

HOTTER THAN USUAL

Prof. Dr. Dr. Franz Durst presents the new coating system from FMP-Technology. **Page 5** 



PUSH OR PULL?

Frank Siegel talks about new thinking and different approaches for digital printing. **Page 11** 



### A FUTURE FOR GRAVURE

James Siever answers questions about the European Rotogravue Association. Page 15

## Deutscher Drucker

INTERNATIONAL EDITION · FOR HIGH QUALITY PRINTERS WORLDWIDE

March 2013

## Win them for print

The social media are changing society and companies. Exchanges between potential applicants and companies via social networks are becoming more and more important and the printing industry is no exception. **See Page 16** 

### Ad specials Advertising that sticks



■ B&K Offsetdruck of Ottersweier specializes in the production of magazine covers and the company is constantly employing striking and unusual advertising formats. Flaps, windows, die-cutting and folds are all possible. Memostick technology from WRH Marketing that applies a printed adhesive label to the cover or internally is the latest innovation from B&K. Page 3

### European printers Slovenia's finest



■ Germany's printers are major exporters and international print service providers are active in the German market. The company Gorenjski Tisk Storitve of Slovenia specializes in illustrated books and generates more than half of its turnover from exports.

Imprint Page 17

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# There's more to print than many think

PRINT IS FASCINATING. As the winning products in the industry's PrintStars competition have demonstrated yet again. Behind each of the victorious products there are managers responsible for their creation and production. They and their committed teams contribute the 'brainware', the technical expertise and often the sheer doggedness needed to bring great products to market despite the prolonged reworking that sometimes goes on. Above all, these 'doers' understand that printers, agencies and

publishers need to explain even more clearly to their customers just what print can do in the media mix and then actively come up with ideas about how this role can be brought to life.



**EXPLOITING POTENTIAL.** How-

ever, on the broader front, courage still seems to be lacking. Erika Gassner, owner of the creative agency Megapac Print, observes that there is often a blind adherence to handed down workflows and excessive belief in print. "But print must change, must finally Previously print's primacy was unchallenged but the creative potential of the medium has not been fully exploited. In today's modern media mix it is vital that it is.

accept its role as an attractive tactile, visual or olfactory lead medium." Gassner says what many of her committed fellow 'doers' feel. "Previously print's primacy was unchallenged but the creative potential of the medium has not been fully exploited." In today's modern media mix it is vital that it is. The industry is still too technically focused and fixated on speed and volume. Often it is simply defensive and deliberately blocks anything new. Erika Gassner fears that this is partly due to the lack of explanation already referred to and urges that the industry be braver so that the monotony of print is finally broken open. Megapac itself has, for example, a whole series of dummies for special forms of printed advertising in its drawers that despite their highly creative potential have not yet made it to market. A cause for concern. Sooner or later, print advertising will find its new place, "but I ask myself whether things will move so slowly that too many will fall by the wayside in the mean time?" She's not alone in asking this question....

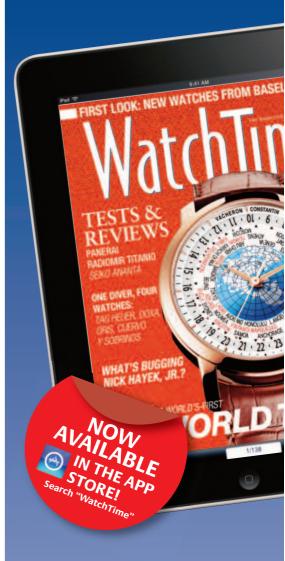


Yours

Mi Dael Solie

Michael Schüle

→ Reactions to: m.schuele@print.de



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## High flying charts

**WEB FINISHING** • Despite every possible technical instrument, the International Civil Aviation Organization (ICAO) still continues to specify aeronautical charts. Since these need to be constantly updated, Jeppesen – a US subsidiary of Boeing – has now switched to digital printing for the production of such charts; and this means that the postpress needs to adapt accordingly.

### By Martina Reinhardt

Editor, Post Press Deutscher Drucker

■ Anybody who has ever flown has probably seen the briefcases that pilots always carry on to the plane. These brief cases do not contain the pilot's midday snack or toothbrush but - besides various service and procedural instructions – aeronautical charts for the region in which the pilot is flying. A brief case with contents to match the type of plane is also to be found on every aircraft and holds manuals and dozens of folded aeronautical charts covering the regions where this type of plane normally flies.

Despite all the on board technology, these aeronautical charts are an important tool for route planning and navigation during the flight and the map projection and the key contents are specified by ICAO. One of the best known producers of such pilot aids is the US company Jeppesen. Based in Denver, it is a subsidiary of the US aircraft manufacturer Boeing, which is based in Seattle, Washington state.

**IMMEDIATE UPDATING.** Jeppesen is not simply responsible for the printing of these pilot manuals and charts but also for updating the print data. In order to carry this out the airlines send the brief cases to Jeppesen every few weeks and anything from an individual sheet to several segments or charts may be swapped.

Obviously, the updating needs to be done as rapidly as possible and ideally within days or even hours. This is where digital printing comes into its own and this is why Jeppesen moved production from offset to digital printing several years ago. Initially, it was just used for the manuals,



Aeronautical charts are reel-to-reel printed by an HP T300 reel-fed digital press at Jeppesen.

which, at the time, were printed on several HP Indigo W7200s.Beginning in May of last year, the aeronautical charts started to be digitally printed on an HP T300 web fed digital press. This is an inkjet press with a maximum web width of 770 mm (30 inch) and a maximum speed of 122 m/min. in 4/4 colour mode. The aeronautical charts are reel-to-reel printed on 45 g/m<sup>2</sup> paper.

**POSTPRESS.** Postpress for the charts is handled by two MBO digital production lines into which the printed reels are fed by a UW-52/770 unwinder and then sheeted to size by a SVC775C sheeter. The web is initially trimmed to left and right by the longitudinal slitter in the infeed of the SVC775C and then two sheeting cylinders cut the sheet to length and chip out 4 to 50 mm of paper.

This section is cut out by the chip out cylinder at 6 o'clock and then blasted away at 11 o'clock and removed by an external suction device. The chip out section carries the necessary printing and cutting marks that are not required on the finished chart and that therefore need to be removed.

A further requirement Jeppesen imposed on MBO was that only perfect impressions should be forwarded for finishing. To ensure this, the manufacturer developed the EM-770 ejector module, which is positioned between the sheeter and the folder. This module is capable of both automatic and manual ejection of print waste and it can also separate out sheets for inspection at full production whenever necessary.

The spectrum of unfolded chart sizes ranges 432 x 889 to 584 x 1397 mm but for their final format all are folded to the American 5" x 8 1/2" (127 x 216 mm) format. The charts are initially zigzag folded and then folded once or twice at right angles. Given the paper grammage of just 45 g/m2 and the need for as many as ten zigzag folds, MBO relies exclusively on folders from its Herzog & Heymann subsidiary.

**SAVINGS POSSIBLE.** Print runs for the charts can range from around 50 copies up to a few thousand. By grouping all the charts with the same web width together and printing them one after another Jeppesen is really able to exploit the advantages of digital printing. The fact that the forme lengths differ poses no real difficulty during the printing because by leaving a few metres of



## Special as standard

**MAGAZINE COVERS** • One of Germany's most innovative sheet-fed and web offset printers is based in Ottersweier, Baden. Numerous well-known publishers turn to it for their magazine covers and in all cases the emphasis is on the special that is to the fore. What B&K has specialized in is offering its customers the unusual. Whether it be flaps, windows, die-cutting, folding or the very latest Memosticks, anything is possible.

#### **By Michael Scherhag** *Technical author Deutscher Drucker*

■ Based not far from Baden-Baden, B&K Offset-druck GmbH specializes in the production of high impact printed products and the company has made quite a name for itself as a supplier of ad specials to numerous German and international publishers. As a rule, ad specials are loose or bound inserts, but, increasingly, customers are also looking for new forms of cover advertising. Such forms



We put a lot of thought into ensuring that binderies do not have problems handling our products.

