



www.PFFC-Online.com

rdgmedia

MARCH 2021

**INCREASE PRODUCTIVITY WITH
SLITTER REWINDER AUTOMATION 12**

ALSO IN THIS ISSUE

MEETING THE DEMAND FOR
SUSTAINABLE PACKAGING
THROUGH SUSTAINABLE PRINTING 6

ACHIEVING DURABLE CODES IN
THE TOUGHEST OF CONDITIONS 18

AND MORE!

CERAMIC ROLLER COVERINGS FOR High-Powererd, Continuous Corona Treating Applications



With their custom-formula, Jemmco's line of ceramic roller coverings offer customers long-lasting performance, extremely hard surfaces, and outstanding resistance to heat.

**Not what you're looking for?
No problem!**

We understand that not all treater roll coverings are the same. We pride ourselves on our expertise and work with our customers to provide the best roller covering solution for their specific application.

From silicone sleeves to bonded coverings, we've got you (and your rollers) covered!



CALL TODAY to speak to one of our expert product specialists!
262-512-9559 • www.jemmco.com

Jemmco, LLC

SRC

Systems Ltd

Est. 1994



Simplex – Duplex – Turret – Spooling – Label Stock – Doctor
Advanced Slitting and Rewinding Technology

USA Headquarters in Montgomeryville, PA.
Showroom, sales, spare parts & service



Model 812LS-SM (Surgical Masks)

66" Wide, 40" Rewind Diameters
unloading and up-ending system

Model 750CS (Label Stock & PSA)

84" Wide, 50" Rewind Diameters
2600 ft/min, unloading system



Model 600 Duplex Turret (films, foil & paper)

63" Wide, 24" Rewind Diameters
Dual trim winders, mechanical unload tree



Global Equipment Intl, LLC is the
N. & S. American Representatives for SRC Systems, Ltd.

Lucas Sheridan, North American Sales
lucas@globalequipintl.com
267-421-4679

SRC

Systems Ltd

Est. 1994



YOUR ONE SOURCE for coating, laminating, metallizing machinery



Stay tuned
for **episode 4** of the Nordmeccanica series
To be announced soon



Linear

the first / the original / the digital



to learn more contact:



NORDMECCANICA Spa

Strada dell'Orsina, 16/A - 29122 Piacenza - Italy
phone +39 0523 596411 - telefax +39 0523 612051
nordmeccanica@nordmeccanica.com

NORDMECCANICA N.A., Ltd.

155 Ricefield Ln, Hauppauge, 11788 New York - Usa
phone +1 631 242 9898 - telefax +1 631 242 9899 - na@nordmeccanica.com
Nordmeccanica N.A. Ltd is a full service company for USA, CANADA and MEXICO

www.nordmeccanica.com



The leader in Trim Cutters

If you can slit it we can cut it!

- ▲ Custom Designed Systems
- ▲ Total Trim Cutter Refurbishment
- ▲ Replacement Knives
- ▲ Knife Sharpening

BloApCo®

BloApCo.com • 800-959-0800 • parts@bloapco.com

TABLE OF CONTENTS

6 MEETING THE DEMAND FOR SUSTAINABLE PACKAGING THROUGH SUSTAINABLE PRINTING

Learn more about the growing market for sustainably packaged goods and how packaging printers can add value and differentiate themselves in an increasingly competitive marketplace.



12 INCREASE PRODUCTIVITY WITH SLITTER REWINDER AUTOMATION

Take a look at how key automation features can make a substantial difference to processes, in terms of safety, ergonomic friendliness, line speed and finished roll quality.



18 ACHIEVING DURABLE CODES IN THE TOUGHEST OF CONDITIONS

Whether you use continuous inkjet (CIJ), thermal transfer overprinting (TTO) or thermal inkjet (TIJ) technologies, ensuring codes will not smear or disappear in hot factories, or rub off in transit, can be difficult on flexible film and foils.

DEPARTMENTS

- 4 EDITOR'S NOTE
- 22 ROUNDTABLE Q&A

29 AD INDEX

One Brand UNLIMITED SOLUTIONS



FLEXIBLE
PACKAGING



PAPER &
BOARD



ALUFOIL



FILM



RIBOSLIT SERIES



RB SERIES



FLEXISLIT SERIES



TR SERIES

- » Highly automated machine with automatic cutting and taping and closing of the finished reels
- » Prepared for end-of-line automation
- » Hydraulic free machine
- » Shaftless unwinder predisposed for retractable vacuum splicing table
- » Customized slitting system, available in full automatic positioning



In the Spirits of Paper



Joan Mantini
Editor

As companies continue to improve carbon footprints, renewable resources are being closely looked at for breakthrough developments, utilizing technology and moving toward solving the technical challenges around developing packaging. Paper is indeed a highly recycled material and can be sustainability sourced, and is one that is being looked at on an agenda by several leading beverage companies.

Paper packing developments have potential to benefit premium spirits manufacturers, as well as presents a window of opportunity to consider a more sustainable packaging format, and below you will find a few leading the way in 2021.

Focusing on finding new and sustainable packaging solutions that have the potential to reduce a carbon footprint and ultimately achieve circularity Absolut Vodka is set to launch its prototype for “Absolut Paper” in the UK. Absolut Paper comprises 57 percent paper and 43 percent recycled plastic. In the initial stages of the project, a first-generation prototype of the paper bottle was created that consisted of biodegradable FSC-certified paper with a barrier of recycled plastic. The company states that it has committed to reducing its carbon footprint by 50 percent by 2030, of which 30 percent is through packaging innovations.

Diageo is planning to launch Johnnie Walker scotch whisky in plastic-free bottles in early 2021. The new bottle was developed in partnership with venture management company Pilot Lite. It will be made from wood pulp that reportedly meets food grade standards and is fully recyclable.

Diageo and Pilot Lite have launched a sustainable packaging company called Pulpex Ltd to develop the paper bottle and collaborate on research and development. Pulpex will also create branded paper-bottles in non-competing categories for companies including Lipton team maker Unilever Plc and soda maker PepsiCo, which are also expected to launch next year.

PepsiCo reported that this innovative effort is taking another step towards its goal of reducing virgin plastic content across its beverage business by 35 percent by 2025. The company is also working to make 100 percent of its packaging recyclable, compostable, or biodegradable by 2025—and reports that it is about 90 percent complete.

Through partnerships and continued efforts, companies can continue to drive progress toward a circular economy. One where plastics no longer become waste by having a clear focus on reducing, recycling, and reinventing packaging materials and processes.

Joan Mantini
Joan Mantini
586.295.1888 | joanm@rdgmedia.net



A RDG Media, Inc. Publication
P.O. Box 893
Fort Dodge, IA 50501
586.227.9344
www.pffc-online.com

President/Group Publisher
Randy Green
randy@rdgmedia.net

Editor
Joan Mantini
joanm@rdgmedia.net

Publisher
Lori Pisano
lori@rdgmedia.net
814.616.8380

Accounting Manager
Tara Scanlan

Systems Administrator
Angi Hiesterman

Operations/Customer Service
Jody Kirchoff

Web Design
Josh Scanlan

Auctions
Angi Hiesterman

PFFC will not be responsible for any errors in placement or content after first run of ad. Publishers shall not be liable for any costs or damages if for any reason it fails to publish advertisement. PFFC recommends that you take appropriate caution before buying items sight unseen. PFFC is not responsible for misrepresentation of advertisers. We suggest you contact your own attorney, the Better Business Bureau, or appropriate government agencies if you experience a problem.

