LABELS & LABELING

# & DIRECTORY 2017

# PRESS TECHNOLOGY **TRENDS** A big year for developments

A big year for developments in both conventional and digital presses points to a ground-breaking Labelexpo Europe 2017



world reflect on the labeling year 2016 and future trends in their regions

Automated FUTURE BECKONS

New workflow technologies are opening the way for full automation of more labeling processes



ANNUAL REVIEW OF MARKETS AND TECHNOLOGIES

WWW.LABELSANDLABELING.COM

# OUR COMMITMENT YOUR ADVANTAGE

 Helping customers with product development is always fascinating – running trials, testing equipment and offering market insights. We average one new product solution every day, and that's a lot of happy brand owners and converters.



Adrian, Sue, David, Min, Andre Technical Excellence Team

Our Technical Excellence Team looks forward to every new challenge to drive solutions for you and your customers. Whatever the request and wherever the help is needed, count on us to make the nearly impossible happen.

Learn more from our team at averydennison.com/advantage



Inspired Brands. Intelligent World.™

label.averydennison.com

© 2016 Avery Dennison Corporation. All rights reserved. 09/16

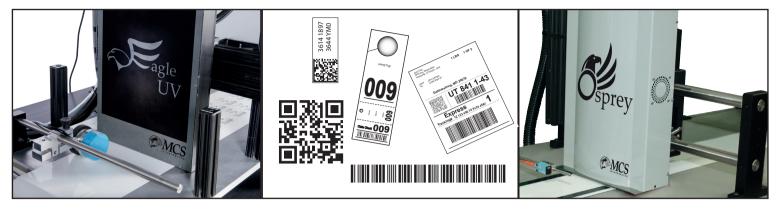


# GT360 series

# 360° INNOVATION



# **Eagle Web Inkjet Systems**



# Finally, an inkjet system designed for flexographic and web printers.

# FOR NUMBERING, BARCODING, GRAPHICS & SERIALIZATION

# SOLID 4.25" OR 8.5" PRINT HEADS AND OUR NEW OSPREY 2.5" PTINTHEAD

- Suitable for multiple lanes of small or large barcodes, numbering or graphics without "stitching".
- Large print area Print heads can be combined for a total width up to 25"
- Supports Data Matrix and HarvestMark capability.

# **HIGH QUALITY**

- True Native 600 x 600 DPI quality and 400 x 600 DPI with our new Osprey printer.
- HIGH SPEED
- 600X400 DPI at 250 feet per min.
- 600X300 DPI at 333 feet per min.

# **SMALLER DOTS**

- Higher resolution 2550 nozzels per Eagle print head!
- Adjustable drop sizes: 6, 7, 11 and 14 pl as well as oversized drop capability.

# SIMPLICITY

- The MCS Web inkjet printers are designed to be easy to use, highly reliable, and very flexible.
- Takes less than 5 minutes to set up.
- Choice of UV-Curable, or FlexPrint Hybrid Polymer; including spot color.

# MCS EAGLE AMS OPTION

- Automated maintenance system.
- Automatically wipes, purges and caps with commands from the MCS Raptor Software.



Scan to see the Eagle in action.



Phone 800.728.0154 or visit www.mcspro.com today!

# Contents

### Editorial team

Andy Thomas, Group Managing Editor James Quirk, Deputy Editor and Latin America Editor David Pittman Package Print Editor Kevin Liu, China Editor Aakriti Agarwal, India Editor Barry Hunt, Technical Editor Mike Fairley, Director of Strategic Development Nick Coombes – Editorial Consultant Bob Cronin – Columnist Henry Mendelson – Australasia Correspondent T: +44 (0)20 8846 2835 E: editorial@labelsandlabeling.com

### Sales team

Randy Kessler, Advertising Manager Joerg Singer, Account Executive – Euorpe Richard Quirk, Account Executive – CMEA & Asia Tina Wang, Account Executive – China Pradeep Saroha, Account Executive – India T: +44 (0)20 8846 2818 E: sales@Labelsandlabeling.com

### Design

Daniel Miller, Designer Ben Walton, Designer Adam Evans, Designer T: +44 (0)20 8846 2841 E: design@labelsandlabeling.com

### Production

James Wenman, Design & Production Manager T: +44 (0)20 8846 2833 E: production@labelsandlabeling.com

### Marketing

Michael Hatton Marketing Director Paul Connelly Senior Marketing Manager T: +44 (0)20 8846 2727 E: marketing@labelsandlabeling.com

### Management

Lisa Milburn Managing Director Tim Gordon Publishing Director T: +44 (0)20 8846 2818

### Publishers

Tarsus Exhibitions and Publishing Ltd, Metro Building, 1 Butterwick, London, W6 8DL, United Kingdom T: +44 (0)20 8846 2700 | F: +44 (0)20 8846 2801

### Offices

Tarsus Expositions Inc, 175 N Patrick Blvd, Suite 180, Brookfield, WI 53045, United States T: +1 262 782 1900 | F: +1 262 782 8474

Tarsus Exhibitions & Publishing Ltd. Room G, 29th Floor, SIIC, 18 North Caoxi Rd, Xuhui District, Shanghai, 200030, China

T: +86-21-64686801 | F: +86-21-64279169 Tarsus Exhibitions & Publishing Ltd. O4U Centre, 649, Office M-03, Phase-5, Udyog Vihar, Gurgaon, Haryana, 122001, India

T: +911244234434

### Subscriptions

E: subs@labelsandlabeling.com ISSN: 1478-7520

### Printed by

Wyndeham Grange Ltd, Butts Road, Southwick, West Sussex, BN42 4EJ

### US mailing

Labels & Labeling (USPS No: 002-914) is published bi-monthly by Tarsus Exhibitions and Publishing Ltd and distributed in the US by SPP, 95 Aberdeen Road, Emigsville PA 17318. Periodicals postage paid at Emigsville, PA.

**Postmaster:** Send address changes to Labels & Labeling, 3175 N. Patrick Blvd. Suite 180, Brookfield, WI 53045

# Features

- 07 Printing trends for 2017 Andy Thomas looks at Labelexpo Americas for trends in conventional and digital printing
- 13 Automate to survive As MIS systems become ever more all-encompassing, Mike Fairley looks at trends towards full automation of the label converting process
- 21 Connected packaging & labels James Bevan, author of a major report on smart labeland packaging technology, looks at the potential in this multi-billion dollar market
- 22 Performing outdoors Len Holtkamp, global segment director Durables at Avery Dennison, looks at how durable label materials can improve product safety for OEMs
- 25 Package printing is here to stay David Pittman looks back on his five years covering package printing for L&L, and looks forward to where the market is heading

### 27 M&A drivers

Moorgate Capital's Nicholas Mockett discusses the recent M&A landscape, and what the future looks like for the label and packaging industry

- 51 Collaborate to be heard Paul Neath, director at Skymark, discusses how retailers and brands can differentiate themselves to win the battle to stand out
- 54 Busy year for Label Academy Mike Fairley reports on the Label Academy's progress over the last year

# Regional

31 Europe The European pressure-sensitive label market has continued its recovery and prospects for 2017 are good, reports Andy Thomas

- 33 North America
   North America editor Chelsea
   McDougall takes a look at growth in the
   North American market
- 35 Latin America James Quirk looks at key trends and market statistics in Latin America
- 37 India Aakriti Agarwal reports on the Indian label industry
- 39 China

The label market is still a vigorous and prosperous industry in China, writes Kevin Liu

**41** Oceania

Perhaps the year's most significant event has been the emergence of a new trade association representing Australian label printers, as Henry Mendelson reports

# World Label Awards

- 43 L9 announces 2016 World Label Awards category winners
- 48 Global label associations
- 53 Best of the best 2015 / 2016 The presentation of the fourth Best of the Best awards (2015- 2016) was held on the firstevening of Labelexpo Americas in Chicago in September

# Supplier Directory

- 56 Exhibitor list by category
- 88 Ad index

**64** Supplier directory

# THE PERFECT CUT?







# PRECISION AND FLEXIBILITY ...

... that's what our team guarantees in all areas: From taking on the contract to production, and right up until delivery.

We want you and therefore also your customers to be completely satisfied all the time – WE work on that every day!



# Perfect – magnetic die cutting technology by Kocher+Beck!

Do you expect the highest quality from your products? **So do we!** First-class tooling and system solutions are one thing, but we also provide excellent service and all of that – **worldwide!** 











WINDING

**TECHNOLOGY** 



Kocher+Beck GmbH + Co. Rotationsstanztechnik KG, Pliezhausen

Kocher+Beck UK LTD Coalville, Leicestershire

OOO Kocher+Beck Moscow Region, Russian Federation

Kocher+Beck USA L.P. Lenexa, Kansas

www.kocher-beck.com



Andy Thomas Group Managing Editor

# Editor's Welcome 2017

Welcome to the Labels & Labeling Yearbook 2017 edition. As we look back on the past year and forward to 2017, a key trends emerges – converter-side industry consolidation.

It is worth comparing where we are now as an industry with the hurricane of closures and acquisitions which swept through the commercial print industry in the years since I edited a magazine called British Printer back in the early 1990s. As end user marketing budgets became ever tighter and product cycles shorter, inefficient print companies simply went to the wall, or were acquired by bigger groups, and the industry was forced to take on board new technology to increase efficiency and protect margins.

Like the old-style commercial print industry, the label industry is highly fragmented. When pressure-sensitive technology started taking hold in the 1970s and 1980s, label converting companies were formed at a blistering pace, started either by new entrepreneurs, or by press operators leaving established companies to start their own. This was driven by the high growth rates across the industry in the 1980s and 1990s and the novelty of pressure-sensitive labels for many end users, meaning all these small new companies could thrive. The entry cost for a basic letterpress or flexo press, new or second hand, was relatively low and there were plenty of well-trained operators to work them due to firmly embedded apprenticeship programs.

Today, we face a very different scenario. In developed markets pressure-sensitive growth rates are barely above 2 percent; end users have consolidated their buying operations on a regional and often on a global basis and squeezed converter margins; the cost of the most efficient converting machinery and surrounding workflow and ancillaries is far higher; run lengths continue to come down as product

# CONSOLIDATION HITS THE LABEL INDUSTRY

variation and shorter marketing cycles become the norm; and there is a global shortage of trained press operators.

In this situation, medium-sized converters have found it increasingly difficult to remain profitable. Not able to achieve the scale to compete with the large groups, they have been the principle acquisition targets of behemoths like

CCL and Multi-Color Corporation. Even on a regional scale, we see the formation of groups – in L&L recently we covered Nuceria's acquisition of Turin-based Appia, which is a perfect example of this trend.

To avoid this fate, mid-sized (in German, 'Mittelstand') companies need to specialize in multi-process workflows which add real value to end users, combining conventional or conventional/ digital print and finishing processes which will form the core displays at Labelexpo Europe in September 2017.

Into this mix comes the Rako, X-Label and Baumgarten merger, which opens up possible new models for consolidation.

These types of co-operative arrangements mean each company retains its own internal structure and cohesion and voluntarily puts into the mix the products and facilities which fit in with a commonly agreed group strategy. In theory this should avoid the disruption and culture clashes that often – though by no means always – accompany acquisitions.

Technology is pushing in a direction which supports such strategies. Secure networks allow the exchange of color-matched pre-press files and profiles, meaning jobs can be color matched on both conventional and digital presses at multiple print sites; MIS packages allow managers to move work between sites and to obtain real-time feedback for planning purposes. On this topic, I recommend reading Mike Fairley's exciting look at the future of automated production on page 11.

And what about the other end of the spectrum – the small converting operation (up to 5m USD turnover)? All the signs are that despite the profitability challenges facing the industry, companies at this scale which are prepared to invest continue to thrive, being small enough to service local label buyers and flexible enough to switch production rapidly between short product runs, as well as filling niches as industry-only suppliers.

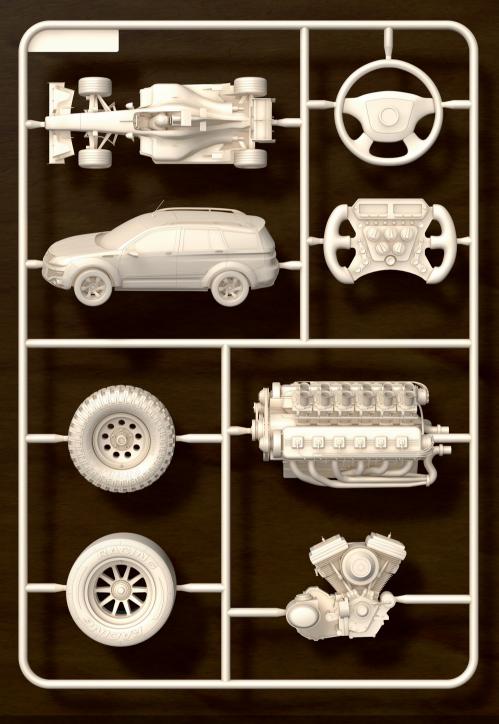
Charles Darwin correctly noted that it is not the strongest that survive – but the most adaptable. It will be fascinating to see which models allow label converters to survive and thrive in the next ten years.

CREATING TOMORROW'S SOLUTIONS

# WACKER

# CONFIGURE YOUR PERFECT SYSTEM





Discover the possibilities: DEHESIVE<sup>®</sup> release systems are the result of a successful combination of the four components polymer, crosslinker, catalyst and controlled-release additive. They work together smoothly so that, with the right choice of release force profile, substrate adhesion, peel rate and release control, you can tailor the perfect system solution for any application. Behind DEHESIVE<sup>®</sup> release systems, you have a partner that optimizes your products and processes at every stage and ranks among the world's leading suppliers. Together we can take your business to the next level. So let's make the perfect combination.

Wacker Chemie AG, www.wacker.com



# Printing trends for 2017

Andy Thomas looks at Labelexpo Americas for trends in conventional and digital printing

he Labelexpo shows which alternate between Brussels and Chicago give us an excellent snapshot of wider trends within the label printing industry.

One clear trend evident at this year's Labelexpo Americas was the blurring of lines on short-to-medium run lengths between faster digital presses and a new generation more efficient flexo and offset conventional presses.

HP Indigo, for example, is looking to directly challenge flexo printing even on medium to longer runs with its 8000 printing platform. The press runs at up to 80m/min (256ft/min), with the option to include in-line semi-rotary die-cutting with ABG's new Fast Track. To maintain quality assurance at these speeds, AVT has integrated a new in-line closed loop inspection system, the Helios S Turbo.

At the same time, conventional press manufactures showed an array of presses dedicated to efficient short run work.

Omet's 'entry level' iFlex press has a range of features which help it compete on short and medium run work. 'iLight' laser beams on the print and die stations allow print and print to die-cut register to be achieved before press start and 'iVision' cameras keep the press in register. The shaft-driven press was demonstrated running extended gamut inks. This requires highly accurate register control, made possible by the direct drive from shaft to print and converting units.

Faster changeover on in-line converting units is a major factor in increasing conventional press efficiency. MPS showed in Chicago for the first time its EF 430 Neo press with a new side load die-cutting unit called Chameleon RobustCut, developed jointly with EMT. This allows fast die exchange from a pre-loaded cart in under one minute without the need for a hoist. The two companies claim the unit has equal stability to vertical die stations at speeds up to 650ft/min on web widths from 13 to 20 inch.

It was significant at Labelexpo Americas that more press manufacturers were running extended gamut ink sets, meaning spot colors are simulated out of 4-7 process colors and there is no need to make special spot color plates or to wash the press down between job changes.

MPS, for example, ran a series of demonstrations with Kodak producing an 8-color job out of CMYK.

In the high-end automated category was Nilpeter's FA-4\*, shown with FP-4 unit for hot foil and embossing and again printing Expanded Gamut jobs.

Codimag demonstrated its Viva340 Evolution press printing with extended gamut inks (six colors out of CMYK+OGV) and using Presstek Zahara water-processed plates, claimed competitive down to run "Labelexpo Americas 2016 revealed the continuing march of inkjet print technology"

lengths of just 1,000ft (300m), particularly if off-line finishing is adopted.

### Digital embellishment

Digital printing is at a major crossroads as we enter 2017, with a vast range of possible applications and options. Not only are we seeing a range of configurations offered – stand-alone with off-line finishing, hybrid conventional/digital or in-line digital – but we also see inkjet integrated as a finishing and even a first down white option.

Codimag, for example, demonstrated its waterless offset Viva340 Evolution press with a Xaar inkjet bar printing opaque white on the first station, replacing a semi-rotary screen unit.

Post-print inkjet coating, both in-line and off-line, allows fully variable spot gloss and matte varnishing and other decoration effects including digital cold foiling, and this was demonstrated by Konica Minolta on the MGI JetVarnish 3DW, an off-line



"A major debate in the digital world is what configuration is most efficient – in-line or off-line finishing?"

unit which allows spot UV varnish, 2D/3D embellishments and foil stamping to be added digitally to preprinted rolls of labels.

Domino's Textures system integrates inkjet varnishing into the N610i digital press, and Epson's new SurePress 6034VW press also has integrated (LED-UV) varnishing included in the base configuration. Not only can these varnish units apply variable spot matte or gloss coats, they can also take down the shininess and tactility inherent in the UV cured ink process.

HP Indigo and JetFX have jointly developed Digital Combination Printing technology which enables single pass production of digital spot and tactile varnishes and digital foils in-line with an HP Indigo WS6800 press.

Xeikon also plans to make use of inkjet in its Fusion 'digital combination' concept. Fusion is a modular series of digital units which will include a high opacity white, digital foiling and spot varnish, positionable either before or after the 4-5 color Xeikon printing unit. Fusion modules will be retrofittable to Xeikon's existing presses at different speeds and web widths. A label converter in Belgium is the beta site, where a CX-3 has been combined with White and foiling modules for the health and beauty market.

### **Digital printing**

Labelexpo Americas 2016 revealed the

continuing march of inkjet print technology. Epson added to its hugely successful water-based inkjet press its first single-pass industrial print system, the SurePress L-6034VW. The press is unique in using Epson's own low migration LED-UV curing inks and is the first to use the company's PrecisionCore linehead technology.

Mark Andy, meanwhile, chose to complement its hybrid flexo/inkjet press with an entry level digital system, the Digital One EP dry toner press. The press images at 1,200 DPI at 62ft/min and includes a flexo coating unit.

Durst has also sought to address the entry level market with its Tau 330 E, which aims to retain the quality of its larger siblings while offering a limit of 4-5 colors and using a high pigmented UV ink set for reduced ink consumption. The press is available in a 330mm width with the same print resolution as the other Tau presses and a top speed of 157ft/min.

Hybrid digital/flexo presses are an important recent development for the big conventional press manufacturers: Nilpeter's Panorama, which matches a Screen-based print engine with a range of conventional FA-4 series print and finishing options; the Mark Andy Digital Series; Gallus DCS340; Omet JetPlus; MPS SymJet; Edale/FFEI Graphium.

Another key digital trend is the growing crossover between commercial print and packaging markets. This is exemplified in wide format, ink and colorants, color management, screen inks and coatings and digital inkjet heads across the whole field of tag and label, flexible, folding carton and corrugated, as well as direct mail. Similarly with Konica Minolta, which is leveraging its inkjet and electrophotograph-

by companies like FujiFilm, is involved

leveraging its inkjet and electrophotographic technologies in the commercial and wide format markets to speed up digitization of the label and packaging sector. The company's Biz hub C71cf mid-market press – running at speeds up to 60ft/min at 1,200 DPI – is based on the established electrophotographic C1070 series engine from the commercial market. A new partnership with Spartanics offers a laser die-cut option and Aztech Converting is a partner for full rotary die-cutting.

Konica Minolta is also looking at whether its Accurio Jet KM-1 B2 digital carton press might have applications in the sheet-fed label market.

### In- or off-line?

A major debate in the digital world is what configuration is most efficient – in-line or off-line finishing?

Durst now has a program to integrate Omet XFlex X6 modules with its Tau 330 inkjet press, with the most common configuration a priming unit and flexo printhead/die-cutting options on the finishing end.

And while digital press manufacturers

# THE PERFECT SETTING ?



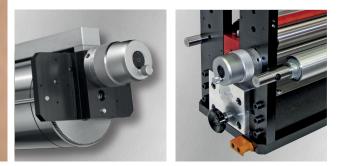




# PRECISION AND FLEXIBILITY...

... since 1997 that's exactly what the original adjustable anvil cylinder – the GapMaster stands for.

Precise to the micron with proven reliability, allowing parallel or individual side adjustment of the gap, by the use of a single adjustment unit.



# Perfect – the original GapMaster by Kocher+Beck!

Do you expect the highest quality from your products? **So do we!** First-class tooling and system solutions are one thing, but we also provide excellent service and all of that – **worldwide!** 











TECHNOLOGY



Kocher+Beck GmbH + Co. Rotationsstanztechnik KG, Pliezhausen

Kocher+Beck UK LTD Coalville, Leicestershire

OOO Kocher+Beck Moscow Region, Russian Federation

Kocher+Beck USA L.P. Lenexa, Kansas

www.kocher-beck.com

# RAORDE IN LABEL PRINTING





 Photo quality reproduction ✦ Wide range of substrates

- ✦ 4-colour 'spotless' technology
- ✤ 90% uptime in daily production

# Visit your regional website for further information

**USA** www.screenamericas.com

Europe www.screeneurope.com Japan

Australia www.screen.co.jp www.screenaust.com.au



### Gallus developments

This feature has concentrated heavily on Labelexpo Americas, where Gallus did not exhibit. However, the company will be a major force at 2017's Labelexpo Europe in Brussels, where it will be both setting and following the industry trends noted above.

Most notably, Gallus is pioneering a new breed of wider, 'entry level' presses with the launch of its Labelmaster series. These 17in machines come with a range of automation and process options, but at base are an extension of the highly successful ECS concept, offering a 'no frills' approach to efficient PS label conversion but in a wider format.

Gallus' partnership with Heidelberg is likely to becoming increasingly important. The results can be seen both in the Labelmaster design and in the DCS340 Labelfire hybrid digital/flexo press line.

incorporate finishing into their presses, finishing systems manufacturers are integrating digital print into inspection rewinders.

Werosys' Compact finishing line for example, has an integrated CMYK TrojanThree Memjet print engine. The TrojanThree digital print unit is fully synchronized with the semi-rotary die-cut and slitting operations, and operated from the same HMI. The system runs at 18m/ min (48ft/min) at 1,600 x 1,600 DPI. The digital print module can be installed on existing Werosys lines in the field, or combined with any of the Werosys Compact modules.

Similarly, Daco and Inkjet Solutions – which recently formed a partnership – have developed a rewinder with integrated CMYK Kyocera-based digital inkjet system, which can print and convert at speeds of up to 250ft/min. The two companies are now represented in the United States by Sanden Machine.

Another route to digital is to incorporate a 4-color print unit on a conventional flexo press. Colordyne now offers the 3600 Series Retrofit modular inkjet unit, and recently announced a deal with Mark Andy whereby the latter will distribute Colordyne's 3600 Series Retrofit modular inkjet unit to existing Mark Andy presses.

### Package printing

We have been noting for some years opportunities opening up for label converters in flexible packaging, and even cartons on narrow or mid-web presses, both conventional and digital.

Nilpeter's Labelexpo Americas stand had a hefty focus on package printing with the new 22in-wide FA-6\*, shown converting flexible packaging at speeds up to 175m/ min (574ft/min).

FA-6\* configurations can include one

or more multi-purpose MP-6 converting units. Designed as 'quick-change' platforms, they have automatic unwind and rewind capabilities. These units offer multiple high intensity air drying and UV curing of process work, inks, adhesives and coatings. In-line functions include high-speed solvent and water-based flexo printing with a reverse-side printing capability (using FA-6\* repeat lengths). A UV-cured lamination capability includes glossy effects, surface protection, barrier solutions and cold foiling. Solvent- or water-based dry lamination capability is available for special laminates, barriers, pouches and sachets. GEW's fully air-cooled curing LED-UV system, LA1 was featured on the FA-6\*.

Mark Andy showed a P7 press fitted with the ProLED UV curing system converting flexible packaging jobs using low migration UV LED inks with in-line solventless lamination technology.

Bobst demonstrated its M6 UV flexo press with a system to constantly monitor UV ink curing on the press. Named UV Track, this system uses two sensors to test and track the ink curing safety directly on the substrate during rather than after printing, with ink safety on each printed meter certified. An ink safety certificate for the whole roll is available immediately.

Reinforcing this trend, GEW presented its multi-point in-line UV monitor, consisting of calibrated sensors positioned along the length of the lamp to continuously measure the intensity in a UV curing system. Multipoint continuously reads and records the actual intensity across the full width of the lamp, calculating the UV energy dose on the substrate with 'great precision'. A dose monitor is set to alert the operator before the wrong dose could have an impact on production. Low UV output, which would not adequately cure, is thus avoided, as is insufficient output from a degraded lamp

HP Indigo is having increasing success with its 20000 digital press running flexible packaging substrates, demonstrating the Karlville Pack Ready laminator to deliver printed flexible packaging with zero cure time.

At the same time, Xeikon is pushing into the digital carton space with the launch of its FDU flatbed in-line die-cutter.



For more detailed coverage of Labelexpo Americas 2016, read the show review in L&L issue 5

# **Passion for Precision**



Flexible Dies



Rotary Tools



**Rotary Machines** 

Ever since 1963 Spilker has developed and manufactured tools for die cutting, printing and embossing, always flexible and innovative.



Spilker GmbH | Handelsstr. 21-23 | 33818 Leopoldshöhe | Germany Fon: +49 (0) 5202 9100-0 | Fax: +49 (0) 5202 910090 | info@spilker.com

# AUTOMATE <sup>TO</sup> SURVIVE

AS MIS SYSTEMS BECOME EVER MORE ALL-ENCOMPASSING, MIKE FAIRLEY LOOKS AT TRENDS TOWARDS FULL AUTOMATION OF THE LABEL CONVERTING PROCESS

Being a label converter in the 21st century has undoubtedly come at one of the most demanding periods in the industry's recent history. Run lengths are decreasing, lead times continue to get shorter, environmental and waste pressures continue to grow and quality demands increase. Consequently, margins tend to get depressed and many converters have seen their profitability decline. Reports from many parts of the world indicate that a quarter to a third of label converters are in the caution or danger area in terms of financial viability. Not good news for the industry's future.

However, there is much for the industry to celebrate when it looks ahead. Technology advances, new software solutions, E-commerce, the introduction of 'Cloud' computing and the 'Internet of Things,' together with an ever faster rate of business integration and workflow automation, are all rapidly moving towards an industry that will be more streamlined, more automated, and more profitable in the future.

Part of the drive towards greater automation has initially come from the world of digital printing, where shorter run lengths and quick turn-rounds have created the need for enhanced pre-press automation, more sophisticated color management, ever-improving digital front ends (DFEs) and moves to integrated inspection and finishing. This, in turn, has now evolved into increasing automation of conventional analogue presses and processes.

Shorter run lengths and quick turnarounds also started to create bottlenecks in the business administration process, with more order processing, more demands on production scheduling, more demands on inventory control, and more invoicing. Today, all these stages are being integrated into increasingly sophisticated Management Information Systems (MIS) which fully integrate the whole administration process into one streamlined and automated workflow. This can be seen in the diagram below.

### Information hub

MIS systems today enable everything from materials purchasing, to production, distribution, invoicing and accounts information to be held in one computerized system, integrating with other applications, including desktop productivity tools, press management control systems, inspection, finishing, inspection, accounting and administration systems and supply chain integration.

Systems are fully integrated so data only has to be entered once

and changes ripple through to other modules automatically. For example, if a customer changes the quantity required on an order, the computerized system automatically adjusts the works order, re-times the job, adjusts the production schedule and stock control – and then re-calculates the quantity of raw materials allocated.

At the hub of an MIS system is a database that holds all the details required to manufacture, stock and sell the label or printed package products, including press requirements, tooling, colors/ inks, plates and finishing. Materials order/stock modules include barcode-driven traceability and details of substrates. An origination module provides full control of design, proofing, platemaking, etc; the specification of the label drives the automated production planning process.

Modules used for job planning and production scheduling in the label or package printing plant are today an essential element of a MIS workflow system and can provide full visibility of machine capacity, both short and long term, and offer detailed scheduling of each production step of the job, from customer approval right through to shipping. Depending on the software it may also be possible for press operators to consult their work schedule on their press or feed back what they are actually doing. A change in schedule can be automatically seen on the shop floor.

Label and package printing production environments may change dramatically from one day to another, one shift to another, or even hour by hour. This means that the system needs to respond to the unexpected and quickly be able to identify backlogs and to modify existing production or press schedules. Flexibility in a system is therefore paramount. Keeping it simple makes scheduling manageable. Fast and responsive production scheduling is one of the major keys to successful supply-chain management, in some cases even linking customer's and supplier's schedules together.

### **Real time**

Increasingly, MIS systems are starting to offer real-time feedback of shop floor activity to the scheduling board or screen via job tracking terminals or JDF capable systems. Others may look to define the current running efficiency as a resource for operators, or identify machine faults to automatically adjust running time of operations. Some can provide an out of sequence alert, indicating jobs started early or not as planned, and so alerting the scheduler.

Outside of the main label and package printing MIS system,



there are now an increasing number of print quality inspection, color, fault, barcode and other inspection solution available, both software and hardware - many of which (including AVT and AB Graphic) are already being integrated with Esko's Automation Engine and MIS systems.

Esko's Automation Engine serves as the heart of any pre-press production operation, integrating workflow automation with quality control. It comes with extensive business system integration capabilities and is highly scalable.

A job in Automation Engine represents a production order that organizes not only the data storage for the job, but also the job's metadata – its link to order ID, due date, customer info, customer service representative contacts, etc. Besides these administration attributes, a job can also contain the graphics specifications like barcode, inks, RIP options. This job information can be used in any workflow to take advantage of all the data that is already there, avoiding double entries.

To meet the specific needs of digital printing in the label and narrow web markets AVT introduced Helios D, an automatic, 100 per cent print inspection system. Based on AVT's Helios product line, Helios D supports all stages of digital production workflow, including the identification of specific defects like missing nozzles, ink dripping spots, and color changes as soon as they occur. The result is reduced waste, enhanced production and comprehensive process monitoring.

The AVT systems extract business intelligence from the production floor and provide seamless connectivity to MIS and Automation Engine pre-press for optimized automated workflows.

Like some other quality control equipment and systems suppliers Global Vision has also embedded a Quality Control Platform within Esko's Automation's Engine so as to provide an all-in-one quality assurance system that runs as a background process and results in an annotated and viewable design file within Automation Engine. This further enables rapid and systematic review of all detected packaging and labeling errors throughout the workflow, from upstream design to print.

### Color management

A highly adaptive new color management software technology for label and packaging applications is also available from QuadTech. Without any hardware modifications to the press, QuadTech's

## THE LABEL PRODUCTION PLANT OF TOMORROW

- CUSTOMER PLACES
   ORDER
- ELECTRONIC DATA
   INTERCHANGE
- PRINTER MIS
   SYSTEM
- ORIGINATION
   AND PRE-PRESS
   INTERGRATION

CONVENTIONAL OR DIGITAL PRESS WITH AUTOMATED SET-UP & COLOR MANAGEMENT

- ▼ INSPECTION AND FINISHING LINE AUTOMATION
- ADMIN MIS COLLECTS ALL DATA
- SHIPPING INITIATED
- INVOICE USING EDI
- CUSTOMER RECEIVES JOB AND PAYS INVOICE

ColorTrack software integrates with ink formulation software to simplify workflow and reduce the number of ink corrections needed to achieve accurate, optimal color.

Another software company with a product specific to the label industry is One Vision. The DigiLabel program automates label production workflows for digital label printers and combines print data optimization and production planning. DigiLabel operates throughout the entire production workflow: print data is automatically subjected to a quality control check and then optimized. The automated production of die-cutting forms or laser-cutting configurations, standard cut lines, a white background and the automatic dispatch of a release PDF to the customer for approval saves labor time and staff resources.

Some of the MIS systems available today also offer 'Dashboards'. Dashboards make use of color, graphs, symbols, and charts to help users quickly and easily review critical management and financial data. This enables companies to take an immediate pulse of each department and quickly pinpoint problems.

By combining data from throughout the MIS system, dashboards create a visual command center where it becomes possible to monitor company performance and launch profitable initiatives. Since getting to the root of an issue may require more than a glance, each Dashboard provides multi-level drilldowns. Each user of these systems can customize their dashboards by selecting from a list of available options that include cash position, net profit performance, late jobs, jobs due out each day, delivery by month, work-inprocess analysis, sales metrics and underperforming employees.

Although based on standard components, bespoke programming is often involved in tailoring individual MIS systems to an individual company's needs. Modern MIS systems operate in real time, allowing the operator to move from window to window and enabling electronic commerce through flexible and adaptable architectures.

### Automated presses

The label industry is continually seeking ways to further automate processes and press set-up and changeover information so as to remove the risks of human error. Quite simply, the aim for the future – as



# Economical - Evolution - Efficiency

High speed printing up to 48 m/min HD Print Mode 720 x 1260 dpi resolution High pigmented UV Inkjet inks for reduced ink costs 4 or 5 color capability CMYK and high opacity White Significantly reduced "Cost of Ownership" (TCO)

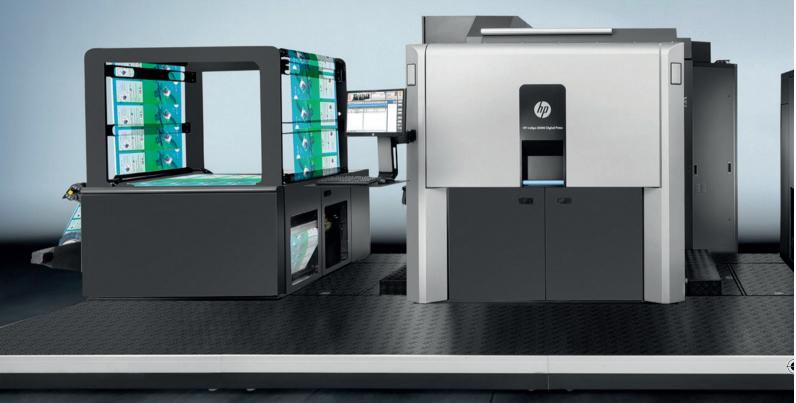


 $Italy \cdot Austria \cdot Germany \cdot Great Britain \cdot France \cdot Spain \cdot Sweden \cdot USA \cdot Brazil \cdot Mexico \cdot India \cdot Singapore$ 

durst

# Limitless Possibilities

Be free to grow with the endless applications of the **HP Indigo 20000 Digital Press** 





HP Indigo has reinvented versatility so that you can create unique solutions for your brand customers, to set them and yourself apart from the competition. The **HP Indigo 20000 Digital Press** thrives in the most demanding converting environments to deliver the highest quality for the world's leading brands. And with Pack Ready, you can deliver high performance applications with immediate time to market.

