Heidelberg News

The customer magazine
Since 1930 • Issue 273 • 2012

GOTPRINT
Family Business in the Global Village

DOUBLE-SIDED HEAVYWEIGHT
The new Speedmaster XL 106 from Heidelberg

YOUR OWN ONLINE SHOP
Everything you need to ensure success

HEIDELBERG

Shaping the future together

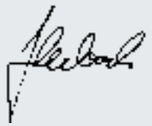
Dear Reader,
It is a special honor for me to have this opportunity to introduce myself to you. As the new Chief Executive Officer of Heidelberger Druckmaschinen AG, I am looking forward to getting to know you and your industry better in the days ahead.

As you are well aware, I've taken up this role in turbulent times. The world of print media production is undergoing dramatic change. It is therefore all the more important to take a proactive approach to this development, to have the courage to seek out new ways, and to play our part in actively shaping the future.

Ultimately, our innovations are intended to help you remain the best in your league in the future. It's our role to ensure you're equipped for the constant challenges on the market, that we're able to shape this change together, and that print has a future for each and every one of us.

You'll find a few examples of our latest solutions on the following pages. All these innovations are geared toward boosting your productivity and thus your competitiveness. I hope this issue, too, contains something of interest to you and wish you an enjoyable read!

Sincerely,



Dr. Gerold Linzbach
Chief Executive Officer, Heidelberger Druckmaschinen AG

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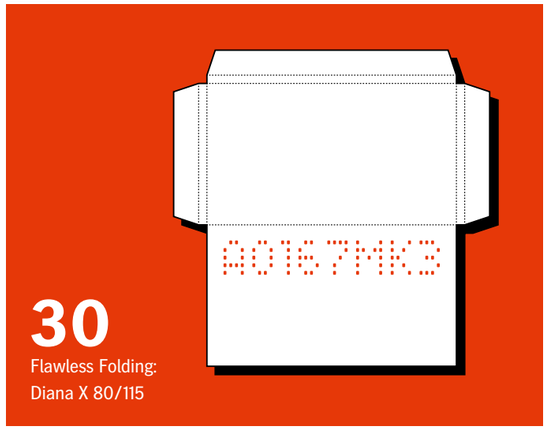

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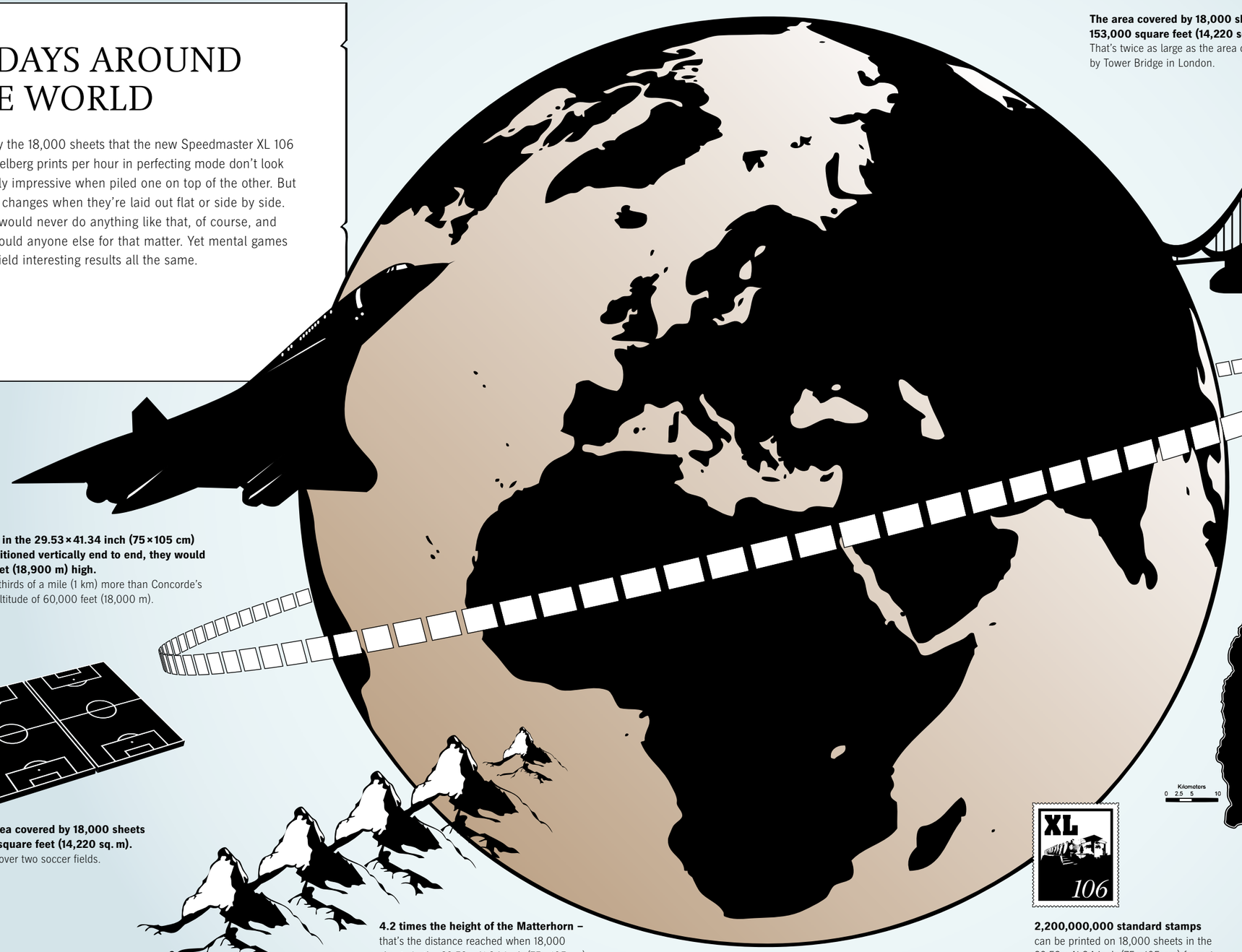
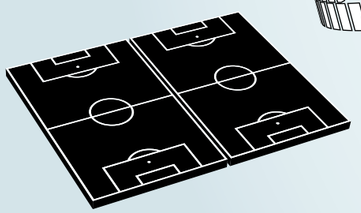
88 DAYS AROUND THE WORLD

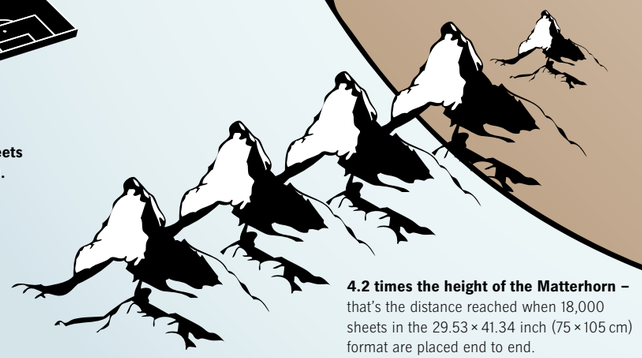
Admittedly the 18,000 sheets that the new Speedmaster XL 106 from Heidelberg prints per hour in perfecting mode don't look particularly impressive when piled one on top of the other. But that soon changes when they're laid out flat or side by side. A printer would never do anything like that, of course, and neither would anyone else for that matter. Yet mental games like this yield interesting results all the same.



If 18,000 sheets in the 29.53 × 41.34 inch (75 × 105 cm) format were positioned vertically end to end, they would reach 62,000 feet (18,900 m) high.
That's nearly two thirds of a mile (1 km) more than Concorde's average cruising altitude of 60,000 feet (18,000 m).

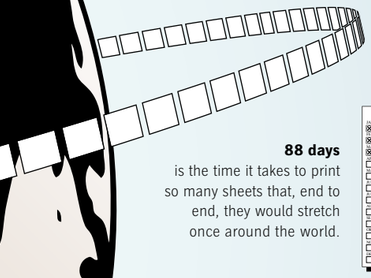


The total area covered by 18,000 sheets is 153,000 square feet (14,220 sq. m).
This would cover two soccer fields.



4.2 times the height of the Matterhorn –
that's the distance reached when 18,000 sheets in the 29.53 × 41.34 inch (75 × 105 cm) format are placed end to end.

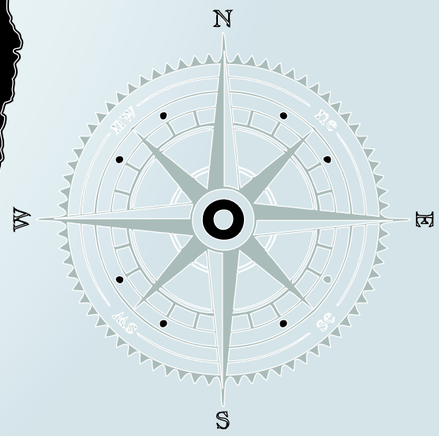
The area covered by 18,000 sheets is 153,000 square feet (14,220 sq. m).
That's twice as large as the area covered by Tower Bridge in London.



88 days
is the time it takes to print so many sheets that, end to end, they would stretch once around the world.

The Dead Sea in Israel is 11 miles (18 km) wide.
The distance covered by 18,000 sheets is 2,950 feet (900 m) further.

2,200,000,000 standard stamps
can be printed on 18,000 sheets in the 29.53 × 41.34 inch (75 × 105 cm) format.



HUNTER-GATHERER

STEPHENS & GEORGE // Andrew Jones is a keen shot and his prey ranges from small animals to large customers. The head of the largest printing company in Wales certainly has enough time for this, as he now prints his customers' magazines around 50 percent faster than before, thanks to his recent investment in four Peak Performance Class presses.

Just a few years ago, "Morlais Castle" was a place that still rang out with laughter, where darts were played and Welsh beer was a favorite drink. Today, the plaster on the facade is crumbling and a poster stuck on the entrance reads: "Danger! Keep out." The former pub in the centre of Merthyr Tydfil is one of many buildings that have seen better days in this South Wales town of some 30,000 inhabitants.

Merthyr Tydfil is not exactly a beauty spot, yet the town can look back on a glorious past. Just a hundred years ago, it was the iron and steel capital of the world and almost 80,000 people lived in the region. Four large steelworks exported their goods around the world and kept the people clothed and fed. It was here in 1804 that the world's first steam locomotive traveled the 15 miles to Abercynon. And it was the town's blazing furnaces that made the cannonballs Horatio Nelson used to sink the Franco-Spanish fleet at Trafalgar in 1805. Merthyr itself suffered a similar fate after World War I. When the last steelworks closed in the 1930s, an unimaginable 80 percent of the male population were out of work. Within 10 years, 30,000 people had left the town to seek their fortune elsewhere.

A question of honor. Andrew Jones' family is one of those that stayed and found their fortune here. While his town still remains in a state of fundamental structural change, Andrew – the Group Managing Director of Stephens & George – and his father successfully put their company on the path toward growth and change in the late 1980s. Just 25 years ago, the company had fewer than 25 ▸

More cost-effective and up to 30 percent faster in processing – the 1.4 metric ton paper reels are moved to the press on a forklift (left) and then prepared for work with the sheeter (right).

employees and almost entirely local customers. Today, with over 225 employees and 120,000 square feet (11,100 sq. m), the company produces work for customers throughout the UK. Stephens & George is the UK's largest printer of monthly and weekly magazines produced using sheetfed offset and is the largest private employer in Merthyr Tydfil. Here, a total of 400 regular titles are printed, cut, folded, bound, addressed and dispatched seven days a week, around the clock. The company handles an average of around 750 jobs a month with runs between 500 and 200,000 copies, including a number of customer magazines for auction house Christie's, industry magazine Printweek and programs for the majority of theaters in London.

However, Stephens & George is also one of the top printing companies for products where the question of quality quickly becomes a question of national honor. For example, it recently produced several programs for the Olympic Games in London. Andrew and his staff are also proud to have helped in the "Wedding of the Century" between Prince William and Kate Middleton in April 2011, since the official wedding brochure including the ceremonial program also came from the Merthyr Tydfil-based printing company. "The quality required wasn't a particularly big challenge for us. The duty of confidentiality up to the wedding day was much more difficult," says Andrew. "More than once, we were contacted by members of the press who wanted to have a copy and claimed they had permission for this."

Play to win. Andrew, 51, is the fourth generation to head the printing company, which was founded by David Stephens and William George in 1912, although he could definitely have pursued a number of alternative career paths. As a young man, he was an excellent sportsman and played in the Cardiff hockey team until 2004. However, first and foremost he was a huge cricket talent with prospects for a playing career. "That would have been great, of course, although I'm not sure I'd really have been cut out for it," he says.

"WE DON'T GIVE OUR ALL ONLY TO LOSE. NO MATTER WHAT COMES IN – WE WANT TO WIN!"
Andrew Jones,
Group Managing Director

Instead of running on grass himself, he now prefers watching others do this, sometimes as a spectator at rugby and cricket games. He also regularly takes part in shoots all over the world. "I shoot, but only game birds – pheasants and partridges," he explains. Andrew is appalled by people who use rapid-fire rifles with an excessively high caliber and shoot at anything that moves. This goes against his stance as a sportsman and is something that also shapes his professional approach. "We don't give our all only to lose. No matter what comes in – we want to win!"

