

# Heidelberg

NEWS

The customer magazine  
Since 1930 • Issue 257 • 2006

## THE JEWEL BY THE SEA

Leonilde Terceiro from Lisbon

## CURTAIN UP!

The new Stitchmaster ST 450  
takes center stage

## JAPAN:

COMPLETELY DIFFERENT PAPER  
A specialty paper manufacturer  
and its unique museum

HEIDELBERG



**Dear Readers,**

Print shops around the world continually call for new solutions to evermore demanding tasks. As a leading provider of such technological solutions, Heidelberg has proved its power to innovate more than once.

We show the spirit of invention, which possesses us as much as it does our customers, by the example of Germany's Druck & Media and Italy's Viappiani Printing. Both print shops have expanded their business model through smart, but wholly different ideas. John Hyde, Managing Director of Professional Services at NAPL, the US Printing Association, analyzes how to conduct "business unusual," and our Management Board Member, Dr. Jürgen Rautert, responsible for Engineering and Manufacturing, speaks on research at Heidelberg.

We let you know how you can use our most recent Prinect product not "only" for networking, but also for integration. We introduce you to the new Speedmaster SM 52-10-P model and the CD 74-LPL, and explain what the Stitchmaster ST 450 "learned" from Shakespeare. In addition, we let you in on the advantages offered by our American logistics center, paint a picture of the "Jewel by the Sea" with the help of Artes Gráficas in Portugal, and drive you through the print shop landscape of Pennsylvania in a carriage.

We hope that, once again, you will find something to pique your interest!

Wishing you delightful reading,

Bernhard Schreier  
CEO, Heidelberger Druckmaschinen AG

# Contents

## Profiles



**Passion for Printing**  
Their labels make Giorgio and Renzo Viappiani of Milan owners of one of the top 20 print shops in Italy. ▶ 18

### Profiles

- 4 [The Jewel by the Sea](#)  
A print shop in Lisbon defies Portugal's economic crisis.
- 10 [No Need to Fear the Groundhog](#)  
Centuries-old traditions like "Groundhog Day" coexist alongside the latest technology in the US state of Pennsylvania. Print shops like Caskey Printing and Whitmore Printing have conquered lucrative markets and demonstrate this truth.
- 18 [Passion for Printing](#)  
The Milanese brothers Giorgio and Renzo Viappiani pour their blood into their print shop – and reap awards.

### Spectrum

- 24 [News & Reports](#)  
from the world of Heidelberg.

## Innovations



**Listen Carefully, then Act!**  
Dr. Jürgen Rautert, Management Board Member for Engineering and Manufacturing at Heidelberg, reveals Heidelberg's research activities goals and the profits to customers. ▶ 40

### Solutions

- 28 [Double Sure with Double Printing](#)  
Heidelberg has three Speedmaster long perfectors on offer. The Swiss print shop Vögeli, one of the first users of the CD 74-10 with coating unit before and after perfecting, draws its initial conclusions.
- 33 ["Surprised by the Extremely High Productivity"](#)  
– says Gotthold Bayer. The Managing Director of the Kohlhammer print shop in Stuttgart, Germany, reports on his new SM 52-10-P.
- 34 [There's Fast, there's Faster and then there's ALC](#)  
Closer to customers: Heidelberg opens the Americas Logistics Center (ALC) in the United States.

### Innovations

- 36 [Still Networked or Already Integrated?](#)  
Process orientation, rather than compartmentalized thinking: Prinect enables the exchange of information in real time.
- 40 [Listen Carefully, then Act!](#)  
An interview with Dr. Jürgen Rautert, Management Board Member at Heidelberg.
- 46 [As You Like It](#)  
The new Stitchmaster ST 450 impresses with its unprecedented flexibility.

## Perspectives



**The Firebrand's Bequest**  
Politician, reformer, printer, and rebel: William Lyon Mackenzie. A visit to his residence in Canada's Queenston brings the printing technology of the past 500 years alive. ▶ 62

### Opportunities

- 50 ["Business Unusual"](#)  
John Hyde of the National Association for Printing Leadership (NAPL), the US Printing Association, lays out strategies for continued growth.
- 54 [From Printer to Airplane Manufacturer](#)  
A southern German print shop thrives from its own clever marketing.

### Perspectives

- 56 [In the Shadow of Fujiyama](#)  
Specialty paper manufacturer Tokushu Paper Manufacturing Co. Ltd. in Japan explores paper in a unique museum.
- 62 [The Firebrand's Bequest](#)  
Introducing the Canadian "Mackenzie Printery & Newspaper Museum."

### Service

- 65 [Tips & Tricks](#)
- 66 [Dates & Tradeshows](#)
- 66 [Winners of the Reader's Survey – HN 256](#)
- 67 [HN Voices](#)
- 67 [Imprint](#)



Leonilde Terceiro

FERNANDES &amp; TERCEIRO, PORTUGAL

## The Jewel by the Sea



Renowned as one of the most beautiful cities in the world, Lisbon is often mentioned in the same breath as Paris, Milan, or New York. The capital of Portugal lies on the Atlantic Ocean and the western edge of the European continent.

The Lisbon metropolitan area, home to about 3.5 million inhabitants, is also a magnet of economic growth.

It offers lucrative opportunities for industrious and intelligent printers like Leonilde Terceiro, manager of the Fernandes & Terceiro printing company in Carnaxide, near Lisbon.

Fittingly nestled among seven hills, the capital of Portugal gets a little bit in its own way topographically. Except for a few grand boulevards, the congested and contracted cityscape is filled with narrow, notoriously clogged streets and alleys. Lisbon's chaotic traffic is no less famous than its gracious old buildings. The resplendence of the city, which rests on the banks of the Tejo river like a beautiful jewel, comes from the Age of Discovery. When the world was being explored and new continents were being discovered, Lisbon was the starting point for most expeditions and voyages of discovery. Thanks to this flourishing overseas trade, the country could afford the sumptuous and expensive luxuries of stone that are so admired today.

**But today Lisbon is in upheaval.** Ever since Portugal joined the European Union in 1986, buildings have been going up, improved, and renovated all over the city. In 1994, Lisbon was the cultural capital of Europe; in 1998 it welcomed World Expo visitors from around

the world; and in 2004 it hosted the European soccer championship. These events were accompanied by a construction boom that included building a second bridge over the Tejo – one of the longest bridges in the world. The downtown area of the city was also polished to a high gloss. The World Expo site along the harbor has become a favorite area for residence and for strolling. It also includes one of the world's most beautiful aquariums. As a result, Lisbon has become a true boom town with many interesting companies.

**Rebuilding Fernandes & Terceiro.** Leonilde Terceiro (46) originally didn't have much interest in the printing business that bears her name. Her father founded the firm in 1960. She studied architecture and was already a well-known architect in Lisbon when her father fell ill and died a short time later. Her sister showed no interest in the print shop, and because Terceiro wanted to keep ownership of the company in the family, she took up a new profession in the printing industry. ▶

“I’m proud of our team in the company. In the past 14 years, we’ve been able to reach our goals despite all the difficulties.”

Leonilde Terceiro

It was quite difficult because neither of the sisters had any concept of what was involved. “When I took over the company in 1992, I didn’t even know the difference between normal paper and cardboard. But I had good employees in the company who helped me a great deal,” says Terceiro, who has gained a thorough understanding of printing technology since assuming control. Thanks to female intuition, her determination, and her sales skills, Terceiro continues to run and manage her inherited company very successfully.

**Investing for success.** Under the management of Leonilde Terceiro the “face” of the company has changed completely. “When I decided to run the firm, it was clear to me that doing so would involve investments. I bought a building plot and built a building I had designed myself,” states the architect. As early as her first year with the printing firm, she introduced a home-grown accounting system and established an IT infrastructure. Setting up management personnel in the areas of sales and finances was also important for her success. These measures not only reduced the burden on her, so she could then concentrate on the really important work, but they also increased efficiency in the company. Terceiro also invested in other areas of the company. For example, she recently purchased a ten-color Speedmaster CD 102 for the print shop.

All of the rebuilding and expansion has paid off for the company, even though the Portuguese economy has been struggling for more than a decade and has been somewhat stagnant – especially in the graphics industry. In defiance of the ongoing crisis, Terceiro quickened the development of Fernandes & Terceiro. The number of customers and the size of the product portfolio have been growing for years, and sales are also rising. Some 33 customers are responsible for about 80 percent of annual sales. The total of 160 active customers includes some from Belgium and France. Most customers come from

Portugal, but this number includes many international firms. The core business consists of two main areas. Typical commercial jobs like brochures, flyers, and business reports make up about 70 percent of the business while products for packaging, primarily for the pharmaceutical industry, account for the other 30 percent. Right now, 94 employees work in two shifts in the company’s 5,200 square meter (55,972 square feet) of space.

**No crisis without a way out.** Terceiro sees difficulties in the lack of training for younger workers. “We have a lot of university graduates in Portugal, but unfortunately we have too few qualified workers for industry,” she explains. “For example, there’s no professional school for technicians and printers like there is in France or Germany. That makes training difficult and leads to competitive disadvantages – primarily in international competition.”

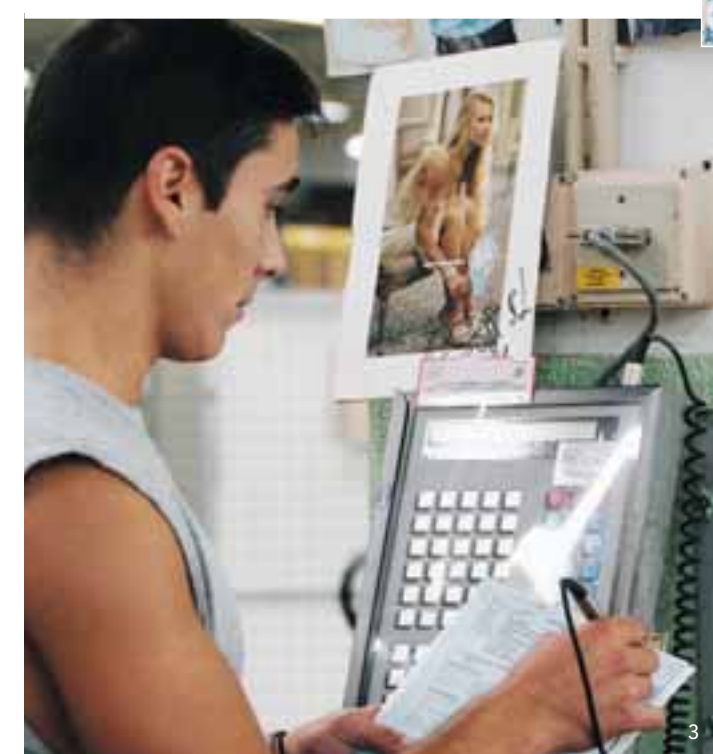
Fernandes & Terceiro continues to invest in improving productivity. Terceiro sees improving productivity as an important factor for keeping production costs low and remaining competitive over the long run. Of course, the economic crisis has created some disadvantages. For example, the company had to stimulate motivation among the employees, who also had to work longer hours but no longer received bonuses. Terceiro looks at this situation with absolute pragmatism. “It’s absolutely necessary to keep wages low,” she says. “Employees should not constantly ask what the firm can do for them, but what they can produce for the firm. After all, employees are an important part of the firm.” ▶



Entrance to the company headquarters of Fernandes & Terceiro.



1



3



2

1. Aquiles Manuel da Silva Dias cleans the Speedmaster CD 102.
2. A view of the press room at Fernandes & Terceiro.
3. João Miguel Vaz Rosa uses a barcode pen to read the data for the next print job.



To gain a better view of productivity, the company introduced the OPTIMUS management system. It enables continual control and transparency of the work produced among employees. Terceiro says, "I'm proud of our team in the company. In the past 14 years, we've been able to reach our goals despite all the difficulties."

Many of Terceiro's ideas for reorganizing the company originated with certifications (such as ISO 9001, 14001 and 18001, and OSHAS standards) that signal to customers that they are dealing with a highly productive and optimally organized company with a clearly formulated responsibility for the environment and for its employees. "Leading a company is always linked to creativity and human understanding," she states. "But that also includes effective management. For example, every machine is in itself an accounting cost center. That's how I can precisely analyze the costs for each machine when each employee uses it."

**Business philosophy à la Fernandes & Terceiro.** "It's not always absolutely necessary to aim at large profits or to generate huge growth curves," says Terceiro. "Our company philosophy is based on four basic pillars: optimization, training, ethics, and a sustainable yield. I'm always investing in the most modern technology, and automation plays the lead role. In my opinion, intensive training is



1. Leonilde Terceiro: Riding is her passion.  
 2. "Portas de Santo Antão" is famous among tourists because of the excellent restaurants and theaters. Depicted: "Teatro Politeama."  
 3. Arcade at the "Terreiro do Paço."



Left: High-end products from Lisbon; Right: João Miguel Vaz Rosa, Pedro Miguel Curto Broz, and Leonilde Terceiro at the Speedmaster CD 102 (left to right).

one of the most important foundations of our success. We make sure that our training always occurs at the highest level of quality. The basics of our actions are integrity, professional ethics, and fulfilling our obligations. We monitor all production procedures so that we can realize continuous improvement."

Given demanding market requirements, adherence to the concept of sustainable development, and the need for efficiency and productivity, Fernandes & Terceiro supports the notion of corporate responsibility. Consequently, the firm considers quality, the environment, and security decisive factors for the optimization and profitability of its business. The company isn't green in the strict sense, but it still follows a proactive approach when dealing with environmental issues.

Each year it publishes an environmental report, audited by an accredited, external agency that describes the company's approach to environmental issues. The company has implemented a strong and dependable management system that has been certified according to ISO 9001: 2000, ISO 14001: 2004, EMAS II, and OSHAS 18001: 1999 / NP 4397: 2001 to foster conscientious environmental behavior, to guarantee the appreciation of the employees, to earn profit, and to ultimately create a better environment for future generations.

**New challenges.** Meeting the goals that have been set and responding to new challenges is in itself a significant challenge. In the coming months, Fernandes & Terceiro will adopt an aggressive marketing and sales plan to increase its available capacity and improve its productivity indices. The company should show positive growth because, "I want to fulfill the vows that I made to my father: to honor our name, to preserve what my father built up, and to continue to manage the company successfully," says Terceiro with visible satisfaction. ■

**Facts & Figures**

Fernandes & Terceiro Lda. – Artes Gráficas  
 Rua Nossa Sra. da Conceição, 7  
 2794-014 Carnaxide  
 Portugal  
 Tel.: +3 51-21-4 25 92-00  
 Fax: +3 51-21-4 25 92-01

[www.heidelberg.com/hd/CD102](http://www.heidelberg.com/hd/CD102)

CASKEY PRINTING &amp; WHITMORE PRINTING, USA

# No Need to Fear the Groundhog

The US state of Pennsylvania is a region rife with contradictions: centuries-old traditions like “Groundhog Day” persist side-by-side with a high degree of industrialization. While groundhogs there spend nearly half the year hibernating, two print shops, Caskey Printing and Whitmore Printing, indicate that they are more than wide-awake: with shrewd investments in high performance equipment, these two medium-sized companies have captured lucrative markets.



**T**he most famous resident of Quarryville in southeastern Pennsylvania is Octoraro Orphie – a groundhog. Each year on February 2, his great hour strikes. When exactly at 2:31 in the morning, dressed in a nightshirt with a top-hat on his head, the chairman of the “Slumbering Groundhog Lodge” sends out a scouting patrol to Octoraro Creek to visit the furry oracle, residents hold their breath: what sort of weather will Orphie predict? If he casts a shadow, since the weather is clear and frosty, it will remain cold for six more weeks. If no shadow is visible, thanks to warmer, greyer weather, then spring is approaching.

Though no one may in fact still believe in this way of forecasting the weather – a rite that dates back to an ancient German custom on Maria Candlemas, a Catholic holiday – still, the careful nurturing of such traditions adds to Pennsylvania’s charm. The idyllic, unspoiled forests in this US state, or the lives of the pious Amish, who have renounced the use of modern technology, strike a provocative contrast to its industrious cities, such as York. In this city of 40,000 residents, located about an hour’s drive by highway from Quarryville,

the 13 founding colonies passed the first Constitution of the United States in 1777. Today, Harley Davidson manufactures its legendary motorcycles in this erstwhile capital of the USA. And this is where Caskey Printing is also based.

