WhatTheyThink

ISSUE THREE **2024** | Finishing & Embellishments

STATE OF FINISHING & EMBELLISHMENTS

HOW TO IMPLEMENT **THE BEST PRODUCTION WORKFLOW**



▶ **Learn About This Cover**
See Page 2

\+ **Drupa Highlights**

\+ **Discover the Latest Die Cutting Trends**

ABOUT THE COVER



Since the theme of this issue of WhatTheyThink magazine is about finishing and embellishment, we thought it would be cool to embellish the cover. So, we asked our friends at Konica Minolta, sponsors of this issue, if they'd like to help us create it.

Sure, they said, but we have another idea. Instead of embellishing the cover, what if we attached an embellished piece to it? Something the reader could pull off and interact with? A design that demonstrates new techniques using texture, color, and form to inspire and show "the art of what's possible."

That was the beginning of the plan to create this fun and unusual cover, incorporating not just digital embellishments but plenty of other finishing treatments. Here's how it was done.

The idea for the format of this piece came from a business card design developed by Konica Minolta client, Elite Print Finishing (EPF) out of Burlington, NC. After installing an MGI JetVarnish 3D, EPF created promotional business cards that could be folded into tiny, embellished boxes. For this project, the question was, could an embellished, folded card box be tipped onto the cover of a magazine?

Enter Royle Printing, the folks that print this magazine. After some testing with sample pieces, the Royle team found that the card boxes could be tipped onto the front cover. With that green light, the project started in earnest.

Once the Konica Minolta design team shared the artwork for the card box piece, the WhatTheyThink design team incorporated it into the front cover design. The artwork had to be placed at a reduced scale from the full-sized piece, to minimize the possibility of the background art peeking out from behind the box piece once it was tipped onto the cover.

Worth-Higgins and Associates in Richmond, VA printed the four-color box designs onto 10pt C1S sheets. The finishing and embellishment magic happened at EPF, where the pieces were laminated on a D&K high-speed laminator, 3D coated and silver foil stamped on a MGI JetVarnish 3D, then die cut and glued on Bobst finishing equipment.



The folded but flattened pieces went to Royle Printing where they were tipped onto the front cover with a dot whack of glue and then the magazine was placed in a polybag to ensure the card boxes remained intact during mailing.

We hope this cover ignites a spark for some great finishing and embellishment ideas of your own!

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WELCOME TO THE

Finishing & Embellishments Issue!

"Finishing" covers a lot of ground, so we have a wide variety of features in this issue. We start off with our regular "Tales from the Database" feature—this time looking at what our industry survey data can tell us about perceived opportunities and investment in binding, finishing, and mailing capabilities. We also lament the low perception of embellishment technologies, which we hope this issue will breathe some life into.

To wit: on page 12, Pat McGrew profiles Paul Hudson of Salt Lake City's Hudson Printing and the success the company has had with digital embellishments. Paul is a true industry visionary and pioneer and Hudson Printing has become synonymous with quality and creativity. Check out how they are using the latest finishing technologies to their best advantage.

Our embellishment guru Kevin Abergel looks at the evolution of embellishments, and some of the new technologies that are hitting the market—or at least the drupa show floor.

Speaking of which, by the time you read this, the much-anticipated drupa 2024 will be afoot, and on page 20 David Zwang rounds up a few of the technology and product announcements that will be unveiled at the show. You can still grab a plane ticket!

Some folks have not gotten their trade show mojo back after the pandemic lockdown year, but after drupa, trade show season kicks off in earnest, so Joanne Gore explains how to get your event groove back on and "survive" trade show season. (Additional tip: It may not involve publishing a show daily.)

Look back at trade shows past, Richard Romano looks at some of the display graphics-based cutting and finishing solutions that were on display at April's International Sign Association (ISA) Sign Expo.

On page 46, Pat McGrew and Ryan McAbee take a look at how a streamlined production workflow can help print businesses get the most out of their finishing equipment.

On page 52, David Zwang surveys the current lay of the land in die cutting equipment.

This issue's sponsor is Konica Minolta and we have our Executive Q&A with William Troxil, President of KM's Industrial Print and Production Print Business. (And check out the inside front cover to find out how Konica Minolta helped us create this issue's cover.)

Cary Sherburne talks with Ranpak's Bryan Boatner and how they are developing automated packaging systems based on paper-based packaging, in the context of complying with new regulations aimed at eliminating packaging waste. Cary also talks with Dr. Seshadri Ramkumar about how AI is being used to help textile designers become more efficient and provide consumers with better fashion-buying experiences.

Finally, Johnson's World is in eclipse as he derives life lessons from the recent "eclipse tourism."

All that and more in the Finishing & Embellishments Issue!



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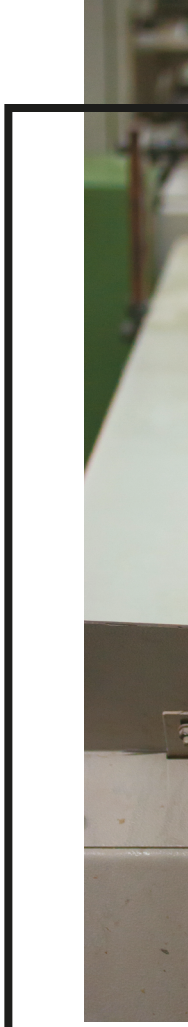





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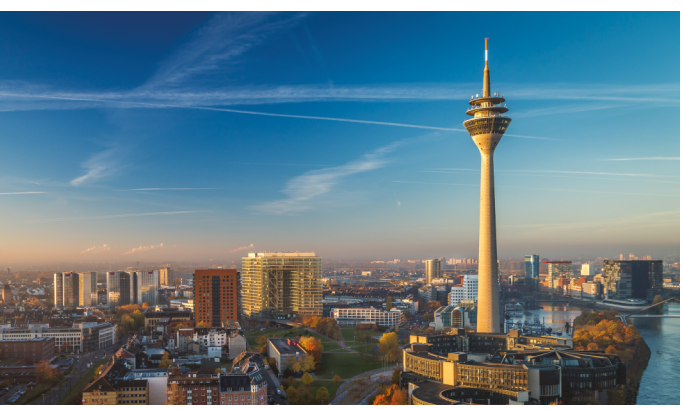

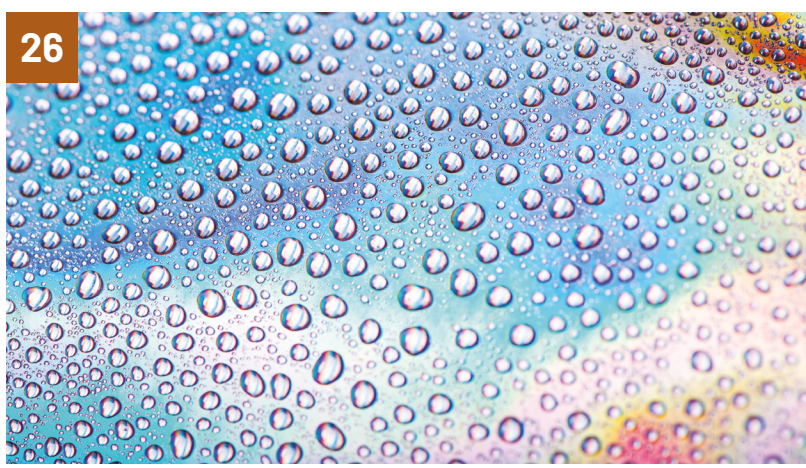

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TALES FROM THE DATABASE

Finishing Up

BY RICHARD ROMANO

Drawing on six years worth of Print Business Outlook surveys, our "Tales from the Database" series looks at historical data to see if we can spot any particular hardware, software or business trends. This issue, we turn our attention to various aspects of finishing, including mailing and embellishments.

These surveys form the basis of our annual *Printing Outlook* reports, the most recent of which (2024) is available at whattheythink.com.

Purchase the Printing Outlook 2024 report

In every survey, we ask a broad cross-section of print businesses about business conditions, business challenges, new business opportunities and planned investments. In our Business Outlook reports, we tend to focus (obviously) on the most recent survey data, occasionally looking back a survey or two to see how these items have changed in the short-term. Plumbing the depths of our survey database can give us a better sense of how these trends have changed since the mid-2010s.

This issue, I rounded up a few opportunities and investments related to various aspects of finishing. Let's see what history can tell us.

FIRST CLASS MAILING

Are print businesses interested in mailing? Yes, to a certain extent: "broadening fulfillment, shipping, mailing capabilities" as a new business opportunity has almost always been a double-digit opportunity, falling under 10% only once (Fall 2021). It has climbed back up to 13% in the two years since (see Figure 1).

As for planned investments, in 2022, after starting to see significant write-in responses, we added "mailing software/equipment" to our Planned Investments list and it debuted at 10%, climbing two percentage points last year.

- Fall 2022: 10%
- Fall 2023: 12%

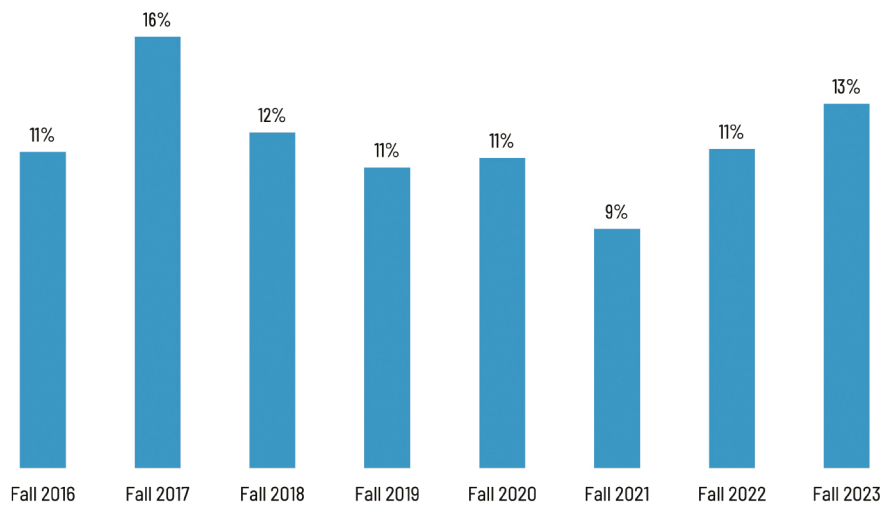

Figure 1: "Broadening fulfillment, shipping, mailing capabilities" as a sales opportunity. Source: WhatTheyThink Fall Business Outlook Survey.

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Duplo is the leader in innovative print finishing solutions with over 10,000 Slitter/Cutter/Creasers sold worldwide since 2000.

The opportunities in mailing are not necessarily technological, but being able to navigate often byzantine postal regulations and rates. If you become enough of a postal authority that you can get the best possible postage rate for clients, that is a very powerful added value.

Some print businesses have also become experts in the USPS's Every Door Direct Mail (EDDM), a way of targeting specific addresses and ZIP codes. It is a vastly underused but very powerful service for marketers. (We have also seen case studies whereby marketers have used the USPS's Informed Delivery as a marketing tool, but it has not taken the industry by storm.) Says the USPS:

"If you're having a sale, opening a new location, or offering coupons, EDDM can help you send postcards, menus, and flyers to the right customers. Use the EDDM Online Tool to map ZIP Code(s) and neighborhoods—even filter by age, income, or household size using U.S. Census data."

AND NOW FOR SOMETHING COMPLETELY DIFFERENT

If you are creating materials intended to be mailed, what's important is standing out from whatever else may be in recipients' mailboxes. Certainly print mail is a better way to get attention than email, which we are constantly barraged by and is so easily deleted sight unseen. Print can still catch the eye if done right—and that can involve finishing techniques.

Which brings us to the fact that there are times when a survey is highly disappointing. Case in point: embellishments. There are so many opportunities for printers and marketers to use embellishments—be they digital or not—to create higher-value print products. We are really keen on embellishments, and as our joint *2023 Specialty Digital Ink and Toner Embellishment Study*[1] with Taktiful found, companies that have invested in specialty toner capabilities (a subset of the overall embellishment market) are reaping the rewards. And yet, in our own surveys, we get very little interest in these technologies (see Figure 2). "Adding digital enhancement technologies" as a business opportunity has only ever been as high as 7% (back in 2018), peaked again at 6% in 2022, but dropped down to 3%. If I were ever inclined to use emoji, a sad face emoji would be appropriate here.

One potential roadblock to greater interest in the technology is that, very often, the print samples that customers see—at trade shows, etc.—are just "too good." That is, they are elaborately designed and produced high-end items and many printers just find them too exotic for more prosaic print jobs. And yet that doesn't need to be the case. The trick—for

1 https://www.taktiful.com/specialtyinkstudy

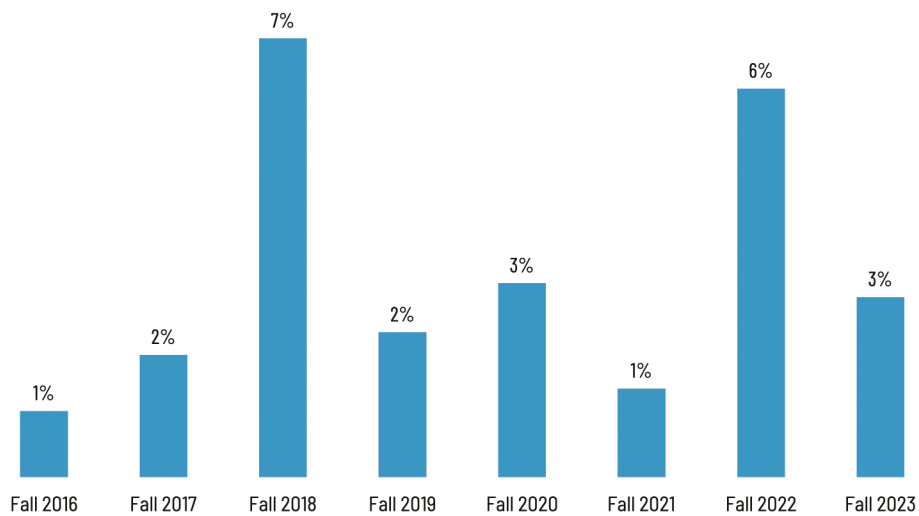

Figure 2: "Adding 'digital enhancement' finishing technologies (like Scodix, Highcon, MGI)" as a sales opportunity. Source: WhatTheyThink Fall Business Outlook Survey.



vendors of this equipment—may be to "dumb down" some of the print samples so that printers can see how they can be applied to something not quite as high-end as BMW or Rolex marketing brochures or the like.

(By the way, we just realized, much to our chagrin, that we never added "'digital enhancement' finishing technologies" to our Planned Investments. That is an oversight we shall rectify this fall. Add another sad face emoji here.)

IN AT THE FINISH

As far as finishing in general is concerned, "broadening binding and finishing services" has always been a modest business opportunity, although dropped off after 2018. (see Figure 3).

Which is interesting, as binding/finishing equipment has been a perennial top planned investment (see Figure 4).

So the sense one gets is not that they are adding binding/finishing, but adding capacity or upgrading to new equipment to take advantage of new automation features, or to run in- or near-line with a digital press. But don't discount the fact that planned investment in binding and finishing for offset (or other analog) production has been on the rise.

Once upon a time, companies would outsource binding/finishing to a trade bindery, but today's turnaround times preclude outsourcing most jobs.

Binding and finishing equipment has become ever more sophisticated, with automation becoming *de rigueur* as the challenge remains finding bindery employees.