The Christie's case. This was also Andrew's mission when the decision was made in 1979 to enter the magazine business. The idea for this came from his father Gareth, who headed up the company at that time, while Andrew was responsible for pre-press. To make Stephens & George less reliant on commercial printing and local customers, the magazine business was established as an independent entity that was separate from the commercial sector. The management team ▸

Well-trained and in good spirits – employees in the pressroom and Alfred Hitchcock on the cover of one of several magazines that Stephens & George prints for auction house Christie's.

repeatedly invested the profits from the fast developing periodicals business in new eight- and 10-color presses, all from Heidelberg.

On the way to the top, Andrew sometimes had to learn the hard way, particularly before concluding a contract with the international auction house Christie's in 2006. "We really wanted this job as the product was very prestigious," he explains. "But when we showed Christie's our first test prints, they told us the colors weren't right. Up to then, I'd always thought we knew our craft, but the results looked really awful when we checked the numbers to the Christie's standard."

To perform better in the second test run, Andrew sent all the printers on a three-day training course to Heidelberg in Birmingham to train them in color management and teach them how to get the most out of their presses. He also hired a consultant to take a close look at all the press settings and process standards and adjust them. Both of these moves paid off, as Christie's gave the go-ahead after the next test run. "That was an extremely important milestone, because in Christie's we gained a prestigious, discerning customer who really understood the key to color management."

Word quickly got around about the deal with Christie's and the magazine's excellent print quality. New customers made inquiries and existing customers increased their job volumes. One of these was the long-established London-based publisher Haymarket, which Stephens & George had worked for on an ad hoc basis. When Haymarket awarded a three-year contract worth 6.3 million U.S. dollars (5 million euros) to produce 10 magazine titles, Stephens & George won against six competitors and also became the preferred supplier for Haymarket's Business Media division. "That was the icing on the cake for all our efforts in the last 20 years," says a delighted Andrew. "All that time, we'd been knocking on doors in London to no avail and then suddenly we had hit the bull's eye."

"CHRISTIE'S WAS AN IMPORTANT MILESTONE FOR US, BECAUSE WE GAINED A PRESTIGIOUS CUSTOMER AND BECAUSE AT THAT MOMENT WE REALLY UNDERSTOOD THE KEY TO COLOR MANAGEMENT."
Andrew Jones

Quality is important – productivity is everything. Today, commercial work makes up only a fraction of total sales and Andrew is seriously thinking of closing down the division completely. "Everyone wants top quality at the lowest price." For a long time, the lion's share of Stephens & George's earnings has been generated by the magazine jobs, which are printed on four large presses. These include two 10-color Speedmaster XL 105 perfecting presses with Prinect Inpress Control inline measuring system, AutoPlate XL simultaneous plate changer and CutStar sheeter. The two other units are two Speedmaster XL 106 presses – a five-color press with coating unit that prints up to 18,000 sheets per hour and an eight-color perfecting press with Inpress Control, AutoPlate XL and CutStar that was the world's first press of this type and was commissioned on the first day drupa 2012 opened. ▸


BOXING

"MANY COMPETITORS USE CHEAP WEB OFFSET PAPER TO SAVE MONEY. WE USE ONLY HIGH-QUALITY PAPER IN SHEETFED OFFSET QUALITY AND THIS IS SOMETHING YOU CAN SEE IN THE RESULTS." Andrew Jones

Quality is always important, but sometimes it's also a question of national honor – as with the official program for the royal wedding between Prince William and Kate Middleton (bottom right).

Just three years ago, this work was performed by four large Speedmaster SM 102 perfecting presses. However, since the switch to the three Peak Performance class presses, productivity has risen significantly. "We can easily print 14.5 million B1 format sheets a month, as the new presses are around 50 percent faster than their predecessors," explains Andrew. This increase in speed is also due in large part to the dramatically reduced makeready times that result in almost 4,500 extra productive hours for an average of 17,000 changeovers a year. There is no alternative to CutStar either, as far as Andrew is concerned. "Paper in roll form costs less than the comparable amount of sheeted paper and can be processed around 30 percent faster." But Andrew isn't prepared to compromise on quality. "Many competitors use web offset paper to save money. We use only high-quality paper in sheetfed offset quality and this is something you can see in the results."

Naturally, Andrew knows how important quality is for his customers and the success of his company. But equally he knows that quality is very rarely the decisive factor. "Many customers are keen to talk about how important quality is for them but are quick to compromise if they find something cheaper elsewhere."

Time for old and new customers. However, Andrew is quite adamant when it comes to negotiating prices. "We invest a great deal of money in new technologies and just because we're now faster, this doesn't mean we also have to be cheaper," he says, gently tapping the table with his index finger. Any doubt about his persistence is removed by looking at the costs. Paper prices have risen 20 percent in the last two years alone. Since the authorities introduced several new environmental laws, the company has been paying more taxes. Energy suppliers also increased their prices last year by a full 25 percent – for Stephens & George, this amounts to additional costs 195,000 U.S. dollars (150,000 euros) a year.

As customers, too, are now affected by price increases, Andrew gives them what they urgently need rather than what they already have – and that, first and foremost, is time. This is because, as a result of the enormous productivity, perfectly coordinated teams and workflows and years of experience in producing magazines, Stephens & George can delay the start of production for an unusually long period. "If we get the print data for a weekly magazine at eight o'clock in the evening, in many cases we can complete production overnight and deliver the finished magazines the following day," he explains. "This is hugely important to our customers, as it means they can sell their advertising space right up to the last minute, and that's a really tough business."

Customers value the time this saves and this helps the sales offices in London and Edinburgh and seven other sales staff throughout the UK to attract new customers. "At the end of the day, we've also gained a great deal of time thanks to the productivity boost made possible by our recent investments," says Andrew with a smile. "And that's time we'd like to spend with new customers."

Stephens & George Print Group
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www.heidelberg.com/en/XL105
www.heidelberg.com/en/XL106

Man and machine –Ray Hartoonian on his Big Bear Chopper in the GotPrint pressroom

GOT PRINT?

GOTPRINT // While many conventional print shops in the United States have found themselves in economic difficulties, web-to-print is experiencing a veritable boom. One of the most successful players in this sector is Raymond Hartoonian with GotPrint.com in Burbank, California.

With more than 100,000 residents, Burbank is more of a large town than a small city. It likes to be known as the Media Capital of the World. One reason for this is Burbank's unique location. Covering an area of just over 17 square miles (45 sq. km), it is almost completely surrounded by Los Angeles proper, with Hollywood just around the corner. A number of large companies are based there such as the Walt Disney Company, Warner Brothers, and ABC Studios.

Large Customer Base. Does the local print media industry benefit from its proximity to Tinseltown? Ray quickly shatters this illusion. "We don't count the big studios in Hollywood or Burbank among our customers," he says. But GotPrint does have more than 1 million customers worldwide, a huge number for a print shop with a staff of just 400. It specializes in promotional printing such as business cards, flyers, postcards, brochures, catalogs and much more, and mostly short runs. This is because the print shop specializes exclusively in web-to-print and is ▸

"completely Internet-based," as 42-year-old Ray puts it. "The process is entirely automated."

Armenian of origin and born in Iran, Ray arrived in California when he was 20. He trained as a prepress operator and started working at a prepress service provider. His budding interest in technology dates back to the start of the new millennium when hardly anyone imagined the role the Internet would play in printing.

While sales in commercial printing have fallen by nearly 20 percent over the past five years, web-to-print has really taken off, with countless new online print shops appearing on the market every year. Ray was one of the first to recognize the market potential. With typical American modesty, the father of two describes himself as something of a pioneer in this field. He founded Printograph (dba GotPrint) in Toluca Lake, not far from Burbank, in 2001.

Efficiency and Flexibility. Ray chose to use Heidelberg equipment from the beginning. Unlike many of his competitors, he favored cost-effective, fast and high-quality production over a cheap, quick-and-dirty approach. "For exceptionally high quality, you need outstanding machines that also have to be particularly efficient and flexible," he insists.

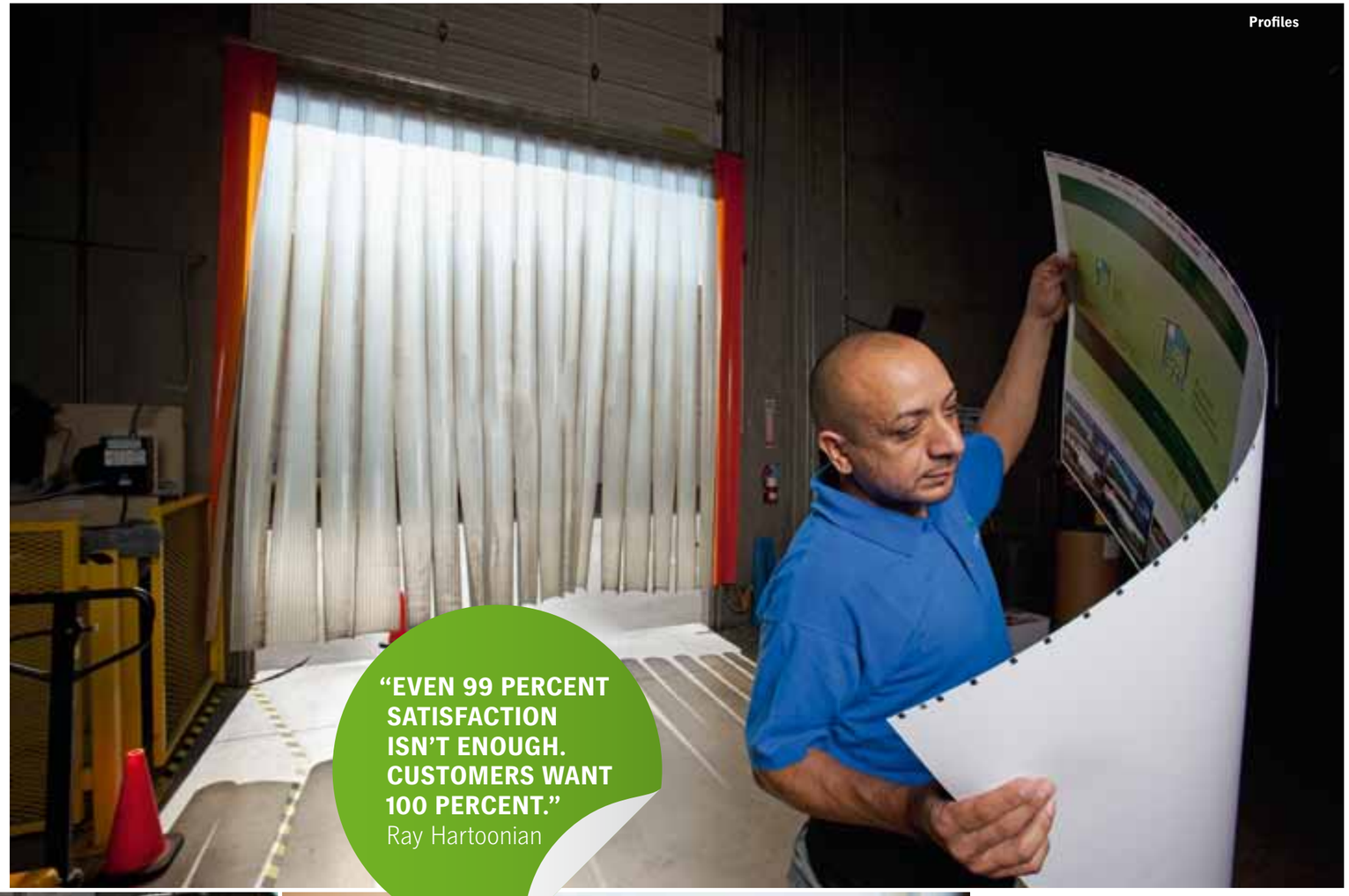
In 2006, Gotprint relocated to Burbank, near Bob Hope Airport, to better serve customers outside of the Los Angeles metropolitan area. The current location now has five buildings covering a total area of 100,000 square feet (around 9,200 sq. m). From his office, Ray can watch the planes take-off and land. Fast delivery times are even more important in web-to-print than in other print segments. Customers can place an order with just a few clicks of the mouse 24/7 and expect their orders to be processed with equal speed. On average, it takes just three days before finished jobs are ready be shipped. From its headquarters on the West coast, GotPrint also supplies customers in Japan, Australia and New Zealand.

Fierce Competition. Being a perfectionist, Ray would like to see improvement on the current turnaround times. "A great deal of fine-tuning is still possible, from job acceptance all the way to shipping," he says. Continuous improvement is essential for anyone who is looking to ensure lasting success in the web-to-print market. Companies that fail to continuously develop new concepts, optimize processes, keep costs under control and operate the best equipment quickly find themselves at a disadvantage.

The Internet is both a blessing and a curse in this respect. "Prices are falling and the competition is just a click away," Ray emphasizes. Competitors in the global online space do not necessarily need to be located in Santa Monica, Los Angeles or San Francisco. They can be based anywhere from Amsterdam to Shanghai or São Paulo, as geographical distances hardly affect an online business. The Internet does create a certain distance of its own, though, because it weakens customer loyalty. Small price differences, delivery delays or tiny defects can cause customers to switch suppliers. "Even 99 percent satisfaction isn't enough. Customers want 100 percent," says Ray. If a supplier fails to live up to these high expectations, word gets around immediately on the Web and social media platforms. "Internet customers have a different mentality," he continues. Ray recognizes that transparency has its price, "but it also pushes us to work even harder and improve," he stresses.

