

Report

PRODUCTS|PRACTICES|PERSPECTIVES

SEPTEMBER 2014

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Digital Printing
First KBA RotaJET with a web width of over 1.60m
for industrial printing. More in the next edition.



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

KBA figures improved significantly

Things are moving

The crisis in the Ukraine, sanctions against Russia, numerous conflicts in the Middle East and North Africa as well as economic issues in many threshold countries have acted as a brake on the global economy and our export-intensive business for some time. Nevertheless, in the first half-year the KBA Group was able to increase its order intake by 2.6 per cent to €456m and its sales by 3.1 per cent to €517.8m compared to 2013. Our broad product portfolio once again proved to be an advantage. The slight dip in demand for sheetfed offset presses and disappointing web offset press orders were balanced out by more orders from security and special packaging printers.

We have also made strong progress with the realignment of the KBA Group to an overall smaller and structurally changed press market. The cost savings resulting from our *Fit@All* programme will gradually have an effect on earnings in the coming months and years. Nonetheless, Group earnings before taxes (EBT) of -€0.1m were nearly balanced after six months. Previous initiatives have also made a decisive contribution. Both our sheetfed offset division and our web and special press segment posted an operating profit.

The realignment of our capacities and sites to a permanently changed sales structure of the KBA Group has had top priority for many months. Shrinking markets, such as newspaper, commercial and publications printing oppose growth markets, e.g. packaging, digital printing and coding, as well as special markets, such as banknote printing or metal decorating. We aim to secure our current strong position in these fields and expand on it further.

We serve the key market for flexible packaging through our new subsidiary KBA-Flexotecnica which joined the Group in 2013. Many of our big packaging customers, with whom we have had a longstanding partnership thanks to our Rapida presses for folding carton printing, are also active in this sector. We are now able to supply these and the many mid-sized flexo printers with cutting-edge flexo presses "Made by KBA", including on-site support via our sales and service network. Aside from large volume markets, there are also small but promising market niches for print in which money can be made with specific know-how. An example of this is the direct decoration of premium glass containers which our new subsidiary KBA-Kammann successfully addresses with its screen and digital printing systems.

Our traditional sheetfed and web offset press volume markets have shrunk considerably in recent years and we have to adjust our capacities accordingly. Therefore, at the sites affected socially responsible solutions were agreed together with workforce representatives in spring for over 700 of the 1,100 to 1,500 jobs to be reduced by the end of 2015 Group-wide. The planned bundling of similar production activities at the best equipped site as part of *Fit@All* is also making good progress. On 1 May we took the first step with the realignment under corporate law towards defining a new organisational structure within the Parent. We expect more transparency and strategic flexibility from a de-central Group and management structure with clear responsibilities for the individual business fields. The reorganisation will be finalised until the AGM in 2015.

Many things are in motion: in the world, our industry and also at KBA. In a relatively stable economic environment we continue to target Group sales of €1bn to €1.1bn. From today's point of view we also expect the KBA Group to post a balanced pre-tax result (EBT) for 2014.

Yours,

Claus Bolza-Schünemann



Below: Thibaud Carlier's, EMEA purchasing group manager for carton and labels at Procter & Gamble, credo: "Packaging is a medium and it has to be treated like any other media"



Packaging. Competence. Network. 2014

"Packaging is an independent medium"

The extremely popular open house "Packaging. Competence. Network. 2014" has subsequently received a lot of attention from the trade press. 450 users from over 40 countries came to the event mid-May at the KBA plant in Radebeul. Along with expert presentations and press demonstrations on technical and process trends in folding carton printing, the keynote speech by Thibaud Carlier from Procter & Gamble was the subject of great interest. Here is a summary:

"Packaging is a means of communication, an independent medium," according to the fundamental thesis of Thibaud Carlier. "Therefore it should be treated like any other media." Only those who do this produce successful packaging. Packaging is the only medium which is accepted with undivided interest or even pleasure by consumers and interested parties. 100 per cent of those who buy a product look at the packaging. What other medium can claim this? This means that along with well-known functions, such as protection, transport and information, modern packaging has to offer

much more. "You produce a medium, speak the language of your medium," said Carlier to the packaging printers.

According to a study conducted by Pro Carton, point of sale packaging is a top performer. It offers detailed product information, promotes the purchase decision, is environmentally friendly, motivates repeat purchases and exemplifies the high quality of a product. For a whole range of product types, from food, cleaning products to personal care, non-prescription drugs and cosmetics, it is the packaging which determines more

Above left: practical aspects were not overlooked, and high quality inline finishing was a key topic. Packaging samples featuring micro-embossing effects for perfume were virtually snatched from print instructor Marcus Söll's hands

than 50 per cent of purchase decisions. In Great Britain Procter & Gamble sell up to 80 per cent of its products as part of offers and campaigns. Therefore packaging has to be current and relate to campaigns. It is prevalent that companies refer to current events when offering bonus points or discounts. Packaging must and can offer added value. The times during which packaging looked the same for years are long gone.

This has consequences for packaging manufacturers. The lifecycle of a piece of packaging is getting shorter, the number of copies is shrinking and a printing house has to react more flexibly. Finished goods stores are no longer needed as they were in the past. Finishing is also a popular topic. "Offer finishing and the corresponding efficient processes," said Carlier. "If possible offer them at unit costs of four-colour printing and the first production run should be offered at the same price as a run of three million." His words are aimed at provoking and challenging the industry. However, we should all keep them in mind.

More information on the open house packaging can be found on the KBA website at:

<http://www.kba.com/en/news/detail/article/successful-open-house-packaging-competence-network-2014/back/48/>



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High-tech sheetfed offset for pharmaceutical packaging and dosage instructions

Edelmann Group exploits benefits of Rapida 106

The Edelmann Group is one of the packaging manufacturing industry's biggest players with thirteen sites worldwide, 2,200 employees and annual sales of €233m (\$302m). The firm produces 4bn packaging products and patient information leaflets per year. Rapida presses can be found at four of the Group's sites, including two in Germany. These presses in Germany mainly produce pharmaceutical packaging and dosage instructions.



The Edelmann plant in Bitterfeld



Production nearly always runs with special colours and not with Euroscale



QualiTronic PDF compares every sheet and blank electronically with the customer's PDF data. Even the smallest print errors are detected

Around half of the Edelmann Group is active in two core markets: the healthcare sector on the one hand and high-quality luxury packaging for the beauty care industry and consumer brands on the other hand. The focus at its site in Bitterfeld, Germany, is solely on pharmaceutical packaging. Founded in 1992, the plant became a member of the Edelmann Group shortly afterwards, in 1997.

After starting off as a small printshop, the company has become an extremely modern printing firm. Sales at this site total €17.5m (\$22.6m).

Two medium-format Rapida 106s have been in operation in Bitterfeld for approx. six months. Both presses with coater and delivery extension also feature DriveTronic SPC, Plate Ident, CleanTronic Multi and VariDry^{BLUE} IR/TA dryers. They are raised which is unusual in the production of pharmaceutical products and the press lines are integrated into pile logistics. This is due to the long job runs which are produced here for large pharmaceutical enterprises. "Normally we would keep to half format when producing pharma packaging. The tech-

nology has to adapt to each site, its respective job structure and the formats implemented there. Pre-press and the processing steps associated with printing, such as die-cutting, labelling or coding and gluing, have to line up. This is why we bank on medium format," says Oliver Sattel, technical director at Edelmann Bitterfeld.

The decision in favour of the Rapida 106 which is now in operation was based on an extensive series of tests that began in 2012. The firm focused predominantly on the presses' makeready. The benchmarks were not only set by Bitterfeld, but by many other Edelmann sites, too.

Nearly 2,000 special colours

While commercial firms only rarely print with special inks, they are the norm at Edelmann Bitterfeld. Almost 2,000 ink formulas are stored in the company's databank and the printers are used to changing inks after every job. Furthermore, production runs with similar carton formats are pooled in order to minimise makeready efforts. Some 50 different carton types, basic weights and formats are used.

Thanks to the high level of automation when changing jobs the new Rapidas have boosted productivity by 30 per cent after six months. "However, their potential has not yet been fully exploited," says Sattel. The printers first had to get used to the change in press manufacturer and technology. A particular challenge was to integrate the complex, simultaneous processes into the production workflow. The presses' SAP links and the CTP as



Lightweight printing on ten-colour Rapida 106

Production at Edelmann Leaflet Solutions in Leverkusen is done differently. The site specialises in patient information leaflets mainly for the pharmaceutical industry and also in premium products. After these products have been printed they are cut to size on a sheet cutter and are delivered as flat, pre-folded or folded goods. Almost an entire B3 sheet is needed for some patient information leaflets.

well as a further JDF workflow also optimised the makeready times.

Electronic inspection of all information

Inline quality control is a further highlight of the presses in Bitterfeld. Not only are they equipped with QualiTronic ColorControl (inline colour measurement), but they are also the first presses in this format class to feature QualiTronic PDF, an inline PDF scanner. This ensures that the printed pharmaceutical packaging is identical to the PDF ap-

proved by the customer. Comparing the sheet with the customer's PDF guarantees the inspection of all relevant data before and during printing. Based on the internal codes for the print operation and the coding for the packing, today all relevant information on the packaging (incl. braille) are checked electronically and continuously from receiving the data up to the finished product.

Processes, such as die-cutting, labelling or coding and gluing, are attached to the printing process. Normally the end products are glued folding carton which are flat packed and shipped. Three die-cutters and three folding carton gluers as well as a coding and labelling machine process these products.

Left, above left:

Oliver Sattel, technical director, and Heiko Pils (r), plant manager of Edelmann Bitterfeld, have seen a 30 per cent increase in productivity thanks to their new Rapidas

Left, above right:

Heiko Pils and press operator Andreas Götze inspect a sheet at the Rapida 106's console

Above: printer Frank

Lehmann values the high level of automation of his Rapida 106 when carrying out challenging colour and job changes

A 1/1-colour sheetfed offset press is used to print patient information leaflets for prescription medicine, packaging supplements for OTC products or hair dyes are printed more elaborately and using 5/5-colour designs. The ten-colour Rapida 106 in operation at this site offers maximum flexibility. Reasons for investing in the Rapida 106 were the option of ten-colour printing to be able to meet the demands of the market and the reel-to-sheet feeder. This paved the way for optimising the site's material efficiency (lower material output) and logistics (material storage). The Rapida 106 is equipped with a reel-to-sheet feeder which cuts the reel exactly into the format required. Nonstop pile changing at the feeder is not possible when processing lightweight paper, however with a reel-to-sheet feeder the amount of paper of three piles for the pallet change can be handled without any interruptions.

The Rapida 106 in Leverkusen, Germany, is also highly automated and is equipped with many KBA winning features, such as DriveTronic SIS (sidelay-free infeed), DriveTronic SPC (simultaneous plate changing) and CleanTronic washing systems. It is able to print 40g/m² (25lbs) substrates at speeds of up to 15,000sph.

"Rapida presses have clear benefits for our pharmaceutical sites when replacing entire press generations," says Oliver Sattel about the new technology from KBA.

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A semi-automatic pile turner transfers the pile to its exact position on the nonstop pallets

Right: Ralf Sammeck, KBA executive vice-president for the sheetfed product house, welcomed over 250 print pundits from 22 countries to the open house at the training centre in Radebeul

Below: Martin Wenk, executive board member of agency Jung von Matt/Neckar in Stuttgart, showed examples of successful ad campaigns



Open House: Commercial Printing. Competence. Network. 2014

KBA illuminates exciting topics for commercial printers

Under the banner "Commercial Printing. Competence. Network. 2014" over 250 print pundits from 22 countries were updated on the hottest topics regarding commercial printing. The open house which took place in the last week of June combined theory and practice.

The keynote speech was held by Martin Wenk, executive board member of communication agency Jung von Matt/

Neckar in Stuttgart. His credo: "Good advertising works just like the Trojan horse. It comes nicely packed as a gift, but it is

specifically designed for conquering." He offered insights into a consumer society full of emotion and with the aid of specific examples showed just what really counts in advertising.



As flexible as an ant

KBA product manager Anja Hagedorn used the example of ants as versatile insects to address the topic of flexibility in printing. The Rapida sheetfed offset presses can achieve this level of versatility with the raft of various add-ons available. Along with standard materials they can handle thin substrates (from

Head of sheetfed marketing Walter Hartmann directly compared HR-UV and LED-UV on an eight-colour Rapida 105 perfecting press



“Good advertising works just like the Trojan horse. It comes nicely packed as a gift, but it is specifically designed for conquering.”

Martin Wenk,
Jung von Matt/Neckar

Above:
Jens Baumann
presented the
unmatched performance
of a ten-colour Rapida
106 with perfecting
and simultaneous plate
changing

0.04mm) up to heavy board, beer mat board or microflute (1.2 to 1.6mm). The Rapidas can also be equipped for maximum flexibility for inline finishing. RSP solutions from CITO open up numerous possibilities in terms of grooving, die-cutting and perforation. These can be implemented in the printing units and coater. Luxury finished printed matter in particular evokes the consumer reactions desired. One coater or a free-standing printing unit in connection with a coater are all that's needed to create many finishing effects, such as drip-off, haptic qualities or fragrances. KBA often sets new trends in inline finishing.

compared to conventional presses as a coater is not necessary. Printed products can still be sent straight to finishing. LED-UV is a process with a promising future. LED-UV dryers significantly and sustainably reduce energy consumption. In addition, they have a long service life, require little maintenance and offer many other advantages. Every firm should look for the optimum solution for them based on job structure and an accompanying cost calculation. KBA offers support in this respect. Jens Baumann recommends: “Look at the clever and adaptable art fox.”

As clever as an art fox

Jens Baumann focused on the topic of performance in commercial printing. He looked at more than just speed. Perfection when turning the sheet, fast job changes and quick finishing with effective drying all at the lowest possible costs contribute to performance. The Rapida commercial presses are designed specifically for this with features ranging from fast perfecting at speeds of up to 18,000sph, AirTronic delivery, simultaneous plate changing (DriveTronic SPC) and the new curing processes HR-UV and LED-UV.

The latter offers perfecting presses interesting approaches to optimise investment costs with short lead times: HR-UV dryers before perfecting or in the delivery only moderately increase costs

Head of KBA complete services Sascha Fischer spoke about boosting efficiency by networking, production planning/control and process optimisation. The company offers integrated solutions and top-of-the-class automation technologies, all flanked by comprehensive advice and consulting services. When required, KBA works closely with technology partners.

Premiere: LED-UV also in large format

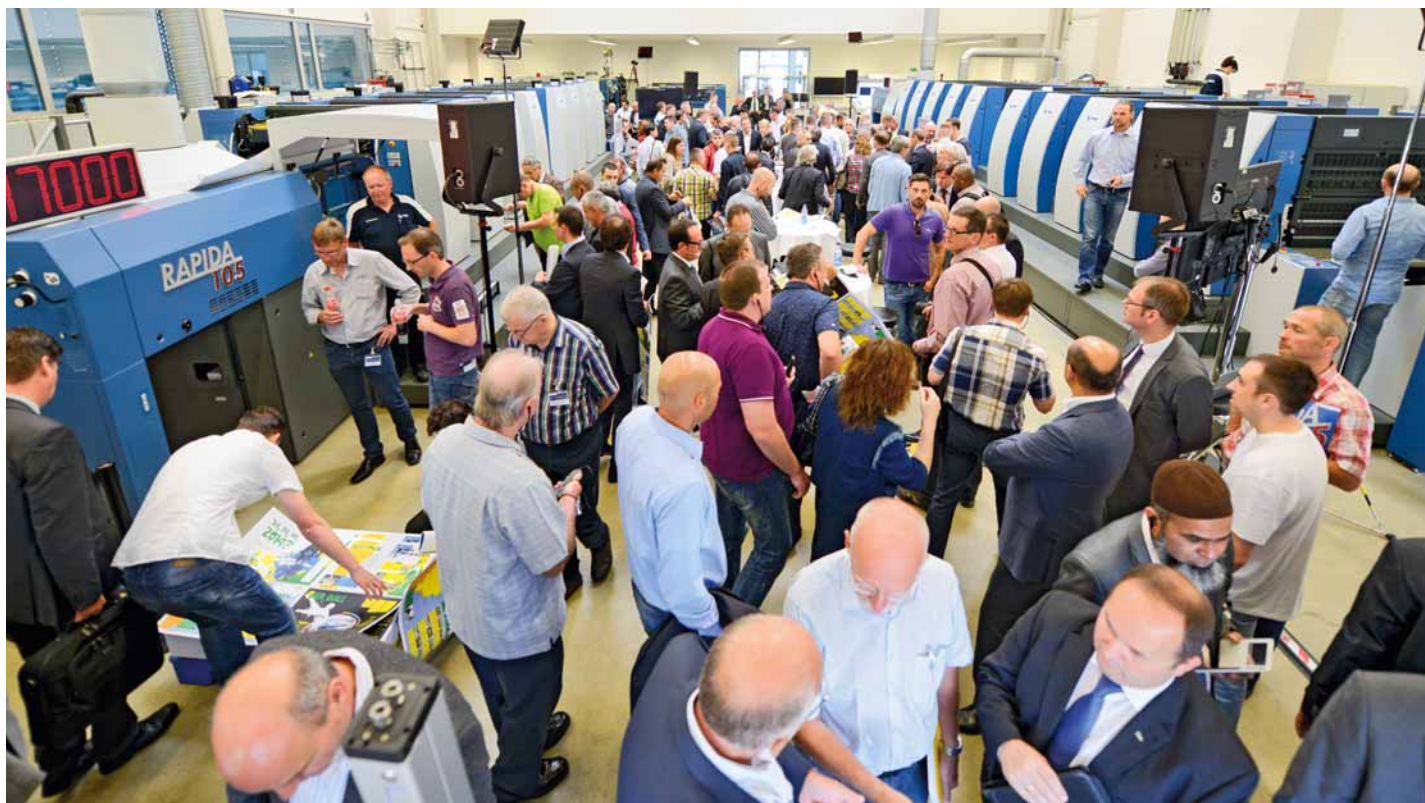
The print demonstrations focused on typical commercial print applications with particular attention paid to economy, efficiency, finishing and innovation. A ten-colour Rapida 106 was shown producing a cookery book signature, followed by a gang forme and four-colour posters were then produced by switching between the first and last four printing units. The units which were not



Dirk Winkler, head of
print technology at KBA,
displayed the world
premiere of LED-UV
curing in large format



Sascha Fischer, head of
KBA Complete Services
& key account manager
Europe, focused on
workflow topics



Anja Hagedorn showed fast work & turn, plus inline perforation on a Rapida 75 featuring LED-UV curing

needed were set up for the subsequent job with Flying JobChange and the next job could begin immediately without any interruptions to production. Innovative UV curing processes were demonstrated on an eight-colour Rapida 105. The visitors directly compared the images produced and cured using HR-UV and LED-UV.

The print demonstrations which took place on large-format presses focused on mass production. Typical book and calendar pages on silk-matt art paper were produced on a six-colour Rapida 145 with coater and delivery extension. The inks were cured by a LED-UV interdeck dryer for the first time ever in large for-

High-quality print samples were the subject of great interest

KBA demonstrated its Flying JobChange capability also on a large-format press which printed brochures in various languages. Wolfgang Ley, head of the KBA customer centre, outlined the process steps on the Rapida 145

mat. The sheets were then finished with a matt aqueous coating, and with glossy UV coating following a coating change. A five-colour Rapida 145 with coater printed a brochure in various languages. With the Flying JobChange capability the plates for black ink were switched between the first and second printing units during production and the language variations were produced without any interruptions to production.

High-quality finishing

LED-UV dryers are also available for the Rapida 75. KBA demonstrated the fast production and finishing of postcards on a five-colour press. Printing on the back of the substrate with LED curing after the fifth printing unit was followed immediately by printing the front. This included inline perforation which meant that the individual post cards could be separated easily. Magazine covers were printed on a six-colour Rapida 106 equipped with a HR-UV dryer and cold-foil kit. They were finished with cold foil and UV high-gloss coating.

Nearly all of the presses used for the print demonstrations are equipped with cutting-edge systems for quality assurance.

