

Heidelberg

News

The customer magazine
Since 1930 • Issue 262 • 2007



FROM THE GARAGE TO BUSINESSMAN

Greg Moquin lives the American Dream

TAKE-OFF TO A NEW DIMENSION

Heidelberg's extra-large champion class

PRINCIPLE QUESTION

Which business model is the right one?

HEIDELBERG



Dear Reader,

Those who want to sustain their current clientele or tap into new customer circles constantly need to offer their target group a real added value. We'll show you how some print shops score profits in the process. To do so, we'll be taking a look at the American Moquin Press, who quickly calms its "nervous" clientele from the print broker branch with products truly worth their money. Additionally, you can witness how the flock of customers at the Indian Anderson Printing gets the royal treatment with full service, despite the 150 different wishes each day. Furthermore, you will learn what Karl Heinz Ottersbach and his customers appreciate about the exclusive print products from the German print shop Stach and also get a glimpse at what kind of customers – and personal advantages – a franchise model like Kall Kwik brings with it for Henry Luce in England. In addition, Peter Göppel from Liechtenstein explains why his foreign clientele is so crazy about the "Prinect-Turbo" at BVD.

On top of it all, we'll also offer you the first insights into our new Speedmaster XL 145 and 162, familiarize you with the enormous possibilities of the Speedmaster SM 74 and introduce you to the CoatingStar. Finally, we invite you to join us at the Japanese printing museum by Toppan. We hope that you will once again find something of interest to you!

Yours sincerely,

Bernhard Schreier
Chairman Heidelberger Druckmaschinen AG

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ANDERSON PRINTING HOUSE PVT. LTD., INDIA

A LITTLE MONEY AND A LOT OF HEART

When Nand Kishore Kajaria from Kolkat, formerly Calcutta, India got his start, he had seed capital of roughly 13 US dollars (10 euros) – not very much money, but enough for the physicist with a passion for the creative. Dauntlessly, he invested the modest sum in a wooden table and a screen printing frame. Today, roughly 30 years later, his business, Anderson Printing House Pvt. Ltd., ranks as one of the most important commercial print shops on India's east coast.

Printing house manager Nand Kishore Kajaria with his parents, Chandrabhan Kajaria (left) und Durga Devi Kajaria (right).

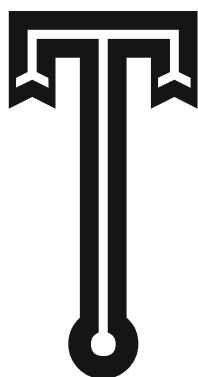
THE LOVE IS PALPABLE,
THE RESPECT AND REGARD
FOR ONE ANOTHER TOO.
AND SO IS THE HUMILITY
AND GRATITUDE, BECAUSE
THE KAJARIAS ARE VERY
RELIGIOUS PEOPLE.

N.K. Kajaria on the balcony in the courtyard of his home, Kajaria Sadan. Several members of his family live in the six-floor building.





Swapan Bagh, Samar Mitra, Ranjan Ghosh and Sanjay On the Speedmaster SM 74-5 with coating unit (from left; top). The machine is in the ultra-modern building of the Anderson Printing House in the district of Salt Lake City (bottom right). N.K. Kajaria with his daughter, Rishika, his wife, Savita, and his son, Krishna (bottom left).



The heat is unbearable. Over 97 °F (36 °C) in the shade. Sweat seeps out of every pore and trickles down your back and sticks to your shirt or blouse. On the roof terrace of the six-floor colonial apartment house where Nand Kishore Kajaria, the manager of Anderson Printing, lives, even the Hindu deities need a break from the heat. His daughter, 15-year-old Rishika, closes the doors to the shrines where the small statues of gods and goddesses

adorned in flowers are housed. The doors are only opened again in the evening, when the worst of the heat at the heart of Kolkata is over.

Three floors below in the Kajaria family's living quarters, the print shop manager's wife, Savita, serves juice made from green mangos, reminiscent of mild balsamic vinegar in taste and incredibly refreshing. Through the open doors is a view of the inner courtyard, lined with balconies where laundry is hanging out to dry. The inhabitants, all members of the Kajaria family, call one another across floors, chat and laugh. Nand Kishore Kajaria's parents also live here. His father, whose family moved from the state of Rajasthan to Kolkata in 1930, looks on proudly at his son who has made something of himself here on his own. The love is palpable, the respect and regard for one another too. And so is the humility and gratitude, because the Kajarias are very religious people.