Smooth Process. Ray considers lean processes to be extremely important and is constantly coming up with new strategies to shorten turnaround times and boost customer loyalty. "We are keenly aware to avoid errors as much as possible or at least to learn quickly from them so that we don't make the same mistakes twice," he says. Ray spends a great deal of money on marketing activities, both online and offline. He is reluctant to reveal exactly how much or to provide an indication of the company's sales and revenues. "We're just a family business," he adds modestly.

Optimizing work flow solutions are integral for greater efficiency. For years, Ray has been using the Prinect print shop work flow from Heidelberg in conjunction with GotPrint's own custom software solutions. Such sophisticated IT is essential to ensure optimum processing of several thousand print jobs for SMEs and private customers each ▸



Lean reporting structures and a good eye for quality are just two of the factors that account for the success of GotPrint.

“THERE WILL SOON BE ONLY FIVE OR SIX MAJOR PLAYERS IN OUR MARKET.”
Ray Hartoonian

Insights into a success story – the pressroom with two of a total of three Speedmaster XL presses, the entrance to the company headquarters in Burbank, and the postpress operations.

day. GotPrint’s customer base also includes other print shops, agencies and numerous online brokers.

GotPrint employs more than 15 IT specialists, including several programmers. They have two main tasks: to present the entire product portfolio to customers and, above all, to make it as easy as possible for these customers to place orders on their computers. Consequently, a good programmer is just as important as a good printer in the world of web-to-print. According to Ray, website design and functionality accounts for almost half the outlay of developing a new product.

Expansion. GotPrint has grown from a small family business to a flourishing SME that operates worldwide. The founder’s sister, Sonik, and brother-in-law, Greg, are an integral part of the company. To speed up delivery to customers in the central and eastern United States, GotPrint opened an 85,000-square-foot (7,900 sq. m) printing facility in Kentucky in 2008, followed by a 110,000-square-foot (10,200 sq. m) facility in Texas in 2011, which focuses on the southern states and Central and South America. Also in 2011, GotPrint took the courageous step of venturing across the pond where GotPrint’s fourth site is located in the Dutch city of Maastricht. This European subsidiary serves customers in Germany, France, the United Kingdom, Ireland, Benelux and Austria, with websites in each country’s respective language. Jobs from the Middle East and Africa are also processed here.

GotPrint uses Heidelberg equipment in all its locations, from prepress to postpress. This includes two Speedmaster CD 102, three Speedmaster XL 105 presses and, since the beginning of 2012, a Speedmaster XL 145 press at the Texas site. According to Ray, these three series are perfect for a web-to-print operation the size of GotPrint. Ray also keeps an eye on the Asian market but is reluctant to expand into the Far East. In his view, the cultural differences and consumer expectations are still a world apart.

Riding the Chopper

Ray firmly believes that the web-to-print market will continue to change rapidly. “If printers fail to find successful niches, many of them will not be able to hold their own for long because they simply don’t have the volume required for cost-efficient production. There soon will be only five or six major players in our market,” he predicts. A born fighter with his shaved head and steady gaze, Ray definitely intends to be one of them.

That may well mean he has a little less time for his wife Ani and his children, 4-year-old Nairi and 2-year-old Dvin. He will probably also have less time for his hobbies – skiing and snowboarding in the winter and motorcycling in the summer. In his garage, Ray has a Big Bear Chopper, which could easily be mistaken by a layman as a Harley Davidson. It takes him just 20 minutes to reach Venice Beach with its long stretches of sand. And the legendary Route 66 is almost at his doorstep. Is America really the land of unlimited opportunity? Perhaps. In any event, Ray’s dream has been realized on a truly global scale.

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www.heidelberg.com/en/CD102
www.heidelberg.com/en/XL105
www.heidelberg.com/en/XL145

News & Reports

FIRST VARIMATRIX 82 CS // WORLD PREMIERE AT D.O.G. GMBH

GERMANY. D.O.G. Digital-Offset Gass GmbH in Darmstadt can pride itself on having taken the world's first Varimatrix 82 CS into service. The former prepress business that now specializes in pharmaceutical packaging intends to use the brand new die cutter to further boost its productivity. With a maximum sheet format of around 24 × 32 inches (605 × 815 millimeters), the Varimatrix is perfectly coordinated with the existing Speedmaster XL 75 around 24 × 30 inches (605 × 750 mm) and also benefits from fast makeready times. It processes up to 8,000 sheets per hour and, thanks to its high cutting pressure of 200 metric tons, opens up a whole host of postpress options. One other key factor for company founder Johann Gass, though, was the machine's "Tested Safety" certification. Since both the wellbeing of his staff and the environment are important to him, Gass has ordered both the Speedmaster and the Varimatrix with carbon offsetting. This underlines the green credentials of D.O.G., which even has a photovoltaic installation to produce its own clean electricity.

info // www.dog-darmstadt.de

PREMIERE AT DWS PRINTING // FIRST CUTSTAR IN THE UNITED STATES

UNITED STATES. In times of low profit margins, productivity is key to success. It was this sentiment that prompted U.S. packaging and label printer DWS Printing Associates to take the very first CutStar in the whole of the United States into operation. Behind the sheeter is an extremely productive eight-color Speedmaster XL 106 press with coating unit, which itself is equipped with the highly efficient Prinect Inpress Control inline color measuring and control system. What's more, this resource-friendly machine also supports optional UV printing. To ensure that the family-run company is equipped to handle all kinds of substrates, DWS has also chosen to fit its Prinect Press Center with the Prinect Axis Control color measuring system. DWS is giving the package an extra boost by optimizing its workflow with the Prinect Pressroom Manager. "It doesn't get much more efficient or flexible than this. That's why I'm confident the technological edge that Heidelberg enjoys will keep us several steps ahead of the competition," says DWS Managing Director Tom Staib.

info // www.dwsprinting.com

World premiere in Darmstadt: D.O.G. GmbH intends to get the most out of its packaging printing line based around a Speedmaster XL 75 by using the world's first Varimatrix 82 CS.

Performance boost: Thomas Staib (center) and John Gulino (3rd from right) from DWS Printing Associates in the United States are benefiting from the productivity increase generated by cutting-edge Heidelberg technology.

FIRST SPEEDMASTER XL 75 ANICOLOR // FIELD TRIAL AT REUFFURTH

GERMANY. Medienhaus Reuffurth in Mühlheim am Main is currently putting the world's first Speedmaster XL 75 Anicolor through its paces. It is looking to prove in everyday operation that the Anicolor "90-50-50" formula (90 percent less paper waste, 50 percent shorter makeready times and 50 percent higher productivity than with conventional inking units), which has already been tried and tested for the small format, also applies to the medium format. According to company owner Hans Reuffurth, "In addition to less waste and faster processes for repeat jobs, we are above all looking to achieve top-quality results, even with difficult print motifs." Reuffurth considers quality to be extremely important and was also involved in testing the Prinect Inpress Control inline color measurement and control system a few years ago. The innovative Mühlheim company is now also looking to help turn its "drupa model" into a series press that meets even the toughest demands.

info // www.reuffurth.net

RESEARCH PROJECT EXTENDED // HEIDELBERG PRINTS ELECTRONICS

GERMANY. Heidelberg, BASF and TU Darmstadt have agreed to take their joint research project "Nanostructuring and plastic electronics print platform" (NanoPEP) to the next level. Having succeeded in printing the first functional electronic components in the clean room of Heidelberger InnovationLab GmbH, researchers are now looking to apply the laboratory findings on an industrial scale in "NanoPEP 2." For this purpose, they intend to further develop both the "conductive inks" and the associated printing methods – a multidisciplinary challenge that involves applying conductive polymer/organic molecule layers just a few nanometers thick to flexible substrates with complete homogeneity and no flaws. A modified Gallus RCS 330 rotary press will be used to test this process. The technology involved offers excellent economic potential because it could be used to make products such as inexpensive circuits, storage devices, light elements and solar cells.

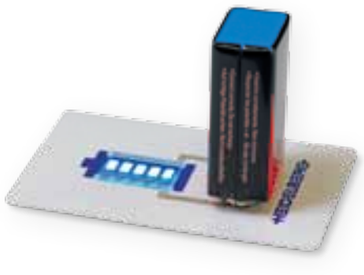
info // www.innovationlab.de

MIDIOGRAF BUYS FIRST SPEEDMASTER SX 102 IN SOUTH AMERICA // PIONEER IN PARANÁ

BRAZIL. For many years now, the Midiograf commercial print shop based in Londrina has been a frontrunner in terms of quality. Founded 20 years ago, the company is considered an ambassador for the trade throughout the Paraná region in southeastern Brazil. And now Midiograf, which employs 200 staff, is preparing to become a pioneer for the entire continent by being the first print shop in South America to invest in a Speedmaster SX 102 eight-color perfecting press. In addition, it is purchasing a Eurobind Pro adhesive binder (also one of the first in South America) and a Stahlfolder TH 82 buckle plate folder. "The Eurobind Pro and the Stahlfolder TH 82 are the ideal machines for ensuring that postpress operations can keep up with our new perfecting press," agree the two print shop owners Edson and Nivaldo Benvenho. They are aiming to increase productivity by at least 40 percent and improve the quality of their catalogs, brochures and books further. The Speedmaster SX 102 will enter into service next year.

info // www.midiograf.com.br

From exhibition to everyday operation: Stephan Plenz, the Management Board member for Heidelberg Equipment, is shown here with Hans Reuffurth and Frank Süsser from the product marketing team (left to right).



Light direct from the press: In the future, innovative "inks" and printing methods will pave the way for inexpensive light elements, solar cells, etc. on flexible substrates.

Pioneers in Paraná: Edson (left) and Nivaldo Benvenho, owners of the Brazilian commercial print shop Midiograf, will be taking South America's first Speedmaster SX 102 into service early next year.

PREMIERE AT CENTRAL PRESS //
FIRST SPEEDMASTER XL 106 IN JORDAN

JORDAN. Yousef Hammad had his finger on the pulse back in 1960, when the rising demand for schoolbooks prompted him to take the step up from simply supplying the paper to printing the books himself. His company has grown steadily ever since. Today, Central Press also produces high-quality magazines, calendars, brochures, posters, flyers and business stationery at facilities covering approximately 140,000 square feet (13,000 square meters). And, keen to grab the bull by the horns himself, Yousef's son Maher Hammad is clearly following in his father's footsteps. By investing in a Speedmaster XL 106 five-color press with coating unit, the current Managing Director hopes to continue to meet his customers' requirements long into the future. The Hammads had previously seen the brand-new heavyweight from the Peak Performance Class in action for themselves at drupa. Attending drupa is another family tradition at this company that strives to meet the highest standards.

info // www.centralpress.jo

TRAINING ON WHEELS //
MOBILE CLASSROOM

COLOMBIA. To give young people in remote areas of the country an opportunity to learn a trade, the state-run educational institute SENA (Servicio Nacional de Aprendizaje) and Heidelberg Colombia have joined forces to convert a bus into a print shop. SENA hopes that the mobile classroom equipped with a Printmaster QM 46, a POLAR 66 cutter and nine computer-based print simulators will greatly improve the career opportunities of around 5,000 students living in rural areas. The institute's large-scale education campaign also includes the installation of three two-color Speedmaster SM 74 presses at its schools in Barranquilla, Medellin and Cali. One of the pivotal reasons for selecting this machine was its user-friendly operation, which makes it even easier for the students to learn a profession in the print industry.

info // www.sena.edu.co

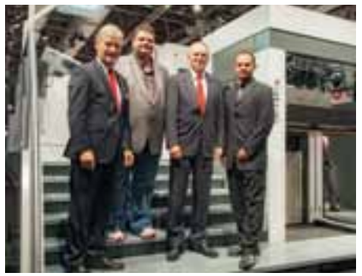
PREMIERE IN AUSTRALIA //
FIRST DYMATRIX 113 PRO FOR AMR HEWITTS

AUSTRALIA. AMR Hewitts PrintPackaging is the first packaging printer on the continent to order the Dymatrix 113 Pro. The former commercial printer plans to use the high-performance die cutter from Heidelberg to further extend its current market leadership in the field of high-quality packaging for the cosmetics, food, pharmaceutical and automotive sectors. "Our capacity utilization levels are now so high that we need an extremely productive solution that works at high speeds without compromising at all on quality," says Lou Mimmo, Managing Director of AMR Hewitts. "That's why we attach such importance to the machine's special features, such as the electronic adjustment of the die-cutting form and the cold start functionality, which enable the Dymatrix 113 Pro to open up completely new opportunities for us in postpress," adds Production Manager Peter Mimmo.

info // www.amrhewitts.com.au

Innovation is a family tradition: Maher Hammad (2nd from left) and Yousef Hammad (right) from Central Press plan to stay a step ahead of the competition by installing Jordan's first Speedmaster XL 106-5+L.

Mobile classroom: Educational institute SENA hopes that its print shop on wheels will give students in remote areas of Colombia the opportunity to learn a trade.