Randy Green, President & Group Publisher

Advertising rates, deadlines, and mechanical requirements furnished upon request. Copyright 2021 PFFC. All Rights Reserved. Reproduction in part or in whole without written consent is strictly prohibited.



Want More Production?



Model HDU



Model EP



Model EP Jr



Model MS2MA



Model DU

Keep your converting machines busy!

See why major corporations, small converters and OEM's prefer the proven and versatile shaftless unwind machines from Powell Engineering, Inc.

- Proven to increase production
- Eliminates shaft related injuries
- Lifts rolls from floor or cart
- Proven quality and reliability
- Easy one-man roll changes
- Braked or spindle driven
- Widest range of options predesigned and available
- Reasonably priced

ALSO AVAILABLE:

- Cantilevered packaging unwinds
- In-floor roll trolleys
- Splice tables
- Dancer units
- Cast Grip™ series core chucks



Machine design specialists

POWELL ENGINEERING, INC.

Phone: 205-625-5444 • 800-213-4267
unwind@powellengineering.com
www.powellengineering.com



Meeting the Demand for Sustainable Packaging through Sustainable Printing

By **Steve Molinets**, Key Account Manager,

FTA Implementation Specialist at tesa tape, inc.



It's no secret that consumers want sustainable packaging. In fact, while sustainable products currently make up 16 percent of the market for consumer packaged goods (CPG), they account for more than half of new growth in the marketplace. That's according to the NYU Stern Center for Sustainable Business.

A Nielsen study also found that nearly half of U.S. consumers say they would definitely, or probably, change their consumption habits to reduce their impact on the environment. It also predicted that – driven by the growing buying power of millennials – the market for sustainable fast-moving consumer goods will reach \$150

billion this year, up from \$128 billion in 2018.

In a quest to learn more about this exciting opportunity for our print and paper customers, tesa recently surveyed CPG decision-makers ranging from brand managers to packaging designers and sustainability officers. Four out of five told us that staying ahead of the curve for sustainable packaging will help them remain competitive in the years ahead as consumers – and large retailers – increasingly demand sustainable products. Last year, for example, Walmart issued a set of plastic waste reduction commitments leveraging its private brand program. The new commitments are expected to impact over

30,000 SKUs.

Sustainable packaging can help packaging printers successfully compete in a COVID-19 world, and beyond. Working with CPG companies to meet the growing market for sustainably packaged goods is a way for packaging printers to add value and differentiate themselves in an increasingly competitive marketplace.

Waste reduction key to sustainable packaging

The World Bank has estimated that our planet produced 3.5 million tons of solid waste per day in 2010 – and that amount

Servo Motion Control Solutions



Beer Filling Production Line



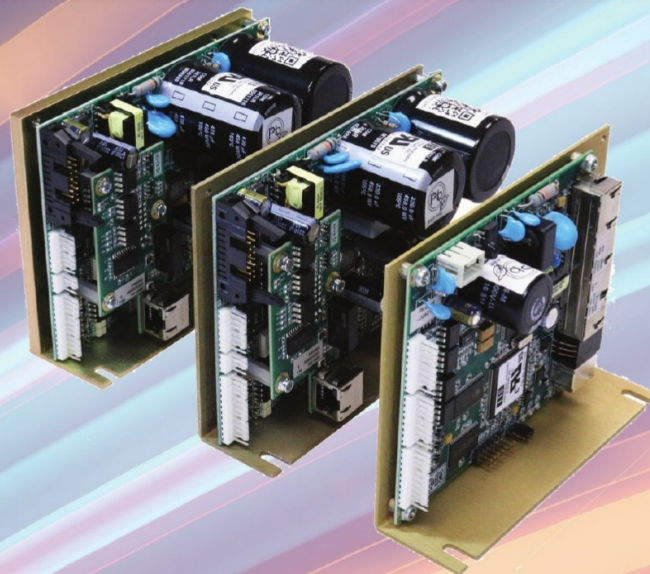
Automated Production of Beverage Cans

Discover multiple examples of systems that provide solutions to a variety of practical industrial applications. Check out methods used in producing products related to printing, packaging, metal fabrication, sewing, food processing and medical device manufacturing industries.

Our comprehensive product line emphasizes power, speed and accuracy. Connectivity options provide an ability to integrate with a variety of equipment used in automation systems.

Check out our solutions at:

www.iis-servo.com/applications/



Industrial Indexing Systems, Inc

626 Fishers Run, Victor, NY. 14564 ~ (585)924-9181

info@iis-servo.com ~ www.iis-servo.com

No Pain. More Gain.

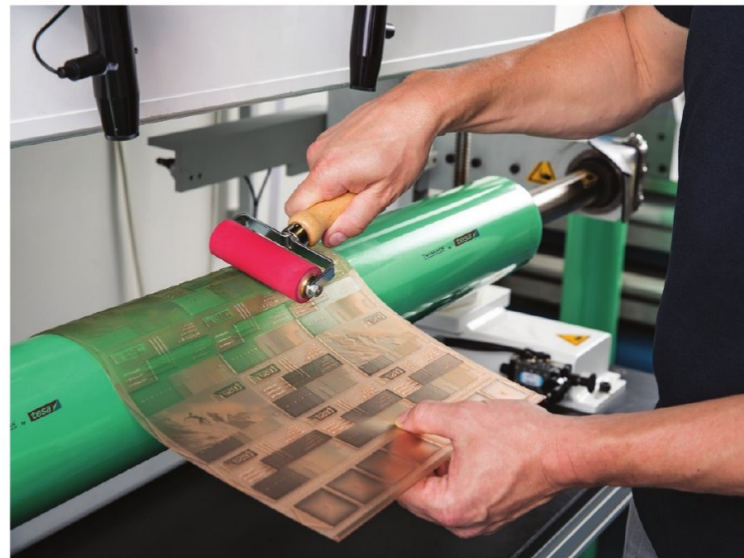


Isn't it time you took away the razor blades and used the original Ripper to open rolls? You'll reduce waste, improve roller life, and increase roll yield—and eliminate nasty accidents.

See the complete line and place your order at ripperonline.com. Or fax us at 1.317.298.1328.

THE RIPPER

ripperonline.com • 1.800.783.7750



Switching from single-use tape to a re-usable adhesive plate mounting technology (as shown here) could help a packaging printer potentially save more than 120 tons per plant of solid waste for an eight-color wide-web process, while achieving significant cost savings. By reducing landfill waste from their production processes, packaging printers can help consumer-product companies meet their 2025 waste reduction sustainability goals.

is projected to double by 2025. Consumer product companies have common sustainability goals, with waste reduction being a top priority. Beyond advances in packaging design and materials, printers can play an important role in helping consumer-product companies meet their waste reduction sustainability goals. They can also do so by reducing landfill waste from their production processes.

In our CPG decision-maker survey, more than four out of five said innovative solutions that can



BIG

System that can clean sleeves up to 70" long

or

SMALL....

System that cleans narrow and medium web rolls



All our anilox roll and sleeve cleaning systems reflect:

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

...we can clean them all!

Call or e-mail us for more information

877.654.7800

customer_service@sonicsolutionsusa.com

www.SonicSolutionsUSA.com



Graphics Experience Center

Alpharetta GA

Sonic Solutions has developed custom cleaning systems for the HP Indigo 20000, HP Indigo 30000 and PageWide T240 exclusively for HP and their customers.

help packaging printers reduce waste matter to their sustainability efforts. They added that packaging printers can play an important role in partnering with consumer-product companies to help meet waste reduction sustainability goals. More than two-thirds indicated they are open to collaborating with supply chain partners on sustainability scoring topics.