In economic fever. Out on the streets on the way to the print shop, however, this sense of quietude can hardly be felt anymore. It is a luxury which many people no longer allow themselves. This is because India's rapid economic growth has put a good portion of the country in a collective work and building frenzy. Companies are sprouting up like mushrooms, and new city districts – or even complete cities – are created within just a few months. People are hammering and drilling, cables are being laid, pipes dug and offices moved into as soon as the new buildings are equipped with the necessary infrastructure. This is the case in Salt Lake City, one of the

new districts in Kolkata where Anderson Printing Pvt. has been residing since September 2006. The print shop, with a total area of roughly 30,000 square feet (2,770 sq. m.), is divided onto nine floors of a newly constructed building. "Salt Lake City ranks among one of the most expensive districts in Kolkata. But the premium location is well worth the high rent. We have a secure electric and water supply as well as the most modern data lines. High-capacity and fast internet connections are our lifeblood, so that we can communicate reliably with our customers at all times and be able to accept orders 24/7," notes Kajaria. The company carries out many business processes electronically so that they can react quickly to customer wishes. Approval for printing takes place over the internet with PDFs. In addition, printing is carried out "on-demand" for some companies, including IBM. "As soon as an order comes in, it is printed immediately and then delivered right away. Even if it's in the middle of the night. Our goal is delivery from one day to the next," reports Kajaria.

The excellent infrastructure isn't the only reason why the print shop manager puts up with the high cost of rent in Salt Lake City, however. His business also profits indirectly from the price driving the building boom since a good number of his 300 customers work in the real estate industry. And his customer base continues to grow. New companies settle in Kolkata almost daily – particularly information technology and Business Process Outsourcing (BPO) businesses, which manage certain business processes such as human resource management for affiliated groups somewhere else in the world. An increasing number of individuals are also moving into the modern high-rises situated in small parks in the middle of the city. With the booming real estate market, Anderson Printing has its hands full with work. The company drafts and prints advertisement and information material such as catalogues or brochures with site plans, floor plans and pictures of properties for this industry. "We offer full service, from technical consultation and design to printing. These are the skills with which we help our customers achieve the best result, for example with the right choice of print screens, paper, or coating," explains Kajaria during a tour of the company premises. ▶





Bollywood films are very popular in Kolkata (left).

Many women wear traditional saris or "Punjabi suits" (a long dress over trousers), such as these women taking a walk along the Hooghly river (right). But the city's image is also shaped by extremes including magnificent buildings, such as the Victoria memorial completed in 1921, which is located in the city center and houses an impressive collection on the history of British colonialism in India – while in poor quarters, people have hardly enough to survive.

Actor and Physicist. Given the print shop's ultra-modern equipment and success, it's hardly imaginable today that only 28 years ago the 51-year-old Kajaria began as a one-man operation and that his entire pride and joy was a screen printing frame for 500 rupees (12 US dollars). When asked about this period in his life, the incredibly personable manager smiles his typical modest Kajaria smile. It seems as if he, too, is somewhat bewildered by all of the success since it was his passion for creativity which really mattered most to him in the beginning. Kajaria is actually a physicist who found his calling for design and printing quite by chance.

A passionate actor in his free time, Kajaria founded a theater troupe while studying physics at college in New Delhi. He was first exposed to the world of print when advertisements for the upcoming production needed to be made: He realized that this was where his heart was. This is the same passion you still feel today when Kajaria presents his products, which he doesn't simply produce but nurtures until they are ripe, as if they were a part of himself – like the large-format calendars which he insisted on designing himself and which he even selected the images for. Simply because these activities are good for his soul, "We added glossy accents here with spot coating. The fluorescent colors lend this calendar's motifs something mysterious, an almost supernatural aura, while on this calendar sheet the printing with metal FX creates a noble effect."

The original founder of Anderson Printing, Byomkesh Ghosh, died early at the age of 50. Anderson Printing has Ghosh to thank for its name. He christened the print shop after his landlady, Mrs. Anderson, out of gratitude for her support which enabled him to complete his degree in printing technology at the university in Leeds. When Ghosh died in 1989 and none of his family wanted to manage the print shop, Kajaria took over the business. ▶



KAJARIA'S MANTRA, "THE EDGE THAT KEEPS YOU AHEAD" TRANSLATES TO LEADING IN ALL AREAS, INCLUDING TECHNOLOGY, EMPLOYEES AND CONCEPT.

Edge that keeps you ahead. This decision changed his life. All at once he possessed the employees and equipment – two offset presses with A3 format – to put his visions into action. And here he isn't modest at all: His mantra, "the edge that keeps you ahead," translates to leading in all areas, including technology, employees and concept, in order to offer customers the decisive advantage and keep ahead of the competition. Kajaria's science background proves helpful here since he is able to analyze markets carefully and seize profitable business opportunities to spur the print shop's growth. In this way he increased sales of printed labels for music cassettes from 100,000 to 1.3 million pieces – and that in his first year after taking over Anderson. "We simply offered the better service: speed coupled with quality," Kajaria remembers. These traits have paid off: The number of employees went up from 13 in 1989 to 90 today. Within the same timespan, sales have grown a hundredfold to 1.8 million euros in the last business year. Production of print products is also enormous: Roughly 90 percent of production goes to commercial products such as brochures or business reports with a volume of (about a million pcs.) yearly. The remaining ten percent are labels, of which Anderson Printing produces (about 18 million sheets) per year.