Jörn Kalbhenn, Managing Director, B&K Offsetdruck

include flaps, sliding elements or popups in the magazine, special cover finishes, integrated samples or vouchers. Not only has B&K mastered such specialities, it is able to produce most of them inline. As a result, it can guarantee customers rapid delivery of time critical jobs. To do so, it has a range of special machines that can be flexibly configured to meet specific requirements.



The latest offering from B&K Offsetdruck is the possibility of applying Memosticks to magazine covers. This form of advertising is becoming increasingly popular with publishers.

The latest offering is Memostick technology from WRH Marketing AG of Switzerland, which allows Memosticks to be placed in any position on the outside or within a magazine.

**SUCCESS STORY.** The Baden-based company was founded in 1969 by Jochen Kalbhenn as a straightforward sheet-fed commercial printer and it has been built up to its present size by Jochen and his son Jörn. Having moved into web offset printing in the 90s, when it had a workforce of around 80, its subsequent success shows just how right its owners were.

Today B&K Offsetdruck employs 210 people and is one of Germany's outstanding web and sheet-fed offset printers, as well as being one known for its innovative capability when it comes

to realizing unusual customer requirements. It has an extensive array of equipment in order to be able to do so. For printing per se it has three 16-page web offset presses and four B1 sheet-fed offset presses with four, five, eight and ten press units. In addition, there are units for UV coating and a range of special machines. At the postpress end there are 15 folders, four saddle-stitchers, four cutting systems, an inkjet feeder and, once again, a series of special machines that are generally capable of implementing special customer requirements both quickly and with a high level of quality.

One of the key elements in its range of equipment is a complex finishing system from the US manufacturer Scheffer. This allows virtually all finishing processes to be handled inline. Whether



Left: The Scheffer finishing system is a key component for the production of unusual products. This is capable of die-cutting, perforating, gluing, lining or plough folding in a single pass.

Right: The system for tiping on cards and gimmicks fulfils numerous customer requirements.





Whether it be a fold out heart with advertising or an Advent calendar – B&K makes it possible.

it be die-cutting, perforating, gluing, lining, plough folding and much more, this system plays a vital role in making possible the range of variants that B&K Offsetdruck's customers prize.

**EVERYTHING PUBLISHERS REQUIRE.** Its customers are well-known publishers of short, medium and long run magazines, manufacturers in the motor vehicle and sanitation industries or from retail. B&K operates two production facilities in Ottersweier in order to serve these customers, producing runs from a few thousand copies up to ones of several million. Magazines and covers account for about a third of the order volume. Other products include bound inserts, wraps, booklets and anything else a publisher might need in order to put their ideas for unusual advertising into effect.

Sheet-fed is primarily used for jobs requiring top quality, spot colours and coating, whilst web offset is used for long run jobs in up to five



Magazines with lots of spot colours or cut out flaps pose no problem.

colours. Managing Director Jörn Kalbhenn qualifies the above by adding, "however, we also have a whole series of special units for our web offset presses, which make them extremely flexible. We produce even the most complex products inline on the web presses and are therefore able to offer rapid, high quality products at an attractive price. With cover production in particular it often comes down to minutes and we are equipped for this." Another unique capability of B&K is that it can web offset print paper grammages of up to 300 g/m².

**MEMOSTICKS ARE THE COMING THING.** The latest new offering – the option to apply Memosticks to magazine covers that has already been mentioned – is a response to increased demand from publishers.

B&K Managing Director Jörn Kahlbhenn reports that, "After we recognized the trend to Memosticks we began to look for suitable solutions. Around the end of 2011 we were point-



Besides unusual covers the company produces numerous other specials.

ed in the direction of WRH Marketing AG of Switzerland, since this company could produce a multitude of individual solutions for the integration of Memostick products into magazine production. Besides the printed Memosticks WRH normally also sells the machines that allow them to be applied. In our case we did not need this since we had our own Pagomat for label application. Naturally, this presented a challenge but WRH responded very flexibly.

14 days after the first tests we were able to apply post-its and labels without any problems and after a run-up period and the time needed to sell the service it was about two months ago that we undertook the first 'genuine' production job with a print run in the millions for a well-known magazine. As a result of WRH Marketing's outstanding and reliable cooperation we are now able to build on this experience and offer our publishing customers new product variants. There is already substantial demand and we are well equipped to meet it."

### Continued from page 2

unprinted web in between changes they are automatically recognized by the sheeter and the process is halted. Further adjustments to a different width and/or length as well as type of fold are then carried out manually by the operator. Since Jeppesen has two of these 30 inch production lines it generally schedules certain widths for the first of the lines and the remainder for the other one – provided deadlines permit.

Digital printing allows Jeppesen to save a great deal of waste paper. In the past tens of thousands of aeronautical charts were printed and stored in readiness for orders that might or might not be received, If a revision subsequently became necessary all these charts would have to be disposed of. Digital printing and print-on-demand now allows a more efficient approach to stock holding. Not only does the HP/MBO solution reduce the costs and the production time usually associated with aeronautical charts, it is also able to match the very high quality of offset printing on the same paper.



With up to ten folds, a specially designed MBO folder combined with an EM770 ejector module is required.

## Just a bit hotter than usual

**GLUE APPLICATION TECHNOLOGY** • The new coating system from FMP Technology is designed to be a jack of all trades. It uses a wide slot nozzle that allows any kind of coating to be applied to widely differing substrates. In the case of the graphics and packaging industry, it is the very precise application of hotmelts that should be of particular interest.

### By Martina Reinhardt

Editor, Post Press Deutscher Drucker

■ The prospect held out by Prof. Franz Durst of FMP Technology of Erlangen sounds promising. A single, universally usable wide slot noz-



Prof. Dr. Dr. Franz Durst

zle application system for a highly diverse array of hotmelt systems. But Durst goes even further. "We're not just talking about hotmelts, thermoplastic materials or solvent-based coatings, FMP wide slot nozzles can be used for all kinds of coatings." Slot nozzle coating technology has proven itself with low viscosity media at low temperatures. However, it can

also be used with coatings that are applied as high viscosity melts. In fact, a hotmelt coating does not differ fundamentally from other types



The production width of FMP Technology's coating systems can span up to 2,620 mm.

hotmelt coating comments Durst.

The from other types why is this so interesting? To date, it has a comment of the comments of

Why is this so interesting? To date, it has essentially been the case that commercially available hotmelt nozzle systems have been produced for a specific application or need to be laboriously adjusted each time in order to apply a uniform coating. This presented a challenge. Could a way be found of applying of hotmelt adhesives without having to carry out such adjustments?

of coating. "It's just a bit hotter than usual",

**NEW TYPE OF COATING NOZZLE.** According to Prof. Durst, the solution lies in a new kind of coating nozzle developed by FMP Technology of Erlangen. The company was spun off around six years ago from the department of flow mechanics at the University of Erlangen with the aim of taking scientific findings and developing them into market-ready products.

Given this background, the coating nozzle developed by FMP Technology is based on the flow properties of the hotmelt adhesive that is to be applied and the composition of the substrate being coated, which, so far as the graphics industry is concerned, means paper, film or board. Using measurements of dynamic viscosity, surface tension and wetting, FMP Technology has modelled the hotmelt coating process and it claims that the system can be adjusted so precisely on the basis of these values that optimal hotmelt coatings can be achieved within a few centimetres. The feasi-

bility analysis that takes place at the outset of such a process is, according to Prof. Durst, the only practical approach in contrast to the trial and error that is otherwise the norm.

**COMPLETE SYSTEM.** The fact that FMP Technology's wide slot nozzles can be used for a very wide range of applications is primarily due to the patented diffusers housed within the nozzles. According to the manufacturer, the special distribution principle ensures absolute precision in the transverse distribution of the coating without having to make any modifications to the hardware.