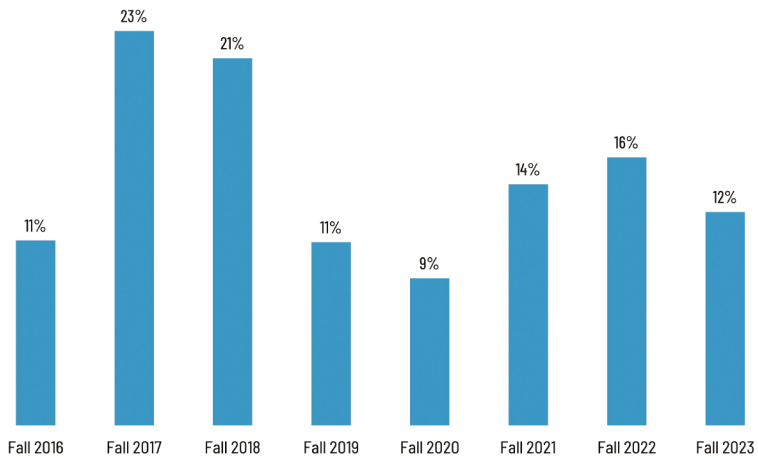

Figure 3: "Broadening bindery/finishing equipment/services" as a sales opportunity. Source: WhatTheyThink Fall Business Outlook Survey.

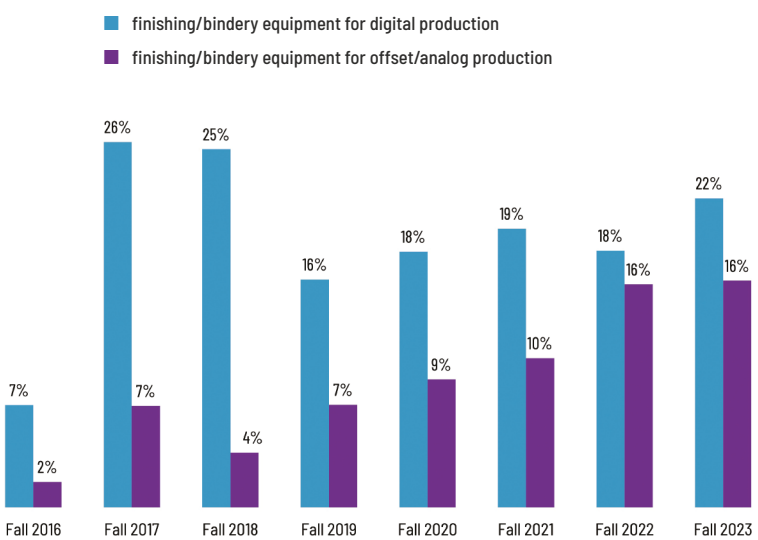

Figure 4: "Bindery/finishing equipment" as a planned investment. Source: WhatTheyThink Fall Business Outlook Survey.



The Pioneering Journey of Hudson Printing into Digital Embellishment

BY PAT MCGREW, MCGREWGROUP, INC.

Paul Hudson is a well-known figure in the world of printing and design. He is the owner of Hudson Printing, a company based in Salt Lake City. The company has a long and fascinating history that dates to 1909 when it was known as Stevens & Wallis, a book producer. In 1972, Paul's father, Blaine, took over the business and introduced the first web offset press, which expanded its operations. Later, Paul's brother Mark took over the company and added more web offset capacity to increase its productivity. On his retirement, Mark sold the company to Paul in 2012. Since then, Paul has been running the business, and he has added more digital print capacity and expanded finishing options to cater to their growing clientele. Hudson Printing is known for its excellence and innovative approach to printing and design.

With a reputation for excellence and a dedication to staying ahead of the curve, Hudson Printing uses the tagline ***Reinvent Print!*** They have become synonymous with quality and creativity. Under Paul's leadership, the company embarked on a transformative journey, expanding its digital capacity with HP Indigos and two Landa S10P Nanographic sheetfed inkjet presses to augment the web offset capacity and expand options for its clients. It would have been easy to stop there, but print brings significant opportunities, and Hudson keeps its finger on the pulse of what technology can bring to the table while also paying attention to the growing requirement for sustainability in the print industry.

The most recent addition to the Hudson production floor brings the power of embellishment to client work. Its new Scodix Ultra 6000 Digital Enhancement Press, powered by Scodix High Definition technology, opens the door to new opportunities.

A VISIONARY APPROACH

Paul admits taking considerable risks while expanding his company but has changed his approach. Now, he analyzes innovative technology with a more calculated perspective, researching the market to identify gaps and opportunities that he can capitalize on. He also pays attention to how to wrap the marketing story around the core technology capabilities. The company magazine is called ***Milkshake***, based on the famous Harvard Business School study that called attention to the remarkable number of milkshakes sold before 8:30 AM. It turned out that the buyers were looking for something interesting that would last for their entire journey and fit in their cupholder. It was not about the taste or viscosity; it was about convenience! The magazine's goal is to uncover the stories that will make the reality and convenience of print come to life.

Since 2022, Hudson has been reinventing its approach to color by unveiling ***SPARK***, weaving the story of four-color and seven-color printing into a compelling narrative. Hudson added to their thought leadership initiatives with ***LOOP***, its sustainability initiative. *LOOP* guides how they approach raw materials, equipment, and waste, earning them the distinction of being North America's first certified carbon-balanced printer. The newest program is ***TOPO***, designed to promote various embellishment products. The program takes inspiration from topographic maps to create contours and raised layers.

THE ROAD LESS TRAVELED

It would be easy for an experienced analog and digital printer to follow the crowd and invest in the most popular machines, but through his research, he discovered the Landa technology. The B1, sheetfed inkjet solution allowed him to expand his offset-quality digital print offering, adding color and leveraging a broader color gamut for his customers. His initial investment led to acquiring a second Landa and set the stage to dive into enhancing the core physical characteristics of print through digital embellishment. Enter the Scodix 6000 High Definition press.

With the investment in the Scodix, Hudson Printing embraced innovation and championed sustainability in the printing process. This decision was not made lightly; it culminated in years of strategic planning and a deep vision for the industry's future.





DIGITAL EMBELLISHMENT AS A STRATEGIC DIFFERENTIATOR

The adoption of Scodix 6000 is a game-changer, enabling vibrant, textured prints that add a new dimension to traditional printing methods. The many variations of shine and texture bring the vision to life, not just keeping pace with industry trends but setting them. With the Scodix, they have something unique that differentiates them in the competitive printing market.

Digital embellishment allows clients to turn ordinary print projects into extraordinary ones. Hudson's embellishment offering is still new, but it is clear that there are clients who see how embellished print allows them to stand out in a crowded market. They have the means to help designers and brands bring creative visions to life—sustainably. The new capabilities have opened new markets and opportunities, from short-run, highly embellished digital folding cartons to exploring the potential in wall art and beyond.

As the printing industry becomes increasingly digitized, there is a growing demand for personalized and unique print products. Digital embellishment is a powerful tool for printers to differentiate themselves and offer added value to their clients. Hudson Printing's implementation of the Scodix 6000 SHD has allowed them to meet the demand and position themselves as innovative and visionary leaders in the printing industry.

ANNOUNCEMENTS WITH VARIABLE EMBELLISHMENT

Weddings, births, bar mitzvahs, graduations and celebratory events of every type deserve announcements that are personalized, customized, and distinctive. From Save the Date cards to holiday and birthday greeting cards embellishment options change how recipients react. Hudson is taking the option to the logical next step with variable, digital embellishment using the Scodix.

Greeting-card-of-one, announcement-of-one and almost any other printed communication can be lifted with foiled and varnished personalization. Imagine the next announcement card you send having every recipient's name called out in foil or other effects. You will get their attention, and they will keep it forever!

The team at Hudson introduced more than 50 designers to the options at their first Elevation event, and the personalized foiling was something every designer took pictures of and grabbed samples of to take home.

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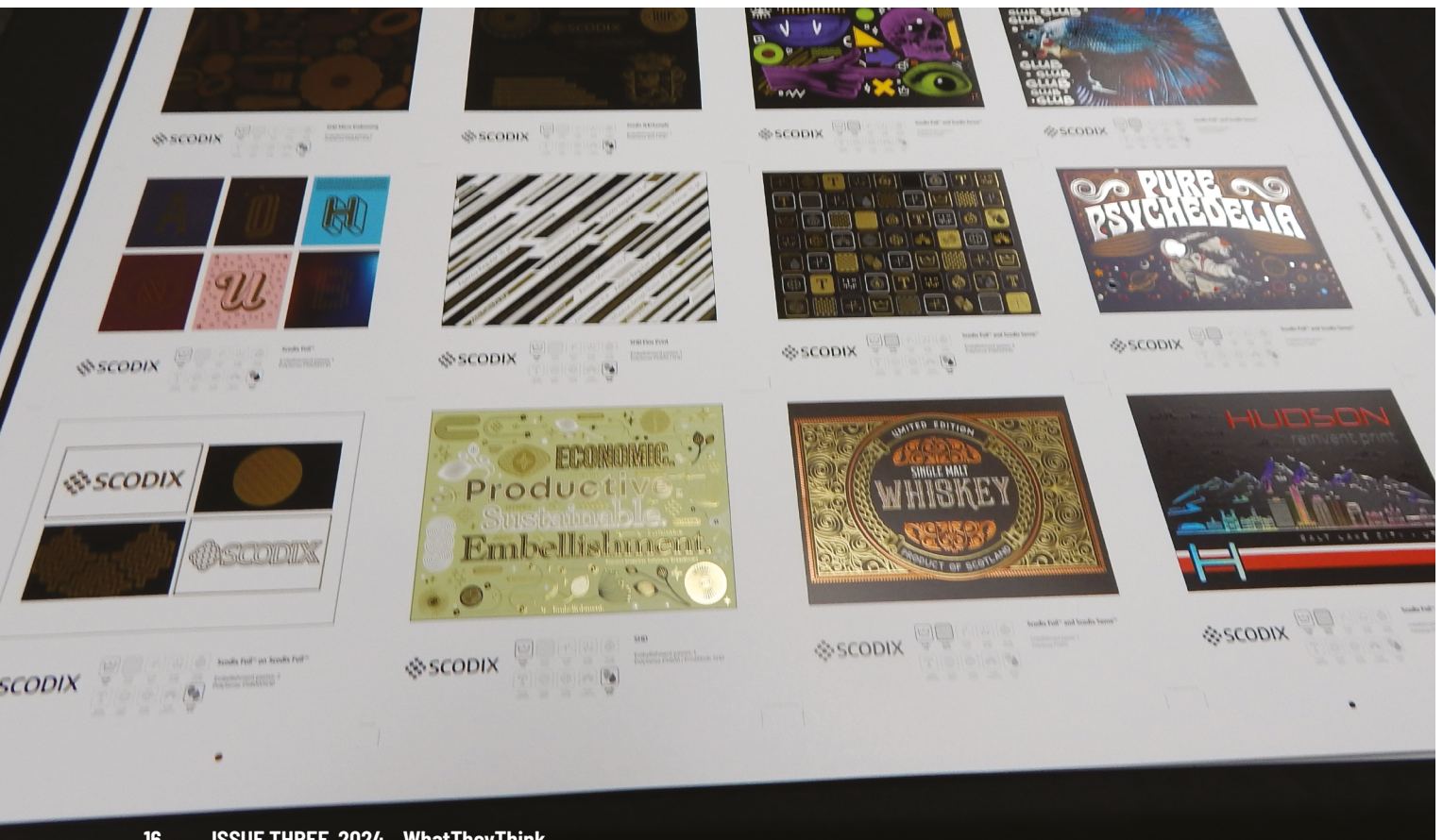
LEADING WITH SUSTAINABILITY

We live in an environmentally conscious world. Sustainability is not just a buzzword but a business imperative. Hudson's decision to integrate the Scodix 6000 into the sales and marketing story, as well as the workflow, was also influenced by its sustainability benefits. The Scodix process is more environmentally friendly than traditional hot foil, cold foil and other embellishment methods, aligning with Hudson Printing's commitment to reducing its ecological footprint. Its commitment to sustainability has allowed it to challenge the perception that print is a wasteful process and demonstrate that printing can be done in an eco-friendly manner.

By investing in digital embellishment technology, Hudson Printing has reduced its reliance on traditional embellishment methods, which often involve harmful chemicals and waste. Its sustainability efforts have not gone unnoticed. The commitment to sustainability has become a key selling point for their clients. More businesses are looking to work with environmentally conscious partners, and Hudson Printing's investment in digital embellishment has allowed them to meet this demand while differentiating themselves in the market.

By introducing digital embellishment to the community of designers, print buyers, and brands they serve, it has become a leader in innovation. Now Hudson is a sought-after partner for both its printing expertise and ability to bring creative visions to life sustainably. With new markets opening, opportunities keep coming, from short-run, highly embellished digitally printed folding cartons to exploring the potential in wall art and beyond. The investment in digital embellishment has allowed the team at Hudson to stay ahead of the curve and anticipate changing market demands.

As the printing industry continues to evolve, digital embellishment will become an increasingly valuable tool for printers looking to differentiate themselves and offer added value to their clients. Hudson Printing's journey with the integration of the Scodix 6000 SHD is a testament to the power of visionary leadership and strategic innovation. By enhancing the physical characteristics of print through digital embellishment, it has set a new standard in the industry. This journey, fueled by a commitment to sustainability and technological advancement, has redefined what is possible in printing and paved the way for future innovations in the field.

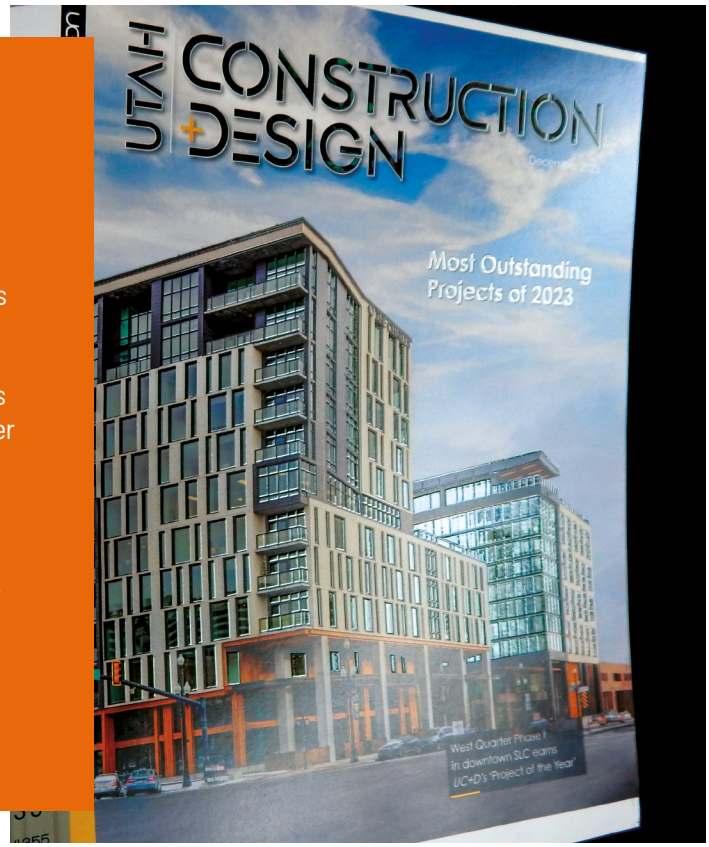


TAKING AWARDS TO NEW HEIGHTS

Printers serve many industries. Some of them are considered colorful and creative, while others have a reputation for being practical.

The construction industry is often synonymous with the combination of manufacturing processes and practical implementation. In Salt Lake City, Hudson produces a magazine for the local construction industry. This year the publisher was introduced to the option for embellishing the cover for their annual awards issue—and went for it!

The cover featured an award-winning building with a lot of windows and detail. The Hudson team created an embellished effect that added clear varnish to each window and called out other architectural elements with foil to make the building shine. Using the embellishment changed the annual awards magazine into a keepsake that will sit on desks for years to come.



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Introducing New SaaS Solutions for Digital Embellishments by the Experts at Taktiful.

taktiful
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Paul Hudson's approach is a valuable resource for printers who want to stay ahead of the curve by leveraging technology to drive sustainable growth and create differentiation. This journey is a compelling example of how embracing innovation can lead to new opportunities and success in the dynamic world of printing. Hudson Printing's investment in digital embellishment technology has allowed them to differentiate themselves in a crowded market and position themselves as leaders in innovation within the printing industry. By enhancing the physical characteristics of print through digital embellishment, Hudson Printing has set a new standard in the industry. Their commitment to sustainability has also allowed them to meet growing demand for environmentally conscious partners. Hudson Printing's journey is a compelling example of how embracing innovation can lead to new opportunities and success in the dynamic world of printing.

