Replacement investment boosts flexibility and performance

Flying start with a Rapida 106 for PMS Offsetdruck  see Page 28
Did you know that...

460,976 Euros of turnover are generated by the worldwide print and packaging industry.

In just one minute,

3,615 kilograms of paper are used to print newspapers and ad journals in Germany.

In one day, the K15 M screen printing system from Koenig & Bauer subsidiary Kammann can add multi-colour decoration to up to 180,000 hollow glass or plastic containers.
Dear customers and friends of our company,

Our anniversary year 2017 was a very successful year for the entire Koenig & Bauer Group. And a decisive share of the credit is due to you, our valued customers from all over the world. You placed your trust in us and ordered our presses, equipment and services. We are much obliged to you for that! The group was able to continue its growth, and we posted revenue amounting to €1,218m and an EBIT margin of 6.7 per cent at the end of the year.

Alongside the pleasing figures, the new market presence launched with the anniversary celebrations in September 2017 has also met with an extremely positive response. As we progress towards drupa 2020, all the products of our group will be assigned a common appearance and design under the umbrella brand of Koenig & Bauer. And as a customer, you can continue to rely on both innovative high-quality products and impeccable service.

We are gradually expanding our core business to embrace further growth segments of the markets for packaging, digital and corrugated board printing. In 2018, for example, the first high-speed beverage can decoration line, a ten-colour CS MetalCan, will be entering production, at almost exactly the same time as the first CorruJET for digital sheetfed corrugated printing. Parallel to this business with new presses, a further important focus is placed on service activities to safeguard the productivity of your investments for years and decades to come, a decisive factor for your success. To this end, our specialist engineers can call on a raft of modern tools, such as remote maintenance, press networking, Internet-based service instruments, data glasses and webshops.

Irrespective of the growth in communication via digital channels, direct customer contact remains indispensable as an opportunity for exchanges on future developments, product improvements, tests and print demonstrations. We are always glad to welcome you to our manufacturing facilities or our sales and service offices, especially to the newly built demo centre in Würzburg or the customer centre in Radebeul, where further expansion has begun this quarter. Our doors are always open to you!

Yours,

Claus Bolza-Schünemann
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Koenig & Bauer on “Award Tour”

It takes a certain courage and stamina to launch a new brand image, as Koenig & Bauer did on the occasion of the company’s 200th anniversary. A brand image serves as orientation, kindles desires, promotes internal and external identification, and builds confidence. It is often said that the brand accounts for 50 per cent of a company’s value. Not least for that reason, it is a courageous step to change a well-established brand. But in times of digitisation and a scarcity of specialist personnel, it is indispensable to inject fresh energy into the brand image from time to time. After all, it transports everything for which the company stands. New technologies, processes, corporate principles, and the new designs for products or even the customer magazine which you are holding in your hands right now. Koenig & Bauer is renewing itself. The process which we have initiated with the new market appearance impacts every sphere of the company, and we want to document that to the world.

The courage shown is already bearing fruit. In February, Koenig & Bauer was named in 27th place among the top 1,000 employers in Germany in a ranking conducted by the magazine Focus and the employer assessment platform Kununu. This was followed by first-place honours for an exemplary company pension scheme when the German bAV Prize 2018 was awarded. The Rapida LiveApp has earned the oldest press manufacturer in the world the German Design Award. Tradition and digitisation are thus by no means mutually exclusive. Product design, too, is guided by a new, modern visual language. In March, the RotaJET received the coveted iF Design Award. And last but not least, Koenig & Bauer is nominated for the German Brand Award for its new market appearance. All that fills us with pride, and tells us that we are on the right track.

We must now bring our stamina into play: Our umbrella brand is Koenig & Bauer. That is the source of our strength and visibility beyond individual branch or national boundaries. Many people still speak of KBA, because those letters form the names of our legal entities. It will take a while before all our employees, customers and partners automatically use only the umbrella brand. But for all the renewal, the goal for which Koenig & Bauer has stood for 200 years remains unchanged: With our pioneering spirit and our passion for engineering, we produce fast and flexible solutions which make our customers successful. In this sense: we’re on it.

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High-end sheetfed offset with Flying JobChange and speeds up to 20,000sph

Hammer Packaging celebrates new Rapida 106

The red carpet was rolled out as Jim Hammer, president of Hammer Packaging, and his team welcomed Koenig & Bauer president and CEO Claus Bolza-Schünemann to the company’s headquarters in Rochester (NY). Here, in the peaceful setting of a wooded suburban office park near the campus of Rochester Institute of Technology, an eight-colour Rapida 106 boasting a unique array of automation features has been on stream since July last year.

“It is always a pleasure of mine to visit a Koenig & Bauer customer and to see first-hand the excellent award-winning work that they are producing,” says Claus Bolza-Schünemann. “Our goal is to provide our customers with the most effective and unique technology, to allow them to compete in the marketplace and set themselves above their competition.”

With the installation of its new eight-colour press, Hammer is pioneering a new generation of offset printing, working hand in hand with its customers. The press configuration can rightly be described as one-of-a-kind and represents some of the newest technology available, with top printing speeds of up to 20,000sph.

**Flying JobChange optimises production**

Jim Hammer: “We are particularly excited that no-one else in our marketplace has this press configuration. The Rapida 106 provides us with fast job changes and higher speeds. It offers a larger format that will greatly benefit some of our layouts. Plus, it is equipped with the revolutionary Flying JobChange technology. That allows our operators to change plates on one or more printing units while the press is running. This addresses the demands of our customers for even higher job throughput, making us even more efficient and productive. We feel that Flying JobChange will be a boon for our customers, who can take advantage of this new feature for recipes, promotions and semi-variable data. An efficient, new opportunity for cut-and-stack labels has come to reality at Hammer.”

Given its strategic growth in the plastic, film, inmould label and lightweight paper markets, the Rapida 106 will enable Hammer to be even more competitive. This is especially true for the production of labels on synthetic substrates, which can be printed at the highest quality and fastest speeds on the new press.

“We have developed a very special business partnership with Koenig & Bauer,” says Jim Hammer. “They are a technology company that is willing to invest in true partnerships in the packaging marketplace. Koenig & Bauer has repeatedly helped us to take the lead in our marketplace. We are proud to continually invest in the most advanced technology the world has to offer – simply to reduce costs and deliver a better product. The Rapida allows our team at Hammer to provide customers with fresh and exciting solutions.”

**Interesting website:**

www.hammerpackaging.com

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Eric Frank

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Inventory management and batch tracking via smartphone

The Rapida LiveApp with its info panel and maintenance manager functionalities has been on the market for around a year. And at the beginning of 2018, it even received a German Design Award in the category “Excellent Communications Design – Apps”. Moving ahead, it is now to be expanded with the so-called ProductionApp as an indispensable assistant in the production environment. Pilot users such as the modern packaging plant of Schur Pack Germany in Gallin are delighted with both the functionality and the ease of handling.

The following situation arises at some point in every print company: A necessary consumable such as an anti-foaming agent or washing solvent has run out. But the stores are empty because a helper on a previous shift took the last bottle or container but neglected to mention this to anyone.

Koenig & Bauer has taken up the challenge of avoiding such annoying circumstances and has developed the ProductionApp as a powerful inventory management and batch tracking tool for use on mobile Android devices. The first practical users are already full of praise.

Overview of inventory levels
The basis for the app is the NFC function which is integrated into many smartphones. Use of this technology renders data acquisition in the production hall both simple and reliable.

The ProductionApp workflow begins in the stores. The storage locations for the various consumables such as inks, coatings, blankets or powder are provided with an NFC tag. Within the app, subsequently, storage location tags can be assigned to any chosen article. The app then saves these assignments.

During an inventory check or after receiving a new consignment, the relevant article data are displayed for an individual storage location. The storeman can then compare the displayed quantities with those actually present. In case of any differences, the numbers can be corrected very simply. The quantities of new incoming supplies are recorded. For any given article, therefore, current stock levels are reconciled and updated automatically (inventory management). This process is realised with the aid of the NFC function. As soon as the smartphone detects a store tag, the display and input forms are opened automatically. The app does not have to be started beforehand.

Batch tracking through to the printing press
At the press, assignments relate to the point of consumption, e.g. a particular printing unit, and are again controlled by way of NFC tags. The individual locations are assigned via the NFC setup. All relevant information about an article (colour, remaining quantity, etc.) is displayed on the smartphone directly at the place of consumption.

The operator selects the quantity which has been topped up or refilled, and scans the batch code of the consumable concerned. The camera is activated automatically to scan the code, and the code itself is then displayed as soon as it is successfully detected.
The app provides exact information on the number of impressions reached by the currently mounted blankets, for example. Target-actual service life comparisons are another possibility. If the blankets have exceeded the planned service life, this can be reported and visualised. In this way, tasks such as blanket changing or the refilling of powder and washing solvents can be indicated and planned in advance. If consumption changes significantly, furthermore, the precise causes can be investigated.

Complex processes become child’s play

The app permits the definition of any number of storage locations, and the stocks at different or distributed storage locations can be summarised. A company thus maintains an exact overview of all stock levels at all times. In addition to the consumables for sheetfed offset presses, further products can also be integrated, e.g. the adhesive for a folder-gluer. Inventory control is likewise greatly simplified with the ProductionApp, because it remembers the order of the shelf areas for each defined storage location.

Benefits of the ProductionApp:
• Tracking of consumables batches
• Inventory management for consumables
• Support for the tasks of the printers and helpers (indication of where something is to be done)
• Availability of a list of all consumables which were used in conjunction with a given job

Only three prerequisites must be met in order to use the ProductionApp: One or more Android smartphones with the Rapida ProductionApp, LogoTronic Professional as the production management system, and a wireless network in the print company. Specialised advisers from Koenig & Bauer are on hand to assist process-specific set-up and commissioning.

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Grafilux Printing in Turnhout:

“LED-UV is not for sceptical printers”

Grafilux Printing from Turnhout/Belgium has opted for an eight-colour Rapida 106 with LED-UV curing. It is the first Rapida sheetfed offset press for managing directors Luc Steylaerts and Guy Van Beeck. One of its special features is that it can use unbent printing plates. “That is indispensable when you have eight plates to change and run lengths are also getting shorter.”

Luc Steylaerts and Guy Van Beeck employ 25 print specialists, many of whom work a shift system. In June 2017, Grafilux invested in an eight-colour Rapida 106 with a perfecting unit for 4-over-4 production and with LED-UV curing. The press is furthermore automated to the maximum degree possible.

The two managing directors have been involved with printing for as long as they can remember. Luc’s parents owned a copy shop, and that soon became one of his favourite childhood haunts. He nevertheless went on to study electromechanics and qualified as an engineer. Analytical skills and sober reasoning have since served him well in the printing business. Guy, too, has spent his entire working life in the printshop. He possesses an eye for practical solutions and is constantly searching for ways to further enhance print quality together with his press operators.

Grafilux Printing was formed through amalgamation of the print companies Van Beeck, Paulussen and Steylaerts, which had all been established around Turnhout and Lier in the north of Belgium, not far from the Dutch border.

**LED-UV**

Luc Steylaerts: “We took plenty of time when choosing a new press – not least in view of my technical background. One central aspect in the decision-making process was the plan to use LED-UV curing. We produce relatively short runs and need to deliver quickly. At the same time, our customers demand flawless quality. In our opinion, this can best be achieved on an eight-colour perfector in combination with very fast LED-UV curing.”

Guy Van Beeck: “Here at Grafilux Printing, we are not automatically biased towards a particular manufacturer. We try to make our decisions on the basis of analyses rather than emotions. We were looking for the press which would best serve our needs. Our printers did some tests on a Rapida with special forms developed by Luc. The results were good. The time to the first good sheet: Great. Changeover times: Excellent. These points had to be offset against the fact that we had no experience with Koenig & Bauer. What would happen when we need spare parts? A change of supplier is always accompanied by an element of uncertainty – especially when the core means of production is at stake.”

