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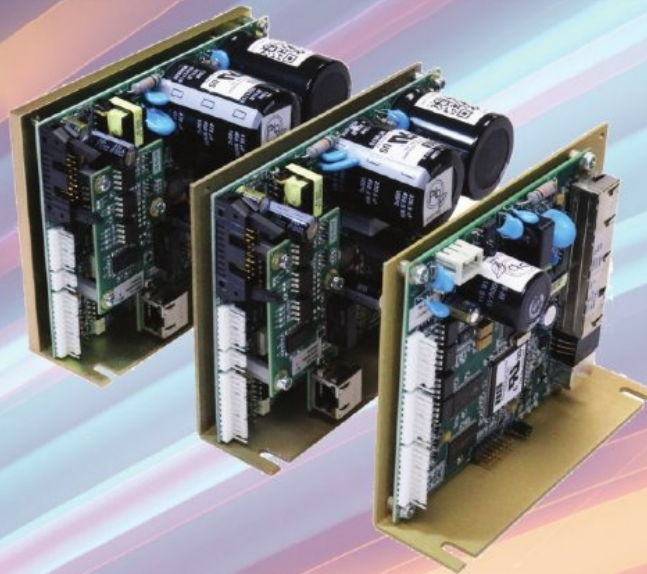
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## Catching the Curve Ball



**Joan Mantini**  
Editor

None of us could have predicted the impact of COVID-19 was going to have in 2020, and many questions are still lingering as we enter 2021. Will COVID-19 change the mindset of consumers? Will sustainability continue to be on the forefront of innovation in the converting and printing industries? What is the impact going to be from the increased use of single-use containers? And many more, all of which are putting our industry to the test to provide solutions. Here are a few companies that are looking ahead and addressing concerns:

- New research from UW-Madison which is taking a solvent-based approach as it looks to make multilayer plastics recyclable. The research looks at the multilayer plastic materials common in food and medical supply packaging. Looking forward, the researchers hope to create a computational system to find solvent combinations for a variety of multilayer plastics.
- Huggies announced its launch of biodegradable baby wipes in step towards its plastic-free goal. Kimberly-Clark estimates that it has removed 359 tonnes of plastic from its broader portfolio of baby wipes and wipe packaging in 2020. Aside from creating plastic-free wipes, it has removed the internal bags from large pack boxes.
- Mars Wrigley UK has unveiled redesigned packaging for some of its confectionery brands which it claims will mitigate the use of 51 tonnes of plastic per year. The lighter weight designs will be used to house products including sharing bags of M&Ms, Galaxy Counters, Skittles and Maltesers. On average, they contain 10 percent less plastic than the current range of packaging. They are anticipated to be launched in supermarkets April 2021.
- Amcor recently announced it launched its first recyclable shrink bag for meat, poultry, and cheese. Eco-Tite® R was launched in Europe, the first designed to be recycled, PVDC-free shrink bag for fresh and processed meat, poultry and some cheeses. Amcor Eco-Tite® R is designed to maximize shelf-life, maintain food safety, reduce food waste and can be recycled in existing polyethylene (PE) plastic recycling streams.

COVID-19 has indeed thrown us a wicked curve ball, but 2021 will continue to be a step forward in recyclability and sustainability. It will also be a step forward in combating the challenges the virus has brought upon the workforce. With the vaccine now being administered, we explore this topic further. Amongst the articles in this issue, we put COVID-19 in the spotlight to explore if employers should require the, now available, vaccination.

'Till next time,

*Joan Mantini*  
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**A RDG Media, Inc. Publication**  
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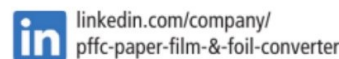
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# Should Employers Require Covid-19 Vaccinations?

By Neal Langerman, Ph.D.

Vaccines approved under Experimental Use Authorizations (EUAs) will be available soon. In theory, this should make re-opening businesses easier.

As immunity develops within the population, the case-count will drop, and the many restrictions will be eased. Realistically, individual immunity will require about 2-3 months following the initial vaccine dose to develop fully. At best, in the U.S., everyone who wants a vaccination should be able to get two doses by late second quarter 2021.

This will vary significantly in other parts of the world. But, one in three people polled in August said they would refuse to be vaccinated (Paulsen, 2020). The “anti-vax” presence on social media has grown significantly (Burki, 2020). In this environment, do you, as an employer, have a duty or moral responsibility to insist your employees be vaccinated—and can you do that?

The law makes it clear that a state government can mandate employee vaccinations. In the 1905 case of *Jacobson v. Commonwealth of Massachusetts*, the U.S. Supreme Court held that States have the authority to require vaccinations. The Americans with Disabilities Act (ADA) defines vaccinations and health screenings as “medical examinations” and, therefore, an employer-mandated vaccination must be job-related and consistent with business necessity. In the opinion of Dorit Reiss (Weise, 2020) of the Hastings College of Law “Legally, every employer can require it—you don’t have to be a high-risk employer to require



Given the infectivity of SARS-CoV2, it is realistic for employers to protect their employees and their business by requiring all employees to be vaccinated. (Widener, 2020) [photo courtesy Adobe Stock]

it. On one hand, employers will be concerned about pushback from employees. On the other hand, they’ll also be concerned about COVID outbreaks that can be prevented.” Other laws are addressed further by Widener (Widener, 2020).

While OSHA has been reticent dealing with the pandemic and has issued citations mainly addressing respirator use (Agency, 2020), the General Duty Clause of the Occupational Safety and Health Act makes it clear that the employer has a duty to take action to prevent illness from spreading in the workplace. There is clear precedent for vaccinations within the healthcare industry. Given the infectivity of SARS-CoV2, it is realistic for employers to protect their employees and their business by requiring all employees to be vaccinated. (Widener, 2020)

Carve-outs to the mandate for religious reasons, for medical

reasons and, possibly, for personal/philosophical reasons should be provided. Large employers should consider offering onsite clinics, open to employees and their families for vaccination. Small employers can provide release time and compensation for employees to go to public-access vaccination locations.

Employees should be reassured that if side effects occur, they will be taken care of medically and financially. Recent reports from the phase III trials suggest that vaccine recipients may exhibit moderate flu-like symptoms during the 24-36 hours following the second dose. Employees knowing they will not be penalized for staying home under those circumstances will be reassured and more willing to be vaccinated.

There are down-sides to such a mandatory requirement. Pushback by employees is certainly possible. If a union is involved, pushback



could be complicated, depending on the contract. Since a vaccine approved under an EUA is considered “investigational,” the application of existing laws, regulations and precedents is a bit uncertain. On this last point, Stephen Hahn (Weise, 2020) FDA Commissioner, said, “It’s possible that some employers or schools will have questions or concerns about an investigational product issued an Emergency Use Authorization, which is why we will be as transparent as possible about the data and information we use to make our decision. This should help those organizations determine what is most appropriate for them.” The message is clear: follow the FDA and CDC guidelines and recommendations.

What, then, should a business owner do? Legally, you can require employees to be vaccinated as long as you can make a credible argument of a business necessity. Protecting your production staff should be adequate. You must make the moral decision based on your beliefs and self-interests.

For me, I would urge all employees and their families to be vaccinated and provide incentives for them to do so. Certainly, a bonus of \$100 per family member vaccinated is a small investment to assure a healthy employee base.

Stay safe and stay healthy. ■

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Dr. Neal Langerman provides litigation support and expert testimony for both defendants and plaintiffs in litigation involving a wide variety of chemical-related issues. [Advanced Chemical Safety, [www.chemical-safety.com](http://www.chemical-safety.com)]

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# Achieving Fluid Production: Controlling Static and Contamination

By **Matt Fyffe**, Vice President and General Manager, Meech USA

Companies in the label and packaging industry have come under serious pressure this year – unprecedented demand due to panic buying and stockpiling, production challenges due to social distancing requirements, staff shortages and supply chain issues have dominated the sector. With its critical

presence in modern day life, helping to dramatically reduce food waste and protect products from contamination, flexible packaging’s seamless production and flawless quality control measures have never been more important.

However, there are numerous threats that can impact upon the

consistent, high quality delivery of products – one of which being static generation.

## **The threat to quality control**

Static, when untreated, can cause web materials to become statically charged. This primarily happens

## The presence of static can lead to a myriad of problems – contamination being one of the most significant.

when the web – paper, foil or film – is moving at high speed and can occur in a few ways; for example – through friction when the web makes contact with converting machinery, or through ‘separation’ – the unwinding of web rolls. Electricity from surrounding machinery can also lead to static generation through induction.

The presence of static can lead to a myriad of problems – contamination being one of the most significant. Static charges attract airborne dust and dirt to the web’s surface, potentially hindering the material’s final presentation but also greatly impacting on the hygiene of the finished product, which is almost guaranteed to be discarded before entering the next phase of production.

Statically charged webs can also impact on print performance; ink drops may be repelled away from the intended surface target, leading the print job to appear faded or blurry, affecting the overall appearance of the product.

But a web moving at speed can also become contaminated without static’s presence. This is caused by the ambient air that the web drags along when in motion – it creates a boundary layer that can trap debris within or beneath the surface of the layer. The faster the web moves, the thicker the layer becomes and the greater the



Meech itself has developed a non-contact web cleaning system for webs running in low tension. CyClean RTM incorporates all the sophistication of the original CyClean web cleaner, and bypasses the challenges presented by low tension webs by cleaning the web on the roller. The CyClean-R’s shape forces the air into a precise direction at the web at extremely high velocity.

chances of contamination.

Regardless of the cause, contaminated web materials can lead to higher levels of wastage, extended downtime and additional costs for maintenance repairs. Fortunately, there is sophisticated technology available in the shape of static control and web cleaning, which can counter the threats that static charges and contamination pose on packaging and labeling lines.

### Static control

Designed to remove static from a moving web, static control uses ionization, where a voltage is fed to an array of emitter pins mounted on an ionizing bar, which releases a high-energy “cloud” of positive and negative ions. Any

statically charged surface passing close to the cloud is quickly neutralized. Static control devices are a highly effective solution when installed just after the unwinding process and before the printing stage.

Today’s high advanced, modern static control products are designed for short, mid and long-range ionization. Suitable for fast-paced production environments, this technology is engineered to include monitoring technology as well as control over output voltage, frequency and balance.

### Web Cleaning

Web cleaners act to effectively resolve contamination issues. Available in two forms – contact

and non-contact – they are highly efficient at removing loose, dry debris from the web’s surface.

A contact cleaning system is suitable for slower, narrow web lines, such as those found in labeling. These cleaners incorporate twin elastomer contact rollers and perforated adhesive rolls which pick up and remove contamination from the web’s surface. While highly effective at removing low to moderately contaminated web materials, contact systems are not ideal for highly saturated webs.

Non-contact systems can remove all types of contamination from a variety of surfaces.

**Investing in equipment that can counter static charge and contamination will help companies keep up with the demands on their business.**

Utilizing advanced computational fluid dynamics, non-contact systems subject the web to a strong but harmless force of turbulent air that breaks through the web boundary layer, releasing the contamination into the vacuum air flow, where it is removed.

**Conclusion**

Increased demand is likely to result in shorter turnaround times, which will lead to incremented production speeds. This can create problems on various parts of the line, impacting on flow and ongoing business costs.

Investing in equipment that can counter static charge and contamination will help companies keep up with the demands on their business and ensure the consistent manufacturing of high-quality label and packaging products. ■

**ABOUT THE AUTHOR**

Matt Fyffe, vice president and general manager for Meech International, is responsible for all of Meech’s operations in the USA. Having joined Meech in 1994, he has developed a vast knowledge of the plastics, packaging, automotive, medical, converting, and electronics industries.



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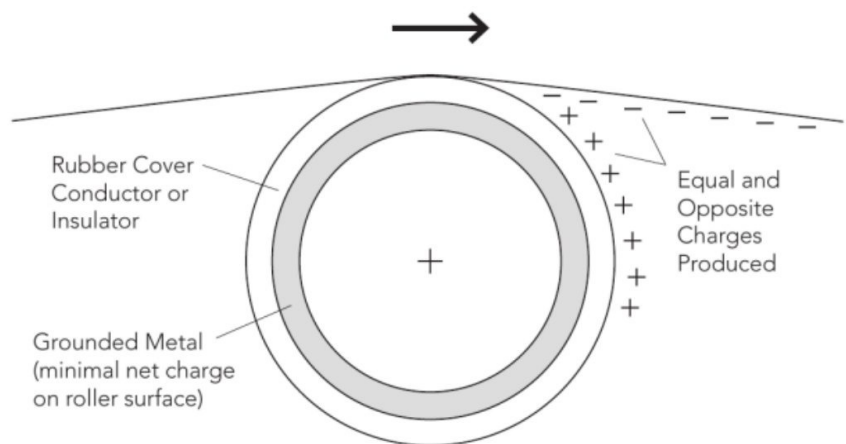
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# Advantages and Benefits of Conductive Rubber Coverings in Critical Roll Positions

By Bruce Hyllberg, Research Specialist, American Roller

When a web contacts a roller surface, electrons can transfer from one material to the other. The electron has a negative charge. The molecule the electron departed from is left with a positive charge. This happens because of the chemical structure of the materials. Some molecules want to gain electrons and some want to lose them. It all has to do with the structure and stability of the particular molecule on an atomic level. The number of electrons transferred is very small; perhaps one molecule in a million gives up an electron. This process is called tribo-electric charging (tribology has to do with friction) or just tribo-charging. Every time the web touches something, it potentially can gain or lose charges of either polarity depending on the interaction with what it touches.

