

Report

PRODUCTS|PRACTICES|PERSPECTIVES

SEPTEMBER 2015

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Claus Bolza-Schünemann
president and CEO, Koenig & Bauer AG

Digitalisation creates new markets for printed matter

Print must remain relevant

In recent years the media has sometimes given the impression that print is on a downhill slope. The print business is all too often reduced only to printed media and the publishing houses and protagonists affected by structural shifts in the industry. It is without doubt that print media has seen considerable cuts in job sizes and has lost ad income through fast growing competition from online media and the resulting mobile wave of smartphones and tablet PCs. Some well-known titles and printing houses have been unable to weather the storm. Although disruptive technologies have changed established structures, they have also created space for something new.

The increasing digitalisation of communication and production opens up opportunities for printed matter. Popular photo books and the raft of other individual print products have only become affordable by internet ordering platforms or digital production techniques and thus create additional print volumes. The trend towards the individual design of decorative articles, textiles and clothing has had the same effect. Future-focused topics, such as electronics or 3D printing, are good for our industry and will continue to become more relevant as technology advances.

The growth market for packaging is receiving extra momentum from consumers' demands for more visually challenging products and the booming e-commerce business. Packaging of the future will be even more personalised thanks to digital technologies, more exclusive due to sophisticated finishing and even more intelligent thanks to the application of electronic modules – a huge playground for innovation.

Large shifts always pose risks and opportunities. Nevertheless, it is better for us all to consider new markets rather than moan about lost volumes. Printed matter in all its breadth and diversity can only maintain its position in our daily lives and secure its importance as an economic factor with new ideas, processes and applications. KBA is therefore actively working on this topic.

In recent months the global print market has experienced a considerable upturn. According to the VDMA (German Machinery and Plant Manufacturers' Association), in the first half-year 2015 order intake for German printing equipment was up 12% on the previous year. Thanks to its broad product portfolio the KBA Group posted a 33% rise in incoming orders to over €607m (\$674m).

Since 1 July Koenig & Bauer AG in Würzburg has functioned as a holding of the KBA Group. KBA-Sheetfed Solutions in Radebeul operates our sheetfed offset business and KBA-Digital & Web Solutions in Würzburg serves the digital and web press market. KBA-Industrial Solutions in Würzburg and Radebeul has also been restructured into a production company for internal and external customers. Our further subsidiaries for the business fields security printing, flexible packaging, metal decorating, hollow container decoration, coding and UV special printing have kept their areas of responsibility and are consolidated in our Special Solutions segment. We expect this spin-off of autonomous companies to deliver stronger market orientation and larger customer focus.

Our Fit@All programme which has been in place since the beginning of 2014 will draw to a close by the end of this year. Positive effects in terms of costs and to capacity are already noticeable. KBA kicks off the next few months with well-filled order books. Thanks to your loyalty and support, valued customers, we are confident that we will reach our planned Group sales target of over €1bn and significantly improve our earnings compared to 2014.

Yours,
Claus Bolza-Schünemann

Digital Business Transformation modifies business processes

KBA-Sheetfed Solutions on the path to the "Internet of Things"

The graphic arts industry has changed immensely and the supply industry is forced to make organisational changes. KBA therefore recently took this shift into account by spinning-off business units operating on the market and production activities from the future holding company.

But that is not enough: in parallel, KBA's largest business unit KBA-Sheetfed Solutions has been working on a new global sales, service and marketing strategy. The strategy's goal is 'digital business transformation' – the optimisation and transparent organisation of all business processes and the development of new business models in accordance with Industry 4.0 and the Internet of Things. The adjusted processes are expected to be transferred to other KBA companies at a later date.

KBA opted for the flexible Salesforce software platform in order to implement these changes. This international CRM solution successful in many industries supports digital business transformation, offers practical mobile services and analysing tools, and can be expanded at any time. This well-known technology from the social media sphere is used for internal business communication. The experts from Salesforce were so amazed by KBA's approach that they invited KBA-Sheetfed

Solutions to their presentation in front of over 4,000 participants on 2 July in Munich as part of the Salesforce World Tour. Managing director Ralf Sammeck, CIO Jürgen Tuffentsammer and Thomas Göcke, head of marketing & CRM at KBA-Sheetfed Solutions, presented the digitally linked cooperation between sales and service in the sheetfed segment with keynotes, interviews, videos and a presentation.

Eliminating information silos

How do the users benefit from this? "We need to understand our customers better," says Ralf Sammeck, managing director of KBA-Sheetfed Solutions. "That means we cannot simply deliver printing presses, we need to support our customers in attaining market success with our machines and systems." This is achieved by linking all available data from sales, service and marketing to reduce information silos and collate this data with press data. This collated data can then be linked, structured and analysed thus of-



During his keynote speech in Munich Marc Benioff, chairman and CEO of Salesforce, named KBA as "the most exciting company that I've seen on my trip this year". Ralf Sammeck (r), managing director of KBA-Sheetfed Solutions, views digital business transformation as an important tool for understanding users even better

fering the foundation for decisions. The quick access and sharing of information within the company leads to an enormous transfer of knowledge.

Services tailored to customer needs

In summary, KBA is able to respond better to customer needs and offer suitable services. This can be a proactive service approach: In the event of a part malfunction, the press sends a message to KBA. A service assignment can be scheduled at the right time enhancing press availability and user satisfaction. Checks for optimising press performance can be derived from comparing the data with top performing presses. Community Clouds support users by providing explanations on operating functions and a platform for exchanging information. Users can learn from each other and share practices, making new customer experiences possible.

Digital business transformation allows all data to be accessed worldwide with mobile devices. Management decisions founded on knowledge can be made anywhere. The user profits from this process acceleration. A lot of groundwork has already been laid and some topics have been implemented.

Thomas Göcke, head of marketing & CRM at KBA-Sheetfed Solutions, used examples to highlight business strategies which arise from combining data from sales, service and marketing

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Relevant websites:
https://www.youtube.com/watch?v=X4R_gXMervA
<https://www.flickr.com/gp/salesforceemea/380505>



The best in its class

New KBA Rapida 105 PRO with improved kit and more automation

With the Rapida 105 PRO KBA-Sheetfed announced a new medium-format press at Print China in Guangdong in April. It was unveiled in front of a large international audience of experts at the KBA plant in Radebeul in June. This new press takes its place in the top performance segment between the proven Rapida 105 and the high-end Rapida 106.

Compared to the Rapida 105, which is still available, at 17,000sph the Rapida 105 PRO delivers a slightly higher level of performance in terms of production, a larger standard sheet format of 740 x 1,050mm (29.1 x 41.3in), shorter make-ready times thanks to more automation and a new, intuitive operating concept. Additionally, it offers more equipment flexibility and greater scope for customisation. KBA considers its new Rapida 105 PRO which is based on the Rapida 106 (up to 20,000sph) as the best in its class and sees excellent market opportunities.

Standard features which were satisfactory in the past are often no longer sufficient. This is why KBA has redefined common industry standards in medium format with the new Rapida 105 PRO. And rightly so as many orders came in shortly after it was launched.

Presetting from the feeder to delivery

One of the Rapida 105 PRO's key features is its full preset capabilities from the feeder to the delivery, something not to be taken for granted in this press class. Changing jobs is faster and easier. All of the settings at the feeder and delivery can be stored according to job type.

When it comes to repeat jobs or orders printed on the same substrate the settings can be used for presetting, saving time and waste.

Automated systems for plate changing are available, such as semi-automatic plate change (change in every printing unit at the touch of a button) and automatic plate change (fully automatic change in all units in 2.8 minutes). The Rapida 105 PRO scores points when washing with the CleanTronic washing system for blankets, impression cylinders and rollers. Optional features include DriveTronic SRW (simultaneous roller wash), CleanTronic Multi (ink changes) and CleanTronic UV. "Fast Clean" enables the high-speed washing of rollers and cuts washing times from four to two minutes.

The EasyClean ink duct's non-stick coating greatly shortens cleaning times when changing inks. In addition, the ink ducts also do not have any expendable parts which need to be replaced frequently. As it is not equipped with a film liner, deviations when setting to zero are prevented and ensures that the ink zone settings can be reproduced precisely. The new

press is equipped with Rapida inking units known for their minimal start-up waste. This is in addition to the ability to uncouple inking units which are not currently being used, a feature valued by many Rapida users. This saves energy, cuts washing times and washing agents as well as extending the service life of inking rollers.

More equipment flexibility

The Rapida 105 PRO is available with up to ten printing units, perfecting as well as single and multiple coating applications and it can be configured for individual production requirements. Notwithstanding the benefits for commercial printing, it is equipped with a raft of interesting features suited to packaging printing. Along with possible kit for nearly all of the conventional types of coating available today, further features include an outstanding coating unit function valuable when changing coating plates, setting the register at the console and the coater and when automatically cleaning the coating circuit or the hydro-pneumatic adjustable doctor-blade chamber. This is in addition to the option of non-stop systems in the feeder and delivery up to fully automated pile logistics.

Above: Optically, the Rapida 105 PRO distinguishes itself from the Rapida 105 and 106 with the new colour of the feeder, delivery and the gallery as well as a continuous blue line under the printing units. It is also available as a perfector, e.g. for 4/4 printing



Special packages for special applications

Microflute, film and lightweight paper packages or kit for in-mould film are available for special applications. The Rapida 105 PRO covers the entire substrate spectrum as it is able to handle thicknesses ranging from 0.04mm to 1.6mm. Moreover, its gripper systems do not need adjusting even when making extreme substrate changes which is an invaluable advantage considering the level of flexibility demanded by the market. Further special components, such as a reel-to-sheet unit, perforation and numbering unit, iris printing device or the KBA ColdFoil, make the Rapida 105 PRO an extremely flexible, universal machine.

The press' maximum sheet format that has been extended by 20mm to 740 x 1,050mm (29.1 x 41.3in) benefits packaging and label printers in particular. In many cases an extra row of blanks can fit onto the sheet with the special formats 750 x 1,050 (29.5 x 41.3in) and 780 x 1,050mm (30.7 x 41.3in). The "small measuring strips" option increases the usage of the printed format further.

Rapidas have long been known for their ergonomic operation. A new, intuitive operating concept makes operating the Rapida 105 PRO even easier for printers. This is explained in more detail on pages 12-13.

HR and LED drying also available

The Rapida 105 PRO also scores points in terms of energy efficiency with the Vari-Dry^{BLUE} drying system. Energy consumption is reduced by up to 50 per cent as it

Above left: The Rapida 105 PRO's feeder offers full preset capabilities and the suction head is free from operating controls

Above right: A touchscreen facilitates intuitive operation at the presettable delivery

Right centre: Full speed at the launch of the Rapida 105 PRO as part of the LED-UV & Traditional UV Conference in Radebeul: Key account manager Jürgen Veil presented the raised press featuring typical packaging printing kit with six inking units and two coaters

Technology at your fingertips: After the demos print experts from more than 30 countries were able to take a closer look at the new press



reuses the hot air. The volume of exhaust air is also minimised. Energy is utilised and not simply "blown away", a contribution to protecting the environment. HR-UV or LED-UV energy-saving drying processes offered for all Rapida presses are also available and ensure fast post-press especially important to commercial printers. Additionally, LED drying leads to a longer service life of the lamps, minimal heat transfer to the printing stock, ad-

vantages in post-press and a significantly higher print quality on uncoated paper.

At 17,000sph the Rapida 105 PRO belongs to the high performers and outstrips many sheetfed presses in this format class.

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Website:
<http://www.kba.com/en/sheetfed-offset/sheetfed-offset-presses/product/rapida105pro/detail/>

LED-UV & Traditional UV Conference at KBA-Sheetfed

LED-UV innovation and fascination in sheetfed offset

A large international customer event took place at KBA-Sheetfed Solutions in Radebeul with the LED-UV & Traditional UV Conference from 24 to 26 June. The event was a resounding success with around 1,000 print experts from more than 30 countries in attendance and shows just how important the topic of UV printing in diverse variations has now become to the print industry. KBA is once again a trailblazer in the relatively young field of HR- and LED-UV in particular.



Ralf Sammeck, group executive board member responsible for the new KBA-Sheetfed Solutions business unit, explained the shift to becoming an even more customer-orientated company



Together with experts from ink, coating and dryer manufacturers as well as representatives of FOGRA and the trade association, key account manager Jürgen Veil discussed questions from the audience related to printing with LED-UV

Dirk Winkler, head of print technology department, talked the visitors through a print demo on an eight-colour Rapida 106 perfecter with coater and LED-UV for both sides of the sheet. Nine different print jobs taking place in under 50 minutes thanks to a high level of automation captivated the audience's attention

When welcoming the guests Ralf Sammeck, managing director of the new company KBA-Sheetfed Solutions, referred to the company's all-encompassing approach. This includes technical and process innovations, intensive customer consulting, competent after-sales service on all continents, user-specific solutions as a longstanding pillar of strength of the Saxon press manufacturer and setting benchmarks with Rapidas installed at other top performing printshops. At the end of the day it is all about understanding our customers and helping them to be successful in the market. In this context he referred to the KBA group with its exceptionally broad portfolio as a financially solid partner of the industry.

HR- and LED-UV from a user's point of view

KBA key account manager Jürgen Veil also mentioned the company's comprehensive approach while presenting the podium discussion on cutting-edge finishing and curing technology. Technology partners from the world of printing

inks (Flint, Epple, INX), coating (Actega, Weilburger) and drying (AMS) answered a raft of user questions. When it came to ink and coating attention focused on the availability of special series, opaque white, metallic or Iriodin, as well as their suitability for food and non-food packaging, the toy and the tobacco industries. Questions were also asked about the print services available, suitable cleaning agents and technological features. The discussion on dryers also focused on practical topics: how do you know when a diode is broken, who can replace these, how is maintenance work carried out on LED dryers, how can the curing of LED inks be measured with measuring technology and much more.

Rapida 105 PRO with new operation

The new KBA Rapida 105 PRO medium-format press (see page 4) was presented in theory and practice as a raised six-colour press with twin coaters for conventional inks, primers and UV coating. A demonstration of a job change

with a fast coating plate change and coating change took place as well as a substrate changeover from 250 g/m² (160lbs) to 1.1mm-thick. The new intuitive TouchTronic operating system was a further highlight (see page 12). New features include comfortable job changing at just one press of a button (One Button Job Change) and the clearly arranged list of jobs. TouchTronic is expected to be gradually built into all new Rapidas in all format classes by the beginning of 2016.

Demonstration of the strengths of LED-UV

A series of press demos was dedicated to UV and finishing: cold-foil kit in connection with HR-UV technology on non-absorbent substrates was shown on a six-colour Rapida 106 with coater and ColdFoil Micro. When changing jobs the visitors saw a switch from self-adhesive labels to folding carton. This was in addition to a demonstration of an automatic anilox roller change with AniloxLoader and automatic coating plate change with DriveTronic SFC. Various print jobs were shown for work and turn on a new five-colour Rapida 75 with coater and LED dryer. One of the highlights of the demonstrations was the brilliant print quality on offset paper delivered by LED-UV.





Above: The new Rapida 105 PRO was presented by Jürgen Veil with an impressive show

KBA-Sheetfed presented a job printed with in-mould film and low-migration LED-UV inks on a Rapida 145 (six colours with coater). This was followed by jobs demonstrating fast work and turn with three different types of paper (matt, gloss and offset). The focus of the job changes was placed on automation modules for fast set-up, these include DriveTronic SRW (simultaneous roller washing) and DriveTronic SFC coater with AniSleeve sleeve changing.

Rapida 106 remains makeready world champion even with LED-UV

The afternoon programme began with an impressive keynote talk from David Bland of Blackmore Ltd. in Longmead, Great Britain. He is one of a raft of users who have already implemented LED-UV technology and he reported on his experience with this new technology (see page 8 for more details).

Afterwards an eight-colour Rapida 106 with coater and perfecting for 4/4 production showed what it could do: it was impressive to see that the sheets were dry immediately after passing through the LED dryer despite the sheets' high colour imposition, the print quality on offset paper in LED-UV was outstanding and the production of nine different jobs took place in under 50 minutes, this included posters with Flying JobChange. The Rapida 106 defends its title as make-ready world champion even with LED technology. The press' technological

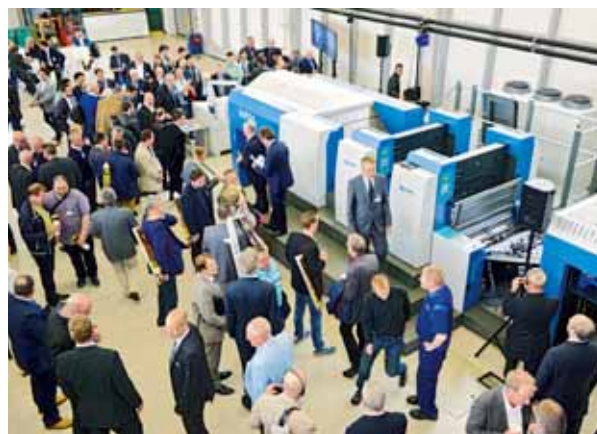
highlights include the cleaning and supplying of the coater with UV coating during production.

KBA Rapida RDC launch

The Rapida RDC was also unveiled at the open house. It features a rotary die-cutter based on Rapida components that can run at speeds of up to 14,000sph. It is equipped with various automation modules for reducing start-up times (e.g. automatic cutting die change). Its intuitive operating concept is based on that of other Rapida presses. Job profiles can be stored shortening makeready when processing repeat jobs. Furthermore, it can be flexibly integrated into MIS systems offering the user complete transparency within their company. Existing systems, such as KBA LogoTronic, can also be applied.

Centre: LED-UV in large format: Wolfgang Ley, head of the customer centre, demonstrated fast job change including quick work and turn on range of different substrates

Below: A further world premiere rounded off the event: The Rapida RDC rotary die-cutter



Grooving and embossing took place in the Rapida RDC's first unit and die-cutting took place in the second. After a quick cutting die change in the second unit, the visitors witnessed die-cutting of self-adhesive labels.

