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JANUARY 2024

### SPECIAL SECTION:

# LEADERS IN CONVERTING

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TO DIGITAL

AND MORE!

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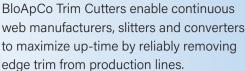
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Catbridge Machinery, a leader in the converting industry, specializes in high-performance machinery catering to a variety of industries, from flexible packaging to nonwovens, paper to label stock and tape. Our expertise extends beyond slitter rewinders to developing comprehensive web converting systems for intricate processes like coating and laminating.

# **Diverse Machinery for Every Converting Need**

At Catbridge Machinery, our extensive range of converting machines is designed to cater to the varied and evolving needs of the industry. We understand that each converting process is unique, and our diverse machinery lineup reflects this understanding.

# • Comprehensive Range:

From duplex center winders and center surface winders to surface winders and advanced turret systems, our portfolio encompasses machines for every scale and type of converting operation.

# Versatility and Adaptability:

Each model in our lineup is engineered to handle a wide array of materials and applications. This versatility ensures that whether our clients are working with delicate films, heavy-duty paper, or specialized materials like nonwovens or building materials, we have a machine that can meet their needs.

# Innovation in Design:

Our machines are not only diverse but also feature the latest innovations in converting technology. We incorporate advanced features like precise tension control, efficient slitting mechanisms, and ergonomic designs to enhance productivity and ease of use.

# Tailored Solutions:

Recognizing that off-the-shelf solutions may not fit every requirement; our line of machines offers various configurations. This flexibility allows us to tailor our machines to the specific requirements of our clients, ensuring optimal performance and efficiency in their unique converting processes.

# Unified Design and Manufacturing Excellence

Catbridge has invested significantly in machine tools, processes, and expertise, ensuring the



highest quality and production efficiency in their state-of-the-art facility. This integrated environment, combining engineering, fabrication, assembly, programming, and testing, allows for complete quality control.

# Showcasing the 900MC: A Paradigm of Versatility

Realizing the need for efficient yet straightforward solutions in the converting industry, Catbridge Machinery introduced the 900MC. This machine ingeniously combines the large-diameter capabilities of our traditional duplex rewinders with the operational efficiency of a turret system. Its design significantly reduces downtime between sets and increases productivity without the complexity usually associated with advanced machinery.

The 900MC stands as a symbol of Catbridge Machinery's dedication to innovation, efficiency, and user-centric design, embodying our deep understanding of the industry's evolving needs.

# Comprehensive Machinery Range

From duplex center winders to advanced turret systems, our machinery portfolio is designed to meet diverse converting demands. Each slitter rewinder from Catbridge is a testament to our commitment to increasing efficiency, enhancing roll quality, minimizing waste, and integrating cutting-edge technology throughout the converting process.

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Catbridge Machinery stands as more than a manufacturer; we are a strategic partner committed to innovation and excellence. Our machines are at the forefront of industry advancement, offering not just equipment, but a partnership for continual success and growth in the converting industry.

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# Golden Opportunities ...



**Angel Morris** Editor

Did you know, January 1848 is noted as the start of the gold rush, when the precious metal was discovered in California? The next year, an estimated 300,000 gold hunters — who would come to be known as '49ers — began searching for their fortunes. Fittingly, January is still the start of "golden" opportunities, when we resolve to remake or improve ourselves and our habits.

January hasn't always been the official beginning of the calendar year, however. Romans made the change in part to honor the month's namesake, Janus — the god of beginnings — whose two faces

allowed him to look back into the past and forward into the future. Whether intentional or not, many of us still pay tribute to Janus by considering what we want to change or do better as we move on from the past.

In this month's Leaders in Converting issue, converting and packaging printing suppliers share their expertise and explain how they go above and beyond for customers. It is an opportunity to highlight the best of the best in a month when we are all looking at ways to become better.

Whether you make resolutions or simply appreciate the opportunity for a fresh start, January is a chance to analyze what is of real importance ... what you will keep the same and what you will change. At *PFFC*, we look forward to sharing advancements and trends coming this year. And if you would like to join us by submitting a thought leadership piece on those topics, we'd love to hear from you!

# **Angel Morris**

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Randy Green, President & Group Publisher

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# Productivity Gains Hiding in Plain Sight

By **Jon Sweitzer**, Product Manager, Print & Packaging, Avery Dennison Performance Tapes



The retail landscape is changing dramatically. As e-commerce thrives, consumers are becoming increasingly more content to shop online from the comfort of their own home. Retailers like Amazon, meanwhile, are finding ways to make the shopping experience faster and easier.

All this is quite a benefit for the global courier and parcel segment. But with that growth comes some new pressure for the converters who serve it. The growth in demand is coming with an increase in competition and a wave of consolidation.

From a plant manager's perspective, it's the double whammy: The pressure to do more with less, controlling costs while increasing production. And in such an environment, additional capital investment is not likely.

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The plant manager needs to work with what's already on the shop floor.

The good news is hidden productivity gains may be lurking in plain sight. These gains are perhaps rolled up (literally) in a product relied on every day, but which may not get a lot of consideration. I'm talking specifically about pressure-sensitive adhesive tapes (PSAs) that provide strong performance for flexible industrial packaging.

I've seen it time and time again in the field. These adhesive products are thought of as a commodity, and have become almost an afterthought in many plants. Converters are ordering the same SKUs over and over again, from distributors who simply haven't refreshed their product offering in years.

# One Manufacturer's Solution

However, just as so many other things are changing, so are these adhesive products. A range of PSA tapes are produced for numerous applications, featuring an aggressive, rubber-based adhesive engineered to bond to a wide variety of packaging materials, including those with a high percentage of recycled content.

These PSAs offer a range of hot melt rubber adhesives suitable for low surface energy foams and films as well as a range of coat weights for very irregular film surfaces such as bubble wrapping. These innovations allow for higher productivity as the strong initial tack allows the assembled packaging to be handled and used immediately.



Switching adhesive products can have a positive impact on your bottom line.

How much more productivity? Again, this depends on the business. But as a quick example, by switching to a more innovative solution, one customer was able to increase its output by 200 fpm. This translated to an additional 96,000 lineal feet per shift and an additional 12,000 boxes per shift.

# Three Steps That Will be Worth Your Time

Would you welcome that sort of productivity gain, simply from switching to a new adhesive product? I think most would. So, as you consider your options, consider these three tips:

- 1. Simply reconsider the importance of the double-sided/double-stick adhesive products you're using to laminate boxes and other corrugated items. It's easy to think of these as "just a commodity," but recent advances in the technology may mean you have some opportunities for additional productivity that can make a very noticeable difference to your bottom line.
- Consider buying these products directly from a manu-

- facturer rather than through a distributor. While distributors can often provide some convenience when it comes to ordering, they simply can't provide the level of technical and application expertise you'd get when working directly with a manufacturer and its product portfolio.
- 3. When you get hold of that technical expert, carve out some time to get him or her into your plant. This is time well spent. For instance, many times our technical application experts help customers pinpoint a product with an adhesive coat weight and finish (full, finger lift or

extended), that's ideal for their application — that helps them maximize productivity gains. Aside from that, individuals like the aforementioned application experts might be able to literally adjust your machine settings to optimize speed and minimize issues, and give you guidance around preventative maintenance to help you run efficiently and increase uptime.

Switching out your existing adhesive products to more innovative solutions like PSAs — or other commodities — may not be the silver bullet that solves all your challenges. But by taking a fresh look at what's available, and by leaning on the technical support offered by suppliers, you may be able to make a noticeable impact on your bottom line. Maybe you can find some of those hidden productivity gains.

# **ABOUT THE AUTHOR**

Jon Sweitzer is the product manager for the Print & Packaging segment for Avery Dennison Performance Tapes.



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In the dynamic world of packaging, corona treatment plays an important role in ensuring the optimal adhesion of inks, coatings and adhesives. However, navigating the nuances of corona treatment poses several challenges for manufacturers and converters alike. Let's dive in.

# Challenge 1: Non-US Manufacturer Parts Availability

Drawing from extensive experience in providing ceramic

electrodes for various corona treaters, we've encountered numerous challenges faced by customers who opted for foreign manufacturers. Issues such as late-night phone calls to secure parts, extreme lead times on vital parts, foreign transaction fees and payment complexities have been recurring themes.

When investing in a corona treater alongside a press, it's common to prioritize convenience. It's crucial to recognize that press manufacturers and corona treater manufacturers differ significantly. Press manufacturers benefit from extensive resources and partnerships, enabling them to provide solutions to US customers efficiently. Unfortunately, non-US corona treater manufacturers often fall short on US after-sale support due to lack of resources and local expertise.

In this case, we recommend considering a dual investment strategy: Purchase the press and select a corona treater from a reputable US manufacturer. US corona treater manufacturers bring decades of experience to the table,



Maintaining a straight and true corona field air gap is critical to achieving uniform corona discharge.

making the entire process a seamless, straightforward experience.

# Challenge 2: Mitigating Ozone in Compact Corona Treaters

Ozone, a natural byproduct of corona treaters, can accelerate equipment corrosion over time. Despite its impact, manufacturers often neglect the importance of effective ozone management and proper evacuation strategies. This oversight becomes more pronounced as corona treaters become increasingly compact.

As treaters become more compact, the confined space exacerbates the concentration of ozone, intensifying its corrosive effects on internal components. This phenomenon underscores the importance of thoughtful engineering to balance compact designs with effective ozone management for sustained reliability.

Because of the compact trend, the types of materials that are used

to manufacture corona treaters become more critical in order to reduce the corrosion effects of ozone and ensure long-term performance.