Figure 1: The Triboelectric Effect



As long as the web and the roller cover are in contact, (assuming neither web nor roller previously had any charge) the voltage is zero, there is no static generated. Static is generated when the materials are pulled apart and the charges cannot get

back to where they came from.

The volume of charges produced can be affected by factors such as web tension, nip pressure, web wrap angle on the roller, web speed, rubber hardness, and rubber surface roughness. These factors all have to do with the intimacy

and area of contact between the two surfaces which directly affect the number of charges produced.

Nevertheless, the voltages on the web and on roller surfaces can both cause a variety of problems.

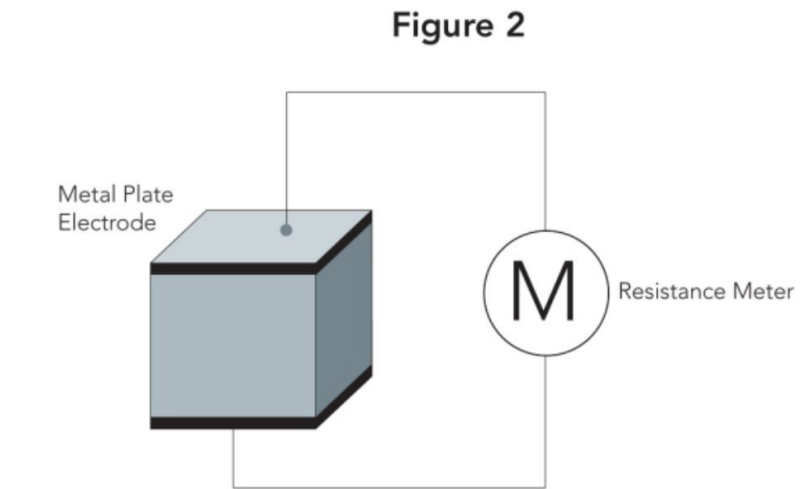
### Dangers of Static Electricity

- Shock hazard to operator
- Web damage from spark discharges
- Web contamination, dust
- Fire hazard using flammable solvents
- Discharge effects on computers, PLCs, controllers
- Wind-up roll or stacking problems

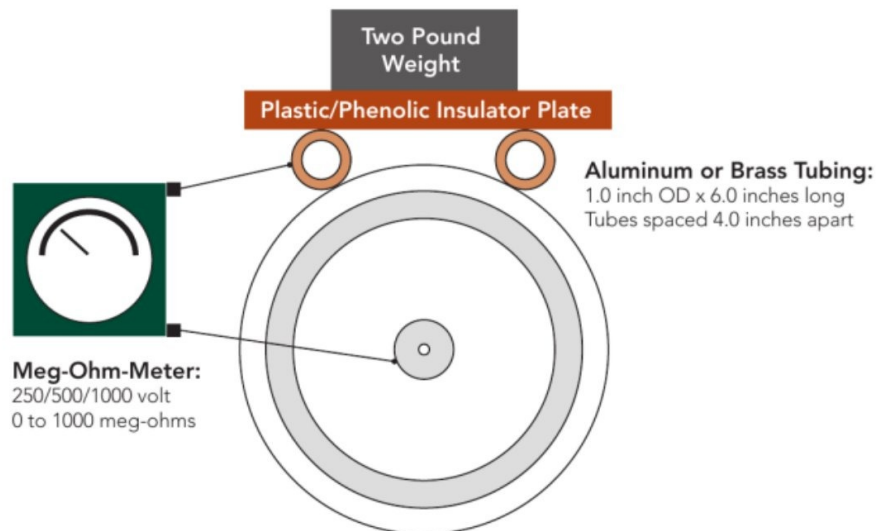
The voltage on a roller can be easily controlled and minimized by using an electrically conductive rubber cover and making sure than the roller core is grounded. This provides a path for the static on the roller surface to escape to ground. Various roller vendors may describe their products as conductive, highly conductive, low resistance, or semi-conductive and often these terms are confusing. They do not have much practical meaning unless you understand how the electrical resistance of rubber is measured.

### Measuring Volume Resistivity

The typical method of testing the volume resistivity of rubber involves measuring the resistance in ohms of a one centimeter cube of material across opposite faces. A measurement of one million ohms would be written as  $10^6$  ohm-cm. The unit is ohm-cm rather than ohms per cubic centimeter even though you are measuring the resistance of a



**Figure 3: Roller Resistance Testing – Hand Method**



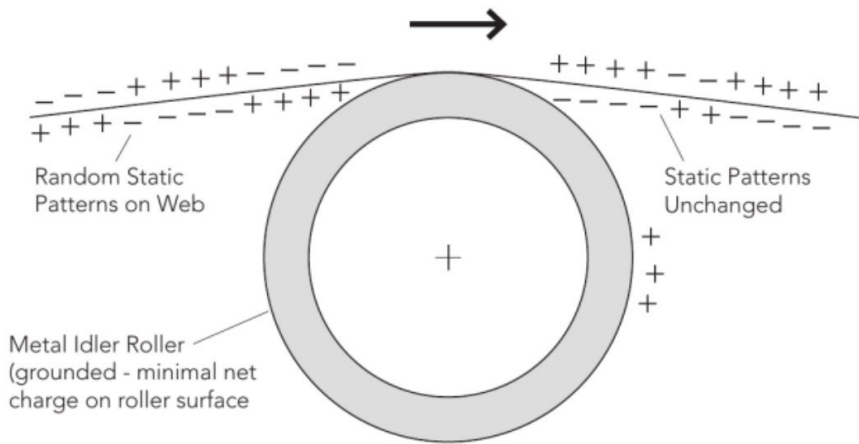
volume of material not just the surface resistance.

True conductors like silver, gold, and copper are  $10^{-5}$  ohm-cm or less (0.00001 ohm-cm). Materials that are basically insulators are above  $10^{12}$  ohm-cm. Usually conductive or semi-conductive rubber is considered to be in the  $10^4$  to  $10^8$  ohm-cm range (10,000 to 100 million ohm-cm). These seem like really high resistance values for something that is termed

conductive but it is conductive enough to dissipate static on rollers because the voltages are high and the currents are very small.

If a rubber covered roller was nipped to metal roller in an actual installation, then it would be simple matter to determine the net resistance of the entire rubber covering by measuring the total resistance from the metal roller core to the rubber roller core through the rubber covering.

Figure 4



Let's assume that number is one million ohms (1 meg-ohm). According to Ohm's Law, for every 1000 volts (1 kV) of static on the rubber covering, it would

be able to dissipate a current of 1 milliamp (0.001 amp) which is a large amount of static. Typical voltages on rubber rollers are many times greater than 1000

volts and static currents are much smaller than 1 milliamp. What appears to be a high resistance roller can still be very effective at dissipating static from its surface.

## Removing Web Static

You would expect that a grounded metal idler roller would remove static from a charged web but that is generally not the case. The path to ground is there and the roller is highly conductive so why doesn't the static on the web flow to ground? The main reason is most likely that the web is two-sided; each side can have a different polarity and magnitude of charge. The charges on the side of the web contacting the roller may flow to ground when

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the web first touches the roller but the charges on the opposite side of the web pull charges up from ground when the web is departing from the roller so that the net charge on the web does not change much or at all.

The situation is the same on rubber covered rollers. If a rubber roller removes some static from the web it is because the triboelectric charge generated by the web-roller interaction is opposite to the charge already on the web. So in general, rubber covered rollers do not dependably remove static from webs. This needs to be done by active and passive ionizers placed near the web especially where the web voltages are high. It is still useful to make sure that surfaces

of rubber covered rollers are not building up large levels of charge.

### Applications

One application which is particularly sensitive to high static voltages is a rubber covered roller used in a coater that employs flammable solvents. In the printing industry it is well known that roller surface voltages below about 1500 volts do not have enough energy to cause a spark that will ignite solvent fumes (example: toluene in gravure printing). A conductive rubber cover with a well-grounded core (carbon brush not through the bearings) will limit the surface voltage to a low and safe level. In this case, care needs to be taken to use a rubber

cover that is minimally affected by the solvent being used.

Another application where a lot of charge can be generated is in an S-wrap assembly where both rubber rollers have the same rubber covering. In this case, the triboelectric interaction with the first roller which contacts one side of the web is the same as the second roller which contacts the opposite side of the web. The charges generated by both rollers are the same polarity and can be additive.

It's a good idea to use conductive, grounded, rubber covered rollers wherever possible. This will minimize charge build up on roller surfaces and will help to keep web voltages down as well. ■

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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](http://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.**





American Roller

## The Leader in Web Handling Expertise and Innovation

As the only solutions provider with all capabilities in-house, American Roller is proud to be a trusted and dependable supplier of custom cores, high-release coatings, and durable coverings. Our dedicated in-house team of engineers, research scientists, and technical field experts partner with our customers to provide comprehensive expertise, convenience, and solutions that optimize production processes.

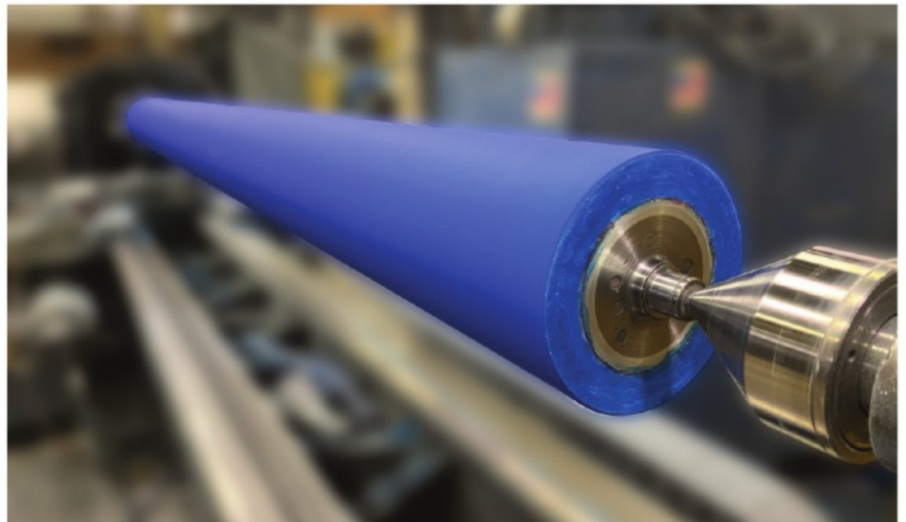
Founded in 1938 and based in Union Grove, WI, American Roller has multiple facilities spread throughout the United States, China, and several licensees located globally. This global network drives multiple levels of availability with local plants, integrated transportation, and a national sales and customer service team.

### Globally Networked Resources

Our globally networked strategies drive multiple levels of availability with local plants, integrated transportation, and national sales and customer service professionals. Our staff is organized in teams dedicated to our customers to ensure your experience is seamless regardless of product or plant. With locations strategically placed throughout the U.S, a plant in China, and 8 globally located licensee locations, we've got you covered regardless of where you are located.

### Roller Services

We differentiate ourselves by anticipating market needs and developing state-of-the-art engineered solutions that help our customers stay at the forefront of their industries. Our services are continuously expanding to provide a more comprehensive experience, personalized solutions, and superior services. While our services are always evolving, our



“core” services include our on-site coatings, reverse engineering, various finishing options, and journal/shaft/core body repair.

### Core Fabrication

Industrial cores and bases are manufactured in-house with the capability to apply all material types. Our experienced team of engineers is available for design and CAD Drawing assistance. Whether you need a new live/dead shaft, idler, bowed, heat transfer, and more, we can engineer a solution for your unique application. Thermalon, our patented electric heat transfer rolls are a cost-effective advantage over oil, water, or steam heat-generating systems found in many converting operations.

### Roller Coatings

Plasma Coatings was developed as a unique dual-coating system that offers the wear and abuse resistance of thermal spray materials such as Tungsten Carbide with high release polymers like Teflon. Our expertise with polymer materials is gained from decades of providing the highest quality and most extensive selection of polymers. Our field engineers will evaluate your application to provide a

solution and conduct lab testing with your product or with you to field test coatings to determine the perfect coating for your specific application.