KBA-Sheetfed invited the visiting print experts to a popular beach bar situated directly at the river Elbe in the evening. The guests had the opportunity to converse informally with each other, to network or simply enjoy the view of the historical old town of Dresden on a summer's evening.

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Keynote speech from David Bland of Blackmore Ltd. in the UK

“LED-UV is changing our industry”

As one of the first users of LED-UV in B3 format, David Bland, sales and marketing director of Blackmore, Dorset, UK, reported on his experience with this new process at the UV conference in Radebeul. The company has been printing with a Rapida 106, featuring this new curing technology and QualiTronic ColorControl since January 2015. Here are some extracts from his keynote speech.

“We began to research the available UV systems about two years ago. Looking at the traditional UV and more recent HR-UV systems, it was quickly clear that we could not make the numbers work in our commercial printing operation. We had issues with ozone and heat, coupled with the ink prices and ongoing lamp replacement costs. We also had concerns regarding the environmental issues around the mercury lamps.

The LED-UV option quickly became of interest owing to the potentially huge reduction in energy necessary to power it and the additional benefits of the lack of ozone and heat from the process. The testing we carried out at KBA in Radebeul

on a Rapida 106 with LED-UV convinced us that we were on the right track.

Less ink consumption and higher output

Now we're in production our ink usage is already proving to be approximately 30% lower. Added to this, the Rapida 106 produces around three times the output of our old B2 press, so the benefits are obvious – especially as we are using the cable that used to run the old B2 press. When you add in the savings in spray powder (we run all stocks without anti-set-off spray), coatings (no longer required) and so on, the payback figures become very impressive. This is in addition to other benefits delivered by the Rapida 106, such as short make-

Above left: Nigel Hunt, production director, shows the LED dryer in the delivery of the Rapida 106

ready times, high print output and minimum waste.

Under shopfloor conditions LED technology has proved to be totally reliable. Any concerns we may have had about dry sheets were cured as soon as the lamps went on. Even our binding manager is impressed and now he runs his machines at full pressure and top speed.

Compared to mercury-based UV lamps, LED-UV lamps have a service life of 20,000 hours and we believe that it could be even longer. LED lamps also compensate their own output to take into account any diodes that may fail, thus making it not necessary to change lamps immediately. What is more, depending on the format width to be cured only those LEDs needed are active, which also has a positive impact on the service life.”

Above right: David Bland, sales and marketing director at British printing company Blackmore, and production director Nigel Hunt in front of their new Rapida 106 with LED-UV curing

David Bland (l) praised his medium-format Rapida with LED curing. He listed the many benefits of this process with examples from the pressroom in his keynote speech

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i Many further benefits of LED-UV can be found on Blackmore's website. It's worth a look:
www.theblackmoregroup.co.uk/new-technology

Two new high-tech Rapida 106 perfectors at Atar Roto Presse

Good results and new options with HR-UV

Two highly automated KBA Rapidas with perfecting and HR-UV kit were fired up at Atar Roto Presse SA in Satigny, Switzerland in late summer 2014. Nine months later Marc van Hove, general director and member of the board of directors, and head of production Sabine Mounir are seeing positive results.*)



The ten-colour Rapida 106-5+T+5 and the five-colour Rapida 106-2+T-3+L are both equipped with a coater, delivery extension and HR-UV curing. They also feature a raft of other automation modules, such as DriveTronic SIS sidelay-free infeed, automatic plate changers, individual drives for simultaneous plate changing, CleanTronic Synchro washing systems for rollers and blankets and an AirTronic delivery. Extensive quality control is carried out by ErgoTronic ICR, ErgoTronic ColorControl, QualiTronic ColorControl, QualiTronic LiveView and QualiTronic Instrument Flight.

UV printing is on the rise

In preparation for this new investment the company's management board developed various requirements which could not be met by most of the presses they evaluated. KBA was the only press manufacturer able to fulfil their demands. Atar general director Marc van Hove: "KBA is currently the only supplier really able to cover an entire spectrum of automation tools. We are not simply talking about technical gimmicks, but optimising the complete printing process."

Marc van Hove continues: "Many initial critics have now implemented UV printing or are in the middle of retrofitting evaluations. This is a logical development from our point of view. Even though UV printing is generally widespread, only HR-UV technology suited our portfolio as we often work with extremely high colour densities. Its superior results on uncoated stock and offset paper are worth emphasising. We have achieved high colour contrasts and rich blank densities that were previously unimaginable. What is more, we can print on plastic or film without any problems. We have improved our productivity, quality and flexibility thanks to this technology."

The five-colour Rapida permits the switch between HR-UV coating and conventional UV coating. The decision in favour of this process was primarily down to costs for head of production Sabine Mounir. "Classic UV coating is more than enough if just a little gloss or a protective coating is required. However, HR-UV is the right solution if the customer desires special effects as this process allows you to stand out from your competi-

tors and adds value to production. Both technologies have their advantages," she confirms.

Clear savings potential

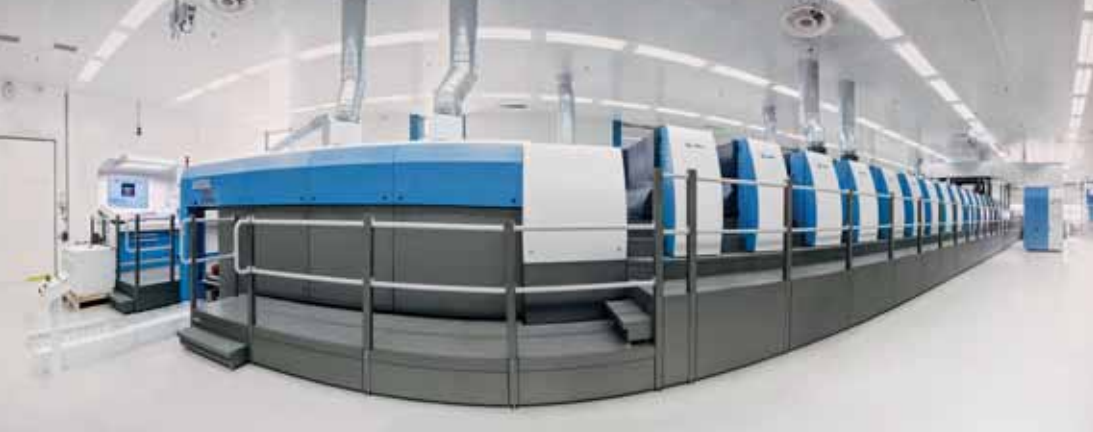
Sabine Mounir on the topic of saving energy with HR-UV: "The potential for savings is significant. Compared to water-based coating, UV coating requires much less energy. Infrared lamps, combined with the high amount of air needed, cost a lot of money. Nevertheless, savings are noticeable in other areas. The protective coating required when printing with high colour densities is not necessary when using UV inks."

Marc van Hove on the possible price savings delivered by the new presses: "Prices are often sunk when competing for jobs which makes no sense in the mid-term. Naturally, such an investment is made to optimise productivity, quality and reliability, but pricing is the most important factor in terms of cash flow. Enhancing performance alone is not enough. You can travel faster from Geneva to Zürich with a 300hp race car than with a hybrid car. The margin has to be stable whether the prices are high or low," he says.

Marc van Hove concludes: "We are currently moving within a market that is becoming increasingly more difficult to define. Fast and short decision-making chains are needed in order to hold on to the top spot. Anyone can drive straight at 180km/h in a racing car, but mastering challenging curves requires expertise which is fine for us as we are certain we have made the right choice."

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*) Summary of an interview by Philippe Evard in the Swiss trade journal VISCOM



Today folding cartons are predominantly printed and finished in one pass

Superior carton packaging for Point of Sale

At the point of sale (POS) producers of brand name goods use eye-catching packaging to incite consumers to buy their products. Creative shapes, distinctive colours, outstanding print quality and increasingly sophisticated finishing all play a central role. Aesthetics and attractiveness are key distinguishing features and are a must in certain product segments. Companies are willing to pay a bit more for the huge amount of effort put into the packaging, just not that much. Brand name manufacturers are under permanent pressure in terms of innovation and pricing and pass these demands on to folding carton producers. This is also why high-quality packaging is often printed 'inline' and finished in one pass today.

Folding carton is usually printed on sheetfed offset presses given their high level of flexibility concerning substrate and format. The trend towards special presses has been noticeable for some years. They are equipped with coating, cold foil or other finishing mod-

ules for inline finishing and cutting-edge measuring and control technology for inline quality control. As the market leader in sheetfed offset systems for printing folding carton, KBA-Sheetfed is a trend-setter for such special configurations in medium and large format and has

The world's longest medium-format press for elegant finishing: Rapida 106 with 19 printing and finishing units at Amcor Tobacco Packaging in Switzerland

delivered presses with up to 19 printing and finishing units.

Today's technical advances in terms of automation and process integration permit press configurations that were impossible ten years ago. Normal sheetfed offset presses are turned into highly complex printing and finishing machines with impressive dimensions and offer an outstanding number of application options. Some presses are built for a specific product segment and others are multifunctional.

Tailor-made configurations

A broad overview of what modern finishing presses could look like to print folding carton is provided below. A medium-format KBA Rapida 106 which can be equipped with various finishing modules for special applications is used as the basis.

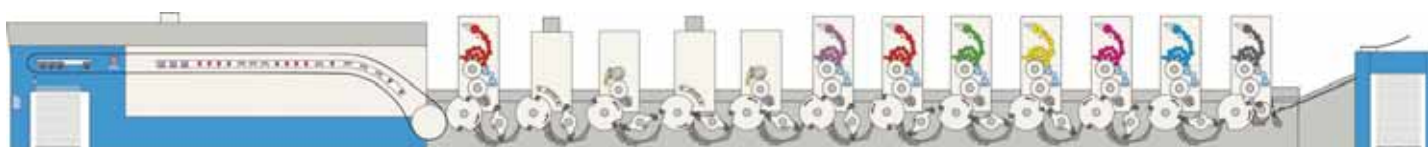
Depending on the consumables and application, conventional roller materials for oil-based and hybrid inks, dual-purpose rollers for mixed production, conventional or UV or EPDM rubber materials for pure UV printing are implemented in the printing units.

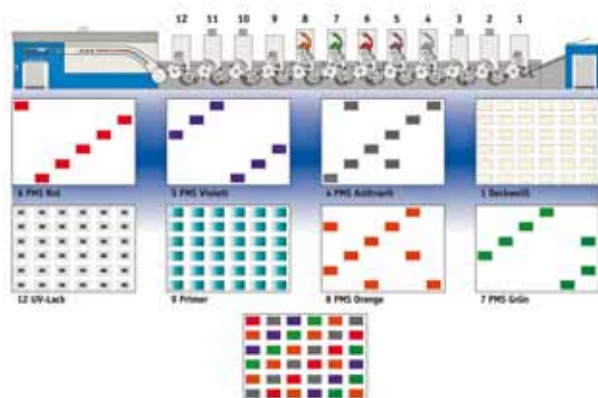
There are also different processes and installation options when it comes to dryers, such as infrared and UV dryers in the printing unit, infrared and thermal air in special drying units (e.g. for twin-coater presses), modules that can be inserted at various positions in the press for intermediate drying with infrared and UV, infrared and thermal air in the delivery extension and UV lamps for end-of-press drying. Eye-catching visual effects can be created with various combinations of inks, coating and dryers as well as with cold foil or embossing devices.

Left: Large-format presses, like the KBA Rapida 164, are popular in the field of high-quality folding carton printing. They feature the same equipment options as the Rapida 106

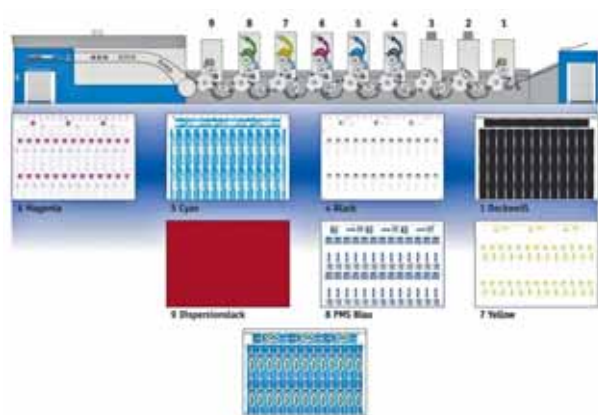


Below: Illust. 4: Technological highlight for high-end finishing: KBA Rapida 106-7+LT+1 with triple delivery extension





Illust. 1: Schematic diagram of ink and coating separation on a Rapida 106 LTT+5+LTTL for especially technologically challenging colour charts or hair dyes



Illust. 2: Schematic diagram of ink and coating separation on a twin-coater Rapida 106 LTT+5+L with double delivery extension. The last coater can also be converted into a die-cutting unit for self-adhesive labels. The die-cutting template is pictured below



Illust. 3: Suitable for Metallure coating with hybrid finishing: Rapida 105 LTT+6+LTTL with double delivery extension and diagram of ink and coating separation using the KBA calendar from 2007 by way of example

Manifold coating options

Coating units featuring anilox rollers and chambered doctor blades are used in KBA Rapidas for finishing. Anilox rollers significant for the thickness of the layer of coating can be exchanged without much manual effort in just a few minutes. Automatic coating supply can be configured for mixed production with water-based and UV coating using the LithoCoat system implemented by KBA. Automated cleaning programmes guarantee system cleanliness which is indispensable for process stability. Twin-coater presses mainly used for creating special gloss effects feature two coating units, often separated by two dryers.

Special packaging for hair dyes

It is imperative that the colour perception of printed products, such as colour cards or packaging for hair dye, corresponds with the colour tone of the contents of the packaging otherwise complaints might arise. The whiteness of a substrate plays a decisive role when producing such packaging. This tends to fluctuate, however, and leads to unsatisfactory colour deviations. Applying cover white before printing keeps these fluctuations at standard levels. UV cover white is applied in the coater before the offset printing units and is cured in the subsequent drying units. Colour separations with conventionally dying inks are then printed onto the cured cover white in the offset printing units. A primer which facilitates adhesion is applied in the subsequent coating units and then finishing takes place with a high-gloss UV varnish (illust. 1).

Superior effects with double-coater presses

Today double-coater presses are almost the norm among special presses. When unsatisfactory capacity utilization levels occur some packaging printers also use these presses for printing self-adhesive labels. Good results can be achieved when used in connection with inline perforation.

Outstanding finishing effects can be attained using two types of coating on a double-coater press with UV interim dryers in UV or hybrid production. In the following example an image is printed with UV curing hybrid inks and spot coated in the fifth printing unit with an offset UV matt coating. A mineral-oil-based coating is applied to the places not covered with the UV matt coating in the sixth printing unit and then the image is

coated completely with UV gloss coating in the first coating unit. Excellent gloss effects are achieved in the places where the gloss UV coating meets the cured hybrid inks and in contrast the UV coating penetrates the overprinting coating when the topcoat is applied. A varnish registration effect with haptic characteristics is attained due to this interaction of the different coating systems.

The last coating unit can be modified into a die-cutter equipped with a specially manufactured die-cutting plate. It is a huge advantage that the KBA coater features registration capabilities (illust. 2).

The undisputed highlight of double-coating technology from a procedural point of view is a seven-colour press with two coaters and a subsequent printing unit. It can be found in the high-quality packaging sector and its printing units are normally equipped with UV interim dryers. Combinations of primer and Metallure/gold coating, or gloss and matt UV coating can be used in the coating units.

When it comes to extremely fine fonts and small type sizes the resolution of the relief coating plate reaches its limits in terms of process technology. The spot coating of such fine details in blank areas can also lead to compromises in quality. In UV production the finest details of an image can be applied to cured inks and coating with a printing unit after the last coater (illust. 4).

Special application metallure coating

Metallure coating consist of sparkling aluminium pigment dispersion and give finished products metallic effects. The possibilities are manifold and this coating is applied to labels, packaging and commercial printwork. KBA demonstrated manifold finishing options with its customer calendar in 2007. A gold Metallure coating is applied to the front of the sheet with Nyloflex plates. The image and the back of the individual calendar sheets were printed with hybrid inks, whereby only the image was on top of the Metallure coating. The printed images were given impressive matt/gloss effects delivered by hybrid technology with oil-based varnish and finally an all-over UV surface coating (illust. 3).

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Eight-colour Rapida 106 at Fischer Druck in Peine

Fast 4-over-4 production with HR-UV



At the end of last year Fischer Druck in Peine, Germany, flipped the switch on a KBA Rapida 106 with eight printing units and perfecting for 4-over-4 printing. The press is equipped with interim dryers after perfecting and in the delivery for HR-UV production. The new drying process permits significant energy savings, the immediate finishing of print products and short lead times. The commercial printing house is thus breaking new ground in a competitive market. Up until now Fischer Druck had only installed conventional medium-format presses from another manufacturer.

« Yesterday evening we printed 130,000 sheets that will be delivered today »

Henning Zittel

The investment was a result of extensive analysis of the company's job structure and the technology available on the market. The managing director family Zittel and Ralf Lütgering, head of printing, viewed KBA as a trailblazer especially with regard to the possibility of disconnecting idle inking units, new drying processes, the option of Flying JobChange and the services offered. An alternative to the HR-UV press would've been a conventional eight-colour machine. In the end the company opted for the eight-colour version with HR-UV in order to send the double-sided, full-colour printed and fully dried sheets

straight to be finished. This decision also results in fewer operating personnel and reduced investment costs.

Fast beats slow

Speed is what counts in today's market. "Yesterday evening we printed 130,000 sheets that will be delivered today," says Henning Zittel. "This was inconceivable in the past." The Rapida 106's strengths come into play particularly when it comes to brochures with high page counts and a raft of plate changes. "Even 600 to 800 copies with 64 pages result in significant improvements to the final costing compared with the same print

runs on a straight-on press." While both straight-on presses each have one operator and an assistant who jumps from one press to the other, the Rapida 106 is run by two press operators in principle. The press' extensive automation package includes simultaneous plate changing with DriveTronic SPC, Data Matrix Code and Flying JobChange, inline measuring technology with QualiTronic ColorControl on both sides of the sheet, LogoTronic Professional software for production management and a JDF interface for exchanging data with the MIS.

