



INACCURATE MILLING OF THE PLATE GAP

A new four-high newspaper press unit displayed register deviations. Our expert tells the story. **Page 8**



THE YOUNG LIKE BOOKS

The young don't just idle away their time on their mobiles. Far from it. **Page 13**



ONLY THE BUILDING IS STANDARD

The WAZ Group opted for an off-the-peg building for its new Braunschweig print centre. **Page 4**

Deutscher Drucker

INTERNATIONAL EDITION · FOR HIGH QUALITY PRINTERS WORLDWIDE

August 2013



Dr.-Ing. Colin Sailer

CASES OF DAMAGE FROM THE PRINTING INDUSTRY

- commercial web offset printing
- newspaper printing
- sheet-fed offset printing
- digital printing
- print finishing
- ink and chemistry
- printing substrates
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expert for printing presses
officially appointed and sworn in by the Chamber of Commerce for Munich and Upper Bavaria

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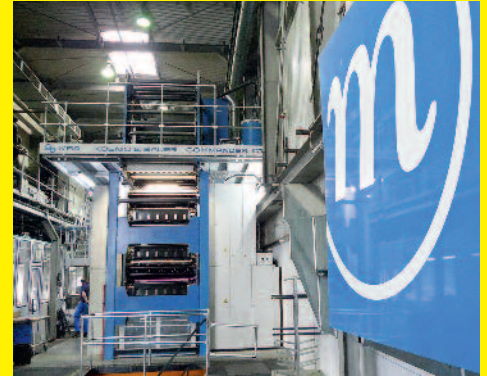
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Investing in newspaper printing Future opportunities with print



■ Whilst the rest of the world is only investing in new newspaper presses sluggishly, many German publishers are taking the bull by the horns. Modern technology does not just improve the economics but also opens up opportunities for new products. In this issue Deutscher Drucker presents companies from Aichach, Minden and Braunschweig that are turning to print. **Page 2**

Zero fault tolerance 100% inspection necessary



■ Visual checking of the printed image by the printer is unable to deliver one hundred per cent quality control. This calls for high performance systems of the kind we present in this issue. **Page 9**

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Ipex downgrades offset

THE ORGANIZERS OF IPEX 2014 have had to cope with a number of disappointments over months as, one after another, leading suppliers have said no to the show. In response, Ipex has realigned its concept and has metamorphosed from a print trade show into a cross-media event. In support of this strategy, it has issued a white paper in which it talks about the retreat from offset in developed markets. Between 2009 and 2014, according to those staging Ipex, digital print's market volume will have risen by 56% to \$84 billion. At the same time it forecasts a 7.3% fall in sales for offset. Unfortunately, the white paper fails to provide actual figures for offset's production volume. Had it done so the reader would have learned that the worldwide sales of offset print are many times those of digital print. Ipex, on the other hand, highlights the reduced space taken by offset press manufacturers back in 2006 and again in 2010, and takes this as evidence for a sustained decline in the relevance of offset. Why leading digital press suppliers of the likes of HP, Landa, Xerox, Kodak and Agfa have now also decided to stay away from Ipex 2014 is skimmed over in passing.

AS THE OPEN LETTER penned by Printers Superstore, a UK dealer, makes clear, the Ipex white paper has caused annoyance in the offset camp. Printers Superstore numbers offset presses from the Chinese manufacturer Hans Gronhi amongst the products that it sells and it was keen to counter Ipex's misdirected and damaging assertions and to assure its customers that offset printing was and is very much alive and



To deduce that offset printing is on its uppers because exhibitors are becoming more selective in their choice of exhibitions is utterly false.

well. According to the open letter, the show's marketing efforts risked undermining the success of its exhibitors, given that the future for many printers would be a combination of offset and digital.

IN GERMANY we have recently seen how shows such as Digimedia or Postprint can be cut from the show calendar due to a lack of exhibitors. To deduce that offset printing is on its uppers from such developments is utterly wrong. The reason why offset press manufacturers have become more selective in the shows they choose to take part in is to be found elsewhere. Industrialization of the printing industry means that today more and more large and specially configured presses are being sold. In contrast to shows in the past, where smaller, standard presses were shown, reasons of costs often preclude such large lines being installed in exhibition halls. This has nothing to do with the supposed decline of offset. Why else would the fastest growing printers be turning to offset as their first choice?

Best regards

Bernhard Niemela

→ Reactions to: b.niemela@print.de

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Print business opportunities

INVESTING IN NEWSPAPER PRINTING ■ Whether in Weiden, Traunstein, Crailsheim or Delmenhorst—Germany’s regional publishers are installing modern production technology. In contrast to the rest of the world, the home of print continues to invest in the printed newspaper. Deutscher Drucker presents two case studies from Aichach in Bavaria and Minden in Westphalia.

By Gerd Bergmann
Editor-in-Chief
Deutscher Drucker International Edition

■ It turned out to be a far-sighted move when Reiner Sixta substantially expanded his printing capacity way back at the end of the 60s. Now the mainstay of his printing and publishing company is no longer the Aichacher Zeitung, which serves the 21,000 inhabitants of the Aichach and the sparsely populated district between Augsburg and Ingolstadt very effectively with a print run of just 9,500. Even the publisher’s own numerous freesheets, with a print run totalling several hundred thousand copies, are not what make the Aichach model special.

CONTRACT PRINTER. Mayer & Söhne is probably the biggest Berliner format, coldest contract printer in southern Germany. The acquisition and subsequent closure of many small local newspapers by large publishers in the 70s led at the time to the emergence of numerous local freesheets. All needed a ‘neutral’ printer and for decades Mayer & Söhne has been the printer that dozens of these freesheet publishers have turned to

As a result, Mayer & Söhne has grown into a major player over the past few decades under the management of its fourth generation owners, Hildegard and Reiner Sixta. In Aichach alone 240 jobs have been created and the group as a whole, which also has offices in Augsburg and Bamberg, has a workforce of 350. Now run by Thomas Sixta and Managing Director Erwin Neudecker, last year, 150 years after the foundation of Mayer & Söhne, it invested in a KBA Commander CT, which handles the company’s output alongside a Manroland Geoman dating from 1999.



Family member Thomas Sixta (l.) and Managing Director Erwin Neudecker.



An der Stelle der früheren KBA Journal steht nun eine 32-Seiten Commander CT. Ausgetauscht wurde quasi bei laufendem Betrieb – während die aktuelle Produktion auf der benachbarten Geoman und jeweils einem 16er-Turm der alten bzw. neuen Maschine (mit manchem Vorprodukt) bewältigt werden musste.

FRESHEETS HOLDING UP. Weekly newspapers exclusively financed by advertising are still undervalued, even though they have held up better than subscription based ones and the total print run of German freesheets rose by 4.3 million to 92.9 million copies even between 2007 and 2012.

For most newspaper printers they are just the icing to the daily newspaper’s cake but for Mayer & Söhne they form the economic basis of the company. In order to look after its numerous customers the company has a large sales and service team as well as a highly flexible prepress department. Furthermore, by adopting the Berliner format the company believes that it is well positioned to exploit the advertising insert market. Fully automatic plate changing in just five minutes means that it is able to cope with numerous four-colour version changes.

The 8.5 million euro investment was a major step towards ensuring the contract printer’s future and the Commander CT brings with it so much new capacity compared with its predecessor, a KBA Journal, that the company has a further 27 production hours a week to sell.

EXPLOITING OPPORTUNITIES. Sven Thomas, who was interviewed by Deutscher Drucker bene-



The coldest printers that have adopted a contract printing strategy like ours can be numbered on the fingers of one hand.

Thomas Sixta, Mayer & Söhne

ath the portraits of his ancestors, is based 600 kilometres to the north of Sixta. Thomas and his father publish the Mindener Tageblatt and he is the sixth generation of the family to run the firm of J.C.C. Bruns, which was founded in 1834.

As a regional publisher with his own printing capacity, Thomas sees future opportunities for launching new and attractive print media based on the journalistic and publishing expertise of his media



Sven Thomas, publisher of the Mindener Tageblatt and Managing Director of Bruns Druckwelt GmbH, “We think that our Berliner format is more suitable for many products.” In the next year a new 48-page Wifag web press will help to expand the base for new types of product.

house. These are opportunities he intends to pursue proactively—not least in order to preserve substantial numbers of jobs on site. Over the next year

The silence is over

COMMENT ■ For many newspaper printers the silence is over. Three shift operation and more and more outside orders mean that operating patterns are more and more coming to resemble those of commercial printers. There are battles over rates and manning levels and the quasi public sector job security has gone because, on the one hand, uneconomic newspapers drag their printing plants down with them into insolvency à la Frankfurter Rundschau, and, on the other hand, even publishers that are doing well are turning to joint ventures or contract printing. This can cost hundreds of jobs at a stroke, as has been the case with the Darmstädter Echo

and the Allgemeine Zeitung of Mainz. The Basler Zeitung closed its own printing plant because of under utilization and now uses an outside printer. Given the large number of new web presses in Germany and Switzerland, there is no great difficulty in finding free capacity at a distance that makes logistical sense. In Fribourg (Switzerland) the Paulusdruckerei has closed after a major customer switched to printing in Berne—supposedly for a saving of 30 per cent. Given the base level of utilization that their own titles give them, the pricing structure of many newspaper printers is even more irrational than that of the commercial ones. **Gerd Bergmann**

therefore the company will be commissioning a new web press from the Swiss manufacturer Wifag and a new Ferag mailroom, and these will open up a whole series of technical options.