### Roller Coverings

All surface enhancement coverings are manufactured in-house giving users the best solution by balancing the engineering trade-offs of each covering type. Arcomax is the name brand for our all-encompassing polymer family of roller coverings. We provide standard compounds as well as blended and specialty formulated versions of standard polymer families. In addition to providing standard and customized compounds, American Roller also provides a variety of specialty covering options; Arcostretcher and Pegasus to name a few. The American Roller Arcostretcher is an all-purpose elastomeric grooved roller designed to remove wrinkles from paper, film, and foil without web distortion. And our Pegasus line of rollers provides a dual-layer compression roll with an abrasion-resistant outer cover for converting, corrugated, and printing industries.

#### American Roller

262.878.8665

[www.americanroller.com](http://www.americanroller.com)



American Roller

YOUR GO-TO WEB HANDLING / CONVERTING EXPERTS

American Roller - Trusted Since 1938

# 82 Years Dedicated to Web Handling Expertise and Innovation

As the only solutions provider with a team of professionals and with all capabilities in-house, American Roller is proud to be a trusted and dependable supplier of custom cores, high-release coatings, and durable coverings. Our dedicated team of engineers, research scientists, and technical field experts partner with our customers to provide comprehensive expertise, convenience, and solutions that optimize production processes.

### Globally Networked Resources

Our globally networked strategies drive multiple levels of availability with local plants, integrated transportation, and a national sales and customer service team.

### Locations

11 locations and 8 globally located licensee locations with dedicated teams providing customers support regardless of their location.

### Roller Services

Anticipating market needs and developing state-of-the-art engineered solutions that help our customers stay at the forefront of their industries.

### Core Fabrication

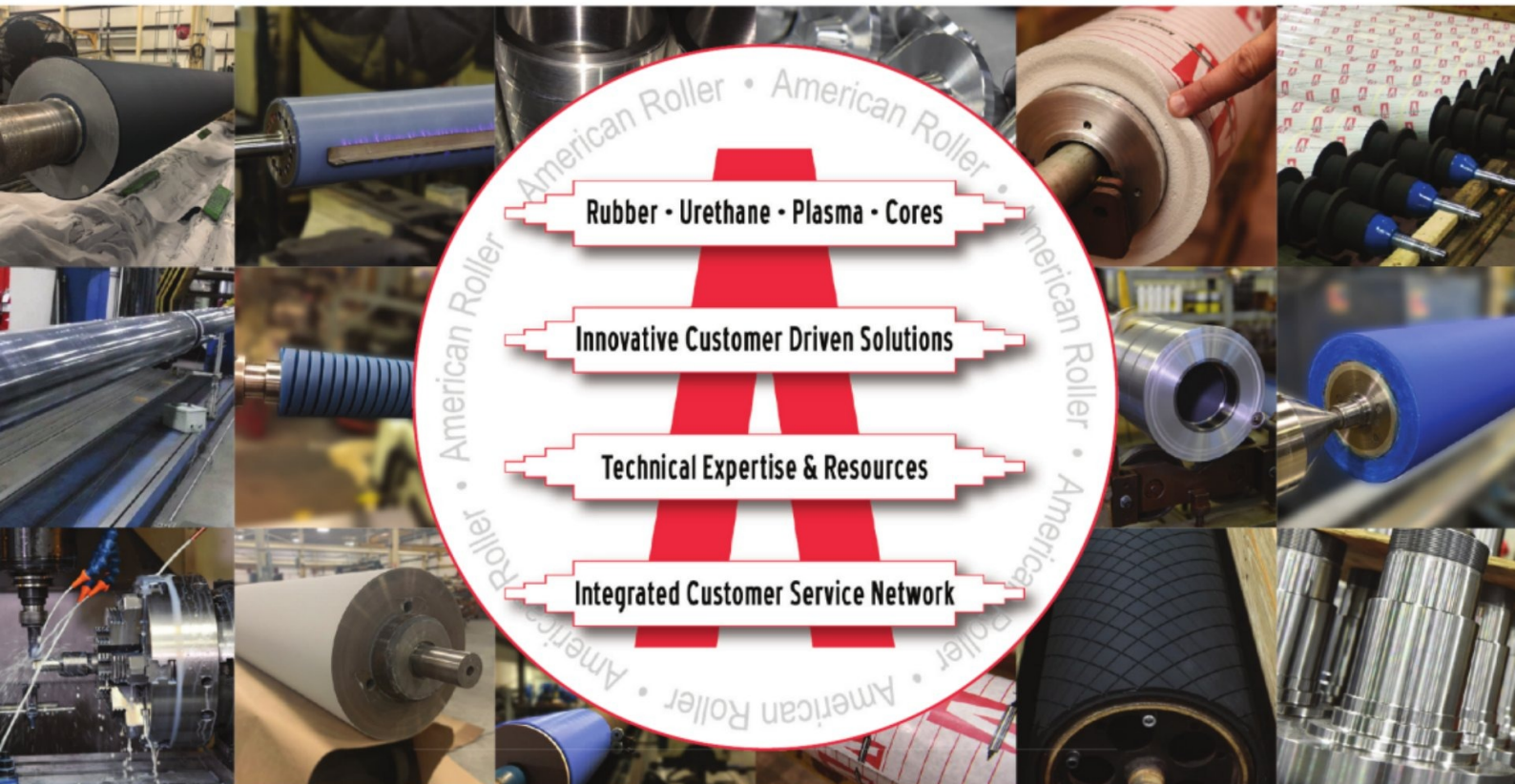
Our experienced team of engineers is available for design, engineering, and fabrication assistance.

### Roller Coatings

Our dual layer coating system offers the wear and abuse resistance of thermal spray materials.

### Roller Coverings

All surface enhancement coverings are manufactured in-house giving users the best solution by balancing the engineering trade-offs of each covering type.



Demand a Solution, Not a Product.



## Engineered for your Toughest Challenge

For over 40 years Delta ModTech has been a global leader in web converting and packaging innovation. Headquartered in Minneapolis, Minnesota, Delta ModTech designs and builds manufacturing systems for the most complex demanding jobs in the medical, pharmaceutical, label, RFID, electronics, automotive, battery, and consumer industries.

Delta ModTech's process support and service is what truly sets them apart from the competition. Real people, with real experience, providing solutions for you Now. Just ask any Delta ModTech machine owner.

### CONVERTING, PACKAGING, COATING, DRYING

Building complete web converting and packaging machines out of proven, flexible modules gets you to market faster, with less risk and less downtime. Our modules have already proven their superior precision, validation, and compliance capabilities.

#### MARKETS SERVED

**Medical:** Woundcare Dressings, Ostomy, Point of Care Diagnostics  
**Pharmaceutical:** Transdermals, Dissolvable Films, IVD  
**Automotive:** Gaskets, Adhesive pads, Metalized labels, Foam  
**Electronics:** Flex circuits, Batteries, Touchscreens, RFID, Wearables  
**Consumer:** Cosmetics, Orthopedics, Filtration, Packaging  
**Labels:** Multi-laminates, Holograms, Digital Finishing

#### ROTARY DIE CUTTING MACHINES

Rotary Die Cutting Machines that Achieve the Tightest Tolerances. Whether you are faced with new specifications that



Crusader® Converter

require tighter tolerances, or your old machine can no longer cut as precisely as it used to, Delta ModTech has a solution with our precision die cutting machines.

- Modular machinery design provides the ultimate flexibility
- Industry-first servo motor control at every die station and winder
- Precision die cutting and multilayer lamination
- Industry leading tension control
- Mod-Track® Vision Inspection – closed loop registration, date/bar code reading, Part-in-pouch, reject bad parts
- Conveyors for spreading, stacking, rejecting and inspection

#### PRECISION PACKAGING SOLUTIONS

Seal to print registration is the packaging solution for process applications where speed, flexibility and consistent seal quality are important. 3-4 side seal equipment with full rotary motion inline and in registration with the converting process.

For the manufacturing of:

- Heat-seal/Cold-seal pouches
- Resealable pouches
- Liquid dispense pouching
- Sachet filling

#### INTEGRATION

Improve your capability with seamless integration. Delta has developed several solutions to meet the package and pouching needs of our customers and their end users. Our experience with building machines to meet the demands of the most stringent specifications will give you confidence in meeting your production goals.

Commonly integrated equipment:

- Extrusion Equipment
- Part handling Conveyors for: stacking, shingling, sorting, turning, etc.
- Turn-key integration of date, lot and bar code printers – inkjet, thermal transfer, laser, digital
- Case packing and cartoning  
Packaging and Pouching

#### COATING & DRYING

Now with Frontier Coating Technology - In 2016, Delta ModTech acquired Frontier Industrial Technology (now Frontier LLC). Frontier has successfully developed custom coating and drying solutions for 30 years. This partnership allows us to provide turnkey solutions from lab scale to production.

- Lab Coaters, Pilot Coaters and Production Coating Solutions
- Specializing in Roll to Roll Slot Die Coating
- Coating Technology Lab for Development and Proof of Principle
- Floatation, Roll Support, Impinged Air Drying

#### INDUSTRY RESOURCE

Check out Delta ModTech's blog for the latest industry trends and case studies. For more information visit [www.deltamodtech.com](http://www.deltamodtech.com)



**Machines  
Engineered  
for your  
Toughest  
Challenge**



**EXPERT ENGINEERING | PRECISION PERFORMANCE | PASSIONATE SERVICE**

**Web Converting, Finishing &  
Packaging Equipment**

**800-279-3358**

+1 763-755-7744

Europe: +46 706 97 24 34

Minneapolis, MN USA

[www.deltamodtech.com](http://www.deltamodtech.com)

 **DELTA MODTECH®**  
**MASTERS IN MOTION®**

# Your experts in Coating and Drying



## Coating & Drying Equipment

Lab Scale • Pilot • Production

### For the manufacturing of:

- Microelectronics
- Batteries and Capacitors
- Fuel Cells
- Medical Diagnostics
- Transdermals
- Oral Pharmaceuticals
- Textiles and Adhesives
- Paper, Film and Foil
- Other Applications



**FRONTIER®**  
A Delta ModTech Company

Towanda, PA USA 570-265-0769 Toll Free: 844-432-9254 [www.frontiercoating.com](http://www.frontiercoating.com)



## Dover Flexo Electronics – The Tension Control Specialists

With over 46 years of experience, Dover Flexo Electronics (DFE) is a recognized leader for tension control products. We manufacture, sell and service a complete line of tension measurement, display and control products for a variety of industries worldwide.

Tension measurement and control systems for flexible packaging and paper, film and foil converting are our specialty. Our systems deliver improvements to material processing productivity and reliability, reducing waste and operating costs. These benefits enable payback on a new tension control system in as little as a few weeks.

The best investment in a new tension measurement system starts with the installation of a DFE Tension Roll® transducer or our cantilevered Narrow Web tension transducer. The Tension Roll® and Narrow Web transducers both combine a high-durability idler roll and two tension sensors in a shaft-centric design. Each roll system requires no assembly — just bolt them onto your machine. They are available in 2.25", 3", 3.5", 4", 5" and 6" roll diameters and in widths from 6" to 120". Available load ratings range from 12 to 400 lbs.

DFE also manufactures the Model C tension transducer, considered the industry standard in high-sensitivity semiconductor strain-gage tension load cells. These workhorse transducers are available to support live-shaft and dead-shaft idler rolls with a wide variety of mounting styles and load ratings that range from 10 to 800 lbs.

The semiconductor strain-gage technology featured in all DFE load cells delivers up to 33x more signal performance



than some foil gage alternatives. In combination with the proprietary digital amplification system featured in DFE amplifiers, indicators and controllers — DFE's tension systems are capable of delivering an incredible range of sensing performance.

For customers requiring display indication, the TrueView™ 1100 series touchscreen tension indicators combine an easy-to-use HMI with simultaneous Ethernet, 0-10 VDC and 4-20 mA connectivity. The TrueView™ 1100 features a bright 500 nit, impact-resistant display and a rugged aluminum enclosure machined from solid 6061-T6 alloy for excellent durability and heat dissipation.

For those seeking a turn-key tension control system, the easy-to-use, touchscreen SteadyWeb™ 6 digital tension controller delivers precise closed-loop

performance with an incredible amount of flexibility and adjustment. The SteadyWeb™ 6 supports electric and pneumatic brakes and clutches, as well as most drive systems.

DFE's full line of pneumatic tension brakes are both simple to operate and reliable. The time-tested design features stress-relieved ductile iron discs, tool-less quick change pads and limited-travel pistons. Since 2011, DFE's patented Silencer™ friction pads have been 100% effective at eliminating brake squeal noise — providing environmental and safety benefits for machine operators and plant managers.

All DFE manufactured products are made in the USA and backed by an industry-leading 5 year tension-free warranty.