EMBELLISHMENT FOR LUXURY

Not long after the Scodix 6000 SHD arrived at the shop in Salt Lake City, a regular customer was preparing their next magazine edition. As a high-end, luxury brand, the work was always beautifully designed to evoke elegance and attention to detail. This time the design file arrived with a distinctive monochromatic cover image with the brand called out in large type down the right edge.

One look at the design gave Paul the idea to show what could be done with a bit of shine or other embellishment. He took the beautiful black and white cover and worked with Scodix to create a few variations to show the client. Silver, cast and cure and gold options were the luxury upgrades. He wanted them to consider the embellishment for future editions, but they surprised him by placing the order for the upgraded covers—90,000 of them.

Always up to the challenge, the Hudson team worked with the Scodix team to get the covers into production only two weeks after the machine was installed. The magazines were delivered, the customer was happy and the seed was planted for future projects.



Plockmatic Group

50 YEAR ANNIVERSARY

EST. 1974



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The possibilities are endless



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28 May - 7 Jun 2024

drupa:
Themes & Highlights

BY DAVID ZWANG

drupa 2024

May 28 – June 7, 2024
Düsseldorf, Germany
www.drupa.com



Since 1951, drupa, occurring every three to five years at the Messe Düsseldorf in Düsseldorf, Germany, has always been considered the bellwether of the graphic arts industry's development and future. This year is unique since the pandemic broke the regular rhythm so there is a lot of catching up to do. This makes it especially unique because the market requirements and technology changes during this period have increased their competition beyond the norm.

In anticipation of the drupa event, there is usually a "pre-drupa" media event. This has been the place for a sampling of the exhibitors to lay out what they see as their future direction and even pre-announce some of their latest technologies. This year, the event was held in March, two months before the official opening of drupa 2024. While there has always been an interest in assigning an identifying tagline that represents the highlight for each of the drupa events, this year we seem to have at least three. These are: digitalization, intelligent process automation and sustainability.



DIGITALIZATION

This is a term that seems to have been taken in many directions in search of marketing differentiation and as such can be a bit misleading. Oxford dictionary defines it as "adaptation of a system, process, etc. to be operated with the use of computers and the internet." This should not be confused, but often is, with digitization which is the process of converting information into a digital (i.e., computer-readable) format, although digitization is really a precursor to digitalization.

INTELLIGENT PROCESS AUTOMATION

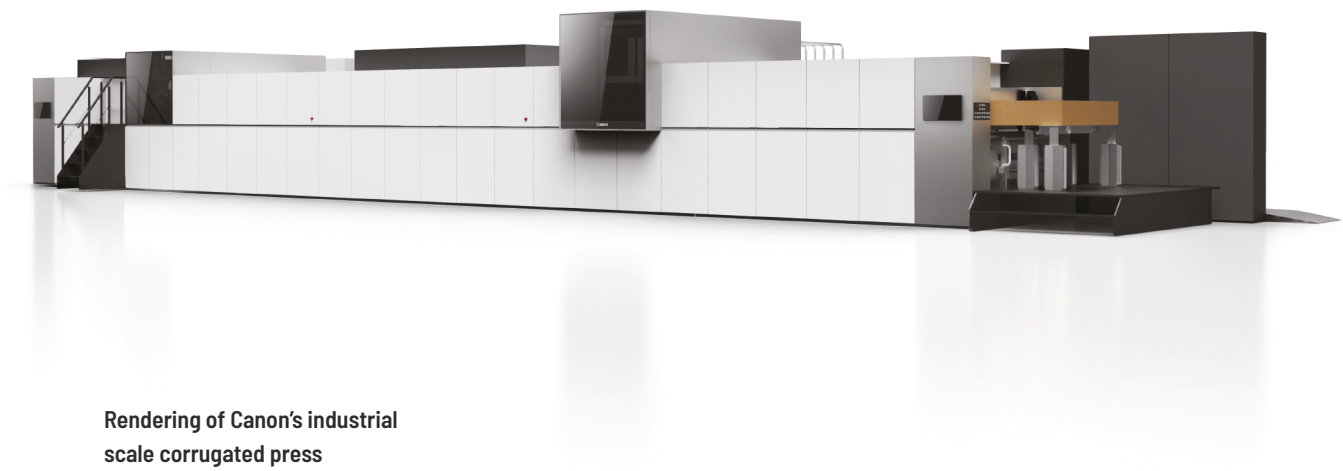
Intelligent Process Automation is the key to a connected supply chain and is supported by machine learning and powered by advanced artificial intelligence (AI). The goal is to mimic human inputs in real time by incorporating Robotic Process Automation (RPA), reasoning, problem-solving and natural language processing.

SUSTAINABILITY

The most often quoted definition comes from the UN World Commission on Environment and Development: "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." In print manufacturing, sustainable practices can include many social behaviors, but when we speak of products and manufacturing processes we tend to look more specifically at the environmental effects.

You can expect to see some, if not all of these themes in the technologies and offerings at drupa. The following are just a small sampling of what will be shown.





Rendering of Canon's industrial scale corrugated press

BOBST

In addition to new press and converting solutions, Bobst Connect is the cornerstone that brings everything together for the corrugated board, flexible packaging, folding carton and label production industries. Bobst Connect is a cloud-based digital platform designed to ensure an efficient data flow between physical and digital world with an automated and digitalized production flow. In line with that, Bobst announced the launch of two major features for Bobst Connect. The first is Job Recipe which enables seamless integration of Bobst machines in production and design workflows, bi-directional job and recipe data synchronization for fast setup and increased productivity. The second feature is Energy Monitoring, enabling customers to measure their energy consumption and cost in real time, driving efficiency improvement and cost savings in the corrugated market to respond to the growing demand from e-commerce to sophisticated type of packaging to be produced in a more automated and sustainable manner.

CANON

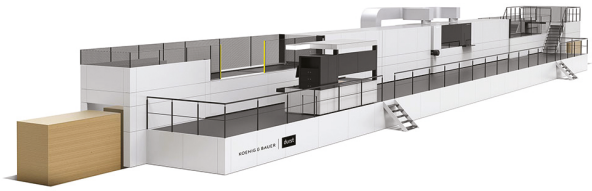
The ProStream 2000 series is the latest addition to Canon's continuous-feed inkjet portfolio. There are two models, the ProStream 2080 and the ProStream 2133, offering two speed versions: 80 m/min. and 133 m/min., and a maximum web width of 558 mm. The Pro Stream 2000 series is based on 1200 dpi fields for electric drop-on-demand heads and uses the Canon Color Grip smart paper conditioning liquid. It requires 29% lower power supply than its predecessor and produces 6% lower exhaust volumes and heat emissions. The flagship of ProStream 3000 series continues with the new ProStream 3160, operating at 160 m/min. It will use the same ink that will launch with the ProStream 2000. In their EP line, they are also extending the ColorStream 8000 with the ColorStream 8200, offering 200 m/min. productivity.

Wide-format introductions will include models from the Image Pro, the Plot Wave, Color Wave, Colorado and Arizona series. They will be introducing the Arizona 2300 series with Flex Flow technology. The new Flex Flow vacuum table is an enhanced media handling system that helps operators handle challenging substrates such as heavy media, delicate media or odd-shaped media. The Arizona series is also upgraded with Flex Flow technology which will have its European debut at drupa. They will also showcase corrugated board production with the Arizona 2380 XT.

Canon also announced that are fully engaged in bringing a line of packaging presses to market. At drupa, they will enter the corrugated market with a dedicated product. Canon will showcase the concept of an industrial scale corrugated press. It is built on an architecture that includes a single-pass sheetfed transport with four to seven colors using water-based inks. It boasts a productivity level of 8,000 sq.m/hr. and a print width of 1.7m. They are aiming for installations of the first corrugated press mid 2026.

DURST

They will be launching a new hybrid press which is a combination of a dual servo-cylinder-based flexo technology from Omet and Durst RCI digital print engine. This will bring the operator simplicity, ease of use, minimal setup waste and minimal setup times.



Durst announced that their front and backend analytic, AI solutions like Hawkeye, are now implemented in every printer, and more than a thousand customers are running with those software solutions successfully. Durst has made it a focus to partner with others to get to market faster and increase product advantages. Omet is a great example, but so is their partnership with Koenig & Bauer which has produced the VariJET 106, the CorruJET 170 and the Delta SPC 130.

While there was a lot of discussion about packaging, Durst does graphics, packaging, ceramics and more. At drupa, Durst will be showing solutions for technical ceramics, their silicon carbide printer for the first time. Applications include automotive, aerospace and beyond.

ESKO

Esko announced the new Esko cloud platform. Over the last few years, the technology has drastically evolved. Cloud technologies and machine learning are now fully mature, and that's something that they can really leverage to accelerate innovation and to bring to their customers. First, they are connecting all their existing products, to ensure that they are preserving the investment of the customers using the product. That means connecting their desktop products to the cloud. They are also adding new cloud-based features on top of it. By connecting all of their collaboration and automation products like Automation Engine and Web Center, Esko is extending their scope of automation and collaboration. This includes Esko's software and hardware products like CDI and XPS. By connecting data and user management, they are able to close the loop and obtain full end-to-end automation.

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FUJIFILM

Since the Fuji/Xerox relationship dissolved, Fujifilm has been running and developing faster. If their booth at PRINTING United was any indication (and considering they have one of the larger booths), Fujifilm will keep you busy at drupa. Their Revoria line of toner presses can be found not only with their branding, but also with that of others. At drupa, they will be showing their Revoria Press GC12500, the only B2 toner press on the market, for the first time in Europe. They will also be showing their FP790 aqueous-based flexible packaging press. They will also be showing the Jet Press 1160CFG, their high-speed continuous-feed inkjet printer for the first time globally.

HEIDELBERG

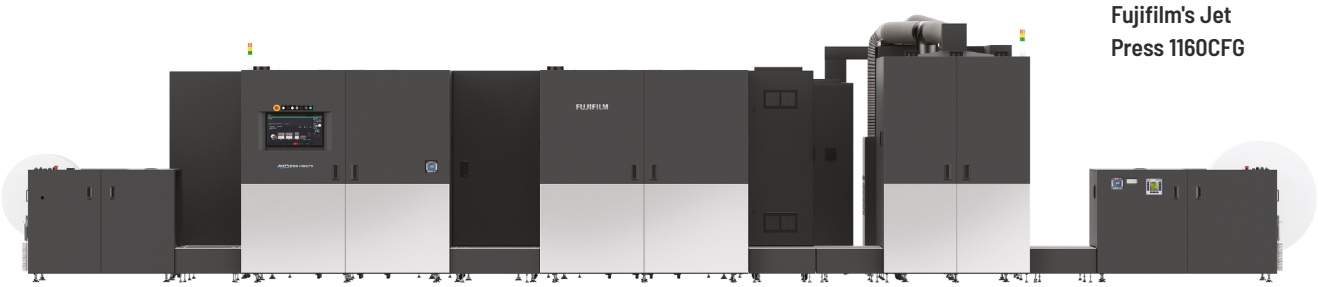
At a very high level, Heidelberg has a dual track strategy. One track is their core business of printing, and that will remain, since this is what Heidelberg stands for. However, they continue to explore new and adjacent business areas. The first one is their charging technology for electric vehicles. That's not a prime focus today, but it is an area is also driven by megatrends, which has a substantial market size and fits well to their capabilities. They reinforced their ambition to continue to be a market shaper in the printing industry. There's a lot of change in the printing market, and where there is change, there are also opportunities. Two of those opportunities are the growing packaging segment and the growing digital printing segment. Both segments are highly relevant for Heidelberg.

There are many drivers of competitiveness, most importantly the cost per sheet. Print shops that focus on efficiency by improving their productivity helps them to get cost per printed sheet. From an equipment perspective, certainly the printing speed is most important, but it's not all about speed. It's also about the intelligent management of print jobs and the entire production process in the print shop. So print jobs need an end-to-end integration of their processes. The second area is the workforce and helping print shops develop their workforce.

Digitalization is an absolute prerequisite for greater efficiency in industrial print production. Heidelberg is developing solutions that integrate workflows end to end to optimize uptime and production efficiency. Heidelberg has been a pioneer in the industry when it comes to digitalization of their hardware with software solutions. For example, the machine they recently produced for WestRock is the longest sheetfed offset press that has ever been produced. It has a large number of printing and coating units and is suitable for handling a wide range of packaging applications with striking coating and metallic effects all done completely in line, double-sided and in a single pass.

HP

Productivity isn't only speed. HP has been working for the last three years on reliability, higher machine availability, wider versatility, advanced automation and operational simplicity. We have seen other manufacturers focus on these areas, because these are some of the elements that affect OEE. Marcus Weiss, general manager for EMEA for the HP industrial business, highlights their focus on "ease of use," because in a world where we have less labor, and perhaps not the expertise, presses that are easy to operate are key. For example, HP introduced PQ Maestro, an automatic calibration tool. This is an artificial intelligence quality and calibration tool initially created for the 120K and 18K, that is completely independent from the operator of the press. It's purely measuring the results against the target.



Fujifilm's Jet Press 1160CFG



Rendering of Highcon's Vulcan

To support the technology and their customers, HP believes in fully automated workflows that are driven by enhanced AI. These workflows are overseen by the humans, where in the end, brands, suppliers, resellers and stakeholders in the market are connected with each other. HP recently announced that they are now working closely together with Esko on solutions from the creative application through the shipping of the final package or product with a fully automated and integrated supply chain of their customers.

HP also announced that it is getting closer to a handover point from LEP to LEPX as seen in the V12. Moving from a common impression cylinder to inline allows the Indigo technology to drive increased speed and productivity. Expect to see some new LEPX application offerings at drupa.

HIGHCON

The Beam 3 is building on the experience of the existing Beam series that enables the user to deliver a 50% leap in productivity with higher quality. New hardware changes and algorithms reduces set up time and predictability. They have also decoupled the crease writing from the die cutter with the Highcon Beam Writer. Crease writing can happen as a parallel process rather than as a serial process, further shortening set up, freeing up production time to increase capacity by around 25% for an average carton customer. It also produces a 15% higher running speed. They have introduced new creasing drums in the DART system to further increase the crease in quality. To minimize the number of touches and reduce the dependence on skilled personnel, they have also partnered with Esko and Hybrid Software in addition to developing their own new software tools.

They also announced the Vulcan (development name), the first digital die cutting solution for the 1.4 x 1.7 m format of the corrugated industry. Vulcan is still under development, and expected to be an active product in their portfolio at drupa 2028.

KONICA MINOLTA

Konica Minolta will be showing end-to-end application solutions, including a new book solution with finishing by Plockmatic. Konica Minolta will be showing the Alpha Jet from their partner company MGI and announcing their first client. They will also premiere a new cut-sheet B2 press: the AccurioJet 60,000, a 6,000 sheets per hour B2+ UV inkjet press.

LANDA

Landa will be introducing the new Landa S11 and S11P models, including a new ink drying system that enables transfer of dry ink from the blanket to the media, at the higher speed of 11,200 sheets per hour. Unlike a majority of inkjet presses, the Landa technology advantage is that it can run a wide variety of media, including paper, plastics and more. The new Landa S11 and S11P can be customized with a choice of four or seven colors, a continuous printing capability and an optional inline coating unit. Existing customers with the IR drying have an opportunity to purchase the 11K Module elevating productivity to 11,200 SPH, and/or the PrintAI module.

drupa

WhatTheyThink has been selected as the exclusive media partner and drupa daily publisher for 2024. Look for digital copies of the drupa daily, along with the latest news about drupa 2024 at whattheythink.com/drupa.