Sustainable packaging begins with sustainable printing

Printers know that plate-mounting adhesive plays a critical role in the package printing process. However, the traditional approach to printing flexible packaging

Innovative adhesive solutions can help printers make the packaging printing process more sustainable – and help CPG companies achieve their 2025 sustainability goals.

– employing single-use tape – can result in tons of waste headed to the landfill every year – for a single packaging printer. But, innovative adhesive solutions can help printers make the packaging printing process more sustainable – and

help CPG companies achieve their 2025 sustainability goals – through significantly reducing landfill waste from the package printing process. For the printers, this can also mean significant cost and efficiency savings on jobs using a common repeat.

To understand the potential impact, tesa is developing a waste diversion calculator. It's designed to empower packaging printers and consumer-goods companies to estimate the avoided waste of packaging jobs by shifting away from single-use tape to a reusable adhesive technology. Specifically, the calculator's intent is to enable brand and sustainability leaders at CPG companies to understand the relationship between the number of different packaging jobs being

Opening Features
Straw Holes

Spouts
Ventilation Holes

Half Cut

Opening Perforation
Beverage Carriers/Trays

Liquid Packaging

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

Inspection Windows
Level Indicator

Flexible Packaging

Tobacco Blanks
Holes

Braille Embossing
Embossing

Hot Foil
Hologram

Schoberttechnologies GmbH
Industriestraße 2
71735 Eberdingen/Germany
Telefon +49 7042 790-0
info@schoberttechnologies.de



Cutting and creasing with maximum efficiency and quality, thanks to Vector Technology



As a manufacturer of digitally printed folding boxes and in-mould labels, your best way into the future is with our new RSM520HD-DIGI-VARICUT. Thanks to our innovative drive technology, continuous and intermittent processes can be combined in the ongoing cutting and creasing process without changing the magnetic cylinder. For you, this means shorter set-up time, minimal tool costs and optimal workflow connection with reduced waste.

schoberttechnologies.com when it comes to punching, stamping, cutting, perforating, creasing, scoring, embossing, sealing, ultrasonic welding, dispensing, applying, cut & place, collating, folding, gluing/bonding, or laser technology.

Please contact us! We can assist you – worldwide.



printed and solid waste generated by single-use tape in the package printing process.

How much can you save?

AET Group Inc. (AET), an environmental consulting firm, was retained by tesa to provide an independent third-party validation assessment. AET studied the potential reduction in waste disposal realized by replacing traditional, single-use plate mounting tape with the tesa® Twinlock re-usable plate mounting sleeve. The assessment included an analysis of product specifications that affect the generation of in-scope waste streams, as well as single-use tape consumption at packaging printers.

AET's calculations demonstrated that – by switching from single-use tape to a re-usable technology – a packaging printer could potentially save more than 120 tons per plant of solid waste for an eight-color wide-web process.

Waste-to-landfill reduction during the flexible package printing process is an important, yet still little explored path for consumer-packaged goods companies to improve their sustainability profile. Through advances in adhesive technology, though, packaging printers can help CPG companies unlock this hidden opportunity, achieve their waste-reduction sustainability goals – and meet the accelerating demand for sustainable packaging. ■

ABOUT THE AUTHOR

A self-described veteran of the flexographic printing industry, Steve Molinets is a key account manager at tesa who is committed to understanding his customers and gets excited about making their world just a little better. He is responsible for coordinating contacts within the corporate procurement, engineering departments and at the plant level to drive opportunities and projects at these accounts.



sapphire S2 series

THE MOST VERSATILE MACHINE

The Sapphire series is available in many types of configurations to suit all Converters' needs, and features all the standard characteristics of an Ashe machine such as unique tension isolation and tension control.

New automation features ensure optimum results for productivity and finish roll quality.

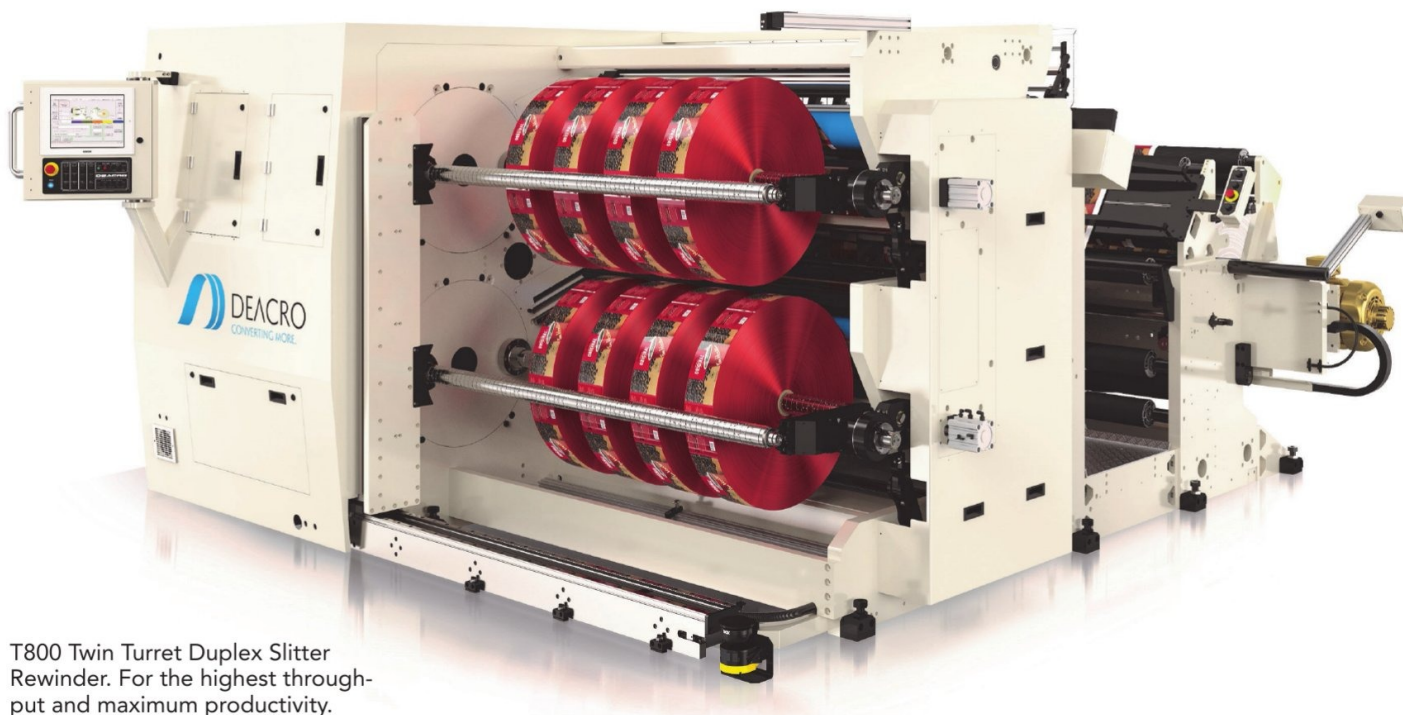


Sapphire S2
Duplex Slitter Rewinder



ASHE CONVERTING EQUIPMENT
Bluestem Road, Ransomes Europark
Ipswich, IP3 9RR, UK
Tel: +44 (0) 1473 710 912
Fax: +44 (0) 1473 719 137
www.ashe.co.uk
sales@ashe.co.uk

ASHE AMERICA INC.
23 Marlboro Road
Brattleboro, VT 05301, USA
Tel: 802 254 0200
Fax: 802 254 1100
www.asheconvertingequipment.com
sales@asheusa.com



T800 Twin Turret Duplex Slitter Rewinder. For the highest throughput and maximum productivity.