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New Rapida 145 at Model Obaly in Opava

Flexibility and productivity for paper and board

Model Holding in Switzerland is one of Europe's largest packaging firms and has banked on half, medium and large-format sheetfed offset presses from KBA in its Czech printshops for 30 years. Model Obaly in Opava recently flipped the switch on a highly automated six-colour Rapida 145 with coater and double delivery extension.

The Rapida 145 equipped with DriveTronic SPC dedicated drive technology at the plate cylinders for simultaneous plate changing and automatic pile logistics at the feeder and delivery replaced an old Rapida 104. The new press significantly expands production capacity at the packaging manufacturer in the Czech Republic.

The press is flexible and can print on paper and heavy board from 0.1 up to 1.2mm (48pt). The DriveTronic SIS no-sidelay feeder which is only available from KBA is a key advantage when handling various substrates. It supports changes of substrate with no manual intervention and ensures precise sheet alignment before the sheets enter the first printing unit.



The new Rapida 145 at Model Obaly in Opava is raised and equipped with automated pile logistics (shown here at the delivery)

Plate changing in 100 seconds

Thanks to DriveTronic SPC all printing plates are changed in just 100 seconds parallel to other makeready processes, such as washing blankets and impression cylinders. This done by the KBA CleanTronic Synchro washing system with two washing bars which can either clean the blanket and impression cylinder simultaneously or just the blanket twice as fast.

The coater for aqueous coating is equipped with a new hi-flow chambered doctor blade for high production speeds as well as with a dedicated coating supply and cleaning system. A KBA VariDry^{BLUE} dryer in the double delivery extension enhances efficiency and saves energy during IR/TA drying. Furthermore, the EES (Emission Extraction System) in the nonstop delivery removes excess powder and extracts emission-laden air.

Cutting-edge measuring and control systems in the press, such as ErgoTronic Lab, QualiTronic ColorControl, QualiTronic LiveView and ErgoTronic ACR (automatic camera register) ensure a constantly high print quality with minimum waste.

The new Rapida 145 has been in operation since the end of March 2014 and prints board for folding carton and paper sheets to laminate corrugated board.

Automated pile logistics at the feeder

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Rattpack Group from Vorarlberg

Austrian power

Based in the city of Dornbirn in the Austrian state of Vorarlberg, the Rattpack Group is one of the showcase companies in the Austrian print and packaging industry. Rattpack recently invested approx. €4m (\$5.4m) in setting up a centre for high-speed packaging production. Part of this new investment is a Rapida 106-6-L, the first Rapida at the Dornbirn site.

“Don’t go where the puck is, go where it is going to be.” This quote by ice hockey legend Wayne Gretzky underscores the Group’s philosophy in place since its founding in 1953 by Hugo Ratt. Today this medium-sized company is managed by brothers Stephan Ratt (CEO) and Matthias Ratt (CFO) who are the third generation of the founding family. After a strong growth curve over the last ten years the Group’s nine sites and 416 employees generate sales of €62.5m (\$85m).

Growth and international orientation

The growth curve began when their father Wolfgang Ratt took over at the helm in 1965, and the investment in high performance presses and in the industrial production of folding carton and blanks took place. Today’s site in Welloch/Dornbirn was bought in 1972. The firm focused on folding carton and package inserts for pharmaceutical products until 2002. The “young generation” then began to strengthen the firm’s international focus. It entered the market for food packaging and acquired Stärkle Moser in Switzerland in 2004. This was followed by the takeover of Eberle, Vienna, in 2006. With this acquisition Rattpack was thus able to operate nationwide.

Flexible Rapida 75E for pharma products

A Rapida 75E has been in operation at Eberle since 2011 handling the firm’s entire range of substrates, from 40gsm (10lb bond) paper for dosage instructions to 600-700gsm (24-27pt) board for packaging. Almost all the colours are spot. The majority of products are two to three-colour packaging for prescription drugs, only the folding carton for generic drugs has a higher colour content. Dosage instructions are printed in anything up to four-backing-four. Folded, they can be as much as 1cm (0.4in) thick, since the instructions are often translated into 25 languages. The packaging, however, is printed in just one language, so up to 20 multiple versions are required for medication that is distributed internationally. Since there are also different product sizes, between 40 and 50 different types of pack must be produced for any one medication.

Rattpack Bulgaria was founded in 2006 in Plovdiv to produce CD inserts and tobacco packaging serving local needs. Nevertheless, this shareholding has been terminated again. The Bulgarian firm is still counted as one of the Group’s production sites.

The Rattpack site in Dornbirn/Vorarlberg, Austria

“

The press nearly always runs at a full speed of 18,000sph from the start”

Stephan Ratt

Specialisation of the plants

“The takeover of Multipack in Bavaria was almost a cloak-and-dagger operation,” says Stephan Ratt. “The company produces packaging for food in large format at its plant in Mindelheim, Bavaria, and was up for sale. Within three days we opted to take it over.” This step also signalled the start of focusing different activities at the individual plants. Vienna became fully responsible for pharmaceutical products, Dornbirn for food and large jobs (pharmaceutical), and Mindelheim for food, dairy products and laminating.

In 2011 Rattpack took over commercial printer Wieder and moved its activities to Dornbirn. Yet, the firm soon discovered that commercial and packaging printing couldn’t be correlated and decided to move its commercial activities to Wenin, a printshop close by.

In the same year Rattpack acquired prepress company DRS (Digital Repro Service) in Lustenau, Austria, which in the meantime has become a base for repro activities for the whole Group. Then DRS also had a PMS (Packaging Management System) which served as a link between brand products, the printshop and advertising agency. This system proved to be of great value to the Rattpack Group and its communication with customers. DRS still generates 50 per cent of its sales with external contracts.

A recent investment is a shareholding in dv-b in Germany, also a family-run business which specialises in laminating (large format). The Group’s existing laminating activities have been moved to this site.

A firm in Apolda, Germany, founded in 2008 produces pizza boxes on-site for a pizza manufacturer to reduce the high freight costs for high-volume packaging. “The concept works well and it paid off from the start,” says Stephan Ratt.

Together with his brother, managing director Stephan Ratt turned the firm into an international vendor





Broad product portfolio

Today 31 per cent of Rattpack's sales are generated with folding carton, 20 per cent with blanks, 19 per cent with laminated corrugated and 18 per cent with package inserts for pharmaceutical products. The rest is split between displays, service prepress, commercial work and labels. Per year this results in 900m folding boxes, 650m dosage instructions and 40,000 tonnes of carton. This done on a three-shift basis, four when necessary, and in compliance with the necessary standards, including ISO 9001, ISO 15378, ISO 22000 and ISO 15593.

Along with the technological spectrum that includes offset, UV offset, flexo, braille/check boxes, hot-foil printing and the high level of automation, customers' value the company's flexibility, lean man-

The Rapida 106 nearly always runs at a full speed of 18,000sph

Below left: the manufacturing of pharmaceutical packaging is one of Rattpack's strengths

Below right: further examples from the company's broad product portfolio

agement and its network and site policies most of all. This shows the advantages of an owner-run, mid-sized company.

High-speed centre features Rapida 106

In 2013 the firm invested approx. €4m (\$5.4m) in a highly automated, high-speed centre with a Rapida 106, a Bobst die-cutter, an Expertfold 110 gluer from Bobst with Cartonpack GT as well as a robotic palletiser. Stephan Ratt: "KBA did very well in the tests we carried out in 2012."

The six-colour Rapida 106 with coater and CX board-handling kit can print without or with little alcohol and is raised given its speed of 18,000sph. The press is equipped with automatic pile logistics, automatic plate changing, QualiTronic Color Control inline colour

measurement, QualiTronic Professional inline sheet inspection, CleanTronic blanket washing systems and an ErgoTronic console with wallscreen. "The press nearly always runs at a top speed of 18,000sph," says Stephan Ratt. "We normally process between 300 and 500m² of board per hour. The press runs stably and I would even go as far as to say that in this respect it beats the competition", he says. Inline colour measurement has considerably increased quality and this can be shown to the customer. Stephan Ratt: "Our ability to compete has improved with this investment in a KBA press and we are able to deliver production stability which is required by the industry's big players."

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20,000sph Rapida 106 in Lahr

Druckhaus Kaufmann banks on high added value with catalogues and magazines

A new, high-performance sheetfed offset press has been in operation at Druckhaus Kaufmann in Lahr, Germany, since the end of January. The Rapida 106 equipped with five inking units, a coater and delivery extension prints predominantly at speeds of up to 20,000sph.



Website:
www.druckhaus-kaufmann.de/en



However, the printing firm which was founded in 1816 does not primarily print in sheetfed offset, but will instead use this new press to supplement its web offset business with a focus on producing catalogues and magazines. Kaufmann believes in creating a high level of added value in the company. Along with high-quality web printing, this also includes postpress with strengths lying in adhesive binding, the production of supplementary products for catalogues and magazines as well as a raft of specialties, such as printing pattern sheets as supplements or stitched inserts in fashion magazines.

Rapida replaces two older presses

Covers make up 80 per cent of the jobs produced on the Rapida 106. The other 20 per cent comprises sheetfed jobs in connection with web printing. As the number of sheetfed copies is linked to the web products, less importance was placed on short makeready when equipping the Rapida 106. Only one to two job changes are necessary per shift with an average print run of 50,000. Instead when deciding to invest the company focused on high production output, a solid coater and a pull lay which does not mark the sheets. The Rapida 106 thus won

Above right: managing partner Markus Kaufmann (l) and authorised officer Karl-Heinz Becker are very pleased with the performance of their new Rapida 106. The firm's two previous presses have already been disassembled

Above left: a Rapida 106 with coater has been in operation at Druckhaus Kaufmann since February

Left: with approx. 1m sheets per week Markus Kaufmann and Karl-Heinz Becker from Druckhaus Kaufmann as well as Andreas Bimmler from KBA-Deutschland (l-r) are happy for a reason

Below left: inline colour control with QualiTronic ColorControl ensures stability when producing covers

points with its unique DriveTronic SIS no-sidelay infeed. This highly automated press features automatic plate changers, CleanTronic washing systems and an ErgoTronic ICR automatic register measuring system. Thanks to its enormous production output of up to 20,000sph the press was able to replace two older sheetfed offset presses. After one single-shift week and seven three-shift weeks it has clocked up an outstanding 7.25m sheets.

Managing partner Markus Kaufmann says: "I was surprised just how smoothly everything went during the press installation and that there was no need for any subsequent work." Karl-Heinz Becker authorised officer and technical director adds, "Delivery, construction and inauguration all happened in just one and a half weeks, and we accepted the press immediately afterwards."

If newspaper circulations hadn't been dwindling in recent years, Markus Kaufmann would have opted for a large-format press. A B3 press is, however, satisfactory and production at his company is fully utilised. Just as circulations are falling, the number and diversity of highly specialised titles is increasing. The flex-

ible Rapida meets these requirements perfectly. KBA made the firm the best offer in terms of quality, value for money and financing. The Rapida also ranked highly with the printers and shift managers who took part in the decision-making process, even though they had previously worked with a different manufacturer.

Finishing is becoming increasingly more important

The necessary visual demands of the individual titles in shops and on the shelves significantly increase with diversification. Every title has to stand out and entice consumers to buy, whether it be fashion, women's and specialist magazines or catalogues for travel agencies and mail order specialists. How the coating is applied is vital for a cover to look good. Glossy, semi-matt and matt water-based coatings applied inline on the Rapida 106 have all been implemented. While the trend towards matt finishing in Germany continues, high-gloss is proving particularly popular in France. Kaufmann exports approx. 20 per cent of its production to the neighbouring countries France and Switzerland.

Sustainability is indispensable when it comes to the production of magazines as many firms use this media to advertise. Climate neutral printing is therefore especially important for travel brochures. With the Climate Partner process printshops can compensate for the amount of



Automation right up to palletising: a high level of capacity and flexibility are essential in postpress at Kaufmann

Top: press operator Christian Tischke prints with the new Rapida 106 at top speed

Above left: as the only sheetfed press in a pressroom set up for web presses, the Rapida 106 holds its own with outstanding performance and reliability

Above right: high-quality magazines and catalogues from the offset reel are the core business of this traditional company

CO₂ produced when printing by supporting well-known climate protection projects. According to Markus Kaufmann, more and more customers are placing importance on FSC/PEFC certification. The company also holds all the relevant certifications, such as ISO 9001 (quality management), ISO 14001 (environmental management) and ISO 12647 (PSO). An energy management system is currently being implemented in accordance with ISO 50001.

Oldest industrial firm in Lahr

The printing firm employs the same number of staff, 220, as it did in 1957 when it changed from lithography to offset printing. Today Druckhaus Kaufmann is the oldest industrial firm in Lahr and the only industrial printshop. In the past up to 15 printing houses were based

there. The town was a hub for folding carton and box production. The printing companies used to deliver products to tobacco firm Roth-Händle and large enterprises, such as Grohe, INA Schaeffler and Schneider Electric Motion. Ludwig Sütterlin, inventor and designer of the old German blackletter handwriting Sütterlinschrift or simply Sütterlin, was born in 1865 in Lahr.

Following the recent investment in sheetfed offset and the further modernisation of its finishing equipment, an additional web press is now on the firm's wish list. This will secure and strengthen the company's field of quality, where Kaufmann is at home.

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Patient information leaflets on lightweight stock

Chesapeake/MPS Greenford: Rapida 106 replaces two presses

Chesapeake/MPS Greenford in Great Britain has chosen the latest feature-rich four-colour Rapida 106 B1 press with an added perforating unit as part of a £3m (€3.8m) investment programme designed to offer its customers the very best production options.



Mark Wilson, general manager of Chesapeake/MPS's Leaflets UK & Ireland business, explains: "The Rapida 106 will future-proof our print capability for the next phase of our development. This investment will help us remain at the forefront of the industry."

In addition to the production of specialist patient information leaflets, the Greenford site is considered an innovation centre for leaflet development, serving niche markets and trialling new

The Rapida 106 equipped with four inking units, perfecting for 2/2 colour printing and a perforating unit is specifically designed for the production of patient information leaflets

offerings. "There is a lot of development at this site that then cascades to other locations. KBA presses are technically advanced and that is something our customers' can benefit from."

More automation and larger format

Thanks to its ultra short makeready times, the four-colour perfecter for 2-over-2 printing replaces two presses. Mark Wilson: "With the flexibility and capacity the new Rapida provides we are much better placed to meet the produc-

tion needs of the market as it is evolving. Much of our work is on 40gsm (25lbs) and we wanted to work with a specialist in lightweight papers."

One key element in this performance superiority is KBA's patented Drive-



Website:
www.chesapeakecorp.com



Mark Wilson (I) and Andrew Pang, managing director of KBA (UK) in front of the new Rapida 106



The firm's existing six-colour Rapida 106 installed in 2010 was retrofitted with roll-to-sheet kit

Chesapeake/MPS

Chesapeake/Multi Packaging Solutions merged in February 2014 to form one of the world's leading specialist packaging companies. The combined business supplies folding cartons, leaflets and labels as well as rigid boxes and tubes to the healthcare, consumer and multi-media markets. Chesapeake/MPS has over 50 locations in Asia, Europe and the United States and employs approximately 7,200 people worldwide.



"With the flexibility and capacity the new Rapida provides we are much better placed to meet the production needs of the market as it is evolving. Much of our work is on 40gsm (25lbs) and we wanted to work with a specialist in lightweight papers."

Mark Wilson

Tronic SIS sidelay-free in-feed system which allows the sheet more time to arrive at the front lays and brings more stability to the sheet travel without operator intervention. "We have a similar system in operation on the Rapida 106 at our Tewkesbury plant so we know just how effective it can be in aiding speed and productivity," states Mark Wilson.

The investment was also prompted by other changes: "We are seeing market demand move towards larger leaflet sizes to meet EU regulations for the inclusion of more information. That means an increase in the amount of work we are producing. The new B1 Rapida will help us efficiently meet that market shift."

Enhanced efficiency

Mark Wilson continues: "I first started at Chesapeake Greenford 13 years ago. Then we had eight presses – now we have two; the number of leaflet styles we produce has reduced but the overall volume of work remains broadly similar."

Chesapeake Greenford's 18,000sph Rapida 106 also features DriveTronic Simultaneous Plate Change, DriveTronic Plate Ident, CleanTronic Synchro multi-purpose washing system, ErgoTronic ColorDrive ink density measurement, LogoTronic CIPLinkX to transfer pre-setting data, high efficiency antistatic equipment, and extended video system for sheet travel monitoring.

Along with the new press, the £3m (€3.8m) spend includes the retrofitting of a roll-to-sheet system for the printing of reels on the operation's existing six-colour Rapida 106 as well as new investment in the pre- and post-press departments. "The benefits of the roll-to-sheet solution include increased productivity and smoother delivery to the pallet," adds Mr Wilson.

As for the relationship with KBA, he concludes: "We have always found that KBA are very supportive and work with us to find solutions to any issues that we might face. This results in improvements that help our production."

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G. Braun Pharmadruck in Bitterfeld, a member of the Edelmann Group, uses QualiTronic PDF inline on a Rapida 106 for its pharmaceutical packaging which demands a perfect quality. Plant manager Heiko Pils (shown here) points to an error shown on the screen. The error occurred as the number of individual blanks was inserted on the sheet at a later time and was not included in the original PDF



Save time, costs and waste

Modern measurement and control technology makes it possible

Rapida users have a broad spectrum of options in terms of comprehensive measurement technology components at their disposal for high-quality production. Depending on the demands for print production and technical requirements individual packages for print quality control can be created. Online or inline, the components have got this in common: they save waste, time and costs.

As shown in the [table](#) below, the press operator can measure and control register and colour inline or online with various measuring technology systems. He then has the opportunity to check print quality and create detailed reports which verify that the print quality lies within the set tolerances. Depending on preference, printing takes place in accordance with various norms, such as *PSO* or *G7* (ErgoTronic and QualiTronic PSO-Match, grey-balance control accord-

ing to Brunner Instrument Flight). The technical measuring components in the press make regulated recommendations and thus automate the task of printing continually in line with tolerances of the norm chosen. KBA offers a raft of control strips which contain full tone, dot gain, grey-balance, doubling fields as well as register marks. KBA can also create tailor-made, specific control strips for customers.

KBA advantage: particularly small control strips

Today every millimetre counts in the packaging industry. KBA has taken this into account with the option 'low control strip height'. The smallest control strips in medium format are only 3mm (0.11in) high or just 4mm (0.15in) in large format. The printed image can be connected directly to it. It is not necessary to leave space between the control strip and the printed image. With a gripper edge of 10mm (0.39in) and a control strip height of 3 or 4mm (0.11 or 0.15in) the possible distance between the sheet edge and image ranges from 13mm (0.51in) in medium format and 14mm (0.55in) in large format. Usually the die-cutting begins at 17mm (0.66in) in large format. This means that 3mm (0.11in) still remains for the spread exposure, which is more than sufficient. In packaging production one piece of packaging has to look like the others. However, today none can afford to replace all of their cutting dies simply because the control strip is too high. KBA thus offers the lowest control strip heights on the

Measurement and control technology from KBA		
	Online: ErgoTronic	Inline: QualiTronic
Register Control	ErgoTronic ACR ErgoTronic ICR	QualiTronic ICR
Color Control	ErgoTronic ColorDrive ErgoTronic ColorControl	QualiTronic ColorControl
Inspection	DensiTronic PDF	QualiTronic Professional QualiTronic PDF

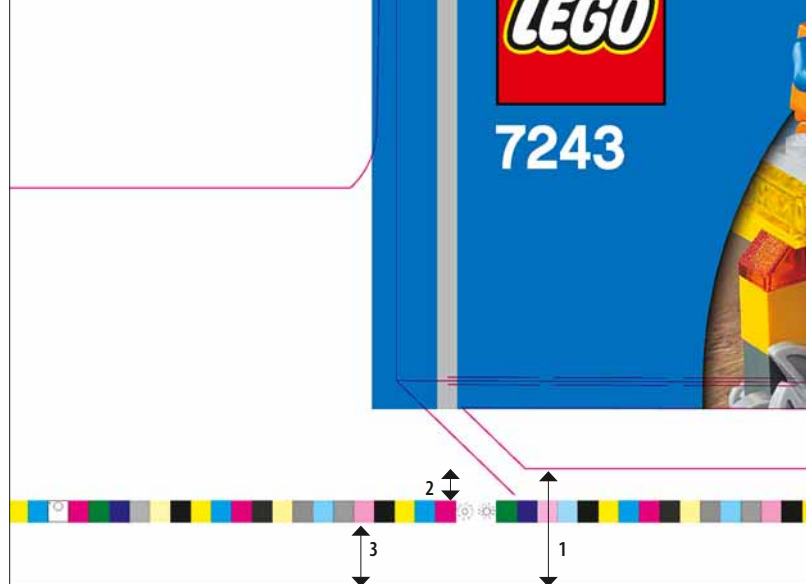


Image 2: space-saving control strips

- 1 – Punching knife usually at 17mm
- 2 – Distance between control strip and image (possibly spread): 1-3mm
- 3 – Start of control strip: 10mm (height 6mm; optional 4mm)

market to make sure this will not occur (see image 2).