Gregory Caskey, the proprietor of the print shop, can only smile about Orphie, the “weather god.” He himself is enjoying spring year round – his business is blossoming: “In 1986, we began with only three or four employees, and we have added on continually since then. Today, we employ 35 employees all told, and we hire someone new nearly every month.” For years, the business has also seen double-digit increases in sales.

This achievement is all the more remarkable, given that the business is located in a region strewn with competitors: Pennsylvania Dutch Country. “Dutch” should not be taken literally here, since primarily German immigrants, for the most part craftsmen and farmers, made up the majority of the population in the 17th century. However, as the German word “deutsch” was too difficult a word for the American tongue, it was simplified to “dutch.” The German settlers were above all enticed by the religious freedom and liberal



1



2



3

Caskey Printing:  
 1. CEO Gregory S. Caskey and Tony Rife, Vice President of Sales (from left).  
 2. Larry Kadilak (lead pressman) on his way to the delivery of his Speedmaster CD 74 six-color with coating unit.  
 3. Tony Patterson (Sormz pressman) in front of the Printmaster two-color.

social policies advocated by Quaker William Penn, who founded Pennsylvania in 1681. Penn, who came from a wealthy English Admiral's family, received the land from King Charles II, who in this way settled a larger debt with the Penn family.

Since most of the German immigrants could read and write, they provided an ideal breeding ground for the printing trade. Already in 1690, the first paper mill, built according to the European model, was established in Germantown, a suburb of Philadelphia. Around 40 years later, the German Pietist Konrad Beissel founded the Ephrata cloister. This developed into an important printing and art center, even praised by the French philosopher and poet Voltaire in his "Dictionnaire philosophique." Beissel's compatriot, Christoph Sauer, established the first type foundry in America in 1772.

To this day, the traditional printing heart of the USA beats in Dutch Country. Competition is correspondingly intense. Despite this, Caskey, who completed his education as a printer after finishing high school, then worked his way up to operations manager, nevertheless set out on his own. That was in 1986. "I was drawn to the challenge, to see if I could do it. I was working extra hours anyway. So, I thought to myself: all or nothing," the 49-year old company boss explains.

Caskey started with a copying machine and a one-color printing press in rented rooms, in a space of just under 280 square meters (3,000 ft<sup>2</sup>). By day, he acquired new orders, which were worked off during the night. Today, the 35 employees working in two shifts process mainly newsletters, brochures, catalogues, marketing materials, and packaging in what has in the meantime become a roughly 2,320 square meter (24,972 ft<sup>2</sup>) large industrial site. A Heidelberg Printmaster, Heidelberg SORMZ, and since September 2005, a Speedmaster CD 74 six-color with coating unit stand in the press room of the full-service enterprise. Digital printing, book-binding, fulfillment warehousing, and mailing services complete the company's service portfolio.

**Capturing niche markets.** The approximately 600 regular customers come from the most diverse branches of business. Among other projects, Caskey Printing is printing a book for a non-profit organization against drug and alcohol abuse, adapting the title to fit various country editions, and it has taken over international distribution, for instance to Canada, Japan, and Australia. Another growth market is

business with private schools in the larger cities of the neighboring states of Maryland, New Jersey, and New York. For these, the print shop produces magazines and books, and runs off mailings.

Thanks to such extensive services, and the targeted acquisition of new customers, Caskey Printing has been able to capture lucrative niche markets, and ensure a continuous workload year-round. Business partner Tony Rife, who has been responsible for sales & distribution at the print shop since 1996, explains: "One-time jobs and seasonal business constitute the majority of our orders. Our financial stability and confidence in our business plans are secured by the roughly 70 periodicals, such as newsletters, magazines, or catalogues, which are printed on a monthly, bi-monthly, or quarterly basis."

**"Our goal is to be ready with any imaginable print media that our clients might need."**

Gregory Caskey



**Total customer orientation.**

Based on their skills, Rife and Caskey make an odd couple – and this is precisely why they complement each other so well. While Rife, as the marketing talent and trained graphic artist, reels in new orders, Caskey is the man of action, making sure that the necessary equipment is in working order. "In this day and age, it is no longer enough if you are merely a good printer. You must also be a good manager, and know how to manage a business efficiently," says the company boss. Caskey knows precisely how to do this. His company is able to adapt rapidly to changing conditions on the market, and to orient itself entirely to the wishes of its customers.

"Our goal is to be ready with any imaginable print media that our clients might need." This is also a reason why the Speedmaster CD 74-6+L was purchased.

The print shop was receiving more and more inquiries from customers who wanted to manufacture high-quality packaging. "The processing of cardboard boxes, however, gave us stomach aches, because we weren't sure whether we could deliver the desired quality. Besides, we didn't have a coating machine. With the Speedmaster CD 74, none of this is a problem, any more. Now, we can print board stock and apply coating in one pass. This opens up entirely new sectors of business for us, such as packaging printing, which is growing magnificently," reports Rife.

Based on the high productivity of the Speedmaster CD 74-6+L, the company can now much more easily persuade its clients to consider higher quality products. In addition, by using diverse coatings or combining them with each other, Caskey Printing is producing

*Even today, the Amish in Pennsylvania maintain centuries-old traditions.*

more projects with interesting effects. Caskey sees an additional advantage to the reduced throughput times: “Thanks to the extended delivery and extra dryer, we can run off jobs that include finishing in the shortest times possible – if need be, even within a few hours. That is an important decision criterion in the awarding of contracts. Ever since the Speedmaster CD 74 has been in operation, we have raised both productivity and sales by roughly 30 percent.”

To be sure, Caskey stretched out the two shifts across 13 hours. Otherwise, they would not have been able to meet the increase in the volume of orders. According to Rife, word of mouth among existing customers contributed the most to the increase: “We receive calls or E-mails on a weekly basis from companies who were referred to us by satisfied customers.” Growth is then only a matter of course. “We achieve a higher quality with the Speedmaster CD 74, and much more rapidly than before. It’s a very good feeling,” says Caskey, happily.

Abraham Whitmore began issuing the weekly “New Holland Clarion” in 1873, which the Whitmores continued to print until 1984. Eric Whitmore is proud of this tradition, though he remains pragmatic, and avidly interested in technology. After all, he was also moved in

the end – relatively late at 29 years old – to take up the family business. “I fell in love with the technology. More than anything else, typesetting captivated me: first, I worked on an old Compugraphic, later with the MCS and Integrator versions.” These are clearly different from those of the middle and late 50s, when lead “pigs” were still made, and Linotype and Ludlow were used to set copy.

He learned the printing craft from his father in the 1950s and early 1960s. In those days, twelve employees worked at the “New Holland Clarion,” and three at the print shop. However, with the emergence of cost-free weeklies in the 1970s, the newspaper became less and less profitable. As a result, Whitmore closed down production in 1984, in order to concentrate fully on the printing business. In the

“Prinect is heaven sent. We now come up with one cost estimate in just under half the time.”

Eric Whitmore



**W**ilkum’ among the Amish. From Caskey’s site in York, Highway 30 will take you to Lancaster County – into the middle of Amish country. Off the main road, a world opens up into a time that was thought long gone: buggies, in which girls wearing knee-length clothes happily chatter next to boys in straw hats and women dressed all in black, trot down on a traffic lane reserved for carriages. Bearded farmers plow the fields with teams of draught horses. Most of them speak “Pennsylvanisch,” an old German dialect intermixed with Anglicisms. One drives past feed silos and windmills, grazing cattle and sheep. Here and there in the distance, you can glimpse the roofed bridges characteristic of Lancaster County, dating back to the 19th century, on which small wooden houses sit enthroned to protect the structural base from the weather. Lancaster, a city of 50,000 residents with a rich colonial heritage, is where Eric Whitmore runs his print shop. Eric is a fourth generation printer. His great grandfather George

beginning, he focused on typesetting, which he took over for a host of print shops. When his son, Michael (25), expressed an interest in the printing business in the 1990s – and had this put to the test during summer vacations – Whitmore decided to expand.

**A**nti-cyclical investments. At drupa 2000, he became enthusiastic about the Heidelberg Speedmaster CD 74 four-color with perfecting device, and the Stahlfolder USA B 20 – and purchased both machines. Soon thereafter, the economy went into a slump, but not the print shop in Lancaster. “We were very lucky we had just installed the highly-modern and efficient equipment from Heidelberg with which we could produce very efficiently. While paper consumption in 2001 in the sector declined by 30 percent, we expanded, raising sales from 400,000 to 1.5 million U.S. dollars (325,000 to 1.2 million euros),” Whitmore reports with pride. After that, the company doubled its sales to as high as three million U.S. dollars (2.4 mil- ▶





*Whitmore Printing:*

1. Eric Whitmore, fourth-generation leader of the company.
2. The Prinect Sigma Station in use.
3. Doug Groff, prepress expert at Whitmore, has worked at the company since 1984.
4. Rob Fraser, machine operator, at his Speedmaster SM 74 five-color with coating unit and extended delivery along with co-workers Matt Osborne and John Reynolds, who operate the Speedmaster SM 52 and the Quickmaster QM 46 (left to right).

lion euros), before crossing the five million dollar mark (4 million euros) in 2005. In the face of such dynamic growth, the time to take a breath has finally come. Whitmore does not think much of hasty measures such as doubling capacity, by adding an additional shift, for instance: "For the time being, we will stay with our 35 employees and a 10 to 12 hour daily shift."

**P**erfect timing. This cautious approach, paired with perfect timing, is certainly an important factor underlying the print shop's success. In the first 18 months after the new machines were installed, Whitmore did not try to attract new clients, but instead only informed existing ones of the expanded service portfolio. This precept had proved itself two years earlier, when the business embarked on digital printing, a line that now accounts for 15 percent of sales. "It was the right move at the right time. We could manufacture greater variety and higher quality. Clients, with whom we had previously earned 10,000 U.S. dollars (approx. 8,000 euros) worth in sales, now gave us contracts in the range of 25,000 U.S. dollars (approx. 20,000 euros)," Whitmore recalls.

He finally employed someone for marketing in 2003, and the new employee brought in precisely the necessary jobs, both for the Speedmaster SM 74-4-P, as well as for the Speedmaster SM 74 five-color with coating unit and extended delivery, installed in 2005. Whitmore has been using the perfecting press as an all-round two-over-two color machine to print a wide range of products such as door-hangers, high-quality yearbooks for colleges, or 600-page catalogues for coin auctions – in one pass, and cost-effectively. Typical products for the Speedmaster with coating unit are first-and-foremost collegiate alumni materials. Besides this, commercial jobs such as compact disc inserts and tray cards, four-color newsletters, and company printed materials, play an important role. One more pillar on which the print shop's business stands is the mailing business. Today, this sector accounts for nearly every fifth printing contract.

**H**eaven sent: Prinect. Most customers reside within a radius of 60 miles, only one is trans-regional. Since no single customer brings in more than five percent of sales, the number of jobs coming from continuous growth adds up to around 500 distinct items per month. This entails a heavy load of administrative work, which Whitmore at first underestimated – and would not have been able to master without the assistance of Prinect: "Prinect is heaven sent; without Prinect Prinance, I would have to pack it in. Daily, we draw up between 40 and 50 bids. Instead of taking 45 minutes for a cost estimate, we now come up with one in just under half the time."

Prinance, Prinect's management information system, has been in service since May 2005. "I can easily export client information such as name and order numbers right into my software. This is an enormous time-saver. Once entered into the system, you can retrieve the information with the press of a button," the print shop boss explains. By his own account, he has been using just 35 percent of the possibilities inherent in the comprehensive Workflow System Prinect. The Prinect Prepress Interface is also used in production, connecting the printing press almost seamlessly with prepress, and delivering all printing relevant parameters for makeready, as well as the imposition software Prinect Signa Station.

"Prinect lightens the work load considerably. My people don't have to think a great deal about whether they have set the right layout or format. They see the layouts during proofing, and they can send orders, say for paper, by E-mail over the system," says Whitmore. The print shop boss has not only provided well for the future in terms of machinery, but also in terms of personnel. His son Michael is just now preparing himself to take over the business. He brings the best credentials with him: from prepress, to printing, to postpress, he is able to operate all of the machines. Two employees, who are currently managers and possess the business and organizational know-how, complete Whitmore Printing's future managerial trio.

With that, there is no question: the heart of printing in the USA will undoubtedly continue to beat in Pennsylvania Dutch Country. Even when – as this year – Octoraro Orphie occasionally forecasts bad weather. ■

**Facts & Figures**

Caskey Printing, Inc.  
850 Vogelsong Road  
York, PA 17404  
USA  
Tel.: +1-717-764-45 00  
E-mail: gcaskey@casprint.com  
www.casprint.com

Whitmore Printing  
360 Steel Way, Suite 5  
Lancaster, PA 17601  
USA  
Tel.: +1-717-399-34 05  
E-mail: eric@whitmoreprinting.com  
www.whitmoreprinting.com

www.heidelberg.com/hd/SM74  
www.heidelberg.com/hd/CD74  
www.heidelberg.com/hd/Prinect

VIAPPIANI PRINTING, ITALY



Passion  
for Printing

Viappiani

Bruno Viappiani didn't need a lot of space in 1929 when he began printing targets for the shooting galleries on the fairgrounds in a garret on Milan's Via Corridoni. But the more that his passion for printing grew, the larger his company became. Today, his sons Giorgio and Renzo run the printing company that is one of the top 20 in Italy and that specializes in printing labels.

During the first years of the company, Bruno Viappiani worked day and night. Even into his old age, hardly a day went by when he did not make an appearance at the firm. "Even at 95, papa came to work. He had two Apple computers, one at home and one here, and he always wanted the newest software," say his sons, Giorgio (60) and Renzo (55) with pride.

They have inherited an interest in new approaches and technical innovation from their father. "For us, it's fundamentally important to offer our customers products and solutions that the competition doesn't have yet. That's why we continue to invest in the newest technology," they say. Many customers from the early days of the

firm are still loyal to Viappiani today. That's no surprise; the first commandment at the company is "quality." By following this principle, Giorgio and Renzo have turned their company into one of the leading printing companies in Italy.

**European-wide business.** Viappiani Printing is also well known beyond the borders of Italy. Of course, only a very small number of consumers know the company name, but few households in Europe do not come into contact with materials printed by Viappiani. The company delivers labels to numerous large corporate groups in the consumer goods industry. For a laundry detergent sold through- ▶



Giorgio Viappiani



A strong team ensures the production.

The press room at Viappiani (above).  
The presentation room of the Milanese  
print shop (right).



out Europe, for example, millions of labels are printed by the company – of which large numbers are destined for important markets like France, Germany, and Italy.

Viappiani began printing labels 35 years ago when Giorgio discovered this growth market during a trip to the United States. He then built up the company in the subsequent years. Today, two-thirds of Viappiani's business is printing labels. The remainder includes catalogs, brochures, business reports, and other printing products. In Italy, only a few firms are successful in printing labels and in the traditional printing market. "Because of our technological know-how and our experience in demanding label printing, we capture new sales opportunities in the traditional printing market," say both of the brothers.

**Concentration on management.** Recent economic difficulties have not slowed the success of the company. Its order books are nearly filled. The presses, including several Heidelberg Speedmas-

ters in use since the 1970s, run five days a week in three shifts (6:00 am to 2:00 pm, 2:00 pm to 8:00 pm, and 8:00 pm to 6:00 am) and on Saturdays in one shift. The company's 110 employees earn revenues of more than 25 million euros (32.038 million U.S. dollars). About 35 percent of the business volume comes from international markets. Since the end of the 1980s, Viappiani has been represented in The Netherlands with a foreign subsidiary, Print'92. This business is driving international expansion of the company.

The company's continuing success has something to do with the self-understanding of the Viappiani brothers. Their father fed sheets by hand himself, but the sons rarely appear on the production floor. They no longer need to prove their passion for printing by getting ink on their fingers. Giorgio and Renzo consider themselves much more as managers. They concentrate on the development of the company, on customer care, and on negotiating with the purchasing departments of large companies like Procter & Gamble, Metro, Unilever, and Chanel. "Our success is primarily based on our



*Renzo Viappiani*

flexibility, on a competitive price, and, of course, on the reliable quality of our products – thanks to the Heidelberg presses,” according to the brothers’ joint opinion.