Phone: (603)332-6150

Website: [www.dfe.com](http://www.dfe.com)





TENSION MEASUREMENT & CONTROL SYSTEMS

## STAY IN TOUCH WITH YOUR PROCESS PERFORMANCE



DFE's latest tension indicators feature an easy-to-use touchscreen HMI with flexible configuration options, built-in diagnostics and time-lapse graphs to keep you informed of your system's status.

### TrueView™ 1100 Series Tension Indicators

- Machined from solid 6061-T6 billet aluminum for superior strength, durability and heat dissipation
- Bright 500 nit, impact-resistant touchscreen display
- Easy to install on a panel, DIN rail or vertical column with included hardware
- Quickly set display parameters and calibrate load cells
- Diagnose circuit faults and incorrect wiring on the fly
- Simultaneous 0-10 VDC and 4-20 mA isolated outputs
- Optional Ethernet connectivity
- Industry-leading 5 year warranty
- 100% Backward compatible with all DFE tension transducers



For a quote on the new TrueView™ 1100 Series tension indicators, email or call:

[1100quote@dfe.com](mailto:1100quote@dfe.com)

603.332.6150





## ETI: Empowerment through Innovation

For more than 20 years, ETI has been a trusted partner with players in the narrow-web converting industry. As a pioneer in the art of in-house coating, the company develops and produces specialized equipment for self-adhesive label printing and converting.

### How does in-house coating stand out from other technologies? A bit of historical background

Brought about in 2000, the concept of in-house coating has upheaved legacy production methods for label printers and converters. By literally deconstructing and rethinking how a label is fabricated, ETI materialized a novel idea and presented COHESIO—an all-in-one label printing, glueing, siliconging and finishing machine. By eliminating the need to outsource label stock procurement, printing businesses suddenly acquired the capacity to truly produce, instead of just printing.

**For us, this now well-established, empowering approach stands as the only appropriate way to make a label—From A to Z.**

### Success factors

In the past two decades, in-house coating technology has established itself as the main alternative to traditional label-making methods. Not only is it a cost-effective solution—reducing adhesive material expenses—but it also boasts sustainability—with its capacity for linerless applications. And we're not even mentioning the autonomization gained by our clients, which can then freely express their creativity.

From its inception, ETI has been constantly innovating and developing state-of-art know-how unequaled in the industry. Rather than offering one-size-fits-all solutions, its multidisciplinary teams strive to grasp the client's unique wishes and needs, always taking in consideration the tangible end product. After the conception and configuration phases, our specialists make sure to pass along to the client all the knowledge needed to make educated choices about raw materials and production recipes. This made-to-measure, result-driven approach ensures maximum ROI for the customers and fosters their self-reliance.

Support from our dedicated teams doesn't stop after the delivery of the equipment. Throughout its lifecycle, our people tag along when the client wants to evolve their system—whether it be a reconfiguration or the addition of a supplemental unit—or when it wants to go after a new niche and requires new production abilities.

### New year, new benchmark

Coming in 2021, ETI will unveil a brand new service platform to producers and suppliers of the label industry looking to test out their creative ideas. Our **Technology Center** will not only showcase ETI's vanguard solutions, but it will enable the experimenting, improving and benchmarking of new cost-reducing methods, with the help of our top-flight engineers and technicians.

ETI  
450-641-7900  
sales@eticonverting.com  
eticonverting.com





# Supporting Industry Leaders

Aiming for Total Manufacturing Independence



## **By producing labels from A to Z, you will:**

Generate higher profit margins by manufacturing your own self-adhesive materials

Seize new business opportunities in growing market segments such as linerless labels and pattern coating

Develop your know-how and propel your creativity with the support of our dedicated experts



**Inquire about the Cohesio line and learn how our technology and expertise can help you achieve your goals.**

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

For over 60 years, the Faustel team has been delivering innovative coating, laminating, and winding machinery world wide. At our headquarters in Germantown, Wisconsin, product and process engineers design, build, and prove custom converting equipment that continually advances and surpasses industry expectations.

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

The transition from prototyping to production can be difficult, and this is the challenge Faustel's engineers are uniquely equipped to solve. Inside the Technology Center, Faustel's experts work alongside the customer's product development team to innovate the converting processes used to make the latest hydrogel bandages, aircraft insulation, Li-ion batteries, and more. There's a reason that Faustel is trusted by major brands to develop the high-performance converting systems their success depends on.

Through effective collaboration with the customer's in-house team of product developers, Faustel's team is able to further streamline the R&D process and improve the quality of the final product. To facilitate continued development in these socially distanced times, Faustel has introduced Tech Connect, a unique program that provides



customers an interactive online interface to allow remote lab trials, while also eliminating travel costs.

### **The Proof is in the ROI**

This synergistic collaboration results in higher quality equipment and converted products through an efficient process which maximizes resources. Faustel is recognized globally for our high tolerance, exceptionally reliable converting equipment, but our ability to support the R&D process is what truly excels beyond the competition.

Particularly when working with expensive substrates, such as foils and laminates, the

continuing ROI of Faustel's equipment is remarkable. Additionally, Faustel's custom engineered converting lines have long-term reliability, producing consistent and superior results throughout their decades-long lifetime. Ultimately, an investment with Faustel is so much more than a simple equipment purchase. It's an assurance of success for your unique process, from beginning to end. ■

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



# FAUSTEL

The Global Leader in  
Custom Converting Technology

## TECHNOLOGY CENTER



## EVERYTHING YOU NEED FOR PRODUCT AND PROCESS R&D



Industrial



Packaging



Batteries &  
Electronics



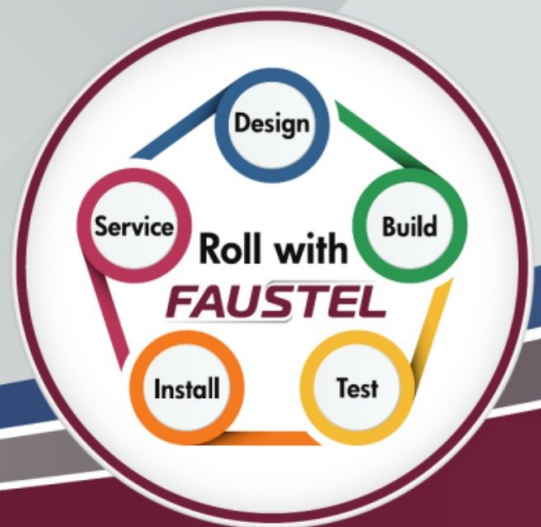
Medical &  
Pharmaceutical



Aerospace



Filtration



(262) 253-3333 | [www.faustel.com](http://www.faustel.com)

## Jemmco, LLC Two Decades of Innovation

Jemmco is excited to be celebrating our 20th year in business and our 20th year as a leading supplier to the extrusion and web converting industries. Jemmco is backed by decades of experience and expertise in the industry, which has translated directly into innovation. Our team is passionate about identifying industry inefficiencies and developing products to overcome these issues and enhance and improve our customers' processes.

### Roller Coverings that Save Time & Money

Jemmco offers a full line of roller coverings, from our JemmTron™ Corona Treater Roll Coverings and JemmTac™ Web Cleaning Roller Coverings to our JemmTrac™ Traction Roller Coverings, JemmStat™ Anti-Static Roller Coverings and JemmSil™ Release Roller Coverings. These unique, rubber sleeves have replaced traditional bonded coverings and have changed the roller covering environment over the past 20 years. Now, instead of having to incur astronomical two-way shipping costs and regrind expenses, customers simply install Jemmco's economical sleeves on-site and with little to no downtime!

### Made-to-Order Dyne Test Products

Our line of Dyne Test Products contain the largest variety, including Accu-Flo™ Felt Tip Dyne Pens, Accu-Flo™ Jumbo Dyne Markers and EZ-Read Poly Test Dyne Pens, which enables us to meet the wide range of applications of our customers. Our pens and solutions are mixed to order and manually tested by our on-site experts to ensure our customers receive the



**"Jemmco's Component Style Web Cleaner has been an incredibly reliable and extremely effective upgrade to our process. With its economical price, we're very excited to have just purchased our second system!"**

**-Rich Grecki, Willow Tex LLC  
Jemmco, LLC Customer Since 2014**

most accurate and highest quality product with every order.

### Reliable, Effective & Affordable Web Cleaning

Most recently, our JemmTac™ Component Style and System Style Web Cleaners have been making waves. Featuring our JemmTac™ Web Cleaning Sleeve and Pre-Sheeted Adhesive Rolls, Jemmco's Web Cleaners offer a comprehensive and highly effective web cleaning solution – without changing your

web path – at a fraction of the cost of traditional systems.

### More to Come!

Jemmco prides itself on its ability to consistently deliver new and innovative products. We are gearing up for a new product launch that will expand our line of JemmSil High Release Sleeves. This new technology will be sure to make waves, so stay tuned!

### When Quality, Affordability & Timeliness Matter...

- High Quality Equipment and Supplies
- Prompt, Friendly Service
- Offers a Wide Range of Solutions from supplies to full lines
- Well Trained Staff with over 50 years experience
- Competitive Prices and Quick Delivery
- Expert Technical Support

**Jemmco**  
262-512-9559  
www.jemmco.com

# This is How We **ROLL.**

**Jemmco offers the best treater roll coverings for every application!**

## JemmTron Corona Treater Silicone Sleeves

- Designed to withstand the harsh Corona Treater environment
- Offers better wear resistance than bonded silicone
- Most economically priced Corona Treater Roll Covering
- FDA Compliant
- Available in 1.5"-10" diameters, lengths up to 10 m



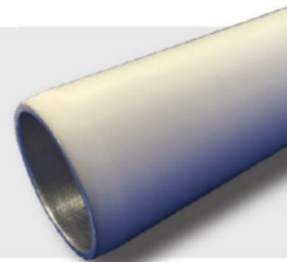
## JemmTron CRS100 Conductive Corona Treater Silicone Sleeves

- Outperforms bare roll & ceramic
  - Soft rubber reduces back-side treat
  - Unique electrical properties redistribute power to reduce energy waste
  - Higher treat levels confirmed by independent OEM's study
- Up to 50% lower cost than traditional ceramic roller coverings
- Reduced overhead & downtime, as sleeves can be easily installed on-site



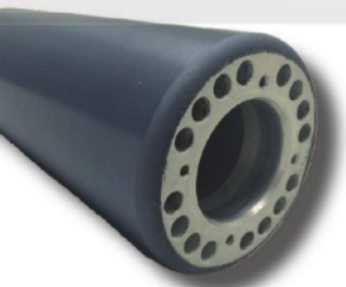
## Epoxy Roll Coverings

- Hard, durable and long-lasting to withstand knife cuts & mechanical damage
- Capable of enduring the heat, ozone and UV typically generated



## Ceramic Treater Roll Coverings

- Available in dielectric, semi-conductive or conductive formulations
- Extremely hard surface, impervious to knife cuts and most mechanical damage
- Outstanding resistance to heat and ozone
- New, long-lasting formula!



**CALL TODAY to speak to one of our expert product specialists!**

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**Jemmco, LLC**

*Celebrating 20 years in 2010*



Martin Automatic

## Martin Automatic – bringing production efficiency to web fed applications

For more than five decades Martin Automatic has helped converters improve their productivity with high performance, state-of-the-art solutions. The scope of the company’s technology has taken it into a variety of markets - almost any material that is produced in roll form has been processed by Martin equipment at some stage.

In label converting, Martin is well known for its range of narrow-web automatic butt splicers and transfer rewinders, but the company is equally respected and known for its global presence other roll-fed industries. Opposite the label industry which considers 670 mm web width and 200 mpm advanced, Martin supplies high-speed, low-tension roll automation to wide-web coating and laminating converters of tissue, nonwoven and film where 900 mpm and 4.5 meter web widths are common.

Once these wide-web materials are converted into narrow rolls, other converters use Martin splicers to automate their manufacturing of disposable diapers, feminine care products, absorbent pads, sanitizing wipes, medical gowns and face masks. Filter media converters also enjoy the benefits of using similar equipment in the manufacturing of filters for home and automotive.

Other markets for Martin technology include roofing, and building materials, medical packaging, toothpaste tube laminate, folding cartons, beverage carriers, and disposable cups and plates

Martin Automatic’s reputation around the world is defined not only by the quality and clarity of its technology, but also its original, and in many cases, patented designs, such as the inertia compensated dancer roller and,



Martin CHV laminate splicer for mid-press installation.

the Airnertia™ idler roller, which offers high-frequency response to speed changes in processes running delicate webs. Martin customers benefit from the thought leadership and intentional simplicity behind Martin’s design philosophy.

Integrating Martin automatic splicers and rewinders into production lines provides converters with significant cost savings – reduced waste and improved efficiency reflect directly on the bottom line. One aspect of material waste is partially used rolls which are often sent to landfill. Martin’s technology allows converters to incorporate partially used rolls for make ready or even into production runs, utilizing material that would otherwise negatively impact the bottom line and the planet’s resources.