QualiTronic ColorControl: the fastest inline colour measurement system

QualiTronic ColorControl measures every sheet, compares the results with the target values and corrects the deviations after every ten sheets. The measuring system has a completely new control algorithm which is extremely dynamic. Together with the fast-reacting Rapida inking units it paves the way to cut waste by up to a half compared to online measuring systems (see images 3 and 4). It is

important that the measuring system is installed after coating on presses with coaters as the coating can have an impact on the final product's colours.

An example: up to 350 pages of waste per print run can be saved with QualiTronic ColorControl. This is based on a large-format press printing GC1 board which costs €175 (\$226) per 100kg in Germany. This equates to over €0.90 (\$1.20) per sheet. A saving of 350 sheets of waste per job would result in a reduction of approx. €330 (\$415) in material costs. An annual production of 6,200

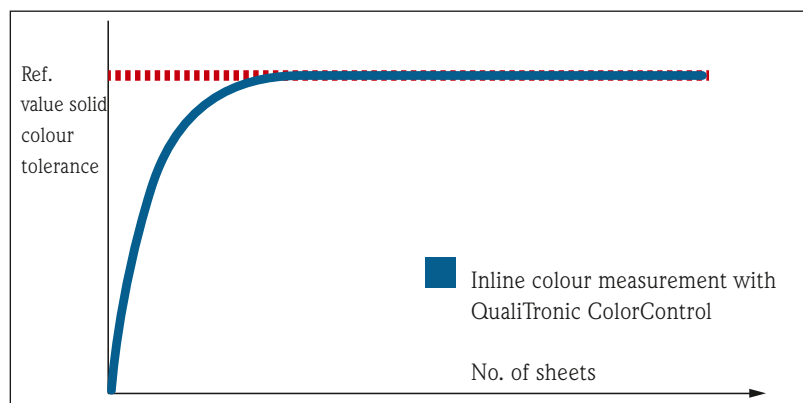


Image 3:
start-up waste is cut by up to 50 per cent with QualiTronic ColorControl's extremely dynamic control algorithm

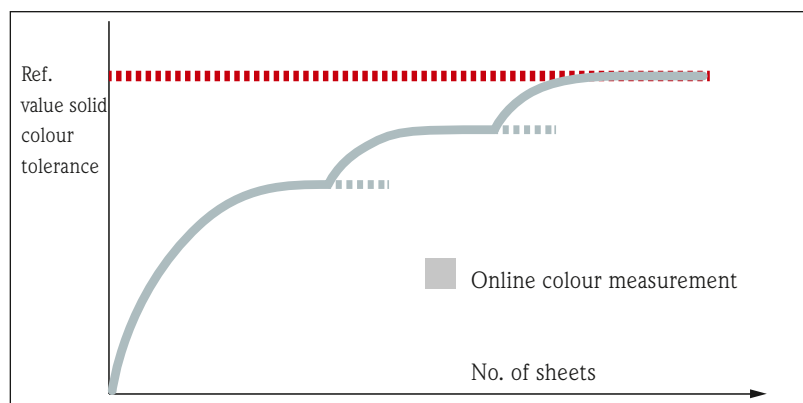


Image 4:
a sheet has to be put onto the measuring desk when using an online control system. It is, therefore, not as fast and dynamic as an inline system

jobs would save over €2m (\$2.5m), an important point to consider when making an investment.

QualiTronic PDF: high-end quality control

As shown in the table, KBA offers a host of systems for quality control and documentation. The online DensiTronic PDF system and the inline QualiTronic Professional and QualiTronic PDF systems serve to verify the accuracy of a job and to log the results. Today these systems are essential especially for pharmaceutical packaging and dosage instructions (see article on pages 4 and 5). It is vital that every sheet is checked in order to filter out faulty blanks in post-press. QualiTronic PDF performs an inline comparison of the freshly printed sheet with data from pre-press. Comparisons are made using a PDF file for either a whole sheet or individual blanks. The user can determine a good sheet which will be automatically compared with the PDF. The press operator has to acknowledge possible errors separately. After this the user has a so-called blank template and every sheet is compared to it during printing. QualiTronic PDF does all of this at speeds of up to 20,000sph with a resolution of 280dpi. This allows for an error accuracy of 85µm.

Of course such a high level of accuracy is often not necessary. Therefore parameter settings are set which are tailored to the customers' requirements and thus enables the optimum identification of errors. If an error appears in the same place on several sheets it is recognised as an inherent error and is logged accordingly. All suspected errors are displayed for the printer to see. He is constantly updated during the printing process on the progress of his job. The possible errors can be viewed in a "gallery" while printing.

QualiTronic PDF features a "traffic light" display system. Green stands for good sheets without any errors, yellow is for sheets with one or several error queries and red indicates a definite error. All of this information is displayed in a report once printing has finished.

QualiTronic PDF is thus the ideal tool for all jobs which must be error-free. The inline PDF scanner helps to prevent unnecessary costs from customer complaints, contact breaches, free copies, etc.

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New high-speed Rapida 106 at Imprimerie Normalisée

FEELING GOOD WITH KBA thanks to cutting-edge technology and outstanding service

Imprimerie Normalisée located in Varennes-Vauzelles, central France, opted for a highly automated, four-colour Rapida 106 to replace its Heidelberg XL75 and to join its existing Rapida 105 from 2003. The press sets the pulses of the Hospital family racing with its AniloxLoader, high-speed package and QualiTronic ColorControl. It prints various commercial printwork at speeds of up to 20,000sph.

Printing – a family tradition

The firm was founded as a commercial printshop by the Hospital family in 1961. As Jean-Paul Hospital took over the running of the company from his dad in 1993, he modernised it from the ground up. The firm invested in its first half-format presses and in 1988 a five-colour press was delivered and the first CtP press was fired up in 2000. The company expanded and needed more space, which is why it moved to Varennes-Vauzelles and into a 1,000m²-large hall near to the A97 motorway in 2003. Jean-Paul Hospital appointed

his daughter, Catherine, as his deputy in that same year. They have managed the mid-sized firm together ever since. Catherine's mother, Bernadette, and her younger brother, Jean-Marie, also work in the company. Imprimerie Normalisée has been a member of Imprimi-club, one of the most influential associations of French commercial printers, since 2012.

As fast as lightning and diversified

As fast as lightning and diversified are words that describe the 28-strong company whose broad portfolio is offered to

Above left: Imprimerie Normalisée, a family firm with tradition (l-r): proprietor and managing director Jean-Paul Hospital, deputy managing director Catherine Hospital, Bernadette Hospital (controlling) and offset printer Jean-Marie Hospital

Above right: the modern plant in Varennes-Vauzelles, Bourgogne

customers from various sectors. Imprimerie Normalisée's commercial product offerings range from simple envelopes to complex high-end books. Brochures, which are predominantly processed by the company, generate approx. 60 per cent of sales. The majority of its customers based in and around Paris are active in the tourist and education sectors. They all value the diverse product spectrum and the ultra-short lead times which are only possible thanks to quick links to the motorway, highly automated machines and a customer-orientated, experienced sales team.



“After we had conducted tests on presses from all the prominent manufacturers, the Rapida 106 really stood out from the crowd with its high printing speed and fast job changing.”

Jean-Paul Hospital

“Good service, innovative technology and a press which breaks all the records in terms of productivity are the reasons why we feel so comfortable with KBA,” says deputy managing director Catherine Hospital

offset machine. “In order to survive in today’s heavily competitive commercial market, productivity must be permanently maximised. When we decided to invest in a new press, it was clear to us that we had to invest in the fastest press currently on the market with the highest output. After we had conducted tests on presses from all the prominent manufacturers, the Rapida 106 really stood out from the crowd with its high printing speed and fast job changing. Unlike any other presses, it prints 70g (45lbs) as well as 400g (257lbs) paper at an amazing speed of 20,000sph. We were bowled over.”

Today, one year after the press was inaugurated, Jean-Paul and Catherine Hospital are more than satisfied. “Assembly and commissioning went smoothly. The service technicians from KBA-France are highly qualified and reliable. We also haven’t been disappointed in terms of performance. Our sales team and customers are impressed whenever they see the press printing at speeds of 20,000sph. This high output and the QualiTronic ColorControl inline colour density control system which guaran-

tees colour consistency throughout the entire print run and thus meets our PSO requirements have made it possible for us to win larger orders and increase our profitability.”

Environmentally friendly printing

Along with an impressive level of productivity, the Rapida 106’s green credentials also won over Jean-Paul Hospital and his team. The Hospital family have long placed importance on eco-friendly printing. Ecological aspects were even taken into account when building their current headquarters in 2003. The company has obtained the environmental certifications Imprim’Vert and PEFC, has banished chemicals to a great extent from its production activities and largely replaced ink and coating cans with an automatic ink and coating feed. Nothing is carelessly just thrown away. Thanks to its drive motor with energy recovery features and its cutting-edge, energy-saving KBA VariDry^{BLUE} dryer the Rapida 106 excels at fulfilling environmental demands.

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A new KBA Rapida to boost productivity

Last year when the commercial market was effected strongly by the economic crisis and electronic means of communication became increasingly more important, Jean-Paul Hospital decided to update his press fleet and invest in a new

K-1 Packaging Group in California chooses KBA again

Eight-colour Rapida 105 supports growth curve

K-1 Packaging Group located in City of Industry in California needed more print capacity. The firm received a new eight-colour Rapida 105 41in press with coater and UV capabilities this spring, which joined two existing presses from this series.

“To keep up with our dramatic sales growth we made the decision to purchase an additional Rapida 105 press,” says president Mike Tsai. “While there are many new features that come with the press, the technology that we are pleased with the most is the QualiTronic ColorControl system. We direct the most colour critical jobs to the new press where the system really helps us to monitor and maintain colour consistency.”

K-1 specifically configured its new KBA press based entirely on the type of work it encounters on a regular basis and its

customers’ needs. UV capabilities were added to offer K-1 the most flexibility in terms of the wide range substrates which it can print on. “Most customers do not know what UV printing is, however, the kind of results they seek frequently require UV printing,” says Tsai. The new press will certainly facilitate the firm’s efforts to increase its market share. “We plan to aggressively target the kind of work that the press is most capable of producing — high-end carton work.”

The installation of its new KBA press represents only a portion of a larger investment plan for K-1. To accommodate the new press the company had to reposition many pieces of existing equipment and adapt its pressroom. The addition of this third press has increased the output of

Website:
www.k1packaging.com



Mike Tsai, K-1 Packaging Group president and CEO, and KBA sales manager Marcus Schoen (r) worked closely together on the installation of K-1's new Rapida 105



“We plan to aggressively target the kind of work that the press is most capable of producing – high-end carton work.”

President Mike Tsai

the pressroom meaning that processes upstream and downstream also needed to increase their respective output.

When considering a new press for its facility, the management of K-1 did not look any further than KBA for new equipment. Tsai explains that his firm is pleased with the reliability and performance of its two existing KBA presses. “We have been working with KBA for over ten years now. Our experience with our KBA presses as well as with KBA’s technical support has been positive. In our overall consideration of technology and reliability, we feel that KBA makes the best sheetfed presses,” he adds.

K-1 Packaging Group is a provider of comprehensive packaging solutions. The company designs and manufactures folding cartons, rigid boxes, pressure sensitive labels, and flexible packaging. It serves industries ranging from food and beverage, beauty and cosmetic supply, media software and hardware, nutri- and pharmaceutical, to various other consumer products. It differentiates itself from its competitors with its contract packaging division that packs different forms of dietary supplements.

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“The Rapida 106’s ability to run a wide spectrum of substrates is critical for us. On a typical day at Allied, we can be printing financial work on lightweight offset and then need to quickly changeover to point-of-sale and packaging work on thick board.”

John Sommers,
president and CEO of Allied Printing Services



Follow-up order after positive experience with the makeready champion

Two Rapida 106 presses for Allied Printing Services

Allied Printing Services, a full service commercial/financial printing firm located in Manchester, CT, USA, is expanding its capacity with the addition of two new Rapida 106 41in, six-colour, high-speed presses equipped with UV and conventional coating to its already extensive array of print capabilities. The decision to invest once again in the high-tech Rapida 106 press series was based on the commercial print firm’s positive experience with an eight-colour version of the “makeready champion” medium-format press installed in 2012.

“We believe strongly in consistently re-investing in our company and maintaining the most up-to-date equipment in all departments,” says John Sommers, president and CEO of Allied Printing Services. “After installing a new eight-colour Rapida 106 41in press in late 2012 and experiencing the success we’ve had with that press, we decided to add two new high-tech Rapida 106 presses. These capital expenditures will increase our capacity and make Allied more efficient and productive for our customers. Our relationship with KBA has grown in these past two years and we believe that these presses will boost automation and productivity. They allow us to continue to grow healthily and further enhance our product offerings and capabilities.”

Flexibility and productivity count

The two six-colour presses with automatic plate changing and automatic washing systems are engineered for a maximum

output of 20,000sph. One of the new machines features a coater for aqueous coatings, and the other is a hybrid UV press with the ability to handle UV inks and UV coating. Both presses have inline colour management and register control. The presses at Allied Printing Services can handle a wide range of printing substrates from lightweight plastics to heavy board with extremely short job changeover times, which along with enhanced productivity was an important investment criterion.

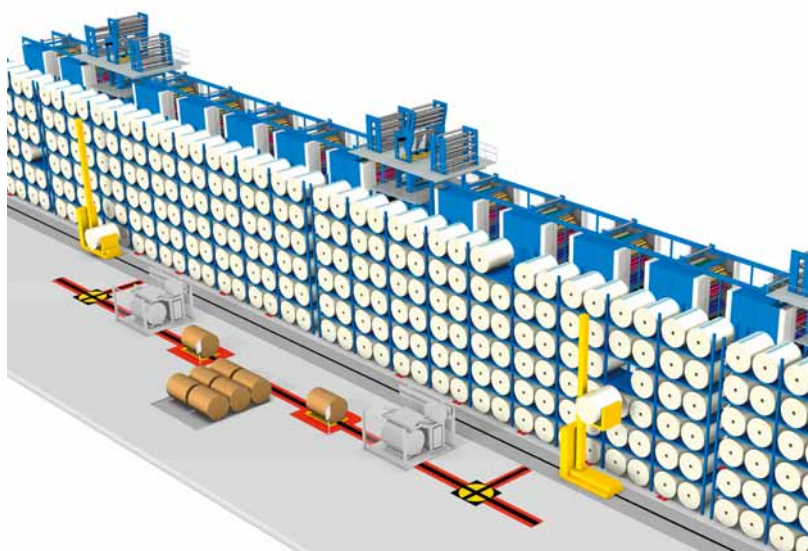
John Sommers: “The Rapida 106’s ability to run a wide spectrum of substrates is critical for us. On a typical day at Allied, we can be printing financial work on lightweight offset and then need to quickly changeover to point-of-sale and packaging work on thick board. Our Rapida 106 allows us to do so with ease. It also provides us with the ability to deliver fast turnarounds, something which our customers value.”

Above: in front of the eight-colour Rapida 106 delivered in 2012: (l-r) John Sommers, president and CEO of Allied Printing Services; sales manager at KBA North America; Jon Kaufman, vice-president for technical development at Allied and production manager Chris Gouveia from Allied

Large, family-owned commercial printing firm

Established in 1949, Allied Printing Services, Inc. is the largest a third-generation family-owned commercial/financial printing business located in New England. Its sales growth places Allied among the top printers in the USA. Allied offers a turnkey solution to its customers and serves a national customer base of pharmaceutical, educational, financial, retail, point-of-sale, manufacturing, agency, and direct mailers. The firm has robust sheetfed, web, and digital press capabilities and its bindery/finishing area is the largest in all of New England. Allied’s mailing, fulfilment, kitting, Print-On-Demand, and variable data capabilities give it a unique value-proposition.

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KBA automates paper logistics in industrial printing firms

What works with web, also works in sheetfed offset

For more than 20 years KBA has planned, produced and installed systems for paper logistics on commercial and newspaper web presses together with partner firms. At the beginning the focus was on manual paper reel supply, however in recent years semi-automatic or complete computer-controlled solutions from the delivery of the reels up to waste removal have become increasingly more important. What works with web presses, also works with pile and pallet logistics in sheetfed offset. KBA offers its know-how and sees substantial potential to increase productivity and reduce costs with logistic systems at industrial sheetfed print firms in particular which have a high material throughput.

The technology to automate processes at the reelstands, such as the loading and unloading of paper reels up to the disposal of residual reels and cores (= white waste), has long been a feature of cutting-edge printing plants. Unmanned, fully automatic reel loading (intralogistics) was the next step. If it makes sense for a specific plant, manual working processes, such as the splice preparation

of reels, are decoupled from the actual production process either automatically or carried out by far fewer staff before production starts. The remaining personnel take over monitoring tasks or are implemented in other areas.

Automation from the truck ramp to the waste container

At the highest level of automation the

Above left: high-rack storage with integrated splice preparation stations at the New York Daily News

Above right: automatic reel loading and disposal of the empty cores with KBA Patras



Automatic pallet logistics at the delivery: the pallets for the next pile are transported directly underneath the press' platform from feeder to delivery

handling process begins even at the delivery of the paper reels with automatic truck unloading. It continues with storage and retrieval within the main warehouse, supplying the daily store, automatic splice preparation, transport to and from the presses up to final waste disposal. However, selected storage technologies, transport and handling components may vary due to set structural conditions and priorities. For example, AGVs and underground conveyor systems could be implemented to enable automated transport. A continuous workflow and the control of the entire process via an intelligent warehouse management system are crucial. A connection to the enterprise resource planning system is also possible.

KBA offers custom-made automation solutions for integrated paper logistics under the name Patras A (= automatic Paper reel Transport System). The connected logistic solutions from KBA are tailored to meet specific requirements and do not distinguish between a paper reel and a pile of paper.

From the reel to the pile

On the back of a host of successfully implemented logistic projects in web printing firms KBA also offers its know-how to large packaging and commercial printshops which have a high material throughput in sheetfed offset. The background is the goal of reducing personnel, lead times and costs in many areas. Many sheetfed offset users use subsystems for automated pile logistics. The economic potential technically possible is, however, not exploited in sheetfed offset.



KBA as a general contractor for logistic solutions

The planning of individual automation solutions always starts with the fundamental analysis of the respective production processes. On the basis of this an optimised production process is developed with the customer depending on the set conditions. In line with the motto "One face to the customer" KBA as a general contractor is able to offer everything from the engineering of single process steps up to complete logistic solutions with the automated connection of individual processing stations. Thus assembly sections, such as storage and rack technology, transport systems, pile turners and conveyor systems can be brought together in a customised complete package. Larger and complex projects are therefore more transparent in terms of costs and are faster to implement.

Above left: AGV at the retrieval of paper reels from the daily store

Above right: already implemented in many plants: automated pile logistics at the feeder of a Rapida 162

Centre left: know-how transfer from the reel to sheets: automatic pile and pallet logistics for an industrial sheetfed printer

Centre right: automated paper logistics in a large newspaper printing firm from the delivery by truck to the removal of waste

KBA Rapidas predestined for automated logistics

Medium and large format KBA Rapidas with their automated pile logistics at the feeder and delivery (see article on Model Obaly on page 9) in place at many firms and the automatic supply of sheet delivery with empty pallets also possible are predestined for the integration in an automated, entire logistic process. Today KBA Radebeul delivers flexible solutions for automated pile logistics (incl. pallet-free systems for substrates from 220 g/m²) under the name PileTronic. The automated supply of the delivery with empty pallets has also often been implemented in a raft of packaging printing firms. The press-control station is connected to the nonstop systems and the pallet feed in line with the goal of industrial production.