Increase Productivity with Slitter Rewinder Automation

By **Keith Hamilton**, Sales Manager, Deacro Industries

Converters continually face the pressure of achieving profitability in a competitive marketplace with tight margins. There is also the challenge of addressing market demands, especially in high-growth industries such as flexible packaging. Ensuring optimal equipment performance, capacity for existing and new products, and operational efficiencies are key to business growth, material savings and better products. One of the most crucial, but often overlooked aspects of the converting process is slitting and rewinding.

Why is the slitter rewinder so important? Simple. For most converters, slitting/rewinding is the final stage in the process before the

product reaches the end customer. This machine is essentially the “gatekeeper,” removing all previous defects to ensure the best possible product is shipped out the door. For customers who manufacture food packaging, medical packaging, industrial products, pressure-sensitive labels and similar products, high quality finished rolls are paramount. Consistent tension, clean slit edges, and minimal waste demand exceptional slitter rewinder technology to make this possible.

When considering the type of slitter rewinder that is best for your process, evaluate the end goal. Are you seeking to increase outputs? Develop new applications

to diversify your product portfolio? Create new structures for existing applications? A combination of these or all of the above? Regardless of your intentions, the best bottom-line results and highest quality laminates can be achieved with automation. Automated slitting/rewinding takes the guesswork out of a vital part of your converting process by offering numerous operational benefits. These include reduced set-up time for new jobs, shorter roll unloading times between finished sets, streamlined roll packaging solutions, simplified maintenance and prevention of unplanned downtime. Automatic features also enable you to reduce labor costs, allowing

WEB WIDTHS CHANGE YOUR SENSOR SHOULDN'T HAVE TO



**Increase Uptime,
Line Speed, and Profits**
with the **NEW DSE-45**
Wideband Sensor from Fife.

Increase Uptime

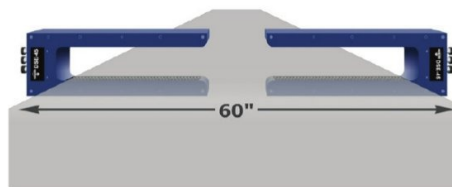
- No manual repositioning required
- IP65 rating allows for operation in harsh environments
- Guides up to 16 edges at a time
- Backward compatibility for easy installation

Increase Line Speed and Profits

- Superior resolution and accuracy
- Digital standalone operation with data monitoring



No Manual Repositioning Required



NEW INDUSTRY 4.0 TECHNOLOGY HELPS YOU RUN SMARTER



**End-to-End,
We Solve Your Problems Faster**

Visit our website at WWW.MAXCESSINTL.COM

existing resources to be used more strategically.

Following are key automation features that can make a substantial difference to your process, in terms of safety, ergonomic friendliness, line speed and finished roll quality.

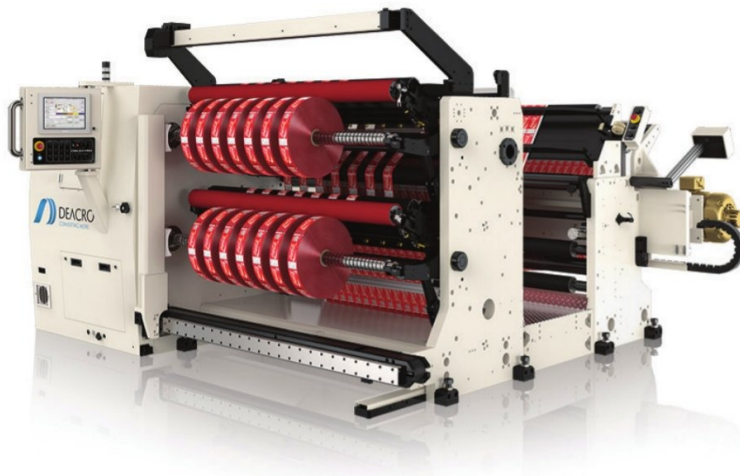
Unwind turret automation

– This feature makes it possible to load a new master roll while the slitter is running. Throughput is increased and the process is fully automated, unwind through rewind.

Auto web cut/transfer – This enables cuts before turreting to keep tails short and maintain web alignment/tension on outside wraps. The flying razor web cut-off system can be upgraded to shear or score.

Auto core cutting/placement

– Auto cuts cores and positions them directly onto rewind shafts.



Deacro C610 Duplex Cantilevered Slitter Rewinder. Designed for quick setup and reduced downtime for increased efficiencies.

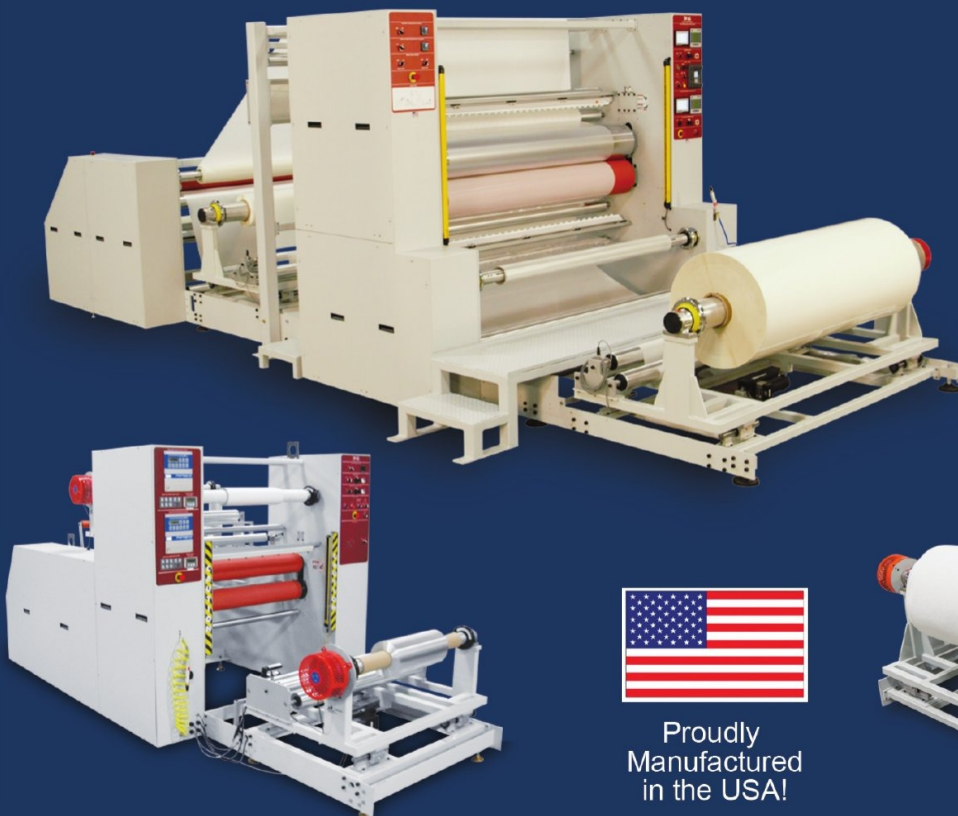
Auto web taping – Options for inside web taping, outside roll taping, label application to tail-tie rolls, and end-of-roll warning tapers.

Auto knife positioning – Integrated to the slitter controls with auto-calibration and auto knife position.