As with all HP Indigo Digital Presses, you can take advantage of **HP PrintOS**, an open and secure cloud-based print production operating system to help you get more out of your HP presses and printers, simplify and automate your production process and enable new forms of collaboration.

Reinvent your ability to be unique, with the HP Indigo 20000 Digital Press.

Find out more: hp.com/go/hpindigo20000 and hp.com/go/PrintOS

© 2016 HP Development Company, L.P.



# **MIS WORKFLOW**

Estimating

Order processing

•

Production scheduling

Inventory control Quality control

Costing

Accounting

Heidelberg puts it – is to work towards 'Smart printing systems which will harness the power of digital integration to deliver new print systems and drive the industry forward.' In short, to make printing presses (whether conventional or digital) that are self-managing, and where everything from production planning, to consumables ordering, to predictive maintenance, are all generated from the press itself.

Certainly, the use of scalable servo drive hardware with intelligent modular design press management software is already being used to minimize press set-up and make-ready, automate plate, cylinder or slitter changes, allow more consistent, repeatable results, and provide converter end-users with greater press flexibility. Inbuilt screens enable all the advanced controls to be visible alongside representative graphics, and provide for easier press commissioning and the simplification of fault finding. WiFi controlled automatic knife slitting has also recently been introduced.

All of this will have an increasing impact on press productivity, freeing up label companies to focus on developing their business rather than spending time on managing manufacturing. The use of cloud-based systems, where everything from press performance to planning scheduling is online and instantly available, will be part of the label world of tomorrow.

Integration with other software systems is also become ever more important, such as sales or corporate group accounting packages. Sales Cloud for example, is a software package that provides a complete view of customers, including activity history, key contacts, customer communications, lead management, sales forecasting, sales performance management and internal account discussions. "INCREASINGLY, MIS SYSTEMS ARE STARTING TO OFFER REAL-TIME FEEDBACK OF SHOP FLOOR ACTIVITY TO THE SCHEDULING BOARD OR SCREEN VIA JOB TRACKING TERMINALS OR JDF CAPABLE SYSTEMS" There are other domains that are typically not covered by MIS software. An example would be dedicated software for machine maintenance programs and/or for spare parts management. Interfaces are also being created to more and more press DFEs which allow the automated creation of step-and-repeat profiles, and this capability is being built directly into digital presses, for example those from Xeikon and Screen.

Additionally, there are other domains that are sometimes not covered well enough by a 'generalist' MIS, such as a CRM (Customer Relationship Management) system – a tool which helps with contact management, sales management, productivity and more. The CRM within an MIS will likely do fine for ninety percent of label printers, but will not be good enough for a very sales-driven company. So in these cases, MIS will need to create an interface to an external CRM. Another example that can be given is the payment of salaries.

Increasingly, MIS suppliers are also being asked to provide an interface so that electronic instructions can be sent to transport carriers, such as DHL and UPS, to manage transport. Cloud- based systems are also being used to automatically save every inbound and outbound e-mail against customer contacts and produce a sorted trail of previous discussions – all available in the right place when needed.

It should be noted however, that integration with other software systems needs to be scalable and upgradable so as to avoid being stuck with the same MIS version forever.

Mobile options are also a hot topic in relation to the latest MIS systems, with management and sales personnel being enabled to access information or data through their mobile phones or tablets.

While this article has been designed to create a flavor of what is now taking place in the ongoing automation of the label and package printing sectors, a new handbook in the Label Academy series of titles will be published in the early New Year. Entitled 'Management Information Systems and Workflow Automation,' the book will provide an extensive overview of just what is now possible, and look at where automation developments are taking these sectors for the future – a human-free, 24/7, fully automated, workplace.

Even today, a sophisticated MIS system with efficient job planning and production scheduling capabilities is more than a nice-to-have tool; it is becoming a necessity.

Page 17 A good MIS will provide a streamlined and seamless administration process of jobs through a label or package printing plant

Page 14 Wheel count meters

(courtesy LabelTraxx)

Page 14 flow chart Automate the production

process wherever possible

integrated die-cutting and 100 percent vision

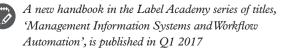
inspection, with business

and administration systems to cope with lots of short to

medium run orders and to streamline operations and

enhance profitability

and integrate pre-press and print production, including



# ROTARY SCREEN TAKES LABEL PRINTING TO ANOTHER DIMENSION

As a complementary process for applying thick deposits in one pass at relatively high speeds, rotary screen printing holds the key to competing in high-value packaging markets.

# Hank Guitjens, Commercial Manager, Label Printing, SPGPrints

The unique feature of the rotary screen process is its ability to print thick deposits of ink or varnish at speed. With adaptations to the hole-size or thickness of the stencil walls, deposits of between 6 and 250µm can be achieved in a single pass.

This capability makes the process important for high-value self-adhesive label design, making numerous vivid and tactile effects possible that enhance aesthetic appeal or offer a functional benefit. No wonder that it is demanded by leading retail brands around the world.

### An easy process to integrate

Above all, rotary screen printing is easy to integrate on a reel-to-reel label press. At the heart of the process is a continuously rotating seamless nickel screen, contained in a compact unit. Its productivity, versatility and ease of integration alongside flexo and other analogue processes make it an ideal complement to the label converting workflow. Specific benefits of rotary screen printing to the label printer are:

- Application-dependent speeds of between 100 and 450ft/min are possible
- The process is compatible with all commonly used ink sets and substrates – plastic and paper – commonly used for narrow-web applications

- It provides a fast return on investment: modules and cassettes can be added without major press refurbishment or disruption
- The process offers low total cost of ownership thanks to high-performance, reusable and re-imageable screens, and digital screen imaging systems

# Aesthetically appealing rotary screen effects

A label printer can enhance the aesthetic appeal or functionality of the printed label in many creative ways:

## Opaques

Opaque inks that block out light and eliminate transparency are easily achieved with a single screen printing pass. One of the most common opaque applications is the no-label look, where white is printed first to prevent transparency of the overprinted visible colours, which are normally printed afterwards by the press's main analogue process.

## Varnish coating

A package succeeds because it stimulates the consumer's sense of touch as well as visual appeal. Screen-printed varnish effects, typically greater than 26µm, achieve both – without waste. They create raised images, smooth shining ('brilliant') solid areas, or



fine line patterns. They can add vividness to an icon or brand name, enhancing impact. The 'texture varnish' (typical print thickness: c.  $70\mu$ m) features large particles to create a coarse feel and give an 'ice-look.' It is a striking way of printing reversed-out images of icons or logos.

## Braille

Screen-printed braille dots, requiring laydowns of approx. 250µm, offer durability and can be printed in one pass. A clear varnish is used to apply dots over the image areas without compromising the impact or integrity of the branding. Braille labelling is mandatory for pharmaceutical and many household products across Europe.

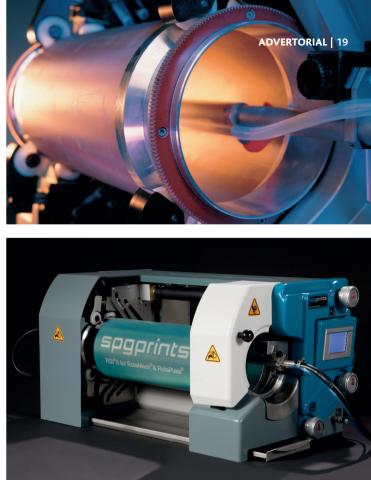
## Metallic effects

Gold and silver inks are a powerful way of communicating heritage and luxury. With rotary screen metallic effects, from fine linework to solid areas – e.g. a crest or medallion – are applied precisely, without wastage. This provides a lean alternative to hotfoil and avoids the need for costlier metallized label stock.

# A bespoke rotary screen workflow to suit your needs

SPGPrints has driven the adoption of the rotary screen process in label printing, developing complete process solutions that





give both a fast return on investment and low operating costs. This choice of printing units, seamless nickel screens and digital prepress equipment enables the printer to configure the workflow according to budget, level of use, the type of printed effects required and the end-user markets supplied.

### Nickel screens for high performance

Screen performance has significant impact on total ownership costs. SPGPrints' RotaMesh® screens featuring nickel, electroformed non-woven meshes offer higher the highest levels of strength and stability and optimum ink flow. These qualities result in longer lifespans: they can be reused and re-imaged for new jobs many times. Their structure also enables smooth running at speeds of up to 450fpm (150 m/min).

An alternative non-woven nickel screen for non-SPGPrints machines is RotaPlate®, which supplied as a flat, pre-coated mesh, for assembly by the printer into a cylinder. These can be used several times for printing a single image, making them an ideal solution for repeat jobs.

The higher the mesh-count, the more detailed the feature: a range of screens is available catering for everything from coarse effects to fine linework and Chinese or Arabic text.

### Modular units vs interchangeable cassettes

In most cases it is possible to add rotary screen technology to existing presses, by retrofitting, with modules or lighter, easily changeable cassette units. SPGPrints has worked closely with almost all major press makers to devise units that fit seamlessly into the machine. They can be ordered with a new press as well as retrofitted.

SPGPrints' RSI® (Rotary Screen Integration®) module can be installed on a sliding rail system above the press, allowing easy repositioning to any position in the printing sequence: primary for opaque white; secondary for varnishes, for example. Lighter 40kg RSI Compact modules with restricted repeat ranges may offer better investment return for dedicated narrow-web printing situations.

Cassette units are suited for presses that allow fast change of print processes at each station of the printing sequence. These are 25kg or lighter, and can be slotted in and out safely by the operator, in minutes.

### Digital, automated prepress workflows

Direct laser engraving and laser exposure methods have greatly simplified and accelerated the prepress workflow, eliminating the need for film and chemicals, reducing manual intervention and delivering outstanding quality that can be repeated without error.

The rotaLEN direct laser engraver is suitable for engraving the screens for the most demanding applications up to 600mm (26in) wide. A sealed CO2 laser ablates the emulsion from the image areas. It is a one-step process that takes a matter of minutes: simply engrave, and the screen is ready for press.

The variLEX laser exposure unit provides a single prepress workflow for multiple print processes: capable of up to 4000dpi, it is suitable for HD flexo, dry-offset, letterpress as well as rotary screen printing. It is uniquely capable of ablation and exposure in one step and comes with SPGPrints' own software solutions.

The accompanying software enhances the control of the imaging process and enables easy recall of repeat jobs for identical results.

# Qualities of a rotary screen technology provider

With experience at all stages of the workflow, a global network of agencies and subsidiary companies and a record of innovation spanning five decades, SPGPrints provides the level of service and ongoing support essential for integrating the process smoothly.

# NEW SGTR Auto Set non-stop glueless turret rewinder...



# ...the **latest** module for the Digicon Series 3



# one complete finishing solution

For more details email: info@abgint.com

www.abgint.com

# **CONNECTED** PACKAGING AND LABELS

James Bevan, author of a major report on smart label and packaging technology, looks at the potential in this multi-billion dollar market

p to now, high unit cost per device has been the principle barrier to wider rollout of radio/ electronic inlays like NFC and UHF for on-board, item level labels and packaging applications.

While lower cost printed technologies such as barcodes, QR codes and digital watermarks can also be interesting as 'gateway' devices to the internet, the potential benefits offered with radio/ electronic devices are substantially more far reaching.

Although the concept is not entirely new, cost effectiveness is now set to become a realistic prospect and a major tipping point in overall viability is fast approaching.

There are several reasons for this change of outlook, and our new report foresees the opening of a Pandora's box of multiple value-added functionalities and benefits for brand owners. These include:

- The reality of lower unit cost inlays

   by an order of magnitude due to the commercialization of plastic electronics for on-label/pack radio/ electronic inlays.
- The commercialization of dual frequency 'combi' inlays (NFC + UHF) which enable inlays to be read at both short and long range, dramatically increasing the functionalities of a single on-label device. Such inlays will need to be readable by smart phones as well as dedicated mobile readers and tunnel readers.
- The emergence of the Internet of Things (IoT) for labels and packaging
- Greatly increasing sales volumes of

connected devices will further drive down unit costs.

Within the next 5-10 years it should be possible to achieve with a single on-label device, each with a unique ID, the following types of functionality:

- The Retail Internet of Things (IoT)
- Mobile marketing and consumer engagement on a number of levels
- Track & Trace/ePedigree for example the EU Falsified Medicines Directive and other legislation worldwide
- Retail inventory management/stock control
- Brand protection/product authentication
- Tamper evidence
- EAS anti-theft
- Product quality assurance by sensing changes that take place to or around the packaged product, such as time/ temperature, moisture content and gas ingress/egress.
- Location based data based around GPS

More functions and applications will be underpinned by the power of Big Data Analytics.

Multiple functionalities will bring multiple benefits for brand owners based on a single on-label/on-pack device, and this will be the cornerstone for a multi-billion dollar opportunity for:

- Solution providers (RFID inlay makers, as well as hardware and software developers)
- Packaging and label industries.

Early adopter vertical markets are likely to include alcoholic drinks, pharma and

healthcare, luxury and beauty, tobacco and food.

And as the unit costs comes down, additional vertical markets in branded consumer packaged products will become economically viable for radio/electronics devices – particularly where consumer marketing activity may be desirable, for example in the apparel and footwear, toys and gadgets, sporting equipment and memorabilia segments. Another driver is addition of useful information, such as the electronics components, printer cartridges and copier toners, automotive aftermarket, household cleaning products and agro-chemicals sectors.

A mix of 'long range' and short 'range' capabilities is required to achieve the various different functionalities. One approach is the dual frequency 'Combi' type devices that can handle both:

- Short range (1 to 4 cm well suited for consumer engagement type applications)
- Long range readability (1 meter plus – well suited for stock control applications).

The key now will be the full recognition by brand owners of the breadth of benefits offered by all this new and enhanced multi-functionality available.

The illustration shows the types of benefit and data layers based on a secure intrinsic electronic ID at the core.

For more information on the Vandagraf report, contact info@vandagraf.com or go to www.vandagraf.com

# PERFORMING OUTDOORS

Len Holtkamp, global segment director Durables at Avery Dennison, looks at how durable label materials can improve product safety for OEMs



Products for use outdoors is a growing market which requires highly durable labels capable of lasting the life of a product even in very challenging conditions.

Users need to retain access to important product information such as lot numbers, barcodes, safety warnings and warranties. Above all, labels should not peel off easily, lose their color, become illegible, scratch or fade. Environmental exposure can easily lead to the loss of essential information when labeling is substandard.

Minimum outdoor labeling requirements are determined by industry standards such as UL 969 (Marking and Labeling Systems) or BS 5609 (Labels for Marine Use). Many OEMs develop performance specifications beyond these standards. For example, tractor manufacturers often specify different standards depending on label positioning, underlying surface type (the substrate) and likely outdoor conditions.

The many variables OEMs must consider include:

- Substrate: factors include surface texture, shape and surface energy.
- Performance properties: outdoor weathering resistance depends on factors such as UV exposure, humidity, temperature extremes and even marine conditions.
- Printing technology and ink systems

### **Overlaminates and varnishes**

Applied to printed labels, these can protect inks and facestocks from UV light, common chemicals and abrasive conditions.

Colors last longer when light-sensitive inks are protected from sunlight. An effective method uses a protective transparent laminate affixed to the label (Figure 1). Such overlaminate films help extend label durability by absorbing and reflecting portions of UV and visible light that may fade label colors, and they also protect printed labels against the effects of humidity, ozone, chemicals and abrasion.

### Testing the specifics

No one-size-fits-all test can work for outdoor labels. Each label construction must be specified, tested and approved for each application. Label materials perform differently on different substrates – such as aluminium, steel or polypropylene – or when they are combined with a protective overlaminate film or coating. It is essential to test performance of all label components working together, using production parts that simulate planned applications and durability.

Conditioning tests are based on industry standards and end-user specifications. For example, UL 969 mandates 750 hours of accelerated weathering tests. However, OEM specifications may require several thousand hours of conditioning tests to

### **Key factors**

- The substrate
- Adhesion requirements
- Ink and printing process
- Overlaminates/varnishes required?
- Number of years in outdoor conditions
- Climates and application angles
- Exposure to chemicals, cleaners, pollutants or fuels
- Compliance with existing standards
- Abrasion/other mechanical stress

simulate the end-use environment. The most common conditioning tests include accelerated weathering, climate cycling, water resistance, high humidity exposure, oven aging and freezer aging, salt spray exposure and immersion in chemicals or cleaners.

Tests can last weeks or months and cost tens of thousands of Euros, and evaluate adhesion, legibility, color retention, abrasion resistance and other properties. OEMs often undertake these tests without knowing if results will be positive.

Partnering with a label material supplier can speed things up, help to reduce cost and enhance chances for success. An experienced supplier has the expertise to perform all necessary testing across many materials, and can recommend materials and testing that will meet end-use specifications as effectively as possible. This helps label converters to develop new label solutions.

Avery Dennison, for example, has made substantial investments over the last three years in the expansion of its accelerated weathering laboratory, and offers comprehensive durable label testing as a service to converters and their end-user customers. Advanced lab technology simulates years of weathering and sunlight exposure in just a few months.

Evolving outdoor label requirements equates to tougher performance specifications and more specialized, label materials, often at a higher cost to OEMs. Only by properly understanding different performance variables can OEMs keep pushing durability to new limits with label materials that are cost-effective, long-lasting and tough. Success and Security for the Labelprinter.



# Redefining Digital Labels.

What digital converting was meant to be!

gallus



Offering the industries best inkjet image quality at native 1200 dpi and fully integrating flexo printing processes, makes the Gallus Labelfire 340 a one of kind industrial-strength digital label converting solution. **www.gallus-group.com** 



A full range of LED curing inks are available under the EkoCure<sup>™</sup> brand!

# **EkoCure<sup>TM</sup> ANCORA** Low migration UV LED

- Suitable for the most stringent food label and packaging applications:
  - Meeting specific migration below 10 ppb, 50 ppb or SML
  - Compliant to the Swiss Ordinance and FDA regulations
  - Tested using several food simulants; (95% Ethanol, Tenax and Acetic Acid) at 40 degrees C for 10 days
- Very good colour strength and adhesion to a wide range of synthetic substrates
- Documented low migration properties achieved at very high print speeds (excess of 150 m/min or 500 fpm)
- UV LED printing offers:
  - Significantly lower maintenance and improved productivity
  - Improved energy efficiency, reducing energy consumption up to 80%

www.flintgrp.com info.narrowweb@flingrp.com



# PACKAGE PRINTING IS HERE TO STAY

David Pittman looks back on his five years covering package printing for L&L, and looks forward to where the market is heading

hen this writer joined the label and package printing group of Tarsus, the parent company of Labels & Labeling and Labelexpo Global Series, the goal was to bring a stronger focus to package printing.

Label printing is a very exciting, fast-paced and evolving industry, and one willing to adapt to new paradigms, and adapt new practices and processes. However, package printing at the start of this decade was somewhat of an unknown quantity for many label printers and their supplier partners, but a topic that was being widely discussed and assessed.

### Then to now

The intervening years have seen this firmed up considerably, with corporate strategies evolving to cater for this, new supply chain models forged, and new technologies launched to meet emerging demand. Big M&A, such as Xeikon's acquisition by Flint Group, Bobst absorbing Nuova Gidue and Heidelberg taking over Gallus; Highcon and Synthogra's emergence as suppliers; and the introduction and market adoption of HP Indigo's 20000 and 30000 digital presses, and the ecosystems supporting them; this is a small sample of package printing developments important to the label sector during my time in the industry. L&L's rebrand, as a publication for 'the world of package printing', provides additional indication of this trend, as does the open use of 'labels and packaging' throughout the supply chain. Visit Labelexpo Europe 2017 in Brussels (September 25-28, 2017), and on almost every stand you'll find technologies, products and services tailored to the needs of package printing. The words 'label and package printing', or a close approximation of that, will be emblazoned across many suppliers' stands, from Mark Andy, HP Indigo, Flint Group, Avery Dennison and UPM Raflatac, to Soma, Synthogra and MBO, and all those in between (Bobst, Taghleef Industries and

Karlville). At my first Labelexpo in 2011, this was not as clear to see.

### **Future developments**

Expect there to be renewed and refreshed focus on package printing as part of the Labelexpo Europe 2017 experience, with all the suppliers already named, and many more, exposing their package printing interests to the market.

There is no doubt that 2017 will provide yet more advances in package printing for the label and narrow web industry. Across the supply chain, R&D is ongoing to provide products and technologies that afford label printers even more opportunity to diversify into package printing, and provide their customers, the brand owner, with the tools to satisfy the consumer.

'Promote, protect, perform' are long-established tenets of packaging, and will remain the bedrock of developments in the market. NFC, QR codes, barcodes and other triggers will be used by brands of all sizes to engage with consumers and make packaging perform in new and exciting ways, either as a delivery mechanism for additional content, promotional activities, or to create an emotional connection between the consumer and the product/ brand through packaging.

Protection will be realized though developments in materials, with new characteristics and capabilities allowing new constructions and films to be used in different ways, be they for packaging difficult and harsh products (from sharp-edged pistachio nuts to abrasive chemicals), or providing the essential OTR and WVTR barrier properties certain products demand. Additionally, GEW, Nilpeter, Bobst, Flint and the like are promoting UV LED as a safe option for food packaging. Expect this to ramp up as we move deeper into 2017.

And to promote products and brands better through packaging, an evolution

in digital and conventional converting technology will facilitate the delivery of shorter runs of customized and personalized flexible packaging and folding cartons. As such, advances in sheet-fed inkjet, mid web CI flexo and web offset will be towards the top of my agenda for



the year ahead. Nanography will feature too. Will 2017 be the year Landa breaks through? Only time will tell.

These developments and more will be covered by Labels & Labeling throughout the year and beyond, and will be there to be seen at Labelexpo Europe 2017, so make sure to visit the show and read the magazine online and in print to stay up-to-date with these package printing developments.



Subscribe to L&L's dedicated package printing newsletter on labelsandlabeling.com



# Erhardt+Leimer

# **ELGUIDER** Web guiding made easy.



# The new DRB2301 for narrow web applications:

- extremely compact
- easy commissioning
- brushless drive
- web-based management

# www.erhardt-leimer.com

# M&A drivers

Moorgate Capital's Nicholas Mockett discusses the recent M&A landscape, and what the future looks like for the label and packaging industry

ompared with 2015, which was a record-setting year for global packaging mergers and acquisitions (M&A), 2016 has been more subdued. At the half year, the market was on course for around 25 percent to 30 percent lower value than 2015.

There were some particularly big deals in 2015, such as Ball Packaging taking over Rexam, Owens Illinois acquiring Vitro, Apollo buying out Verallia, and the Mead-Westvaco-Rock Tenn merger. Against any other benchmark, 2016 will be a good year for packaging M&A, probably approaching a value of 25-30 billion USD globally.

The stand out segment in 2016 has been flexible packaging. The headline deals have been Egeria buying out Clondalkin Flexibles from Warburg Pincus, RPC Group taking over Europe's leading polyethylene film producer, British Polythene Industries, Berry Plastics bidding for AEP Industries, Lindsay Goldberg's buy-out of Schur Flexibles, Pritzker Group buying ProAmpac, Novolex taking over Heritage Bag, and Amcor acquiring Alusa of Chile for 435 million USD. These seven deals are all in the several hundred million dollar range, which adds up to a significant aggregate enterprise value.

The key drivers here are the high growth of flexible packaging, the differentiation and added value – which can build strong customer relationships and margins, and the innovation which is still leading to substitution from other packaging formats. It is one segment which benefits particularly well from many ongoing trends, like demographics and social changes such as more food consumed on-the-go, often involving more and smaller packs. Flexible packaging is not bulky and works well in the convenience market.

### Label sector

In the label sector, due to the fragmented nature of the industry, the acquisitions tend to be smaller. The most notable deal is arguably the acquisition by CCL Industries of Checkpoint Systems for 433 million USD. This was a particularly interesting transaction as it highlights the scope for value-added services with labels at the nucleus. CCL is the key international acquirer of labels businesses and, unlike other packaging companies of its scale, it makes some fairly modest acquisitions in the 10-50 million USD range. Two other notable deals in the labels sector were Platinum Equity's sale of Mactac in two parts; the European business to Avery Dennison for 200 million USD and

"In the label sector, due to the fragmented nature of the industry, the acquisitions tend to be smaller. The most notable deal is arguably the acquisition by CCL Industries of Checkpoint Systems for 433 million USD"

Mactac Americas to Lintec for 375 million USD. Also, Private Equity house Advent International replaced KRG Capital Partners as majority investor in Madison Dearborn.

The other interesting facet of M&A of packaging businesses is valuations. M&A is normally looked at on the basis of enterprise value to EBITDA multiples. Although deal volumes are down the multiples are averaging out at almost the same levels as 2015. This is good news for vendors and the multiples continue to be some way above the long-term trend levels. How long this will last is difficult to predict, but it may prove to be that 2015 was the top of the market. One influence on M&A multiples is the EV/EBITDA ratios of public packaging companies. PLCs will tend to limit what they will offer for a business to less than their own trading multiple and even in private buyer transactions counterparties tend to mark-to-market. The PLC multiples are also a little down on the 2015 levels. Of course, in any given year the deals being analyzed are different form

Even after the M&A activity of recent years, most segments of the packaging industry are still fragmented when compared with their customer base and suppliers. Industry concentration will continue as packaging companies increase their scale to be better placed to negotiate with customers. Furthermore, large brand owners are increasingly asking their trusted suppliers in established territories to follow them to new regions, which is often done by acquiring a local operator. Additionally, we are experiencing increased demand from packaging manufacturers in Asia seeking acquisition targets in Western Europe, perhaps to acquire existing relationships with Brand owners and leverage those back in their domestic markets.

the year before so it is not an exact science.

In the labels industry the multiples

formats. This is partly because smaller

companies tend to trade at lower EV/ EBITDA multiples. However, a target

which is differentiated (such as those

not commodity products) is exposed to high-value end markets (think pharma-

ceuticals) or high growth end markets, like

those that are emerging, is likely to attract

a multiple at the higher end of the range.

tend to be lower than for other packaging

*i* Nicholas Mockett is head of packaging M&A at Moorgate Capital, a corporate finance and M&A advisory firm. Read a Q&A with him in L&L issue 3, 2016, and at http://bit.ly/2eDq437

# LEADING INNOVATION IN LABEL PRINTING TECHNOLOGY

BOBST narrow- and mid-web inline flexo presses and inline multi-process printing & converting lines provide exclusive solutions and are the best value for quality and innovation, satisfying the needs of label manufacturers in the food, beverage, cosmetics, healthcare, household and industrial market segments.





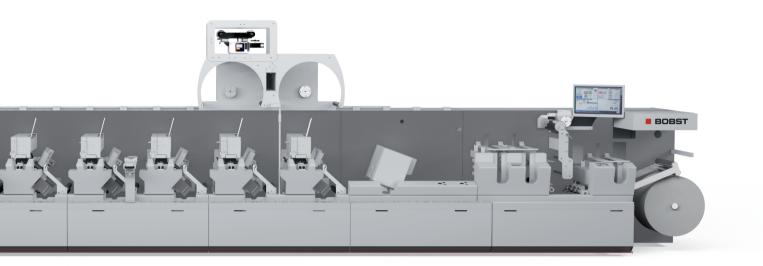
All lines in the range are very reliable and deliver profitable production and superior quality in the manufacture of labels for a wide spectrum of market applications.

- PS labels
- Wet glue labels
- In-mold labels
- Wrap around labels
- Sleeves
- Coupons.



The system combines the benefits of BOBST unique Digital Flexo and Excellence technologies to provide:

- Minimum possible waste
- Automatic on-the-fly job changeover print cylinder and die-cut - performed in 1 minute
- No ink change, no stop for color matching
- REVO extended color gamut technology.





The range of equipment is very wide, ranging from fixed configuration dedicated presses through to multi-process printing and converting lines which can be equipped with an ample choice of options adding value to label production.



BOBST technologies for multiple web handling allow for a wide range of possible multi-layer label configurations. These include peel-and-reseal and peel-tear and stick coupon labels, multi-page peel and read booklet labels, and labels combining all methods.



# LABEL Academy



# **TOP OF THE CLASS!**

# It's time to go BACK TO SCHOOL with the Label Academy.

Study the technologies, processes and developments of the label and package printing industry.

The Label Academy is a global training and certification program for the label and package printing industry. You learn through free self-study modules - then take an exam to earn a certificate. Your learning is supported by free access to detailed articles and videos!

The Label Academy is endorsed by FINAT, TLMI and the LMAI.

# There's a book for every module

Aid your success with the Label Academy text books. Produced by industry-leading experts, they're available at great value prices in paperback and Kindle editions.

Sponsored by:









REGISTER FOR FREE TODAY TO TAKE THE NEXT STEPS IN YOUR LABEL AND PACKAGE PRINTING CAREER

# WWW.LABEL-ACADEMY.COM

# EUROPE BOUNCES BACK TO GROWTH

The European pressure-sensitive label market has continued its recovery and prospects for 2017 are good, reports Andy Thomas

fter the dark days of 2011-12, when the European label industry suffered a 'double dip' following the 2009-10 crash, 2015 saw the industry return to a path of sustained growth.

According to European industry association Finat, total consumption of pressure-sensitive label materials in 2015 was 6.77 billion sqm, which is a 6.5 percent increase on 2014 and continues a three-year run of positive results (3.4 percent in 2013 and 5.7 percent in 2014) – beating GDP growth across Europe.

At the same time, Finat reports that PS label converters continue to diversify, with over 20 percent now offering at least one other decoration technology – IML, shrink sleeves, flexible packaging. This means that overall narrow web industry grow rates are higher than those for PS alone.

Filmic materials continue to increase their market share, growing at 8.3 percent in 2015 and now representing more than 35 percent of total European label demand – a rise of 15 percent since 2000.

Not surprisingly, the top ten label markets in the EU account for 75 percent of total PS label consumption, and these grew 15 percent between 2010 and 2015.

Eastern Europe has doubled its market share in the last ten years, now representing over one fifth of European demand, and Poland has increased its consumption by an astonishing 50 percent since 2010. Looking at label consumption sqm per capita, the European average is 8.3 sqm, with Denmark at the top of the range



at 17.5 sqm and Turkey and Romania at the bottom with 3 sqm. Europe's developing markets will require a doubling of label consumption to reach the European average, which is a marker for further growth in 2017.

By end use, the biggest market for PS labels of all types is food, representing 25 percent of demand, followed by retail and logistics at 12 percent. Half of all PS labels consumed are in VIP/industrial applications.

### Radar

Finat's annual Radar report, which tracks label converter trends, showed an average 7 percent growth rate for the 80 converters who responded to the survey, with Eastern European converters leading the pack. The best performing market segments were pharma, health & beauty and food. Office, transportation and retail sectors were not so profitable but are still growing.

Average run lengths are still going down. For conventional print this is now 2,000-9,000 linear meters (5,000m average), which is around 20 percent lower than 2014. For digital, most runs are between 250-2,000 linear meters, suggesting the break-even point with conventional is 1,500-2,000 meters.

Converters continue to be interested in flexible packaging, driven by the trends towards shorter run lengths, with between 20-40 percent saying they are either printing flexible packaging or are interested, and this is matched by a move towards wider width presses. When asked what are the most valued services by their customers, respondents cited new materials, digital printing and the ability to offer short runs. Customers also valued a wider variety of applications such as text/booklet labels and shrink sleeves, as well as offering in-house artwork expertise.

During Finat's annual meeting in Amsterdam, the upbeat mood of the PS materials survey and Radar report was supported by a survey of delegates, where 44 percent of converters said they saw good prospects for 'moderate' revenue growth, with half the sample predicting 'significant' growth. However, the red flag is that 19 percent thought margins will decline, and 40 percent expected margins to grow by no more than 3 percent.

The other key trend in 2016, and likely to be repeated in 2017, is consolidation among both suppliers and converters. The key event was the merger announcement between Rako Group, X-Label and Baumgarten, which not only brings together two of Europe's leading converting groups, but adds a global dimension with facilities throughout Latin America, China, Russia and Eastern/Central Europe.

Among suppliers, 2016 saw Avery Dennison ramp up its European presence with the acquisition of Mactac Europe, with the North American division of Mactac going to Lintec.



Read more about industry mergers and acquisitions on page 27

WWW.MPS4U.COM



# OPERATOR FOCUSED, RESULTS DRIVEN.

**EB** The Label Solution Press



**EF** The Multi-Substrate Press



**EF SYMJET** Flexo Inkjet Combination Press



At MPS, we put the needs of our clients first.

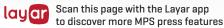
Our focus is on you, your operators and your results.

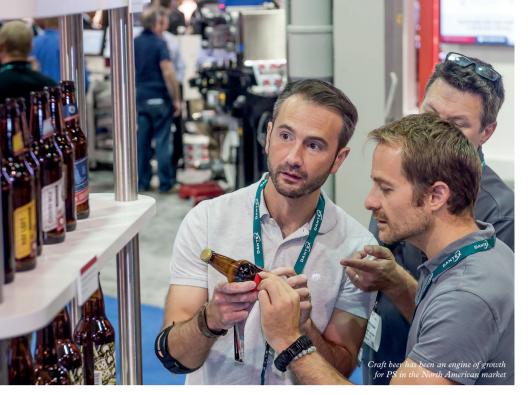
We are driven, driven to improve your results.

We design our presses to enhance the talents of your operators.

## **MPS Systems B.V.**

The Netherlands info@mps4u.com www.mps4u.com





# North American LABEL INDUSTRY SHOWS STRONG GROWTH

North America editor Chelsea McDougall takes a look at growth in the North American market

f the industry's largest North American label and package printing show is any indication, the label industry here is not only growing, it's thriving.

Labelexpo Americas 2016 saw record numbers of technology launches and visitors in its largest floor space yet. There were 17,407 label and package printing professionals, an 8.5 percent increase in attendee numbers, and 455 exhibitors including more than 100 first-time exhibitors, on an expanded 201,000sq ft show floor.

The North American market, which includes Canada, the United States and Mexico, makes up 19 percent of global label demand – third in the world behind Asia, which makes up 42 percent, and Europe at 26 percent. Latin America, and Africa and the Middle East make up 9 percent and 4 percent of the worldwide label demand, respectively. The US comprises 77 percent of the North American label market, while Mexico is at 12 percent and Canada at 11 percent.

### Future growth predicted

These are all signs of a thriving North American label market, industry experts say.

## Press launches

Key press manufacturers continue to invest in the industry. Labelexpo Americas saw the unveiling of new presses in this market including Bobst's M6 mid-web in-line UV flexo press, the K600i from Domino, the Durst-Omet hybrid system – which sees Omet XFlex X6 modules integrated into Durst's Tau 330 UV platform – HP Indigo's 8000, the Digital One from Mark Andy, MPS' latest EF technology, the Panorama digital, FA-4\* and the 22 inch FA-6\* flexo press from Nilpeter, and the Xeikon CX3 digital press.