The complete FMP Technology hotmelt coating system consists of a heated hotmelt nozzle, an intelligent melting and supply unit with integrated filter unit as well as heated supply hoses. According to the manufacturer, such a system can be integrated quickly and simply into the production unit in question, such as, for example, a perfect binder. It is controlled by FMP Technology's own Coating Window Suite software, which models coating windows in order to set the machine parameters without, "time-consuming and costly trials", as Prof. Durst explains. A further advantage is its ability to allow tolerances of +/- 1%, +/- 3% or +/- 5% to be selected

The company plans to live up to the claims made for its new developments and it promises users their money back if it fails to do so.

### Adhesive symposium

■ This article contains extracts from the talk given by Prof. Durst at the Munich adhesive and finishing symposium on the subject of, "Universal wide slot nozzles for uniform coating with a very wide range of hotmelt and pressure sensitive adhesives in layer thicknesses of from 1 to 1000 µm".

The three day symposium was held at the end of October 2012 for the 37th time and addressed a whole range of questions relating to pressure-sensitive adhesives including dispersions, solvent-based products, reactive systems or Hot Melt Pressure Sensitive Adhesives (HMPSA). New generations of dispersion adhesives for application by high-speed nozzles were presented. One morning session was devoted to environmental aspects of adhesive technology.

The symposium is staged every year by the Münchener Klebstoff- und Veredelungs Symposium MKVS GbR.

# Details make the difference - demanding books with an individual touch

**SLOVENIAN PRINTER** • Over recent years Germany's printers have managed to steadily increase their level of exports but international printers are also serving the German market. At the 2012 Frankfurt Book Fair there were numerous printers from both Germany and elsewhere that caught the eye, and one of these was a company from Slovenia that offers a number of specialities.

### By Frank Lohmann

Editor, Printing & Finishing Deutscher Drucker

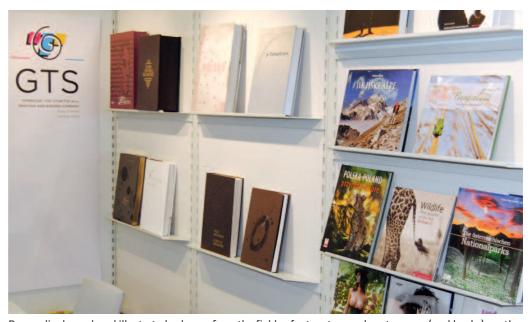
■ There are plenty of well-produced books in Germany but not everything that passes over the bookshop counter or is ordered online has been made in Germany. Just as German printers are selling their services abroad, so full service printers from all over the world are making their in some cases impressive capabilities available in Germany.

Gorenjski Tisk Storitve D.O.O. (GTS) is one such full service provider. Hailing from south-eastern Europe, it is based in Kranj, not far from Ljubljana, the capital of Slovenia, where it enjoys a picturesque view of the foothills of the Carinthian Alps. The company aims to offer high quality combined with loving attention to detail and this was readily apparent at the 2012 Frankfurt Book Fair. In the words of the Managing Director Dr Andrej Krope, "It's not for nothing that our motto, 'The difference lies in the detail', pervades every aspect of the company's corporate identity."

**EXPORT ORIENTED.** The company has a history dating back over more than 100 years and can call on a great deal of experience, well qualified staff, together with modern press and post-



Splendid illustrated volumes are produced in various different languages. Exports take 65% of sales, whilst Slovenia accounts for 35%.



Demandingly produced illustrated volumes from the fields of art, nature and gastronomy (cookbooks) are the speciality of Gorenjski Tisk Storitve.

press equipment. "We serve both domestic and foreign markets and generate more than half of our turnover from exports", reports Andrej Krope. And the aim is to increase this. To be precise, overall turnover in 2011 was €11 million and 65% is currently generated from exports and 35% from domestic sales.

GTS focuses on demanding illustrated books from areas such as:

- art, photography
- nature, travel
- gastronomy

**PRIZES AND AWARDS.** GTS has more than 200 customers in over 20 countries and its 130 staff produce in excess of 5 million books per annum. It has won more awards than any other Slovenian book printer and over the last ten years the company has won an award from the Slovenian Chamber of Commerce for the 'Highest quality in book production' eight times.

In February 2010 the Paris Cookbook Fair was held in Paris and on the evening before the opening Gourmand International presented the fifteenth Gourmand World Cookbook Awards. Entrants from 136 countries competed in various categories for the title of 'Best in the World' for their services in 2009. GTS won first prize in

the Best Cookbook Printer in the World category. Gorenjski Tisk won the award for the quality of its print and postpress work on a cookbook published by a restaurant in Ljubljana. "Numerous international prizes and awards tell their



Dr Andrej Krope, Managing Director of Gorenjski Tisk Storitve based in Kranj not far from Ljubljana, focuses on quality and attention to detail in book production.







Left: Brilliance Profile. A special combination of FM screening and high pigmentation inks creates a fascinating printed result in which the images display enhanced detail compared with conventionally printed images. The gamut and colour depth are also greater and the colours appear purer and glossier. Centre and right: Luxury editions of the Bible form another part of the job spectrum.

own story and confirm our expertise. We are especially proud of the Gourmand Best Cookbook Printer in the World award", comments Krope.

**THE LATEST TECHNOLOGY.** For GTS to achieve what it has requires modern technology and that is precisely what is to be found in Kranj. Graphic production from prepress to printing and then finishing is all carried out under one roof, which allows total quality control, from receipt of print files to delivery of the finished product.

Two CtP lines are available for platemaking. Printing is carried out in accordance with Fogra standards 39, 43, 44 and 47 using Staccato screening (proofing: Kodak/Veris digital printing). The aim is to achieve ProcessStandard Offset certification in 2013.

The conventional printing department is equipped with 8 and 5 colour B1 offset presses and the presses are capable of inline dispersion coating and inline UV coating, as well as being

fitted with the latest facilities such as print control systems (Image Control, for example). All the presses are connected with the CIP3 system via the CtP. Printing is carried out on a variety of substrates from low grammage paper up to heavy board. One particular speciality is printing with hybrid inks on metallized papers and board.

**BRILLIANCE PROFILE.** When printing demanding jobs the in-house developed brilliance profile is used. "This is a unique combination of FM screening and high pigmentation inks. The result is a fascinating printed product in which the images display enhanced detail compared with conventionally composed images. Their colour gamut and colour depth are also greater than in the CMYK colour space, coming close to RGB, and the effect of the colours is purer and they have a natural gloss", claims Andrej Krope.

It is a claim that can be checked. GTS has published a catalogue that allows the viewer to experience the capabilities of the Slovenian printer for

him- or herself. The second part of the catalogue takes the form of a sample book in which two photographs apiece from the fields of gastronomy, nature and art are printed using the Brilliance Profile on five different grades of paper. They can then be compared with the same motifs printed using a conventional profile (Fogra 39).

**FINISHING.** At the postpress end of the chain, GTS offers folding, gathering, thread stitching case making, blind embossing and hot foil stamping, wire-stitching, binding – including the use of PUR adhesives – integral binding and hardcover binding.

For special finishing effects GTS's printers also use high pigmentation, high gloss and hybrid inks, film laminated boards etc. Customers are offered complete production of the most demanding of projects from two principal manufacturing programmes.

- Printed advertising for the promotion of companies or products and services (catalogues, brochures, annual reports, magazines, illustrated matter, folded sheets, posters, calendars, folders etc., bound, wire bound or wire stitched).
- Harcover books (hardcover with book case in standard materials and also modern and demanding materials or leather with blind embossing or hot foil stamping with foils in different colours), softcovers (glued with PUR adhesives) and integral binding.

The Kranj-based company is constantly striving to increase quality whilst reducing harmful impacts on the environment. Accordingly, GTS is ISO 9001, ISO 14001 and FSC COC (COC = Chain of Custody: FSC product certification ensuring that process and distribution companies mark FSC certified materials with the right label and do not mix these with other, unpermitted materials).

GTS is expanding in European markets in particular and in Germany its sales grew by 14% between 2010 and 2011. Andrej Krope believes that there is further potential for growth in Austria and Switzerland as well as in Germany. To tap into this he is looking for additional sales staff and is prepared to consider temporary placements or experienced retirees.