Unbent plates

“Grafilux Printing places a strong focus on efficiency and productivity,” says Luc Steylaerts. “I had always found it strange that the printing plates had to be bent be-

With short runs, there is no need to push the Rapida 106 to its performance limits.
fore they could be used. That may be no great deal on a two-colour press, but the wasted time soon adds up with eight colours, and all the more so where run lengths are just 200 to 300 sheets. We informed Koenig & Bauer that the use of unbent plates was a deal-breaker for us. Johan Dengis from Wifac, the Koenig & Bauer representative in Belgium, told us that the development of a new SPC plate changer with the ability to mount unbent plates was already approaching completion. That meant that we had to wait a little longer for our press. But it was certainly one of the arguments which helped to clinch the decision.”

More advantages than disadvantages
Now that the press has been in production for over half a year, the two managing directors are able to give a first summary. Steylaerts: “The decision to switch to LED-UV is not one which can be recommended for sceptical printers. The technology has delivered the advantages which we were expecting. No damage to the printed areas, no curing problems. Quality is also another step higher thanks to the sharper print and deeper contrast, also with uncoated papers.”

Van Beeck: “There are nevertheless a few downsides. The plates run clean faster. It takes longer for the ink to reach the right operating temperature to be able to print on thinner papers. And it is not so easy to achieve an optimum ink-dampening balance. But after a few experiments, these complexities are no longer a worry. It is important not to cover up the drawbacks of LED-UV, but they are far outweighed by the advantages at the end of the day.”

No turning back
“It may sound unusual from the mouth of an engineer, but our employees — together with our customers, of course — are the most important prerequisite for the healthy positive future of Grafilux Printing. There are quite a few print companies here in Turnhout, and the printers all seem to know each other. When you switch to a new press, everyone has something to say about it,” says Luc Steylaerts. “Most people shy change, and printers are no exception. Now, six months later, everyone has come to appreciate the handling of the Rapida, the benefits of LED-UV and the convenience of using unbent plates. For us, there is simply no turning back.”

Grafilux Printing produces a broad spectrum of commercial products and periodicals — market segments which have been under pressure for several years. For Luc and Guy, that is nothing new. Van Beeck: “Everyone praises our quality, but very often it is the price which makes the difference. That is a shame, but I have to organise my production accordingly.”

Steylaerts: “This is a healthy company, and we decline to embark on adventures in markets where we have no real insights. We made a conscious decision to ignore the mass market. That has cost us orders, but that is the way things are. Together with our employees and thanks to our investment in the Rapida 106, we are nevertheless convinced that Grafilux Printing can look forward to a positive and sustainable future.”

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Rapida 105 PRO for Kart Trefl in Kraków

The first Rapida 105 PRO in Poland was commissioned at the end of last year. The five-colour press with coater and double-length extended delivery went into service at Kart Trefl in Kraków, a Polish playing card specialist whose links with Koenig & Bauer stretch back to the 1980s. This latest acquisition increases the company’s offset capacities and is at the same time an important element in its plans to expand on the world market.

Kart Trefl can be proud of its rich traditions. The company was founded as Krakowskie Zakłady Wyrobów Papierowych (KZWP) in 1947 and from the very beginning specialised on the production of playing cards, ranging from skat decks to classic family card games such as “Old Maid”. Over the past decades, Kart Trefl has created hundreds of card designs, many of them in close cooperation with the Kraków Academy of Fine Arts and some of the country’s leading graphic designers. One milestone in the history of the company was the commissioning of a press from Radebeul in 1989. Shortly after privatisation in 1997, another press purchase brought a Rapida into the pressroom. In 2014, Kart Trefl moved to new premises in Podłęże on the outskirts of Kraków, and the subsequent years were characterised by further investments in new equipment to boost productivity and quality.

The Rapida 105 PRO is engineered for a maximum production speed of 17,000sph and prints not only the full portfolio of playing cards, but also other game elements and the corresponding packaging. It incorporates accessories for the handling of substrates up to 1.2mm (48pt), FAPC fully automatic plate changers, CleanTronic washing systems and energy-saving VariDryPlus dryers, as well as ErgoTronic ColorDrive (densitometric and Lab measurements), QualiTronic PSO Match (inline colour control to PSO specifications), ErgoTronic Quality Pass (quality reports) and the production management system LogoTronic Professional.

Interview with Stanisław Wiązowski, director of Kart Trefl

Report: Your production focus has always been placed on playing cards. Where do you stand on the market today?

Wiązowski: Today’s card market is changing very dynamically. There is demand for both classic playing cards for games such as bridge, skat or poker, but also for the cards used in various board games. About 90 per cent of board games, for example, include cards of different kinds. At the moment, we are the largest card producer in Poland, and our cards are used both in games we distribute ourselves and as components of games published by other companies. Our export quota is currently 70 per cent. We already supply to 33 countries around the world, and are continuing to grow thanks to our investments.

Report: It seems that one event in particular – the move in 2014 – has been decisive for the company’s development …

Wiązowski: Yes, indeed. We moved to a 2.5 hectare (6.2 acre) site on a commercial estate in Podłęże, where we opened a new production centre with space totalling some 7,000m² (75,000sq.ft). The
new facility has improved our logistics dramatically. After all, we were originally working from a multi-storey building in the centre of Kraków.

**Report:** What is the role of print in your company?

**Wiązowski:** It is naturally one of the most important aspects. All the company’s products are printed, usually in full colour, and very often also finished. Whether for cards, game boards or packaging, high print quality is imperative, especially where the products need to be printed on both sides. We do a lot of coating, which is why we added an inline coater to our Rapida 105 PRO. Five colours plus coating is the optimum configuration for us. The numerous automation modules also make our work easier. One of the most important is the fully automatic plate changing, which shortens makeready times significantly. That is crucial when you produce so many short runs. Thanks to the FAPC system, we can handle many more jobs than before during a three-shift day, which greatly improves our internal cost structures.

**Report:** What led you to choose this new press?

**Wiązowski:** Our first contact with Koenig & Bauer dates back to 1989/90, when we purchased our first medium-format press. Dynamic growth soon enabled us to invest again, and we bought a Rapida. Given our long-standing positive experience with both the technology and the customer service of KBA CEE, it was only logical to opt for another Rapida press.

Our belief is that production machinery should be obtained from one and the same manufacturer, wherever possible. Our two previous presses have been running very well, our operators appreciate them and — what is perhaps even more important — they also enjoy working with them. This factor was also taken into account in our planning, because the job satisfaction of our 140 employees plays a major role.

**Report:** How do you answer the expectations and needs of your customers?

**Wiązowski:** It has always been very important for us to develop a firm standing on the market and to promote good relationships with our business partners and customers. Especially now, as our export quota and the expectations of our customers continue to increase. We have obtained comprehensive certification and choose our substrates and other materials with a view to sustainability.

**Report:** What are your plans for 2018 and the future?

**Wiązowski:** We saw a sharp increase in turnover last year. Accordingly, we have set ourselves ambitious goals and want to at least repeat the excellent results. As I said, the market for games and playing cards is very dynamic and we must be ready to adapt. We are similarly watching the advertising market, because we also produce for customers in that field. We now have to earn the almost €3m (US$3.7m) which we invested last year, and at the same time further improve our internal organisation. Our sales and marketing departments, in particular, have plenty to do because we will also be present at various branch events, such as toy and advertising fairs.

Mr. Wiązowski, thank you for your time.
Ambitious goals with a new Rapida 164

The global packaging group DS Smith also operates five production facilities in the Czech Republic, one of them in the quiet town of Jílové near Děčín. It was here that Koenig & Bauer installed a new six-colour Rapida 164 with coater and triple-length extended delivery at the end of last year.

Alongside a multitude of economic relations, it is not least the River Elbe which is seen to link Central European neighbours Germany and the Czech Republic. And the town of Jílové, with its population of 5,000, is located precisely here in the very north of Bohemia, just a few miles from the point at which the Elbe flows over the Czech-German border. Board production has a long tradition in the region. The latest impetus has been delivered by a Rapida 164 press installed at the local plant of DS Smith Packaging. The press has been in production since January and has significantly increased the company’s production capacity with its comprehensive features and a configuration cleverly tailored to the character of the work handled by the 150 employees. The DS Smith plant in Jílové is specialised on corrugated board production.

Production manager Milan Šimoňák explains: “The purpose of the investment in a new press was to raise our quality and productivity.” Accordingly, inline colour control and production quality monitoring were key aspects. The press features the colour control system QualiTronic ColorControl Next Generation. The combination of colour measurement and control with QualiTronic ColorControl and sheet inspection with QualiTronic PDFCheck (both using the same camera system) is especially appreciated in Jílové. QualiTronic PDFCheck compares the printed sheets with the PDF data from pre-press and marks the sheets concerned if any deviations are detected. One great benefit of QualiTronic PDFCheck is that print quality can be evaluated even before actual production begins.

Another advantage which Milan Šimoňák places in the foreground is the productivity of the Rapida 164 with its maximum running speed of 13,000spm. Taking into account the special properties of the substrates, inks and other media used, the regularly attained average of 12,000spm is an outstanding result. Both central demands placed on the new press, namely quality and productivity, are clearly fulfilled.

The coater of the Rapida 164 was installed in a hybrid version which is capable of applying both UV and dispersion coatings. Compared to the older press from another manufacturer which previously handled the bulk of print production, the new press is much more...
modern and user-friendly. Job changeover times are significantly shorter thanks to makeready-sav -
ing features such as fully auto -
matic FAPC plate changers and
the CleanTronic Synchro washing
systems.

The many automation solutions translate directly into enhanced productivity. And it goes without saying that the press delivery was accompanied by corresponding training for the six printers, which took place at the manufacturing facility in Radebeul. The printers from DS Smith were very grate -
ful for the countless tips they received alongside the standard training on operation of their high-
tech large-format Rapida. Their task now is to realise the bound -
less potential of the Rapida 164 in
their daily work.

After the first three months
The new press sailed through the supposed baptism of fire and has now completed its first three
months of production. The curve is pointing steeply upwards, but there are still reserves waiting to be tapped. The plant management plans to utilise the full potential of the new press within the next six months. “We are currently stand -
ing at about 80 per cent of what we want to achieve,” says Milan Šimoňák. But week by week, the press is showing more and more of what it can do in terms of quality, reliability and productivity.

The Rapida 164 has also heralded a change in the technological approach to jobs finished with coating. With the old press, only dispersion coatings were possible in an inline process. UV coatings were always applied offline. The Rapida 164, however, can now handle both in an inline process. The jobs which have been coated on the new Rapida have received a great deal of positive feedback from customers. In addition, the turnarounds for individual jobs are naturally much faster thanks to the new technologies.

The company’s experience confirms that the Rapida 164 is extremely flexible with regard to the inks and consumables used and the substrates which can be print -
ed. DS Smith uses inks from Flint and Huber, both of which deliver top quality on the Rapida press. It is likewise possible to combine blankets and coating blankets from different suppliers without compromising the quality of the results. The company has not had to adapt its standards to the new press; on the contrary, the press was matched to the specific needs of DS Smith and its customers, as the basis for ultimate efficiency and profitability.

Milan Šimoňák praises the remote maintenance and diagnosis func -
tions, and indeed the whole sup -
port and service package offered by Koenig & Bauer and its Czech subsidiary KBA CEE. It is at the same time very useful that the Koenig & Bauer factory is barely a hour’s drive from Jílové.

Ambitious goals
The DS Smith plant in Jílové has set itself ambitious goals with the new large-format Rapida. Since the installation, production ca -
pacities have been expanded dra -
matically and the company can now react much more quickly to customer demands. A significant increase in print volume is expect -
ed this year. As in most other seg -
ments, the average run lengths are also declining in packaging print. There are many more small -
er and medium jobs. But in Jílové, DS Smith is now well equipped to respond more flexibly than ever before.