Advanced solutions from pile delivery, storage, pile turner, the press and post-press up to the dispatch ramp are available in various levels of automation with different storage solutions and transport methods. The implementation of a continuous workflow with interfaces to order management, enterprise resource planning and MIS systems is also possible. Such projects are already being discussed with large packaging printing firms. And it is only a question of time before AGVs, rollways and computer-controlled storage will replace pallet trucks and fork-lift trucks which are common in many sheetfed offset printshops.

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Allied Publicity Services (APS Group) in Manchester

Makeready world champion shows its strengths

Up until last year average makeready times of 25-30mins on an older medium-format press from another German manufacturer were normal at the APS Group in Manchester, UK. Production director Stephen Goodall and his team calculated from this that 27 per cent of shift time or 13 weeks a year was spent on makereadies. They therefore began looking for more powerful technology to strengthen the Group's competitiveness. The firm opted for two Rapida 106 makeready world champions and hasn't looked back since.

The first Rapida 106, a highly automated, ten-colour perfecter for 5/5 printing arrived in September 2013 and replaced three Roland 700s, a five and a six-colour press and a ten-colour perfecter. Originally the company wanted to wait and see how the first Rapida performed before ordering a further Rapida 106 twelve months later. But the firm just couldn't wait. Stephen Goodall: "The results from our first Rapida have been everything we could have hoped for. We are regularly making ready within three minutes for four-colour one side and eight minutes for four-back-four. Our print capacity has been boosted by 45-50 per cent. After just three months we were ready to replace our remaining Roland 700 with a second Rapida 106."

Enhanced productivity creates space

Although APS is active in digital printing, thanks to fast job changes the litho side of the business can now process shorter run lengths right down to 500 sheets

economically as long as there's added value in the finishing of the job. A further benefit is that along with less personnel the two new presses need far less space than the four older presses. The team at APS was also able to bring the digital printing kit into the main press hall and the processing of orders in both printing methods is structured far more efficiently benefitting lead times. APS invested in dehumidification kit, new MIS software as well as high-performance folders and stitching lines in order to make the most of the presses' high level of productivity.

Automation pays off

The two long KBA Rapidas run in straight and perfecting at speeds of up to 18,000sph and leave nothing to be desired in terms of automation. Simultaneous plate changing with DriveTronic SPC dedicated drive technology, CleanTronic Synchro for simultaneous washing of ink rollers, blankets and impression cylinders, ErgoTronic ICR (video registering)

Stephen Goodall is proud of his Rapidas and his team



Stephen Goodall: "We are regularly making ready within eight minutes."

Company profile APS

Ever since its inception as Allied Publicity Services Manchester in 1961, APS has offered its customers media solutions beyond the boundaries of print. Today the APS Group generates £65m (€82m) in sales of which offset and digital are still an important element, but not the only contributors. The product mix has been expanded to comprise marketing communications, creative services, digital publishing, data management, cross-media campaigns, logistics and other customer services up to project management. Print items range from security transactional print to point-of-sale and packaging, commercial and publications (catalogues, brochures, company reports, etc.).

and inline sheet inspection with various QualiTronic modules for automatic colour control in accordance with PSO standards all make the press operation easier for the printers and slash waste levels. Stephen Goodall: "The machines have proved a dream to work with for our operators." The production director is also very impressed with the feeder, the SIS no-sidelay infeed and sheet travel of his Rapidas. The travel of the paper through the perfecting unit takes place without any scratching or marking at high speeds. Furthermore, he also refers to the environmentally friendly aspects of the new technology compared to his previous presses as blanket, air pressure, energy and powder consumption have all been reduced. He concludes: "KBA (UK) have done exactly what they said they would. The Rapidas have performed beyond our dreams."

Klaus Schmidt

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Holzer Druck und Medien has been using Rapida sheetfed offset presses since 1990. A six-colour Rapida 106 with LED drying will be joining the line-up in November.

First medium-format press with LED drying in Bavaria

New Rapida 106 for Holzer Druck und Medien

Holzer Druck und Medien in Weiler/Allgäu is a longstanding KBA user and invests regularly in the latest sheetfed offset technologies. Leaving aside a single small-format press and the digital machines, this is an exclusive domain of medium-format KBA presses. The current line-up unites a five-colour Rapida 105 coater press, a Rapida 105 with six printing units and inline coating, and an eight-colour Rapida 106 for 4/4 perfecting.

In November, the company will be expanding its capacities further with a Rapida 106 of the latest generation – this time a six-colour model with coating and triple-length extended delivery. As a high-speed press with additional accessories for the handling of both board and plastic substrates, it is engineered

for production at speeds up to 20,000 sheets/hour. The press has also been configured for the alternating use of conventional and UV inks and coatings, and thus promises enormous production flexibility. The sidelay-free infeed (DriveTronic SIS), simultaneous plate changing (DriveTronic SPC), washing systems

designed to permit parallel washing processes (CleanTronic Synchro) and many other configuration details are geared to ultimate automation and fast job changeovers.

One feature which is still far from commonplace in this format class is the energy-saving LED-UV drying, which Holzer chose not least due to the possibilities for fast further processing of the printed products. Depending on the job in hand, the LED dryer can be positioned after the sixth printing unit or in the extended delivery. Interdeck drying after the first unit is similarly possible, e.g. for jobs requiring opaque white. Quality and colour control to PSO specifications is handled by the inline control system QualiTronic ColorControl.

With the new Rapida 106, Holzer Druck und Medien has once again confirmed its reputation as a technology pioneer – and that with impact well beyond the local region. Where, in the past, it was frequently sophisticated and high-quality facsimile products which attracted the attention of a wider clientele, Holzer today offers its customers a comprehensive portfolio of services which go far beyond the bounds of classic offset print, for example three-dimensional products, translation management, web-to-print and content management.

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Harald Wolfbauer, managing director of Holzer Druck und Medien, and sales manager Jochen Hole (left) present a calendar sheet printed on silver mirrorboard with opaque white and 4-colour LED-UV at KBA in Radebeul. With the new press, Holzer will soon possess its own facility to handle such production.

KBA Rapida 75

Argraf expands press fleet with Rapida 75-5+L CX ALV2

Argraf in Warsaw is one of many Polish printing firms which have operated half-format presses from KBA for many years. Argraf's third KBA press, a Rapida 75 with five printing units, coater, double delivery extension, board-handling kit and a raft of practical automation modules, was fired up a few months ago.



Andrzej Malejko: "I have been a satisfied KBA user for many years."

Proprietor Andrzej Malejko: "I have been a satisfied KBA user for many years. Our existing four-colour presses and the new five-colour Rapida 75 from KBA with coater have all lived up to my expectations. We looked at other manufacturers, but KBA made us the best offer." The new Rapida 75-5+L is raised by 225mm (8.85in) and can process various grades of board up to 0.8mm (0.03in) at speeds of up to 15,000sph with its CX board package. The firm predominantly prints books, magazines, albums, catalogues and various commercial print-work. "Thanks to the press' extensive automation and high level of productivity we are able to process orders faster and

we hope to expand our customer base with this new investment," explains Andrzej Malejko.

The Rapida 75-5+L is equipped with CleanTronic roller and blanket washing systems, ErgoTronic ColorDrive automatic online colour density measuring device (with ErgoTronic Lab colour control according to Lab values) and ErgoTronic ACR register-measuring system via video camera. Andrzej Malejko stated that increasing customer demands was the reason behind his decision in favour of systems for quality control. Argraf's customers mainly come from central Poland, however some are based abroad.

Andrzej Malejko, proprietor of Argraf (left), is looking forward the reduction in lead times and new customers that the new Rapida 75 will bring. Also shown: sales manager Adam Ślaziński from KBA CEE in Poland

Argraf was founded in 1990. The printing house works with offset and digital printing systems and has a well-equipped graphics studio with a CtP platesetting service. Books and other products are glued, stitched and given hard covers on production lines in the bindery. Argraf proudly offers the entire processing chain under one roof. A publishing house also belongs to the firm and has won many awards for the book "Zagadka śmierci Mariana Grzybowski" (The mysterious death of Marian Grzybowski).

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The Rapida 145 - a similar press shown - at Cartografica Veneta features nearly all of the automation modules available for the makeready champion in large format

Opting for the makeready champion in large format

Rapida 145 enhances productivity at Cartografica Veneta

A highly automated large-format Rapida 145 with seven printing units, coater and triple extended delivery was recently installed at Cartografica Veneta in Lonigo (Vicenza), Italy. The new press equipped with a high-speed package is raised by 630mm (24.8in). With the new investment this longstanding KBA user has strengthened its competitiveness in the packaging market.

Cartografica Veneta was founded as a small printshop by Bruno Tassoni in 1949. The firm has since grown into an impressive packaging business with three production plants covering an area measuring 100,000m². In 1969 Cartografica Veneta installed large-format presses for packaging printing. Today the firm has three presses, including a Rapida 162 with six inking units and two coaters from 2003.

Extensive automation

The Rapida 145 which prints at speeds of up to 17,000sph boosts productivity at the firm significantly due to its extremely short makeready times. This is ensured by extensive automation with a host of winning features in large format, such as sidelay-free infeed (DriveTronic SIS), simultaneous plate changing for all printing units thanks to dedicated drive technology (DriveTronic SPC), parallel washing processes during plate changing with CleanTronic Synchro (simultaneous washing of blanket and impression cylinder), changing coating formes in

Over the last 65 years Cartografica Veneta in Lonigo, Italy, has grown from a small printshop into a large packaging printing enterprise with three production sites

Sascha Fischer (l), from KBA, and Joachim Nitschke (r), managing director of KBA Italia, with Giuseppe Tassoni, president of Cartografica Veneta, as well as managing director Dario Lovato (2nd left) and Carlo Baraldo (2nd right) after signing the contact

parallel to plate changing with DriveTronic SFC and anilox roller sleeves that can be changed within minutes by only one operator.

The press is also equipped with typical packaging printing components, such as automatic nonstop facilities and pile logistics, EES (Emission Extraction System) in the delivery and energy-saving VariDry^{BLUE} drying systems which recirculate heat thus improving efficiency, operation and the energy balance further. In addition the Rapida 145 features KBA DensiTronic Professional (densitometric and spectral colour measurement, also in the printed image) and ErgoTronic ACR (register measurement system) for quality control and management.

The company is successfully pursuing a sustainable course of growth with continual investments. Nevertheless, it predominantly focuses on packaging made out of high-quality paper and board. Along with the production of packaging for food and beverages, Cartografica



Website:
www.carven.it

Veneta is also active in the general packaging sector. Challenging, specialised packaging round off the firm's broad product portfolio.

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DC-R 105/106 rotary sheet die-cutter from montex-print ost

Useful addition or alternative to classic flatbed die-cutter

There are many printing firms who seek to generate additional revenue with flexible processing and finishing of the most varied materials, formats and run lengths. When it comes to die-cutting the DC-R 105 rotary sheet die-cutter developed by KBA and montex-print ost is an interesting option and in many cases a useful addition or even an alternative to the classic flatbed die-cutter. It scores points with its easy handling, short makeready times and attractive price-performance ratio.

The DC-R 105 was presented live in operation at the "Commercial Printing. Competence. Network. 2014" open house at KBA in Radebeul. Interest in the die-cutter was great as makeready times when die-cutting are becoming increasingly more important given the trend towards smaller batch sizes and shorter lead times.

Rotary die cutting is a well-known and sophisticated process in web presses.

However, when it came to sheetfed presses this technology was implemented rather half-heartedly with a "it's possible, but..." and until now was only properly used in a few application fields. "It's not about replacing a die-cutter, but making a useful supplement to the classic flatbed die-cutter with flexible and fast processes. The right machine in the right place," says Eberhard Fuchs from montex-print ost.

Eberhard Fuchs (3rd left) from montex-print ost explained more about the new sheet die-cutter at the "Commercial Printing. Competence. Network. 2014" open house

The single-unit die-cutter shown in Radebeul is specially designed for work with entire sheets and does not require finished blanks, such as kiss die-cutting, from self-adhesive materials like labels, stamps, stickers, adhesive labels etc., surface finishing with embossing, blind blocking, braille etc.

Fast makeready

Die-cutting can be done almost without die makeready thanks to the highly accurate cylinder with a runout tolerance of max. $\pm 5\mu$. Small corrections to IML materials might be necessary depending on tolerance in the film thickness. Even in this case makeready does not take longer than 10 to 15 minutes.

Just-in-time production which is becoming increasingly more popular demands fast and cost-effective processing. DC-R 105 is ideally suited to these requirements as it is easy to handle. Die-cutters usually require large production runs as their makeready normally takes over an hour. However, changing jobs is done in just a fraction of this time with the DC-R 105.

The precise setting of the cutting-die is facilitated by the unique distance between the magnet and back-pressure cylinder in single steps by 1μ as well as

Right page below: ergonomic and fast handling via touchscreen at the delivery

simultaneously and individually on side one and two. A laser sensor scans the cutting die height for automatic pre-adjustment of die thickness and prevents incorrect machine settings. It also protects not only the cutting dies, but also the die-cutting plates.

Extension in the pipeline

An expansion of the DC-R 105/106 by a second die-cutting unit with a vacuum

Closely surrounded: the DC-R 105 rotary sheet die-cutter – view from the feeder side

magnet cylinder for window cuts is in the pipeline. Therefore in connection with so-called folding carton equipment in one pass even packaging can be creased in the first unit and die-cut in the second. This separate process has the advantage that there are no spaces between the crease and the die-cutting blade. There are no makeready times which are necessary for conventional die-cutting machines.



“It’s not about replacing a die-cutter, but making a useful supplement to the classic flatbed die-cutter with flexible and fast processes. The right machine in the right place.”

Eberhard Fuchs, montex-print

When required, additional units can be added for blind blocking or other applications and processing components. From summer 2015 the DC-R 105/106 will be available featuring a waste stripper and a separator, thus ensuring that small and larger batch sizes are processed fast and efficiently. All of the components on the market can be applied and integrated if necessary for automatic post-press of separated blanks.

The die-cutting unit can also be implemented in a Rapida press as an inline die-cutting module. Even though many classic die-cutting jobs can be done inline in the press today, the DC-R die-cutting unit is far superior than die-cutting at the blanket cylinder or in the coater.

High savings potential

Depending on application the stand-alone DC-R 105 or 106 can be a better solution for professional users compared to classic die-cutters. It also scores points with regard to sustainability. A die-cutter, which has the same sheet format and double the weight, consumes significantly more energy than the DC-R 105. It is possible to reduce energy consumption by up to 50 per cent. High costs for separate and costly foundations can also be saved. Highly qualified and expensive packaging mechanics can be implemented elsewhere.

The benefits mentioned could sooner or later lead to the DC-R 105/106 rotary sheet die-cutter being implemented in a raft of printshops.

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14 years of success with KBA

Third Rapida 105 for Emibra in Suzano

KBA has enjoyed a close business relationship with Brazilian packaging printer Emibra in Suzano, near São Paulo, for the last 14 years. The firm recently received its third Rapida 105, a six-colour press with coater.

In 2014 Emibra looks back at a 40-year long history, a fitting milestone for the latest investment. The folding carton printer's customer base comprises prominent Brazilian and international companies, such as Aché, Cifarma, Johnson & Johnson, Ajinomoto Laboratories, NGK and many others. Emibra not only aims to keep its press fleet up to date, but also wishes to remain a pioneer in the Brazilian graphic arts industry as a management model for corporate governance.

Emibra was founded in 1974 by the Braghiroli family. However, in 2009 it underwent a profound administrative

restructuring. The brothers Wanderley, Wagner and Waldir Braghiroli directors of the company left their operational activities and became part of the supervisory board which is also composed of external shareholders. Three new managing directors took over at the helm. Director of operations Danilo Braghiroli: "We are growing in a strong and sustainable manner." He refers to a programme to coach the management and develop the firm's processes started in 2011.

Investments have to pay off

Danilo Braghiroli places great importance on regular investments in new technology. "We have to present our investment plans to the supervisory board and give reasons why the proposed new investment will boost the firm's growth and earnings. I think that's fair," he says.

Emibra opted for its first Rapida 105 in 2002 after researching the market for high-performance sheetfed offset technology. Back then KBA had a different agency in Brazil. The relationship to Emibra flourished when Deltagraf took over the KBA agency in 2009. Danilo Braghiroli: "At the time I told Luiz Cesar Dutra that I would only buy a new press if I could speak to the boss of KBA. And soon enough Ralf Sammeck came to Brazil and we signed the contract for a six-

colour Rapida 105 with coater which was installed in 2010." The delivery of this press represented an important reference for Deltagraf. Luiz Cesar Dutra has held a share in the newly founded sales agency Koenig & Bauer do Brasil since 2013 and manages it successfully.

More automation = more productivity

Danilo is very pleased with his Rapida 105 from 2010. "The press has many standard features which would have cost extra or were not even offered by other manufacturers." It is therefore not surprising that another cutting-edge Rapida 105 with the same configuration as the existing press from 2010 was recently delivered to Emibra. Danilo: "Demand is currently large for this format class and the newest Rapida has developed technologically. It brings with it a higher level of automation which enhances our productivity."

Among the highlights mentioned by Danilo is automatic plate changing, uncoupling of inking units which are currently not in use and lower maintenance. Sales manager Lincoln Lopes from Koenig & Bauer do Brasil expects the firm to see a 15 to 20 per cent increase in productivity thanks to the new press.

Lincoln Lopes: "During investment talks with customers we carefully analyse the client's production requirements and look at what kit they possess. We then tailor the configuration recommended exactly to this information. Our goal is to offer our customers an individual and affordable solution."

Above left: Danilo Braghiroli from Emibra places pronounced importance on solid corporate management based on current corporate governance standards

Above right: Danilo Braghiroli next to his six-colour Rapida 105 with coater installed in 2010. Recently a new cutting-edge Rapida 105 with the same configuration as the other press was assembled at Emibra

Left: a subsidiary of packaging printer Emibra on the doorstep of economic hub São Paulo in Brazil

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Signal for growth against the branch trend

Vogel Druck invests in KBA C48 commercial web press

German print enterprise Vogel Druck und Medienservice GmbH (VDM) in Höchberg near Würzburg has set the ball rolling on a project to replace an existing production line with an ultramodern KBA C48 commercial press. This step will serve not only to expand production capacity, but also to broaden the diversity of available formats for magazines and catalogues.

With its decision to invest in a KBA C48, Vogel Druck has yet again confirmed its reputation as an innovation-oriented print centre. Managing director Rolf Lenertz: "This investment enables us to satisfy current market demands in optimum fashion. As an economically strong member of the Bertelsmann group, we are also setting a clear signal for growth – against the branch trend and despite the generally challenging competitive environment. When the new press comes on stream in August 2014, it will lend a further boost to our production reliability, and we will be able to offer customers an ever wider choice of formats for their print products."

The four-unit press has been configured for a maximum web width of 1,460mm (57.48in) and a cylinder circumference of 1,156mm (45.51in). In combination with a variable superstructure, integrated gluing device and a P5G folder with two deliveries, this caters for a wide range of products with up to 64 pages in reduced format. Standing alongside three further press lines and recent investments for the associated bindery, the new KBA C48 will become part of one of the most modern commercial web production centres in the branch.

Extensive automation

The new 48pp press features a high level of automation. This includes, for example, automated KBA RollerTronic roller locks for reduced maintenance and high energy efficiency, and an ErgoTronic control console with LogoTronic press presetting system, which is likewise geared to fast makeready and minimum waste. The KBA C48 is to be integrated into the LogoTronic professional production and management system of an existing 32pp KBA Compacta 217 with eight printing units. With its maximum production speed of 50,000iph, fully automatic plate changing and an operator-friendly drive concept with two motors for each printing unit, it promises ultimate productivity. The KBA EasyTronic module for optimised press start-up and run-down underlines the economic strengths of the engineering concept.