Managing directors

Christian, Wolfgang and Henning Zittel (l-r) fired up an eight-colour Rapida 106 with HR-UV at the end of 2014





After only a few months of operation the Rapida 106 plays a decisive role when it comes to capacity planning. The press operators got used to the change in manufacturer and system quickly, and now switch easily between working on the different machines. They prefer jobs of 3,000 to 5,000 sheets on the Rapida 106. These job sizes add variety to their everyday production activities. The Rapida 106 runs 4/4-colour jobs 95 per cent of the time, only a small percentage is made up of purely straight printing. Flying Job-Change training recently took place with the support of KBA technicians. 3,600 posters in 13 versions and corresponding batch sizes are particularly well suited to this press and the Rapida 106 featuring KBA Flying JobChange makes it possible.

Further growth possible also in commercial printing

As a purely commercial printing house Fischer Druck does not produce any publishing products and periodicals. Image brochures, flyers – also in DIN long format – form the 100-year-old company's core business. Its customers come from various industries and include agencies, retailers, financial service providers and chocolate manufacturer Schokoland Rausch which can be seen from the company's printing plant. Fischer Druck in Peine proves that a family-run business with personnel contacts, good consultancy services, longstanding business partners and competitive prices still has good prospects on the commercial market. The order books are so well-filled that another expansion of the firm's production site is on the cards. It will be the third expansion after Wolfgang Zittel first built the site on greenfield land in 1985.

He bought Fischer Druck as an eight-man company in 1980. Today 60 employees work in production in three shifts and in autumn a production site measuring 4,500m² (48,437ft²) will be available. The goal of the new extension is the optimisation of manufacturing processes. A goods reception area, a goods collection point and a buffer storage will contribute to a streamlined material flow.

Fischer Druck has clearly defined how resources are to be managed in its environmental management handbook. Reducing waste and chemicals is a top priority which means saving money. It has already been proven that the Rapida 106 offers great potential for reducing waste. Direct comparative figures will be used

Press operator Niklas Ottenberg at the console featuring TouchTronic user interface

Daniel Pansegrau loads the plate changers. Plate changing takes place in parallel to other makeready processes with DriveTronic SPC

to verify this after the press' first year in operation. Waste management is also expected to be continuously improved and the company has used 100 per cent green energy since 2014. It has been certified with all the usual accreditations, including FSC and EMAS. Furthermore, climate-neutral production (Climate Partner) is also available on request. Customers from the energy sector are especially interested in CO₂ compensation through approved climate-protection products.

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Energy efficiency in print

“A lot” is sometimes too much

Energy is becoming an increasing cost factor when it comes to print production. Press manufacturers seek to compensate in part for this with technical developments. Gerd Bergmann from the German magazine *Deutscher Drucker* spoke to Dirk Winkler, head of the press technology department at KBA-Sheetfed Solutions in Radebeul, about advances in the field of energy efficiency in sheetfed offset presses.

KBA Report: How important is energy efficiency when it comes to new investments?

Dirk Winkler: Energy efficiency is in demand more than ever, partly as subsidies are available for energy efficient press systems. Another question that arises concerning energy saving parts is the time period it takes such systems to pay off. We also provide data to expert firms specialising in energy management regarding planning new printing plants on greenfield sites.

KBA Report: Can the amount of energy that a print job consumes be calculated?

Dirk Winkler: Yes – based on data from previous jobs. We have developed tools especially for this purpose. As part of KBA Complete KBA users are able to calculate energy consumption per thousand

sheets or per job. We can attach ammeters to all of the press' main energy consumption points. A calculation framework is established over time and takes the respective substrate, inks and dryer installation into account. The measuring system is anchored to the LogoTronic Professional data management system. It is available for all press series and also functions as a data server between a customer's MIS system and the press fleet.

KBA Report: What are the main energy consumers?

Dirk Winkler: The main motor, cooling system for the fount solution and press temperature control, compressed and suction air generation as well as the entire drying system, hence IR thermal-air or UV dryers which are both partly in operation in hybrid presses. Cold-foil finishing

Dirk Winkler is head of the press technology department at KBA-Sheetfed Solutions

modules are also key energy consumers. Interfaces to our energy data capture can also be split up enabling the customer to see every configuration separately.

KBA Report: How compatible is your data capture solution with those from other suppliers?

Dirk Winkler: As part of KBA Complete, KBA offers an “objective energy measuring solution” for the entire printing plant able to capture data from KBA presses as well as presses from other manufacturers or departments, such as pre-press and post-press. Systematically broken down according to individual cost centres and reported over a specific time period, the results can even be made available online.

KBA Report: This goes far beyond a press manufacturer's product portfolio.

Dirk Winkler: We are the trailblazer in this field and have yet to officially launch this system. It has been installed at four test customers until now. After the testing phase we will decide exactly how we will offer this system in the future.

KBA Report: With which energy consumers in a press have you made the biggest progress with?

Dirk Winkler: Definitely with dryers. Our VariDry^{BLUE} system saves up to 40 per cent more energy compared to conventional IR/TA dryers as the heated air into is not just blown out into the atmosphere. It is filtered and re-used by certain modules. We can thus drastically reduce the energy needed for the heating coil which otherwise permanently heats up the air or requires a lot of infrared. With regard to UV dryers we have been able to significantly reduce the number of interim dryers implemented with the introduction of our HR-UV technology. LED-UV technology saves printers even more energy and has achieved the largest savings in energy. This system only uses a small percentage of the energy required by other UV technologies. There have also been advances in compressed and suction air generation as we only work with controlled compressors. These are normally stored in a water-cooled box and always only generate as much energy as is needed by the press at that time.

KBA Report: Some years ago KBA said "We'll find your energy guzzlers!" when

advertising for its consultancy services. What are energy guzzlers?

Dirk Winkler: We carried out production analyses at our customers' plants and took a closer look at the main energy users. As part of this week long analysis we looked at all processes and those KBA components that could be upgraded as that is where we have made the largest advances. We then advised our customers on how these components can improve their processes. This can also be done with specific checks and the replacement of individual assemblies. A third component is consulting focusing on technology. We demonstrate that the current UV inking system used does not deliver optimum curing results and it therefore has to operate permanently in connection with a lot of interim dryers. In this case we recommend complete technology packages on the one hand to increase output and on the other hand to reduce the energy resources implemented.

KBA Report: How can a press operator contribute to saving energy?

Dirk Winkler: He can do this by using and linking all automation modules that we offer as part of the console configuration in the manner we instructed. We have consciously reduced the individual influence of the operator in order to cut the number of errors. The more measuring and control processes that are left to the press operator, the higher the

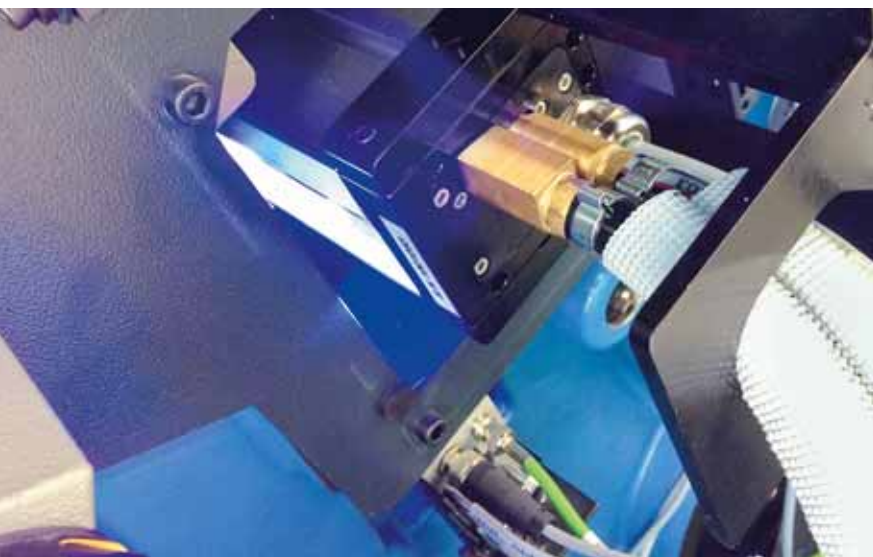


When it comes to energy efficiency there have been major advances in drying. Shown here a diagram of a VariDry^{BLUE} drying system in the delivery extension of a Rapida 106

possibility of mistakes. This is why the automation modules associated with makeready components have been expanded. We also demonstrate efficient processes as part of our training courses, for example how an operator can get to grips with the performance parameters of a particular dryer, without having to implement all of these and to 100 per cent.

KBA Report: Are there any common misconceptions when it comes to the energy efficient operation of sheetfed offset presses?

Dirk Winkler: The approach "a lot equals a lot" really uses energy. When the dryer is always run at full power. This can even have a negative effect on the product. The worst thing is when the operator still has to lithograph the press at the start of a job as the standardization of processes has not been carried out correctly in advance and the operator needs three or four more prints for every start-up process. We have responded to this problem and, for example, have created a link to a newly developed ink database which is also a part of our LogoTronic Professional package. It provides standardised calibrated ink data that the operator automatically receives from the server. When the press is running the biggest energy consumer is the dryer. The main drive only consumes a little energy and can be ignored.



LED-UV continues to revolutionise drying

Interview by Gerd Bergmann/Deutscher Drucker
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High quality packaging for the pharma industry

Ingersoll Paper Box in Canada scores points with Rapida 106

In April 2014 Ingersoll Paper Box (IPB), a leading folding carton manufacturer headquartered in Ingersoll, Ontario, took delivery of a Rapida 106 with seven inking units, coater, full UV capabilities and inline colour control. Here is a short summary of the press' first year in operation:

"2014 was an exciting year for our company," says Sarah Skinner, managing director of Ingersoll Paper Box. "We eagerly anticipated the delivery of our new Rapida 106 as it allowed us to broaden our customer base. Once installed we held an open house where we demonstrated our recent automatic sheet inspection machine, KBA press and other enhancements to our sheetfed operation."

Choosing the new press was not a light-hearted decision for the management at Ingersoll. As part of a ten-day trip the company visited three German leading press manufacturers and tested their presses. But ultimately, IPB felt that KBA was the best fit and provided Skinner

and her management team with an ongoing partnership well into the future.

A raft of production options

The Rapida 106 aids in maintaining Ingersoll's reputation for quality, fast turnaround and personalized service to its pharmaceutical customers that demand quick turnarounds on short-run work.

"Seventy-five per cent of our work is derived from the pharmaceutical industry," says Skinner, "while the rest of our customer base hails from food, consumer goods, and the health and medical industries. New for our company will be the in-line colour control system on the Rapida 106. Our clients expect innova-



Ingersoll Paper Box has been able to significantly expand its product portfolio with the Rapida 106 and offer its clients high-quality folding cartons with short lead times

tion and this latest technology delivers. Key features of the Rapida 106 that attracted us to it was that it offered many features in one press. KBA enhances our ability to provide our clients with more intricate, high-quality finished products with up to seven colours and various finishing options in a relatively short time."

Expectations met: managing director Sarah Skinner (3rd from right) and the management team from IPB together with representatives from KBA North America are pleased with the performance of the new Rapida 106

Ingersoll Paper Box, a fourth-generation family-owned business, was established in 1922 by Robert Skinner. Today, it is headquartered in a modern facility with over 7,500m² (80,000ft²) of manufacturing space including 3,500m² (38,000ft²) of warehousing space. The firm produces quality folding cartons from standard designs to custom design solutions. Various production levels from design to printing and post-press are all under one roof.

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Dee Paper Box Company invests in Rapida 145

Folding carton producer expands in top quality segment

Dee Paper Box Company, a leading folding carton design, printing, and manufacturing firm located in Chester, PA, is broadening its pressroom capabilities with the installation of a new seven-colour Rapida 145 double-coater UV press with a host of unique automated KBA technology in spring 2015. The firm hopes to emerge into higher-end carton production with this press.

Sales manager David Dee: “We’re seeing a trend toward more difficult work with shorter run lengths and faster turnarounds. It’s our job to take those complicated jobs and make it simpler for our customer. We’ve put a talented team together and we’ve seen continued growth, last year we grew by 20 per cent.”

General manager Steve Harrell adds: “Our new Rapida 145 gives us better graphics, improved colour consistency, faster speed, and better control of the

entire process. This specially-configured press with unique automation and double coaters provides us with new capabilities and advantages.”

The KBA Rapida 145 features DriveTronic SIS sidelay-free infeed, CleanTronic UV system for washing blankets and impression cylinders, automatic plate changing, and additional parallel makeready processes that contribute to significantly higher net production output. Convenient operation is guaranteed at the new ErgoTronic console with

The globally successful Rapida 145 sets benchmarks in folding carton printing. The larger Rapida 164 is also very popular in the USA

wall screen. Dee Paper’s press is also equipped with KBA QualiTronic Color-Control inline colour measurement and Instrument Flight® from System Brunner for measuring and controlling colour during impression.

Steve Harrell: “A significant advantage on our new KBA press is the UV double coating system. We can now print and finish a raft of jobs in one press pass rather than running the job twice. We’ll be able to utilize the UV by offering a wider range of coating effects in addition to streamlining our workflow through our plant, resulting in improved lead times.”

Founded by Max Dee in 1919 as a specialty paper products company, Dee Paper Box Company has steadily evolved its business and capabilities to meet the changing dynamics of the marketplace

With the new Rapida 145 Steve Harrell sees more opportunities and growth perspectives for his firm in the high-end packaging market



and the folding carton industry. Along with design, printing and post-press of folding carton, it also offers finishing services such as foil stamping. The firm caters to predominantly East Coast customers across several industries and market segments, including food and confectionery, health and beauty, and specialty sectors such as pet supplies, automotive, dental, and baby products. Dee Paper Box Company is located in a beautifully-renovated brick mill that overlooks the Delaware River.

L-r: Sales manager David Dee and general manager Steve Harrell (both Dee Paper Box Company) as well as Chad Fugate from KBA North America



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Technological milestone from Saxony revolutionised press engineering

50 years of unit-type sheetfed offset presses

Some 50 years ago most colour prints still had to be passed through the press several times. On the one hand predominantly only one or two-colour presses were available and on the other hand from a technological point of view the prints required up to 12 colours. The establishment of the "short" colour scale (BCMY) in offset printing made production more rational on four-colour presses. These widely available presses were, however, a combination of two two-colour presses in a tandem design in line with the five-cylinder principle.

This resulted in shortcomings with regard to press technology as every two printing units used a single impression cylinder. This type of construction also meant a huge amount of effort for press manufacturers, especially when it came to large-format presses. After assembly and print tests at the manufacturers' plant, the machines then had to be taken apart again to a large extent and the many single components had to be re-assembled a second time upon reaching the customer.

1965: Sensation at the spring trade fair in Leipzig

At the beginning of the 1960s engineers at the Planeta press plants (a member of the KBA group in Radebeul since 2001) thus toyed with the idea of building a press without all of these grave disadvantages. The switch from the tandem to today's dominating unit-type design for sheetfed offset presses began with the launch of the Planeta Variant P4 (B3 format) at the spring show in Leipzig in 1965. The future-focused configuration was even applied to large-format presses from Radebeul only two years later. The world first from Saxony unveiled 50 years

ago was one of the technological milestones which fundamentally changed sheetfed press engineering and is widely used by a raft of manufacturers today.

Pros of the unit-type design

The unit-type design was then a completely new and revolutionary press design in line with the three-cylinder principle. For the first time the individual parts and the technical properties were identical in every printing unit. This offered a raft of advantages which today still apply to all subsequent presses in the Planeta Variant series up to our cutting-edge KBA Rapidas:

- high level of flexibility when it comes press configuration
- significant reduction in the number of different parts during production
- short assembly time at the customer given delivery of completely assembled parts
- accurate print register via a superior drive system
- smooth sheet travel given the first double-size impression cylinders and transfer drums
- lower number of sheet transfer

points between the printing units

- outstanding dot-sharp reproduction compared to other presses.

Convertible perfecting in one sheet pass (Planeta patent from 1967) is also based on the unit-type design. While it was only possible to place an imprinter in front of the first printing unit with the tandem design, perfecting on a unit-type press is possible anywhere.

New technology opens up new possibilities

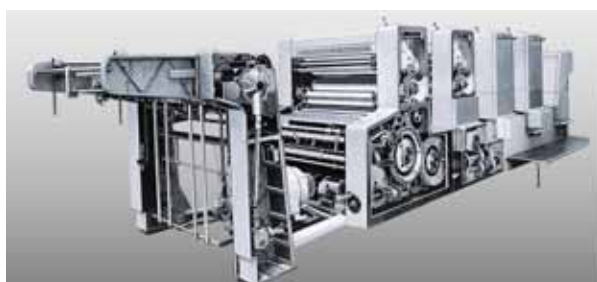
The new technology with double-size cylinder systems opens up completely new possibilities for printers in terms of print quality and substrate flexibility. The streamlined, smooth sheet travel delivers significant advantages especially for cartonboard printers. Accordingly, the Variants and Varimats from Radebeul were installed in a raft of packaging plants worldwide at an early stage. Thus the foundations for the press manufacturer's leading position in folding carton printing were laid. KBA Rapidas are the first choice for printers of heavy board, beer mat board and corrugated. Furthermore, large-format Rapida printing units are also implemented into KBA Metalstar



Centre: A diagram of a six-colour press with coater in the then revolutionary unit-type design

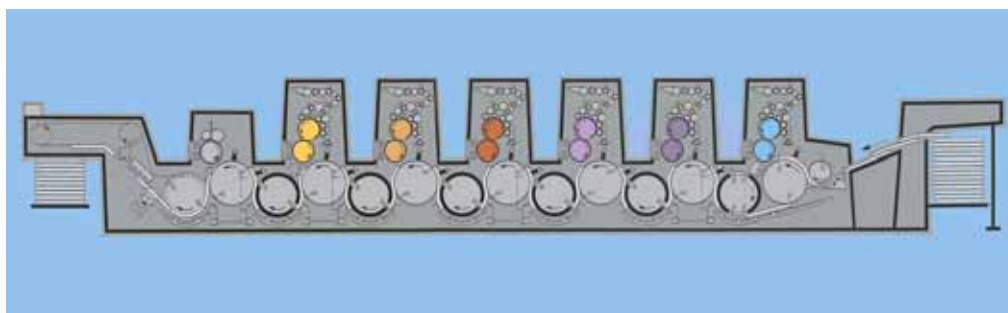
Below left: In 1965, some 50 years ago, Planeta launched the unit-type press design which today is the dominating design in sheetfed offset engineering with double-size impression and transfer cylinders

Below right: The five-cylinder system dominated in the past with all of its cons. Shown here a PVO 6 from 1957





Above: The flexible design was constantly updated and used for the Rapida 104 from Koenig & Bauer (here at Drupa 1986)



metal-decorating presses. It is not without reason that KBA is the global market leader in large-format packaging printing presses.