In addition to the drupa daily news, you will find video interviews with drupa attendees, including printers, exhibitors, analysts, speakers and others, captured live in the WhatTheyThink studio at drupa, plus walk-through tours and videos with exhibitors directly from their booths on the show floor. Scan the QR code to get started!

The Evolution of Digital Embellishment: A Glimpse into the Latest Innovations

BY KEVIN ABERGEL



As this issue hits subscribers' mailboxes, drupa 2024 is afoot, which promises to be a groundbreaking event for the printing industry, particularly in the realm of sheetfed digital embellishment technology. As brands continuously seek innovative ways to differentiate their products in a crowded market, the significance of digital embellishment has never been more pronounced. This year's drupa showcases advancements from established players and introduces new entrants like Harris & Bruno and Kama, alongside updates from veterans such as MGI on the Konica Minolta stand and Scodix, signaling a transformative phase in digital printing and finishing.

This article provides an overview of what will be on display in Düsseldorf and what will be hitting the market post-show.

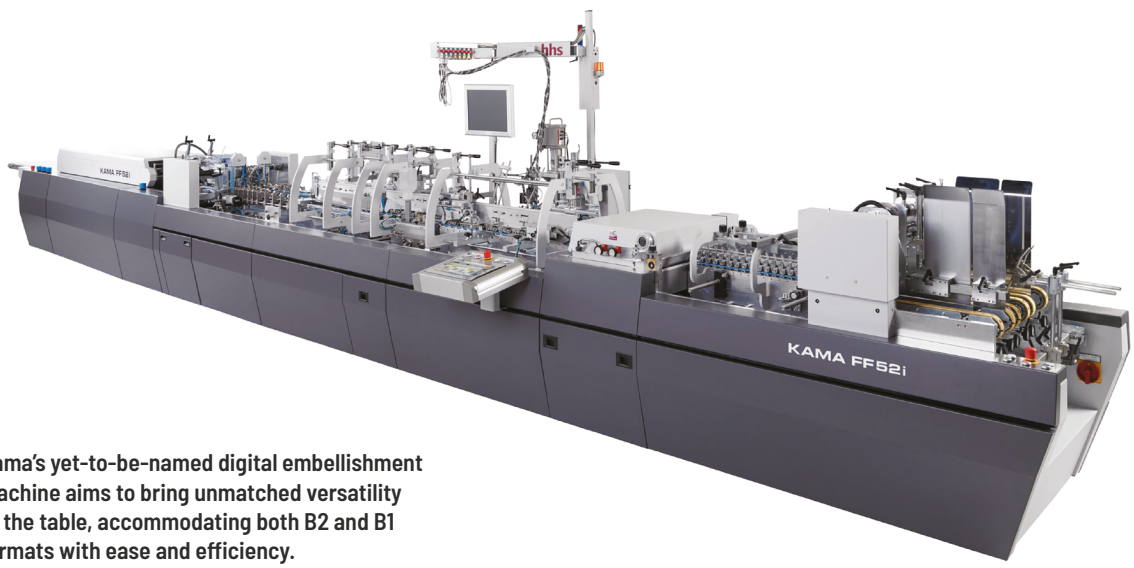


HARRIS & BRUNO: PIONEERING WITH PRECISION

Harris & Bruno is traditionally known for their high-quality flood coating anilox technology. This year, they entered digital embellishment with a groundbreaking approach. Their new technology marries their analog coating expertise with digital embellishment to address the industry's existing gaps. The ZRX model, set to operate in both B2 and B1 format versions, is designed to embellish directly onto uncoated media without the need for lamination, a significant leap as this has been the Achilles heel of the digital embellishment industry. This not only broadens the range of printable substrates but also opens new special effects that have not yet been seen in the industry.

KAMA: BLENDING TRADITION

Kama is making a bold move into digital embellishment, underlining its commitment to innovation and customer needs. Their approach is not about competing head-on with giants but rather offering a unique value proposition that complements their existing line. Kama's yet-to-be-named digital embellishment machine aims to bring unmatched versatility to the table, accommodating both B2 and B1 formats with ease and efficiency. This strategic move is designed to cater to the packaging sector's growing demands for flexibility and speed. Their experience on the traditional side of embellishments will shine on their new entry into the digital side of things.



Kama's yet-to-be-named digital embellishment machine aims to bring unmatched versatility to the table, accommodating both B2 and B1 formats with ease and efficiency.

THE KURZ GROUP: EXPANDING HORIZONS

The Kurz Group, traditionally known for its consumable products, has bloomed into equipment manufacturing with a focus on three core technologies: transfer on toner embellishment, inkjet on transfer and inkjet on substrate. Their approaches, including the Smart Liner for toner transfer and the Max Liner for inkjet embellishment, promise to open new avenues for creative design. Head of Digital Embellishments Michael Aumann hints that a sheetfed version of the inkjet on transfer product will be in Düsseldorf.

MGI: CONTINUING TO INNOVATE

MGI Digital Technology, known for their JETvarnish series, has consistently pushed the boundaries of digital finishing, offering capabilities ranging from tactile effects to foiling and holographic finishes. The company has forged ahead with advancements and potential new releases that will continue to shape the future of digital embellishment. MGI Executives have teased a new roll-to-roll embellishment solution called the JETvarnish 3D Web 400, a new digital die-cutting solution called the Octopus and an all-in-one B1 digital printing and embellishment press called the AlphaJet. Stay tuned.

SCODIX: ELEVATING DIGITAL EMBELLISHMENT

Scodix is renowned for its innovative solutions that enable printers to add value to printed materials through sensory effects and visual appeal. Their comprehensive lineup, from the B2 1000-5000 models, as well as their B1 6000 model, are designed to cater to various market needs and formats, and has made Scodix a go-to provider for those looking to elevate their print products. Scodix's latest offering is Smart High Definition (SHD), which allows users to get unheard of levels of details, such as font sizes as small as 5 or 6 points. As digital embellishment becomes increasingly crucial for differentiation in print, Scodix's latest offerings highlight their continued commitment to innovation.



The Future of Digital Embellishment

The introduction of new players and advancements in the embellishment market—at drupa and elsewhere—is significantly accelerating the mass adoption of digital embellishment technologies. Innovations from Harris & Bruno, Kama, MGI/Konica Minolta, the Kurz Group and Scodix exemplify the dynamic evolution of the industry. These developments not only promise to enrich the aesthetic and tactile qualities of printed materials but also aim at enhancing production efficiency. This trend towards broader, more versatile, and high-quality digital embellishment solutions suggests a promising future for the printing industry. While this article highlights key participants, it's important to acknowledge that there may be other notable contributors to this field not mentioned here, each playing a vital role in shaping the landscape of digital embellishment.

EXECUTIVE Q&A:

Konica Minolta's William Troxil

BY RICHARD ROMANO

This issue, we spoke with William Troxil, President of the Industrial Print and Production Print Business at Konica Minolta Business Solutions, about the company's finishing and embellishment offerings, the relationships they have with their customers, and how the industrial print business is the growth area for the industry.



William Troxil
President of the Industrial Print and Production Print Business at Konica Minolta Business Solutions



WhatTheyThink: Let's start with a little bit about Konica Minolta's product offerings in the finishing and embellishing space.

William Troxil: We invested in a French company named MGI. With the CPCs in the toner business dropping precipitously and the number of machines shrinking, our offering has been to differentiate ourselves and provide added value to print because basic black-and-white print commercial printers can't make any money anymore. We came up with a reasonable solution and a reasonable return on investment to create a market that had been highly centralized—embellishments in a few places on some high-end offset-type press technology—and are now redistributing the ability to embellish print from the $3 to $5 million printer all the way up to, say, Taylor Corporation, depending who and what they are. In our inkjet business, we now have 42% market share in B2 size inkjet. As a result, the likely candidates are for the high-end embellishments. And about 30% of our inkjet presses are now attached to an embellishment solution and headed north of that. It could be 40% and then 50%. And those are the printers that are going to have a competitive advantage. Because customer buying habits have changed and design has changed.



So the added value of that print increases—such as mail responses from 2% and 3% up to over 10%. From credit cards from banks, to casino marketing, to all kinds of vertical marketing—their response rates are through the roof 5X because of embellishment. And we've been able to come up with an affordable solution—and on the toner side as well—where the $3 to $5 million commercial printer can now afford a reasonable return on investment of less than 24 months. We show them how to create the marketing and the business development activities to add value to print and keep the customers they've got as well as get new customers. And we're showing them how to build that business.

WTT: So what do you find are printer's biggest challenges in successfully adding these types of applications and capabilities?

WT: Well, I think one is their designers. The creative designers are used to developing their output around toner, and color toner, and black-and-white toner, and that's it. It's expertise that's needed from a design standpoint—from the design community or hiring people that have the design expertise to be more creative and come up with new and better ideas, as customer buying habits have changed. The other thing is that they have to have expert advice—so then we've got to be a trusted advisor. And that's why we're doing so well. 82% of the time when a customer calls us, they're looking for advice, not a service call on something like a copier. So we've got to be a trusted advisor and a safe decision for them to make. That's what we've built our organization around, so people have come our way. We have to give them that advice because labor markets are so tight that they can't develop those people overnight.

WTT: What does some of that advice consist of? What are some of the specific pieces of advice or things you're doing to help build that market?

WT: There are a lot of different substrates out there now. People aren't printing on bond paper or plain paper. They're printing on highly sophisticated substrates like films for backlit signs. If you get a piece of mail, the printed image of, say, a golf ball will feel like a golf ball. So we've got to help them with all that. And the substrates and the workflow and how to put it into the workflow of their plant are where we have to give them advice. We're not selling stuff into an office. So we help them with their workflow and ROI and give them the advice they need, and we have the remote diagnostics technology to keep them going remotely versus the old model of, "well, you got a copier and we hope you call for service all the time." It's a whole different business model. The other thing is, it's a business, not a product. We've been able to have built a business versus developed a distribution strategy. Customers trust us and we're giving them good advice. I always say selling copiers is kind of like, you've been going to your dentist for the last 10 or 20 years, but would you ever let him operate on your head? The answer's no. But if a guy comes to you that's operating on your head and he says, "I'm gonna pull out your teeth," you'd say yes. (Laughs.) That's the difference.

We have over 150 locations now and, forecasted, this is a growth engine for our company. So we're investing in this industrial print space and the key will be who can execute the best.

WTT: Getting back to customers, what do you see as effective ways for printers to market and promote these embellishment capabilities once they've got them up and running?

WT: We give them the key vertical markets. We've got a business development package that we implement after installation, and we're providing them with the expertise on what type of vertical markets are demanding high-end print, and we show them how to sell. We cite the fact that marketing response rates and things like that are all 5X or more and you can get 10%, 12%, and 15% return versus 5% and 6%. So we've got a business development package in which our people live with the installation for three to six months. We're on-site providing the expertise to help train their people. And that, therefore, becomes a safe decision for the printer—or whoever. It's also inplants. It's not just commercial printers, but universities, insurance companies, anyone that is protecting their brand. They value the brand so much they want to make sure that that brand is protected and is perfect, especially if there's a family name on it.

WTT: So it's a whole different decision-making process.

WT: Usually you're in front of the executives as owners of the companies that you're marketing to. So then you become very sticky. The strategy is, replacing your copier is easy. Replacing someone that's giving you trusted advice and helping you build your business isn't. So you've got a stable and profitable customer base. But we're partners. We're forming partnerships, not just taking sales orders.

WTT: Pulling back a little bit, what are some of the major challenges that your customers are wrestling with in general, not just in terms of finishing and embellishment, and how are you serving as advisors for those types of problems?

WT: They're all struggling with labor. And if we can show them that we can have one person run three presses and that's more of a person that's played video games before versus someone that can fix a press. So if we can give them the remote diagnostics that they need, then we're able to fit into their workflow and their fixed costs don't go up because they have to hire more people and they can't find them. So we take that tight labor market right out of the equation. It's no longer, oh, you have to hire someone who knows how to run this equipment. You have to hire someone from McDonald's to run this equipment. So we're taking the pressure off the shortage of labor.

WTT: Is there anything else you'd like to add?

WT: If you look at everybody's presentations to their boards, to their management teams, to their stakeholders, they're all racing to the industrial print segment. And the manufacturer who can execute the best will be the big winner going forward. Because we all know office printer/office copier business volumes are down. Our print volumes are down in production print with toner because there aren't a lot of black-and-white toner prints being made anymore. We know the trends, so we have to outrun them by developing this industrial print business as a business. That's the key thing that we've done to be successful and it's the fastest growing, highest margin business we have now.



KONICA MINOLTA



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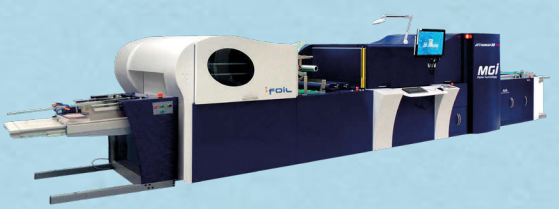

MG1 Jet Varnish 3D EVO

STEP INTO THE FUTURE OF PRINT WITH KONICA MINOLTA'S REVOLUTIONARY TECHNOLOGY

The print industry is evolving at pace. Competition amongst print businesses is high, and pressure on margins is greater than ever before. Consequently, the demand for versatility, creativity, and efficiency continues to grow. However, there's no one-size-fits-all solution or easy route to profitability.

At Konica Minolta, we're constantly rethinking print. In a new era for the industry – where stories and experiences are brought to life through colorful, creative designs and detailed textures – we want to build the future together with our customers. That's why our portfolio of hardware, software, and services has been designed to ignite opportunities – whatever and wherever they may be.

Whatever our customers' objectives, we'll work with them to drive dynamic change and Ignite Print Possibilities.

Take the innovative applications exhibited on the tip-on attached to this magazine, a testament to the depth and brilliance Konica Minolta technology brings to your prints. Produced by Worth Higgins & Associates on Konica Minolta's innovative UV inkjet AccurioJet KM-1 and embellished by Elite Print Finishing with their MGI Jetvarnish 3D EVO 75, this piece exemplifies the transformative power of our solutions.

With Konica Minolta, your prints transcend the ordinary and become extraordinary works of art. The MGI JETvarnish 3D EVO 75 takes this transformation to the next level, allowing you to add captivating spot-coating, highlight specific areas, or create tactile 3D effects that mesmerize your audience. Seamlessly integrated into your printing workflow, the MGI JETvarnish 3D EVO 75 unleashes the full potential of Konica Minolta's innovative solutions, empowering you to create prints that leave a lasting impression.

Elite Print Finishing harnesses the extraordinary power of the MGI JETvarnish 3D EVO 75 to achieve great success. With over 35 years of industry expertise, Elite Print Finishing is renowned for its customer-focused approach to print finishing services. With options like laminating, embossing, foil stamping, and more they have plenty of options to make customer projects stand out.

Here's what Steven Roberts, President of Elite Print Finishing, has to say about their experience:

"Integrating the JETvarnish 3D EVO 75 has increased the value we bring to our customers and opened up new avenues for business growth. With Konica Minolta's technology, we've unlocked a world of creative possibilities, delighting our clients with stunning tactile effects and unparalleled quality."

A true influencer in North Carolina for digital embellishment, with access to all kinds of technology, Elite Print Finishing continues to rely on Konica Minolta for its decorative print needs.

The AccurioJet KM-1 redefines print production for those seeking to meet evolving demands with agility. Packed with innovations like Konica Minolta's UV inkjet technology, traditional cut sheet stack feeding, and exceptional media handling, this powerhouse device delivers high-quality jobs on various substrates, cutting costs and expanding market reach.

Brian Losch, President and CEO of Worth Higgins & Associates, shares their perspective:

"Thanks to Konica Minolta's AccurioJet KM-1, we've elevated our print production at Worth Higgins & Associates to new heights. The versatility of this machine allows us to offer our customers a diverse range of applications, from high-quality commercial prints to personalized marketing materials, exceeding their expectations every time."