**The family’s reputation.** That Giorgio and Renzo have consistently developed the firm according to their father’s sensibilities seems self-evident. Yet both brothers originally had other plans. Giorgio accepted the fate of the first-born son and joined the company when he was just 13. That’s what his father wanted. But Giorgio had a different vision of his future back then. He longed “to do something with electronics.” But he ultimately came to enjoy the graphics industry and is only a little wistful when he says “I often console myself that I do work with electronics today. After all, there’s a lot of technology inside every Heidelberg press.”

The career of his brother Renzo was much different. He first studied business administration and then worked in a bank. His work there on the “situation of cost analysis in midsize printing companies” predestined him to run the finances of the family’s printing business. His father also dragged him into the company. Renzo has been with the firm for 35 years and has long since been captivated by a passion for printing. He’s now the president of the graphics industry association in Milan and a vice president of the association at the national level.

**SAPPI Award 2005:** outstanding quality. Those who have accomplished much don’t need to hide their accomplishments. At Viappiani, advertising its own business is a big part of company strategy. For its TrashZappingPixel promotion, the company won the SAPPI International Printer Award of the Year for 2005, as well as the first prize at the “Targa d’Oro della comunicazione Italiana.” In addition, Viappiani shows its design at the “Milanomadeindesign” in New York and other North American cities. The company was also nominated in the “ADI Design Index 2005” in the category of “visual design.” To realize their ideas, the brothers involved a Milanese designer, Antonio Barrese, whom Giorgio got to know during his days as a student.

With the TrashZappingPixel promotion (see the sidebar) Barrese and Viappiani Printing did some explanatory work on the technical possibilities of printing. The catalog demonstrates what printing technology can produce on any conceivable surface. “The haptic or tactile sensation of a printing product conveys a completely different experience than electronic media. Printing companies that understand that reality and can communicate it can generate additional business,” says Giorgio to justify the product’s complex design.

**The human factor is decisive.** Just as their father could awaken his sons’ enthusiasm for printing only with sensitivity and tender pressure, Giorgio and Renzo are today conscious of the significance of the human factor for the success of the company. That’s why the

most modern technology at Viappiani Printing is only one precondition for economic success. A second key is employees who are involved and well qualified. Quality is closely linked to the people in the company – Viappiani Printing is completely convinced of that truth. That’s the only way that the company can realize its goal to be more than a good printer – to be a creative service provider for everything associated with printing.

A passion for printing has not yet overtaken Bruno Viappiani’s grandchildren. “If they want to work in the company some day, there’s room for them,” points out Giorgio. But the twinkle in his eyes as he says this shows only too clearly that he secretly wishes they will develop an interest so that the company can continue to be led in the family tradition. ■

### TrashZappingPixel



TrashZappingPixel, Viappiani Printing’s promotion, won the SAPPI International Printer Award of the Year 2005. “Trash” and “zapping” indicate the flood of information that affects everyone today. “Pixel” stands for the tactile experience that modern printing products offer – and virtual experiences do not.

TrashZappingPixel is used for special occasions or as an information and acquisition instrument for targeted customers and agencies. The sample publication features a complex design, and production demonstrates the technical possibilities of printing that are often not recognized in detail. TrashZappingPixel presents the entire spectrum of printing: embossing, linking, lenticular printing, pop-ups, film printing, varnish, holograms, and flavor printing.

### Facts & Figures

Viappiani Printing  
Via Cassanese 206  
20090 Segrate (MI)  
Italy  
Tel.: +39-02 70 10 11 12  
Fax: +39-02 73 84-345  
www.viappiani.it

## News & Reports

### “Riverboat” in Holland: Tetterode Sets Print Shop Afloat



Print shop at sea: Tetterode BV, Heidelberg's Dutch sales partner, converts a former Rhine shipping steamer into a floating print shop.

**Holland.** Heidelberg's Dutch sales partner, Tetterode BV, waged an unusual campaign to inform its customers of some of Heidelberg's diverse offerings: in the spring, Tetterode launched a “demo boat” on a voyage – outfitted with a complete print shop onboard. A Prinect Printready System including MetaDimension and Signa Station found a berth onboard the former Rhine river shipping steamer, along-side a Suprasetter, a Speedmaster SM 52-2, and a PM 74-4. The more than 800 visitors who boarded during nine moorings were even given a “live” view of a Polar 78 high-speed cutter, as well as a Stahlfolder TA folding machine. The upshot of the “Riverboat,” which Tetterode especially set afloat for the benefit of (smaller) commercial print shops with scheduling bottlenecks: three printing presses and one CtP system found a buyer already in the first week of the cruise.

### Inline Finishing: Now Available for the Speedmaster XL 105

The RSP inline finishing system from CITO PrintLine GmbH, which has already proven itself in all Speedmaster models, is now available for the Speedmaster XL 105. The system can be installed in the printing or coating unit of the printing press, where it may be used for creasing, punching, and perforating. As compared to offline solutions, this approach offers benefits such as shorter makeready times, as well as quicker production and throughput times. Moreover, no extra space is needed for material logistics. All in all, printshops can noticeably expand their range of offerings – at a comparatively low initial investment – with this system. It even handles the quite demanding production of self-adhesive postage stamps.



Creasing, punching, and perforating: the RSP inline finishing system is now also available for the Speedmaster XL 105.

For further information: [www.printline.de](http://www.printline.de)

### Long-distance Runner: 20 Million in 18 Months

**Georgia:** Although the Rezoni print shop in Georgia has only been in operation since 2003, it is producing at seemingly record levels: the family enterprise has output 20 million prints within a mere 18 months! First and foremost, Rezoni Director, Razmadze Revaz, set his sprightly “workhorse” to work turning out advertising brochures, magazines, and forms, which were certainly not only monochromatic. In the meantime, although a Printmaster PM 52-2 has now taken over multi-color jobs, the GTO at Rezoni is still in service around-the-clock. Revaz, the print shop boss, still has a few plans for both: “We would be delighted to keep on growing with the help of Heidelberg. This Printmaster will certainly not be our last Heidelberg press!”



Andro Revaz, son of the Director of Rezoni, Razmadze Revaz, in front of the apparently record-setting GTO.

### “Turbocharger” for the Speedmaster CD 74: 18,000 Sheets per Hour

Thanks to a host of additional technical improvements, the Speedmaster CD 74 can now achieve a rate of 18,000 sheets per hour – and this during continuous operation. The real “turbochargers” of the press are the newly developed suction heads, together with automatic pile lifting control system in the feeder. Along with additional components, in what is termed the “Smart Sheet Travel” concept, they



“Formula 1” in straight printing: thanks to a host of innovations, the Speedmaster CD 74 can now achieve a rate of five sheets per second.

not only ensure time-savings at the feeder, but also a clean and mark-free sheet run, even at the highest speeds. At the same time, the print stock that can be employed ranges from light weight paper to cardboard. The high-speed version of the Speedmaster CD 74, which offers 20 percent higher productivity, is available starting October 2006. It is suited for commercial, package, and label printers, who process diverse printing stock with varying print runs. The optional semi-automatic pile change system in the delivery should spark the interest of packaging printers, since it allows for non-stop operation – in its format class (50×70 or 19.69×27.56 inches), and as of yet, a unique logistical approach.

### Metallic Effects: Cold-foil Module for the Speedmaster CD 74 and CD 102

By using the new FoilStar for the Speedmaster CD 74 and CD 102 production series, foil-based metallic finishes can be applied in high quality and with stunning brilliancy to the most varying printing stock. In this process, a paste adhesive is partially or completely applied to the printing material in the first printing unit using a conventional offset plate, while a metal foil is fed between the blanket and the impression cylinders in the second unit, which has been equipped with a cold-foil module. Here, the pressure from the blanket transfers the foil to those portions of the printing material where adhesive has been applied. The advantages of this method (even as compared to hot-foil stamping): employing conventional printing plates allows for substantially shorter makeready times, much faster printing speeds (up to 15,000 sheets per hour), and excellent register accuracy for fine structures such as texts, lines, and screens. The spectrum of printing stock that can be used ranges from grammages of 70 grams per square meter to 400 grams per square meter. What's more, the two units can be employed in conventional offset printing straight away after completing a cold-foil application.



A feast for the eyes: the new FoilStar for the Speedmaster CD 74 and CD 102 enables the most varying printing stock to shine with a metallic luster.

## XL Continues to Grow

Heidelberg wants to tap larger format classes with the development of two new printing presses – the Speedmaster XL 142 and the Speedmaster XL 162. The goal is to broaden existing product portfolios upwards, in order to further extend market leadership in sheetfed offset printing. The new generation of presses is laid out in the 102×142 cm (40.16×55.90 inch) or 120×162 cm (47.24×63.78 inch) format. While the presses are designed primarily to serve the packaging market, they can also be used in commercial and publishing printing. Indeed, just as the packaging market grows comparatively robustly at the moment, the expanded range of offerings from Heidelberg is especially targeted at the printing and finishing of folding boxes. Heidelberg plans to unveil the new generation of presses in the 6 or 7b format classes to the public for the first time at drupa 2008.



The future Speedmaster XL 162 (in black) compared to Heidelberg's current flag ship, the Speedmaster XL 105.

## PMA: “Succession in Family Enterprises” – Going International

In February 2007, the Print Media Academy (PMA) begins offering its training sequence “Succession in Family Enterprises” (see HN 254) – already successful in Germany over the past six years – as an international program. The seminar will be held in English and starts out with a seven-day event in Heidelberg. It focusses on topics such as how to professionally organize the process of transferring authority, and how participants can continue to develop themselves personally into becoming leaders. During the subsequent, second module (also held at PMA in Heidelberg), the current proprietors are invited to exchange their views regarding transfer arrangements. The third and last training module will be held half-a-year later, in the country whence the majority of participants originate. For three days, issues discussed revolve around the design of the legal and financial framework, among other topics, as well as the concrete implementation of the change-over.

For further information:  
Horst Schmitz, Tel.: +49-(0)-62 21-92-52 45  
E-mail: [Horst.Schmitz@Heidelberg.com](mailto:Horst.Schmitz@Heidelberg.com)

## Design Award: Speedmaster XL 105

**Germany.** The Speedmaster XL 105 was conferred a special honor early this year: it was awarded a “silver medal” in the Design Award of the Federal Republic of Germany, perhaps the most exacting design award competition in the country. No other comparison of this kind sets more rigorous standards for participants in the fields of product and communication design, meaning that in Germany, it can confidently be called the “Prize of Prizes.” With this award, the XL 105 places a crown, so to speak, on the other prizes it was already awarded in Germany, Japan, and the USA. Dr. Jürgen Rautert, Heidelberg’s Board Member responsible for Engineering and Manufacturing, and Björn Wilke, Industrial Designer, accepted the corresponding trophy during an event held by the German Design Council.



Prize recipients: Dr. Jürgen Rautert, Heidelberg’s Member of the Board, responsible for Engineering and Manufacturing, and Björn Wilke, Industrial Designer (from left) accept the silver medal awarded to the Speedmaster XL 105 at the Design Award of the Federal Republic of Germany.

## From Hamburg into the Wide World

Happy news from New York: “Wood Type Manufacture Hamburg” won first place in the competition for young designers held by the “Type Directors Club” (TDC), the trade association for typography. In addition to this, it was awarded the “Certificate of Typographic Excellence.” This recognition for exceptional creativity in a work is as much sought after in typography circles as an Oscar. This year, from among the 2,100 entries sent in from 29 countries, the TDC ([www.tdc.org](http://www.tdc.org)) recognized 205 works. The TDC began holding the event for the younger generation of typographers as long ago as 1955. It is counted among one of the most prestigious international competitions for type and design. You can find an in-depth article on “Wood Type Manufacture Hamburg” in HN 256, or in the online archive: [www.heidelberg-news.com](http://www.heidelberg-news.com). Beginning in the summer of 2006, it will be on display throughout North America, Europe, and Japan, under the auspices of the “TDC World Exhibition.”

For further information:  
Germany: Hermann Schmidt Verlag/ German Committee of the TDC  
Brigitte Raab ([b.raab@typografie.de](mailto:b.raab@typografie.de))  
International: Type Directors Club, New York, USA  
Carol Wahler ([director@tdc.org](mailto:director@tdc.org))

## Inline-finishing for Small Format

Print shops using a Printmaster PM 52 or a Speedmaster SM 52, can now equip these with a Laco coating unit: the coating unit, tried and tested for years on the GTO 52, is deployed as an independent unit after the final printing unit. It consists of a coating unit together with a coating blanket cylinder, and an IR drier integrated in the delivery; it fits the PM 52 and the SM 52 with normal pile delivery and basic equipment for numbering and imprinting. Consequently, printing and coating can be performed in a single pass. The availability of UV, dispersion, and blister coatings allows for special applications such as full-area, spot, and effect coating. Key advantages: makeready and clean-up times are shortened; refined printed materials can be processed more quickly, and besides this, they require less or – in the case of UV coating – even no dusting of powder. A mobile UV drier is used for the UV coating.

For further information: [www.laco-bruchsal.de](http://www.laco-bruchsal.de)



With the help of the Laco coating unit, the Printmaster PM 52 and the Speedmaster SM 52 can now also finish inline.

## Premiere in Israel: CD 102-6+LX UV

**Israel.** Impress Printing & Packaging Solutions Ltd. has installed a Speedmaster CD 102-6+LX with UV, the first print shop in Israel to do so – and this, right away, in a new building in Holon. There, this beauty is supposed to extend the range of packaging offered by Impress. Although the enterprise has already specialized in packaging – including from PVC or other plastic materials – it will be attempting its first steps in UV printing. The 20 employees who work for printing director Roby Trubowitz will be more than happy to test the limits of their CD 102.



Setting sail on uncharted waters: Roby Trubowitz (left), Hillel Trubowitz (2<sup>nd</sup> from right) and Yoram Nathan (right) of Impress, as well as Rainer Manderbach (2<sup>nd</sup> from left) of Heidelberg, in front of Israel’s first Speedmaster CD 102 equipped with UV.

LONG PERFECTORS IN SMALL AND MEDIUM FORMAT

# Double Sure with Double Printing

Heidelberg offers three Speedmaster long perfecter models in the 35×50 (13.78×19.68 inch) and 50×70 (19.68×27.56 inch) print formats: the SM 52 and SM 74, with up to ten colors and perfecting device, and the CD 74, with up to twelve colors and a coating unit before and after the perfecting device are technical milestones in their class.



Frank Süßer, Senior Manager for Product Management for the 35×50 and 50×70 formats at Heidelberg.

Long perfectors in 70×100 (27.56×39.37 inch) format enjoy a long tradition at Heidelberg. Innovations first made in the larger format have been carried over to the smaller format classes, and optimized for their particular applications. This is why long perfectors in small and medium format – conventional wisdom notwithstanding – are not only the ideal work-horses for larger print shops: they may be just the alternative for medium sized commercial printers who want to print the special requests of their customers profitably. As a long perfecter, the Speedmaster SM 74 has more than amply demonstrated this, with over 200 installations world-wide over the last eight years. Hence, the determined step to broaden the selection of perfecter models – both downwards, with the SM 52, and upwards, with the CD 74.



The new Speedmaster SM 52-10-P combines maximum productivity with the highest levels of flexibility.



**Peak performance – even in the smallest space: the Speedmaster SM 52.**  
 The Speedmaster SM 52 was first introduced at drupa 1995, and has been continuously updated since then. A tally of its equipment now includes the following useful features: high-pile delivery, inking system temperature control, a CP2000 control system with Prinect Axis Control and optional features such as UV equipment, a coating unit with extended high-pile delivery, and the inline die-cutting unit. This success highlights the variety that the SM 52 makes available to print shops: with more than 24,000 printing units sold world-wide, to date. One momentary high-point in the ongoing evolution was the SM 52-8-P, first presented at drupa 2004. Since the middle of 2005, the coating unit is also available equipped with doctor chamber blade technology. The Speedmaster SM 52 ten-color was unveiled for its world-premiere at this year's industry trade fair "Ipex 06" in Birmingham, England.  
 "For industrial commercial print shops, the Speedmaster SM 52 complements the large-format area, providing cover for short runs. Small and medium sized commercial print shops employ the Speedmaster SM 52 as their standard press, with which they can print their entire range of products," explains Frank Süßer, in charge of industrial print as Senior Manager for Product Management 35×50, 50×70 at Heidelberg.