Many of the print products are designed exclusively by the 15 employees in the in-house design studio. A top-notch digitally networked prepress contributes to a technically perfect realization of these ideas. Anderson Printing was one of the first print shops in India to invest in a Topsetter P 74 from Heidelberg four years ago. With the CtP device, the business implements AM, Hybrid and FM screens up to 300 lpi. "The choice of screens is often underestimated, but it is decisive in a print product's effect. We printed this black-and-white volume of photographs with Heidelberg Satin Screening, which was the only way we were able to achieve such a sharpness of detail in the highlights and shadows," says Kajaria. Many products are also printed in an extended color space (hexachrome or hifi color), which ▶





The machines in the printing room, which include a Heidelberg GTO, a Speedmaster SM 52-4 and a Speedmaster SM 74-5, run around the clock. The employees, however, in postpress work in two shifts, predominantly cutting, folding and stitching. The garlands of fresh flowers, such as the one draped on the Polar cutter and the SM 74's inking unit, symbolize love, peace, and purity with their red, yellow and white petals.



N.K. Kajaria next to a photo of his spiritual guru, Srila Bhakti Swarup Tirtha Maharaj. In the photo below he and his son, Krishna, participate in prayers along with other members of the Gaudiya Vaishnav faith.



“MONEY IS RELATIVELY UNIMPORTANT TO ME. WHAT REALLY MATTERS IS THAT OUR CUSTOMERS ARE HAPPY AND SATISFIED.”

is only possible with an FM screen, in order to increase the brilliance of colors and plasticity of motifs. A further advantage of the Topsetter is its plate progression, which is not only environmentally friendly, but also saves time since certain steps are no longer needed.

With roughly 150 jobs a day, it is important to be economical when it comes to time; thus, many steps take place using a workflow such as sending data in JDF format to the printing presses – a Heidelberg GTO 52-1, a Heidelberg Speedmaster SM 52-4 and a Heidelberg Speedmaster SM 74-5 with coating unit. The machines are hooked up to prepress with Prinect Prepress Interface; the software takes over the accurate presetting of ink zones. During printing, the Prinect Color Management System ensures that the desired color tone is achieved, “With the workflow, we can cut down work time by 20 percent per day, but we want to be even faster in the future,” says Kajaria.

Kajaria praises the Heidelberg machines not only for their special print quality, reliability and flexibility, but also for their high automation and short make-ready times. The wide breath of orders with printing stock thicknesses of 0.001 inches (0.03mm) to 0.02 inches (0.6 mm) or weights of 80 to 350 gsm is a challenge, particularly since labels and packaging are also printed. “We had previously run print items through the Speedmaster SM 52 twice to coat labels. With the SM 74, which is in operation since last year, we can create a lot of these effects such as spot coating or metal FX in one pass inline. With a printing speed of 15,000 sheets per hour, we naturally achieve excellent throughput times,” Kajaria explains excitedly. The 15 employees in printing let the machines run around the clock six days a week; Sundays they are cleaned and maintained.

The environment, however, doesn’t get short-changed in the printing business: Anderson Printing uses soy-based, bio-degradable, high-density inks as well as recycled paper when it fits with the print product. “We don’t want to pollute the environment more than absolutely necessary. Given the rapid economic growth in our country with over a billion people, this is an absolute must,” reports the print shop boss.