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The Rapida 164 stands on raised foundations to facilitate board production. The increased pile height is particularly evident at the feeder.
Showcase for consistent customer orientation

First customers benefit from digitisation in sheetfed offset

When it comes to the digitisation of business processes, Koenig & Bauer is one of the European pioneers in the manufacturing sector. Digital transformation has been based very successfully on the Salesforce platform. Against this background, the leading supplier of cloud computing solutions is now showcasing current data-based applications and services from Koenig & Bauer in its new Executive Briefing Center (EBC) at the German headquarters in Munich.

To this end, Salesforce has installed a virtual offset press console in the EBC to visualise the daily practice of a modern press hall and thereby to highlight the consistently customer-oriented processes implemented between print companies and Koenig & Bauer as the press manufacturer.

The official opening of the Salesforce EBC was attended by high-ranking representatives of politics and the economy, among them Ilse Aigner, the Bavarian State Minister for Economic Affairs and Media, Energy and Technology, Ralf Sammeck, member of the executive board of Koenig & Bauer, and Ilse Aigner, Bavarian State Minister for Economic Affairs and Media, Energy and Technology.

“With a practically 360° perspective on our customer’s activities, we can better understand their wishes and demands and then contribute accordingly to their success.”

Thomas Göcke, head of marketing and CRM at Koenig & Bauer

Innovative data-based solutions

Thomas Göcke, head of marketing and CRM at Koenig & Bauer, introduced some of the data-driven services developed on the basis of the Salesforce platform.

“With a practically 360° perspective on our customer’s activities, we can better understand their wishes and demands and then contribute accordingly to their success.”

Thomas Göcke, head of marketing and CRM at Koenig & Bauer.
presented a number of solutions which are still considered quite revolutionary in some parts of the rather traditionally oriented print industry (see info box). The sole prerequisite to make use of these new opportunities is a valid remote maintenance contract. In return, the user receives access to an exemplary package of services. And Koenig & Bauer also benefits through the enhanced customer satisfaction and long-term customer ties. This reflects the great value of data services such as those made available to manufacturing partners through the intelligent Salesforce platform. Thomas Göcke: “With a practically 360° perspective on our customer’s activities, we can better understand their wishes and demands and then contribute accordingly to their success.”

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Innovative data-based solutions in sheetfed offset

- Performance reports: Performance data from the company’s own production, generated automatically and presented in clear diagrams
- Benchmarking: Anonymised performance comparisons with the leading companies in a given segment
- Maintenance monitor: Pointers to outstanding and necessary maintenance tasks
- Service notifications: Automated notifications as the basis for proactive maintenance to avoid unplanned downtimes
- Customer portal: Access to all data-driven “Connected Services” via a single platform
- PressCall: Simple, fully digitised process enabling printers to contact the manufacturer and submit service tickets to Koenig & Bauer directly from the press console
- Workflow solutions: Innovative software solutions for the digitisation of processes on the press (e.g. ErgoTronic AutoRun, Rapida LiveApp)
Preventive maintenance

Minimising service costs with press inspections and spare parts recommendations

Press inspections are able to identify potential sources of problems before any real damage arises. A detailed audit is conducted in the sense of preventive maintenance, including comprehensive evaluation of the results and recommendations for spare parts with prioritisation according to the urgency of replacement. On the basis of individual production data, attention can be drawn proactively to pending inspection cycles, permitting the user to devote full attention to the actual work to be done.

A stitch in time saves nine. That saying is equally applicable to printing presses. Regular inspections not only help to avoid production losses, but also improve availability, quality and performance to a significant degree. The future of efficient press care belongs to preventive maintenance.

This is the approach taken with regard to inspections for sheetfed offset presses. Instead of merely reacting to a sudden problem situation, potential sources of faults are identified reliably and in good time before they lead to actual damage or even failure. In this way, unplanned service costs are avoided and service calls are reduced to a minimum. And if it is necessary for a service technician to attend, this can be arranged for a time when critical production will not be disrupted.

Spare parts recommendations based on urgency of replacement
If an inspection identifies weak spots or fault potential, it is important to seek targeted remedy as quickly as possible. But how is the user supposed to know which of the items revealed is most urgent? Which parts should be replaced first to achieve the greatest positive effect?

This is a key point demonstrating the unique value of a press inspection performed by Koenig & Bauer. In addition to six-level categorisation of the inspection findings according to the degree of mechanical or electrical wear, the potential impact on production from the parts concerned is also taken into account. The outcome is a comprehensive report in which the inspection results are presented in a series of lists and diagrams, along with specification of the required spare parts and indication of the urgency of replacement. In the meantime, these reports can be generated in more than ten different languages.

Users are thus offered an individual decision aid to support parts selection and budgeting. On the basis of the specified priorities, they
can be sure to order and install those spare parts which are most important for maintenance or restoration of the optimum working condition of their press.

Proactive contact ahead of pending inspections

Regular press inspections are the best insurance for maximum availability and reduced service times. Printers, however, should be left to concentrate exclusively on their print production. Accordingly, Koenig & Bauer contacts the user proactively to draw attention to forthcoming inspections.

If defined production parameters are exceeded, e.g. the number of sheets printed, a so-called “service notification” is issued automatically. This mail contains information on recommended and pending press inspections. All necessary details such as costs, duration and above all the benefits of the proposed inspection are thus available to the user in good time. Inspection measures can then be planned for the less busy periods in the production schedule.

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With fresh impetus at Brazil’s most important trade fair

**ExpoPrint Latin America 2018**

New company premises, new staff, and with further enhanced services – Koenig & Bauer do Brasil attended the ExpoPrint Latin America trade fair, which took place in Sao Paulo from 20th to 24th March, with fresh wind in its sails. The designated showpiece was a half-format sheetfed offset press of the Rapida 75 PRO series, which was being exhibited for the first time at a trade fair in South America. Already last year, this was the most frequently sold B2 sheetfed offset press in Brazil.

Alongside, visitors could also admire a K80 combi folding machine from MBO. Information on many other highlights from the broad product range of Koenig & Bauer, from Digital & Web via Flexotecnica to Iberica die-cutters, rounded off the presentations of the world’s oldest printing press manufacturer.

**Live presentation of a Rapida 75 PRO**

A Rapida 75 PRO was shown in live production, demonstrating fast job changes and printing speeds up to 16,000 sheets per hour for a variety of high-quality posters, cut-out models and games on paper and board up to a maximum format of 605 x 750mm (23.8 x 29.5in). Configured as a five-colour coater press with extended delivery, 450mm (17.7in) raised foundations and additional board-handling accessories, it brought local print professionals flocking to the Koenig & Bauer stand. Fast job changes were facilitated by inking units which can be disengaged when not required for a particular job, fully automatic FAPC plate changers and CleanTronic Synchro washing systems for parallel washing processes. Coating forme changes, too, were completed in next to no time thanks to SAPC automation.

The ErgoTronic console provides not only a wallscreen display, but also online measuring and control systems for print quality assurance. ErgoTronic ColorDrive enables ink density measurements and colour control according to Lab values, QualityPass delivers measurement reports as proof of the attained quality, and ErgoTronic ACR optimises register settings. With LogoTronic CIPLinkX, furthermore, the Rapida 75 PRO boasts an interface to pre-press for the conversion of CIP3 PPF data into press presetting data.

**Traditionally strong market**

Brazil is a traditionally strong market for Koenig & Bauer. But since 2017, Koenig & Bauer do Brasil has been pushing ahead with even greater success. Last year, for example, Grafica Rami installed an eight-colour Rapida 106 with coater and triple-length extended delivery for packaging production, as well as a Rapida RDC 106 rotary die-cutter. The company already operates several half-format Rapi-das and a further Rapida 106 with double coating. Brasilgrafica is another major user with three especially long Rapida presses in medium and large format. The longest, a Rapida 106, comprises a total of 12 printing and finishing units. The Rapida 75 PRO from the Koenig & Bauer stand at ExpoPrint was also moved directly to Industria Grafica Sul in Nova Candelaria once the trade show closed its doors.

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Pure Impression now owns three Rapida 106 presses

Perfected print results with HR-UV

Pure Impression installed the first Rapida 106 at its plant in the French city of Montpellier at the beginning of 2014. That was a four-colour coater version with dryer tower and HR-UV technology, and was purchased to replace an older Japanese press. Four years later, the company already owns three Rapida 106 presses with HR-UV capabilities, including two eight-colour perfectors.

With a total of 24 units, Pure Impression today operates the largest fleet of Rapida 106 HR-UV presses in France. Pure Impression and its parent company Exaprint, which are members of the CIMPRESS Group since 2015, continue to produce under their own brands PURE Impression and Exaprint.

HR-UV effects electrify the customers

Olivier Marsil, director for development at Pure Impression: “Our current strategy is to extend the reach of the brand Pure Impression through the quality and competitiveness of the HR-UV technology. Even standard jobs are improved with HR-UV. The printed images are much more vivid, and that naturally helps to strengthen customer loyalty.”

The substrate flexibility of the Rapida presses also permits Pure Impression to use HR-UV for an unbelievable spectrum of products, especially in conjunction with uncoated papers, as is presently all the rage.

In harmony with nature

“The HR-UV technology is a perfect match for our environmental policy,” says Olivier Marsil. All three Rapidas print without alcohol and without powder. In addition, Pure uses solvent-free inks with vegetable-based pigments. “Inline colour control with Quali-Tronic ColorControl enables us to keep makeready times and waste down to minimum.”

Productivity – a key factor for CIMPRESS

To satisfy the productivity expectations of the CIMPRESS Group, the three Rapida presses are configured with numerous time-saving automation modules. The two eight-colour perfectors are High-Speed versions for production at up to 18,000sph. They feature DriveTronic SPC for simultaneous plate changes and CleanTronic Synchro for parallel washing processes. In this way, all kinds of jobs can be produced competitively.

Three presses in the same format are a formidable line-up and promote high production flexibility.

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Plant director Cédric d’Haussy, printers Nicolas Flament and David Rancoul, and development director Olivier Marsil (l-r) in front of one of the HR-UV Rapida 106 presses at Pure Impression.
Italgraphica with new Rapida 105

Italgraphica is a mid-size print company in the northern Italian town of Alessandria. Ever since its founding in 1985, Italgraphica has been dedicated to packaging production and specialises above all in folding cartons for pharmaceuticals, cosmetics, foods and the wholesale trade.

Within the framework of plans to modernise the company and expand print capacities, partners Mauro Bianco and the brothers Federico and Eugenio Dalera last year decided to purchase a higher-performance sheetfed offset press. The existing press was thus replaced with a new five-colour Rapida 105 with coater and double-length extended delivery.

Economical production
Italgraphica has always done everything in its power to meet customer demands for high-quality results and fast production turnaround. Accordingly, it was necessary to invest in modern technology in order to further improve quality and to be able to handle production even more economically.

The new Rapida 105 – with much of the same technology under its bonnet as the make-ready world champion Rapida 106 – was installed in September. Its coater is prepared to enable both conventional and UV finishing. In addition, the Rapida 105 is configured with special board-handling accessories and 450mm (17.7in) raised foundations to enable higher piles. Quality control is realised with ErgoTronic ColorDrive (colour measurement and control according to Lab values).

High substrate flexibility
For many years now, the Rapida 105 has stood for reliability and excellent value for money in the medium-format arena. Its high substrate flexibility is an ideal basis for Italgraphica’s packaging production. The production speeds of up to 16,000sph are also superior to other presses in this class.

The Rapida 105 purchased by Italgraphica is the first platform press of this series to be installed in Italy. Many of the components and technical features are absolutely identical to those of the more extensively automated Rapida 106. The list includes the gripper systems, inking units, an improved sheet guiding concept, VariDry dryer systems, and a new AirTronic delivery, which uses the Venturi principle to guarantee precise sheet delivery over the whole range of substrates.

Italgraphica is not only relying on printing technology from Koenig & Bauer. The company is also the satisfied owner of an Optima flat-bed die-cutter from Iberica.
Cold foil — a success for TPG Packaging

First Vinfoil Optima in France expands 13-unit Rapida 106

Founded in 1987, TPG Packaging in Malville near Nantes in western France has developed continuously since it was acquired by the Allain family in 2000. The company has played a key role on the packaging market for a number of years. Owners Jonathan and Maxence Allain are committed champions of the UV process and supply print products meeting the highest quality standards.