**Speedmaster SM 52-10-P.** The new ten-color Speedmaster SM 52 with perfecting device combines maximum productivity with the highest degree of flexibility in the

B3 format. "It is the first press in this format on the market to offer ten colors. It makes possible the more efficient processing of jobs that require special colors or protective coating in a single pass. Given its equipment, the press is ideally suited for small runs and frequent job changes," reports Frank Süßer.  
 The SM 52-10-P can be supplied with a perfecting device after the fourth or fifth printing unit. The Speedmaster SM 52 ten-color delivers the highest quality perfecting because of its innovative sheet transfer system. This includes ink-repellant cylinder jackets: the TransferJacket for the transfer cylinders, and the Perfect-Jacket for the impression cylinders after perfecting. They ensure the highest print quality on both sides of the sheet.  
 The reduced diameter reversing drum, also fitted with TransferJacket, provides sheet reversal with minimal marking. Closed sheet guide plates and transfer cylinders ensure smooth sheet travel. ▶

A sheet brake is used in the delivery; its central suction tape can be replaced with air panels so that the sheet is transported on an air cushion. This allows for full-area printing on the front and reverse sides normally required for brochure covers. Even over long operating periods the inking unit temperature control maintains consistent print quality.

The maximum print speed of the Speedmaster 52-10-P, in both straight and perfecting printing, is 13,000 sheets per hour. All other models in the SM 52 series process up to 15,000 sheets per hour.

**Speedmaster CD 74: an all-rounder.** The Speedmaster CD 74 celebrated its premiere at drupa 2000, and it has been available as a perfecter press since drupa 2004. As of 2005, Heidelberg offers the Speedmaster CD 74 also as a long perfecter, with up to twelve printing units and an additional coating unit. A new variant that has come out after "Ipex 06" is the long perfecter with coating unit before and after the perfecting device. Meanwhile, more than 5,000 CD 74 printing units have been shipped.

"The Speedmaster CD 74 is Heidelberg's high-end product in the 50x70 print format, which begins with the Printmaster PM 74. Tried and tested product features have been adopted from the Speedmaster SM 74 and transferred to the CD 74, and then extended across a new, more flexible platform. Today, the press is widely used by commercial printers, but it is also used by an increasing number of folding box and label printers," Frank Süsser attests.

**The agony of choice.** The Speedmaster CD 74 is available in selections ranging from four to twelve colors, with or without perfecting device – and even in two formats: the classic C-format (53x74 cm or 20.87x29.13 inch) or the F-format (60.5x74 cm or 23.82 in x 29.13 inch). Utilizing the opportunity to operate the press in the larger F-format, can result in 14 percent higher sheet exploitation.

As a straight printing press it can be optionally outfitted to operate at a speed of 18,000 sheets per hour.

The modular design of the CD 74 allows the printing, coating, and drying units to be combined in nearly any way desired. As a result, it is possible to offer special configurations such as double coating units (LYYL), duo machines (coating units before printing units), or

perfecter presses with coating and dryer modules placed before the perfecting device. Moreover, the CD 74 is the only press in the medium format that can be equipped with a CutStar roll sheeter and a pile handling system for sheet delivery. Since the "Ipex 06", you can now also select from among three color measurement systems: Prinect Axis Control, Prinect Image Control, and the new Prinect Inpress Control. Heidelberg's new inline color measuring system measures both color and register in the press during on-going production.

**Speedmaster CD 74-5+LY-P-5+L.** What at first glance looks more complicated than the formula for Albert Einstein's Theory of Relativity is in reality a thumbnail description of Heidelberg's total productivity in medium format. The requests of even the most demanding customers, such as agencies and international companies, will not stretch the limits of Speedmaster CD 74-5+LY-P-5+L. Simply said, the name reflects a five-color press (5) plus coating unit ▶



The Speedmaster CD 74-5+LY-P-5+L offers double-sided printing and coating with high register accuracy in a single pass.



Three drum perfecting device in action: Sheet-stretching rotary suckers tighten the trailing edge of the paper before the patented pincer grippers pass the sheet along to the next impression cylinder. This design guarantees true-to-register sheet reversal and a controlled transfer to the next printing unit with a single gripper closure.



## “Surprised by the extremely high productivity”

Since the beginning of 2006, the Kohlhammer print shop in Stuttgart, Germany has been using a Speedmaster SM 52 ten-color with perfecting device. More than three million sheets have been printed on it as of April. In an interview with Heidelberg News, Directing Manager Gotthold Bayer recounts his experiences with the new machine.

**Experience founded on practice.** As of the end of 2005, the world's first Speedmaster CD 74 ten-color with coating unit before and after sheet reversal has been put to work in the Swiss print shop, Vögeli. After more than 7.8 million prints on the Speedmaster CD 74-5+LY-P-5+L in the first four months, feedback has been very positive, above all with respect to speed, productivity, and the variety of surface finishing options. Vögeli prints exclusively in frequency-modulated screening in photorealistic quality. For several weeks, the presses have been running in triple-shift mode, and are producing up to 1.7 million sheets per month. Printing is carried out on printing stock thicknesses of 0.06 millimeters to 0.7 millimeters (0.002 to 0.027 inches). The average run is around 3,000 sheets per job, but there is a clear trend, also at Vögeli, towards shorter runs. “Through the F-format, the printing press provides us with one enormous advantage. This allows us, for example, to print a 16-page brochure over the full format or to use five repeats instead of four for a training folder,” explains Markus Vögeli, Junior Manager, and expands on this thought: “For example, today we are now able to print in four colors plus a special color and coating before and after sheet reversal in a single pass. And the completed sheet can go straight to postpress. This has doubled our overall productivity.” ■

(L) and dryer (Y), as well as perfecting device (P). After perfecting, there are once again five colors (5), plus a coating unit (L). The Press can be flexibly employed in commercial jobs, with glossy or matte coating as a finish, protective coating on both sides, spot coating over a flexo printing plate, MetalFX and protective coating printing on both sides, or also “simply,” as a pure, straight printing press employing special effects such as Iriodin and protective, brilliant varnish. “Even duo variants where the coating unit prints opaque white on aluminized paper with subsequent application of foil inks and a protective coating are possible in this version of the CD 74,” explains Frank Süsser.

### Facts & Figures

Druckzentrum Vögeli AG  
Sägestrasse 23  
3550 Langnau im Emmental  
Switzerland  
Tel.: + 34-4 09 10-10  
Fax: + 34-4 09 10-15  
www.voegeli.ch

[www.heidelberg.com/hd/SM52PerfectingPresses](http://www.heidelberg.com/hd/SM52PerfectingPresses)  
[www.heidelberg.com/hd/CD74PerfectingPresses](http://www.heidelberg.com/hd/CD74PerfectingPresses)

*Mr. Bayer, what were the criteria for choosing your new Speedmaster SM 52 ten-color press?*

**GOTTHOLD BAYER:**

We are constantly investing in the best and the most productive machines. In this way, we show our customers that their products – intended for today – are not printed using yesterday's technology. After all, our customers always expect the highest quality from us, and we can only guarantee that persuasively when we use the appropriate technology. Consequently, it was clear to me that the new press had to be fitted into our existing business model.

*... no doubt your product portfolio played a critical role in all of this?*

**GOTTHOLD BAYER:** Yes, we print magazines with long print runs, such as you find in pharmacies or on trains operated by Deutsche Bahn. In addition, there are also business reports, catalogues, pamphlets, calendars, cards, posters, magazines, and books. We print everything from single-color forms to lavishly finished art books. The average run is 3,000 to 5,000 sheets, although at times we print runs as short as 70 sheets or as long as 40,000. We mainly produce the cover pages of magazines and brochures in final format on our Speedmaster SM 52-10-P. But as coating and special color were often needed, jobs had to go through the press twice. We saw an eight-color SM 52 at drupa 2004, and were immediately excited by it. Adapted to our business model, the press was extended to a ten-color Speedmaster SM 52.

*A special machine, tailor-made just for you?*

**GOTTHOLD BAYER:** The press was customized as if cut-to-fit especially for us by Heidelberg in a four over six configuration. To our delight, the press ran without a hitch. We were surprised by the extremely high productivity; compared to its predecessor, we have increased our productivity by an astounding 50 percent. At the same time, our business model is not at all that “unique.” Naturally, each person must judge for themselves which of their customer's demands and expectations they need to fulfill, and



Steffen Franzi, Proxy, and Gotthold Bayer, Directing Manager, are pleased with the tremendously increased productivity of their new Speedmaster SM 52-10-P (left to right).

then consider the kind of technology in which they should invest. But a ten-color SM 52 will certainly not remain an isolated case.

*Which of the ten-color SM 52's technical details do you think are particularly successful?*

**GOTTHOLD BAYER:** The ten-color SM 52 assures optimal quality even for high-quality brochures and magazine covers. Personally, I am especially impressed by the Alcolor continuous dampening system with Vario function. Since we started using it, we've had practically no disruptive hiccups and, as a result, much less waste. Thanks to coating, which not only lends a glossy effect to magazines and brochures but is primarily intended to protect against mechanical impacts, sheets dry faster now, and can be handed off almost instantly into postpress.

*What are the next steps you consider to develop your enterprise further?*

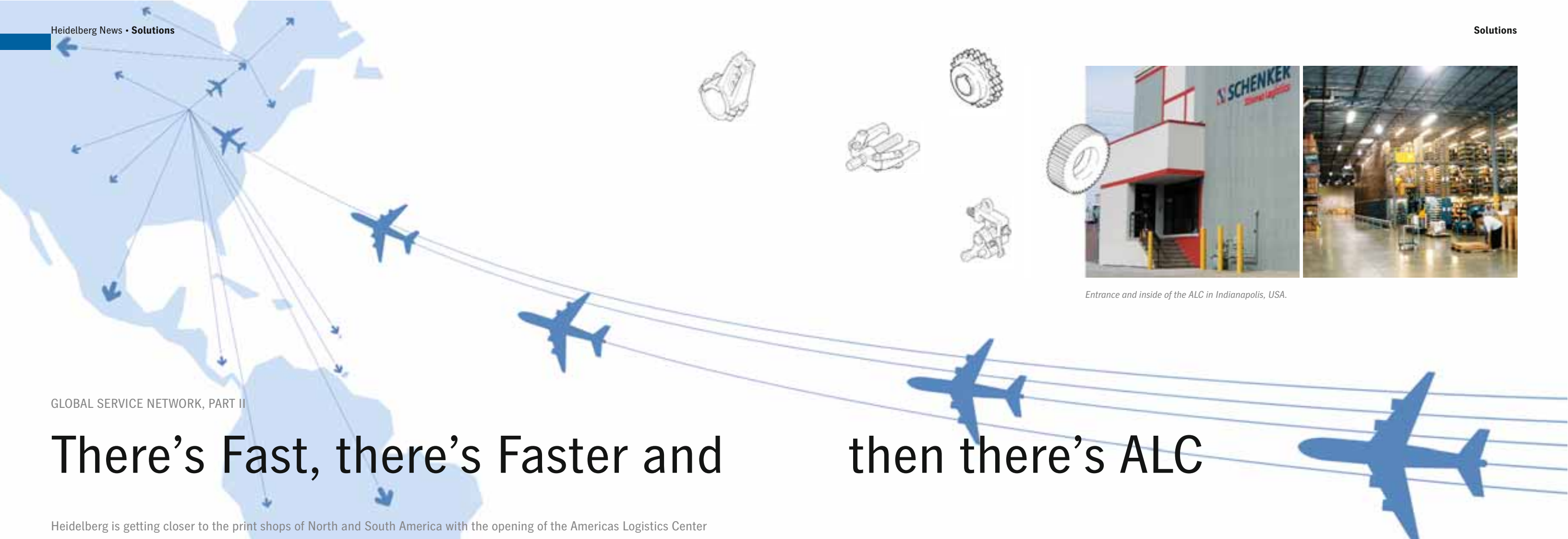
**GOTTHOLD BAYER:** After the installation of a new Speedmaster XL 105-5+LX, a total of 33 additional Speedmaster XL 105 printing units will be operating in our business over the coming months. We expect to see a productivity increase of up to 30 percent from these presses. Along with networked production and the highly productive SM 52 ten-color, Kohlhammer is once again convincingly well-equipped.

*Thank you very much for talking with us.* ■

### Facts & Figures

Founded 140 years ago.  
260 employees.  
Printing plate consumption: more than 100,000 annually.  
13,000 square meters (139, 930 square feet) production and storage area.  
approx. 55 million euros (71 million U.S. dollars) in annual turnover in 2005.

Kohlhammer Druck GmbH & Co. KG  
Augsburger Straße 722  
Stuttgart  
Germany  
Tel.: +49-(0)-711-32 72-0  
Fax: +49-(0)-711-32 40-80  
www.kohlhammer.de



GLOBAL SERVICE NETWORK, PART II

# There's Fast, there's Faster and then there's ALC

Heidelberg is getting closer to the print shops of North and South America with the opening of the Americas Logistics Center (ALC) in Indianapolis. The rapid delivery of a vast range of service parts is already taken for granted by our customers in the USA, but now this will also be the norm for other countries in the region.

In order to minimize the disruption to print shop production, Heidelberg makes a point of ensuring that its customers do not have to wait long for a spare or wear part to be delivered. "The customer is king as far as we are concerned and no production means no money. This is exactly where Heidelberg systemservice comes in," explains Per Rasmussen, who is in charge of service parts at Heidelberg USA. "It ensures that Heidelberg solutions always do what they were created for – work," he continues with conviction.

The ALC has enabled Heidelberg to reduce delivery times for service parts to less than 24 hours, thanks to a dedicated logistics system set up by Heidelberg. At German headquarters, the World Logistics Center in Wiesloch (WLC, see HN 256), over 234 staff handle a stock of around 130,000 service parts. The WLC in Germany also supplies its counterpart serving the Americas, which is run on Heidel-

berg's behalf by the logistics service provider Schenker. The ALC covers an area of some 40,000 square feet and employs a further 36 specialist staff who are responsible for the shipment of service parts and stock administration.

**Orders can be placed with the ALC around the clock.** A call to the responsible Heidelberg contact is all it takes and seconds later the relevant order has been relayed to Indianapolis. An automated check reveals whether the relevant part is in stock or needs to be sent from the WLC. Thus, customers on the American continent, too, benefit from a quick and straight access to Heidelberg's unique global logistics network. If the call is made before 8 p.m. and the service part is in stock, it will be shipped the same day, and delivered to the relevant countries the following day by transport service providers who are always on standby. In very urgent cases, customers in the USA and Canada can even request same-day delivery of absolutely essential parts. A small number of parts required very infrequently are stocked only at the WLC. Over 90 percent of standard

service parts are available at the ALC. The Center stocks a total of some 26,000 parts, resulting in a huge improvement in the availability of parts throughout the Americas. Stocks include parts for Heidelberg and Polar equipment and are updated whenever a new product is added. What's more, parts are kept in stock for the entire life cycle of a product – in many cases far beyond it.

**An ALC for both Americas.** 90 percent of orders received by the ALC still currently originate from the USA or Canada. Now, however, many other countries from Central and South America are linked to the ALC, which is in a free trade zone. The result of this particularly favorable shipping position is that next-day delivery of service parts is now normally possible even in "remote" destinations such as Trinidad. And the ALC also benefits neighboring Canada. "A plane jets up to Toronto overnight where far more parts than ever before can now be supplied in a very short space of time to our courier service provider Purolator," explains Kenneth Freek, Head of Logistics at Heidelberg Canada. "And this means we can get almost any spare

part to our customers within 24 hours!" For Freek's customer Yves Côté, Owner of Imprimerie Siel Inc. in Vanier (Quebec), for example, everything was right with the world again at 8:30 a.m. the very next morning. "I was very pleasantly surprised that the Heidelberg service part was available so soon. Just a few hours after I got in touch, my SM 74-2 was up and running again!" ■

## Facts & Figures

**The following countries are linked to the ALC:** Barbados, Brazil, Canada, Mexico, Panama, Peru, Trinidad, USA.

You can find Part I of the article on the WLC at [www.Heidelberg-News.de](http://www.Heidelberg-News.de)

[www.heidelberg.com/hd/Systemservice](http://www.heidelberg.com/hd/Systemservice)

PRINECT WORKFLOW

# Still Networked or Already Integrated?

Prinect is capable of both. This modular solution grows in step with the demands of print shops, according to the scale of integration, and handles all data and processes arising from administration, prepress, pressroom, and postpress in a shared, continuous workflow. The result? More transparency, more automation, and common procedures across the entire print shop.