BRUNS DRUCKWELT. With just under 40,000 copies of its own daily newspaper, the Minden publisher would have been able to secure a production slot in nearby Bielefeld, where two rival newspaper publishers have also invested in new presses. However, neither of these are Berliner format, which for Bruns represents an increasingly promising launch pad for the commercial market. Sven Thomas is optimistic that with his combination of newspaper web offset, sheet-fed offset and digital printing he has the right mix for a wide range of products.

In 2012 all the printing departments were bundled together and spun off into Bruns Druckwelt. When asked whether it wasn't a brave move for a newspaper publisher to run a sheet-fed commerci-

al printer too, Sven Thomas replied that, “We've entered commercial with the aim of achieving real growth. We have invested in a small research and development laboratory. It's a delicate plant but one that looks promising.”

ROOM FOR MANOEUVRE. There are a number of reasons why the Minden publisher opted not to print in Bielefeld. “We are rooted in this region. There is recognition that we are creating or preserving jobs and for us, as a family company, it is important to keep people employed locally.”

In order to do so, the company has, according to Thomas, not sought, “to squeeze out the last euro of profit”, which might have been able to do if the newspaper printing contract had been placed with a third party. “We have thought long and hard about whether it makes sense for a newspaper publisher of our size to invest in a new press but it has always been our philosophy to remain independent and preserve our room for manoeuvre.”



In 2012 all the printing departments were bundled together and spun off into Bruns Druckwelt.

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“Only the building is standard”

INVESTING IN NEWSPAPER PRINTING ■ The WAZ Group opted for an off-the-peg building for its brand new print centre in Braunschweig (known as Brunswick in English) in order to save time and money, and the new production plant on the outskirts of the city in Lower Saxony was ready to roll within ten months. Even the problems that hit the press supplier during this period failed to derail the project.

By Gerd Bergmann
*Editor-in-Chief
 Deutscher Drucker International Edition*

■ The situation in Braunschweig was ripe for change. The existing web press, which dated from 1993, had been installed in an imposing, pre-existing printing and publishing complex and had limited colour capabilities despite its twelve reelstands, nine press towers and four folders. The lack of automation also meant that it required a large crew. In response, the WAZ Group gave the green light in 2011 for a 31 million euro spend on the northern outskirts of Braunschweig whilst at the same time the publishing and editorial operation would be moved into the city centre, so the existing buildings could be put to fresh use.

UNIT CONSTRUCTION. The WAZ Group, which has owned the Braunschweig publisher since 2007, has a team of experts specializing in investment and building planning, facilities management and building infrastructure. What became apparent from the invitation to tender for the Braunschweig project was that there were much cheaper ways of building a newspaper plant than the classic approach of hiring an architect and designing the building like a tailor-made suit around the chosen press.

This persuaded the WAZ to place the order with the Goldbeck Group, a specialist in factory buildings that uses a unit construction system and which has its own concrete works where the units are produced. Goldbeck, as the main contractor, has built a factory beside the A2 motorway that could be used for other purposes at any point. The decision to install a floor-standing press—

i.e. the reelstands are placed in front of the web press—meant that the overall height of the building could be reduced and made a standard building geometry possible.

The new Manroland Colorman Autoprint XXL—four 6/2 towers, four reelstands and two folders—stands in a hall together with enough unpacked reels for the day’s production. Everything is arranged at ground level and is easy to monitor, with



Elmar Edeler (l.) plant manager of the Braunschweig print centre, and Dr. Clemens Berkoldt, head of the printing division of the WAZ Media Group (Essen), explain their concept to Deutscher Drucker

even the damping solution supply being readily accessible. Reel preparation is largely manual but from then on Manroland’s Aurosys oversees the fully automatic paper flow right up to mounting. The reel warehouse rises to the same height as the press hall and is divided off by a fire wall. Dr Klemens Berkoldt, head of the printing division at the WAZ Group reports that, “the construction work undertaken by Goldbeck was considerably cheaper than the conventional approach.”

Dr Berkoldt believes that, “potential savings of 25 per cent for the building costs and technical facilities is rather an underestimate.”

And it is not simply the costs. “Largely thanks to Goldbeck”, it was also possible to take the project from the first sod being turned in January 2012 to the first saleable printed products on 5 November 2012 within the space of ten months. The only element of uncertainty arose shortly before the first sod was turned with the insolvency of the press supplier Manroland AG. However, Possehl, which took over the web division, quickly clarified the situation and Dr Berkoldt is able to report that in the end there were neither delays nor cost overruns.

TWO FORMATS. As part of a relaunch of its daily newspaper titles, the Braunschweig newspaper publisher wanted to introduce a six column page. This meant that the existing Berliner format had to be widened to the unusual width of 340 mm but the cut-off would remain unaltered due to the high proportion of products for outside customers and its own advertising free sheets, which all continue to have the typical Berliner width of 315 mm.

The switch between the two printing formats is made possible by a spreader ahead of the first printing unit, which allows a previously slit web to be centred for the former as it runs through. However, it can only handle ‘double width’ and so, whilst the daily newspapers can be produced with up to 48 pages per press unit, a maximum of 32 pages is possible in Berliner format. According to plant manager Elmar Edeler, feeding the two slit webs through the same press unit has not so far led to problems on the Colorman satellite press, which uses metal-backed blankets. Ink build up on the 5 cm wide gap between the ribbons is managed by means of the Elettra blanket wash-up device.

FASTER PLATE CHANGING. The fact that the Braunschweig print centre now only needs two presses rather than three is due to fully automatic plate changing. According to the press manufacturer, this should take no longer than 7 minutes (standard) or 13 minutes (with change of pagination), regardless of the number plates to be changed. The main product has ten regional editions, the smallest of which has a run of just 3,100 copies; and in future this should take just four hours to produce from 11.00 at night until 3.00 in the morning. A total of between 10,000 and 12,000 plates are required every week for production and these are set by two Krause LS Jet Multifformat setters with an hourly capacity of 350 plates per line.

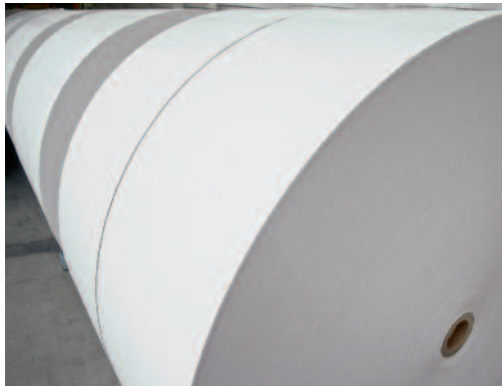


A rarity in the German newspaper landscape: the triple width, extra wide Berliner format satellite press is floor-standing. The two sets of two reelstands are positioned in front of the compact 96-page press, which has four press towers and two centrally positioned folders.

Inkjet printing: coated paper with good abrasion resistance

PATENTS AND REGISTERED DESIGNS ■ The coated paper presented here combines several characteristic properties: good offset printability, good ink fixing and absorption, even for inkjet ink, as well as suitable dot diffusion, even when using pigment inks.

■ When, in the past, a conventional coated offset paper was used in an inkjet printer various problems might arise. The poor ink fixing and absorption properties of the coated offset paper meant that images printed at high speed could suffer from rubbing and lose colour after printing. If one reduced the quantity of bind-



Offset presses and inkjet printers need to be able to print a coated paper well.

ing agent or increased the quantity of porous pigment in the coating in order to improve the fixing and absorption of inkjet inks, the coating might be weakened, leading to blanket piling and impairing the offset printability of the coated printing paper.