TPG is well known for its comprehensive machinery base, wide-ranging processes and broad competencies, which enable the company to place an ideal solution for any customer needs at the focus of its activities.

A total of 24 Rapida 106 printing units are divided between two presses in configurations which cover all typical UV applications for food, cosmetics and spirits packaging. Jonathan Allain explains: “Many packaging products in these segments are printed on aluminium-coated substrates and finished with hot foil. It was thus a natural step to extend our portfolio with cold foil capabilities.”

Jonathan Allain, owner and manager of TPG Packaging, has already gained a number of new customers thanks to the cold foil module

Know-how, environment awareness and creativity

“Our decision to invest in this technology was driven by customer demands which could not be realised using hot foil,” says Jonathan Allain. “Customers want to see the substrate and paper white, but are opposed to the use of opaque white on metallised materials. They are thrilled by the possibility to overprint cold foil.”

Thanks to its special know-how, TPG is often a pioneer when it comes to technical solutions to answer new market trends. Jonathan Allain has observed a growing desire to reduce the use of plastics: “The positive environmental effects of cold foil application are a big advantage. The Vinfoil Optima system allows us to apply cold foil precisely and with minimised waste.” The creative directors also welcome numerous new possibilities. “We have installed the cold foil module on our 13-unit Rapida 106 and can offer finishing before cold foil application with a maximum number of overprinted colours. Our market asks for more than just plain four-colour print.” TPG’s customers draw the benefits of new visual effects and economical solutions.

15 new customers after just three months

“Customers from all three segments who previously had their packaging printed on aluminium-coated substrates, whether by us or elsewhere, have since switched to cold foil,” says a delighted Jonathan Allain.

Together with his team, he conducted extensive tests with cold foil before making the final decision: “It was important to know that the system would meet our quality demands, and only the Vinfoil module offered by Koenig & Bauer guaranteed production in uncompromising quality.” In the end, the Optima model was chosen. “We wanted to integrate the Vinfoil Optima into one of our Rapida 106 presses so as to be able to finish complex products in a single pass.” The automated reel changing, optimised foil use and flexible handling of the Vinfoil Optima module from Koenig & Bauer soon convinced everyone involved at TPG.

TPG Packaging is not the first print company in France to install a Vinfoil cold foil module, but is one which sets the quality bar much higher than most. And in that way, TPG Packaging has today established a clear technological advantage over its competitors.

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Delta Print T switches to Rapida 75 PRO

High-quality packaging on metallised board

The print company “Delta Print T” was founded in the south of Russian capital Moscow in 1998 and is thus celebrating its 20th anniversary this year. Production is concentrated on packaging of various types using pulp, kraft and designer board grades, alongside postcards, POS and advertising materials, including a variety of offset products printed with UV inks on laminated (metallised) board, plastics and films.

At the end of last year, Delta Print T installed and commissioned the first Rapida 75 PRO in Russia, a six-colour press with coater, UV dryers and a two-section extended delivery. This was a long-awaited investment for the company, not least as a means to further strengthen its position in the production of premium packaging for perfume and cosmetics.

General director Maxim Evlampiev explains: “A large proportion of our packaging is printed on metallised board and requires extensive finishing. We produce a lot of packaging for perfume and cosmetics products. It is important that they catch the eye of the consumer and convey the image of a perfect product. Unfortunately, there is practically no growth in the market for such products. New companies emerge from time to time, but few of them actually grow. This means that the market for perfume and cosmetics packaging is relatively stable. On the other hand, there are many print companies who want a share of the cake. And so we must be very active to remain competitive.”

There are a number of special aspects to the premium packaging market, and a high degree of specialisation is thus imperative. The substrates are complex, the images often extraordinary, the quality demands high, and perfect results only possible with a diversity of additional equipment. Only few print companies are able to supply such products at reasonable prices.

Finishing in all dimensions
Delta Print T laminates all its products itself. The lamination is always realised in precisely the required format so as to optimise film consumption. In addition, the company possesses equipment for micro-embossing, with which visual and tactile structures and ornaments can be created on the paper or board surface. Such effects automatically shift the final products into the premium segment. Alongside, more traditional finishing technologies such as
screen printing, standard embossing and foil stamping are also employed.

Delta Print T has operated two sheetfed offset presses for several years. One from a German manufacturer is configured for UV production, while a Japanese press is used with conventional oil-based inks. “We produce different types of jobs,” says Maxim Evlampiev. “In the cosmetics branch, packaging is expensive and sophisticated. Some of the other folding cartons, by contrast, can be printed in a conventional process. The necessary finishing is also much less complex in those cases. Consequently, we need separate presses for each technology.”

Precise quality monitoring
Last year, the company collected ideas on the configuration of a new sheetfed offset press with which production could become even more efficient. Key factors were modern colour measurement and control systems, sheet inspection, fast job changeovers and uncompromising print quality. In other words, only a press of the latest generation would suffice.

“For us, it was important to achieve reliable measurements of the opaque white layer applied to our metallised board, along with exact colour evaluation when printing on metallised and designer board or on plastics, including transparent substrates,” says Maxim Evlampiev. “We have found a good partner in Koenig & Bauer. All our wishes were heard and taken into account, and we now have a press which is perfectly matched to our expectations and market needs. It was especially pleasing to note the level of support we received both from KBA-RUS and directly from the manufacturer.”

The ideal press
Maxim Evlampiev: “We were invited to an open house at Koenig & Bauer in Radebeul, and watched a demonstration on the Rapida 75 PRO. We liked what we saw, because it seemed to offer everything we needed. On the other hand, a demo in the manufacturer’s showroom and real-life production are two completely different things. Consequently, we visited a printer in Vienna to see the press in daily practice. That was even more important than the initial demo. In order to be absolutely sure, we then returned to Radebeul for a series of tests on the Rapida 75 PRO. The print results left no doubts: The Rapida 75 PRO is precisely the press we were looking for.”

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New technology for faster turnarounds

Taylor Bloxham invests in high-performance Rapida 106

One of the UK’s largest printing companies, Leicester-based Taylor Bloxham Ltd., is increasing its print capacity by investing in a new six-colour Rapida 106 press with coater and extended delivery, which will enable the business to print 18,000 sheets per hour.

Taylor Bloxham specialises in offset, ultra HD print, digital and large-format print and print finishing, and has now chosen a Rapida sheetfed offset press for the first time after previously relying on presses from another German manufacturer.

The purchase of the new press is the latest in a series of investments that Taylor Bloxham has made in state-of-the-art print technology. Efficiency and production capacity have already risen as a result, and the installation of the Rapida 106 will further increase production levels.

Benefits for clients

Robert Lockwood, CEO of Taylor Bloxham, comments: “As printers of high-quality brochures, marketing communications and POS materials, our customers demand speed, value and excellence. Dealing with high volumes, sometimes at short notice, doesn’t mean that we have to sacrifice quality. By investing in the latest print technologies, we can ensure a quick turnaround with a superior finish. We are looking forward to the benefits which the Rapida 106 will generate for our clients.”

The new Rapida 106 is being installed in April 2018. Important standard features which serve to increase production speeds and thus ensure faster job throughputs include the sidelay-free infeed DriveTronic SIS and further DriveTronic automation modules based on dedicated drives, e.g. at the feeder.

ErgoTronic AutoRun, furthermore, allows multiple jobs to be queued on the press and triggers the necessary job changeovers autonomously on the basis of presets and makeready processes predefined by the operator. Fully automatic plate changing is completed in just two minutes.

Specialists for ultra-HD print

“One of our specialities is ultra-high-definition print,” says Robert Lockwood. “And we feel that the Rapida 106 offers the best solution for colour control and compliance with ISO 12647-2, as well as quality analysis and reporting.”

KBA (UK) sales director Chris Scully: “We are thrilled that Taylor Bloxham has chosen Koenig & Bauer as their new partner for the next stage in the company’s develop-
They join a prestigious list of high-quality UK printers who have made the switch to Rapida 106 technology. Taylor Bloxham prints some of the most demanding quality work in the UK. They also need to produce this work at the highest speeds. With its superb engineering and technology, the Rapida 106 ticks the box on all counts."

Taylor Bloxham was established in 1938 and employs over 200 people. The company comprises three brands which unite to manage the whole chain of marketing communications. Together, Taylor Bloxham, FastAnt and Instore offer expertise in the fields of print, direct mail, fulfilment design and retail point of purchase.
PMS Offsetdruck off to a flying start with its Rapida 106

Business has been buzzing at PMS Offsetdruck in Wendelstein near Nürnberg since the beginning of March, not least thanks to the installation of a new Rapida 106. The five-colour coater press is a classic replacement investment. But also one which adds a significant boost to production capabilities compared to its predecessor. This is furthermore the company’s first sheetfed offset press from Koenig & Bauer.

PMS subjected the products of the three biggest German manufacturers to some stringent testing. And it was the Rapida 106 which came out on top to secure the management’s investment decision. Apart from the usual criteria such as production speed, job changeovers and quality, Christopher Buhr was interested to see whether complicated formes could be die-cut in an inline process, and how quickly the coater could be converted to die-cutting and back to coating. After all, 40 per cent of his jobs require die-cutting, and 60 per cent are coated.

At the same time, the Rapida 106 made the best impression on the specialists from PMS in terms of innovative technology. They were especially convinced by advanced automation solutions such as the sidelay-free infeed DriveTronic SIS. The broad-based advice offered by Koenig & Bauer was likewise very well received. Spot-on customer care characterised not only the investment phase, but also the installation and commissioning, the training provided for PMS employees and technical support over the first few weeks of production.

PMS has invested in further equipment besides the Rapida 106: A new trimming line and a folder are already in production. The company premises, too, are being treated to a major facelift.

Relief in the production process
The high production speed of the Rapida 106 has brought tangible relief in the printshop. The company operates a two-shift system, and the previously necessary third or weekend shifts to cover demand peaks should now be a thing of the past. Job turnaround is also accelerated to the benefit of the customers. Even today, the timing for individual products is already relatively short. The delivery time for 21,000 perfect-bound brochures with over 400 pages of content and a cellophane cover is less than a week.

Another point which benefits customers of PMS is the expansion of its portfolio in the field of high-quality inline coating. In the past, PMS outsourced its coating needs to a partner company. The results were good, but the additional transport was costing far too much time. Christopher Buhr: “Under the motto ‘Faster, higher, farther’ and with an ideal investment at just the right place and time, we are looking ahead very positively to the future.”

Inline colour control with Quali-Tronic ColorControl has raised the quality of the printed products yet another notch compared to the eleven-year-old predecessor.

Everyone is delighted with the new high-end Rapida 106 (l-r): Armin Schwarz (PMS Offsetdruck), Christofer Hugel (Koenig & Bauer), Philipp Rachel, Thomas Walzer, Wilfried Buhr, Ahmet Kocak, and Ulrike and Christopher Buhr (all PMS Offsetdruck). And if they are happy, then canine director Anton is satisfied, too!
This quality also remains identical for every single sheet, even in case of later repeat jobs.

Green printing in every dimension

PMS attaches particular importance to sustainable production processes. Many of its customers, such as pharmaceuticals companies, manufacturers of outdoor and luxury goods, insurance companies and government authorities, themselves demand ecologically manufactured products. In addition to its Blue Angel certification, PMS works with FSC- and PEFC-certified substrates.

A photovoltaic installation with 854 solar modules on the roof of the production building is operated exclusively to cover the company’s own energy needs. At peak output, it can supply around 80 per cent of the required energy. The whole production area is illuminated with LED daylight lighting. That not only saves energy, but also enables customers to rely on what they see when approving print results.

On the Rapida 106, low-alcohol processes and the VariDryBlue IR/hot-air dryers in the swan neck and extended delivery contribute to a reduction of the energy input for drying by up to 30 per cent. This is achieved by recycling the hot but not yet saturated air within the dryer modules.