Sealing the deal for the first Dymatrix 113 Pro down under: Alastair Hadley from Heidelberg Australia, Peter Mimmo from AMR Hewitts, former Heidelberg CEO Bernhard Schreier and Lou Mimmo from AMR Hewitts (from left to right) at drupa.

Hard work alone is not enough. Without perfect organization, even the best production operations falter. To ensure your commitment to your print shop really pays off, you need smooth processes along with production resources that are both efficient and reliable. We will help you to turn speed, quality, and reliability into profitable print products – because productivity is your biggest competitive advantage.
www.heidelberg.com

HEIDELBERG

18,000

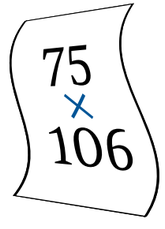
SHEETS PER HOUR

00'8L

XL 106 // The new Speedmaster XL 106 takes print shops to new heights in productivity – and not just thanks to the top speed of 18,000 sheets per hour in perfecting mode.

When it got to the point that they were no longer happy with their own delivery times, Steve and John Pizzey boarded a plane and headed for Heidelberg. The brothers are owners of Sterling, a print shop in Kettering in the UK, where the 200-strong workforce produces high-quality commercial products, often in long runs for customers from industry, public administration and educational establishments. Sales have shot up by 80 percent in the last four years alone. "We got to the point where we simply hit the limits of our capacity," explains John Pizzey. "Despite our 10-color Speedmaster XL 105 perfecting press with its speed of 15,000 sheets per hour, we had to boost our output even further. We urgently needed faster delivery times and greater capacity."

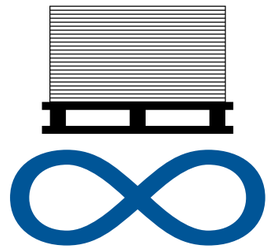
"First, in Wiesloch-Walldorf, we subjected the perfecting press to intensive testing with our jobs and were soon impressed by the exceptional stability and quality of the press, which is 3,000 sheets per hour faster," says Pizzey. They then started in earnest in mid-November 2011 with the new generation of Peak Performance presses. The press is equipped with the Prinect Inpress Control spectrophotometric inline measuring and control system, the automatic AutoPlate Advanced plate changer and the CutStar sheeter. Sterling uses it primarily to produce long runs averaging 13,000 sheets. "We've increased our productivity by over 20 percent and can therefore process more jobs in a shorter time. This gives us a clear competitive edge, particularly since we also achieve rapid delivery times with the aid of the Prinect print shop workflow," explains Steve Pizzey.



SHEET FORMAT
The larger Speedmaster XL 106 sheet format of 29.53 × 41.73 inches (75 × 106 cm) delivers clear benefits – packaging printers have a larger die-cutting border and commercial printers get more repeats per sheet for web-to-print gang forms.

Performance boosted by over 20 percent. All Speedmaster XL 106 users report similarly high performance boosts, states Karlheinz Dittmann, product manager at Heidelberg. "Countless discussions with customers have enabled us to identify how industrial companies with production levels of 40 to 60 million sheets a year can make their production operations even more profitable," he says. "The answer was to increase speed." Heidelberg therefore systematically geared its new Peak Performance class toward even better performance and increased the sheet format by 0.39 inches (1 cm). The maximum sheet format of 29.53 × 41.73 inches (75 × 106 cm) notably offers a larger die-cutting border for packaging printers.

Absolute register accuracy at 4.9 meters per second. Dittmann and his team from R&D spent three years in testing and development, completely revamping the XL 105 and the proven perfecting technology. The existing Speedmaster XL 105 already achieved a top speed of 18,000 sheets per hour in straight printing mode. The biggest challenge was therefore to deliver 18,000 sheets per hour in true Heidelberg quality in perfecting mode, too. "Increasing the number of sheets per hour by 3,000 is a huge step forward, as the difficulties in doing this don't increase in a linear fashion but exponentially. Sheets pass through the press at 16 feet (4.9 meters) per second," explains Dittmann. The main focus was therefore on ensuring stable, contact-free sheet travel and register-accurate reversal. This was achieved by using a new perfecting and delivery concept and an adapted sheet control system. To do this, the engineers from Heidelberg increased the dynamics and stability of the storage and reversal drums even further, reaching a top speed of 18,000 sheets per hour. The modifications to the reversing drum and the new pincer grippers ensure absolute register accuracy in perfecting mode. The extended delivery also supports mark-free sheet travel. The extension module includes the new CleanStar, which minimizes powder emissions from the delivery, resulting in over 80 percent less dust in the immediate vicinity of the press.

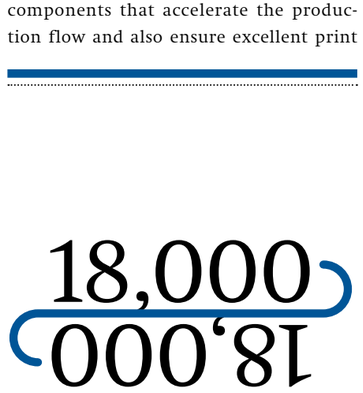


NON-STOP PILE CHANGE
The automatic non-stop device on the delivery ensures uninterrupted material flows on the fly and boosts material throughput. Precisely aligned piles also enable smooth finishing.

Supremely simple operation. The Speedmaster XL 106 also raises the bar in user friendliness. Intelligent components reduce the printer's workload and minimize makeready times. The press can be set with just a few clicks via the high-performance Prinect Press Center control station. The operator only needs to enter the length, width and thickness of the substrate – the format and air settings are handled by the press. "The fully automated setting wins you up to five minutes additional production time, often far longer with difficult substrates," stresses Dittmann. The new control panel concept enhances ergonomics and efficiency. Additional touchscreens at the Preset Plus Feeder and printing and coating units save legwork and thus valuable time. "We adopted this innovation from the Speedmaster XL

145 and XL 162. After all, a 10-color Speedmaster XL 106 measures no less than 69 feet (21 meters)," he explains. Activities such as washing the blankets can now be started and monitored directly at the Preset Plus Feeder. A further benefit is that operators can see at any time what work the press is currently performing and determine the press's current status at each unit at a glance – for example, it can also identify whether the cloth supply roll of a particular printing unit will soon need changing.

Ultra-short makeready times. The Speedmaster XL 106 is incredibly easy and fast to operate. It is also packed full of high-tech components that accelerate the production flow and also ensure excellent print quality. Heidelberg is the only manufacturer that supplies databases with characteristic curves directly from the factory for the various substrates, speeds and inks. This dispenses with complex manual adjustments on the press and gets it to the maximum production speed faster. "Don't waste time" is also the message when it comes to washing inking rollers, blanket cylinders and impression cylinders. Optimized and customized cleaning programs accelerate the washup process by up to 30 percent while also using less washup solution. "One minute is all that's needed to wash blankets," says Dittmann. The Hycolor inking and dampening system combined with the Color Package also sets the pace in quality assurance. The package minimizes makeready time and startup waste and ensures maximum color stability throughout the entire run, at any speed.



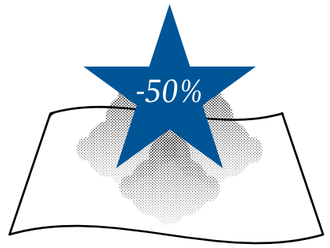
18,000 SHEETS PER HOUR …
… that's the speed of the Speedmaster XL 106 in both straight and perfecting modes with stable sheet travel, offering reliability throughout. The exceptionally high speed and innovative technology increase print shop productivity by 20 percent.

Not Just Long Runs

AUMÜLLER // Aumüller Druck in Regensburg is field testing one of the first pilot series Speedmaster XL 106 presses, which prints 18,000 sheets per hour in perfecting mode and achieves amazing results even with short runs.

This was an eagerly awaited field test, as Aumüller Druck is not at all the "typical ideal customer" for the 18,000 sheets per hour Speedmaster XL perfecting press, the normal preserve of businesses with long runs in the tens and hundreds of thousands. But Aumüller Druck is different, since the long-established Regensburg-based company specializes in high-end commercial work for customers such as BMW, Adidas and Audi. It is also producing an increasing number of short runs from 250 to 2,000 sheets, primarily for its web-to-print partner Flyeralarm. "We wanted to check whether the higher speed also pays dividends for shorter jobs involving frequent job changes," explains Stefan Aumüller, who manages the business with his brother Christian. Although the idea of using the long-distance runner for nothing but short sprints might sound strange at first, shrewd thinking lies behind this move. Aumüller Druck is one of the best performing sheetfed offset print shops in Germany. The company has been a field tester for long perfectors since 1996 and uses six Speedmaster XL perfecting presses from Heidelberg for all its production operations. State-of-the-art technology and a high level of automation ensure maximum quality, flexibility and speed.

The new Speedmaster XL is also equipped with Prinect Inpress Control and the AutoPlate XL simultaneous plate changer. It went into production immediately after being installed in February 2012. And the results so far have been impressive: "The press does exactly what it promises. The perfecting device and extended delivery work perfectly, with the result that we almost always operate at the top speed of 18,000 sheets per hour," says Aumüller. Printing is performed in line with the Process Standard for Offset Printing (PSO). Aumüller Druck harnesses the full potential of the press thanks to automated and standardized workflows. Using AutoPlate XL, a complete plate change for Aumüller's eight-color Speedmaster XL takes around four minutes less than for a comparable press with AutoPlate Advanced. This means an extra 100 hours of production capacity for every 1,500 job changes. Prinect Inpress Control also controls color and register on the fly, whatever the speed. The press does not therefore need to be halted for setup or production run monitoring. "Our expectations have been met. With net output of 17,000 sheets per hour, turnaround times are noticeably shorter, and our productivity is around 20 percent higher than before, even for short runs," explains Aumüller.

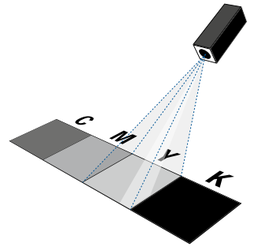


POWDER SPRAY DEVICE …
… PowderStar AP 500 Duo powders sheets uniformly even at high production speeds. An innovative powder application system cuts the amount of powder needed by up to 50 percent.

Color Assistant Pro, part of the Color Package, monitors the status of the ink fountain liner, independently calibrates the ink zones at every job change and automatically adjusts the characteristic curves. This means that color presettings are even more precise and easier to reproduce. The Prinect Inpress Control inline measuring and control system also ensures that color and register are optimized as quickly as possible. This results in up to 150 fewer sheets of startup waste for each job change. A program-controlled ink feed, as well as an ink vibrator throw-off, working in tandem with digitally controlled ink zone motors, enhances efficiency further during setup. The ink zone motors ensure high-precision ink feed and a very rapid response during color control.

Reliable non-stop operation. To boost the productivity and process reliability of the Speedmaster XL 106 even further, the delivery can also be fitted with an optional non-stop system. The unique non-stop system from Heidelberg is fully automatic and processes paper (70 gsm and above) and cardboard at top speed. This cuts operators' workloads and enables them to concentrate on other operations. Naturally, this system, too, can be conveniently controlled via the Prinect Press Center.

Unrivaled productivity. The Speedmaster XL 106 was premiered at drupa 2012 and immediately became a bestseller, particularly among highly industrial packaging and commercial printers. The press processes substrates up to 0.039 inches (1 mm) in the straight printing version and up to 0.031 inches (0.8 mm) as a perfecting press (max. flexural strength 130 mNm to DIN 53121). It is therefore ideal for processing everything from inmold foils to kraft board. The new flagship in the Peak Performance class also scores highly thanks to the broadest range of configurations in the 27.56×39.37 inch (70×100 cm) format. The press can be adapted to virtually all market needs in an extremely wide range of versions extending from two to 19 units, with or without perfecting, as a UV or dual-coating press. It can also be ordered as an LPL configuration (coating unit before and after sheet reversal), as a Duo press with flexographic printing units before the offset units or as a rotary die cutter for inmold labels, for example. "The Speedmaster XL 106 is designed for print shops with a wide range of materials, high print volumes or frequent job changes," says Dittmann. "We also cater to packaging printers who can benefit, for example, from the machine's productivity of 18,000 sheets per hour with one- or two-color reverse-side printing." Packaging printers will also be interested in the new inkjet module, which delivers perfect quality in a workflow with Dymatrix or Varimatrix die cutters and the Diana X 80/X 115 folding carton gluing machines in a fully automated process.



COLOR PACKAGE …
… reduces makeready times and the amount of paper waste. It consists of Color Assistant Pro, Prinect Inpress Control, digitally controlled ink zone motors, a program-controlled ink feed and an ink vibrator throw-off.

But that's another story – and it continues on the next page …

Perfect Folding

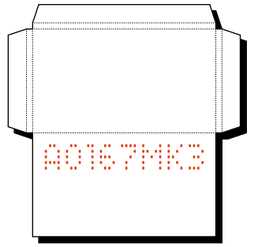
DIANA X 80/DIANA X 115 // Whether used on their own or in combination with the Speedmaster XL 106, Diana X 80/X 115 folding carton gluing machines are a powerful tool in the constant quest for higher peak performance, with new functions enhancing their versatility, speed and productivity even further.

