Cone Ring-Cycles<sup>TM</sup>. They replace the plastic rings found on its six packs, which are imported from Canada. Labatt Blue and Blue Light 16-ounce six-packs now contain the eco-friendly carriers.

The Hi-Cone RingCycles are made with more than 50 percent post-consumer recycled content and continue to be photode-





gradable. The rings are green and stamped with information on how to recycle to help communicate the new sustainable packaging.

"By switching to recycled content, we're taking one small step toward improving our environmental footprint," said Janine Schoos, brand director, Labatt. "This carrier ring will begin to break down when exposed to UV light. We value nature and understand our role in helping to reduce plastic waste and promote the health of our waterways and environment."

For more information, visit www.labattusa.com.

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