REQUIREMENTS FOR THE PAPER. What is required from the coated printing paper is good inkjet printability, including sufficient ink fixing and ink absorption, without impairing its offset printability. According to the patent application, these requirements could be met by a coated printing paper consisting of a base paper and a coating. The coating is applied to at least one surface of the base paper and its main components consist of a pigment and a binding agent. The base paper may include a cationic compound; the coating, as a pigment, contains at least 50 parts of ground calcium carbonate per 100 parts of the overall pigment. The coating is applied to the surface at a rate of 2 to 7 g/m². The cationic compound might be a cationic resin or a high quality cationic salt so as to

DD-SERIES

IDEAS FOR TOMORROW'S TECHNOLOGY

We take a look at patent and registered design activity in our industry. Part 120 Mitsubishi Paper Mills Limited, Tokyo JP Document No. DE112010002826T5

achieve favourable ink fixing and ink absorption properties. The calcium carbonate (pigment in the coating) can display a particle size distribution in which the cumulative frequency of a particle of 2 µm or less is 70% or less, which should prevent poor dot diffusion. For the base paper it should be possible to achieve good ink absorption with an ash content of 10 per cent by weight.

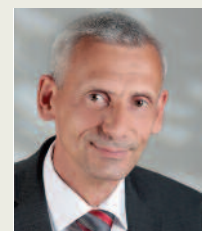
Edited by Frank Lohmann

INSIDER

Print media will remain important initiators

The Ikea catalogue has a global print run of more than 200 million copies, making it one of the world's highest print run products, and some 26.5 million of these head straight to German homes. In its 2013 catalogue the Swedish manufacturer has resorted extensively to augmented reality, using smartphone apps and image recognition to deliver additional digital information and virtual added value. Just two years ago, the online retailer Zalando created a stir in the industry by launching a printed edition of its Zalando magazine and opening up a new offline communication channel for itself and its customers. Its initial print run has now grown to two million copies. Retail experts agree that whilst the catalogue will become less and less important as a means for placing orders it will retain or even boost its role as a catalyst for fixed outlet, mail order and online sales. The lesson media houses and publishers should learn from the above examples is that what is referred to as media convergence is not just relevant for retail

giants. It also applies to small and medium sized retailers, to fixed outlets and to regional and local dealers. Any print service provider offering advice on multi-channel communication based either on its own new media know-how or that of experts it brings in will be able to market printed products with an enhanced attractiveness to its customers. The strengths of the printed media can be combined with the augmented possibilities of the digital world, and online links can be used to compensate for the classic disadvantages of printed products such as declining topicality or a lack of three-dimensionality. Even the use of simple QR codes allows a key part of the customer journey to be reconstructed. Daily deals and smart voucher offers can be promoted through the combination of printed products and online communication via mobile devices. The introduction of augmented reality into such existing media as catalogues, brochures, flyers, posters and mailings offers customers real added value. They discover the service



Joachim Haas (51) occupied management positions in the printing and publishing industries for over 20 years. Since 2010 he has been a consultant and temporary manager focusing on change management and purchasing. He also works as a buying coach in various industries.

or product through the communication channel that best suits their media consumption habits and when and where they like to buy. The task for the print world is to: develop its ability to advise on new media, develop communication concepts with its existing customers that fully exploit the possibilities of augmented reality printed product development specific arguments in favour of printed products—because they exist!

➔ **Reactions to?** insider@print.de

The world's largest beer mat maker optimizes its organization

INTEGRATION ■ August Koehler SE (Oberkirch), the paper manufacturer, has implemented an EFI Monarch MIS at its printing subsidiary, Katz of Weisenbach, and is also using this at Katz's two US facilities. By linking it to the SAP system for finance and accounting it has achieved even greater planning and commercial transparency and the integration circle has now been closed by the adoption of SAP in the US printing plants.



Highly motivated team (l. to r.) Wolfgang Schwaab, Tina Lang, Nadja Scherer, Dieter Wieland and Markus Franz.

By Kurt K. Wolf
Technical author
Deutscher Drucker

■ The Koehler group consists of three German paper mills in Oberkirch, Kehl and Greiz, where it employs some 1800 people. Its origins date back to 1807, when the Karlsruhe businessman Otto Koehler acquired a paper mill at Oberkirch in the Black Forest. Today, this has become the Papierfabrik August Koehler SE (European company) and forms the core of the group.

The Weisenbach printing plant of the Katz Group is Germany's largest producer of beer mats and in 2009 the Katz Group was forced into insolvency—not least because of the drop in beer consumption and the global economic crisis—and it was at that point it was acquired by Koehler. Besides board and beer mat production in Weisenbach the group also has two further production sites in the USA: in Johnson City (Tennessee) and Buffalo (New York), as well as a sales office in the UK. 96 of the 255 employees work in the US and 157 in Weisenbach. Annual output amounts to more than three billion beer mats and over 23,000 tonnes of mechanical pulp board, making the Katz Group not just Germany's but the world's largest manufacturer of beer mats and the market leader.

THE GOAL: FULL INTEGRATION. The activities of the Katz Group are controlled from Weisenbach and by its joint Managing Directors, Kai Furler, who is also Chairman, and Daniel Bitton. Accounting and inventory in Weisenbach are

overseen by SAP business management software, which requires an IT department that knows what it is doing. This department is headed up by Thorsten Daverkausen. Having acquired Katz, the goal was to unify the IT landscape in order to be able to monitor the commercial operations of all the production sites. However, unlike the situation in Weisenbach, Katz in the USA used the EFI Monarch MIS and, specifically, the Monarch Foundation module (formerly Hagen OA) to control the company. Wolfgang Schwaab, head of IT-CC in Oberkirch, therefore turned to EFI Deutschland in Ratingen in order to identify what options there were for linking Monarch in the USA to the German SAP system. The EFI SCS (Software Consulting Service) team, whose job is to adapt and integrate software for EFI customers, quickly worked out a way to link the finance functions of SAP to Monarch in the USA and also managed to connect Monarch to the SAP inventory system.

MONARCH FOR WEISENBACH. The MIS used in Weisenbach alongside SAP was based on an older standard solution. This had already been extended through some in-house developments and further development would be difficult. Daniel Bitton and Wolfgang Schwaab therefore embarked on an urgent search for a solution that would allow them to bring their own MIS up to date.

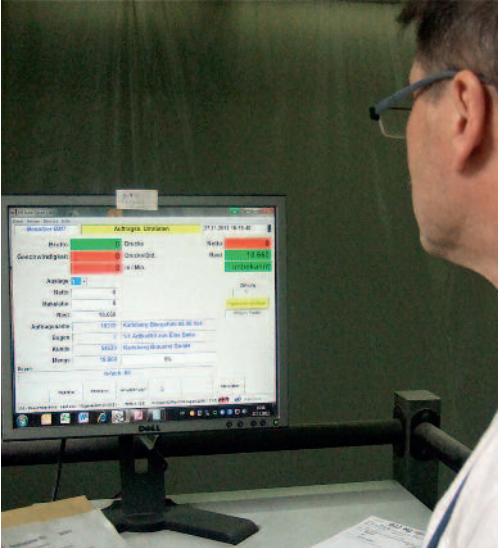
Katz was not facing such problems in the US, since, as mentioned above, it had long been running Monarch software and enjoying the benefit of functions that it believed no other solution

provider was capable of offering. First and foremost amongst these were the openness of the functions and automatic data reporting from the presses and die-cutters. Another plus point was the digital planning board, which provided an overview of production planning in its entirety for all the company's sites and at all times.

It turned out that Monarch also featured numerous functions that were right at the top of the Weisenbach wish list. As a result, in the autumn of 2011, Daniel Bitton and Wolfgang Schwaab decided to check out on the spot how the MIS solution might meet the needs of Weisenbach. Besides the head of IT, senior production staff from Weisenbach travelled to the US to assess the pros and cons of switching software packages. They concluded that the one-off cost of converting to Monarch would quickly be recouped and so, at the end of December 2011, the order was placed with EFI. Without more ado, the team of Bitton and Schwaab was entrusted with organizing things, the project was scheduled to start on 1 April 2012, and the deadline for commissioning was set for 1 November 2012, at which point all parts of the production programs were due to be running real data and have taken over responsibility for operations from the previously used MIS solution. Specifically, this meant the Monarch Foundation digital planning board and Auto-count automatic wastage compensation; whilst the accounting and finance as well as the inventory modules would not be used since these functions were already covered by the SAP system.

Oberkirch in the Renchtal and Weisenbach in the Murgtal are 45 kilometres apart as the crow flies or an hour by car, but this physical separation proved to be no real problem. All of the production planning for Katz in Weisenbach can be carried out and monitored at the head office in Oberkirch and use of the Internet meant that not only could every licensed employee view his or her own job schedule but they could also consult the planning board in its entirety.