All-round service provider

With its 380 staff, Vogel Druck und Medienservice is one of the leading web offset print enterprises in Germany, and a specialist for perfect-bound and wire-stitched magazines, catalogues and brochures in the medium-volume segment. Beyond its web and sheetfed offset printing activities, the company

Above: The 48pp KBA C48 for Vogel Druck und Medienservice. Alongside automated plate changing, the integration of fully automatic KBA Patras A paper logistics permits automatic switching between wider and narrower webs in a matter of minutes

Right: After signing the contract at the KBA headquarters in Würzburg: Rolf Lenertz (managing director of Vogel Druck und Medienservice) with KBA executive vice-president Christoph Müller



sees itself as an all-round media service provider. The services offered include advertising specials, print and online media design, database publishing, address management and individually tailored mailroom and logistics services. Vogel Druck places the needs of its customers at the focus of all decisions, and accompanies them through the whole media process as a reliable professional partner and advisor.

Schaffrath optimises magazine printing with KBA C48

Quickly armed for a fragmented market

The diversity of colourful magazines is thriving and flourishing. There are more and more magazines on kiosk shelves. The impression that there are increasingly more titles in Germany is not an illusion. Nevertheless, circulations and page counts are decreasing. This has an effect on magazine print specialists in particular, such as L.N. Schaffrath DruckMedien in Geldern, Germany. Reason enough for the firm to adapt with cutting-edge web offset technology from KBA.



Schaffrath has invested in two web offset and one sheetfed offset press from KBA since Dirk Devers (shown here) has run the business together with his colleague Dirk Alten



Optimising production processes is an ongoing task for technical director Martin Sellmann



Some 200 periodicals belong to the growing product portfolio which Schaffrath prints in web and sheetfed offset

“German magazine publishing houses serve the interests of a fragmented society,” said managing director of the VDZ (Organisation of German Magazine Publishers), Stephan Scherzer, at the annual press conference in April 2014. According to the VDZ the number of consumer magazines has risen by 47 per cent since 1997 to around 1,600 titles. Furthermore, printed magazines reliably cover every niche, every target group, from “AAA” a German journal on English and American studies, to “ZZI” a magazine for dental implantology. Statistics by Deutsche Fachpresse (German Association of Business Media) show an impressive 3,800 titles in 2013, 177 more than two years earlier.

Whoever wishes to track the trend of the many organisation, trade and special interest titles has to look no further than Geldern for answers. The 280-odd staff at Schaffrath DruckMedien situated near the German border to the Netherlands produce some 200 periodicals with an average run of 30,000 to 40,000 copies. The firm specialises in short and medium-run magazines which make up 80 per cent of sales.

“We will have to adapt”

Dirk Devers, who manages the group with his colleague Dirk Alten, says yes he can confirm what the associations have announced. The number of titles is growing. Today Schaffrath also prints approx. ten per cent more magazine jobs than three years ago. However, their page counts, circulations or editions published yearly are nearly all sinking. When a new title is launched it is produced on a smaller scale than the one that was withdrawn from the market.

“Complaining won’t bring us further, we have to adjust,” says Devers. “As the

magazine remains our primary business model”. The media service provider no longer simply offers prepress, print and binding capacities. Schaffrath Concept and Schaffrath Medien are two of the firm’s subsidiaries which are involved already with the planning of corporate publishing media. And of course customers receive a completely integrated production of media, print plus online, if desired.

Optimisation is an ongoing task

More jobs with increasingly smaller circulations mean a rise in makeready and less production times for the printing plant. The technology thus has to fit perfectly. Schaffrath therefore ordered its first web offset press from Koenig & Bauer in 2010, a highly automated 16pp press from the then freshly launched C16 series. Its short makeready times were the main focus of an open house in Geldern in 2011. In the meantime makeready now stands at around three minutes – three minutes to slow the 16pp press down from its top speed (60,000rph), change the four-colour plate sets, clean the blankets and run the press up to full speed again. Separate drives for recto and verso printing ensure that automatic plate change can take place in parallel.

Optimisation is an ongoing task, says technical director Martin Sellmann, and the times achieved are the result of a long process. An average of 25 job changeovers take place on the C16 in 24 hours at Schaffrath. If the production planning team does their job well there are less format changes. However, every minute that shortens the makeready process amounts quickly to half an hour a day or 150 working hours a year.



Above left: the KBA C48's ErgoTronic console with LogoTronic presetting system is set up to reduce makeready times and waste

Above right: with a five-colour Rapida 106 the first press with coater was fired up in Geldern in 2011

Left centre: an own industrial bindery with two gang-stitchers and two glue-binders guarantee short production times

It is therefore not surprising that a further KBA web offset press followed in 2013: a C48 with the same high level of automation. Job changes on this press also take only approx. seven minutes thanks to its high level of automation and the ErgoTronic console including LogoTronic pre-setting system which is engineered to minimise makeready times and waste. The short job change times have constantly lowered the threshold from sheetfed to web printing in Geldern. "We also print 10,000 magazine copies from the reel on our C16," says Martin Sellmann. In some individual cases we have even gone down to 8,000.

The higher speed, the improved utilisation ratio and the greater possibilities connected to the new presses have even paved the way for Schaffrath to reduce its web offset line from three to two presses in the future. This is despite the same volume produced and a rise in complexity. Thus in 2015 a 16-year old Rotoman N will be decommissioned without a replacement.

"Each of the investments which we have made in the past is also a rationalisation step," Dirk Devers admits. The firm's payroll will fall by a further 20 per cent in the coming years. Even the new jobs for non-print business activities or individual targeted staff recruitment in the printing plant will only slightly alter this general trend.

All eventualities were considered

As comfortable as it is to fill 80 per cent of the press capacity with periodicals, the more challenging it is to keep to deadlines. Especially with a two-press fleet.



However, before Schaffrath made the final decision to change, all production scenarios were tested. What happens when a press breaks down? How can the two presses support each other? These topics were of course taken into account when determining the press' equipment and even the postpress lines are configured in such a way that allows the compensating stacker and bundle stacker or palletizing robot to be controlled from both presses. Accordingly Schaffrath will place even greater importance on inspection and maintenance in the future.

Yes to the future

Particularly in view of the strong pressure to optimise Dirk Devers is extremely satisfied with his change to KBA presses. When asked about the viability for the future, if a mid-sized web printer can exist on the basis of a clear niche concept, Dirk Devers didn't have to think long before answering: "We can answer that with a definite yes".

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Right: happy faces at the inauguration of the new Cortina (front-back): technical director Kurt Schergen, director of press technology Rudolf Werner, TV editor-in-chief Isabell Funk, authorised officer Wolfgang Sturges and Volksfreund managing director Thomas Marx. Photo: Friedemann Vetter

Below: Trier is Germany's oldest city with impressive Roman monuments. Porta Nigra, shown here, is one of the town's most well-known landmarks



20th Cortina at Trierischer Volksfreund

Printing without water, but finishing with coating

On 20 February 2014 the first printing unit was delivered to Trier, Germany's oldest town with over 2,000 years of history and Roman monuments. Since 12 May a Cortina with two coaters has produced the daily newspaper *Trierischer Volksfreund*, supplements, magazines and many other print products in a high quality.

The Volksfreund-Druckerei Nikolaus Koch printing house in Trier, Germany, belongs to the Saarbrücker Zeitung media group

The 20th Cortina is in operation in Trier. Germany's oldest town now prints without water, but finishes with coating

The possibility of inline finishing with water-based coating with the waterless coldset Cortina paves the way for the production of print products which are especially challenging in terms of quality as well as environmentally friendly, something not every newspaper house has. Volksfreund-Druckerei Nikolaus Koch aims to use this potential to creatively expand its product portfolio and reach new reader groups and ad clients. Along with the printing house's daily newspaper, which even without coating is produced in an excellent quality, special publications with coating have already been produced to Volksfreund's complete satisfaction.

More possibilities for print

Thomas Marx, managing director of Trierischer Volksfreund media house:

"Besides the high-quality printing of our daily newspaper, the Cortina offers us the possibility to produce additional own products, as well as external orders, in various formats (e.g. A4) and substrates. The two integrated coaters, a feature which so far has only been implemented by some of the few KBA Cortina users, will be used specifically to expand our service range."

Coating is primarily suitable for high-quality brochures, special products and supplements in full colour and high ink coverage, or centre spread ads which run over the fold. A layer of coating effectively prevents ink smearing or set-off which is often unavoidable when printing such images in conventional newspaper production. Our first coated print runs have proven this. In addition, the Cortina's



format flexibility is advantageous for special publications as well as its extremely low start-up waste, even with unusual print jobs in the waterless offset printing process.

New print era

Named after its founder Nikolas Koch the company, which has existed for over 135 years, today belongs to the Saarbrücker Zeitung media group. The parent supported the medium of print with considerable investments at its site in Trier from the beginning. When placing the order in June 2013 Saarbrücker Zeitungsgruppe CEO Dr Joachim Meinhold said: "The decision in favour of the KBA Cortina puts *Trierischer Volksfreund* technologically and economically in pole position".

The *Trierischer Volksfreund* has a daily circulation of about 100,000 copies with twelve regional editions. Along with the town of Trier, it is distributed in Eifel, Mosel and the Hunsrück region. The regional business journal *MACH-ER*, *Menschen + Märkte*, the lifestyle magazine *glanzvoll*, the entertainment magazine for patients *Pieks*, the *Familienmagazin* for families, the children's magazine *Lucky* and the football magazine *Anstoß* all add to the company's media offerings. The publishing house

also publishes the cross-border newspaper supplement *DeLux* together with Luxemburger Tageblatt. The *Trierischer Volksfreund* is available as a printed edition, an e-paper and an app for mobile devices. The media house is the region's internet market leader with its website volksfreund.de.

Technology for the 21st century

The double-width Cortina is engineered for the Rhine format with an output of 85,000 copies per hour and has the ability to print and coat up to 32 broadsheet or 64 tabloid pages in full colour. Its two Pastomat reelstands are fed automatically with paper reels. Since it is configured as a floor-mounted press this extremely compact and extensively automated Cortina is low in height which makes it user friendly and minimises the number of operators needed. Automatic web width adjustment and automatic plate changing ensure fast job changes.

Both coaters, which simply need an IR/TA drying aid and not a high-energy heatset dryer, are integrated above both printing towers saving space. Water-based coating can be printed on both sides of the web in varying widths. Furthermore, the possible combination of a coated and non-coated web and the use of various paper grades enhance product flexibility. The

Above left: ergonomic handling via lift: equipping one of the two compact four-high towers with waterless printing plates

Above right: the two coaters in the superstructure with the compact IR/TA dryers (blue boxes) in between

The good mood at the press' inauguration could also be seen in postpress
Photo: Friedemann Vetter



superstructure has two double turner bars, three conical formers and a skip splitter. Additional features allow printed products to be glued, stitched or perforated. Other capabilities support the production of ad specials, such as four-page centre spreads or half covers.

The Cortina is controlled from a cutting-edge ErgoTronic console incorporating KBA PressNet, a production scheduling and press presetting system. Automatic colour and cut-off register controls, cylinder washing systems and further features support a high printing and folding quality with minimal waste.

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“Along with the high level of performance, the press will enable us to improve print quality.”

Proprietor Klaus Nussbaum



Opting for enhanced productivity, flexibility and quality

Nussbaum Medien St. Leon-Rot chooses Commander CT 6/2

With a triple-width Commander CT Nussbaum Medien St. Leon-Rot is fundamentally upgrading its own printing house and thus strengthening its various print products in the competitive media arena. At the beginning of 2015 the compact press with one tower and a folder is scheduled to take over the print jobs currently produced on two Albert 101s and a Clauberg web press as well as the majority of those given to third parties.

Proprietor Klaus Nussbaum: “The highly automated Commander CT lays solid foundations for printing our plethora of gazettes and bulletins with very small circulations efficiently, flexibly and economically. Along with the high level of performance, the press will enable us to improve print quality, cut waste, and enhance ease of operation and reduce maintenance tasks for our press opera-

Above: the Commander CT 6/2 for Nussbaum Medien St. Leon-Rot

tors. We have worked with KBA in St. Leon-Rot for approx. 30 years and wish to continue our close partnership with this new investment.”

Local information via many media channels

Nussbaum Medien St. Leon-Rot publishes gazettes and private bulletins in the Rhine-Neckar region, around north Karlsruhe and the municipality Altrip near Ludwigshafen. The firm focuses on serving local communities with up to 20,000 inhabitants, who are often the editors of the gazettes. In the Rhine-Neckar region Nussbaum Medien St. Leon-Rot reaches approx. 60 per cent of all households. In addition, Nussbaum Medien also has facilities in Bad Friedrichshall and owns Druckerei Stein in Bad Rappenau in the north-eastern part of Baden-Württemberg.

Under the management of owner Klaus Nussbaum the three media houses publish local newspapers in over 100 cities and communities, informing several hundred thousand readers about local news week after week. Usually all of the printing plates have to be changed for nearly 100 different weekly titles as the news differs significantly depending on region. The editions vary between 700

and 23,500 copies, with anything from eight to 48 tabloid pages apiece.

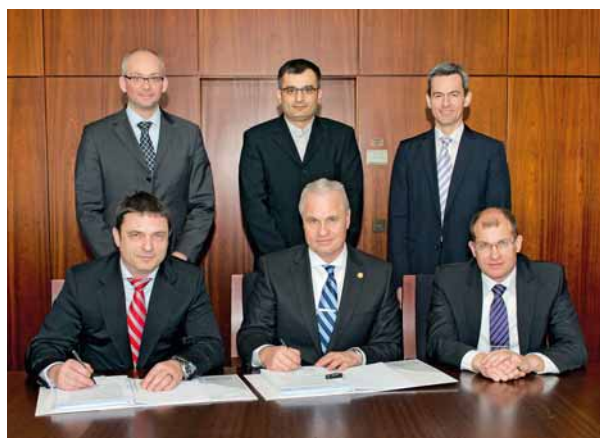
Along with its core business, in recent years Nussbaum Medien St. Leon-Rot has expanded into new business fields. In 2003 *DAS LOKALE* signalled the firm's entry into telephone directory printing. Since the launch of the online printing portal *Lokalmatador.de*, Nussbaum Medien now also supplies its readers in the region of northern Baden with a wealth of local and regional news online and for mobile devices.

Extensive automation for flexible production

The new triple-width Commander CT will have a cylinder circumference of 900mm (35.4in), a maximum web width of up to 1,860mm (73.2in) and is able to print 40,000 full-colour copies collect per hour, each with up to 48 tabloid pages. Automatic pagination changes for the many different products can be initiated from the console.

The KBA Pastomat reelstand will be embedded in a KBA Patras A automatic reel handling system with stripping station. The Commander CT's high level of automation is reflected in its automatic plate changing, roller locks, colour-register controls, ink pumping and washing systems. Other equipment will include a folder superstructure with three formers, a KF3 jaw folder, cut-off register controls and a section stitcher. The KBA ErgoTronic console will be networked with KBA PressNet production scheduling and presetting software and will incorporate waste- and time-saving KBA EasyTronic software.

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After placing an order for the Commander CT 6/2 (sitting l-r): Christoph Müller (KBA executive vice-president for the web press product house), Klaus Nussbaum (proprietor and managing director of Nussbaum Medien St. Leon-Rot) and Timo Bechtold (commercial managing director of Nussbaum Medien St. Leon-Rot). Standing l-r: Alexander Huttenlocher (sales director, KBA), Ender Kavakli (plant manager, Nussbaum Medien St. Leon-Rot) and Georg Fleder (web press sales, KBA)



The German-South African team after the successful relocation of the Uniset 75 at Paarl Coldset. Behind l-r: Hans-Peter Schiller (PHS), Uwe Zeh (PHS), Gert Grünler (Tesuse-C). Front: 2nd from right: Neel Naicker (managing director Paarl Coldset Johannesburg & Paarlmedia Commercial)

Successful PHS operations in Europe and overseas

Fast and professional

PrintHouseService (PHS), a subsidiary of KBA, carries out retrofits, upgrades, entire press relocations, professional repair and maintenance work on web presses which are also not from KBA, as well as all-round technical support of the technical infrastructure at print firms with on-site personnel if desired. In recent months PHS specialists proved their extensive expertise with a host of successful operations in Europe and overseas.

New cylinder bearers for print group :Styria in Graz

PHS successfully replaced the bearers on six H-type printing units on a MAN Colorman newspaper press belonging to print group :Styria in Graz and St. Veit, Austria, from a Sunday morning to a Friday evening. It was an operation that had to be carried out with military precision. Nine cylinders had to be disassembled, transported to Würzburg, worked on, sent back to Austria, reassembled and adjusted. Subsequently each cylinder had to be tested. All of the tasks took place within the time period given.

Print group managing director Kurt Kribitz: "We managed to carry on with our work without any interruptions to production thanks to this operation and the professionalism of PrintHouseService." PHS business unit director Harald Klein adds: "This operation has demonstrated just what a small company is capable of in connection with its Parent, KBA. Cylinders on a Colorman have probably never been replaced as quickly as this before. The parties involved worked together like clockwork."

Relocation and retrofits at Paarl Coldset

Paarl Coldset produces 342 million daily, Sunday and weekly newspapers a year at its plants in Johannesburg, Cape Town, Port Elizabeth, Bloemfontein and Pietermaritzburg. This includes South Africa's leading daily, the *Daily Sun*. 185,000 tons of paper are printed annually. Paarl Coldset is part of the Media24 group which publishes, prints and distributes newspapers, magazines and books. In recent months PHS specialists have carried out several tasks at Paarl Coldset. After getting a disused manroland Cromoman 50/70 ready for day-to-day production again in November last year, the specialists from PHS and the technicians from Paarl recently relocated a Uniset 75 press from Durban to Johannesburg. They also carried out extensive repairs and re-commissioned the press. The Uniset 75 used to belong to Universal Web which was taken over by Paarl Coldset.

The German-South African team ensured that the relocation and retrofit package was done quickly. The team's smooth cooperation facilitated the



Close cooperation with the parent KBA in Würzburg: measuring, replacing, grinding of the bearer rings



As good as new following the reassembly. The *Kleine Zeitung* can once again be published in its usual print quality

training of the press operators and ended with an on-schedule press restart. Neel Naicker, managing director at Paarl Coldset Johannesburg & Paarlmedia Commercial: "Once again the excellent teamwork with the technicians from PHS delivered an outstanding result."

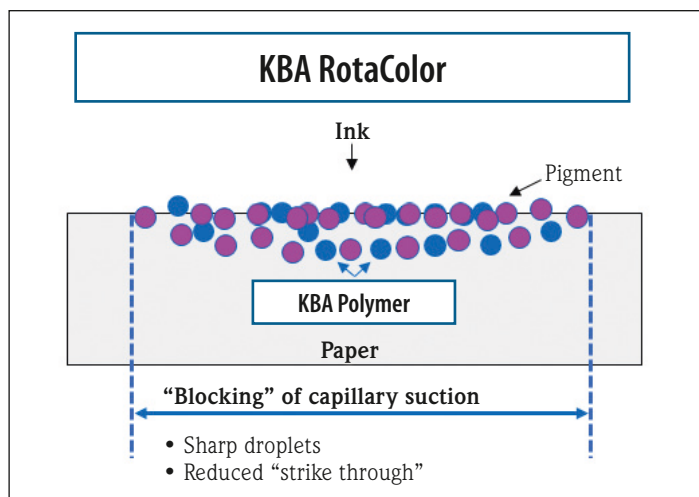
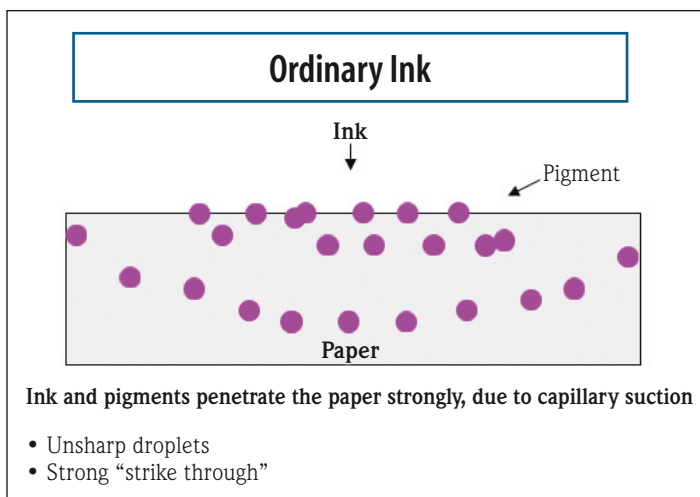
Klaus Schmidt

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Officially certified by INGEDE

KBA RotaJET: RotaColor ink can be superbly deinked

The polymer-based RotaColor ink used by the KBA RotaJET can be deinked extremely well. This has been confirmed by tests carried out by the International Association of the Deinking Industry (INGEDE) which was founded in 1989 by leading European paper manufacturers. Shortly before this year's IPEX the trade experts announced this breakthrough on 24 March in a press release titled "First web-fed aqueous inkjet is good deinkable without pre-treatment."



