



# DIGITAL PEAK PERFORMANCE

INKJET SYSTEM FOR  
INDUSTRIAL PRODUCTION

# IN THE FAST LANE

COHBER PRESS  
IN ROCHESTER, USA

# MORE THAN MACHINES

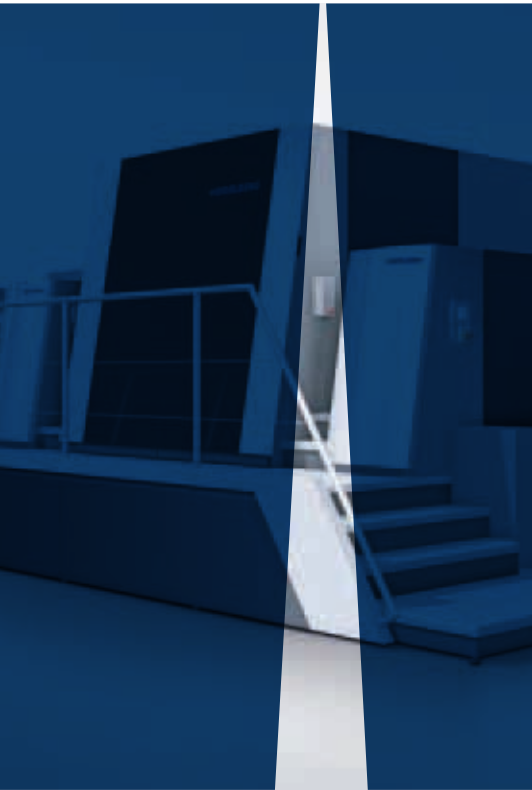
ROLAND KRAPP TALKS ABOUT  
THE NEW PMC COMMERCIAL

# HN

**HEIDELBERG NEWS**

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**HEIDELBERG**

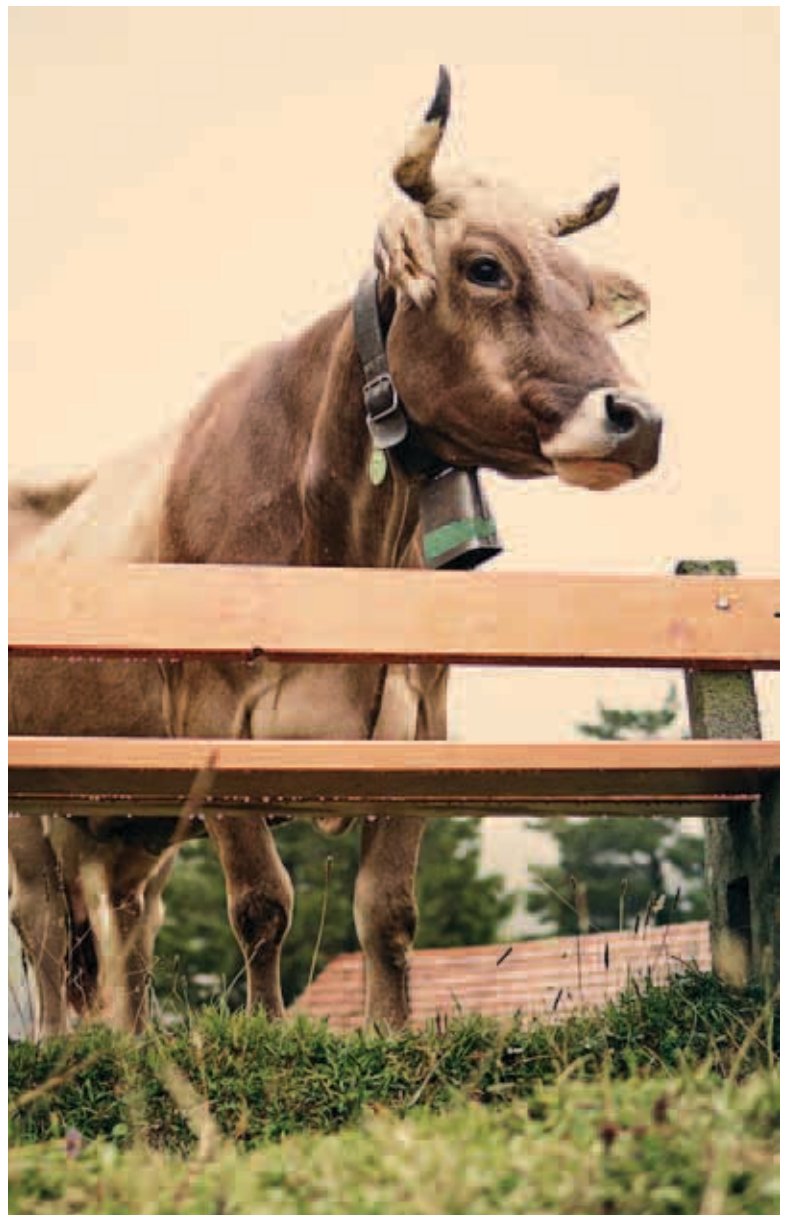


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1.2016

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# Buy "Jenny" by the C

## SNAPSHOT



## **CHEERS TO THAT!**

Anyone who buys a crate of beer at the supermarket these days knows they'll have their hands full with some heavy lifting ahead. As indicated in this poster, produced in the mid-20th century for the Genesee brewery in Rochester in the United States, life was once a little easier for beer lovers – all you had to do was drive up to the market in your sports car, and the friendly salesman with a pencil behind his ear would place the crate straight onto the passenger seat for you. It's not just in the supermarket that times have changed – there have also been big changes in Rochester, where Cohber Press is based. Up till the 1970s, the city was home to industry giants including Kodak and Xerox and a real hotbed for printing. Since then, however, most of these companies have moved their headquarters elsewhere. This goes some way to explaining why competition between local print shops is so intense. To gain a competitive edge, Cohber has decided to make use of the Performance Plus service from Heidelberg – with exciting results.

**Find out more from page 12 onward**



## DEAR READER,

# S

*Simply Smart*™ is the motto that Heidelberg will be exhibiting with at drupa 2016 and also using for the first time in both Print Media Centers in Wiesloch-Walldorf. However, we see “Simply Smart” as much more than just a motto. It is our guiding principle for developing solutions that make using processes and technologies as simple as possible – our vision for an intelligent, highly automated print shop.

To put this vision into practice, Heidelberg has been strategically restructured. Using pooled know-how from strong global partners, we want to offer pioneering, future-focused products and services that help our customers address new challenges successfully. This is also demonstrated in our new brand identity, which uses three colors to represent Heidelberg as a solution provider for a fully integrated, end-to-end process – yellow for service, cyan for equipment, and green for consumables.

All three themes and colors come to the fore in the enclosed drupa brochure and in this edition of HN, which provides an exciting taster of some of this year’s drupa highlights. Examples include our new inkjet system for industrial packaging and commercial printing (p. 22), the new generation of the Anicolor 2 short inking unit (p. 42), and the DryStar LED dryer system (p. 20), which was used to produce the drupa supplement for this edition. We have also visited customers who are preparing for the future in very different ways – Cohber Press in Rochester in the United States has opted for the Performance Plus service, while BVD in Liechtenstein is venturing into 4D printing.

Yours,  
The HN Editorial Team

P.S. Write to us at  
[heidelberg.news@heidelberg.com](mailto:heidelberg.news@heidelberg.com)  
to let us know how you like the HN.  
We look forward to receiving your comments,  
whether positive or negative.

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## BEER FROM CARDBOARD BOTTLES

An ambitious project by brewery giant Carlsberg could write a new chapter in the history of beer. The company intends to make beer bottles out of cardboard. As with conventional egg boxes, the material is made up of wood fibers that are environmentally friendly and biodegradable because they can be composted after use. The packaging will also keep the beer cold for longer than aluminum cans. Prototypes have already been produced but, despite all the ecological benefits, they have a drawback that should not be underestimated – it remains to be seen whether Carlsberg can get millions upon millions of beer drinkers used to silent toasting with cardboard bottles.



GOOD TO  
KNOW

# 11.9

million mail order catalogs were sent out in 2013 in the United States – the first increase in six years for this classic print product. A further interesting development is that a growing number of online companies are using printed advertising material. A prime example is mail order company J.C. Penney, which after a gap of six years has once again been using mail order catalogs to advertise its own online shop since March 2015.\*



## COFFEE GROUNDS FOR T-SHIRTS

John Mohr and Alex White from California have developed a process for turning coffee grounds into ink. The two young entrepreneurs already have a business model. They are now successfully using their “natural ink” to print T-shirts. To ensure the motifs’ good looks last, the coffee grounds are mixed with vinegar and put through a sieve. The mixture is then boiled again to allow the remaining liquid to evaporate till it reaches the same consistency as screen printing ink. As soon as the ink has cooled, it is ready for printing. “Naturally, there are a few secret tricks, but by and large that’s all there is to it,” says Mohr. No chemical additives are required for printing and the final product will withstand any kind of washing. ■

[domesticstencilworks.com](http://domesticstencilworks.com)

\* Source: The Wall Street Journal, January 2015



# KICK-OFF

## COLLABORATION 4.0

In a digitally networked business world, customers expect information, support and e-commerce solutions to be provided online, kept up to date and tailored specifically to their needs. Heidelberg is systematically expanding this “Smart Collaboration” portfolio.

By Tom Oelsner



**i**

Industry 4.0 means transferring all business processes into a digitally networked world. This is taking place in the print media industry as well. Heidelberg is using cutting-edge products and services to mold this transformation in collaboration with its customers. But the very collaboration between Heidelberg and its customers will also undergo enormous changes in the digital age.

For more than 10 years now, Heidelberg has operated an online shop for consumables in more than 20 countries. So far, this shop has been more of an order system for existing customers. We have invested heavily in a new platform to provide both existing and new customers with efficient, permanent access to the most comprehensive consumables portfolio ever. The new online shop was launched in mid 2015 and will provide customers with a range of services comparable to that of Amazon. It is now also possible to make a purchase without registering. This is aimed at attracting new customers in particular. Big customers, on the other hand, are looking to link their order systems directly to the online platform for fully automated processing of day-to-day purchases. Heidelberg will provide an electronic interface for this purpose.

The next step toward the complete service platform has already been marked out with the future sale of additional items such as software, licenses and documentation. Such items purchased in the shop will be available to download and will install them-

selves in the customer’s system if required. This will make it a one-click action to do certain tasks, such as use a test license for a new Prinect product.

That’s not all, though. The ultimate aim is a customer portal that includes various apps. All the information, support and contacts customers require from Heidelberg will be provided – from an overview of equipment installed, available updates, fault messages and self-help tools, to service reports for Remote Monitoring and Performance Plus.

The service platform is based on the Remote Service network operated by Heidelberg, which links more than 10,000 machines and 15,000 software products to the Heidelberg service portfolio and benefits from TÜV-certified security.

Industry 4.0 also means more data and information is available than ever before. In order to provide targeted information and the best possible support, it is essential to gear the details provided to the relevant customer’s employees. In the future, all users will have their very own Heidelberg ID to obtain tailored information and support services. The customer portal will offer ready-made profiles such as “pressroom manager” for this purpose. On top of this, Heidelberg will gradually integrate many other service options into the customer portal to make collaboration as easy as possible for customers. Heidelberg will always be just a click of the mouse away if a customer has any concerns. Take a look and see for yourself! ■



**TOM OELSNER**  
SVP Sales Excellence,  
Heidelberger  
Druckmaschinen AG



## FRESHLY PRINTED – THE SISTINE CHAPEL OF ROTTERDAM

The new covered market in downtown Rotterdam designed by Dutch star architect Winy Maas is a truly eye-catching building – and not only because of its unusual shape and windowed facade. Another special feature can be found inside – the “Horn of Plenty” – a stunning work by artist Arno Coenen. It extends over the entire ceiling and comprises some 4,000 aluminum panels printed with huge motifs depicting fruit, vegetables, meat, bread and butterflies. Dutch company TS Visuals produced the 400,000 megapixel end product in a 1.47 terabyte print file.

The panels and their coating come from the in-house research department. They are lightfast and designed to withstand any attempts by graffiti artists to “embellish” them. ■

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# THREE TIMES BETTER

**Measuring and controlling color** with Prinect Image Control 3 is now more effective than ever. With faster hardware and newly improved software, three key functions are now supported that save on material, time and costs – plus deliver a high level of automation.

# p

Prinect Image Control 3 measures the entire print image. Thanks to this unique function, color can be maintained not just on the print control strip or at individual locations, but also on areas of the actual image being sold. Being able to monitor the entire print image ensures that repeats and CI colors are uniform across the entire sheet. Print shops that up till now have only measured the control strip can thus enjoy the benefits of increased accuracy and reduced use of materials.

Heidelberg has developed a process for Prinect Image Control 3 that uses CIP4-PPF data to automatically identify all solid areas in the job and control their color – in the motif, between the flaps or in the ink pick-up field. If prepress in package printing can deliver solid patches in all ink zones, there is no need for the print control strip in many cases. It may only take up 0.15 inches to 0.31 inches (4 mm to 8 mm) in space, but depending on order volumes this can deliver savings of up to 43,500 U.S. dollars (40,000 euros per year).

The optional new “Proof Match” function also helps cut down on time and material requirements. Businesses can use this option to

scan in digitally produced proofs (e.g. inkjet) to be saved and used as templates when required. Where there are different repeats on one sheet, Prinect Image Control 3 automatically assigns them the relevant templates and adjusts the colors accordingly.