The unit-type row design was also the prerequisite for the flexible integration of coating, drying and other finishing units in presses that are becoming increasingly longer. It delivered the huge level of flexibility in terms of printing and finishing equipment in sheetfed offset

presses that is now standard. Sheetfed offset presses have become even longer since then. A KBA Rapida 106 in Switzerland holds the world record with 19 printing and finishing units.

The fundamental ideas are still in place today

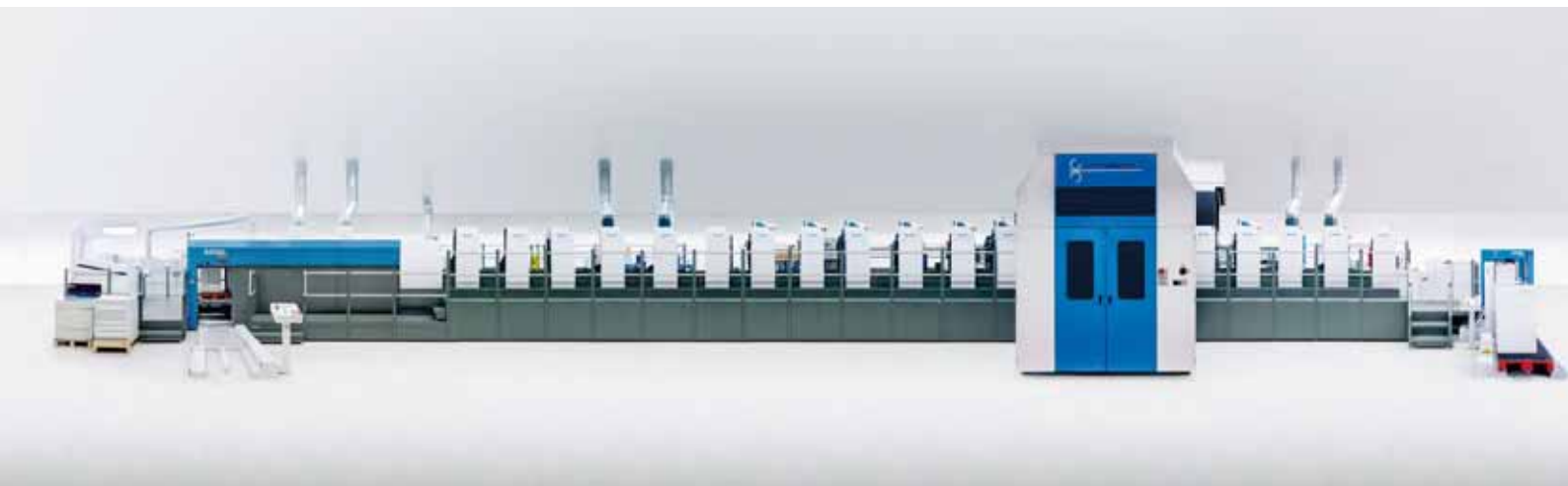
It goes without saying that the basic inventions have been updated regularly over the last 50 years and brought up-to-date technologically. Today's standard

production output of up to 20,000sph on the Rapidas and extensively automated printing and makeready processes were still unheard of in the 1960s. The Planeta Variant P4 was engineered for 10,000sph and nonstop operation for 8,000sph, half as fast as the Rapida 106.

All leading press manufacturers use the unit-type design with the usual modifications in their sheetfed offset presses today. In our fast-paced world it is easy to forget that it was the clever engineers from Saxony who first had this groundbreaking idea and that it often took decades for others to adopt it.

Below: Long sheetfed offset presses, like this 19-unit Rapida 106 in Switzerland, are only possible thanks to its unit-type design

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KBA-Italia celebrates 20 years

Successful branch in the Italian market



KBA-Italia was founded in the first few days of February in 1995. This Koenig & Bauer sales and service subsidiary in Italy was the result of the initiative shown by employees of the former sales company, La Bodonia. KBA-Italia celebrated its 20th birthday in February this year.

Koenig & Bauer acquired the press manufacturing plant Planeta in Radebeul, near Dresden, in 1992. Relatively soon afterwards came the decision to establish an own sales and service subsidiary in the key Italian high-sales market in order to offer the country's many users and potential clients the best level of support possible. The adventure began with just a few staff, but a lot of determination.

The headquarters of KBA-Italia and KBA-Flexotecnica are located in Tavazzano, near Milan

After a difficult start, KBA-Italia soon became a company which has continued to grow thanks to its high-performance presses, dedicated employees, reliable partners and most of all its loyal customers. KBA-Italia has carried out sales and service activities for KBA sheetfed

Managing director Joachim Nitschke at KBA-Italia's 20th jubilee celebrations



and web presses in Italy since the very beginning. Further services were added later, such as remote maintenance, preparation and coordination of new press installations, service contracts, press relocations, retrofits and upgrades on existing presses. Customer satisfaction has always been a top priority.

Close partnership with customers

Joachim Nitschke, managing director of KBA-Italia: "Our Italian customers have always felt like they are part of a large family thanks to our numerous informative events and workshops in Italy and the successful annual group trips to small and large open-house events at KBA-sheetfed in Radebeul. This is how it should be as a good partnership has advantages for both sides."

In the last 20 years almost 1,000 KBA presses have been installed in Italian printing companies: This includes many large-format presses for renowned book and packaging printers as well as a large fleet of Rapida 105 and Rapida 106 presses in family-run firms and big printing groups. This is in addition to numerous

Compacta press lines for commercial and book printing.

In past crisis years KBA-Italia has also fully supported its many Italian customers. Following the market-related slump in new investments, there are now signs of growing demand in high-performance KBA technology. KBA-Italia has felt the effects of this and the growth in trust of its customers accumulated over decades, despite shifts in the print industry.

A part of this change is also the move to Tavazzano where KBA's second Italian subsidiary, KBA-Flexotecnica, is based. The expertise of both companies is now bundled at the new site and KBA users profit from a range of resulting synergies and short communication paths.

KBA-Italia wishes to thank all of its customers and partners in the Italian print industry on its 20th birthday, and will continue to be a reliable and experienced partner.

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Superior inline finishing on a raft of substrates

Unique Rapida 106 at Ruggeri Grafiche

An open house took place at Ruggeri Grafiche in Modena at the end of March 2015 to mark KBA-Italia's 20th jubilee. More than 100 Italian print experts were in attendance. A highlight of the event was the unveiling of a unique KBA Rapida 106 for high-quality inline finishing with seven inking units, coater, two interim dryers, a further printing unit, triple delivery extension and perfecting after the first unit.

Joachim Nitschke, managing director of KBA-Italia, thanked Ruggeri's managing partners for their hospitality and support in organising the event. Many of KBA-Italia's customers and potential clients as well as Ruggeri's business partners came to see the high-tech Rapida live in action. Managing partner Davide Pini presented his company. KBA sales director Jan Drechsel thanked the staff of KBA-Italia for 20 successful years of hard work on the Italian market.

Graziano Mion, sales manager at KBA-Italia, talked the visitors through the print demos. Production of a four-colour job with UV coating on coated paper was first – a Ferrari poster and KBA world map. The press then printed greeting cards on carton and packaging in perfect-

ing mode. The press' fast job change and the high printing speed of 18,000sph which is unique in this configuration on the Italian market amazed the print pundits.

Flexible for paper, carton and film

The long Rapida is equipped for printing on paper, carton and film. It features automatic plate changers, CleanTronic Multi combined washing systems for mixed operation with conventional and UV ink, and CleanTronic UV. An EES (Emission Extraction System) extracts exhaust air ensuring optimal conditions for the press operators.

Along with the new Rapida 106, an older Rapida 105 with six printing units, coater, delivery extension and kit for conven-



Above left: Group photo (l-r) with Daniele Zagni and Davide Pini, both managing partners of Ruggeri Grafiche, Joachim Nitschke, managing director of KBA-Italia, and Marcello Anderlini, managing partner of Ruggeri

Centre: The Rapida 106 was fired up at the end of last year

Below: Illustration of the unique Rapida 106 at Ruggeri Grafiche

tional and UV coating is in operation at Ruggeri Grafiche's new plant.

Ideal working conditions, harmony between staff and customers, honesty and attention are the company's guiding principles. This is in addition to a focus on quality and the environment. Ruggeri is FSC accredited and remains competitive with the industry's big names thanks to cutting-edge technology.

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New dimensions in performance with Rapida 106 at C.E.C. Group in Carmaux

118,000 carton sheets in 8hrs and 3.4m sheets/month

French printing group Compagnie Européenne de Cartonnage (C.E.C.) which specialises in the production of food packaging flipped the switch on a high-speed KBA Rapida 106-6+L at its plant in Carmaux, Southern France in 2014. After seven months of non-stop press production at speeds of nearly always 20,000sph, co-owner and plant director Stéphane Grapy opened the doors of this family-run company to *KBA Report*.

The 126-strong C.E.C. Group is one of the largest manufacturers of food packaging in France with annual sales of €33.8m (\$36.5m) in 2014. Thousands of pieces of folding carton leave its three plants in Carmaux, Valence and Le Mans every day destined for renowned trademark companies. Founded in 1988, the company has been in the hands of the Grapy family since 1995 and is now managed by Roland Grapy and his son Stéphane. The firm regularly invests in new production systems thanks to its continually increasing sales in order to adjust to the market trend of lower grammage and smaller job runs.

The Carmaux plant opened in 2001 with 18 employees. Today the plant run by Stéphane Grapy has 25 staff and generates annual sales of €8m (\$8.6m). A cutting-edge six-colour Rapida 106 with high-speed package and coater was installed here in 2014. Various automation modules, such as DriveTronic SFC simultaneous coating forme changing, DriveTronic automatic plate changing and CleanTronic automatic roller and impression cylinder washing systems, guarantee maximum productivity.

Always up-to-date with the latest press technology

Stéphane Grapy: "Our systems are renewed every five years ensuring that we remain competitive and are continually able to offer our customers the latest printing technology. We wanted the new press to predominantly offer us a huge increase in productivity and a reduction in manufacturing costs. This has been the case with the Rapida 106. We have raised productivity by 25 per cent compared to our older press, a Rapida 105 from 2007. In the first seven months after installing the Rapida 106 we have printed over 20m sheets with an average job size of 13,000 sheets. Start-up waste



At 20,000sph and over 100,000 good sheets per shift, the team at the folders and in the mailroom work up a sweat keeping up

comes to only 85 to 120 sheets and we are always able to reach press speeds of around 20,000sph. In January 2015 alone we printed 3.4m sheets in three-shift operation and we even set a new in-house record of 118,000 good sheets in an eight-hour shift. It is worth noting here that 90 per cent of our jobs are five-colour jobs printed on 300g-strong recycled carton and finished with acrylic varnish. All in all we are extremely pleased with the productivity, print quality and reliability of the Rapida 106. It has fulfilled all of our highest expectations. The entire printing process has become more comfortable. We have increased capacity and have more leeway to process urgent jobs quickly and deliver jobs to our customers within 24 or 48 hours. The ability to offer maximum service and the fastest reaction times is a key advantage over our competitors in the industry."

Consistent quality

Furthermore, the high-tech Rapida 106 has allowed C.E.C. to receive the PSO certification. "Most of our customers are large enterprises from the food industry whose demands in terms of quality and standardisation have risen constantly in recent years," explains Stéphane Grapy. "Some colour scales demand the harmonisation of shade curves in order to achieve immaculate printing results. We tackled the PSO certification to guarantee that our customers' packaging looked the same down to the finest detail regardless of which of our presses it was printed on." C.E.C. is the second packaging printer in France to be successfully PSO accredited.

The success of the Rapida 106 at C.E.C. Tarn in Carmaux bowled over the Grapy family to such a great extent that they



The new high-speed KBA Rapida 106 at the C.E.C. plant in Southern France continuously breaks new production records

decided to update their press fleet in Valence earlier than planned. They are eagerly awaiting the delivery of a six-colour high-speed Rapida 145 with coater, pile logistics and equipped with same automation features as the Rapida 106 in Carmaux, in October.

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A.F.A. installs five-colour Rapida 106 perfector

Pocket diary specialist banks on substrate flexibility

A.F.A., based in Pantin a suburb of Paris, is a member of the Exacompta-Clairefontaine group, the leading printing house in the French stationery market. The company updated its press fleet with a five-colour Rapida 106 perfector. Configured especially for the production of high-quality pocket calendars, the high-performance press was delivered at the end of August and replaces a four-colour press from another German manufacturer.

Robert Vinette, head of production at A.F.A.: "The Rapida 106 primarily won us over with its unbeatable ability to handle a wide range of substrates. As a specialist for high-quality yearly planners we needed a press that would not only print our covers (350g/225lbs), but also the calendar's pages on lightweight paper (40g/25lbs) in a high quality and with maximum economic efficiency. Its high speed and rapid inking-up were deciding factors."

The Rapida will be installed next to a four-colour Rapida 105 with perfecting from 2008. It is equipped with DriveTronic automatic plate change and QualiTronic ColorControl inline colour measurement and control. KBA QualiTronic ColorControl inspects every sheet and corrects the colouring after every tenth sheet. This saves up to 60 per cent in waste during press start-up and guarantees that the client receives perfect print results on all sheets.

The high level of substrate flexibility and productivity delivered by the Rapida 106 tipped the scales at A.F.A. in favour of this high-performance press

Including the new Rapida 106 at A.F.A., the Exacompta-Clairefontaine group now operates a total of four KBA Rapida presses at full speed.

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Industrial production

More productivity and quality with standardised processes

Thanks to growing levels of comprehensive automation and networking, in the past two decades printing companies have switched from manual workmanship to industrial operations. The main goals of automation are cutting make-ready times and achieving the highest level of production security possible.

Automation means the transfer of as many operating processes as possible from the operator to independently acting machines and self-optimising systems. The role of humans is thus restricted increasingly to administration, planning, preparation, controlling of results, maintenance and services. Automation requires largely standardised processes so that the process variables can be kept within set, reproducible tolerance limits. This affects standards not just for quality, but also environmental protection and work safety.

Substantial cost-saving effects in terms of operating personnel and makeready times can be achieved through automation which pays off over varying time periods. Furthermore, automated quality assurance contributes to production reliability and thus lowers the risk of losing time and money through complaints. Ultimately, the result of extensive automation should be an equal boost in quality

and productivity. Only then can quality be achieved not at the expense of productivity and the other way around.

Networking supports automation

The level of automation, the proportion of automated processes of the entire process, increases with networking. This is why most plants which invest in automated presses already have a networked workflow or use the installation of such a press to push ahead with networking and standardisation within the company.

Machines and components are linked to a central system, normally a management information system (MIS). Information flows in two directions: from the central MIS to the various positions in the production chain and from there back to the MIS in the form of a status notification. Standards are used here, too – agreed many years ago by CIP3 or CIP4 consortium („Cooperation for Integration of [Processes in] Prepress, Press

Synchronized dedicated drives for every plate cylinder are the key components of KBA Drive-Tronic SPC simultaneous plate changing

and Postpress“). KBA has implemented corresponding standardised networking interfaces:

- The CIP3 Print Production Format (PPF) stores technical production data which is used for press pre-setting when printing and finishing.
- The advanced CIP4 Job Definition Format (JDF) contains extensive job data which is updated as it runs through the production stations as well as PPF preset data. It thus meets the demands for a job ticket, a “digital job bag”.
- A part of CIP4 is also the CIP4 Job Messaging Format (JMF) which among other things is created by JDF controllers of presses, by LogoTronic Professional at KBA, describes the status of production and reports it to MIS.
- Control over all job and press-related production steps is achieved at all times – up to delivery. As today’s MIS network solutions are platform-independent based on XML and are programmed for browsers, remote access via the internet is possible with Apps for mobile devices during a business trip or after work in the evening.