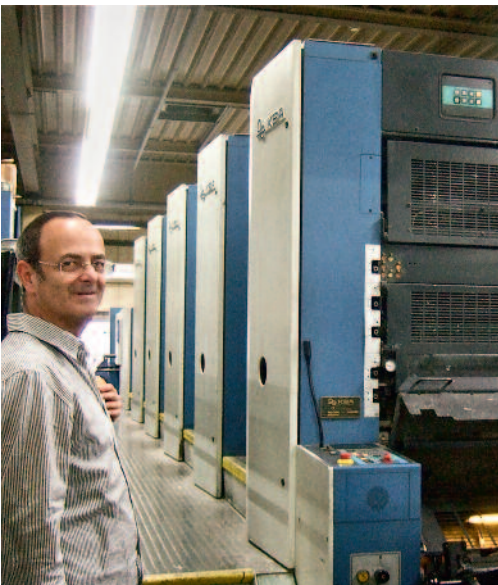
TOTALLY DIGITAL PLANNING. EFI's electronic planning board can be used as an independent tool in each printing plant. Integrated into Monarch it provides planners with an overview of the planning for a job. Timings for data delivery, prepress, board delivery, plate and press planning as well as postpress are shown alongside each other and the fastest or cheapest production path planned.



On opening a new print job the printer finds all the current Autocount data for the job and his press on the job ticket.

Data delivery serves as the starting point for deadline planning. The printer enters the time required for prepress operations (i.e. data checking, page production and proofing) and then determines the earliest time point for platemaking. The planner fixes the time for board delivery with the board production manager and then enters this into the system as the earliest possible start time for printing. The start time for printing is then specified in print planning—either on a specific press or on the next one to become available after this time point.

COMPENSATING FOR WASTE. In Monarch, EFI Autocount accepts the data from the press counter. All the waste copies generated downstream from the press are counted and automatically added to the amount remaining to be printed. The makeready waste can be recorded separately and the same module records all the pro-



Dieter Wieland in front of one of the two large format KBA Rapida 130 presses.

duction times, stores them and displays them in real time. All down times are also recorded.

STARTING GUN FIRED. One month after Monarch went live in Weisenbach Wolfgang Schwaab, Sales and Marketing Director Nadja Scherer, Plant manager Dieter Wieland and Markus Franz (head of the die-cutting and packaging department) were able to report their initial experience and to draw provisional conclusions. During the last two weeks in October all the customer service staff entered the data for their areas of responsibility into the programs. This entailed each sales person reviewing the current data for each customer rather than simply automatically transferring the old data. Nadja Scherer comments, “This meant that we had a lot of work to do and not much time but thanks to the professional efforts of all those involved we now have clean, up to date customer data.” At the same time, the customer service staff prepared all new jobs in Monarch so that by 1 November two weeks of production had been built up in Monarch. “The major challenge was that production and customer traffic had to continue uninterrupted during these weeks”, explains Nadja Scherer. “However, we didn’t have any technical problems with the new MIS and with the switch to Monarch we are now working more professionally and accurately.”

PRECISE PRINT RUNS GUARANTEED. When a printer calls up a new print job he has all the current Autocount data for the job and his press on the job ticket. This eliminates the mistakes that could arise with manual entry. After make-ready, he prints precisely the amount required for postpress and, because the offset presses deliver all the job data and production times to Monarch, the printer no longer has to fill in any time sheet.

This has made Dieter Wieland’s job easier, “As production manager I can see the production data for our presses at any time. I can see which

jobs have been completed and at the same time I can see the status of the jobs that are running.” Markus Franz thinks that the advantages of the system are mainly at the postpress end. “The automatic reporting of job data to Oberkirch means that we have become more flexible and can respond to customer wishes more effectively. Autocount monitoring in particular ensures the production of accurate numbers of beer mats, which saves us a lot of time and money. Another plus point is that we no longer have to enter reports for finished pallets by hand and mail them to Oberkirch.”

TRANSPARENCY IS EVERYTHING. Head office is also pleased that the planning board for Katz’s Wiesensch printer is located in Oberkirch. Vol-



The die-cut beer mats are forwarded to the packaging machine fully automatically.

ker Panther, a planner on the new planning board in Oberkirch, is particularly happy with the dynamic Printflow planning module. “We can see when and where a job is coming from at any time. If changes are made at one stage in production one can already see what the impact will be and when the job will be ready. That means we are able to intervene quickly and in good time.”

SAP FOR THE US PRINTERS. Daniel Bitton and Wolfgang Schwaab are pleased with the successful switch to Monarch. “We have our highly motivated team in Weisenbach to thank for this”, comments Wolfgang Schwaab in looking back over the last year. “It has allowed us to achieve a further step in standardizing the Koehler Group and to successfully complete the technical integration of EFI Monarch into our SAP system”, he adds, whilst playing down the fact that he and his IT department have achieved an exceptional result through their highly developed expertise. It’s something that will be put to the test again in 2013 because, following the switch to Monarch in Weisenbach, SAP will now be integrated into Katz’s two American printing plants.



The automatic die-cutter is also configured for the maximum possible productivity.

Inaccurate milling of the plate gap and its consequences

AN EXPERT REPORTS FROM THE COAL FACE ■ A new four-high unit type newspaper press displayed register deviations during the commissioning phase. Were these quality problems with the printed products the result of press faults?

■ On commencement of the printing trials for a new newspaper press, faults became apparent in its four-colour printing. Specifically, there was a persistent, local distortion in the circumferential colour register, and there was a diagonal displacement of individual colours in the same tower—cyan and magenta, for example—in relation to each other. The latter problem could not be corrected by the printer. Given that the magnitude of the fault was five tenths of a millimetre, this meant that the products were unsaleable, in other words, waste.

THE CIRCUMFERENTIAL REGISTER FAULT.

During an on site inspection a test print was carried out using special register marks for the individual colours positioned around the circumference of the cylinder. This revealed that the automatic registration device was able to successfully dynamically correct the middle of the printed product using the marks in this region. However,

sed from the drive to the operator side. This distortion cannot be compensated for by the printer. The accuracy of the plates had previously been checked by the operator by moving the plates to other printing positions and by mounting new plates at the problem printing positions. The fault persisted at the problem position.

There was no indication of the plate moving during the run. The diagonal fault was therefore generated by the rotation of the cylinder but various different kinds of mechanical fault could be the cause

Mounting of the bridge units at an angle to each other. The consequence of this would be an angling of the web as it ran between the two angled printing positions. However, this was not observed. An examination of the horizontal alignment of the individual cylinders revealed no unusual deviation.

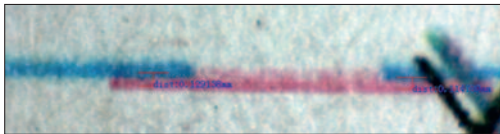


Abb. 1: Operator side, lower,
 $\Delta_{\text{circumference}} = -0,129 \text{ mm}$.

at the head and foot of the same printed product there were register deviations that were well outside the permitted tolerances and these were in different directions. Such a distortion implies a rhythmic relative movement of the cylinders for two colours being printed one after the other.

This fault occurred on all four towers to differing degrees. Prior investigations by the press supplier's technicians had suggested an unusually large radial play in the cylinder bearing bushes on the drive side as a possible cause. As a result, the bearing bushes in tower 1 for cyan and magenta on the front side were exchanged. A further printing trial was carried out as above with improved results that were within the permitted tolerances. In addition, during a manual check it was found that the motors for circumferential register adjustment were only capable of irregular, non-reproducible turning movements. The cause was found to be an axial misalignment between the axis of the adjustment motor and the adjustment device output. This requires mechanical correction by the press manufacturer.

DIAGONAL REGISTER DISTORTION. In tower 1, for example, there was a striking diagonal displacement of 0.5164 mm (fig. 1 and 2) that increa-

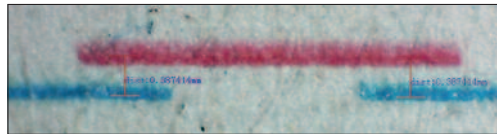


Abb. 2: Drive side, lower
 $\Delta_{\text{circumference}} = 0,3874 \text{ mm}$.

Basic set-up of the cylinders. Excentrics are used to axially align the printing cylinders in relation to each other. By adjusting an eccentric on one

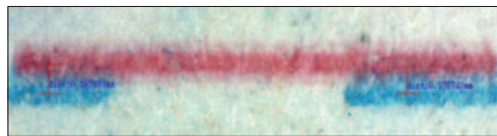


Abb. 3: Operator side, lower,
 $\Delta_{\text{circumference}} = 0,197 \text{ mm}$.

side, the axes of the cylinders can be set at an angle to each other. However, the angle required to generate the measured difference of 0.5 mm also results in clear differences in impression pressure between the cylinders, and this was not observed when the trial prints were assessed technically. Inaccurate cylinder gaps. If the plate gap is not milled parallel to the central axis then a correctly set plate will be mounted at an angle on the cylinder.

In order to confirm this as the cause, a precisely dimensioned 80 mm long and 0.75 mm thick piece of wire was placed in the plate gap on the drive side. The previously used plate was then re-mounted on the same cylinder and fresh

DD-SERIES

PROBLEMS IN GRAPHIC COMPANIES



Horst-Walter Hauer is a publicly appointed and sworn press expert. He runs an engineering and expert's practice for web offset presses in Würzburg.