# Challenge 3: Inconsistencies in Air Gap

The air gap is the ionized field of air present in corona treaters between the electrode and ground roll. Maintaining a straight and true air gap is critical to achieving effective, uniform corona discharge. The type of adjustment process and frequency of required adjustments often poses a challenge. Existing systems sometimes complicate the adjustment process and require more adjustments to maintain that air gap. This leads to inaccuracies that impact the corona process's effectiveness.

Addressing this challenge, there are systems designed to simplify the air gap adjustment process ... not only simplifying the manual adjustment process but also introducing automatic gap adjustment to ensure foolproof precision.

# Challenge 4: Additives

Slip agents are additives incorporated into polymer formulations to reduce the coefficient of friction on the material's surface. While slip agents offer benefits in material handling, their presence can pose challenges during corona treatment due to their influence on surface energy. The corona treatment process relies on increasing the surface energy of materials to promote adhesion. However, slip agents create a barrier on the surface, inhibiting the effectiveness of corona treatment. Thus, the formulation of the polymer must be taken into consideration when sizing the corona treatment system for effective treatment.

# Challenge 5: Additive Blooming

Additive blooming refers to the migration of additives, often incorporated into polymer formulations, to the surface of a material. These additives can migrate over time, forming a thin layer on the material's surface. The migrated additives create a low-energy layer on the material's surface, counteracting the intended effect of corona treatment. As a result, the migration can lead to compromised corona treatment.

When faced with the occurrence of additive blooming, conduct a thorough investigation into the migration rate of the additive. This comprehensive analysis allows for a correlation between treatment processes and the ob-

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served findings. In such instances, the application of a process known as bump treating becomes viable to mitigate the degradation rate of surface energy caused by migrating additives. This involves a post-manufacture treatment of the film, elevating the surface energy back up to a desirable level.

# Challenge 6: High Maintenance Corona Treaters

Many corona treaters necessitate rigorous cleaning schedules to sustain functionality. Manufacturers often attribute breakdowns to perceived lapses in cleaning protocols by customers. However, in a fast-paced industry, expecting flawless adherence to cleaning

regimens around the clock can be impractical.

Understanding the unique demands of converters in the packaging industry, means comprehension of the urgency and scale of their operations. The last thing you should encounter is a rescheduled job due to treater downtime. Design principles should align with operational realities to provide a solution that complements the pace of your industry.

# Challenge 7: Uninformed Purchases

The role of knowledgeable sales representatives cannot be emphasized enough. A significant challenge faced by manufacturers lies in the occurrence of uninformed purchases, often driven by sales representatives lacking essential knowledge about corona treaters. This predicament leaves end-users dealing with equipment that fails to meet their specific needs, leading to wastage of resources and substantial financial losses.

The devil is in the details, especially when it comes to corona treatment. An overlooked detail, such as multiple widths to be treated in an extrusion process, can lead to the selection of the wrong corona treater. This not only affects the treatment efficiency but can also speed up the degradation of the treater's components, leading to maintenance headaches and reduced equipment lifespan. Paying attention to these fine details allows manufacturers to provide



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solutions that stand the test of time. A well-informed purchase is the first step towards long-term success.

# Challenge 8: Customization Limitations

The packaging industry demands precision, flexibility and adaptability. Unlike the one-size-fits-all approach often associated with standardization, a corona treater demands a tailored, application-specific design to truly optimize its performance. The ability to tailor corona treaters ensures that each component of the production line is optimized for its unique role, ultimately contributing to enhanced performance, reduced downtime and increased

overall efficiency.

Advanced customization requires a foundation of expertise. Unique strength lies in the depth of customization solutions and expert guidance that set apart manufacturers. Your corona treater is not just a tool, but an engineered solution tailored to your specific needs.

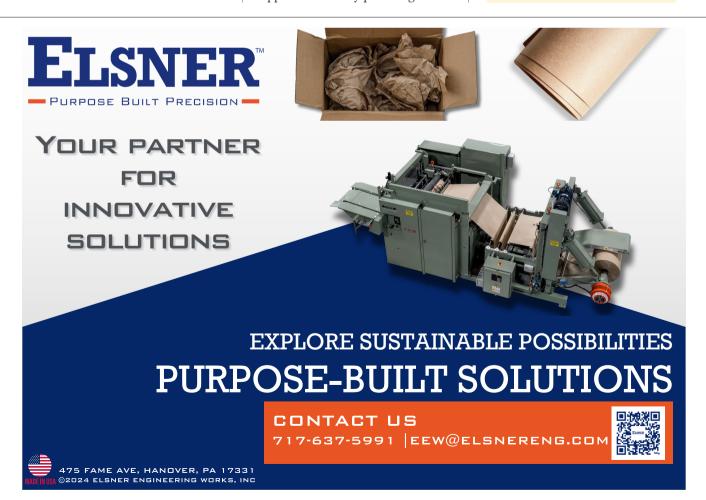
# Facing the Challenges

In the multifaceted realm of corona treatment, navigating challenges becomes integral for sustainable operational success. These challenges, from international sourcing complexities to material-specific intricacies, underscore the need for a comprehensive and informed approach. Actively providing

solutions — emphasizing reliability, adaptability and meticulous customization — are key pillars for overcoming obstacles in the dynamic landscape of corona treatment within the packaging industry.

### **ABOUT THE AUTHOR**

Born into the world of corona treatment as the daughter of QC Electronic's CEO, Ken Klein, Alyxandria Klein brings a unique perspective shaped by a lifetime around the industry. "In this industry it is easy to learn something new every day – I have a passion for helping people and I look forward to sharing my insights along the way," Aly commented. She can be reached at sales@qcelectronics.com.



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Some presses have a front-facing flexo press user interface that guides the press operator properly during all steps when changing from one job to the next. Photos courtesy of SOMA

# Automating Flexo Closer to Digital

By Garrett Taylor, Sales Director, Flexo Equipment OEM

With market segmentation, brand proliferation, extended product testing and the brands' desire to limit inventory, we all have seen more, but smaller quantity packaging runs. If anything defines the requirements of printing, it is the need for programmed systems that can deliver quickness and flexibility.

You would think that plays solely into the hands of digi-

tal printing, but technological advances in flexography — particularly via automation — has made flexo a viable alternative.

One of the best ways to stay competitive and save material costs is to make scheduling flexible and reduce makeready time. Flexo presses are fast, but the limiting task had been assuring quick job changes. The faster a printer can change plates and perhaps inks, and get a job running, the more work a printer can complete, and with less waste and more profitably.

Modern flexo presses offer an exceptional level of automation, delivering faster makereadies along with more precise printing, leading to a higher quality finished product.

# It Starts with Communications

It's evident that Industry 4.0 is being applied within flexo print facilities. Data is now tied to the press. By connecting software and equipment to the Cloud, we can develop and utilize intelligent functions that boost efficiency and minimize operator errors. By making presses smarter, print quality is better and press operation easier and much more efficient.

A lot of data can be shared between software and hardware systems, moving job info from prepress systems to mounters and, ultimately, to the press. Every job has uniquely specific data. Key parameters, such as information affecting changeovers, press status and press energy consumption are just some of the information being shared.

The easy transfer of specific job info such as including design specifications; substrate, sleeve, anilox and ink data; and unwinding/rewinding, drying and tension parameters, among others, offers further intelligent functions. The press knows exactly the parameter settings for each job to be printed, making processes more efficient.

# Plate Mounters Have a Role

Although not a piece of the press, the plate mounter plays an important role in print quality and the speed of changeovers. When plate mounting is automatic, it accelerates the ability to prepare plates for the press. Automated mounters also assure exceptional registration. With excellent precision, automatic



The easy transfer of specific job info offers further intelligent functions.

mounters reduce the time needed to mount plates and assure repeatable accuracy.

What really makes mounters special is if they also share automated register and impression setting systems. While mounting a flexo plate, registration data and topography/impression settings — "peaks and valleys" on the plate sleeve — are stored in RFID chips, in the plate sleeve or even in the Cloud.

When the sleeve is inserted into a flexo press, this data is read and prepared for fully automatic setting of register and impression automatically, assuring very quick and accurate settings. This reduces makeready time and results in faster completion of jobs along with almost zero set-up waste — imperative for

short runs. There is also virtually no press downtime caused by improper mounting of printing plates.

# An Automatic Tune-up

Controlling bounce on a flexo press is critical because it maintains job consistency, particularly when using high-definition plates at very fast press speeds. It can also assure that the press can hold stable highlight dots with exceptional registration.

During job setup on specific presses, you can automatically tune the drives in the press with specially designed algorithms that minimize bouncing and ensure accurate registration for each particular design. This takes just seconds! It considers the dynamic effects of each bridge,

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the sleeve, the tape and the plate itself.

# Taking the Guesswork Out of Changeovers

With fewer skilled press operators, flexo often needs to meet the challenges of efficient and fast changeovers while under the operation of a novice workforce. Any job changeover requires a number of steps which need to be taken in proper order. With an automated, self-directed system, even inexperienced operators may run the press and perform changeovers efficiently.

Some presses have a front-facing flexo press user interface that guides the press operator properly during all steps — in the

correct order — when changing from one job to the next. The built-in intelligence suggests the optimal steps to be taken during the job changeover. It can reduce the number of tasks, define their ideal order and also automate as many steps as possible, saving the printer time and minimizing operator error.

It automatically analyzes differences between the job just printed and the job that follows. If the system can do certain things by itself — for example, opening a unit so a sleeve can be changed — it does so automatically, and reports that the task has been completed.