Automation levels

Automation is organised in hierarchical levels at industrial print operations. This can be illustrated as a pyramid model. The company level forms the top of the pyramid, below a multitude and variety of executing and reporting levels down to the final control elements and measurement readers in the press, where Makros and other programmes purposely carry out repeat commands without notice. The more complex the levels and the higher the level of networking between them is, the higher the operating



The KBA ErgoTronic console – here on a Rapida 145 – is the operator’s most important human-machine interface on an highly automated press. All data is communicated both directions, the operator has the last word here

Systems implemented	Typical jobs and sub-systems	Examples of KBA products involved
1. Company level (top of pyramid, management information)		
<ul style="list-style-type: none"> • ERP: Enterprise Resource Planning • MIS: Management Information System 	<ul style="list-style-type: none"> • rough production planning • order processing • CRM: Customer Relationship Management, Marketing • detailed production planning (press allocation, utilisation and availability) 	<ul style="list-style-type: none"> • open for all XML-based systems • Complete-Workflow-Suite • Complete Optimus Dash • Complete Print.X
2. Operations control levels (PPS: Production planning and control)		
<ul style="list-style-type: none"> • MES: Manufacturing Execution System • AMS: (Production) Press Management System • PPS (Production Planning and Control software) 	<ul style="list-style-type: none"> • BDE, MDE: Operating and press data capture (also from CIP4-JMF) • HRIS: Human Resources Information System • KPI: Key Performance Indicator Material Management (order system, logistics) • QM: Quality Management 	<ul style="list-style-type: none"> • Complete-Workflow-Suite • LogoTronic Professional • open for all XML-based systems
3. Process control level		
<ul style="list-style-type: none"> • process control systems • HMI: Human-Machine Interfaces • SCADA: computer-aided monitoring and control of technical processes (Supervisory Control and Data Acquisition) • BIRT: database access (Business Intelligence and Reporting Tools) 	<ul style="list-style-type: none"> • Preset: pre-set values from pre-press (CIP3/4) as well as from material and job-related stored data (internal formats) • Operating: operation by pressing a button at the console or press, per mouse click or touch of screen at console screen • QS: Quality assurance through <ul style="list-style-type: none"> – monitoring and checking (monitoring, visual quality control in connection with objective inspection/editing/measuring systems) – Logging, reporting and marking in connection with the production database – long-term monitoring and comparisons (quality monitoring) 	<ul style="list-style-type: none"> • LogoTronic CIPLinkX/Plus/Professional • ErgoTronic console technology • QualiTronic inspection and colour control • DensiTronic PDF and QualiTronic PDF • QualiTronic Mark and Quality Pass • DriveTronic pre-set module • BIRT-Link
4. Control level		
<ul style="list-style-type: none"> • SPS, PLC: Programmable Logic Controller 	<ul style="list-style-type: none"> • programmed execution of identical running processes (e.g. plate changing) • tracking of process conditions: <ul style="list-style-type: none"> – sporadic depending on situation: control (open loop) – permanent cyclical: control (closed loop) 	<ul style="list-style-type: none"> • programmed plate change DriveTronic SAPC, FAPC and SPC • ErgoTronic and QualiTronic-modules • PileTronic logistics and Ident/PDF
5. Field level		
<ul style="list-style-type: none"> • data entry and retrieval module • fieldbus 	Data interfaces to technical production process (press protocol, CIP3/4- interoperability, remote diagnostics and maintenance)	<ul style="list-style-type: none"> • console gateway to LogoTronic • interfaces and buses to presses and peripheries
6. Production level (pyramid base)		
<ul style="list-style-type: none"> • measurement readers (sensors) • final controlling elements (actuators) 	Technical production process (print run), capture of process variables (binary signals), response (automated correctional response of press elements according to target-actual comparisons)	<ul style="list-style-type: none"> • Rapida sheetfed offset presses • integrated measuring systems • remote-control press elements

Table 1: Automation pyramid of a printing operation with all key systems and terms shown as a table. Processes can be automated from top to bottom given the data retrieved from all levels.

Goals of automation in press room				
Process stability	Prevention of errors and press downtimes			
Shortened makeready times	Faster and partly simultaneous processes			
Reduced operator workload	The press operator is freed from strenuous physical and unnecessary routine work, and is thus able to concentrate on more important topics, such as print quality and completing scheduled print runs. Personnel costs can also be reduced.			
Enhanced quality	Objective, error-free measuring system instead of subjective, experience-based evaluations. Quality can be compared and can always be repeated.			
Industrial mode of production	Gains in productivity and quality			
The three levels of automation in a press				
Level 1: programmed process control	Processes, which can be activated by pressing a button, mouse click or touching a screen and are completed by themselves, are efficient when the process should be repeated in exactly the same way as before. <i>Examples: semi-automatic plate change, washing programmes for rollers and cylinders, use of CIP3 PPF pre-set data, pressing ink slide buttons.</i>			
Level 2: semi-automatic process control, plant controlled system, open loop control	The system uses a sensor to react to changing situations, nevertheless there are differences to fully-automatic systems (loading by hand, pressing start button or confirming via mouse click) <i>Example: fully-automatic plate changing systems, ErgoTronic ColorDrive/ColorControl</i>			
Level 3: fully- automatic process control, closed loop control	No operator intervention, the system acts and reacts on its own, recognises the optimum time within an entire process. <i>Examples: simultaneous plate change with DriveTronic SPC, Plate Ident pre-registering (sensors check the alignment of the loaded and retracted plates and start register correction), automat. PileTronic pile change at the feeder and delivery, automat. palette logistics to and from storage</i>			
The four levels of integration of measuring technology using inking control and regulation as an example				
Level of integration	1: offline (stand-alone)	2: online (connected)	3: nearline (centralised)	4: inline (fully integrated)
Place of measuring data capture	at the sheet delivery table	at the sheet delivery table	at a scan desk in the press room	in the press
Measuring device	Hand spectral densitometer for representative individual measurements at colour control bar or in the image. Display of colour density, CIELAB values, deviations or concrete recommendations, e.g. “0.1 D more Cyan”	KBA ErgoTronic Color-Drive/ ColorControl scan spectral densitometer measures in the control bar. Connected to console PC, KBA Color-Control software makes recommendations for every ink zone position.	Special case of online measuring (integration level 2), A single scan measuring system is linked to all printing machines	KBA colour measuring camera. Linked to console PC on which KBA QualiTronic Color-Control quality analysis software calculates control commands for each ink zone and executes these in real-time.
Actions of press operator	Press operator has to decide if corrections are necessary or not after inspecting image.	Confirms position recommendations with a single click in ErgoTronic operator screen (“open loop”).	Confirms position recommendations with a single click in ErgoTronic operator screen (“open loop”).	None (action only during set-up phase and in exceptional cases).
Production stability	Subjective control according to selected measurement at colour control bar. Long time delay of system due to manual corrections.	Objective control, slight time delay	Objective control, but with long time delay as the respective job has to always be activated first with this multi-machine connection.	Objective control, fast and low-waste solution. Allows continuous inking-up to OK sheet and seamless transition to production run.



KBA offers a raft of automation modules, also for quality assurance (inspection, colour control, PDF editing). Shown here the QualiTronic camera for inline colour control

automation level is and the stronger the individual production methods are pronounced.

Tailored automation concepts

Various automation concepts are implemented on presses in the press room. KBA creates individual configurations of automation modules together with the customer as choosing automated functions depends on the production requirements and print portfolio. Usually, Rapidas for commercial printing are different to those for packaging printing, not just in terms of sheet travel (perfecting, substrate thickness) but also in terms of the additional automation modules for logistics (non-stop pile change, transport belts) and quality assurance (inspection, colour control, PDF editing).

Nevertheless, there are also many similarities, as in both areas certain automation modules can achieve considerable reductions in makeready times, primarily through pre-setting, automatic plate changing and washing processes. An additional saving effect is delivered by simultaneous operation of makeready processes. The KBA Rapidas are ahead of their competitors in this respect.

Practical automation

The more electronic components and software that are integrated into a system, the higher the chance of system failures in theory. However, given the proven reliability of today's automation solutions, this basic rule cannot determine the level of automation. The individual job structure and the result-

ing production requirements are more important deciding factors. For example, automatic plate change with DriveTronic FAPC or even direct drives at the plate cylinders with DriveTronic SPC for many small and smaller commercial printing jobs make more economic sense than for large-format packaging printing. Not everything that is possible today makes economic sense. The time it takes an automation solution to pay off depends considerably on to what extent they are used in daily production and its effects (e.g. fewer personnel, shorter delivery times, less waste, improved quality, higher prices) are economically viable.

Along with the current or future production structure planned, the starting point when planning an investment should be a high level of press availability. The level of automation of a press is always a combination of the right number of automation modules and, where appropriate, different degrees of automation and integration (see table 1).

Together with the customer, KBA plans configurations that make sense, which are not just a question of budget, but also the market segment that the customer serves and the associated demands in terms of quality and productivity. An example: semi-automatic plate changers are enough for a printer who predominantly prints large job sizes. But whoever primarily earns money with makeready times as the print runs are becoming smaller, should not save in the wrong places and invest in DriveTronic technology with automatic plate change and parallel washing processes.

KBA has won the renowned CIPPI award several times for its engagement in printing house networking and workflow automation



Left page: Table 2: Basics of automation technology and automation levels in the press room

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Over 160 print experts from Poland, the Czech Republic and Slovakia attended the UV open house at KBA-Sheetfed in June 2015 to see a Rapida 75 with LED-UV live in action

demands of small and mid-sized printing firms. This small Rapida has managed to hold on to its market share against competition from digital systems.

Press configurations with five printing units and an extra coater are popular.

Cutting-edge B2 offset press for ambitious small and mid-sized firms

The flexible Rapida 75 is very popular in Central Eastern Europe

Users of small and half-format offset presses in particular are suffering the effects of the shift in the graphic arts industry, ever smaller print runs and the growth of digital printing. However, there are a raft of printing companies in Poland, the Czech Republic and Slovakia with sheetfed offset presses in B2 format or smaller. KBA CEE in Prague and Warsaw also looks after these users with great dedication. It is not without reason that the Rapida 75 is particularly successful in this sales region.

In 2014 55 new and 24 used printing and coating units belonging to the Rapida 75 went to users in the Czech Republic, Slovakia and Poland. In the first half-year 2015 alone 47 new printing and finishing units were ordered by printing companies in these three countries. This is in addition to 18 second-hand units. Further orders are in the pipeline.

Extensive automation is becoming standard

A lot has changed since the Rapida 75 was launched at Drupa 2008. A host of parts, technological innovations and automation modules flowed from the large Rapida models into the Rapida 75. Step by step a cutting-edge half-format press with an excellent price-performance ratio was developed. It is tailored the



The B2 Rapida 75 is particularly popular in Central Eastern Europe

Nevertheless, eight-colour perfectors for 4/4 production are also not uncommon. Commercial printers are turning more and more to LED-UV even for half-format. The demo center at KBA-Sheetfed Solutions in Radebeul has registered growing interest in the Rapida 75 featuring LED-UV curing with its fast processing times.

Automation solutions, such as automatic plate change, touchscreen operation, automatic format adjustment, densitometric measurement with automatic colour control, washing systems for rollers, blanket and impression cylinders, are becoming increasingly important and are standard features of many of the Rapida 75 presses ordered today. The maximum printing speed is often not a key criteria when it comes to small print runs, nevertheless, the Rapida 75 prints at speeds of up to 16,000sph in format 605 x 750mm (23.8 x 29.5in). What is more, it is able to handle a wide range of substrates from 0.04 to 0.8mm. The press offers users the level of flexibility needed in today's competitive market.



Zdenko Kugler (l) and Marek Kmetik from Slovakian printshop Valeur installed a new eight-colour Rapida 75 for 4/4 printing a year ago

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Commitment to the printed newspaper

The highly automated Commander CL for Aschendorff Druckzentrum in Münster, Germany

Aschendorff Druckzentrum in Münster orders Commander CL

The printing plant belonging to media group Aschendorff in Münster, Germany, has been in operation for over 250 years. A new chapter is set to begin there in spring 2016 with the production start-up of a Commander CL from KBA.

The highly automated and flexible 32-page web press will join three presses from another manufacturer and will predominantly print small-circulation newspapers at night given its significantly shorter makeready times thanks to automated plate changing. Its high print quality and performance potential with up to 50,000 full-colour newspapers per hour will be used to produce high-quality print products with high circulations during the day.

"Together with our steadily evolving range of digital offerings we believe in the future of printed, appealing daily newspapers and other print products in terms of their visual qualities and contents," says head of the business area responsible for the printing facility Gerhard Dust. He sees the most recent investment as an important step in producing the media house's numerous print titles efficiently and economically, and to meet today's demands for quality. "The KBA web press featuring a first-class inking unit with three forme rollers demonstrated its outstanding potential in terms

of print quality during a printing test." The company's technical director Thomas Wenge adds: "From a technical point of view we were bowled over by key features, such as practical automation with automatic plate changers and plate lifts as well as the unique roller locks, which result in a high level of productivity and economy."

A media vendor with a broad portfolio

The Aschendorff group is the leading media supplier in Münster and the region. The core competence and roots of the family-run company which was founded nearly 300 years ago lie in the printed word. The firm publishes 20 different local editions including the *Westfälische Nachrichten*, the region's daily with the largest circulation, the *Ahlener Zeitung*, the *Tageblatt für den Kreis Steinfurt* in Ochtrup, the *Münstersche Zeitung* and the *Grevenener Zeitung*. The newspaper experts are well known in the industry for their outstanding print quality. They are a longstanding member of the exclusive International Newspaper Color Quality Club and also belong to

Automatic plate changing in under three minutes on the Commander CL



ties for special ad forms, such as four-page centre spreads (Superpanorama), half-covers and spadia and provision has been made for the addition of further modules for Zip'n'Buy and ribbon stitching. The Commander CL will be controlled from an ErgoTronic console featuring EasyTronic software for optimised start-up and automated run-down as well as PressNet for scheduling, presetting and process control.

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the WAN-IFRA Star Club. Apart from its core business in print media, which also comprises of frees, supplements, magazines and books, the media group with its some 600 staff take advantage of the possibilities and opportunities of electronic media, internet, radio and TV. The www.wn.de is the widest reaching online news portal in the region. Setting up new digital platforms is the second pillar of the company's business strategy. The third cornerstone of the group's portfolio are professional service providers and marketing offerings, e.g. in the areas of marketing and logistics for the media sector.

Highly automated and flexible

The 350 x 510mm format (13.8 x 19.7in) press can print 100,000 broadsheet newspapers per hour with up to 16 full-colour pages. It comprises two four-high towers for 4/4 printing, a KF 5 jaw folder and two Pastomat reelstands with a stripping station and Patras A reel-transport system. An extensive package of automation modules including inking unit and cylinder washing systems, fan-out compensation, colour measuring and control systems, colour and cut-off register controls, and automatic plate changing reduce make-ready times, waste, operating efforts and maintenance. An intelligent quality management system supports a high print quality. The press is equipped with facili-

Excellent results and innovation in newspaper printing

UK newsawards for KBA newspaper press users

The newsawards have evolved from The Newspaper Awards, which have been a significant and successful event in the UK news media calendar for 18 years. This year the coveted prizes that reward pioneering newspaper innovation in the industry received a new, modern look. The awards ceremony took place on 29 April at the Lancaster Terrace Hotel in London.



National Newspaper Printer of the Year (Agfa Premier Award) WESTFERRY PRINTERS (Daily Star / Daily Express)
Westferry operations and projects manager Mick Crawley (l) is presented with the award by Agfa Graphics business development manager Nick Lazell



International Newspaper of the Year (Resolute Forest Products Premier Award)
FRANKFURTER ALLGEMEINE SONNTAGSZEITUNG London FAZ political correspondent Jochen Buchsteiner (l) receives the award from Resolute Forest Products vice-president sales Europe Rob Hilbrink



Weekly Newspaper of the Year (WRH Global UK Award) THE CUMBERLAND NEWS Graham Stephenson (centre), print general manager at CN Media, receives the award from WRH UK managing director Lee Whatmough (l) and news-awards director Gary Cullum

This unique event recognises the industry's best and awards prizes in different categories: print, digital and the most successful business model.

Newspapers and publishing houses are awarded prizes in the category print for quality and innovation regarding printed newspapers. Three newspaper houses that use KBA press technology won top awards. We would like to congratulate all winners on their outstanding performance and especially wish to congratulate the following KBA users:

- **National Newspaper of the Year:**
Daily Star / Daily Express
(Westferry Printers with KBA Commander CT)
- **Weekly Newspaper of the Year:** *The Cumberland News*
(with KBA Comet)
- **International Newspaper of the Year:**
Frankfurter Allgemeine Sonntagszeitung
(Frankfurter Societätsdruckerei with KBA Commander)

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KBA RotaJET 76 goes to renowned book producer

Kösel enters digital book printing market

Kösel in Altusried Krugzell, Germany, is known in certain industry circles for its innovative spirit and its high-quality books. Founded in 1593, the firm produces some 13m copies per year and its 190 employees generate sales of around €22m (\$23.9m). Kösel has won numerous awards including book printer of the year at the Druck & Medien Awards, the DID award 2014 for book finishing, the IF Design Award in the category Print Media and many more for the outstanding print and finishing quality of the books it produces.

Until now Kösel printed and finished its high-quality books on cutting-edge sheetfed offset presses and an offset web press. This prominent firm took into account the trends towards smaller runs with shrinking cycles to print-on-demand and installed a KBA RotaJET 76 inkjet press connected to inline finishing kit from GEP Germany (Global - EHRET Processing Technology). The new press is expected to replace an offset web press.

The right digital press for thin paper

Ultimately, what tipped the balance in favour of the RotaJET was its robust engineering which combined with an intelligent web guidance system over two large cylinders without turner bars result in optimum web tension and a high print and register quality even on thin paper. The KBA RotaJET gives rise to fewer register issues than other digital machines when perfecting in one or full-colour.

The RotaJET in Altusried, Germany, predominantly prints substrates under 40g/m² (25lbs). It is mainly used to print literary and scientific works, legal literature as well as textbooks and schoolbooks in black on both sides of the paper.

KBA RotaJET: precision engineering "Made by KBA"

With a max. web speed of 150mpm (500fpm) and a max. web width of 780mm (30.7in) (equalling approx. 3,000 DIN A4 pages a minute or approx. 85m DIN A4/month) the RotaJET prints using KBA RotaColor water-based pigment inks. Its Piezo inkjet heads are designed for high loads and are reliable and low-maintenance. They do not need to be changed frequently as is the case with other systems. The inkjet heads are cleaned automatically. Furthermore, the heads are aligned automatically (stitching) and every head can be controlled

The KBA RotaJET 76 with inline finishing technology from GEP Germany for book producer Kösel in Altusried-Krugzell, Germany

Below left: The RotaJET's intelligent web guidance system over two large central cylinders without turning bars ensures a high level of register quality when perfecting even on thin paper

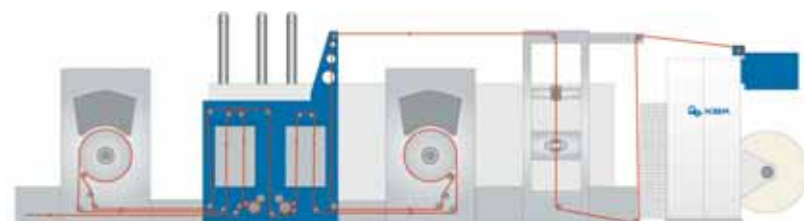
Below right: Kösel managing partner Erik Kurtz (r) and Christoph Müller, managing director of KBA-Digital & Web Solutions

individually. Print resolution stands at 600dpi native and variable droplet sizes deliver an additional boost to quality.