Alexander Watson Associations (AWA) estimates that in 2015, global label demand grew by 3.5 percent over 2014. At the same time, the North American market saw growth rates at 1.5 to 2 percent.

Growth is likely to continue through 2020. AWA estimates that the North American label market will grow by a compound annualized growth rate of 1.7 percent through that time.

### Label formats

Pressure-sensitive labels continue to dominate the North American market, making up 53 percent of the label demand, or 5.75 million square meters. Glue-applied labels are second at 3.28 million square meters, or 30 percent of the market, and sleeve label technologies make up 1.175 million square meters, or 11 percent of the market. In-mold labels are at 2 percent at 250 million square meters produced.

According to AWA data, sleeving technology and in-mold labels are projected to show the biggest growth through 2020, at a CAGR of 2.7 and 2.6 percent, respectively. AWA projects pressure-sensitive labels to grow at a CAGR of 2.2 percent through 2020.

AWA says food and beverage labels making up a combined 59 percent of the total North American label market. The firm further breaks down label end uses such as health and beauty, pharmaceutical, and household chemical, but in the 10 other categories, not one is great than 10 percent of the market share.

## Further growth for digital

Digital printing will continue to be a key trend to watch in the coming years. Digital production press installations have already begun to outpace conventional installations, and a TLMI-commissioned study predicted that by 2020, three in four press installations will be digital.

All Printing Resources teamed with market research firm LPC for a 'Narrow Web Flexo Production and Digital Printing Study' earlier in 2016. LPC asked label printers and converters in the US about drivers of digital press acquisitions and key flexo production benchmarking metrics. Both small and large converters named lead times and run lengths as the most challenging trends for their business.

The APR/LPC study asked converters what's driving the purchase of digital press systems. The need to be efficient, have a better short-run solution and expedited delivery times were cited at the top reasons for investing in digital.



Labelexpo Americas will return to the Donald E Stephens convention center near Chicago from September 25 to 27, 2018

# Serious Brainpower. Serious Business.

What happens when you challenge the world's brightest digital engineers to build upon 70 years of flexo innovation? You infuse digital printing with hybrid performance, maximum versatility and true production speeds. You develop superb print quality at the lowest total cost per label. You create serious new opportunities. That's the Mark Andy Digital Series.



# It's clear to see

Franklin Adhesives & Polymers is proud to unveil, Covinax 234-01, a new high shear removable that offers clear results. This high shear removable is APE-free, formaldehyde-free and will remain clear when exposed to UV and moisture. From window graphics and emblems to decals and specialty tapes, Covinax 234-01 is clearly suited for a wide range of applications.





Covinax 234-01

nax 234-01

# Trendspotting in Latin America

James Quirk looks at key trends and market statistics in Latin America

Label Summit Latin America will take place in Santiago, Chile, in May 2017

R anging from Mexico in the north to the southernmost tip of Chile, the Latin American label and packaging industry is made up of diverse local markets, often with strong variances in size and end-user requirements. But, broadly, certain trends – not dissimilar to those in other parts of the world – have emerged during your correspondent's time reporting on the region.

The first is consolidation, with international groups such as CCL, CTI Invest, Multi-Color Corporation and Sato Group creating regional networks in order to serve multinational brands with the same quality and consistency in each local market. This year, however, has seen fewer major mergers and acquisitions in the Latin American label sector, the exception being Brazilian converter Baumgarten's merger with Rako and X-Label, creating a global group to rival the biggest in the industry.

The regional networks set up by these companies have thus far mainly focused on Latin America's four biggest label markets. CCL is present in them all: Mexico, Brazil, Chile and, most recently, Argentina. MCC operates in Mexico, Chile and Argentina; Sato Group in Brazil and Argentina; CTI Invest in Brazil, Argentina and Colombia. Prior to its merger, Baumgarten had acquired converters in Mexico and Argentina.

So, where to next? A second key trend has been rapid growth in the region's smaller markets, where increased local consumption has encouraged new converters to be formed, or companies to move into the sector from wider format printing. Labels that used to be imported are increasingly produced locally. The star performers have been Colombia and Peru: expect these countries to be in the sights of major converting groups. Meanwhile, markets such as Ecuador, Bolivia and Paraguay have installed top-level presses that would not have been seen in these countries a decade ago.

Among technology trends, label converters are increasingly bringing pre-press in-house, a 'natural step', according to Martin Fraire, CEO of Leftech, a distributor in South America of Toyobo's Cosmolight water-wash flexo and letterpress plates. 'There is a trend towards label converters bringing pre-press in-house for increased flexibility and security. With label jobs coming in ever smaller runs and increasing variation, the quicker turnaround times of flexo CTP and the speed of water processing are a great advantage.'

Another notable technology trend has been the region's rapid adoption of digital printing. A few years ago, Latin America was HP Indigo's fastest-growing market; currently, it is Xeikon's. Nowhere in the region does digital have a firmer foothold than in Chile, thanks to the short runs and quick turnarounds required by the country's huge wine export market. HP Indigo has more machines here per capita than in any other country in Latin America. This year Xeikon has made considerable inroads, with six installations in the last 12 months, and its first label converter client in the country, Artica. on which L&L reported in issue 4 2015, has ordered two further presses. 'It has been a fantastic result,' says Xeikon's Latin America sales manager Patrick Pittoors. 'Chile has been our strongest market in Latin America this year.'

# Green shoots of recovery in Brazil?

After six periods of contraction, the Brazilian packaging industry registered a growth of 2.54 percent in the second third of 2016 (April, May and June), compared to the three previous months, according to a study by Fundação Getúlio Vargas on behalf of Brazilian packaging association ABRE.

It is anticipated that production will

value USD 19 billion in 2016, despite production decreasing by 5.1 percent in the first six months of the year. In the second half of the year, the prediction is that variation will not be so negative – around -0.2 percent. This means that the sector should end 2016 with a reduction of 2.6 percent in production, with strong chance of recovering in 2017, says the study.

# AWA release liner report

According to AWA's South American Release Liner Market Report, published this year, in 2015 the total South American market for release liners represented 1.895 million square meters. The production of labelstock is the largest market segment, and accounted for 68 percent of all applications. (Note these figures are for South America rather than Latin America, and therefore do not include Mexico.)

The release liner market in South America overall will see growth of around 2.5 percent in the next few years, with the highest growth segments being medical and hygiene. The market is dominated by glassine/SCK paper, accounting for 52 percent of materials used.

Solventless silicone systems continue to hold the highest share in South America at 68 percent. Emulsion technology continues to take second place at 13 percent. The used of solvent-based technology is now around 11 percent. UV technology holds an 8 percent share and, while coming from a smaller base, will continue to grow at the fastest rate, driven by growth in the hygiene market, opportunities for in-line label coating and conversion and general cost improvements.

Label Summit Latin America will take place in Santiago, Chile, on May 16-17 2017. Go to www.labelsummit. com/chile for more information







# CLEANING UP THE INDIAN LABEL INDUSTRY

The Indian label industry has reacted to the government's announcement of banning the old currency notes in the country. Aakriti Agarwal reports

ovember 8 2016 will go down in Indian history. Prime Minister Narendra Modi, in a surprise address to the country late in the evening, declared currency notes of Rs 500 and Rs 1,000 illegal as of midnight. He gave citizens 50 days to return the notes to the bank and exchange them for new 2,000 and 500 notes. All transactions done from the next morning were to be tracked by the Indian government.

The move, aimed at cracking down on the black market in the country, reducing corruption and dealing with terror strikes while also empowering the poor as well as honest service and business people, has largely been well received.

As a result of this move, however, the Bombay Stock Exchange crashed almost 1,689 points; real estate prices saw a correction of between 20 and 30 percent and gold prices shot up overnight. A lot of businesses have been greatly affected, including in the label industry. Labels & Labeling spoke to machine manufacturers and converters to understand how the announcement affects the industry at large. 'I welcome the announcement as it is in favor of the progress of the country. There is cash crunch for a few weeks but it will have good long term impact,' revealed one industry supplier. 'A lot of people who deal in black money to save tax and get the print job by reducing the selling price of the labels won't be able to do it at a large scale. Thus, improving the industry health in long run.'

# Shake-up

Another echoed the same sentiment: 'It will become a level playing field. The announcement does not affect organized players as much as it does the unorganized sector. The small and medium businesses will be forced to be more professional as they won't have the same margins that they used to. The industry needed a shake-up to get its act together. With a Goods & Services Tax (GST) to also come into effect from the next fiscal year, I expect to see a more organized and professional Indian label industry in 2017.'

A representative from one machine manufacturer added: 'The implementation of GST from April 2017 and the ban on old currency notes is a big deterrent to the regeneration of black money. Stacks of money that was lying idle in the market will now go to the banks. Banks will have more money to lend and interest rates should come down, so the move will benefit the Indian label industry.'

One raw material manufacturer commented: 'The announcement will officially increase the gross domestic product of the country and will provide good impetus to the growth of the economy as well as the Indian label industry. With the growth of the organized sector, the packaging industry will get a boost that will have a positive effect in the long term on the label industry as well.'

A converter from north India said: 'The market will see a slump in the next few weeks. Big and medium sized companies that mostly generate bills for print jobs won't be affected as much.'

Another printer added: 'It is the best thing that could have happened and I am very happy with the move. Those who have not done the business the right way are suffering right now. It will eventually clean up the label industry and pave the path for better growth.'

With mostly positive reactions to the government's announcement, the Indian label industry is set for a large scale financial boost.

For more information on the Indian label industry, read Aakriti Agarwal's articles on www. labelsandlabeling.com





# HIGHLIGHTS OF THE CHINESE LABEL INDUSTRY

The label market is still a vigorous and prosperous industry in China, writes Kevin Liu

abelexpo Asia 2015 came to a satisfying end with a record-breaking 22,104 visitors, and the Label Pavilion at All in Print 2016 was the most dynamic area of the show. Both indicate that the label market is still a vigorous and prosperous industry in China.

Besides the strong growth in the label industry, we can also see some key trends emerging.

The traditional satellite letterpress machine focuses on extending multi-functionality, for example adding hot stamping, flexo printing, gravure printing, folding, single sheet cutting and variable data functions among others. However, at the same time, there was a sharply reduced presence of booths for traditional letterpress manufacturers. On the contrary, several traditional domestic letterpress manufacturers have started to produce flexo presses – companies such as Weigang, Taiyo and Hontec.

Another key development at Labelexpo Asia was that UV-LED technologies are increasingly being applied to letterpress and intermittent offset machines. There were many domestic suppliers displaying such UV-LED curing devices, arguing that the LED technique not only has the advantage of energy savings and curing at low temperatures, but also curing using commonly available UV inks.

# Digital

Digital printing has not been widely applied in China. High cost is one key factor. In addition, compared with the markets in developed countries which mainly use flexo printing, intermittent letterpress and offset presses are more popular in China, which means the short-run space for digital printing machines is not as great.

However, this situation has changed this year, and several digital suppliers got more optimistic feedback. 'We sold more than 30 narrow web machines this year,' enthused Hendry Feng, sales director, Greater China for HP Indigo/ PWP digital printing business division. 'Currently, the efficiency, quality and process control offered by narrow digital presses are comparable and competitive with traditional letterpress and intermittent offset presses. Digital presses have shown distinct advantages in short-run printing, variable data and multi-versioning applications. Several large converters such as Suzhou Jantan and Shanghai Hengze have successively installed Indigo digital presses this year.'

Chinese manufacture Founder's feedback was also optimistic: 'Our digital inkjet press has achieved a quite good business performance this year,' said Liu Yajuan, sales director of Founder. 'We concluded a strategic cooperation agreement with CymMetric Group and installed full-color variable data digital presses in five plants of the group.'

Epson has a strong presence in all print market sectors, and the company's sales manager, Guo Jinbo said, 'Compared with the packaging and publication markets, the label market maintains quite a sound growth rate. The personalized label and package fulfilling internet demands will be the new growth point, where there is a big demand for variable data and personalized labels.'

Epson is pioneering an entry into the Chinese digital printing market. 'We have installed seven machines up to now, including one newly launched SurePress L-6034W press. The number should be ten by the end of 2017.'

After the launch of its bizhub Press C71cf at Labelexpo Europe 2015, Konica Minolta displayed the press at All in Print. What's more, Domino has established its own sales and service teams in Shanghai promoting its digital label press.

We will likely see more digital presses at Labelexpo Asia 2017, and digital printing will show a new round of explosive growth in China.

# Converters

The most important change for label converters is the accelerated expansion and

"The most important change for label converters will be the accelerated expansion and merging of giant converting corporations in China"

merging of giant converting corporations in China. After taking over World Mark and Woelco, CCL now owns five manufacturing plants in China, respectively located in Tianjin, Guangzhou, Hefei, Changzhou and Suzhou. Rako has also set up a second factory in Guangzhou, which starts operation at the end of 2016 – another milestone of its expansion in China.

Local converters have also accelerated their expansion. For example, Meikei has not only expanded its manufacturing bases from Guangzhou to Shenzhen, Shanghai, Tianjin and Hubei, but also actively promotes its label supply chain platform Meiyin.net.

Besides this, SuzhouJanTan – which we reported on several times – has also set up branches in Guangzhou (with one Bobst M5 and one Bobst M3) and Tianjin (with one Bobst M3) this year, the former located in South China and latter in North China, creating a truly national footprint.

A company to watch is Chinese printing giant Shanghai Jielong Group Corp, which moved into the label market with the acquisition of the Shanghai Eternal Printing Group, a converter which focuses mainly on the printing of tickets, tags and anti-counterfeit labels.

As the Chinese label market enters a 'new normal' status of low and medium growth rates, this new round of integration and reshuffling of the label market will intensify.



Read more from Kevin Liu about the Chinese label market in every issue of Labels & Labeling, and online at labelsandlabeling.com



# **NewfoilMachinesLtd The Complete Solution**



**HD Unwind Unit** 340mm (13.4") Wide Maximum roll diameter 800mm

**NEWFOIL SP330** Flat U.V Screen with G.E.W Drying system 340mm (13.4") Wide Servo Control

**NEWFOIL 3534** Maximum web width 340mm (13.4") 18,000 Impressions Per Hour Embossing, Hot Stamping, Die-cutting, Digital converting and much more

**NewfoilMachinesLtd** Moorhey Street, Oldham, OL4 1JE, England.

Tel: +44 (0) 161 627 0550 Fax: +44 (0) 161 627 0551 www.newfoilmachines.co.uk E-mail: sales@newfoilmachines.co.uk



There are Newfoil agents world wide

# Oceania trends

Perhaps the year's most significant event has been the emergence of a new trade association representing Australian label printers, as Henry Mendelson reports

Together, the flexo family at Australia's Flexographic Manufacturers Association and long-established LATMA (Label and Tag Manufacturers Association) under their new Flexible Packaging & Label Manufacturers Association (FPLMA) banner, demonstrated faith in their industries' future in the form of a highly successful two-day conference in Melbourne in October 2016. A packed program covering packaging and labeling provided a platform demonstrating a new force to forge growth and relevance.

The importance of this event, held at Melbourne's Hilton, was reflected in the keynote speaker, Federal Minister for Innovation the Hon. Kelly O'Dwyer MP, who set the tone for the local printing community's positioning for tomorrow's values and its technical and commercial priorities.

The conference highlighted the need for labeling and packaging in Australia to be backed by strong, proactive trade association support. Efforts to achieve a resurgent association were outlined by its youthful president, Mark Easton, who comes across as an affable and articulate spokesperson for the now-combined Australian industry body. As sales & marketing manager of Sydney-headquartered self-adhesive label converting specialist Impresstik Labels Group, his labeling credentials are non plus ultra and as recent president of LATMA he has witnessed the organization falling into harder times.

Segue to 2014 and the need had become blindingly obvious that the organization's best years were behind it. In conversation with his industry peers, it transpired that the local Flexo Association was on a similar trajectory. This triggered a meticulous discussion process which resulted in the bonding of the Flexo and Label Associations to become today's Flexible Packaging & Label Manufacturers Association (FPLMA), with Easton at its helm.

During the two-day conference, Easton spoke to *Labels & Labeling* about the process which brought the two organizations together, confirming that after comprehensive consultative analysis and numerous deliberations the overall objectives had been achieved. 'The merger has overcome duplication and crossover of existing memberships and offers a united force and future,' he said.

'The new association enables us also to reach members within the Asia Pacific Region and incorporate us into increasingly expanding areas rather than Australia only. This complements representation for current members from both associations who have converter sites within the Asia Pacific region.'

Easton cited among the benefits of the merger such elements as savings arising from shared administration costs, increased revenue from a bigger membership pool, a combined Print Awards program, broader scale technical forums and the larger



association's ability to lobby apprenticeship initiatives with training and government agencies.

The inaugural FPLMA event culminated in a glittering awards dinner ceremony attended by close to 300 industry members and their partners.

# Tech trends

Looking forward to 2017 from a technology perspective, Australian and New Zealand converters will surely be looking at digital options, and one of those, adopted by the leading conventional press manufacturers, is hybrid flexo-digital converting lines.

An interesting perspective presented at the conference was from print industry veteran Raymond Dickinson, now Mark Andy vice president of marketing and business development. He picked out a trend of great interest with an insight into the rapid growth of hybrid developments since their emergence in 2010 following 2008's changes from analogue printing. Dickinson pointed out that current press configurations within today's hybrid world are almost unlimited and foreshadowed digital hybrid as the next wave of digital printing.

Said the Mark Andy executive: 'Digital hybrid applications will provide twice the output with the same labor as previously; hence twice the revenues, twice the gross margins.'

'At the same time they will deliver up to 25 percent in substrate savings,' he added, summarizing the overall digital hybrid profile by what may to some sound simplistic but in reality will deliver dramatic savings per label job to the extent that one digital hybrid press will output the volume of two flexo presses.



Read more regional reports from Henry Mendelson on labelsandlabeling.com







# **DLC** FLEXIBLE DIE



The standard quality meets the most stringent demands for use on all types of self-adhesive materials: Paper, PP, PE, PVC, PET, Tyvek etc.

Finishing options are NTP and DLC.

Hardness of cutting edges: 48-50 HRC



Suitable for very large print quantities. For standard and all special materials. Is generally recommended for cutting through and maximal lifetime.

Finishing options are NTP and DLC.

Hardness of cutting edges: 65-68 HRC



Standard or laser hardened flexible die with a very hard coating NTP, ideal for the abrasive thermal (thermal transfer) papers and cardboard. A thick layer of NTP enables extremely high running performances with outstanding wear properties.

Hardness of cutting edges: 60-63 HRC



Standard or laser hardened flexible die with a very hard and non-stick coating DLC, ideal for the separation of inks and adhesives, combined with a very long life.

Hardness of cutting edges: over 100 HRC

FLEXIBLE DIES

# FLEXIBLE **DIES**

Are manufactured using CNC technology which guarantees minimum tolerances and maximum quality flexible dies. Used for all types of materials including all materials with a thin backing (liner) PET or PP. We produce cutting edges heights up to 1mm and cutting angles from 50° to 110°. All special applications booklet labels, sandwich materials, micro-perforation etc. are possible. Option of all-round cutting lines or cutting contours. Fast dispatch within 8 to 24 hours.



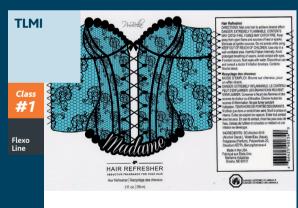
# L9 announces 2016 WORLD LABEL AWARDS CATEGORY WINNERS

Tony White, chairman of the judging committee, reveals that choosing the award winners becomes harder each year Each year the World Label Awards gain in prestige and are considered by the label industry as the awards to win. The annual competition pits the best labels from the participating L9 associations against each other and the competition is fierce. The only way for label converters to enter is through their local national association competition, as all the entries in the WLA awards must have won an award in their respective national competition.

We see ever more intricate designs using all the processes available to produce some stunning results. Every year we see the technical boundaries put under pressure with new ideas and methods of using the existing and new technology which shows off the advances being made in the international label industry. As chair of the judging committee, I can say we always find the judging a challenge, and we have to be extremely critical when discussing the respective entries. When it comes to deciding on the five Best of the Best awards, it becomes very difficult to select the final winners. The Best of the Best awards were presented during the Global Label Industry Awards evening in Chicago during Labelexpo Americas 2016.

# WINNERS **V**

More details of how the WLA awards work can be found at www.worldlabelawardsassociation.com.



# McDowell Label & Screen Printing, USA, for 'Madame Hair refresher'

Printed on a Gallus press using Actega-Wit inks on a Klockner substrate, using Harper aniloxes and RotoMetrics cylinders and dies.



# Wedderburn, Australia, for 'Gold Truffle Salami'

Printed on a Mark Andy P7-10 press at 75 m/min in four colors using Pulse/Jet inks and an Avery Dennison PS matt finish.

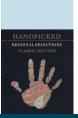


#4



Rapid Labels, New Zealand, for 'Silver Moki Marlborough Sauvignon Blanc 2014' Printed on a Gallus RCS330 press in four colors plus matt varnish, UC casting varnish and High Build Gloss varnish using Sericol inks and Kantac Mirrorkote paper substrate from Spicers.

# LATMA



Studio Labels, Australia for 'Handpicked' Printed on a Gallus EM410S press in six colors using DIC inks and Avery Dennison Vintage substrate.



Takara Pac, Japan, for 'Cherry Body Soap' Printed on a MPS EC330 press in four colors including lamination and cold foil using T&K Toka inks on Lintec PET and PET Acrylic/ polylaminate glassine substrate.



# JFLP

Combination Wine/Spirits

Class JOINT #16

**FINAT** 

ar



Diströya

Class

#18

Seieido Printing, Japan, for 'Musashi' Printed on a Sanjyo P03-270-5CFPFR press in 6 colors using T&K Toka inks and Yoshimori Paper substrate.

# Australia, for 'HR – The Gorge Whisky' Printed on a Gallus TCS250 press in five colors using DIC inks and gold foil and a matt varnish and a Gallus Screen DW mesh and Highbuild along with a grain embossing and Avery Dennison Killer White substrate.

Collotype Labels,

LATMA

HELLYERS

Distillery



WS Packaging Group, USA, for 'Meguiar's Paint Protect' Printed on an HP Indigo WS6600 press in four colors using HP Indigo inks plus spot varnish and a holographic foil substrate.

Collotype Labels, USA, for 'Diströya' Printed on an HP Indigo WS6600 press in four colors using HP inks and Siegwerk varnish plus embossing and debossing and foil stamping on Walsall Coated Products Estate 8 Special Opaque substrate and Digicon finishing.

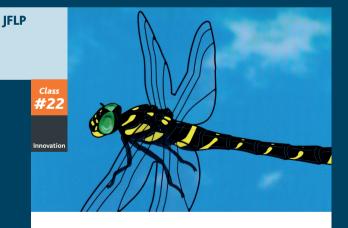


CymMetrik (kunshan) Printing, China, for 'Sony PS4 Handle' logo Printed in nine colors.



National Label Company, USA, for 'Energizer EcoAdvanced AA' Printed on a Cerutti press in four colors using National Silver,

Sun Chemical and Ashland inks on Klockner and Flexcon substrates using WRE cylinders.



Sunny Sealing, Japan, for 'Flying Dragonfly' Printed on a Lintec LPM-300-40 DHS press in four colors with lamination and embossing using T&K Toka inks and Lintec PETWH125 PAT1 and Fuji Clear 16A NPL substrates. Opening Features Straw Holes Spouts

Ventilation Holes Half Cut Opening Perforation Beverage Carriers/Trays Liquid Packaging

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

Packaging

Inspection Windows Level Indicator Elexible Packaging

# Tobacco Blanks

Holes Braille Embossing Embossing

Hot Foil Hologram



# Inline – the Rotary Converting Concept of the Future!

All-in-one is the secret for the optimal production process: Embossing, Creasing, Punching, Die Cutting and Stacking directly attached to your existing printing equipment. Converting in registration is no problem with Inline Rotary Converting Equipment from Schobertechnologies. We take speed, efficiency and precision to a new dimension!

# www.schobertechnologies.de

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

## Schobertechnologies GmbH Industriestr. 2 · 71735 Eberdingen/Germany Tel +49 7042 790-0 · Fax +49 7042 7007 info@schobertechnologies.de



Schobe

technologies



# HONORABLE MENTIONS **V**



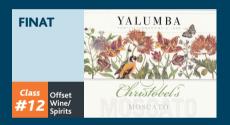
Constantia Flexibles Label Division, UK, for 'Cranes Drinks'



DGS Baski Teknolojleri AS, Turkey, for 'Opet Full Gear EP 1lt'

# TLMI Class #3 Flexo Color Process

McDowell Label & Screen Printing, USA, for 'The Curse'



Collotype Labels, Australia, for 'Christobel's Moscato'



Panprint, New Zealand, for 'Brancott Estate Flight Sparkling Sauvignon Blanc'



Shimokuni, Japan, for 'Hawaii Kona Blend Coffee'



Collotype Labels, Australia, for 'Lady Burra'



Collotype Labels, USA, for 'Tres Manos Añejo Tequila'



Sibel Industry, Japan, for 'Masquerade'



Stratus Packaging, France, for 'Nocibé Lotion 200ml'



Codex Security Printing House, Hungary, for 'Scholl Velvet Smooth booklet'



CymMetrik (Shanghai) Printing, China, for 'Lens Plus'

For more information, please contact Tony White, chairman of the WLA judging panel. Tel: +44 1379 741844. Email: tony.white@awaconsulting.co.uk

# **Global label** associations

Global Association Members of the L9



# LATIN AMERICA

# ABIEA

# Associação Brasileira das Indústrias de Etiquetas Adesivas President: Umberto Giannobile

ABIEA, founded in 1986, aims to organize and promote events such as meetings, congresses, courses, seminars and prize competitions for the benefit of its members. ABIEA publishes the magazine 'O Auto Adesivo', the official communication vehicle for the country's label sector, read by converters, suppliers, end users, publicity agencies and other companies.

# OCEANIA

# **5** FPLMA

# Flexible Packaging and Label Manufacturers Association President: Mark Easton

The FPLMA represents the new association name following the merger of ANZFTA and LATMA. Officially launched on July 1, 2016 the FPLMA will represents the flexible packaging and label converters across the Australia and New Zealand region. The main aim of the association is to impart technical knowledge to the wide market it represents. The efforts of the industry are recognized at its annual awards and technical forum held each vear in Melbourne.

# LATIN AMERICA

# **2 AMETIO**

ASIA

6 LMAI

# La Asociación Mexicana de Etiqueteros

# President: Keren Becerra

The Mexican Association of Label Companies (La Asociación Mexicana de Etiqueteros), AMETIQ, was created in 2008 by six label manufacturers. The association's main objective is to strengthen the flexographic printing and converting industry through active collaboration of each of its members and seeks to integrate more partners - converters and industry suppliers who are interested in participating in this goal.

# ASIA

# **7** PEIAC

# Printing and Printing Equipment Industries Association of China President: Xu lian Guo

NORTH AMERICA

Manufacturers Institute

Chairman: Craig Moreland

TLMI, founded in 1933, positions

itself as an industry resource for its

web industry. TLMI is comprised of

more than 350 members. The TLMI

Label Initiative for the Environment

(LIFE) certification process is a tool

that association members are using

to differentiate themselves and to

demonstrate their commitment to

environmental best practices.

converter and supplier members and

for the greater North American narrow

**3** TLMI

The Tag & Label

The Label Printing Sub-Association of PEIAC was founded on June 16, 2008. Its major tasks are to assist the government in shaping the label printing industry's development strategy; to make proposals to the government on macro policy decisions and industrial policies; to adjust import and export tariffs of label equipment; to set national standards for label printing products and materials, and to organize quality evaluation activities for new printing products.

# EUROPE

# **4** FINAT

The association for the European self-adhesive labelling and adjacent narrow web converting industries President: Thomas Hagmaier

FINAT was founded in 1958 in Paris. With more than 500 member companies in over 50 countries, FINAT provides not just a European but a global platform for self-adhesive label printers and suppliers to meet, network, exchange and enhance collective knowledge and expertise, develop and maintain standards and tests, provide the facilities for management development and education, and to promote the industry as a dynamic. creative and innovative workspace.

# OCEANIA

# 8 SALMA

# Self-Adhesive Label Manufacturers Association President: Mark Easton

SALMA represents the label, ticket and tag sector of the New Zealand printing industry. The association focuses on ensuring members are kept abreast of changes relevant to their business and on promoting its membership's products and services to print purchasers. SALMA has a membership of more than 40 companies, including some 90 percent of the New Zealand label industry.

# The Label Manufacturers

Association of India President: Sandeep Zaveri The LMAI is the central body incorporated by label manufacturing members, founded in 2002. It currently boasts at least 305 members across India. The LMAI has organized multiple conferences and awards and has participated in many international exhibitions. It publishes quarterly newsletters and hosts meetings to share information about the latest IT systems related to marketing and supply chain management. The bi-annual LMAI conference is becoming a must-attend event for the label fraternity in India.

# **PRECISION** PRODUCTION TECHNOLOGY MEETS HIGH QUALITY **FLEXIBLE DIES**



**GVM** engraving machines, for CNC sharpened flexible dies features the rotary and flatbed cutting demands by fulfilling the highest requirements.

**DieJet**, the DTP direct to plate solution for technological printing demands considers state of the art production needs for precision and efficiency.

Made in Germany – manufactured with excellent care.

Please take a look at our videos: Google+: goo.gl/DC1SbW | YouTube: goo.gl/Wf6zi7

ANDERSON EUROPE GMBH Am Oberen Feld 5 I D-32758 Detmold/Germany





machines | punching tools | services

# **DIE - CUTTING** by Berhalter Switzerland



aluminum lids | recessed lids | polyester lids | in-mold-labels | transparent labels | paper labels

# LABEL-light TM

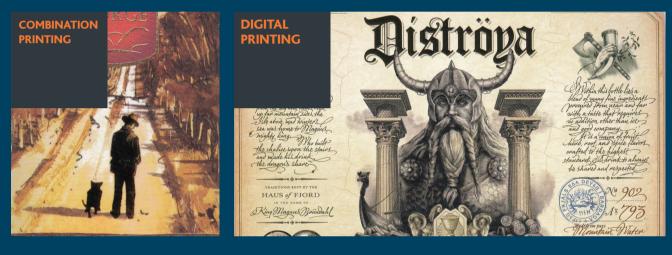
# high-tech on a low budget

- favourable tool costs
- short lead times
- flexible design
- cut & stack solution

# BEST OF THE BEST 2015 2016

The presentation of the fourth Best of the Best awards (2015- 2016) was held on the first evening of Labelexpo Americas in Chicago in September during the Label Industry Global Awards. The awards were presented to the winning companies by Mike Fairley.

# THE WINNERS WERE:



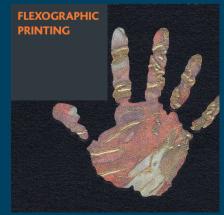
Collotype Labels, Australia, for HR – The Gorge Whisky, entered by LATMA The award was received by Daren Hudson of Collotype Labels Australia Collotype Labels, USA, for Diströya, entered by FINAT The award was received by Daren Hudson of Collotype Australia on behalf of Collotype USA

LETTERPRESS PRINTING

Sato Printing, Japan, for Green Tea 'Keikacha', entered by JFLP The award was received by Mr Kushida of Sato Printing



Fuji Mark, Japan, for Salted Firefly Squid, entered by JFLP The award was received by Mr Shibata of Fuji Mark



Studio Labels, Australia, for Handpicked, entered by LATMA The award was received by Andrew Maxwell on behalf of Studio Labels



# FINAT HIGHLIGHTS OF THE YEAR 2017

# January

Radar no. 6, your 360° scan of the label industry and its markets is available for members.

# June

7-9: European Label Forum, Berlin, Germany 'A 360 degrees journey around Planet Label of the future'. The annual summit for business leaders, media representatives and stakeholders along the labelling value chain in Europe.

www.europeanlabelforum.com



# March

17: Deadline entries for the FINAT Label Competition, promoting and highlighting the advantages and uses of self-adhesive labels and associated products as effective marketing, promotional and identification tools.

22-24: Young Managers Club Global Congress Lisbon, Portugal 'Create your pathway to success'. An event supporting the young generation to become the future leaders of the industry.

# September

25-28: FINAT stand at Labelexpo-Europe, Brussels, Belgium. Visit us at 11A31 and get answers to questions on matters such as marketing, management, technical, public affairs and other topics related to the label industry.

οC

FINAT IS ALL ABOUT:

YOUR PARTNER IN LINKING THE LABEL COMMUNITY

# **FINAT.COM**

# Collaborate TO BE HEARD

Retailers and brands can differentiate themselves through innovative product collaborations to win the all-important battle to stand out on shelf, according to Paul Neath, director at Skymark, a UK flexible packaging manufacturer



on pack graphics for Huggies Baby Wipes for Kimberly-Clark

hilst post-recession the focus was on cost reduction, today the key trend in the market is shelf appeal. Brand owners are aiming to add value through new and innovative pack finishes that grab the consumers' attention from both a look and feel perspective.

Paul Neath, Skymark director, says flexo printers need to focus on innovation and support brands to deliver unique, standout options through process and product innovation.

'To help supply retailers and brands with novel packaging solutions, we believe that supplier collaboration is now the key to future innovation in packaging.

'From drupa 2016, the key observation we made from the exhibition was the increase in the number of packaging and ancillary suppliers that were working together to create truly unique innovation for their clients. The number of new innovations demonstrated, emerging from packaging sector players working together, was astonishing to see at such a large event.'

# A way of life

Collaboration is one way of managing the packaging supply chain more effectively and it can help to drive innovation and speeds up delivery to market. But what is the proven strategy in collaboration success?

'For me personally, a key ingredient to successful collaboration is trust and a willingness to share information,' adds Neath. 'There also has to be a culture in the business at a senior level that supports working with partners. An embedded innovation culture is needed within a business to launch new products but at times you need to share concepts for comprehensive development. No one has all the ideas, answers or capabilities themselves and it is about finding the right partners.

'Our key suppliers are prepared to come and discuss new ideas for us to test. They are often best placed to advise us who might be a good fit in terms of product compatibility.'

To demonstrate this thinking, Skymark has begun working with a number of other packaging companies to deliver complete pack solutions and the seamless multi-substrate brand management support that brand owners are looking for. Working with Smurfit Kappa Inspirepac, on a recent range for Huggies Baby Wipes with Disney graphics for Kimberly-Clark, Skymark and Inspirepac collaborated to optimize the retail ready corrugate and flexible pack graphics.