It can be used by anyone the primary press operator or any assistant — letting experienced operators overrule any suggestion at any time. The process will continue, making adjustments based on the operator's input. This automation has achieved simplicity considered only possible for digital presses.

Post-production feedback is also important. A good, modern flexo press monitors efficiency and energy consumption. It also sorts data down to each individual job, so the waste between shifts and/or jobs can be compared — and feeds data to provide a standardized printed report about each printed job. This data can be used to improve efficiency for the next runs.

# Save Ink and Time

High pigment inks, such as ex-



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pensive spot colors, special effects and metallics, are expensive. Some flexo presses have ink cartridge systems that can reduce expensive ink costs. An automatic washup system removes residual ink from the complete inking system including doctor blade chambers, anilox sleeves, connecting hoses, pumping hoses and filter cage. It can take as little as three minutes, but allows printers to maintain profit margins, staying competitive.

Some say that the future of flexo printing is based on fixed-gamut flexo color printing — typically either CMYK or 7-color printing without the use of brand inks. By using the same inks for every job, there are no wash ups and, therefore, savings on time

and inks — while also being more sustainable.

Using this method, different jobs can often be gang printed at the same time. This approach is pretty much "a given" with digital printing, which usually sticks to the same inks or toners. As flexo moves further in this direction, either CMYK or expanded gamut, it helps the process become more efficient and simplifies change-overs.

# We Can be More Intelligent

Automated Industry 4.0 processes in presses — and mounters — make a flexo press more competitive vs. digital. Once the change-overs are minimized, the rest pays for itself.

### ABOUT THE AUTHOR

Garrett Taylor has more than 25 vears of experience in the printing and packaging industry; and specifically with flexographic printing. He plays a significant role developing operations in North America for a flexo press manufacturer. Part of this responsibility has been a significant role in the creation and management of the uniquely innovative Flexo Xperience Center (FXC). which brings industry partners together to move flexo forward through collaboration, research, experimentation, and training. Garrett can be reached at taylor@ soma-eng.com.



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# Precision and Possibilities:

# The Evolution of Digital Die Cutting

By Chase Pender, Head of Business Development, Supply55, Inc.

In modern design and manufacturing, precision is critical. Whether it is creating and producing custom labels or packaging, the demand for precision in cutting and shaping materials has never been higher. This demand has led to the rise of digital die cutting, a technology that has transformed the landscape of design and production.

Digital die cutting, often referred to as computerized or CNC (Computer Numerical Control) die cutting, represents a significant advancement from traditional die cutting methods. While traditional die cutting relies on physical steel dies and presses to cut materials, digital die cutting utilizes computer-controlled machines to achieve unparalleled accuracy and flexibility.

One of the advantages of digital die cutting is its ability to advance creativity. Designers and manufacturers can bring their most intricate and imaginative ideas to life with ease. From paper and cardboard to vinyl, fabric, leather, DTF (direct-to-film) and even thin metals, the technology is adaptable to a wide range of materials, covering a multitude of industries, from printing, manufacturing, packaging and apparel



Digital die cutting utilizes computer-controlled machines to achieve unparalleled accuracy and flexibility. Photos courtesy of Supply55, Inc.

graphic production.

At the core of digital die cutting is precision. Computer-controlled machines execute cuts with high accuracy, ensuring that each piece is consistent and flawless. This level of precision is especially crucial for industries where uniformity is of concern, such as in the production of labels, packaging or custom-designed cards.

Digital die cutting is about precision and efficiency. Unlike traditional die cutting, which requires the creation of custom physical dies for each design, digital die cutting eliminates the need for dies altogether. This translates to time and cost savings. Change the design on the computer, and the machine can immediately adapt to the new specifications.

In today's market, personalization is a key driver of customer engagement. Digital die cutting provides customization on a mass scale. Whether it is tailoring product packaging for different clients or processing unique label designs, this technology makes personal-



The Supply55, Inc ExpressCutPRO.

ization both feasible and cost-effective.

Digital die cutting also has environmental benefits. It generates less waste compared to traditional die cutting methods as there are no physical dies to be disposed of after use. This reduction in waste aligns with the growing sustainability trends in manufacturing and design.

As technology continues to advance, the future of digital die cutting holds even greater promise. Innovations in materials, increased automation and enhanced software capabilities will further expand the possibilities of this technology.

In conclusion, digital die cutting represents a significant step forward in precision cutting and shaping, delivering versatility, efficiency and adaptability to a wide range of materials and industries.

### **ABOUT THE AUTHOR**

Chase Pender is responsible for Business Development at Supply55, Inc., www.supply55.com, based in Ann Arbor, Michigan. Supply55 was founded with the vision to develop cutting-edge-workflow products for the sign, screen, graphic arts and converting markets. Supply55 is the exclusive distributor in North America for ExpressCutPRO a digital die cutting system.

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# **Label Industry Continues To Thrive**

By Susan Stansbury, Industry Consultant

On rolls or sheets, in bulk or in specialty niches and across myriad materials, label production is healthy and thriving. After all, labels bring information, identity and eye-catching add-ons to nearly every brand and product. Labels sit atop boxes, bottles, bags and packages across markets.

Crucial medical information enables pharmacists. Identity on boxes propels warehouse efficiency. Branding graphics on labels sell merchandise, with an estimated 70 percent of consumers saying that packaging and labels influence their buying decisions.

Label converters work with dozens of substrates depending on the market segment and customer requirements. One of these is Contract Converting of Greenville, Wisconsin which uses films including lightweights for "overlaminating" which is completed by customers for specialty labels; and coated papers used in pressure-sensitive "peel-off" tapes and labels. Contract Converting also has a Roll Express

# **Leading Industry Players**

- Avery Dennison
- CCL Industries
- Multi-Color
- UPM-Kymmene

Source: Freedonia Group

program to offer a large inventory of high-quality, custom slit, non-pressure-sensitive tag and label stock, and flexible packaging substrates available for shipment within 24 hours.

According to Contract Converting President Robert Saari, "Our new expansion is an important part of our growth initiative moving forward." At the company's Plant 2, an additional 20,000 square feet of space provides both warehousing and production. "I just accepted the keys, and we

are up and running in the fourth quarter," Saari said. "We needed to move beyond factory congestion and prepare for a new machine/ warehouse platform."

Wisconsin provides a surprising level of label industry support. The large numbers of mid-size label industry players add up. "We call this the 'Converting Corridor™," Saari said, "because of the considerable impact of label and related services, from slitting-winding, adhesives and pressure-sensitive support, papermaking and substrates available locally and regionally."

One of these regional suppliers is Jemmco, LLC of Mequon, Wisconsin. Providing high release roller sleeves and coverings, web cleaning, and static and corona treating supplies, Jemmco makes life easier for label industry producers.

"Jemmco's full line of roller sleeves eliminate the need for spare rolls and costly two-way roller shipping," Melissa Lang, vice president, said. "Our FDA compliant web cleaning sleeves



Contract Converting's new facility expansion. Photo courtesy of Consolidated Construction.

slide over an existing idler roller to add highly effective contact web cleaning with seamless, non-scratch benefits to eliminate the expense of capital equipment and associated costs."

The company's high release sleeves, anti-static offerings, dyne test products and traction sleeves add quality results, enhancing grip and release.

From Avery Dennison, to Raflatec, Mactac, Green Bay Packaging Coated Products and Belmark, collective strengths of the label industry are seen in diverse product configurations. And these are just to name a few. They use numerous types of papers, in gloss, matte, water-resistant substrates, with light to heavy weights. Clear films, metallics and the full PFFC is in play, along with stretch labels, foam labels and heat transfer labels. Track-and-trace labels are seen as a strong growth category.

Freedonia Group said that heat-shrink and stretch sleeve, and non-shrink wraparounds, will continue to expand their share of the market at the expense of more traditional label types.

Analytic reports by companies like Freedonia Group estimate the U.S. Market Size at about \$42 billion in 2023, with a CAGR of 4.9 percent from 2023 to 2033. Global market CAGR is projected higher for the "smart label" marketplace. (A smart label is an item identification slip that contains more advanced technologies than conventional bar code data.)

Top markets, in order of highest to lesser segments are:

- Food,
- Secondary Packaging,
- Industrial,
- Mailing and Shipping.

Those involved in the label industry have exciting opportunities if they are able to track the complexities and apply expertise in this growing field. ■

## **ABOUT THE AUTHOR**

Susan Stansbury is also author of a new e-book, 14 Dinners and A Lunch (It's not about the food! It's Susan's stories about decades in the industry told around a series of meals.)





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# Safety Compliance in the Printing and Packaging Industry

By Rick Farrell, President, PlantTours

By 2030, the packaging and printing market is expected to reach a valuation of \$2.06 billion.<sup>1</sup> Converters play a vital role in this market by transforming base materials like films and papers into customized, flexible packaging solutions. With so much growth happening in the industry, there's also a growing demand for awareness of the best safety practices.

If you currently work as a leader in this sector, it's critical that you understand the importance of safety compliance and key protocols that every printing and packaging facility should follow.

# Understanding OSHA Regulations

The Occupational Safety and Health Administration (OSHA)<sup>2</sup> has implemented several safety regulations for employees in the printing and packaging industry to abide by. The following are some of the most significant ones to be aware of:

# **Recordkeeping Guidelines**

Employers covered by OSHA must maintain up-to-date records of job-related injuries and illnesses. This includes converters and

other employers in the flexible packaging supply chain. Records should include the following

- OSHA Form 300, an injury/ illness log
- OSHA Form 301, an injury/ illness incident report
- OSHA Form 300A, a summary of the incidents on Form 300

# **Reporting Guidelines**

Employers must report to the nearest OSHA office within eight hours of an accident that results in a fatality or within 24 hours of an 35+ SPEAKERS

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Risk assessments help identify potential hazards as part of a company's safety plan. Photo: WavebreakMediaMicro - stock.adobe.com

incident resulting in hospitalization, amputation or eye loss.