Rather than shipping them around the world, foreign newspapers are often printed de-centrally with aqueous inkjet. According to INGEDE these newspapers cannot be recycled as new bright, graphic paper. In the deinking process* the soluble colours bleed and stain other paper fibres.

Therefore, the topic of efficient deinking was at the top of the list of development goals following the launch of the new RotaColor polymer pigment inks with very good printing results on the RotaJET at the Hunkeler Innovation Days in February 2013. A year later the KBA RotaJET delivered issue-free, deinkable printed products for the first time with water-based inks. Test prints on uncoated newsprint paper have shown a good level of deinkability. In the meantime this winning feature in high-volume inkjet printing with water-based inks has been officially certified.

Along with the newspaper printing sector, naturally the topic of deinking efficiency is also important in all other graphic art application fields whose printed paper is usually recycled. KBA RotaColor polymer pigment inks also produce outstanding results even on paper for books and direct mail.

Polymer prevents pigments from bleeding into the fibres

The RotaJET inkjet technology works with a polymer pigment ink. The polymer stops the jettable fine pigments from bleeding into the fibres. It joins the particles and thus improves both colour brilliance and its removability, without negatively impacting on the printed matter's water resistance. Pigmenting the RotaColor inks has been perfected as much as possible so that the cellulose fibres in the paper are not attacked but their natural characteristics are preserved. Therefore it is

The RotaColor polymer pigment ink ensures a good level of deinkability by reducing the capillary effect

Above right: Thanks to the use of RotaColor ink newspapers produced on the KBA RotaJET can be deinked extremely well using the standard flotation process

possible to carry the rest of the ink to the surface using the flotation process. The paper fibres remain in the water and are not soiled by conventional pigments. An optional control fluid (RotaColor ControlFluid) enhances the deinking process further.

Chemist Axel Fischer from INGEDE: "A small amount of printed products that contain water-soluble dyes or pigments can render entire loads of waste-paper for recycling to white, graphic paper useless. The latest developments prove that it is possible to design inkjet printers in such a way that they can be easily integrated into existing paper recycling systems."

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*deinking is the process of removing the ink from waste-paper when recycling.



New KBA subsidiary in Italy delivers:

Tailor-made technology for flexible packaging

In December 2013 KBA acquired Flexotecnica in Tavazzano, near Milan, Italy and with this the firm once again expanded its portfolio for the growing flexible packaging market. The newly established KBA-Flexotecnica has supplied flexible packaging producers with central-cylinder flexo web presses (CI) since 1979. The cutting-edge EVO press series is available in different performance classes with various equipment and automation levels. They are predominantly used for the printing and finishing of plastic film, paper, carton, aluminium-coated and multilayer laminated materials.

With the integration into the KBA Group KBA-Flexotecnica has good chances of becoming an important vendor in the flexible packaging market segment. The broad experience of the 150 employees based in Tavazzano combined with the extensive process know-how of the KBA Group allows KBA-Flexotecnica to expand its product range with user-orientated hybrid presses with various printing and finishing processes as well as profit from KBA's global sales and service network.

The flexo presses in the EVO series feature up to twelve printing units and further auxiliary kit for inline finishing. The printing widths available range from 600mm to 2,500mm (23.6-98.4in) with variable image lengths and a maximum press speed of 1,000mpm (3,280fpm).

The product spectrum covers the key requirements in flexible packaging printing from budget-orientated entry-level machines to highly automated high-end presses.

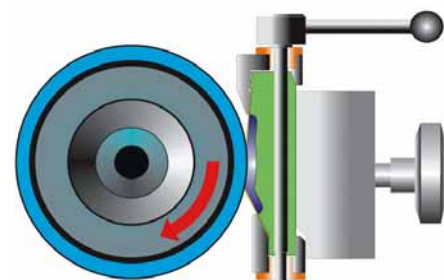
Product spectrum

- CI flexo web presses for multicolour perfecting
- laminating machines for flexo printing, gravure or solvent-free technology for the application of cold-seal and hot-melt coating
- water-, solvent-based or UV inks and coating
- digital printing and EB drying processes
- hybrid presses with various print, coating and layering processes in one single pass for maximum efficiency

Above left: the EVO XD series from KBA-Flexotecnica addresses today's market demands with a host of innovations for flexo printing

Above right: the linear-guided, lightweight doctor-blade chamber is pneumatically adjustable on both sides

Air distribution system for intermediate drying



Packaging applications

- food and medical packages
- pouches and bags
- labels
- industrial bags
- packaging for detergents, cosmetics and toiletries
- packaging for frozen foods
- containers for milk or other liquids
- multi-carriage bags for cans or bottles
- carton packaging for all segments

The EVO series: user-oriented technology

The gearless **EVO XD HIGH PROFIT**, designed to meet the demands of producing with a high level of efficiency and quality, features a number of technical innovations in the printing section with a new print deck and high performance final bridge drying delivers maximised energy savings.

The **EVO XDs** and **EVO XDn** represent a new generation of compact flexo presses with smart ergonomics. They are designed to meet the ever increasing demands for producing short runs with a high level of efficiency and market-leading print quality whilst keeping the capital investment low. The press can be adapted for printing with conventional solvent-based ink systems for packaging, with water-based inks and UV inks for the label sector. EB technology is also possible for EB flexo printing which assures the highest level of versatility for a wide range of applications.





The new EVO XDn/s series is very compact and designed for smaller budgets



Ergonomic sleeve changing on the gearless EVO XD



Changing sleeves on the high-tech EVO XG 12

The sleeve gearless **EVO XG** flexo press series is engineered for larger printing widths of up to 2m (6.5ft), high printing speeds of up to 600mpm (1,825fpm) and can handle a range of substrates. The design engineers attached particular significance to short makeready times, whereby this series is also suited to small and medium-sized jobs. Optional add-ons, such as pneumatic ejectors for print and anilox sleeves or the patented SSC (Safe Sleeve Change) which allows the preparation of idle units during production in the safest and most comfortable way, have been designed to improve efficiency and flexibility. A further option is the new user-friendly “pipeless” doctor chamber design.

The **EVO XG LR** press series (LR = large repeat) offers the same optional equipment as the EVO XG with a larger maximum printing length of 1,000mm (39.37in) up to 1,200mm (47.2in). It is designed to meet the demands of large industrial packaging jobs. The series guarantees high production performance even on wide web widths and offers quick changes of print and anilox sleeves. Due to the maximum printing length provided and the higher profile of the printing section, the machines in this range are also equipped with SRS (Smart Ride System) which includes special trolleys with mobile lifting platforms for the safer and more comfortable changing of heavier sleeves and adaptors.

The top-of-the-range **EVO XG 12** won the flexo tech award for innovation at Drupa 2012. Along with the standard and optional add-ons belonging to the EVO XG this press incorporates a number of important innovations aimed at remarkably optimising productivity and efficiency in the high-end flexo press engineering segment. It differs from the EVO XG LR

Press portfolio KBA-Flexotecnica

Press**	EVO XD	EVO XD s/n	EVO XG	EVO XG LR	EVO XG 12
No. of printing units	8 or 10	8	8 or 10	8 or 10	12
Printing width	1,000 – 1,600 mm	s: 600 – 1,000 mm n: 1,100 – 1,200 mm	1,000 – 1,600 mm option: up to 2,000 mm	1,000 – 1,600 mm option: up to 2,000 mm	1,000 - 1,600 mm option: up to 2,000 mm
Image length	up to 1,070 mm	up to 800 mm	up to 1,000 mm	up to 1,200 mm	up to 900 mm
Speed*	up to 400 m/min	up to 350 m/min	up to 600 m/min	up to 600 m/min	up to 600 m/min

* higher speeds available on request

** in addition, there are also hybrid presses with further printing processes and inline finishing



Left: the EVO XG series is engineered for larger printing widths of up to 2m (6.5ft) and high speeds of up to 600mpm (1,825fpm)

Right: the EVO XG with ten printing units clustered around a central cylinder



in that it has a maximum image length of 900mm (35.4in). However, up to twelve print decks are possible compared to a maximum of ten in other press series. The EVO XG 12 features flexible direct drive technology in addition to a control system with touchscreens for press pre-setting and monitoring the print process. Almost unlimited colour combinations, special primer coatings required on certain substrates, and particularly challenging printing applications with a top coat or a special finish can all be achieved on the EVOXG12 without jeopardizing production speeds.

A host of new developments all contribute to a drastic reduction in start-up and production-run waste. This includes the auto impression setting system A.I.F.

Control and management of printing process

Extensive equipment for the control and management of the printing process are in line with KBA-Flexotecnica's T.Q.M.A. philosophy (Total Quality Management Approach), which is true for all products belonging to the X range.

AIF Auto Impression Flexotecnica enables the automatic control of print impression positions with less than 30m (98.4ft) of waste assuring a quick and efficient production start-up. The system is completely integrated into the new touchscreen with an intuitive interface.

ARF Automatic Register Flexotecnica automatically controls print registration and is also fully integrated into the touchscreen and guarantees a precise registration with minimal material waste. It is easy to use and provides for the immediate setting of all reference parameters via a user-friendly graphical interface.

Flexocolour Matching facilitates a spectrophotometric analysis of the printed product aimed at making ink colour formulation quicker. This helps the press operator during press start up and this software is also integrated into the new touchscreen.

Efficient drying

The intermediate drying process is optimised by the new ventilation system

with stainless steel drying boxes and new connecting manifold with increased air speed improves the drying of solvent-laden and water-based inks on various packaging substrates.

The closed-loop drying bridge is armed with a new-generation hood for air supply. It is equipped with panels featuring an array of efficient deep-drawn circular nozzles. The panels can be easily removed for cleaning. Independent blowers and extraction fans complete with an air recycling system reduce energy consumption.

Combined Flexo

Cutting-edge flexo press installations are sometimes also configured as hybrid presses enabling the application of primers before printing or a high-gloss or protective coating on to the printed matter. Production with coating before printing or varnishing after printing, both on the front or reverse of the web, can be performed with an additional flexo unit downstream equipped with an independent vertical drying hood without jeopardizing press speed. When applying a cold seal, wax or PVC coating, one or more gravure units are usually integrated into the flexo press.

24/7: Round-the-clock support

Maximum uptime of production equipment combined with qualified staff are key to achieving the highest level of press performance. KBA-Flexotecnica therefore set up a remote maintenance hotline which is available 24 hours a day, 7 days a week.

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Ergonomic management and control of printing process at the touchscreen





New HighEcon drying oven from KBA-MetalPrint

More efficiency with less energy

An efficient, yet energy-saving dryer is essential for a high level of productivity and economy when printing in offset on metal sheets. KBA-MetalPrint has many decades of experience in this area and scores of know-how. With the HighEcon the KBA subsidiary in Stuttgart has developed a new generation of drying ovens which operate even more economically and efficiently than in the past.

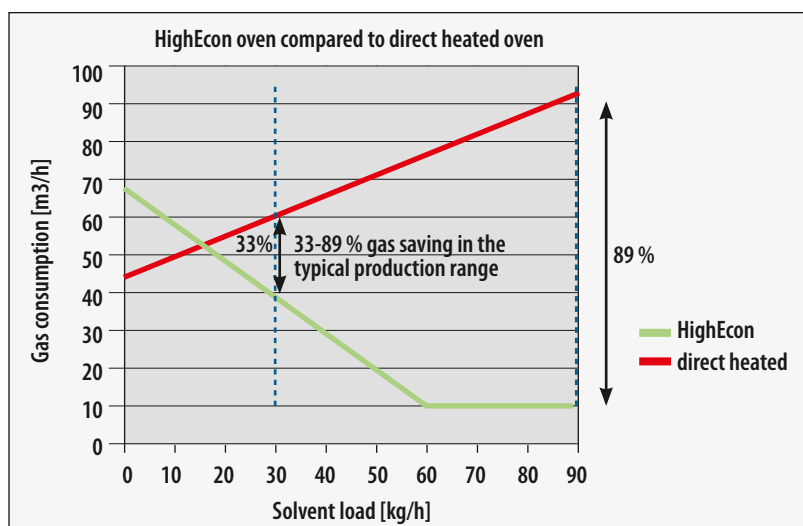
The concept of the new HighEcon drying oven is essentially a combination of two aspects:

- Integrated HighEcon exhaust air purification based on automatic exhaust air volume control and results in annual gas savings of up to 50 per cent on average
- The dryer's design permits the handling of thin sheets down to 0.100mm.

This enables significant savings in terms of material costs.

The new exhaust air volume control is in response to the fact that an oven only needs to be operated at the upper end of its rated output range for a certain proportion of the overall production time. Previous sheet-drying ovens were geared to a constant exhaust air volume

The new HighEcon dryer is efficient and saves energy



at maximum output with a maximum solvent concentration. During production, this high air volume then was heated to the temperature required for exhaust air purification with a correspondingly high energy input, irrespectively of whether this volume of air was actually necessary under the current production conditions.

Only as much exhaust air as necessary

This was the starting point for the HighEcon concept. The oven operates with its minimum exhaust air volume until the maximum permissible solvent concentration at that level is reached. Only then is the exhaust air automatically increased step by step – in line with the determined solvent concentration – up to the maximum volume. Consequently, it is only necessary to heat the volume of air which is genuinely required, and the constantly high solvent concentration can be utilised optimally resulting in a significant reduction in gas consumption. Along with the corresponding control functions the key to the system is a new cone burner which has been specifically designed to withstand the high thermal impacts of this process.

Superior with thin sheet metal

The new HighEcon drying oven has been optimised specifically for production with thin metal sheets. The HighEcon oven is to date the only line-integrated oven in the world capable of processing sheets with a thickness of 0.100mm. To this end, it was necessary to modify the oven in several areas and to fit new, optimised components. This refers in particular to the redesigned air flow in the oven, but also to adaptation of the sheet handling features before, in and after the oven. This guarantees the gentle and damage-free transportation of sensitive materials. The world's first machine with such features was delivered by KBA-MetalPrint in 2013. It has been in operation decorating 0.100mm-thick metal sheets since the beginning of 2014.

The HighEcon drying oven offers customers the potential for significant production cost savings in two respects. Further benefits of this new generation of drying ovens include ease of operation and maximum flexibility.

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New press series

MetalStar 3 - New peak performance in metal decorating

The name MetalStar is synonymous with high performance and high-quality metal decorating. KBA-MetalPrint recently launched the next generation of this successful press, the MetalStar 3. Based on the world-leading technologies of the latest large-format presses for printing on paper and board, the new MetalStar 3 can be characterised by its extended automation, high technical availability and robust engineering.

The MetalStar 3 has been fully redesigned. The feeder is advantageous to users with its proven DriveTronic individual drive technology and ensures stable and trouble-free production. The patented and equally proven KunziMatic vacuum registration system for tinplate,

aluminium and scroll sheets has been further optimised and guarantees perfect infeed precision even at high production speeds.

The high-tech MetalStar 3 press features the most stable and the fastest reacting inking unit in the metal decorating sector and thus meets the highest quality standards.

A raft of winning features

One world first in metal decorating is DriveTronic SPC. Thanks to the individual direct drives on each plate cylinder, plate changing takes place simultaneously on all printing units in just 75 seconds, irrespective of the number of printing units involved. Other makeready processes, such as blanket or impression cylinder washing, can run parallel to plate changing. This permits a dramatic reduction in makeready times.

The washing system CleanTronic Synchro is completely new to metal decorating. Two washing beams make it possible to wash both the blankets and impression cylinders, or to wash the blanket

Above left:
the MetalStar 3 is the fastest metal-decorating press in the world

Above right: the new Windows-based ErgoTronic console with optional wallscreen

DriveTronic SPC
dedicated plate-cylinder drives permit simultaneous plate changing in all printing units and parallel washing processes result in short makeready times



from both sides. The time savings of up to 50 per cent significantly enhance net productivity.

A further innovative feature is DriveTronic SRW (simultaneous roller washing). Separate drives on the inking units permit simultaneous washing of ink rollers and blankets. In combination with CleanTronic Synchro, it is even possible to wash the rollers, blankets and impression cylinders simultaneously. Washing times are thus reduced to an absolute minimum.

Optimised user-handling

The MetalStar 3's new ErgoTronic console is easy to use and ergonomic. The user-friendliness of the whole press interface has been raised to a new level with its modern, Windows-based control software. All press functions can be controlled conveniently by touchscreen, and all relevant press parameters can be saved as job-specific preset data for repeat jobs. One new function is a job changeover programme for the automatic execution of all preselected makeready processes in an optimised, time-saving order. An integrated remote maintenance module allows the service team from KBA-MetalPrint online access to all of the press' key components at any time should a problem arise.

The name MetalStar still stands for speed. With an output of up to 10,000 metal sheets/hour the MetalStar 3 is and remains the fastest metal-decorating press in the world with the fastest makeready times in the industry.

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The new alphaJET mondo inkjet printer excels in day-to-day operation

Clean solution for natural remedies

The alphaJET mondo inkjet printer from KBA-Metronic wins over customers with its fast and economic operation, low energy consumption, and outstanding print results on a variety of surfaces. These characteristics made it the first choice for Kräuterhaus Sanct Bernhard, a German firm which has produced and marketed high-quality natural remedies and cosmetics for over a 100 years.



For many years hpdSYSTEM vario hot-foil coding devices from KBA-Metronic have been in operation marking and labelling product packaging at Kräuterhaus Sanct Bernhard in Bad Ditzgenbach, Germany. The pharmacist and production manager Karl Löther is very pleased with the reliability of these devices and KBA's customer service. Therefore he turned straight to the specialists from KBA-Metronic when looking for a suitable printing solution for a new product line.

High-quality products made of natural raw materials

The firm started out selling herbal teas in Düsseldorf under the trade name Sanct Bernhard, which was registered in 1903. The products were made with herbs that have grown on the hillsides of the mountain Sanct Bernhard in the Swiss Alps for centuries. The teas won many awards, such as gold medals and honorary prizes, at exhibitions in London and Rome. In the 1960s family Schulz from Bad Ditzgenbach took over the sale of Sanct Bernhard herbal teas and expanded Sanct Bernhard's product range to

include over 600 natural remedies, medicinal herbs and specialised cosmetics.

The firm's ingredients are of plant or mineral origin. In-house production and permanent checks guarantee the highest quality. Today, hundreds of thousands of customers take advantage of the company's know-how, and the products can be ordered online. Pharmacist Karl Löther places great importance on the development of innovative and fresh healthcare products. The products are affordable as they are sold directly by the firm.

Contact-free printing

As Kräuterhaus Sanct Bernhard distributes its products by itself and is very customer orientated, the firm places high demands on packaging and its appearance. Before the alphaJET mondo was installed pots and jars of cream were labelled by hand after coming from a cutting-edge production line. These pots should now be given an expiry data and/or a batch number without visually impacting on the packaging's design.

Above left: high-quality cosmetics made of natural materials are an important part of Kräuterhaus Sanct Bernhard's product portfolio

Above right: the new alphaJET mondo inkjet printer from KBA-Metronic wins over customers with its easy handling and excellent value for money

The clean, easy and contact-free operation of the inkjet printer, as well as its ability to be inserted at various points in a production line, compact design and extremely low maintenance were all crucial factors for its implementation at Kräuterhaus.

The alphaJET mondo now prints data directly onto the base and sides of pots and jars for beauty products at a high speed and was easily integrated into the firm's production line. Additionally, the printer offers the high level of adhesion expected when printing data onto health and personal care products.