The two arrays of 56 inkjet heads form an arch over two large central impression cylinders and can be moved aside for maintenance purposes. This arrangement facilitates an outstanding register accuracy on challenging substrates. The unwinder which was specially developed for the RotaJET and the infeed unit ensure optimum web tension. Tension is controlled automatically. At the end of the day this results in less waste, fast job change, efficient production and more flexibility.

Press line intercommunication and the integration of third-party systems take place in accordance with JDF standard. The RotaJET 76 workflow is based on APPE (Adobe PDF Print Engine). Moreover, the upstream front-end is configured for high-volume POD production.

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The first KBA RotaJET VL in operation in Arnsberg

Interprint at the head of digital decor printing

The desire to individualise our living environment to a greater extent is the driving force behind the rapid transformation of decorative printing. There is potential for much more than the some 500 new wooden, stone and creative decorative products currently brought onto the market by the big European decor printers every year. Supplementing gravure with digital printing makes it possible. Interprint has won the first round of the race for the best starting position. Digital printing is already taking place at its headquarters in Arnsberg, Germany, on a KBA RotaJET 168.

The RotaJET has already been modified many times since Drupa 2012 when Koenig & Bauer presented its digital web press for the first time on a large scale. A raft of variations with regard to width and equipment options have evolved in order to meet the special demands of the application in question. That the first RotaJET VL (= Very Large) took up production in a typical industrial printing field has to do with Interprint's desire to be a technological trailblazer on the one hand, and on the other hand with KBA's ability to implement customer wishes rapidly during the testing phase.

In the top 3 worldwide

Owner of Duropal, Paul Wrede, fired up his first gravure decor press at the newly founded firm Interprint in 1969. Four and a half decades later Interprint has perfected the balance between customer-orientated services and industrial pro-

duction so much so that it is now one of the top three decor printers in the world. In 2014 the Interprint group delivered some 1bn square meters of decorative paper, finish foil and melamine film which was not only produced in Arnsberg, but also in the USA, Malaysia, Poland, China, Vietnam, Russia and recently also Brazil. Over 1,200 employees generate annual sales of around €285m (\$321m) and form a key pillar of the family-run Wrede industrial holding company.

Water-based inks

Printed decorative paper is the key product for the visual appearance of furniture, floor coverings and interior furnishings. The technical parameters are exactly matched to the industrial production of wood-based materials (chipboard, MDF, HPL/CPL boards) which are sometimes over 2m (6.5ft) wide. The 50 to 70g/m² (35-45lbs) paper normally used

Interprint shows off the new production possibilities delivered by digital decor printing on the walls of its air-conditioned press room
Photo: Interprint



is uncoated. Nevertheless, it has to remain highly tear-proof even when wet as it is saturated with resin during further processing.

In contrast to publishing gravure, decor printers use water-based inks when printing with gravure presses. No solvent recovery is needed, but drying is particularly energy intensive. Printing takes place from reel to reel at speeds of up to 450m per minute (1,476ft), at Interprint it is even up to 600m per minute (1,968ft).

Seven Kochsiek gravure presses are in operation at Interprint in Arnsberg. Their downtimes are sometimes even longer than the printing times: proofing when setting up gravure printing formes takes up to 4.5 hours per job depending on the technology. It also includes laminating the proof onto the substrate selected in order to assess the actual end product. In contrast to publishing and packaging printing, decor printers only work with secondary colours. They usually have three, but sometimes also additional or fewer printing units. Paper also counts as a further 'colour'. In this way thousands of colour variations can be created from the raft of wooden or stone decorations.

Gradual entry into digital production

Interprint began heavily researching digital printing back in 2006 in order to shorten these processes, react to the advances in individualisation and offer customers greater flexibility.

In 2009 the company entered into a joint venture with Daetwyler. How-

With the RotaJET VL KBA demonstrates its extensive expertise in engineering also in decor printing with large web widths and sensitive substrates



ever, “Lasersonic” technology did not lead to an economic solution in decor printing. The firm has fired up several Roland Multipass inkjet plotters since 2011 which in part take over laboratory proof-printing. The “Digital proofing” department was set up in parallel. Proofing is taking place more often with the customer in front of the computer screen. Interprint operates 15 plotter systems worldwide for proofing.

The next step in digitalisation led to the installation of a Palis pilot system with a cutting width of 750mm (29.5in) and a maximum speed of 75mpm (246fpm). It was a cooperation which helped collect experience but was not continued. Interprint instead turned its focus to the RotaJET. Even though the KBA Group is successful in many different industry segments from newspaper and security presses to printing glass hollow containers, decor printing was new territory for the press manufacturer, aside from a gravure press installed in Soest, Germany, ten years ago.

If it had been solely up to Interprint, they would have made the jump to 2.25m (7.38ft) from the beginning. This is a standard web width used also by gravure presses. Nevertheless, it is challenging in terms of mechanics and temperature control for a width of 2.25m (7.38ft) when a double-width press for newspapers in Berliner format only needs 1.26m-wide (4.1ft) impression cylinders.

Interprint and KBA thus opted for an interim step and chose to start with a

maximum production width of 1.68m (5.5ft) press, also a common width for decor printers especially when producing 5ft-wide HPL material (High Pressure Laminate) used for kitchen surfaces for example.

Fast implementation from the drawing board into practice

The path from the drawing board to the first saleable decorative materials was cut considerably by this decision: Interprint ordered a RotaJET in summer 2013, in September 2014 test runs were carried out on the press at KBA in Würzburg and it was installed in Arnsberg in December last year. Customer and manufacturer spent around six months working on optimising the system which was almost complete in July.

A two-hour test during which the RotaJET 168 digitally printed various decor products without any interruptions was completed to everyone’s satisfaction. The time needed for proofing one printing forme to another was zero as it had already taken place in advance. The data for the next printing forme is imported while the press is running thanks to a data transfer rate of 2.2 terabytes per second. The RotaJET’s maximum speed is 150mpm (492fpm), approximately a quarter of what gravure printing permits. However, the speed currently is not an issue given the expected job structure and average print volume.

Climate control necessary in digital decor printing

The KBA RotaJET 168 at Interprint is



From top to bottom:
Inkjet printing unit (r)
with the printed 1.68m-
wide paper web
Photo: Interprint

equipped with an automatic reelstand, an inkjet printing unit, a press module with a pre-coating unit (for fibre optimisation) and a downstream hybrid dryer (infrared plus hot air) as well as a second module featuring two dryers where the web runs through after printing. There is no need for turner bars and the necessary drying paths are guaranteed thanks to the arrangement of the three towers and intelligent web lead. The inking heads which are arranged in two rows permit a resolution of 600 x 600 dpi with variable droplet sizes.

A perfect register with an intelligent web lead:
decor web on the central
cylinder with an idle array
of inkjet heads
Photo: Interprint

Consistent climatic conditions are especially important for stable digital decor printing. The RotaJET is located in a fully air-conditioned hall measuring some 35 x 17 x 5m (114 x 55 x 16ft). Rollers and cylinders within the press are also temperature-controlled.

Robert Bierfreund,
managing director responsible for technology at
Interprint (l), and Malte
Tadday, head of digital
printing at Interprint (r),
at the KBA RotaJET 168's
console
Photo: Deutscher Drucker

When discussing the topic of digital decor printing the role of the ink always comes up, not least since it is a large cost factor as is normal in digital printing. Adapting printing with secondary colours which is usual in decor gravure printing to CMYK requires years of experience. Interprint acquired this through its entry into digital pre-press early on





Two pivoting hybrid dryers (IR/TA) after printing



KBA Patras M supplies the KBA reelstand with 1.68m-wide paper reels



The printed reels at the rewinder are stored away during ongoing production



Interprint has praised the precision and register accuracy of the RotaJET where the inkjet heads are positioned over a central cylinder.

as well as through colour matching. The first press operators were trained here and now the team consists of eight staff. KBA is able to supply Interprint with the correct ink (KBA RotaColor) as part of the package which also helps to avoid possible conflicts in advance.

Interprint has praised the precision and register accuracy of the RotaJET where the ink heads are positioned over a central cylinder. Typical substrates used in decor printing are not exactly easy to guide says Robert Bierfreund, technical managing director at Interprint and COO of the globally active group: "Our paper is like blotting paper. It expands when it gets wet and even when a colour is off by just two pixels this can be seen."

The coup at Design Post

Interprint landed the coup in May 2015 with the unveiling of the first digitally printed decor paper at Design Post in Cologne, Germany. This "showroom for design aficionados, boulevard for aesthetes and source of inspiration for design industry professionals" can be found in the historic halls of a former post office in the Deutz quarter of Cologne. Interprint exhibits its latest designs every two years here over 3,000m² (9,842ft²) where exclusive international interior design brands too present their current trends. This year the company will be showing off its new digital designs.

Robert Bierfreund explained that at first Interprint thought that its customers wouldn't be interested in the printing process behind the designs as long as the

print quality remained the same regardless of gravure or digital printing. They were wrong. A video which came out for the start of Interzum and showed the new press in action quickly amassed hundreds of clicks on YouTube and is proof of the industry's huge interest in this step taken. The announcement at the beginning of May that read "Interprint can print decor digitally" was soon followed up with the first deliveries to customers two months later. "While others simply talk about digital printing, we are putting it into practice," says Robert Bierfreund about their lead over the competitors. "What is more we have solved customers' problems with this technology, especially when it comes to short print runs and demands for individual designs," Bierfreund continues.

A door opens

Interprint cannot foresee the possibilities delivered by digital printing offerings yet. Adjusting its internal order-handling procedure to a process which is expected to reduce lead times from five weeks to less than ten days is only the first step. Logistics and packaging solutions between machine and the delivery ramp is another. Nevertheless, more importantly digital printing is able to open up completely new markets and customer bases for decor printing. Interprint Group managing director responsible for sales and marketing, Holger Dzeia, is certain of this. The high number of inquiries from a raft of industries that have reached In-

”

« While others simply talk about digital printing, we are putting it into practice »

Robert Bierfreund



Above: Automatic webbing-up is one of the strengths of the KBA RotaJET for industrial printing

Centre: The trend in individualisation boosts demand for individual decor. The opportunities for industrial digital printing thus increase with sinking print runs
Photo: Deutscher Drucker

The non-stop rewinder with a printed decor reel

terprint in the weeks following the announcement all point to this conclusion.

Interprint CEO Frank Schumacher: "This new technology will radically change our business model. We are actually talking about revolutionising the decorative printing industry. Here at Interprint we are proud to have taken on a leading role."

KBA CEO and president Claus Bolza-Schünemann already announced the sale of a RotaJET to a further decor printer at the Koenig & Bauer AGM, this time a 2.25m-wide (7.28ft) press. The success story thus continues.

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After signing the contract at Shanghai Zidan Food Packaging & Printing: (r-l) Zhang Peng, sales manager flexo at KBA-China; Andreas Dallavalle, sales director KBA-Flexotecnica; Claudio Bisogni, CEO KBA-Flexotecnica; Lu Weida, general director Shanghai Zidan Food Packaging & Printing; He Congyou, chief engineer and deputy general director; He Hongjian, production director (all Zidan) and Andreas Friedrich, general manager web press sales and service KBA-China



Collaboration with global KBA organisation bears fruit

EVO XD presses from KBA-Flexotecnica for China and Canada

Thanks to the support of KBA's global sales and service network KBA-Flexotecnica has achieved significant success with its cutting-edge EVO XD press series, also in regional packaging markets which in the past were only rarely served.

The EVO XD series from KBA-Flexotecnica is also popular in Asia and America

Flexo with EVO XD adds to sheetfed offset with KBA Rapidas
Shanghai Zidan Food Packaging & Printing ordered this new central-cylinder flexo press from KBA-Flexotecnica after an intensive selection process. KBA China's great dedication to this project proved helpful as our Chinese sales and service company delivered a large-format Rapida 142 sheetfed press to Zidan Food Packaging & Printing in 2012 and has an excellent reputation in China. Zidan Food Packaging & Printing is a leading supplier of sophisticated packaging and was founded in 1996 by the Zijiang Group. The Group sets the standards in China with regard to flexo printing. Zidan's main products include food packaging, folding carton, corrugated packaging, shopping bags and even packaging for toys. Internationally renowned enterprises, such as KFC, McDonald's, Kraft,





David Seychell, president of Seydaco Packaging Corp., eagerly awaits the delivery of his new EVO XD flexo press

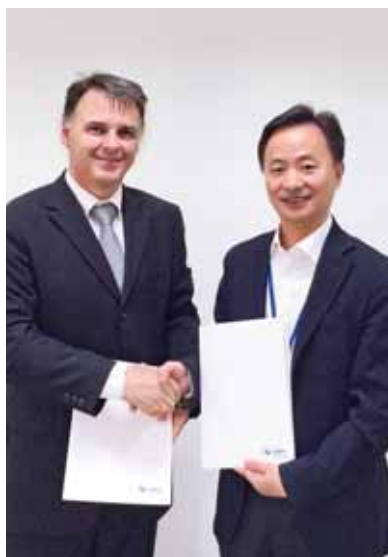
Phillips, Sony, GE and GM, are just some of its longstanding customers.

Zidan owns an extensive press fleet and keeps a close eye on offering the highest level of quality coupled with environmentally friendly production. Along with the order for an eight-colour EVO XD with an additional inline flexo printing unit, the packaging experts also ordered a high-tech, medium-format Rapida 106 with nine printing units and a coating unit at Print China in Dongguan in April 2015. Zidan aims to expand its capacities for fast-food paper packaging with the EVO XD from KBA-Flexotecnica. Lu Weida, general manager of Zidan: "We are following our strategy of achieving the highest level of quality using a sustainable production process with this new press. We are convinced that we made the right choice by ordering the EVO XD."

EVO XD sets new Flexo standards in Canada
Seydaco Packaging Corp. in Mississauga, Canada, has also ordered an eight-colour EVO XD from KBA North America. It will be delivered this year and is expected to support the company's fast growth curve. The entire flexo EVO XD web press includes the new KBA-Flexotecnica eight-colour CI plus two inline flexo downstream units as well as double reelstands with auto splicer, festoon dryer, flatbed die-cutter with rotary stripper, belt askew, and delivery.

The EVO XD from KBA-Flexotecnica press will complement Seydaco's sheetfed arsenal allowing them to offer competitive long-run carton production for export markets. Seydaco and its sister firms, Groupe Ecco (folding carton manufacturer); Miramont Labels (both based in Quebec) and National Carton & Coating, (manufacturer of custom-printed folding cartons, stock chipboard boxes, and mailers) all pride themselves on offering maximum flexibility to all of their market segments including a wide variety of folding carton and pressure sensitive label services.

Once the new press is installed, Seydaco's intention is to use it to support mid- to



KBA-Flexotecnica CEO Claudio Bisogni (I) and general manager Lu Weida from Zidan Food Packaging & Printing are pleased with the conclusion of the contract



« We are following our strategy of achieving the highest level of quality using a sustainable production process with this new press. We are convinced that we made the right choice by ordering the EVO XD. »

Lu Weida

long-run requirements at all Seydaco-related locations. Initially, the firm will target paperboard foodservice packaging, where Seydaco and Groupe Ecco are already well positioned. The firm also intends to attract label owners and consumer packaged goods companies. Until now Seydaco, Groupe Ecco and National Carton & Coating had only installed sheetfed offset presses. However, Miramont has already gained experience in flexo. While flexo printing is new to Seydaco, its partnership with KBA is not. The firm currently operates two six-colour Rapida 105 presses, a seven-colour Rapida 105, and a 10-colour Rapida 130 with two coating stations. All are equipped with UV kit.

It was four years ago when David Seychell began thinking about acquiring a flexo press. In early 2013 he found a new location that was suitable to house both the sheetfed operation and the future KBA-Flexotecnica kit along with reel storage and other equipment requirements.

Seydaco Packaging Corp. is a privately-held corporation specializing in the manufacturing of stock and specialty paperboard products and is one of the largest suppliers of critical high-quality graphics for leading manufacturers of cake, pie, pastry and pizza cartons.

Klaus Schmidt
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Website :
<http://www.seydaco.com>

Flexible marking & coding for the pharmaceutical industry

Inline or offline coding – based on the same technologies

Pharmaceutical product packaging is there to make sure the products can be tracked, traced and protected from piracy. It must also provide consumers with various information, such as the expiration date. With a raft of marking and coding solutions on offer using various technologies, KBA-Metronic enables the subtle and economic marking of pharmaceutical packaging in large batches and small runs.



Above: Thermal inkjet coding of a blister pack for medicine with the betaJET

The betaJET thermal inkjet printer is often used for coding the secondary packaging of pharmaceutical products made of carton and plastic

The international pharmaceutical industry is often an easy target for product piracy and medicine counterfeits. Online sales channels are especially at risk as they can be used as a platform for circulating fake or copied medicine of dubious quality. Along with damaging the patient's health, the reputation of the brand's owners might also be damaged.

Track & trace measures including the coding of pharmaceutical packaging with individual serial numbers detect counterfeits. "The effort associated with track & trace is great, but with the appropriate coding and marking systems this can be kept within reasonable economic limits," says Oliver Volland, managing director of KBA-Metronic.

Marking and coding systems integrated into the production line are suitable for batch production. Flexible offline marking systems are the better choice for small runs as well as limited special campaigns in terms of time and space. As a coding and marking system specialist, the KBA subsidiary offers solutions for both cases with various technologies and is thus able to offer tailor-made solutions for almost every coding application.