# Lockout/Tag-Out Regulations

This regulation protects employees from unexpected machine startups and hazardous releases. Converters rely on a diversity of equipment — from printing presses and slitters to pouch fillers and sealers. It is critical converters implement a rigorous lockout/tagout program covering all production machines and lines.

That includes thorough procedures detailing isolation and lockout steps for energy sources on each piece of equipment. Converters must also train all employees on proper lockout techniques when performing maintenance or clearing jams. Regular audits should ensure converter lockout/tagout programs remain fully compliant and effective at protecting workers from hazardous energy.

# Hazard Communication Guidelines

Some converters use a broad array of chemicals from printing inks to solvents and adhesives. These

guidelines require information to be communicated to employees about the chemical hazards they are exposed to and protective measures that have been implemented to protect their health and safety. Examples of protective measures include a formal written program, safety data sheets for all relevant chemicals, employee training and precise container labels.

# Machine Guarding Standards

Several standards are designed to protect employees from exposure to hazardous machine components. Converters must track possible injuries associated with all equipment, from printing presses to pouch fillers. Machinery like sheeters and flexographic printers also require fitting guards.

Machine guarding standards require physical guards to be provided to protect employees from exposure to and contact with moving parts.

# Personal Protective Equipment Regulations

OSHA requires all employers to conduct a formal hazard assessment to determine whether and what personal protective equipment (PPE) is required, underlining the essential role of PPE in ensuring workplace safety<sup>3</sup>. Employers must also provide personal protective equipment and train employees on proper use.

Examples of PPE that converter employees in the printing and packaging industry might use include protective gloves to avoid skin irritation from harsh chemicals, as well as masks to avoid the inhalation of fumes from these chemicals.

# Key Safety Protocols for Printing and Packaging Operations

Detailed safety protocols are crucial for all employees in the printing and packaging industry. The following are some examples of protocols you can implement to safeguard employees and ensure OSHA compliance:

# **Regular First-Aid Training**

Employers should provide first-aid training to all employees in the event of an accident, which will ensure that employees can take swift action — which could potentially be lifesaving.

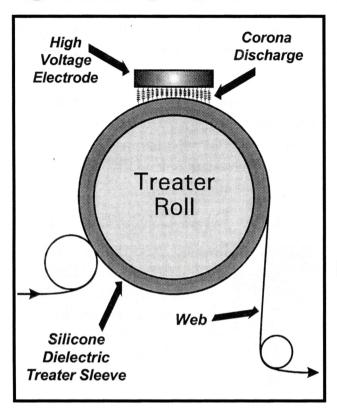
# **Regular Schedule Reviews**

Employers should review work schedules and shift patterns regularly to protect workers from fatigue. Being tired on the job increases the risk of mistakes or mishandling of equipment, both of which can cause accidents and injuries.

### **PPE** Issuance

Employers must issue high-quality,

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Product	Fits Roll OD*		Actual		Wall	Price per
Code	English	Metric	ID	Color	Thickness	Linear Inch
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96202	2.0"	51 mm	46 mm	Orange	.080" (2.0 mm)	\$1.35
96252	2.5"	64 mm	59 mm	Orange	.118" (3.0 mm)	\$1.85
96302	3.0"	76 mm	70 mm	Orange	.080" (2.0 mm)	\$1.85
96402	4.0"	102 mm	95 mm	Orange	.080" (2.0 mm)	\$2.25
96602	6.0"	152 mm	141 mm	Orange	.095" (2.4 mm)	\$3.15
96802	8.0"	203 mm	190 mm	Orange	.102" (2.6 mm)	\$4.55

<sup>\*</sup>These sleeves will fit any treater roll OD within +/- 0.125" (3 mm) of listed size.

Wall thickness variance: +/-.006" Hardness (Shore A): 70-80 Dielectric Constant: 4-5 Dielectric Strength: 250 v/mil

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relevant PPE to all team members and ensure every employee knows how and when to use it. For converter press operators, protective apparel needed for safe handling may include gloves, aprons and respiratory gear.

# **Regular Training Sessions**

Training is an ongoing process, and all employees should be required to participate in regular training sessions. These sessions will provide refreshers to seasoned employees and will also familiarize new hires or temporary staff with the company's safety policies.

# Risk Assessment and Management in Print and Packaging Workplaces

An important part of developing and implementing a safety plan for your organization is conducting a thorough risk assessment. An assessment enables you to identify specific hazards and create a protocol for shielding employees from them.

An effective risk assessment should include the following steps:

- Risk Identification: The first step is figuring out what the specific risks and hazards in the facility are.
- **Risk Analysis:** The second step involves a detailed consideration of hazards, potential accidents, the consequences of those accidents, the likelihood that they will occur, etc.
- Risk Evaluation: The third step involves careful examination of the risk analysis to determine where additional controls might be needed, as well as what those controls might be.

For instance, when examining risks, converters need to study

factors like the likelihood of slitter jams and possible operator finger amputations.

# The Importance of Hazard Communication in Print Production and Warehouses

Effective warehouse communication<sup>4</sup> also plays a vital part in keeping printing and packaging facilities — as well as the employees who work in them — safe. Proper communication, especially regarding workplace hazards, ensures that everyone is on the same page regarding risks and how to avoid them.

Here are some examples of how employers can improve hazard communication protocols:

Identify and Appoint Responsible Staff — Effective communication starts with knowing who is responsible for developing safety protocols and communicating them with the rest of the team. Employers should appoint specific staff members to spearhead safety programs and ensure everyone knows who has been selected.

Prepare and Implement a Written Program — The staff member or members in charge of the safety program should carefully document all company protocols and share those protocols with all team members. The safety rules and guidelines should be available in multiple languages to ensure everyone understands.

Ensure Containers Are Labeled Properly — Careful labeling is critical, especially when it comes to chemicals used in printing and packaging facilities. All containers should have clear labels indicating what they contain and whether or not the substance is hazardous.

Create and Maintain Safety

Data Sheets — Safety data sheets
provide detailed information on

particular hazardous chemicals. Employers should ensure they create and maintain these data sheets and ensure that workers have access to them.

Regularly Evaluate and
Reassess the Program — A safety
program requires continuous evaluation and assessment. Employers
should review the program regularly
to ensure it is up to date and is effectively protecting employees from
accidents, injuries, illnesses, etc.

## In Conclusion

Safety compliance plays an essential role in helping printing and packaging facilities run as smoothly as possible. By following the guidelines above with a converter-specific risk analysis lens, employers can help safeguard the health and safety of flexible packaging line staff.

Keeping converter personnel safe through training, procedures, and equipment investments fosters a culture dedicated to operational excellence.

- 1 https://www.marketbusinessinsights.com/ packaging-printing-market-52191.html
- https://www.osha.gov/printing-industry
   https://www.allseasonsuniforms.com/blog/ role-of-ppe-workplace-safety
- 4 https://www.plant-tours.com/blog/tips-for-communicating-effectively-in-warehouses/

# **ABOUT THE AUTHOR**

Rick Farrell is an expert in improving manufacturing group communication, education, training and group hospitality processes. He has over 40 years of group hospitality experience, serving as President of PlantTours for the last 18 years. He has provided consulting services with the majority of Fortune 500 industrial corporations improving group communication dynamics of all types in manufacturing environments.



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We differentiate ourselves by anticipating market needs and developing state-of-the-art engineered solutions that help our customers stay at the forefront of their industries. Our services are continuously expanding to provide a more comprehensive experience, personalized solutions, and superior services. While our services are always evolving, our "core" services include our on-site coatings, reverse engineering, various finishing options, and journal/shaft/core body repair.



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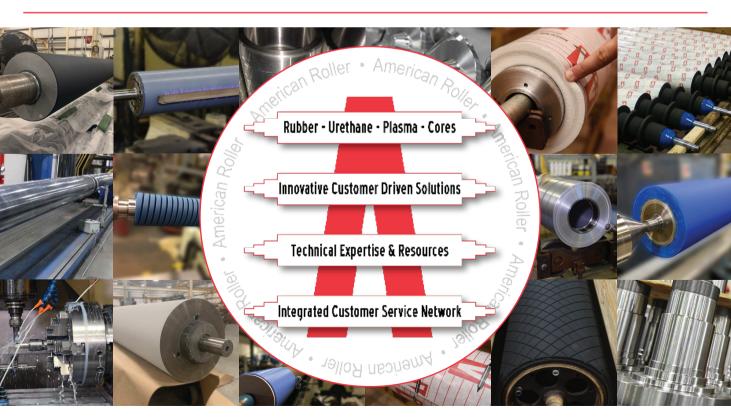
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BOBST continues to make significant progress in addressing the challenges faced by the flexible packaging industry. The company has recently reached key milestones for long-term R&D projects, which are giving further strength and substance to the company's vision for the future of the packaging industry.

oneBARRIER and One Complete Solution address two important issues for the flexible packaging industry – the circular economy of packaging and the transformation of the production workflow.

# Making recycle-ready flexible packaging a reality today with oneBARRIER

oneBARRIER is a family of new recycle-ready high-barrier substrates and sustainable solutions, developed by BOBST and its partners.