Production of books, catalogues and printed advertising at GTS.

# Achieving energy saving effects – without compromising performance

**SHEET-FED OFFSET** • Sheet-fed offset printing is an energy intensive process and in order to achieve technically and economically viable solutions the press manufacturers have to develop components that are as energy efficient as possible and the waste heat that is generated needs to be rationally exploited in the press hall. Which units or components offer the most potential for energy savings and can deliver a noticeable reduction in power consumption?

#### By Frank Lohmann

Editor, Printing & Finishing Deutscher Drucker

■ It is known from practical experience that the energy consumption of a sheet-fed press is heavily dependent on the job structure. Besides general measures to optimize energy usage, from which every user will benefit, there are additional solutions that although they make sense in terms of primary energy will only pay off for certain print applications because of the investment that they entail.

In order to determine the potential for the rational exploitation of the energy produced by the machines in the form of waste heat it is necessary to carry out precise, time consuming measurements. This is just what the press manufacturer Koenig & Bauer AG (KBA) has done and it has used the resulting body of data as the basis for various technical solutions offered as standard or as an option to increase the energy efficiency of its Rapida presses.

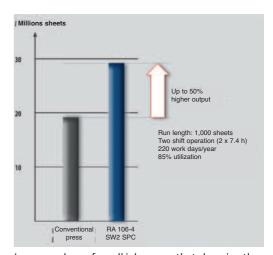
**INCREASING EFFICIENCY.** The Rapida drive concept features a four quadrant drive to increase the overall degree of efficiency by feeding the braking energy back into the supply network. As a result, power consumption is cut, especially during change-overs. The press manufacturer prefers direct belt drive for the first impression cylinder.

**DIRECT DRIVES.** KBA highlights the fact that the Drivetronic feeder has no mechanical gears, longitudinal shafts or other energy guzzling parts that are subject to wear. Instead, it uses direct, highly efficient drives. Proportional valves are connected to an air cabinet that is controlled to ensure that only the amount of blast and suction actually required is delivered to the sheet separator. This reduces the energy required for compressing air or creating a vacuum whilst individual fans in the suction belt section ensure energy efficient sheet transport.

**SHEET FEED.** Unlike mechanical or pneumatic systems, the Drivetronic SIS sidelay-free feeder that is now available as an option in all format classes requires no suction and therefore also dispenses with energy intensive vacuum production.

In describing its concept for the cylinder bearings KBA claims that low play and smooth roller bearings mean that the impression cylinders and transfer drums can be turned without any great effort using a hand crank. This kind of bearing technology significantly reduces the press's energy consumption. The Venturi effect is used for sheet guidance in order to reduce the requirement for blown air and spoilers on the transfer drums reduce under currents.

**ROLLERS.** Fewer rollers in the inking unit increase the speed of response and at the same



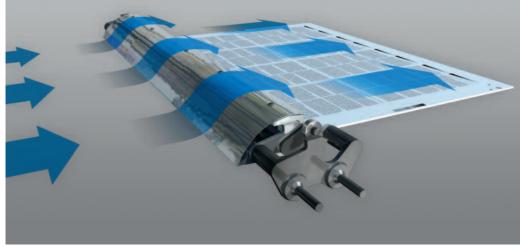
Large numbers of small jobs mean that changing the plates on a press becomes a time consuming process. 'Flying Job Change' combined with the Drivetronic SPC (simultaneous plate change) can result in a 50% increase in printed sheet output.

time reduce the friction and energy losses of the single-train ink feed. The same is true for the three roller inking unit. The ability to uncouple ink units that aren't required is another energy saving option and, according to KBA, this alone allows around 3kW per ink unit to be cut from overall energy consumption.

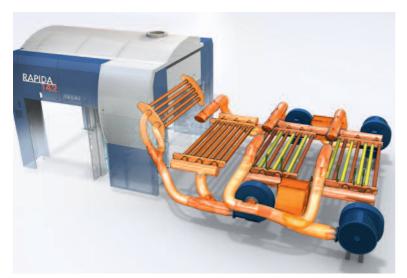
KBA claims that this in turn means that printers can help both the environment and their bank balances by dispensing with expensive roller pastes and the time needed to apply them and wash them off.

**DELIVERY.** The Airtronic delivery features a smaller number of blast tubes and therefore requires less blast air. Energy efficient Venturi nozzles allow stable floating sheet guidance. Aerodynamic spoilers on the gripper carriages optimize the energy efficiency of the air flows. Reduced air resistance and improved sheet guidance automatically mean lower air consumption.

**DRYER.** The latest generation of in-house developed drying systems substantially increase coating energy efficiency. The KBA Varidry-Blue IR and hot air dryer uses heat recovery to save up to 50% of the energy consumed by classic systems. KBA also claims that the energy efficiency of the new Varidry UV dryers has been improved



Aerodynamic air flow spoilers on the delivery gripper carriages increase energy efficiency.





Left: Reuse of the drying air means that the power consumption of the Varidry Blue infrared/hot air dryer is significantly lower than that of a conventional infrared/hot air dryer, according to KBA. Right: Optimized reflector geometry and improved radiator heat management increase drying energy efficiency.

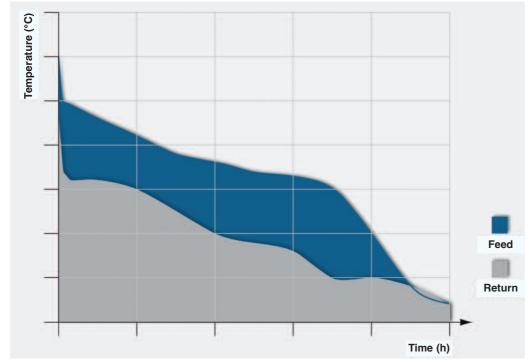
through better reflector geometry and improved radiator heat management. This has allowed the results of UV irradiation to be significantly improved, whilst the use of electronic chokes saves energy in stand-by mode.

**TEMPERATURE CONTROL CIRCUIT.** Free cooling in the temperature control circuit is another measure that can be exploited. When exterior temperatures are low enough the return cooling circuit is directly coupled to the temperature control circuit. How much use is made of the system varies depending upon installation location and the waste heat load. Test measurements have found that free cooling could be used efficiently for 1,000 hours or 11.5% of the year.

Assuming a combination cooling device running for 220 days per year in a two-shift opera-

tion and an average of 6 kW in the temperature control circuit then 20.9 MWh from the temperature control circuit needs to be cooled by the cooling circuit per year. 1,000 hours of free cooling per year reduces power consumption to 6.45 MWh, all other parameters remaining unchanged. If free cooling is available for 3,000 operating hours then it is possible to save €850/year.

**AIR SUPPLY.** An energy efficient air cabinet should always be water-cooled. Through the appropriate use of various different types of compressor it is possible to reduce energy consumption for the air supply by up to 24 MWh per year compared with other air cabinets. This is the equivalent of a 28% saving on electricity consumption.



Temperature cycle in a combination cooling device (long-term measurement).

**EXPLOITING WASTE HEAT.** There is considerable potential for exploiting the waste heat from the press and water-cooled ancillary devices recovered via the cooling return circuit for uses such as heating. However, a number of parameters need to be clarified first. If the printing plant uses economical high temperature heating there is a problem. The feed temperature of the cooling circuit averages 40 °C whereas the feed temperature of a high temperature heating system is usually around 70 °C to 80 °C and the return is around 50 °C to 60 °C.

This means that it is not possible to use the heat from the cooling return circuit directly, since it would actually cool the heating circuit. One possible way of getting around this is to use a heat pump to raise the temperature from 40 °C to the heating level.

When considering the economic viability of such an installation it is necessary to take into account the gas for heating that is substituted, the mismatches in demand (heating is only used in the winter months, presses do not print constantly) and the energy consumed by the pumps. Under the most favourable circumstances one might expect an ROI of 15 years, which throws into question the viability of such an installation.

If, however, the printing plant is housed in a new building using low temperature heating, then it is possible to make sensible use of the waste heat from the cooling return circuit to reduce energy consumption by the heating system or to heat warehouses and similar facilities at relatively little expense.