As one of Virginia's largest sheet-fed commercial printers, Worth Higgins & Associates brings over 50 years of experience to the forefront of print innovation. Continually pushing the boundaries with Konica Minolta technology, they deliver impeccable projects that exceed expectations for all their customers.

The good news is, by partnering with Konica Minolta, you'll be able to service new market segments, build stand-out creative pieces, and optimize workflow like never before.

It's time to bring your print possibilities to life.

Because when you see the potential for your business, there are no boundaries.



HOW TO CONQUER Trade Show Season

BY JOANNE GORE

The pandemic-induced pause in trade shows led to significant challenges for businesses in the print industry, including reduced new business, difficulties in establishing customer relationships and staying abreast of industry trends. According to Statista,[1] the B2B trade show market in the United States was forecast to reach US$11.8 billion in 2023, an increase of roughly 16% compared to the previous year. Due to the impact of the coronavirus outbreak, the industry saw a sharp decline to US$3.9 billion in 2020. Although it will keep growing in the next years, it is not forecast to recover to pre-pandemic levels until 2027.

The 2024 trade show calendar is packed with key events, most notably, Drupa 2024, which returns to Düsseldorf after eight long years. This year's lineup includes FESPA Global Print Expo in Amsterdam and Dscoop Edge Indy Conference—both of have already come and gone. In April, Montreal hosted the 42nd Gala Gutenberg, showcasing excellence in print, while summer and fall feature specialized events like LABELEXPO AMERICAS in Chicago, PRINTING United Expo in Las Vegas, Sign Expo Canada in Toronto, and the Xplor CCM Summit in Orlando, each offering unique opportunities for networking, learning, and industry advancements.

With the 2024 trade show season underway, it's crucial for professionals in the print industry to gear up for the array of opportunities that these events present, explore the latest innovations, shake hands, exchange business cards and connect with old (and new) friends. Navigating this landscape requires a blend of preparation, strategic engagement, and resilience.

Whether you're planning your first trade show ever—or simply the first in a while—sit back, get comfortable and get ready to conquer your next event.

The show floor opens in 5, 4, 3, 2, GO!

1 https://www.statista.com/statistics/865283/b2b-trade-show-market-value/.





THE ULTIMATE TRADE SHOW SURVIVAL CHECKLIST

Packed with essential tips, this checklist is your secret weapon for an easier, more productive trade show journey, no matter your level of experience.

1. Know where the bathrooms are on the trade show floor. Need I say more?
2. Have plenty of business cards on hand. Tip: keep a stash in your name badge holder for quick access to pristine cards.
3. Stay hydrated. Aim for 6–8 glasses of water. And yes, this is why tip #1 exists.
4. This means your lips too. Keep ChapStick/ lipstick on hand.
5. And your throat. Throw a pack of lozenges in your bag or pick them up at the airport.
6. Beer doesn't count (and you'll still need to know where the bathrooms are).
7. Wear comfortable shoes. If you must wear dress shoes or heels, throw on a pair of flip flops or sneakers when you're not "on duty" and give your feet a break.
8. Pack blister Band-Aids. See #7.
9. Get some fresh air. Take a few deep cleansing breaths. Count to 10. Do it again. Your brain will say thank you.
10. Fuel up on as many fresh fruits, nuts and veggies during the day as possible. Make a run to a local Walgreens or CVS. Many now have already cut up fruit and veggies bagged and ready to go.
11. Keep your breath fresh, your hands clean. Yup, this means mints and hand sanitizer.
12. Throw some deodorant and a comb/brush into your bag while you're at it. You might not get a chance to go back to your room and freshen up.
13. Have your phone charger (or a portable battery charger) available at all times. And pack a couple of AA batteries for your mouse. If you're traveling abroad, bring adapters.
14. Know where you're staying! Grab a business card from the front desk. Put the address in your phone. Take a picture of the front entrance. Write it on your hand. It doesn't matter how you do it, just make sure you know where your hotel (or Airbnb) is!
15. Last but not least… Say thank you. A lot of people have worked tirelessly behind the scenes to make the event a success. When you see the show staff running around, take a minute to thank them.

THE POWER OF AN EVENT PLAN

Facing FOMO? You're not alone. Whether it's your first trade show or your 50th, everyone attends for their own reasons. However simple or complex, an event plan lets booth staff, management, sales, marketing and finance know what's happening, when and where it's happening and how it's happening.

Creating an event plan that guides your strategy and ensures your efforts are focused and fruitful starts by answering two questions:

1. **Why are you there?**

When asked this question, most people will either answer that they're an Exhibitor/Vendor (they're selling) or a Delegate/Consumer (they're buying).

Think beyond those hats. Who are you there to meet/learn from/sell to/buy from?

Are you media? A presenter? Are you there to keep up with certifications? Do you want to network? Are you looking for a job?

Yes, it's easy to lump yourself into someone who's either buying or selling. But if you dig a bit deeper, and become as specific as possible, then your chances for success grow exponentially—along with your ROI.

Which brings us to question number 2.

2. **How will you measure success?**

Whether you're the one responsible for managing the budget, logistics and marketing—or going to check out the latest industry innovations—the question always comes back to ROI: How will you justify the expense and decide if it was a "good show"?

Seasoned marketers will tell you the most common B2B trade show measure of success is the number of leads generated. Whether it's based on the number of scanned badges, the number of quality conversations, the value of a deal, or some other criteria, how you identify, measure and qualify a lead is critical—and why everyone in sales, marketing and business development need to be in alignment. To set your show lead targets, simply calculate the Number of Exhibit Hours (fixed) x Number of Exhibit Staff (fixed) x Interactions Per Hour (variable).

But what if you're in the job market? In this case, you are the product, and your "leads" become all the people who will help you find—and land—your next job. If you're attending purely for the educational content, you can measure success by the number of conversations you have with presenters, fellow delegates, or vendors. A presenter? Attendee feedback is your likely KPI.



SET THE STAGE FOR TRADE SHOW SUCCESS

Success is not just about showing up; it's about showing up with purpose and a plan. By defining SMART (Specific, Measurable, Attainable, Relevant, Timely) goals and aligning them with your business strategy, you're playing to win. Let's map out a strategy that moves you beyond mere attendance to making meaningful impacts, outlining actionable steps for before, during, and after the event to ensure your team's performance is not just good, but stellar.

- **Get the word out that you're attending**—Use a CTA (call-to-action) everywhere. Update your social media profiles, and email signature (on ALL your devices). Join the conversations, attend meetups, zooms, and chat groups and include/follow the event's hashtag across your social platforms. Create a unique calendar (I like Calendly) to simplify the meeting process. If the event has an app—download and use it.
- **Make an impression**—Think about your business card and the impression it leaves as you hand it out. In addition to how to get in touch with you, it should remind people why they have your card in the first place. Your business card can include key messages, touchable textures and embellishments, as well as calls-to-action and/or keywords that nudge the connection farther. Design your card for your audience, not yourself. Make it interactive.

- **Capture and manage leads**—Your CRM is only as good as the data that's in it. If you talked to a prospect, handed out a business card, attended a kick-ass session, scheduled a meeting or had an impromptu conversation—capture it and update your CRM as soon as possible. Collecting leads with a lead scanner? Most will allow you to add notes on the fly, while the conversations and action items are fresh in your mind. Take a picture of their badge, use your phone's voice recorder to take notes, use a calendar tool, an Excel spreadsheet or good old-fashioned pen and paper to keep track on the go.
- **Follow up**—Post-event follow-up is critical. Not just for the "hot" leads, but the tire-kickers too—if nurtured just right—they could end up being the very reason you go back to the event. I recall working for a software company—back when business cards and lead forms were collected in fishbowls. After each event they sat in boxes, untouched—until it was time to pack up for the next one. Learn how to recognize, differentiate and allocate leads that are sales qualified vs. marketing qualified. With a strategy in place, you can deliver relevant, engaging content aligned to your audience and event goals.
- **Measure your results**—When it comes time to answer whether or not it was a "good show," remember why you went in the first place and how you planned to measure success. Capture what went well and what could have gone better in a summary report. Add any ideas, recommendations and insights. As you execute your follow-up strategy, commit to re-measuring the results quarterly. Then you can decide if it's worth it.

Trade show success hinges on meticulous preparation, dynamic engagement and the flexibility to adapt to evolving landscapes. Embrace the checklist to streamline your experience, leverage the power of a well-crafted event plan to meet specific goals and don't forget the human element—acknowledging the effort of those behind the scenes. With these strategies, you're set to do more than survive, but to thrive from the rich opportunities that trade shows offer. Let's make this season your most rewarding yet.

ABOUT JOANNE GORE

President of Joanne Gore Communications and passionate about print, Joanne is a marketing powerhouse with over 25 years of experience in building global B2B marketing strategies for print, software, hardware, and manufacturing companies—and the brands they serve.

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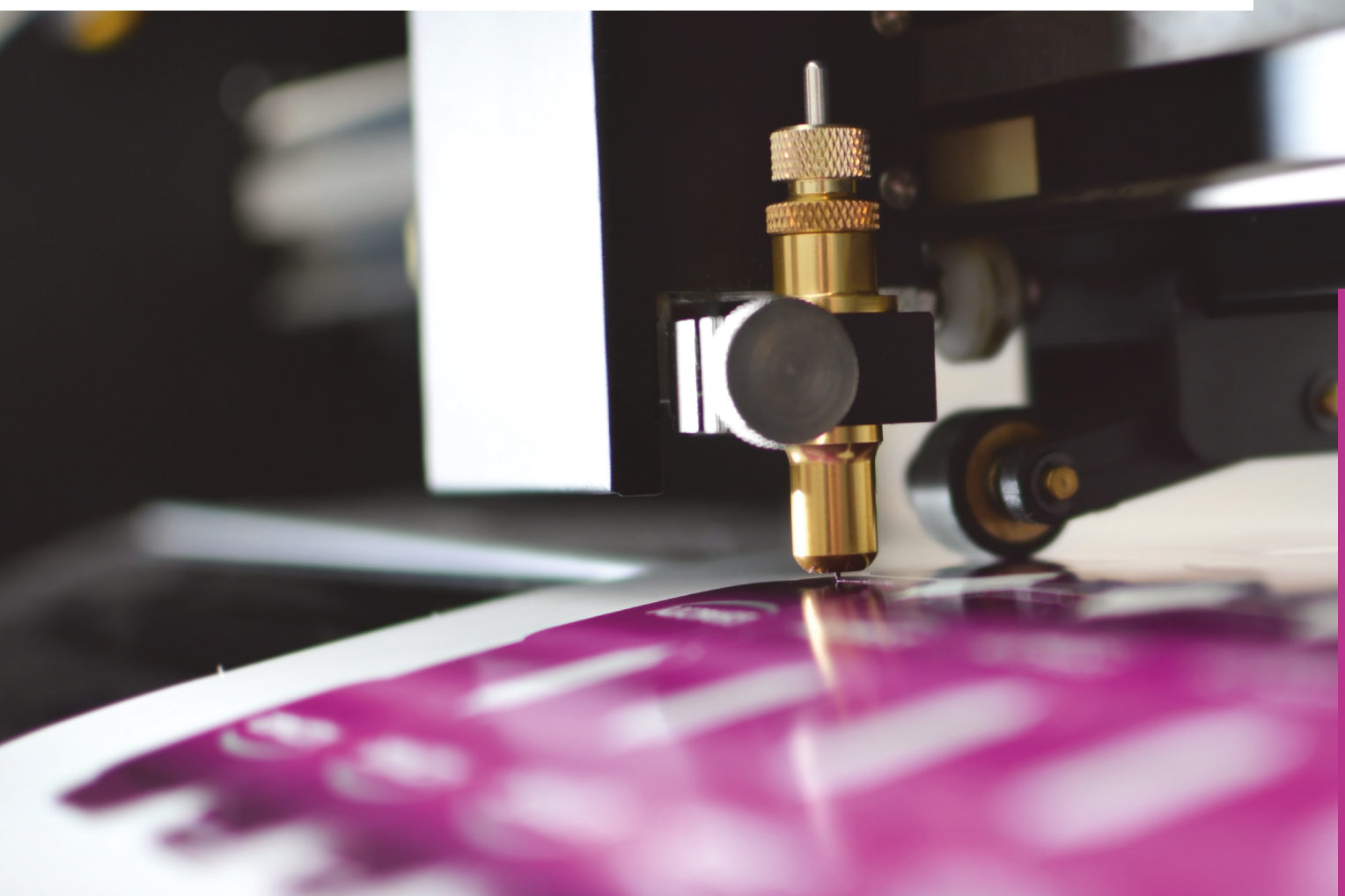
TABLE TALK:

New Options for Display Graphics Cutting and Finishing

BY RICHARD ROMANO





The last five years have seen a substantial investment in UV flatbed printers on the part of display graphics and signage producers. And many have also found that a perfect ancillary piece of equipment is a cutting table. Time was, if you needed to, say, contour cut something, sign shop production staff would be hunched over worktables cutting printed boards with X-Acto knives—not the most productive workflow in the world. Shops that have added a table—with various levels of automation and swappable tooling—have found that the kinds of jobs and applications they can produce, and produce efficiently, has increased inordinately.

An automated cutting table can also help with the perennial challenge of employee shortages—when you have a limited staff and a lot of work, surely employees have better things to do than manually cut shapes out of boards.

As a result, the past few years have seen a spate of new entrants into the cutting market, and veteran players releasing new platforms that boast a host of new features.

TOOLING AROUND

In its most basic configuration, a cutting table features a knife that is capable of cutting through thick materials like board, plastics, wood and other materials. Some at the lower end of the spectrum can only make rectangular cuts, but detailed and intricate contour cutting is par for the course on today's models.

As any chef can tell you, there are different knives for different types of cuts. Likewise, there are hundreds of different blades available for cutting tables—single-edge flat blades, serrated blades, double-edge flat and rotary blades and many more, all designed to cut different materials. For example, if you are going to want intricate contour cutting, a thin small knife will be better able to get around small curves or corners. On the other hand, if you are cutting a thick piece of wood or acrylic, you're going to need something more robust.

Even with hundreds of blades, a knife is not enough these days, and any respectable cutting table will offer other tools. One of the most common is a "router," a tool used to hollow out bits of wood, board, plastic or other surface. Routers are commonly used in carpentry to "rout out" areas in wood to attach hinges, knobs or other accessories. Like blades, you can get router bits (like drill bits) that vary in size and shape. Milling bits, crease wheels and blades, engraving tools, polishing tools, perforating tools—many other tools are available for today's cutters. Adding new tools expands the number of those applications the company can produce.

Pro tip: while you will likely want to keep your cutting table close to your printer, if you are going to be using your table for routing—or another function that will create a lot of dust—you'll actually want to keep it some distance from your printer, as the dust can get into the printer and damage the printheads, which can be pricey to replace. So think strategically when installing this equipment.

BUT SOFT!

We think of cutting tables as predominantly for boards and other rigid materials, but they are also well-suited for cutting textiles, although you need to make sure your table is large enough. You will also need an especially sharp blade for cutting textiles cleanly—and you can even get a laser cutting option for many cutting tables.

ROBOT RUMPUS

Then of course there is the *mot de jour*, automation. While cutting tables aren't (yet) run inline with printing equipment (and, as I remarked above, that may not even be desirable), they can come close. But it's really software that enables much of cutting table automation, a process that starts at the RIP even before printing. During prepress, the finishing parameters can be set which generates the cut file that contains all the salient information the cutter needs to finish the job: final trim dimensions, if there is contour cutting involved, what specific tools are required and so forth. Information in the cut file is embedded in a bar or QR code that is added during printing. The table scans the code which then controls the cut head and other tools. This control is the function of the table's software, and each table manufacturer has its own software which is compatible with the majority of RIPs used for display graphics printing. Cut files can also be used for repeat jobs. Some tables can also change the tooling automatically.

One of the "classic" ways that software can boost productivity is "nesting optimization," or strategically ganging and squeezing as many images as possible on a single sheet or board, a process that was, once upon a time, done manually in a program like Illustrator but is now a standard feature on any prepress software designed for display graphics printing. The cut file can instruct the cutting head how to "extract" all the nested images.