The validity and viability of the oneBARRIER substrates have been firmly established, having been tested by BOBST together with different ecosystems of leading industry partners. High and ultra-high barrier duplex and triplex substrates are now available for packaging designers to use as alternatives to non-recyclable metallized packaging.

oneBARRIER includes PrimeCycle solutions which are polymer-based mono-material substrates that are EVO and topcoat free, and FibreCycle solutions – fibre/paper-based mono-material structures coated with functional layers that can be recycled in the existing paper stream. Both are viable replacements for metallized polyester non-recyclable substrates.

oneBARRIER PrimeCycle PE AlOx mono-material has been certified by the German institute Cyclos-HTP. With a recyclability level of 98%, it exceeds industry guidelines, which is an extraordinary achievement for a high-barrier film.

The oneBARRIER FibreCycle AluBond structure has also been declared officially recyclable by Papiertechnische Stiftung (PTS), the German research institute of the



One complete solution EXPERT K5 vacuum metallizing and oneBARRIER expert coater for production of oneBARRIER PrimeCycle flexible packaging



oneBARRIER FibreCycle packaging, a fibre/paper-based mono-material flexible packaging structure that can be recycled in the existing paper stream.

paper industry, 4evergreen, Aticelca and Western Michigan University.

BOBST is working on other types of sustainable packaging, including compostable/bio-degradable solutions.

# One complete solution: dedicated workflows for seamless quality production

Beyond the significant progress made in sustainable flexible packaging, BOBST also recently announced the launch of One Complete Solution. This comprises BOBST's portfolio of end-to-end workflows for seamless quality production: from application management guidance and production of functional substrates through to pre-press set-up, printing, converting, quality control, and services. As the needs

of converters become more unique due to diverse market factors, the One Complete Solution portfolio provides everything they require, tailored to their specific business model.

The One Complete Solution for one-BARRIER FibreCycle is a good example: it comprises the EXPERT K5 vacuum metallizer for deposition of AlOx or AluBond and the oneBARRIER MASTER COATER for the primer and top coating processes.

One Complete Solution includes other dedicated workflows that connect all steps, from production file and pre-press through to the reels of printed or laminated substrates. This has been made possible because BOBST is the only supplier in the industry that offers all such printing and converting technologies for the production of flexible packaging.

BOBST was recently recognized for its end-to-end solutions when receiving the sought-after Top Company to Watch Award at the Digital Packaging Summit 2023. The award was given after two leading European label printing companies – Geostick in Belgium and Germark in Spain – implemented All-in-One platforms from BOBST to optimize their production floor and explore new opportunities in a sustainable and productive way.



# One complete solution



One complete solution from BOBST connects, integrates and orchestrates your flexible packaging workflow. With the help of BOBST Connect, it enables you to manage pre-press, printing, converting and quality control seamlessly while maximizing sustainability and empowering continuous optimization. Interested? Find your local BOBST representative at www.bobst.com/contact



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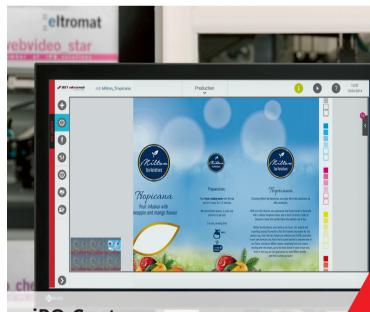




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**Electronics:** Batteries, Fuel Cells, Flex Circuits, Wearables, Touchscreens

Automotive: Gaskets, Adhesive pads, Metallized Labels

**Consumer:** Cosmetics, Orthopedics, Filtration **Tag & Label:** RFID, Multi-laminates, Holograms

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ELBA offers tailor-made solutions and provides commissioning, training and after-sales support. The modular design allows the machines to be customized and their configuration can be upgraded at any time, to face new unpredictable market demands

The **ELBA machines** can produce different kinds of bags and pouches:

- the SA-V machine can manufacture stand-up/Doypack, side gusset, center seal and 2/3 side seal pouches;
- the SA-U machine can produce simple bottom/side sealed bags, gusseted bags, boutique bags, STEB, courier bags, heavy-duty bags and much more:
- the SA-M machines can manufacture high-quality pouches, header bags and flat and gusseted reels for the medical and pharmaceutical markets;

- the SA-W machine can produce a wide range of wicket bags like bottom gusset bags, bread bags, poultry shrink bags, hygiene bags and diaper bags;
- the SA-V/TVB can manufacture high-barrier shrink bags with straight/ curved bottom seals and side seals.

All the machines can run with **recycla- ble films**, as proof of the **ELBA** commitment to the environment and attention to
the customers' needs. Furthermore, they
are equipped with a **kinetic energy recov- ery device** which ensures savings of up to
20% on total energy consumption.

Thanks to the mechanical processing department and the sister company FAE, 80% of the machine parts are produced in the **ELBA** facilities, ensuring **high-quality controls** during the whole process and the utmost attention to the smallest details.

The machines are fully equipped with Siemens components and are entirely controlled by a state-of-the-art HMI based on Profinet®, one of the most advanced communication protocols that controls each of the installed stations/tools independently and in real-time and, consequently, the whole production process. Each station is

independent, servo-driven and plug & play.

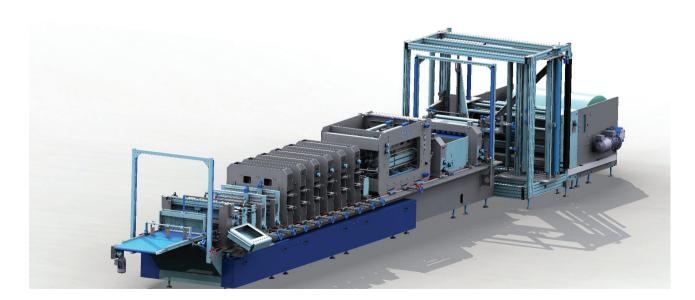
The **Siemens connection system**, installed on all the machines, enables the service department to offer real-time and on-site technical support within 24 working hours.

Thanks to manufacturing and technological capacities and as a result of constant investments in **R&D**, **ELBA** develops advanced and **patented solutions**, serving the market innovatively and efficiently.

Attention, high accuracy and the perfect combination of technological and manufacturing capacities are the keystones of the **ELBA** strategy.

For more information, contact us at sales@elba-spa.it and visit our website at www.elba-spa.it







### YOUR CONVERTING PARTNER



elba-spa.it







### Faustel Leads the Converting Industry with Our Innovative Technology Center

For over 65 years, Faustel has been delivering innovative coating, laminating, and winding machinery to customers worldwide. At the company's Germantown, Wisconsin headquarters, our team of experts is focused on designing, building, and proving state-of-the-art converting equipment with superior quality and industry leading performance.

### What Does it Mean to Collaborate with the Global Leader in Custom Converting Technology?

The transition from product development to production can be difficult, and this is the challenge Faustel's engineers are uniquely equipped to address. Inside the Technology Center, Faustel's process team works alongside customers to innovate the converting processes used to create the latest products, including filtration membrane, aircraft insulation, Li-ion batteries, and so much more. There is a good reason that Faustel is trusted by major brands to develop the high-performance converting machinery their success depends on. With multiple pilot lines that include limitless configuration possibilities for coating, drying, and curing, the Technology Center is well equipped for virtually any product development project.

Through effective collaboration with the customer's in-house team of scientists, chemists, and engineers, Faustel can further enhance the R&D process and improve the outcome. To facilitate continued process development as more people are working remotely, Faustel created Tech Connect, a



unique program that provides customers an interactive online interface which allows the conducting of remote lab trials, saving time and eliminating travel costs.

### The Proof is in the ROI

This synergistic partnership results in better designed equipment and improved converted products through an efficient process which maximizes resources. Faustel is recognized globally for high performance and exceptionally reliable converting equipment, but the ability to support the entire R&D process is the key reason we rise above the competition.

The long-term ROI of Faustel's equipment

is remarkable, especially when working with expensive substrates, such as battery foils and optical quality laminates. Additionally, Faustel's converting lines have industry leading reliability, producing consistently superior results for many decades into the future. Ultimately, an investment with Faustel is so much more than a simple equipment purchase. It is an assurance of continued success for your unique process, from beginning to end.



For more information on the Technology Center, contact a Faustel sales engineer at (262) 253-3333, or visit our website at www.faustel.com.





# Technology Center



# EVERYTHING YOU NEED FOR PRODUCT AND PROCESS R&D

















SCAN FOR MORE INFO!

## Jemmco Celebrates 25 Years as a Global Leader in Rollers, Roller Coverings, Supplies & Equipment

From our affordable rubber stretch roller sleeves and roller tapes to our made-to-order dyne test products and web cleaning supplies and equipment, Jemmco's wide range of product offerings have made us the ONE-STOP-SHOP for film extruders and web converters.