Jörg Bauer, Head of Product Management, Prinect.

Two men stand opposite each other trying to juggle over a two-meter-high (6.5 foot) partition. But most of the time the balls fall to the ground. Only after the partition has been shoved aside can they pull off their ensemble act: the jugglers can now toss the balls back and forth in perfect coordination. “Similar situations often arise in print shops during the handling of jobs. There is no seamless interplay among administration, prepress, press, and postpress, because a comprehensive view of all the information is missing. Only integration of all areas in a continuous workflow achieves enterprisewide transparency, enabling the subsequent smooth handling of a job,” explains Jörg Bauer, Head of Product Management Prinect at Heidelberg.

**Central data hub.** And Prinect creates this transparency. A central data container forms the core of the solution: the Prinect Integration System. It contains all of the administrative and technical data necessary for handling a given job. Once entered, all the information remains available in Job Definition Format (JDF) to all areas – from job management to postpress – throughout the entire enterprise.

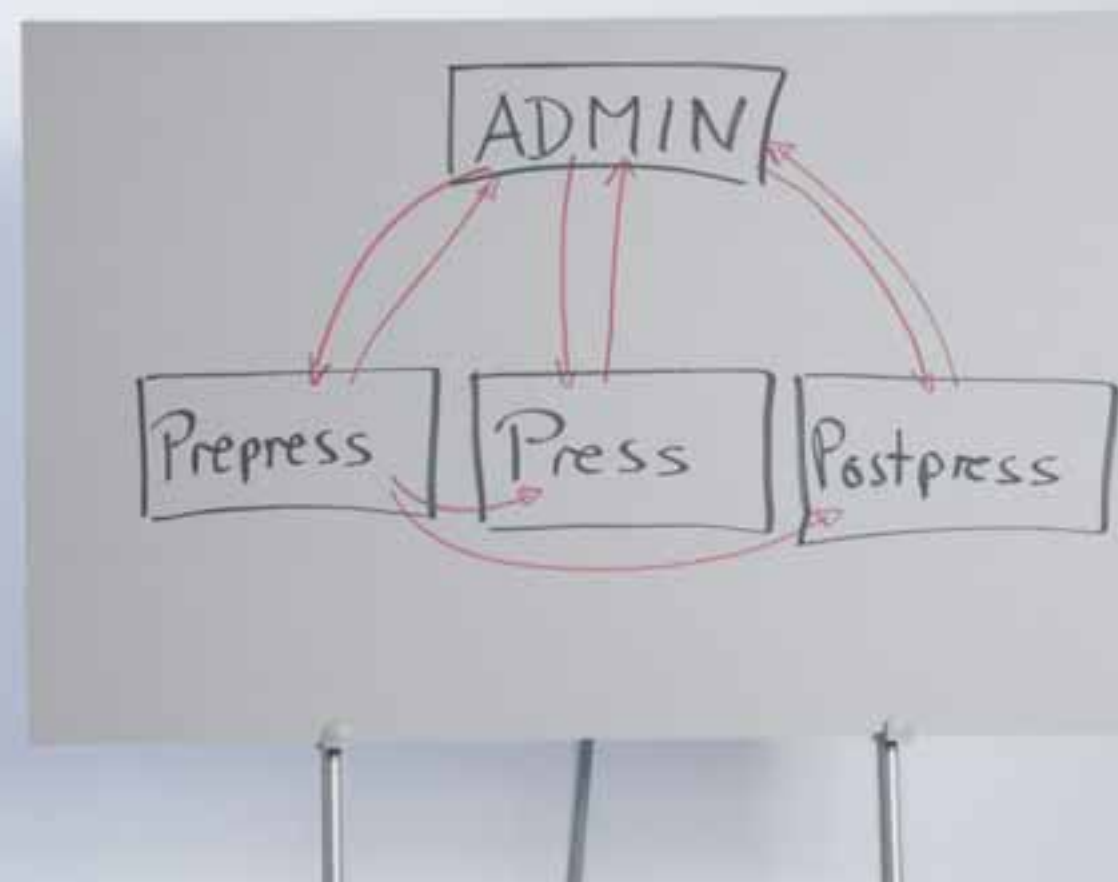
All departments can call up any information they need from this data container at any time to perform their assignments. Information concerning the status of all current jobs flows back to the Prinect Integration System in the reverse direction. All participants have access to this central information pool, which replaces shuffling information back and forth across interfaces. This feature is precisely the critical difference with a network, where data is “flung over a partition.” In the past, this approach led to the creation of data islands, because, as on a one-way street, information

was passed along only in one direction (between two neighboring departments, for example) – if at all. In this respect, the new Prinect solution represents a paradigm shift: process orientation in place of compartmentalized thinking. Or, as Bauer stresses, “the Prinect Integration System tears down the walls between individual departments and allows for a holistic view of all the job-related processes in a printing enterprise.”

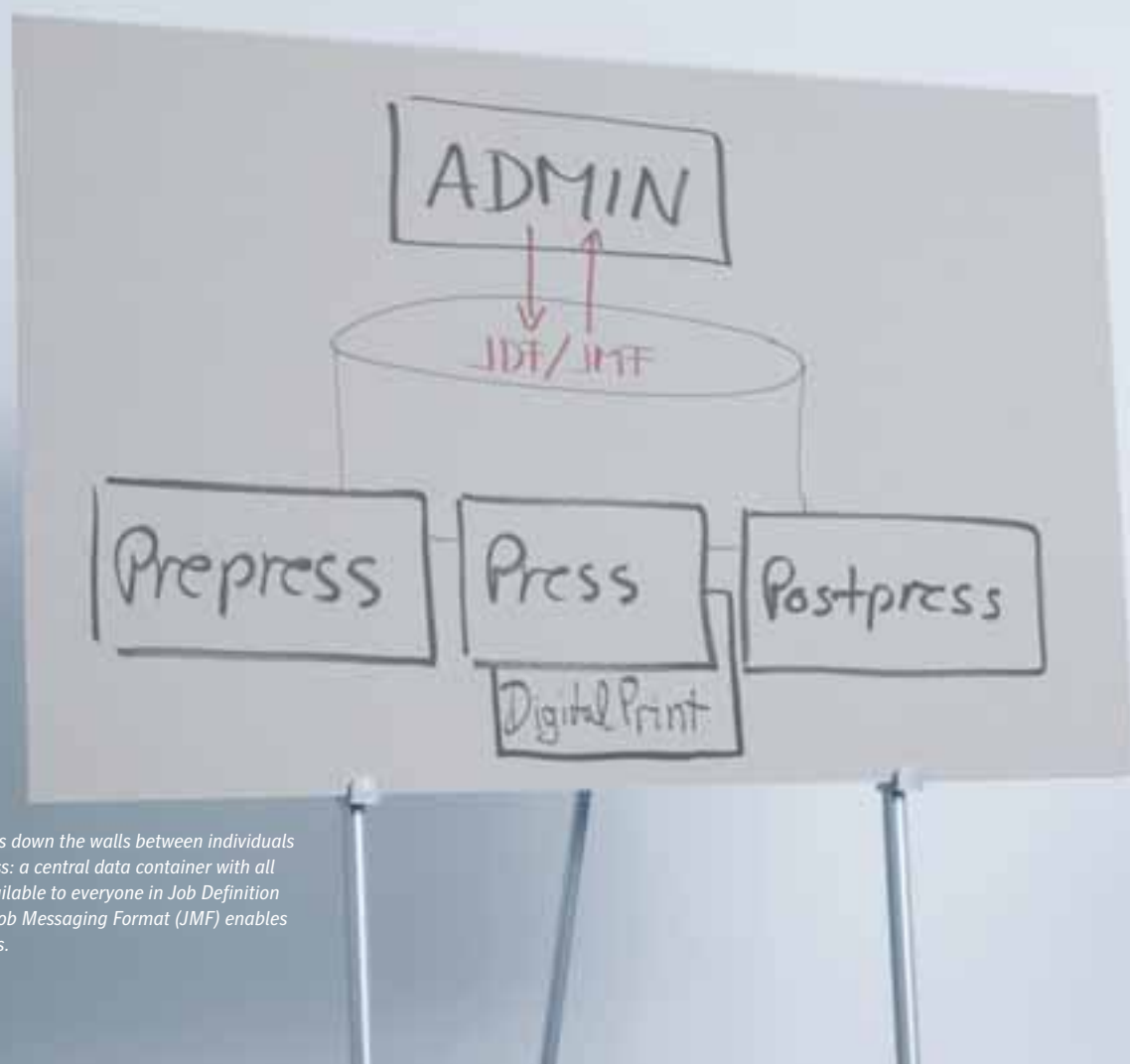
Not only are the walls dividing departments collapsing; maintenance costs are also sinking. Multiple systems with countless interfaces no longer need to be maintained. Moreover, software updates like those that follow an upgrade of the JDF standard, for example, are performed more easily.

**Job ticket as data courier.** The database stands ready, but how is the workflow kept running? That’s where the Prinect Pressroom Manager comes into play. The pressroom management system controls and manages all the data required in print production and work stages. It is an integral part of Prinect’s JDF workflow as well as the Prinect Printready System and the Prinect Integration System. The latter allows for integration of a third-party management information system (MIS) into the Prinect workflow.

As the data courier that secures communication between the workflow components, the job ticket acts on the basis of JDF. It contains the relevant information for a given job, such as customer-specific data, materials, and the production path. For example, should a customer order a 16-page brochure with a five-color cover and four-color contents in A4-format, saddlestitched, and in a print run of 5,000 units, the job ticket drawn up by the MIS is transmitted to



Prinect previously linked everyone involved in a process at a printing company primarily with common administration ...



... Princt now tears down the walls between individuals involved in a process: a central data container with all the information available to everyone in Job Definition Format (JDF) and Job Messaging Format (JMF) enables removal of the walls.



the production areas. There the data is automatically sent to the appropriate devices or machines, for example, as a job list for the printer to the Princt CP2000 Center – the control console of the printing press.

In the opposite direction, machines and process data (such as makeready, start and end times, and the number of waste sheets) is reported back by the central job ticket to the Princt Integration System – in real time. This feature, in turn, makes all the production data available to the MIS – to perform postcalculations, for example. And that closes the information loop.

**Cockpit: information in real time.** During current production, a user can virtually patrol the process network to keep an eye on the process steps by using the Princt Cockpit, a feature designed with the same tried-and-true look and feel as the familiar Princt products. At the touch of a button, the user receives information concerning which machines are integrated into the workflow, their job assignment, as well as an overview of both planned and processed assignments – whether the printing plates are ready, for instance, or the number of sheets that have already been printed.

Consequently, every employee knows exactly what stage a job has reached at any given moment. And this information is available at any computer that has been integrated into the Workflow Management System, without actually needing to be on site. “Thanks to this transparency, every employee in every department knows precisely what work waits next in line, and can plan ahead accordingly. In a word, they receive the right information at the right time to complete their work as efficiently as possible,” explains Bauer.

In the future, this unparalleled transparency will also enable planners to act with even greater flexibility. To be sure, they can already call up information in real time today – whether a customer has received his proofs, for example. Yet, the integration of a planning board into the Cockpit will enable them to optimize throughput times and better utilize machinery and resources – including digital printing.

**Digital printing and Adobe Print Engine included.** The Digital Print Manager establishes a bridge with digital printing and enables a “hybrid workflow” (managing offset and digital printing in a shared workflow). It integrates the workflow of digital print system manu-

facturers such as Xerox and HP into the Princt workflow through a JDF interface. In this manner, information such as the size of a print run, format, and paper grade can be preset in the Princt Cockpit, while still remaining available to the digital printing system and the PDF data that is to be printed. The Digital Print Manager simultaneously reports back data from the current production to the Princt Integration System and – given an appropriate configuration – also to the MIS. In the future, another Heidelberg partner will also become a component in the Princt workflow: Adobe, or more precisely the PDF Print Engine. As Bauer announces, in the future, print shops will be able to profit from the interplay between native PDF and JDF: “PDFs can be read and interpreted by RIPs that have been outfitted with the Print Engine without first having to be converted into Post Script. That means that graphics can be processed and output directly in PDF format.” Everything occurs according to the principle of “what you see is what you print.”

**Growing and safeguarding investments.** Naturally, Princt still allows you to network areas with each other, say when a customer would only like to use one Princt component (for example, the Signa-

station for imposition, the MetaDimension for RIP in prepress, or the Princt Prepress Interface in the pressroom). Princt grows along with the demands of the print shop. Additional Princt building blocks can be easily added as required and when the need arises. For instance, the prepress workflow Princt Printready System can reduce throughput times and lay the cornerstone for integration. “Once a customer employs Princt in two or all three production areas – in prepress, printing, and postpress – you are no longer linking over interfaces, but rather integrating,” says Bauer with assurance. ■

**Facts & Figures**

[www.heidelberg.com/hd/Princt](http://www.heidelberg.com/hd/Princt)

# Listen Carefully, then Act!

As an industry pioneer steeped in tradition, Heidelberg Druckmaschinen AG currently holds around 5,000 patent applications and patents world-wide. Annually – in global terms – around 500 additional patents and applications are added to the sum total. The more than 1,500 employees in areas involved in research and development have more than 230 million euros (296 million U.S. dollars) at their disposal, to design additional products with prospects for the future. Heidelberg News learned how and on what researchers at Heidelberg are currently working, in conversation with Dr. Jürgen Rautert, Management Board Member responsible for Engineering, Research, Manufacturing, and Purchasing at Heidelberg.

*Dr. Rautert, products are becoming less and less distinguishable in many areas of technology. Is it even possible to achieve something like a “head start through technology” any longer?*

**DR. JÜRGEN RAUTERT:** (laughs) Well, this question is not entirely new to the world of engineering. Indeed, when industrialization was just beginning, some were even convinced that the limits of the possible had been reached at around 35 km per hour (22 miles per hour), since the human body – in any event – would not be able to withstand higher speeds. Since then, we’ve been disabused of this notion multiple times. To be sure, many technologies today are developed to the point where true “revolutionary” breakthroughs have become rarer – but the potential to achieve economically meaningful advances still remains, as before. It is remarkable how boundaries continue to expand in many areas of technology, through better computational tools, for example, or research networks that span the globe, and not least because of sizeable investments. As a technology driven company, it is naturally an absolute existential necessity that we remain a nose ahead of the competition in this development.

*In view of this pressure on research and development departments, a globally active electronics concern once claimed, regarding its innovations, “better only 98.5 percent than 1.5 years too late.” Would you stand behind such a motto?*

**DR. JÜRGEN RAUTERT:** Certainly not a false statement in terms of attitude; however, I would still critically examine the elements making up the numerical values once again; something involving apples and oranges, no? What is important, is that we don’t try to accomplish everything that might be technically feasible, but rather that we adapt ourselves to the needs of our customers.

When it comes to capital investment goods, this is not even so very difficult: the value to customers of most technical innovations is quite easily calculated in terms of euros, dollars, yen, or renminbi. Add in a degree of user-friendliness, an attractive design, and above all reliability and you have the basic recipe for successful products.