# Supply chain collaboration

In terms of which areas of the packaging supply chain are currently experiencing a high level of supplier collaboration, Neath identifies ink and coating partners as having always been cooperative. Ink and coating suppliers are introducing new innovative coatings and finishes to drive increased shelf appeal – glitters, metallic, tactile coatings, soft touch and fluorescent finishes are all sought after for a variety of categories and applications.

'They're now expanding into different product finishes. This will enable the brand owner to add new and different value to the product and enhance the consumer experience.'

Machine manufacturers are also realizing the benefits of collaboration. They are investigating the need to add processes to their equipment that will save on process costs and deliver an innovative product in an increasingly competitive packaging landscape.

The flexographic process continues to develop to meet the ever-increasing quality demands of brands and retailers. With the breadth of advancements and an increase in collaboration practice, there is almost a printing press to suit every product and market.

'No longer can companies offer a simple pack solution and expect to gain sales,' Neath states. 'Brand owners are seeking pack differentiation, consistency, unique innovation and speed to market. By working together with the other parties in the chain, we are able to offer a more inclusive approach to new product development, get the solutions right first time and get to market more quickly as a result.'



Go to www.skymark.co.uk for more information



# Busy year for Label Academy

Mike Fairley reports on the Label Academy's progress over the last 12 months

S ince the last Yearbook review of the Label Academy just 12 months ago, considerable progress has been made in the writing and commissioning of new education and training modules, as well as in the development and presentation of master class and workshop programs alongside Labelexpo shows.

Indeed, following the initial announcement about the Label Academy in Chicago just over two years ago – at that time with just three modules available – a further six education books and training modules have now been launched, two of those at the recent Labelexpo Americas show in September. A further three titles are nearing completion and are scheduled to be launched in early 2017, with another two already being planned.

Put together, it means that some fifteen Label Academy education and training modules – plus the Encyclopedia and the History of Labels books – are expected to be completed and on-sale by the middle of 2017. Quite an achievement a little more than four years from the Label Academy initiative being conceived.

All of the currently available modules now have examination questions online, with certification for those that achieve the accepted level of pass; all enabling increasing numbers of industry employees, from new entrants to senior managers, to proudly display their module certificates.

On show at Labelexpo, the handbooks attracted considerable attention from show visitors, with many sales taking place. While many of the initial modules produced were targeted at new and first year trainees - providing basic knowledge about printing processes, origination and pre-press, codes and coding technology and die-cutting and tooling - some of the newer titles are now aimed at more senior levels.

These include Brand Protection, Security Labeling and Packaging and Management Information Systems and Workflow Automation, which will be available in the early part of 2017.

# Employee development

To develop and support their employees at all levels, label converters and industry suppliers are now able to build their own in-house library of titles, making them available to their teams as part of the company's human resource and education and training business plan, as well as incorporating ongoing study and certification into the annual appraisal.

Complementing the books and certification modules, the Label Academy has introduced a range of master classes, two of which were held alongside Labelexpo Americas. The five-hour Digital Label and Package Printing Master Class provided a comprehensive series of presentations by leading industry experts that enabled delegates – who also received a copy of the Digital book – to speed up study for the module examination. The book and examination entry were provided as part of the Master Class entry fee.

A second five hour Master Class, on

Conventional Label Printing Processes, was also run at Labelexpo, again providing study for the relevant module examination. In addition, The Label Academy also held an extensive workshop on Shrink Sleeve Technology at the show, which proved to be very popular.

Outside of the Labelexpo shows, in-house master classes on conventional label printing, origination and pre-press, and digital label printing, have also been run for specific industry suppliers' companies. These can be arranged on request for industry suppliers or label converters.

Now under consideration is the creation of a unified Label Industry Certificate, requiring students to pass a specific number of examination modules, which will be recognized worldwide by the major industry associations.

It should be emphasized that the aim of the Label Academy is not to replace any of the existing training bodies or colleges, supplier training programs or individual company initiatives, but rather to support them with resource material and examinations (if they wish to incorporate them) and to work towards internationally accepted education standards that will grow the industry for the future.

Individuals and companies interested in the Label Academy books, examinations, certification or attending master classes should go to www.label-academy.com for further information



# UNITING OF OPPOSITES - OUR PATENTED EXPERTISE



Small cylinder or sleeve diameters, stiff plates, and the use of solvents for in-press cleaning pose high demands for any bonding agent. Our tesa Softprint® Secure line adhesives are resistant to common solvents and offer an extra strong bond for secure plate edges during printing. At the same time, they allow for easy removal of both plate and tape after printing, thus combining all your needs in one tape.



tesa.com

Zeller+Gmelin GmbH & Co. KG Germany www.zeller-gmelin.de

Zeller+Gmelin UK Ltd. Great Britain www.zeller-gmelin.co.uk High Quality UV Printing Ink for Labels and Packaging

- food packaging
- flexible packaging
- folding carton
- selfadhesive labels
- shrink sleeve labels
- in-mould-labels

UV Printing Ink and Lacquer



Zeller+Gmelin Printing Inks

# **Exhibitor list by category**

# 3D technologies: imaging, prototyping and

printing Athena Graphics Artheta Graphics AV Flexologic CGS Publishing Technologies, LLC CHILI Publish Creative Edge Software DALIM SOFTWARE GmbH DPL Industri A/S DPC Insource IC DPS Innovations II C El Empaque+Conve FFEI Four Pees Hybrid Software Inc. ISRA Vision Parsytec Lucky Huaguang Graphics Co Ltd Mimaki Europe BV Mutoh Belgium n.v. Nakata USA One Box Vision Poligrafika uv-technik mever gmbh

# Active and intelligent packaging

Collano Adhesives AG Complete Inspection Systems Inc. Creative Edge Software El Empaque+Conversion Flexpol Sp. z o.o Graphi Mecc srl Infopack Lana Papier SpÈciaux II One Box Vision Pap'Argus Shandong Taibao Anti-Counterfeiting Technology Products Co., Ltd Sun Chemical (Germany) Weifang Donghang Graphic Technology Inc. WRH Global Americas

## Adhesives

Maan Engineering BV 3M Industrial Adhesives & Tapes ACTEGA North America Adhesive Technical Services Ltd AM-PG Group ANFEC Angstrom Technologies Inc API Foils Arjowiggins Ashland Inc Ashinin Inc. Avatack Co Ltd Avery Dennison Label and Packaging Materials Bar Graphic Machinery Ltd BeardowAdams, Inc. Beijing Zodngoc Automatic Technology co.,Ltd Bella Kagit Bluestar Silicones North America Bostik SA CMC Klebetechnik GmbH Collano Adhesives AG Crown Van Gelder B.V. D&K Coating Technologies, Inc Da Shen Printing Machine Co Ltd DONGGUAN CO-MO ADHESIVES CO., LTD. Dow Corning Corporation Drytac Dyna-Tech Adhesives, Inc. Edson International Emax Label Solutions EPS Materials Etiquettes Plus Excelitas Technologies Corp. Fangda Packaging Co., Ltd.(Hebei,China) Finjetchemical Industries Ltd Flexpol Sp. z o.o Flint Group Folex AG Franklin Adhesives & Polymers Frimpeks A.S. Golden Hontec Laser (Donnguan Hontec Machinery) GSB-Wahl GmbH sharing TLS Anilox GmbH H.B. Fuller Europe GmbH Heartland Adhesives Henkel Corporation Hurkimsa Kimya San. Icap-Sira Chemicals And Polymers Spa Ichemco s.r.l. Interflex Laser Engravers INX International Ink Co. Japan Pulp & Paper GmbH K Laser Technology (USA) Co., Ltd. Kor-Chem, Graphic Arts Division Lana Papier SpÈciaux II Laser Art Studio Ltd. Lombardi Converting Machinery Srl LUSTER LightTech (Beijing) Co. Ltd.

Macta MAX International Converters Inc Minus Nine Technologies Mirage Inks Ltd MoistTech Corp. Momentive Performance Materials Nakata USA Nastrificio di Cassano SpA Natural Ink New Solution S A Nicoat Novamelt Paragon Inks Ltd Polyonics Prime UV Systems, Inc. Printgraph SpA Pulse Roll Label Products Ltd Rotolificio Pugliese Srl Rowat Inks BV Royal Adhesives and Sealants Seal King Shandong Taibao Anti-Counterfeiting Technology Products Co., 1td SHANGHAI ROCKY INDUSTRIAL CO.,LTD Shanghai Jaour Hot Melt Adhesive Shanghai Jinda Plastic Co., Ltd. Spring Coating Systems Squid Inks AG (Ltd.) Strata-Tac Superior Label Tech-Melt Adhesives Ltd. tesa SE Toyo Ink Arets NV uv-technik meyer gmbh Uvitec Printing Ink, Inc. VanDerEng BV VPF GmbH & Co. KG Wacker Chemie AG Weifang Donghang Graphic Technology Inc. Wenzhou Rhyguan Machinery Co Ltd Zeller+Gmelin GmbH & Co. KG Zhejiang Hexiang Printing Machinery Co Ltd Zhongshan Fu Zhou Adhesive-Product Co Ltd Zhongshan Shuguan Self-Adhesive Products Co., Ltd

Air-water treatment systems DRAABE Humidification FL Empaque+Conversion Gerhard Bartling GmbH & Co KG Toc Maquinas Industriales SA De CV

uv-technik meyer gmbh

# Anilox rolls Access Printing Solution Agfa Graphics Alphasonics Apex International Applied Laser Engineering Ltd. ARC International Beta Industries - The Qualility Control Company Cheshire Anilox Technology Ltd Conversource Inc. Convertech Equipment Pvt Ltd CTS Industries Daetwyler SwissTec AG (Print) Dantex El Empague+Conversion Esterlam International Ltd FLXON Fuii Shoko Co. Ltd. Harper Corporation of America INOMETA GmbH Interflex Laser Engravers Mark Andy Max Daetwyler Corporation Mona Equipments Pamarco Polygraphica Equipment Ltd Praxair Surface Technologies PrimeBlade Sweden AB Print Systems Provident Quality Discount Press Parts & Equipment Recyl SAS Rossini North America, LLC Rotary Technology (Guangzhou) Co Ltd Sandon Global Sibress Tech Sleeves TLS Anilox GmbH Tower Products Inc Troika Systems Ltd Vinsak Zecher GmbH Anilox rolls-press cleaning systems Access Printing Solution

Agfa Graphics

Alphasonics Apex International ARC International Archem S.R.I Beta Industries - The Qualilty Control Company Bradley Systems Cheshire Anilox Technology Ltd Conversource Inc. Convertech Equipment Pvt Ltd CTS Industries DIP Co. Flexo Concepts Flexo Wash ApS Flexomaid Graphbury Smart Solutions, LLC Harper Corporation of America Inglese S.r.l INOMETA GmbH Laser Eco Clean Max Daetwyler Corporation Nanovis GmbH Pamarco PolymagTek Inc. Recyl SAS Sandon Global Sonic Solutions LLC Spring Coating Systems Tech Sleeves TI S Anilox GmbH Tower Products Inc Troika Systems Ltd Vinsak Zecher GmbH Archival and filing systems El Empaque+Conversion Graphbury Smart Solutions, LLC Jalema Filing Systems Railex (Filing) Ltd Sixtrue Srl

Barcode systems AEBO Science Technology Co Ltd ALS Engineering GmbH ARMOR AKMOR Astro-Med GmbH QuickLabel Systems Axicon Auto ID LLC Bitek Technology Inc. (anytron) cab Produkttechnik GmbH & Co KG Carl Ostermann Erben GmbH (COE) Colordyne Technologies, LLC Complete Inspection Systems Inc Creed Engineers (VINSAK) Digital Print, Inc. DOMINO Domino Printing Sciences DPS Innovations LLC Dropjet Makina Kimya San. Ltd. Sti. Edwards Label El Empaque+Conversion Episcan EyeC GmbH Felins USA FFFI FFEI FRANCIS BUEHLER AG Fujicopian Co., Ltd. (Europe) branch Gainscha International Co LTD Global Vision Inc Graphi Mecc srl GSE Dispensing Gulton Inc. Hangzhou Todaytec Digital Co., Ltd. Hapa AG Hu Zhou HengXin Label manufacture Co Ltd Infopack Inkiet Solutions Limited Instar Office Appliance Factory of Tianjin ISys Label Kasha Ribbon Kirk-Rudy, Inc. Lake Image Systems Ltd Laser Art Studio Ltd. LUSTER LightTech (Beijing) Co. Ltd. m print morlock gmbh & co. kg Mastercorp Group Microscan Systems, Inc M, hlbauer GmbH & Co. KG Multifeeder Technology Inc Novation, Inc. One Box Vision Open Data Srl Palmetto Imaging Technology, LLC PC Industries Primera Technology, Inc. Printex Srl Prototype & Production Systems, Inc./ DICE Graphic Technologies

# RFA Elektronik GmbH Reconcile Engineering Ltd. Sermar Machines Srl Shandong New Beiyang Information Technology Co., Ltd. Simple Solutions and Innovations Inc SNBC-Orient-Technologies SoftSolutions, Inc. Thermal Printer Support Ltd Thermal Transfer Solutions Ltd Transfer Trade s.r.l. TTR Euroworks BV Typerite Union Chemicar Europe Vinsak VIP Color Europe Webscan Inc WRH Global Americas Xiamen Delish Automation Equipment Co., Ltd Xinxiang Fineray Technology Ltd Yeuell Nameplate & Label Zhongshan Shuguan Self-Adhesive Products Co., Ltd

# Booklet processing systems

adphos Digital Printing GmbH BOGRAMA AG Controls Engineering Daco Solutions Ltd Edwards Label Fix-A-Form Engineering Solutions LLC G&K-Vijuk Intern. Corp. GIC (GRAPHIC INTERFACE CONCEPT) Global Vision Inc Herzog + Heymann Konica Minolta Business Solutiona U.S.A. Inc. KPG (Europe) Limited Longford International Ltd Printum GmbH Rosas GmbH ROTOCONTROL Vinsak

## Card and board materials Aluminium Feron GmbH & Co. KG

API Foils Beta Industries - The Qualilty Control Company Camelot Papers Inc Flexpol Sp. z o.o FUJIAN TAIXING SPECIAL PAPER CO, LTD GIC (GRAPHIC INTERFACE CONCEPT) GIFT7 AG Granwell Products / Polylith Graphi Mecc srl Hurkimsa Kimya San. IOT Innovative Oberflachentechnolgien GmbH Italstick Self Adhesive Materials & Coatings Lana Papier SpÈciaux II LECTA Mark Products Corp Matthias Paper Corporation Mitsubishi HiTec Paper Opakowanie Pap'Argus ROCHELIX INTERNATIONAL Sappi Seibert - PFV Weifang Donghang Graphic Technology Inc.

# Charging and discharging systems Ferrarini & Benelli srl

Fraser Anti Static Techniques Ltd Hamamatsu Photonics Meech International Pillar Technologies - An ITW Company Spengler Electronic AG

# Coating-laminating machines

Maan Engineering BV AB Graphic International Ltd ABBA Roller Adhesive Technical Services Ltd Advanced Machinery NV Afinia Label American Ultraviolet Beijing Zodngoc Automatic Technology co.,Ltd bielomatik Leuze GmbH + Co. KG Catbridge Machinery ChemInstruments Coating International / Rek & Thomas Medien AG D&K Coating Technologies, Inc Davis-Standard, LLC Delta ModTech DIAVY SRL DPL Industri A/S Drytac Esterlam International Ltd ETI Converting Equipment FAES AG

Fuii Shoko Co. I td. Futec Europe GmbH Graphtec Corporation Hunkeler AG Hurkimsa Kimya San. INOMETA GmbH IOT Innovative Oberflachentechnolgien GmbH ITW Dynatec GmbH Kompac Technologies KROENERT MacDermid Printing Solutions Markem-Imaje CSAT GmbH M, hlbauer GmbH & Co. KG Nakata USA NDC Spray Coating System Fabricating Co., Ltd. New Solution S.A Opakowani Papier & Druck Pillar Technologies - An ITW Company Preco, Inc. Printum GmbH Process Sensors Corporation Ravenwood Packaging Ltd Retroflex Inc. Soma Engineering TRESU Group Trojan Color Systems Uninet UTECO NORTH AMERICA INC. Uvitec Printing Ink. Inc Vinsak Werosys ApS

# Coatings and varnishes Applied Rigaku Technologies, Inc.

Ashland Inc Braden Sutphin Ink Dunmore Dyna-Tech Adhesives, Inc. Edson International Frimpeks A.S. Frimpeks A.S. Harper Corporation of America Interflex Laser Engravers Kompac Technologies Konica Minolta Business Solutiona U.S.A. Inc. Natural Ink Nazdar Ink Techologies Nicoat Prime UV Systems, Inc. Wikoff Color Corporation Zecher GmbH

Zhejiang Ouli Digital Inkjet Materials Co Ltd **Coding and marking** AEBO Science Technology Co Ltd Amica Systems (Europe) B.V. ARMOR Astro-Med GmbH QuickLabel Systems Axicon Auto ID LLC bielomatik Leuze GmbH + Co. KG cab Produkttechnik GmbH & Co KG Digital Print, Inc. DOMINO Domino Printing Sciences DPS Innovations LLC Dropjet Makina Kimya San. Ltd. Sti. Dvnic UK Ltd FFFI FRANCIS BUEHLER AG Fujicopian Co., Ltd. (Europe) branch Graphi Mecc srl Hapa AG IIMAK Europe Infopack Inkjet Solutions Limited Jiaozuo Zhuorim Digital Material Co Ltd Kasha Ribbon KBA-MePrint AG Kirk-Rudy, Inc Lemmaco Kft m print morlock gmbh & co. kg Markem-Imaje CSAT GmbH Mimaki Europe BV Multifeeder Technology Inc Mutoh Belgium n.v. Nazdar Ink Techologies Novation, Inc Opakowanie Palmetto Imaging Technology, LLC PDC International Corporation Prototype & Production Systems, Inc./ DICE Graphic Technologies Provident Rea Jet Reconcile Engineering Ltd. Repacorp, Inc. Ricoh Industrie France Sermar Machines Srl

Shandong New Beiyang Information Technology Co., Ltd Shanghai Realtac Trading Company Ltd Sixtrue Srl tesa SE Thermal Printer Support Ltd Thermal Transfer Solutions Ltd Thiele Technologies Transfer Trade s.r.l. TTR Euroworks BV Typerite Union Chemicar Europe VAN DEN BERGH Consulting byba VanDerEng BV Vellerino Sdi Vovantic Ltd Xinxiang Fineray Technology Ltd

## Cold foiling API Foils

API Foils Bar Graphic Machinery Ltd Da Shen Printing Machine Co Ltd DIAVY SRI DIAVY SRL Digital Print, Inc. DOMINO Domino Printing Sciences Dragon Foils Limited Edson International Far East Yu La Industry Limited FUJIAN TAIXING SPECIAL PAPER CO, LTD Griff Paper and Film Infinity Foils, Inc- UEI Group Company ITW Foils K Laser Technology (USA) Co., Ltd. KURZ, LEONHARD, Stiftung & Co. KG L C Trade Lemmaco Kft MGI Minus Nine Technologies MPS Systems B.V. Multitec Aids Pvt Ltd Nicoat Pack Vision BV Shandong Taibao Anti-Counterfeiting Technology Products Co., Ltd Tangshan Wanjie Europe Telstar Engineering Inc. Toyo Ink Arets NV TTR Euroworks BV Typerite UFI Falcontec Univacco Foils Corporation VAN DEN BERGH Consulting byba Werosys ApS Zhejiang Zhongjia Technology Co Ltd

**Color management and control** All Printing Resources Amica Systems (Europe) B.V. Athena Graphics ΔVΤ Beta Industries - The Qualilty Control Company Bitek Technology Inc. (anytron) Braden Sutphin Ink BST eltromat International GmbH CC1, INC GS Publishing Technologies, LLC Creative Edge Software CT Graphic Arts DALIM SOFTWARE GmbH Decosystem SRL Dropjet Makina Kimya San. Ltd. Sti. EFI Fag Graphic Systems SA Flint Group Four Pees Global Graphics Software Clobal Graphics Software GMG Americas Goss International Europe B.V. Grafikontrol North America Graphbury Smart Solutions, LLC GSB-Wahl GmbH sharing TLS Anilox GmbH GSE Dispensing GTI Graphic Technology, Inc. Hamamatsu Photonics Harper Corporation of America Hybrid Software Inc. Hybrid Software Inc. IGT Testing Systems INX International Ink Co JUSA Vision Parsytec JUST Normlicht GmbH Konica Minolta Business Solutiona U.S.A. Inc. Lake Image Systems Ltd Luminite Products Corp. Memjet Labels Mimaki Europe BV

Nikka Research Deutschland GmbH Papier & Druck Paragon Inks Ltd PC Industries Print Proof Solutions B.V. Print Systems OuadTech Inc. Rena, a Neopost Brand RK Print Coat Instruments Ltd Roland DG Benelux NV Sandon Global Selectra Srl Sibress Siegwerk Environmental Inks Sun Chemical (Germany) Techkon USA Tectonic International Ltd Tectonic International L TRESU Group Trinity Graphic USA Inc Troian Color Systems Trojanlabel Wikoff Color Corporation X-Rite Europe GmbH Xeikon

Color proofing equipment Beta Industries - The Quality Control Company BST eltromat International GmbH CGS Publishing Technologies, LLC CT Graphic Arts DALIM SOFTWARE GmbH Dantex Episcan EyeC GmbH Fag Graphic Systems SA FFFI Global Graphics Software Global Vision Inc Grafikontrol North America GSE Dispensing GTI Graphic Technology, Inc. Harper Corporation of America IGT Testing Systems ISRA Vision Parsytec JM Heaford Ltd JUST Normlicht GmbH Lake Image Systems Ltd Mimaki Europe BV Mutoh Belgium n.v. One Box Vision PC Industries Print Proof Solutions B.V. RK Print Coat Instruments Ltd Testing Machines Inc. X-Rite Europe GmbH

# Cores and core cutters

Adolf Brodbeck Maschinenbau GmbH & Co. KG Dienes Corporation Grafisk Maskinfabrik Grafotronic AB Heartland Products Group Holtby Williams International Jurmet Sp. z.o.o. Sp.K. Lemorau Lemu Talleres SA Nagel Paper Precision AirConvey Corp SRC Systems Limited TGW International Inc. Wasberger Label Equipment Yazoo Mills, Inc.

# Corona and flame treaters Advanced Machinery NV

Boussey Control Europe Enercon Industries Corporation Ferrarini & Benelli srl Grafikontrol North America Graphbury Smart Solutions, LLC Hamamatsu Photonics IEEC POWER ELECTRONICS PVT. LTD IEEC POWER ELECTRONICS PVT. LTD IEEC-PBJ Industrial electronics Pvt. Ltd IOT Innovative Oberflachentechnolgien GmbH Jemmco, LLC Kompac Technologies Martigonoi Elettrotecnica Srl Nakata USA Pillar Technologies - An ITW Company SOCTAL Corceas & Placema CmbH SOFTAL Corona & Plasma GmbH Union Chemicar Europe Vetaphone A/S

# Cutting/stamping machines

Allen Datagraph Systems, Inc. ALS Engineering GmbH Beijing Zodngoc Automatic Technology co.,Ltd Berhalter AG

Blumer Maschinenbau AG BOGRAMA AG Cartes S.r.l. Cately Sala Cately Machinery CMC Klebetechnik GmbH Comercial Arquë, S.A. Daco Solutions Ltd DCM USIMECA Delta ModTech Dienes Corporation Edale Itd Esko FAES AG FLEXOR (EMIS) Ltd Future Pack / KOREA GIC (GRAPHIC INTERFACE CONCEPT) CIETZ AC Golden Hontec Laser (Donnguan Hontec Machinery) Grafotronic AB Graphtec Corporation Hans-Gronhi Graphic Technology Company Limited Hans-Gronhi Graphic lechnology Compa Herzog + Heymann Holtby Williams International Hunkler AG Infinity Foils, Inc- UEI Group Company Jiazzuo Zhuorim Digital Material Co Ltd Jurmet Sp. z.o.o. Sp.K. зантес эр. 2000 эр.к. Karlville Development LLC Kocher + Beck GmbH + Co. Rotationsstanztechnik KG Kumar Labels Link Label Machinery Co Ltd Lombardi Converting Machinery Srl m print morlock gmbh & co. kg MBO America Meccanica Maggiore MELZER maschinenbau GmbH M , hlbauer GmbH & Co. KG New Solution S.A. Packers Polar-Mohr Polar-Mohr Precise Graphic India Pvt Ltd Preco, Inc. Printum GmbH Prisma Srl Rietstack Rollem USA Rosas GmbH ROTOCONTROL Rotoflex Kotoflex Sam Meccanica Srl Schobertechnologies GmbH SELL aser Serame SMAG (SRAMAG SAS) Sohn Mfg Soma Engineering Spartanics Spilker GmbH Spliker GmbH SRC Systems Limited Starfoil Technology Netherlands bv STOMA GmbH Tangshan Wanjie Europe Trojan Color Systems Trojanlabel Universal Engraving, Inc.- UEI Group Company Universal Engraving, Inc.- UEI Group Company Vinsak WEIGANG Machinery Wenzhou Rhyguan Machinery Co Ltd Werosys ApS Wink Stanzwerkzeuge GmbH & Co. KG Xiamen Delish Automation Equipment Co., Ltd Zhongshan Shuguan Self-Adhesive Products Co., Ltd

# Cylinders, printing and magnetic

Applied Laser Engineering Ltd. Conversource Inc. Electro Optic Werkzeugtechnik GmbH ESON CZ s.r.o. Gallus Ferd. R , esch AG Holfeld Tool & Die Ltd Interflex Laser Engravers Kocher + Beck GmbH + Co. Rotationsstanztechnik KG LARTEC - Flexible Dies LARTEC - Flexible Dies Lederle Machine Company Luminite Products Corp. Precise Graphic India Pvt Ltd Reel To Reel International Ltd Rollem USA Rotary Die Company Sp. z o.o. Rotary Technology (Guangzhou) Co Ltd Rotometal Sp z o.o. S.K. RotoMetrics Spilker GmbH Synthogra Tech Sleeves

Universal Engraving, Inc.- UEI Group Company Wilson Manufacturing Co. Wink Stanzwerkzeuge GmbH & Co. KG Zecher GmbH

# Data processing services

Athena Graphics BEL Computer Systems Bitek Technology Inc. (anytron) CHILI Publish ISRA Vision Parsytec Nikka Research Deutschland GmbH One Box Vision SoftSolutions, Inc. theurer.com TLS Anilox GmbH X-Rite Europe GmbH

Desktop printers AEBO Science Technology Co Ltd Astro-Med GmbH QuickLabel Systems Bitek Technology Inc. (anytron) Colordyne Technologies, LLC Dropjet Makina Kimya San. Ltd. Sti. Epson America Inc. Flexpol Sp. z o.o Gainscha International Co LTD Godex International Americas Graphtec Corporation Gulton Inc. Hu Zhou HengXin Label manufacture Co Ltd Impression Technology Europe Inkjet Solutions Limited Iwatsu Electric Co Ltd Mastercorp Group Memjet Labels Microplex Mutoh Belgium n.v. Mutoh Belgium n.v. NeuraLabel Printing Solutions OKI Europe Ltd Palmetto Imaging Technology, LLC Primera Technology, Inc Printing Innovation AG Prototype & Production Systems, Inc./ DICE Graphic Technologies Rebo Bv Rena, a Neopost Brand Roland DG Benelux NV Rti Digital Shandong New Beiyang Information Technology Co., Ltd. Simple Solutions and Innovations Inc SNBC-Orient-Technologies Thermal Printer Support Ltd Thermal Transfer Solutions Ltd Transfer Trade s.r.l. Union Chemicar Europe VIP Color Europe

Dies and tooling (rotary and flatbed) Anderson Europe GmbH Atlas Die LLC Berhalter AG Blumer Maschinenbau AG Brenna Srl De Rossi Vittoriano S.r.l Diehard Dies Pvt Ltd DMS, INC. Electro Optic Werkzeugtechnik GmbH ESON CZ s.r.o. Flexo Label Advantage Group LLC (FLAG) Holfeld Tool & Die I td ITW Dynatec GmbH Kocher + Beck GmbH + Co. Rotationsstanztechnik KG KURZ, LEONHARD, Stiftung & Co. KG LARTEC - Flexible Dies Lederle Machine Company Lemu Talleres SA Midway Rotary Die Solutions Neryos SAS Packers Polar-Mohr Precise Graphic India Pvt Ltd Pro-Cut Dies Ltd Rollem USA Rotary Die Company Sp. z o.o. Rotary Technology (Guangzhou) Co Ltd Rotary Technology (Guangzhou) Co Ltd Rotometal Sp z o.o. S.K. RotoMetrics Schobertechnologies GmbH Sinkotech USA Sohn Mfg Spilker GmbH STOMA GmbH TECHNI FORM Tools & Production Inc. UEI Falcontec Universal Engraving, Inc.- UEI Group Company Vinsak Wilson Manufacturing Co. Wink Stanzwerkzeuge GmbH & Co. KG

Digital converting equipme AB Graphic International Ltd Allen Datagraph Systems, Inc. ALS Engineering GmbH Ashe Converting Equipment AzTech Converting Systems B. Bunch Company, Inc.

Bar Graphic Machinery Ltd BOGRAMA AG Brotech Graphics Co., Ltd Carl Ostermann Erben GmbH (COE) Cartes S.r.l. Colordyne Technologies, LLC COMPONEX INC Converting Equipment International Inc D.P.R. S.r.I Daco Solutions Ltd DALIM SOFTWARE GmbH Delta ModTech ebeam Technologies Episcan FFEI FlexoExport Ltd FLEXOR (EMIS) Ltd Focus Label Machinery Ltd FRANCIS BUEHLER AG GIC (GRAPHIC INTERFACE CONCEPT) Golden Hontec Laser (Donnguan Hontec Gonderflex International Inc Graficon Maschinenbau AG Grafisk Maskinfabrik Grafotronic AB Herzog + Heymann Impression Technology Europe Infopack International Financial Services J&J Converting Machinery Konica Minolta Business Solutiona U.S.A. Inc. Kumar Labels Labeltech LasX Industries, Inc. Lemorau LTHD Maxcess International MBO America Michelman Mida Maquinaria Monotech Systems Ltd MPS Systems B.V. Neryos SAS Newfoil Machines Limited OKI Europe Ltd Opakowanie ORTHOTEC, WAN AN PRECISE MACHINERY WORKS CO., LTD. Preco, Inc. Printum GmbH Reel To Reel International Ltd Rietstack Rollem USA Rosas GmbH ROTOCONTROL Rotoflex SEI Laser SMAG (SRAMAG SAS) Sohn Mfg Spartanics Telstar Engineering Inc. Trojan Color Systems UV Ray S.r.l VAN DEN BERGH Consulting bvba Wenzhou Rhyguan Machinery Co Ltd Werosys ApS Xeikon Zheliang WeiGang Machinery Co., LTD

Digital presses AAA Press International, Inc. adphos Digital Printing GmbH adphos Digital Printing GmbH Afinia Label All Printing Resources Allen Datagraph Systems, Inc. ALS Engineering GmbH Amica Systems (Europe) B.V. Anderson & Vreeland, Inc. AP digitales Astro-Med GmbH QuickLabel Systems Pascol Corula (Cultua) Astro-Med CmbH QuickLabel Systems BASCH GROUP (CHINA) BE-MA Editrice Srl Bitek Technology Inc. (anytron) Carl Ostermann Erben GmbH (COE) Cerm Business Management Software Colordyne Technologies, LLC COMPONEX INC. D.P.R. S.r.L. Daco Solutions Ltd Dantex Digital Print, Inc. DILLI Discount Labels DOMINO Domino Printing Sciences DPL Industri A/S DPS Innovations LLC Dropjet Makina Kimya San. Ltd. Sti. Durst Image Technology US Durst Phototechnik AG Edale Ltd EFI Electro Optic Werkzeugtechnik GmbH Epson America Inc. FFEI Flexo Label Advantage Group LLC (FLAG) FlexoExport Ltd Focus Label Machinery Ltd Futec Europe GmbH

Gallus Ferd. R , esch AG GB Flexo Equipment GIC (GRAPHIC INTERFACE CONCEPT) Golden Hontec Laser (Donnguan Hontec Machinery) Graficon Maschinenbau AG Graphi Mecc srl Graphtec Corporation GTI Graphic Technology, Inc. Hapa AG HC Miller Press Hoya Candeo Optronics Corp. HP Indigo Impression Technology Europe Industrial Inkjet Ltd Inglese S.r.l Inkjet Solutions Limited International Financial Services INX International Ink Co. IPT Digital LLC iSvs Label watsu Electric Co Ltd Kodak Konica Minolta Business Solutiona U.S.A. Inc. KPG (Europe) Limited Label Pack LINTEC Corporation Lucky Huaguang Graphics Co Ltd m print morlock gmbh & co. kg Mark Andy Markem-Imaie CSAT GmbH MCS, Inc. Memjet Labels MGI . IGI Michelman Miyakoshi Printing Machinery., Co. Ltd. Monotech Systems Ltd MPS Systems B.V. Mutoh Belgium n.v. Neryos SAS Newfoil Machines Limited Nilpeter A/S OKI Europe Ltd Omet Srl Opakowanie Pillar Technologies - An ITW Company Poligrafika Primera Technology, Inc Printum GmbH Prototype & Production Systems, Inc./ DICE Graphic Technologies Rena, a Neopost Brand Repacorp, Inc. Roland DG Benelux NV Rti Digital Screen Europe Shandong Taibao Anti-Counterfeiting Technology Products Co., Ltd SHIKI MACHINE SUPPLY CORP. SPGPrints Styers Equipment Company Toshiba Tec Corporation Trojan Color Systems Trojanlabel Uninet UTECO NORTH AMERICA INC. VIP Color Europe Weifang Donghang Graphic Technology Inc. Werosys ApS Xaar PLC Xeikon Doctor blades Agfa Graphics Allison Systems Corporation

Conversource Inc CT Graphic Arts Flexo Concepts FLXON HC Miller Press IV Imaging Solutions, Inc Provident Quality Discount Press Parts & Equipment Retroflex Inc

**Dome labeling-doming machines** Color-Dec Italy Demak America Inc. Drive and control systems BST eltromat International GmbH

CC1, INC Coating International / Rek & Thomas Medien AG Davis-Standard, LLC Dover Flexo Electronics, Inc. FMS USA, Inc. MEROBEL Pillar Technologies - An ITW Company Re S.p.a. Controlli Industriali Selectra Srl SRC Systems Limited Valmet

Engraving machinery Anderson Europe GmbH D.P.R. S.r.L. Hans-Gronhi Graphic Technology Company Limited Inglese S.r.l SPGPrints Universal Engraving, Inc.- UEI Group Company