### High Quality Rubber Roller Sleeves Save Time & Money

Jemmco's unique, rubber stretch sleeves offer a cost-effective alternative to traditional bonded coverings:

- **JemmSil™** High Release Sleeves
- **JemmTron™** Corona Treating Sleeves
- **JemmTac™** Web Cleaning Sleeves
- **JemmTrac™** Traction Sleeves
- JemmStat™ Anti-Static Sleeves

### Why choose Jemmco's stretch sleeves?

- Reduce downtime: sleeves are easily installed in-house, by your team!
- Eliminate the need for costly spare rollers
- Eliminate costs incurred from two-way roller shipping & regrinds
- Available in diameters up to 10"



### One-Stop-Shop for Converters WEB CLEANING

- Stretch roller sleeves & bonded covers
- Pre-sheeted adhesive rolls
- Contact web cleaning equipment

#### **HIGH RELEASE**

- Stretch roller sleeves & bonded covers
- Tapes & roller wraps

#### TRACTION

• Stretch roller sleeves, tapes & roller wraps

### **CORONA TREATING**

- Dielectic & conductive roller sleeves
- Ceramic & epoxy coverings
- High voltage wire
- Ceramic electrodes

### DYNE TEST PRODUCTS

• Made-to-order pens & solution

### CLEANING PRODUCTS

- Heavy-duty copper gauze & pads
- Treater roll cleaner

### **HOLE PUNCH & PERFORATING**

Parts and equipment

### ANTI-STATIC

- Stretch roller sleeves & roller coverings
- Anti-static bars, cord, tinsel & more

### Web Cleaning for as Little as \$2.55 per Inch

Jemmco's JemmTac™ Web Cleaning
Sleeves slide over an existing idler roll for instant contact web cleaning. With its small footprint, the JemmTac™ Component
Style Web Cleaner can be bolted directly onto the endplates of the customer's existing idler roll for more continuous contact web cleaning.

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ROLLER COVERINGS



TRACTION
ROLLER COVERINGS



WEB CLEANING
ROLLER COVERINGS



HIGH RELEASE
ROLLER COVERINGS



DemmStatic

ANTI-STATIC

ROLLER COVERINGS

### **Next Generation Flexible Packaging Solutions from Mamata**

Mamata serves the plastics and packaging industry for over 32 years offering equipment for film extrusion, converting, and packaging.

Globally, our footprint expands to over 90 countries with more than 5000 converting machines working in the field. In North America, we have over 500 installations and are growing.

We offer state of the art mono & multilayer blown film lines, high speed side seal and Bottom seal poly bag machines, Wicketers, pouch machines for a wide range of applications and HFFS rollstock pouch packaging machines and premade pouch filling systems for end user flexible packaging market.

The Flexible Packaging / Converting Markets are ever changing. At Mamata, we have always designed systems that are fit for today's market needs and capable to see the road ahead, transform the course and win the Race for our Customers.

Our philosophy of providing machines with improved flexibility, operator friendliness with greater productivity has given our customers a vital edge in today's competitive market.

Recently at K 2022, Mamata introduced the shortest footprint pouch machine in the industry. With 22 ft. footprint, 150 cpm speeds, and under 20 minutes fully automated changeovers, it is the game changer in the Pouch converting industry and an ideal machine for digital printers, narrow web printers and short job run applications.

At this show, Mamata also introduced Robotic Pick & Place systems on it's Wicketers. This system will allow the wicketer users to run their machines at high speeds with minimal labor involvement. It enhances their production capabilities and increases their overall productivity.

Our converting machines offer best value for money proposition to the converters. Mamata offers capability to process Recyclable mono-material film structure and make wide variety of pouches like





stand-up Zipper Pouches, side gusseted Quad seal Pouches, Flat Bottom Pouches, etc. since 2004. At 70 ft. length, our Flat bottom Pouch machine offers shortest footprint in the Industry and is the most flexible pouch machine available to the converters.

Mamata's solutions on its Flat Bed Poly Bag Machines & Wicketers for applications like E-commerce mailer bags, diaper / hygiene bags, heavy duty fertilizer / salt / potting mix bags, string & flange zippered bags makes it unique in the industry.

Our high-speed bottom seal machines offer flexibility to run a wide variety of bottom seal bags.

Our special application converting machines include surgical mask machines, non-woven fabric bag machines, flower/ candy sleeve machines, laminated back seam woven sack machines, etc.

For your pre-sales and after-sales support, our Florida and Chicago are at

your service with spare-parts, local technical support, and sales consulting. We have an extensive network spread across 90+ countries around the world.

Our converting & packaging systems are a perfect fit for today's market needs and capable to see the road ahead, transform the course and win the Race for our Customers. This is the key to our success.

For more information on our Products, visit our website www.mamata.com or write to us on sales@mamatausa.com



Contact: Sanjay Amin (O) 941 205 0227 (M) 630 885 0312

Email: sales@mamatausa.com Website: www.mamata.com

# MANATA Total Solutions For Flexible Packaging



### **VEGA 300 PM**

The quickest changeover stand-up Pouch Machine in the Industry



- Tool less changeovers
- ~26 ft. length
- Lowest setup waste due to short footprint.
- Ability to process Recyclable mono materials
   / Eco-friendly films
- Servo driven seal time, seal pressure control on each station



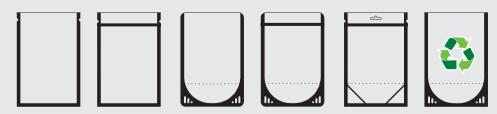
**150 ppm**Mechanical speeds



~20 minute changeovers



Recyclable pouches











# **End-To-End Solutions From Maxcess Keep You Running Better, Faster, Smarter**

Maxcess® saves you time and money by optimizing your peak output performance. We do this by leveraging the world's best web handling product brands of RotoMetrics, Fife, Tidland, MAGPOWR, Webex, Valley Roller and Componex, offering customized end-toend web handling solutions that help you work better, faster and smarter.

We manufacture all of our components to meet the highest standard of precision, with the deep application knowledge behind how each component works better together, to solve challenges faster across your converting line. All to provide unmatched product integration and precise positioning from unwind to rewind.

We're Maxcess. Solutions that help you work better, faster and smarter.

### We Help You Run Better

Better Quality End Products are Achieved Through Components Designed to Work Better Together

- It takes a Combination of proper Tension Control, Guiding, Precision Rolls,
   Slitting, Winding and Rotary Dies to achieve precise and perfect parts
- We Don't Point Fingers When
   Problems Occur. We Solve Problems
   Faster!
- Maxcess is the ONLY Company with End-to-End Knowledge

Better Product Quality Means Less Scrap, Less Waste and Less Downtime



### We Help You Run Faster

Increase Your Throughput and Reduce Downtime

- Decades of Combined Knowledge to Increase Line Speed
- Combining our Rotary Dies, Precision Rolls, Shafts and Custom Performance Coatings Optimize Your Production Output While Keeping Downtime At A Minimum.

More Product Faster Means Greater Profits and More Opportunities

### We Help You Run Smarter

Deep Global R&D Investments for Next-Generation Industry 4.0 Solutions

- Millions Invested Annually in Global R&D
- Industry 4.0 Smart Connected Devices
- Developing Inner-connected Data Analytics From The Entire Line, Endto-End, Allowing For:
- Predictive Maintenance
- Web Performance Monitoring
- Wear Detection Inspection
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When You Run Smarter, You Run More Profitably



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### Leader in Anilox Roll and Sleeve Cleaning

Sonic Solutions has been a leader in the converting industry for nearly 24 years. They first started because a printer was having problems with their water based inks ruining their anilox rolls. Sonic Solutions provides ultrasonic cleaning systems for any sized anilox roll or sleeve. From 6 inches to over 10 feet. Today, thousands of printers throughout the world rely on Sonic Solutions anilox cleaning systems. The current family-owned business developed a wide range of cleaning systems for printers ranging from the narrowest of anilox rolls to the largest possible anilox sleeves.

Joe and Marie Walczak personally talk to printers every day and help them solve their printing problems. When a printer has problems matching or maintaining their densities it's usually caused by a dirty roll. So then the press needs to stop and no one wants that. A stopped press adds up to thousands of dollars of lost revenue. No one can afford this!

Coming to the rescue is Sonic Solutions. They can provide the best system for your needs. Sonic Solutions uses ultrasonics to gently and safely clean your anilox. It's really the perfect way to clean them. The tiniest of crevices of the ceramics are subject to the cleaning strength of ultrasonics. In their cleaning systems the ultrasonic power gently vacuums the anilox of any built up dirt and debris. Ultrasonics isn't a wash or a blasting system. It's better and safer. Ultrasonics is the same technology used to steril-



ize medical instruments in hospital operating rooms as well as components used in space by NASA. Shouldn't your anilox's be cleaned in the same safe and thorough manner?

Sonic Solutions has evolved their systems to be one of the safest in the industry using the most recent developments in the ultrasonic industry. While others still use lower frequencies, Sonic Solutions has standardized all of their equipment to utilize ultrasonics at 68 kHz. The smaller bubbles are able to go into the smallest of cells and clean the anilox safely and completely. No need to worry about the highest of line counts you have. The company has also made the equipment more durable, reliable and serviceable. The plug and play power generators can guickly be replaced with loaner generators to keep the systems and your cleaning operations up and running. No waiting for a month or more for replacement parts or repairs with some international companies.

Want to kick the tires a bit? Sonic Solutions has the ability to prove to you that the system will work with YOUR very own rolls and sleeves. You can send your rolls to the company and they will clean them for you and send them back. Or they can even offer a demo of the equipment directly at your plant. Keep the system for a week or so and see what kind of an impact it has on your business. Just to warn you though, once you have a demo in your plant you won't want to give it up. Customers usually buy the system because they are already saving money on using it.

Call or email Joe Walczak today to see how they can start making your company more money. He can be reached toll free at 877/654-7800 or emailed at Joe\_Walczak@SonicSolutionsUSA.com.

He'll be happy to chat with you to learn more about your company and how Sonic Solutions can make a difference in your company's profits today.