*How, then, does research and development at Heidelberg function concretely?*

**DR. JÜRGEN RAUTERT:** We invest more than six percent of our turnover in research and development projects with three main thrusts of attack. The lion’s share of investment flows into concrete product ideas, which will go into full production within the next 36 months. A smaller portion benefits pre-development, projects where we anticipate long-term advantages, in the area of surface engineering, for example. Naturally, we also invest a little in “fundamental research” – with correspondingly higher risks and opportunities. We strive to protect the results of all of this work from imitation by applying for patents in all of the relevant countries – for example, over the past ten years consistently in China, also. We are willing to pay a good deal to protect our intellectual property – and for good reason: we know from years of experience that forward-looking thinking is very much to the point here. After all, we are only in a position to offer certain solutions on the market today, because our colleagues already had a good idea years ago that they patented at the time. ▶



*And where do the majority of impulses to investigate specific areas come from?*

**DR. JÜRGEN RAUTERT:** As a rule, from the market. Our colleagues in sales and product management, as well as our development engineers themselves, maintain close contacts with our customers in all important segments of our industry. The demands made on our products – concerning possibilities for raising productivity, or about finishing a final product, or also for lowering the costs of production – arise out of a dialogue with all of these stakeholders. Sometimes, concrete proposals for a solution are in fact generated in the context of these conversations. It may also happen that ideas from an entirely different industry are introduced into our products. It goes without saying that we also keep a close eye on our competitors, so that we can answer external offers by providing our own solutions. Wherever these impulses may come from: by and large, we have significantly more project ideas, than we have resources at our disposal. This is why we must set corresponding priorities. Between equivalent choices, recognizable customer benefit is the decisive criterion. Incidentally, we handle the topic of special requests separately: frequently, our customers try to set themselves apart from the competition with smart ideas, for which no stock solutions are available. We have a small customizing group dedicated to these sorts of requests, who realize special solutions, often bringing in outside companies for the customer – when this is warranted economically.

*And what are the main areas of emphasis in which Heidelberg is currently researching?*

**DR. JÜRGEN RAUTERT:** (smiling) I'd rather not say in any detail. After all, some of this should remain a surprise! However, you can easily read the general thrust from those products we introduced in April at Ipex: for the first time, you have full process integration and transparency based on our work-flow solutions, all under the umbrella of Prinect. Very important, as well, are all the measures we've taken to reduce spoilage and makeready times. This spares our customers' wallets, and the environment, too, by the way. The Speedmaster SM 52 Anicolor with short inking unit, as well as the Inpress Control spectral inline color measurement both set fundamental benchmarks in this respect. FoilStar for cold-foil applications is a good example of our efforts in the field of enhancement, as are the Duopress configurations for the Speedmaster CD 74 and 102. Last but not least, we are also concerned with the issue of speed: the Speedmaster CD 74 and XL 105 now reach speeds of 18,000 sheets per hour across a very broad spectrum of printing stock. Even at this tempo, both machines can be attended by people, who are not related to Michael Schumacher: this is ensured through intelligent sensor technology and drive engineering, which are at the cutting edge of technology.

*And how do things stand with postpress products?*

**DR. JÜRGEN RAUTERT:** Naturally, this sector also plays an important part in our research and development. Examples of this are our new Eurobind 4000 adhesive binder, the Diana X folder gluer, the folding machines in the Stahlfolder production line – the TA 52 and TH 56 are fully new here – or the ST 450 saddlestitch-

er: ever shorter throughput times mean that printers must locate more value-added within the print shop itself. If they are clever about it, they can achieve improved margins by exploiting opportunities for differentiation that arise in the area of postpress. Naturally, we also support such integration by incorporating our postpress products into the Prinect workflow.

*In which of your main areas of research do you see the greatest potential for further development?*

**DR. JÜRGEN RAUTERT:** At the moment, from a purely technical point of view, I believe a reduction in makeready times and in costs is the most important, and that we can make the greatest strides here. Additionally, in order to grow a print shop's earning power, an adequate understanding of cost structure is indispensable. Although the relevant software for this is already available, there are still many print shops that hardly work with networks, and therefore rely – or are forced to rely – on the gut instincts of management when it comes to making process improvements. This makes the targeted improvement of processes more difficult than it would be given transparent cost accounting.

*Which research endeavors might be of particular interest to small and mid-sized printing enterprises?*

**DR. JÜRGEN RAUTERT:** When you look at successful print shops of various sizes in all parts of the world, you discover that the working methods and tools used in the production process, in fact, hardly differ. Larger differences are much more likely to be found in the areas of marketing and acquisition. In principal, what I mean by this is that one actually need not distinguish much between small and large print shops, when talking about technical approaches. What is important is that investments undertaken by print shops during their growth phase, not become suddenly obsolete during later expansion. This is why we designed the components of our Prinect System in such a way that a customer can start out with a few cost-effective building blocks, and then later – with complete compatibility – upgrade to a fully integrated print shop. In other words, the investment made at the start is not lost.

*From what one hears, many package printers in the future will have to busy themselves with "Radio Frequency Identification Chips" (RFID), which will replace conventional barcodes. Is RFID also a topic of research at Heidelberg?*

**DR. JÜRGEN RAUTERT:** Yes, certainly, we've been following the topic for some time. Unquestionably, it involves a technology that will see wide distribution over the next ten to twenty years. Yet, in countless debates, the current situation is often exaggerated. The chips are still comparatively expensive, and consequently are not considered for use in the identification of mass-produced goods, what in new German is referred to as "single item tagging." Whether it will even prove possible, in the near future, to drive down costs significantly below ten cents is still rather doubtful; until that happens, wide use in supermarkets remains a vision. Though the possibility of printing RFIDs is repeatedly beaten about, I still don't see it within reach – and certainly not by using printing machines such as we have today. For the moment, RFIDs have primarily proven their potential in logistics applications, ▶





access systems, bank cards, and related products – in other words, in those areas where direct, optical reading is difficult. Above all, however, when information must also be exchanged bidirectionally. At the same time, RFID is far superior to purely graphic representations. Be that as it may, the barcode in all its manifestations will remain with us for a long time to come.

*According to certain market analyses, the increasing number of offset printers indicates a growing interest in digital printing. How will Heidelberg respond to this?*

**DR. JÜRGEN RAUTERT:** (smiling) We already have reacted: we introduced the Prinect Digital Print Manager at Ipex; with its help, a user can integrate a digital press into their workflow as an output device, the same as their platesetter. We will expand this to allow for the handling of different data. Our customers will then be able to intergrate their digital machines for the requisite jobs into their workflow without problems. Moreover, Prinect will support the user during the handling of certain physically conditioned differences: digital printing presses, after all, generate a different color space depending on the printing process; in this respect, one needs to pay attention to certain things, given a more elastic output on different devices. Naturally, you would also like to know if we will be entering digital printing with our own equipment: certainly not in the foreseeable future with the proprietary development of a toner press; however, we are keeping our eyes open for everything else.

*“Everything else” might also include inkjet technology. What do you think of that idea?*

**DR. JÜRGEN RAUTERT:** The basic flexibility of this principle is virtually unassailable: without contact, the most variable liquids, such as inks, varnishes, but also special technical liquids, may be applied to nearly all substrates. This opens up countless opportunities for application. Unfortunately, in each case the ink, jet system, and printing substrate must be compatible with each other: a circumstance that puts the brakes on a market introduction in the print-for-pay segment. Nevertheless, we are watching this technology very carefully.

*All powers of observation notwithstanding, is there no danger that one may eventually be watching the tail-lights as the digital printing train pulls away?*

**DR. JÜRGEN RAUTERT:** The question is surely, whether we have to travel on this train at all. To date, all the forecasts regarding digital printing that I’m aware of had one thing in common: they all proved false. I am reluctant to make my own forecast, which may then immediately share the same fate – and yet I believe that the volume of printed materials in the next ten to twenty years will come far less at the expense of offset printing than is commonly feared. For its part, sheetfed offset printing has enough in the way

of future prospects to take business away from the spheres of web, or even toner printing. The radically shortened makeready times made possible through Anicolor and Inpress Control, as well as our larger XL 105 siblings will contribute to this.

*Are there any fundamental efforts to explore entirely new terrain, outside of deeper investigations into Heidelberg’s familiar core technologies?*

**DR. JÜRGEN RAUTERT:** Current efforts – no. But, during considerations within the scope of our annual strategy meetings – repeatedly. At present, however, we are of the opinion that enough assignments await us in our core area, and that sufficient advances still remain to be made over the next twenty years to keep this market interesting. ■

## Facts & Figures

### Dr. Jürgen Rautert: Career Background

1977 Engineering studies in Mechanical Engineering, Darmstadt Institute of Technology.  
 1990 Doctorate, Darmstadt Institute of Technology.  
 1990 Joined Heidelberger Druckmaschinen AG, Measurement Engineering and Computing Technology.  
 1991 Project manager “Development of the Speedmaster SM 52 production series.”  
 1996 Overall responsibility for product development of all small and mid-format sheetfed offset presses.  
 1997 Head of Development, Speedmaster Business Unit.  
 1999 Head of the Speedmaster Business Unit.  
 2000 Head of the Sheetfed Business Unit.  
 2001 Head of the Solution Center Postpress.  
 March 2004 Head of Research and Development, Production; Head of Postpress.  
 July 2004 Member of the Management Board, responsible for Engineering and Manufacturing.

### Personal Information:

Born on 28 August 1958 in Frankfurt/Main, married.  
 Private interests: music (“from classical chorales to Tom Waits”) and sports (climbing, mountain hiking, skiing).

STITCHMASTER ST 450

# As You Like It

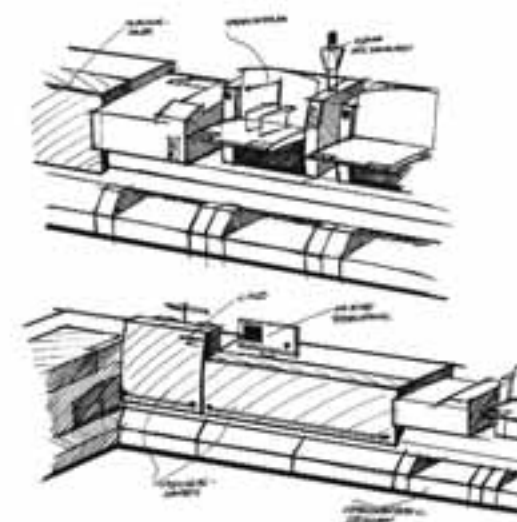
In the past, products have had to adjust themselves to a saddlestitcher, but the Stitchmaster ST 450 has turned this principle on its head. Thanks to its modular design and a variety of automatic and intelligent functions, the saddlestitcher easily adjusts itself to the most varied types of products. Or, as the title of Shakespeare's comedy states, "as you like it." Curtain up!

Somewhere in northern Germany. Without interruption, the sheet feeders move signatures to the six stations of the Stitchmaster ST 450. With a thunk, the staples drill into the paper at precise positions, and the next signature follows. The ST 450 processes exactly 13,966 52-page brochures within an hour.

Martin Messy, Head of Product Management Postpress at the Leipzig site, is well satisfied with the performance. But he is also aware that in many companies, saddlestitching is sometimes like stop-and-go traffic and that interruptions in production are part of daily operations. "The output of finished products is often only 50 percent of the capacity of the saddlestitcher. For example, a total production time of two to three hours to stitch a run of 14,000 magazines is no exception."

**Act 1: Doing the right things correctly.** A variety of factors are responsible for the discrepancy in performance. The separation suckers might separate the signature incorrectly, the prefold might be defective, or the feeder and the saddle chain might not be synchronized. All these problems lead to the same result: production standstills that last for several minutes.

The ST 450 was designed to prevent such operational or technical errors from occurring and to correct them automatically when they do occur. Functions like additional grippers help. To demonstrate the function, Messy puts a signature with an incorrect prefold into the feeder of the ST 450. The additional gripper automatically grabs the signature and pulls it from the register stop, without halting the machine. Programmed logic also ensures that after a signature is fed incorrectly, the corresponding signatures are not fed at all.



*Demanding new development: from sketch ...*



*... to the 3-D model ...*

**Act 2: Intelligent functions.** Central controlling is a similarly intelligent feature. It automatically checks to see if a product is complete before it leaves the saddlestitcher. If the product is incomplete, the ST 450 reorders and restitches the job. The command is given by a central database that also controls the inkjet unit. The database stores all signature equipment and all addresses for personalized products. "Central data management guarantees a high level of production security – quite the opposite of decentralized data handling. An incorrectly ejected brochure can mean that some customers don't receive any brochures at all. Automatic reordering is the answer here," stresses Messy.

Central control also plays an important role during selective binding. With selective binding, the inner portion of a brochure or magazine varies for a specific target group – by age or sex, for example. If a magazine has four regional variants, the file manager of the

ST 450 uses a distribution key to determine which signatures are stitched into a given regional issue. The brochures are processed by postal code: The six feeders of the ST 450 hold the signatures open over the chain. Thanks to central control, each "knows" when its turn has come, and it drops the signature onto the saddle chain. "Selective compiling by a servo-driven feeder is far more secure than selective suction of the signatures because the suckers can't be controlled that precisely and are thus prone to errors," explains Messy. ▶





... to the complete Stitchmaster ST 450.



**Deutsche Post**  
Erregelt Anzahl

*Heidelberg Postpress Deutschland GmbH*  
Jan Schölzel (Service Technician, left)  
Martin Messy (Head of Product Management Postpress)  
Brahestraße 8  
D-04347 Leipzig  
Germany

**Act 3: Highly adaptable feeders.** The servomotor makes the feeders so flexible that they can be pushed around like a shopping cart, sometimes to the last station and sometimes to one or the other side of the saddle chain – wherever the product requires. Thanks to this flexibility, product samples or reply cards can be attached with extreme precision and in unusual places like next to the last page in an internal section. “The ST 450 adjusts itself completely to the product,” emphasizes Messy. “That feature enables customers to offer unusual products and to differentiate themselves from the competition. And it enables them to do so profitably. The ST 450 integrates and optimizes the most varied of process steps so that manual work is no longer necessary.”



The ST 450 offers the highest flexibility for attaching product samples.

**Act 4: Going into production quickly.** This optimized process flow significantly reduces overall production time and ensures constant, error-free production in products with high numbers of cycles. The Stitchmaster ST 450 also provides highly effective start-up help. The feeder automatically adjusts to the specified format of the signatures. The actual show stopper here is 100 percent synchronization between the saddle chain and the feeder and between the saddle chain and the saddlestitcher. As a result, the staples are always exactly in the right place, and the drivers transport the signatures securely – even when the speed of the ST 450 increases rapidly.

Moreover, complex production settings, such as the opening time of the suckers and the angle at which the signatures drop onto the chain, can be stored. You simply call up the settings to quickly repeat jobs. And even if production is interrupted, the settings remain. You just need to push a button to get things going again at high speed.

**Act 5: Extremely flexible.** “The ST 450 is well suited for printers and finishing specialists that want to produce more than standard products and for printers that want to deliver services to their customers from one source. Its modular construction allows expansion of the machine in the future – just when the customer needs a new function,” summarizes Messy. Or simply “as you like it.” ■

**Facts & Figures**

**Specifications of the ST 450:**

- 14,000 cycles per hour
- Minimum paper size: 85 × 125 mm (3.35 × 4.92 inches)
- Maximum paper size: 320 × 480 mm (12.60 × 18.90 inches)
- Maximum product thickness: 12 mm (0.47 inch)
- JDF-capable machine control
- Optional equipment: two-ups and multiple-ups; hole punchers

[www.heidelberg.com/hd/ST450](http://www.heidelberg.com/hd/ST450)

## STRATEGIES FOR MORE GROWTH

# “Business Unusual”

Is it by luck or chance that certain printshops score continuous increases in sales and profits – even during economically difficult times? Neither of the two, answers John Hyde, Managing Director of the Professional Services Group at the National Association for Printing Leadership (NAPL), an American trade organization. In an interview with Heidelberg News, he explains which strategies print shops can use to expand their business.

*Mr. Hyde, what allows some print shops to break free of general trends and to grow more rapidly than the industry average?*

**JOHN HYDE:** The most successful companies in the industry follow a long-term business strategy with the goal of setting themselves apart from the competition. They constantly adjust their commerce to conditions on the market; they no longer “merely” position themselves as a job fulfilling print shop, but also as a partner in the value-added chain of their clients. By way of contrast, many businesses are fixated on day-to-day business. They carry on as “business as usual,” and rely on their existing customers staying with them in the future. This tactic

*may well work – for a while – but over the long run, it will not ensure any growth in sales.*

*What must companies do to generate more growth?*

**JOHN HYDE:** In a word: practice “business unusual.” For instance, companies can diversify and build up new business sectors. Appropriate sectors would be those that extend core competencies, allowing synergies to emerge. This can include mailings, fulfillment, digital printing and photography, the production of advertising materials, data base management, storage and logistics services for customers, or could involve text production and design. Thanks to these additional services, print shops are able to out-run price pressures in standard print jobs, while generating new business, by at first selling their existing customers more, in order to acquire new customers at a later stage.