## Fabric label materials

Astro-Med GmbH QuickLabel Systems Budaval AG Comercial ArquË, S.A. Dunmore Dynic UK Ltd Emax Label Solutions FFFI Folien Fischer AG Huzhou Kingdom Coating Industry Co.,Ltd. Huzhou Siny Label material Co., Ltd Icap-Sira Chemicals And Polymers Spa Infopack Italstick Self Adhesive Materials & Coatings ITD S.r.l Itochu Deutschland GmbH Kasha Ribbon Mimaki Europe BV MSM Nastrificio di Cassano SpA Paper Resources, Inc. Roll Cover Italiana S.r.L **Rolling Optics** Rotolificio Pugliese Srl Sanyo Corporation of America Shanghai Realtac Trading Company Ltd Thermo Code System Transfer Trade s.r.l. TTR Euroworks BV VanDerEng BV Zhongshan Fu Zhou Adhesive-Product Co Ltd

Fabric label presses Esterlam International Ltd Focus Label Machinery Ltd Infopack Label Pack MELZER maschinenbau GmbH Pillar Technologies - An ITW Company

Finishing equipment, slitters and rewinders AB Graphic International Ltd Accraply Afinia Label ALS Engineering GmbH Ashe Converting Equipment AzTech Converting Systems B. Bunch Company, Inc. Bar Graphic Machinery Ltd Beijing Zodngoc Automatic Technology co.,Ltd Berra s.r.l bielomatik Leuze GmbH + Co KG Bitek Technology Inc. (anytron) Blumer Maschinenbau AG BOGRAMA AG Brotech Graphics Co., Ltd BW Bielomatik Catbridge Machinery Coating International / Rek & Thomas Medien AG Colordyne Technologies, LLC COMPONEX INC Controls Engineering Converting Equipment International Inc Creed Engineers (VINSAK) CTC International, Inc. D&K Coating Technologies, Inc D.P.R. S.r.L. Daco Solutions Ltd Dantex DCM USIMECA De Rossi Vittoriano S.r.l Deacro Industries Ltd. Delta ModTech Dienes Corporation Electro Optic Werkzeugtechnik GmbH Enprom Esko ETI Converting Equipment EUROMAC FAES AG Focus Label Machinery Ltd G&K-Vijuk Intern. Corp. GIC (GRAPHIC INTERFACE CONCEPT) GN Flevo Golden Hontec Laser (Donnguan Hontec Machinery) Gonderflex International Inc Graficon Maschinenbau AG Grafisk Maskinfabrik Grafotronic AB Graphtec Corporation GSM Graphic Supplies & Machinery Ltd Holtby Williams International Hunkeler AG Hyden Packaging Pvt Ltd Impression Technology Europe Infinity Foils, Inc- UEI Group Company J&J Converting Machinery Jurmet Sp. z.o.o. Sp.K. Karlville Development LLC Kompac Technologies KOR Engineering Inc. Kumar Labels Labelmate LLC Labeltech LasX Industries Inc Lemorau Lemu Talleres SA Lombardi Converting Machinery Srl

Longford International Ltd Markem-Imaje CSAT GmbH Matik, Inc. Maxcess International MBO America MELZER maschinenbau GmbH Mid American Rubber Mida Maquinaria Monotech Systems Ltd NEPATA GmbH Neryos SAS Nikka Research Deutschland GmbH OKI Europe Ltd Packers Pap'Argus Pinewood Label Systems Limited Polar-Mohr Poligrafika Polygraphica Equipment Ltd Prati s.r.l. Precise Graphic India Pvt Ltd Preco, Inc. Primera Technology, Inc Printum GmbH Reconcile Engineering Ltd. Reel To Reel International Ltd Rietstack Rollem LISA Rosas GmbH Rotatek S.A. ROTOCONTROL Rotofley Ryback & Ryback Inc. Sam Meccanica Srl Serame Sermar Machines Srl SMAG (SRAMAG SAS) Soma Engineering Spartanics SRC Systems Limited Styers Equipment Company Tamarack Products Inc Tangshan Wanjie Europe Tectonic International I td TGW International Inc. Tidland Tilt Lock Tools & Production Inc. Totani America Troian Color Systems Trojanlabel Uninet VAN DEN BERGH Consulting byba Wasberger Label Equipment Webex WEIGANG Machinery Wenzhou Rhyguan Machinery Co Ltd Werosys ApS Xeikon Xiamen Delish Automation Equipment Co., Ltd ZheJiang WeiGang Machinery Co., LTD Zhongshan Shuguan Self-Adhesive Products Co., Ltd

Flexo presses AAA Press International, Inc. Advanced Machinery NV Alliance Printech Pvt Ltd Alltrade Recycling Equipment Alpha-Cure Ltd American Water Graphics, Inc. Anderson & Vreeland, Inc. AzTech Converting Systems Bar Graphic Machinery Ltd BASCH GROUP (CHINA) Bobst Brenna Srl Brenna Srl Carl Ostermann Erben GmbH (COE) Convertech Equipment Pvt Ltd Creed Engineers (VINSAK) DCM USIMECA De Rossi Vittoriano S.r.l. DIP Co Discount Labels DPL Industri A/S Edale I td Edwards Label Episcan ERREPI S.r.l. Esterlam International Ltd ETI Converting Equipment Etirama Industria de Maquina Ltd FlexoExport Ltd Flexpol Sp. z o.o FLXON Focus Label Machinery Ltd Foc Valley Technical College Fuji Shoko Co. Ltd. Futec Europe GmbH Future Pack / KOREA Gallus Ferd. R , esch AG GB Flexo Equipment GIC (GRAPHIC INTERFACE CONCEPT) Globe-Tek Corporation GN Flexo Gonderflex International Inc Goss International Europe B.V. Graficon Maschinenbau AG GSM Graphic Supplies & Machinery Ltd Hapa AG HC Miller Press

Hoya Candeo Optronics Corp. Industrial Inkiet Ltd INOMETA GmbH Iwasaki International Inc. 1&I Converting Machinery KRA-MePrint AG KPG (Europe) Limited Label Pack Lemu Talleres SA Lombardi Converting Machinery Srl Lucky Huaguang Graphics Co Ltd Mark Andy Matik, Inc MCS, Inc. Memjet Labels Michelman Mid American Rubber Mona Equipments MPS Systems B.V. Multitec Aids Pvt Ltd Nilpeter A/S Nuova GIDUE S.r.l Omet Srl Opakowanie PCMC - Paper Converting Machine Company PIASC Pillar Technologies - An ITW Company Poligrafika Poligrafika Polygraphica Equipment Ltd Printing Innovation AG R.C. Lamps S.n.c. / VTI RayPress Corporation Reel To Reel International Ltd Retroflex Inc. Rotary Die Company Sp. z o.o. Rotatek S.A. Ruttiman Trade AG Sam Meccanica Srl Shandong Taibao Anti-Counterfeiting Technology Products Co., Ltd Shanghai Realtac Trading Company Ltd Sohn Mfg Soma Engineering Styers Equipment Company Tangshan Wanjie Europe Tech Sleeves Tectonic International Ltd Telstar Engineering Inc. Tower Products Inc. TRESU Group Troika Systems Ltd Tungsman and Company Inc UTECO NORTH AMERICA INC. Weifang Donghang Graphic Technology Inc. WEIGANG Machinery WUHAN GOLDEN LASER CO.,LTD Zhejiang Hexiang Printing Machinery Co. Ltd Zhejiang WeiGang Machinery Co., LTD ZHEJIANG ZHONGTE MACHINERY Zhongshan Shuguan Self-Adhesive Products Co., Ltd

Gravure presses ABBA Roller Brenna Srl Convertech Equipment Pvt Ltd DCM USIMECA ETI Converting Equipment Flexpol Sp. z o.o FLXON Fuji Shoko Co. Ltd. Futec Europe GmbH GSM Graphic Supplies & Machinery Ltd Hoya Candeo Optronics Corp. INOMETA GmbH International Financial Services Michelman Mona Equipments Nilpeter A/S Polygraphica Equipment Ltd Retroflex Inc. Troika Systems Ltd UTECO NORTH AMERICA INC.

# Hand-held labeling systems

Ben Clements and Sons, Inc./Tach-It Open Data Srl Pinewood Label Systems Limited Printex Srl START International Typerite

# Hologram equipment DCM USIMECA

DIAVY SRI DMS, INC. DPL Industri A/S FAES AG GIETZ AG Laser Art. Studio 1 td. Matik, Inc. Newfoil Machines Limited Pantec GS Systems AG PCT Engineered Systems LLC Sam Meccanica Srl Schobertechnologies GmbH Tecscan Print Inspection Systems VAN DEN BERGH Consulting byba Zhejiang Zhongjia Technology Co Ltd

# Holograms-OVDs (optically variable devices)

Complete Inspection Systems Inc. Crown Roll Leaf, Inc. DIAVY SRL DMS INC Episcan FLEXcon Company, Inc. Holostik India Ltd ITW Foils K Laser Technology (USA) Co., Ltd. KURZ, LEONHARD, Stiftung & Co. KG L C Trade Leonardus S.r.l - Italy Pack Vision BV Prooftag Rolling Optics Zhejiang Zhongjia Technology Co Ltd

# Hot air and IR drying systems

AAA Press International, Inc. adphos Digital Printing GmbH Air Motion Systems Alpha-Cure Ltd Brenna Srl Brenna Srl Coating International / Rek & Thomas Medien AG Davis-Standard, LLC DR. FISCHER Group Dr. H<sup>^</sup>nle AG, UV Technology ebeam Technologies Eltosch Grafix GmbH Excelitas Technologies Corp. G Technologies Srl GEW (EC) Ltd Graphbury Smart Solutions, LLC Hamamatsu Photonics Heraeus Noblelight GmbH Honle UV America Hoya Candeo Optronics Corp. IOT Innovative Oberflachentechnolgien GmbH IST METZ GmbH KETT US Kompac Technologies KROENERT Lamp Tech Papier & Druck PCMC - Paper Converting Machine Company PCT Engineered Systems LLC Phidastien International Phidastien Internet Phoseon Technology Prime UV Systems, Inc. PrintConcept UV-Systeme GmbH R.C. Lamps S.n.c. / VTI Toc Maquinas Industriales SA De CV TRESU Group UV Ray S.r.l uv-technik meyer gmbh Uviterno AG XDS Holdings, Inc

## Hot foil machinery AB Graphic International I td

Berra s.r.l Cartes S.r.l. DIAVY SRL DMS, INC. FlexoExport Ltd GIETZ AG Grafisk Maskinfabrik GSM Graphic Supplies & Machinery Ltd Infinity Foils, Inc- UEI Group Company Invasaki International Inc. KURZ, LEONHARD, Stiftung & Co. KG Link Label Machinery Co Ltd Lombardi Converting Machinery Srl Matik, Inc. Matik, Inc. MGI Mida Maquinaria Newfoil Machines Limited ORTHOTEC, WAN AN PRECISE MACHINERY WORKS CO., LTD. Pantec GS Systems AG Prisma Srl Reel To Reel International Ltd Sam Meccanica Srl Schobertechnologies GmbH Starfoil Technology Netherlands bv STOMA GmbH Telstar Engineering Inc. UEI Falcontec UltraSource LLC VAN DEN BERGH Consulting byba Wenzhou Rhyguan Machinery Co Ltd Werosys ApS ZHEJIANG ZHONGTE MACHINERY

Hot stamping foils API Foils ARMOR Crown Roll Leaf, Inc. DIAVY SRL Diehard Dies Pvt Ltd Dragon Foils Limited FAES AG Far East Yu La Industry Limited FUJIAN TAIXING SPECIAL PAPER CO, LTD Hangzhou Todaytec Digital Co., Ltd. Holostik India Ltd IGF Europe NV (International Graphic Films)

Infinity Foils, Inc- UEI Group Company ITW Foils Jiaozuo Zhuorim Digital Material Co Ltd Kasha Ribbon KURZ, LEONHARD, Stiftung & Co. KG I C Trade Lemmaco Kft Mastercorp Group MGI Pack Vision BV Sanyo Corporation of America SECUTAC Shandong Taibao Anti-Counterfeiting Technology Products Co., Ltd Starfoil Technology Netherlands by Thermo Code System TTR Euroworks BV Typerite UEI Falcontec UltraSource LLC Univacco Foils Corporation Xiamen Delish Automation Equipment Co., Ltd Xinxiang Fineray Technology Ltd Zhejiang Hengfeng Packing Co., Ltd. Zhejiang Zhongjia Technology Co. Ltd

# Hot stamping-embossing cylinders

ABBA Rolle Applied Laser Engineering Ltd. DIAVY SRL DMS, INC. Felix Boettcher GmbH & Co Holfeld Tool & Die Ltd ITW Foils Kocher + Beck GmbH + Co. Rotationsstanztechnik KG KURZ, LEONHARD, Stiftung & Co. KG LARTEC - Flexible Dies Luminite Products Corp Pantec GS Systems AC Precise Graphic India Pvt Ltd Rotary Technology (Guangzhou) Co Ltd Spilker GmbH Starfoil Technology Netherlands bv TECHNI FORM **UEI Falcontec** Universal Engraving, Inc.- UEI Group Company Wink Stanzwerkzeuge GmbH & Co. KG In-mold label materials

Allen Plastic Industries Co Ltd AM-PG Group Ario Gloup Arjobex/Polyart Collano Adhesives AG Controls Engineering Dyna-Tech Adhesives, Inc. Electro Optic Werkzeugtechnik GmbH FUJIAN TAIXING SPECIAL PAPER CO, LTD Granwell Products / Polylith H.S. Industries Co., Ltd Hop Industries Corp. Innovia Films Jindal Films Americas Leonardus S.r.l - Italy Max Speciality Films Ltd Michelman Minus Nine Technologies Multi-Plastics, Inc. POLIBAK PLASTIK FILM SANAYI VE TICARET A.S. ROCHEUX INTERNATIONAL Shanghai Realtac Trading Company Ltd Souid Inks AG (1td.) Super Film Packaging Films Synthogra Taghleef Industries SpA Taizhou Newtech Film Co Ltd Tamerica Products, Inc. TESLIN Substrate by PPG Industries Toyo Ink Arets NV Treofan America, Inc Yupo Europe GmbH

# Industry service suppliers Air and Water Systems, Inc.

Alltrade Recycling Equipment Andantex USA Inc Dima Dr. H<sup>-</sup>nle AG, UV Technology Electro Optic Werkzeugtechnik GmbH Flexographic Technical Association (FTA)/FLEXO Magazine Fuji Shoko Co. Ltd. Graphic Innovators Inc/ Lighthouse Consulting & Restoration Services HEIGHTS (UK) Limited J&J Converting Machinery ITHD marks-3zet GmbH & Co. KG NPPS - Flexo for Hire Oxford Instruments Praxair Surface Technologies Precision AirConvey Corp SoftSolutions, Inc. tesa SE Tri-Tronics Company, Inc. Wikoff Color Corporation

Ink control-dispensing systems ACTEGA North America Convertech Equipment Pvt Ltd

Fag Graphic Systems SA Flint Group FULL Systembau GmbH Graphbury Smart Solutions, LLC Graymills Corporation GSE Dispensing Industrial Inkjet Ltd Inkiet Solutions Limited INX International Ink Co. Kor-Chem, Graphic Arts Division Memiet Labels Memjet Labels Print Proof Solutions B.V. QuadTech Inc. RK Print Coat Instruments Ltd Siegwerk Environmental Inks Sun Chemical (Germany) TRESU Group Wikoff Color Corporation Zeller+Gmelin GmbH & Co. KG

Inking rollers ABBA Roller Apex International Applied Laser Engineering Ltd. ARC International Cheshire Anilox Technology Ltd CTS Industries Felix Boettcher GmbH & Co Garvey Harper Corporation of America Jemmco, LLC Jiaozuo Zhuorim Digital Material Co Ltd Jiaozuo Zhuorim Digital Material Co Ltd Kasha Ribbon Luminite Products Corp. Mid American Rubber Papier & Druck Praxair Surface Technologies Rossini North America, LLC Rotary Technology (Guangzhou) Co Ltd Ruttiman Trade AG Wilson Manufacturing Co. Xinxiang Fineray Technology Ltd Zecher GmbH

# Inks

ACTEGA North America AEBO Science Technology Co Ltd Alden & Ott Printing Inks American Water Graphics, Inc. Angstrom Technologies Inc ARMOR Bella Kagit Boussey Control Europe Braden Sutphin Ink Collins Inkjet Corporation Colorgen Colorgraf SpA Creed Engineers (VINSAK) Dropjet Makina Kimya San. Ltd. Sti. ECKART GmbH Edson International FFI Encres Dubuit Epson America Inc. Ercon Inc. FFEI Finjetchemical Industries Ltd Flexo Label Advantage Group LLC (FLAG) Flint Group FRANCIS BUEHLER AG Frimpeks A.S. Fujicopian Co., Ltd. (Europe) branch Fujifilm Europe GmbH Garvev Garvey General Srl GSB-Wahl GmbH sharing TLS Anilox GmbH Hapa AG Hoya Candeo Optronics Corp. IIMAK Europe Industrial Inkjet Ltd INX International Ink Co. J‰necke+Schneemann Druckfarben GmbH Kor-Chem, Graphic Arts Division Label Pack Lucky Huaguang Graphics Co Ltd Luminescence International Ltd Luxul FZC Luxui FZC Magnum Inks & Coatings Marabu GmbH & Co. KG marks-3zet GmbH & Co. KG Memjet Labels Minus Nine Technologies Mirage Inks Ltd Natural Ink Nazdar Ink Techologies NeuraLabel Printing Solutions Nicoat Paragon Inks Ltd Printgraph SpA Pulse Roll Label Products Ltd Radior (France) S.A.S Resino Trykfarver A/S RK Print Coat Instruments Ltd Rowat Inks BV RUCO Druckfarben, A.M. Ramp & Co GmbH Siegwerk Environmental Inks SPGPrints Spring Coating Systems Sauid Inks AG (Ltd.)

Sun Chemical (Germany) Thermo Code System Toyo Ink Arets NV UCS (UV Curable Systems byba) United Speciality Inks Pvt. Ltd. Uvitec Printing Ink, Inc. Wikoff Color Corporation Zeller+Gmelin GmbH & Co. KG

# Insertion/onsertion systems

AzTech Converting Systems bielomatik Leuze GmbH + Co. KG Comercial ArquË, S.A. Controls Engineering Edwards Label Edwards Label Longford International Ltd MELZER maschinenbau GmbH M, hlbauer GmbH & Co. KG Multifeeder Technology Inc Newfoil Machines Limited RayPress Corporation Rosas GmbH Rosas GmbH SMAG (SRAMAG SAS) Tamarack Products Inc Thiele Technologies

Inspection equipment AAA Press International. Inc. AB Graphic International Ltd Accraply Adhesive Technical Services Ltd Advanced Machinery NV Alliance Printech Pvt Ltd Applied Rigaku Technologies, Inc. Ashe Converting Equipment AVT Axicon Auto ID LLC Bar Graphic Machinery Ltd bielomatik Leuze GmbH + Co. KG Boussey Control Europe BST eltromat International GmbH CC1, INC Complete Inspection Systems Inc. Covectra Europe Ltd Creed Engineers (VINSAK) CTC International, Inc. DCM USIMECA De Rossi Vittoriano S.r.l. Decosystem SRL Electromatic Equipment Co, Inc Episcan Erhardt + Leimer GmbH EUROMAC EyeC GmbH Fag Graphic Systems SA Fife-Tidland GmbH FLEXOR (EMIS) Ltd Four Pees Futec Europe GmbH Global Vision Inc Grafikontrol North America Grafisk Maskinfabrik Grafotronic AB GSE Dispensing GTI Graphic Technology, Inc. Honle UV America Hunkeler AG Hyden Packaging Pvt Ltd IN-CORE SYSTEMES ISRA Vision Parsytec Jemmco, LLC Karlville Development LLC KETT US Labeltech Lake Image Systems Ltd Lemorau LUSTER LightTech (Beijing) Co. Ltd. Mahlo America Inc Maxcess International MIIP MoistTech Corp. Monotech Systems Ltd Nikka Research Deutschland GmbH Novation, Inc. One Box Vision Pantron Automation, Inc PC Industries Prati s.r.l. Process Sensors Corporation QuadTech Inc. Reconcile Engineering Ltd. Rosas GmbH ROTOCONTROL Rotoflex Selectra Srl Sibress SMAG (SRAMAG SAS) Tecscan Print Inspection Systems Tectonic International Ltd Testing Machines Inc. Tidland Unilux, Inc uv-technik meyer gmbh Voyantic Ltd Wasberger Label Equipment Webex Webscan Inc Wenzhou Rhyguan Machinery Co Ltd X-Rite Europe GmbH . ZheJiang WeiGang Machinery Co., LTD

Label applicators Accraply ACHEM Industry America, Inc. ANFEC Ben Clements and Sons Inc /Tach-It cab Produkttechnik GmbH & Co KG Dispensa-Matic Label Dispensers Dropjet Makina Kimya San. Ltd. Sti. Etiquettes Plus Garvey HENAN PROVINCE WELLKING TECHNOLOGIES CO.,LTD Hu Zhou HengXin Label manufacture Co Ltd Hurkimsa Kimya San. Inkstar Office Appliance Factory of Tianjin Itochu Deutschland GmbH Karlville Development LLC Kirk-Rudy, Inc. Laser Art Studio Ltd. Mimaki Europe BV Novation, Inc. OKI Europe Ltd Open Data Srl PDC International Corporation Pinewood Label Systems Limited Primera Technology, Inc Ravenwood Packaging Ltd RayPress Corporation REA Elektronik GmbH Recording Engineering Ltd. Simple Solutions and Innovations Inc START International Tamarack Products Inc Tech-Melt Adhesives Ltd. Thermal Printer Support Ltd Thiele Technologies UltraSource LLC VAN DEN BERGH Consulting byba WRH Global Americas Xinxiang Fineray Technology Ltd Zhejiang Ouli Digital Inkjet Materials Co Ltd Zhongshan Shuguan Self-Adhesive Products Co., Ltd Label dispensers AEBO Science Technology Co Ltd ANFEC Ben Clements and Sons, Inc./Tach-It cab Produkttechnik GmbH & Co KG D.P.R. S.r.L. Dispensa-Matic Label Dispensers Etiquettes Plus Garvey HENAN PROVINCE WELLKING TECHNOLOGIES CO.,LTD Infopack Labelmate LLC. Longford International Ltd Novation, Inc. OKI Europe Ltd Open Data Srl Pinewood Label Systems Limited Printex Srl Printing Innovation AG REA Elektronik GmbH START International Thiele Technologies UltraSource LLC WRH Global Americas Label overprinters and print-apply systems Afinia Label Alpha-Cure Ltd ANFEC cab Produkttechnik GmbH & Co KG De Rossi Vittoriano S.r.l. Domino Printing Sciences **Etiquettes Plus** FEFI FRANCIS BUEHLER AG Grafotronic AB Hapa AG HENAN PROVINCE WELLKING TECHNOLOGIES CO.,LTD Hurkimsa Kimya San. Impression Technology Europe Inkjet Solutions Limited Iwatsu Electric Co Ltd KBA-MePrint AG Labelmate LLC. Lake Image Systems Ltd Mimaki Europe BV Mutoh Belgium n.v. Newfoil Machines Limited OKI Europe Ltd Palmetto Imaging Technology, LLC Printex Srl Printing Innovation AG Prototype & Production Systems, Inc./ DICE Graphic Technologies REA Elektronik GmbH Rea Jet ROTOCONTROL SNBC-Orient-Technologies SwiftColor Thermal Transfer Solutions Ltd Transfer Trade s r l Trojanlabel Typerite UltraSource LLC

Union Chemicar Europe VanDerEng BV WRH Global Americas Label papers Aluminium Feron GmbH & Co. KG ANFEC Antalis International Appvion, Inc. Arjobex/Polyart Arjowiggins Avery Dennison Label and Packaging Materials AzCoat, Inc. Bella Kagit BESEL Boise Paper BW Bielomatik Camelot Papers Inc Catalyst Paper Celestik Inc Cham Paper Group Contract Converting, LLC Crown Van Gelder B.V. Delfortgroup AG Dunafin Kft. Etiquettes Plus Frquertes Plus Fangda Packaging Co., Ltd.(Hebei,China) Folien Fischer AG Foshan Chancheng Hengyi Plastic Color Printing Factory FUJIAN TAIXING SPECIAL PAPER CO, LTD Globus International Granwell Products / Polylith Guangdong Guanhao High Tech Co Ltd Guangzhou Manborui Material Technology Co Ltd Hansol Paper Co Ltd Heartland Adhesives HENAN PROVINCE WELLKING TECHNOLOGIES CO..LTD Hinderer GmbH - APP Pindo Deli Hop Industries Corp. Hu Zhou HengXin Label manufacture Co Ltd Hurkimsa Kimya San. Hurkimsa Kimya San. Hurkou Kingdom Coating Industry Co.,Ltd. IGF Europe NV (International Graphic Films) Infinity Tapes Italstick Self Adhesive Materials & Coatings Japan Pulp & Paper GmbH Jujo Thermal Ltd. Kanzaki Specialty Papers KANZAN Specialpapiere GmbH Kasha Ribbon Koan Hao Technology Co.,Ltd Label Pack Lana Papier SpÈciaux II I FCTA LTHD Mactac Mark Products Corp Matthias Paper Corporation MAX International Converters Inc MDV GmbH Mitsubishi HiTec Paper Munksj<sup>\*</sup> National Paper Company NDC Spray Coating System Fabricating Co., Ltd. New Solution S.A. Oxford Instruments Paper Resources, Inc. PASACO Coated Papers Co Ltd Printing Innovation AG PURE Labels (Elevate Packaging, Inc) REA Elektronik GmbH **Ricoh Industrie France** Ritrama S.p.A. Rolling Optics Sappi Seibert - PFV SHANGHAI ROCKY INDUSTRIAL CO.,LTD Shanghai Jinda Plastic Co., Ltd. Shanghai Realtac Trading Company Ltd Sihl GmbH SMI Coated Products Pvt Ltd SMI Loated Products PVC Ltd Superior Label Taizhou Newtech Film Co Ltd Tamerica Products, Inc. TESLIN Substrate by PPG Industries Torraspape ISA (headquarters) VanDerEng BV Verso Corporation VIP Color Europe Xiamen Delish Automation Equipment Co., Ltd Yupo Europe GmbH Zhongshan Fu Zhou Adhesive-Product Co Ltd Zhongshan Shuguan Self-Adhesive Products Co., Ltd Zuber Rieder

Uninet

## Laser-cutting engraving systems AB Graphic International Ltc

ALS Engineering GmbH Applied Laser Engineering Ltd. Bitek Technology Inc. (anytron) Cartes S.r.l. D.P.R. S.r.L. Delta ModTech Golden Hontec Laser (Donnguan Hontec Machinery) Grafisk Maskinfabrik Hans-Gronhi Graphic Technology Company Limited Hunkeler AG Laser Art Studio Ltd. LasX Industries, Inc. Matik, Inc. Max Daetwyler Corporation Preco Inc SEI Laser Sibress Spartanics WUHAN GOLDEN LASER CO., LTD

Letterpress presses Alpha-Cure Ltd Codimag Da Shen Printing Machine Co Ltd Da Shen Printing Machine Co Ltd FlexoExport Ltd Graficon Maschinenbau AG GSM Graphic Supplies & Machinery Ltd Hoya Candeo Optronics Corp. Hu Zhou HengXin Label manufacture Co Ltd Iwasaki International Inc. KPG (Europe) Limited Labelmen Machinery Co. Ltd Link Label Machinery Co Ltd LINTEC Corporation Mid American Rubber Mida Maquinaria ORTHOTEC, WAN AN PRECISE MACHINERY WORKS CO., LTD. Polygraphica Equipment Ltd Reel To Reel International Ltd Ruttiman Trade AG SHIKI MACHINE SUPPLY CORP. WUHAN GOLDEN LASER CO.,LTD Zhejiang Hexiang Printing Machinery Co Ltd ZHEJIANG ZHONGTE MACHINERY

# Linerless and self-wound labels

Maan Engineering BV ACHEM Industry America, Inc. Appvion, Inc. Ashland Inc. Bella Kagit Bostik SA Celestik Inc D&K Coating Technologies, Inc ETI Converting Equipment Evonik Corporation Frimpeks A.S. Hunkeler AG IGF Europe NV (International Graphic Films) Kanzaki Specialty Papers Kumar Labels Lemu Talleres SA MAX International Converters Inc Mitsubishi HiTec Paper NAStar Inc. Nicoat Onemech Industries CO.,PTE LTD PASACO Coated Papers Co Ltd OSPAC Industries. Inc Ravenwood Packaging Ltd Ricoh Industrie France Ritrama S.p.A. Transfer Trade s.r.l Wacker Chemie AG

## Metalized substrates

BESEL Camelot Papers Inc Coating International / Rek & Thomas Medien AG Contract Converting, LLC Dunmore ECKART GmbH FLEXcon Company, Inc. Flexpol Sp. z o.o Folex AG GARWARE POLYESTER LTD. Griff Paper and Film Hanita Coatings HUECK FOLIEN GmbH Infinity Tapes Innovia Films Italstick Self Adhesive Materials & Coatings ITW Foils Jindal Films Americas Kumar Labels LECTA Leonardus S.r.l - Italy LINTEC Corporation Manucor Spa Max Speciality Films Ltd MDV GmbH POLIBAK PLASTIK FILM SANAYI VE TICARET A.S. Print Systems Sanvo Corporation of America Seibert - PFV Sustanium Taghleef Industries SpA Torraspapel SA (headquarters) Treofan America, Inc.

MIS software BEL Computer Systems Cerm Business Management Software Computer Productivity Services Inc. Covectra Europe Ltd CRC Information Systems, Inc. DALIM SOFTWARE GmbH

Enterprise Print Management Solutions FFFI Globe-Tek Corporation Hybrid Software Inc. Key2Print sp z.o.o. Kodak Label Traxx Lake Image Systems Ltd Nikka Research Deutschland GmbH Perspex Kft Rti Digital Siemens PLM / SIMATIC IT Preactor SISTRADE ñ Software Consulting, S.A. SoftSolutions, Inc. Tharstern theurer.com

## Offset blankets

Braden Sutphin Ink Felix Boettcher GmbH & Co Future Pack / KOREA LARTEC - Flexible Dies marks-3zet GmbH & Co. KG Papier & Druck Printgraph SpA Rossini North America, LLC

Offset presses adphos Digital Printing GmbH Alliance Printech Pvt Ltd Alpha-Cure Ltd Bobst Codimag Codimag DIP Co. Futec Europe GmbH Gallus Ferd. R, esch AG Goss International Europe B.V. Graficon Maschinenbau AG GSM Graphic Supplies & Machinery Ltd HC Miller Press Iwasaki International Inc. KBA-MePrint AG Labelmen Machinery Co. Ltd Link Label Machinery Co Ltd Matik, Inc. Mid American Rubber Mida Maquinaria Miyakoshi Printing Machinery., Co. Ltd. Monotech Systems Ltd MPS Systems B.V. Nilpeter A/S Omet Srl ORTHOTEC, WAN AN PRECISE MACHINERY WORKS CO., LTD. Poligrafika Poligrafika Polygraphica Equipment Ltd R.C. Lamps S.n.c. / VTI Rotatek S.A. SHIKI MACHINE SUPPLY CORP. STINI MACHINE SUPPLY CC Styers Equipment Company Tangshan Wanjie Europe iangsnan wanjie turope Weifang Donghang Graphic Technology Inc. WEIGANG Machinery ZheJiang WeiGang Machinery Co., LTD ZHEJIANG ZHONGTE MACHINERY

# Plate mounting equipment

Agfa Graphics All Printing Resources Anderson & Vreeland, Inc. AV Flexologic Carl Ostermann Erben GmbH (COE) Conversource Inc. CT Graphic Arts DuPont de Nemours (Deutschland) GmbH Felix Boettcher GmbH & Co Glunz & Jensen Gonderflex International Inc Graphbury Smart Solutions, LLC INOMETA GmbH JM Heaford Ltd Mark Andy Polymount International Precise Graphic India Pvt Ltd Print Systems Quality Discount Press Parts & Equipment Rogers Corporation Sinkotech USA Sys Tec Converting Tectonic International Ltd tesa SE Weifang Donghang Graphic Technology Inc.

# Plates and platemaking equipment 3ES Mega Elektromekanik

Agfa Graphics Agfa Graphics All Printing Resources Alltrade Recycling Equipment Anderson & Vreeland, Inc. Applied Laser Engineering Ltd. Asahi Photoproducts (Europe) Athena Graphics AV Flexologic Beta Industries - The Quality Control Company Carl Ostermann Erben GmbH (COE) ContiTech Elastomer Coatings Cron Europe Gmbh CRON-ECRM LLC CT Graphic Arts

Dantex DigiFlex Ltd DuPont de Nemours (Deutschland) GmbH Esko Felix Boettcher GmbH & Co Flint Group Focus Label Machinery Ltd Fujifilm Europe GmbH FUJITIM EUROPE GMDH Glunz & Jensen HEIGHTS (UK) Limited Inglese S.r.l Jet USA Corporation JV Imaging Solutions, Inc Kodak Lucky Huaguang Graphics Co Ltd Luminite Products Corp. MacDermid Printing Solutions marks-3zet GmbH & Co. KG Max Daetwyler Corporation Papier & Druck Print Systems Railex (Filing) Ltd Screen Europe Sibress Spring Coating Systems STOMA GmbH ThermoflexX Tower Products Inc Toyobo Co Ltd Trinity Graphic USA Inc Troika Systems Ltd Vianord Engineering SAS

Prepress systems 3ES Mega Elektromekanik All Printing Resources Alphasonics Anderson & Vreeland, Inc. Athena Graphics AV Flexologic BASCH GROUP (CHINA) BEL Computer Systems Carlo Tagliabue CGS Publishing Technologies, LLC CHILI Publish Computer Productivity Services Inc. Cron Europe Gmbh CRON-ECRM LLC CT Graphic Arts DALIM SOFTWARE GmbH Dantex DigiFlex Ltd DIP Co. EFI Epson America Inc. . Esko EyeC GmbH Fag Graphic Systems SA FFEI Flexo Label Advantage Group LLC (FLAG) Four Pees Fujifilm Europe GmbH Global Graphics Software Global Vision Inc Glunz & Iensen GMG Americas Hybrid Software Inc. Jet USA Corporation IM Heaford I td JV Imaging Solutions, Inc Kodak marks-3zet GmbH & Co. KG marks-3zet GmbH & Co. KG Max Daetwyler Corporation Monotech Systems Ltd Nikka Research Deutschland GmbH One Box Vision PC Industries Phoenix (Tilia Labs) Print Systems Provident Rossini North America, LLC Rti Digital Ryback & Ryback Inc. Screen Europe SPGPrints STOMA GmbH Tech Sleeves ThermoflexX Trinity Graphic USA Inc Vianord Engineering SAS

# Pressure-sensitive films

Maan Engineering BV 3M Industrial Adhesives & Tapes ACHEM Industry America, Inc. acpo, ltd Acucote Aluminium Feron GmbH & Co. KG Antalis International Appvion, Inc. ARCONVERT S.D.A Arjobex/Polyart Ashland Inc. Avatack Co Ltd Avery Dennison Label and Packaging Materials AzCoat, Inc. BeardowAdams Inc Bella Kagit Budaval AG C.I ARclad S.A.