High-quality catalogues for luxury goods, here for Blancpain, are among the favourite jobs of the printers at PMS Offsetdruck.

High product diversity

The Rapida 106 was able to demonstrate its outstanding substrate flexibility during the first weeks of production. The schedule included everything from 55gsm (37lbs) paper to 450gsm (304lbs) board. The print jobs handled by PMS are equally diverse: From high-page-count brochures to voucher booklets (with inline die-cutting and perforations), from children’s books to premium-quality catalogues for watch and clock manufacturers. The latter are printed with high ink layer thicknesses, with all-over screen or UV spot finishes, and with every page creased and sewn. Covers and slip cases are produced from the same materials in different colours. While the covers are numbered, the slip cases are finished with hot-foil stamping. The majority of jobs are long-life products supplied as short to medium runs.

Wilfried Buhr summarises: “We are not your printer if you only want it cheap. We produce high quality.” That includes offering genuine full service to customers – from business cards to new design developments which help them to present their products at the point of sale. That could mean displays or dispensers which have yet to be produced in the envisaged form, or small items which require complex handling and exceptional creative input. The Buhrs are actually happiest when the customer simply describes the task in hand and asks them to “get on with it”.

No time wasted

The change of manufacturer and the switch to latest-generation technology meant that there was no shortage of new things to learn for the four printers on the Rapida, but they are nevertheless delighted with their new “toy”. For Philipp Rachel, the sidelay-free infeed is one of the most important innovations. It requires no manual settings and thus eliminates many of the cumbersome aspects of substrate changes. During the first two weeks, a print instructor from Radebeul assisted the smooth transition. When there are 30,000 printed sheets on the pallets after two hours of production, and that already in the first few days, everyone is bound to be eager for more.

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ScanMould uses rotary die-cutting for inmould labels

“Most effective die-cutter on the market”

ScanMould has operated a Rapida RDC 106 rotary die-cutter for the processing of inmould labels at its production centre in Jyllinge/Denmark since the middle of last year. Founded just two years ago, the company is one of the early adopters of rotary die-cutting on the basis of Rapida sheetfed offset technology.

The Rapida RDC 106 was installed in a configuration with a single die-cutting unit and accessories for the processing of labels and inmould films. Important features include the sidelay-free infeed system DriveTronic SIS, an AirTronic delivery, a compressor cabinet and various details to safeguard scratch-free sheet travel. Both reels and individual sheets can be handled: An RS 106 reel sheeter incorporating the newly developed “Register-Cut” system cuts reels from a flexo press into sheets of the required length ahead of the feeder. Subsequently, the sheets are fed to the rotary die-cutter in absolutely precise register. Video systems at the feeder and in the delivery permit close observation of the passing sheets.

Nine times more effective than flat-bed die-cutters

When asked about the benefits he has gained with the Rapida RDC 106, ScanMould managing director Martin Fundal gives an amazingly simple answer: “It is by far the most effective die-cutter on the market.”
ScanMould estimates that the Rapida RDC 106 is around nine times more effective in production compared to a classic flat-bed die-cutter, depending on the substrate and forme contours. This can be attributed both to the higher processing speed of up to 12,500 sheets per hour (for other applications up to 15,000 sheets per hour) and to the faster make-ready. Makeready on the Rapida RDC 106 is approximately three to four times faster than on a conventional die-cutter. Furthermore, the necessary dies and cutting formes are significantly less expensive than those of a traditional system.

For ScanMould, it is a major advantage that reels printed on a large flexo press can be sent to the RDC 106 without further intermediate steps thanks to the reel sheeter. Comments from his extensive network of contacts in the print industry drew Martin Fundal’s attention to the option of rotary die-cutting with the Rapida RDC 106.

**Fast job changeovers**

Already after the first months of production, the expectations placed on the Rapida RDC 106 at ScanMould have been fulfilled. A complete job changeover (die and forme change) takes five to ten minutes. The machine is thus suitable for both high-volume production and short runs. The high die-cutting speed is effective for long runs, and the fast job change-overs ensure that shorter runs are also economical. This flexibility is a particular merit of the Rapida RDC 106. But Martin Fundal sees another key benefit: “The register accuracy in die-cutting is absolutely perfect.” He is convinced that the Rapida RDC 106 could be used equally successfully in folding carton production, in addition to inmould labels.

At ScanMould, however, production has from the very beginning been focussed on the printing and die-cutting of inmould labels. The company was founded with the support of the Danish Growth Fund, a state initiative which provides capital and expertise to assist new companies. Martin Fundal is at the same time a co-proprietor of ScanKet, another Danish company with over 30 years of experience in the production of conventional labels.

“**It is by far the most effective die-cutter on the market.**”

Martin Fundal, managing director of ScanMould

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**A reel sheeter cuts reels from a flexo press into sheets of the required length ready for die-cutting**

**Die-cutting production at the delivery of the Rapida RDC 106**

**Martin Dänhardt**

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Southern California printer produces for Fortune 500 brands

High-speed Rapida 106 expands pressroom at D’Andrea Visual Communications

Ever since it was established in 2005, D’Andrea Visual Communications in Los Angeles has continued to grow as a premier creative provider in this field. While its competitors remained dubious of the UV technology and its printing benefits, D’Andrea immediately embraced the innovation. With now 12 years of experience, the company has built a sterling reputation for high-quality UV print and produces for some of the most impressive Fortune 500 brands around the world.

But that is not the only point which distinguishes D’Andrea from the rest of the field. To better serve its customers, the company currently combines its commercial UV offset capabilities with digital large-format production and high-quality finishing. With its 150 employees, D’Andrea is one of the few companies which prints on practically all types of substrate from thin paper to heavy corrugated board, as well as a variety of synthetic stocks.

Last autumn, the company installed a Rapida 106 alongside an existing press. With production speeds up to 20,000 spm, this is the fastest medium-format sheetfed offset press on the market. At the same time, it promises simultaneous makeready processes, fast job changeovers, ultimate print quality and the flexibility to print on a wide range of substrates – all factors which help D’Andrea to maintain its competitive advantage.

Gary Reyes, litho division manager at D’Andrea: “For two years, we researched which sheetfed press would be best for our clients and for us. Ultimately, Koenig & Bauer offered us the most advanced technology. In addition, the press opens doors into a new market, namely small packaging. The Rapida 106 will be our workhorse press and differentiates us from any of our competitors.”

Interesting products for top-tier clients
D’Andrea Visual Communications is headquartered in an ultra-modern two-storey facility in Cypress, California, under a bevy of palm trees between Long Beach and Huntington Beach. Newly opened in 2013, it offers extensive production space. This is a prime location from which to print and produce for top-tier companies across the national market and particularly in Southern California, including large advertising and design agencies, entertainment companies, movie studios, record producers, DVD production and distribution companies, as well as major automobile marketers. The whole team of sales experts, project managers, engineers and print specialists works closely with clients to help them enhance their individual brands.

“On the bottom line, our goal is to create visual marketing materials that get noticed,” says Gary Reyes. “Every day, we are producing impactful and innovative visual experiences that inform, motivate and inspire, while reinforcing our clients’ brand and making a lasting impression. Currently, we see clients wanting quality work with a speedy turnaround. They also want to feel confident that their projects are being handled in an efficient manner. And our clients praise us for the unparalleled customer experience.”

The team at D’Andrea Visual Communications is excited about its new Rapida 106 press (l-r): David Schiller, founder and VP business development; Carson Ladd, VP operations; Lety Villegas, controller; Gary Reyes, litho division manager; David D’Andrea, founder and CEO

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Interpress Printers invests in flexo technology from Koenig & Bauer

EVO XD for the leading packaging company in Malaysia

Interpress Printers (IPP) is a young company focused on the printing of fast-food packaging and operates from headquarters in Kuala Lumpur. IPP has already built up a fine reputation among its customers and is currently enjoying a period of dynamic growth. To accommodate the flood of new business, production capacity is now to be expanded at new premises in the Malaysian capital.

After a series of visits to companies in Europe, it was decided to invest in an ultramodern flexo printing line from KBA-Flexotecnica, a subsidiary of Koenig & Bauer AG. “We are convinced that Koenig & Bauer is the ideal partner to answer our high demands. The outstanding technology of the EVO XD will enable us to define new yardsticks for the packaging sector,” says Ratha Kerisnan, managing director of Interpress Printers. The press is scheduled to come on stream at the new production site by the end of the year.

Interpress Printers was founded almost ten years ago. In the meantime, it counts around 200 employees and has developed into one of the region’s biggest suppliers of fast-food packaging. The company produces for customers in both Malaysia and other Asian countries. IPP is furthermore a member of the International Packaging Group, a global alliance of leading companies from the field of packaging printing. As of 19th January 2018, SCGP Solutions (Singapore) Pte Ltd, a subsidiary of SCG Packaging (SCGP), which belongs to the Siam Cement Public Company Limited Group, has acquired a majority stake in IPP. Listed on the Thai Stock Exchange, SCG is a leading business conglomerate within the ASEAN region with a strong position in the market and a more than 100-year history. The partnership with SCG Packaging will support IPP’s vision of becoming a leading one-stop solution provider to support all packaging requirements for its clients.

Flexo print is a growth market
With annual growth rates of 4-5%, flexible packaging – today a strong domain of flexo printing – is the fastest growing packaging segment. “This project is solid proof that we have arrived on the Asian market. The next step is now to further strengthen our local presence. Our quality and our local service capabilities as a globally active press manufacturer will benefit not only IPP itself, but also its customers,” says executive board member Christoph Müller from Koenig & Bauer.

EVO XD: Minimal waste paired with quality and efficiency
The modern CI flexo web presses of the EVO and NEO series are designed and manufactured at KBA-Flexotecnica near Milan/Italy. The EVO XD for IPP, with its eight printing units, a new dryer generation and a newly developed coating unit, has been engineered for ultimate quality on the most varied materials. The technical highlights include a highly efficient energy-saving ventilation system in the bridge dryer, the fully automatic impression control system A.I.F. (Auto Impression Flexotecnica) and the operator-friendly register setting system A.R.F. (Automatic Register Flexotecnica) as the key to minimum start-up waste. All important automation and control functions are integrated into the new touchscreen and enable intuitive operation. With regard to automation serving fast job changeovers, the EVO XD can be considered the latest state of the art.

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Main-Post media group invests in further printing towers by Koenig & Bauer

Evolution instead of revolution

With the purchase of two highly automated Commander CL printing towers, the Main-Post media group is resolutely pursuing its chosen path of gradual modernisation. “Piece by piece, we are upgrading our printing presses so that they represent the latest state of the art. For us, the two new printing towers also indicate our clear commitment to printed newspapers,” says David Brandstätter, managing director of Main-Post GmbH.

The company already invested in a new folder in 2015. With the two new printing towers, which are due to start production at the beginning of 2019, up to 47,000 newspaper copies with 32 pages each can be printed in one hour. “Our companies are linked by a very long and above all a very good partnership. The geographical proximity of the two companies, in particular, allows for a very strong exchange in terms of new developments, innovations or also practical tests,” says Claus Bolza-Schünemann, president and CEO of Koenig & Bauer AG.

It was 135 years ago that Koenig & Bauer delivered a first printing press to the Würzburg General-Anzeiger, the precursor of today’s Main-Post. The first edition of the Main-Post appeared on 24 November 1945. About 1,000 people are currently working for the company, which belongs to the Pressedruck media group in Augsburg. Every day, the daily newspapers Main-Post, Schweinfurter Tagblatt, Schweinfurter Volkszeitung, Haßfurter Tagblatt, Bote vom Haßgau and Volksblatt are published and printed. Thanks to third-party print jobs, the company produces more newspapers than ever before. For example, the Main-Post produces innovations such as zipper applications or large double-spread supplements in order to satisfy the wishes of advertisers.