*How can printshops identify additional products and services that make economic sense?*

**JOHN HYDE:** Naturally, the most economical would be to add such services that at least one or two important customers have asked for. When a high-volume customer, for instance, indi-

cates that he or she not only would like to carry out printing externally, but also mailings, this is an excellent moment for the print shop to step into the mailing business. The

*costs of entering the market are low, and the risks of suffering a setback minimal.*

It is more difficult to develop a completely new product or solution and sell it. In any event, the prospects of winning go up the better a company knows its target group. For example, if it knows what its customers’ needs are and the markets in which they operate. Because, when a print shop is able to offer the client an added value, while at the same time assisting them to differentiate themselves from the competition – whether through a polished solution or an exceptionally creative product – a cornerstone for future growth is laid. (See page 54 “From Printer to Airplane Manufacturer”) Another approach involves taking over a niche market. The first step

*consists in amassing specialized knowledge on the given industry or market segment*

such as schools or financial service providers. This know-how enables print shops in the next step to offer tailor-made solutions under one roof. The kinds of services that might be offered is practically unlimited, they might range from text generation, through print and mailings, to carrying out marketing campaigns.

*What role do new technologies play?*

**JOHN HYDE:** New technologies play a key role in raising productivity and profits, one need only think of UV printing. Nevertheless, investments – a new printing press, for example – ▶

*Expert on “business unusual:” John Hyde of the National Association for Printing Leadership (NAPL).*



are only the admission ticket to future growth. One must also use the new capacities effectively – keyword, differentiation – and market them. Here, quite many print shops need to play catch-up. To rely solely on word-of-mouth from existing customers is no longer enough,

*the active acquisition of new clients is necessary, by the owner, for example, or by building up a forceful salesforce.*

*How can companies better market themselves?*

**JOHN HYDE:** Print shops are increasingly competing with enterprises in other sectors, with marketing service providers, for instance. Besides, many companies employ similar equipment and offer similar services. This makes it all the more important to define what is exceptional in one's own company (value proposition), in other words, to answer the question: What makes us unique? One needs to communicate this message on the market, either through personal conversations, or through mailings, brochures, press articles, and over the company website. It is also important

*to cultivate good relations with decision-makers. Here also, one will stand out by differentiating oneself and by not,*

for example, using impersonal standard clichés or automatic text when making offers. Instead, one should formulate offers individually and communicate them personally – in particular, in the case of new customers – perhaps during a customer visit, or by extending an invitation.

*How often should companies review their portfolio?*

**JOHN HYDE:** Actually, continuously, but at least once a year one should examine all aspects of the business in terms of the question: How can we achieve higher sales? This should be done first in view of existing customers as it is easier to sell them addi-

tional services than to win over new customers. Furthermore, it makes sense to establish a benchmark that provides information concerning the strengths and weaknesses of one's own company, as NAPL or trade organizations in other countries offer to do. For example, "eKG," our diagnosis instrument, analyzes criteria such as customer satisfaction, quality, and pricing in one's own company as compared to the competition. Company priorities are reexamined based on the results: Are we relying on the right customers or competencies? Where do we need to take action? One result of benchmarking may be to establish a network of partners, for example, or to join in an enterprise in order to expand one's own portfolio of services, or to reach outside of the local market – region or country – in order to win new customers.

*Fundamentally, every company needs a clear vision of what it wants to accomplish in the long run. The path to that goal leads through "business unusual." ■*

#### Facts & Figures

The Professional Services Group of the National Association for Printing Leadership (NAPL) advises companies in the printing industry on questions concerning strategy, financing, reorganization, process optimization, and company succession.

75 West Century Road  
Paramus, NJ 07652-1408  
USA

Tel.: +1-201-634-96 00

Fax: +1-201-986-29 76

E-mail: [Information@napl.org](mailto:Information@napl.org) or [jhyde@napl.org](mailto:jhyde@napl.org)

[www.napl.org](http://www.napl.org)

# From Printer to Airplane Manufacturer

When Thomas Geng and Gottfried Keller set themselves up independently in the southern German city of Esslingen-Berkheim, they did not wait for customers to come to them. They relied on an old passion and a clever idea to bring in new clients – even from abroad. Druck & Media GmbH prints promotionally effective paper airplanes on a Heidelberg Speedmaster SM 74-2-P, and then stamps them on a modified Original Heidelberg cylinder.

Model airplanes already inspired Thomas Geng, 35, Managing Director of Druck & Media GmbH, as a young boy. “I was always caught up in flying – flew model airplanes passionately. Then it occurred to me that one might be able to use paper airplanes to their advantage in printing and advertising,” Thomas Geng relates. The trained salesman, who comes from a family of printers, brought the idea to fruition in 1998. Together with printing technician Gottfried Keller, 55, he founded a printshop, and has been producing paper airplanes ever since.

The “big-easy’s” were originally conceived of as advertising material for the tourist industry. Yet, the range of applications has been continuously expanding: in addition to airline companies, airports, and airplane manufacturers, now, sectors that are less “experienced” fliers also count among the main customers of the individually customizable promotional airplanes. In the form of a hinged folder, they can serve as an invitation to a trade fair, a stockholders’ meeting, or even as a self-mailer. “We rely on the Heidelberg Speedmaster SM 74 for this product, in particular. It is stamped on a Heidelberg cylinder, model year 1965, which has already logged an estimated 200 million prints,” explains Keller.

**Business takes flight.** Depending on the client’s wishes, the airplanes are available as a small propeller driven machine, as a modern passenger airliner, and most recently, as a wide-bodied jet. As for color and promotional company names, these are individually

configurable. Only the paper must retain a certain quality, in order to guarantee the “statics” of the airplane. “What is so special about these paper airplanes is that they fly without needing glue, but simply by putting them together – and they fly beautifully. On the underside, there is a small hook, so that you can launch it using the enclosed rubber band,” explains Keller.

Thanks to this clever business idea, the printshop has also taken flight: at this point, the paper airplanes generate roughly 50 percent of company sales, a business that today has 10 employees, and just under 850 customers. An increasing number of retailers are also distributing the product. To guarantee things continue this way into the future, a special internet presence was created for the complete “big-easy” line of products, and an application was filed for patent protection. In addition to protecting the type of airplane, the patent covers the paper and folding technique. After all, “cheap knock-offs” must be prevented. ■

## Facts & Figures

Druck & Media GmbH  
 Eschbacher Weg 19  
 73734 Esslingen-Berkheim  
 Germany  
 Tel.: +49-(0)-711-34 59 60-0  
 E-mail: [post@druckundmedia.de](mailto:post@druckundmedia.de)  
[www.druckundmedia.de](http://www.druckundmedia.de)

“Airplane builders” Thomas Geng and Gottfried Keller (left to right) with their advertising airplanes.



TOKUSHU PAPER MANUFACTURING CO. LTD., JAPAN

## In the Shadow of Fujiyama

# TOKUSHU

Nagaizumi-cho, Suntou-gun, Shizuoka is located southwest of Tokyo and headquarters to the Tokushu Paper Manufacturing Co. Ltd., a specialty paper producer that is famous in Japan. In 2001, the company opened “PAM,” a private museum with extremely interesting, rare and very valuable exhibits dedicated to the subject of paper.



Visibly pleased, Kiyotoshi Misawa, Chairman, and Mitsuaki Ozaki, Sales Director, view their paper catalog (left to right).



Posters belonging to the PAM exhibit. View of one of the museum's showrooms. (left to right)



Rear view of the PAM. Interior view and storage of exhibits appropriate for paper. (left to right)

# PAPER

**F**ujiyama with its snow-capped peak, Japan's highest and holy mountain, is always within view. No matter where a person goes in Shizuoka, the breathtaking view of this 3,776-meter (12,388 ft) high giant is inescapable. The Tokushu Paper Manufacturing Co. Ltd. with its roughly 620 employees is headquartered here. Kiyotoshi Misawa, 56, is already the tenth chief executive officer of this company founded in 1926 and he has held this position since April of 2004. Generating about 22 billion Yen (170 million euros/218 million U.S. dollars) in annual sales, the company does research and works very heavily in the area of traditional paper production. They are constantly looking for suitable natural base materials and accordingly offer unusual types of paper and even more unusual paper designs.

In search of the ideal paper design, employees embody their visual image of nature in their papers, for example, in order to create papers that have surfaces and colors like stone, marble, wood or other natural materials. "Paper is an important part of Japanese culture and far more than just a printing stock. It is also used in housing con-

struction, where the interior walls of the traditional houses consist of paper. Traditional Japanese houses are built out of three basic materials: paper, wood and earth," Misawa points out.

**Whether as insoles in shoes, for labels or stationery.** If it is to be something extremely special, in Japan they rely on a product from Shizuoka. The company is a niche producer, not a mass producer. The company turns out about 55,000 tons of paper per year, which constitutes a small volume for a Japanese paper manufacturer because altogether about 30 million tons per year are manufactured in Japan and scarcely is any paper purchased abroad. The raw materials for paper manufacturing, on the other hand, for the most part come from other countries. If regular paper costs approximately 100 Yen per kilo (0.72 euros/0.90 U.S. dollars), then with Tokushu it is around 400 Yen (2.88 euros/3.60 U.S. dollars). But they also meet other demands than merely writing paper. Special papers for catalogs, bible pages, posters, admission tickets, post cards, paper money, checks, photo papers and labels, for example, are produced.

Among these are papers that even if totally saturated with water do not swell up or tear easily, or even types of paper that do not decompose. No wonder, therefore, that of the overall 25,000 types Japanese paper and paper designs Tokushu themselves offer 5,000. On the specialty paper market, for this reason, the company is also a market leader in Japan. One of the favorite types of paper is called "Tanto." The name is derived from a Portuguese word and means "many." This type of paper comes in 152 colors, as well as various weights and different formats to choose from. There may well be no other single product in the world with such a vast selection as Tanto.

**Research object "old paper."** At Tokushu research is done in part on very old papers in order to find out how paper was manufactured 1,000 years ago for example. "If this has lasted down to today, the basic materials or the manufacturing processes for it must be jointly responsible. This information is important for the paper manufacturer and useful as the papers' impression and knowledge about the still visible colors," Misawa explains, adding: "The research results

can then be used possibly to derive new papers that hold for a long time and do not yellow. For this reason the results are often incorporated directly in an in-house paper production. A result of this intensive research is the "stabilized paper" for example. Water or humidity is paper's enemy, it destroys it in the long run. A box overlaid with this new kind of paper maintains a constant climate inside. The papers stored there, such as documents and paper money, withstand storage for long periods of time because mold, mites and humidity do not have a chance anymore. Many museums and art galleries are banking on this material in order to protect their "treasures" from decay. Another Tokushu paper is used in new buildings because it protects, at relatively low costs, against toxic gas emissions that can even be observed in new cars.

**1,300 years old and still like new.** The decision had already been arrived 20 years ago to set up a collection based on paper that has already grown to 160,000 exhibits, and includes exhibition pieces from almost every culture and century. The collection was at first stored ▶



A view of one of the research labs for the paper museum.



Paper is also used as insoles in shoes. The paper museum holds the largest collection of antique currency notes from the last 300 years in Japan. (left to right)

# JAPAN



in a central archive. “The idea was to make some of these in part valuable and rare exhibition pieces accessible to a larger public and to inform people about the history of paper and its various utilization options,” Misawa explains the museum’s intention. In 2001, it was then ready and the Museum for Paper and Material (PAM) was opened. For this about 1 billion Yen (approx. 7 million euros/8.9 million U.S. dollars) was invested.

It is surely the most impressive and presumably the one and only paper museum in all of Asia. However not all exhibits could be put on display, because for that the amply dimensioned museum room was inadequate. The oldest paper in the museum is already 1,300 years old. Since the paper has survived so long despite climatic and storage conditions that have not always been optimal, and the color still looks fresh, tests were run to determine which raw materials the paper contains. For instance, if the bamboo portion is high, and

which type of bamboo was used? Does this type of bamboo still exist today, and if so, where? These findings are then incorporated in the modern paper manufacturing if this type of bamboo still exists. In this case bamboo is still located in a very specific region in China.

**Surplus money.** Also about 4,000 Japanese bills are part of the collection at the PAM, the oldest dating from 1672 and were already printed on presses. The regions and cities of Japan used to have the right to print their own paper money, depending on the political influence. For this reason many different bills existed. It is the largest private collection in Japan, only the Japanese National Bank owns a still larger collection of paper money. The first paper money already had security features such as embedded hair or then around 1750 even watermarks to prevent counterfeiting. “They were designed as a means of payment for the regular people, a genuine Samurai in those days would pay in gold, copper, or silver coins,” Misawa explains, laughing. On one of the bills, dated around 1870, the supposedly Dutch inscription “Voordeelig.” is located, which, since it was totally unfamiliar, was difficult to copy. Original copyright à la Japanese.

At the museum historical testimonials are displayed in the “Remembrance of the Times” room – also shown on Tokushu paper, such as a poster of the Olympic Games in Tokyo in 1964. In the “Product Display Room” a wide collection of products from the company is located that should also prove the diverse use of Tokushu products from the company, for example, shoe insoles made from paper. In the “Sample Room” communication with the designers should turn out well, unusual and somewhat crazy papers and products are shown here, as for instance, book covers made from unusual materials. The museum is also dedicated to obtaining important and rare paper documents, such as old monk writings, books and cards.

**Rare books.** A treasure of a special type is a part of the legacy of Hiromu Hara, who was one of the founders of the new modern Japanese designs. About 30,000 pioneer exhibits for graphic design were handed over to the museum after his death. These include 4,000 books and posters drafted by Hara. Japanese, as well as international book and poster classics, are a part of the collection. Part of these have survived the Canto earthquake of 1923 and the Second

World War. The work “New Typography,” for example, is located among them and it had a great impact on the designers in the 1920s. Particularly rare books on the development of the modern printing press in Japan are also part of this collection.

Whoever “just happens” to come into the proximity of Fujiyama and Shizuoka, would be well advised to take a little detour into PAM – and to sign up first. The entrance is free, but not for the general public, but rather for interested paper lovers. ■

### Facts & Figures

Tokushu Paper Manufacturing Co., Ltd.  
501 Honjuku  
Nagaizumi-cho, Suntou-gun, Shizuoka 411-8750  
Japan  
Tel.: +81-55-9 88-11 11  
Fax: +81-55-9 88-11 59  
[www.tokushu-paper.jp](http://www.tokushu-paper.jp)



1. The restored Mackenzie Heritage Printery & Newspaper Museum.
2. Chair Al Teather and Secretary Lou Cahill (from left).
3. Main display area of the Albion Press.
4. Artifact from the VE Day Peace Exhibit 1905.
5. Manual guillotine, circa 1880.
6. Sydney Chantrey, Volunteer Operator, at the Linotype.
7. Display Wood Poster Type.

MACKENZIE PRINTERY & NEWSPAPER MUSEUM, CANADA

# The Firebrand's Bequest

Politician, reformer, printer, and rebel: all these words describe William Lyon Mackenzie. The native Scotsman stirred up intense tumult in Canada in the early 19th century with his print shop, or more precisely, through the newspaper he published and printed – the “Colonial Advocate.” Today, among other things, 500 years of printing methods are kept alive in his former home in Queenston (Ontario). Welcome to the Mackenzie Printery & Newspaper Museum.

In 1837, the government of Upper Canada, today's Ontario, established an impressive 1,000-pound reward for the capture of William Lyon Mackenzie. He had attempted nothing less than to depose the Lieutenant Governor in York (today Toronto). With his shock of fire-red hair and hot-blooded temperament, Mackenzie was a rebel as if drawn from a book. Visitors to the museum can happily see this with their own eyes, since the host always welcomes his guests personally – in the form of a wax-figure.

**Freedom of opinion, enlightenment, democracy:** for Mackenzie, printing his ideas was the key to generating positive change. This is why “his” museum is not only dedicated to his life's work, but also to the art of printing – and in this regard, the museum has much to offer. For example, museum staff working on a Hopkinson and Cope Albion iron hand press from 1863 demonstrates how a document is printed. When the demonstration is over, the visitor is handed the document with his or her name printed on it as a souvenir. All told, there are eleven printing presses on display – among them six platens. Eight of the printing presses are still working; visitors may operate them under guidance from the museum staff, which applies to the linotype and Ludlow casting machines, as well. “Please Touch” is also true for the collection of wooden type.