Celestik Inc Channeled Resources Group CMC Klebetechnik GmbH Collano Adhesives AG Crown Roll Leaf, Inc. D&K Coating Technologies, Inc Discount Labels Drytac Emax Label Solutions Emax Label Solutions EPS Materials FLEXcon Company, Inc. Flexo Label Advantage Group LLC (FLAG) Folex AG Folien Fischer AG Franklin Adhesives & Polymers Frimpeks A.S. GARWARE POLYESTER LTD. Globus International Grafityp Selfadhesive Products Griff Paper and Film Guangdong Guanhao High Tech Co Ltd H.S. Industries Co., Ltd Heartland Adhesives Herma GmbH Icap-Sira Chemicals And Polymers Spa IGF Europe NV (International Graphic Films) Infinity Tapes Innovia Films Intercoat Italnastri S.p.A Italstick Self Adhesive Materials & Coatings Itochu Deutschland GmbH Japan Pulp & Paper GmbH lindal Films Americas King Label Adhesive Products Co., Ltd Kl^ckner Pentaplast Koan Hao Technology Co.,Ltd Kumar Labels LECTA Leonardus S.r.l - Italy LINTEC Corporatio Mactac Max Speciality Films Ltd MDV GmbH Momentive Performance Materials Mondi Akrosil, LLC MSM NAStar Inc. National Paper Company Paper Resources, Inc. POLIBAK PLASTIK FILM SANAYI VE TICARET A.S. Polyonics PURE Labels (Elevate Packaging, Inc) QSPAC Industries, Inc RayPress Corporation Repacorp, Inc. Ritrama S.p.A. ROCHEUX INTERNATIONAL Roll Cover Italiana S.r.L Sales Srl Sanyo Corporation of America SAScoat SECUTAC Sihl GmbH SMI Coated Products Pvt Ltd Spinnaker Coating STA, LLC Strata-Tac Super Film Packaging Films Sustanium Synthogra Taghleef Industries SpA Tamerica Products, Inc. Tech-Melt Adhesives Ltd. Technicote. Inc. TECHNICOTE, INC. TESLIN Substrate by PPG Industries Torraspapel SA (headquarters) Treofan America, Inc. UPM Raflatac VPF GmbH & Co. KG Wausau Coated Products, Inc. Yenom Pte. Ltd. Yupo Europe GmbH Zhejiang Ouli Digital Inkjet Materials Co Ltd Zhongshan Fu Zhou Adhesive-Product Co Ltd

# Pressure-sensitive papers

Maan Engineering BV Acucote Aluminium Feron GmbH & Co. KG Antalis International Appvion, Inc. ARCONVERT S.p.A Arjowiggins Ashland Inc. Avatack Co Ltd Avery Dennison Label and Packaging Materials AzCoat, Inc. BeardowAdams, Inc. Bella Kagit Boise Paper Budaval AG C.I ARclad S.A. Catalyst Paper Celestik Inc Cham Paper Group Channeled Resources Group Collano Adhesives AG Delfortgroup AG Discount Labels

Dongguan Wangli Adhesive Technology Dunafin Kft. Emax Label Solutions EPS Materials Flexo Label Advantage Group LLC (FLAG) Folien Fischer AG Franklin Adhesives & Polymers Frimpeks A.S. Globus International Clobus International Griff Paper and Film Guangdong Guanhao High Tech Co Ltd Hansol Paper Co Ltd Herma GmbH Icap-Sira Chemicals And Polymers Spa Infinity Tapes Intercoat Italnastri S.p.A Italstick Self Adhesive Materials & Coatings Japan Pulp & Paper GmbH King Label Adhesive Products Co., Ltd I FCTA LINTEC Corporation Mactac MAX International Converters Inc MDV GmbH Mitsubishi HiTec Paper Mondi Akrosil, LLC MSM MSM NAStar Inc. National Paper Company Paper Resources, Inc. PURE Labels (Elevate Packaging, Inc) QSPAC Industries, Inc RavPress Corporation Repacorp, Inc. Ritrama S.p.A Sales Srl Sappi SAScoat Shanghai Jinda Plastic Co., Ltd. SMI Coated Products Pvt Ltd Spinnaker Coating Strata-Tac Superior Label Tech-Melt Adhesives Ltd. Technicote, Inc. Torraspapel SA (headquarters) Trinity Graphic USA Inc UPM Raflatac Verso Corporation VPF GmbH & Co. KG Wausau Coated Products, Inc. Yenom Pte Itd Zhejiang Zhongjia Technology Co Ltd Zhongshan Fu Zhou Adhesive-Product Co Ltd

Pressure-sensitive tapes Maan Engineering BV ACHEM Industry America, Inc. acpo, ltd Aluminium Feron GmbH & Co. KG Antalis International Ashland Inc. Avatack Co Ltd BeardowAdams, Inc. BeardowAdams, Inc. Bella Kagit Ben Clements and Sons, Inc./Tach-It Cham Paper Group Channeled Resources Group CMC Klebetechnik GmbH Collano Adhesives AG Conversource Inc Discount Labels EPS Materials Finjetchemical Industries Ltd FLEXcon Company, Inc. Folex AG Franklin Adhesives & Polymers Heartland Adhesives Icap-Sira Chemicals And Polymers Spa Infinity Tapes Italnastri S.p.A King Label Adhesive Products Co., Ltd LINTEC Corporation Mactac Momentive Performance Materials Mondi Akrosil, LLC Mondi Consumer Packaging GmbH Paper Resources, Inc. Polyonics QSPAC Industries, Inc Ritrama S.p.A. Rogers Corporation Seal King SECUTAC SHANGHAI ROCKY INDUSTRIAL CO.,LTD Shanghai Realtac Trading Company Ltd STA, LLC START International Strata-Tac Tech-Melt Adhesives Ltd. tesa SE Wausau Coated Products, Inc. Yenom Pte. Ltd. Zhongshan Fu Zhou Adhesive-Product Co Ltd

# Radio Frequency Identification (RFID) AM-PG Group

AM-PG Group Arjowiggins bielomatik Leuze GmbH + Co. KG BW Bielomatik Comercial ArguË. S.A. Graphi Mecc s Huzhou Siny Label material Co., Ltd ITD S.r.l Iwasaki International Inc. King Label Adhesive Products Co., Ltd Kirk-Rudy, Inc. Matik. Inc. MELZER maschinenbau GmbH M hlbauer GmbH & Co. KG Praxair Surface Technologies Printum GmbH Prooftag Reconcile Engineering Ltd. Reconcile Engineering Ltd. Rosas GmbH Schobertechnologies GmbH Shandong Taibao Anti-Counterfeiting Technology Products Co., Ltd Sun Chemical (Germany) Tamarack Products Inc Vovantic Ltd

# 5

**Release liners** 3M Industrial Adhesives & Tapes Applied Rigaku Technologies, Inc. Boise Paper Catalyst Paper Celestik Inc Cham Paper Group Channeled Resources Group Crown Van Gelder B.V. D&K Coating Technologies, Inc Delfortgroup AG Dongguan Wangli Adhesive Technology Dunafin Kft. Fangda Packaging Co., Ltd.(Hebei,China) Folien Fischer AG GARWARE POLYESTER LTD. Globus International Globus International Granwell Products / Polylith Griff Paper and Film Guangdong Guanhao High Tech Co Ltd Hansol Paper Co Ltd Herma GmbH Infinity Tapes Italstick Self Adhesive Materials & Coatings ITASA King Label Adhesive Products Co., Ltd Koan Hao Technology Co.,Ltd Kunshan Formula Coating Technology Co., Ltd. Mactac Michelman Momentive Performance Materials Mondi Akrosil, LLC Mondi Consumer Packaging GmbH MPI Release MSM Munksi PASACO Coated Papers Co Ltd Rossella S.r.L. Sappi SAScoat Shanghai Jinda Plastic Co., Ltd. Siliconature S.P.A. SMI Coated Products Pvt Ltd Strata-Tac Sustanium Taghleef Industries SpA Tamerica Products, Inc. Technicote, Inc. Verso Corporation Wacker Chemie AG Yenom Pte. I td. renom Pte. Ltd. Zhejiang Ouli Digital Inkjet Materials Co Ltd Zhongshan Fu Zhou Adhesive-Product Co Ltd Roll handling equipment Alliance Printech Pvt Ltd AzTech Converting Systems COMPONEX INC CTC International, Inc. CTS Industries Daco Solutions Ltd Dima Fife-Tidland GmbH FLEXOR (EMIS) Ltd Holtby Williams International KOR Engineering Inc. KTI- A Quantum Design Company Labeltech Lemu Talleres SA Maxcess International Maxcess International Mona Equipments NeuraLabel Printing Solutions Onemech Industries CO.,PTE LTD Papier & Druck Precision AirConvey Corp Quality Discount Press Parts & Equipment Reconcile Engineering Ltd. Sermar Machines Srl SRC Systems Limited Tidland Tilt Lock

UltraSource LLC

Webex Zecher GmbH

Wasberger Label Equipment

Seal King SECUTAC

Screen printing equipment 3ES Mega Elektromekanik AB Graphic International Ltd adphos Digital Printing GmbH Alpha-Cure Ltd ALS Engineering GmbH Berra s.r.l Carl Ostermann Erben GmbH (COE) Cartes S.r.l. Codimag DPL Industri A/S DPS Innovations I I C Epson America Inc. Gallus Ferd. R , esch AG Hu Zhou HengXin Label manufacture Co Ltd Kor-Chem, Graphic Arts Division Link Label Machinery Co Ltd marks-3zet GmbH & Co. KG Mida Maquinaria MPS Systems B.V. Omet Srl ORTHOTEC, WAN AN PRECISE MACHINERY WORKS CO., LTD. Preco, Inc. Prisma Srl Prisma Srl Ruttiman Trade AG Sam Meccanica Srl Shanghai Realtac Trading Company Ltd SHIKI MACHINE SUPPLY CORP. SMAG (SRAMAG SAS) Spartanics SPGPrints Sun Chemical (Germany) Telstar Engineering Inc. WEIGANG Machinery ZheJiang WeiGang Machinery Co., LTD Security inks-varnishes ACTEGA North America Alden & Ott Printing Inks American Water Graphics, Inc Braden Sutphin Ink Colorgraf SpA Creed Engineers (VINSAK) ECKART GmbH Encres Dubuit Frcon Inc Flint Group FRANCIS BUEHLER AG Hapa AG IIMAK Europe Industrial Inkjet Ltd 1‰necke+Schneemann Druckfarben GmbH Kor-Chem, Graphic Arts Divisior Luminescence International Ltd Magnum Inks & Coatings marks-3zet GmbH & Co. KG MGI Michelman Minus Nine Technologies Mirage Inks Ltd Natural Ink Nazdar Ink Techologies Nicoat Paragon Inks Ltd Radior (France) S.A.S Rowat Inks BV Royal Adhesives and Sealants Siegwerk Environmental Inks Squid Inks AG (Ltd.) Sun Chemical (Germany) United Speciality Inks Pvt. 1td Security materials Accurity materials acpo, ltd Acucote Aluminium Feron GmbH & Co. KG AM-PG Group Angstrom Technologies Inc ARCONVERT S.p.A Arjobex/Polyart Arjowiggins Avatack Co Ltd Budaval AG Collano Adhesives AG Complete Inspection Systems Inc. Drvtac Dunmore Electro Optic Werkzeugtechnik GmbH Folien Fischer AG Globe-Tek Corporation Guangzhou Manborui Material Technology Co Ltd Hanita Coatings HENAN PROVINCE WELLKING TECHNOLOGIES CO.,LTD Holostik India Ltd HUECK FOLIEN GmbH Huzhou Siny Label material Co., Ltd Infinity Tapes King Label Adhesive Products Co., Ltd Lana Papier SpÈciaux II Leonardus S.r.l - Italy MDV GmbH MDV GmbH Mitsubishi HiTec Paper M , hlbauer GmbH & Co. KG PCT Engineered Systems LLC Prooftag

Seibert - PFV Sihl GmbH Siktrue Srl SPCPrints TESLIN Substrate by PPG Industries UEI Falcontec Yenom Pte. Ltd. Yupo Europe GmbH Zhejiang Zhongjia Technology Co Ltd

## Semi-rotary presses

Converting Equipment International Inc Da Shen Printing Machine Co Ltd Delta ModTech FLEXOR (EMIS) Ltd Grafotronic AB Iwasaki International Inc. KBA-MePrint AG Kumar Labels Lombardi Converting Machinery Srl Mida Maquinaria Miyakoshi Printing Machinery, Co. Ltd. ORTHOTEC, WAN AN PRECISE MACHINERY WORKS CO, LTD. Precise Graphic India Pvt Ltd R.C. Lamps Sn.c. /VTI Rotatek S.A. Sam Meccanica Srl Spartanics Tangshan Wanjie Europe WEIGANG Machinery Deljang WeiGang Machinery Co., LTD

## Shrink/stretch films Allen Plastic Industries Co Ltd AM-PG Group

AM-PG Group Athena Graphics Beijing Yongshengyunjia Wrapping Materials Co Ltd Bonset America Corporation CGS Publishing Technologies, LLC Controls Engineering Creative Edge Software Felins USA Four Pees FUJIAN TAIXING SPECIAL PAPER CO, LTD GARWARE POLYESTER LTD. Itochu Deutschland GmbH Jindal Films Americas Klear Plastic Ventures, LLC Kl'ckner Pentaplast PCT Engineered Systems LLC PDC International Corporation QSPAC Industries, Inc SECUTAC Sustanium Taghleef Industries SpA Taizhou Newtech Film Co Ltd TGW International Inc.

# Silicone release coatings

Maan Engineering BV ACHEM Industry America, Inc Acucote adphos Digital Printing GmbH Applied Rigaku Technologies, Inc. Ashland Inc. Bluestar Silicones North America Coating International / Rek & Thomas Medien AG COMPONEX INC EVI Converting Corporation ETI Converting Equipment Evonik Corporation Fangda Packaging Co., Ltd.(Hebei,China) Folien Fischer AG GARWARE POLYESTER LTD. Globus International Ichemco s.r.l. IOT Innovative Oberflachentechnolgien GmbH ITASA Jemmco, LLC Keco Coatings KROENERT Kunshan Formula Coating Technology Co., Ltd. Minus Nine Technologies Mirage Inks Ltd Momentive Performance Materials Nicoat Paragon Inks Ltd **OSPAC** Industries, Inc Rossella S.r.L. Royal Adhesives and Sealants Siliconature S.P.A. Squid Inks AG (Ltd.) TLS Anilox GmbH Toyo Ink Arets NV Wacker Chemie AG Yenom Pte. Ltd.

# Sleeve systems

Accrapty Alten Plastic Industries Co Ltd ARC International Asahi Photoproducts (Europe) AV Flexologic Beta Industries - The Quality Control Company Dantex DCM USIMECA De Rossi Vittoriano S.r.l.

Felix Boettcher GmbH & Co Flint Group GARWARE POLYESTER LTD. Glunz & Iensen Goss International Europe B.V. Harper Corporation of America Inglese S.r.l Inglese S.r.I Itochu Deutschland GmbH JV Imaging Solutions, Inc Karlville Development LLC Luminite Products Corp. PDC International Corporation Polymount International Rossini North America, LLC Ryback & Ryback Inc. Sibress Tech Sleeves TLS Anilox GmbH Vianord Engineering SAS Zecher GmbH

# Splicing equipment

Brenna Srl BST eltromat International GmbH CMC Klebetechnik GmbH CTC International. Inc. Davis-Standard, LLC Dover Flexo Electronics, Inc. Erhardt + Leimer GmbH FAFS AG Kirk-Rudy, Inc. KTI- A Quantum Design Company Martin Automatic Inc Serame tesa SE TGW International Inc

# Static elimination systems

Advanced Machinery NV Air and Water Systems, Inc. Airtrim, Inc. Airthin, Inc. Boussey Control Europe DRAABE Humidification Fraser Anti Static Techniques Ltd Hamamatsu Photonics Jemmco, LLC KELVA Meech International Precision AirConvey Corp SDI Simco-Ion Spengler Electronic AG StopStatic.com division of Alpha Innovation

Test equipment Access Printing Solution Adhesive Technical Services Ltd Applied Rigaku Technologies, Inc. Axicon Auto ID LLC bielomatik Leuze GmbH + Co. KG ChemInstruments Complete Inspection Systems Inc Dr. H^nle AG, UV Technology ebeam Technologies Electromatic Equipment Co, Inc Erhardt + Leimer GmbH EveC GmbH Fag Graphic Systems SA Four Pees GSE Dispensing GTI Graphic Technology, Inc. Ichemco s.r.l. IGT Testing Systems lmada Inc IMASS IN-CORE SYSTEMES JM Heaford Ltd JUST Normlicht GmbH KETT US Laser Art Studio Ltd. LUSTER LightTech (Beijing) Co. Ltd. MoistTech Corp. Onemech Industries CO.,PTE LTD PCT Engineered Systems LLC Print Proof Solutions B.V. Process Sensors Corporation RK Print Coat Instruments Ltd Ryback & Ryback Inc. Sibress Sibress StopStatic.com division of Alpha Innovation Testing Machines Inc. Thwing-Albert Instrument Company Unilux, Inc. uv-technik meyer gmbh VivaCasa Voyantic Ltd Webscan Inc X-Rite Europe GmbH

# Thermal transfer ribbons AEBO Science Technology Co Ltd AM-PG Group

ARMOR Astro-Med GmbH QuickLabel Systems Calor GmbH Cator GmbH Comercial ArquË, S.A. DNP Imagingcomm America Corporation Dynic UK Ltd Emax Label Solutions FAES AG

Far East Yu La Industry Limited Fujicopian Co., Ltd. (Europe) branch General Srl Gulton Inc. H.S. Industries Co., Ltd Hangzhou Todaytec Digital Co., Ltd. Hu Zhou HengXin Label manufacture Co Ltd Huzhou Siny Label material Co., Ltd IIMAK Europe Inkstar Office Appliance Factory of Tianjin ITD S.r.l ITW Thermal Films Jiaozuo Zhuorim Digital Material Co Ltd Kasha Ribbon KURZ, LEONHARD, Stiftung & Co. KG Labelmen Machinery Co. Ltd Lemmaco Kft m print morlock gmbh & co. kg Mastercorp Group Microplex New Protech Srl Pack Vision BV Palmetto Imaging Technology, LLC Ricoh Industrie France Simple Solutions and Innovations Inc Thermal Printer Support Ltd Thermal Transfer Solutions Ltd Thermo Code System TODAYTEC Thermal Transfer Ribbons Transfer Trade s.r.l. TTR Euroworks BV Typerite Union Chemicar Europe VanDerEng BV Xiamen Delish Automation Equipment Co., Ltd Xinxiang Fineray Technology Ltd

# Track and trace solutions

AM-PG Group Angstrom Technologies Inc Appvion, Inc. ATT Advanced Track & Trace ATT Advanced Track & Trace BEL Computer Systems Computer Productivity Services Inc. Covectra Europe Ltd Creed Engineers (VINSAK) Crown Roll Leaf, Inc. Digital Print, Inc. Dima DOMINO Felins USA FLEXcon Company, Inc. Globe-Tek Corporation Graphi Mecc srl GSE Dispensing Holostik India Ltd Hunkeler AG ITD S.r.I Lake Image Systems Ltd Longford International Ltd Monotech Systems Ltd M, hlbauer GmbH & Co. KG Multifeeder Technology Inc Nikka Research Deutschland GmbH Pap'Argus Polyonics Prooftag Prototype & Production Systems, Inc./ DICE Graphic Technologies Rolling Optics Seal King Sixtrue Srl SoftSolutions, Inc VanDerEng BV Trade associations

## 

FINAT FINAI Flexo Label Advantage Group LLC (FLAG) Flexographic Technical Association (FTA)/FLEXO Magazine Foil & Specialty Effects Association (FSEA) Italian Manufacturers Association for the Graphic. Converting and Paper Industry (ACIMGA) KVGO Labelexpo Global Series Tag and Label Manufacturers Institute UL LLC UNFEA VskF

## Trade press

Aktuelle Papier-Rundschau Extra Wellpappe Cartiflex Envase Flexible Flexographic Technical Association (FTA)/FLEXO Magazine Foil & Specialty Effects Association (FSEA) Labels & Labeling magazine Pap'Argus Ruttiman Trade AG Stampare Yeuell Nameplate & Label

# Used and rebuilt presses

AAA Press International. Inc FlexoExport Ltd Gallus Ferd. R , esch AG GB Flexo Equipment GIETZ AG Gonderflex International Inc Graficon Maschinenbau AG Graphic Innovators Inc/ Lighthouse Consulting & Restoration Services GSM Graphic Supplies & Machinery Ltd HC Miller Press Holtby Williams International 1&I Converting Machinery Mark Andy Polygraphica Equipment Ltd Quality Discount Press Parts & Equipment Reel To Reel International Ltd Ruttiman Trade AG STOMA GmbH Styers Equipment Company

# UV lamps and curing systems

AAA Press International, Inc. adphos Digital Printing GmbH Air Motion Systems Alpha-Cure Ltd American Ultraviolet Amica Systems (Europe) B.V. CGS Publishing Technologies, LLC DPL Industri A/S DPS Innovations LLC DR. FISCHER Group Dr. H<sup>^</sup>nle AG, UV Technology ebeam Technologies Eltosch Grafix GmbH Excelitas Technologies Corp. G Technologies Srl GB Flexo Equipment GEW (EC) I td Glunz & Jensen Hamamatsu Photonics Heraeus Noblelight GmbH Heraeus Noblelight GmbH Honle UV America IGT Testing Systems Integration Technology Ltd (ITL) IOT Innovative Oberflachentecht IST METZ GmbH echnolgien GmbH IST METZ GmbH Jelight Company Inc Kirk-Rudy, Inc. Kompac Technologies Lamp Tech Lipi És trsa Bt m print morlock gmbh & co, kg PCT Engineered Systems LLC Phidastien International Phoseon Technology Prime UV Systems, Inc Printabl FD PrintConcept UV-Systeme GmbH ProPhotonix R.C. Lamps S.n.c. / VTI Rot. Lamps J.n.c. / VII Rotary Die Company Sp. z o.o. Ruttiman Trade AG Shun Zhe (Shanghai) Mechanical & Electrical Technology Co Ltd Toc Maquinas Industriales SA De CV U.V. Reflection Ultralight AG Ushio America UV Ray S.r.l uv-technik meyer gmbh Uviterno AG XDS Holdings, Inc.

# VIP/thermal materials

3M Industrial Adhesives & Tapes Aluminium Feron GmbH & Co. KG Appvion, Inc. ARCONVERT S.p.A ARMOR Avatack Co Ltd Bostik SA C.I ARclad S.A. C.I ARclad S.A. Cham Paper Group Channeled Resources Group Contract Converting, LLC Fangda Packaging Co., Ltd. (Hebei, China) Frimpeks A.S. Guangdong Guanhao High Tech Co Ltd Gulton Inc. H.S. Industries Co., Ltd Havita Cortice Hanita Coatings Hansol Paper Co Ltd Herma GmbH Huzhou Siny Label material Co., Ltd Innovia Films Japan Pulp & Paper GmbH Iuio Thermal Ltd. Jujo Thermal Ltd. Kanzaki Specialty Papers KANZAN Spezialpapiere GmbH LECTA LINTEC Corporation Mactac Mark Products Corp Matthias Paper Corporation Max Speciality Films Ltd Mitsubishi HiTec Paper MSM NAStar Inc. Nastrificio di Cassano SpA National Paper Company PURE Labels (Elevate Packaging, Inc) Ricoh Industrie France Ritrama S.p.A. Rolling Optics SAScoat

Seibert - PFV Shanghai Jinda Plastic Co., Ltd. Sihl GmbH SMI Coated Products Pvt Ltd Technicote, Inc. TODAYTEC Thermal Transfer Ribbons Torraspapel SA (headquarters) Yenom Pte. Ltd.

## Waste management and handling systems

Waste management and handlu Aitrim, Inc. Alltrade Recycling Equipment Andantex USA Inc Gerhard Bartling GmbH & Co KG Grafikontrol North America KTI- A Quantum Design Company Lundberg Tech A/S Matho GmbH Precision AirConvey Corp OuadTech Inc. SoftSolutions. Inc.

Web cleaning systems Advanced Machinery NV Agfa Graphics Archem S.R.L Boussey Control Europe Erhardt + Leimer GmbH Jemmco, LLC KEIVA Meech International New Eurografica SRL ORTHOTEC, WAN AN PRECISE MACHINERY WORKS CO., LTD. PolymagTek Inc. SDI Simco-Ion Spengler Electronic AG StopStatic.com division of Alpha Innovation

# Web guiding and tension control

Accraply Advanced Machinery NV Andantex USA Inc BST eltromat International GmbH Coast Controls, Inc. Coating International / Rek & Thomas Medien AG CTC International, Inc Dover Flexo Electronics, Inc Erhardt + Leimer GmbH Fife-Tidland GmbH FMS USA, Inc. INOMETA GmbH KROENERT KTI- A Quantum Design Company MAGPOWR Martin Automatic Inc Maxcess International MBO America MEROBEL Onemech Industries C0...PTE ITD Quality Discount Press Parts & Equipment Re S.p.a. Controlli Industriali Roll-2-Roll Technologies LLC Selectra Srl Tecscan Print Inspection Systems Telstar Engineering Inc Tidland Webex

Wraparound films Beijing Yongshengyunjia Wrapping Materials Co Ltd BESEL GARWARE POLYESTER LTD Globe-Tek Corporation Itochu Deutschland GmbH Jurmet Sp. z.o.o. Sp.K. Leonardus S.r.l - Italy Manucor Spa Max Speciality Films Ltd Multi-Plastics, Inc. OKI Europe Ltd POLIBAK PLASTIK FILM SANAYI VE TICARET A.S. ROCHEUX INTERNATIONAL Sustanium Svnthogra Taghleef Industries SpA Taizhou Newtech Film Co Ltd Tamerica Products, Inc. TGW International Inc. Treofan America, Inc. Zhejiang Zhongjia Technology Co Ltd

# **Supplier directory**

33ES Mega Elektromekanik W: www.3esmega.com

3M Industrial Adhesives & Tapes W: www.3m.com/converter

AAA Press International, Inc. W: www.aaapress.com



AB Graphic International Ltd

Lancaster Road, Carnaby Industrial Estate, Bridlington, East Yorkshire, YO15 3QY, United Kingdom T: (+44) 1262671138 E: info@abgint.com W: www.abgint.com

# Labels

• Coating-laminating machines • Digital converting equipment • Finishing equipment, slitters and rewinders • Hot foil machinery • Inspection equipment • Laser-cutting engraving systems • Screen printing equipment

ABBA Roller W: www.abbarubber.com

Access Printing SolutionW: www. accessprintingsolution.com

Accraply W: www.accraply.com

ACHEM Industry America, Inc. W:www.achem-usa.com



acpo, ltd 8035 Lake Winds Drive, P.O. Box 418, Oak Harbor, OH, 43449, United States T: (+1) 4198984243 E: cs@acpo.com W: www.acpo.com Twitter: @acpoltd

Labels Flexible packaging

• Pressure-sensitive films • Pressure-sensitive tapes • Security materials

ACTEGA North America W:www.actega.com



Acucote

PO Box 538, Graham, NC, 27253, United States T: (+1) 8002282683 E: sales@acucote.com W: www.acucote.com

Labels

Pressure-sensitive films • Pressure-sensitive papers
 Security materials • Silicone release coatings

Adhesive Technical Services Ltd W: www.adhtechnical.com

Adolf Brodbeck Maschinenbau GmbH & Co. KG W: www.brodbeck.info

adphos Digital Printing GmbH W: www.adphos.de

Advanced Machinery NV W: www.advancedmachinery.be

AEBO Science Technology Co Ltd W: www.china-ttr.com/

Afinia Label W: www.afinialabel.com

AG Foil s.r.o. W: www.agfoil.com

Agfa Graphics W: agfagraphics.us

AIMCAL W: www.aimcal.org

Air and Water Systems, Inc. W: www.airandwatersystems.com

Air Motion Systems W: www.airmotionsystems.com

Airtrim, Inc. W: www.airtrim.com Aktuelle Papier-Rundschau Extra Wellpappe W: www.apr.de/

Alden & Ott Printing Inks W: www.aldenottink.com

All Printing Resources W: www.teamflexo.com

Allen Datagraph Systems, Inc. W: www.allendatagraph.com

Allen Plastic Industries Co Ltd W: www.allenpack.com

Alliance Printech Pvt Ltd W: www.allianceprintech.com

Allison Systems Corporation W: www.allisonblades.com

Alltrade Recycling Equipment W: www.alltraderecycling.com

Alpha-Cure Ltd W: www.alpha-cure.com

# **ALPHASONICS**

# Alphasonics

18 Caddick Road, Knowsley Business Park South, Liverpool, Merseyside, L34 9HP, United Kingdom T: (+44) 1515473777 E: alphasonics@alphasonics.co.uk W: www.alphasonics.co.uk Twitter: @alphasonicsucs

Labels Flexible packaging Folding cartons

• Anilox rolls • Anilox rolls-press cleaning systems • Prepress systems

ALS Engineering GmbH W: www.als-engineering.net

Aluminium Feron GmbH & Co. KG W: www.feron.de

AM-PG Group W: www.ampg.am

American Ultraviolet W: www.americanultraviolet.com American Water Graphics, Inc. W: www.americanwatergrahics.com

Amica Systems (Europe) B.V. W: www.amicasystems.com

Andantex USA Inc W: www.andantex.com

Anderson & Vreeland, Inc. W: www.andersonvreeland.com



Anderson Europe GmbH Am Oberen Feld 5, Detmold, 32758, Germany T: +49 5231 966 30 E: sales@andersoneurope.com W: www.andersoneurope.com

Dies and tooling (rotary and flatbed)  $\boldsymbol{\cdot}$  Engraving machinery

ANFEC W: www.anfec.com

Angstrom Technologies Inc W: www.angtech.com

Antalis International W: www.antalis.com

AP digitales W: www.apdigitales.com

Apex International W: www.apex-groupofcompanies.com

API Foils W: www.apigroup.com

Applied Laser Engineering Ltd. W: www.appliedlaser.co.uk

Applied Rigaku Technologies, Inc. W: www.rigakuedxrf.com



# Appvion, Inc.

825 E. Wisconsin Avenue, PO Box 359, Appleton, WI, 54912-0359, United States **T:** (+1) 8009221729 **E:** thermal@appvion.com **W:** www.appvion.com/en-us/products/thermal/ pages/label\_and\_polytherm.aspx

Labels

• Label papers • Linerless and self-wound labels • Pressure-sensitive films • Pressure-sensitive papers • Track and trace solutions • VIP/thermal materials

ARC International W: www.arcinternational.com

Archem S.R.L W: www.archem.it/

ARCONVERT S.p.A W: www.arconvert.com

Arjobex/Polyart W: www.polyart.com

Arjowiggins W: www.arjowigginscreativepapers.com



ARMOR 20, Rue Chevreul, Nantes, 44000, France T: (+33) 240384000 E: contact.emea@armor-group.com W: www.armor-tt.com

Labels Flexible packaging

• Barcode systems • Coding and marking • Hot stamping foils • Inks • Thermal transfer ribbons • VIP/ thermal materials

Asahi Photoproducts (Europe) W: www.asahi-photoproducts.com

Ashe Converting Equipment W: www.ashe.co.uk

Ashland Inc. W: www.ashland.com Astro-Med GmbH QuickLabel Systems W: www.quicklabel.de

Athena Graphics W: www.athena-graphics.be

Atlas Die LLC W: www.atlasdie.com

ATT Advanced Track & Trace W: www.att-fr.com

AV Flexologic W: www.flexologic.nl

Avatack Co Ltd W: www.avatackco.com



Avery Dennison Label and Packaging Materials 8080 Norton Parkway, Mentor, OH, 44060, United States T: (+1) 4405346000 E: carolyn.polanski@averydennison.com W: www.label.averydennison.com Twitter: @aldabelleader

Labels Flexible packaging

Adhesives • Label papers • Pressure-sensitive films •
Pressure-sensitive papers

AVT W: www.avt-inc.com

Axicon Auto ID LLC W: www.axicon.net

AzCoat, Inc. W: www.azcoat.com

AzTech Converting Systems W: www.aztechconverting.com

B. Bunch Company, Inc. W: www.bbunch.com



Bar Graphic Machinery Ltd Rhodes House, 6 Oxford Place, Bradford, West Yorkshire, BD3 0EF, United Kingdom T: (+44) 1274730981 E: sales@bargraphic.com W: www.bargraphic.com Twitter: @bargraphic

Labels Flexible packaging

• Adhesives • Cold foiling • Digital converting equipment • Finishing equipment, slitters and rewinders • Flexo presses • Inspection equipment

BASCH GROUP (CHINA) W: www.basch.com.cn

BE-MA Editrice Srl W: www.bema.it

BeardowAdams, Inc. W: www.beardowadams.com

Beijing Yongshengyunjia Wrapping Materials Co Ltd W: www.bjysyj.com/

Beijing Zodngoc Automatic Technology co.,Ltd W: www.zodauto.com

BEL Computer Systems W: www.bel.gr



Bella Kagit Cihangir Mah. E-5 Yanyol No:305, Istanbul, Avcilar, Turkey T: (+90) 2124221776 E: kubratutuncu@ilkaykagit.com W: www.ilkaykagit.com

# Labels

• Adhesives • Inks • Label papers • Linerless and selfwound labels • Pressure-sensitive films • Pressuresensitive papers • Pressure-sensitive tapes

Ben Clements and Sons, Inc./Tach-It W: www.tach-it.com

Berhalter AG

W: www.berhalter.com

Berra s.r.l W: www.berra.com

BESEL W: www.beselfoil.com Beta Industries - The Qualilty Control Company W: www.betascreen.net

**bielomatik Leuze GmbH + Co. KG** W: www.bielomatik.com

Bitek Technology Inc. (anytron) W: www.anytron.net - www.bitekps.com

Bluestar Silicones North America W: www.bluestarsilicones.com

Blumer Maschinenbau AG W: www.blumerag.com

Bobst W: www.gidue.com - www.bobst.com

BOGRAMA AG W: www.bograma.ch

Boise Paper W: www.boisepaper.com

Bonset America Corporation W: www.bonset.com

Bostik SA W: www.bostik.com

Boussey Control Europe W: www.boussey-control.com/en

Braden Sutphin Ink W: www.bsink.com

Bradley Systems W: www.bradley-systems.com

Brenna Srl W: www.brennasrl.it

Brotech Graphics Co., Ltd W: www.bro-tech.net



BST eltromat International GmbH Heidsieker Heide 53, Bielefeld, 33739, Germany T: (+49) 052069990 E: info@bst-international.com W: www.bst-international.com

Labels Flexible packaging

Color management and control • Color proofing equipment • Drive and control systems • Inspection equipment • Splicing equipment • Web guiding and tension control Budaval AG W: www.budaval.hu

BW Bielomatik W: www.bwpapersystems.com

C.I ARclad S.A. W: www.arclad.com

cab Produkttechnik GmbH & Co KG W: www.cab.de

Calor GmbH W: www.calor.de

Camelot Papers Inc W: www.camelotpaper.com

Carl Ostermann Erben GmbH (COE) W: www.coe-bremen.de

Carlo Tagliabue W: www.tagliabuecarlo.it



ADVANCED LABEL TECHNOLOGY

Cartes S.r.l.