In addition to the two printing towers, the company is investing in two Pastomat reelstands and two Patras A reel loading systems. An extensive automation package consisting of RollerTronic roller locks, CleanTronic cylinder washing systems, colour register and cut-off register controls, colour measuring and control systems and fully automatic plate changing systems with plate lift reduces makeready times, waste, and operating and maintenance costs to a minimum. The Commander CL is controlled via a new ErgoTronic console with EasyTronic for optimised press startup.

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Above: In future, six printing towers and three folders from Koenig & Bauer will remain responsible for production. Two older towers can be shut down at short notice (spare parts supply for existing systems)

Signing the contracts (l-r): Christoph Müller, member of the executive board of Koenig & Bauer AG; Adrian Alt-Steiner, head of printing at the Main-Post media group; David Brandstätter, managing director of Main-Post GmbH; Günter Noll, sales manager for Koenig & Bauer; Claus Bolza-Schünemann, president and CEO of Koenig & Bauer AG

Photo: Daniel Peter
Next Cortina comes on stream at ICP Roto on La Réunion

ICP Roto Industrie Graphique, a highly respected commercial and newspaper printing house based in Le Port on the French island of La Réunion, has successfully commissioned its new Cortina press from Koenig & Bauer. Installed in a new modern press hall, the Cortina has already taken over a large proportion of the company’s overall production.

As the leading contract printing house on La Réunion, ICP Roto is now even better equipped to serve its customers with high-quality and flexible print products in the future. The installation of a modern high-tech press line also confirms the ultimate importance which the company management attaches to ecological concerns on an island where the tourism industry dominates. “Environment protection is a matter dear to our hearts,” says proprietor and managing director Alfred Chane-Pane. “Given that it eliminates the need for dampening units and all the associated additives, the Cortina technology is an ideal vehicle for the eco-aware realisation of many very sophisticated products.”

High degree of automation for simple handling
The Cortina comprises a fully automatic reelstand, an ultra-compact printing tower, an efficient hot-air dryer system, a flexible superstructure and two proven jaw-type folders. This impressive press line incorporates numerous automation modules such as the Patras A reel-loading system, automatic plate and circumference changing, CleanTronic washing systems and RollerTronic roller locks, as well as colour and cut-off register controls. “The Cortina is definitely much easier to operate than a conventional offset press,” says technical director Philippe Van Damme.

Process optimisation with waterless technology
The waterless printing technology of the Cortina permits not only sharper detail and finer screen rulings, but also hybrid production options and seamless switchovers between heatset and coldset production. Full utilisation of these strengths of the Cortina has already been factored in for the future, not least through preparations for expansion with a further coldset web.

Variable web width and two folders for production flexibility
Through the elimination of dampening units and ink keys, the Cortina technology is simply predestined for applications with variable web widths. This production flexibility facilitates the printing of a broad diversity of job types, such as magazines, brochures and supplements in a standard magazine format, as well as flyers in attractive special formats, alongside traditional tabloid newspapers and newspaper-like products. Thanks to the two folders, high-capacity 4-up production is an interesting possibility, and even 8-up production can be realised with special formats.

“Together with the optimised pre-press, the Cortina technology enables ecological, industrial-scale contract printing of a higher quality than ever before,” says the visibly satisfied technical director Philippe Van Damme.

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Perfect interplay between Tiber S.p.A and Koenig & Bauer

With its investment in a used 48-page Compacta last year, Italian print company Tiber S.p.A. from Brescia renewed its faith in highly automated compact web offset technology from Koenig & Bauer. The press has now been running to the fullest satisfaction of the customer for more than six months – and that at maximum production speed from day one.

Koenig & Bauer took care of the relocation, a comprehensive overhaul of almost the entire press, re-installation at Tiber and finally commissioning of the Compacta 618. The printing units and folder, for example, were fully reconditioned at the Koenig & Bauer factory in Frankenthal. The folder superstructure was expanded to enable the handling of a number of new products. A major logistics and scheduling challenge.

“The interplay between our two companies has always been very smooth. Koenig & Bauer is a reliable and professional partner. For us, therefore, it was clear that we wanted to work with Koenig & Bauer again when we decided to invest in further machinery,” says Giacomo Becchetti, managing director of Tiber S.p.A.

The high-performance 48-page Compacta 618 is engineered with a cylinder circumference of 1,240mm (48.8in) for a maximum web width of 1,450mm (57.1in). The press was furthermore expanded with a Patras A automatic reel-loading system and innovative superstructure technology. A comprehensive service concept has also been elaborated to safeguard sustained production performance.

Giacomo Becchetti, managing director of Tiber S.p.A., explains: “The Compacta 618 exceeded our expectations from the very first day. You would hardly think that this is a used press. In this respect, especially, Koenig & Bauer has done a really good and professional job.”

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150 years Druckerei Berger

Into the future with Koenig & Bauer

For 150 years now, the name Berger has been inseparable from the development of the print industry in Austria. Time and again, this tradition-steeped company has been the one to recognise future-oriented technologies and to apply them to the benefit of its customers. Many customers have been loyal partners of the company for decades.

Druckerei Berger is today one of the most modernly equipped print companies in the country and is generally considered the second most important of the four remaining web offset printers in Austria. It is thus hardly surprising that the last two investments in new machinery were both presses from Koenig & Bauer. Over the past years, a Rapida 106 (eight-colour perfector with coater and HR-UV technology) and an essentially new Compacta 618 were installed. “We are very satisfied indeed with our two presses. The cooperation with Koenig & Bauer was also very smooth right from the beginning. We are convinced that we can look forward to a successful future together with Koenig & Bauer,” says technical director Ferdinand Berger.

Family company in the fifth generation
Druckerei Berger is a private company which has been family-owned without interruption throughout its entire 150-year history. It is today managed by Ferdinand and Peter Berger as representatives of the fifth generation. The 245 employees in Horn currently produce around 300 periodicals, generating a turnover of €60m ($74m). True to the motto “Standstill is a step backwards”, Berger has always applied the combination of prudence and pioneering spirit which is typical of a family-run business. The 150th anniversary celebrations are to be accompanied by further investments. “In our size and performance class, we are the only family-owned and -managed web offset printing company in Austria,” says Peter Berger, not without a certain pride.

“With our new presses, Berger is well prepared not only to consolidate its position on the market, but in fact to expand,” says Peter Berger Jr. And there is still a little space at the company for further investments when the time comes.

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Drucker Ferdinand Berger celebrated the company’s 25th anniversary together with his employees in 1893
Klingele Group invests in the new high board line rotary die-cutter CorruCUT from Koenig & Bauer

Klingele signs up as CorruCUT development partner

The focus on growth markets, such as conventional and digital packaging printing, is a key element of the successful Koenig & Bauer strategy. With its decision to re-enter the market for presses dedicated to the processing of corrugated board, the company has now taken the next logical step along this road.

The new Koenig & Bauer presses were officially unveiled to the market at the FEFCO Technical Seminar 2017 in Vienna. And just a short time later, the Klingele Group was welcomed on board as a top-class cooperation partner for the high board line rotary die-cutter CorruCUT. “After Koenig & Bauer announced its return to the corrugated market at drupa 2016, we followed the further developments very closely. The branch was simply lacking another potential supplier to the premium segment,” says Dr. Jan Klingele, managing partner of the Klingele Group and president of the European Federation of Corrugated Board Manufacturers (FEFCO).

Over the past two years, Koenig & Bauer has gathered a strong new team to push ahead development of the press. Koenig & Bauer executive board member Christoph Müller: “We studied the market very carefully and also spoke directly with many of the companies. On this basis, we then sat down to design a press which mirrors the specific needs of the customers as precisely as possible.”

Unique features of the CorruCUT

The Klingele Group has ordered a six-colour press with a working width of 2,800mm (9.2ft) for its Delmenhorst box plant. The press is in every respect a completely new design – from the feeder, via the printing units and rotary die-cutter to the delivery. The CorruCUT also incorporates a number of unique features such as a vacuum-belt feeder without infeed shaft, a new solution for anilox roller exchange and an overhead vacuum delivery. Dr. Jan Klingele: “The concept presented by Koenig & Bauer and the many new technical ideas embodied in the press sealed our decision in favour of the CorruCUT. We are now looking forward to accompanying the new rotary die-cutter through to series maturity in cooperation with Koenig & Bauer.” The new CorruCUT will first be set up and tested at the Koenig & Bauer manufacturing plant in Würzburg, and is then scheduled for delivery in early 2019. In addition, the two companies have already concluded an agreement on further presses in the future.

Klingele Group: Pairing tradition and progress

The Klingele Group was founded in 1920 and current managing partner Dr. Jan Klingele represents the third generation of the owning family. The company is an international supplier with a total of around 2,400 employees. The product range covers corrugated base paper manufactured using recycled waste paper, innovative and sustainable packaging solutions for a diversity of industries and applications, as well as adhesives. Together with affiliated partners, the company’s paper and packaging divisions serve customers through two paper mills, twelve corrugated board plants and eight processing plants in Europe, Africa and Central America.

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The new FoilCOAT – original finishing for the most varied products

With its entry into the film processing arena, Koenig & Bauer is also defining new benchmarks for the process of film coating.

What makes print products truly unique? The exceptional print and finishing quality is a major factor, of course. But original refinements and special haptic or visual impressions also catch the eye and stick in the mind. The new FoilCOAT was developed by Koenig & Bauer to advance the production of matt films with solvent-free UV coatings in accordance with the latest state of the art, but at the same time incorporates additional modern technologies and functions, as well as unique features specific to Koenig & Bauer.

The excimer and UV technologies implemented in the FoilCOAT are used to manufacture special products for laminating films, decorative films and release films, among others. The FoilCOAT can be expanded to satisfy individual customer requirements, for example with an ESH system for the refinement of decorative papers and finishing films.

KBA-FT Engineering
KBA-FT Engineering is a specialist provider of technologically demanding engineering services in the fields of machinery and automation. The combination of expertise and experience makes KBA-FT Engineering a reliable partner for the implementation of the most varied solution concepts. In addition, a broad spectrum of services is offered to users of rotogravure printing presses, ranging from repairs and maintenance, via retrofits to spare parts supplies.

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Applications
1. Laminating films
2. Decorative films
3. Release films
4. Finish foils
5. High-quality packaging
6. Pharmacy and food
7. Labels, etc.

Technical data
Max. running speed 250m/min
Production speed 100m/min or 200m/min
Web width 600mm to 1,600mm
Max. reel diameter 1,000mm
Max. reel weight 1,800kg
Rewinder accuracy ±1mm with 1,000mm reel diameter
Material orientation (rewinding) Coating inside/outside with lay-up roller
Clamping shaft 3” (76.2mm) and 6” (152.4mm)
Coating system 100% solvent-free UV coatings

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KBA-FT Engineering
KBA-FT Engineering is a specialist provider of technologically demanding engineering services
What do new entrants into inkjet digital decorative printing need to watch out for?

In recent years, a number of manufacturers of inkjet digital printers have launched models for the decoration of glass, metal or plastic containers. The systems differ in their complexity and, consequently, the required level of investment. In line with its declared commitment to guaranteed reliability and printer availability, Koenig & Bauer subsidiary Kammann is aiming the digital printers it introduced three years ago at the upper end of the performance and price spectrum. At this level, according to Matthias Graf, managing director of KBA-Kammann GmbH (Bad Oeynhausen), inkjet already delivers production quality on a par with screen printing and even enables the same industrial approach.

Inkjet digital printing on a grease cartridge

The contactless nature of inkjet makes it a particularly suitable method for printing on asymmetrical objects. In order to guarantee consistent quality, however, it is necessary to keep the distance between the inkjet print head and the object being printed as constant as possible.

This is not difficult in the case of uniformly cylindrical objects such as silicone or grease cartridges, but the challenges become significantly greater with convex or concave shapes or when decorating objects which are entirely asymmetrical such as decorated beer glasses or plastic containers for the body care market.

Kammann: Practical experience since 2013

Kammann entered the market for inkjet digital presses in 2013 and there are now about a dozen users who have adopted the technology developed in Bad Oeynhausen – primarily in the form of hybrid printers which offer both screen and inkjet printing.