The "barcode test" works every time, explains Bodo Junge, Product Manager Postpress Packaging at Heidelberg, taking a box of pills from his jacket pocket. Lines in various thicknesses are arranged on the side to make up the product barcode. "One line here is broken," says Junge, pointing to a relevant section. Indeed, the defect can't immediately be detected by the human eye. Yet the small imperfection underlines the challenge for folding carton printers, particularly for those in the pharmaceutical sector – that of ensuring cost-efficient production and flawless quality. After all, it isn't just about appearance but first and foremost patient health. Added to this is the fact that increasing numbers of manufacturers only order packaging in small quantities and on demand.

To hold their own against the competition, printers therefore need flawless quality, as delivered by the Diana. A narrow version of this folding carton gluing machine with a working width of 31.50 inches (80 cm) has also been launched recently, giving it the ideal dimensions for processing demanding pharmaceutical and standard packaging such as straightline, lockbottom and four-corner cartons in long runs. Anyone looking to cover the entire spectrum of folding cartons with customized products is extremely well placed with the 45.28 inch (115 cm)-wide Diana X 115. It can handle all carton layouts, ranging from straightline, double-wall and lockbottom cartons to four- and six-corner cartons and unusual customized products.

Quest for "Japanese quality." Yet whether they have the narrow or wide version, explains Junge, "print shops can use the three new modules, the Stack Turner, the Diana Inspection Control module and the Diana Braille module, to give an added boost to speed, quality and productivity by streamlining their production chain further." And this starts with printing, since errors that creep in at this stage, such as incomplete patterns and barcodes, impair the efficiency of the entire production process. It is therefore only logical to use the Inspection Control camera system for folding carton production, too, to deliver the reliability and "Japanese quality" that is legendary in folding carton circles.

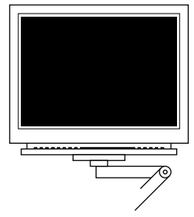
The high-resolution high-speed camera compares the entire print image during setup with the digital proof (PDF) from prepress and with the scanned-in reference copies (repeats) during production. Even the slightest imperfections are reliably identified and incorrect blanks are ejected at high machine speed. Color defects, register inaccuracies, barcode errors and print image deviations are detected along with defects such as carton damage and scratches on coatings and surfaces. "Diana Inspection Control ensures flawless production. It also saves money, as print shops don't have to dispose of the whole sheet if only a single repeat is defective. This single repeat is reliably ejected in the folding carton gluing machine," stresses Junge.



INKJET INTEGRATION
Up to 12 inkjet heads can be integrated into the coating unit. This enables simultaneous coating and imprinting of alphanumeric codes, for example, or marking of individual repeats as waste when used in conjunction with Prinect Inspection Control.

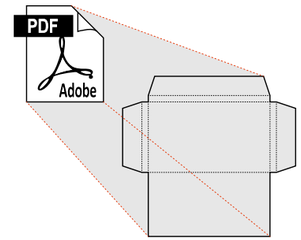
Inkjet creates added value. A further benefit is that print shops can use the system on its own in the Diana folding carton gluing machine or alternatively in the press. This is because the straight printing version of the Speedmaster XL 106 offers packaging printers an added extra – inkjet technology. Up to 12 inkjet heads based on the continuous inkjet method can be integrated into the coating unit. Print shops can therefore perform coating and imprint alphanumeric codes, for example. Another advantage is that, in conjunction with Prinect Inspection Control, it is possible to check the full area of individual repeats by using a PDF comparison and destroy the code on the repeat's adhesive flap if the quality is inadequate.

After die cutting with a Dymatrix or Varimatrix, the defective repeats are then automatically detected in the Diana X 80/X 115 folding carton gluing machine by the Diana Inspection Control module and are removed in the ejector module. Users thus benefit from 100 percent quality control and also save money, as only the defective individual repeat is removed after the printing process and not the entire sheet. In addition, working in tandem with the Speedmaster XL 106 to prevent errors, a small compact camera in the Diana X 80/X 115 is all that is needed to detect the Speedmaster error marking on the code of the carton's adhesive flap. "Heidelberg is the only supplier that covers the entire production chain in packaging printing, from printing and die cutting to folding and gluing. Generating synergies between the individual stages ensures every customer derives the optimum benefit," explains Junge.



THE CONTROL SYSTEM …
… Diana X 80/X 115 benefits from an efficient, easy-to-use operating concept. The DIAlog process control computer acts as an operator-machine interface. The touchscreen saves time by making the process of entering data effortless.

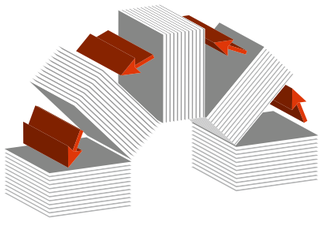
The Diana X 80/X 115 separates out defective repeats whatever the customer's preferred error prevention method. The size of the repeat plays no role in this – the Diana ejector module eliminates the smallest cartons in pharmaceuticals and cosmetics just as reliably as large specialty cartons. The electronics are keener than even the sharpest of eyes and therefore avoid annoying errors in sensitive folding carton production. To prevent costly breakdowns from occurring in the first place, the Diana X 80/X 115 stops automatically as soon as the number of successive defective repeats specified by the user is exceeded. This is also helpful, for example, when producing foreign-language packaging (text length, special characters) and incorrect blanks have been inserted by accident.



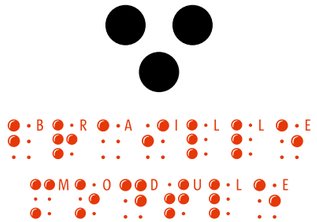
CHECKING OF ENTIRE BLANK AREA
The Diana Inspection Control module compares the print image with either a digital proof (PDF) or a reference blank that has been scanned in. Even the slightest imperfections are reliably identified and incorrect blanks are ejected at maximum machine speed.

Higher piles – faster turning. To keep productivity as consistent as possible after printing and die cutting (e. g. by using the high-performance Dymatrix 106 Pro CSB die cutter from Heidelberg), the Diana X 80/X 115 can also be equipped with a new Stack Turner that packs up to 1,000 carton blanks at once and turns them automatically. With up to four and a half turning cycles a minute, the new module ensures a consistently high feed of carton blanks. "The automation reduces operator workload and increases throughput by up to 25 percent," says Junge.

Fast and flexible – Diana Braille module. The Diana X 80/X 115 primarily owes its high productivity and speed to its folding station's exceptional length of 12 feet 1 inches (3.70 meters), which enables production speeds of up to 2,130 feet (650 meters) per minute and precise and smooth material processing of even large blanks. This amounts to output of up to 200,000 folding cartons an hour. Added to this is the enormous flexibility of the Diana X 80/X 115. Both models are of modular design and can be adapted precisely to production needs. As each module is driven by its own servomotor, additional components or add-ons can be integrated to meet specific customer requirements. These include not only the Stack Turner and Diana Inspection Control module but also the lockbottom, collapsible box and turning modules and the Diana Braille module, which is also new and, for example, can be used to apply the DIN standard for embossing medicine names in Braille on packaging as stipulated by the EU. This is performed cost-efficiently and with exceptional flexibility, as the embossing rollers can be positioned anywhere across the entire format width. A further benefit is that two or more Braille tools can be located next to each other on the same drive shaft, thereby enabling simultaneous embossing of several areas – for instance, to emboss large amounts of text or apply Braille or appropriate surface finishings on several fields in a single pass. With speeds of up to 100,000 cartons an hour, the Diana X 80/X 115 sets an impressive pace even with these kinds of applications. Setting up the Braille tools outside the machine also cuts makeready times. The blanks are transported precisely and reliably during embossing using telescopic transport belts that can be positioned flexibly across the entire machine width.



DIANA STACK TURNER …
… is geared to high production speeds, with up to four and a half turning cycles a minute. It can turn up to 1,000 carton blanks at once, thus ensuring precise and continuous pile feeding.



DIANA BRAILLE MODULE …
… enables Braille to be embossed on all areas of the carton and simultaneous embossing of several areas. Even when the Diana Braille module is in use, the Diana X 115 produces over 100,000 folding cartons an hour.

Special folding types. Belt folding solutions can be used to produce small, high-quality pharmaceutical packaging and folding cartons for cosmetics. They even allow reliable processing of open blanks in formats as small as 1.77 inches (45 mm). To do this, the lower center carrier is moved away to the side. Since it remains in the machine, however, it is available whenever required. The user-friendly design is characteristic of the Diana X 80/X 115 – the machine can be switched from one job to the next in just a few simple steps, thanks to the modules available and the open construction.

However, the processing operations are not the end of the workflow. Once the folding cartons have been glued, the Diana Packer comes into play. With a maximum output of over 200,000 cartons per hour, it ensures the folding cartons also get to the customer well protected. "Print shops can offer fast, absolutely flawless and extremely flexible production with the Diana X 80/X 115. Thanks to the new Diana Stack Turner, Diana Inspection Control and Diana Braille modules, users have several tricks up their sleeve to expand their portfolio in line with market needs and also to cut unit costs while achieving maximum productivity and quality," says Junge.

http://www.youtu.be/3twmPbMK1Vs

VIDEO
Take a look at the Heidelberg folding carton process, from prepress to press and postpress. The perfect interplay of all Heidelberg products ensures optimum productivity, efficiency, reliability in production, and impressive quality.

FOCUS INNOVATION

New DryStar with Round Nozzles for Speedmaster XL 75

PREMIUM PERFORMANCE IN HOT AIR // To enable medium format users to get the most from their Peak Performance press, Heidelberg is now also offering a new generation of DryStar delivery dryers for the Speedmaster XL 75. Their innovative round nozzle technology ensures maximum efficiency and quality at top speed.

Something new … //

The standard slotted nozzles in the DryStar Coating and DryStar Combination of the Speedmaster XL 75 are being replaced in the new delivery dryer by numerous round nozzles distributed over the entire width of the dryer. These round nozzles are now located behind and between the infrared (IR) lamps, with the result that almost twice as much hot air can be applied over the same distance. Increased IR radiation at the edges of sheets (edge zone compensation) also ensures they are dried perfectly, even with the largest format. The lamps are so efficient that the second IR hot-air module is being replaced by a hot-air cassette for the DryStar Combination and DryStar Combination UV, which ultimately saves energy. The DryStar Combination UV can also be equipped with a combination slide-in module (for cold and circulating air in a shared housing). This makes the process of changing over the modules a thing of the past.

The benefits … //

Thanks to the innovations, which will be available around the start of the year, the sheets benefit from extremely fast and uniform drying, even at top production speeds. Overall energy efficiency is also improved. This delivers truly dazzling results for coating applications in particular, while the more stable sheet travel enhances print quality. To this end, the outer round nozzles can even be shut down manually if only the standard format of 17.32 × 24.80 inches (44 × 63 cm) is needed. What's more, a new safety kit also enables the sheet guide plates to be inspected and cleaned with the slide-in dryer modules removed. The machine can now be "inched" backward and forward without always having to put back the modules. The dryers can be conveniently controlled in the normal way via the Prinect Press Center.

The options … //

The round nozzle technology adopted from the larger format classes is still reserved for Speedmaster XL 75 straight printing presses. However, Heidelberg is already working on applying this principle to the XL 75 perfecting press, too. This work is due to be completed by spring 2013. In addition, it is already possible to equip the DryStar Combination dryer in the extended delivery with a heat recovery system that further optimizes the energy balance of the Speedmaster XL 75 (and CX 102 and XL 106). This cuts power consumption by around 20 percent based on full-load operation and is thus easy on the wallet as well as the environment.

The best of both worlds

SX SERIES // The print media industry is changing incredibly quickly, with shrinking print runs, highly specific customer requirements, growing competition and increasing pressure on prices. The new generation of presses from Heidelberg is the perfect solution. The Speedmaster SX models for the 35 × 50, 50 × 70 and 70 × 100 centimeter (13.78 × 19.69, 19.69 × 27.56 and 27.56 × 39.37 inch) format classes are based on the tried-and-tested SM platform and incorporate numerous additional high-performance features from the flagship XL presses. As a result, they perfectly bridge the gap between the new standard models and the Peak Performance Class.

Heidelberg has always offered the broadest product portfolio in the sheetfed offset sector, ranging e.g. from the small Printmaster QM 46 two-color press to the VLF Speedmaster XL 162. Markets are changing all the time, though, as are the demands placed on presses. The trends in the sector are plain for all to see. For years, print runs have been shrinking, while the number of jobs has been growing, as has the complexity of product designs that need to stand out from the crowd. This means that each job is subject to different production requirements. What's more, ever higher productivity is needed to cope with the continuing pressure on prices. The new SX series has been specifically designed to meet these new requirements.

SM platform with XL technology. With more than 100,000 printing units sold, the Speedmaster SM is the world's most successful series of sheetfed offset presses. This tried-and-tested platform has now been combined with Peak Performance Class technology from the XL series. The new SX models thus offer an exceptional level of flexibility. Like XL presses, the models in the SX series benefit from a modular configuration that enables them to adapt flexibly to all kinds of print shop and job requirements.

Presses can be equipped with anything from two to 10 inking units, with or without coating unit, and can also be configured for use with UV inks. What's more, a perfecting device can be ordered ▸

The connecting link between the world of the SM and the XL: The new SX Series from Heidelberg.