**EXHAUST AIR FROM THE IR DRYER.** A portion of the energy contained in the exhaust air from the dryer can be extracted by a heat exchanger to directly pre-heat the air being fed into the dryer. Once again, this reduces power consumption.

Further major savings can be achieved if a heat pump is used to cool the exhaust air from the dryer and to heat the incoming air further. Depending upon the type of press, this can deliver energy savings of 50 MWh per year.

## Personalization: the joker

**PRINT CONGRESS 2012** • At Drupa 2012 digital printing took centre stage alongside packaging printing. Offset printing, however, continues to score in crucial areas. In the 'Drupa Duel: digital and offset printing – strengths, weaknesses and overlaps', DD editors Judith Grajewski (digital printing) and Gerd Bergmann (offset printing) championed the two processes.

#### By Martina Reinhardt

Editor, Post Press Deutscher Drucker

■ Offset is the clear winner in terms of performance. The most productive offset presses can produce over 4.5 million A4 pages per hour across a web width of 2860 mm at a web speed of 970



m/min, whereas even the fastest digital press, the Impika iPrint Extreme, limps along at just 227,000 A4 pages. Offset is the clear winner here.

When it comes to quality it initially looks as if Bergmann will be able to extend his lead. Holding register? No problem for offset but in digital printing, on the other hand, white streaks and problems with cut and fold register crop up now and then. Colour stability also continues to be a problem for digital printing.

But Grajewski hits back, "What about ink fade in offset?" and also, "When it comes to colour space, toner-based digital printing knocks spots off offset." In offset the pigments penetrate into the paper and as a result the colours lose their brilliance. In toner printing the particles remain on the paper surface and the colours appear more brilliant. Bergmann is stumped by one argument in particular: in practical trials even experts can-



not immediately tell the difference between digital and offset prints. One point apiece.

When it comes to print format Bergmann scores a classic own goal. Granted the formats of a KBA Rapida 206 or a 96-page web from Goss or



Two of DD's editors, Judith Grajewski and Gerd Bergmann, exchanged telling arguments.

Manroland Web make the B2 digital presses shown at Drupa seem 'cute'; but then Grajewski points out that there are large format printers with a maximum printing width of 5.10 metres.

Digital		Offset
2	•	3

However, it's a bit like comparing chalk and cheese. Once again, one point each.

Grajewski emerges the victor when it comes to substrate versatility: films, textiles, wood, glass, ceramics can all be inkjet printed without any problem, which means that digital printing can

Digital		Offset
3	•	3

be used over a broad range of applications. When it comes to paper, the spectrum has widened significantly.

Offset takes the finishing point without any trouble. Whilst a press such as the Kodak Nexpress can convincingly simulate many effects with its fifth unit it can't match the finishing options of offset. Bergmann lists integrated cold

Digital		Offset
3	:	4

foiling, UV coating, die-cutting units, drip-off coating and gloss and matt film combinations to name just some.

The argument goes the same way over spot colours. Yes, digital printing systems now usual-

ly have six or seven colours including light CMYK colours but they can still only reproduce Pantone colours approximately.

The duel appears to have been decided. A gap of two points is just too big to be bridged. Then Grajewski plays a joker: personalization and individualization are the magic words. These are only possible with digital printing. "How many offset printed personal photobooks are there?", asks Grajewski.

And even though Bergmann immediately points the finger at a sore point, "out of all the current digital printing applications ten per cent at most are personalized", the two adversaries agree that in many companies it is no longer a case of either/or but of both/and. It is for the audience or rather for the individual company to decide which technology suits its particular requirements.

## Push or pull?

PRINT CONGRESS 2012 • What premedia and AV skills will traditional printers require if they want to use digital printing in order to develop into communication service providers? The talk given to the Printcongress 2012 in Stuttgart by Frank Siegel addressed this question. Technical aspects, which are frequently the subject of heated discussion, are one thing; but digital printing requires different approaches and also a rethinking of many of the workflow subprocesses. SMEs also usually lack specialist IT, database and web technology know-how. This is undoubtedly one reason why variable data printing is growing so sluggishly.

### By Michael Schüle

Editor,

Deutscher Drucker

■ "Digital printing means exploiting synergies between IT (databases, servers, networks), the web (webshops, online processes, cloud) and print (digital printing systems)." The increasing



Frank Siegel

extent to which digital printing is reduced to short runs is, for Frank Siegel, the Managing Director of Printdata GmbH (Eggenstein), at best a half truth, because. after all, the Internet printers keep on driving down the break even point for such jobs in offset. What is really unique about the 'more flexible medium' of digital printing is its ability to produce single copy runs or time and place independent on-demand

production. But this has to be matched by fast prices, fast production (involving not just printing but a specialized inline postpress as well), fast logistics and fast commercial handling. "Here, offset estimating, production workflows and MIS links often turn out to be too complex and slow", according to Siegel. What is needed are lean (hybrid) workflow solutions and what is especially important is a good, automated print controller that includes RIP, workflow, colour management, imposition and hotfolder management with matching software in order to avoid creating bottlenecks in print data generation of all things. In addition, one often finds that is better to follow a separate, second path for digital print estimating/invoicing (ideally, moving away from process-oriented towards item-based estimating).

TWO STRATEGIES. Frank Siegel then graphically expounded the strategic difference between variable data printing and web-based printing the push/pull strategies illustrated on the right.

Technically, variable data printing requires a client- or server-based solution with software for variable data printing (standalone or plug-in; the more complex the VDP concept, the more demanding the software). A VDP capable print controller is a must, additional solutions for image personalization, QR codes or augmented reality

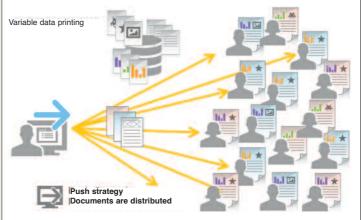
depend on the concept and are optional. Additional investments in enveloping, gluing, fulfilment will arise but what is crucial is specialist know-how. Siegel, "A multi-dimensional understanding is required in design development. Premedia staff need to be able to handle dynamic documents, must know what variables are and must be able to understand Boolean algebraic if-then queries. Everybody needs to be at home with databases (collating, cleaning, and also mailing optimization), whilst production must obviously be able to handle sorted printed matter. In addition, if one is automating processes via the Internet then web know-how is vitally important (eg. HTML, PHP, Javascript, SMS)."

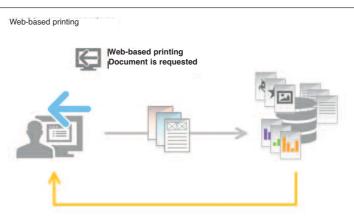
Web-based printing, on the other hand, requires a web-to-print platform for prepress and a shop system (which are not necessarily the same thing), web-based process management and automated commercial processes. A rendering engine for PDF production is also necessary, system interfaces need to be created and choice needs to be made about hosting or one's own IT infrastructure with sufficient network bandwidth. To an even greater extent than with variable data printing, this segment demands web expertise from those involved

KNOW-HOW IS OFTEN STILL LACKING... "In future, anyone working in digital printing will have to pay great attention to staying abreast of web technology", cautioned Frank Siegel. This is fundamental whether one is dealing with webto-print or mobile publishing. Whether one actually enters the latter as a field of business and as a supplier of services that are personalized but not printed is something that each individual must decide for him- or herself. However, it is important to use the web at least as a sales channel and to slim down and optimize processes.

The push distribution strategy that is typical of variable data printing (top diagram): master templates with variable fields or layers are filled from databases in accordance with certain design rules and sent to the digital printing system as a text/image optimized data stream. The variable documents (i.e. single copy print runs) are printed, finished and distributed to the customers using the address database

In web-based printing (cloud printing) documents are pulled by the customer triggering printing with the press of a button, after he or she has filled the variable parts of the master template held





# Efficient grey balance correction in the printing process

**PATENTS AND REGISTERED DESIGNS** • The invention presented here relates to a process for the grey balance correction of a printing process. Waste results from the use of papers that differ from the materials previously specified in the printing conditions of the colour profile. Undesired colour variations can also arise. The goal is therefore to reduce the wastage rate and to avoid colour variations.