Digital knife positioning – Knife positions are saved in a file recipe database and a digital tape measure displays the required knife position.

Automated setup – Eliminate setup time with unwind roll auto-centering, web guiding

Quality Built Custom Laminators: “Designed for your converting applications”



Advanced Greig Laminators

Engineered to Last

800.276.2664

aglinc.com



Proudly
Manufactured
in the USA!



Carolina Tape & Supply Corporation

If it's tape...WE DELIVER

Converting Services:

- Specialty Slitting
- Die Cutting
- Kiss Cutting
- Butt Cutting
- Perforating/Scoring
- Laminating

**Custom slit Plate
Mounting & Roller Wrap tapes.**

**We are a distributor for all
major tape brands.**

**Call for a
FREE Quote
& Catalog
800-237-6079**



If it's tape... WE DELIVER.

www.carolinatape.com • gsales@carolinatape.com

positioning, roll lock rewind tooling and dual durometer lay-ons.

Auto roll unloading – Permits auto roll unloading off rewind shafts. Several receiving stations are available per application. A scissor table automatically unloads rolls to an ergonomic height with smart positioning control for faster cycles.

Auto roll packaging – Options for labeling, weighing, wrapping/bagging and pallet wrapping/labeling.

Auto roll palletizing – Programmable robots, roll upenders with auto load sensing, and calibration are available.

The good news is, you can upgrade existing manual slitter rewinders with automated technology. Retrofits include auto or digital knife positioning, core positioning, auto cut and transfer

systems, auto roll unloading/packaging, extended web paths and provisions for laser perforation, web cleaners and corona treating.

In addition to machinery automation, you can realize even more benefits by using smart technology such as IIoT platforms that provide continual line monitoring. By interfacing with your data system to monitor key parameters of your converting line – extruder, laminator, casting section, coater, unwind, winder and slitter – you can receive early notifications of potential failures. It also enables valuable data assessment such as tension monitoring using configurable dashboards. Notifications can be received via e-mail or text, and review of machine status is available on smart devices and remote PCs.

We recommend you work with your supplier to do an evaluation of existing equipment to determine beneficial upgrades. You may also want to consider complete solutions that include roll packaging, salvage rewinders and core cutters. We wish you well in your converting endeavors! ■

ABOUT THE AUTHOR

Keith Hamilton is the sales manager and Deacro Industries, a Davis-Standard company.

For more information, visit www.deacro.com or call 647-372-2924.



Advanced Surgical Grade Anilox Cleaning That Leaves Rolls & Sleeves 100% Clean & 100% Safe

Alphasonics uses patented, microscopic technology that is kind to your aniloxes and also to your budget.

Our unique technology framework cannot be beaten on performance, safety or price.

It's so good, we'll give you that guarantee in writing.

Contact us to find out what medical cleaning standards can bring to your business.



Tel: +1-804-441-8865
 Mob: +1-804-418-1859
 Email: hello@alphasonicsusa.com
 Web: www.alphasonicsusa.com

The solution for the demands of this moment

Catbridge 900-M now available for quick delivery

- Ideal for film & flexible packaging applications
- Rewind diameters to 32"
- Web widths to 62"
- Speeds to 2500 fpm
- Minimum 2" slit width
- Auto knife positioning



973.808.0029 | www.catbridge.com | sales@catbridge.com



Achieving **Durable Codes** in the **Toughest of Conditions**

By Gary Bolton, Product Marketing Manager at Markem-Imaje

Codes on products, such as lot numbers and expiry dates, enable safe usage and traceability. If codes are missing or illegible, the ability to track products through the supply chain disappears. This can lead to costly shipment rejections or fines from retailers and wholesalers.

Additionally, consumers' perceptions of brands can be harmed by poorly coded products. A smudged code detracts from the carefully crafted look and feel of the package on which it appears. Or, more seriously, an unreadable expiry date can potentially lead to illness.

Tough conditions

Whether you use continuous inkjet (CIJ), thermal transfer overprinting (TTO) or thermal inkjet (TIJ) technologies, ensuring codes will

not smear or disappear in hot factories, or rub off in transit, can be difficult on flexible film and foils. Extreme temperatures, oils and solvents interfere with code adhesion.

This is particularly the case in routinely hot regions, especially if air conditioning in factories and refrigerated trucks for distribution are not regularly used or reliably available.

Some industries, such as food and pharmaceuticals, are also particularly challenging. For example, oils inherent to nuts, chips and popcorn production can form a barrier between the package material and the code being applied by ribbon transfer or ink. Chemical solvents, such as those used in antibacterial wipe manufacturing, are similarly problematic as they could dissolve the code.

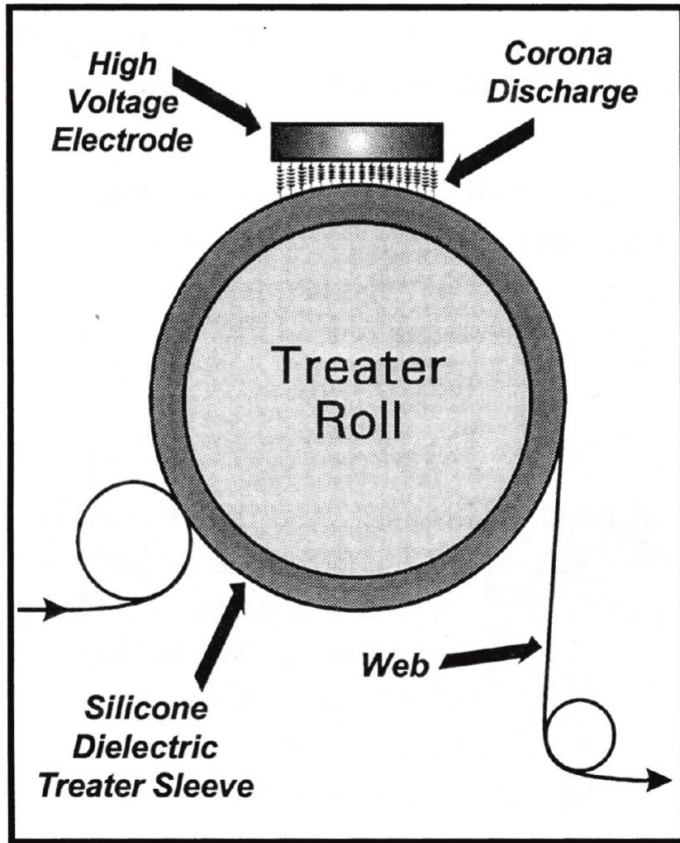
There are several solutions.

Lasers

Lasers, set up properly, produce excellent, permanent codes, 100 percent of the time. Generally speaking, in flexible film, a carbon dioxide laser (CO₂) is used for dark surfaces as its principle is to remove the first layer of color on the product, revealing a second layer. A fiber laser is often needed for light-colored film as its principle is based on a thermochemical effect where nothing is removed; instead, there is a chemical modification of the surface creating a contrast code.

However, lasers have a greater initial investment cost than other technologies – typically twice that of TTO, for example. That said, with its low running costs, a laser's overall cost over five years is lower. Additionally, picking a good quality laser will result in

SILICONE Treater Sleeves



Life inside a corona treater is hell.

Dielectrics must withstand high frequency, high voltage discharge, plasma-induced ion bombardment, elevated temperature, and concentrated ozone. Even the slightest defect can result in premature failure.