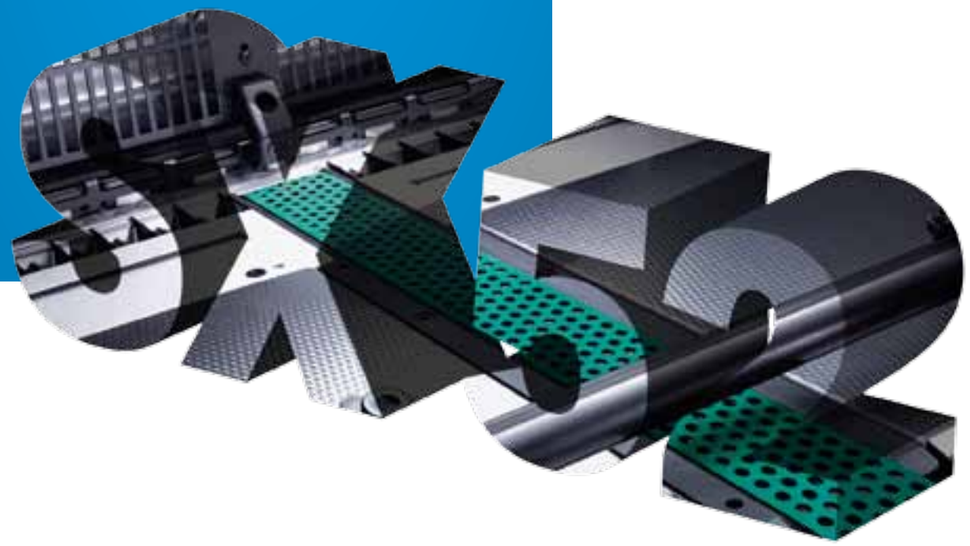
SX 52
EQUIPMENT HIGHLIGHTS
- Numbering/perforating device
- Transfer cylinder with adjustable diameter
- Anicolor
- UV and round nozzle technology
- PerfectJacket Blue/TransferJacket Blue jacket technology

with small- and medium-format presses if required and is supplied as standard with the Speedmaster SX 102. SX models are thus primarily designed and optimized to meet the requirements of commercial printing. Depending on the format class, they can be equipped with numerous additional features such as the AutoPlate Pro fully automatic plate changer or the new ink-repellent PerfectJacket Blue and TransferJacket Blue on the paper-feeding cylinders.

"Many print shops want and need more than a standard Speedmaster SM press provides," says Jürgen Grimm, who is in charge of the Sheetfed & Packaging Business Area at Heidelberg. "For some users, though, a Speedmaster XL is just that little bit too big," he adds, explaining the difference between the two model series. Some businesses simply do not have the job structure to make full use of the huge capacity of the XL series. "The Speedmaster SX neatly plugs the gap between our standard models and the Peak Performance class. It delivers exactly the boost in productivity that many customers currently need," stresses Grimm.

The new model series is augmented by the Speedmaster CX 102, which has already enjoyed a successful launch. The SX models cover most everyday applications of both relatively small and industrial-scale businesses in the commercial sector in particular. The CX 102 is designed for straight printing and supports a wide range of different substrates, which makes it ideal for both commercial and packaging printing.

Maximum productivity. The productivity of a press depends on factors such as speed, makeready times and machine availability. SX models boast an impressive production speed of up to 15,000 sheets per hour and support high-speed printing of substrate thicknesses ranging from 0.0012 to 0.024 inches (0.03 to 0.6 millimeters). This also applies to the SX 102 perfecting press, which can process numerous substrates at a speed of 14,000 sheets per hour.



CARSTEN FABIAN //
FABIAN DRUCKEREI GMBH
CONSTANCE (GERMANY)

"Thanks to our Speedmaster SX 74 with automatic plate changer, we are much faster and far more productive than with our previous four-color SM 74 – especially with shorter runs. The fifth printing unit was a big step forward for us because, in addition to saving time, it makes us far more flexible – and flexibility is what our business is all about. Factoring in the automatic plate changer, the fifth inking unit and the higher production speed, we estimate productivity to be around 50 percent higher."

SX 74
EQUIPMENT HIGHLIGHTS
- AutoPlate Pro fully automatic plate changer
- New screen roller bearing
- Transfer cylinder with adjustable diameter
- Ink zone calibration and optimization
- PerfectJacket Blue/TransferJacket Blue jacket technology

In view of the trend toward shrinking print runs and more job changes, the development engineers at Heidelberg also focused on delivering shorter makeready times that maximize the periods during which presses are in operation. Fully automatic, partially simultaneous plate changes play a key role in achieving this. Take the example of the SX 102. Thanks to AutoPlate Pro and the process-oriented operator guidance system Intellistart, it takes less than three minutes to complete a full plate change on an eight-color press. This cuts makeready times by more than half compared with an SM press in the same format class. Intellistart uses the high-performance Prinect Press Center control station to determine and manage the optimum process sequence for job changes on a fully automatic basis.

New jacket technology also significantly boosts press availability. Field trials have shown that the new jackets last three to five times longer before needing to be cleaned.

The fully automatic AutoPlate Pro plate changer is also used to change plates on the Speedmaster SX 74 press in the 50×70 centimeter format class. Color Assistant Pro delivers another significant boost in productivity. The fully automated system monitors the ink fountain liner, automatically calibrates ink zones, adapts characteristic curves and optimizes color presettings to make them even more precise and reproducible. This intelligent color assistant can also be used to optimum effect on the Speedmaster SX 52.

Exemplary green credentials. The Speedmaster SX 52 can be equipped with the Anicolor zoneless short inking unit, which minimizes start-up waste, reducing it by up to 90 percent compared with the conventional inking unit. The Speedmaster SX 52 Anicolor is supplied with carbon offsetting as standard. Customers can also request carbon offsetting for all other Heidelberg machines. To offset ▸

The difference is like day and night

A Speedmaster SX 74 five-color press with AutoPlate Pro has been undergoing a field trial at Druckerei Fabian since the beginning of 2012. In a brief interview, print shop owner Carsten Fabian reports on his initial impressions.

Mr. Fabian, your Speedmaster SX 74 field trial started in January. What are your impressions so far?

Fabian: We are very happy with the new five-color press. We were previously operating a Speedmaster SM 74 four-color machine. Although this, too, is an impressive press with high performance levels, the SX 74 beats it hands down.

What do you like so much about it?

The best thing is the fully automatic plate changer. Once you've got something like that, you wouldn't want to be without it. It makes us far quicker and much more productive, especially with shorter runs. And of course print runs are getting shorter all the time. Our staff also appreciate the fully automated plate changing, because no-one really enjoys having to change plates manually.

Why have you switched from four- to five-color printing?

Because it saves us a great deal of time. We are able to apply the spot colors and print varnishes increasingly requested by our customers in a single pass. The big step forward we've taken thanks to this fifth printing unit safeguards our future. It enables us to work very flexibly – and flexibility is what our business is all about.

And the presses are faster, too.

Exactly. It was something really special that the SM 74 reached around 13,000 sheets an hour, but that's completely normal now. With most substrates, even an output of 15,000 sheets an hour can be achieved without any problem.

But the tendency toward shorter runs makes that less important.

In principle, yes, but we do have some bigger jobs, such as printing up to 180,000 copies of a flyer for a mail order company. Being able to print 2,000 to 3,000 more sheets an hour definitely makes a noticeable difference in such cases.

The press also has a whole host of new technical features. Has anything in particular caught your eye?

The delivery is much better, the far finer adjustment of blast and suction air is very impressive and automation means the same results are achieved irrespective of who is operating the machine. This results in far greater reliability.

By how much do you estimate the SX 74 has boosted your productivity overall?

Taking into account the automatic plate changer, the fifth inking unit and the higher production speed, it must be 50 percent higher. Compared with the four-color SM 74, the difference is like day and night.

IZHAM YUSOFF //
MANAGING DIRECTOR,
PERCETAKAN NASIONAL MALAYSIA BERHAD (PNMB, MALAYSIA)

"In Malaysia, too, print buyers expect ever shorter delivery times combined with top quality and lower costs. Our SX 102-8-P enables us to cut production times substantially. We can now print up to 14,000 four-color sheets an hour in perfecting mode in a single pass. Job changes are much faster, too. The press is also ideal for letterpress printing, a market segment that is currently very important to us."

SX 102
EQUIPMENT HIGHLIGHTS

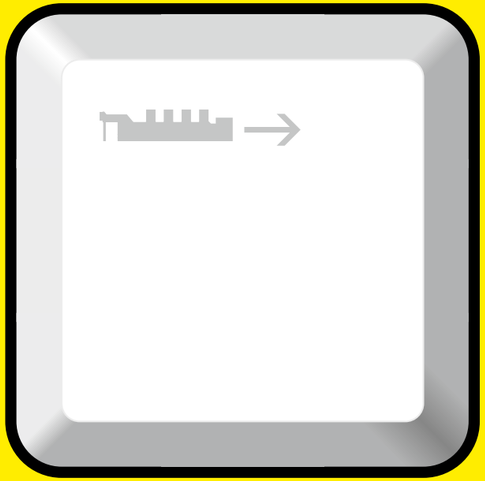
- AutoPlate Pro fully automatic plate changer
- UV operation
- Prinect Inpress Control
- Lightweight paper kit
- Cloth washup device

emissions, Heidelberg purchases emissions certificates from nature-Office, thereby supporting a TÜV-certified reforestation project in the western African country of Togo.

The SX models go further than simply setting new environmental standards, though. Heidelberg makes a point of ensuring they are the most energy-efficient and most environmentally friendly presses in their class. Customers can opt for an integrated energy measuring device that displays the precise energy requirements per 1,000 printed sheets during the printing process. This enables operators to optimize the machine's environmental performance on the fly. Star System peripherals such as PowderStar, DryStar and CleanStar are perfectly coordinated with the press. What's more, all Heidelberg presses support alcohol-free or alcohol-reduced printing.

The SX series also sets new standards in terms of productivity and flexibility in the relevant format classes. Now that a long-standing gap in the Heidelberg portfolio has been plugged, it is even easier for print shops to find their perfect machine – and unlock huge reserves for additional and new business activities.

Further Information
www.heidelberg.com/en/SX52
www.heidelberg.com/en/SX74
www.heidelberg.com/en/SX102



Success on the Web

WEB-TO-PRINT // Thanks to effective shop systems such as Prinect Web-to-Print Manager, it has never been so easy for print shops to move into online business. That's all well and good, but how can web-to-print be used to profitable effect?

For some time now, it has been virtually impossible for companies to ignore the Internet as a sales channel. In many western countries, more than 70 percent of private and business customers regularly use search engines or special portals to obtain information on products, services and prices. The Web has also long been a key factor for print products, determining what is bought from whom and at what price.

Although a large number of print shops have already established themselves as web-to-print suppliers, it is still worthwhile moving into this segment. For one thing, it unlocks new business potential and makes better use of existing offset press capacity. For another, it enables print shops to boost loyalty by offering existing and new customers additional round-the-clock services. But what is needed to move into or step up online business and what are the key requirements during subsequent operation of the online shop?

Easy to get started. In software terms, this question is an easy one to answer. You need an interface to the customer – a "front end" with all your products and services plus order processing. At drupa, Heidelberg unveiled an effective, easy-to-use solution in the form of Prinect Web-to-Print Manager. This software module can be operated on a standalone basis or integrated seamlessly into the Prinect print shop workflow. In the latter case, orders are automatically transferred from the online shop to the Prinect MIS. What's more, print shops can take advantage of many further benefits within the production workflow, such as automatic sheet/repeat optimization, the calculation of the cost per copy for digital and offset printing, and full tracking of all orders from the online shop throughout the process.

Whether it is used in isolation or in combination with other modules, Prinect Web-to-Print Manager offers print shops a flexible application for the straightforward creation and operation of one or more portals for private and business customers, including shopping cart, order processing, approval process, user administration, shipping and payment. As Product Manager Lucia Dauer explains, "With Web-to-Print Manager, you can create an unlimited number of shops for different target groups without any programming knowledge. This includes freely accessible portals with standardized products for private individuals, craftspeople and other small businesses. And it is equally easy to create password-protected portals for franchise or chain stores with staff-specific order options for branded print products that can be edited online.

Thinking of customers. The actual software is installed in no time at all. Depending on the number of products and templates and how many fields the customer needs to complete, a simple shop can be online in just a few days. If several shops and a wide range of products and services are involved, however, the process can take weeks or even months.

Much of the work, such as deciding whether or not to "stock" a particular product in the shop, takes place before or after the shop is created. Direct contact with the customer is still the best approach for products where a great deal of advice is required. Depending on the target group, it may also be worth considering whether the company's own portfolio needs to be expanded and/or how additional products can be integrated seamlessly into the workflows. "Even though around 95 percent of print shops are adequately equipped for web-to-print, many of them first need a change of approach," says Dauer. For example, each shop should be systematically geared to the needs of the relevant target groups. A further challenge with business-to-business (B2B) portals that grow particularly quickly is to map business customers' requirements and processes in the shop. "This requires intensive interaction with each customer and may well result in internal restructuring in specific cases," continues Dauer.