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www.hauer-engineering.de

prints made. It was found that insertion of the wire largely eliminated the diagonal distortion.

Measurements revealed parallel register from the operator to the drive side within the permitted tolerances. The register distortion for cyan and magenta between the operator and drive sides was 0.011 mm (difference between 0.208 and 0.197, see fig. 3 and 4). This shows that the unacceptably poor quality of the print from this tower was due to the cylinder gap being at an angle to the plate cylinder axis.

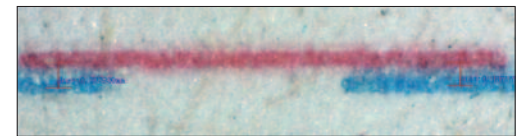


Abb. 4: Drive side, lower,
 $\Delta_{\text{circumference}} = 0,208 \text{ mm}$.

CONSEQUENCES. Using a suitable measurement device the press manufacturer, supplier and operator must first of all precisely measure the cylinder gaps of all the plate cylinders. These are staggered at 90°.

The plate-cylinder combinations from the various towers displaying acceptable manufacturing tolerances might be re-used by removing them and then re-mounting them. Plate cylinders that are not usable would need to be replaced with newly manufactured ones.

Edited by Frank Lohmann

Zero-fault tolerance in printing can only be achieved through 100% inspection

SHEET-FED AND WEB PRINTING ■ Demand for ever higher print quality means that jobs produced without quality control systems are resulting in ever increasing numbers of complaints or the rejection of entire runs. Visual checking of the printed image by the printer is unable to deliver one hundred per cent quality control. This calls for high performance systems of the kind we present here.

■ What was once done by the printer and his trained eye is now generally handled by inspection systems. Given the production speeds that many presses are now capable of it is no longer conceivable for a consistent level of quality to be maintained without technical aids for monitoring process and product quality. The human eye can no longer keep up with increasing web speeds and video web monitoring systems have now taken over the supervisory function.

The speeds that are now possible were unimaginable just a few years ago and these, in combination with greatly reduced change-over times, have contributed to substantial increases in productivity and profitability. When presses, whether sheet-fed or web, offer enhanced performance then this needs to be exploited to the full.

It is here that inspection systems come into their own. They identify and eliminate printing faults, colour deviations, register faults and unscannable bar codes in real time. And they pay for themselves through significantly reduced substrate wastage.

ZERO-FAULT TOLERANCE It is always important for printed matter to be fault-free but this is particularly so when it comes to the production of pharmaceutical packaging inserts and the packaging itself. Here it is not simply important



BST is offering the new Qcenter Spectral inline spectral colour measurement system. This system automatically measures colour on the running press, supplies spectral values and is calibrated to international standards that cover offline measurement devices.

it is a legal requirement. Even the slightest error in the text can result in incorrect dosage or usage instructions. Clearly, only zero-fault tolerance will do here and that this can only be guaranteed by automatic and seamless quality control.

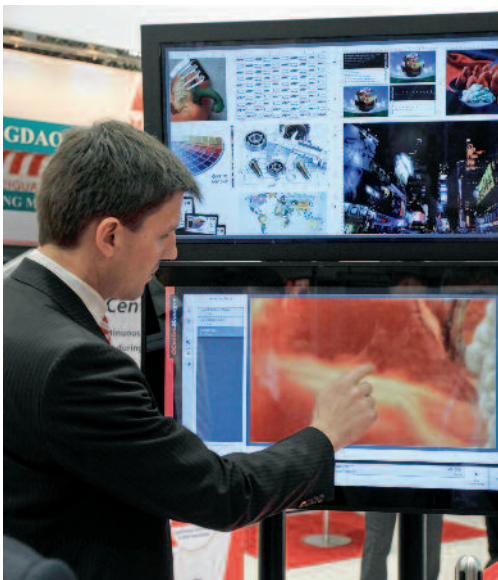
BST INTERNATIONAL is a well-known manufacturer of quality assurance components for the web processing—that is reel-to-reel applications—industry. Based in Bielefeld, the company specializes in web travel control, optical print monitoring systems, register controls, inline colour measurement systems, process automation and solutions for layer thickness and grammage measurement. The focus of its activities lies in product and production assurance systems for the printing, packaging and converting industries (film, rubber and tyre production), as well as solar cell and battery production. Its range extends from individual components and standard applications to print management systems and complex process controls. For web printing applications its portfolio includes: Optical monitoring systems such as web monitoring and 100% inspection systems to help press minders monitor print quality (web speeds of up to 1,000 m/min, web widths of up to 2,500 mm, special solutions possible)

Inline quality measurement systems: The BST Qcenter-Spectral inline colour measurement system offers the possibility of measuring colour inline spectrally for the first time.

Qcenter and Qcenter-Spectral are the latest BST product lines for visual print monitoring and spectral colour measurement. Qcenter offers central quality assurance control and for the first time integrates a range of quality assurance modules configured to customer requirements into a single, centrally controlled platform. It starts with plain visualization of the travelling web and can extend to complex fault detection and spectral colour measurement. The result is a smart, modular tool for managing production monitoring tasks in areas such as flexo and gravure printing.

What is innovative in the Qcenter concept is the use of an intuitive smartphone and tablet style graphic user interface (GUI) to control the hardware and software components. Its touchscreen provides central access to functions such as spectral colour measurement, zoom, selection of image sections, view of the full web width and other quality assurance tasks. This represents a move away from the old concept. The operator no longer needs to switch between systems and controls. Instead, he or she defines the task and the appropriate hardware module is automatically selected. The Power-Scope 4000 and Super Handyscan 4000 optical monitoring systems are particularly suitable for digital printing.

EYE-C from Hamburg offers printed image monitoring systems for the offline and inline inspection of printed products and supplies such systems both to the printing industry and its custo-



Faults detected during print production are displayed on the monitor.

mers; with the latter using them for checking incoming goods. The manufacturer also offers inspection systems for offset and digital printing, as well as inline and offline solutions. Offline inspection provides the means for customers to approve copy and so prevents the systematic presence of faults throughout the entire run. This can take place either at the prepress stage (Profiler Graphic) and/or in the press hall (Profiler 400, Profiler 1600). Eye-C Proof Runner inline monitoring checks every sheet or blank to eliminate individual, random errors as they arise.

Tailored solutions can be supplied for each application from low cost, offline monitoring to full, inline monitoring of every printed product on each press or piece of postpress machinery. Full monitoring of the entire production run can—depending upon the requirements of the final customer—take place both on the press and also during postpress, for example on a folding box gluer. The big advantage of the second approach is that faulty blanks can be ejected immediately. Typical inspection widths can range from 300 mm (digital printing) up to 1600 mm (6 format) and the resolutions range from 100 dpi up to 600 dpi, depending upon what is necessary in order to detect the faults in question.

For inline examinations the company offers the Proof-Runner 450, 550, 760, 1270, Folding Carton and Twinspect. The Profiler 400, 600 DT, 700, 1000 and 1400 systems operate offline. Besides checking the printed image in order to obtain customer approval, Profiler systems (offline) also handle the checking of 1D-, datamatrix and QR code quality and the content and quality of embossed braille. Besides the normal printed image control against the 'OK copy and ongoing production monitoring, Proof-Runner products also offer the option of monitoring other product properties. The bar code option allows variable or fixed bar codes to be read and checked. The serial number option reads printed serial numbers or fonts, whilst the colour monitoring option monitors colour density. Eye-C also offers systems for digital printing. The Variable Data Proof-Runner, for example, monitors 100% variable data from a digital press against the customer PDF in real time and guarantees



Proof-Runner in web offset printing for leaflet production at 330 m/min. (Eye-C).

that each individual printed product is totally correct. The solution can be validated for the pharmaceutical industry and works automatically, simplifying the frequent set up procedures that are typical of low unit numbers on digital presses. Eye-C products have been optimized for ease of operation by user interface experts and the aim is to allow printers to concentrate on the printing, with the inspection systems aiding rather than distracting them.

ISRA VISION of Herten offers comprehensive solutions for the complete inspection of web and sheet-fed printing.

Printstar is an inspection system for web-fed printing (gravure, flexo, and offset printing) and allows real 100% monitoring and documentation of print quality across the full web to ensure fault-free jobs. Employing a scaleable number of cameras, the system is able to recognize all print relevant defects even at very high web speeds. According to the manufacturer, Printstar offers precise fault classification as the basis for analysing causes, trend statistics to help with process improvement, and it makes an important contribution to improving earnings from print production as a whole.

As a comprehensive solution for digital PDF comparison in sheet-fed offset, Proofstar checks printed sheets for defects both before and in parallel with the printing process. The entire printed sheet is scanned at a very high resolution and compared with the PDF file from prepress approved by the customer in order to ensure that production matches the original. Everything is checked—the full printed image, gloss film applications, coating, matt and gloss combined—which is important in packaging printing.