■ The grey balance is defined as a set of tone values for chromatic process colours such as cyan, magenta, yellow (CMY) that result in an achromatic printed colour when viewed under specified conditions. The printing conditions specified for this are laid down in process standards such ProcessStandard Offset or the Media Standard Print of the BVDM (German Printing and Media Federation). These in turn are based on the guidelines of the corresponding ISO standard such as, for example, ISO 12647-2: 2004. The viewing conditions are also standardized by ISO standards.

**GREY BALANCE.** The conventional offset printing process requires printing formes (printing plates). When producing offset plates further test formes or appropriate process control strips with different colour patches are laid down at the edges of the plates being used or between the individual pages in order to check the inking and the register. As is already known and as the patent application explains.

In an earlier patent publication a grey balance patch for example is applied in which a 40% coverage halftone black (K) patch is directly aligned with a chromatic patch formed by the other colours (CMY). This, in accordance with a colour profile, should exhibit the same grey colour value as the 40% K patch. If differences between the grey value of the chromatic grey

patch and the black patch are detected visually then a more precise densitometric measurement of further solid patches is recommended. Such a grey balance patch can also be measured colorimetrically. If it is found here that the actual values do not match the aim values the ink keys are adjusted and the layer thickness of the relevant process colours are increased or reduced. However, this changes both the solid colourings of the corresponding process colours and also the corresponding tonal value increases and therefore the overall superimposed printing behaviour.

It is only possible to use such a change in layer thickness within certain limits into order to alter the actual values so that they match the aim values since it changes all colour values at the same time. It may, for example, be desirable to adjust the grey balance within a specific tonal range but the undesired result may be that a new colour cast appears in another tonal range. In addition, it can be especially problematic if papers and inks are used for printing that nominally correspond to the materials for the specified printing condition but which in fact display different colour tones.

**INVENTION.** The task of the invention therefore is to present a correction process that allows the regularly recurring waste to be reduced and to avoid the undesired colour variations. How can

DD SERIES
IDEAS FOR TOMORROW'S
TECHNOLOGY

We take a look at patent and registered design activity in our industry.
Today: Heidelberger Druckmaschinen AG – Patent application, document No.
DE102011015306A1

this be achieved? A grey balance is specified through initial colour values of a reference printing process. The initial colours chosen for this either lie on the grey axis of the colour space of the reference printing process or at least in its vicinity.

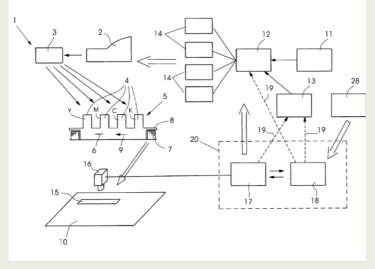
Alternatively, the colour values can be defined through the guidelines for initial tonal values of the chromatic process colours of the reference printing process. To do so, tonal value combinations of the chromatic inks, CMY for example, are specified that result in an approximately grey printed product. Initial colour values that are assigned to these specified initial tonal values then describe a colour gradation at least in the vicinity of the grey axis. The initial colour values that are related to the initial tonal values can then be determined in accordance with a colour profile of the reference printing process or via characterization data for the printing process itself. The colour values can be stated as Lab colour values.

**PRINTING SYSTEM.** The task of the invention is then satisfied by a printing system that features a grey balance correction device with at least one calculation unit for determining the tonal values of the chromatic process colours of the target printing process, as is further explained. This calculation unit works in such a way that it can determine the tonal values in accordance with a corrected grey balance.

In a further development the printing system also features a spectral measurement device for the spectral measurement of the measurement patches of a test element. This allows the actual spectral values to be determined.

get printing system. The printing system is described through the printing process conditions. These include properties such as screening process, screen angle, ruling, platesetter, inks and sheets used. All the components of the printing process condition have an impact on the colour displayed by the printed

The diagram shows a tar-



Edited by Frank Lohmann

## What can happen if cylinder damage is not insured

**AN EXPERT REPORTS FOM THE COAL FACE** In the insurance claim made by a printer on its press breakdown insurance it was stated that there was corrosion damage on several plate cylinders of the sheet-fed press. The first expert commissioned by the insurers found that the consumables used by the printer were responsible for the visible corrosion damage.

■ The insurer, however, had concerns. It did not believe the findings of the first expert opinion that the damage could have resulted from items such as damping solution additives, alcohol substitutes and, possibly, the wash-up agents; and it commissioned our expert to drawn up a second expert opinion.



Figure 1: Pustules on the cylinder surface.

Our expert was commissioned to examine the report of the first expert in detail and then to agree a course of further action with the insurer.

**INITIAL OPINION.** The first expert opinion refers to visible corrosion products on the plate cylinder surfaces exhibiting typical colour changes. From this the expert concluded that



Figure 2: Pustule-like structure (50 x magnification) containing corrosion products.

only the chemicals used during operation could be responsible. However, the first expert did not analyse the chemicals being used and compare the findings with the limits permitted by the press manufacturer in order to determine their potential to cause corrosion.

In his expert opinion he simply came to the unsubstantiated conclusion that the traces of corrosion that were present were caused by the chemicals being used.

Our expert, however, was aware that during cylinder production a coating of thermally sprayed stainless steel is applied. This coating of sprayed metal has a chrome content of around 16%, which means that this sprayed coating can never corrode. The explanations and reasoning of the first expert opinion are incorrect. **CHEMICALS.**To begin with, samples of all the chemicals used by the printer during operations were obtained and investigated in the laboratory for their corrosive behaviour. Nothing stood out.

All the relevant values such as mass loss, pitting and electrochemical behaviour ay within the permitted values. This confirmed that the traces of corrosion on the cylinder surfaces could never have been caused by the chemicals used during operations.

**ON SITE INSPECTION.** During the on site inspections our expert detected numerous traces of corrosion on the cylinder gaps edges (fig. 1). These were magnified (figure 2) with the aid of a digital microscope and the rounded, pustule-like projections are clearly apparent. Red products are visible at the centres of these pustules. These are corrosion products, as further laboratory investigations confirmed.

**LABORATORY INVESTIGATIONS.** Samples were taken from the coating of a heavily damaged cylinder and these were investigated in the laboratory with the aid of a scanning electron microscope. At this point it was noted that the holes left by sample removal could be closed up with the aid of pad galvanizing and the customer was able to resume production.

Investigations of numerous cross sections of the samples that had been taken revealed that the pustules and corrosion products they contain originated from the underlying cylinder body, which is made from a low alloy, nonstainless steel. The thermally sprayed layer of

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### PROBLEMS FROM GRAPHICS COMPANIES



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metal is not thick enough, which means that the chemicals used during operation are constantly being forced through it and gradually corrode the underlying cylinder body. The corrosion products formed there force the metal covering layer up and penetrate through the open pores of this covering layer to reach the surface of the cylinder coating.

There is considerable damage to the cylinders and the cylinders need to be exchanged. Permanent pad galvanized repairs are not possible. Pustules in the coating will constantly recur because the thermally sprayed coating was not correctly applied by the manufacturer in accordance with the state of current technology. The causes of this corrosion damage are production or design flaws on the part of the press manufacturer.

**INSURANCE.** Damage due to design or manufacturing flaws on the part of the press manufacturer are not covered under the terms of the insurance conditions and so are not insured for. The insurers will not pay for this damage and will also declare other, similar damage to be uninsured. It was recommended that the printer seek redress from the press manufacturer.

Edited by Frank Lohmann

# Publishing gravure: how does one respond to a shrinking market?

**EUROPEAN ROTOGRAVURE ASSOCIATION** • "Challenging figures, but no drama", is how ERA Vice President Hans-Wolfgang Blumschein (Flint Group) described the latest figures for paper consumption at the ERA's annual conference in Turin. Demand for magazine and catalogue papers from Europe's gravure printers was down by 12 per cent in the first half of 2012, which was a much steeper fall than registered by their offset peers (minus 4%).