A system for regulating opaque white in an offset printing unit is a genuine world first. Using spectrophotometric measurement and a newly developed algorithm, opaque white can now be controlled easily and reliably. The opaque white stabilizes faster and remains uniform, just like the chromatic colors applied on top. The real plus here is that the system can identify any deviations and indicate whether the opaque white or colors need to be adjusted. This not only reduces setup time and paper waste – it often cuts down on waste during the run, too. Combined with a high level of automation, Prinect Image Control 3 significantly improves production quality and reduces unit costs. ■



## €40,000

Measuring and controlling without print control strips saves 4 millimeters per sheet. Depending on order volumes, this can amount to savings of up to €40,000 per year.

## 5 TO 15 MINUTES

Direct opaque white regulation saves between five and fifteen minutes per job.

## 2 PULLS

Thanks to “Proof Match,” just two pulls are often all that is required to reach the desired color quality.

## 4 PRESSES

Up to four presses can be connected to Prinect Image Control 3.

## HEIDELBERG UP TO DATE

# MORE FLEXIBLE FOLDING

**Stahlfolder TH 82-P/Stahlfolder KH 82-P.** At drupa 2016, Heidelberg will be showcasing the next generation of the Stahlfolder TH/KH 82. These newly developed folding machines boost productivity by up to an additional 30 percent. The enhanced performance is achieved by further optimizing sheet transport. Another benefit: For the first time, this technical innovation supports overlapping (shingled) fold production at all stations. The excellent performance and wide range of applications make the new Stahlfolder TH/KH 82-P machines equally attractive to commercial printers and companies producing signatures – especially for 16-page products.



## CREATIVE LIGHT CUTTERS

**Digicut laser cutter.** The Digicut laser cutter from POLAR-Mohr can be used to create striking effects that quickly and effortlessly boost the value of print products. The system cuts, perforates, creases and engraves flat materials such as paper and card, but also wood, acrylic glass and other materials. As a result, it can cut intricate patterns into invitations, letterheads, bookmarks and lanterns and even laser-cut jigsaw pieces – all in a single pass. An air-cooled 30 watt laser cuts materials in a contact-free process, with no need for any additional tools. Vector graphics are used as digital cutting dies that process runs from one to several hundred items on a working area measuring 33.8 inches x 24 inches (860 x 610 mm). The Digicut is controlled from a standard PC via a USB 2.0 or LAN connection.

## MORE THAN 7 INCHES WIDER

**Heidelberg ICS 850.** The new ICS 850 press system from Heidelberg now enables processing of reel stock with a width of up to 33.46 inches (850 mm). The new inline press system is a particularly attractive solution for folding carton printers with larger job volumes. By skillfully arranging repeats, print shops can realistically produce up to 30 percent more folding cartons with virtually identical energy consumption and makeready times. The maximum web width of the Heidelberg ICS was previously 26.38 inches (670 mm).

The Heidelberg ICS 850 offers comprehensive finishing options in the inline process, such as hot foil embossing, relief engraving, laminate and cold foil finishing, and gravure and screen printing to produce premium-quality packaging for tobacco products, confectionery and the cosmetics industry. The modular structure of the press forms the basis for maximum process flexibility and adaptability to changing market requirements. As a result, additional finishing units can be easily integrated to produce haptic effects, for example.



Stefan Hasenzahl (second from right), head of the Sheetfed business area at Heidelberg, presents a certificate marking the 40,000th printing unit in the SM 52/SX 52 series to Baier & Schneider's Production Manager Ralf Wagner.

## NO. 40,000 SHIPPED TO BAIER & SCHNEIDER

**Speedmaster SM/SX.** Thanks to their extensive levels of automation, the Speedmaster SM 52 and SX 52 are renowned worldwide for their exceptional flexibility and productivity. Heidelberg has now delivered the 40,000th printing unit in the series to Baier & Schneider in Heilbronn, Germany. It is part of a four-color Speedmaster SX 52 Anicolor perfecting press with coating unit. The company, with a workforce of more than 1,000 employees, is utilizing the press for cost-effective short runs of surface-finished envelopes and cover sheets for school books and college blocks. Each year, the company processes more than 18,000 metric tons of paper and exports its products to 60 countries. The Speedmaster SX 52 has been available since 2012 and a variety of configuration options offer the flexibility to customize the press to suit specific customer requirements. Presses can be equipped with anything from two to 10 printing units, various coating and dryer systems such as UV and LE UV, and even Anicolor zoneless inking unit technology.

[www.heidelberg.com/SX52](http://www.heidelberg.com/SX52)

## AT THE LIMIT

“The result of the analysis was a revelation.”

**ERIC WEBBER**  
PRESIDENT AND CEO  
COHBER PRESS INC.

### PAGE 12

#### Page 20

Efficiency compared:  
DryStar LED and LE UV –  
differences and similarities

#### Page 22

Curtain up: Interview about  
the new inkjet system  
from Heidelberg and Fujifilm



# IN THE MATRIX

**You sometimes need** more to go on than gut instinct, so Cohber Press in Rochester, New York, bases its business operations on facts and figures – plus a little touch of magic.



GEORGE C. WELLS  
PRESIDENT  
1954-1961

# t

he entire team at Cohber Press in the north-eastern part of the United States shares a common passion. As they put it, they have the desire to work magic – something customers particularly value. They don't literally cast a spell on their customers, of course, but for President and CEO Eric Webber, this magic – or mojo as Cohber calls it – is a quintessential part of the corporate philosophy. Being aware of the role they play in the success of the company as a whole means each and every member of the team is highly motivated.

This includes helping to bring about change, being open to new ideas and constantly taking new approaches – a strategy that has proved successful. Cohber Press has a history dating back nearly 85 years, and Webber is the third generation of his family to run the business. A large proportion of the workforce has been with the company for many years and staff turnover is low. It certainly hasn't always been easy for Webber and his team, though. "We've been through quite a lot together over the past 15 years. We've had some very good times and some bad ones, but things have always worked out in the end because we can rely on each other completely. Honesty and loyalty are vital factors for us and for staff retention," he says.

Cohber doesn't rely solely on "soft" factors, though. Figures and statistics play a hugely important role – not only in terms of sales (13.8 million U.S. dollars or 12.69 million euros last year), quantities (20 million print products per year), delivery reliability (99.97 percent) or the number of customers (260), but also in relation to customer satisfaction. "Ultimately, it's not simply a question of maximizing press capacity utilization, but also of keeping our customers happy by giving them exactly what they need," explains Webber.

### Hard facts rather than gut instinct

Cohber underpins this with hard facts. The business model comprises a wide variety of print products, which account for 70 percent, and marketing consulting, which makes up

"It's a question of keeping our customers happy by giving them exactly what they need."

**ERIC WEBBER**  
PRESIDENT AND CEO  
COHBER PRESS



in a print product or a Web portal," continues Webber. It isn't always easy to convince customers of this, though. "Customers see us as a print shop and nothing more. We have often struggled to put ourselves on a par with the marketing manager and convince him that we may have a better approach for his campaign," he admits. That's one reason why the consulting business has been outsourced since the beginning of 2015. Cohber has called its strategic marketing consulting business Cause & Effect and hopes its customers' management teams will sit up and take notice. This plan appears to be working.

### Reciprocating trust with trust

But is this enough for the company to hold its own in the stagnating printing market? The print shop covers an area of just under 270,000 square feet (25,000 square meters) and boasts three Heidelberg presses – a six-color Speedmaster XL 105, an eight-color Speedmaster CD 102 with UV printing unit and a 10-color Speedmaster SM 102 perfecting press. "These beasts need feeding regularly, so we obviously always have to keep our foot on the gas in our sheetfed offset operations," says Webber with a smile.

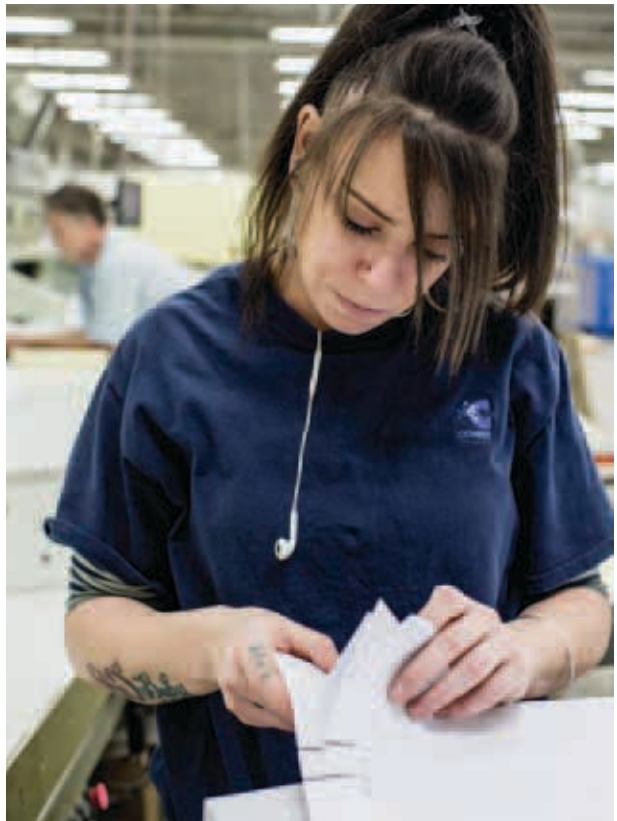
This made the offer from Heidelberg to become a pilot partner in the new Performance Plus service program extremely tempting for Cohber. The chance to increase efficiency and lower costs sounded good. "What's more, ▶

the remaining 30 percent. "We realized at a relatively early stage that an unbelievable amount of money is wasted in direct marketing for campaigns that it isn't even possible to keep track of, so we started scrutinizing and analyzing our customers' projects," explains Webber. Cohber uses a combination of its own data and information from customers to measure and control campaign success. Tests comparing various mail campaigns are just one example.

The in-house agency doesn't just analyze print products, though. Cohber offers its customers active online support, too – with Web portals, shop systems, e-mail campaigns and other products that are usually accompanied by printed materials. "We advise our customers on what measures are worthwhile. It makes no difference whether this results



Total commitment – being aware of the role they play in the company's success means staff at Cohber Press are highly motivated in their work.





“We’ve had some very good times and some bad ones, but things have always worked out in the end because we can rely on each other completely.”

**ERIC WEBBER**  
PRESIDENT AND CEO  
COHBER PRESS

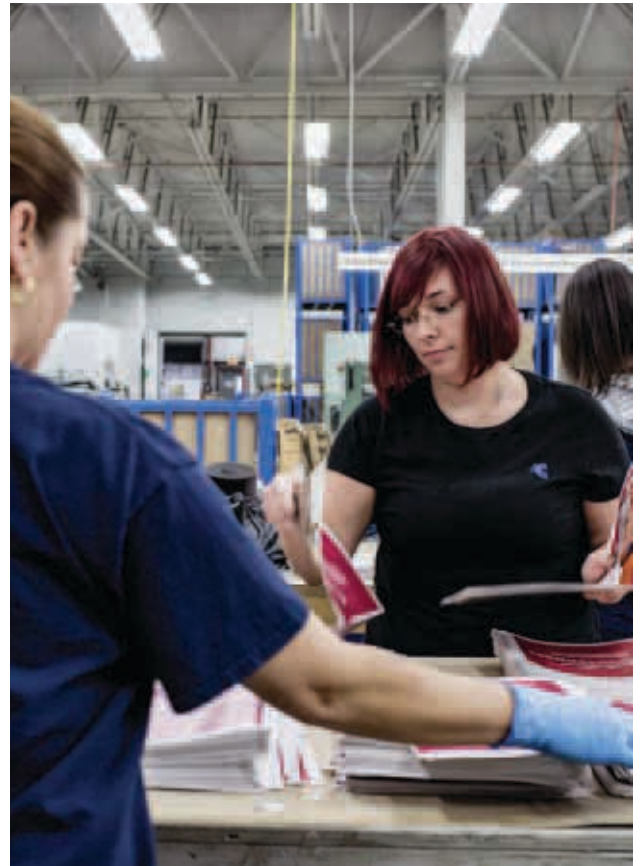


Rather than less work, the Performance Plus analysis of the current situation actually resulted in more scope for additional business, but CEO Eric Webber still finds time to raise his chickens.









The team in charge spent around one and a half years tweaking various aspects, and makeready times for new jobs are now more than 50 percent lower than before.



“We have lots of  
unscheduled  
and varying jobs,  
so Performance  
Plus was just  
what we needed.”

**DAN MAHANY**  
CHIEF OPERATING OFFICER  
COHBER PRESS

› we enjoy a long and trusting relationship with Heidelberg,” says Webber. Cohber switched to digital plate imaging back in 1996 – when it was still in its infancy. Webber recalls: “My father Buzz returned from drupa in 1995 and said he’d bought something. ‘I don’t know exactly what it is, but it’s really cool,’ he told us.” That’s when Cohber entered the digital world. The print shop was already using Heidelberg equipment at that time, with reliability the most important criterion of all. “We have a relatively small number of repeat jobs, which means even more unscheduled and varying jobs, so reliability is the top priority for us,” says Webber.

#### **No two jobs are alike**

Cohber also implements flexible process control based on lean principles, which helps the company respond quickly to new situations. “Performance Plus was just what we needed,” says COO Dan Mahany.

The first step was an in-depth analysis of the existing situation. “The Heidelberg team started by taking a look at everything and then asked questions such as why do you do it that way and why is this the way it is?” explains Mahany. What followed was a ruthless comparison – where are there weaknesses, where do the strengths lie and what would be the ideal scenario? “There’s no blueprint for more productive processes. It all depends

on the specific case. But there are very probably approaches that need to be scrutinized,” Mahany continues. That impacts all areas. The analysis focused equally on leadership, knowledge, tracking, asset management, and processes, because potential for improvement exists everywhere.