Two recent examples of Martin’s positive impact are Iconex in Tennessee and ProPrint in the UK. Iconex installed Martin butt splicers to existing production lines to support the company’s growth in innovative labels, but with the rapid spread of Coronavirus, these lines were quickly switched over to converting paper rolls for



Cederholm has been President and CEO since 2002



Jim Price with rolls of sanitizing wipe material

sanitizing wipes, “without missing a beat”, according to Plant Manager, Jim Price. In the UK, ProPrint installed a new 430mm web press exclusively for the production of linerless labels and fitted it with a Martin MBS unwind splicer and LRD rewriter to allow non-stop production at 450ft/min. Operations Manager Bob Green claims ‘we save 150 – 300ft of material per roll change and have boosted productivity by at least 20 percent.’ These stories are typical of the productivity gains achieved with non-stop unwinds and rewinds from Martin Automatic. ■

[www.martinautomatic.com](http://www.martinautomatic.com)

ENGINEERED

# SIMPLICITY

We do the hard work so you don't have to.

*"It is far more difficult  
to be simple than  
to be complicated."*

*John Ruskin*

Martin intentionally designs  
each piece of equipment to be  
*easy to use,*  
*easy to understand,*  
*and easy to maintain.*



**Martin Automatic**

*High Performance Splicing, Rewinding,  
and Tension Control Systems*



**OUR EXPERIENCE...YOUR ADVANTAGE**



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

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

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

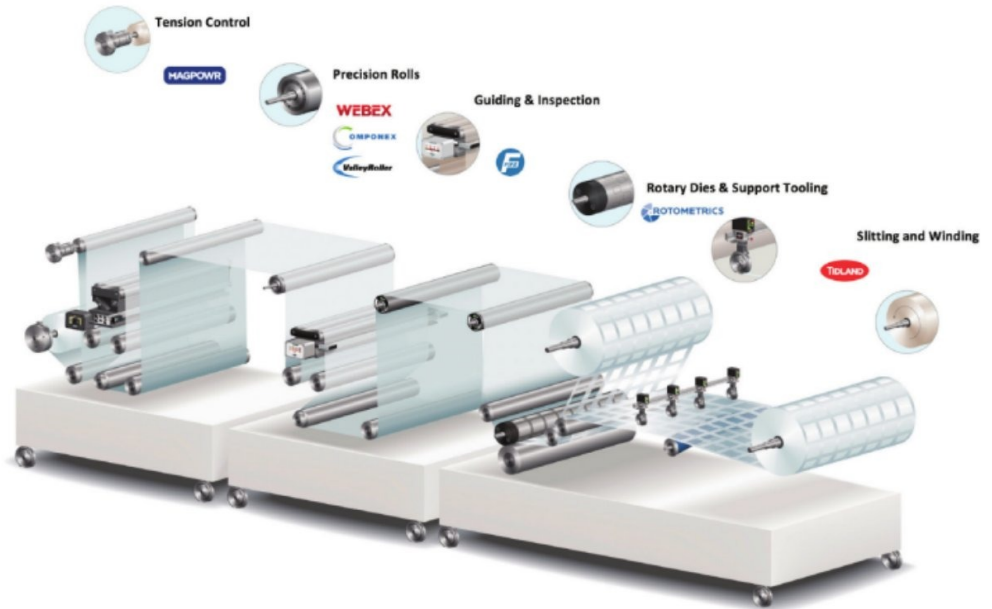
We're Maxcess. Solutions that help you work better, faster and smarter.

### We Help You Run Better

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

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

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



### We Help You Run Faster

#### Increase Your Throughput and Reduce Downtime

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

**More Product Faster Means Greater Profits and More Opportunities**

### We Help You Run Smarter

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

- Millions Invested Annually in Global R&D
- Industry 4.0 Smart Connected Devices
- Developing Inner-connected Data Analytics From The Entire Line, End-to-End, Allowing For:
  - Predictive Maintenance
  - Web Performance Monitoring
  - Wear Detection Inspection
  - Automated Manufacturing to Minimize Potential for Human Error

**When You Run Smarter, You Run More Profitably**

Call Us Today At **1-844-MAXCESS** or Visit Us At [www.Maxcessintl.com](http://www.Maxcessintl.com) To Learn How To Run Better, Faster and Smarter



# WEB WIDTHS CHANGE YOUR SENSOR SHOULDN'T HAVE TO



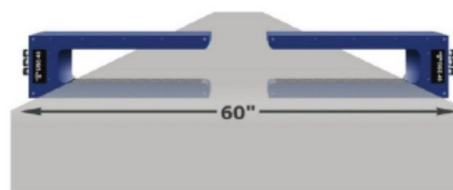
**Increase Uptime,  
Line Speed, and Profits**  
with the **NEW DSE-45**  
Wideband Sensor from Fife.

#### **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



## NEW INDUSTRY 4.0 TECHNOLOGY HELPS YOU RUN SMARTER



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

Visit our website at [WWW.MAXCESSINTL.COM](http://WWW.MAXCESSINTL.COM)



**Leading manufacturer of quality Core Chucks, Mandrels and Core Cutter Machines since 1958.**

Mechanical Specialties' **Self-Locking Core Chucks and Core Cutter Machines** are unique in their simplicity of design. Our mission is to provide top quality products that are simple to use and built to last. Let us help you make a better product.

**Mechanical Core Chuck key features and options**

- Self-Locking in either direction of rotation. No need for mechanical change which reduces your set up time.
- Self-Adjusting to the web tension pulls with immediate gripping-no slippage.
- Standard, Specialty and Custom Chucks from 1" core I.D. to 20" core I.D.
- Steel or Aluminum. Steel chucks and all steel components of aluminum chucks are black oxide coated for rust prevention.
- All chucks have case hardened locking rollers for strength and durability.
- Round or Square bores
- Set Screw, Split Hub-Clamp & Flange styles
- Chuck & Mandrel combination units.
- Spare parts repair/rebuild kits available
- CAD Data/3D Model Files of Core Chucks available

We offer Standard size for general use and Long Projection Chucks for heavier roll applications.



Our Specialty chucks include the Tandem/Dual series. the Tandem is available in different combinations such as 2"/3" core I.D. or 3"/6" core I.D. They are great for short run, small lot orders with core size variations. Eliminates chuck changing. We also make Custom Chucks.

The Adapter series is used on machines equipped with 3" air mandrels. For orders requiring larger cores, it is a less expensive option rather than buying larger expensive mandrels.

The Mechanical Specialties' classic **Manual Core Cutter Machine** is now even better with a fresh new look and new features. Still the same uniform, accurate, clean cut without burrs. Simple to use and built to last. We also build custom machines.

Our core cutter eliminates the constant replacement of cutting knives because of the combination of our unique cutting platen and limitation roller.

**Manual core cutter key features**

- Dual Drive Chuck
- Unique cutting Platen
- Two adjustable Support Rollers
- Variable Limitation Roller-cutting depth adjustment
- Safety illuminated push button handle and switch

- Measuring Bar & Adjustable Core Stop
- Rotary knife with guard
- Extension Support Disc
- Energy saving motor

All materials are purchased in the USA, as is the manufacturing of all our products.

Only superior alloys are used. Mechanical Specialties has a full-service machine shop able to manufacture and fabricate any of your specific needs. All we need is an authorized drawing or a sample of your existing product.

We are a family run business started in 1958. Since beginning, we have obtained numerous patents for our Core Chucks and Core Cutter designs.

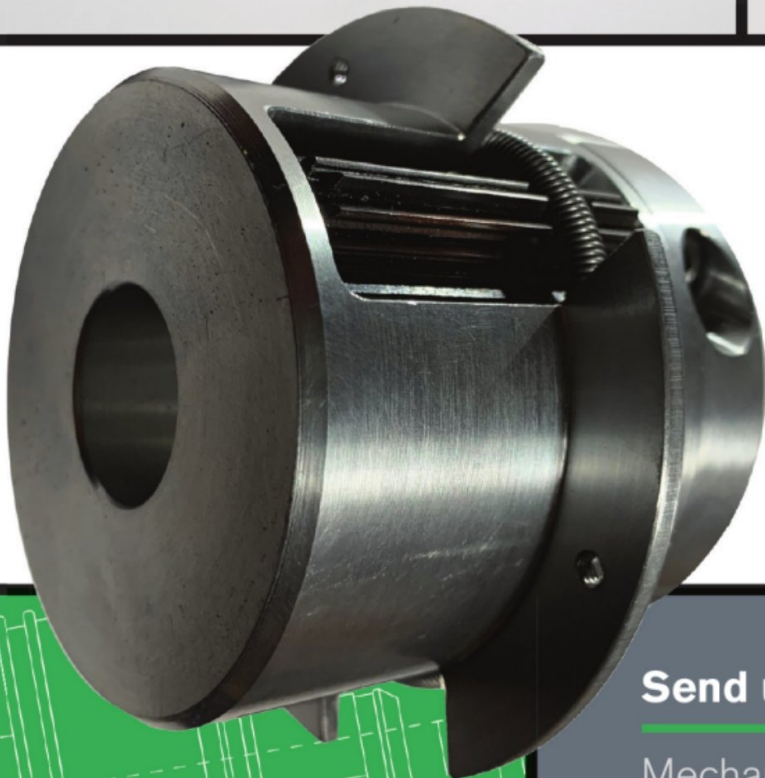
We are proud to be a leader having built a solid reputation in this field with very effective, high quality products. We strive to provide personal service and attention.

See the full line of our products with photos and video demonstrations on our website at [www.msccorechucks.com](http://www.msccorechucks.com). The website has our product catalogs available to download. ■

[sales@msccorechucks.com](mailto:sales@msccorechucks.com)  
 (P) 401-267-4410 CALL OR TEXT  
 (F) 401-267-4661



# CUSTOM MANUFACTURING



**Send us your drawing, and we'll make it.**

Mechanical Specialties can manufacture and fabricate any of your specific needs.

The possibilities are endless.



**Mechanical  
Specialties**

Learn more at  
[www.msccorechucks.com](http://www.msccorechucks.com)

**novation inc** World leader in defect marking

Throughout the 1980's and 1990's a number of companies marketed numerous styles of web flagging devices. They were met with varying degrees of success and much greater degrees of disappointment. Most were notorious for not performing as promised. They were simply variations of label applicators. None of the web flagging devices at that time were designed specifically to address the challenges that come with applying labels to moving webs—especially webs moving at high speeds.

Some of these machines attempted to dispense a label off the liner directly onto the moving web. Some tried to accelerate the label to match the web speed before applying. And others used air jets to blow a flag onto the web.

As a result of these shoe-horned applications, maintenance shop “boneyards” started to fill up with web flagging machines sold, installed, and subsequently removed when they failed to perform reliably. Like the famous line from the movie “Anchorman” sixty percent of the time, they worked every time. And converters and printers one after another adopted the opinion that all WebFlaggers were doomed to fail.

This changed in 2002 when Alfonse Novelli founded Novation, Inc. It began with his efforts to find a reliable web-flagging device to pair with his ScrapTracker system. ScrapTracker was Novation's initial product. It was a roll mapping program which required a bar coded flag to be placed on webs moving at any process speed. The bar



It accomplished this feat by first transferring the flag completely off of its carrier onto a vacuum applicator head. The applicator head then transferred the flag to the moving web by pressing the leading edge of the flag against the web where it is supported by a roller. “Nipping” an already dispensed label to a moving web in this fashion was a game changer. Novation's AF2 WebFlagger was marketed at that time as “The First WebFlagger that Actually Works.”

Novelli realized the AF2 could meet the need for a reliable web flagging machine in the converting and



printing world, with or without the ScrapTracker system, and Novation began to market the AF2 as a stand-alone WebFlagger. As they say, the rest is history. Since 2002, Novation has sold over 1,500 WebFlaggers which have marked over 50 million defects, etching their place in converting history as the market leader in web flagging.

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In 2018 the battle-proven AF2 was retired and replaced by the much smaller and robust AF3 model which has options such as applying different color flags on demand, wireless remote control, and a slide base used to adjust the WebFlagger for web width changes.

Novation has built a reputation for excellent customer service, and they thrive on problem-solving and innovating to improve safety and efficiency in the converting and printing industries. ■

Necessity being the mother of invention, Novelli put his 25 plus years of converting machinery design experience to work to design his own machine. The result was the AF2 WebFlagger. The AF2 was designed for no other purpose than to apply pressure sensitive labels onto any type of web traveling at any process speed.