2, via Michelangelo, Moglia, Mantova, 46024, Italy T: (+39) 0376511511 E: info@cartes.it W: www.cartes.it Twitter: @cartes\_it

Labels

• Cutting/stamping machines • Digital converting equipment • Hot foil machinery • Laser-cutting engraving systems • Screen printing equipment

Cartiflex Envase Flexible W: www.alabrent.com

Catalyst Paper W: www.catalystpaper.com

Catbridge Machinery W: www.catbridge.com

CC1, INC W: www.cc1inc.com

Celestik Inc W: www.celestik.com

# 

Passion for printing inks

# ...PLAY!

UT N2 N3 N4 M5

**G**...

DGT30

# The **all-in-one** solution for your **Web Tension Control**



- > Full Service
- > Short Delivery
- > Distant remote control available



# and innovative solutions for label decoration

# Responsible • Unique • Creative • Original







Special RUCO ink systems ensure enhanced performance, stability and colour brilliance in

UV screen printing • UV flexo printing • UV varnishes Especially for standard systems and low-migration systems.

All system and product benefits: www.ruco-inks.com





Cerm Business Management Software Siemenslaan 17, Oostkamp, Brugge, 8020, Belgium T: (+32) 050833883 E: peter.dhondt@cerm.be W: www.cerm.be

Labels E Flexible packaging

Digital presses 
 MIS software

CGS Publishing Technologies, LLC W: www.cgsusa.com

Cham Paper Group W: www.champaper.com

Channeled Resources Group W: www.channeledresources.com

ChemInstruments W: www.cheminstruments.com

Cheshire Anilox Technology Ltd W: www.cheshireanilox.co.uk

CHILI Publish W: www.chili-publish.com

CMC Klebetechnik GmbH W: www.cmc.de

Coast Controls, Inc. W: www.coastcontrols.com

Coating International / Rek & Thomas Medien AG W: www.coating.ch

Codimag W: www.codimag.fr

Collano Adhesives AG W: www.collano.com

Collins Inkjet Corporation W: www.collinsinkjet.com

Color-Dec Italy W: www.color-dec.it



Colordyne Technologies, LLC

3275 Intertech Drive, Suite 100, Brookfield, WI, 53045, United States T: (+1) 2627841932 E: sales@colordynetech.com W: www.colordynetech.com Twitter: @colordynetech

Labels

• Barcode systems • Desktop printers • Digital converting equipment • Digital presses • Finishing equipment, slitters and rewinders

Colorgen W: www.colorgen.com

Colorgraf SpA W: www.colorgraf.it



Comercial Arqué, S.A. Carretera Del Mig 54, Barcelona, L'Hospitalet de Llobregat, 8907, Spain T: (+34) 932615300 E: jmacanas@arque.com W: www.arque.com

Labels

• Cutting/stamping machines • Fabric label materials • Insertion/onsertion systems • Radio Frequency Identification (RFID) • Thermal transfer ribbons

Complete Inspection Systems Inc. W: www.completeinspectionsystems.com

COMPONEX INC W: www.componex.net

Computer Productivity Services Inc. W: www.cpsinc.ca

ContiTech Elastomer Coatings W: www.conti-laserline.com

Contract Converting, LLC W: www.contractconverting.com

Controls Engineering W: www.stretchfilmbander.com

Conversource Inc. W: www.conversource.com Convertech Equipment Pvt Ltd W: www.convertechblades.com

w: www.convertecribiades.com

Converting Equipment International Inc W: www.slitandrewind.com

Covectra Europe Ltd W: www.covectra.com

CRC Information Systems, Inc. W: www.crcinfosys.com

# Creative Edge Software

W: www.creativeedgesoftware.com

Creed Engineers (VINSAK) W: www.vinsak.com

Cron Europe Gmbh W: www.cron.com.cn

CRON-ECRM LLC W: cron-ecrm.com

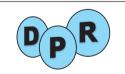
Crown Roll Leaf, Inc. W: www.crownrollleaf.com

Crown Van Gelder B.V. W: www.cvg.nl

CT Graphic Arts W: www.ctgraphicarts.com

CTC International, Inc. W: www.ctcint.com

CTS Industries W: www.ctsindustries.com



D.P.R. S.r.L. Via Marisa Bellisario 8C, Barlassina, MB, 20825, Italy T: (+39) 0362542939 E: info@dpr-srl.it W: www.dpr-srl.it Twitter: @dpr\_srl

Labels Flexible packaging

• Digital converting equipment • Digital presses • Engraving machinery • Finishing equipment, slitters and rewinders • Label dispensers • Laser-cutting engraving systems

D&K Coating Technologies, Inc W: www.dkcoatingtechnologies.com

Da Shen Printing Machine Co Ltd W: www.dashenprintingmachines.com/



Daco Solutions Ltd Unit 2, Oldbeck Road, Beverley, East Yorkshire, HU17 OJW, United Kingdom T: (+44) 1482860288 E: sales@daco-solutions.com W: www.daco-solutions.com Twitter: @dacosolutions

# Labels

 Booklet processing systems • Cutting/stamping machines • Digital converting equipment • Digital presses • Finishing equipment, slitters and rewinders
 Roll handling equipment

# Daetwyler SwissTec AG (Print)

W: www.daetwyler.com/swisstec

# DALIM SOFTWARE GmbH

W: www.dalim.com



# Dantex

Danon House, 5 Kings Road, Bradford, West Yorkshire, BD2 1EY, United Kingdom T: (+44) 1274777777 E: info@dantex.com W: www.dantex.com Twitter: @dantexglobal

Labels Flexible packaging Folding cartons

• Anilox rolls • Color proofing equipment • Digital presses • Finishing equipment, slitters and rewinders • Plates and platemaking equipment • Prepress systems • Sleeve systems

Davis-Standard, LLC

W: www.davis-standard.com

DCM USIMECA

W: www.dcm.fr

**De Rossi Vittoriano S.r.l. W:** www.derossivittoriano.it

Deacro Industries Ltd. W: www.deacro.com

Decosystem SRL W: www.decosystem.com



Delfortgroup AG Fabrikstrasse 20, Traun, 4050, Austria Dunafin Kft. Papírgyári út. 42-46, 2400 Dunaújváros, Hungary Tervakoski Oy, Vähikkäläntie 1, 12400 Tervakoski, Finland T: +36-25-511555 E: releasebasepapers@delfortgroup.com W: www.delfortgroup.com

Labels

 $\boldsymbol{\cdot}$  Label papers  $\boldsymbol{\cdot}$  Pressure-sensitive papers  $\boldsymbol{\cdot}$  Release liners



# Delta ModTech

11501 Eagle St. NW, Minneapolis, MN, 55448-3062, United States T: (+1) 7637557744 E: contact@deltamodtech.com W: www.deltamodtech.com Twitter: @deltamodtech

Labels Flexible packaging Folding cartons

Coating-laminating machines • Cutting/stamping machines • Digital converting equipment • Finishing equipment, slitters and rewinders • Laser-cutting engraving systems • Semi-rotary presses

# Demak America Inc.

W: www.demakamerica.com



DIAVY SRL Via A. Vivaldi, 108, Soliera (MO), Soliera, 41019, Italy T: (+39) 059565865 E: a.pastorelli@diavysrl.it W: www.diavysrl.com

Labels

• Coating-laminating machines • Cold foiling • Hologram equipment • Holograms-OVDs (optically variable devices) • Hot foil machinery • Hot stamping foils • Hot stamping-embossing cylinders

Diehard Dies Pvt Ltd W: www.dieharddies.com

Dienes Corporation W: www.dienesusa.com

DigiFlex Ltd W: www.digiflex-print.com Digital Print, Inc. W: www.digitalprint.com

DILLI W: www.dilli.co.kr

Dima W: www.dimasimma.com

DIP Co. W: www.dipworldwide.com

Discount Labels W: www.discountlabels.com

Dispensa-Matic Label Dispensers W: www.dispensamatic.com

DMS, INC. W: www.dmsdies.com

DNP Imagingcomm America Corporation W: am.dnpribbons.com



# DOMINO

1290 Lakeside Drive, Gurnee, IL, 60031, United States T: (+1) 8472442501 E: bill.mvers@domino-na.com

W: www.dominodigitalprinting.com

Labels Flexible packaging Folding cartons

• Barcode systems • Coding and marking • Cold foiling • Digital presses • Track and trace solutions



# **Domino Printing Sciences**

Bar Hill, Cambridge, Cambridgeshire, CB23 8TU, UK T: (+44) 1954782551 E: enquiries@domino-uk.com W: www.domino-printing.com Twitter: @domino\_digital

Labels Flexible packaging Folding cartons

• Barcode systems • Coding and marking • Cold foiling • Digital presses • Label overprinters and print-apply systems

DONGGUAN CO-MO ADHESIVES CO., LTD. W: www.cheng-ming.com

Dongguan Wangli Adhesive Technology W: www.lxz999.com

Dover Flexo Electronics, Inc. W: www.dfe.com **Dow Corning Corporation** W: www.dowcorning.com/psi

DPL Industri A/S W: www.dpl.dk

DPS Innovations LLC W: www.dps-innovations.com

DR. FISCHER Group W: www.dr-fischer-group.com



# Dr. Hönle AG, UV Technology

Lochhamer Schlag 1, Gräfelfing, 82166, Germany T: (+49) 089856080 E: uv@hoenle.de W: www.hoenle.com

Labels Flexible packaging Folding cartons

 $\cdot$  Hot air and IR drying systems  $\cdot$  Industry service suppliers  $\cdot$  Test equipment  $\cdot$  UV lamps and curing systems

DRAABE Humidification W: www.draabe.com

Dragon Foils Limited W: www.dragonfoils.com/

Dropjet Makina Kimya San. Ltd. Sti. W: www.dropjet.com

Drytac W: drytaccoating.com/

Dunafin Kft. W: www.delfortgroup.com

Dunmore W: www.dunmore.com

DuPont de Nemours (Deutschland) GmbH W: www.cyrel.eu



DURICO C & T, INC Oedap 6-gil, 33, Sangju-si, Gyeongbuk, 37240, Korea T: (+82) 025258405 E: polystar@durico.co.kr W: www.durico.co.kr

Labels

• In-mold label materials • Pressure-sensitive films • Security materials • VIP/thermal materials

Durst Image Technology US W: www.durstus.com



Durst Phototechnik AG Julius-Durst-Str. 4, Brixen, BZ, 39042, Italy T: (+39) 0472810111 E: info@durst.it W: www.durst-online.com

Labels Flexible packaging

Digital presses

Dyna-Tech Adhesives, Inc. W: www.dyna-techadhesives.com

Dynic UK Ltd W: www.dynic.co.uk

ebeam Technologies W: www.comet-ebeam.com

ECKART GmbH W: www.eckart.net

Edale Ltd W: www.edale.com

Edson International W: www.edson-international.com

Edwards Label W: www.edwardslabel.com

EFI W: www.efi.com

El Empaque+Conversion W: www.elempaque.com

ElastiTag® - Bedford Industries W: www.elastitag.com

Electro Optic Werkzeugtechnik GmbH W: www.electro-optic.de

Electromatic Equipment Co, Inc W: www.checkline.com

Eltosch Grafix GmbH W: www.eltosch-grafix.com

Emax Label Solutions W: emaxlabels.com

Encres Dubuit W: www.encresdubuit.com Enercon Industries Corporation W: www.enerconind.com/treating

Enprom

W: www.mecavela.com

Enterprise Print Management Solutions W: www.entpms.com

Episcan W: www.episcan.ie

EPS Materials W: www.epscca.com/en/index.html

Epson America Inc. W: proimaging.epson.com

Ercon Inc.

W: www.erconinc.com



Erhardt + Leimer GmbH Leitershofen/Augsburg, Albert-Leimer Platz 1, Stadtbergen, 86391, Germany T: (+49) 82124350 E: info@erhardt-leimer.com W: www.erhardt-leimer.com

Labels Flexible packaging

 $\bullet$  Inspection equipment  $\bullet$  Splicing equipment  $\bullet$  Test equipment  $\bullet$  Web cleaning systems  $\bullet$  Web guiding and tension control

ERREPI S.r.l. W: www.erre-pi.it

Esko W: www.esko.com



ESON CZ s.r.o. Karlická 457, Lety, 25229, Czech Republic T: (+420) 257830039 E: eson@eson.cz W: www.eson.cz

Labels

• Cylinders, printing and magnetic • Dies and tooling (rotary and flatbed)

Esterlam International Ltd W: www.esterlam.com

ETI Converting Equipment W: www.eticonverting.com



### CUSTOMISED INDUSTRIAL INKIET SOLUTIONS FOR YOUR APPLICATION

Inkjet Solutions offer monochrome or CMYK inkjet print engines for retrofitting to existing narrow and mid web printing presses.

For more information contact us today



www.inkjetsolutions.co.uk Tel: +44 (0) 1733 235 533 Email: info@inkjetsolutions.co.uk

### Less Stopping, More Production

KTI is a world-class manufacturer of automatic splicers and turret rewinders. KTI equipment is designed to be easily customizable to individual requirements. With precise engineering, durable solid steel plate construction and operator friendly designs fit for the global market, KTI is the answer to non-stop production.

### **KTI Equipment Benefits Include**

- Eliminating downtime for roll changes
- Reduced material waste
- Increased production
- Reliable operations
- And much more!

### **KTI has a NEW WEBSITE!**

Visit www.ktiusa.com to learn more about KTI and the web converting equipment that can save you time and money!



815-624-8989 info@ktiusa.com www.ktiusa.com

## Flexographic INK TESTING



**FLEXIPROOF 100** Press quality proofs



**K LOX PROOFER** Quick and easy



AUTO K LOX PROOFER Repeatable proofs

ESIPROOF Portable proofer

To find out how our range of flexo equipment can benefit your company, contact:



RK PrintCoat Instruments Ltd. Litlington, Royston, Herts SG8 0QZ UK Tel: +44 (0)1763 852187 Fax: +44 (0)1763 852502 E-mail: sales@rkprint.com www.rkprint.com

## **101** reasons to choose Vetaphone CORONA & PLASMA



sales@vetaphone.com · www.vetaphone.com

**Etiquettes Plus** 

W: www.etiquettesplus.com

Etirama Industria de Maquina Ltd W: www.etirama.com.br



### EUROMAC

Strada Statale 31 - 6,, Villanova Monferrato, Alessandria, 15030, Italy T: (+39) 0142483195 E: euromac@euromacslitters.com W: www.euromacslitters.com

Labels Flexible packaging

Finishing equipment, slitters and rewinders • Inspection equipment

**Evonik Corporation** W: www.tego-rc.com

Excelitas Technologies Corp. W: www.excelitas.com

EyeC GmbH W: www.eyec.de

FAES AG W: www.faes.com

Fag Graphic Systems SA W: www.fag.ch

Fangda Packaging Co., Ltd. (Hebei, China) W: www.fangdapack.com

Far East Yu La Industry Limited W: www.sinofoils.com

Felins USA W: www.felins.com

Felix Boettcher GmbH & Co W: www.boettcher-systems.com

Ferrarini & Benelli srl W: www.ferben.com



### FFEI

The Cube, Maylands Avenue, Hemel Hempstead, Hertfordshire, HP2 7DF, United Kingdom T: (+44) 1442213440 E: marketing.comms@ffei.co.uk W: www.ffei.co.uk Twitter: @ffei ltd

Labels Flexible packaging

• 3D technologies: imaging, prototyping and printing • Barcode systems • Coding and marking • Color management and control • Color proofing equipment • Digital converting equipment • Digital presses • Fabric label materials • Inks • Label overprinters and print-apply systems · MIS software Prepress systems

### Fife-Tidland GmbH W: www.maxcess.eu



### FINAT

Laan Copes van Cattenburch, 79, The Hague, 2585 EW, Netherlands T: (+31) 703123910 E: info@finat.com W: www.finat.com Twitter: @finatcom

Labels

Trade associations

**Finjetchemical Industries Ltd** W: www.finjetchemical.com

Fix-A-Form Engineering Solutions LLC W: www.fix-a-form.com

FLEXcon Company, Inc. W: www.flexcon.com

Flexo Concepts W: www.flexoconcepts.com

Flexo Label Advantage Group LLC (FLAG) W: www.flagadvantage.com

## FLEXO WASH

### Flexo Wash ApS

Grenavej 631K, Skodstrup, 8541, Denmark T: (+45) 86993631 E: info@flexowash.com W: www.flexowash.com

Labels Flexible packaging

Anilox rolls-press cleaning systems

FlexoExport Ltd W: www.flexo.com

Flexographic Technical Association (FTA)/ **FLEXO Magazine** W: www.flexography.org

Flexomaid W: www.flexomaid.com

FLEXOR (EMIS) Ltd W: www.flexor.pl

Flexpol Sp. z o.o W: www.flexpol.pl



### Flint Group

Gutenbergsgaten, Box 1003, Trelleborg, Skåne, 23126, Sweden T: (+46) 041059302 E: niklas.olsson@flintgrp.com W: www.flintgrp.com

 Adhesives • Color management and control • Ink control-dispensing systems  $\boldsymbol{\cdot}$  Inks  $\boldsymbol{\cdot}$  Plates and platemaking equipment • Security inks-varnishes • Sleeve systems

FLXON W: www.flxon.com

FMS USA, Inc. W: www.fms-technology.com

Focus Label Machinery Ltd W: www.focuslabel.com

Foil & Specialty Effects Association (FSEA) W: www.fsea.com

Folex AG W: www.folex.com

Labels Flexible packaging



## **REA** VERIFIER

## **REA** JET

4.5

### Code Quality makes the difference!









Know how Made in Germany

### REA offers a complete product range of Industrial Coding and Marking Systems as well as Barcode Verifiers from development to production. Everything from a single source since 30 years.

### **REA VERIFIER**

- Code Verification (ISO/IEC 15415 and ISO/IEC 15416)
- Error avoidance by standardized checking
- Prepared for demand of pharma Industry
- Quality check according to retail demands
- Integrated GS1 DataMatrix Data Structure Check

### **REA JET**

- Realtime Serialization
- Top quality 2D Codes
- Guided GS1 Data Input
- Perfect platform for Track & Trace projects
- Digital inline printing of variable data
- Printing speed of up to 762 m/min

### **REA Elektronik GmbH**

Teichwiesenstrasse 1 64367 Muehltal Germany T: +49 (0)6154 638 0 E: info@rea-jet.de info@rea-verifier.de

www.rea-jet.com www.rea-verifier.com Folien Fischer AG W: www.fofi.ch

Foshan Chancheng Hengyi Plastic Color Printing Factory W: www.hengyicy.com

Four Pees W: www.fourpees.com

Fox Valley Technical College W: www.fvtc.edu/print

FRANCIS BUEHLER AG W: www.francisbuehler.ch

Franklin Adhesives & Polymers W: www.franklinadhesivesandpolymers.com

Fraser Anti Static Techniques Ltd W: www.fraser-antistatic.com

Frimpeks A.S. W: www.frimpeks.com.tr

Fuji Shoko Co. Ltd. W: fuji-shoko.co.jp/en/

FUJIAN TAIXING SPECIAL PAPER CO, LTD W: www.fjtaixing.com

Fujicopian Co., Ltd. (Europe) branch W: www.fujicopian.com

**Fujifilm Europe GmbH** W: www.fujifilm.eu/print

FULL Systembau GmbH W: www.fuell-dispensing.com

Futec Europe GmbH W: www.futeceurope.com

Future Pack / KOREA W: www.futurepack.kr

G Technologies Srl W: www.gtechnologies-srl.com

G&K-Vijuk Intern. Corp. W: www.guk-vijuk.com

Gainscha International Co LTD W: www.grinter.hk

Gallus Ferd. Rüesch AG W: www.gallus-group.com

Garvey W: www.garveyproducts.com GARWARE POLYESTER LTD. W: www.garwarepoly.com

**GB Flexo Equipment W:** www.gbflexo.com

General Srl W: www.general.co.jp/english/

Gerhard Bartling GmbH & Co KG W: www.bartling.de



...engineering UV

GEW (EC) Ltd Crompton Way, Crawley, West Sussex, RH10 9QR, United Kingdom T: (+44) 1737824500 E: sales@gewuv.com W: www.gewuv.com

Labels

 $\boldsymbol{\cdot}$  Hot air and IR drying systems  $\boldsymbol{\cdot}$  UV lamps and curing systems

GIC (GRAPHIC INTERFACE CONCEPT) W: www.gic-online.com

GIETZ AG W: www.gietz.com

Global Graphics Software W: www.globalgraphics.com

Global Vision Inc W: www.globalvisioninc.com

Globe-Tek Corporation W: www.globe-tekcorp.com

Globus International W: www.globusinternational.in

Glunz & Jensen W: www.glunz-jensen.com

GMG Americas W: www.gmgcolor.com

GN Flexo W: www.gnflexo.co.uk

Godex International Americas W: www.godexintl.com/us

Golden Hontec Laser (Donnguan Hontec Machinery) W: www.goldenlaser.cc Gonderflex International Inc W: www.gonderflex.com

Goss International Europe B.V. W: www.gossinternational.com

Graficon Maschinenbau AG W: www.graficon.ch

Grafikontrol North America W: www.grafikontrol.com

Grafisk Maskinfabrik W: www.gm.dk

Grafityp Selfadhesive Products W: www.grafityp.com

Grafotronic AB W: www.grafotronic.se

Granwell Products / Polylith W: www.granwell.com

Graphbury Smart Solutions, LLC W: www.graphbury.com

Graphi Mecc srl W: www.graphimeccgroup.it

Graphic Innovators Inc/ Lighthouse Consulting & Restoration Services W: www.graphicinnovators.com

Graphtec Corporation W: www.graphteccorp.com

Graymills Corporation W: www.graymills.com



### Paper and Film

Innovative global suppliers of materials that create solutions.

Griff Paper and Film 275 Lower Morrisville Road, Fallsington, PA, 19054, United States T: 215-428-1075 E: inquiry@paperandfilm.com W: thegriffnetwork.com

Labels Flexible packaging

• Cold foiling • Metalized substrates • Pressuresensitive films • Pressure-sensitive papers • Release liners

GSB-Wahl GmbH sharing TLS Anilox GmbH W: www.gsb-wahl.de



GSE Dispensing Mercuriusweg 17, Brummen, 6971 GV, Netherlands T: (+31) 575568080 E: info@gsedispensing.com W: www.gsedispensing.com Twitter: @gsedispensing

Labels Flexible packaging Folding cartons

• Barcode systems • Color management and control • Color proofing equipment • Ink control-dispensing systems • Inspection equipment • Test equipment • Track and trace solutions

### GSM Graphic Supplies & Machinery Ltd W: www.gsmuk.com

GTI Graphic Technology, Inc. W: www.gtilite.com

Guangdong Guanhao High Tech Co Ltd W: www.guanhao.com

Guangzhou Manborui Material Technology Co Ltd W: www.china-mbr.com

Gulton Inc. W: www.gulton.com

H.B. Fuller Europe GmbH W: www.hbfuller.com/tapes-and-labels

H.S. Industries Co., Ltd W: www.hsi.co.kr

Hamamatsu Photonics W: www.hamamatsu.fr

Hangzhou Todaytec Digital Co., Ltd. W: www.todaytec.com.cn

Hanita Coatings W: www.hanitacoatings.com

Hans-Gronhi Graphic Technology Company Limited W: www.gronhi.com

Hansol Paper Co Ltd W: www.hansolpaper.co.kr



Hapa AG

Chriesbaumstrasse 4, Volketswil, 8604, Switzerland T: (+41) 433993200 E: info@hapa.ch W: www.hapa.ch

Labels Flexible packaging Folding cartons

• Barcode systems • Coding and marking • Digital presses • Flexo presses • Inks • Label overprinters and print-apply systems • Security inks-varnishes

Harper Corporation of America W: www.harperimage.com

HC Miller Press W: www.hcmillerpress.com

Heartland Adhesives W: www.i-coatings.com

Heartland Products Group W: www.heartlandproductsgroup.com

HEIGHTS (UK) Limited W: www.heights.com

Henkel Corporation W: www.na.henkel-adhesives.com/tapesandlabels

Heraeus Noblelight GmbH W: www.heraeus-noblelight.com

Herma GmbH W: www.herma-material.com

Herzog + Heymann W: www.herzog-heymann.com



Holfeld Tool & Die Ltd Johnstown Avenue, Dun Laoghaire, Co. Dublin, Ireland T: (+353) 12857002 E: holfeldtool@eircom.net W: www.htd.ie

Labels

• Cylinders, printing and magnetic • Dies and tooling • (rotary and flatbed) • Hot stamping-embossing cylinders

Holostik India Ltd W: www.holostik.com

Holtby Williams International W: www.holtbywilliams.com

Honle UV America W: www.honleuv.com

Hop Industries Corp. W: www.hop-syn.com

Hoya Candeo Optronics Corp. W: www.hoyacandeo.co.jp



HP Indigo Kiryat Weixmann, PO Box 150, Rehovot, 76101,

Israel T: (+972) 89381818 E: moniquec@hp.com W: hp.com/go/labelsandpackaging Twitter: @hpindigo

Labels Flexible packaging Folding cartons

Digital presses

Hu Zhou HengXin Label manufacture Co Ltd W: www.hengxin-label.com

HUECK FOLIEN GmbH W: www.hueck-folien.com

Hunkeler AG W: www.hunkeler.ch

Hurkimsa Kimya San. W: www.hurkimsa.com

Hybrid Software Inc. W: www.hybridsoftware.com

Hyden Packaging Pvt Ltd W: www.ahyden.com



Icap-Sira Chemicals And Polymers Spa Via Corridoni 19Parabiago (MI), 20015, Italy T: (+39) 0331496316 W: www.icapsira.com/

Labels

 Adhesives • Fabric label materials • Pressuresensitive films • Pressure-sensitive papers • Pressuresensitive tapes

Ichemco s.r.l. W: www.ichemco.it

IEEC POWER ELECTRONICS PVT. LTD W: www.ieecpe.com IEEC-PBJ Industrial electronics Pvt. Ltd W: www.ieecpbj.com

IGF Europe NV (International Graphic Films) W: www.igf-europe.com

IGT Testing Systems W: www.igt.nl



IIMAK Europe Liesdonk 5b, Geel, B - 2440, Belgium T: (+32) 014579800 E: sales@iimak.be W: www.iimak.eu

Labels Flexible packaging

Coding and marking 
 Inks 
 Security inks-varnishes
 Thermal transfer ribbons

Imada Inc W: www.imada.com

IMASS W: www.imass.com

Impression Technology Europe W: www.impressiontechnologyeurope.com

IN-CORE SYSTEMES W: www.incore-systemes.com/

Industrial Inkjet Ltd Unit 3, Meridian, Buckingway Business Park, Swavesey, Cambridgeshire, CB24 4AE, United Kingdom

T: +44 (0) 1954 232 023 E: sales@industrialij.com W: www.industrialij.com

Labels Flexible packaging Folding cartons

• Digital presses • Flexo presses • Ink controldispensing systems • Inks • Security inks-varnishes

Infinity Foils, Inc- UEI Group Company W: www.infinityfoils.com

Infinity Tapes W: www.infinitytapes.com

Infopack W: www.infopack.es

Inglese S.r.l W: www.inglesesrl.com



#### **Inkjet Solutions Limited**

13 Holkham Road, Orton Southgate, Peterborough, Cambs, PE2 6TE, United Kingdom T: (+44) 1733235533 E: info@inkjetsolutions.co.uk W: www.inkjetsolutions.co.uk/

Labels Flexible packaging

• Barcode systems • Coding and marking • Desktop printers • Digital presses • Ink control-dispensing systems • Label overprinters and print-apply systems

Inkstar Office Appliance Factory of Tianjin W: www.inkstar.cn

Innovia Films W: www.innoviafilms.com

INOMETA GmbH W: www.inometa.de

Integration Technology Ltd (ITL) W: www.uvintegration.com

Intercoat W: www.intercoat.de

Interflex Laser Engravers W: www.laserengrave.com

International Financial Services W: www.ifsc.com

INX International Ink Co. W: www.inxinternational.com

IOT Innovative Oberflachentechnolgien GmbH W: www.iot-gmbh.de

IPT Digital LLC W: www.iptdigital.net

ISRA Vision Parsytec W: www.isravision.com



IST METZ GmbH Lauterstrasse 14-18, Nuertingen, D-72622, Germany T: (+49) 702260020 E: info@ist-uv.com W: www.ist-uv.com

Labels Flexible packaging Folding cartons

 $\boldsymbol{\cdot}$  Hot air and IR drying systems  $\boldsymbol{\cdot}$  UV lamps and curing systems

iSys Label W: www.isys-label.com

Italian Manufacturers Association for the Graphic, Converting and Paper Industry (ACIMGA) W: www.acimga.it/en

Italnastri S.p.A W: www.italnastri.it

Italstick Self Adhesive Materials & Coatings W: www.italstick.com

ITASA W: www.itasa.es

ITD S.r.l W: www.textil.it

Itochu Deutschland GmbH W: www.labelexpo-europe.com/www.itochu. com%20%20/%20%20www.bonset.com

ITW Dynatec GmbH W: www.itwdynatec.com

ITW Foils W: www.itwfoils.com

ITW Thermal Films W: www.itwthermalfilms.com

Iwasaki International Inc. W: www.itk-iii.co.jp

Iwatsu Electric Co Ltd W:

J&J Converting Machinery W: www.jjconvertingmachinery.com

Jänecke+Schneemann Druckfarben GmbH W: www.js-druckfarben.de

Jalema Filing Systems W: www.graphicartsfiling.com

Japan Pulp & Paper GmbH W: www.jpd.de

Jelight Company Inc W: www.jelight.com

Jemmco, LLC W: www.jemmco.com

Jet USA Corporation W: www.jetusa.com

Jiaozuo Zhuorim Digital Material Co Ltd W: www.zhuorim.com Jindal Films Americas W: www.jindalfilms.com

JM Heaford Ltd W: www.jmheaford.com



Jujo Thermal Ltd. PO Box 92, Kauttua, FI-27501, Finland T: (+358) 01030300 E: jujosales@jujothermal.com W: www.jujothermal.com

Labels

Label papers • VIP/thermal materials

Jurmet Sp. z.o.o. Sp.K. W: www.jurmet.com.pl

JUST Normlicht GmbH W: www.just-normlicht.de

JV Imaging Solutions, Inc W: www.jvis-flexo.com

K Laser Technology (USA) Co., Ltd. W: www.coldfoil.com

Kanzaki Specialty Papers W: www.kanzakiusa.com

KANZAN Spezialpapiere GmbH W: www.kanzan.de

Karlville Development LLC W: www.karlville.com

Kasha Ribbon W: www.kasha.com.tr

KBA-MePrint AG W: www.kba-meprint.com

Keco Coatings W: www.kecocoatings.com

KELVA W: www.kelva.com

KETT US W: www.kett.com

Key2Print sp z.o.o. W: www.key2print.com/

King Label Adhesive Products Co., Ltd W: www.kinglabel.com Kirk-Rudy, Inc. W: www.kirkrudy.com

Klöckner Pentaplast W: www.kpfilms.com

Klear Plastic Ventures, LLC W: :www.klearplasticventures.com

Koan Hao Technology Co.,Ltd W: www.koanhao.com



Kocher + Beck GmbH +Co Dieselstrasse 6Pliezhausen, 72124, Germany T: (+49) 71279785703 E: sales@kocher-beck.com W: www.kocher-beck.com

📕 Labels 📕 Flexible packaging

 Cutting/stamping machines • Cylinders, printing and magnetic • Dies and tooling (rotary and flatbed)
 Hot stamping-embossing cylinders

Kodak W: www.kodak.com/go/flexcelnx

Kompac Technologies W: www.kompactech.com

Konica Minolta Business Solutiona U.S.A. Inc. W: www.kmbs.konicaminolta.us

KOR Engineering Inc. W: www.kormachinery.com

Kor-Chem, Graphic Arts Division W: www.kor-chem.com

KPG (Europe) Limited W: www.kpgeurope.com

KROENERT W: www.kroenert.com

KTI- A Quantum Design Company W: www.ktiusa.com

Kumar Labels W: www.kumarlabels.com

Kunshan Formula Coating Technology Co., Ltd. W: www.formulacoating.com

KURZ, LEONHARD, Stiftung & Co. KG W: www.kurz.de KVGO

W: www.labelexpo-europe.com/www.kvgo.n

L C Trade W: www.lctradefrance.com



### Label Academy

Metro Building, 1 Butterwick, London, W6 8DL, United Kingdom T: (+44) 2088462700 E: support@label-academy.com W: www.label-academy.com

Labels Flexible packaging Folding cartons

### Label Pack

W: www.labelsandlabeling.com/www.labelpack.lat

Label Traxx W: www.labeltraxx.com



Labelexpo Global Series Metro Building, 1 Butterwick, London, W6 8DL, United Kingdom T: (+44) 2088462700 E: sales@labelexpo.com W: www.labelexpo.com Twitter: @labelexpo

Labels Flexible packaging Folding cartons

Trade associations

Labelmate LLC. W: www.labelmate.com/europe



Labelmen Machinery Co. Ltd No. 9, Tin-Hu 3rd St., Kuei Shan District, Tao-Yuan City, 333, Taiwan T: (+886) 33183939 E: webmaster@labelmen.com W: www.labelmen.com

Labels

• Letterpress presses • Offset presses • Thermal transfer ribbons



Labels & Labeling magazine Metro Building, 1 Butterwick, London, W6 8DL, United Kingdom T: (+44) 2088462700 E: sales@labelsandlabeling.com W: www.labelsandlabeling.com Twitter: @labelsnlabeling

Labels Flexible packaging Folding cartons

Trade press



### Labeltech

via per Turbigo 17, Castano Primo, Milano, 20022, Italy T: (+39) 0331882289 E: info@labeltech.it W: www.labeltech.it Twitter: @labeltech\_sas

#### Labels

• Digital converting equipment • Finishing equipment, slitters and rewinders • Inspection equipment • Roll handling equipment

Lake Image Systems Ltd W: www.lakeimage.com

Lamp Tech W: www.lamp-tech.com

Lana Papier Spéciaux II W: www.lanapapier.fr

LARTEC - Flexible Dies W: www.lartec.com.es

Laser Art Studio Ltd.