**Sonic Solutions** 1-877-654-7800 www.SonicSolutionsUSA.com



# Big

System that can clean sleeves up to 70" long

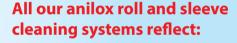
or

### SMALL....

System that cleans narrow and medium web rolls



### ...we can clean them all!



- Preset functions that allow you to safely clean the highest line count anilox.
- Plug and play external power generators that can be easily replaced
- Stainless steel construction for longest durability
- Over 20 years of proven industry experience
- Fast friendly service that only a family run business can provide



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Sonic Kleen - The original and still the best.

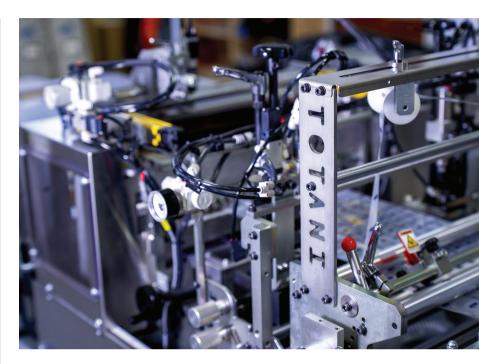
### The World Leader in Pouch Making Machinery

For over half a century, Totani Corporation has manufactured pouch and bag making machinery. Since its incorporation in 1961, over 6,000 Totani machines have been installed in more than 60 countries across the globe. These machines are highly regarded and trusted by well-established packaging companies.

Totani is widely recognized as the world leader in pouch making machinery. Through the robust design, reliability and safety, Totani has developed a strong reputation throughout the packaging industry. In addition, Totani always has an eye on future needs, like packaging sustainability. Totani has reacted quickly to these industry needs by investing heavily in R&D related to converting sustainable films structures.

Outside of machine improvements, Totani's head office building in Kyoto, Japan, was built with a focus on the "reduction of environmental impact". Solar power, rainwater collection, a strict focus on recycling manufacturing waste and a "green" parking lot are just a few of the many considerations that been made. Totani has truly embraced these goals and has a newly adopted slogan; "Think Sustainable, Think Totani".

Totani's original design, the Box Pouch®, continues grow in popularity. By utilizing two separate webs of film, the machine is capable of handling a diverse array of pouch formats. Already widely sought after by the food, pet food and lawn and garden industries, it has more recently found its way into coffee



packaging. By utilizing less film for the same amount of volume (as compared to traditional stand-up pouches), the Box Pouch® helps to meet the ever-demanding sustainability goals.

Totani has also recently released a new machine model; the CT-40D. This high-speed machine uses a single web to create a plowed in bottom stand up pouch. Using proven technology, Totani created a machine to fit the growing narrow web market used in both digital and flexo printing. Its compact design and customizable components allow for the flexibility to convert a wide portfolio of pouches without

losing productivity. There are also quick change technologies that can be adapted to this machine, and others, that significantly reduce changeover times.

Contact Totani today to discuss this industry leading equipment or retrofittable enhancements for existing machinery.





# SHAPING THE FUTURE OF PACKAGING

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### Vetaphone - the first and best in surface treatment

Vetaphone has more knowledge and experience of surface treatment than any other manufacture in the industry. Since Verner Eisby invented corona treatment in 1951, we have continued to develop technology that meets the requirements of a changing market. This passion for solving adhesion problems, part of the company's DNA, is vital if you are involved in printing, laminating, or lacquering, because Vetaphone can tailor-make a solution to meet your specific requirements.

Using cutting-edge technology in partnership with our customers, Vetaphone continues to pioneer surface treatment with its unique technical knowhow. We design and build systems that are innovative, highly functional, and ultra-reliable, because we know that no ancillary process can afford to be a weak link in the overall production chain. That's why many international OEMs name Vetaphone as their preferred supplier.

The key to our success is the willingness to share knowledge and expertise, and to expedite this we have opened a high-tech Test Lab and a fully equipped showroom and demonstration facility at our HQ in Denmark.

Our unique Test Lab allows converters to trial their substrates prior to full commercial production, and is also available to manufacturers of substrates, inks, and lacquers. All have full access to cutting-edge corona and plasma surface treatment technology to test, monitor, and analyze performance under true simulated production conditions. Fine tuning in the Test Lab prevents costly errors later.

The showroom houses a selection of corona treaters for wide and narrow web print applications as well as units specially designed for the laminating, converting, and extruding sectors. Unlike display equipment at a trade show, each unit is powered to enable us to carry out full customer demonstrations either online or in-person, wherever they are in the world.

Like all market leaders, we know the





importance of service and support. Our global network of agents ensures users are never far from technical back-up and a comprehensive stock of parts. We also have a 24-hour online support team, while in key markets like the US, we have our own sales and support company to service our customers there.

Whether it's corona treatment or the latest generation of Plasma technology for use with today's increasingly complex substrates, Vetaphone has the answer. Our aim is to be your perfect business partner by providing a seamless operation from initial brief to installation and commission-

ing, and then to provide support for all the years that follow.

When it comes to surface treatment, Vetaphone is the first and only choice you will ever need to make.

### VETAPHONE Corona & Plasma

### Vetaphone North America

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Chicago, IL 60606

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### Solutions for Guaranteed Adhesion



SOFTAL Corona & Plasma manufactures surface treatment systems for foil, film, web, paper, foam and more. With more than 65 years of experience and time-tested technology, SOFTAL is a world leader in the surface treatment industry.

SOFTAL produces a full range of powerful, dependable corona and plasma systems designed to raise the surface energy and adhesion properties of numerous substrates. Printing inks, lacquers and adhesives thoroughly wet out once treated with SOFTAL's technology.

### The Benefits of SOFTAL's Surface Treatment Systems

 Corona stations - from 10 inches to 10 meters - with single or multiple

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- Stand-alone, high-performance ozone filter and destruction system
- Low energy requirements and operating costs

Based in Hamburg, Germany, SOFT-AL is represented in the North America by 3DT LLC of Germantown, Wisconsin. This strategic partnership provides German engineering with expert U.S. sales, service, and support.



### 3DT LLC

### Innovation in Corona & Plasma Surface

3DT manufactures a broad line of innovative corona and plasma surface treatment systems, all customizable for unique applications. Let's discuss your adhesion challenges and how we can improve your process and profitability. Contact sales@3DTLLC.com or visit our website at www.3DTLLC.com.



### **Total QC Solutions for Silicone Release Coaters**

Applied Rigaku Technologies engineers and manufactures high-quality benchtop and process elemental analyzers that perform at-line or real-time silicone coat weight analysis using proven Rigaku EDXRF technology.

For in-line process control, the **NEX LS** linear scanner offers real-time cross and machine direction Si coat weight profiling of your process. Technicians can quickly identify problems and make immediate quality control decisions for the entire roll.

NEX LS software is easy to use and provides continuous process control from the beginning to the end of the roll. The intuitive user interface lets users easily define recipes, including scan speeds and sub-second measurement settings, advanced roll reporting, and raw data logging for traceability and audits. Users can customize reports, export them as PDF or



CSV, and store copies to USB or a network using industry-standard communications protocols.

For at-line solutions, **NEX QC Series** benchtop analyzers enable the measurement of very low silicone coating weights and metal catalysts in silicone coatings. Challenging applications that were either marginal or impossible with earlier technologies are now a reality. **NEX QC Series** analyzers are cost-effective and do not require helium or special sample cups for Si determination. They provide QC techni-

cians with an ideal tool for quickly checking silicone coating thickness and composition by simply placing a coupon sample in the analysis chamber. For high-throughput analysis, automatic sample changer options are available.



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### Printers and Converters: Your All-in-One Shop for Innovative Solutions

For over 60 years, Anderson & Vreeland, Inc. has been dedicated to providing printers and converters with the right tools to create high-quality printing that sets their products apart from competitors.

When you partner with Anderson & Vreeland (A&V), you'll benefit from a consultative process that involves strategic business analysis to identify the best solutions for your success and bottom-line growth. We can help you find state-of-the-art equipment, materials, software, and support to meet the demands of your printing business.

### **Prepress**

Whether you need to accelerate prepress to reach production faster or improve preflight accuracy, A&V can assist you with Preflight & File Management, Digital Prepress Workflow, Color Management, Proofing, and Quality Control.

### Plate-room

For printers looking to bring the platemaking process in-house or upgrade their equipment, A&V offers specialized support and resources. Our plate materials include engravable plates, photopolymer, thermal plates, letterpress, water wash, and solvent wash.

### **Pressroom**

Are you tired of dealing with multiple vendors for your pressroom consumables? Our team can help you with your total cost reduction strategy by bundling everyday items or streamlining the process with an RFID Replenishment Tracking System.

### **Service and Support**

The A&V Technologies Team is here to assist you with troubleshooting issues in prepress, platemaking, and print. Our team

comprises individuals with backgrounds in design, color, platemaking, proofing, and press applications. With the help of the A&V Technologies Center, our team can test products and find solutions to the daily problems our customers experience. We also offer installation and training on all the equipment we sell to ensure our customers successfully implement their new technologies.



Anderson & Vreeland, Inc.

15348 US Highway 127 Ew, Bryan, OH

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# Your Single Source Supplier for All Things Flexo.



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**PLATEROOM** 



**PRESSROOM** 

### Single Source Solutions for the Press Room

Provident, LLC knows what it's like to work in the press room—they've been there themselves. That's why they've built the company on the knowledge they've gained as pressroom professionals, and why they make products designed by people who know what works best in a busy production space. Provident can help you minimize downtime by up to 75% and increase productivity, while limiting waste of inks, substrates, and production time.

Provident offers custom doctor blades and end seals fit for your application, in addition to, flexographic cleaning chemistry and press room supplies.