And at Cohber, too, it emerged that there was massive potential for boosting efficiency. “The result of the analysis was a revelation,” says Webber. He initially found it hard to believe the final figure of 42 percent – the amount by which productivity could be improved according to the analysis. The challenge here is that Performance Plus does not offer a ready-made solution. It’s simply up to the entire team to pull out all the stops.

And that’s easier said than done. “Naturally, people initially fear they may no longer be needed if a machine does the work faster,”

says Webber. “It takes a bit longer to get across the message that this doesn’t mean less work, but rather more scope for additional business.”

#### **Pulling out all the stops**

Various measures were taken over a period of several months. Staff attended workshops and training sessions to brush up on their know-how. With the help of Heidelberg engineers, the Cohber team gradually made full use of all the possibilities. Mahany, lean management expert Brian Gerstner, and the Heidelberg consultants repeatedly reviewed the figures, performed measurements and analysis, and made re-adjustments.

The team in charge spent around one and a half years tweaking various aspects and the end result surprised everyone. Makeready times for new jobs are now over 50 percent lower than before. What’s more, there’s virtually zero downtime. “Alongside the improved performance, that’s a vital factor for us. We’re now able to calculate precisely how long print jobs take – and keep to these promises,” says Gerstner, who is responsible for lean processes at the company. That improves planning reliability throughout the downstream process chain. Cohber is now using the shorter makeready times combined with reliable forecasting to obtain additional business. But that’s not all. “The whole process ultimately ensured that all departments had to address the challenges of everyday business operations, which resulted in a big step forward for the lean process at the company. We’ve only just scratched the surface, though,” says Gerstner.

And that’s the thing with the matrix – once you realize the impact you can have on the figures, the possibilities are virtually endless. ■

**Cohber Press Inc.**  
Rochester, New York 1469, USA  
[www.cohber.com](http://www.cohber.com)

[www.heidelberg.com/XL106](http://www.heidelberg.com/XL106)  
[www.heidelberg.com/performanceplus](http://www.heidelberg.com/performanceplus)



# EFFICIENCY COMPARED



**A large numbers of commercial printers** around the world already know and appreciate the benefits of the DryStar LE UV dryer system. These include printing on paper, plastic and foil, drying without distortion of material, and immediate postpress. The DryStar LED system from Heidelberg, with numerous unique selling points, is now available for Heidelberg machines throughout the world.



## BOTH SYSTEMS CAN DO THIS

The two systems differ in terms of their light sources, lamp technology (LE UV) and diode (LED), but have one thing in common – instant sheet drying. Protective coatings or energy-intensive IR and hot-air dryers with delivery extensions can thus be dispensed with. DryStar LED and LE UV combine extremely short throughput times with high energy and CO<sub>2</sub> savings. In both cases, this results in print products and inline surface finishing options with enhanced color brilliance. This can be seen in particular with uncoated paper, which retains its tactile qualities. DryStar LED and LE UV also score highly when it comes to environmental protection, as no ozone is produced during curing, while the LE system generates much less infrared radiation and the LED none at all. They therefore have many similarities, but key differences also exist.



### DRYSTAR LE UV – THE LOW-ENERGY CLASSIC

Like the DryStar LED, the DryStar LE UV is also a cutting-edge system but is a more cost-effective alternative in terms of purchasing and operating costs. The technology is based on the highly efficient lamp technology in tandem with highly reactive inks, the ELC control system familiar from the all-UV solution from Heidelberg, and URS (UV Reflection System) reflector technology. These features ensure optimum curing results with lower energy consumption. DryStar LE UV lamps also have the advantage that an even greater selection of highly reactive spot colors and coatings is now available (See box on page 21).

#### The highlights at a glance

- Various lamp doping options available
- Lamp service life – up to 2,500 hours
- Reduced startup times thanks to InstantStart (option)
  - Available for all format classes in the Speedmaster SM, SX, CD, CX and XL series
- Retrofitting possible on all UV-equipped and UV-ready presses
  - Depending on the model, up to complete integration and extremely straightforward operation via Prinect Press Center



### DRYSTAR LED – PIONEERING AND FULLY INTEGRATED

After a successful launch in Japan, the DryStar LED system from Heidelberg has now been in use worldwide for several months. Energy consumption has been reduced by 60 percent compared to the LE UV, thanks to several innovations: An instant on/off system enables LEDs to be switched on only if and when they are required during production. And the Automatic Format Setting (AFS) function activates only those LED modules necessary for the relevant print job. Highly efficient, low-energy temperature management ensures a long service life for the LED system. Overall, this enables the lowest possible energy consumption. A further USP is that the controls are fully integrated into the press and can thus be operated easily via the Prinect Press Center and incorporated into Remote Services from Heidelberg.

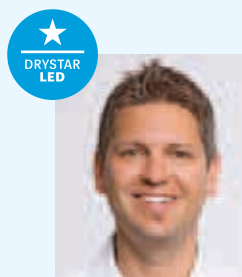
#### The highlights at a glance

- Diode technology with specially developed dual lens technology
- Service life of LED strips: +20,000 hours of actual production time
  - Energy savings: up to 90 percent compared to all-UV lamp systems/conventional IR/HA dryer systems.
- Available for Speedmaster XL 75, CD/CX 102, SX 102 and XL 106
  - Installation positions: interdeck, reversing deck and delivery
  - Can be retrofitted in UV-ready presses from 2008 and later
- Minimal energy consumption thanks to automatic format setting, instant on/off and the cooling system
  - Full integration and easy operation via Prinect Press Center



“The new dryer system has helped expand our product portfolio. We can now offer our customers a wide variety of finishing options, a larger range of substrates and faster production times.”

**ARND SPITZLEI**  
MANAGING PARTNER  
GÖRRES-DRUCKEREI UND VERLAG GMBH, GERMANY  
EIGHT-COLOR SPEEDMASTER XL 106 WITH DRYSTAR LE UV



“We can print on paper with metallic surfaces and process opaque and transparent plastics. All in all, we have more freedom when it comes to finishing, particularly where uncoated paper is used, as we no longer need an additional coating and can retain the same character and feel.”

**CHRISTIAN ZEMP**  
OWNER AND MANAGING DIRECTOR  
ABÄCHERLI MEDIA AG, SWITZERLAND  
EIGHT-COLOR SPEEDMASTER XL 75 WITH DRYSTAR LED

## NEW INKS AND COATINGS

**Heidelberg** is pulling out all the stops in developing new inks and coatings for the DryStar LE UV and LED dryer systems to expand the range of applications as fast as possible.

Two new ink series – Saphira Ink LE-/LED-UV 101 and Saphira Ink Low Energy UV 400 – have been added to the portfolio, which together with dampening and washup solutions, blankets and other consumables form a powerful all-in-one system for long-term stability in printing. Both series are now available and enable printing to ISO 12647-2.

**Saphira Ink LE-/LED-UV 101** is a highly reactive ink series for curing with the DryStar LE UV and LED and thus a true all-rounder. The ink series offers outstanding runability on paper, card/board and non-absorbent materials, a low picking, buildup and misting tendency, and a fine screen dot quality. A primary color mixing system for spot colors, gold, silver tones (Pantone 871–877) and opaque white is also available.

**Saphira Ink Low Energy UV 400** is a highly reactive ink for printing on paper and card/board. This ink series exhibits excellent gloss levels and runability.

As with the inks, the available **coatings** are also optimized for the technologies of the two systems and the relevant wavelengths. Saphira coatings for the DryStar LE UV are available in Gloss, Semi Matt, Matt and Drip Off. They can be dried with two lamps or fewer but require at least two UV lamps for complete curing at maximum press speed. Highly reactive coatings for DryStar LED are available from Saphira in matt, gloss and special effect gloss. ■

# y

*ou both have lots of drupa trade shows under your belts. Is drupa 2016 going to be a very special event for you?*

**Sabrina Janta:** Heidelberg has always launched fascinating and often groundbreaking technological innovations at drupa. We are continuing that tradition with a completely new digital printing system and, of course, I'm really excited to see what kind of reaction we get.

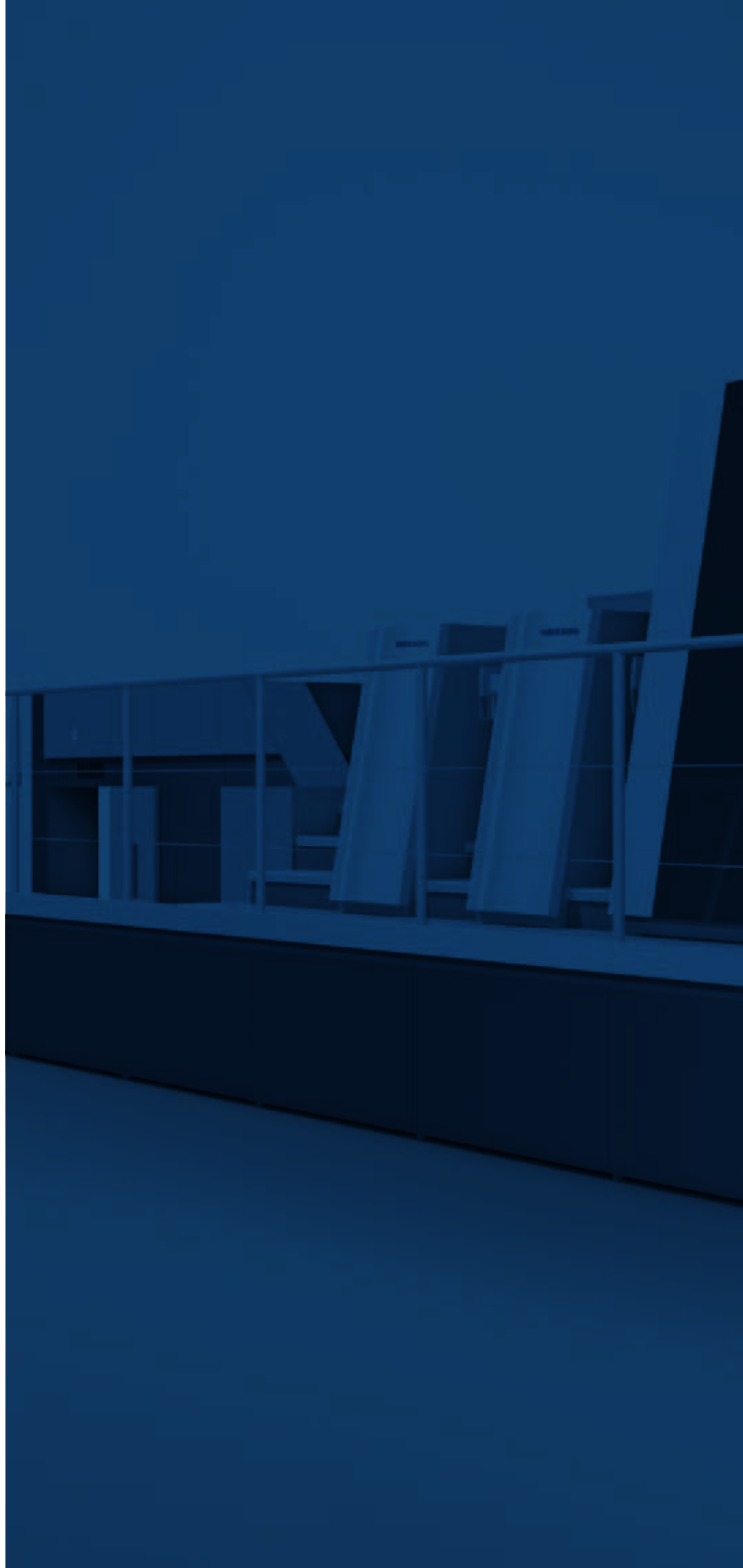
**Alexander Knabe:** I can answer that question with a very definitive 'yes.' Our new inkjet system, which we've developed with Fujifilm, is a clear signal of the innovative prowess of our industry and will certainly be a talking point for a lot of meetings.

*What was the motivation for developing this new system?*

**Sabrina Janta:** Everyone in the market knows how much our sector is changing and will continue to change. Shrinking run sizes and an ever expanding range of product variants are only part of it. Manufacturers of branded goods and print buyers are optimizing their process chains with the aim of reducing complexity, cutting costs and improving the time-to-market for their products. This is generating completely new challenges for the portfolios of print businesses.

Brand owners increasingly want to reach out to customers on a personal level and are looking for ways to offer customers a buying experience. The aim is for the success of product sales to be measurable and visible at the end of the process chain.

Consumer expectations are also changing due to trends such as the rising number of one-person households. Demand is centered on different batch and packaging sizes, right up to personalized products and thus, »



# CURTAIN UP

**At drupa 2016**, Heidelberg is showcasing the revolution in digital print production – the world's first multicolor inkjet system for industrial production in the 70×100 format. In this interview, product manager Sabrina Janta and project manager Alexander Knabe explain what the digital heavyweight can do and what new opportunities it opens up.

› increasingly, custom packing, too. We have developed our new inkjet system to meet these requirements. When combined with our Prinect print shop workflow, it can be fully integrated into the overall print shop workflow while offering the usual ease of use.

*You are focusing primarily on industrial print shops with this new inkjet system.*

**Sabrina Janta:** Yes, after talking to a lot of people and working very closely with our customers, we know that they want more flexibility, but with the same high level of availability, reliability and robustness that we offer with our sheetfed offset presses. What's more, customers must be able to integrate the new technology smoothly, cost-effectively and reliably into existing processes. The digital printing system offers all that. It is based on the tried-and-tested Peak Performance platform we use for our offset technology and can be fully integrated into Prinect, postpress processes and our Remote Services. Using Prinect, production can be automated and jobs sent individually to digital or conventional systems. Heidelberg Print Color Management ensures we achieve comparable printing results on all systems.