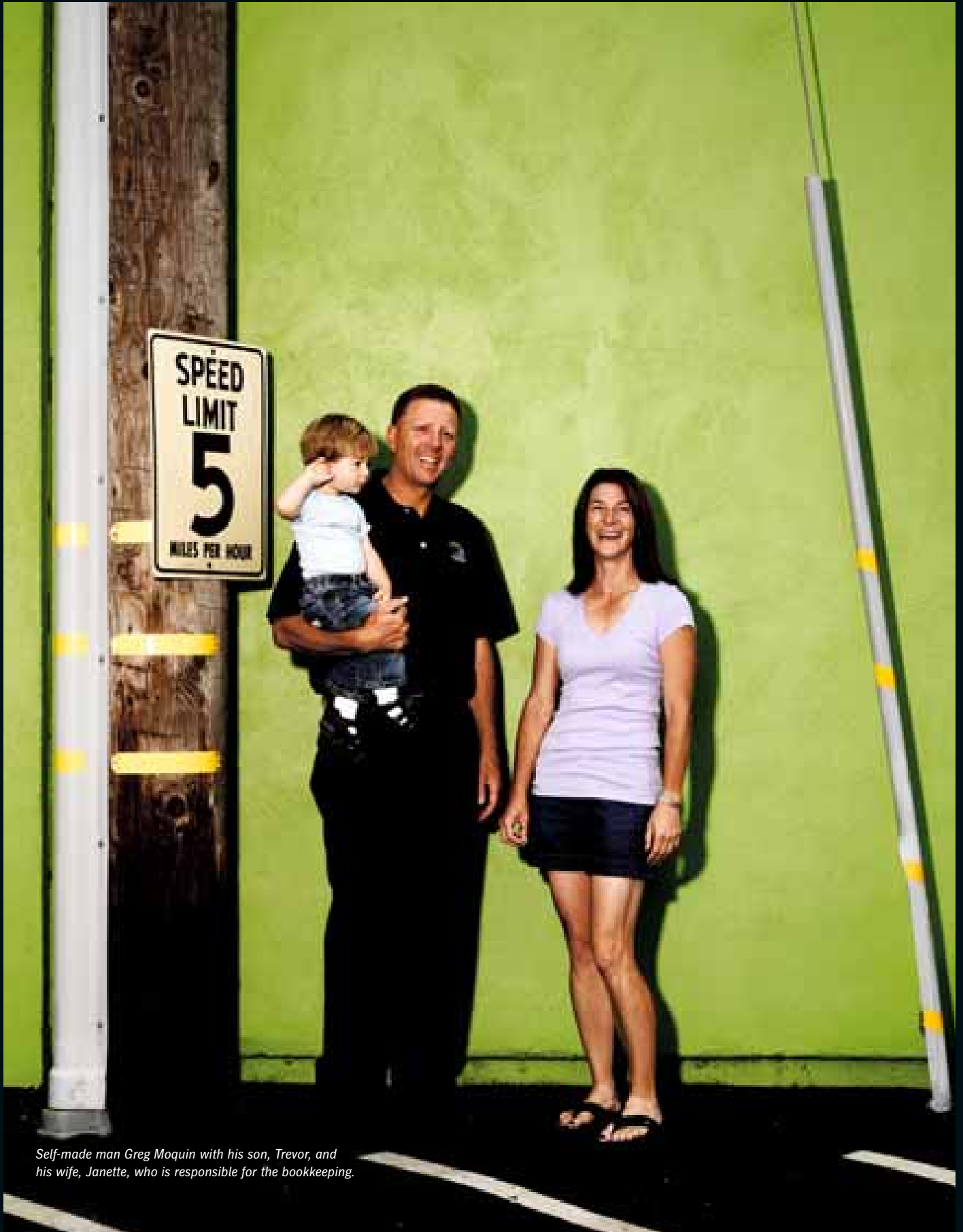
International Expansion. In postpress, which is equipped with a cutting unit 58 EM from Polar, saddle stitcher and perfect binder, 16 employees complete the print products. An external partner takes over a large part of finishing, such as UV coating. The products then go to shipping, where some are sent to London since Anderson Printing is also expanding internationally. The print shop opened a sales office in the British capitol this year. “Of course, it is to our advantage that we can complete orders roughly 20 percent cheaper than a European operation. However, cheaper prices bring absolutely nothing if the quality and service aren’t right,” explains Kajaria. He places a lot of value on the continual training and education of his employees, including the seminars offered at the Print Media Academy (PMA), Chennai.

For Kajaria, the employees are the soul of his business. They represent his values in their daily contact with customers. The print shop boss embodies this view as well, “Money is relatively unimportant to me. What really matters, is that our customers are happy and satisfied.” Anyone who has met Kajaria will tell you that these are not just empty words. ■

Facts & Figures

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Self-made man Greg Moquin with his son, Trevor, and his wife, Janette, who is responsible for the bookkeeping.

MOQUIN PRESS, USA

THE AMERICAN DREAM

555 Harbor Boulevard, Belmont, California. This is the address of one of the most unconventional print shops in the US: Moquin Press. The company's business model is as unusual as the career path of its founder – Greg Moquin – or is it really just “typical American”? Imagine, if you can: a flood of orders without any customers, two Speedmaster XL 105s and sunny California ...

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reg Moquin is someone who doesn't give up, someone who fights. He is someone who did not set out to start his own print shop, but then climbed the ladder from "garage printer" to owner of a business with 90 employees

just outside beautiful San Francisco. A true "Made in the USA" success story – and this despite a career start which was anything but promising. At his first job in an acquaintance's processing company, Greg was literally first given the "dirty work to do: mopping the floors, cleaning and taking out the garbage, – all day, every day." But Greg was ambitious. Little by little, he acquired the knowledge of a machine operator and made his way to the next rung of his career ladder: he became an "unskilled worker".

In hindsight, one of the driving factors in his career was, quite honestly, a lack of money, the businessman readily admits, "life in the San Francisco area is very expensive. And the position as an unskilled worker was not well-paid." Thus the young Moquin soon began looking around for another job. Eventually he found a position at a print shop which offered him a higher hourly wage. For the first time, Greg was actually trained on running equipment – the company's printing machines – and he discovered that he really enjoyed the work.