What has become clear to Kammann in the course of numerous discussions over the past few years, however, is that many users who are planning to take the plunge and move into digital printing have not thought this step through sufficiently and are thus inadequately prepared. Potentially trapped in a technology which they cannot handle, such customers can all too quickly find that their investment has become a dead end and subsequently draw completely wrong conclusions as to the market maturity of the digital printing process as such.
Why use digital printing to decorate objects?
Digital printing technology, in combination with web shops, has given the public the opportunity to customise virtually any print-able item. Having started with paper products such as photobooks, this trend has long since spread to packaging of all kinds.

The personalisation of a plastic drinking bottle with a name or even a photo triggers a steep increase in value, and consumers are prepared to pay a lot more money than they would for an “impersonal” mass-produced product. This in turn means that suppliers are able to achieve higher margins.

Inkjet digital makes it possible to decorate even single objects. Equally, a different image can be printed on each example of the same object. By eliminating screen costs, inkjet digital also offers an alternative for short print runs and applications, such as samples of new decorative designs or instances where numerous different motifs are required, but the required batch sizes are correspondingly small. If digital printing can be used to reduce minimum order quantities, then customers may be willing to accept higher unit costs.

Special applications
Leaving aside production quantities, there are still many other reasons why companies should consider inkjet for decorative printing.

Halftone decorations: It is common knowledge that the make-ready for many halftone decorations can occupy screen printers for half an hour or more, especially when decorating glass objects with their attendant dimensional tolerances. Digital printing is a meaningful alternative for such applications, because the inkjet heads are always perfectly aligned with each other. And since it is a contactless process, quality is not critically affected by the varying distances of the heads from the surface of the object.

Alternative to sleeves: Digital print can also be used as an alternative to sleeve labels where it is sometimes impossible to avoid blisters and air bubbles, which otherwise impact production quality. Inkjet heads are able to print all parts of a shaped bottle.

Tight radii, grooved surfaces: Oval objects with their often tight radii are ideally suited to inkjet printing, and the same is true for the decoration of objects with surfaces which have been impossible or at least problematic up until now. Grooved surfaces are one example.

The illustrations on page 43 reveal some of the characteristics of digital printing:

Individuals can also be used as an alternative to sleeve labels where it is sometimes impossible to avoid blisters and air bubbles, which otherwise impact production quality. Inkjet heads are able to print all parts of a shaped bottle.

1. As a contactless printing process, it is capable of printing in places which screen printing cannot reach.
2. It is possible to print with accurate register on both debossing and embossing.
3. The entire surface of an object, right down to the base, can be finished without problems.
4. Sharp reproduction of fine lines and type.
5. 360-degree sleeve printing is also possible — even with photorealistic images.

Inkjet digital is also capable, to some extent, of producing the relief structures which screen printing achieves through appropriately thick layers of ink. A double application of opaque white already creates the impression of a relief.

What do I need to watch out for when I move into inkjet digital?
Professional-grade digital printers should not be confused with desktop office printers, even though both employ the inkjet process. The same holds true for the quality of the end product, and even more so for the prerequisites to be met by the production environment.

The so-called drop-on-demand (DOD) piezoelectric process is one in which the nozzles of a print head are opened for each individual drop of ink. This means that drops of ink are only expelled when they are actually needed. The individual ink drops fired at
the surface of the object can be as small as 2 picolitres (1 picolitre equals a trillionth of a litre, $10^{-12}$ litre). The nozzles in an inkjet head are correspondingly tiny and can thus easily become blocked. Such blockages can already be triggered by stray light hitting the UV-cured inks which are commonly used for container decoration. Just one blocked nozzle will be apparent in the printed image, and so it is vital to prevent nozzles blockages if top quality is to be achieved.

It also does inkjet print heads no favours if they are used infrequently. In order to avoid these kinds of problems, Kammann ensures that the ink in its digital and hybrid presses is kept circulating. In addition, shields prevent stray light from reaching the individual print heads. These measures ensure exceptionally reliable print head operation, but if a nozzle should still fail, despite everything, smart software functions can compensate during the printing process by activating redundant rows of nozzles.

Such complexity means that what an inkjet press used for decorating containers really needs are operators who know what they are doing and who are prepared to take on board the importance of press care and regular servicing. The process also calls for skilled pre-press staff who are able to optimise data supplied by the customer for print.

**Support from the press manufacturer**

Digital printing can only be economically viable when, on the one hand, high-quality products are produced consistently and, on the other hand, the necessary makeready times, net machine performance and the costs of the consumables remain within the defined envelope. As with screen printing and/or hot stamping, makeready time can be minimised through the use of 3D scanners, as well as an optimum level of press automation.

Kammann’s staff are fully conversant with the various hurdles confronting both newcomers and printers switching to digital. A manufacturer with expertise covering the entire production process, who can thus provide comprehensive support, is especially important for companies who have previously outsourced their decorating processes to service providers and possibly lack basic knowledge which is imperative when bringing this value creation step back in-house.

Before they make an investment decision, Kammann guides those interested in moving into inkjet digital print through all the steps in the process, using their own products as examples. This starts with data preparation and profile generation, and continues with advice on the optimum level of automation for the printer. This is the only way to lay the necessary foundations for investment calculations, assessments of employee training needs and effective realisation of the digital print workflow.

**Combining the best of two worlds**

The various decorating processes – screen, inkjet or hot stamping – all have their pros and cons. KBA-Kammann is the only decorating technology supplier to combine multiple processes within one printer and to offer inline hybrid solutions.

Outwardly, a linear K 20 or a K15 rotary-table printer for industrial digital printing appears identical to the same model for screen printing. Combined with a familiar operating platform, this helps to secure acceptance in any company which is already working with Kammann equipment. But even though the external dimensions of the printer may be the same, there is room inside for more print or drying stations, for example because space-saving LED-UV systems can be used.

The printing speed for decorative images whose height matches the built-in print heads is roughly the same as for screen printing, and so estimates can be based on the same output. When images of greater heights need to be printed, however, the inkjet head may have to be positioned several times. Software should shortly be available to enable “invisible” realisation of the resulting transitions. Another alternative is to print in a spiral, but this requires perfect interplay between the software, inkjet heads and transport system.

**Motorised product alignment for high-quality print results**

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Kammann actually has a particular strength in fast and very precise product transport systems. These systems allow movement of the highly sensitive inkjet heads to be minimised and represent a decisive contribution to reliable operation of the overall printer.

**What matters at the various production steps?**

Inkjet inks differ from screen printing inks in terms of covering power and this means that it is critical for the ICC profile of the printer to be matched to the object in question, its surface properties and colouring. KBA-Kammann has designed a device that makes it possible to generate optimised profiles for printing on containers.

This involves printing patches on the original object and then calibrating the individual print heads on the basis of the resulting colour and intensity measurements. Kammann offers this calibration as a service, though customers can also choose to generate the profiles themselves (in which case the additional measurement device needs to be purchased).

None of this, however, releases the user from his responsibility to acquire adequate colour management knowledge for industrial digital printing. The sheer variety of different substrates and kinds of container makes this quite a complex undertaking, but has in turn also resulted in a growing number of external consultants specialising in such industrial printing processes.

Whilst the demands on the process differ massively from screen printing, at least the tools used for pre-press are not new. In most cases, the print data is generated, checked and retouched using Adobe software such as Acrobat, Illustrator or Photoshop. The data are then ripped using Onyx or Colorgate software to obtain print-ready, rasterised data.

In contrast to screen printing, inkjet uses almost exclusively the four process colours cyan, magenta, black and yellow, and corporate spot colours need to be composed in CMYK. Opaque white can also be printed as a base layer, of course, and the inkjet heads can be used to pre-print a primer or protective coating.

**Free choice of ink systems and print heads**

At this point, it is important to make clear that the Kammann technology, unlike many competitor systems, is not tied to specific ink suppliers. This means that it is possible to use the ideal combination of primer, ink and coating for any given application. It is also possible to make case-by-case decisions regarding the colour sequence and the use of UV-LED for pinning between each ink application on the basis of the image, the object being decorated and the demands to be placed on the decoration.

Kammann also allows the use of inkjet print heads from different manufacturers. Currently, resolutions of up to 1,200 x 1,200 dpi can be achieved, though only for simple geometries and products with non-critical tolerances where a minimal distance can be guaranteed between the print head and the object being decorated. The use of different drop sizes allows the level of detail to be varied within the image as a whole, which also helps when adjusting an image to conical surfaces.

**The future of inkjet digital decorative printing**

There is no doubt that digital printing can unlock new market opportunities for the decorating of containers. Its pioneers, however, are still thinly spread. Since 2010, Kammann alone has sold some 200 of its K 15 systems, but if one compares this with the number of such systems that pre-date digital, the extent of the potential becomes apparent.

The future belongs to press users who are prepared to work together with the press manufacturers and customers to develop new business models. The more “business intelligence” is fed in, the faster the digital decoration express will get under way and fuel the technological development of container decoration.

Ultimately, perhaps, we will end up with a coin-operated “box” which, rather like copiers in copy shops, can one day be left unattended to produce individually decorated souvenir mugs and glasses.

**Gerd Bergmann**

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The successful combination of the inkjet printer alphaJET, the software code-M and the VeriSens camera from specialist sensor manufacturer Baumer prints data directly from a database and verifies the printed information on the spot. In this way, all products can be assigned to a particular production batch and quality is assured.

**Verified quality**
Ever since 1925, Henry Lamotte Oils GmbH has been one of the leading suppliers and producers of oils, greases, waxes and related base materials, as well as aroma extracts.

True to its Hanseatic character, the company attaches great importance to fair and sustainable business relations and is proud of its longstanding relationships with customers and suppliers. Profound market knowledge, committed employees and consistent quality assurance are factors which promote an innovation-oriented business climate.

A broad client base represents the food industry, food retailers and the pharmaceutical and cosmetics sectors, as well as the animal feed branch and the chemical industry.

**With an eye for security**

Whether food, medicine or cosmetics: Batch numbers and use-by dates are indispensable. This information must be guaranteed on every item, to enable reliable identification of the batch to which a product belongs at any later time.

**Coding and verification of the printed text in a single work step**
01 The starting point

After the clean room, a conveyor belt transports the filled and sealed products to the packaging point. Here, an inkjet printer adds two-line code markings to the different packages (e.g. bottles, folding boxes or jars).

If the products run too close to each other on the conveyor belt, however, it can happen that the sensor identifies only a single item and thus sends only one printing signal to the inkjet. Visual monitoring by an employee also remains prone to errors.

02 A solution for quality and security

Inkjet printer, software and camera are already perfectly matched in the standard combination: alphaJET + code-M camera + VeriSens.

An on-site trial installation on the production line delivered positive results almost immediately, as the technical team at Henry Lamotte Oils had already prepared the test setup in the best possible way.

Separation of the products by way of differences in speed is not a problem for the marking.

03 Camera check with added benefits

The software code-M checks firstly that the products are sufficiently spaced, and secondly that a complete printed text has been applied. At the next step, the camera and code-M can also verify the text content.

The average belt speed of 12 to 15m/min (39.4 to 49.2ft/min) is no challenge for product coding with the alphaJET system.

Camera inspection is performed ideally at a distance of 135mm (5.31in), measured from the centre of the print head to the centre of the camera lens.

"Our technical team switches the system on in the morning and switches it off in the evening. The printer functions practically without intervention. We are thrilled with the reliability of the code-M camera combination."

Sebastian Fehsenfeld, technical operations manager

code-M software

The code-M software and its add-ons optimise production processes. Integration with code-M camera helps to avoid incorrect user interventions and ensures the highest possible production reliability.

alphaJET – continuous inkjet technology

Contactless printing with CIJ systems is a proven method for the direct use of variable data on the production line. It offers users a high degree of flexibility and delivers accurate print results.

For further information, visit: kba-metronic.com/en/coding-systems/continuous-inkjet-systems

"Our technical team switches the system on in the morning and switches it off in the evening. The printer functions practically without intervention. We are thrilled with the reliability of the code-M camera combination."