### **Doctor Blades**

With optimal combinations of straightness and flatness, edge finish, surface finish, strength and wear resistance, you can count on Provident doctor blades to deliver



unparalleled quality. We offer a complete selection of premium doctor blades available in a variety of alloys and tips.

- Steel
- Nano-Treated by PrimeBlade
- Coated
- Synthetic
- Mylar

### **End Seals**

Provident offers a complete selection of FULLY CUSTOMIZABLE end seals that deliver long-lasting performance and are important in extending the life of your doctor blades. These seals outperform the competition because of superior materials and a proprietary machining process that creates a better seal. Made in the USA.

### **Pressroom Supplies**

Provident can help you source Troika products, anilox roll cleaning products, defect marking systems, and anilox and plate inspection systems.



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### When Performance Matters Specify Enercon Corona Treaters

More converters and film extruders specify Enercon surface treaters than any other brand. And with good reason.

At Enercon we know that not all corona treaters are created equal. How do we know? Because we're the number one corona treater brand in the United States, home to the most demanding film extruders and converters in the world.

We've learned what it takes to satisfy the most efficient, quality conscious operations in the world. Its reliable surface treating technology expertly matched to each application and backed by remarkable customer support. Whether you're adding a treater to a new OEM line or retrofitting to an existing line do your due diligence and contact Enercon for a



solution you can depend on.

For 50 years Enercon has blended its technical expertise with family values to deliver reliable equipment that gets the job done time after time. Our talented team is dedicated to our customers' success and its why companies who invest in Enercon become lifelong customers.

### New Corporate Headquarters

We're also excited to announce that in 2024 we'll be moving into our new Corporate Headquarters and Production Facility. This investment will increase our manufacturing capacity, research & development capabilities, and enhance our customer support offerings.

We look forward to serving your corona, plasma & flame surface treating needs.

And remember...when performance matters: **Specify Enercon.** 



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### **Pro Tapes: Cutting Edge Converting Solutions**

Pro Tapes® is rounding out our arsenal of state-of-the-art converting equipment with new fully automatic G&A FA300 and RTA600 wide web slitters. Our new G&A FA300 & RTA600 provide Pro Tapes with the versatility and dexterity to convert the widest possible range of materials in the market today.

### **How Pro Tapes Provides** Value-Added Service

Our newest converting equipment allow us to convert wider jumbo rolls, and faster cycle times equal increased output. Combined with a programmable PC that stores recipes, Pro Tapes can service our customers at a very high level with the most competitive pricing possible.

### Key Features of Our G&A FA300:

- Inline crack-and-peel liner backsplitting
- 2,000mm wide fully automatic turret rewind slitter, score and razor
- Paper tab
- Double sided adhesive tab
- Process liner recovery
- Full width logging system
- Transversal cut off system for converting thicker substrates
- Recipe job PLC storage

### Key Features of Our G&A RTA600:

- 1,800mm wide fully automatic turret rewind slitter, score and razor
- Automatic score blade positioning
- Automatic turret and cut off system
- Laser core alignment
- Differential winding
- Roll ejecting/off-loading system
- Increased capacity

We pride ourselves on providing you with the most versatile contract converting solutions in the market today.

Contact Pro Tapes today and schedule a personal tour of our 175,000 sq. ft. facility, located in North Brunswick, New Jersey, and see our 12 wide web slitters in operation — 8 of which are fully automatic!



Contact: Chris Hart Phone: 732-743-4164

Email: chart@protapes.com

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### **Pro Tapes is the Global Leader** in Fully Integrated Converting **Solutions and Services**

- 175,000 sq. ft. facility
- · State-of-the-Art fabricating, laminating, and die-cutting
- In-house foam skiving capability
- Fully automated rewind slitting
- Integrated in-line roll wrapping
- Narrow width specialty slitting
- · Automated packaging with custom labeling and retail packaging
- Supply chain & inventory management solutions
- · Retail packaging & labeling
- Private labeling
- Custom printing
- · In-house prototyping design & support
- ISO 9001 Certified, EDI Compliant

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### A New Generation of Hybrid Drive Technology

The RSM-DIGI-VARICUT is equipped with for the rotary converting of digitally printed packaging materials. A combination of continuous & vector drive technology – in re-registration mode – allows format independent converting by the use of a single tool circumference.

The RSM-DIGI-VARICUT is based on modular platform, available for different working width (max. working width currently 850 mm, max. format length 1220 mm).

The standard configuration of the RSM-DIGI-VARICUT includes a vacuum controlled delivery table. A high-speed programmable robot-automated stacking and counting system (Spider) which combines extreme acceleration, velocity and precision at continuous web speed of up to 50 m/min can be added.

The Spider is designed to pile up different types of products combined within the same printing image. They can be heavily nested or combined – i.e. very large/long with small products. Product specific, fast interchangeable pick-up plates take up products at synchronized speed and stack them into a dual piling cassette system – non-stop.

A 100% product inspection system with defective product discharge is available in addition.

The RSM-DIGI-VARICUT is – due to its advanced design – ready to meet the specific demands of the digital market to cope new business challenges.

Short make-ready time, minimum waste & cost-effective cutting technology with maximum lifetime – due to a micrometric die wear compensation adjustment

- are additional significant benefits of this converting technology.

If you want to experience the latest development of the RSM-DIGI-VARICUT series in action, we recommend our current video of the RSM770-DIGI-VARICUT model



Schober USA Inc www.schoberusa.com



### Leadership in Converting through Static Control Solutions

TAKK Industries is an early innovator in the static elimination field, originating best in class static control solutions since 1943. TAKK continues as a leading provider of static control expertise, with cutting edge static control and static generation technologies for the converting, printing, packaging, textile and allied industries. Our technical team with decades of expertise delivers static control process evaluations and specification of our high performance, quality static elimination and generation technologies to fit the unique requirements of each company we work with. We pride ourselves on technology driven solutions, built to last and economically priced.

TAKK provides a comprehensive range of solutions:

**Static Elimination Bars** – precision engineered tools with the exact electronic power, ionization range and scope to



solve your specific static problem.

**Static Elimination Blowers** – combining powerful ionization with controlled air flow, an encompassing field, and extended range of static elimination.

Electro-Static Generators and Generator Bars – a low cost, effective method of temporary adhesion and pinning through the bonding force of static electricity.

**Passive Static Eliminators** – led by our low cost, effective anti-static tinsel, and outstanding line of no power needed static neutralizers.

### Measuring and Monitoring Devices

- static meters and bar testers for analysis.

We are in the solutions business. Providing economical solutions, through quality products and technical services. Solving the costly static problems frequently experienced by our customers in the fields of converting, packaging, plastics, printing, painting, electronic assembly and textiles. We serve end users of static elimination equipment and original equipment manufacturers, nationally and internationally.



#### **TAKK Industries**

Terrance Clark Sales Manager 800-792-8255 sales@takk.com www.takk.com

### Is Static Electricity A Problem?

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Ion-Edge Model 400T The industry workhorse for AC Static Eliminators



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### **STAY TUNED FOR DRUPA 2024**

Nordmeccanica celebrated 45 years of activity in 2023. Being the larger provider to the industry of coating, laminating and metallizing machinery Nordmeccanica faces daily the need to properly serve converters with innovative products that meet the needs of industry. It is a significant challenge in an era where packaging is exposed to continue evolution and to the requirements to comply with developing regulations. There are two main streams recorded in the industry. On one side, packaging that allows for the highest degree of correspondence with the circular economy rules; on the other side, packaging that allows for the utmost extension of the shelf life. For the first stream Nordmeccanica is partner in a number of international R&D projects, collaborating with some of the largest industry leaders in the relevant fields, those projects feature the most advanced results in the direction of mono-material and fully recyclable packaging. First results have been announced last year scoring impressive achievements certified by third party institutions. In the other stream, the one requiring the highest possible level of product protection and consequently the use of more traditional packaging set up, Nordmeccanica is as well leading the field offering machinery solutions with the highest productivity at the lower power consumption and with no-emissions, solutions that minimize the carbon footprint and allow to convert substrates at the best possible efficiency and productivity with the highest quality levels available in the industry.

Therefore, while year 2023 offered the chance to Nordmeccanica to introduce a few innovative solutions in the entire product range, year 2024 will offer an even larger set of technical contribution. In 2024 Drupa show in Dusseldorf Germany will



be back after the cancellation of the 2020 edition. Drupa remains the largest stage to present technical innovation and Nordmeccanica will honor the opportunity by showcasing multiple "firsts", industry changing developments and inventions that will be presented live at the show. Innovations will cover the field of the innovative packaging, leading the front of the circular economy. There will be innovations and product development offered by the inventor of all that counts in coating and lamination. There will be demonstrations of top of the industry achievements in energy savings and emissions reductions. Obviously at Drupa paper conversion will not be missed. Nordmeccanica will in fact show innovative paper conversion processes involving the substrate that shows the fastest consumption growth. There will be demonstrations of technologies never ever shown live before at an industry show. Innovations that will mark the industry for next decades as happened for the 5 rollers coating head

developed and patented by Nordmeccanica during the 80s; the Simplex family, introduced by Nordmeccanica during the 90s; the One-Shot family of products introduced by Nordmeccanica during the 10s, the N-Gen evolution in the Vacuum Metallizing product range introduced during the 20s.

Mark it on your calendar and stay tuned as more details will be unveiled during next few months leading to Drupa 2024.

nordmeccanica group

Contact info: Nordmeccanica NA Ltd Ph. +1 631 242 9898 www.nordmeccanica.com

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