*What applications can the new digital printing system be used for?*

**Sabrina Janta:** In an initial stage, primarily for printing packaging, posters, calendars and similar applications. Our customers have very wide-ranging ideas for individualized and personalized products.

**Alexander Knabe:** In future, however, the custom configuration options of the XL 106 platform will give customers access to further new applications and business models.

*What is so special about this new digital printing system?*

**Sabrina Janta:** It is the best of both worlds and combines the advantages of offset and digital printing – the drop-on-demand inkjet technology from our partner Fujifilm and our tried-and-tested sheet transport system and Prinect print shop workflow. The result is the world's first inkjet system for industrial packaging and commercial printing in B1 format to a quality that is on a parallel with offset printing.

**Alexander Knabe:** We have deliberately made use of technology from the XL 106 by adopting elements such as the

feeder, while other elements such as the jetting cylinder and delivery have undergone further development. The system works with a seven-color multicolor process and prints at a high resolution of 1,200 × 1,200 dpi. Moreover, the Saphira digital ink developed by Fujifilm achieves exceptionally brilliant color results. Because it offers an extended color space compared to the four-color process, more than 90 percent of all Pantone Plus colors can be produced within a Delta E2 tolerance. But that's not all. The system also supports inline coating. That is unique, since inline coating application has never before been achieved in an inkjet system in this format.

*How is the partnership with Fujifilm going?*

**Alexander Knabe:** Heidelberg and Fujifilm are two strong partners that each boast world-leading expertise in their field. We began our close collaboration when developing the Gallus DCS 340. While working on the new inkjet system, we cooperated closely from the very outset, working in parallel in Heidelberg and Tokyo. Industrial environments place extremely high demands on the inkjet system. That is why it is important to keep an eye on the system as a whole, as every change affects the overall process.

**Sabrina Janta:** The fact that we can present this inkjet system at drupa in Düsseldorf after just two years of development work shows that this strategy is working and highlights the success of the Synerjetix collaboration.

*How are you meeting demands for the packaging market?*

**Alexander Knabe:** The water-based system works with Saphira Digital Ink, an ink that has been developed based on the extensive expertise of Fujifilm. All the liquids used in the system are subject to compliance with the Swiss Ordinance, which ensures the best conditions for achieving low-migration certification. Finally, manufacturers of branded goods and print buyers put great emphasis on ecological credentials and suitability for recycling.

*What printing speed can the inkjet system reach?*

**Alexander Knabe:** Printing speed depends on several factors, such as the desired print quality and physical conditions. When working to the highest printing quality standards, with resolution at 1,200 × 1,200 dpi, we can currently run



**“OUR MACHINE IS THE WORLD'S FIRST INKJET DIGITAL SYSTEM FOR INDUSTRIAL PACKAGING AND COMMERCIAL PRINTING IN THE B1 FORMAT.”**

**SABRINA JANTA**  
PRODUCT MANAGER  
HEIDELBERGER DRUCKMASCHINEN AG



**“THE PRESS SUPPORTS INLINE COATING. THAT'S UNIQUE. INLINE COATING APPLICATION HAS NEVER BEFORE BEEN ACHIEVED IN AN INKJET SYSTEM IN THIS FORMAT.”**

**ALEXANDER KNABE**  
PROJECT MANAGER  
HEIDELBERGER DRUCKMASCHINEN AG



at a rate of 2,000 prints per hour in simplex mode. The precision needed to achieve this is provided by both the Fujifilm print head technology and Heidelberg data management, which allow us to place some 12 billion drops accurately on a B1 sheet. But printing speed is not everything. When operators anticipate a job structure comprising primarily short runs, it is equally important to optimize the processes in Prinect, in the inkjet system and right through to postpress so that job throughput can be maximized.

*Do you believe your digital printing system signals the beginning of the end for offset printing?*

**Sabrina Janta:** No. It's more that we're witnessing the emergence of the "smart print shop," where more and more processes are being run on a fully automatic and digital basis and where, ultimately, the print job itself decides which process and system are going to be the most efficient for printing.

We are only at the start of this exciting development. We often come across job structures on the market where more than half a print shop's jobs have a run size of fewer than 3,000 sheets but make up only around 10 percent of the volume of paper that is printed. The big challenge for our customers is being able to produce all run sizes on a cost-effective and industrial basis. That makes it increasingly important that all relevant production systems are integrated through Prinect and can make decisions autonomously and share real-time data along the entire process chain. It is getting more and more important to carry out color management for different output channels and job checks through portals, right up to the end-customer. When using Prinect, the print shop always stays in full control.

Our new digital printing system is the answer to the question of how custom products can be produced with a degree of flexibility never before seen and how new business models can be developed – we call it "Simply Smart." ■

## TO PERFECTION

“Achieving long-term success in the print media industry requires you to adapt to the circumstances and be agile.”

**PETER GÖPPEL**  
MANAGING DIRECTOR  
BVD DRUCK+VERLAG

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New presses for digital 4D printing

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More ink at the touch of a button:  
Anicolor 2 for the Speedmaster XL 75



# WHERE ARE ALL THE CUSTOMERS?

**Anyone looking to run a successful print shop** in the small principality of Liechtenstein needs to be a creative thinker. One such person is Peter Göppel, Managing Director of BVD Druck+Verlag, which invested in a new press park with LE UV technology and is tapping into completely new customer groups for 4D printing through its online shop Balleristo.



# W

hen it comes to country comparisons, Liechtenstein nearly always features among the record-breakers. The principality is Europe's fourth-smallest country, with a population just short of 37,000 living in this tiny enclave of just 62 square miles (160.5 sq. km) between Austria and Switzerland. Of the country's population, 5,500 live in Vaduz, the sixth-smallest capital city in the world. As for transportation links, there's no airport, nor is there a high-speed rail network. The scenery is made up of lush fields and impressive mountain ranges, with roads that connect Vaduz with the neighboring town of Schaan. It is in Schaan that records are also being broken at BVD Druck+Verlag AG, a truly innovative and unique print shop near the famous Vaduz Castle.

Being innovative is the only way a print shop in Liechtenstein can achieve success. And that requires someone at the helm who makes the right decisions at the right time. Someone like Peter Göppel, for example. The Managing Director at BVD hatches new ideas on an almost daily basis to help him get an edge in the complicated market in Liechtenstein. The background to this, as Göppel explains, is a drastic drop in orders from domestic banks since the government signed an international agreement on the prevention of tax evasion in November 2013. "Prior to this, the banks had a lot of advertising material printed with us, whereas nowadays it's practically just mandatory publications." The strong Swiss franc also presents a major headache for Göppel. "Our rent, wages and materials are expensive. Eventually you run out of levers to pull," says the BVD boss, quite matter-of-factly. But Göppel is certainly not at a loss when it comes to what action to take. In fact, so far he's always managed to find a lever for the company and its 45-strong workforce.

### Being truly up to date is a challenge

For example, BVD gradually introduced an end-to-end Prinect-based workflow concept extending from prepress to postpress in 2004. "We were looking to streamline production



Managing Director Peter Göppel is always on the lookout for niche products such as branded soccer balls printed to specific customer requirements.

and gain more control over the increasingly fragmented job structure," says Göppel, summarizing the objectives of the project. The strategy paid off. After just two years, BVD was able to process almost 600 additional jobs and deliver a healthy increase in sales.

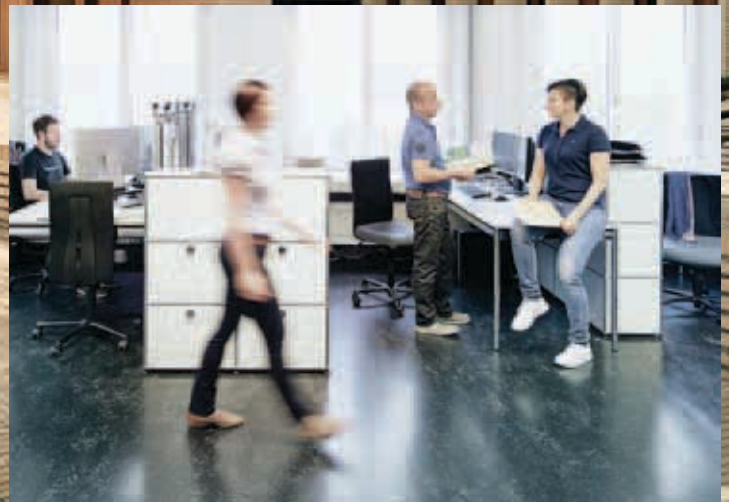
Ten years later, Peter Göppel unleashed another modernization offensive, the company's largest investment since its inception in 1927. BVD extended its existing premises, creating space for two new presses – a four-color Speedmaster SX 52 and an eight-color Speedmaster SX 102 perfecting press with coating unit – that broadened the range of applications and enabled the company to address new customer groups. Both presses bear the "CO<sub>2</sub> neutral" label and feature the DryStar LE UV dryer system.

Along with the entire print shop team and customer support staff, Production Manager Martin Scherrer was also heavily involved in the decision. "We were one of the first to purchase this press," he says. "The move enabled us to make the leap from the four- to eight-page format in 2014." In particular, BVD leverages the new presses to position itself as >



“The new presses enabled us to make the leap from the four- to eight-page format in 2014.”

**MARTIN SCHERRER**  
HEAD OF PRODUCTION  
BVD DRUCK+VERLAG



BVD's products include flyers, posters, brochures and catalogs. Average runs range between 3,000 and 5,000 copies. In the background is the Principality of Liechtenstein's parliament building in Vaduz.



## ON THE BALL

Lots of people have a soccer ball. But only [www.balleristo.com](http://www.balleristo.com) customers can get their hands on a unique soccer ball featuring a personalized dedication, greeting or souvenir of a tournament. The online shop of Liechtenstein-based BVD Druck+Verlag offers personalized printing for a wide range of match balls, in cooperation with professional clubs like FC Zürich and FC St. Gallen. These are a great gift idea for all, not just soccer fans. BVD produces the balls with a first-generation Jetmaster Dimension and, since the start of 2016, with a four-color Jetmaster Dimension 250. ■



Production Manager Martin Scherrer and his team were strongly in favor of purchasing the new presses with DryStar LE UV. The company wants to use these machines to position itself as a specialist in uncoated and creative papers.

› a specialist in uncoated and creative papers. “Conventional production generally employs a protective dispersion coating that impairs the touch and feel of the prints,” explains Scherrer. “But LE UV technology fully retains the specific quality of the paper.”

However, just as important is also the ability to print on plastics and perform a vast array of finishing options. “A further benefit is that the sheets are ready for further processing immediately thanks to rapid curing,” says Göppel. “Not only that, no dangerous emissions are generated during production and, on the eight-color press alone, we save around 89 metric tons of CO<sub>2</sub> each year.” This is an important figure for the company, whose commitment to environmental protection stems from its deep-seated convictions. In April 2011, BVD was one of the first print shops worldwide to receive CO<sub>2</sub> neutral (Gold) certification from Swiss Climate, a hallmark that is only awarded to firms who record their carbon footprint in line with ISO 14064 and continually reduce and completely neutralize emissions.

**Strategy for prepress**

BVD utilizes the new presses for products such as flyers, posters, brochures, annual reports, catalogs, a real estate agent newspaper and books – all printed on an extremely wide

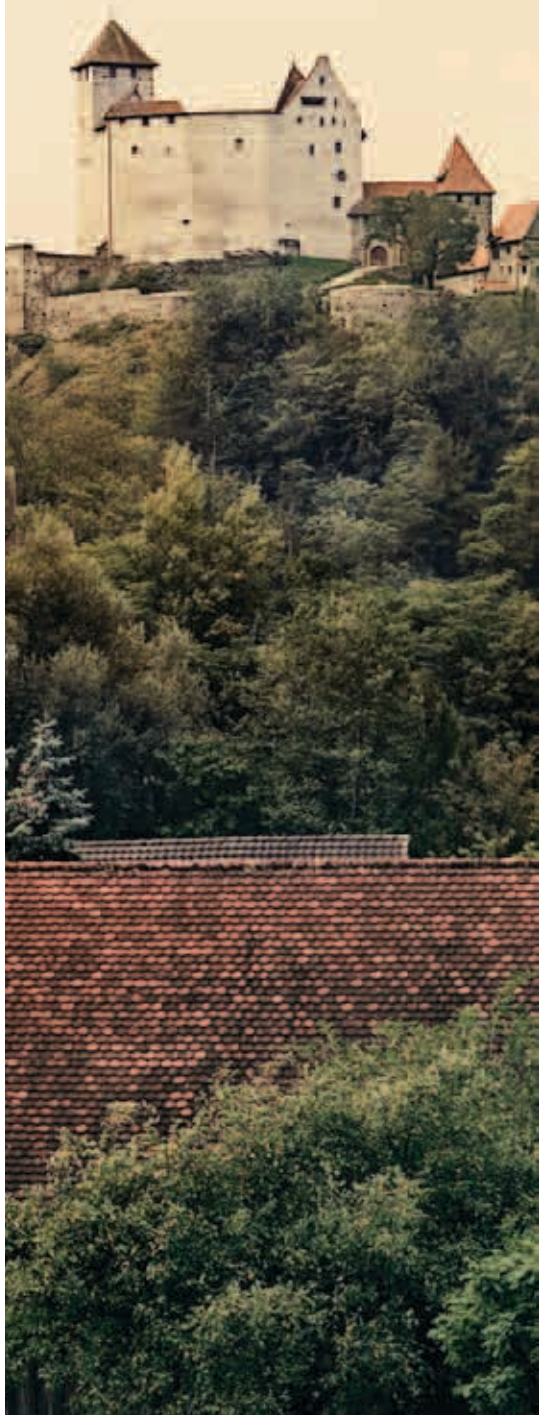
variety of substrates. Occasionally, runs climb as high as 20,000, but the average ranges between 3,000 and 5,000.