High print quality with thermal inkjet (TIJ)

betaJET thermal inkjet printers from KBA-Metronic print freely programmable plain text, codes and logos with a resolution of up to 600 dpi. Even the smallest characters are legible with this resolution. Suitable reading devices can



import coded data in the complete logistics chain from the wholesale to the pharmacy and guarantee the traceability and authenticity of the PPN code and serial number.

An important point to consider when choosing a coding system is maintenance, in particular the exchange of worn parts. The betaJET does not contain any moving parts in its ink supply system which could interrupt production and cartridges can be changed quickly and easily by the operator. The automatic ink-saving mode as standard limits costs linked to consumables. Thermal inkjet printers are thus suited to coding the outer carton or plastic packaging of pharmaceutical products.

Smear- and smudge-proof with laser

Using a laser is ideal for the pin sharp, permanent coding of pharmaceutical products and packaging at high speeds. LaserSYSTEM coding systems meet the demanding requirements of the pharmaceutical industry (21 CFR part 11) and code a variety of surfaces as well as a raft of materials permanently without smearing or smudging.

The laserSYSTEM series has proven itself in the pharmaceutical industry where it is used for coding paper and carton, plastic film as objects made from PET, PVC, PP, PA and glass. When equipped with a CO₂ laser plastic film can even be cut, perforated and scored.

Offline coding

Some pharmaceutical products are only made in limited quantities. Fully automatic production lines equipped with integrated coding devices do not pay-off for promotional, seasonal or special products with low batch sizes. Nevertheless, such pharmaceutical products must still be coded. Manual coding and marking



Left: Track & Trace: ablative laser coding of folding carton

Right: Thermal transfer coding of a can label



The semi-automatic udaFORMAXX for economic offline coding of small batch sizes

is likely to end in errors and amount in high costs. Semi-automatic coding systems meet these criteria without going over budget.

This versatile offline coding system can print on flat-lying folding boxes, carton blanks, single sheets, blister packs, paper

blanks, ISO board, block bottom bags and other containers.

Available with various printing technologies

Compared to manual solutions, semi-automatic coding with the udaFORMAXX is not only more cost effective, but it is also safer and faster due to its interrup-

tion-free operation. Operators are able to refill the cartridge without stopping production. In addition, the system can also be equipped with various printing technologies.

Oliver Volland: "The most ideal coding solution in terms of technology and economy is determined based on the individual requirements. Our betaJET thermal inkjet systems and the laserSYSTEM series are predominantly suited to the counterfeit-proof, serial coding of pharmaceutical products."

Iris Klühspies

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EU Cosmetics Regulation

Coding meets packaging design

Cosmetic and skincare products are expected to have an embellishing effect and their packaging must therefore reflect the product's high quality and appeal to customers in terms of design and functionality. KBA-Metronic presents its solutions for aesthetically sophisticated marking and coding.

Great importance has been placed on coding cosmetic product packaging since the introduction of the so-called EU Cosmetics Regulation in July 2013. Basically, the coding applied to cosmetic products must be non-smudge, easily readable and clearly visible on containers and packaging. All EU member states are obligated to display the batch number,

nominal content, instructions for use, all ingredients and the best-before date.

There is normally a direct correlation between the price of product and the quality of the packaging. Metallized film with a gold or silver finish and distinctive packaging shapes increase the perceived value of the consumer product. Depend-

CO₂ lasers are suited in particular to marking carton by removing colour and gravure

ing on the time of year, packaging is often shaped like Christmas trees, Santa Claus, the Easter Bunny or hearts.

Fixed product information, such as ingredients and instructions for use, are applied directly to the carton during production blending seamlessly into the design. Up until now applying the best-before date and the product code as a flexible element of the sales packaging detracted from the overall effect created by the elaborately crafted packaging design.

Fibre lasers are the right choice for HiRes marking and for film

"What catches the eye has the biggest influence on the purchasing decision. Markings which are legible but interfere with the aesthetic experience have no place on elaborately designed packaging," argues KBA-Metronic managing director Oliver Volland. However, new trends in marking and coding technology





Right: The ablative laserSYSTEM series from KBA-Metronic allows the marking of cosmetic packaging to blend seamlessly into the design



Above and left: Marking on plastic containers for skincare products

coating is selectively removed. This results in razor-sharp text, logos or patterns which are clearly legible even on small packaging. Colour removal is an attractive design option for the types of foil which are commonly used in the cosmetics industry. Product designers can make the marking blend in nicely with overall packaging design by tailoring the typography and colour of the expiration date and product code.

Besides the aesthetic considerations, lasers are also very economical. There are no consumables to purchase and no unforeseeable operating costs. The costs per product remain low and can be precisely calculated. Laser printing can take place while the products are in-motion so that the production line does not need to slow down. A camera can also be set up, for example for the recognition of 2D codes to verify the marking.

Contact-free marking of outer packaging

Until now labels had to be applied to secondary packaging. This can be avoided to a large extent with new laser technology. A laser markable varnish is applied during carton manufacturing or printing, either to an entire surface or as spot coating.

When the carton reaches the packaging line, a CO₂ or fibre laser from KBA-Metronic causes the varnish the change

colour. Depending on the type of varnish used, laser-reactive colour pigments change colour from light to dark or dark to light when they are exposed to the beam. The technique works with most materials. Codes, images and extensive information about the ingredients can be placed on packaging at a low cost. The image is razor sharp and fulfils the most stringent demands in terms of readability.

The new laser technology eliminates the need for consumables on the production line, so no time is wasted changing ink, solvents, inking ribbons or labels. The only investment is the laser printing system and there are no unpredictable running costs.

A portfolio for any demand

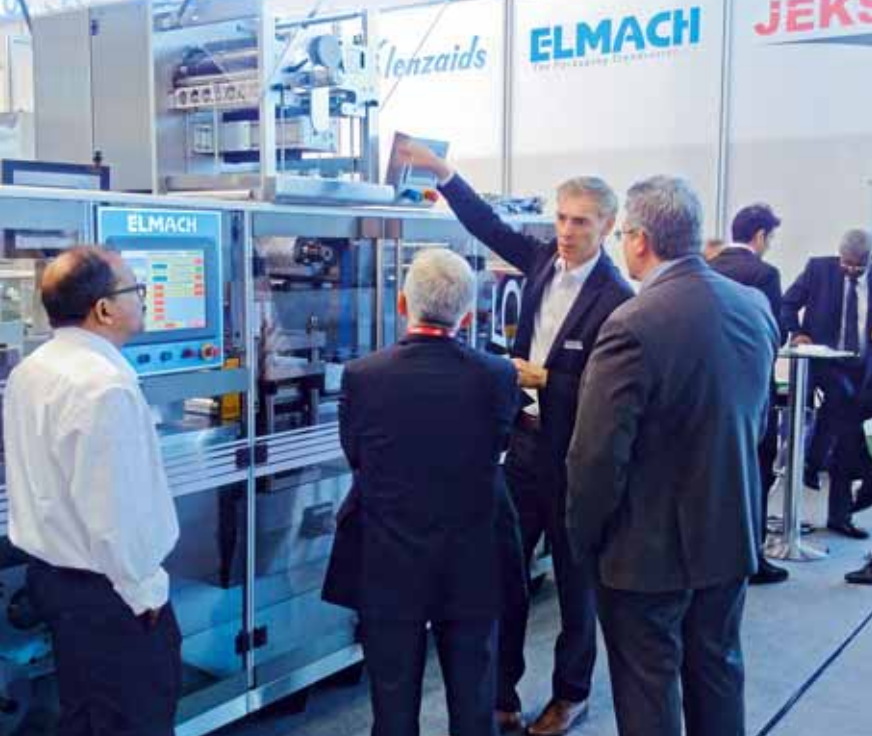
The cosmetics industry can apply eye-catching coding and markings with the innovative marking systems from KBA-Metronic. Its portfolio includes inkjet, laser, thermal inkjet, thermal transfer, hot stamping and offline marking systems. The specialists from KBA-Metronic have the best system for the task at hand. Oliver Volland: "We can quickly react to changing trends and offer customized solutions thanks to our raft of various coding and marking systems."

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permit a harmonious interplay between the packaging design and the coding. Oliver Volland: "Innovative technology from KBA-Metronic, such as laser printing along with special foil, varnish and ink opens up new creative horizons for packaging and product design."

Laser like printing

The laserSYSTEM series facilitates attractive marking on printed carton and foil. The technique is based on colour removal (ablation) and the laser beam applies markings with a very high level of precision. The colour of the foil underneath is exposed when some of the



Sales manager Günter Meyer presents the new flexo printing unit at AACHEMA 2015

INPRINT UV flexo printing unit for blister packs

Renaissance of a proven printing solution

The INPRINT inline UV flexo printing unit for high-quality random and position printing on all packaging films made of aluminium or plastic signals a return to a technology with which KBA-MePrint was very successful with in the past. The enhanced INPRINT printing unit is designed to be integrated into blister and existing packaging machines.

The print unit operates using the rotation flexo printing process. A screen roller and a doctor blade chamber system ensure a consistently uniform ink transfer to the plate cylinder. This ensures the highest print quality from the smallest detail to full-surface printing. A UV dryer guarantees fast drying or curing of ink facilitating immediate finishing. There is also the option of installing a LED curing system. The ink chamber system which can be replaced without the need for tools enables convenient and clean colour filling outside the printing unit.

The INPRINT can be integrated into numerous packaging lines, how deeply it is integrated depends on the customer's wishes. A classic application is the printing of aluminium foil for blister packaging in the pharmaceutical industry (e.g. for tablets). It can print on substrate thicknesses between 15 and 50 microns, such as aluminium, PVC, PE, PP, OPP, vinyl, paper, Tyvek®, composite materi-

als and commercially available packaging films. An innovative, user-friendly interface with a colour 7in touch display enables easy data entry and job setup. The compact flexo printing unit configured for printing widths of 210mm (8.26in) or 310mm (12.2in) can be installed both in continuous and intermittent packaging machines and runs at speeds of up to 20m/min (65.6ft/min).

The new INPRINT was unveiled at the AACHEMA trade show in Frankfurt in June for the first time. The flexo printing unit was mounted on a packaging system belonging to Indian blister and cartoning machine manufacturer Elmach Packages. Renowned manufacturers of packaging systems are already showing great interest in this new technology.

Flexible packaging has to be printed with more than just one colour in order to create more challenging print images. KBA-MePrint is therefore planning a modular

Advantages of INPRINT at a glance:

- Can be integrated into almost all existing packaging lines
- Proven doctor blade chamber system for optimum ink transfer
- Easy and fast ink change with rapid ink unit
- Instant drying and smudge-resistant curing of the UV ink within milliseconds
- Smooth and fast plate mounting
- Economical even with small runs and batches
- Intuitive colour touch screen
- High and consistent printing quality down to the smallest details
- Fast, easy to learn operation



1-colour-INPRINT – the modular machine design can be easily extended to up to four colours

stand-alone system with which multi-colour applications including up to four printing units reel-to-reel can be created. Further integration solutions up to hybrid systems flexo/digital are feasible.

Today various data, such as best-before dates, information on tracking or piracy protection, has to be applied to pharmaceutical products in particular. Market demand for suitable flexible printing and coding solutions is thus understandable.

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Thermal exhaust air purification systems from KBA-CleanAir

Less environmental pollution with more energy efficiency

KBA is the world's leading system supplier for the metal packaging industry with KBA-MetalPrint active in metal decorating. KBA-CleanAir is the environmental arm of KBA-MetalPrint in Stuttgart and designs future-focussed, economic concepts for air purification and enhancing energy efficiency. 90 years of experience in air and process air technology lay the foundations for the now more than 1,500 air purification systems worldwide.



Above: Regenerative Thermal Oxidiser RTO in the pharmaceutical industry

Air purification systems from KBA-CleanAir are also implemented in the print industry. Along with the automotive industry and the food industry, many of these systems are used by the chemical industry. Compliance with the emission thresholds specified in air pollution control regulations is a constantly recurring challenge for the chemical industry. The legal framework for plants in Europe is defined in the Industrial Emissions Directive 2010/75/EU of the European Parliament. The so-called "BAT reference documents" (BAT = best available techniques) stipulate binding limit values listed for different industrial applications. Alongside the aim of reducing future emissions of climate-relevant greenhouse gases, measures to improve

energy efficiency in the chemical industry are an important economic objective.

Air purification in the chemical industry

Over the past years KBA-CleanAir has successfully installed thermal exhaust air purification systems in numerous plants and oil refineries, and has in this way made a significant contribution to the attainment of environment protection and energy efficiency targets.

KBA-CleanAir offers the following thermal exhaust air purification systems:

- Regenerative Thermal Oxidiser (RTO)
- Thermal Recuperative Air Purification (TNV)
- Catalytic Air Purification System (KNV)



Catalytic exhaust air purification H-KNV in the chemical industry

Depending on the task in hand, these processes can be combined with concentration (ZEROclean), scrubber and filter systems. To maximise energy efficiency, suitable heat recovery systems are also incorporated, including air/air or air/oil heat exchangers and steam generators.

Safety first

In addition to the straightforward incineration of hydrocarbons, the chemical industry often faces tasks involving the treatment of corrosive exhaust air contents in conjunction with high water vapour concentrations and/or inert gas compositions. In such cases, targeted pre-treatment of the exhaust gases can be provided ahead of the actual oxidation stage.

In the chemical industry, where the substances being handled are frequently characterised by high levels of toxicity or explosion risk, even greater attention must be paid to fail-safe monitoring of the safety functions of a thermal exhaust air purification system in accordance with EN 12753. Engineering and process verification are for KBA-CleanAir a matter of course, as is close cooperation with the operator when performing risk analyses.

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Honoured for merits in the field of digital printing

Friedrich Koenig medal goes to Ted Cyman



The Friedrich Koenig medal has been awarded for special merits within the press engineering industry since 1953 in memory of the inventor of the printing press, Friedrich Koenig. The board of trustees of TU Darmstadt and the Forschungsgesellschaft Druckmaschinen (German Printing Press Research Association) in the VDMA decides who receives this award. Ted Cyman, vice president of research and development at RR Donnelley in the USA, received this award in April 2015 for his merits in the field of digital printing. It is the first time that a non-German engineer has won this medal. KBA Report interviewed him during a VDMA conference in Würzburg.

KBA Report: Mr Cyman, what does receiving the Friedrich Koenig medal mean to you?

Ted Cyman: I feel incredibly honoured because of the tremendous respect I have for German engineering. It is precision, reliability and quality.

KBA Report: Had you heard of Friedrich Koenig before?

Ted Cyman: Yes. He invented the steam-powered rotary press, which in his time was an amazing feat. It was a disruptive technology, like digital technologies are today, and Friedrich Koenig was concerned about the pressmen that worked with him.

KBA Report: Do you reflect on digital printing as a disruptive technology?

Ted Cyman: Yes. Digital printing is disruptive and there are many different flavours of it. As digital printing continues to improve, it is creating new opportunities to reach targeted audiences in a cost effective manner in our evolving world of multichannel communication. Dynamics

in the industry are changing and, in the end, customers are getting better prices and improved quality due to the ongoing technological advancements in digital print. Digital printing is the up and coming technology in the print area.

KBA Report: Which of your inventions do you rank as most important?

Ted Cyman: I've been working in the area of variable printing for 38 years now. Obviously, we went through a number of different technologies. We started with inkjet, went on to toner technology and then back to inkjet because the quality improved. The patents that were most effective across this whole time span were variable printing patents. And, we also have quite a few patents to do with inkjet systems, which are now at the forefront of the industry.

KBA Report: Could you please give us an overview of RR Donnelley?

Ted Cyman: We are a leading provider of integrated communication services and the largest print provider in North America. We offer creative and design,

content management, digital and print production, supply chain management, fulfilment and distribution services in support of our customers' communication needs. Our digital and analogue printing solutions are a part of a platform of products and services that aim to meet the demands of our 63,000 customers in 39 countries around the world.

KBA Report: To what extent will digital printing replace analogue processes?

Ted Cyman: Analogue is going to remain the primary printing process when it comes to high volumes in a high quality. Digital is growing as the preferred method for short and medium-size runs but there are quality limitations. As the quality and efficiency of digital technology continues to improve, more print jobs will switch from analogue to digital.

KBA Report: Do analogue and digital processes co-exist in the solutions that RRD offers?

Ted Cyman: Both analogue and digital processes are critical to our ability to fulfil the diverse communication needs of our customers. We believe that the future of innovative communication will be a combination of both. Then you have the best of both worlds - high quality and fast offset printing matched with the versatility of digital technology.

KBA Report: Where do you see the most important trends in printing technology?

Ted Cyman: Today, we print eye-catching graphic art and communication. In the future print will have more functional components. An example, and one that RR Donnelley is also involved in, is printed electronics. Print is no longer just for communicating with words and images but for new functions like passing electrons. Think of RFID labels. We print those antennas.

KBA CEO Claus Bolza-Schünemann (l) and Dr Markus Heering (r), managing director of VDMA Printing and Paper Technology Association, with Ted Cyman after receiving the Friedrich Koenig medal as part of a general assembly in Würzburg



Klaus Schmidt
markus.heering@vdma.org

KBA at Converflex 2015 in Milan



KBA-CleanAir industrial air-purification systems which are particularly of interest to packaging companies in terms of energy and environmental issues

KBA offers an exceptionally broad product spectrum for the growing packaging printing market and is a trendsetter in folding carton printing. Its portfolio includes half, medium and large-format sheetfed offset presses for board, decorating and coating systems for metal, flexo web presses for flexible packaging, screen and digital presses for glass and plastic hollow containers, digital coding systems for packaging lines and narrow-reel presses for labels.

A highlight at the KBA stand was a printing unit belonging to the popular EVO XD central-cylinder flexo press from

KBA-Flexotecnica. Along with a raft of practical automation features, the redesigned bridge dryer leads to substantial energy savings. The unit on show was equipped with eight print decks and engineered for web widths of up to 1,500mm (59in) and speeds of up to 500mpm (1,640fpm). Presses from the EVO XD series have been implemented for flexible packaging printing on plastic film, aluminium-coated or layered substrates, paper and carton, and the series is known for its excellent print quality. Several orders for EVO XD presses were received at the show from Italy, England and Latin America.