We closely inspect each and every sleeve that goes out the door, and we guarantee our sleeves against immediate blowout on your treater. *That's why we can say, with full assurance...*

“Our silicone sleeves are equal or superior to those supplied by the world’s leading treater manufacturers.”

We've been selling these treater sleeves for over 25 years now — in that long period of time, we have had only one or two sleeves fail on installation. 100% visual inspection is, indeed, very effective!

We guarantee these are the same high quality treater sleeves sold by OEMs worldwide — all at significant savings!

Product Code	Fits Roll OD*		Actual ID	Color	Wall Thickness	Price per Linear Inch
	English	Metric				
96152	1.5"	38 mm	35 mm	Orange	.080" (2.0 mm)	\$1.15
96202	2.0"	51 mm	46 mm	Orange	.080" (2.0 mm)	\$1.35
96252	2.5"	64 mm	59 mm	Orange	.118" (3.0 mm)	\$1.85
96302	3.0"	76 mm	70 mm	Orange	.080" (2.0 mm)	\$1.95
96402	4.0"	102 mm	95 mm	Orange	.080" (2.0 mm)	\$2.35
96602	6.0"	152 mm	141 mm	Orange	.095" (2.4 mm)	\$2.95
96802	8.0"	203 mm	190 mm	Orange	.102" (2.6 mm)	\$4.45

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

Wall thickness variance: +/- .006"
Hardness (Shore A): 70-80

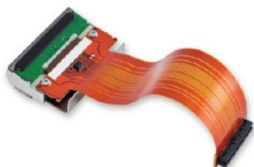
Dielectric Constant: 4-5
Dielectric Strength: 250 v/mil

www.accudynetest.com

Diversified Enterprises, 101 Mulberry St., Suite 2N, Claremont, NH 03743

Phone 800-833-4644 or 603-543-0038; fax 603-543-1334; email rsmith@accudynetest.com

Printing at 600 mm/s, the innovative SmartDate® Xtreme Plus printhead – a market first – delivers the market’s fastest high resin TTO codes.



minimal running costs – only filter replacement two to three times a year – and no downtime. It is also worth noting that lasers require safety precautions, such as guarding tunnels and extraction units, to protect workers from laser beam radiation and fumes.

Another important consideration is the fact that laser is not suitable for all types of materials. It requires a strong underlying surface and a top layer responsive to the laser beam. In most cases, it is not possible to use a CO2 laser on polyethylene film.

Inkjet coders

TIJ coding also has material limitations e.g., its use on non-porous film is challenging under normal conditions, let alone the ones under consideration here. Also, assuming suitable consumables can be identified which will provide sufficient adherence, TIJ tends to be expensive at high production levels. High volumes result in frequent cartridge changes which, over time, may lead to a less than optimum total cost of ownership (TCO) compared to other technologies, despite TIJ’s low upfront capital costs.

CIJ is much more forgiving than laser or TIJ in terms of material: it can code virtually anything, pre- and post-product filling. It also achieves an excellent

82 Years Dedicated to Web Handling Expertise and Innovation

A collage of images showing various industrial machinery and rollers. In the center is a large circular logo with a red 'A' and the text 'American Roller' repeated around the perimeter. Inside the logo are four horizontal bars with the following text: 'Rubber · Urethane · Plasma · Cores', 'Innovative Customer Driven Solutions', 'Technical Expertise & Resources', and 'Integrated Customer Service Network'.

American Roller

Demand a Solution, Not a Product.

1400 13th Avenue, Union Grove, WI 53182 | 262.878.8665 | info@americanroller.com | www.AmericanRoller.com

return on investment compared to laser, for example, given CIJ's low capital cost, versatility, and ability to code at all available speeds. This is particularly true if good quality equipment is chosen to ensure maintenance costs are low. However, CIJ delivers a lower print quality, in terms of resolution, than other options. And, as with TIJ, manufacturers must be aware that challenging applications like those discussed here, will require high adhesion consumables. It is not unheard of for CIJ or TIJ-coded products to appear marked when they come off the line, only for the content to fade over time or be easily rubbed off in the marketplace. The ink, once again, is key to achieving long-term, durable codes. Ink solutions exist that can and will ensure codes do not easily rub off, but they may be more expensive than the standard ink offering. Achieving a durable code with CIJ typically requires the use of resistant solvents.

Thermal transfer coding

Of all the digital coding technologies available for flexible film,

assuming you are printing on a flat, unfilled surface, TTO is the most popular option given its low capital and operating costs. It is also known for providing a better print quality than CIJ and TIJ for a wide range of film types with no smell, mess or drying time. It is also able to print complex information, such as QR codes.

TTO does, however, operate at lower speeds than the three non-contact technologies described above, with the precise speeds achievable depending on a range of factors, e.g. expected production or shipping conditions. To achieve a crisp, durable code in the face of high heat, oil and solvents, many manufacturers turn to high resin thermal transfer ribbons (TTRs) which are proven to deliver the adhesion and quality required. High resin TTO code durability is second only to that of laser.

However, using high resin TTRs have historically limited printing speeds to 300-400 mm/s (0.98 - 1.31 ft/s), approximately half of what would be commonly used with other TTRs, adversely affecting overall throughput. Another potential disadvantage

has been that the high energy level required for printing with resin, as compared to other grades of thermal transfer ribbons, reduces the life of a printhead. This has often led to increased maintenance costs, particularly when using suppliers who do not offer printhead warranties as standard with their offering.

New in 2021 is an advanced printhead design capable of printing crisp, high resin codes at up to 600 mm/s (2 ft/s), and with a printhead warranty of 40 kilometers (25 miles) or six months. Production throughput no longer needs to be sacrificed in order to ensure high quality, durable and cost-effective TTO codes on flexible film. ■

ABOUT THE AUTHOR

Gary Bolton is the product marketing manager at Markem-Imaje responsible for the thermal transfer overprinting product range. He has been with the company since 2011, and in the coding and marking industry for over 20 years.

Designers and Manufacturers of Totally Enclosed Chambered Doctor Blade Systems

Servicing the narrow and wide web industries since 1983

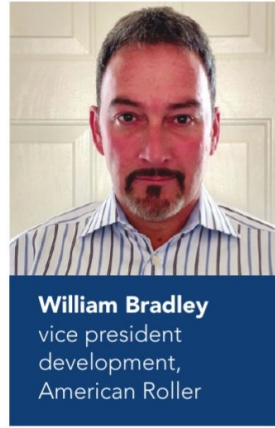


2596 St. Hwy 32
Pulaski WI USA 54162
New Phone: 920-865-7775
and Fax: 920-865-3824

Web: printco-industries.com
E-Mail: sales@printco-industries.com



Roundtable Q&A: Roll Cleaning & Maintenance



William Bradley
vice president
development,
American Roller



Christopher D. Jones
vice president,
Alphasonics USA

What are some of the problems associated with inconsistent or improper roller maintenance and cleaning?

Bradley: Many rubber, urethane, and plasma roller coverings can be adversely affected when subjected to different types of cleaning chemistries. With rubber and urethane coverings, they can harden or soften

prematurely, and in some cases swell considerably. Without a routine regiment for cleaning roller surfaces, build up can occur that will impact quality and production target speeds. This is not always visible until a problem occurs, and then it is too late. American Roller has roll cleaning tech sheets available to the industry, displaying compatibility of rubber, urethane, and

plasma coatings and common chemistries used for cleaning roll surfaces.

Jones: The problems are multiple, and serious. High levels of waste, time lost, reduction in productivity and a degradation in print quality. All of these contribute to rework, inefficiency and most importantly - bottom line.