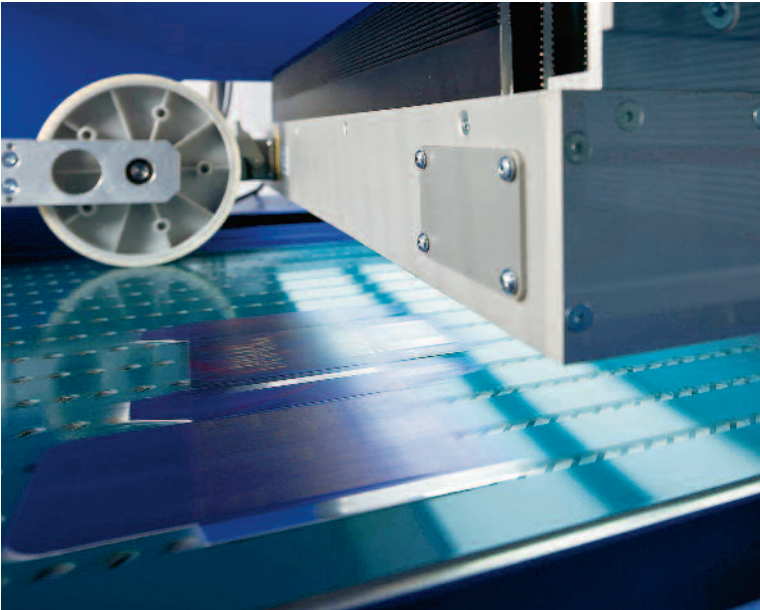


The Proofstar is designed for efficiency and throughput, offering optical sheet inspection for seamless quality control for packaging printing including PDF comparison.

The Blankstar inspection system is configured for use in folding box production and handles the full inspection of die-cut boxes at production speeds of up to 200 m/min. Besides inspection of the printed image, Blankstar offers such features as checking the embossing register, monitoring of colour consistency, inspection of the finishings such as hot stamped foils, as well as printed image verification against the PDF. According to the manufacturer, it guarantees the recognition of typical faults. Tolerance values can be freely defined and adjusted and any folding boxes that exceed these are automatically ejected. The 100% print inspection is based on the compari-



All Profiler models of the Proof-Runner Folding Carton range from Eye-C are suitable for the inspection of die-cut folding box blanks.



No faults remain undetected. Isra Vision's Blankstar reliably spots the smallest faults on folding boxes.

son of a reference image with subsequent printed images. This requires a static printed image without changing content.

Areas with personalized printed images or other changing printed images, such as in digital printing, can, however, be masked out with the aid of quality masks so that the printed image can still be inspected. Complete inspection of the printed image is independent of whether the printing technology being used is inkjet or toner based and it is suitable for high quality digital printing. The manufacturer stresses that its 100% inspection system is flexible enough to be used for various applications.

Printstar offers Advanced Streak Detection (ASD) to counter the doctor blade streaks so feared in gravure printing as an added function to detect streaks and filled in halftones at the earliest possible point. There is an optional Colorwatch module for colour monitoring that checks various areas of the image for colour consistency in real time. Deviations in the printing process are displayed as standardized delta E values.

The Quickproof module undertakes colour PDF verification by comparing the printed image to a reference PDF supplied by the customer in order to check the contents and for prepress exposure errors. Multiple-up copies on the sheet are automatically recognized.

The result is a seamless digital proofing chain for correct print content from prepress to plate to the final production run.

VISION EXPERTS GMBH from Karlsruhe develops inline inspection systems for a variety of applications. Its VE 4000+ line camera inspection systems are widely used in the production of

- pharmaceutical packaging inserts
- pharmaceutical blister foils
- pharmaceutical packaging
- flexible packaging
- metal printing

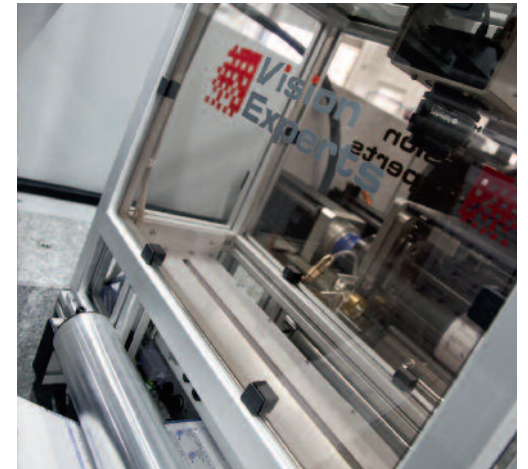
Pharmaceutical packaging and pharmaceutical inserts are particularly significant for both offset and digital printing. In its products Vision

Experts combines the checking of individual prints against the customer PDF with 100% monitoring of every print at full production speed. Both kinds of check are required in order to ensure,

- that the right item is printed, since the PDF comparison ensures versions or languages are not muddled up, and
- that the printing is fault-free, with 100% inspection covering problems such as hickies, spots, damaged material and so on.

In order to reliably detect small but critical faults in the offset printing of packaging inserts (dot versus comma, for example) a resolution of 300 dpi is required for the PDF comparison and at least 150 dpi for ongoing production run checking. All Vision Experts products therefore operate with high resolution, high speed line cameras with up to 12,000 pixels per printed side for greyscale images and 8,000 pixels in colour. The leaflet version of the product is capable of double-sided inspection across a width of 1050 mm and speeds of 365 m/min or 18,000 sheets per hour. For digital printing the resolution needs to be even higher but the running speeds of the

presses are lower. Vision Experts and its OEM partners integrate these inspection systems into all kinds of web and sheet-fed presses from a range of manufacturers. Over 300 systems are now operating around the world and a third of these are being used for pharmaceutical packaging. In the pharmaceutical sector it is not just the detection of all critical errors that is crucial but also the documentation of all the results. Consequently, the product generates a quality certificate either in the form of a database or a PDF that lists all the faults with images, statistics and operator inter-



Inspection camera from Vision Express in use on a graphic finishing line.

vention. This can be accessed and archived via the network.

Serial faults are bundled together and presented and acknowledgements can be demanded for all faults. The system provides a scaled reaction to faults, from colour graded optical signals to warning sounds and then unit shut downs.

Faulty prints can also be marked if it is not possible to eject copies immediately. Inspection set up is largely automated and requires just a few clicks from the user.

Compiled and edited by Frank Lohmann



The VE 4000+ Digital is an optional component for the Heidelberg CSAT GmbH Linoprint L inkjet printing system for self-adhesive labels. Labels are printed and numbered sequentially in a single pass. PDF checks, inspection and code reading are carried out simultaneously.

Rima-System and Müller Martini: “We understand each other at every level”

ROTARY DELIVERIES ■ Printers specializing in newspaper and magazine production are competing in a market that is under enormous price pressure and they therefore look to the machinery manufacturers for effective postpress solutions. Deutscher Drucker has been talking to the management of the Dusseldorf manufacturer Rima-System about what this means.

■ **Around a year and a half ago you announced that you were cooperating with the Swiss manufacturer Müller Martini. How has this cooperation turned out in practice?**

Dr. Axel Tübke: The cooperation has built up really well. We understand each other at every level—human, technical, commercial. It was perhaps a bit more difficult to begin with for the sales people because we had long been competitors; but the problems were quickly overcome. Firstly, because it soon became obvious that cooperating is better than fighting and, secondly, because the market responded very positively to the cooperation; quickly bringing the first successes.

to well in excess of 50 per cent. Two large and very demanding systems have been ordered from Müller Martini and Rima-System acting together. Müller Martini, on its own, would not have won the orders and neither would we, on our own.

Dr. Axel Tübke: In Europe the best joint win has been the rotary deliveries behind the two 80-page Lithoman presses at Kraft & Schlötels (WKS), which is undoubtedly the largest and most demanding postpress installation of 2013. For this project Müller Martini supplied newly developed chain conveyors and Rima-System is responsible for the trimming, stacking, palletizing and the logistics software. As you can see, the symbiosis is really working.



The senior management team at Rima-System: Dr Axel Tübke (right) and Klaus Kalthoff talk to DD. The 3D layout is that of the new postpress lines for the two 80-page Lithoman presses at Kraft & Schlötels, which are being jointly installed by Müller Martini and Rima-System.

What are the demands that you as a manufacturer are currently being confronted with by your customers?

Kalthoff: In essence, the key demand from our customers is to be able to produce more efficiently. So far as mass market insert production is concerned, we need to be able to supply high quality machines are prices the market can bear. This is a market driven by price. If one turns to other markets such as books, for example, which is suffering from a relatively severe decline, the added value of the systems and their ability to do such things as supply niche products plays a greater role alongside price.

Could you give us an example?