NOVATION-INC.COM  
610-837-5026

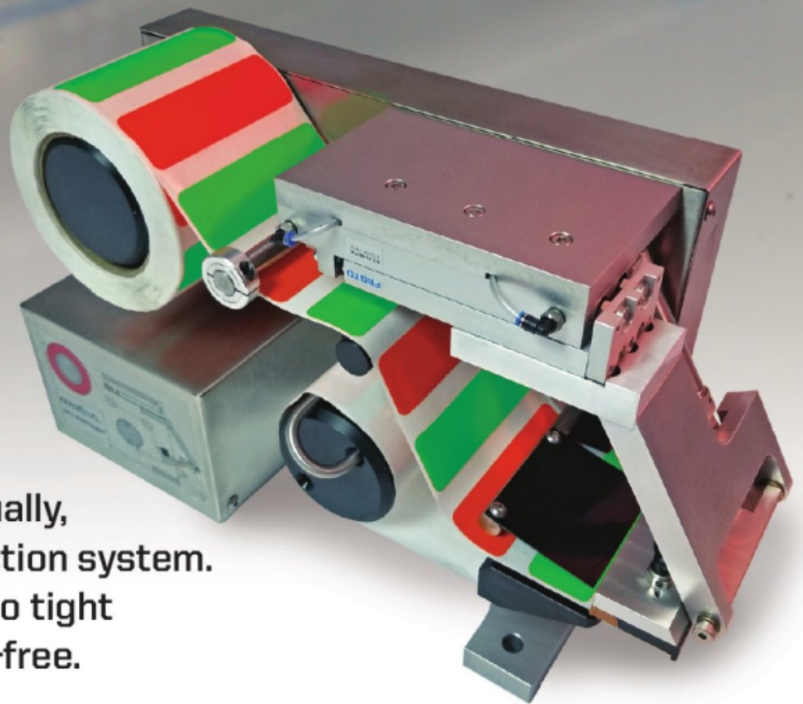
# MAKE IT FLAWLESS!

Finding and removing defects downstream is easy with the Novation AF3 WebFlagger. With the push of a button, you can flag the start and end of a defect with different color flags—so now you can leave flaws on the floor, not out the door!



## **FLAG IT. FIND IT. FAST & SAFE!**

Keep hands away from moving machinery with automated flagging. The AF3 safely and accurately marks webs moving at speeds over 4,000 FPM. It can be triggered manually, by any machine signal or web inspection system. The compact stainless frame fits into tight spaces and is virtually maintenance-free. Over 1,500 installations worldwide!



novation  inc

MADE IN  
THE U.S.A. 

The printing and converting industry standard in defect marking and tracking

**NOVATION-INC.COM (610) 837-5026**





## Leader in Anilox Roll and Sleeve Cleaning

Sonic Solutions has been a leader in the converting industry for nearly 23 years. They first started because a printer was having problems with their water based inks ruining their anilox rolls. Sonic Solutions provides ultrasonic cleaning systems for any sized anilox roll or sleeve. From 6 inches to over 10 feet. Today, thousands of printers throughout the world rely on Sonic Solutions anilox cleaning systems. The current family-owned business developed a wide range of cleaning systems for printers ranging from the narrowest of anilox rolls to the largest possible anilox sleeves.

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

Coming to the rescue is Sonic Solutions. They can provide the best system for your needs. Sonic Solutions uses ultrasonics to gently and safely clean your anilox. It's really the perfect way to clean them. The tiniest of crevices of the ceramics are subject to the cleaning strength of ultrasonics.



In their cleaning systems the ultrasonic power gently vacuums the anilox of any built up dirt and debris. Ultrasonics isn't a wash or a blasting system. It's better and safer. Ultrasonics is the same technology used to sterilize medical instruments in hospital operating rooms as well as components used in space by NASA. Shouldn't your anilox's be cleaned in the same safe and thorough manner?

Sonic Solutions has evolved their systems to be one of the safest in the industry using the most recent developments in the ultrasonic industry. While others still use lower frequencies, Sonic Solutions has standardized all of their equipment to utilize ultrasonics at 68 kHz. The smaller bubbles are able to go into the smallest of cells and clean the anilox safely and completely. No need to worry about the highest of line counts you have. The company has also made the equipment more durable, reliable and serviceable. The plug and play power

generators can quickly be replaced with loaner generators to keep the systems and your cleaning operations up and running. No waiting for a month or more for replacement parts or repairs with some international companies.

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

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

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

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





# BIG

System that can clean sleeves up to 70" long

or

## SMALL....

System that cleans narrow and medium web rolls



### 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.

**VETAPHONE** Corona & Plasma **Vetaphone – the first and best in surface treatment**

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

Using the latest technology and developing close working partnerships with our customers, Vetaphone continues to pioneer surface treatment with its uniquely rich seam of technical knowhow. We design and build technology that is innovative, highly functional and ultra-reliable, because we know that no ancillary process can afford to be a weak link in the overall production chain. It's therefore no coincidence that many of the major international OEMs name Vetaphone as their preferred supplier.

Typical of this innovation is our iCC7 integrated display panel that facilitates system operation via a simple front screen. Behind it, in-depth data on function and maintenance requirements, as well as remote analysis, is easy to access. It's been available since 2017 and takes users beyond Industry 4.0. In addition to innovation, our unique flexibility brings lateral thinking to resolving many issues. Typical of this is our approach to power supply. If a customer's current requirement is 30kW, we will supply four modular and interlinked 10kW units to provide a power reserve.

But, the key to success is a



willingness to share knowledge and expertise, and to facilitate this we opened a new high-tech Test Lab at our HQ in Denmark this year. The Test Lab allows converters to trial their substrates prior to committing to full commercial production, and is also available to manufacturers of substrates, inks and lacquers. All have full access to cutting-edge Corona and Plasma surface treatment technology to test, monitor, and analyze performance under true simulated production conditions. This allows for all fine tuning to be done in the Test Lab and avoids costly errors later.

Like all market leaders, we know the importance of service and support, so a global network of more than 60 agents is strategically located to ensure that users are never far from technical back-up and a comprehensive stock of parts. Added to this, there is the Vetaphone 24-hour online support team, while in key markets like the US, Vetaphone has its own permanent sales and support company to service the requirements of its customers.

So, whether it is with highly controllable Corona units for the majority of applications, or



the latest generation of Plasma systems for use with today's increasingly complex substrates, Vetaphone has the answer. Our declared aim is to be your perfect business partner by providing a seamless operation from initial brief to installation and commissioning, and then to provide support for all the years that follow.

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

**Vetaphone North America**  
 155 North Wacker Drive, Suite 4250  
 Chicago, IL 60606  
 E-mail: [sales@vetaphone.com](mailto:sales@vetaphone.com)  
 Phone: (312) 803-3691  
 Web: [www.vetaphone.com](http://www.vetaphone.com)



THE IMPORTANCE OF CORRECT

# ***SURFACE TREATMENT***

As the inventor of the  
Corona technology...

..Vetaphone offers vast knowledge and experience with surface treatment and has an extensive portfolio of solutions for any type of application in the web processing industry.

Our expertise ensures the perfect surface adhesion – so you can deliver the perfect end result.



**LOCAL SUPPORT**



**OPTIMAL ADHESION**



**LOW COST OF OWNERSHIP**

[www.vetaphone.com](http://www.vetaphone.com)  
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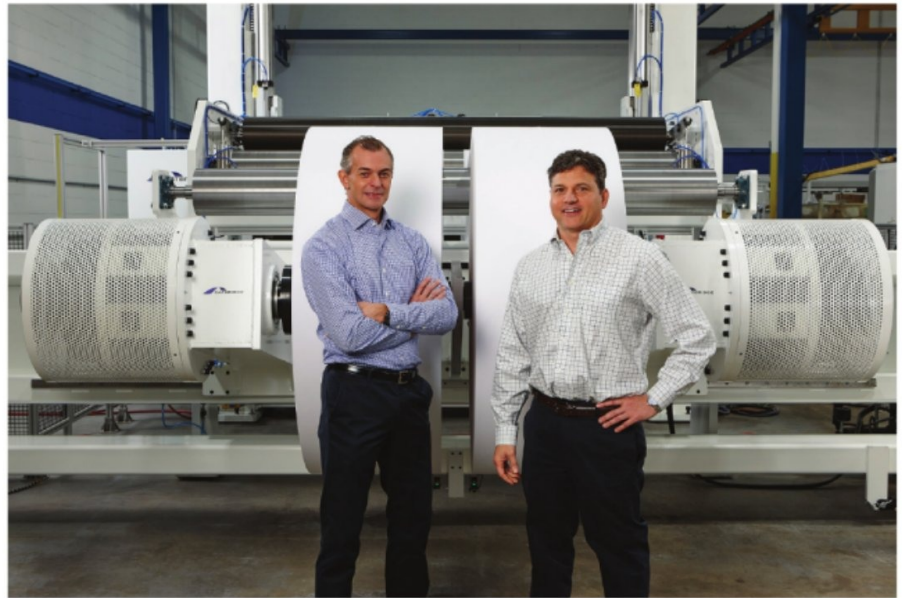
## Leading Manufacturer of Converting Machinery

Catbridge Machinery designs and manufactures innovative, high-performance converting machinery for a wide range of industries including flexible packaging, film, paper, adhesives, nonwovens and building products. In addition to a complete line of slitter rewinders, Catbridge excels at integrating components to build state-of-the-art web converting systems and process lines for coating, laminating and other functions.

### The Catbridge Difference

Using an innovative, customer-centric approach to design and engineering, Catbridge has emerged as the leader in state-of-the-art web converting solutions. What makes Catbridge different is their commitment to tailored solutions to meet the customer's needs. Unlike many of its competitors, Catbridge Machinery conceptualizes, engineers, builds, programs, calibrates and tunes every piece of equipment they sell, with customer input playing a role throughout.

Catbridge's highly qualified engineers combine decades of



experience in the converting machine industry with the latest computer-assisted design and manufacturing technologies to create the best converting machine design solution for its customers. President, Michael Pappas and Vice President, William Christman, bring an unmatched passion and expertise to the web converting industry. Catbridge Machinery's greatest strength is the ability to provide solutions for a broad range of applications.

### Innovative, Highly-Productive Slitter Rewinders

Catbridge has a complete line of high performance machinery designed to accommodate any level of converting. Catbridge duplex center winders, center surface winders, surface winders and turrets all offer quality and performance that guarantee success. All Catbridge slitter rewinders safely and effectively increase throughput, improve finished roll quality and reduce waste. From unwind to rewind, all models integrate innovative technologies that deliver improved results.

Catbridge Machinery's design and manufacturing facility integrates engineering and construction seamlessly under one roof allowing for unmatched quality control. From start-ups and training to spare parts and remote servicing, Catbridge stays with you for the life of your machine. ■

**Catbridge Machinery, LLC**  
sales@catbridge.com  
www.catbridge.com  
973-808-0029





## Global Leader in Technically Advanced Web Guide Systems

AccuWeb Inc. is a global leader in providing technically advanced web guide systems to customers worldwide. Acquired in 2012 by BST North America, the AccuWeb brand remains the technology flagship among all web guide companies.

Under both the AccuWeb and BST brand, our systems precisely guide a large range of substrates in essentially any web process. Our products are designed to help you produce a higher quality product, more productively and efficiently. Core benefits of every product under the AccuWeb and BST brand are to reduce waste, maximize machine time, reduce and minimize down time, optimize productivity and enhance and improve quality. We have



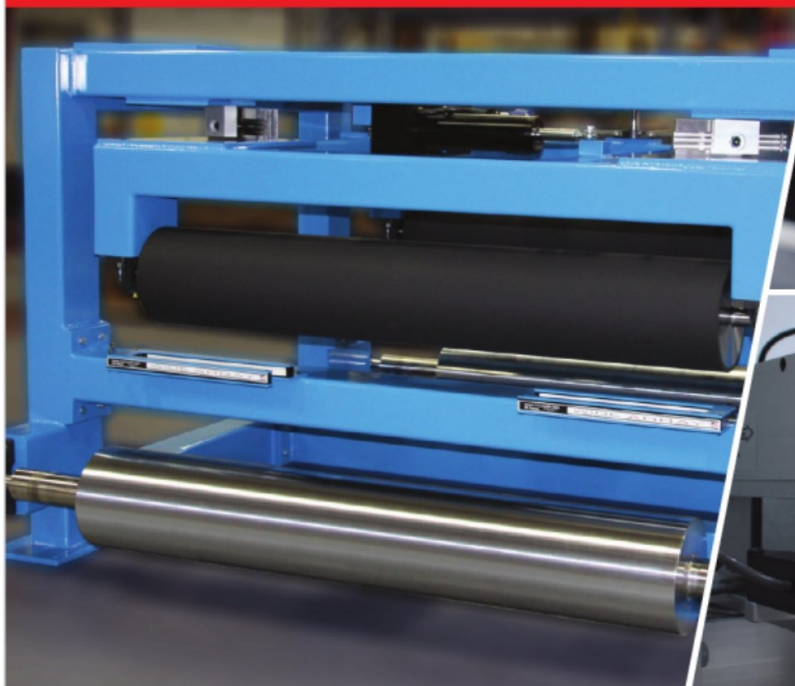
many standard product solutions, and the capability for custom solutions. Our product portfolio allows customers to combine web guiding, color measurement, surface inspection, video web inspection, register control, process automation, 100% inspection and coating thickness measurement to achieve customer specific solutions.