Printing in the garage. He was still not making enough money to pay the bills including the mortgage on his house. To make a little extra money, he decided to buy a used printing press with the goal of restoring it and selling it and pocketing the profit. But life does not always work according to plan: A realtor friend asked him to print some business cards and before Greg knew it, the next customer was waiting on his doorstep so he decided to set up his own business in the garage behind his house with two used printing presses, a platen press and a paper cutter. The neighbors, however, were anything but pleased about Greg's new enterprise. They wanted to enjoy their peace and quiet in the evening hours and on weekends instead of having to spend their free time listening to the sounds of a press humming next door. When the local authorities began to hound him about the noise, the garage printer eventually moved to a new building. "It was a little, 400-square-foot warehouse," he recalls. "It cost 1 US dollar per square foot." Naturally, this move involved more expenses, so Greg took on even more orders and proved to be very proficient.

Everything was going smoothly – or so it seemed – until his day job employer discovered that Greg was moonlighting on the side, running his own printing business, which they viewed as a conflict of interest. Needless to say, Greg was given his walking papers. "I became really desperate and started knocking on the doors of other

small printers with duplicators. I could print work they couldn't – solids, screens, and halftones on coated paper. I started getting work from those guys," Greg recalls.

At this point in his career, Greg realized he needed to make 100 US dollars (71 euros) in revenues a week for his livelihood, an ambitious goal – but he managed it and continued to grow. "From the start, I handled orders very quickly. If an order came in on Monday, I delivered it to the customer on Tuesday," remembers Greg. And according to him, short delivery times are still the trademark of Moquin Press today, "We are incredibly service-oriented. That's one of the reasons why the business is doing so well."

Working 24/7. At the beginning of the boom in 1989, Greg's days no longer had any nights. You could say that the business was 'all about Greg' at this point: Greg behind the presses, Greg at the paper cutter, Greg taking care of the office work, why, he even took care of some deliveries. The ensuing success did not limit itself to his private life, however. His business was buzzing so well that his wife, Janette, gave up her job as a receptionist to join him in his work full-time, taking care of the bookkeeping and most of the deliveries. But in

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I T SEEMS SOME OF HIS
 OBSESSION HAS RUBBED
 OFF ON HIS EMPLOYEES.

1990 the tide turned when his partnership with his most important customer failed three months after its start.

"That was the absolute low," Greg recalls. Yet, he and his wife managed to recover from the setback and within seven months, they had won back all of their old customers. Their trump card: the extensive production expertise. The intense growth led to a real vagabond life: The print shop relocated a total of 14 times due to space problems before settling into its current Belmont address in the San Francisco Bay area.

The business has seen its sales increase by roughly 15 percent a year ever since. And the number of employees has grown with it. But Greg still can't leave the work in the pressroom. It seems some of his obsession has rubbed off on his employees, not to mention his high demand for quality in his own work, "I also fired an employee here and there because I thought that their work was not good enough for me. Later I had to admit to myself that I should have kept some of those people. I learned from that and today I place a lot more value on my employees. They make up the resources I need to produce ▶



Moquin Press mixes colors as well. Employee Jeff Ballein knows how it's done.



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THE PRINTING PRESSES ARE CONSTANTLY RUNNING.
THUS GOOD SERVICE AND SOLID TECHNOLOGY ARE ESSENTIAL.
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Robert (Bobby) Weatherwax and George Bernal (from left; upper left photo) do good work for Greg Moquin. Both know their Speedmaster XL 105 in and out.



Gabor Ujvari, who emmigrated from Hungary, is a driving force in the Moquin Press pressroom.

quality work – thanks to their skilled operation on the new machines,” explains Greg and then emphasizes, “It is important to my customers that we work with the most modern equipment. Because they have come to expect the highest quality from me, my customers follow closely which machines we’re printing on.” Although ‘customers’ at Moquin Press is a relative term.

Success without customers. There are a considerable number of aspects of Greg Moquin’s story which are unusual, exciting and interesting. This includes his personal business model. He has never actually worked directly with print buyers, a print shop’s typical customer. Rather, his business is based on solid contacts with brokers who function as external sales representatives. The brokers advise their customers, large advertising agencies and businesses, on all aspects of printing. They bring in the orders for Greg and make sure that the right paper is delivered. Greg then sees to it that the print quality is correct and that the order is carried out quickly. He also mixes the colors himself. In the meantime, a good 200 brokers and print shops, largely from the greater San Francisco area, look to Greg for orders – although “only” around 75 of these brokers can really be included among the good – in other words regular – “customers”, accounting for roughly 80 percent of sales. In this way, Greg is a kind of “undercover” producer for large, international organizations, famous sports teams and service providers of high-quality brochures, catalogues and fliers.

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IT’S IMPORTANT TO MY CUSTOMERS THAT WE WORK WITH THE MOST MODERN EQUIPMENT.