Peter Göppel estimates that the new presses will enable him to operate for seven years in the traditional print business without requiring further investment. “We’re unlikely to be making similar large investments in offset in the mid-term,” he adds. He believes that, as things are now, business is just too tricky, particularly when thinking about printing on a traditional scale.

That’s something that Peter Göppel does, but he also does way more than that. “Achieving long-term success in the print media industry requires you to adapt to the circumstances and be agile. We have therefore taken a targeted approach of entering niche markets, outside of the classic print business, with innovative applications.”

The strategy behind this is based around the prepress sector, which employs 13 staff who are both the creative and commercial heart of the business in equal measure. And their work extends beyond the town of Schaan. BVD prints and sells splinter- and heat-resistant films in the town of Bendern, some four miles away. This operation has developed from BVD’s car wrapping business, which is based there. Trained specialists laminate around 150 cars each year with films designed by their prepress colleagues in Schaan. Decorative printed panels for interiors can also be ordered in Bendern. The print originals for these also come from the creative center in Schaan, where the digital printing division is based. It also supplies restaurants in Liechtenstein and neighboring countries with food and ice cream menus. While the advertising technology business contributes around 30 percent of sales through wrapping and digital printing, the core business area of offset printing accounts for around 70 percent.

In offset, Peter Göppel is also attempting to occupy niche markets, e.g. positioning the company as a specialist in the production of complex catalogs. For this reason, in 2014, BVD invested in the multichannel publication solution Prinect Media Manager from Heidelberg, which enables content to be prepared in a media-neutral format and either printed or distributed digitally across different channels. “Our approach includes addressing target customers who require multilingual catalogs featuring a number of products or different price structures,” says Göppel. Despite the demand, BVD did not offer services like this in the past, he says. “Nowadays, ›





› we deliver this because we have 13 staff who are all competent when it comes to the processes involved and because we have the perfect tool for it, in the form of the Prinect Media Manager.”

#### Round instead of square

His openness to new ideas makes Peter Göppel an exceptionally active and innovative businessman. “The majority of print shops only think about paper and therefore automatically only think in 2D,” he says. “That’s not something I can afford to do,” he adds, laughing.

So it’s no wonder then that BVD is also one of the pioneers when it comes to 4D printing. Since the end of 2014, the company has dedicated itself to the task of finding new customers, namely those who are crazy about soccer. Since then, BVD has been printing branded soccer balls, fully customized to buyers’ requirements, under the name “Balleristo,” initially with a first-generation Jetmaster Dimension from Heidelberg and, since January 2016, with a new four-color Jetmaster Dimension 250.

The printing process takes 70 seconds including plasma curing, which boosts the adhesive properties and wettability of the surface to ensure that the personalized print takes hold. Peter Göppel knew from the very beginning that delivering this offering would not be the problem – he had the right equipment and highly skilled staff for the job. The real issue was how to address and hook potential customers. He therefore employed someone specifically for Balleristo, 25-year-old Reto Knecht who has experience in sales and, like his boss, has a real passion for soccer. His commitment ensures he keeps his eye on the ball so as to keep on improving things.

In his first few months at BVD, Reto Knecht worked closely with Peter Göppel to develop and implement suitable concepts. And Knecht was soon able to bring the professional soccer teams FC Zürich and FC St. Gallen on board as partners for Balleristo. Both clubs have a high profile and, with their large fan bases, are important vehicles for publicizing the firm’s personalized printed soccer balls as gifts or souvenirs. Göppel and Knecht see the major sales potential in the online shop [www.balleristo.com](http://www.balleristo.com), where various match balls can be personalized and ordered. “In this respect, it’s important to gain the trust of more professional and amateur teams and explain the benefits of cooperation, such as the opportunity to increase revenues via sponsors who advertise on the team ball,” says Knecht.

To further develop the business, the older Jetmaster Dimension is set to go on tour, for example to print souvenir balls for participants in junior soccer camps in Germany and Switzerland. The prospects look good, and thanks to high-quality balls and abrasion-resistant printing, there hasn’t been a single complaint so far. What’s more, the customer potential is huge. There are around 7.8 million active soccer team members across Switzerland, Germany and Austria combined. And then there are all the fans.

Naturally, Peter Göppel and Reto Knecht have more ideas in the pipeline. The plan is for Balleristo to soon begin offering personalizable volleyballs, handballs and golf balls along with accessories such as shin guards. Finally, we should also mention that, aside from Balleristo, Peter Göppel is also working on web-to-print ideas. In fact, the longer you speak with him, the clearer it becomes that what he modestly describes as “adapting to the circumstances” could also be viewed as entrepreneurship in the truest sense of the word. ■

**BVD Druck+Verlag AG**  
9494 Schaan, Liechtenstein  
[www.bvd.li](http://www.bvd.li)

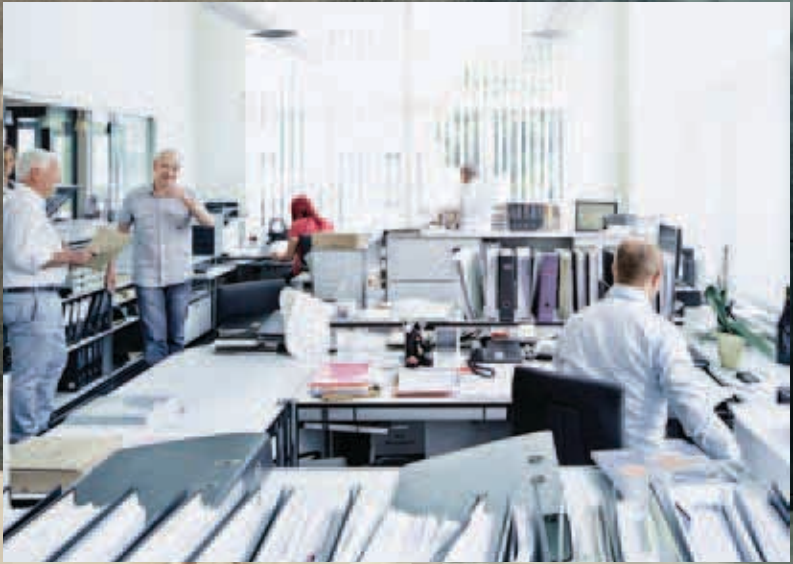
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**“Achieving long-term success in the print media industry requires you to adapt to the circumstances and be agile.”**

**PETER GÖPPEL**  
MANAGING DIRECTOR  
BVD DRUCK+VERLAG

Well-practiced teamwork with minimal legwork – the 45 BVD staff work in close proximity to each other so that everything runs smoothly. The company’s entrepreneurial spirit can be felt in every single department.





The latest inkjet technology enables the new Jetmaster Dimension 250 to print objects with up to four colors, opaque white and an optional protective coating. The four-axis robotics guide items with diameters from 0.39 to 11.8 inches (from 10 to 300 mm) with great precision.

## VARIETY OF SHAPES AND COLORS

The new Jetmaster Dimension 250 and 1000 bring color to all kinds of three-dimensional objects. Cutting-edge inkjet technology and high-precision robotics combine for a new diversity of 4D printing applications.

### W

ith the Jetmaster Dimension, Heidelberg has opened up a new dimension – digital 4D printing. To coincide with drupa 2016 in Dusseldorf, it is showcasing two next-generation presses. The Jetmaster Dimension 250 with four-axis robotics can print objects from 0.39 to 11.8 inches (from 10 to 300 mm) in diameter, with up to four colors, opaque white and an optional protective coating. The Jetmaster Dimension 1000 with six-axis robotics offers the same options, but for more complex objects up to 19.6 inches (500 mm) wide and 39.37 inches (1,000 mm) long, or more.

The new presses greatly expand the range of 4D applications. “The Jetmaster Dimension is highly flexible. We can print on all kinds of geometries and substrates,” says Ivar Emde from the Business Development 4D Printing team at Heidelberg.

This enables easy and efficient personalization of consumer goods, so print shops, too, can unlock new areas of business with personalized printing of customer products, or new concepts for wider circles of customers. The presses are also a good option for manufacturers and dealers looking to personalize their products directly, for on-demand production, or at the point of sale. ■



**IVAR EMDE**  
Business Development 4D Printing  
Heidelberger Druckmaschinen AG

[www.heidelberg.com/4D](http://www.heidelberg.com/4D)

# COMPETENCE CENTER AND TEST LABORATORY

**The statement** “We are More than Machines” is the first thing you see on entering the Print Media Center (PMC) Commercial in Wiesloch-Walldorf. And that’s highly appropriate because, as Roland Krapp, head of the PMC, explains, most customers are surprised at the level of support Heidelberg offers.

# m

*r. Krapp, this looks more like an industrial print shop than the showroom of the largest press manufacturer. Why is that?*

We work just like a full-service print shop here, with all the same production operations, but we don’t sell print products. Instead, we combine all our know-how and invest considerable time in optimizing processes in the press environment. This maximizes the support we can offer our customers in making the right decisions for their business throughout the production process. The PMC Packaging was the successful starting point for this concept. By opening the PMC for industrial commercial printers in Wiesloch, we now have everything at a single location – which means less travelling around for us and our customers.

*How do the two PMCs complement each other?*

The PMC Packaging focuses on the entire production chain for folding cartons and labels, high-end surface finishing, special applications and all press configurations in the 145 and 162 formats. The PMC Commercial is aimed at commercial printers, who naturally have very different requirements and processes.

*What areas do you cover?*

We see the PMC as a competence center that aims to offer a wide range of services. This starts with advice on investing in offset, digital and postpress equipment and solutions such as the Prinect workflow. It also includes service offerings to boost performance, feasibility

tests with the appropriate consumables and user training. In addition, we organize information events on topics that are of particular interest to customers, such as extending their portfolios or making their production leaner.

*What is the customer response to these offerings?*

Most customers come to us for a test run of a particular machine. They want to be sure they’re making the right investment and clarify the configuration details. To do so, they can get us to run one or more demonstration jobs and find out what impact various configurations have. Many of them also discover something useful in the process, such as the “flower boxes” on the gallery of a large Speedmaster press.

*What are the “flower boxes” for?*

They’re containers we’ve developed specifically for ink cartridges given that these need to be stored upright. They’re attached to the rails on the drive side of the press, which means they’re within easy reach and ready for use. The aim of such solutions is to suggest ways of making processes even more ergonomic and efficient. Customers who have come to the PMC to look at a press leave with additional ideas for everyday production operations.

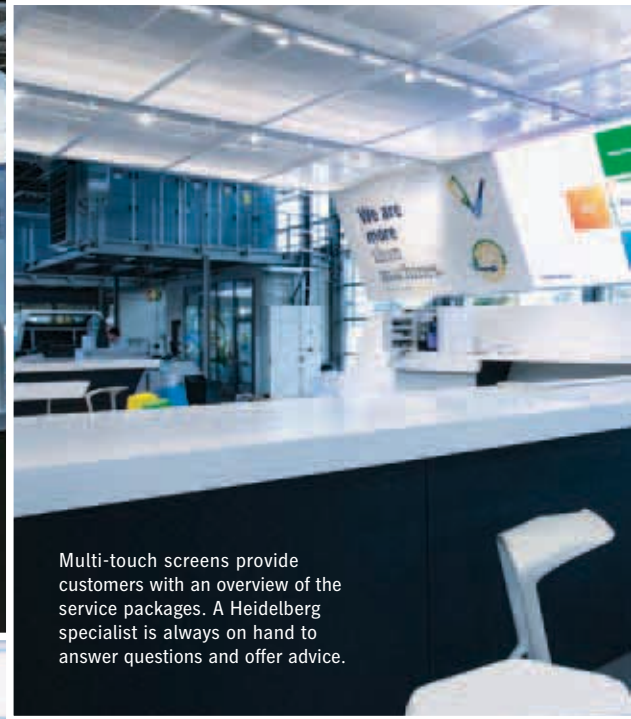
*In other words, it goes beyond the actual machines to all the “ingredients” required for a successful business?*

Exactly. Customers can also obtain inspiration and tips for their day-to-day work here, including new business ideas such as personalized printing. The focus naturally lies on equipment testing, test runs and production simulation. Customers send us the relevant jobs and we print these to show what can now be achieved using highly automated presses, appropriate consumables and workflow technology. Many





**ROLAND KRAPP**  
Head of Print Media Center  
Heidelberger Druckmaschinen AG



Multi-touch screens provide customers with an overview of the service packages. A Heidelberg specialist is always on hand to answer questions and offer advice.

## PMC COMMERCIAL: HIGHLIGHTS

**Concentrated customer benefits:** The PMC Heidelberg, with the two halls for commercial and packaging applications in Wiesloch-Walldorf, is incorporated into the global Print Media Center network. This also serves the American market with the PMC Atlanta in Kennesaw and the Asian market with the PMC Shanghai in Qingpu.

**Demonstration print shop for individual customers:** Test runs to provide peace of mind for investments and define the appropriate configuration and equipment for digital and offset presses. Performance and feasibility tests to discover whether and how job production can be improved.