Flexo is not an art form. It



We're the Global Leader
In Fully Integrated Converting Solutions and Services

ISO 9001 CERTIFIED • EDI COMPLIANT

- State-of-the-Art Fabricating, Laminating and Die-cutting
- In-house Foam Skiving Capability
- Fully Automated Rewind Slitting
- Integrated In-line Roll Wrapping
- Narrow Width Specialty Slitting
- Automated Packaging with Custom Labeling and Retail Packaging
- Supply Chain & Inventory Management Solutions

DISCOVER ALL THIS AND MORE IN OUR NEW VIRTUAL TOUR:

www.protapes.com/tour

Contact Chris Hart: 800-345-0234 ext. 114
chart@protapes.com



NEW VIDEO TOUR



is an exact science which consists of inputs to a process and the subsequent outputs. You will always get an output - but the cleanliness and condition of the anilox will directly relate to the “quality” of that output.

The issue we see around the world is that print managers are tinkering with the process of flexo by making ink and on press adjustments to get their desired print quality, rather than address the anilox as the main input condition.

Poor cleaning practices, and just as importantly, poor examples of cleaning technology only compound these issues, even if they are addressed.

How do your products or services solve these problems,

including solutions associated with efficiency, productivity, and quality?

Bradley: In 2020, American Roller dedicated an industry webinar series addressing this issue across many markets. Our approach is an engineered roller covering or coating that provides maximum release of foreign debris or build up. Our philosophy is to address the problem before it happens. These solutions have proven to increase efficiency, speed, and quality, also reducing downtime associated with maintenance practices. For more info visit our website to view past webinars, or reach out directly.

Jones: Alphasonics guarantee that aniloxes are 100 percent

clean and 100 percent free from any potential ultrasonic damage. We provide the means to control rather anilox roll, rather than simply cleaning it.

Controlling the anilox by consistently rendering it 100 percent clean will give a baseline to enable the delivery of six tangible, cost saving and production-based benefits:

- No requirement to over-pigment inks;
- Faster and more consistent make-ready times;
- Greatly reduced waste;
- Higher and more consistent print quality;
- Improved production run hours; and
- Easier and more accurate anilox inventory management.



**Machines
Engineered
for Your
Toughest
Challenge**



EXPERT ENGINEERING | PRECISION PERFORMANCE | PASSIONATE SERVICE

**Web Converting, Packaging &
Coating Equipment**

DELTA MODTECH®
MASTERS IN MOTION®

Minneapolis, MN USA 800-279-3358 +1 763-755-7744 Europe: +46 706 97 24 34 www.deltamodtech.com

FASTER
SHARPER
PRINTING

STEEL—BELTS—FOR —HIGH—SPEED— —PRECISION— DIGITAL—PRINTING

The drive for greater print productivity places new demands on press conveyors: as speeds increase, so does risk of vibration. As the world's leading manufacturer of high specification steel conveyor belts, we can help.

IPCO belts offer up to 5x better stability than plastic belts, and are precision engineered to the finest tolerances of thickness and straightness. Together with high precision belt tracking, this means the position of the print substrate is assured, and speeds can be maximized without compromising on quality.

- Maximum stability – up to 5x less vibration vs. plastic belts.
- Precision engineered for complete flatness/straightness.
- High tensile strength resists stretching.
- Solid steel or perforated for vacuum systems.
- High precision belt tracking.
- 100+ years' experience in belt manufacturing.

Read more at ipco.com/print



The mantra is clear and simple; control the anilox, control the process, control the profits.

What new technologies and products have you incorporated into your product portfolio?

Bradley: American Roller has formulated a new series of rubber, urethane, and Plasma Coatings roll coverings specifically designed to improve release on roller surfaces. We launched these products last year through our webinar series. How do they benefit converters? In specific markets under “converting” customers have seen real gains in increasing speeds, maintaining control of their process, and reducing costly downtime.

Jones: Since our inception in 1993, we have been engaged in a constant state of R+D, aimed at solving issues for printers and converters around the world. The technologies we've introduced over the years have essentially solved the anilox problem unlike those on offer elsewhere in the industry. We provide a framework that provides a way to clean rolls to 100 percent volume at the touch of a button. Operators simply need to press a button and walk away. They do not need to soak, pre clean or monitor the roll during the cleaning process.

We have also discovered ways to in fact speed up the cleaning process with the developments of automatic roll reversal and our Active Cavitation technology. Our technology is effective against any ink type, coating or varnish. Whilst some other cleaning methods are restricted by such variations, Alphasonics still maintains a written 100 percent cleanliness guarantee.

Our technology framework is so far advanced, stringent and effective, that we recently made the move into the cleaning of surgical equipment in the medical sector. We currently operate within this sphere by greatly reducing bacteria and residual proteins and therefore, vastly reducing the risk of theatre born infection. All with the very same technological framework as we use in the print industry. Again, something our competitors cannot claim to achieve.

Finally, this year we have introduced the Plaeto Vertical Plate Loading System. This unique offering automatically loads plates into our plate cleaning units in a space saving solution. Again, this saves operator time and increases production hours. This also eliminates the need for large conveyed systems or manual loading.

How are your products or services helping companies to achieve sustainability goals?



CONVERTING SCHOOL HYBRID COURSES

We offer an option combining the convenience of online learning at home or office, with the ability ask and answer questions live with the instructor.

- March 22-26 - Process Troubleshooting - Case Studies, Methodology, & Solutions - Instructor: Neal Michal
- April 5-9 - Winding Course: Practical Methods to Wound Roll Quality - Instructor: Neal Michal
- April 26-30 - Unwinding Dynamics - Instructor: Neal Michal
- May 17-21: Easy Web Handling Modeling - Instructor: Ron Lynch

learn more at www.aimcal.org

Bradley: There are multiple areas we could address here, but I will highlight “speed.” Most customers today are looking to increase their line speeds, producing more product in a certain time-frame, without additional cost. Engineered roller surfaces can assist. In some cases, next generation coverings and coatings can be a “drop in replacement” for an existing roller position, allowing line speed to increase with reduced surface build up and increased traction control.

Jones: The use of our equipment means a reduction in waste in any event, as we established a little earlier. This means less substrate and ink waste but with longer production hours. It also means that less on press chemical cleaning is required.

However, our systems only require a 10 percent chemical product, meaning that 90 percent of the cleaning solution is in fact mains water. Further to this, our cleaning solutions can be easily neutralized and therefore, wastewater can be disposed of safely and effectively. In some cases, the waste can go to drain, depending on ink types and the local water authority in question.

We have also introduced parts washers that recycle water as part of their use whilst leaving the ink waste itself as a solid mass that be disposed safely to landfill.

What are some unique challenges your customers faced in 2020 and how did you help them overcome them?

Bradley: One challenge we have focused on is “build up on roller surfaces.” For example, in the blown film and flexible packaging markets, anti-static and slip agents adhere to roller surfaces while transporting the web substrate. This buildup can eventually cause lack of traction, web defects, and sometimes web breaks. By installing Plasma Coatings dual layer traction release technology, build up can be eliminated and maximum traction can be achieved.