Planning resources. In addition to the necessary server capacities, print shops also need to provide administrative staff for the online shops. "With smaller print shops, it is often sufficient to assign one member of the prepress team and ensure he or she has enough time for online products, and user and shop administration. This person does not need to be an IT specialist but should know the basics and, for example, be familiar with proxy servers and firewalls," explains Dauer. Alternatively, an external service provider can assume responsibility for hosting and administration. Another option is to use Prinect Web-to-Print Manager in a "software as a service" capacity. This model involves the customer "renting" the solution without investing in additional capacities and has the advantage that the rental charge is not a fixed monthly sum but depends on the level of shop transactions.

The success of online business depends on a great many factors, from how well the products and services cater to the relevant customers' needs to pricing, service quality and marketing. A company's next customer may be just a mouse click away, but so are its competitors. This results in fierce competition on prices in the business-to-consumer sector.

Although print shops can avoid being sucked into a price war to a certain extent by offering special services, competition is still very stiff. Dauer therefore recommends focusing web-to-print operations firmly on the B2B sector. "Creating and extending business portals clearly offers the greatest growth potential. It also enables print shops to build on their position as a business partner offering advice and support, which is an effective way of boosting the loyalty of existing customers and leverages important competitive advantages when acquiring new customers," she stresses.

A meticulous approach is needed for this, though, because the Internet registers every single error and makes it plain for all to see. Potential new customers can use existing customer ratings to find out who offers good product and service quality and whose performance leaves something to be desired. Without a clear marketing strategy, suppliers will quickly find themselves at a disadvantage. "A portal requires active online advertising to make potential new customers aware of it. Companies moving into web-to-print should acquire basic Internet marketing skills or use the services of a specialist agency to ensure they are found easily via search engines and price portals," explains Dauer.

Heidelberg offers comprehensive support with such activities and with creating online shops. Each print shop investing in Prinect Web-to-Print Manager benefits from an introduction that covers everything from shop and template design to price assignment, setting up user accounts, administration and evaluation. And if customers also need advice on strategic issues such as pricing and marketing, the experts from the Heidelberg Business Consulting team can help.

Info
Try out the Prinect Web-to-Print Manager Online Demo Shop:
www.hei-cloud.com/hdcustomerdemo/

FAST, FINE, ECO-FRIENDLY

UV COMMERCIAL PRINTING AT DRUCKHAUS BECKER // Druckhaus Becker is providing proof that UV printing no longer deserves its reputation for polluting the environment and being beyond the financial reach of most customers. Thanks to the world's first Speedmaster XL 106 with DryStar LE UV dryer, this print shop is benefiting from 60 percent lower energy consumption and CO_2 emissions. Powder- and ozone-free production works to the benefit of man and the environment, too, while reduced turnaround and delivery times more than compensate for the higher cost of consumables.

It takes quite a bit of effort to constantly stand out from the crowd. And although this strategy by no means always works, Druckhaus Becker from Ober-Ramstadt in the German state of Hesse has made it a real recipe for success. Ten years ago, the small full-service print shop made a name for itself by using dispersion coatings for commercial products, and this pioneering approach gave fresh impetus to the market. Demand grew sharply, which led managing directors Jens Becker and Thomas Groth to invest in two further presses for dispersion coating in 2006. "But this type of coating soon became a standard production method and was in time being offered by every print shop, so we started looking for some other innovation to replace it, as it was simply no longer a lucrative niche for us," explains Becker.

The company, which currently has a workforce of 38, found exactly what it was looking for with the world's first Speedmaster XL 106 five-color press with coating unit and new DryStar LE UV (low-energy ultraviolet) dryer. This new acquisition has had pride of place in the pressroom since midway through 2012. As Becker sees it, though, the abbreviation "LE UV" is not simply an indication of the particularly energy-efficient cur-

“WE WOULDN’T HAVE CONSIDERED CONVENTIONAL UV PRINTING.”

JENS BECKER, MANAGING DIRECTOR OF DRUCKHAUS BECKER

ing of the inks and coatings used. It also reflects the market that the print shop is looking to conquer. “By moving into UV printing with LE technology, we are taking a big step forward, because inline surface finishing boosts our added value while also saving our customers a great deal of time. What’s more, the new technology makes us far greener and significantly improves our quality. In other words, it’s a win-win situation in every respect and for everyone involved,” stresses Groth.

More in-house added value. Convincing as this may sound, the benefits by no means apply to other print shops to the same extent. “No-one can buy a press of this kind without first having identified a viable market,” says Becker. He himself was on safe ground in this respect, since the print shop primarily works for well-known high-end customers, for example from the automotive, watch and jewelry industries. Such customers are increasingly looking to stand out from their competitors by offering print products with elaborate surface finishing. “We knew what we were doing, because we’d seen years of double-digit growth with UV coatings,” says Becker, explaining his market analysis in a nutshell.

However, the print shop had only received a share of the benefits from this growth in the past, because UV surface finishing was previously outsourced to external partners. “Our new press enables us to combine previously separate production steps under one roof and move the entire value-added chain in-house. This also simplifies logistics and cuts transport costs. The quality of our print products is now in our own hands. And thanks to the new press’s impressive production speed and extremely fast drying, we can offer our customers far shorter delivery times. At the end of the day, this more than compensates for the higher ink and coating costs,” states Thomas Groth.

To illustrate the benefits, Becker uses the practical example of a book with more than 250 pages that the company produced for a watchmaker in a run of 180,000 copies. “We used to print it over a period of three to four weeks in two-shift operation and then send it to an external service provider who required a further four to five weeks for the relevant UV applications. Now, though, we are able to send the first sheets to postpress after just three or four days. In other words, a comparable print job would now be ready a good four weeks sooner,” he explains.

Groth also points out that customers no longer need to make two separate trips to approve their products (one to Druckhaus Becker and one to the company in charge of surface finishing). “Far more important than this, though, is the fact that customers no longer have to simply put up with the possibility of a slight color shift when the semi-finished print product is coated. Thanks to our end-to-end in-house production, we can now ensure perfect coordination of ink and coating application in advance,” he says.

Green transport – Druckhaus Becker uses a truck with exceptionally eco-friendly diesel technology (top left).

Five colors, one drying process, and a perfect result – Thanks to powder-free production with the Speedmaster XL 106 and highly reactive UV inks, end-of-press drying with the DryStar LE UV is sufficient for a calendar page of this kind. A single UV lamp with an output of just 160 watts per centimeter is used (top right).

The print shop with a total of 38 staff has a production area of just under 27,000 square feet (2,500 sq. m) (left and bottom right).

Powder-free production without register inaccuracies. To demonstrate the possibilities opened up by the Speedmaster XL 106 when used in conjunction with the DryStar LE UV, Becker lays a printed calendar page on the table. “This is the result of four-color reverse printing. After printing the process colors, we also applied opaque white inline, followed by a full-area UV coating to protect against mechanical damage. The actual print is therefore protected on both sides. The really interesting thing about this page is the way we produced it, that is to say inline with a single lamp and no dryer before the yellow,” he explains. This is unusual for several reasons, all the more since Druckhaus Becker’s new press benefits from completely powder-free operation and the DryStar LE UV dryer uses only one UV lamp with an output of just 160 watts per centimeter in the end-of-press dryer. In conventional UV printing, drying normally requires double this output after each ink, and in any case before the yellow so as to prevent any blackening. “Even the product managers at Heidelberg were amazed that LE drying here at the end of the press is sufficient,” says Becker.

The UV inks and coatings that Druckhaus Becker uses play a key role in this respect. They respond particularly well to the narrow wave spectrum of the UV lamps in the DryStar, which results in extremely fast curing. This enables a gloss level of 96 to be achieved inline in no time at all. Features such as the Prinect Inpress Control automatic color measuring and control system ensure consistently high quality, even at top speeds. “What’s more, the pile temperature only increases by five to six degrees. The material doesn’t expand, so we can continue with the next step straight away without experiencing any registration problems,” ex-

A CAN WITH A PLAN // DRUCKHAUS BECKER'S CREATIVE MAILING CAMPAIGN DEMONSTRATES THAT CUTTING-EDGE UV PRINTING IS PERFECT FOR MEETING STRICT ENVIRONMENTAL REQUIREMENTS.

Although UV printing looks good, it creates a highly unpleasant smell and pays for its looks with a less than impressive energy balance. Conventional UV production really does have a bad image, which makes it all the more important for a green print shop to convince its customers of the benefits of the new LE technology. Druckhaus Becker has devised an unusual mailing campaign for this purpose. Using the motto "Green printing is happy printing", the print shop is sending out small packages containing a green metal watering can along with a hardcover brochure explaining all the benefits of the new LE technology – including its green credentials, of course. The company is also in constant dialog with existing and potential customers via Facebook.

www.facebook.com/druckhaus.becker

Premium products for Druckhaus Becker's high-end customers, who primarily come from the the automotive, watchmaking and jewelry industries and the financial sector.

"BY MOVING INTO UV PRINTING WITH LE TECHNOLOGY, WE ARE TAKING A BIG STEP FORWARD."

THOMAS GROTH, MANAGING DIRECTOR OF DRUCKHAUS BECKER

plains Groth. But shorter delivery times and higher quality that the print shop's customers can both see and feel are not the only benefits. Order handling is better, too, for example in the case of subsequent personalization, because powder no longer needs to be removed from the rollers and lasers.

UV goes green. Becker and Groth are particularly pleased that their move into low-emission UV printing with minimized energy consumption perfectly reflects the company's green aspirations. "We wouldn't have considered conventional UV printing," stresses Becker. The new technology, on the other hand, fits in perfectly with the corporate concept. The Speedmaster XL 106 was ordered on a carbon-neutral basis with offsetting of 237 metric tons of CO_2. Compared to conventional UV printing with offline surface finishing, Druckhaus Becker's inline surface finishing and LE drying cuts energy consumption and thus CO_2 emissions by more than 60 percent. There are no pressroom emissions either, because no powder is used and no ozone is generated during drying in the restricted UV wave spectrum.

"When we told our staff that we were moving into UV printing, they weren't particularly enthusiastic, but now they find it really hard to drag themselves away from a press that benefits from such clean operation," reveals Becker.

But they have to from time to time, though, because the print shop still also operates a Speedmaster XL 105 with dispersion coating. The new Speedmaster XL 106 is also equipped to apply dispersion coatings thanks to its dual coating circuit. "It was important for us to play it safe in case the market fails to develop as expected. At the moment, though, it definitely doesn't look like that will be a problem. We have so many UV jobs that even our XL 105 would be operating to full capacity if it could be used for UV printing," says Groth.

Further information
www.druckhaus-becker.com
www.heidelberg.com/en/DryStarLEUV
www.heidelberg.com/en/XL106

40 HAPPY BIRTHDAY, GTO!

40 YEARS OF GTO // 1972 was a very special year – the first game console came onto the market, the most recent manned space flight to the Moon, Apollo 17, was launched, and at drupa, Heidelberg unveiled a GTO – the machine that was to become the benchmark for the small format and the world's best-selling press in this class, with over 106,000 printing units sold. To this day, it continues to set printers' hearts racing throughout the world. Four of them explain why.

40 Greetings from Brasil!

NOSSO PARABÉNS PELO TEU ANIVERSÁRIO!

AGENOR DUTRA, GRÁFICA AGETRA LTDA., BRAZIL

For Agenor Dutra, the owner of Brazilian print shop Gráfica Agetra Ltda. in Nova Prata, the GTO is almost a life saver. "When our business was still in its early days, we placed all our hopes in the GTO and its versatility. Today, we have three of these presses and they are the backbone of our company."

First and foremost, it is the robustness of the GTO that impresses Dutra: "Our GTO 46 single-color has been in operation for 38 years and is still as reliable as on the first day." He has a story to tell about each of his presses. For example: "A few years ago, two of my employees got hold of a second-hand GTO 52 single-color that came to us in a dreadful state. I didn't even want to unload it. But the two of them didn't give up. They cleaned the press and carried out some minor repairs. Then, around a week later, we did the first test print and it was absolutely perfect. The press has continued to run virtually around the clock right up to the present without any major maintenance."

This experience in particular has helped Dutra develop an implicit trust in his GTO presses, spurring him on to make targeted investments each year in the print shop in the form of new presses, accessories and personnel. The print shop primarily produces business cards, folders and catalogs. "It's particularly impressive to see how many different materials can be printed with the GTO, as this is something our customers very much appreciate."

40 Greetings from Egypt!

ديع داليم ديعس

MOHAMED ABU ZAHRA, POLICE PRESS, CAIRO

For Mohamed Abu-Zahra, the Managing Director of Police Press in Cairo, the GTO 52 is an absolute blessing. He had already been using two GTO presses for some time and both had impressed him so much that he added another in 2004 – his first GTO 52 with two printing units. "We wanted to increase our productivity and expand into new markets in security printing, but then one thing led to another."

Up to this point, Police Press had shared the market for printing birth certificates with another government printshop. One day, the other printshop withdrew from this sector completely and Abu-Zahra and his team had to step into the breach. "Overnight we were supposed to print all the birth certificates for the whole of Egypt. Without our new GTO 52 two-color, we'd never have managed it."

By purchasing the third GTO, the print shop is able to offer a wide range of products. As well as printing birth certificates and other security documents, Police Press also produces magazines, specially designed bookbindings and commercial jobs such as brochures and business stationery. Along with conventional inks, this also involves using inks that are invisible in daylight. "The GTO is extremely versatile, easy to operate and highly robust," says Abu-Zahra. "It also delivers outstanding quality while keeping operating costs to a minimum – it might sound strange, but we see it as a member of the family."