Software control of cutting has been around for a while, but where the automation action is these days is material handling. Automatic roll and sheet/board feeders are becoming standard features of today's cutting tables and robotic arms have also started to muscle into board printing workflows. Zünd and Kongsberg were among the first to attach robotic arms to on-/offload material from their tables.





Mimaki CFX-2550 cutting table

TURNING THE TABLES

There have been some recent product announcements in the realm of cutting tables, some of which were on display at April's FESPA Global Print Expo and/or International Sign Association (ISA) Sign Expo.

Mimaki

Complementing its wide array of printers, both rollfed and flatbed, Mimaki launched (in North America) its CFX Series of production flatbed cutters at the International Sign Association (ISA) Sign Expo in April. (The line had debuted a few weeks previously in Europe at the FESPA Global Print Expo.)

The tables are available in three sizes. The smallest, the CFX-2513, is 2.5m wide by 1.3m long (101.18 in. x 74.4 in.). The midrange model, the CFX-2531, is 2.5m wide by 3.1m long (101.18 in. x 148.81 in.). The largest, the CFX-2550, is 2.5m wide by 5m long (101.18 in. x 223.22 in.). Both the CFX-2513 and CFX-2531 can be upgraded to the next larger bed size after installation. In terms of speed, the CFX units can achieve a tool moving speed of up to 60 m/min. (39 in./min.), and acceleration of 0.7 G.

For any cutting table these days, variable tooling is *de rigueur*, and the CFX units can use up to four tools simultaneously—in addition to the eccentric cutting pen unit, three additional tools from a selection of nine types—including pen, reciprocating, V-cut and creasing—can be mounted on the head at the same time. This reduces the frequency of tool changes.

The units also feature a patent-pending "backside cutting mode," which is available with an optional camera unit. This mode uses the camera to identify registration marks printed on the surface and material edges, reverses the material, recognizes the edges, and, says the company's press release, "applies corrections based on the data-specified locations for processing. It is useful for low-surface incision cuts and ruled lining cardboard, and for V-cuts to create seamless edges on fixtures."

The CFX Series cutters are intended to be paired with Mimaki's JFX Series of UV flatbeds.

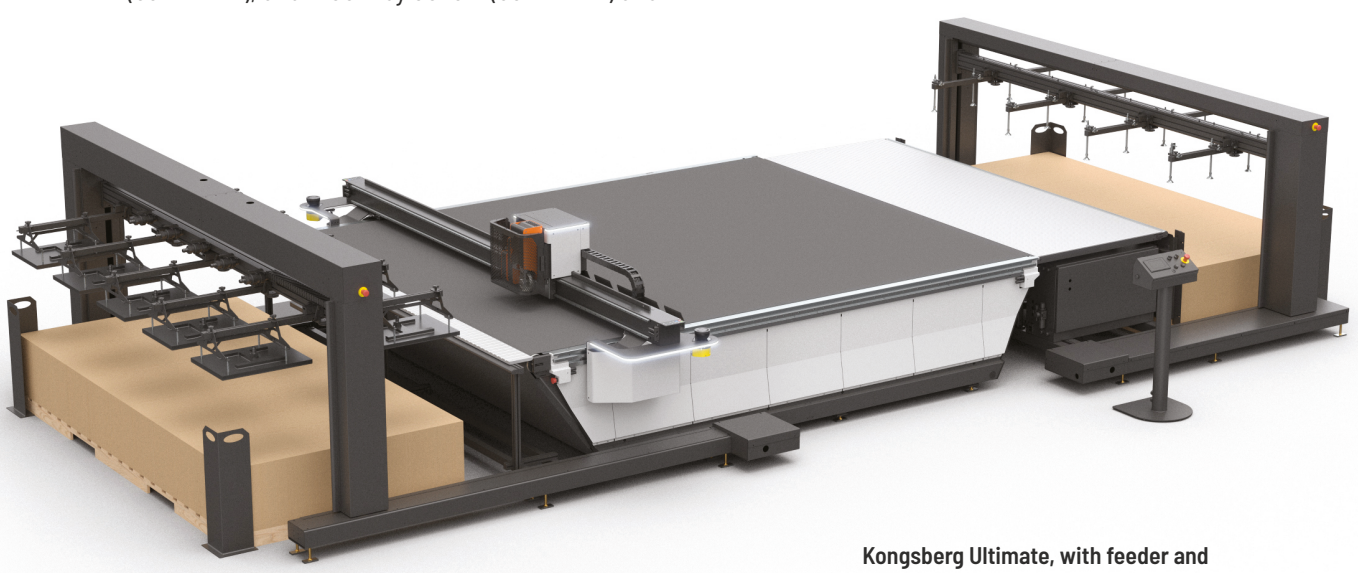


Kongsberg

At the ISA Sign Expo, Kongsberg Precision Cutting Systems (PCS) was showing its Kongsberg-branded cutting tables as well as the CNC solutions it acquired from MultiCam. Specifically, the Kongsberg C24 multifunction super-wide digital cutting system and the MultiCam Apex3R CNC router, the flagship in its line of routing and CNC cutting systems. The Kongsberg C series supports a maximum material size of 1.68m by 3.2m (66 x 126 in.), a maximum speed of 1666 mm/sec. (66 in./sec.), and an acceleration of 1.72 G.

The MultiCam Apex3R CNC router has table sizes of 135cm by 254cm (53 x 100 in.), 160cm by 307cm (63 x 121 in.), and 210cm by 307cm (83 x 121 in.) and comes with a variety of tools to cut a wide variety of materials, including rubber, foam, gaskets, textiles, wood, metals, plastic, composite materials and more.

Late last year, Kongsberg released its Kongsberg Ultimate, a new digital cutting platform that features an innovative drive technology that can achieve an acceleration rate of up to 2.74 G and a cutting speed of 168 m/min. Not just for display graphics, the new platform was also optimized for corrugated cutting applications.



Kongsberg Ultimate, with feeder and stacker configuration, was also designed for corrugated applications.



Zünd has doubled down on automation and robotics.

Zünd

The Zünd product line was designed to be highly modular, meaning that users can add tools and material handling options on-the-fly, not just at the time of purchase. I mentioned earlier that Zünd was one of the first cutting table manufacturers to offer robotics, and they have doubled down on automated material handling, be it partially or totally automated. The touch-based Zünd Cut Center (ZCC) is used to control virtually all aspects of a cut job, as well as control robots and other material handling systems. At the Sign Expo, Zünd was demonstrating a Robot PortaTable, a mobile off-load table equipped with a robotic arm. The Visualizing Option, with optical part marking and the use of printed QR codes, offers more ways to facilitate the production process and make it more efficient. The use of metadata enables end-to-end job tracking and guarantees smooth and efficient logistics throughout the production process.

Summa

Summa has a variety of options for vinyl and laser cutting, as well as flatbed cutting. In its Flatbed Cutter series, there are five models that range in size from 160cm by 120cm (63 x 47 in.) to 327cm by 320cm (128 x 126 in.) and speeds up to 39 in./sec. (1000mm/sec.) and an acceleration up to 1 G. Its multifunctional head can support up to three modules at one time, reducing the time needed to swap out tools.

AT THE END OF THE DAY

Today's cutting tables are highly versatile, highly automated systems that can help shops not only maximize their productivity and efficiency, but also dramatically expand the kinds of jobs and applications they can take on. With the number of options expanding (and I have only scratched the surface here), there is almost certainly a unit that will fit your needs and your budget.



BUILDING THE BEST PRINT PRODUCTION WORKFLOW:

Leveraging Finishing Capabilities for Optimal Results

BY PAT McGREW & RYAN McABEE

The finishing stage of any print job is where much of the magic and differentiation happens. Think about a book. Casebound books with sewn book blocks and embossed covers give a different impression than perfect bound books with soft covers. Direct mail pieces with intricate folds and shiny embellishment tell a different story than oversized postcards or trifold brochures. In regulated and transactional mail, the differentiation may come from how marketing ride-alongs are handled. Across the realm of print production, the finishing stage holds a prime place as it transforms printed pieces into the final product. Finishing ensures that every printed piece brings visual appeal and keeps the attention of the target audience.

Finishing is essential, but getting the most value requires a production workflow designed to ensure that the printed pieces can be finished efficiently and to the defined specifications. To truly optimize the print production workflow requires starting at the end with finishing and working back to the original document creation. It is essential to understand the finishing requirements and your capabilities in order to implement the best production workflow.

IMPORTANCE OF INTEGRATED PRINT PRODUCTION

An integrated print production process is pivotal in determining the efficiency and cost-effectiveness of the finished product. Products will be finished, but if there are mismatches in understanding machine capabilities, finished size options, and other physical elements there will be delays, inconsistencies in quality, higher operating costs and reduced flexibility. The best practice is to unify how products are specified and automate manual steps.

Begin with an assessment of your current finishing equipment and capabilities:

- What is the average age of your finishing equipment?
- How reliable is the equipment?
- Is it integrated inline into printing operations or does it stand alone?
- Is it participating in sharing data with your production dashboards?
- What skill levels do operators require?
- How much manual work is required to set up the equipment and quality control for the final product?
- Do you use equipment for embellishment, like digital or analog devices, to add foil or varnish?





Once you have walked through your workflow and understand your current state, consider your goals and opportunities. Single-product shops have different levers and knobs to work with than those producing a range of products. Your current level of operational capability also plays a role. If most jobs flow smoothly but you know you can be more efficient, your path will differ from those shops requiring constant manual touch points at every step with the constant risk of delayed deliveries.

Begin your workflow streamlining journey with these steps:

1. Identify the most common bottlenecks from the completion of primary print to the point of finished product. How much delay and rework are caused by the bottlenecks?
2. Review your current integrated finishing capabilities. What products can be finished with minimal touch points? How much information can be reported to dashboards?
3. Determine what software is in your workflow. What has been supplied by the vendors, and what is from third-party vendors or written in-house?
4. Determine your scalability with your current workflow. If your business doubled, could your finishing workflow keep up? Can your currently implemented solutions grow with business operations to handle increased volumes or accommodate new print products?
5. Review your vendor partnerships. Call a status meeting with each provider to determine your current readiness regarding their products and recommendations. These software providers can provide valuable insights, training and updates to enhance the integration process.

This process will lead you to the solutions that can improve your workflow no matter what you produce.

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WORKFLOW CONSIDERATIONS FOR FINISHING

It all starts with design. Designing for finishing requires understanding how the graphic elements will be placed on the substrate. At the highest level, consider these as rules to live by:

1. Determine where creases, folds, flaps, and cuts are in the final product, then back into where to place logos and other essential elements.
2. Consider what will be seen first. When folding a sheet for insertion into an envelope, what is the first thing the recipient will see when they unfold the paper, open the brochure or open the box?
3. If the project includes an address that must be seen through a window on an envelope, it is important to know the envelope specification so the information is readable by people and machines.
4. Unique shapes and cuts bring visual intrigue but often complex finishing. The workflow needed to manage imposition, print, embellishment, folding and cutting may require multiple devices with different tolerances.

Once the decision has been made about the finishing, go back to the start of the workflow process to ensure the design will work with the target solution.

- **For Embellishments:** Does the design use layers to separate the embellished elements from the core design? Most workflow solutions support design files with multiple layers and can determine what device needs access to each layer. This helps ensure seamless integration of decorative elements like foiling, embossing or spot varnishes and ensures that they land precisely on the final product.
- **For Packaging/Folding in General (Dielines):** Complex designs usually have a dieline file that defines crease, fold and cutting patterns. For packaging projects this is needed to ensure structural integrity, but even folding projects benefit from the use of dielines to provide visual guides for graphic and text element placement.
- **For Versioning (e.g., Languages):** Versioning design involves layers that allow for easy adaptation of printed materials into multiple languages. This includes accommodating text variations while maintaining a cohesive design layout.



Impositioning, ganging and nesting programs are other features of the workflow related to finishing. Book finishing, mail packet preparation and most other complex print projects require precise image placement on the physical sheet to meet the design vision.

- **Placement of Artwork:** Precise impositioning involves strategically placing artwork within the print layout to ensure accurate alignment and registration during the finishing process.
- **Order of Pages/Pagination:** Sequencing pages correctly is crucial for multi-page documents to maintain continuity and readability post-finishing.
- **Assignment of Supporting Marks:** Supporting marks, side guides for offset printing, finishing OMR (Optical Mark Recognition) coding and barcodes are used to ensure accurate cutting, folding and alignment during finishing processes.

FROM DESIGN TO EXECUTION

The bindery department presents an interesting conundrum for PSPs. Many pieces of finishing equipment are effectively heirlooms at this point but still function flawlessly, so it is harder to rationalize new investments. Platen presses used for numbering and guillotine cutters are good examples. When maintained, finishing equipment can last for decades and keep its functional use but there lies the problem. Who wants to eliminate a usable piece of equipment, especially if it is fully owned and paid for?

The risk is in overall productivity and the ability to analyze production data to take corrective action. PSPs must think of finishing investments in terms of optimal production and not functional production. How many labor hours can be saved, and throughput increased by

replacing dated cutters, folders, or stitchers with ones capable of physical automation and use of preset data from prepress? Automation of finishing equipment requires connectivity and integration. In some cases, older equipment can be retrofitted or upgraded to support higher levels of automation. Check with your vendor and independent suppliers to learn if there are upgrade paths for any existing equipment, then create a capital expense plan to modernize your bindery.

New investments in software are also needed to optimize your finishing workflow. Generally, data must be shared and interpreted from prepress, where the dimensional data is kept, to the interfaces sitting in front of the finishing equipment. The Job Definition Format (JDF) is a common method to pass finishing specifications to present the equipment, but not the only method. Your vendors will know which integration methods are required for the best results. If you have not used this level of automation before, expect to purchase additional integration options for your prepress workflow to generate the data files and bindery software to use the data files.

The other advantage of modernizing bindery operations is gaining actionable insights that can be fed into an operational dashboard or further integrated into your print MIS or ERP solution. In the bindery, shop floor data can be collected manually by the operator or automatically reported by the equipment. Regardless of the data collection method, the results can be viewed immediately so operators and managers can respond to acute production problems, like the need to change equipment. The information can also be viewed over time to identify patterns where action should be taken. Dashboards and their data can alert management to various issues: disparities in operators and shifts, increasing number of defects and reruns, the need for equipment maintenance, issues with specific substrates, cost overruns, and more.

It is rare for automation projects to not be financially justified, especially due to the compounding (job-to-job and day-to-day) benefits. Yet every business must operate under constraints, so use these three questions to guide your investment decisions:

1. What is the value of automating this bindery operation, e.g., 20% more throughput or 10-minute savings per job?
2. Can the equipment be upgraded, or does it require replacement?
3. What is the payback period for the investment?

LEVERAGING FINISHING CAPABILITIES FOR OPTIMAL WORKFLOW

By leveraging finishing capabilities effectively within the print production workflow, print service providers can streamline operations and enhance customer experiences by delivering consistent quality and powerful printed materials. The integration of finishing technologies with upstream processes ensures a seamless transition from file input to finished piece, offering better value and capturing new opportunities in the market. Understanding the pivotal role of finishing capabilities in shaping the overall print production workflow is essential for achieving optimal results. By implementing integrated print management solutions, leveraging advanced finishing technologies and focusing on seamless workflow integration, print service providers can build a robust and efficient production workflow that meets today's dynamic customer requirements. By adopting these strategies and embracing a holistic approach to print production workflow optimization, businesses can elevate their operations, deliver exceptional printed materials and stay ahead in an increasingly competitive market.



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DIE CUTTING

The Latest Trends

BY DAVID ZWANG

According to the Smithers report "The Impact of Changing Run Lengths on Packaging and Labels to 2027," it is predicted that average run lengths are falling, which means many more short to medium runs. The predicted shift of 26% to 29% of all carton volume equates to over a million more jobs in Europe/NA. This is 15 million additional jobs over all packaging types—and globally it could be over 50 million additional jobs!