Minimal emissions

A stainless steel housing with protection rating IP65 is a standard feature of the alphaJET mondo. The inkjet printer is thus perfectly suited to the production climate of the food and beverage industry, and also to the production of cosmetics and natural remedies. The production manager consciously opted for a user-friendly printer to allow him to concentrate on the quality of his prod-

ucts. The alphaJET mondo is controlled easily via an intuitive 8.4in colour TFT touchscreen with straight-forward buttons. Along with a clearly arranged status display, the software offers a preview feature to help avoid misprints. Further positive aspects include its short set-up times and it is generally not susceptible to faults as the ink system is robust and simply designed. The ink bottles may be replaced at any time during print operation, which in turn avoids production downtimes and significantly reduces associated costs.

An eye on consumption data

The alphaJET mondo is freely programmable and can handle various special inks. As the inkjet printing process can continually mark different materials directly on the production line, this technology is the first choice when it comes to applying data, such as MHD or batch numbers.

The alphaJET mondo's ink system ensure that the ink containers are used until they are completely empty. The software alerts the operator when they need to be

refilled. The original inks and solvents are available at reasonable prices. The components' long service life and the printer's operating data were also important to Kräuterhaus. The printer can start printing immediately which helps when changing markings. As the alphaJET mondo was developed and produced in Germany, the technicians from KBA-Metronic are on-site fast to carry out service and maintenance tasks. Spare parts and consumables come directly from Veitshöchheim, Germany.

Production manager Karl Löther: "Originally the alphaJET mondo was planned only as a test installation at our firm, but within a few days the inkjet printer had completely won us over. The device stayed with us and was integrated into our production line." In the meantime the printer has been in operation for several months now and has proven its worth. "We are delighted with the device and pleased that everything has run smoothly," says Karl Löther.

Iris Kluehspies
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Above right: inkjet imprint of use-by date on a jar of cream

Below right: the quality of the packaging plays a decisive role in the cosmetic business



Successful interpack 2014 for KBA

The whole is greater than the sum of its parts

The companies belonging to the KBA Group were all very pleased with the results of their presence under the banner "KBA: The Right One" at interpack 2014. Analogue and digital coding technology from KBA-Metronic, UV film and card printing from KBA-MePrint, full-colour metal decorating from KBA-Metal-

Six companies belonging to the KBA Group joined forces to present their individual print solutions for the packaging market under the banner "KBA: The Right One" at interpack 2014

Print, folding carton and corrugated printing from KBA Radebeul, digital decorative and industrial printing from KBA Würzburg, printing systems for flexible packaging from KBA-Flexotecnica, and finally technology for the direct decoration of glass and hollow containers from KBA-Kammann – the high-quality prod-

uct samples on show from each segment were all received with great interest. KBA staff from the various companies were on hand to discuss possible combination solutions and a lot of new ties with representatives from the packaging industry the world over were established.

According to the old saying "The whole is greater than the sum of its parts", in the future greater advantage will be taken of possible potential for synergies arising from different technologies for packaging printing as well as the transfer of know-how will increase between the different sites. This much is already clear today: The companies belonging to the KBA Group which target packaging printers will be present together again at interpack 2017 with a raft of innovative packaging solutions.

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An insight into the assembly of screen printing systems at Kammann

Printing on glass and metal

Elegant packaging for luxury contents

Hardly any packaging can be produced without print. The decorating processes alone compete with each other, e.g. labels or direct-to-container printing. KBA-Kammann in Bad Oeynhausen, Germany, builds suitable printing presses for screen and digital printing on hollow containers, especially glass. The firm has been under the majority ownership of the KBA Group since summer 2013.



When it comes to hostile environments or a high level of abrasion resistance applying labels to bottles, cups and similar containers is unlikely to guarantee great results. In this case, and also for premium glass packaging which should stand out from the crowd, presses are required that can print directly onto hollow containers. In particular those from market leader KBA-Kammann in Bad Oeynhausen. The firm based in Westphalia, Germany, has designed and produced highly specialised screen printing systems since 1955. Recently the firm's product range was expanded to include digital inkjet printing for the direct decoration of glass containers.

Elegant niche with tradition

The first, initially semi-automatic systems were used for decorating ampoules, cups or glasses. The objects were mounted in holders manually and processed over a flatbed screen. In the following decades it was mainly the level of automation and the variety of feeding systems which changed. The direct printing of hollow containers held a strong market position until the introduction of industrially

Above left: prominent luxury brands belonging to the cosmetics and beverage industries continue to rely on directly printed glass packaging in unusual shapes

Centre left: the Kammann press series with a combined screen printing (I) and inkjet printing unit was unveiled at the trade show K in Düsseldorf in October 2013. It will soon be installed at a customer's site for the first time

Photo: Bergmann

Below left: the managing directors of KBA-Kammann, Dr Christian Maas (I) and Matthias Graf, holding impressive, directly printed glass bottles

Photo: Bergmann

produced self-adhesive labels in the mid-1970s. Meanwhile it has become a niche for particularly high quality standards: directly printed bottles and flacons are perceived as "luxurious" and it is mainly upscale products which are decorated in this way.

The data storage device decades

In the 1980s Kammann discovered a promising market with the emergence of optical data storage discs (CD, DVD) and developed automatic printing lines for silver discs. At first they were based on screen printing, and later on the waterless offset printing process ("screen-offset"). It was a business which took the firm to new heights and after two spectacular decades led to its fall.

The sharp decrease in demand for CDs and DVDs from the middle of the 2000s caught Kammann by surprise: with 80 per cent of sales generated by data storage disc printing lines, the firm was too one-sided. This crumbling business could not be balanced out quickly enough with other products and in 2009 the company which was then

owned by a private equity company fell into insolvency.

New beginning at a new site

The firm's realignment at a new site with significantly fewer personnel put Kammann in a position within the direct-to-container print market which was better than ever before.

Today 130 permanent employees construct and assemble machines for three product lines in the halls formerly used by the Balda plants on the northern edge of Bad Oeynhausen:

- K 15 CNC automatic screen printing press featuring rotary indexing tables for direct printing on glass and plastic (generate approx. 80 per cent of sales);
- Automatic, highly flexible multicolour screen printing presses in a linear design (product series K 1 CNC);
- Special machines for individual applications, e.g. for printing on plastic containers

Narrow web presses, which can be equipped with screen, offset or flexo printing units on request, have long be-

The indexing tables are central components of Kammann's presses. They put hollow containers of various shapes and sizes into the exact position for printing

longed to Kammann's portfolio and offer possibilities for joint activities with other firms in the KBA Group.

Heterogeneous market for container printing

The market for container printing presses is difficult to "grasp" and its niches are even more fragmented. While the alcoholic beverage industry predominantly invested in such kit in the 2000s, in 2012 and 2013 cosmetic and pharmaceutical manufacturers guaranteed sales.

Matthias Graf, along with Dr Christian Maas, one of the managing partners (together both hold a 15 per cent stake in the firm, KBA holds the majority with 85 per cent) estimates the annual market volume at €70m to €80m (\$94m-\$107m). KBA-Kammann shares the market with a few specialist providers, for example Isimat in Germany and Omso in Italy.

No plastic for spirituous beverages

Brand manufacturers constantly think of new types of packaging and decoration. However, the strong market position of the direct decoration of perfume bottles and premium spirituous

beverages remains unrivalled. These are unlikely ever to be marketed in plastic bottles, says Dr Christian Maas. Glass also has distinct advantages over complex plastics with respect to its barrier properties for food. This is in addition to design freedom. Dr Maas: "If a certain design is in mind, if there are images which go around the entire bottle then direct printing is naturally the most suitable method." All types of label wouldn't give good results when decorating a round shape without any creases.

Supple screen

The direct decoration of hollow containers with "perfectly adapted flatbed screens and blades" (Dr Maas) has been proven over decades. In addition, currently two colour systems are in use: thermoplastic inks which contain glass particles that are embedded in wax and melted onto the bottles to be decorated, and UV inks that are more commonly used. Thermoplastic inks are extremely scratch-resistant but require special user knowledge. KBA-Kammann also develops and produces curing lamps for UV systems that are very popular. Increasingly several decorative processes are being implemented into a press, for example screen printing plus hot-foil stamping kit.

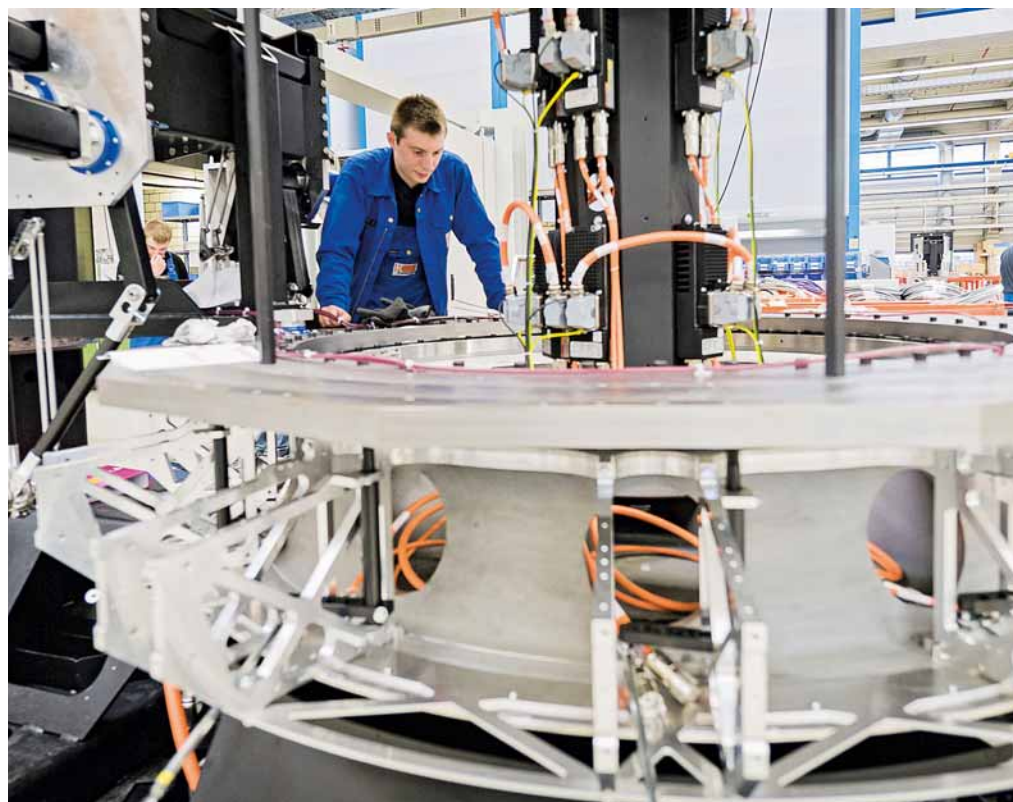
As the indexing table machine works according to a certain way and the containers have to be aligned before printing, the amount of objects that can be printed is limited: a maximum of 100 to 120, or at best 200 hollow containers, can be printed per minute. When printing on complex shapes the throughput can fall to 20 to 30 items per minute.

First Kammann inkjet press

Given growing market interest KBA-Kammann also has intensively looked into the possibilities of inkjet digital printing regarding the direct decoration of hollow containers for some time. Therefore the company presented a linear container printing press which combines screen and inkjet printing at K, the trade show for plastics and rubber, in Düsseldorf in October 2013. A version of this hybrid press which in the meantime has been optimised will shortly be delivered to a customer.

Gerd Bergmann

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More quality with less waste

Waterless UV offset printing with keyless short inking units on plastic cards, film, CDs, DVDs, as well as paper, board and other materials has long been a core competence of KBA-MePrint. This KBA subsidiary recently discovered a further promising market segment: industrial tube decoration. Demands in this sector regarding quality and economy are also increasing and print runs are shrinking. Compared to the technology often used today, the integration of offset short inking units from KBA-MePrint in conventional hollow-container decorating systems (so-called decorators) offers users key advantages which pay off after a short time. The new inking unit was the subject of great interest at Interpack in May 2014 and has already proven itself in day-to-day operation.

Hollow plastic containers have so far predominantly been decorated using indirect letterpress printing or UV digital printing systems. A disadvantage of the letterpress printing process is that finer grids, precise detail drawings and subtle colour nuances are nearly impossible to create. This is in addition to extremely

long makeready times, high prepress costs and a high volume of start-up waste often amounting to several thousand tubes. On the other hand the initial investment costs for digital printing and the ink costs are relatively high. Cost-effectiveness therefore decreases with larger print runs. KBA-MePrint's new

inking unit thus pits its strengths against the weaknesses of the other two processes.

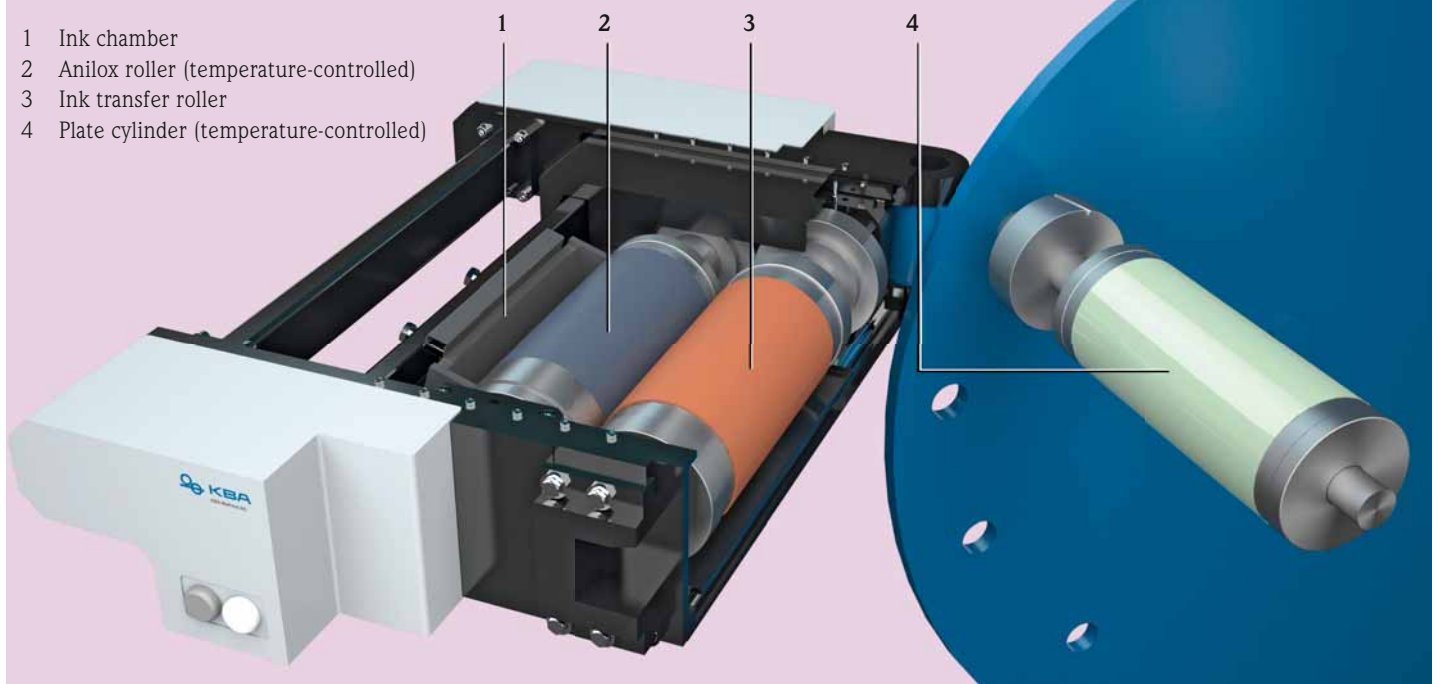
Successful development project with prominent user

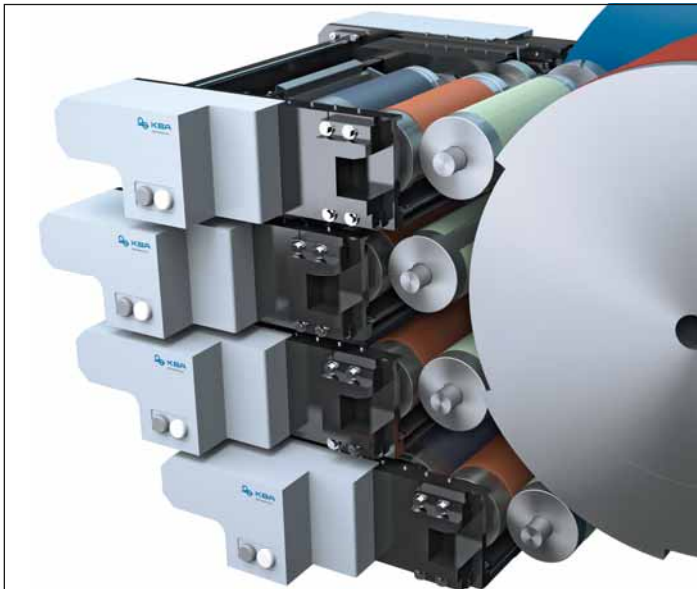
A renowned manufacturer of printed round containers contacted KBA-MePrint looking to use the advantages of waterless short inking technology for the decoration of plastic tubes. The respective company produces aluminium and plastic tubes, aerosol cans and other types of packaging made of aluminium and plastic, such as small tubes, cans or cigar cases, at several sites in Germany and abroad. A joint development project was agreed on mid-2012. Its main goals were a significant improvement in print

Innovation in short inking technology

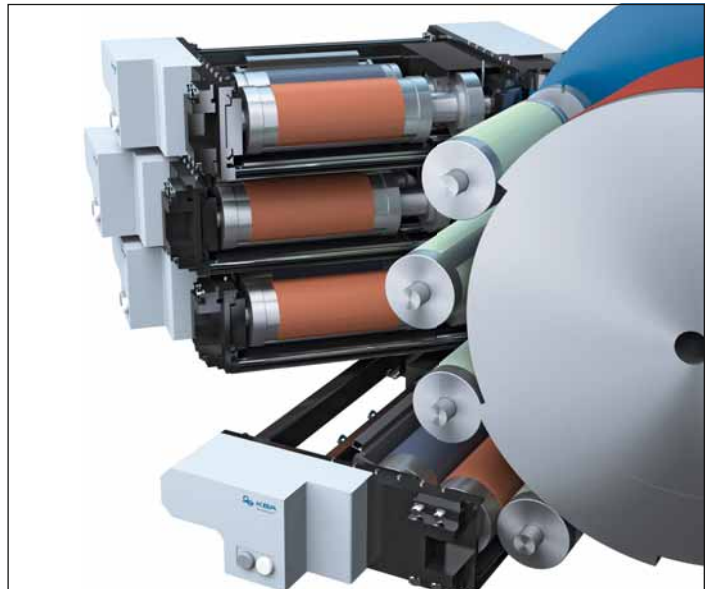
The short inking unit from KBA-MePrint (see picture below) is characterized by its compact design with few rollers. It works without any ink zones, without a dampener and runs up to colour quickly as the ink-water balance does not have to be established first. Additionally, time-consuming adjustments and maintenance work is thus no longer necessary. The temperature of the plate cylinder and screen roller is controlled in order to stabilize the printing process ensuring uniform, constant and reproducible production. The environmentally friendly printing process is without water, solvents or powder.

- 1 Ink chamber
- 2 Anilox roller (temperature-controlled)
- 3 Ink transfer roller
- 4 Plate cylinder (temperature-controlled)





Schematic illustration of four short inking units in an existing round-container printing system. Subject to technical modifications



The inking unit can be easily swung out for cleaning, mounting offset printing plates, cleaning and maintenance

quality, shorter makeready times as well as a considerable reduction in waste. The first step was to replace a letterset unit on an existing press used for printing round containers with a new short inking unit from KBA-MePrint.

Customised adaption of an existing decorator

Following the successful changeover of four inking units to short inking technology intensive tests were carried out to guarantee that the requirements were met. At speeds of 80 tubes/min. the short inking unit was then put through its paces offline. Colour stability, colour density measurements, functionality, up-time, handling and operation, makeready times, plate changing, and plate service life were all thoroughly tested. After this was all completed successfully a fifth inking unit was built into the press and the tests were repeated. Testing finished at the beginning of 2014. The adapted inking units were built into a production line to check their reliability in nonstop operation.