Our 100% inspection systems reliably detect both random and repeating defects

as they occur. With our workflow solutions, you can easily integrate multiple machines, processes, and departments into one comprehensive system. Common application include flexo, gravure, digital and web offset printing machines, slitters-rewinders, laminators, and coaters.

We provide a wide range of services for our customers designed to help get the most value from our equipment. Our North American organization is comprised of almost 3- US-based persons in technical service, parts support and customer support. Our team is available and ready to help in person, over the phone, or online. For more information about AccuWeb and BST North America, please visit [bstna.com](http://bstna.com), or email [info@bstna.com](mailto:info@bstna.com) ■

### IMPROVING PROCESSES FOR RESULTS THAT COUNT



- Web Guiding
  - 100% Inspection
  - Register Control
  - Web Monitoring
  - Color Measurement
  - Surface Inspection
  - Color Management
  - Workflow
  - Process Automation
  - Layer & Basis Weight Measurement
- More information: [www.bstna.com](http://www.bstna.com)





## Manufacturing Quality Print Finishing Solutions in the USA

D&K Group is a leading manufacturer of print finishing solutions including laminating films and equipment. D&K Group products are made in the USA to high quality standards backed by over a forty year history.

Some of D&K's finishing products include thermal, heat assist and pressure sensitive laminating films and adhesives. D&K manufactures these items in a wide variety of sizes including wide format rolls up to sixty one inches wide. These films and adhesives are available for all types of laminating equipment including automated high speed systems, wide format laminators, and even small school and office desktop systems.

D&K recently launched a



new line of durable, waterproof thermal laminating films called Endura Overlams. These polyester (PET) overlams are stronger than other thermal products on the market, making them ideal for demanding applications including cards, menus, durable labels, etc.

Endura Overlams are

water-resistant and are suitable for moist or wet environments where other thermal films fail. Compared to pressure sensitive lams, Endura products offer equivalent performance at about 1/3 less the price. Plus, the quality far exceeds that of low-grade, self wound pressure sensitive products.

Endura Overlams and other D&K Group products including transfer adhesives and the revolutionary SuperStick® line of digital laminating films are available to D&K partners in master roll and slit roll formats. D&K Group also offers custom coating and toll coating services for industries of all types. For more information on D&K products, visit [www.dkgroup.com](http://www.dkgroup.com) or call 800-632-2314. ■

# ENDURA™ Overlams

**Durable, Waterproof Thermal Overlams**



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TURNKEY

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## Enercon is the Converting Industry's First Choice for Corona, Plasma & Flame Surface Treating

With thousands of surface treating installations at converting operations around the world, Enercon's technology, application expertise and support lead the industry. Whether your application involves film extrusion, printing, coating or laminating, Enercon has a solution for you. Our unique High Definition Corona Treaters produce powerful and reliable corona treatment with the industry's best insurance against film wrinkling, pinholing and backside treatment.

Enercon continues to innovate with its next generation of power supplies: the Compak™ Pro Series. This Industry 4.0-ready power supply is designed for professional converters & extruders looking to maximize their productivity.



Its intuitive touchscreen interface provides users with unprecedented operating control, detailed system data, maintenance reminders and support options. And its Artificial Intelligence captures critical system data should a fault ever take place.

As the only surface treater manufacturer to offer corona, plasma and flame surface treating, the Enercon surface

treating laboratory can be your proving ground for your next product innovation. Our application experts will help you determine which technology is best for your application.

Additionally, our partnerships with international OEMS ensure seamless integration of our surface treating technologies with all types of processes and lines.

You can depend on Enercon for world class support with our responsive support team of highly trained electrical and mechanical engineers, all dedicated to ensuring your uptime with 24/7 rapid assistance.

For more information, call +1.262.255.6070 or visit [www.enerconind.com/web-treating](http://www.enerconind.com/web-treating)

# Corona Treater Innovation

Artificial Intelligence  
Advanced Communication  
Integrated Reminders & Help Screens



**Innovative People.  
Ensuring Your Treating Success.**

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## Leadership in Converting through Static Control Solutions

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

TAKK provides a

comprehensive technology range:

### Static Elimination Bars

– precision engineered tools with the exact electronic power, ionization range and scope to solve your specific static problem.

### Static Elimination Blowers

– combining powerful ionization with controlled air flow, an encompassing field, and extended range of ionization.

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

### Passive Static Eliminators

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

### Measuring and Monitoring

**Devices** – static meters and bar testers for analysis.

We are in the solutions business. Providing economical solutions, through quality products and technical services. Solving the costly static problems frequently experienced by our customers in the fields of Converting, Packaging, Plastics, Printing, Painting, Electronic Assembly and Textiles. We serve end users of static elimination equipment and original equipment manufacturers, nationally and internationally. ■

### TAKK Industries

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

## Is static attracting contamination to your webs and products?

### We Have The Solutions.

## Introducing the NEOS Series: The Future of Static Controls

- Built-in Reactive Intelligence to detect and eliminate static
- Ultra-high performance through intelligent technology
- Effective at higher charge levels and higher speeds
- Models to match applications with multiple distances and speeds
- 24 volt DC operation with built in HV power supplies
- Remote and local monitoring including "Clean Me" feature
- For use on plastics, paper, textiles and more



**NEOS 33 XIFO:** 33kV pulsed DC technology with built-in field polarity sensing. Software algorithms control all operations to achieve fastest neutralization and ease of operation. Up to 60" static elimination range.

**NEOS 30:** 8" to 60" range; extended range applications—winding, large area coverage

**NEOS 20:** 6" to 30" range; mid range applications—web, conveyors, etc.

**NEOS 12F:** 1.5" to 6" range; high speed applications up to 4500 feet per minute





## Leaders in Converting Solutions

### PRO TAPES® LATEST INVESTMENT, OUR NEW G&A FA300 WIDE WEB SLITTER

Pro Tapes® latest investment is a fully automatic G&A FA300 wide web slitter with an integrated LS60 packaging line which rounds out our capabilities in our arsenal of state-of-the-art converting equipment. This new FA300 & LS60 provides Pro Tapes® the versatility and dexterity to convert and package the widest possible range of materials of any single machine available on the market today.

Here are some key features and benefits this new G&A slitter (our 6th!) brings to the table:

1. The ability to slit 12mm to 78.74" wide materials from single coated or double coated products with or without

a liner fully automated.

2. Inline shrink wrapping and automated labeling system from single rolls to multi roll 2, 4 or 6 roll configurations.

3. Increased capacity = shorter lead times and better service levels for our customers.

4. Increased cycle times = best possible pricing for our customers.

5. Core ID options 1.5" ID & 3" ID.

6. Universal tooling group to produce high volume non-standard roll widths.

7. Inline fully automated double coated tabber for interlined products.

8. Advanced tension and torque controls combined with a programmable PC provide our operators with the tools needed to

slit some of the toughest materials.

This FA300 wide web slitter Wider jumbo rolls, faster cycle times equal increased output combined with packaging automation and a programmable PC to store recipes all allow us to service our customers at a very high level with the most competitive pricing possible. Please call to make an appointment and see firsthand why we are the talk of the industry. You will see our new machine as well as a complete plant tour with over 20 slitters in operation!

### Pro Tapes & Specialties

Chris Hart

732-743-4164

chart@protapes

[www.protapes.com/services/](http://www.protapes.com/services/)

[converting-solutions-and-services](http://www.protapes.com/services/converting-solutions-and-services)



## 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

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## Leaders in Surface Treatment Technology

Corona treatment is a surface modification process that uses a corona field to increase a material's surface free energy and wettability thus increasing adhesion. The wettability of your material is important when bonding, coating, or printing.

QC Electronics, Inc. designs and manufactures a complete line of surface treatment equipment. We work closely with manufacturers including blown film, coaters, laminators, extruders, and printers to seamlessly integrate our systems with their production facility's equipment. We also offer consulting and lab sample services through our in-house laboratory. QC is your one-stop-shop for all corona treatment needs.

Our latest investment was

the complete redesign of our NEXTGEN-i power supply. We developed the new design with a focus on new capabilities, longevity, and ease of operation. The power supply is now controlled by an advanced operating platform using FPGA control. This allows the system to be more efficient and customer centric. The power supply is completely touch controlled; this allows you to access important operation information and run quick glance diagnostics. In 2021, we are also investing in a contact angle measurement device for our lab.



Throughout our 32 years of business, we have established a promising global presence. We work closely with scientists of the industry, continuously educating ourselves of the industry's innovations and discoveries with regards to the treatment of surfaces. QC is committed to studying the science

behind surface adhesion and wettability to provide the highest quality, most efficient corona treaters available to the market. ■

[www.qcelectronics.com](http://www.qcelectronics.com)  
+1-608-742-1661  
[sales@qcelectronics.com](mailto:sales@qcelectronics.com)

[WWW.QCELECTRONICS.COM](http://WWW.QCELECTRONICS.COM)

+1-608-742-1661

## IMPROVE SURFACE ADHESION + WETTABILITY VIA CORONA TREATMENT



Throughout our 32 years of business, QC Electronics, Inc. has led the corona treatment industry through science and innovation. We take it upon ourselves to know the physics behind corona treatment in order to deliver our customers the best possible adhesion results. Featured is our DocuDyne laboratory corona treater and sheet treater. Both have a compact design with touch panel control. The touch panel's capabilities allow these units to be very customer-centric. To find out more about how corona treatment can help you, contact us at [sales@qcelectronics.com](mailto:sales@qcelectronics.com).







## Leading Contract Slitting Service Provider to Manufacturers

Cranston, RI— Metlon Corporation provides contract, custom slitting of plastic films, paper, metal foils, impregnated fabrics or laminations of these products. Specializing in extremely narrow widths (down to .008") holding very close tolerances to (+ 0.001"), Metlon works closely with manufacturers in every industry imaginable, partnering in their production process, and at times, without ever knowing the end use for the product.

### Distinct difference: Flexibility and responsiveness

Metlon designs and builds its machines, having developed and integrated a proprietary slitting technique that consistently maintains precision to meet the

stringent requirements of its customers. Metlon's in-house engineering capabilities enables them to respond quickly to customer demands for unique jobs or fast turnaround. Processing of R&D projects, short, and year-long continuously running jobs are designed for maximum efficiency. While large jobs are desirable, Metlon also processes orders as small as one 2" X 100 meter roll slit to narrow widths.

President Wayne Etchells explores every facet of the prospect's job with the customer, whether for R&D projects, a short run or ongoing, continuously running jobs. Extensive experience with unique materials, projects and stringent standards positions Metlon to help customers

determine how to slit, wind and package material for maximum efficiency, meaning time and cost-savings for customers.

Metlon built its business and reputation on successfully tackling the challenges of its customers' ever-changing industries and increased competition, as well as responding to the demand of new materials and technology. Focused on continuous engineering improvement and increased productivity, Metlon works closely with every customer, monitors every aspect of every job, producing consistent quality and performance as well as bottom line results.

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## **TOTANI** World Leader in Pouch Making Machines

### **Leading company in manufacturing industry**

For over half a century, Totani Corporation has manufactured pouch and bag making machinery. Since its incorporation in 1961, Totani machines are now located in over 57 countries all over the world and are highly regarded by well-established companies.

Totani Corporation continues to excel in leading the industry in pouch making machinery.

Totani's original idea, technology and development, power change the common sense of pouch making.

Our pouch and bag making machines use various film materials to make pouches with storage stability and heat resistance.

Totani machines make high-speed, high-quality pouches, in various shapes, which can be used in a wide range of fields.

### **Totani Recycle Ready/Quick Changeover Pouch Machine**

- Totani's CT-Series are THE most popular machines in North America.
- CT-35, CT-40, CT-60 and CT-80 can use Sustainable Films.
- Compact Pouch machines means less film waste and Quicker Change-Over.
- The most efficient pouch machines available.
- Totani America has the Best Technical Support.
- Totani is committed to the wise use of our natural resources.
- Recycle-Ready Films Can be produced at high speeds efficiently.