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Moquin Press has been printing in two 12-hour shifts, every day, for years. Yet, the print shop does not even have a storeroom. Products are loaded and delivered immediately upon completion. The virtual end customers are all from the area – they are located along the Bay – from Oakland to Palo Alto to San Jose.

Today, Greg still sees himself as more of a printer than a businessman even though he has to admit that he can no longer operate the ultra-modern machines himself. Instead, he has the business side of things under better control and is planning a joint strategy with his wife for the company’s future. Thus, the Moquin family keeps up with the times: In 1999, Greg installed a management information system to determine how and where he actually makes profits or loses money. Before, it had simply been enough for him that there was money in the bank account at month’s end and he didn’t really know which job yielded what margins. But it was clear to him that

he can only afford not knowing about margins up to a certain degree, up to a certain business size. So Greg geared himself towards those jobs which were profitable.

Cash cow thanks to high-tech. “I wanted to buy the most modern offset printing press in the world,” explains Greg – the Speedmaster XL 105. The Preset Plus feeder and delivery are simply state-of-the-art technology. “The press components are all designed for an enormous tempo. This means that the XL runs with exactly the speed we need – and that’s very important for me,” says Greg. Actually, Moquin Press was among the first print shops in the US to own two Speedmaster XL 105s. And this is a typical “Greg story” as well: “At the Graph Expo 2004 in Chicago, I had actually wanted to discuss problems with – what was at the time – a new machine from another manufacturer and which we still had standing in the pressroom. But then our printers suddenly did not want to leave the Heidelberg booth and were so utterly fascinated by their machines. I returned the other machine, bought a Speedmaster CD 74 while still at the trade show and soon thereafter ordered the two Speedmaster XL 105s.”

The decision to go with Heidelberg was quite easy for Greg: He knew about the printing presses from Germany early on in his career. According to him, the reliability of the machines is legendary, “I got my start as a printer on a GTO. I still have the press today and refuse to give it up. Since our printing presses have to run fast and continuously, only Heidelberg can measure up to that because of its solid technology and its excellent service.”

The price of success has been high: a lot of hard work and little free time. Endless beaches, Alcatraz and the Golden Gate Bridge are as irrelevant as Fisherman’s Wharf or other famous tourist spots in and around San Francisco. Greg regrets that he missed out watching his older son, Bryan, (20) grow up. That is why he wants to take more time for his son, Trevor, who is not quite three years old. But when asked where they spend their free time, his wife answers with a laugh, “Still in the print shop.” Thanks to modern technology and good employees though, this is scheduled to change in the future. Both are convinced of that. ■

Facts & Figures

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Director Truong Thi Dinh wants to achieve profits: for the benefit of the country, the employees and the company itself.

FINANCE PRINTING COMPANY, VIETNAM



Star of the South China Sea

Vietnam's economy is booming, and the country's state-owned businesses play a large role in this success. The Finance Printing Company is no exception. The management of the Vietnamese Ministry of Finance's print shop in Hanoi strongly believes in modern processes and the latest technology.

From the very first hour, I was pretty much a part of it. We had really poor equipment back then," says Nguyen Van Luong, vice director of the Finance Printing Company. The print shop received its rather humble beginnings in the middle of the 1980s and, as a state-owned business, is directly under the control of the Vietnamese Ministry of Finance. "When I entered the company in 1986, there was only really outdated technical equipment with letterpress printing, and the first offset press, which arrived shortly thereafter, was a present from the Soviet Union and originated in the GDR," the 52-year-old Nguyen Van Luong remembers. Today, the Finance Printing Company achieves an annual turnover of almost 10 million US dollars (7.1 million euros) with its 13 Heidelberg offset machines. Roughly one-tenth of that is profit.

A socialist, state-owned enterprise which makes a profit, and that in Vietnam? A lot of people are surprised – the clichés from Hollywood movies still whirl through their heads,

and, even today, they still associate Vietnam with war and communism. But those times are long gone. The country on the South China Sea has returned to its traditional industriousness, and the economy is booming. As with China, the small neighbor to the southeast converted its communist economic system to a "socialist market economy".

THANKS TO PRIVATE ENTERPRISE, VIETNAM'S ECONOMY IS GROWING.

In the meantime, the country is becoming competitive with its northern neighbors and big role model, China. By the mid-1980s, the policy known as "Doi Moi" (renovation) brought about the renunciation of the collective economy. However, it was not until the mid-1990s that the current economic boom began to take hold, after the US lifted their 20-year trade embargo and Vietnam joined the Association of Southeast Asian Nations (ASEAN). In the meantime, Vietnam is the second-fastest growing national economy in the region – right after China. As a magnet for capital

for direct investments, Vietnam has surpassed its big role model to the north. In the past two years, Vietnam's national economy has gained by a full eight percent, with export being the primary growth engine. Exportation of goods rose by 25 percent in 2006 compared to 2005 and accounted for more than half of the gross domestic product (GDP). The former enemy in war – the US – has become the largest export market, and factories owned by foreign investors are responsible for almost 60 percent of the export volume. But state-owned businesses such as the Finance Printing Company are also a substantial component of the economic success. They account for almost 40 percent of the GDP and industrial output as well as 35 percent of exports. An end to the boom is nowhere in sight. The World Bank expects growth rates of around eight percent in the future and doesn't rule out double-digit rates. This past January, Vietnam realized the last step towards entering the world market: Twelve years after its application, ▶

OUR PROFITS SERVE THE STATE, AND THUS ALL OF US.