**Application-oriented competence center:** Developing and presenting new applications and running application-oriented customer training at the PMC and customer premises.

**Trends and business ideas:** Presentation of new technologies and applications such as personalized 4D printing.

**Consumables:** Testing and qualification for reliable production that meets environmental requirements or maximum performance etc.

**Customized consulting on services and software solutions:** To achieve specific targets such as availability levels or automatic processes.



› customers are astonished at how much room for improvement still exists. The growth of our software and service portfolios has been particularly impressive.

*How can customers get an idea of whether software and services will be of use to them?*

Our multi-touch screens provide an overview of the packages we offer for services, consumables and software for specific applications such as Anicolor technology or digital printing. However, it's also possible to go straight to a particular service or software product such as the Prinect Business Manager or Remote Monitoring. More information about any specific product can be displayed if required. Customers gain the greatest added value by consulting one of our specialists to answer questions and offer one-on-one advice. They can also book a live machine demonstration with the consultant to try out the workflow using an actual job.

*What form does personal customer consulting of this kind take?*

For specific consulting, it's helpful to work with the latest production data. In the case of boosting performance, we obtain the customer's agreement to gain remote access to the relevant machine, measure its performance and identify potential for improvement. We then discuss possible measures such as preventive maintenance or Remote Monitoring to increase machine availability, user training, Prinect Color Management for faster inking-up or our Performance Plus package – to name but a few. This often results in concrete projects with measurable improvements.

*How do you help customers who want to offer something special?*

We also see ourselves as a test laboratory. We perform feasibility tests with customers to find out whether an application is viable and under what conditions. We also experiment with inks and coatings to

make progress with challenging applications that have value-adding potential, such as printing with a textured coating or producing a metallic gloss. Another reason why many customers come to the PMC is to expand their business by offering digital printing. Our hybrid workflow provides them with a live demonstration of the interaction between offset and digital and shows them how multi-channel publishing works with the Prinect Media Manager. Last but not least, our events also regularly showcase new trends and unusual applications such as 4D printing.

*How can customers use the PMC?*

They can approach us for personal demonstrations to address specific issues or attend an event such as the Packaging Days or Commercial Days. The Heidelberg local office acts as their contact and organizes the visit. We also organize an open day on the third Thursday of each month at which we run sample jobs on all our machines. There's no need to register well in advance for this. One particular highlight for 2016 will be a Heidelberg drupa in both PMC halls, which we're organizing to coincide with drupa in Düsseldorf. Interested customers from all over the world are cordially invited to book a visit via their Heidelberg local office. That will be something really special, and I'm very much looking forward to it. ■



## PMC PACKAGING

The PMC Packaging in Hall 11 offers just over 58,000 square feet (5,400 square meters) of expert know-how on the production of folding cartons and both wet-glue and in-mold labels. High-end surface finishing and special applications such as cold foil and double coatings are a further focal point. Large-format and long presses with up to 15 printing, coating and drying units, the relevant postpress equipment and appropriate software solutions are all on show.

# DIE-CUTTING MADE EASY

**Easymatrix 106 CS.** The new Easymatrix 106 CS die cutter focuses on all the key functions. This very fact makes it particularly attractive to companies that are looking for an inexpensive way to move into packaging printing, replace equipment that has seen better days or expand their packaging capacities.



It comes as no surprise to Hakim Arbaou that the Easymatrix 106 CS has already been delivered to customers before the official sales launch. The Heidelberg product manager sees a lot of the market on his travels and knows how important new growth opportunities are for small and midsize print shops. He also knows that these businesses have limited resources.

“To lower the investment threshold, we consciously focused on functionality when configuring the Easymatrix 106 CS,” says Arbaou. That makes it an attractive option for all kinds of companies, including commercial printers that are moving into packaging printing or looking to improve their flexibility and value added, by once again doing die-cutting and embossing work themselves instead of outsourcing it. The die cutter is also in demand among multitaskers that are keen to modernize or expand without breaking the bank. Small to midsize packaging printers have their eye on the machine, too.

The Easymatrix 106 CS was geared to the requirements of exactly such customers. “The die cutter focuses on functions that enable rapid familiarization and cost-efficient production combined with excellent quality and flexibility,” explains Arbaou. “Based on feedback from our customers, we know that the

Easymatrix 106 CS fully meets all expectations in terms of production speed, functionality and ease-of-use.”

Another reason for the excellent response is that the machine built by Masterwork (MK), a strategic partner of Heidelberg in China, incorporates functions as standard that are not a given in this performance class and often have to be purchased as extras. For example, the nonstop feeder and delivery give operators additional time for production monitoring and quality control. The fine adjustment feature in the undertable to readjust the position of the die-cutting plates ensures highly precise operation, even when using third-party dies. And options such as quick-action clamping systems are available for the cutting and stripping station to further reduce makeready times. The machine is also extremely robust. “Companies can work and grow with the Easymatrix 106 CS over the coming years – for the price of a remarketed machine but with full warranty,” sums up Arbaou. ■

[www.heidelberg.com/easymatrix](http://www.heidelberg.com/easymatrix)



## MINIMALISM CREATES ADDED VALUE

The Easymatrix 106 CS punches, creases, embosses, perforates and cuts paper, card, labels and corrugated board at speeds of up to 7,700 sheets per hour. Beginners only take a week to get the hang of the machine, while old hands master it within a day.





MASTER-PIECE

GOOD JOB!

Anyone who likes to cherry-pick has made exactly the right choice with mymuesli. At the company's shops, customers themselves can put together their very own muesli from a vast array of tasty ingredients. Another completely new idea is to sell the personalized muesli in personalized packaging that is printed instantly in the shop. This is possible at the mymuesli store in the Heidelberg pedestrian zone, which is also home to the press that performs this work – a four-color Jetmaster Dimension 250. Before personalization, the cardboard of the 11 inch (27 cm) high standard packaging, which has a dispersion coating, bears only the manufacturer's name, barcode and mandatory content. The reverse of the packaging has white space for a picture and two text fields. Once the picture has been selected and the text has been input by the customer at the terminal, the packaging is inserted by a mymuesli assistant. Printing is then performed in cyan, magenta, yellow and black with inkjet technology. UV drying is carried out after each ink application. Customers can watch while the tube is printed in next to no time and to the highest quality standards and then take it straight home with them – a finished, personalized quality gift. The famous mymuesli tube is finally set to become a legend. ■

Show us your very own masterpiece!

Do you have a packaging solution, brochure, calendar or some other print sample that you're particularly proud of? A masterpiece, large or small, that you would like to see featured in an upcoming issue of HN? If so, join in and send a copy to us at:

Heidelberger Druckmaschinen AG  
Sabine Langthaler  
Gutenbergring  
69168 Wiesloch  
Germany



The muesli packaging is clamped in the Jetmaster Dimension 250 ready for printing. Customers can watch the printing process through the window.

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he black plexiglass in the printing unit guard – a design element taken from the digital presses – is a sign of what the new features of the Speedmaster XL 75 Anicolor 2 are designed to achieve: “Anicolor and digital printing are drawing closer together. And that’s not just in terms of producing short runs cost-effectively, it’s about simplifying operations, too,” explains Product Manager Frank Süsser. Indeed, by introducing the new Anicolor 2 generation, Heidelberg has further expanded its medium-format portfolio and ensured the technology delivers even greater benefit. This is particularly true of the Anicolor Booster, which helps to drive up productivity significantly.

### Laying it on thick

The Anicolor Booster helps to increase ink application to suit the substrate – at the touch of a button. “That is a huge advantage when you have to be flexible in working with a range of absorbent materials, such as coated or uncoated paper that requires a high ink film thickness,” says Süsser. Heidelberg has doubled the adjustment range for ink density. If a job requires a thicker ink film, the operator at the Prinect Press Center simply has to switch on the Anicolor Booster. “This means that Anicolor 2 helps us achieve a similar level of flexibility to conventional offset. However, the excellent process reliability and familiar benefits of Anicolor technology offer added value,” explains Süsser.

The fact that the zoneless short inking unit is at the top of its game when handling short runs and frequent job changes is part of its success story. It has revolutionized the printing of short runs in offset – all thanks to the formula 90-50-50: Fast and stable inking-up results in around 90 percent less paper waste.

## MORE INK AT THE TOUCH OF A BUTTON

At drupa 2016,

Heidelberg is presenting the latest generation of the short inking unit for the Speedmaster XL 75:

Anicolor 2. It simplifies press operation and makes the press even more productive and flexible.

And since only 20 to 30 startup sheets are needed to ink-up a new print job, the end result is a 50 percent reduction in makeready times and 50 percent higher productivity. Moreover, these gains are further enhanced by simplified, dependable processes, as there is no need to adjust ink zones.

### One ink series for everything

Until now, when printing on absorbent materials, press operators would often have to ensure every inking unit had a second ink chamber containing inks that were more highly pigmented. Thanks to the Anicolor Booster, all they need now is a single ink series – which means less work. Press operators no longer have to replace cartridges or clean the additional ink chambers. What’s more, the new system is easier to operate. At the touch of a button, the Anicolor Booster increases ink density as appropriate to the absorbency of the substrate to achieve the desired coloring. It makes Anicolor faster, more flexible and more productive.

However, there are two more innovations that help drive up productivity even further. “Faster inking unit washup shaves one minute off every job change,” says Süsser. Operators can also select a shorter ink shut-off if they need to, saving themselves a further 20 seconds. This is a particularly useful option when processing similar jobs consecutively.

### 15 minutes faster for spot colors

Using Prinect Multicolor enhances productivity even further. With the aid of software, spot colors can be simulated to deceptively realistic standards using the CMYK process colors plus orange, green and violet. That saves press operators from having to change inks and screen rollers and thus boosts throughput. “Heidelberg customers who utilize these benefits with their Speedmaster XL 75 Anicolor save a lot of money on short runs,” points out Süsser.

And who is the latest Anicolor 2 generation going to benefit? “We believe the optimum run size for the system is between 200 and 1,500 sheets – this is where the benefits of Anicolor with regard to short makeready times and minimum paper waste take full effect. However, even runs of 50 sheets will not cancel out cost-efficiency gains and, naturally, Anicolor can be used to produce longer runs cost-effectively, too,” explains Süsser, adding: “Anicolor 2 offers full substrate flexibility, jobs with spot colors can be produced just as economically as multi-color applications, and the inline finishing we are familiar with from the Speedmaster XL 75 is available, too.”

Applications in UV printing are also to be added in the future. Heidelberg is already evaluating suitable ink series, so that UV printers can cut paper waste even more easily when working with expensive special paper. “Anicolor 2 shows how easy it can be to produce short runs quickly, flexibly and cost-efficiently using offset. That makes this technology even more appealing,” says Süsser. ■



**FRANK SÜSSER**  
Product Manager  
Heidelberger Druckmaschinen AG

## VARIABLE DATA PRINTING FOR BEGINNERS

Whether you want to personalize names and addresses for a mail campaign or prices and photos in flyers and brochures, variable data printing makes it possible. But how exactly does it work? Variable data printing (VDP) enables mail campaign, brochures and other media to be personalized during the digital printing process. The layout, together with elements such as the company logo, illustrations and text blocks, typically remain the same in all copies and form the master document. This is combined with variable data that changes from copy to copy. Variable content such as names, customer addresses, figures, images and background colors are normally prepared and sorted in a database or Excel spreadsheet. ■

### TIPS & TRICKS

Title | First Name | Last Name | Address | City/State/Zip ...

Title | First Name | Last Name | Address | City/State/Zip ...

Title | First Name | Last Name | Address | City/State/Zip ...

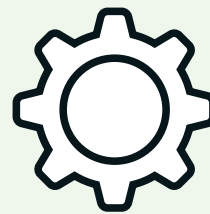
Title | First Name | Last Name | Address | City/State/Zip ...

Title | First Name | Last Name | Address | City/State/Zip ...

Title  
First Name/Last Name  
Address  
City/State/Zip

### LINKING PLACEHOLDERS TO VARIABLE DATA

All the necessary placeholders are first defined in the static master document. These then need to be linked to the appropriate variable data. If this data is contained in an Excel spreadsheet, for example, the contents of individual columns or rows can be linked for the replacement process. Descriptive labels such as <first name> or <surname> are then normally used for the columns.



## MS WORD INDESIGN VDP

### WHICH SOFTWARE PROGRAMS CAN BE USED?

The mail merge function of MS Word, Adobe InDesign with appropriate plug-ins and special VDP programs can be used to link the master document to variable data.

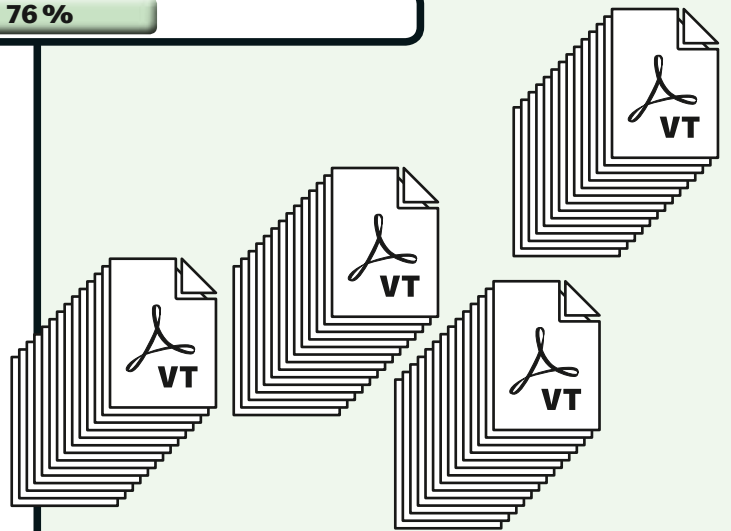
The main differences lie in the range of functions. InDesign, for example, only supports text variables, but plug-ins are available for images. VDP software offers the widest range of functions. It enables additional elements to be defined, such as colors and fonts to be replaced, and processing rules such as automatic insertion of line breaks after a pre-specified number of characters.