### **By Gerd Bergmann** *Editor-in-Chief Deutscher Drucker*

■ However, in his conference introduction Blumschein also added that the shift in the market opened up opportunities, "if we grasp things properly." The conference, held in the capital of Piedmont – the 'kingdom of gravure' (as Dr Giancarlo Cerutti styled it in the invitation), was intended to highlight these opportunities.

The fact that consolidation in publishing gravure is proceeding apace was reflected in attendance at the conference. There were just under 100 attendees and Germany, still Europe's leading gravure nation, had a mere four representatives from printing companies in the form of the head of Prinovis, Dr Bertram Stausberg, the Burda managers Egon Weimer and Christophe Barth, and the Cologne gravure printer Hans-Jürgen Scheiwe. The largest contingent came from suppliers such as Cerutti, Burgo, Flint, Heliograph, GMG and EAE.

#### INCREASED FURNITURE SHOP TRAFFIC.

Gravure, however, continues to play an important role in Europe. Measured in terms of paper demand, the ratio between web offset and gravure in the magazine and catalogue market is around 2:1, with some 6.5 million tonnes being supplied

for offset and 3.5 million tonnes for gravure.

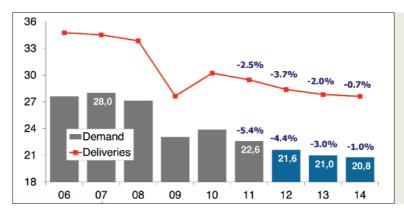
The Ikea catalogue with its worldwide print run of 212 million copies remains the jewel in the crown. Stefan Svensson, the print buyer in charge at the production subsidiary Inter Ikea Systems B.V. (Delft, the Netherlands) is therefore a more than welcome guest at gravure conferences. For the 2013 catalogue the for-



Stefan Svensson

the 2013 catalogue the format (which had been substantially reduced of late) was widened by 15 mm, the paper quality improved (LWC instead of SC A+) and the paper grammage increased from 54 to 57 g/m2. However, the pagination was cut to 312 pages. Product descriptions have largely migrated to the Internet, with icons on many pages providing links to these via smartphone.

Why therefore does Ikea continue to print more



Supply and demand for printing and writing papers in Western Europe since 2006 and forecasts for the next few years (in millions of tonnes). Source: PPPC

than 200 million copies? "For brand building and to draw customers into the furniture shops", explains Svensson. 23 gravure printers and 35 industrial binderies – the number of production sites involved in producing the catalogue around the world – are delighted by this declaration. And, of course, it's not just Ikea. Former ERA President Giorgio Ferraris supplied further examples in Turin of the central role printed catalogues play for many companies, even if their structure is new and the rhythm altered.

**DECLINE IN DEMAND.** Alberto de Matthaeis from the paper manufacturer Burgo presented some figures for the paper market as he described how



Stefano De Alessandri

his company was dealing with the changes in the market – primarily through enhanced production efficiency and new grades of paper. Whilst global demand for printing and writing papers is stable, in Western Europe it is declining. Here, according to De Matthaeis, the Pulp & Paper Products Council (PPPC) is forecasting a fall of around 8% between 2011 and 2014.

It is the magazine market in particular that is under pressure. In Turin, Stefano De Alessandri, the general manager of Mondadori's magazine division, provided an overview of the Italian consumer magazine market: an 11% fall in newsagent sales between 2008 and 2011 accelerated by massive newsagent closures. The number of sales outlets has fallen by 12,000 to 30,000 in four years. Drastic increases in postage

costs have led to a fall of around 20% in magazine subscriptions. Advertising customers, on the other hand, are demanding more and more transparency to match the analytical possibilities that they get when placing ads on the Internet.

Despite these trends De Alessandri listed ten reasons why he believes that printed magazines will never disappear from the media market. These include the fact that internationalization of the magazine market still offers great potential. "New continents are beginning to read." The Italian publishing manager also views print as a "very flexible technology", which allows magazine concepts to be adapted to changing markets rapidly and flexibly.

## **OTHER COUNTRIES, OTHER SITUATIONS.** The ERA routinely looks beyond Europe and this time round Christophe Barth provided a status report for the Indian joint venture between Burda and the Hindustan Times.

However, whilst publication gravure is just beginning to open up the Indian market, in North America the two gravure groups left standing after an unprecedented wave of consolidation, Quad and RR Donnelley, are faced by completely different problems. They have just one ink supplier and the paper supply market is continuing to shrink. The President of the Gravure Association of America (GAA), Bill Martin, reported that, "The manufacturers are increasingly moving away from coated gravure grades for magazine and catalogue printing." Instead, machine capacity is being expanded for grades that seem to have a future such as label papers.

Interview with James Siever, the General Secretary of the ERA, on page 15.

# "The effectiveness of the ERA is unimpaired"

**PUBLISHING GRAVURE** • Deutscher Drucker spoke to James Siever, the General Secretary of the Munich-based European Rotogravure Association (ERA), after its annual conference in Turin.

■ DD: With Schlott in 2011 and now Badenia yet more German gravure printers have become sacrifices to price pressure and industry consolidation. How many members does the European Rotogravure Association (ERA) still have in the publishing sector?

James Siever: The membership of the ERA in this sector includes companies that span the entire production and added value chain: the major paper groups, ink and press manufacturers as well as publication gravure printers and even some print buyers such as Ikea. Some 80 per cent of European publishing gravure printers belong to the ERA.

What role do the two major elements of packaging gravure and publishing gravure play in view of their differing developments? What impact has the ongoing consolidation in the publishing gravure segment had on the ERA?

Unlike publishing gravure, packaging gravure is really booming. In recent years the press manufacturers have achieved record sales. This is partly due to the fact that the international brand owners prefer gravure for their film packaging. In publishing



The ERA has long sought to talk to web offset.

gravure, on the other hand, the structurally driven consolidation process has led to a drop in members in this segment. However, due to the high level of organization of publishing gravure printers, this has not impaired the effectiveness of the ERA. What's more, publishing gravure printing has in no way become a 'negligible activity'. At the end of the day, nearly 3.5 million tonnes of paper for magazines and catalogues were gravure printed.

Outside Europe, the USA and Japan in particular were always strong publishing gravure nations. In the USA, however, only two such printing

groups - Donnelley and Quad Graphics - remain. If gravure is to become established in Brazil, South Africa and India must the ERA become a 'World Rotogravure Association'?

Besides the USA and Japan, magazines have been gravure printed in Brazil and South Africa for decades and positive developments in their markets has recently resulted in investment in new gravure presses. India is now also a publishing



James Siever

gravure nation. For the last two years Burda has been operating a gravure printing plant near Delhi in a joint venture with the Hindustan Times. Besides magazines and catalogues this is also focusing on company reports and school books. The ERA is effectively a 'World Rotogravure Association'. Apart from the North American

gravure printers, who belong to our US sister organization, publishing gravure printers in Japan, Brazil and South Africa have long been overseas members of the ERA.

Would it make more sense for the ERA to cease to be exclusively linked to the gravure process? Many publishing gravure printers are now using both gravure and web offset technology. And the problems and wishes of high volume printers are similar regardless of the printing process.

The ERA is a technical organization and there are important questions such as the ongoing approval process for hexavalent chromium that only affect gravure. Increasingly, however, there are problems where gravure and web offset have common interests. The ERA has therefore long sought to talk to web offset and has invited European web offset printers to its annual meetings. Large web offset printers from France and Italy have accepted this invitation but, unfortunately, no German web offset printers have done so to date. However, perhaps they will accept for the next ERA annual meeting, which will be held in early autumn 2013 in the Frankfurt region.

Questions: Gerd Bergmann

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# Social media channels are becoming increasingly important for staff recruitment

**HUMAN RESSOURCES** • The social media are changing society and companies. Exchanges between potential applicants and companies via social networks are becoming more and more important and the printing industry is no exception. Besides rapidly distributing information to the desired target group, digital channels open up new possibilities for building and maintaining contacts with qualified interested parties.