Kalthoff: Here's one up-to-the-minute example. We're supplying an automatic log stacker for a rotary book press that can form logs that are between 20 and 25 cm long. This hasn't been done before. This log stacker will also communicate directly with the press. We're talking about part runs of between 500 and 5,000 copies, with the bulk of jobs running to 1,000 copies at most.

Do you also offer machines for mass market insert production, where the price pressure is severe? Do you have low budget, mid budget and high budget variants in your portfolio?

Kalthoff: It's really quite simple. The manufacturing for our entire product portfolio is premium quality and we use first class suppliers. This commitment to quality is also what made us interesting to Müller Martini. We don't do cheap machines in the negative sense.

Dr Tübke: That being said, we do have machines with a lower performance range for simpler applications. They might, for example, have fewer features, scaled down performance or be set up manually.

But it's automation that is particularly important for most users ...

Dr. Tübke: Definitely, producing more efficiently is very attractive, but the requirements may differ to a certain extent. These range from highly automated new systems down to simple individual machines and the upgrading of existing equipment. To give a couple of quick examples of how requirements differ. Rima-System will supply the postpress for four of the five commercial presses ordered at Drupa and the equipment will include seven robots to automate the entire palletizing process.

In contrast, there is a growing business for upgrading existing installations, as is happening at Bruckmann, where there is a major project to re-configure and fully automate three press deliveries. This means that, depending upon the project, we have to rapidly switch between being a supplier of new systems and being almost an engineering practice. At the end of the day, however, in both cases it is a question of understanding requirements, offering customers individually tailored advice, and implementing the right solution for the printer, whether we are talking about complete systems, individual machines or retrofits.

Questions: Gerd Bergmann/Martina Reinhardt



If one looks at the book market then the added value of a system plays a bigger role alongside the price.

Klaus Kalthoff

How did you agree on a new product portfolio?

Klaus Kalthoff: When we looked at the machines and the sales things were really obvious. We assessed the products technically and commercially and took a look at a world map to see who was better positioned where. As a result, in the classic postpress arena we have mainly gone with machines from Rima-System whereas for chain conveyors and Print Roll we have adopted Müller Martini technology.

How have you divided the market up geographically?

Kalthoff: By adopting the same 'who's best' principle. A country or region is handled by whichever of us was better established in it. In China, for example, Müller Martini has become our general agent, and the same is true for Argentina and Brazil. Since we started working with Müller Martini our market share in Brazil has risen from just five per cent

The young like books

BOOKS RULE ■ The young don't just sit around in front of their computers and playstations or idle away their time on their mobiles. Far from it. Many consumer publications and web sites for the young are stuffed with insider info in which rock and film stars talk about their favourite books.



The actor Daniel Radcliffe doesn't just read Harry Potter books.

By Bernhard Niemela
Editor-in-Chief
Deutscher Drucker

■ starflash.de reports that the Harry Potter star Daniel Radcliffe has five favourite books: "The Old Man and the Sea", by Ernest Hemingway, "Germinal", by Emile Zola, "Fear and Loathing in Las Vegas", by Hunter S. Thompson and "The Master and Margarita", by Mikhail Bulgakov. With the last of these being Radcliffe's, "absolute favourite book of all time." Of the Harry Potter books, he has a clear favourite, "Harry Potter and the Philosopher's Stone". The film star is well aware that the series of famous original books, "has given me everything that I have and will have."

His Harry Potter co-star, Emma Watson, reveals that she loves books that are tied up with her memories. In first place she named a classic, "The Little Prince". The fact that she also listed, "The Perks of Being a Wallflower", as one of her favourite books is perhaps not just down to the literary quality of the text. Emma Watson played a leading role in the film version of the Stephen Chbosky novel.

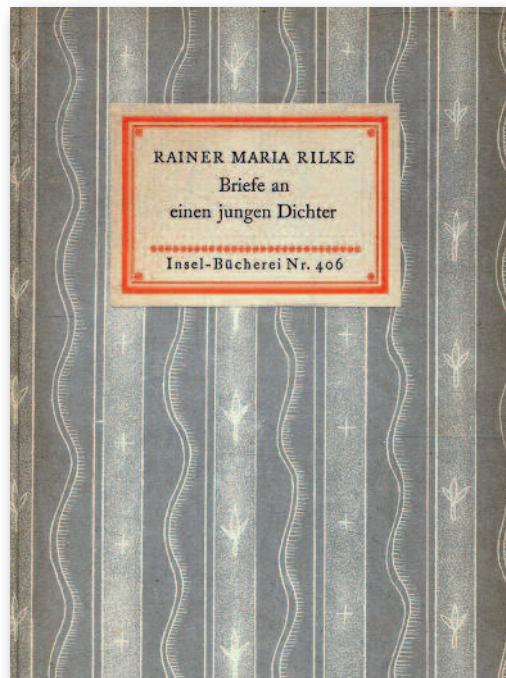
TWILIGHT STAR LOVES JOHN STEINBECK. Kristen Stewart, who starred in the film versions of the Twilight novels is another avid reader and has several favourite books. One is the American clas-

sic, "On the Road", by Jack Kerouac, and she also loves another couple of standards by John Steinbeck, "East of Eden" and, "Cannery Row".

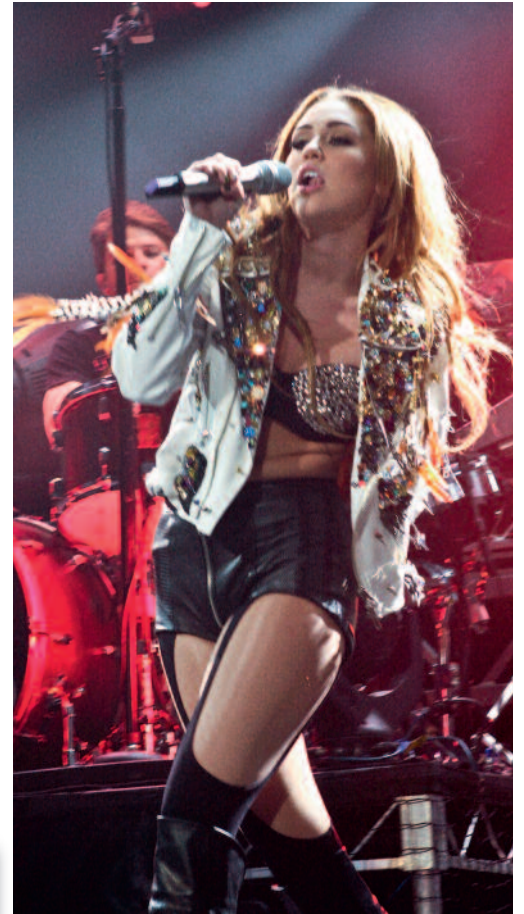
The favourite book of Les Misérables star Anne Hathaway is another classic, "The Secret Garden", by Frances Hodgson Burnett. "I still have a weakness for gardens and I always look for a closed door in them", Hathaway told the National. There's no doubt that young actors enjoy classic authors. According to Forbes, Keira Knightley is one of the best paid actresses in Hollywood and her favourite reads are, "Pride and Prejudice", by Jane Austen and, "War and Peace", by Leo Tolstoy.

However, it's not just in Hollywood that the reading of books is the thing. Stefanie Bock, star of ARD's series, "Verbotene Liebe" [Forbidden Love], thinks that, "reading is the best way of relaxing." She thinks David Safier's novels, "Mieses Karma" [Lousy Karma] and, "Jesus liebt mich" [Jesus Loves Me], are magnificent and she describes them as, "extremely funny and excitingly written", so that, "you can easily plunge into another world that you can create according to your own imagination."

In an interview with RP Online, one of Germany's most successful young songwriters, Phillip Poisel, named a recent book, "The Ashes of My Mother", an autobiographical account of an Irish childhood, as his favourite book, whilst his favou-



Who would have thought it? Lady Gaga's favourite book is, "Letters to a Young Poet", by Rainer Maria Rilke.



Miley Cyrus likes, "Identical", by Ellen Hopkins.

rite author is Sandor Marai, "He uses words wonderfully to paint moods", according to Poisel.

One of America's biggest superstars for young people, the actress and singer Miley Cyrus (High School Musical, Hannah Montana) names several favourites, including the literary classic, "The Catcher in the Rye", by J.D. Salinger, and she praised, "Identical", by Ellen Hopkins, as, "so moving yet so wonderfully written".

LADY GAGA HAS A RILKE TATTOO. And now comes a surprise for lovers of German literature, Lady Gaga's absolute favourite book is, "Letters to a Young Poet", by Rainer Maria Rilke, and she even has a quote from it tattooed on her arm in German, "Prüfen Sie, ob er in der tiefsten Stelle Ihres Herzens seine Wurzeln ausstreckt, gestehen Sie sich ein, ob Sie sterben müssten, wenn es Ihnen versagt würde, zu schreiben. Dieses vor allem: Fragen Sie sich in der stillsten Stunde Ihrer Nacht: Muss ich schreiben?" What better illustration of the value of books?!