KBA-Flexotecnica and KBA-Italia manned a stand at **Converflex** in Milan informing visitors about innovative flexo and offset solutions for high-quality packaging production. In addition, KBA-MetalPrint in Stuttgart presented its

KBA-Flexotecnica and other KBA subsidiaries presented KBA's broad portfolio for packaging printers at Converflex in Milan

Graphispag Barcelona: KBA shows its colours in Spain

After some difficult years in terms of the economy, there are now signs of a revival also for the important print industry on the Iberian peninsula. This was evident at **Graphispag** in Barcelona in March at which KBA together with its sales partner KBA-Lauvic España informed visitors on the company's broad product portfolio for many market segments.

KBA-Lauvic España was the only German press manufacturer's subsidiary at Graphispag in Barcelona. It presented new products from KBA's broad product portfolio for the graphic arts industry

Whether for high-quality sheetfed offset with the Rapidas for commercial work and packaging, high-volume inkjet printing on the RotaJET L, printing flexible packaging on web flexo presses or modern web offset for the commercial sector and newspapers, the KBA Group offers products to suit every need and has a remarkable customer base in Spain.

After many successful years as sales distributor for KBA web presses, Barcelona-based KBA-Lauvic España also took over sales and service responsibilities for sheetfed offset and flexo presses from KBA in 2014. Lauvic has expanded its staff and opened a new branch in Madrid in October, alongside offices on the



Spanish East Coast, Andalusia, La Rioja, Galicia and the Basque region to optimise customer care.

Emerging from the sluggishness of recent years, the numbers of enquiries relating to sheetfed offset, digital and flexo projects are currently increasing once more and KBA-Lauvic España booked its first

success with the order for an EVO XD flexo press for the Mondi media group.

KBA-Lauvic España is the only sales company in Spain that is growing while all the others are shrinking. This is shown in its presence at the trade fair as our German competitors were not present in Barcelona.

Sensational promotional box with Rapida 106

Soon after Cenveo's packaging division installed its new eight-colour KBA Rapida 106 with two coating units and an inline cold foil system at its flagship facility in Jacksonville, Florida, the management wanted to display its versatility and productivity to existing and potential customers. **Cenveo** (CVO), headquartered in Stamford, Connecticut and deemed a global leader in the management and distribution of custom print and packaging has a long history of delivering top value to its customers. One of the top marketing initiatives for the packaging division was directed at the tobacco and vapour industry, a leading market within their group, to develop a high-end promotional piece.

A recent winner of the FSEA Gold Leaf Awards for Best Use of Specialty Coating,

the promotional kit demonstrated packaging expertise and creativity utilizing the unique features of the Rapida 106. Emily Allen Director of marketing and sales for Cenveo's packaging division: "The intent was to have the promotional piece completed in time for the Tobacco Plus Convenience Expo, which targets the tobacco and vapour markets, held in late January 2015 in Las Vegas. At the end of the two-day show, the promo piece was considered a huge success. We gained an enormous amount of traction as a result, which led to new business and exposure for Cenveo. Our sales group continues to promote this piece."

In keeping with the Las Vegas theme, the box intertwines gambling and spirits motifs with realistic wood grain texture and a die-cut gold band. The box contains



Above left: Cenveo Packaging's intricately finished promotional box printed on the KBA Rapida 106 was awarded the FSEA Gold Leaf Award

Above right: The contents of the promotional box created for a trade fair in Las Vegas came from several Cenveo departments

several Cenveo branded items, such as beverage coasters, playing cards, a carton with five dice, and a shot glass. All of these items were secured through various divisions of the company, for example the label division produced the cards.

D.J. Cabler, pressroom manager in Jacksonville: "Our Rapida 106 press provides our clients unique solutions for their packaging needs. It enabled us to transform standard SBS paperboard to look like a real wooden humidor box."



Website:
www.cenveo.com

Aerosmith singer Steven Tyler visits Hub Folding Box Company

Hub Folding Box Company, in Mansfield, MA, an innovative folding carton printer, was pleased to host acclaimed rock and roll singer Steven Tyler of the popular rock band Aerosmith, on a recent visit to his family's folding carton facility.

Tyler, who always enjoys stopping by to see the plant's latest equipment, was watching a press approval on Hub's new KBA Rapida 106 for his daughter Chelsea's band Kaneholler and its latest CD entitled Vol. 3, the group's third EP.



Aerosmith singer Steven Tyler signs a printed copy of the new CD jacket of his daughter's band on the KBA Rapida 106's console

Tyler watched from the Rapida's press console as the CD cover was produced.

Tyler's many accomplishments include being inducted into the Rock and Roll Hall of Fame in 2001 and the Songwriters Hall of Fame in 2013. Aerosmith was founded in the early 1970s and went on to record such hits as "Walk This Way", "Sweet Emotion", and "Dream On."

Founded in 1918, Hub Folding Box Company, Inc. is a quality-orientated packaging producer with a broad customer base with consumer end-user markets in the liquor, cosmetic, food, sporting goods, pharmaceutical sectors and media. Its philosophy of "Creativity Through Packaging" embodies the vision of founder Francesco DiRico and the firm's management is committed to its implementation.

High-tech Rapida 106 goes to Ducart Packaging Industries

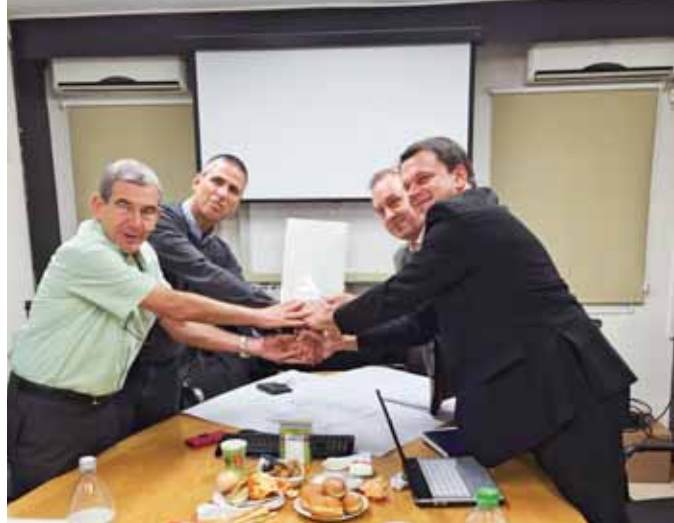
Ducart Packaging Industries is part of the Ducart Group, the leading and biggest carton packaging group in Israel. It deals in the development, planning, design, graphics and production of high-quality printed carton packaging, and the planning and service of packaging and filling machines at its customers' plants.

Ori Sheffi, CEO of Ducart: "We supply packaging to the largest companies in Israel and around the world. Our clients come from the food, pharmaceutical and cosmetic industries, catering and fast-food, agriculture and more sectors. Our company, which has been at the forefront of the industry for the last 35

years, is based on a professional, dedicated and innovative team."

Ducart Packaging Industries has worked with sheetfed offset presses from KBA for many years, including a Varimat in format 90 x 126cm and a Rapida 106. In recent the firm has experienced growth and has expanded its activities. In August 2014 Ducart Packaging entered the cosmetic packaging market. The company took over many clients and activities from a competitor who went bankrupt.

This expansion demanded new printing capacities and the firm opted for a high-end Rapida 106 from its longstanding press technology partner, KBA. Giv-



Sealing the deal for the KBA Rapida 106 just before Christmas with (l-r) Doron Stanitzky, chairman of the board of directors at Ducart, Ori Sheffi, CEO of Ducart, Jörg Henkel and Rolf Possekel sales at KBA-Sheetfed

en the rise in demands for quality and productivity, on 18 December 2014 Ducart Packaging ordered a Rapida 106-6+L SPC-ALV2 with six inking units, coater, double delivery extension, UV and cold foil kit. The press has since been installed in Israel and aims to support Ducart Packaging Industries' growth curve.

Polish students visit Leipzig and Radebeul

At the beginning of June 30 students from the Technical Universities in Warsaw and Łódź found out more about the latest developments in print at the KBA plant in Radebeul and the media faculty of HTWK Leipzig, Germany. The visitors also received information about studying at

the university of Leipzig. KBA, KBA CEE and Mondi organised this event.

In the new rooms of HTWK Leipzig's media faculty Ulrike Herzau-Gerhardt, professor for printing processes, and Frank Roch, professor for measuring technology

and coordinator for international relationships, gave the students a tour of their cutting-edge laboratory and presented the array of degree programmes on offer.



Group photo on the gallery of a six-colour Rapida 162a with twin coaters at Werner Kenkel

Jan Korenc, managing director of KBA CEE, welcomed the students to KBA-Sheetfed in Radebeul. Sascha Fischer, head of product management, told the visitors more about KBA and its Rapida sheetfed offset press portfolio. The participants were then treated to live demonstrations of KBA press technology from half to large format. Fast job changes and inline quality control were a main focus of commercial and packaging print demos. LED-UV printing in all format classes was just one of many KBA winning features presented.

On their way home they stopped at Werner Kenkel in Krzycko Wielkie and took a closer look at its KBA Rapidas, flexo presses and the production of corrugated board in a cutting-edge packaging plant.

UK: Bayliss boosts capacity and product range with Rapida 105

Workshop-based trade print house, **Bayliss Printing Company Limited**, has more than doubled its pressroom capacity with the introduction of its first B1 press – a five-colour Rapida 105 with integral coating and dual conventional and UV ink capabilities. The new press replaces an SRA1 Ryobi. Managing director John Bayliss: “A1 format was a good stepping stone, but it is not sympathetic to anything outside the standard page sizes and for our trade work we need to be flexible. The Rapida 105 is also a big leap in performance levels.”

Since 1953 the family-run firm has implemented presses from other well-known manufacturers and has now opted for a KBA press for the first time. John Bayliss: “I attended an open house at KBA’s plant in Radebeul when looking for a suitable B1 press and I was impressed by KBA’s customer-orientated approach. As they build each press to order they

were able to create the specification in line with our ongoing business strategy. Even more positive was the support we received from the PressConsum team from KBA (UK) with a printing problem on a previous press.”

A senior team led by Alan Johnson and John Bayliss created a tailor-made specification comprising a maximum speed of 16,000sph, automatic plate changing, ErgoTronic ColorControl with LAB function and wallscreen, VariDry dryers for water-based or high gloss UV coating, and board-handling kit for substrates up to 1.2mm-thick (0.047in).

John Bayliss is extremely satisfied with the performance of his Rapida 105 and is convinced that it will change and expand his business significantly. The company already has good ties with the publishing sector and supplies book covers. John Bayliss: “We see the Rapida at-



The team from Bayliss Print with managing director John Bayliss (3rd right) and Sam Wyld (4th right) in front of their new Rapida 105

tracting overspill work for the packaging sector, greetings cards and even for print on plastics, such as loyalty cards.” Pressroom manager Sam Wyld adds: “Our operators have taken to the new Rapida like ducks to water. And the support from KBA (UK) has been excellent.”

Bayliss Printing Company Limited continues to be run by the Bayliss and Johnson families and employs 16 staff in the litho division. Core products include posters, flyers, high-quality brochures, magazines and books in runs of all lengths, but typically between 3,000 and 10,000.

PHS expertise in demand for electronic retrofits

Demand for KBA subsidiary **Print-HouseService’s** (PHS) expertise in exchanging older electronic modules in web printing presses from other manufacturers is increasing. Following the successful first retrofit which included the replacement of Interbus loop components on a Colorman press from 2003 at *Nürnberger Nachrichten*, the printing house decided on working with PHS again for the second step that includes replacing web break sensors, filling level sensors for the ink ducts and encoders for the positioning of the turner bars.

The old Colorman press is equipped with twelve satellite printing towers, 16 reelstands and six folding units. Its electronic components in particular were in need of replacing without interrupting production. Karl Weiß, head of electronic workshop in Nuremberg: “The smooth execution of the first retrofit met our expectations. It has given us more security for the future and has provided us with

a cost-effective and independent supply of spare parts through the use of components that are easily available on the market.”

Mundschenk Druck- und Vertriebsgesellschaft in Soltau, Germany, also requested an electronics retrofit from PHS. The entire control system technology from the reelstand to the folder on an older Ecoman was replaced with cutting-edge console, drive and section control and production planning technology. PHS will guarantee the press’ availability 24/7 by remote service (PHS PressSupport). Dr Martin Mundschenk: “We anticipate that cutting-edge control technology will considerably enhance the productivity and availability of our press. We will be able to react better to the demands of our ad clients with the upgrade options ordered.” Founded in 1864, Mundschenk Druck- und Vertriebsgesellschaft is a family-run firm. Its product portfolio includes sheetfed, continuous, digital



Retrofits to control technology on older web presses from other manufacturers are a core competence of KBA subsidiary PHS

and newspaper printing. The *Böhme-Zeitung* newspaper published every working day and four other advertising supplements are produced on the Ecoman. This is in addition to various commercial and plant jobs.

Along with other activities, PHS is focusing more on electronic retrofits in order to meet the growing demand for measures aimed at extending the service life of older web presses. Harald Klein, head of system service at PHS: “The rise in orders in this field confirms our strategy.”



Takeaki Kato, owner and CEO of Joemay, proudly shows off his new high-speed Rapida 106

tising material to PR. Along with catalogues, brochures, flyers and posters, challenging packaging substrates, e.g. for Japanese chocolate, also belong to its portfolio.

Given the mix of small to very large-sized jobs Joemay looked for a press offering the highest level of automation and the shortest makeready times. KBA was thus able to win points with its Rapida 106 makeready world champion against competition from Japan. The experts from Niigata were bowled over by the savings in waste thanks to QualiTronic Color-Control. Further features include automatic plate change, water cooling, inking unit temperature control and networking via LogoTronic CIPLinkX.

Raised by 450mm (17.7in) the press is currently the only press in Japan delivering this high level of performance. A digital speedometer is used by owner Takeaki Kato to draw the company's employees', customers' and business partners' attention to this. Further Rapida presses will be installed in Japan over the coming months.

High-speed sheetfed offset at Joemay in Japan

In April a Rapida 106 with four printing units went live at printing house **Joemay** in Niigata. Normally the Rapidas going to Japan are usually longer. Nevertheless, the world's makeready champion won over all at Joemay with its fast job change and its outstanding performance of up to 20,000sph.

Founded in 1995, the family-run firm with approx. 70 employees focuses primarily on commercial printing. However, Joemay doesn't think of itself solely as a printing company, but more a communication company given its broad service offerings ranging from ad campaign planning, production of contents and adver-

KBA-FT Engineering replaces press controls without production downtimes

KBA-FT Engineering from Frankenthal, Germany, has replaced the control technology on a single-width C213 newspaper web press in Butzbach, Hessen. This press' aging control system which was no longer fully functional was replaced with new technology. The retrofit was carried out during a production-free period ensuring that the *Butzbacher Zeitung* newspaper was published on time.

The customer support engineers from KBA-FT Engineering quickly found the cause of the aging press control system's failure. However, as the parts needed for the old control system had been discontinued by the manufacturer years ago,

the engineers and the customer decided to replace the entire system with cutting-edge technology.

In order to avoid extended production downtimes, all of the old control system parts were first repaired provisionally. During the day, when the press wasn't in operation, the new control components were installed and adjusted in a way that allowed production to run using the old system at night. After all of the necessary control parts were replaced production was switched over entirely to the new system. The complete retrofit was finished within a week. Additionally, the customer also received support in locating press errors with a status display tool.



The creativity of the technicians from Frankenthal was of great advantage for Druckhaus Gratzfeld, the printing house behind the *Butzbacher Zeitung*, as they made the proven, yet now somewhat aging C213 offset web press fit for the future without jeopardizing production. The printing house's technical manager, Mario Weil, was extremely satisfied with the service operation.

R-l: Mario Weil from Druckhaus Gratzfeld (Butzbacher Zeitung) and Bernhard Kleiner from KBA-FT Engineering after the installation of the new press control system for the C213



Third and fourth KBA Rapida 145 for Walter G. Anderson

With three large Rapida 145 presses, Walter G. Anderson's plant in Newton, Iowa, is a cutting-edge KBA showroom

Walter G. Anderson a respected independent supplier of folding cartons in the USA, installed its third KBA Rapida 145 in only four years at its site in Newton, Iowa. The seven-colour press with coater joined two similarly configured presses from the same series and thus turned this plant, which has been in operation since 2011 outside of Des Moines, into a KBA showroom. "Ever since we first saw the new Rapida 145 large-format press in action, we've been thoroughly impressed with its performance," says Marc Anderson, president and CEO of Walter G. Anderson, "Our first two Rapida 145 presses run round-the-clock and have become workhorses. The third press enhanced our productivity and flexibility for our valued customers."

The company's first Rapida 145 was still covered when installed in August 2011 as it was delivered before the press' official launch at Drupa in May 2012. "It was the breakthrough press we were seeking. KBA has the leading reputation in large format and our prior eight KBA presses have operated seamlessly," says Anderson.

Only a few weeks after the third Rapida 145 was fired up in Newton the folding carton printer ordered its fourth Rapida 145, also a seven-colour press with coater, for its headquarters in Hamel, Min-

nesota. It is expected to be delivered at the beginning of 2016. Marc Anderson: "Our headquarters facility in Hamel is one of the most modern folding carton plants in North America with the most dedicated craftsmen in our industry. We continue to invest in the latest technology to bring our customers high quality on a wide variety of substrates. The Rapida 145 is a key investment for us."

Founded in 1950, Walter G. Anderson has grown to be the leading independent supplier of folding cartons in the upper Midwest. Its commitment to reinvesting enables the company to grow, as it meets and exceeds its customers' demands.

President and CEO Marc Anderson (pictured) recently ordered his fourth Rapida 145 in total for the firm's headquarters in Hamel, Minnesota



Report

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