# RIP

76%

## RIPPING BOTTLENECK – FORMAT DETERMINES PROCESSING TIME

Intelligent use of optimized output formats significantly shortens this RIPping time. The static data that always remains the same is only RIPped once and only the variable content is replaced. How efficient this process is and the RIPping functions that are supported depend on the output format of the master document. Manufacturer-neutral formats such as PPML or PDF/VT are recommended. The latter is the current VDP standard (ISO 16612-2:2010) and offers benefits such as fast screening, transparencies, layers and ICC-based color management.



## PDF/VT – COMPACT FILES AND HIGH PRINT THROUGHPUT

Many VDP programs can export files in PDF/VT format, which enables separate processing of the static and variable content. Recurring elements in the master document are converted and saved once only. To personalize the eight-page flyer in the example cited below, the RIPping software thus only replaces the variable data for each data set and combines it with the static content. This saves time and money, because far less data needs to be processed and a less powerful RIPping system can be used. PDF/VT only processes eight static pages and, separately from this, the variable data – rather than 8,000 full pages!



## LARGE FILES SLOW DOWN PROCESSING IN PDF FORMAT

InDesign can only output data in PDF format and therefore always saves the entire page description in a file. In the VDP process, this means a copy of the complete master document is generated for each personalized version – even if the only changes are the name and address on the first page. This results in huge job files that require a great deal of time and powerful systems for RIPping and imposition. An eight-page flyer with 1,000 data sets, for example, produces an 8,000-page PDF, with a correspondingly long RIPping process.

## FOCUS INNOVATION

### WHEN IMAGING IS ON A ROLL

**The new Auto Pallet Loaders (APL)** for the Suprasetter 106 and VLF formats support the uninterrupted loading of up to 1,200 printing plates in 106 format, or 600 in VLF format. That makes them a flexible, high-performance automation solution for highly efficient plate production.

**L**ean processes and extensive automation are key factors when it comes to standing out from the competition and delivering smooth industrial print production and consistent quality. That is particularly true in prepress, which is precisely why Heidelberg has developed these new products. To achieve flexibility for changing up to three plate formats, print shops can also run the 106-format Suprasetter in combination with the Auto/Dual Cassette Loader.

“Unlike the Auto/Dual Cassette Loader, the APL does not require manual plate insertion,” says Volker Becker, CtP Product Manager, outlining a key benefit of the new solution. Instead, the printing plates stay on the pallet, which is simply moved up to the Auto Pallet Loader using a hand pallet truck – from either side, as required. The APL for the Suprasetter 106, A106 and 106 UV can be loaded with up to 1,200 printing plates in this way. When using the APL for the VLF 145, 162 and 190 formats, the total number of plates is up to 600, depending on their thickness. The desired loading side for this model is optional.

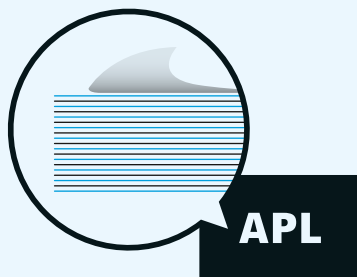
#### Fully inclusive modular and extendible package

“Both APLs can be retrofitted, support the maximum speed of the relevant Suprasetter and – once loaded – run fully automatically,”



#### INFEEED

The new 106 format APL from Heidelberg can be loaded with a pallet of up to 1,200 printing plates from either side. When using the APL for the VLF 145, 162 and 190 formats, the total number of plates is up to 600.



#### UNPACKING

During the fully-automated loading process, the slip sheet is first removed free of marks. The printing plates are then separated using suckers and an air stream.



#### LOADING

On the APL for large format machines, the printing plates are transported via a transfer table before then reaching the platesetter via a plate or paper separator.

says Becker. When running, the APL 106 removes the slip sheet without leaving any marks and reliably separates the individual plates using suckers and blast air. The APL for the large format uses a transfer table to transport the plates to the platesetter. As the coated sides of the plates in the VLF format are face-up, the Auto Pallet Loader is fully encapsulated to prevent light penetrating and reaching them. Optional loading modules can be used to extend the APL by up to three additional pallet holding areas.

On the APL 106, the coating on the printing plates faces down and the plates are turned before being transported over the conveyor to the Suprasetter. Becker sees the APL first and foremost as an automated means of safeguarding quality: “Manual loading leads to a growing number of stoppages in production because some printing plates are scratched. Automatic loading stops that happening.”

However, the APL has even more to offer than that. It transmits regular status updates via the Suprasetter that can be used to analyze errors or enable integration into Heidelberg Remote Service.

Depending on the level of automation, the Suprasetter can be flexibly combined with prepress to boost efficiency. For example, it can be linked up with the Auto/Dual Cassette Loader or Auto Pallet Loader with additional automation features such as automatic plate edging with subsequent plate sorting or storage in magazine systems. ■



**VOLKER BECKER**  
Product Manager  
Heidelberger Druckmaschinen AG  
[www.heidelberg.com/APL](http://www.heidelberg.com/APL)

## A QUESTION FOR HEIDELBERG



### WHAT SHOULD I DO ...

... if UV ink or coating gets onto my skin or clothes?



Special precautionary measures need to be taken when working with UV inks and coatings. Work clothing, including protective gloves, should be worn as a matter of course when cleaning or doing other work on the press, such as fitting and removing rollers. Anyone

handling coatings should wear protective glasses, too.

If ink gets onto your skin despite these measures, the best way to remove it is by using suitable soap and plenty of water. It is vital to wash off UV ink as quickly as possible because the longer it remains on the skin, the greater the irritation/sensitization. Special solvents such as alcohol or UV washup solutions should not be used. They destroy the skin's natural protection, and that allows the ink to penetrate into deeper-lying skin layers even faster. In addition to cleaning the skin, it is also vital to protect it. A suitable skin protection cream should be applied before starting work, as well as appropriate skincare creams each time you've washed your hands and at the end of the shift.

Heavily soiled work clothes should be disposed of as hazardous waste. Specialist cleaning companies that use appropriate detergents and cleaning programs to remove UV ink are available for lightly soiled clothing. Under no circumstances should soiled clothes be washed at home in your own washing machine, as ink residue may contaminate the next load. It is also recommended that each employee has two lockers at work. This enables normal clothes to be kept separate from workwear.

#### Andreas Hartmann

Product Manager Consumables  
Heidelberger Druckmaschinen AG

#### Do you, too, have a question you'd like to ask?

Is there anything relating to complicated applications, optimum use of equipment and consumables, or other matters that is on your mind? If so, write to us at [heidelberg.news@heidelberg.com](mailto:heidelberg.news@heidelberg.com) and put your questions directly to the Heidelberg Global Expert Network.

# ECO

“Inks are harmful to man and the environment.”  
Really?

A FACT CHECK ON ECO-MYTHS

**PAGE 48**

**Page 50**

Giving more than you take:  
Cradle to Cradle printing with  
Gugler Print in Austria

### **“E-BOOKS ARE MORE ECO-FRIENDLY THAN BOOKS MADE OF PAPER.”**

Is it accurate to say that reading electronically saves the rain forests? Not entirely. A comparison by the New York Times between the production of an Apple iPad and a book showed that the reader is only more eco-friendly from the 50th book onward. It takes 15 kilograms of minerals, 300 liters of water and 100 kilowatt hours of energy to produce an iPad. A printed book, on the other hand, requires just 0.3 grams of minerals, 9 liters of water and 2 kilowatt hours for drying. Although e-books have the upper hand when it comes to impact from transportation, because downloading consumes fewer resources, it takes most people at least four years to read 50 books, whereas Apple takes only a year to produce a new model.



### **“CONSUMERS CAN’T SEE WHAT THEY’RE BUYING.”**

The print media industry’s various quality seals enable customers and consumers to play their part in environmental protection. For instance, the World Wide Fund for Nature (WWF) recommends the Forest Stewardship Council (FSC), Rainforest Alliance and ÖKOPApplus seals of quality. PEFC (Programme for the Endorsement of Forest Certification Schemes), Blauer Engel, Nordic Swan and the European EcoLabel also keep their promise of actively protecting the environment.

### **“PAPER DESTROYS FORESTS.”**

The paper industry cannot survive without any wood at all, but more than 74 percent of the 22.5 million metric tons of paper, card and board produced in Germany alone in 2014 was made from recycled paper. Paper manufacturing only accounts for around 10 percent of wood consumption in Germany. The vast majority – some 11 million cubic meters or around 20 percent – is used for heating. What’s more, there’s no real shortage of wood. Europe’s forests have grown by 30 percent since 1950.



# REALLY?

**Talk is cheap**, and things only really get interesting when hard facts are provided. It then quickly becomes clear that the truth of the matter is often very different. A check of the facts regarding the printing industry and the environment provides a prime example.

## **“PRINTING MEANS POORER WATER QUALITY.”**

Today's print shops do a great deal to reduce the amount of soiled water they generate and also to save water. Alcohol-free printing in conjunction with an appropriate filter system is just one example. This quickly reduces the amount of soiled water per year and per press by 1,000 liters. Chemical-free plate production results in further savings, because the wash-off unit no longer requires a permanent water supply. This saves up to 11,500 liters of water if printing 1 million sheets with 1,250 plates.

## **“INKS ARE HARMFUL TO MAN AND THE ENVIRONMENT.”**

Tests show that solvents in conventional inks quickly degrade to form water and carbon dioxide. However, there is no evidence that the organic solvents used in inks destroy the ozone layer.

What's more, solvents that are harmful to health such as chlorinated hydrocarbons stopped being used some time ago.

Instead, inks containing high proportions of renewable raw materials are increasingly used and are saponifiable, which improves their biodegradability.

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he complex is barely noticeable from the air. The satellite images from Google Maps show only lush green at the address of Gugler Print, three miles outside of Melk in Austria. It's only on closer inspection that you can see the large hall under the vegetation-covered roof. The walls of the building are largely constructed of rammed earth, glass and wood. Organic vegetables are grown behind the building for use in the company canteen.

For Gugler Print, sustainability isn't just a label, it's a living and breathing corporate strategy – the company's DNA, so to speak. "When we started in 1989 and committed ourselves to environmentally sustainable printing, people called us crazy eco freaks," says CEO Ernst Gugler. Twenty-five years later, the tables have turned. Sustainability and environmental protection are on the agenda for an ever increasing number of companies. Many other print shops have now followed suit.

### Pioneers pave the way for imitators

In fact, so many print shops have made environmental pledges, Gugler feels customers can no longer tell whose production operations really are environmentally sustainable. "Initially, we did a lot of work to convince people, and thus we paved the way for numerous imitators," says Gugler, without a hint of resentment. Quite the opposite, in fact. Do companies go to Gugler for printing out of conviction or merely to soothe their green consciences? "At the end of the day, it doesn't matter," says Gugler with a smile. Ultimately it's about more than a smart marketing concept, as far as he's concerned. His aim is not only for his products to cause less damage to the environment than others, but also to make them that little bit better.

The concept behind this is Cradle to Cradle (or C2C for short). "This means we optimize our products such that, at the end of their life cycle, they can be fed back into the ecosystem in their entirety," explains Gugler. Thorough checks relating to origin and compatibility are carried out on print products with a C2C certificate in Gugler's portfolio,

# GIVING MORE THAN YOU TAKE

## Communication specialist

**Gugler** in Austria is a pioneer in sustainability. For CEO Ernst Gugler, it isn't about causing a little less damage to the environment than others – he wants to do a whole lot more.



With its vegetation-covered roof and walls constructed of rammed earth, glass and wood, the headquarters of Gugler Print in Austria show the outside world that Ernst Gugler (top right) and his team are committed to sustainable, green print production.

and all elements are classified and positively identified. They contain no toxic chemicals or other harmful substances and are thus completely biodegradable.

### Reversing a paradigm

C2C reverses a paradigm: "Realistically, it would be best for the environment if we didn't exist – that's the standard approach. But C2C assumes we can also make the environment better through our actions," says Gugler. One example is graphical paper – European countries produce roughly 360 million tons a year. "Around a third of this is left to a greater or lesser extent as toxic hazardous waste after recycling," says Gugler. If the paper were manufactured using the C2C principle, the pulp could be harnessed as a high-grade fertilizer instead of being disposed of in a costly process.

Approximately 20 percent of print products from Gugler Print are now manufactured using the C2C method, and that figure is set to rise. "We offer virtually the complete range of products," says Gugler. It's taken a long time to reach this point. To enable the substances involved to be tested and certified, manufacturers of inks, coatings, paper and other components need to disclose their formulations and provide proof of origin. This is no easy undertaking in a global business world. Gugler's next step is thus to form an alliance of like-minded people under the banner "Print the Change": "We want to find at least one print shop in every European country that thinks and operates as we do and secure them as partners." In Denmark, for example, KLS Grafisk Hus is already part of the young network. In Gugler's view, this could increase the incentive for research, development and manufacturers to offer Cradle to Cradle products. His aim is to achieve a sustainable concept for green printing that is worthy of the name. The eco-pioneer is taking the first step himself. He is looking to switch his entire portfolio to C2C soon and thereby pave the way for imitators once again. ■

**GUGLER GMBH**

3390 Melk  
Austria

[www.gugler.at](http://www.gugler.at)  
[www.printthechange.com](http://www.printthechange.com)



## PANORAMA

“Close to 85 percent of all consumers choose products primarily based on color.”