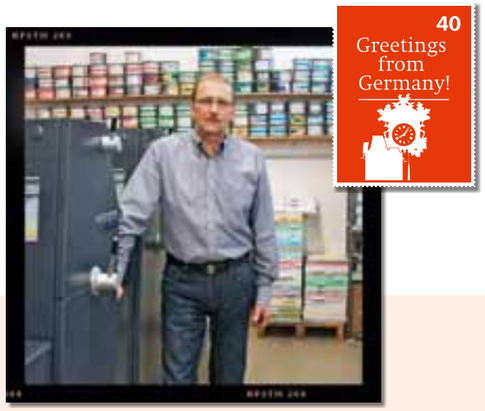
ALLES GUTE ZUM GEBURTSTAG

DIETER SCHIEMENZ DRUCKEREI SCHIEMENZ GMBH, COTTBUS

Dieter Schiemenz is a self-made man. Based in his home town of Cottbus in the former East Germany, he wanted to make a fresh start after reunification. He trained as a typesetter, took over his father's print shop, gradually built it up and has kept on expanding in recent years. Druckerei Schiemenz GmbH now employs 40 staff at two sites in Cottbus. The print shop operates a GTO two-color with numbering and imprinting unit and a GTO four-color with perfecting technology.

"The GTO presses have enabled us to achieve continuous growth over the years. They are easy to operate and can print virtually anything – from envelopes to thick card," says Schiemenz. For a long time, the bulk of business came from invoices and delivery notes, but the volume of orders for advertising materials increased over the years. The company now has customers throughout Germany and Switzerland.

As Schiemenz knows, though, technology alone cannot guarantee success. "We need to make the money to pay for this technology, which is worth around 6.5 million U.S. dollars (5 m. euros). It isn't easy to survive in the printing sector these days, because the large companies ruthlessly dictate prices," he explains. Although Schiemenz has too much entrepreneurial blood flowing through his veins to regret setting up his own printing business, he admits that there's one other challenge that would have excited him. "Knowing what I do today and with my acting talents, I could have been a politician," he says with a wry smile.



祝您生日快乐

ROGER YUEN, CHUN MING PRINTING FACTORY CO. LTD, HONG KONG

When Chun Ming invested in a new GTO 52 four-color for his small commercial print shop in Hong Kong a few years ago, he made a crucial decision. The new press opened up a completely new area of business for the print shop that continues to make up the lion's share of its sales to this day.

At that time, the booming clothing industry in Hong Kong was clamoring for service providers to print tags. "The business was there for the taking but we lacked production capacity and the right press," says Managing Director Roger Yuen, who now runs the print shop. "We were faced with a race against the clock, as it normally takes six months from ordering a press to having it in operation – but the customer didn't give us that much time." Chun Ming called Heidelberg, whose team managed the impossible and got the new press ready to go in just two and a half months. "That made a lasting impression on us and to this day we're grateful for this," says Yuen.

Using all five of their GTO 52 presses, Yuen and his team were able to attract many other customers, mainly from the clothing industry. Everything had in fact been planned quite differently, as the print shop was originally supposed to expand in printing advertising materials. "Thanks to previous management commercial foresight and the GTO's versatility, we were able to fill a real market niche," says Yuen, adding with a smile: "Despite this there's a downside, as our GTO presses keep us very busy."

TIPS AND TRICKS

Color Measurement the Right Way

INTERPRETING CIELAB, ΔE AND DENSITY CORRECTLY // Quality printing depends on precise color measurement, which makes it all the more relevant to ask why different measuring devices often produce different results. What should you rely on in this case?

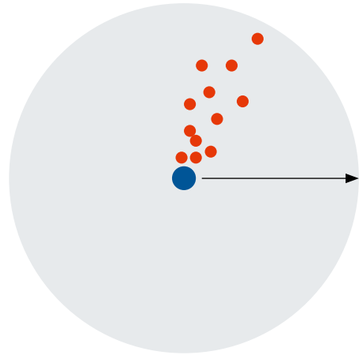
Modern color measuring devices are generally based on spectrophotometers, even if they only show densities. This is because of the higher measuring accuracy of spectrophotometry, together with a greater range of available measurement values. The measuring conditions set on the devices therefore not only need to be selected correctly but must also be identical for all devices. The correct setting often depends on the country. Regional associations such as the bvdm in Germany and CGATS in the United States formerly laid down these conditions. Today they are to be found in the relevant ISO standards. Settings can be made for the following values:

Illuminant: This defines the color temperature of the lighting source. For printing, the standard is currently D50, which corresponds to 5,000 Kelvin.

Observer angle: The standard observer angle in printing is currently defined as 2°. This corresponds to the printer's observation angle in the matching stage.

Density filter: This determines the spectral range that is to be used to calculate the density values for CMYK. Standards "Status E" (= DIN 16536) and "Status I" (= DIN 16536 NB; narrowband) are usual in Europe. "Status T" is used for measuring in the United States.

Polarization filter: Polarization filters eliminate the gloss of wet ink. The wet values therefore correspond almost entirely to the dry density and tonal values.



Typical distribution of measuring device deviations – the blue dot in the center is the ideal value for the reference device. The grey circle shows the permitted tolerance. The red dots represent the deviation for different measuring devices. As this illustration shows, the deviation usually tends toward one direction.

White reference: The "absolute white" setting is preferred for density measurement in North America. In all other countries, the white reference is "relative." Paper white is therefore always taken as the zero point here.

To match a spectrophotometer to an old densitometer, it is necessary to know the densitometer's settings precisely and apply exactly the same parameters to the spectrophotometer.

Despite identical settings, minor deviations may occur even within a group of spectrophotometers. These are generally due to the quality and design of the sensor and its calibration. Theoretically, every spectrophotometer should be calibrated to absolute white and black. However, in practice neither one exists, which means it is best to use reference values from an independent institution such as the German Federal Institute for Materials Research (BAM) in Berlin. Manufacturers can have a device calibrated here and use this "master device" to calibrate all other devices. The better the measuring device, the narrower the tolerances that the manufacturer defines for the ΔE and density values. And the smaller the tolerances, the greater the measuring accuracy.

To ensure the measuring accuracy remains constant for as long as possible, users are well advised to have devices serviced and calibrated regularly. Heidelberg is the only press manufacturer to offer a software option – the Prinect Net Profiler – that enables printers to personally calibrate almost all new-generation Prinect color measuring equipment, even including colorimetric calibration. This ensures devices are always close to the factory settings and therefore deliver highly reliable results.

It is also advisable to designate a selected spectrophotometer as the "master" in the print shop itself. This ensures maximum measuring accuracy and, ultimately, print quality across several work stations.

Thank You for Your Feedback!

RESULTS OF THE 2012 READER SURVEY // Dear Reader, Your feedback has shown us you find *Heidelberg News* very interesting and read it intently, with the magazine enjoying unusually strong reader loyalty overall. These were the results of the online survey that around 350 subscribers from all over the world took part in between the end of 2011 and the start of 2012. As well as a great deal of praise, we were also fortunate in receiving constructive criticism. This will enable us to identify how the magazine can be improved further. We would therefore like to take this opportunity to thank everyone who took part for their commitment and support. If you've been lucky enough to win a small prize for taking part in our reader survey, you'll find your name on page 55.

INTENSIVE USAGE

59 %

of respondents have read or browsed through all four editions from the last two years.

How many editions did you receive in the past two years?

USEFUL SOURCE OF IDEAS

The vast majority of respondents rate the magazine highly as a useful source of new ideas, guidance and support for making decisions.

Heidelberg News ...

A ... provides interesting insights into other companies in the print media industry
B ... keeps me up to date with the latest products and services from Heidelberg
C ... suggests new ideas
D ... helps me keep on top of what's happening on the market
E ... offers guidance when making investment decisions

SATISFIED READERS

98 %

of respondents are at least satisfied with the magazine.

How satisfied are you with Heidelberg News?

PROFESSIONAL AND CREDIBLE

Almost **90 %**

rate the magazine as "objective, credible reporting," while 95 % enjoy reading it.

How would you describe Heidelberg News?

A Heidelberg News is an enjoyable read
B Offers well-informed, expert articles
C Articles are written in an understandable style
D Provides background information
E Objective, credible reporting
F Features topics that you don't find anywhere else
G Offers useful tips and suggestions for my work

HIGH LEVEL OF INTEREST

Almost **50 %**

of respondents read the last edition of Heidelberg News more or less in full.

How many pages of the last edition did you read?

STRONG LOYALTY

88 %

of respondents would miss the magazine if they didn't receive any more copies.

Imagine if you stopped receiving Heidelberg News. Would you ...

CONSTRUCTIVE SUGGESTIONS FOR IMPROVEMENT

Readers would like to see more technical information and advice for day-to-day work.

Heidelberg News could be improved by ...

A ... offering more technical information
B ... offering more advice for day-to-day work
C ... featuring more information on the business models of other print shops
D ... focusing more on the latest market trends
E ... including interesting historical features from the industry
F ... focusing more on the people who work on and with the machines
G ... focusing more on the people who work in the print media industry
H ... using more infographics
I ... featuring shorter texts
J ... other

MEN AT WORK // PART 11
FRANZ VORRABER //
ST. RUPRECHT, AUSTRIA

Versatile and Highly Flexible Technical Operations Manager

FRANZ VORRABER (54) has been employed by Universitätsdruckerei Klampfer in St. Ruprecht an der Raab for 36 years, has a golf handicap of 13.8 and plays with his band “Circles” at events throughout Austria. First and foremost, however, the versatile technical operations manager is a family man who rejoices in the art of relaxation in his free time.

What’s a normal day like in the life of Franz Vorraber?

I get up around 5:30 a.m. and have a nice coffee, rye bread with jam and some fruit from our garden. It takes me about 30 minutes to get to the print shop from our house – a former farm where I live with my wife. I start work about 7 o’clock. As an operations manager, I deal with print planning, production and, of course, support for our key customers. I return home around 5 p.m. or later.

What do you like about your work? And what are you less fond of?

My job calls for flexibility and creativity. I also like the close contact with customers and the personal interaction with my colleagues. Whatever job they do, everyone is an important part of our print shop, which is why we’re also competitive. I like that, as things are never dull. However, it does worry me when I see how hard it is for us to find good employees because of the industrial companies based here. That’s something I’m not happy about.

How do you spend your free time?

I’m a family man and most of all enjoy being with my wife and three grown-up daughters, who often come and see us. Relaxing is important to me and that’s also why my wife and I have been playing golf for the past nine years. We also regularly unwind in a quiet and peaceful house in Greece that is away from the hustle and bustle of the tourist areas.

Is it true you play in a band?

Yes, I play the drums and accordion in “Circles.” Our band performs dance music from the 60s and 70s – songs from the Beatles, Stones and current artists. We’re therefore very versatile and, as dance music is once again very popular right now, we perform regularly throughout Austria.

Is there anything in particular you wish for?

Not really – I have a very fulfilling life. I enjoy my job very much and get time for my hobbies. On top of that, I’m glad to be alive here and now and am happy that my wife and children are doing well and we’re all in good health. If things stay like that, everything will be perfect. You can’t ask for more.

HN Voices

Arthur Fischer, Volketswil, Switzerland // *Even for a trained letterpress printer, Heidelberg News is very interesting, entertaining and – most of all – an exclusive print product that lives up to the Heidelberg name. Keep up the good work!*

Bernd Stehr, Wiesbaden, Germany // *Please expand Tips and Tricks, as this section is useful for trainees and qualified employees alike.*

Nick Gawreluk, Minnesota, US // *Keep up the great work but also take a look at students in our industry. That could be a really interesting story for your magazine.*

Anthony Minchinton, Uxbridge, UK // *I’d like to read more in your magazine about marketing and sales techniques for small print shops. It’d also be interesting to see articles on how to sell to local government and on the key technical aspects in producing innovative print products.*

Maryna Fedotova, Kyiv, Ukraine // *It’d be great to read more about different business models in various regions of the world in Heidelberg News. I’d also be interested in finding out about the creative ideas that make print shops successful on the market and what they feel needs to change to ensure the future of our industry.*

André van Dijk, Haarlem, Netherlands // *Heidelberg News is a key source of information in the print media industry. I think it’d be good if the magazine reported regularly in the future on what’s hot and what’s not on the digital technology market . Finding out what Heidelberg thinks about this and what solutions the company is working on for this rapidly growing sector would surely be interesting for many other readers, too.*

WINNERS OF THE READER’S SURVEY – HN 272

1st Prize: iPad
Tore Bergstrøm, Aller Trykk AS, Trøgstad, Norway

2nd through 4th Prize: iPod touch
Abdul Monem, Lion Press Private Limited, Lahore, Pakistan
Richard Lisac, AGI North America LLC, Illinois, US
José Olger Ludeña Chávez, Libreria Impresora Independencia s.r.l., Arequipa, Perú

5th to 7th Prize: 130 U.S.-dollar (100 euros) Gift Certificate for the Heidelberg Merchandizing Shop
Mark Atkinson, Rotary Offset Press, Homebush West, Australia
Peter Mifsud, PROPRINT, Mosta, Malta
Masoud Aghaei, 13 printing industry, Sari (Mazandaran), Iran

IMPRINT

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