High expectations were met

The press runs five days a week in three shifts and has been in operation since the testing finished virtually round the clock. When demand is high it occasionally also runs on weekends. Its brilliant print quality and perfect reproduction of photorealistic images win over both company executives and clients. Furthermore, the investment pays off within ap-

prox. a year due to the drastic reduction in waste alone. The significantly more cost-efficient production process allows tube manufacturers to tap into new groups of customers. Clear advantages in terms of costs arise in particular when jobs are frequently changed for smaller and medium-sized print runs. Given the high level of machine capacity utilization the user has already had to refuse new orders. Therefore talks are already underway to adapt further presses as all of the hopes and expectations stated at the beginning of the project have been met, and in some cases even exceeded.

Flexible adaptations possible

A further joint project is the adaption of a press with higher speeds of up to 150 tubes/min. Initial measurements regarding the stability of colour density were very satisfactory. The short inking units do not have to be mounted horizontally. KBA-MePrint has already implemented printing units in various positions in the Genius 52UV, OC 200 and Premius without compromising operation or print quality. This flexibility in principle allows the implementation of KBA-MePrint's inking units in round-body printing systems from various manufacturers.

Initial talks and meetings have shown that interest in alternative printing technology for the broad market segment of tube decoration is great. The outstanding print quality in connection with a large

Benefits of waterless short inking unit technology for tube decoration:

- Multi-colour printing in photo-realistic print quality
- Excellent reproducibility of repeat jobs
- Printing speed 80 tubes/min. (coming soon 200 tubes/min.)
- Minimal setup times
- Little start-up waste (up to 95% potential for savings)
- Lower costs for printing plates compared to printing blocks
- Fast time-to-market in connection with in-house CtP prepress
- Low maintenance costs with few wear parts
- High and consistent print quality
- Colour gradation without breaks
- Exact drawing details and high edge definition with high dot definition
- No ghosting
- 1:1-color transfer eliminates ghosting
- Economical for small to medium print runs

potential for savings offer manufacturers and end customers significant quality and cost benefits which were previously unheard of in this market segment.

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Successful Expoprint 2014 for KBA in São Paulo

The joint stand shared by KBA, subsidiary Koenig & Bauer do Brasil and its cooperation partners MBO and AMS was well attended at **Expoprint 2014**, the most important trade show in Latin America, in São Paulo. A raft of decision-makers from Brazilian and other Latin American printing firms all visited the KBA stand. Posters and world maps were printed live on a six-colour Rapida 105 raised by 450mm (17.7in) with coater, delivery extension and in connection with cutting-edge folding technology from MBO.

Some of the print samples showed matt-gloss effects using the drip-off technique. KBA presented innovative drying processes, such as HR-UV and LED-UV, together with dryer manufacturer AMS (Air Motion Systems). This was in addi-

Live print demos of a Rapida 105 attracted big crowds



tion to workflow solutions and MIS systems.

Koenig & Bauer do Brasil in São Paulo is regarded as a first-level vendor for sheetfed offset presses. The Rapida 105 on show went to Industria Grafica Sul in Nova Candelária, Brazil, after the trade fair. Almost at the same time a third Rapida 105 was being installed at Emibra in Suzano, São Paulo. Brasilgra-

fica in Alphaville has three Rapidas and recently received its first large-format press, a Rapida 145 with seven inking units and twin coaters. Packaging printer APICE will receive a Rapida 106 that has similar kit and a two-colour Rapida 106 with coater was recently fired up at Cartondruck Grafica in Blumenau. KBA is anticipating further new projects and orders from Brazil and its neighbouring countries driven by Expoprint.

Rapida 106 with HR-UV replaces three presses at BOPI in Illinois

Along with offset and digital printing, **BOPI** in Bloomington, Illinois, provides its customers with mail and e-commerce solutions. The respected firm located in America's Midwest replaced three sheetfed offset presses with one high-tech Rapida 106 perfecter for four-over-four printing. BOPI president Tom Mercier: "Our old presses still printed in a good quality, but it was time for a new press with a much higher level of productivity."

When looking for the most suitable technology BOPI focused on long perfectors combined with low-energy UV curing technology. KBA offered everything they needed. After seeing the Rapida 106 in action at a printer in Des Moines they then went to Germany. BOPI was very impressed with the KBA plant in Radebeul and the fast Rapida 106 with its extremely short makeready times and energy-saving HR-UV technology. Tom Mercier: "Until now we had to wait 24

to 36 hours for the sheets to dry with conventional inks and no coating. Having this HR-UV drying feature has benefited our customers by providing us with a significant increase in production efficiency."

The highly automated eight-colour press replaced three straight printing presses. It includes unique automated features, such as QualiTronic ColorControl in-line colour control and measurement for two-sided printing in one pass. The management and team in Bloomington could hardly wait for their delivery to arrive.

Founded in 1947 as Bloomington Offset Process, Inc., the Illinois firm began as a high-quality commercial printer. Since then, BOPI has established itself in the direct marketing field through initiatives in variable data digital printing, personalised direct mail, data services, web based commerce, collateral management and



Production director Jeff Mercier (l) and president Tom Mercier could hardly wait for their high-tech Rapida 106 to arrive

fulfilment. It serves the Midwest market including insurance, manufacturing, college and university, agricultural, hospital, financial, government, and non-profit organisations.

DTL in Poland: New Rapida 75 for all kinds of packaging

More and more Polish commercial printers seek specialisations and new areas of business. An increasing number are turning their attention to the packaging sector, even with their sheetfed offset presses in B2 format. One such company is **DTL** in Porąbka near Bielsko-Biała. In May the firm fired up a six-colour Rapida 75 with inline coater, triple extended delivery and equipment for hybrid kit for the alternating use of conventional and UV inks. This is already the sixth purchase of a KBA press in the 15-year history of DTL with three KBA machines currently in operation.

It was two years ago that DTL ventured its first steps into the realm of packaging printing with a five-colour Rapida 75 with coater and perfecting after the second printing unit. Its configuration permitted the economical production of short-



DTL production manager Wojciech Willman (l) and managing director Zdzisław Wawak inspecting a print job on their new Rapida 75

and medium-run packaging jobs. The new Rapida 75 is expected to accelerate this step. The press is configured with CX board-handling accessories and has been raised by 225mm (8.85in). Further significant features include an enlarged sheet format, inking unit temperature control, CleanTronic Multi washing sys-

tems for alternating ink systems (conventional/UV), a coating supply system, UV interdeck dryers and energy-saving VariDry^{BLUE} dryers in the swan neck and extended delivery. To enable colour measurement and control it is equipped with ErgoTronic ColorDrive, ErgoTronic Lab (online) and QualiTronic ColorControl with the functions LiveView, DotView and ColorView (inline). Managing director Zdzisław Wawak points out that the new press was purchased above all for its UV production capabilities which permit DTL to add non-absorbent substrates to its list of product options. "In the first month we printed UV jobs exclusively, which shows just how big demand is. With the new press, we aim to strengthen our presence on the packaging market by offering highly refined products on out-of-the-ordinary substrates," says Wawak.

New giant Rapida for Box Marche in Italy

The Italian printing market, which eight years ago was one of KBA's largest markets for sheetfed offset presses, has felt the severe effects of the sovereign debt and economic crises in recent years. However, for some time now there have been significant signs of economic recovery and Italian printers are once again investing more in cutting-edge sheetfed offset technology. KBA has profited from its outstanding reputation and large customer base in folding carton, even beyond the Alps. In spring **Box Marche** from Corinaldo, a longstanding KBA user, invested once again in a giant Rapida. Founded in 1969, the firm has won many awards for its packaging, such as the prize for the most innovative packaging from ECMA Pro Carton in 2012.

The Rapida 145 delivered in August which features a high-speed and CX board-handling package, six inking units, coater and triple extended delivery has joined a similar Rapida 142 in operation since 2000 at Box Marche. The raised Rapida is armed with a raft of automation, such as nonstop facilities at



Box Marche, a longstanding Italian KBA user, visited the plant in Radebeul in April 2014 to carry out print tests on the Rapida 145. In the meantime the new six-colour press from this popular press series has expanded the packaging printer's print capacity considerably

the feeder and delivery, automatic plate changing, CleanTronic Synchro washing systems as well as ErgoTronic ColorControl + Lab, QualiTronic ColorControl and ErgoTronic ICR for the measurement and control of colour and register

accuracy. The press also features an energy-saving VariDry^{BLUE} IR/TA dryer and an emission extraction system (EES) in the delivery. The new Rapida 145 is linked to the workflow via LogoTronic CIPLinkX.



Steps Ahead: KBA-MetalPrint at METPACK 2014

Under the banner “Steps ahead” at METPACK 2014 in Essen KBA-MetalPrint once again showed that technical innovations in metal decorating primarily come from Stuttgart. Two new presses, the MetalStar 3 and the Mailänder 280, were unveiled at the trade fair. The new HighEcon drying oven (see page 42) was a further highlight for which KBA-MetalPrint received the silver METPACK

Innovation Award. Together with the optimised MetalCoat coating machine series, KBA-MetalPrint consolidated its reputation as the sole system supplier in metal decorating.

The idea to introduce the new MetalStar 3 and Mailänder 280 in a series of technical interviews was well received by the visitors. World firsts in metal

Above left:
KBA-MetalPrint presented its innovations at METPACK 2014 under the banner “Steps ahead”

Above right:
the new MetalStar 3 is characterised by its high level of automation and short makeready times

decorating, such as simultaneous plate changing, parallel washing of blanket and impression cylinder, a new job changing programme and the new ErgoTronic console, were the focus of the presentation on the MetalStar 3. The MetalStar 3 is still the most productive metal-decorating press in the world.

The new Mailänder 280 unites key automation modules from the MetalStar with the universal application opportunities of the proven Mailänder product line for various sheet metal grades and thicknesses. Further main features include a new inking and dampening unit, the optimized extremely flat sheet run, separate roller drive for simultaneous roller washing, CleanTronic blanket washing system, semi-automatic plate changing and the new central operating concept with Windows-based software in the ErgoTronic console.

The MetalStar 3 and Mailänder 280 were later demonstrated live at a subsequent open house in Stuttgart. The successful trade show presence has had a positive effect on KBA-MetalPrint's order books.



The stand crew were delighted with the silver METPACK Award for the HighEcon drying oven

KBA-CleanAir at IFAT

IFAT, the world's leading trade fair for the environmental technology sector, takes place in Munich every two years. From 5 to 9 May, over 135,000 visitors from approximately 170 countries and 3,081 exhibitors from 59 nations beat

the records at IFAT 2014. KBA-CleanAir, the energy and air purification division of KBA-MetalPrint, once again manned a joint stand with the Baden-Württemberg environmental engineering platform. The platform represents an organisation



Franz Untersteller, Baden-Württemberg's minister for the environment, (centre) visited IFAT. He is shown here with director of energy and air purification systems Dietmar Decker and sales assistant Julia Bechstein

of companies from the sectors of air/water/legacy pollution/renewable energies to jointly and successfully market Baden-Württemberg's environmental technology internationally.

KBA-CleanAir presented its portfolio for the cleaning of solvents, hydrocarbons and pure odour emissions as well as innovative high-temperature heat storage technology. At an evening reception Franz Untersteller, Baden-Württemberg's minister for the environment, also took the opportunity to find out more about these innovations.

Over 80 per cent of the visitors to the CleanAir stand came from abroad, predominantly from Eastern Europe, and the Middle and Far East. A multitude of international partners and support from KBA branch offices worldwide allow all the resulting projects and enquiries to be supervised "on site". Two large visitor delegations from Chile and Russia were organised in advance to be specifically informed about "odour elimination" with KBA-CleanAir and state-of-the-art technology in this area.

Heider Druck boosts contract printing with more colour capability

The KBA Colora in operation since 2006 at **Joh. Heider Verlag** and its associate company **Heider Druck** in Bergisch Gladbach, Germany, will shortly be extended by a four-high tower and a console. Together with a KBA Journal installed in 2002 the press line will be equipped for 4-over-4 printing of up to 64 pages in Berliner format. After the extension the press will comprise two separate and couplable 32-page sections. With this contract Joh. Heider Verlag continues its longstanding partnership with KBA. The order also includes the comprehensive electronic modernisation and maintenance of the publishing house's existing presses.

Established in 1889, Joh. Heider Verlag is managed by the fourth generation of the founding family and after

starting out as a newspaper house has developed into a versatile publishing, printing and media enterprise. Today its broad portfolio encompasses brochures, magazines, books, calendars and many

other commercial products in sheetfed offset, and the company's web-based offerings include freesheets, trade and federation publications, magazines, supplements, gazettes, etc.

After signing the contract in Bergisch Gladbach, Germany (l-r): standing: Hans-Martin Heider, senior director Hans Heider, Guido Heider, sitting: Günter Noll from KBA with Roberto Heider



Students from Warsaw visit KBA Radebeul



The students from ZTP in Warsaw found out more about cutting-edge sheetfed offset printing at the KBA plant in Radebeul (photo) and at several customer facilities

Students from the press technology faculty (ZTP) at the institute of machinery and print which belongs to the Warsaw University of Technology took part in a visit organised by KBA CEE in May. They visited the KBA plant in Radebeul and Rapida users in Poland and Germany. Along with a tour of Mondi SCP's Slova-

kian site, this visit is expected to breathe life into the partnership which began last year between ZTP and KBA CEE as well as Mondi Paper Sales.

Grzegorz Szymczykowski and Paweł Krasowski from KBA CEE accompanied the students to the KBA plant. Product

manager Dr Roland Reichenberger talked about solutions to increase printing speeds and optimise press productivity. Product manager Simona Jurk then held a presentation on quality assurance and measuring technology. The students then viewed high-quality finishing samples.

The experts from KBA CEE presented automation solutions, such as nonstop pile logistics and QualiTronic Professional for inline quality control, on a six-colour Rapida. On another Rapida the students were shown further finishing effects, such as micro embossing and cold-foil finishing. They were also able to compare HR-UV and LED-UV curing samples.

The students watched the production of POS systems, displays and posters in extra-large format on several Rapida 205s at Ellerhold in Radebeul and cutting-edge packaging production on presses from the Rapida 106 and 145 series at Karton Pak in Nowa Sól. The visitors were amazed by the high level of automation in packaging production.

Service forum in Spain

A **service forum** organised by KBA-Service and KBA-Lauvic España KBA's Spanish web press agency took place once again in June 2014 in Barcelona. Under the banner "Business prospects: How can we boost sales?" executives from a host of Spanish newspaper

houses found out more about possible retrofits and updates for their existing offset presses as well as prospective applications for the KBA RotaJET digital press in the newspaper market. After José A. Díaz and Pablo Roca from KBA-Lauvic welcomed the visitors, KBA

Spanish newspaper printers with representatives from KBA and KBA-Lauvic España at this year's service forum

sales director Alexander Huttenlocher gave an overview of the international newspaper market. Tobias Erhardt from KBA-Service then presented technical options to enhance the flexibility and performance of existing presses. Among other things he explained retrofitting inkjet units for individual prints and kit for four-page centre ad spreads.

KBA sales manager Fernando Ramos spoke about the possibilities of combining the new KBA RotaJET inkjet press with conventional offset machines. Sven Michael presented the RotaJET and its high print quality on various types of paper.

Despite the current crisis in the Spanish newspaper market, the guests present showed great interest in add-on options for their presses to strengthen their newspapers and allow the production of further print media for their readers.



A raft of KBA users among the world's best newspaper printers



The global competition for acceptance in WAN-IFRA's exclusive International Newspaper Color Quality Club took place this year for the eleventh time

This year media firms from all over the world with a total of 165 newspaper titles competed in WAN-IFRA's (World Association of Newspapers and News Publishers) global quality competition. It aims to promote high-quality colour printing in newspaper production on the basis of internationally recognised standards in order to offer readers and ad clients an attractive form of print media. 77 publishing and printing firms from 26 countries won a membership to the exclusive International Newspaper Color Quality Club 2014-2016. The award ceremony will be held at the World Publishing Expo in October 2014 in Amsterdam.

29 newspaper printing firms which operate KBA web presses were among the winners, including seven waterless KBA Cortina compact press users. This represents nearly 40% of all the prizes awarded.

The award-winning KBA newspaper customers are:

- Al Nisr Publishing, Dubai, UAE (*Gulf News*),
- Botnia Print, Kokkola, Finland (*Keskipohjanmaa*),
- Brune-Mettcker Druck- und Verlags-GmbH, Wilhelmshaven, Germany (*Wilhelmshavener Zeitung*),
- Druckerei Konstanz in Konstanz, Germany (*Konstanzer Anzeiger, Südkurier*),
- DZB Druckzentrum Bern, Bern, Switzerland (*Berner Zeitung*),

- E. Holterdorf, Oelde, Germany (*Die Glocke*),
- El Telégrafo, Guayaquil, Ecuador (*Diario El Telégrafo*),
- Frankfurter Societäts-Druckerei, Mörfelden, Germany (*Frankfurter Allgemeine Zeitung, Frankfurter Allgemeine Sonntagszeitung*),
- Märkische Verlags- und Druck-Gesellschaft, Potsdam, Germany (*Frankfurter Allgemeine Zeitung*),
- Feza Gazetecilik, Trabzon, Izmir, Adana, Ankara, Istanbul, Turkey (*Zaman Cumartesi, Zaman, Zaman Pazar, Today's Zaman, Zaman Cuma*),
- Freiburger Druck, Freiburg, Germany (*Badische Zeitung*),
- Göttinger Tageblatt, Göttingen, Germany (*Göttinger Tageblatt*),
- Heilbronner Stimme, Heilbronn, Germany (*Heilbronner Stimme*),
- Mayer & Söhne Druck- & Mediengruppe, Aichach, Germany (*Aichacher Zeitung*),
- Mediagroup Press in Singapore (*Today*),
- Nordost-Druck, Neubrandenburg, Germany (*Nordkurier*),
- Nordsee-Druck, Bremerhaven, Germany (*Nordsee-Zeitung, Sonntagsjournal der Nordsee-Zeitung*),
- Pressehaus Stuttgart Druck, Stuttgart, Germany (*Stuttgarter Zeitung, Stuttgarter Nachrichten*),
- Printing Partners Brussels, Groot-Bijgaarden, Paal-Beringen, Belgium (*Het Nieuwsblad, L'Avenir, De Standaard, De Gazet van Antwerpen, Het Belang van Limburg*),
- Rheinpfalz Verlag und Druckerei, Ludwigshafen, Germany (*Die Rheinpfalz*),
- Singapore Press Holdings in Singapore (*The Straits Times, Berita Harian, Lianhe Zaobao*),
- Tamedia, Zürich, Switzerland (*Tages Anzeiger*),
- Tamedia Publications romandes, Centre d'Impression Lausanne, Bussigny, Switzerland (*Tribune de Genève*),
- The Printers (Mysore), Bangalore, India (*Deccan Herald, Prajavani*),
- Ungeheuer + Ulmer, Ludwigsburg, Germany (*Ludwigsburger Kreiszeitung*),
- United Printing & Publishing, Abu Dhabi, UAE, (*7 Days, The National, Al Ittihad, Financial Times, Al Roeya*),
- V-TAB AB, Västerås, Sweden (*VLT*),
- West Australian Newspaper, Perth, Australia (*The West Australian*) and
- Zeitungsverlag Aachen, Aachen, Germany (*Aachener Zeitung*).



29 KBA users are proud to be members of the International Newspaper Color Quality Club 2014-2016

KBA congratulates its customers and all the other winners on this outstanding achievement.

Report

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and / or



Digital with KBA RotaJET

Variable data
Direct mail
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Industrial printing
On-demand printing
Microzoning
Personalization
New business models
One to one marketing

Offset with KBA Commander

High volume printing
Short makereadies
High quality
New advertising formats
High performance
Customised automation
Compact design
Commercial products
Target orientated newspaper production

Whichever road you choose KBA can help you

There is a shift in newspaper production. Print runs are getting smaller and target groups more specific. The bar is being raised in terms of quality, productivity, flexibility and economy. New ad formats, new business models and added value concepts are in demand. As the market leader KBA offers future-orientated solutions tailored to individual needs – whether traditional offset or high-performance digital printing.

Any questions? Give us a call.

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