The friendly employees in postpress. The small tobacco stamps require a lot of manual work.

the country on the South China Sea was finally accepted as the 150th member of the World Trade Organization (WTO).

MANY NEW JOBS ARE CREATED THROUGH LIBERALIZATION.

“The change to a market economy wasn’t easy for me at the beginning,” Nguyen Van Luong openly admits. “But the principle of receiving ‘good money for good work’ convinced me. The economic liberalization created many new jobs, wages are continuously increasing, and

the profits which the country earns flow into building hospitals and kindergartens: And that, in the end, benefits us all,” states vice director Van Luong contentedly. Since 1990, the Ministry of Finance’s print shop has been operating as an independent business by request of its directors. “On the one hand, that means greater independence from the government, but it also means foregoing government subsidies,” explains Van Luong. Then, in 1993, the management procured the first printing press from Heidelberg. “I remember

it well. On October 28 we began production with an M-Offset. The machine is still in operation with well over 200 million sheets on its counter since then. And we’d like to continue to keep it in production, also because we have no problem receiving replacement parts from the Heidelberg representation here in Hanoi,” says Van Luong.

WAGES CONTINUOUSLY INCREASING.

The Finance Printing Company specializes in all types of print products for the financial



sector, such as brochures, magazines, books and calendars. In the meantime, roughly 30 percent of jobs are acquired on the free market. “Our spectrum of customers reaches from industry to banks and government agencies such as the department of transportation, from state-run institutions and businesses to foreign organizations, and private businesses,” explains Truong Thi Dinh, director of the Finance Printing Company. “Orders from governmental and private sectors balance each other out. Almost 10 percent of

our orders come from abroad,” says Thi Dinh, who entered the state-owned business only a year after her vice director.

SPECIALIST FOR TINY AND RAZOR-THIN.

Yet the majority of production at the Finance Printing Company is still allotted to orders from various departments of the Ministry of Finance. Their entire demand for print products covers both the Finance Printing Company in Hanoi as well as their location in the country’s southern region, in Ho Chi Minh

City (formerly Saigon), which was founded in 1997. The bulk of the business is tobacco stamps. “We produce around 4.5 billion stamps annually since we are the only print shop in the country which is allowed to print these stamps,” explains Truong Thi Dinh. “These tobacco stamps alone, which are on every legally sold pack of cigarettes, cigars, and other tobacco products, account for 2.3 million US dollars (1.6 million euros) in sales, which is almost 20 percent of our entire sales volume,” emphasizes Thi Dinh. In terms of ▶



Vice director Nguyen Van Luong has been in the company for over 20 years (top left). The printers at Finance Printing Company are experts in security printing (top right). Director Truong Thi Dinh (middle, 5th from right) discusses machine acquisitions with her employees. Concentration and an eye for detail are needed in completing print items.

THE STATE-OWNED COMPANY INTENDS TO ADD AN “INC.” TO ITS NAME.



printing, the stamps are particularly challenging and compare with security printing for banknotes or stocks. Many of the safety features are intended to make them forgery-proof because that's the only way to ensure that the tax revenue actually reaches the government. A software has been developed solely for the layout of the stamps in prepress. The paper needed is a very thin special paper with watermarks which is produced domestically. Postpress is a story in and of itself. “Cutting the sheets is incredibly difficult, and packaging the razor-thin, small stamps requires a lot of manual work,” explains vice director Van Luong. In addition, the print shop has to be very careful because not a single one of the razor-thin, tiny stamps can get lost.

All of this is, of course, reflected in director and finance expert Truong Thi Dinh's price calculations, “Our criteria for the product's price are paper type, how elaborate printing is, the necessary level of security as well as the format and quantity. Finally, the price is also dependent on the particular customer: Smaller customers often receive a cheaper price.” This may very well be an indication of the small difference between

Vietnam's economic model and that of capitalist countries, where the predominant drive is to obtain the highest possible price.

REVENUES HAVE DOUBLED WITHIN THE LAST FIVE YEARS.