W: www.laser-art.com

Laser Eco Clean W: www.laserecoclean.de

LasX Industries, Inc. W: www.lasx.com

LECTA W: www.torraspapel.com

Lederle Machine Company W: www.lederle.com

Lemmaco Kft W: www.lemmaco.com Lemorau W: www.lemorau.com

Lemu Talleres SA W: www.lemu.es

Leonardus S.r.l - Italy W: www.leonardus.it

Link Label Machinery Co Ltd W: www.linklabel.com

LINTEC Corporation W: www.lintec-global.com/

Lipi és társa Bt W: www.labelsandlabeling.com/lipi.tech/

Lombardi Converting Machinery Srl W: www.lombardi.it

Longford International Ltd W: www.longfordint.com



LTHD 70 Ardealului Str., Timisoara, Timis, 300153, Romania T: (+40) 256201273 E: Ithd@Ithd.com W: www.lthd.com

 $\bullet$  Digital converting equipment  $\bullet$  Industry service suppliers  $\bullet$  Label papers

Lucky Huaguang Graphics Co Ltd W: www.hgfilm.com.cn

Luminescence International Ltd W: www.luminescence.co.uk

Luminite Products Corp. W: www.luminite.com

Lundberg Tech A/S W: www.lundbergtech.com

LUSTER LightTech (Beijing) Co. Ltd. W: www.lusterinc.com

Luxul FZC W: www.luxulfzc.com

m print morlock gmbh & co. kg W: www.mprint.de

Mühlbauer GmbH & Co. KG W: www.muehlbauer.de Maan Engineering BV W: www.maangroup.nl/innovations/ inlinerless/?lang=en

MacDermid Printing Solutions W: www.macdermid.com/printing

Mactac W: www.mactac.com/rolllabel

Magnum Inks & Coatings W: www.magnuminks.com

MAGPOWR W: www.maxcessintl.com

Mahlo America Inc. W: www.mahloamerica.com

Manucor Spa W: www.manucor.com

Marabu GmbH & Co. KG W: www.marabu-inks.com

Mark Andy W: www.markandy.com

Mark Products Corp W: www.mpc800.com

Markem-Imaje CSAT GmbH W: csat.markem-imaje.com

marks-3zet GmbH & Co. KG W: www.marks-3zet.de

Martignoni Elettrotecnica Srl W: www.martignoni-srl.com

Martin Automatic Inc W: www.martinautomatic.com

Mastercorp Group W: www.mastercorp.com.br

Matho GmbH W: www.matho.com

Matik, Inc. W: www.matik.com

Matsui International W:

Matthias Paper Corporation W: www.matthiaspaper.com

Max Daetwyler Corporation W: www.daetwyler-usa.com

MAX International Converters Inc W: www.maxstick.com

Max Speciality Films Ltd W: www.maxspecialityfilms.com

Maxcess International W: www.maxcessintl.com

MBO America W: www.mboamerica.com

MCS, Inc. W: www.mcspro.com

MDV GmbH W: www.mdv-group.com

Meccanica Maggiore W: www.mmaggiore.it

Meech International W: www.meech.com



MELZER maschinenbau GmbH

Ruhrstr. 51-55, Schwelm, 58332, Germany T: (+49) 2336929280 E: sales@melzergmbh.com W: www.melzergmbh.com

Labels

• Cutting/stamping machines • Fabric label presses • Finishing equipment, slitters and rewinders • Insertion/onsertion systems • Radio Frequency Identification (RFID)

Memjet Labels W: www.memjet.com

w. www.memjec.com

### 

Zone Industrielle, Ferrieres, 45210, France T: (+33) 238944200 E: merobel@merobel.com W: www.merobel.com

Labels

 $\boldsymbol{\cdot}$  Drive and control systems  $\boldsymbol{\cdot}$  Web guiding and tension control

### MGI

W: www.mgi-fr.com

Michelman W: www.michelman.com/printing-%26-packaging/

Microplex W: www.microplex-usa.com Microscan Systems, Inc W: www.microscan.com

Mid American Rubber W: www.midamericanrubber.com

Mida Maquinaria W: www.midamaquinaria.com

Midway Rotary Die Solutions W: www.midwayrotary.com

MIIP W: www.miip.ca

Mimaki Europe BV W: www.mimakieurope.com

Minus Nine Technologies W: www.minus9.com

Mirage Inks Ltd W: www.mirageinks.com



Mitsubishi HiTec Paper Niedernholz 23, Bielefeld, 33699, Germany T: (+49) 52120910 E: info.mpe@mitsubishi-paper.com W: www.mitsubishi-paper.com

Labels

• Card and board materials • Label papers • Linerless and self-wound labels • Pressure-sensitive papers • Security materials • VIP/thermal materials

Miyakoshi Printing Machinery., Co. Ltd. W: www.miyakoshi.co.jp

MoistTech Corp. W: www.moisttech.com

Momentive Performance Materials W: www.momentive.com

Mona Equipments W: www.monaequipments.com

Mondi Akrosil, LLC W: www.mondigroup.com

Mondi Consumer Packaging GmbH W: www.mondigroup.com

Monotech Systems Ltd W: www.monotech.in

MPI Release W: www.mpirelease.com



PRINTING PRODUCTIVITY

MPS Systems B.V. Delta 100, 6825 MV Arnhem, PO Box 3152, 6802 DD Arnhem, Arnhem, 6802, Netherlands T: (+31) 267601538 E: i.brinkman@mps4u.com W: www.mps4u.com Twitter: @mpssystemsbv

Labels Flexible packaging

 Cold foiling • Digital converting equipment • Digital presses • Flexo presses • Offset presses • Screen printing equipment

MSM W: www.msm-paper.co.uk

Multi-Plastics, Inc. W: www.multi-plastics.com

Multifeeder Technology Inc W: www.multifeeder.com

Multitec Aids Pvt Ltd W: www.multitec.in

Munksjö W: www.munksjo.com

Mutoh Belgium n.v. W: www.mutoh.eu

Nagel Paper W: www.nagelpaper.com

Nakata USA W: itro-usa.com

Nanovis GmbH W: www.nanovis.ch

NAStar Inc. W: www.nastar-inc.com

Nastrificio di Cassano SpA W: www.nastrificiodicassano.com

National Paper Company W: www.nationalpapercompany.com

Natural Ink W: www.naturalink.com.mx

Nazdar Ink Techologies W: www.nazdar.com

NDC Spray Coating System Fabricating Co., Ltd. W: www.ndccn.com

NEPATA GmbH W: www.nepata.com Neryos SAS W: www.neryos.com

NeuraLabel Printing Solutions W: www.drumlabelprinter.com

New Eurografica SRL W: www.eurografica.mi.it

New Protech Srl W: www.newprotech.it

New Solution S.A. W: www.newsolution.eu

### NewfoilMachinesLtd

### Newfoil Machines Limited

Moorhey Engineering Works, Moorhey Street, Oldham, Lancashire, OL4 1JE, United Kingdom T: (+44) 1616270550 E: sales@newfoilmachines.co.uk W: www.newfoilmachines.co.uk

#### Labels

 Digital converting equipment • Digital presses
 Hologram equipment • Hot foil machinery • Insertion/onsertion systems • Label overprinters and print-apply systems

Nicoat W: www.nicoat.com

Nikka Research Deutschland GmbH W: www.nikka-research.com

Nilpeter A/S W: www.nilpeter.com

Novamelt W: www.novamelt.com

Novation, Inc. W: novation-inc.com

NPPS - Flexo for Hire W: www.npps1.com

Nuova GIDUE S.r.l W: www.gidue.com

### **OKI Europe Ltd**

Blays House, Wick Road, Englefield Green, Egham Surrey, TW20 OHJ, United Kingdom T: (+44) 2082192183 E: marketing@okieurope.com W: www.okieurope.com

#### Labels

 Desktop printers • Digital converting equipment
 Digital presses • Finishing equipment, slitters and rewinders • Label applicators • Label dispensers
 Label overprinters and print-apply systems • Wraparound films Omet Srl W: www.printing.omet.com

One Box Vision W: www.oneboxvision.com

Onemech Industries CO.,PTE LTD W: www.onemech.net

**Opakowanie W:** www.opakowanie.pl



### Open Data Srl

Via Anticolana KM. 0,300, Anagni, (FR), 3012, Italy T: (+39) 077577681 E: info@openitaly.com W: www.openitaly.com

Labels

• Barcode systems • Hand-held labeling systems • Label applicators • Label dispensers

ORTHOTEC, WAN AN PRECISE MACHINERY WORKS CO., LTD. W: www.orthotec.com.tw

Oxford Instruments W: www.oxford-instruments.com

Pack Vision BV W: www.packvision.nl

Packers W: www.packers.co.kr

Palmetto Imaging Technology, LLC W: www.pitsc.com

Pamarco W: www.pamarco.com

Pantec GS Systems AG W: www.pantec-gs.com

Pantron Automation, Inc W: www.pantron.com

Pap'Argus W: www.pap-argus.com

Paper Resources, Inc. W: www.paperresources.com

Papier & Druck W: www.papierunddruck.eu/

Paragon Inks Ltd W: www.paragoninks.co.uk PASACO Coated Papers Co Ltd W: www.pasaco.pl

PC Industries W: www.pcindustries.com

PCMC - Paper Converting Machine Company W: www.pcmc.com

PCT Engineered Systems LLC W: www.teampct.com

PDC International Corporation W: www.pdc-corp.com

Perspex Kft W: www.perspex.hu

Phidastien International W: www.phidastien.com

Phoenix (Tilia Labs) W: www.ss-c.eu



### Phoseon Technology

7425 NW Evergreen Parkway, Hillsboro, OR, 97124, United States T: (+1) 5034396446 E: info@phoseon.com W: www.phoseon.com

Labels Flexible packaging Folding cartons

 $\boldsymbol{\cdot}$  Hot air and IR drying systems  $\boldsymbol{\cdot}$  UV lamps and curing systems

PIASC W: piasc.org

Pillar Technologies - An ITW Company W: www.pillartech.com

Pinewood Label Systems Limited W: www.pinewoodlabels.com



Polar-Mohr Hattersheimer Str. 25, Hofheim, 65719, Germany T: +49 6192 204 0 E: polar@polar-mohr.com W: www.polar-mohr.com

• Cutting/stamping machines • Dies and tooling (rotary and flatbed) • Finishing equipment, slitters and rewinders



GULF PRINT & PACK 2017 www.gulfprintpack.com

27 - 30 March• Dubai

### EXHIBIT AT THE BIGGEST PRINT SHOW IN THE MIDDLE EAST & NORTH AFRICA

Gulf Print & pack is the largest print packaging show in the Middle East & North Africa. The four day show will take place on the 27 -30 March 2017, Dubai International Convention and Exhibition Centre.

BOOK YOU STAND TODAY AND SECURE YOUR STAND LOCATION: WWW.GULFPRINTPACK.COM

<b>W:</b> www.polibak.com.tr	
Poligrafika W: www.poligrafika.pl	Print Pr
	Mercuriu <b>T:</b> +31 (
Polygraphica Equipment Ltd W: www.polygraphica.com	E: info@ W: www
	Calan
PolymagTek Inc.	<ul> <li>Color r</li> <li>equipme</li> </ul>
W: www.polymagtek.com	equipme
Polymount International W: www.polymount-int.nl	Print Sy W: www
Polyonics	Printab
W: www.polyonics.com	<b>W</b> : www
Prati s.r.l.	PrintCo
W: www.praticompany.com	<b>W</b> : www
Praxair Surface Technologies	Printex
W: www.praxair.com/printing	<b>W</b> : www
Precise Graphic India Pvt Ltd	Printgra
W: www.pgitech.in	<b>W</b> : www
Precision AirConvey Corp	Printing
W: www.airconvey.com	<b>W</b> : www
Preco, Inc.	Printun
W: www.precoinc.com	<b>W</b> : www
Presstek	Prisma
W: www.presstec.co.za/	<b>W</b> : www
Prime UV Systems, Inc.	Pro-Cut
W: www.primeuv.com	<b>W</b> : www
PrimeBlade Sweden AB	Process
W: www.primeblade.se	<b>W</b> : www
	Proofta



Primera Technology, Inc Two Carlson Parkway North, Ste 375, Plymouth, MN, 55447-4446, United States T: (+1) 7634756676 E: sales@primera.com W: www.primeralabel.com

Labels

• Barcode systems • Desktop printers • Digital presses • Finishing equipment, slitters and rewinders • Label applicators



Print Proof Solutions B.V. Mercuriusweg 17, 6971 GV Brummen, Netherlands I: +31 (0) 575 - 568 020 E: info@printproofsolutions.com W: www.printproofsolutions.com

 Color management and control · Color proofing equipment · Ink control-dispensing systems · Test equipment

Print Systems W: www.printsystems.pl

PrintabLED W: www.printabled.it

PrintConcept UV-Systeme GmbH W: www.printconcept-uv.de

**Printex Srl** W: www.printexsrl.com

Printgraph SpA W: www.printgraph.it

Printing Innovation AG W: www.printing-innovation.com

Printum GmbH W: www.printum.de

Prisma Srl N: www.prismavigevano.com

Pro-Cut Dies Ltd W: www.pro-cutdies.co.uk

Process Sensors Corporation W: www.processsensors.com

Prooftag
W: www.prooftag.net

ProPhotonix W: www.prophotonix.com

Prototype & Production Systems, Inc./ DICE Graphic Technologies W: www.prototypesys.com

Provident W: www.providentgrp.com

Pulse Roll Label Products Ltd W: www.pulserl.com

PURE Labels (Elevate Packaging, Inc) W: www.purelabels.com QSPAC Industries, Inc W: www.qspac.com

QuadTech Inc. W: www.quadtechworld.com

Quality Discount Press Parts & Equipment W: www.qualitydiscount.com

R.C. Lamps S.n.c. / VTI W: www.rclamps.it

Radior (France) S.A.S W: www.radior.net

Railex (Filing) Ltd W: www.railexfiling.co.uk



Ravenwood Packaging Ltd Unit 1, Brunel Business Court, Eastern Way, Bury St Edmunds, Suffolk, IP32 7AB, United Kingdom T: (+44) 1284749144 E: sarah@ravenwood.co.uk W: www.ravenwoodpackaging.com Twitter: @ravenwoodpack

Labels Flexible packaging

• Coating-laminating machines • Label applicators • Linerless and self-wound labels

RayPress Corporation W: www.raypress.com

Re S.p.a. Controlli Industriali W: www.re-spa.com

REA Elektronik GmbH W: www.rea.de

Rea Jet W: www.reajetus.com

Rebo Bv W: www.rebosystems.com

Reconcile Engineering Ltd. W: www.reconcileengineering.com



Recyl SAS 17, Rue de Montréal, ZI, Ville-la-Grand, 74100, France T: (+33) 450924868 E: info@recyl.fr W: www.recyl.com

Labels Flexible packaging Folding cartons
 Anilox rolls • Anilox rolls - press cleaning systems

Reel To Reel International Ltd W: www.reeltoreel.co.uk

Rena, a Neopost Brand W: www.renausa.com

Repacorp, Inc. W: www.repacorp.com

Resino Trykfarver A/S W: resino.dk

Retroflex Inc. W: www.retroflex.com



Ricoh Industrie France 144 Route de Rouffach, Wettolsheim,, 68920, France T: (+33) 0389204000 E: thermal.info@ricoh-industrie.fr W: www.ricoh-thermal.com

Labels

• Coding and marking • Label papers • Linerless and self-wound labels • Thermal transfer ribbons • VIP/ thermal materials

Rietstack W: www.rietstack.nl

Ritrama S.p.A. W: www.ritrama.com



RK Print Coat Instruments Ltd Abington Road, Litlington, Royston, Herts, SG8 0QZ, United Kingdom T: (+44) 1763852187 E: sales@rkprint.com W: www.rkprint.com

### Labels

• Color management and control • Color proofing equipment • Ink control-dispensing systems • Inks • Test equipment

ROCHEUX INTERNATIONAL W: www.rocheux.com

Rogers Corporation W: www.rogerscorp.com/rbak

Roland DG Benelux NV W: www.rolanddg.eu

Roll Cover Italiana S.r.L W: www.rollcover.it Roll-2-Roll Technologies LLC W: www.r2r-tech.com/

Rollem USA W: www.rollemusa.com/diecut

Rolling Optics W: www.rollingoptics.com

Rosas GmbH W: www.rosas-maschinenbau.de

Rossella S.r.L. W: www.rossella.it

Rossini North America, LLC W: www.rossini-na.com

Rotary Die Company Sp. z o.o. W: www.rotary.com.pl

Rotary Technology (Guangzhou) Co Ltd W: www.rotary-technology.com

Rotatek S.A. W: www.rotatek.com

ROTOCONTROL W: www.rotocontrol.com

Rotoflex W: www.rotoflex.com

Rotolificio Pugliese Srl W: rotolificiopugliese.com

Rotometal Sp z o.o. S.K. W: www.rotometal.pl

RotoMetrics W: www.rotometrics.com

Rowat Inks BV W: www.rowatinks.com

Royal Adhesives and Sealants W: www.craigadhesives.com/

Rti Digital W: www.rti-digital.com

## RUCO

RUCO Druckfarben, A.M. Ramp & Co GmbH Lorsbacher Strasse 28, Eppstein/Taunus, D-65817,

Germany T: (+49) 61983040 E: info@ruco-inks.com W: www.ruco-inks.com

Labels Flexible packaging

Inks

Ruttiman Trade AG W: www.ruettimannag.com/

Ryback & Ryback Inc. W: www.rybackandryback.com



Sales Srl Via Chivasso, 5 Rivoli, TO, 10098, Italy T: (+39) 0119571000 E: info@salesspa.com W: www.salesspa.com

Pressure-sensitive films 
 Pressure-sensitive papers

Sam Meccanica Srl W: www.sammeccanica.com

Sandon Global W: www.sandonglobal.com

Sanyo Corporation of America W: www.sanyocorpusa.com

Sappi W: www.sappi.com

SAScoat W: www.sascoat.com

Schobertechnologies GmbH W: www.schobertechnologies.de



Screen Europe Bouwerij 46, Amstelveen, 1185 XX, Netherlands T: (+31) 0204567800 E: emc@screeneurope.com W: www.screeneurope.com Twitter: @screeneurope

Labels

Digital presses • Plates and platemaking equipment
 Prepress systems

SDI W: www.sdinetwork.com

Seal King W: www.sealkingeurope.com

SECUTAC W: www.secutac.com

SEI Laser W: www.seilaser.com Seibert - PFV W: www.seibert-pfv.de

SEIDO Systems bvba W:

Selectra Srl W: www.selectrasrl.it

Serame W: www.serame.com

Sermar Machines Srl W: www.sermar.it

Shandong New Beiyang Information Technology Co., Ltd. W: www.newbeiyang.com

Shandong Taibao Anti-Counterfeiting Technology Products Co., Ltd W: www.zbtbjt.com

SHANGHAI ROCKY INDUSTRIAL CO.,LTD W: www.shrocky.com

Shanghai Jaour Hot Melt Adhesive W: www.jaour.com

Shanghai Jinda Plastic Co., Ltd. W: www.jdlabel.com

Shanghai Realtac Trading Company Ltd W: www.rightint.com

SHIKI MACHINE SUPPLY CORP. W: www.shiki-co.jp

Shun Zhe (Shanghai) Mechanical & Electrical Technology Co Ltd W: www.uvenergy.cn

Sibress W: www.sibress.com

Siegwerk Environmental Inks W: www.siegwerk.com

Siemens PLM / SIMATIC IT Preactor W: www.siemens.com/preactor

Sihl GmbH W: www.sihl.com

Siliconature S.P.A. W: www.siliconature.com

Simco-lon W: www.simco-ion.com

Simple Solutions and Innovations Inc W: www.ssiprintheads.com



Sinkotech Turkey YESILCE MAH. CELIK CAD. DEMIRBASSOK. No: 1, SEYRANTEPE KAGITHANE 34418 ISTANBUL, Turkey T: +90 212 325 00 70 E: cs@sinkotechusa.com W: www.sinkotech.com

Labels Elexible packaging Folding cartons

• Dies and tooling (rotary and flatbed) • Plate mounting equipment

SISTRADE ,Äi Software Consulting, S.A. W: www.sistrade.com

Sixtrue Srl W: www.sixtrue.com

SMAG (SRAMAG SAS) W: www.smag-graphique.com

SMI Coated Products Pvt Ltd W: www.smicoatedproducts.com

SNBC-Orient-Technologies W: www.orient-technologies.com

SOFTAL Corona & Plasma GmbH W: www.softal.de

SoftSolutions, Inc. W: www.softsolutionsit.com

Sohn Mfg W: www.sohnmanufacturing.com

Soma Engineering W: www.soma-eng.com

Sonic Solutions LLC W: www.sonicsolutionsusa.com

Spartanics W: www.spartanics.com

Spengler Electronic AG W: www.spengler.ag

SPGPrints W: www.spgprints.com

Spilker GmbH W: www.spilker.com

Spinnaker Coating W: www.spinps.com

Spring Coating Systems W: www.spring-coating.com Squid Inks AG (Ltd.) W: www.squidinks.eu

\_\_\_\_\_

SRC Systems Limited W: www.srcsystems.co.uk



STA, LLC

75 Industrial Park Drive, Rogersville, TN, 37857, United States T: (+1) 8002588273 E: stacs@sta-usa.com W: www.sta-tapes.com

Labels Folding cartons

Pressure-sensitive films 
 Pressure-sensitive tapes

Stampare W: www.fcmagazine.it

Starfoil Technology Netherlands bv W: www.starfoil.com

START International W: www.startinternational.com

STOMA GmbH W: www.storma-gmbh.com

StopStatic.com division of Alpha Innovation W: www.stopstatic.com

Strata-Tac W: www.stratatac.com

Styers Equipment Company W: www.styersequipment.com

Sun Chemical (Germany) W: www.sunchemical.com

Super Film Packaging Films W: www.superfilm.com

Superior Label W: www.superior-label.com

Sustanium W: www.sustanium.com

SwiftColor W: www.swiftcolor.com/

Synthogra W: www.synthogra.com

Sys Tec Converting W: www.stconverting.com Tag and Label Manufacturers Institute W: www.tlmi.com



### Taghleef Industries

Taghleef Industries SpA Via E. Fermi, 46, San Giorgio di Nogaro, Udine, 33058, Italy T: (+39) 431627111 E: staff@ti-films.com W: www.ti-films.com Twitter: @ti\_films

Flexible packaging

• In-mold label materials • Metalized substrates • Pressure-sensitive films • Release liners • Shrink/ stretch films • Wraparound films

Taizhou Newtech Film Co Ltd W: www.newtechfilm.com

Tamarack Products Inc W: www.tamarackproducts.com

Tamerica Products, Inc. W: www.tamericaproducts.net

Tangshan Wanjie Europe W: www.tw-europe.eu

Tech Sleeves W: www.tech-sleeves.com/

Tech-Melt Adhesives Ltd. W: www.techmeltadhesives.com.tr

Techkon USA W: www.techkonusa.com

TECHNI FORM W: www.techni-form.com

Technicote, Inc. W: www.technicote.com

Tecscan Print Inspection Systems W: www.tecscanelectronics.co.uk

Tectonic International Ltd W: www.tectonicinternational.com

Telstar Engineering Inc. W: www.telstareng.com

tesa SE W: www.tesa.com/industry/paper\_print

TESLIN Substrate by PPG Industries W: www.teslin.com Testing Machines Inc. W: www.testingmachines.com

TGW International Inc. W: www.tgwint.com

Tharstern W: www.tharsten.com

Thermal Printer Support Ltd W: www.thermalprintersupport.com

Thermal Transfer Solutions Ltd W: www.thermaltransfersolutions.com

Thermo Code System W: www.thermocodesystem.com

ThermoflexX W: www.thermoflexx.com

Thiele Technologies W: www.streamfeeder.com

Thwing-Albert Instrument Company W: www.thwingalbert.com

Tidland W: www.maxcessintl.com

Tilt Lock W: www.tiltlock.com

TLS Anilox GmbH W: www.tlsanilox.de

Toc Maquinas Industriales SA De CV W: www.toc.com.mx

TODAYTEC Thermal Transfer Ribbons W: www.todaytecllc.com

Tools & Production Inc. W: www.toolsandproduction.com

Torraspapel SA (headquarters) W: www.torraspapel.com

Toshiba Tec Corporation W: www.iacs.be

Totani America W: www.totaniamerica.com

Tower Products Inc. W: www.towerflexo.com

Toyo Ink Arets NV W: www.toyoinkarets.com

Toyobo Co Ltd W: www.toyobo.co.jp Transfer Trade s.r.l. W: www.t-trade.it

Treofan America, Inc. W: www.treofanamericas.com

TRESU Group W: www.tresu.com

Tri-Tronics Company, Inc. W: www.ttco.com

Trinity Graphic USA Inc W: www.trinitygraphic.com

Troika Systems Ltd W: www.troika-systems.com

Trojan Color Systems W: www.trojancolorsystems.com/

Trojanlabel W: www.trojanlabel.com/

TTR Euroworks BV W: www.ttr.nl

Tungsman and Company Inc W: www.flexochina.com/

Typerite W: www.typerite.com

UCS (UV Curable Systems bvba) W: www.ucs-inks.be

UEI Falcontec W: ueigroup.com

UL LLC W: industries.ul.com/plastics-and-components/labels

Ultralight AG W: www.ultralight.li

UltraSource LLC W: www.ultrasourceusa.com

Unilux, Inc. W: www.unilux.com

Uninet W: www.icolorprint.com

Union Chemicar Europe W: www.unionchemicar.nl

United Speciality Inks Pvt. Ltd. W: www.dsv-chemicals.com

Univacco Foils Corporation W: www.univaccofoils.com Universal Engraving, Inc.- UEI Group Company W: www.ueigroup.com



UPM Raflatac PO Box 53, Tesomankatu 31, Tampere, 33101, Finland T: (+358) 20416143 E: info@upmraflatac.com W: www.upmraflatac.com

Labels

Twitter: @upm\_raflatac

Pressure-sensitive films 
 Pressure-sensitive papers

UTECO NORTH AMERICA INC. W: utecona.com

UV Ray S.r.l W: www.uvray.it

uv-technik meyer gmbh W: www.uv-technik.com

Uvitec Printing Ink, Inc. W: www.uvitec.com

Uviterno AG W: www.uviterno.com

Valmet W: www.valmet.com

VAN DEN BERGH Consulting bvba W: www.vandenberghconsulting.com

VanDerEng BV W: www.vandereng.nl

Vellerino Sdi W: www.vellerino.com

Verso Corporation W: versoco.com



### Vetaphone A/S Fabriksvej 11, Kolding, DK 6000, Denmark T: (+45) 76300333 E: sales@vetaphone.com W: www.vetaphone.com Twitter: @coronatreatment

Labels Flexible packaging

Corona and flame treaters

Vianord Engineering SAS W: www.vianord.com

### Vinsak W: vinsak.com/



VIP Color Europe Carrer Pagesia 22-24, 1-B, Rubi, Barcelona, 8191, Spain T: (+34) 935883018 E: js.satorra@venture.com.sg W: www.vipcoloreurope.com

Labels

• Barcode systems • Desktop printers • Digital presses • Label papers

VivaCasa W: www.vivacasa.hu

Voyantic Ltd W: www.voyantic.com

VPF GmbH & Co. KG W: www.vpf.de

VskE W: www.vske.de



### Wacker Chemie AG

Hanns-Seidel-Platz 4, Munich, 81737, Germany T: (+49) 89627901 E: info.silicones@wacker.com W: www.wacker.com

Labels Flexible packaging Folding cartons

• Adhesives • Linerless and self-wound labels • Release liners • Silicone release coatings

Wasberger Label Equipment W: www.wasberger.se

Wausau Coated Products, Inc. W: www.wausaucoated.com

Weifang Donghang Graphic Technology Inc. W: www.donghang.cn

WEIGANG Machinery W: www.weigangmachinery.com/www.weigang.cc

Wenzhou Rhyguan Machinery Co Ltd W: www.rhyguan.com

Werosys ApS W: www.werosys.com/

Wikoff Color Corporation W: www.wikoff.com Wilson Manufacturing Co. W: www.wilsonmfg.com



Wink Stanzwerkzeuge GmbH & Co. KG Lerchenstr. 12-18, Neuenhaus, 49828, Germany T: (+49) 594192700 E: info@wink.de W: www.wink.de

Labels Flexible packaging Folding cartons

 Cutting/stamping machines
 Cylinders, printing and magnetic
 Dies and tooling (rotary and flatbed)
 Hot stamping-embossing cylinders

WRH Global Americas W: www.wrh-global-americas.com

WUHAN GOLDEN LASER CO.,LTD W: www.goldenlaser.cc

X-Rite Europe GmbH W: www.xrite.com

Xaar PLC W: www.xaar.com

XDS Holdings, Inc. W: www.teamxds.com



### Xeikon

Duwijckstraat 17, Lier, 2500, Belgium T: (+32) 003234431311 E: info@xeikon.com W: www.xeikon.com Twitter: @xeikon

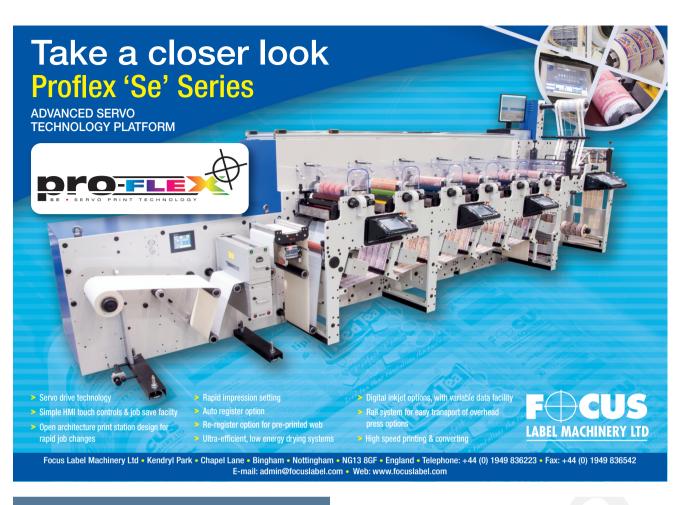
Labels Folding cartons

 Color management and control • Digital converting equipment • Digital presses • Finishing equipment, slitters and rewinders

Xiamen Delish Automation Equipment Co., Ltd W: www.delishmachine.com

Xinxiang Fineray Technology Ltd W: en.fineray.cn

Yazoo Mills, Inc. W: www.yazoomills.com



### **POLAR LabelSystems**



POLAR LabelSystems distinguish themselves by extremely short makeready times and a high degree of productivity with very low staffing levels – without you having to make compromises in terms of quality.

For more information visit: www.polar-mohr.com





## See the latest in Printable Synthetics

Sign up for Synthogra News





Yenom Pte. Ltd. 88 International Road, #03-01, Singapore, 629177, Singapore T: (+65) 67440711 E: sales@yenom.com.sg W: www.yenom.com.sg

#### Labels

Pressure-sensitive films • Pressure-sensitive papers •
Pressure-sensitive tapes • Release liners • Security materials
 Silicone release coatings • VIP/thermal materials

Yeuell Nameplate & Label W: www.yeuell.com



Yupo Europe GmbH Willstätterstr. 30, Düsseldorf, 40549, Germany T: (+49) 021152054260 E: a.soterio@yupo.de W: www.superyupo.com

### Labels

• In-mold label materials • Label papers • Pressuresensitive films • Security materials

Zecher GmbH W: www.zecher.com



### Zeller+Gmelin GmbH & Co. KG

Schlossstr. 20, Eislingen, 73054, Germany T: (+49) 07161802352 E: a.rascher@zeller-gmelin.de W: www.zeller-gmelin.de

Labels Flexible packaging Folding cartons

Adhesives • Ink control-dispensing systems • Inks

Zhejiang Hengfeng Packing Co., Ltd. W: www.china-tj.com.cn

Zhejiang Hexiang Printing Machinery Co Ltd W: www.hxjx.com

Zhejiang Ouli Digital Inkjet Materials Co Ltd W: www.cnouli.com.cn

ZheJiang WeiGang Machinery Co., LTD W: www.weigang.cc

Zhejiang Zhongjia Technology Co Ltd W: www.laserzj.com/en/

ZHEJIANG ZHONGTE MACHINERY W: www.ztyj.cn

Zhongshan Fu Zhou Adhesive-Product Co Ltd W: www.fzlabel.com

Zhongshan Shuguan Self-Adhesive Products Co., Ltd W: www.scsticker@gmc.globalmarket.com

Zuber Rieder W: www.zuberrieder.fr

# Ad Index

ltem	Page No	ltem	Page No
ABG	20	Label Academy	- 30
Anderson Europe	49	Labelman	IBC
Avery	IFC	Mark Andy	34
Berhalter	50	MCS	2
Bobst	28	Merobel	67
BST	38	MPS	32
Cartes	1	Newfoil	40
Daelim	36	Polar - Mohr	87
Dantex	46	REA	73
Durst	15	RK Printcoat	71
Erdhart & Leimer	26	Ruco	67
Eson	42	Schober	46
FFEI	38	Screen Europe	10
FINAT	52	SMI	36
Flint	24	SPG Prints	18
Franklin	34	Spilker	12
Gallus	23	Synthogra	87
Gulf Print and Pack	80	Tesa	55
Holdfield & Tool	73	Verso	BC
HP	16	Vetaphone	71
Inkjet solutions	71	VIP Colour	40
Kocher & Beck	4	Wacker	6
Kocher & Beck	9	Zeller	55
KTI	71		



TORRES,



舒酸定











CLAIR 0 Herbal Ssences





羅鐵機械股份有限公会

TEL: 886-3-318-3939 (10 Line) FAX: 886-3-396-2020 (國內部) FAX: 886-3-396-2121 (International) http://www.labelmen.com E-mail:webmaster@labelmen.com