Jones: With the COVID-19 crisis dominating every aspect of our daily lives, customers were naturally concerned with the safety of their workers and the ability to maintain production seamlessly. We

Enhance your brand with a touch of brilliance



A century of expertise in tobacco packaging



New North Carolina plant



Innovative & Customized Foil & Film Solutions

Differentiate your product with brilliant packaging

- Creatively incorporate dazzling effects with foil and film laminates
- Utilize customized films including metalized, holographic, Fresnel Lens and transfer-metallization
- Enjoy supply security with our financial strength, decades of expertise and expanded global footprint

Packaging@LLFLEX.com
+1-800-634-36450



Global HQ: Louisville, KY, USA
High Point, NC, USA
LLFLEX.com



Committed to Manufacturing Excellence

Industry leading converters require consistency in their operations and depend on WestRock to deliver. Manufactured with a focus on low product variability, our ReliaKraft™ grades provide the consistency required to help you achieve the efficiency and performance your converting operations rely on.

That's the ReliaKraft™ advantage.

westrock.com

©2021 WestRock Company. All rights reserved.



were able to serve our customers remotely by embracing technologies that allowed service and support without having to visit their facilities directly.

Our systems are also plug and play. Therefore, our new customers were able to install and commission their brand new Alphasonics systems without the need for an engineer visit. Plus, we were also to provide free of charge online training and certification for these customers where required.

We have been able to keep our facilities operational and productive during the pandemic, making it so customers have not been affected by shutdowns or experienced delivery delays.

There are a number of companies' converters can choose from to purchase services or equipment for roller maintenance and cleaning. What are some key

factors they should pay attention to when choosing the right products and services for their specific needs?

Bradley: Look for innovation. Look for companies that provide solutions with "solid data" backing the claims. Search out suppliers that are understanding of "your process" or probe proactively to learn it. Each converter has a unique process, and often a broad stroke solution might give limited success or no success at all. When it comes to roller coverings and coating surfaces, the supplier should be challenged to provide your custom solution!

Jones: It's the age old saying - it is a case of getting what you pay for. Cheap and cheerful systems are just that. Often, they are ineffective and unreliable but expensive to run.

When I make presentations to those in the industry, I encourage them ask themselves three pertinent questions when they're considering an anilox cleaning system:

1. **Can your system give you full control of the anilox?**
2. **Can you control your cleaning system?**
3. **At what cost?**

Converters are often caught cold by thinking different systems

will do the same job regardless of vast differences in specification, quality and price.

As such, we categorize ourselves as entirely different to any ultrasonic supplier out there. Our systems our fully automatic and provide a safer and more effective cleaning quality than anything out there. Plus, if your cleaning supplier suggests you should presoak a roll and restricts ultrasonic cleaning time - you have yourself a red flag to consider. This means their technology has damage potential and will not be able to clean an anilox roll to the required standards. We always encourage customers to benchmark us against other methods. Press and anilox manufacturers around the world have done just that - and thus have a strong and lasting relationship with Alphasonics.

Always base your buying decision on research driven scientific data and facts. Just as importantly, ensure they can provide the data in the first place. Not just figures taken from their existing customers but those that benchmark cleaning technologies against each other. Allow facts and figures to be your guide rather than simply price or hearsay and you will indeed end up with the right solution for you. ■

TICKETS FAST
ticketsbycarter.com

NEW! 2 DAY ECONOMY SHIPPING
217.227.4464
Fax 217.227.4140
raffletic@aol.com

CP
Carter Printing Co. Inc.
607 Elevator Street • Farmersville, IL 62533

Your Full Service Printer
LETTERHEAD • ENVELOPES • CARBONLESS FORMS
BUSINESS CARDS • BROCHURES • NOTEPAPER
AND MORE

High Quality, On Time Converting

- Expert slitting, sheeting, trimming, die cutting, corona treatment & shrink wrapping services
- Quick turnaround on specialty projects
- Clean, affordable & reliable

WESTECH INDUSTRIES

Get A Quote Today:
www.Westech-Industries.net
800-916-9488






























Surface Tension Testing

For Adhesion AND Cleanliness Testing

• Quick • Easy • Clean

LOTAR ENTERPRISES TESTING INKS & PENS

Tel: 920-465-6678
sales@lotarllc.com
www.lotarllc.com

 AGL Inc 14 www.aglinc.com	 Finzer Roller COBC www.finzerroller.com	 Nordmeccanica Group.....1 www.nordmeccanica.com
 Alphasonics..... 16 www.alphasonicsusa.com	 Global Equipment Int'l LLC..... IFC www.globalequipintl.com	 Powell Engineering Inc.....5 www.powellengineering.com
 American Roller 20 www.americanroller.com	 Global Plastics Inc.....8 www.ripperonline.com	 Printco Industries LLC 21 www.printco-industries.com
 ASHE Converting Equipment ... 11 www.ashe.co.uk	 IMS Technologies Group.....3 www.imstechnologies.com	 Pro Tapes & Specialties..... 22 www.protapes.com
 Blower Application Co2 www.bloapco.com	 Industrial Indexing Systems7 www.iis-servo.com	 Schober USA Inc..... 10 www.schoberusa.com
 Carolina Tape & Supply..... 15 www.carolinatape.com	 IPCO US LLC 24 www.ipco.com	 Sonic Solutions 25 www.sonicsolutionsusa.com
 Carter Printing Co., Inc. 28 www.raffle-tickets.com	 Jemmc0, LLC..... FC www.jemmc0.com	 Supply 55, IncIBC www.supply55.com
 Catbridge Machinery 17 www.catbridge.com	 LLFlex..... 26 www.llflex.com	 Westech Converting..... 28 www.westech-industries.net
 Delta ModTech 23 www.deltamodtech.com	 Lotar Enterprises 28 www.lotarenterprises.com	 WestRock 27 www.westrock.com
 Diversified Enterprises 19 www.dynsonline.com	 Maxcess International 13 www.maxcessintl.com	

CONVERTING SIMPLIFIED



Top converters worldwide rely on NEPATA to get the job done. To learn more contact Supply55, Inc. at 734-668-0755 or visit www.supply55.com.

 **NEPATA**
REWIND. TRIM. SLIT.
EQUIPMENT FOR EFFICIENT CONVERTING

SUPPLY55
www.supply55.com
info@supply55.com



PFFC
 An RDG Media, Inc. Publication
 PO Box 893
 Fort Dodge, IA 50501

Presorted Std
 US Postage
 PAID
 RDG Media, Inc.



WE'VE GOT YOU COVERED...



ROLL COVERINGS

Rubber • Polyurethane • Silicone
 Ceramic • Chrome • Nylon



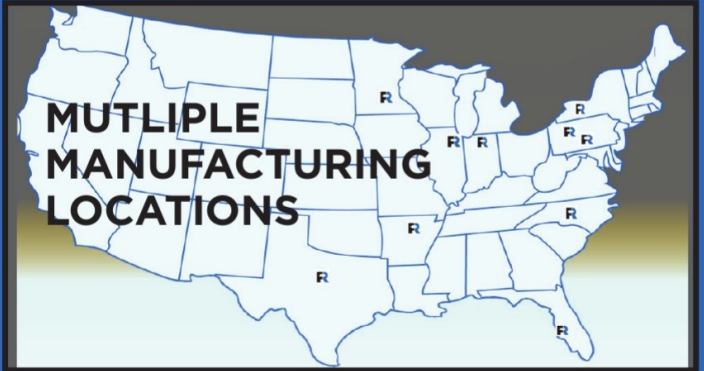
CAPABILITIES

Recover • Regrind • Repair
 New Cores • Grooving
 Dynamic Balancing



SPECIALTY PRODUCTS

Rotary Brushes • Pin Rolls
 Fiberglass Sleeves
 High-release Coatings Chrome



**MUTIPLE
 MANUFACTURING
 LOCATIONS**



888-486-1900
www.finzerroller.com
sales@finzerroller.com