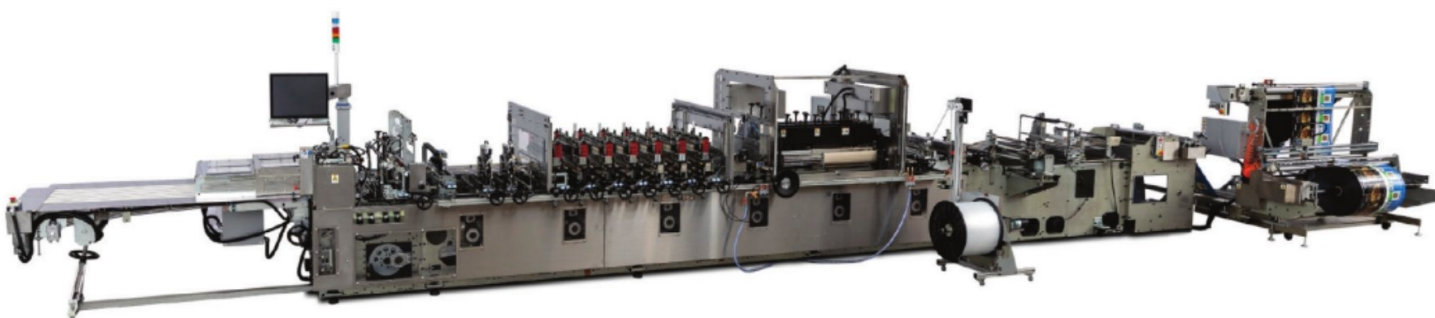
Totani innovations and enhancements have proven effective to improve efficiency in operation of recyclable stand-up pouches.

Dealing with web melt, print variation, shadow seals, and web instability were primary factors that went into Totani's most recent pouch machine that features a number of enhancements and new proprietary technology.

Ask Totani innovations and enhancements prove effective in set-up and change over times for stand-up pouches.

Ask us about Totani's most recent pouch machine that features a number of enhancements and new proprietary technology. ■

Contact Totani America Inc. for more information.  
sales@totaniamerica.com  
920.632.7319



### Paper-based Diaper Packaging from Mondi

Mondi has launched a new paper EcoWicketBag for Drylock Technologies' baby diaper ranges, bringing sustainable paper-based packaging to the hygiene market globally.

The global hygiene products manufacturer approached Mondi to create a more sustainable alternative to its existing plastic diaper packaging that would travel well, have strong shelf-appeal, and protect the product - while also using renewable resources and significantly reducing its CO2 footprint.

A key advantage of using paper-based solutions is the recyclability of paper and that consumers are more likely to know how to dispose of it correctly.

The EcoWicketBag can be placed in existing paper streams, even in countries with the strictest recycling regulations, thereby supporting the circular economy. An EcoWicketBag made out of fully compostable materials is also available.



Mondi also ensured that EcoWicketBag fits with Drylock Technologies' existing plant processes, meaning it is the first paper wicket bag range that can be filled and sealed on existing machines.

For more information, visit [www.mondigroup.com/ecowicketbag](http://www.mondigroup.com/ecowicketbag).

### Taking Aim on Single-Use Plastics

The team at AIM Sweden AB (AIM) has developed new methods for modelling and 3D printing an entirely new tooling concept that is being introduced in the manufacture of molded paper food and drink containers.

Over the past five years AIM Sweden has been using its three GE Additive Arcam EBM Q20plus and Q10plus systems to develop cutting-edge 3D printed perforated molds that address the unique challenges of turning wet, fibrous pulp into products, such as food containers and packaging material, with improved strength, thinner walls and the ability to contain liquids and fats.

This work has piqued the interest of the pulp and packaging industry as it is looking for new ways to help solve wider environmental challenges with new solutions. It also comes as consumer attitudes steer consumption habits in a more sustainable direction and governments increasingly look to regulation to help clean up the environment.

With the support of GE Additive, whose EBM additive manufacturing machines produce the molds, AIM Sweden's new technology reportedly has the potential to be a game changer in the consumer goods packaging industry for cost, quality and sustainability reasons.



The collaboration has reportedly allowed AIM Sweden to develop a completely new tooling solution as well as an optimized EBM build strategy to produce extremely thin, highly stackable molds with minimal or no support structures, reducing production time significantly. In operation the thin titanium forming skins rest on a 3D printed nylon backing, also designed and produced by AIM Sweden.

These molds make it viable to design and optimize porosity on a hole-by-hole basis, including position, size, shape and angle at a consistent quality, allowing molded fiber to be used in ways never thought possible.

For more information, visit [www.aimsweden.com](http://www.aimsweden.com).



### Scodix Makes Food Packaging Enhancement More Accessible with PolySense 550 Release

Scodix announced the release of PolySense™ 550, a new polymer for digital enhancement developed for the food packaging industry. Compatible with the entire Scodix Ultra portfolio, the polymer is already being used by Italian folding carton producer, Packly, to great effect.

Scodix PolySense 550 food packaging compliance refers to indirect contact for low migration. Scodix reportedly capitalized on its four years of experience in manufacturing low migration Scodix PolySense for the Scodix E106 press. This development was validated by the world renowned SQTS Labs in Zurich Switzerland and was tested and approved according to Swiss Ordinance.

“Scodix PolySense 550 augments existing Scodix applications with the ability to apply it to food-grade packaging. It is a Packly company priority to guarantee 100 percent safe packaging in the food sector, as well as the other sectors we operate in,” said Giuseppe Prioriello, CEO and founder, Packly. “With no set-up, no waste and the fast time-to-market, food packaging digital enhancement has just broadened the possibilities for the industry dramatically.”

Scodix applications that can use Scodix PolySense 550 include Scodix Sense, Scodix Foil, Scodix VDE, Scodix Cast&Cure and Scodix Glitter. Types of substrates applicable include offset, HP Indigo ElectroInk and Lamination.

For more information, visit [www.pack.ly](http://www.pack.ly).

### Kendall Packaging Brings Pouch Converting in House

Kendall Packaging has grown so well that the strategic decision was made to bring pouch-converting capabilities in-house, to ensure that customer expectations continued to be met and exceeded, particularly when it came to delivery.



Earlier in 2020, Kendall Packaging worked with CMD to complete the installation of a new, state-of-the-art Pouch Converting System from CMD. The CMD 760-SUP Stand Up Pouch System is the latest addition to Kendall’s impressive store of advanced technology.

“Adding pouch converting to our capabilities gives us more options for customers, some of whom have requested that Kendall bring it in house,” said Stewart Landy, director of sales, Kendall Packaging. “We now have the ability to control everything in the process under our roof – we actually print, laminate, slit and make the pouches in our facilities.”

This added capability reportedly infuses a level of flexibility and speed to market important for specific customers and gives Kendall the close control necessary for custom applications.

The 760 SUP Stand Up Pouch Converting System offers advantages that are laser-pointed at bringing significant value to serious pouch converters. Coined “the Profit Advantage,” the system is designed to optimize existing processes by slashing downtime and scrap, and offers unique, built-in analytics to ensure consistent product quality.

Kendall serves customers in the food, non-retail and personal care industry, and the 760-SUP reportedly delivers advantages that address common needs among these customers. Chief among them is verifiable pouch quality, to ensure product safety and freshness.

The CMD machine is designed for quick changeovers between jobs, which builds in the flexibility for short runs and quicker deliveries.

For more information, visit <https://kendallpkg.com>.

## Pouch Papers Keep Rolling to Greater Future

For packaging high-volume, mass distributed items economically, pouch materials are hard to beat. Close teamwork between converter, customer and package machine maker is essential to production of better packages and this expanding and increasingly diversified market.

A greater swing in pouch packaging may be expected in coming months as large volume packagers seek to economize.

Depending on the size, type, distribution and merchandising of the product to be packaged, and honest adaptability to machine handling, the pouch is inherently an economical flexible package. It eliminates separate production operations. Beginning with base flexible materials in rolls, packaging machines form, fill and seal pouches (or packets as they are also called) automatically. The result is savings in time and labor to the product manufacturer. A further saving is realized in the cost of roll stock compared with converted bags or other packaging media.

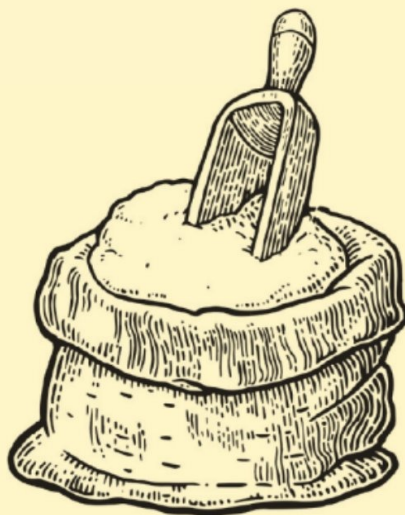
Aware of the trend to expanding pouch packaging, Thilmany Pulp and Paper Co. has developed a line of polyethylene-coated papers that meet a variety of packaging needs.

In airing the subject at a seminar for distributors, Thilmany reviewed the various types of pouches and the requirements of good pouch papers.

There are four basic styles of pouches, all of which can be produced by automatic machines. They are:

### **THE PILLOW POUCH:**

This is most commonly used and



was the first to be developed for automatic packaging. It is still widely employed for packaging free-flowing solids such as soap and coffee. It has a center seam seal plus a head seal at both ends and is formed from a single sheet. Although it has the advantage of a large capacity, its disadvantage as a paper pouch is a weaker center seam because the bond on one side is made to an uncoated surface. This disadvantage, plus operating difficulties (such as friction) in producing it, prompted manufacturers to develop other types.

**THE 4-SEAL POUCH** is the second most commonly used style and is formed by combining two sheets. Obviously, this eliminates the weak seam problem with pouch papers because the coated surfaces of each sheet can be bonded. Its advantage of extreme strength is offset to some extent by its capacity limitations, making it suitable for packaging small items. It can, however, be adapted to packaging shaped solids (screws, washers, etc.) by using a horizontal

rather than a vertical feed, and by changing the sealing mechanisms to eliminate the reciprocating operation and thus reduce friction. Another desirable quality for some uses is that the pouches need not be cut apart individually, but can be used in "tandem" or "strip" with serrations between for later cutting or tearing by the consumer.

**THE 3-SEAL POUCH** is fed into the machine from a single roll and is folded over and sealed on the three "open" sides. Not too common, its most popular acceptance is in small sugar packs for individual servings. Actually, it is a variation of the pillow pouch with the center seam problem eliminated, but with a much smaller capacity.

**THE 3-SEAL POUCH WITH GUSSET:** One manufacturer researched an improvement in the 3-SEAL pouch and developed a style that is formed from a single sheet but provides a double gusset at the bottom. Its advantage is that it provides greater capacity without the center seam sealing problem. This type has found wide acceptance in the food industry for packaging cake mixes, dry cream and similar products. The same manufacturer pioneered the development of an attachment which allows packaging in an inert atmosphere (gas packaging), prolonging the shelf life of products subject to rapid spoilage by eliminating oxygen from the package.

Pouch papers can be defined as any paper coated or treated with a heat sealable material, used in roll form, that is formed, filled and sealed in one operation on an automatic piece of equipment. The

definition may also be applied to foil, cellophane, other films and combinations of these materials.

Heat seal ability is of prime importance to pouch papers. The bond is made by the single application of heat without other glues or adhesives being necessary. This is important in speeding production by eliminating drying time for adhesives to "set." Further, it eliminates handling and application of sealing material by the packager and may contribute to simplified machine design.

Thilmany features polyethylene coatings on its pouch papers which are distributed under the name of Polly-Kraft. In addition to polyethylene, other coatings can be applied for heat seal ability including nitrocellulose coatings, poly vinyls, Philofilm, specialized lacquers and waxes.

The paper company is coding most of its pouch papers with extruded polyethylene because the plastic rates so highly in a number of properties essential to good pouch packaging...

## Relation to Machines

Converters who supply pouch papers to packagers should be aware of the minimum requirements necessary to produce a package from the standpoint of

## In addition to polyethylene, other coatings can be applied for heat seal ability including nitrocellulose coatings, poly vinyls, Philofilm, specialized lacquers and waxes.

end product protection, shipping and merchandising. Also, they should be familiar with the type of machinery on which their rolls are to be run.

Briefly, pouch packaging machines operate on a reciprocating or non reciprocating principle. The first is a start and stop operation while the latter, once started, continuous without interruption.

This difference in machine operation may have a bearing on the type of material the converter suggests for packaging since:

Reciprocating machines usually require:

1. Higher tensile strength.
2. Better slip qualities of heat seal coating and paper.

Non-reciprocating machines can usually tolerant:

1. Lower tensile strength.
2. Poorer slip qualities (or none) of heat seal coating and paper.

Another factor the converter must consider is pliability vs stiffness. These qualities can have a definite effect on machine operation and will vary from machine to machine. Some require pliability to form packages properly while others require stiffness to fill properly.

The type of heat seal is important. If the seal is face to face, the coated surfaces are brought together and fuse to each other, giving a very strong seal. Generally, and disregarding the protective requirements for the product, less heat seal material is required to give a satisfactory closure.

If the closure is face to back, the heat seal material is in contact with an uncoated surface. This type of sealing may result in a weaker seam and normally requires more heat seal material. (It is understood that the former refers to coated pouch papers and not to films such as cellophane which are heat sealable in themselves.)\* ■

\*The full version of this article can be found in the March 1958 issue of *Paper, Film and Foil Converter*.

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