Iris Klühspies
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World premiere: Automated blanket change with RBC (Rapid Blanket Change)

It is the aim of every printing company to work as efficiently as possible and to increase the productivity of its printing presses. Downtimes must therefore be reduced as far as possible. The new RBC (Rapid Blanket Change) was developed with this in mind. It reduces blanket change times by more than half. In addition, it also saves operating personnel, since only one operator is needed. The blanket change is performed automatically under program control at the press of a button.

The printing of metal sheets places extremely high demands on the printing press, and especially on those components that are in direct contact with the substrate.

Special requirements to be met by the blanket

The blanket is one of the components exposed to particular stress. With every print job, the sharp edges of the sheet cut into the blanket. The result is surface damage to the blanket in the format of the printed material. If a larger format is set up after a small format, this surface damage results in unwanted non-printing areas on the sheet. To solve this problem, care is taken as early as the job planning stage to ensure that the print formats are progressively reduced. In addition, the blankets are changed very frequently, typically once or even several times a day, depending on the frequency of format changes and the job structure of the customer.

Significant reduction in change times

A manual blanket change takes 6 to 8 minutes per printing unit. If all the blankets of a 6-colour press are changed, this means a production downtime of at least 36 minutes, and two operators are also tied down. With RBC, the change time can be reduced to 2 minutes per unit and changes can easily be performed by one operator. This adds up to a time saving of 65% and allows the second operator to devote himself to other tasks, for example preparing the print job at the ErgoTronic control console. If we take the example of a 6-colour MetalStar 3 on which the blankets are changed on a daily basis, this results in a reduction in downtimes from 180 minutes to 60 minutes per week.

Program- and sensor-controlled process

The blanket change is program-controlled. The old blanket is automatically ejected, and the operator can effortlessly insert the new blanket into the clamping...
bar via the channel of the blanket change unit. As soon as a sensor detects the correct position, all other operations are performed automatically. This high degree of automation increases process reliability significantly.

**Reproducible results**

A new blanket which MetalPrint supplies for UV and conventional inks was developed specially for use with automated blanket changing. During development, particular attention was paid to functional compatibility with the RBC system, and the structure of the blanket was also adapted to the needs of metal decorating. Instead of the fabric carrier layer which is typically found on the market, the MetalPremium RBC blanket uses a thermoplastic synthetic material as the carrier; this rules out the possibility of the blanket stretching, thus rendering regular and annoying retensioning of the blanket superfluous. At the same time, no packing sheets are required. Through sensor-controlled replacement of the blanket, many uncertainties can be avoided, such as uneven tensioning or operating errors, and reproducibility is significantly increased.

**Blankets to match the format**

One special feature of the MetalPremium RBC blanket is that it can be stripped to match the format of the substrate. This prevents unwanted ink transfer from the printing plate to the impression cylinder outside the print format, so-called “picture framing”, and the cleaning intervals for the impression cylinder can be prolonged. Picture framing is an especially frequent problem on UV presses and leads to significantly more cleaning work, particularly if a UV interdeck dryer is used, because the ink then dries on the impression cylinder. This advantage of the blanket is particularly appreciated by MetalPrint customers when printing opaque white. Blankets can be stripped to size and reused for the given substrate formats. The customer gains valuable production time and at the same time avoids costly and time-consuming cleaning work on the printing press.

Damian Pollok
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Metzgerdruck and abcdruk choose MIS Optimus Dash

The kick-off meeting for implementation of an MIS solution from Koenig & Bauer at Metzgerdruck and abcdruk was held in Obrigheim in the so-called Rhine-Neckar metropolitan region of south-western Germany on 22nd February. One interesting detail: Both companies have to date used mainly press equipment from other manufacturers.

The subject of workflow gained particular significance with the merger of the two companies Metzgerdruck in Obrigheim and abcdruk in Heidelberg. Different management information systems were originally in use at each of the two locations, but the plan for the future was to replace both existing solutions. To this end, the implementation of Optimus Dash, including key process automation modules for JDF networking, sheet layout optimisation/gang forme planning, enquiry and quotation management and order processing, as well as the mobile sales solution Cloud Mobile coupled with a CRM system, is to be completed by the end of the year.

High degree of flexibility

Management representatives on both sides recognised that the outstanding flexibility of the MIS solution from Koenig & Bauer would enable clear mapping of all business processes at both locations – for both their digital and commercial print activities and including the interfaces to existing web-to-print applications.

The strength of Optimus Dash lies in its flexible, product-oriented templates. Calculations require only a minimum of inputs and new jobs can be created in next to no time. This supports ultimate streamlining of the administrative processes and fast job turnarounds in the sense of lean management.

Innovation motor in the Rhine-Neckar metropolitan region

As innovation motors in the Rhine-Neckar metropolitan region, Metzgerdruck and abcdruk are softening the divide between online and offline media, and similarly between customer and service provider. From classic print products, via web-to-print applications, through to app and website development, Metzgerdruck covers a broad diversity of processes, and it was above all for this all-embracing media competence that the company was voted among the 100 most innovative companies in Germany.

Art of Packaging 2018: Koenig & Bauer presents Golden Pixel Award

Within the framework of the 12th Art of Packaging awards, Dagmar Ringel, head of corporate communications and marketing at Koenig & Bauer, presented this year’s Golden Pixel Award to Joanna Nowacka from KREA SP. Z.O.O. in Poznan.

The winners of the Art of Packaging and Golden Pixel Awards are automatically entitled to submit an entry to the World Star Awards of the World Packaging Association. As one of the two main sponsors alongside Stora Enso, Koenig & Bauer supports the professional work being done within the industry and honours the achievements of young contributors who are driving creativity in the field of packaging.

Some 500 guests attended the festive award ceremony in the impressive hall of the Poznan exhibition centre. The Art of Packaging Award is organised by the European Media Group and is the most renowned prize for the Polish packaging industry.

Left to right: Dagmar Ringel (Koenig & Bauer), Izabela E. Seidl-Kwiatowska (European Media Group) and Michael Seidl (PACKAGING-ING Magazines) discuss trends in the packaging industry.
Packaging service provider PAWI invests in 12-unit Rapida 106

PAWI Verpackungen AG is a Swiss packaging specialist with headquarters in Winterthur. Innovative packaging designs are developed and realised at two production locations. In addition, the company offers success-enhancing services relating to various aspects of packaging as a complete solution.

PAWI elaborates marketing and packaging concepts, and then produces, stores and supplies the corresponding board and paper packaging. Throughout this process, a focus is placed on everything which contributes to an effective POS impact.

From prototyping for smart design solutions and special forms, via marketing displays and product launch samples to uniquely innovative packaging solutions, PAWI supports its customers along the whole road from the idea to a finished product. The individual packaging solutions are rounded off with high-quality finishing variants such as hot-foil stamping, lamination, relief embossing and matt or gloss coatings.

To better handle current and future customer demands in the offset segment, PAWI decided to implement a one-press strategy based on high-performance Koenig & Bauer technology at the beginning of 2018. The new high-end Rapida 106 is a highly automated and tailor-made means of production with 12 printing and finishing units and uniquely fast makeready processes for the printing, inking and coating units. Standard features include a side-lay-free infeed (SIS), fully automatic plate changers and the automatic disengaging of unused inking units. The latter permits the use of Drive-Tronic SRW – parallel roller washing during on-going production.

The Rapida 106 is configured with the fastest inline measurement and control technology on the market (QualiTronic ColorControl), integrated automatic register control and PrintCheck sheet inspection. The press console, furthermore, implements the cutting-edge Touch-Tronic operating concept, including AutoRun functionality (autonomous printing). The production management system LogoTronic Professional permits optimum integration of the Rapida 106 into the company’s workflows. The press is moreover extremely flexible, handles substrates from lightweight paper to 1.2mm (48pt) board in UV and mixed operation for special applications, and comprises eight printing units, two coaters and two dryer towers. It will also stand on raised foundations and features a new logistics system. PAWI can look forward to optimum support through the comprehensive service and maintenance programme Service Select & More.

Centro Stampa Veneto: All according to plan

The Commander 3/2 purchased by the Italian Caltagirone publishing group has been taken into service punctually and to the fullest satisfaction of the customer at the group’s Mestre plant near Venice.

After almost 35 years, Centro Stampa Veneto decided to replace its old flexo newspaper press with a Commander 3/2. The new press can print up to 80,000 four-colour tabloid newspapers per hour (format: 440 x 300mm/17.3 x 11.8in). The somewhat unusual configuration incorporates the latest software and hardware. Five four-high towers with H-type printing units are engineered for a web width of 1,320mm (52in) and have been set up as a floor-mounted press with the operating side to the right. The webs leaving the towers are turned by 90° to be passed to the folder. The turner-bar decks, the folder superstructure with two balloon formers and the KF 5 folder are all placed centrally behind the printing units. The Caltagirone publishing group owns and distributes a total of six newspapers and describes itself as the market leader in north-eastern Italy. Some 90,000 newspapers are produced every day in seven different editions.
Marking technology in Austria

It was around 18 months ago that the idea of establishing a permanent point of contact for Metronic coding and marking technology in Austria was first floated. Given its long-term internationalisation strategy and the significance of the Austrian economy, this decision was a logical step for Metronic.

A suitable location was soon found, and rooms were rented on the premises of the company’s fellow Koenig & Bauer subsidiary in Mödling. The first contact for all questions relating to coding and marking is now Robert Aurednik, who heads the new organisation and coordinates a team of sales and service staff in Austria.

Festive opening

A showroom for coding and marking systems was ready for business right on schedule by mid-February. The official inauguration was held on 21st February 2018. Numerous customers from industry and the commercial world joined press and local government representatives at the official opening ceremony with guest speakers, live coding demonstrations and a tour of the facility.

After a warm welcome from Oliver Volland and Robert Galik, the managing directors of KBA-Metronic and KBA-Mödling, respectively, the mayor of Maria Enzersdorf Johann Zeiner emphasised the importance of Koenig & Bauer as one of the region’s industrial beacons. Johannes Schedlbauer, director of the industry division at the Lower Austria Economic Chamber, is convinced that product marking will become even more important in the future and that digitisation in conjunction with Industry 4.0 will also create new jobs.

“Together under a strong roof” is more than just a vision

The local presence of the coding and marking subsidiary of Koenig & Bauer in Austria allows the market to make even better use of existing synergies and the comprehensive know-how of a strong company group in the fields of print, packaging and product marking. In this way, we are supporting our Austrian customers to an ever greater extent with mature solutions and outstanding service on their doorstep.

New sales director at Flexotecnica

The Koenig & Bauer subsidiary KBA-Flexotecnica S.p.A. recently expanded its sales capacities to add further momentum to the declared course of sustainable growth on the market for flexible packaging. Stefano Squarcina, who has worked with considerable success in various segments of the packaging market over the past years, was appointed sales director at the beginning of 2018.

“Our presses embody a high technical standard with optimum solutions in respect of energy savings, productivity, occupational safety and environment protection. In the growing packaging market, in particular, we can offer our customers a very modern and comprehensive portfolio,” says Stefano Squarcina. His goal is to position Flexotecnica as one of the leading suppliers to the flexible packaging market.
Fairs & Dates

15th May - 18th May 2018
CANNEX
KBA-MetalPrint,
Pazhou Complex, Guangzhou, China

15th May - 18th May 2018
FESPA GLOBAL PRINT
KBA-Digital & Web Solutions,
Berlin ExpoCenter City, Germany

23rd - 30th May 2018 and
5th - 14th Sept. 2018
Built for your needs. The B2 presses.
KBA-Sheetfed Solutions,
Radebeul, Germany

29th May - 1st June 2018
Print4ALL
KBA-Flexotecnica,
Milan, Italy
At Koenig & Bauer, innovations in printing have a tradition dating back 200 years. From banknotes to high-end packaging. We use digitalisation for new products and customised services. And in doing so make it easier for you to do business, with greater performance and higher quality.

This is our commitment from 200 years of partnerships with the printers of this world.

koenig-bauer.com