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

■ The trend towards more interactive and virtual communication is something that the heads of HR in SMEs should no longer ignore. Whether they use social media such as blogs, online forums, Facebook, Xing or Twitter as a source of information, see them as promotional tools or as a technology for virtual collaboration the result in all cases is to change HR practice and it can add a direct contact option to the traditional means of recruiting staff through newspapers.

**SOCIAL MEDIA ACTIVITIES.** Companies active in this area do not just use these channels for the recruitment of staff but also to raise their profile and support their public image.



Javier Salas

According to Javier Salas, the Managing Director of the Stuttgart web agency Anders und Sehr, it is not possible to offer a general recommendation about how companies should integrate the social media into their communications mix. He explains that it very much depends upon the specific company, the products and the target groups. An Internet start-up, for example, would need to

behave very differently on the web from a law firm.

Markus Besch, a consultant who advises companies in this area, also believes that a social media strategy is an absolute must. Amongst SMEs in particular, activities on social platforms are generally heavily 'boss driven'. What Besch means by this is that, "if the company's owner is against Facebook and co for whatever reason then generally nothing will happen." The reasons for avoiding Facebook are often security concerns and the worry that confidential company secrets could be revealed. "In such circumstances outsiders and staff will find it difficult or impossible to have any impact and to push the subject forward."

Melanie Erlewein, head of the training department at the Baden-Württemberg Printing and Media Federation, refers to the need for companies to 'professionalize' their social media activ-

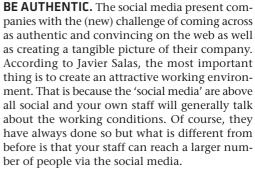
ities. All experts agree that companies need to draw up a plan and define goals in order to decide which platforms they should be active on. This process should clarify the fol-

lowing basic points:

- Who is the target group?
- What are the goals?
- Which topics interest the target group and stimulate participation (=interaction) in social networks?
- What is the right tone?
- Which are the right social networks for one's specific goals?
- How will the goals or their achievement be measured?

If a company has no experience with social media, it might be advisable to bring in external advisers.

Even though the creation of profiles on networks such as Facebook, Google+ and Xing is generally free it is necessary to budget for the staff time and associated costs needed to maintain the contents, moderate activities and for ongoing editorial. Money needs to be spent on such things as seminars and consultancy services (Markus Besch estimates a rough cost of between €1,000 and €2,000). Within the company itself a specific person should be made responsible for the social media and should allocate roughly 20 to 30 per cent of his or her time to these activities.



At the same time it is precisely this that offers an opportunity. As an employer you can participate in these conversations and motivate employees with a high level of loyalty to the company to represent their employer on the web. In order to build up a positive image you could set up a Facebook page and let your employees have their say on it. What is essential is to behave in an authentic way and not to promise anything that cannot be delivered.

**EMPLOYEES FROM THE NET.** The platforms best suited to recruitment are Facebook and the Xing professional network. Apprentices in particular can be secured through Facebook, since almost the entire cohort of under 25s is active on it

Nowadays graduates and apprentices are genuine digital natives and when making applications or searching for information about companies the experiences of other users play a role in the decisions. It is important to identify and to decide



Markus Besch

Companies can publish vacant apprenticeships free of charge on the Facebook page. The photo shows media technologists producing the T shirts for the 'I make media' Facebook campaign. The aim is to make their profession better known.

#### INTERVIEW: DR BIRTE KEPPLER, EMPLOYMENT LAWYER

"THE SOCIAL MEDIA ARE SHIFTING THE AREAS OF LEGAL CONCERN"

The Stuttgart lawyer Dr Birte Keppler specializes in employment law. She talked to Deutscher Drucker about the specific legal questions that arise out of recruitment via the social media.

## DD: What needs to be borne in mind when recruiting via Facebook, Twitter or StudiVZ?

Recruitment via the social media has to abide by the 'normal' legal rules, as with any other kind of recruitment.

However the unique features of the social media such as the speed of distribution, the level of distribution and the discoverability shift the areas of legal concern. Whereas in the past questions revolved around the general equality of treatment law or the right to questions in the preliminary discussions, this has changed with the wider use of the social media. Suddenly, copyright law, the federal data protection law and competition law have become of enormous importance.

### What legal problems and questions regularly crop up?

To date, competition law has played virtually no role in recruitment. It was only in May 2012 that the Heidelberg District Court was first called on to decide whether contacting a rival company via Xing was contrary to competition law. The central statement: "Hopefully you know what sort of company you have ended up in. I simply wish you lots of luck. I'd be happy to answer any questions", was deemed to be contrary to competition law (LG HD 23.052012 ) Az. 15 58/11). Also the 'rapid' -- usually without any awareness of wrongdoing - use of downloadable photos or passages of text is increasingly being noticed and pursued by the owners of the rights.

Are there legal judgments for all questions or are most of the uncertainties in a legal 'grey area'? Jurisprudence has only just begun to deal with the theme of social media and employment law,

because the latter is right at the heart of the matter. There are more and more decisions on the issue of dismissals resulting from problematic statements by employees in the social media.

However, it's not possible to identify a clear line here and a definitive legal clarification is still awaited. Nevertheless, I would distance myself from the phrase 'legal grey area'. What is needed at present is to apply the abstractly phrased laws to the new situations arising out of the social media.

Currently, what legal advisers are looking for is for things to be brought together. This will require those involved in the innovative social media being open to and at the same time applying the rules with soundly based legal knowledge.

Therefore, it would be short-sighted to get stuck on legal questions with Facebook because what Facebook is today may be quite different from what it is tomorrow. The legal answers need to be open to

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this dynamic so that no 'grey area' emerges.

To what extent do companies 'check out' applicants on social networks (Facebook, Xing) and what influence does their presence there have on applications? Obviously, in the USA a lot of research is done into the social media. Supposedly, applicants are even required to reveal their Facebook name. As ever, things have not gone that far with us - yet? In our experience, the likelihood of research being undertaken increases with how innovative the company is. This makes sense because if somebody is active in the social media then it is normal for them to also rely on the structures to be found in them.

with which tools the right people can be reached and where in the social media the target group hangs out. Advertising on these platforms can attract the right staff.

However, target group selection differs considerably from platform to platform. With Xing one can specifically search for professional capabilities whereas, "with Facebook one often has to approach the search tangentially in terms of what products, magazines or series/films the target group likes", explains Javier Salas.



Melanie Erlewein

According to Melanie Erlewein there is a demand for print and postpress apprentices in the printing industry and this is also the area were it has not been possible to fill all the apprenticeships either because there have not been enough applicants or because those interested lack the necessary qualifications. The shortcomings might lie in knowledge of maths or physics or in the so-

called 'soft skills', which cover such things as lack of commitment, reliability or punctuality. There are no reliable figures for the percentage of apprenticeships not taken up but as an example Melanie Erlewein refers to one training company that could only fill six out of its ten places.

In order to address this lack of apprentices the printing and media federations have set up an apprenticeship exchange for media technologists on Facebook that allows training companies to fill vacant apprenticeships with media technologists free of charge. They can also announce events such as open houses or their participation in careers shows in the events calendar. The aim is to create a platform where young people can gather information about the profession and (prospective) media technologists can swap experiences.

**FUTURE.** When it comes to the question of whether future recruitment will be online or offline – i.e. via the classic print media or via the Internet, the experts are agreed. The future lies in both areas. Applicants will increasingly seek jobs online and companies must therefore have a presence on the relevant platforms in order to address the desired target groups. Whilst, at present, a presence in the virtual world is an advantage, in the near future absence will be a real competitive disadvantage.

Nevertheless, a presence at careers shows and classic advertising in the print media will continue to be a reliable channel for finding suitable candidates for apprenticeships, not least because parents and relatives are involved in decisions about apprenticeships.

The number of apprentices who will in future find their training company via the social media

is something that is still up in the air. Previously, family links with the industry or information events at schools also played an important role in securing fresh blood for the graphics industry.

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