Are companies where the employee has a stake more successful?

INCENTIVE SCHEMES AS A MANAGEMENT CONCEPT ■ Profit sharing or shares – which is best way of financially incentivizing employees? Can one increase employee motivation, productivity or innovation by these means? Can intangible employee incentives—perhaps in conjunction with financial ones—be used as an active ingredient in fault reduction? Industry experts talk about their experiences.

By Petra Ebeling
Editor
Deutscher Drucker

■ For many companies, profit sharing or shares for employees form an important element in modern HR and company management. “However these are models that are found relatively infrequently in printing industry companies”, reports Holger Busch, the chief executive of the Bavarian printing and media federation.

“In the first place this is associated with the industry’s structure. Such schemes tend to be found in larger companies and especially in public companies. Since most printers are private companies and are often also family run it is not uncommon for there to be a fear of employees gaining an insight into the incomes of their owners”, continues Busch. “The argument that they increase employee retention is also of lesser significance given the predominantly long periods of employment and low



Used effectively, employee participation can have not just a financial impact but can contribute to increased company efficiency and workforce motivation, provided all are committed to working openly with each other.



Employees must have confidence in the company if they are to take a stake in it.

Stefan Aumüller, Managing Director of Aumüller Druck, on the subject of employee shareholdings.

employee turnover. If the aim is for employees to share in the success of the company then a bonus distribution is often turned to as a more flexible tool”, adds Busch.

However, even the printing industry does have some financial incentive schemes for employees that work well and one needs to be very clear about their pros and cons. It is for each company to decide which model could best be tailored to its particular situation.

MUTUAL TRUST. Aumüller Druck GmbH & Co. KG of Regensburg has adopted a shareholding model, which has operated successfully for many years. Going back 30 years, even then its boss, Georg Aumüller, viewed his staff not simply as workers but sought to make them fellow thinkers and strivers. What’s more, the financial crisis at that time meant that pay rises would be unlikely and the figures for a company pension no longer made sense. Therefore the company set out to help its employees to generate wealth through employee share ownership. The first shares were issued to employees in 1981, who act as silent partners so far as the world at large is concerned. In this form of employee shareholding, the partners are neither entered in the register of companies nor referred to in the company name.

Today, each one of the 125 permanently employed staff at Aumüller Druck can acquire share certificates in the company worth 1500 euro per year. This sum includes 250 euro con-

tributed by the company itself. “This benefits the employees in two ways. Firstly, they receive a 250 euro contribution to their shares and, secondly, depending upon company profits, they receive interest that is more attractive than that offered by the current capital market”, explains Stefan Aumüller, one of the current managing directors. However, just as the certificates share in any profit, so they share in losses. When it comes to determining the share of losses, there is a graduated scale that is structured in the same way



Stefan Aumüller

as the share of profits. However, the liability of the silent partners is limited to their stake—they are not liable for any further call. The silent partners are also better informed than staff who do not have shares. The balance sheet is explain-

ned to them and they receive information about future projects, investments and so on.

“Overall, this employee shareholding scheme has achieved precisely what my father set out to do 30 years ago: to improve the way that we work together, more open and fairer dealings, greater commonness of purpose and increased employee identification with the company”, comments Aumüller. It is at times when interest rates are low that employees are particularly keen on shareholding options. “Obviously, the employees must have confidence in the company if they are to take a stake in it”, explains Aumüller.

PROMOTING MOTIVATION. The Druckstudio group of Düsseldorf, which has 75 employees, has implemented a model that combines profit sharing and employee shareholding. “Back in 2005 we began to systematically address the question of employee motivation and shareholding and since 2007 we have shared not only the company’s growth with our employees but also a percentage of the profits”, reports Dirk Puslat, one of the managing directors. Employee shareholdings in Druckstudio is part of a company culture that is focused on people. It is designed to lead to improved capability, to bind employees to the company and to ensure their contentment. “Employee stakes mean that we can also gather suggestions and ideas through a kind of knowledge database. Their know-how substantially contributes to the innovative capabilities of the company”, adds Dirk Puslat.

The Druckstudio group uses profit sharing as a means of motivating its employees, binding them to the company and spurring them on to perform even more effectively. “For potential employees, such forms of employee incentivization are one factor that helps to persuade them to choose the company. The model is also a clear signal that we invest in our staff over the long term. In general terms, we are convinced that our employee shareholding and profit sharing schemes have a positive impact on the productivity, innovative power and profitability of the company. As a result of them, the company’s management is obliged to keep the staff well informed, to involve them in the decision making processes and to promote motivation”, continues Puslat.

COST CONSCIOUS THINKING. Rucksaldruck of Berlin pursues a different profit sharing model. The economic downturn in 2002 forced the company’s management to leave the national wage agreement. In order to save the company, the employees were asked to give up their annual bonus. As a result of the rethink that went on at the time one of the managing directors, Giselher Ruks developed the R(Rucksal)-Dax [pun on a German stock market index]. The R-

Dax allows the 32 employees to track the economic situation of the company on a monthly basis. Since then, in good years the agreed profit sharing has brought them annual bonuses of up to a third of a month’s pay.

“This form of profit sharing for the employees undoubtedly has any amount of positive effects. The employees are more aware that if what they print goes in the skip then this will have an impact of the company’s earnings and therefore the annual bonus. Above all, there is a highly collective attitude, because things affect all the company’s employees: management, job planners, media designers, printers and mail-room workers. Everybody, therefore, is keen to prevent mistakes, to save materials and to think cost consciously”, explains a convinced Managing Director Werner Schmidt.



Werner Schmidt

EXPLOITING EMPLOYEE POTENTIAL. Daniela Krawinkel, who works as a management consultant at Print Xmedia Consult Nord-West GmbH, has dealt with the question of intangible employee incentives over a number of years. In this DD interview she explains how faults can be reduced by involving the workers.

DD: Mrs Krawinkel, you argue that employee incentives can be an active element in fault reduction.

Krawinkel: The approach needs to be integrated. The goal is to convey entrepreneurial thinking and action at all levels of a company and in doing so to actively involve staff in the project and so exploit the potential of the employees for optimizing workflows and reducing the sources of faults.

Does a financial incentive for employees in the company form the foundation for this kind of fault reduction?

A financial incentive for employees can result from the described process but it’s not a must. This is a conceivable incentive for the workforce to jointly improve processes so that measurable successes result.

What specifically do you recommend to printing industry SMEs?

In the worst case scenario, deadline pressure on orders may lead to faults being hushed up and then having to be put right if the customer spots them. Furthermore, employees may have no awareness of the associated costs or there may be a negative fault culture in the company—a culture of worry. This can be changed with the right tools, resulting in a fault culture that stresses preventing faults rather than putting them right. There should be a three-pronged approach to fault reduction.

Could you explain this in more detail?

The first involves the tools that you can use in the company to actively encourage employees to unco-

ver faults, to analyse their origins and to help improve processes so that they are avoided in future. These tools can be individually adapted and expanded to suit a company’s structure and size. One can use existing tools and tailor these to the company. The second line—quality control—involves visualizing the changes and making them, and therefore the result, measurable. Key figures are defined that can be used to check the effectiveness of the measures that are adopted. This has the advantage of further tying the management into the active employee participation system and it helps to convince the employees of the sense and purpose of the measures. The third prong is to provide ways of conveying entrepreneurial thinking and acting to the employees and to direct the



Daniela Krawinkel

company along the path to success through improved staff management. It serves to increase identification with the company and to raise employee satisfaction and loyalty. It involves goal systems and agreements as well as options for paying employees by results or for sharing success with them through shareholdings.

So, is it necessary to specifically adapt these approaches to the company in question?

Essentially, each approach can be pursued by itself. However, in order to implement the principle of continuous improvement as a corporate philosophy it is a good idea to consider all three approaches. There are a whole host of instruments and tools in all three areas. Consequently, at the start of a project one has to analyse which instruments are right for which company. During the course of a project one might also find that an instrument turns out to be not so suitable and one has to modify it or change it for another one.

What advantages are there for the company from this approach to fault reduction?

Besides reducing the costs of faults and improved process and production stability, it also promotes cross-department knowledge transfer. Staff are made aware of the costs of faults and motivated through optimized employee management.

What do the staff get from it?

Staff can actively contribute to improving workflows and, ultimately, to the processes that each employee carries out every day at his or her workplace. If one pursues the third prong of employee participation then employees can decide for themselves how they can share in and influence company success.

What future do you see for employee participation and fault reduction?

At times of tighter margins and high pressure on performance, lean, fault-free production has an impact on company success and job security. Employee participation and the implementation of entrepreneurial thinking increases the identification of employees with the firm. All are singing from the same hymn sheet.