Another topic on which the museum lays heavy emphasis can be found in the building's cellar – in the truest sense of the word: the printing stones used in lithography are stored here. Museum Curator, Tania Denis explains to the visitors not only the origins of this printing method, invented more than 200 years ago by the German Alois Sennefelder, but also its pros and cons. One “disadvantage” of the process from her perspective, for example, is that she can barely move the very heavy stones, explaining why she has to limit her demonstration to the “smaller” exhibits.

Naturally, a part of the museum's exhibits is given over to the many products that can be manufactured by employing the printing processes that are on display or available to be tried out. These include, for example, striking newspaper cuttings, posters from the

time of the Second World War, and many books. Reprints of the original Luther Bible, as well as pages from the Gutenberg Bible of 1455 also belong to the museum.

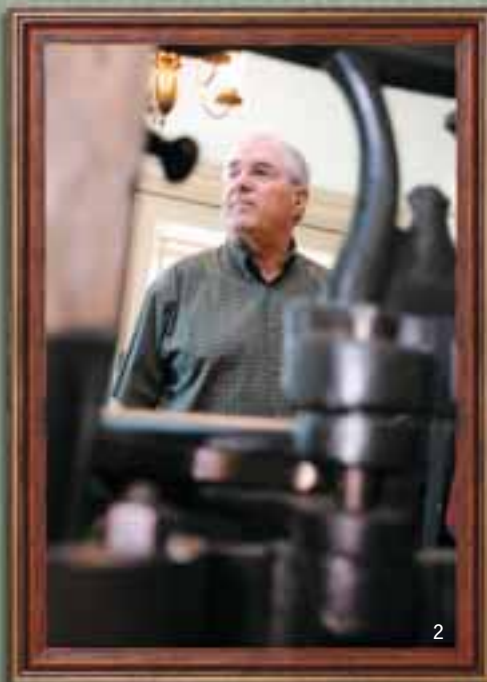
An absolute centerpiece of the exhibit is the so-called Roy press. Built around 1760 in England, it is one of the oldest wooden presses in the world, and most very likely the oldest in Canada. The press was named after the printer Louis Roy, who brought it with him from Quebec to Newark (today Niagara-on-the-Lake). This took place by order of the first Lieutenant-Governor of Ontario, John Graves Simcoe. He signed a contract with Roy to begin printing, among other things, the first newspaper in Upper Canada in April 1793, titled “The Upper Canada Gazette and American Oracle.” The paper was a government mouthpiece that staunchly supported the King, and did not seek independence from Great Britain. It was also a jolt to the flaming democrat Mackenzie, provoking him to become politically active.

**Pursued, acclaimed, incorrigible.** William Lyon Mackenzie was born in Scotland in 1795. In 1820, he immigrates with his mother to Canada, where he manages – rough-and-ready – to establish himself as a merchant, before publishing the first issue of the “Colonial Advocate” in Queenston in 1824, with great enthusiasm but without any professional journalistic qualification. In his own pieces, Mackenzie attacks the clique gathered around government, the so-called “Family Compact.” This faction is made up of a handful of powerful and wealthy men, who dominate both the provincial legislature and executive, and who, thanks to their political monopoly, also control the banks, as well as the institutions of higher education and the judiciary.

The “Colonial Advocate” quickly becomes a thorn in the side of the governing faction, primarily since thanks to Mackenzie's harsh attacks – against the politics of land allocation, for instance – the newspaper is loudly acclaimed in public. A journalistic powder keg explodes in 1826, when government supporters partly demolish his print shop in Toronto, hurling the lead type into the Toronto Bay. ▶



1. Lithographic Printing Stone.
2. Director Art Ellis, encircled by Albion Press.
3. Wax figure of rebel and printer: William Lyon Mackenzie.



**The storming of Toronto.** The “Colonial Advocate” serves Mackenzie as a springboard to a rather tumultuous political career: after 1828, he is elected five times to the Legislative Assembly of Upper Canada, and five times expelled for “libel.” He becomes leader of the Reform party, and in 1834, Toronto’s first mayor. Despite this, the Reform party loses unceremoniously to the Tories, who remain loyal to the Crown, during the provincial elections held in 1836.

This defeat, as well as the failure to realize the reforms he demanded, leaves Mackenzie so bitter, that he feels compelled to strike a radical blow. Convinced that only independence from England will free the way to reform, he rallies 600 supporters to his side in 1837, intending to overthrow the Lieutenant Governor of Upper Canada. A complete misadventure, he only saves his life by fleeing to the USA. Following his amnesty, Mackenzie returns to Toronto in 1850, where he dies in 1861.

**Show of strength based on partnership.** To this day, two of the five locust trees that Mackenzie planted on May 18, 1824 – the day on which the first issue of the “Colonial Advocate” appeared – continue to flourish near the museum. That Mackenzie’s former residence can be visited today in authentic detail, is thanks to the honorary work of the “Niagara Parks Commission” and the “Printery Committee.” The house had already collapsed to its foundation walls, when it was lovingly restored to its historical appearance in the mid 1930s. It only became a print museum in the early 1990s. Since its opening in 1991,

the museum has regularly hosted special exhibitions, such as in 1999, to celebrate the 175th anniversary of the “Colonial Advocate” – the very newspaper that so profoundly stamped Mackenzie’s life, and the political face of Canada. “Naturally, we are delighted to accept support. Donations and new members are more than welcome, in order to maintain our museum for many more generations, so that visitors may continue to learn a great deal about printing methods, as well as the meaning of the art of printing to our world,” stresses Al Teather, Chair of the museum’s board of directors. ■

**Facts & Figures & Membership Inquiries**

Mackenzie Printery & Newspaper Museum  
 1 Queenston Street  
 P.O. Box 1824  
 Queenston, Ontario, L0S 1L0  
 Canada  
 Tel.: +1-905-262-56 76  
 E-mail: mackenzie.printery@bellnet.ca  
 www.mackenzieprintery.ca  
 Tax receipt issued for all donations.

Opening Hours:  
 May 6 to September, 2006 from  
 11:00 to 17:00 hrs

## Tips & Tricks

### Printing with Polyester Printing Plates (Part II): Profitable Use on Heidelberg Printing Presses

Polyester printing plates offer a cost-effective alternative to metal printing plates. In particular, they offer several advantages to commercial print shops with short run lengths of up to 20,000 copies, such as shorter throughput times and lower production costs (see Tips & Tricks, HN 256). Companies that use polyester printing plates on Heidelberg printing presses also profit from a variety of high-performance options that increase ease of operations and improve profitability. The AutoPlate setup is one example. You can use it to clamp the plates in the blink of an eye.

**Polyester Printing Plates & AutoPlate**

For perfect printing results, the press must always be kept clean and maintained carefully. Polyester printing plates demand special consideration:

- We recommend manual output with polyester or paper-based printing foils with a thickness of less than 0.15 mm (0.006 inch).
- Perform register corrections only after a few waste sheets, especially when print jobs extend across the entire print area.
- For critical print motifs, first adjust the forward third of the printing plate.
- After each register correction, print about 30 sheets to restabilize the polyester printing plate and minimize register irregularities.

**Treatment with Special Solutions**

- Manufacturers of polyester printing plates offer dampening solution additives. Check with your contact at Heidelberg to see which one is ideal for your requirements.
- Before the start of production, you can treat polyester printing plates with etching solution to accelerate the freewheeling of the printing plate and achieve the ink-water balance at the start of printing. Follow the solution manufacturer’s directions.

**Polyester Printing Plates & Printmaster QM 46**

- We recommend using polyester printing plates with a rough reverse side because they guarantee secure handling for plate clamping and the diagonal setting. They also ensure the dimensional accuracy of the polyester printing plate.
- After clamping, dampen the polyester printing plate using the dampening system.
- Include a predampening interval whenever printing is interrupted by dampening the plate a few times to prevent the plate from smearing. You can use the control panel to set a higher predampening level for the polyester printing plate quickly and easily.

**Polyester Printing Plates & Printmaster GTO 52**

- Tighten the clamping nuts only by hand. Hand tightening avoids overexpansion of the polyester printing plate and ensures a good register from the very start.
- Adjust the inking unit according to the instruction manual and set the inking form rollers to the polyester printing plate more acutely than indicated.
- During the production run, you should work with a large ink fountain roller sweep with a minimal ink zone opening. ■

**Facts & Figures**

You can find the first part of this article and all previous Tips & Tricks at [www.heidelberg-news.com](http://www.heidelberg-news.com)

# Dates & Tradeshows

## ■ Asian Dates

### Korea: KIPES

The international conference for the printing industry offers approximately 30,000 visitors an opportunity to learn about printing presses, printing equipment as well as typesetting and the production of print originals.

**Location:** Seoul, South Korea

**Dates:** September 6 – 10, 2006

**Contact:** Korea E & Ex Inc.

**Phone:** +82-2-5510102

**Fax:** +82-2-5510103

**E-mail:** ex@eandex.co.kr

**Internet:** www.kipes.com

## ■ European Dates

### Poland: Taropak 2006

With visitors from approximately 30 countries, this is the most important trade show for the packaging and logistics industry in Central and Eastern Europe. It focuses on four areas: packaging material and design, machines, logistics, and technical consulting.

**Location:** Poznań, Poland

**Dates:** September 18 – 20, 2006

**Contact:** Taropak project team

**Phone:** +48-61-869-26 00

**Fax:** +48-61-869-29 53

**E-mail:** taropak@mtp.pl

**Internet:** www.taropak.pl/en

### The Netherlands: IfraExpo 2006

This four-day, international conference offers decision makers in the newspaper industry and media production a platform for the exchange of information and experience. It covers the complete range of products and services for newspaper and magazine production.

**Location:** Amsterdam, The Netherlands

**Dates:** October 9 – 12, 2006

**Contact:** Michael Heipel

**Phone:** +49-(0)-61 51-7 33-6

**Fax:** +49-(0)-61 51-7 33-8 02

**E-mail:** heipel@ifra.com

**Internet:** www.ifraexpo.com

## ■ North American Dates

### USA: Graph Expo and Converting Expo \*

“Building your business from design to delivery” is the motto of the biggest American printing trade show with a comprehensive program related to commercial printing and converting. The exhibition presents worthwhile knowledge and the hottest topics in prepress, printing, converting, large format, mailing, and fulfillment. Some 500 exhibitors are expected.

**Location:** Chicago, USA

**Dates:** October 15 – 18, 2006

**Contact:** Graphic Arts Show Company (GASC)

**Phone:** +1-703-264-72 00

**E-mail:** info@gasc.org

**Internet:** www.gasc.org

\* Tradeshows where Heidelberg is participating

## Winners of the Reader's Survey – HN 256

### 1st Prize: Trip to Heidelberg

Rarfs C. Ionescu, TRIMPRESS, Cluj-Napoca, Rumania

### 2nd to 5th Prize: iPod

Chanbana Amaratunga, Unique Packaging PVT, Talwate, Sri Lanka

Aristide Dourado, Ordem Franciscana, Dept. Gráfico, Lisbon, Portugal

Andrew Kelleher, Courier Newspapers, Bridgewater, Australia

Francisco Lizarrara, Imprenta San Francisco, Paso del Rey-Moreno, Argentina

### 6th to 11th Prize: XL 105 model

Adair Anderson, Stevens Printing, Portland, USA

Prachak Chinsin, Darnsutha Press, Bangkok, Thailand

Marco Patricio Moreno, Graficas Moreno, Quito, Ecuador

Sadrollah Baharami Nezhad, Irandaily, Teheran, Iran

Josephope T. Sardalla, Salman Printers, Sidhafs, Bahrain

Norr Mohmud Shirnsa, Graphic Lineups, Nairobi, Kenya

# HN Voices

**Hans Joachim Laue, Wiedlisbach, Switzerland:** A good balance of professional, subject matter, and design competence.

**Jackie Powell, Ashford, United Kingdom:** More articles about customers and companies that use Heidelberg, please!

**Urs Egli, Fyshwick, Australia:** I enjoy reading the magazine a great deal. It's the only customer magazine that's worth reading. Thank you.

**Jim Siemons, Berkeley, California, United States:** HN is the National Geographic of the printing industry!

**Portpong Wattanadech, Bangkok, Thailand:** A very informative and excellent magazine. Useful information on the latest technology. The number one magazine for the printing industry.

**Mark Jess, Georgetown, Canada:** Classy design, informative articles, and good news. Keep it up!

**Elke Neunzer, Alsdorf, Germany:** The articles from other cultures as related to our printing technology are particularly interesting. Always exciting, always good!

**Orlando Luis Berlanga Guerrero, Mendoza, Argentina:** The magazine is outstanding. We find the articles very interesting. Each section contains valuable articles that we regard all the more highly because they come from the country that invented printing.

**Alfredo Lazo Molina, Valencia, Spain:** The entire magazine is very good. Above all, I'm personally interested in articles in the “Perspectives” and “Tips & Tricks” sections.

**Gaie Orton, Prince Edward Island, Canada:** I'm very impressed by the layout of HN – congratulations. Attractive, clean, and still good reading. Not a typical customer magazine. It's made so that I simply want to read it.

**Kirsten Hein, Baunatal, Germany:** Worth reading from front to back and a treat for the eye!

**Betti Emilia Colli, Cordoba, Argentina:** I find all the articles very interesting. It's sad that our country is still so far away from this technology.

**Christof Steidle, Kempten, Germany:** I find the articles about the situation in other countries very interesting. Marketing topics would also be interesting.

## IMPRINT

© Heidelberger Druckmaschinen AG,  
Issue 257, 2006

Internet: www.Heidelberg-News.com  
E-mail: Heidelberg.News@heidelberg.com

### Publisher

Heidelberger Druckmaschinen AG  
Kurfürsten-Anlage 52–60  
69115 Heidelberg  
Germany  
www.heidelberg.com  
Adriana Nuneva, Senior Vice President – Global Marketing

### Project Management

Matthias Tritsch  
Tel.: +49-(0)-62 21-92-45 70  
Fax: +49-(0)-62 21-92-49 49  
E-mail: Matthias.Tritsch@heidelberg.com

### Editorial Management

Dietmar Seidel  
E-mail: Dietmar.Seidel@heidelberg.com

### Solutions & Innovations Department

Isabelle Specht  
E-mail: Isabelle.Specht@heidelberg.com

### Editorial advisory board

Daniela Bethonico (Latin America), Dominique Bouffard (France), Timothy Henschel (USA), Manuela Deufel (Germany / Switzerland), Irene Duffy (UK), Brian Ellis (Canada), Jasmine Ho (Asia Pacific), Karl Kowalczyk (Applications), Andreas Lang (Product Line Management), Henriette Larsen (Nordic), Rainer Manderbach (Eastern Europe / Asia), Hans-Dieter Siegfried (Communications), Elke Steinbach (Service), Volker Trapmann (Western Europe / Middle East / Africa)

### Design and Production

SIGNUM communication GmbH  
Lange Rötterstraße 11  
68167 Mannheim  
Germany  
Tel.: +49-(0)-621-3 39 74-0  
Fax: +49-(0)-621-3 39 74-20  
www.signum-web.de

### Editor-in-Chief

Jürgen Ströbele  
E-mail: Stroebele@signum-web.de

### Editorial Office

Heike Link  
E-mail: Heike.Link@signum-web.de

### Project Management

Christian Westenhöfer  
E-mail: Christian.Westenhoefen@signum-web.de

### Creative Direction

Matthias Birkenbach  
E-mail: Birkenbach@signum-web.de

### Art Direction

Oliver Weidmann and Karin Breuner

### Printing

Printed in Germany

### Production

Platemaking: Suprasetter  
Printing: Speedmaster SM 102  
Finishing: Stahlfolder  
Fonts: Heidelberg Gothic, Heidelberg Antiqua

### Circulation

130,000 copies

### Area of circulation

81 countries

### Languages

Danish, German, English, Finnish, French, Korean, Swedish, Spanish, Hungarian

### Cover photo

Leonilde Terceiro, Fernandes & Terceiro Lda. – Artes Gráficas, Portugal

The articles' content does not necessarily reflect the opinions of the publisher. All rights reserved. Copying or electronic distribution with the publisher's permission only.



www.heidelberg.com

Printing: the art of making music with paper. **Passion for Print.**

**HEIDELBERG**