That growth includes all sizes and shapes of packaging, including labels, folding carton and both preprint and postprint corrugated production, etc. That short-run growth will come from flexo, offset and digital, which is an important distinction to make, since many mistakenly believe that only digital print is designed for short runs or on-demand applications. As the generational purchasing shifts take hold, the quest for more product variations, sizes, tailored messaging and promotions will continue to be key drivers behind SKU proliferation and more packaging. Much of that growth will be in the form of shorter runs and quicker turnaround, and all of it needs converting.

It's not just about packaging, and with the growing need for short-run displays, developers and manufacturers of converting equipment have been working on more productive and flexible systems by boosting hardware automation and new software developments.



Bobst, a name synonymous with die cutting, has a wide range of steel rule die cutters. They are used by converters for folding carton and corrugated production.

Flatbed Die Cutting

Flatbed die cutting is probably most widely used in print and display production. I'm not speaking of the old Heidelberg Windmill Letterpress Die Cutter, although I still see some of them working hard in the finishing area of print shops. Today's flatbed die cutting systems generally come in two varieties — steel rule and digital.

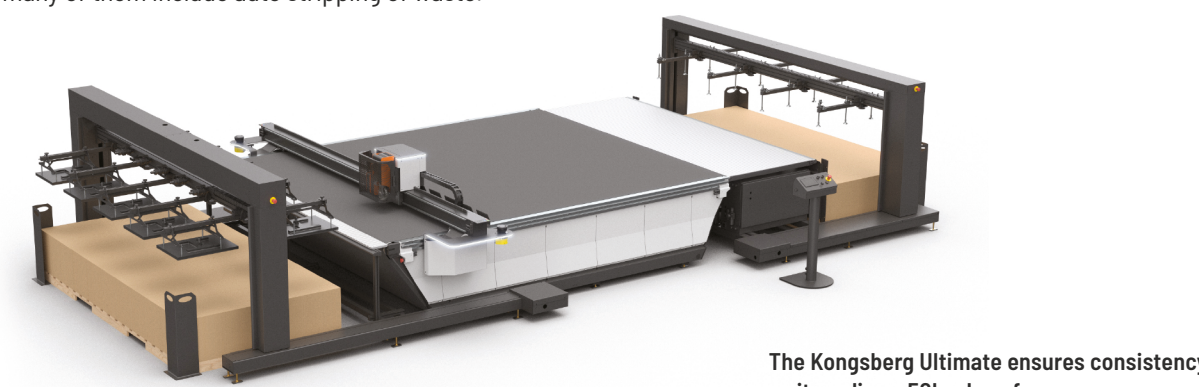
STEEL RULE DIE CUTTING

Flatbed die cutting with cutting dies made from strips of metal called rules or steel rules, is probably the closest to the old Windmill. The steel rules are formed into shape using a rule bender which bends, cuts and notches steel into the shape needed. Steel rule die cutting is much more productive if you have longer runs. An example of state-of-the art steel rule die cutting can be found in the Bobst product line.

Bobst, a name synonymous with die cutting, has a wide range of steel rule die cutters. They are used by converters for folding carton and corrugated production. Their MASTERCUT 145 PER can produce up to 9,500 carton sheets per hour, and their MASTERCUT 1.7 can produce triple wall corrugated in excess of 7,000 sheets per hour. They have die cutting solutions for almost any packaging application, and many of them include auto stripping of waste.

DIGITAL DIE CUTTING

Flatbed die cutting with moveable head tools offers a variety of cutting tools that are mounted into multifunctional moveable heads that can be programmed to cut, score, perf, etc. Today, the productivity of these solutions is being addressed through speed of the head, but more importantly the acceleration, since these cutter heads are constantly moving up, down and around the media. Some of the many available solutions have multiple heads to increase performance, and others even have robotic assist. One advantage of the multifunctional head tool solutions is that you don't have to incur the time and cost associated with steel rule die making. This type of die cutter is great if you have a lot of variability in your die cutting needs.



The Kongsberg Ultimate ensures consistency as it applies a 50kg downforce.

Kongsberg and their latest precision digital cutting platform, Ultimate, is fitted with a new drive and a newly designed custom carbon fiber beam. This new, innovative drive technology, has an impressive acceleration rate of up to 2.74G and a remarkable productive cutting speed of 168 m/min.

The feeder and stacker configuration shown at the bottom of page 53 was designed to ensure accurate and automated cutting of corrugated substrates. The Kongsberg Ultimate ensures consistency as it applies a 50kg downforce. The tool head camera further elevates its precision, making every cut align perfectly with the highest industry standards. In addition to the feeder and stacker and the robotic arm, other options include a motorized roll feeder and a take-up unit for processing flexible materials roll-to-roll.

The Zünd G3, shown below, is an "all around" option because it can do it all. It can accommodate every tool that they offer, and has three modules with tools available at any given time. Zünd's modular design lets you put together a tailor-made cutting solution configured to meet specific production needs, and adapts to new requirements with modifications and upgrades. It comes in five different cutter sizes with widths from 70 to 126 in. The G3 line lets you select the perfect machine size for all production needs, no matter the area of application or run size. On a G3 cutting system, you can process materials up to a thickness of 110mm (4.3 in.), with 2.1G acceleration.



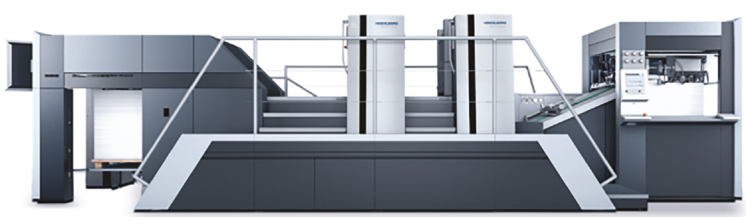
Zünd's modular design lets you put together a tailor-made cutting solution configured to meet specific production needs, and adapts to new requirements with modifications and upgrades

Rotary Die Cutting

Rotary die cutting is currently the fastest of the die cutting options. While you need to have a rotary die created for each job, current speeds can be in excess of 300 ft./min. or 15,000 sheets per hour depending on the application.

There are two types of rotary die cutters: flexible and solid. A flexible die is made of a thin sheet of steel, and folds around a magnetic cylinder. A solid die is a solid steel cylinder, and is traditionally used in more long-run applications for extended die life. There are many of rotary die cutting solutions available, and many of them are integrated into a complete print and converting line for label and carton production, since it can keep up with the printing speeds. There are also standalone solutions like the Speedmaster XL 106-D from Heidelberg.

The Speedmaster XL 106-D is a rotary die-cutter designed for in-mold label production. It is designed with optimized sheet travel to guarantee high production speeds and top product quality. As a special feature, the Speedmaster XL 106-D can also be connected to a CutStar with register cut for die-cutting preprinted rolls. At the delivery, an automatic tape inserter separates individual sheet packages in non-stop mode.



The Heidelberg Speedmaster XL 106-D is a rotary die-cutter designed for in-mold label production.



SEI LabelMaster is the fastest continuous-feed CO2 laser system in the market.

Laser Die Cutting

Laser die cutting is the latest of the mainstream die cutting technologies. While it's not really new, the lower cost and increased availability of lasers has made it more economical for print, packaging and display. In addition to operating without the need for a die to be created, it is a high precision and reliable cutting solution, since there is no die wear. However, depending on the substrate being cut, there could be some laser ablation, where the material gets burned or melted, although almost all of the systems are highly configurable and have integrated ventilation.

SEI produces laser marking systems, laser cutting systems, OEM laser systems, laser label converting, laser paper converting, textile converting and laser backlight processing. They specialize in laser systems for visual communication, graphic arts, paper converting, labeling, flexible packaging, folding carton, fashion, interior design and furnishing. SEI LabelMaster is the fastest continuous-feed CO2 laser system in the market. It can perform laser based processes including cutting, scoring, marking, micro-perforating, versioning and other types of personalization, all inline and in a single pass. The modular system can be combined with other digital or conventional processes like varnishing, laminating, hot foil stamping, slitting and more. They also produce Mercury Wide-Format Laser Cutting and Marking systems. This 63-in. wide plotter is a very flexible platform that can cut PMMA, acetates, ABS, plastics, micanite, wood, leather, paper, cardboard and textiles. It can also be used for marking on glass and marble (excluding PVC and polycarbonate), as well as thin ferrous and non-ferrous metals.

Highcon has been producing laser die cutting and creasing systems to support folding carton and corrugated production since 2009. The new Highcon Beam 3 has been enhanced to allow customers to be more productive and address a broader range of applications. With the new system, a converter will be able to run 10 jobs with an average run length of 1000 sheets every shift.

By decoupling the creasing writer from the die cutter, with the addition of the new Beam Writer, it enables customers to create creasing rules using Highcon's proprietary DART system offline. It is estimated that for every 100 jobs per month, using the offline Beam Writer can free up more than 16 hours of die cutting capacity, or two full shifts. Highcon will also be making a field upgrade to existing Beam 2 systems. They have also announced the Highcon Vulcan (development name), a high-performance corrugated production solution. It will have a maximum sheet size of 1.4 x 1.7m (55 x 66-in.) and support boards up to 5mm, including microflute, B-, C- and EB-flutes. Like all Highcon systems, Vulcan will combine true physical creasing with laser cutting, and will have a maximum throughput of 3000 full-size sheets per hour (up to 7,000 sq.m/hr. or 75,000 sq.ft./hr.). It will have a job changeover time of 5–10 minutes. It is expected to be available by 2028 or sooner.

So, Where to Start?

There are enough solutions out there and more coming to support your needs. Ultimately it is all about the application.



The new Highcon Beam 3 has been enhanced to allow customers to be more productive and address a broader range of applications.

Don't Just Slap "Marketing" on a Salesperson's Title and Hope for the Best

A CONVERSATION WITH PATRICK WHELAN

BY HEIDI TOLLIVER-WALKER



Most B2B sales are a two-part process. Marketing is what happens before the buyer contacts you (part one). Sales is what happens after (part two). A printer's salesperson only has control over part two, and that's the shortest window in the B2B sale.

It's a distinction that, according to Patrick Whelan, founder of Great Reach Communications, most printers don't make, and it's why so many printers are losing sales without realizing it.

Whelan has been beating this drum for some time now. Great Reach Communications is a content marketing company that offers complete marketing programs that include fully designed direct mail, email, blog and social media content, and postcards, and he's watched the pattern play out decade after decade. Smart, successful printers get it. Struggling printers don't.

WhatTheyThink decided to take a deeper dive into this topic.

WhatTheyThink: This is a topic you are clearly passionate about. Why does it get you so wound up?

Patrick Whelan: I regularly hear printers complain that they aren't getting meetings anymore. They don't seem to realize that buyers don't want them. Meetings are time-consuming and disruptive. Nobody wants that anymore. Buyers only reach out at the end of their journey when they are ready to make a final decision. Today, more than half of the sales process is done before any type of meeting takes place. Some studies say it's 52% - 53%. Others say it's more like 70% to 80%. That's telling you that the salesperson is only involved in less than half of the sales process. That's pretty shocking if you think about it.

Twenty five years ago, salespeople were involved in 90% of that journey. Now they are involved in less than half. Printers need to start inserting themselves into the buying journey much earlier.

WTT: So how do salespeople do that?

PW: That's part of my point—they don't. It's not the salesperson's job. It's the printer's job. It's marketing. If printers want any chance of having influence during the 52% - 80% that happens before the customer contacts a salesperson, the best way to do this is with drip marketing. Buyers only keep three to five vendors top of mind at any given time. Staying in that grouping requires content marketing. It requires using customer centric content, across multiple channels, to generate top of mind awareness (TOMA) and position your brand as a trusted resource.

WTT: Printers have never been known as particularly good self-marketers.

PW: Printers promote themselves as a trusted resource to help their customers promote their businesses, and yet so many of them aren't doing it themselves. It's a well-known rule of thumb that only 5% of B2B buyers are ready to make a purchase at any given time. The rest could take months or years. So it's a numbers game. Rather than targeting the 5% who are ready to buy now, printers should be targeting the 95% that are not. You never know when that B2B buyer is going to be ready to make a purchase, so you need to be visible and top of mind all the time. This way, you're on their radar so the prospect will reach out when they're ready.

WTT: I know many printers are super busy right now. It might be difficult for them to justify slowing down, hiring someone, and planning out a marketing strategy.

PW: It doesn't matter if you're busy now. The point of marketing is to smooth out the peaks and valleys. That first half of the sales process is a marketing function, not a sales function. So don't ask a salesperson to do it. That's not what they do. Let them do what they do best and let someone else do the rest.

WTT: Doesn't adding "marketing" to the salesperson's title get the job done?

PW: Ugh! Whenever I see that, I know one or the other isn't being done right. Salespeople are salespeople—they aren't marketers. That's not their area of expertise. That's an area where the printer has to support them. Even if some salespeople do have marketing skills, they never have time. If you ask them, they'll say, "I'll do It when I get to it." That is the kiss of death, because we're all human, and whenever we say that about anything, we always find a way to not get to it. If printers truly want to support their sales teams with marketing, they need to hire someone or source it out.

WTT: That can be a tall order. Just go to most printers' blogs and the last post was from 2019. Or try to find a printer's social media and it doesn't exist.

PW: Exactly! That is where most sales are being lost. When I go to a website that hasn't been updated since March 2020, I figure they've gone out of business. When it comes to basic brand-building and thought leadership, many of these printers don't clear the bar.

WTT: With the sales meeting now taking place at the end of the process, if the customer does go somewhere else, how would the printer even know?

PW: Great point. The biggest problem with the research stage of the sales process is that you never know the business you lost. In the old days, the prospect contacted the salesperson up front, and the salesperson gave them a sales pitch. If the prospect didn't end up making a purchase, the salesperson knew that he or she lost the sale. Today, buyers only reach out for a meeting at the very end, so salespeople may have no idea how many potential sales they've lost.

WTT: So there is a certain amount of trust required — trust that the money you are spending on marketing is going to create a return.

PW: Marketing is about giving, not asking, and we know that drip marketing works. Printers need to invest in customer-centric content. Create top of mind awareness and position your brand so when the buyer does have a need, the printer is in the position to meet that need. There is too much luck and timing involved in trying to find and win the business of the 5%. So focus on the 95% instead. Send out a steady drip out of content that makes you look good and helps them. You'll drive traffic to your website, stay top of mind, and be in a potion to capture the business when the buyer is ready to buy. Don't do that and you don't have a chance.

AI IN TEXTILES: A Different Approach

BY CARY SHERBURNE



Dr. Seshadri Ramkumar

Artificial intelligence (AI) seems to be everywhere today, and especially in the textiles and apparel industry. Most of the focus there, though, seems to be on the design aspect—how can AI help designers be more efficient and the consumer have a better experience seeking items they want to purchase? In this article, we speak with Dr. Seshadri Ramkumar, professor in the Department of Environmental Toxicology and The Institute of Environmental and Human Health, Texas Tech University. Dr. Ramkumar is taking a different approach to AI in textiles, which he has exclusively shared with WhatTheyThink.

WhatTheyThink: Dr. Ramkumar, you recently penned an extensive article for the Advanced Textiles Association (ATA) entitled "AI's promise for the textiles industry: Policy makers, manufacturers and end-user communities need to be engaged."

Read Article: "AI's promise for the textiles industry: Policy makers, manufacturers and end-user communities need to be engaged."

You say, for example, "According to the U. S. Chamber of Commerce's AI Commission Report, AI will enable economic growth by about $13 trillion by the end of this decade. As it was during the Cold War era when defense technologies were considered a nation's main strength, in the near future, knowledge-related fields such as AI will take on this role, as well as serving as an indicator of economic strength." And you note that while AI is coming into use in textiles, most of its utilization has been in design and fast fashion.

First, can you provide us with a little background on yourself and your programs, and then we will dig in to your thoughts on how AI should be considered differently by textiles professionals and end users.