THE EFFECT COLORS HAVE ON US

**PAGE 52**



# COLORFUL SEDUCERS

**Colors influence our perception** far more than we realize. The colors used to present products to consumers also play a key role in purchasing decisions. But what effect do they have?

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erman and Spanish banks Deutsche Sparkasse and Santander are involved in a legal dispute, and Beiersdorf scored a partial victory over a competitor in court midway through this year. What were these proceedings about? The colors red and blue and who is allowed to use them. Because companies are defined not only by their logo and lettering, but also by a particular color – and that needs to be defended. After all, close to 85 percent of all consumers choose products primarily based on color. Companies use this to their advantage, because a particular color is often sufficient for customers to make the association with a specific product or brand – magenta for T-Systems, blue for Facebook or Ford and red & white for Coca-Cola. There are many more examples. The choice of color also suggests certain product characteristics to consumers. For example, we automatically associate white with purity or innocence – and are drawn to the relevant product in the hope that a little of this will rub off on our own personality. So colors are far more than they appear to be, as the colorful examples on the following pages will show. ■



## A TREAT FOR THE EYES

It is generally accepted that the color green symbolizes hope. For the advertising industry, this is doubtless the hope of higher sales because if something appears to have green credentials, customers are prepared to pay more for it – up to 100 percent according to the German Research Institute of Organic Agriculture. It has been demonstrated that consumers associate green packaging with nature and health. Studies have also revealed that the color green has a positive impact on our sense of well-being. Employees working in green rooms are less likely to suffer from stomach problems and depression. Researchers are at a loss to explain why. The one thing that has been established is that the human eye reacts the most sensitively to green and can distinguish between the largest number of shades of this color.

**Stands for:** Relaxation, nature, healing power, prosperity and freshness

**Brands:** Spotify, Starbucks, Android, Land Rover and Xbox

## MAKING HEARTS BEAT FASTER

It's no coincidence that we proverbially see red when we get worked up. This color really does get the heart beating faster – which in turn explains why red is also the color of the heart. The color red conveys strong emotions such as anger or love. And restaurants have latched onto a further effect of this color – red is also said to whet people's appetites. So the next time you're ravenous, it could be down to the red poster you've just seen. Or the hamburger of a fast-food chain depicted on it, normally with a logo on a red background. In any case, red is a strong signal that always attracts attention, signifying danger on the roads and mistakes in the case of the traditional red pen.

**Stands for:** Passion, hunger, caution and danger

**Brands:** McDonald's, Netflix, Kmart, Coca-Cola and Lays

# COLOR WORKS



## 85%

of consumers are significantly influenced by color when purchasing products.



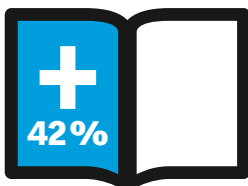
## 90 SECONDS

is the maximum time it takes for consumers to form an opinion about products or premises – and decide either to buy or not to buy.



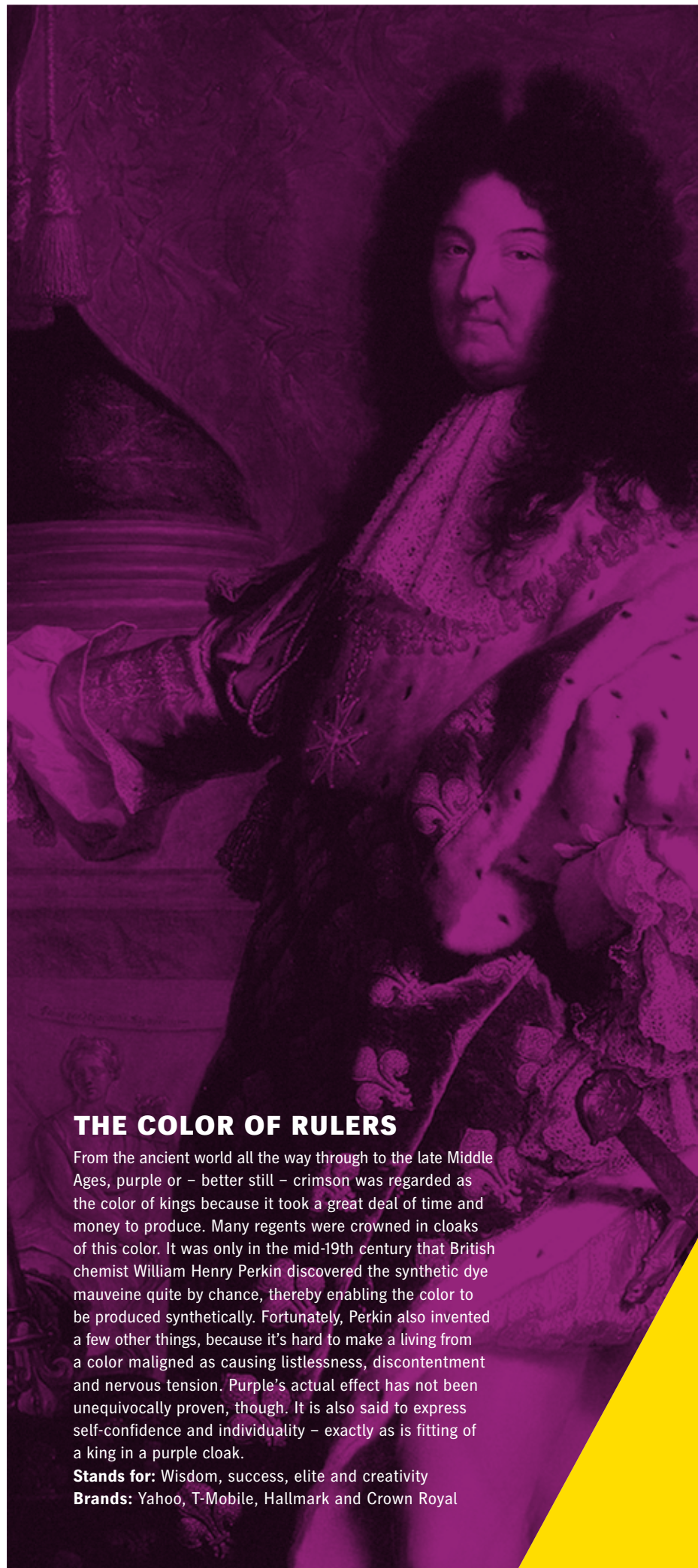
## COLOR RECOGNITION

80 percent of consumers believe selecting the right color has a vital impact on brand/product recognition.



## ATTENTION RATE

Color advertisements reach 42 percent more people than the same ad in black and white.



## THE COLOR OF RULERS

From the ancient world all the way through to the late Middle Ages, purple or – better still – crimson was regarded as the color of kings because it took a great deal of time and money to produce. Many regents were crowned in cloaks of this color. It was only in the mid-19th century that British chemist William Henry Perkin discovered the synthetic dye mauveine quite by chance, thereby enabling the color to be produced synthetically. Fortunately, Perkin also invented a few other things, because it's hard to make a living from a color maligned as causing listlessness, discontentment and nervous tension. Purple's actual effect has not been unequivocally proven, though. It is also said to express self-confidence and individuality – exactly as is fitting of a king in a purple cloak.

**Stands for:** Wisdom, success, elite and creativity

**Brands:** Yahoo, T-Mobile, Hallmark and Crown Royal

## HERE COMES THE SUN

Surprising as it may sound, the color yellow has a hard time of it with women. While 5 percent of men name it as their favorite color, hardly any women share this opinion. And yet yellow symbolizes high spirits and warmth. It stimulates the brain and has a positive impact on the nervous system – except perhaps for the optic nerve, which admits defeat relatively quickly on encountering yellow and closes the eyes. Babies are probably better able to sense the insidious effect of the color yellow and tend to start crying in yellow surroundings. The proportion of other colors determines whether we feel at ease in the presence of yellow. If it contains hints of green, we associate it with lemons, that is to say freshness but also acidity. If the yellow contains more red, it creates a feeling of fulfillment and calm.

**Stands for:** Joy, warmth, optimism and youth

**Brands:** Nikon, Caterpillar, National Geographic and Ikea



## THE TURNCOAT

Virtually no other color is as contradictory as orange. On the one hand, it is stimulating and symbolizes warmth. On the other, it warns of danger in the same way as red. Despite this, orange is the favorite color for a “call to action” in marketing circles. Sign here, click there – the color is clearly an effective prompt. Orange is unfortunately having a bad time of it in soccer right now, though. The Dutch national team, which traditionally wears the color of the Netherlands and its royal family, will be missing from the upcoming European Championships.

**Stands for:** Enthusiasm, excitement, friendliness and respect

**Brands:** Harley Davidson, Firefox, Gulf and Nickelodeon

## ONE FOR THE SUITS

Blue is the color of calm, relaxation and reserve, which makes it completely incomprehensible why it is also the favorite color for offices. Another striking fact is that virtually all conservative parties worldwide use blue as their symbolic color. Why? Possibly because blue is primarily associated with the sky and water, which means it creates a certain feeling of continuity. But blue also encourages productivity and feels homely. Both these things could be key reasons for Facebook’s blue logo. Blue is regularly associated with health, too, which is why health service providers and many yogurt manufacturers have a weakness for this color. It also symbolizes trust, harmony and friendship – one reason for its popularity among insurance companies.

**Stands for:** Water, peace, safety, trust and productivity

**Brands:** Facebook, Flickr, Ford, Pepsi, Oreo and Skype





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## COMPETITION



## CAN YOU TELL US?

At drupa 1995, Heidelberg unveiled the world premiere of an offset press whose unusual technology made it a center of attention – the Quickmaster DI. It was the first purely offset press capable of imaging printing plates directly in the press. The Quickmaster DI opened up completely new possibilities for commercial printers, as the short makeready times of around just 10 minutes enabled particularly cost-effective production of very short runs.

Within 10 years, Heidelberg sold close to 2,000 Quickmaster 46-4 presses with DI technology. Despite this, in 2006 the company decided to discontinue production of the press, thus also marking the end of DI technology. The reason for the decision was a new, much faster and future-proof technology that Heidelberg had invested around six years in developing. It was first used in small-format Speedmaster presses, where even today it continues to impress with its particularly fast makeready times and almost negligible waste, making it an ideal production tool for very short runs at speeds of up to 15,000 sheets per hour.

**What is the name of the inking unit technology that Heidelberg replaced the DI process with in 2006?**

**1<sup>st</sup> PRIZE**  
iPad Air**Do you know the answer?**

If so, write to us at

**heidelberg.news@heidelberg.com**

and, with a little bit of luck, you could win one of 10 great prizes from our merchandising shop.

The closing date for entries is May 30, 2016.

**THE ANSWER TO THE COMPETITION  
IN HN 277 WAS:**

Hubert H. A. Sternberg

**1<sup>st</sup> PRIZE:**

**BRUNO BENEDICTUS**  
Imprimerie BBI Actuacolor  
Neuilley-sur-Marne, France

The other winners will be notified in writing.

The judges' decision is final. Employees of Heidelberger Druckmaschinen AG and their families may not take part. Prizes cannot be substituted for their cash equivalent. Full conditions of entry are available at [www.heidelberg.com/hncompetition](http://www.heidelberg.com/hncompetition).



## READERS' LETTERS

**Richard Mahany, United States**

I was a Heidelberg Eastern Inc. (HEI) employee for just short of 30 years. Not only do I know the question to the "Who Am I" competition – I actually met Hubert Sternberg many years ago when he visited the Glendale site in New York. I also saw him again at a national print show in Chicago. Incidentally, his birthday is April 14 – just like mine. That day on the show floor, a German band played "Happy Birthday" for Mr. Sternberg, and several of my colleagues who knew that it was my birthday joked: "They're playing for Mr. Sternberg and you!" The president of HEI at that time was Wally P. Lauffs, Mr. Sternberg's stepson. Mr. Lauffs encouraged me to start the first K-Offset

Pressman's School in Glendale. I taught the course for approximately one year, and then became a full line salesman. I enjoyed the work a great deal and have many fond memories of those years. And yes, I was even "Salesman of the Year" in 1980. Of course,

I also visited the factory and foundry in Heidelberg – along with my wife, Berit Unni Mahany.

Kind regards,  
Richard Mahany

**Send us your comments!**

We're happy to hear your suggestions, praise and criticism.

**heidelberg.news@heidelberg.com**



## AT WORK

### SOPHIE MONNERA FROM IMPRIM'ÉCLAIR IN ÉPERNAY, FRANCE

# S

ophie Monnera gives customers what they want, be it self-adhesive designs destined for luxury champagne bottles or small, rectangular ones for sweet treats. The 45 year old joined Imprim'Éclair in the French town of Épernay in 2007 and is in charge of prepress operations. Together with her six-strong team, she designs self-adhesive labels and packaging for champagne manufacturers and extremely high-quality menus for some of the world's top restaurants. She also works closely with the production department. "My production colleagues check whether our creative ideas are technically feasible," she explains with a smile. Monnera remains in close contact with her customers throughout the entire process, discussing designs, schedules and possible optimizations. No two days are the same and that's exactly what she appreciates about her job. "It's a great feeling when I look back on the day in my car on the way home in the evening and know that once again I've been able to satisfy one of our customers," she reveals.

The mother of two lives in Dormans, over 15 miles from her workplace, and likes spending her free time at home in the garden. "At home I'm able to switch off and end the day with a nice meal with my family," says Monnera. ■

## IMPRINT

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