Seshadri Ramkumar: I am a material scientist, and I have been at Texas Tech University for 25 years. My work involves fiber for advanced applications, and one of my products is a decontamination wipe which has been commercialized and is very successful. I also look at sustainable materials, particularly fiber materials for national defense, environmental protection and human health.

WTT: That's quite a broad scope!

SR: It is, and we have had success in bringing innovation to the market. For example, we were the first lab to provide that a certain type of cotton is able to sop up toxic oil. Another patented technology which is commercialized is able to remove fentanyl and synthetic opioids, and it works in sub-zero temperatures. This is important because in cold climates, there is more opioid addiction because people are forced to stay inside more.

WTT: So how do you see AI playing in textiles in a different manner that most others are thinking about?

SR: One of the key advantages of AI is its ability to aggregate and analyze massive amounts of data. And there are decades of data available in different areas of the industry that could be used to train an AI tool. For example, if I am trying to get a certain quality of yarn, what type of fiber should I use and what should the length of the fibers be? What should be the individual strength of the fiber to be able to achieve your goal. Although that was one of my early interests, I couldn't take it further because the textile industry was declining here.

WTT: I assume there is still a possibility this could be resurrected. But meanwhile, what did you attack next?

SR: Well, I noticed that AI was predominantly being used in fast fashion as a design aid. One thing with fashion is they have a hard time predicting more than a season ahead. So I wondered if we could use data to help them make better predictions. For example, for a particular spring season or summer season when the temperatures were X, Y and Z, what type of fabric blend did people prefer? There are vast amounts of data from a variety of mills that could be aggregated and analyzed to determine which fiber blends were most popular by season and by region. And based on all the data available on climate change, predictions can be made even more accurate by blending in climate data as well, predicting how climate change will affect temperatures—and thus the types of fibers and blends consumers will prefer—over the next few years, or even decades. As far as I can tell, no one else is looking at AI in this way.

WTT: Climate change is also affecting how we grow natural fibers, too, right? Are you looking at that as well? I mean, some parts of the world are better at growing high quality cotton than others. Could you aggregate data to help improve cotton growing, for example, in other regions based on positive experiences in those successful regions?

SR: Yes. And really, what we need to do is go back to the source—what types of natural fibers are being grown successfully and how does that translate into fabrics and blends that consumers will want, especially as our climate changes. Plus you compare that to projected temperatures in various regions. For example, for the past ten summers, what was the average temperature in Europe and what type of clothing was preferred—or moving off the shelf fast. And what are temperatures projected to be over the next 10 years as our climate continues to deteriorate. I don't think anyone is doing this kind of research with AI.

WTT: I guess an example of how it's not being used is that no one really predicted the severe heat and cold we have experienced, such as the deep freeze in Texas that knocked out all the power, or more than a dozen consecutive days of temps well over 100 degrees in some parts of the Southwest.

SR: Exactly. Design is very subjective, but temperatures are objective numbers. I believe that AI-supported analysis of climate as it relates to what people want to wear is low-hanging fruit. If we project, for example, that the temperature will be changing by a certain amount, higher or lower,

that gives the industry insight into what types of fibers need to be manufactured to meet those changing needs. I think this can be a game changer for the textile industry. It can bring together climate science, material producers, agriculture and textile/apparel manufacturers and retailers into one platform. There are so many factors to take into account. For example, right now the cotton market is run based on speculation, and there is an excess supply of polyester fibers. And the type of fibers that will sell depend on the climate. For example, in India, Pakistan and Bangladesh, cotton is preferred because of the temperatures there. And depending on that demand, you could work globally to ensure more cotton production, and of better quality. In India and African countries, they need more help in terms of technology, which they could get from analysis of this data set. Plus, using this data set with AI can also help governments frame policies. For example, how did America and Australia bump up cotton yield and how could that translate to helping other geographies do the same. This is just one small example of how we can use AI to analyze massive data sets to benefit both the economy and the environment. It can't perhaps provide concrete guidance, but at least it can help with better planning, beyond one or two seasons.

WTT: So I see two things here: working with the growers to make sure that there's sufficient supply, particularly of the natural fibers. And then on the other side, making sure what the garment or home décor manufacturers are producing is in line with what is going to sell so we have less waste. So, for example, if they say we are going to produce a lot of woolen fabrics and then all of a sudden it's 100 degrees for 10 days, no one wants to wear wool.

SR: That's exactly right. Because right now this type of correlation is not happening. And we should be considering textile usage beyond the consumer as well. Imagine advanced textile products such as indoor air filters. If the temperatures are going to continue to rise, we need better insulation materials. The example of Texas is a good one. The grid in Texas broke down because of the freezing temperatures and the grid was heavily utilized. So if the pattern is going to continue like this, analysis of this data set can help builders, farmers, manufacturers, brands, and even consumers. As energy prices rise to be able to adequately heat or cool homes, for example, people won't be able to afford it. That's where better insulation could come into play. That's where AI tools can help—extrapolating the data based on climate and more, to better predict what will be needed and when.

WTT: Right, and you can't really extrapolate based solely on history, which I think is what people have been doing. Climate change is accelerating and you have to factor that in. You can't just say, well, 50 years ago we had this, and now we will have that.

SR: Right. I don't think AI will replace the human brain, but it will offer intelligence about using the data that we would have a hard time seeing without the analysis these AI tools can deliver. AI is progressing slowly in the medical field, because you have to be extra cautious with people's lives. But it's not that risky in textiles. That's why I believe textiles provides an ideal platform or an ideal testing tool for AI assisted modeling and predictions. And there are many, many other areas we can explore. Think about soldiers and what they have to wear in different temperatures and under different conditions. Data can help in quickly developing advanced defense protective tools.

WTT: Your research sounds not only interesting, but highly important for the future of the planet. Thank you so much for sharing your thoughts with us. I would encourage our readers to read your paper, Google some of your accomplishments and then reach out if they think they can collaborate with you or benefit from your research. Please keep in touch as things evolve!

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Packaging Automation from Ranpak Delivers Improved Results for Packing Operations

BY CARY SHERBURNE

In a recent expert article prepared for drupa by Elena Knight of FuturePrint,[1] she notes, "The packaging industry is poised for a transformative shift in the coming decade, particularly in the area of paper-based packaging. This shift is driven by a growing movement against plastic packaging and the recognition of its environmental impact. Governments and brands are actively pushing for change through legislation and innovative packaging solutions."

While the article primarily focuses on primary packaging, the trends she outlines also apply to secondary packaging, especially in the ecommerce space. To gain an understanding of how brands and retailers and the packing companies that support them can make this transition, we spoke with Bryan Boatner, Global Managing Director for Automation at Ranpak.



Bryan Boatner
Global Managing Director for Automation at Ranpak

WhatTheyThink: Bryan, thanks for taking the time to speak with us. Let's start with a brief overview of Ranpak and your role there.

Bryan Boatner: Sure. Ranpak is a global company with more than 800 employees worldwide. Operating for the last five decades, Ranpak has been focused on delivering fully sustainable packaging solutions, including protective packaging, void fill and wrapping. That's how most customers in the warehousing industry know us—what we call the Ranpak blue machines. We have more than 139,000 of these converters in the field that convert paper into different packaging solutions.

1 https://www.drupa.com/en/Media_News/Press/Expert_Articles/The_Paper_Packaging_Revolution_A_Shift_Towards_Sustainability_and_Innovation.

WTT: So as a consumer, when I receive a box of goods with crunched up or wavy paper as void fill, that's likely done by a machine, not a person?

BB: Exactly. That's our Protective Packaging Solutions Division. Where I spend my time is in Ranpak Automation, a smaller division of the overall company, but a very high growth segment. Warehouses and packing operations are facing a lot of challenges—labor challenges, regulatory challenges, and demands from customers to ship within 24 hours in many cases. And packaging automation is a way to help them meet those challenges more effectively.

I've been in the automation industry for about two and a half decades, originally starting with a machine vision company where we were looking at opportunities for barcode scanning and machine vision inspection; and then more recently with companies that were focused on what is called picking automation, which helps the middle of the warehouse process run more efficiently. Now I am more focused on end-of-line automation with Ranpak where we help with the internal efficiency of the warehouse, but we also improve the unboxing experience, where the customer can easily open the box as well as easily seal it back if they need to return it, and where the packer is not shipping a lot of air.



Fillpak Trident Mini automates preparation of paper void fill.

WTT: I've watched some of those unboxing videos. They are quite the thing these days. Especially with things like meal kits, you often see the consumer somewhat shocked and dismayed by all the plastic they see inside.

BB: Exactly. All of our packaging is paper-based and curbside recyclable, and the ease of opening and re-closing the package is a big factor in improving that unboxing experience.



Paper packaging offers a more pleasant unboxing experience.



Ranpak Cut'it! EVO automates right-sizing of shipping boxes to drastically reduce void (shipping air).

WTT: On the regulatory front, especially in Europe, and starting next year in California and other states, there are a number of initiatives to reduce packaging waste, including mandating shipment of less air in those packages.

BB: I like to say there are three key numbers: 20, 30, 50. In 2030, there needs to be 50% void or less in shipments. For many packers, that is incredibly challenging, especially if you look at the average void in a carton or shipping container. It's much higher than 50%. We actually have a solution that gives you well under 10% void based on a process whereby we sense the height of the items right before we right size the box. So regardless of how it is packed, every time we can ensure a very low amount of void in that carton. Not only is reducing the void preparing them for regulatory compliance, but it's extremely beneficial from a cost perspective. You spend less on materials and shipping if the cartons are rightsized. And with our solution you have a smaller number of SKUs that you need to manage. Instead of having 25 or 30 different boxes you need to choose from, there are typically just three main footprints to choose from for a medium to large operation.

WTT: And if whatever is packed in the carton is not flat on top, I understand you have the ability to put that paper void fill in the carton at the end.

BB: Yes, and that's more protection for the product that's being shipped. So you get the benefit of the void reduction, more sustainable and protective packaging, and no plastic pillows are needed. Plus, you get more packages per pallet or truckload with right-sized boxes.

WTT: So that solution, as I understand it, it's called Cut'it! EVO ...I've wondered what happens to the cardboard that is cut down when you right size.

BB: Good question. The way the carton is cut, we can fold the flaps over, giving even more protection, especially if you are shipping something heavy, like automotive parts. So there is no cardboard waste to dispose of in the packing operation, and when the end recipient is through with it, it's curbside recyclable.

WTT: Then how is the carton sealed for shipping?

BB: We have a top that glues on. It has a tear strip for easy opening—no need to use a knife and worry about damaging what is contained. And there is another strip for resealing in case the package needs to be returned, making that easier as well.



Right-sized boxes with convenient glued-on lid exiting Cut'it! EVO.

WTT: Many of our members or subscribers are from the commercial printing industry, and companies that provide finishing or bindery equipment often recommend that when considering a production workflow, they should begin with the end in mind—in other words, when looking at a production configuration, you should start by thinking about how the final product is finished. I've heard you say similar things about end-of-line packing automation. Tell us about that.

BB: I mentioned briefly some of the past automation companies that I was with in the warehouse automation space and both of them were more focused on picking automation. Anytime I would do a facility tour when I was with those companies, typically the way warehouses are laid out, you do start with the end. There is outbound shipping and sortation. You walk past the pack out area, and then you get to the picking automation. And every time I'd walk through there, you just see all these manual processes. I'm a manufacturing engineer by education, and anytime you see manual operations, it's an opportunity for variability. You really just want to reduce the manual touches as much as possible.

WTT: So where the picking operation is manual, what do you typically see?

BB: You see rows and rows of manual pack stations with 25 to 35 different boxes to choose from, and an old green screen with a list of the items they need to put in the box, and a handheld scanner, lots of opportunity for error. At Ranpak, where we are focused on packaging automation, not picking automation, it's really refreshing to be able to just go to those areas, and say to those customers, look, there are so many benefits we can provide to you here.

Not only can we reduce some of the labor and enable your employees to focus on more value-added activities, but we can also reduce errors. We can reduce the amount of void shipped in the box. We can reduce the number of SKUs that these employees have to manage. We can reduce the inventory of those box SKUs that you have to manage. And because we're focused on that last step in the process, the ability for us to impact that unboxing experience is a part of the value we can provide to customers. And then finally, in starting with the end in mind, if you unblock the inefficiencies in the last step of the process, that enables more upstream efficiencies because now, any innovation that you did further upstream in picking automation can flow directly through to the outbound shipping process.

WTT: And of course, there's a labor savings, but there's also the difficulty in finding labor these days. So it sounds like by adopting some of these solutions, you'd be able to give people maybe a little bit more challenging or pleasant work experience, not just repetitive, mindless tasks, but actually doing more value-added work. It gives them more pride in what they're doing, as well. And it probably makes it easier to hire and retain talent.

BB: And we have a range of solutions that help these companies do just that. As you mentioned, if there is void fill needed after the carton is rightsized, we have 2D and 3D vision systems where we can calculate the void inside of a box, and we pass it under an autofill head that auto-distributes the amount of paper required, and then the top is sealed on the carton.

WTT: I really appreciate you taking the time to talk to me and sharing the Ranpak story, because like you said, sustainability is really important; and the work you are doing is good for the planet. We look forward to hearing from you as you bring new solutions to market.

BB: Absolutely. We have a lot of exciting innovations in the works, and we will look forward to sharing them with you as they become available.

Watch the full interview
https://bit.ly/4bnKlCG

Live Your Life in Totality

JOHNSON'S WORLD

BY STEVE JOHNSON

When a total eclipse of the sun cast its shadow across the United States in 2017, I was a busy man. While it is true that I am fascinated by all things astronomical, I just couldn't be bothered to make time to journey to an optimal location to observe the eclipse in totality.

After all, I reasoned, I could simply step outside during lunchtime to witness the partial, almost total eclipse as was visible from my office…and that's just what I did.

Sure, it was mildly interesting: the slight dimming of the summer sun, the eerie grayness and the unusual phenomenon of people in our industrial park outside looking at the sky.

My son Cyrus did make the trip to the zone of totality, in typical Johnson fashion making it into a business trip. Afterwards, I declared that witnessing "almost" totality was probably just about as good as the real thing. He politely disagreed.

His words stuck with me, so I decided to take a few days off to make the trip as North America was again treated to a solar eclipse this year. Lunchtime on April 8, 2024, found me sitting in the town square of Shelbyville, Ind., staring at the sky.

As the moon's shadow steadily encroached on the sun it felt no different than 2017, until…

Bam! The sun went out. The collective gasp of everyone in the square reflected amazement at this incredible, other-worldly (literally) sight. For over four minutes we all stared while streetlights came on, crickets sang, and solar flares danced before our eyes. Everyone's mouths hung open until once again…

Bam! With a blinding flash the sun was back. It was over, and those of us who made the effort to seek out this amazing event would never forget it.

The moral of this little anecdote is simple: "almost" is almost never the same as the real thing. Not even close.

I thought of this as Kevin Martin of Hafkey Business Solutions recounted his recent adventure. To mark his 60th birthday, he decided to hike the Grand Canyon.

Not some of the Grand Canyon, mind you, but the whole thing, top to bottom, and back up again, all in one day. He invited friends to come with, but friend after friend demurred. At last someone agreed to join him. That friend might not have been in the best shape for the hike, but he was willing.

When hike day came, it became apparent that Kevin was better suited to the task than his companion.

"Go on ahead; I don't want to slow you down," said his friend.

"No," replied Kevin. "If I leave you behind you'll cheat and not cover the whole distance."

Kevin stayed with his friend. It was dark when they returned to the rim of the canyon, but they had both finished, a significant accomplishment for Kevin and a real milestone for his friend.

Would it have been the same if they had hiked some of the way, or "almost" all of the way? No. In real life, there are no prizes for almost.

Life is meant to be lived. Go to the concert instead of just listening to the recording. Ask the girl out on a date, in person. Run the marathon. Climb the mountain. Go to Germany for drupa instead of watching the videos.

Life is just too short for "almost."




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