The Finance Printing company is constantly forced to offer the lowest market price to the various institutions belonging to the Ministry of Finance – which are the print shop's main customers after all – regardless of whether it is profitable. The print shop has doubled in size, however, since Truong Thi Dinh took over its direction five years ago – both in terms of sales volume as well as technical equipment. “There were, and are, clear aims for growth – a one-year plan, a five and a ten-year plan,” explains Thi Dinh. The state-owned business' paramount goal in their current planning is the conversion to a joint stock company. In Vietnam, the state generally retains the majority of 50 percent of shareholding. “The employees also have precedence in obtaining stocks, and the rest then goes to the Vietnamese stock exchange, which was founded a good two years ago,” explains vice director Nguyen Van Luong. “However, there is a possibility for the state to only keep a minority

stake of 40 percent of the company, if management submits a proposal. The decision on our application hasn't been made yet,” adds Van Luong. In addition, part of the Finance Printing Company's long-term plan is to reduce manual work through investments in production technology.

This is known as rationalization in a market economy. And the Finance Printing Company management seems to have successfully arrived at just such an economy. When asked why the print shop isn't in-house, vice director Nguyen Van Luong laughs mischievously and responds, “Then our print shop could not continue expanding and staying good business partners with the Heidelberg representation in Hanoi, right?” ■

Facts & Figures

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★ Profit Maximization = Benefit to Society

At the Finance Printing Company in Hanoi, nothing is how it should be for a socialist, state-owned business: The management is interested in profit maximization, and in the future, they're aiming to convert to a joint stock company. But for director Truong Thi Dinh, this isn't contradictory.

Ms Dinh, could you describe your business goals for the Finance Printing Company?

Truong Thi Dinh: Our priority is to achieve profits as well as to strengthen the Finance Printing Company's position on the market. Although there aren't any official statistics about the Vietnamese printing market, according to my assessments, we're among the top ten of the country's roughly 1,000 print shops. We try to increase the following three benefits: Benefit to the business, to employees and to the state. If our government has revenue, it can help enhance our lives, build new and better schools, hospitals, streets, and much more. That improves our life overall. The profit we gain – after tax deductions, roughly consisting of 28 percent of profit – helps the three listed parties: A percentage goes to the Ministry of Finance, another percentage flows into new investments, and the rest benefits our employees. There are also special bonuses for the top performers in the company.

What role does the government, or the Ministry of Finance, play in the business?

Truong Thi Dinh: The Ministry of Finance doesn't intervene in the business side of things. We can make the decisions ourselves. I simply have to file a proposal in which I present my investment strategy. My superiors in the ministry have complete trust in me. If my signature is at the bottom of the proposal, then it generally gets approved. In the end, the machine we choose to buy is my decision and it is made together with my colleagues.

And what are your criteria for choosing a machine?

Truong Thi Dinh: Before I decide on an investment, I first look at our customers and which direction they appear to be heading. The machine has to fulfill their needs after all. We are also interested in the kinds of customers we can win with the new technology. That naturally plays an important role as well. In addition, I don't want the Finance Printing Company to be comparable with any other domestic print shops. I go my own way with the business. Our technical equipment, which consists entirely of Heidelberg machines, is unparalleled in Vietnam. Generally, I believe that the shape of a company is dependent on the person in charge. The various strategies, leadership styles and mentalities make the difference. ■

About Truong Thi Dinh

After completing her education at the Vietnamese secondary school for finance, Truong Thi Dinh (45) initially began her career at the Ministry of Finance. In 1988 she became head accountant for the Finance Printing Company, the print shop owned by the Vietnamese Ministry of Finance. In this position, she was responsible for the smooth processing of financial matters as well as for new customer acquisitions. After several years as vice director, she took over the management of the print shop in 2002. Truong Thi Dinh was born and raised in the Hanoi region. She is married and the mother of two children. Her daughter is currently studying in Peking, and her son is still in school. Her husband is also active in the printing industry. In her free time, Truong Thi Dinh is a passionate cook, but also practices another popular female passion – shopping.

HEI TECH



For more than 150 years there has been only one company whose name is associated with the highest-level requirements of the print media industry: Heidelberg. Our family of SupraSetter CtP systems, for example, stands for cutting edge technology in prepress. www.heidelberg.com

HEIDELBERG

News & Reports

Firm Favorite – 25,000th SM 52 Printing Unit Arrives in Belgium



Almost like six winning numbers in the lottery, the 25,000th printing unit in the SM 52 series arrived at the printshop of Hendrik Baert, who, along with his wife Natalie, Els Vianene from Plantin, and Dr. Jürgen Rautert from Heidelberg, celebrated the milestone unit (from left to right).

Belgium. Hendrik Baert had already sensed that the new four-color Speedmaster SM 52 would be something special for his four-man team. That the magenta printing unit for this new masterpiece would be the 25,000th in the SM 52 series though was a genuine surprise for the owner of Drukkerij Baert in Beveren-Leie. The celebratory installation was attended by a delegation from Heidelberg's Belgian sales partner, Plantin, and by Heidelberg's Director for Engineering and Manufacturing, Dr. Jürgen Rautert. Hendrik intends to use his absolutely "extraordinary" SM 52 to add attractive birthday and wedding cards to this thriving business specializing in short runs. To boost productivity, this family company, founded by Hendrik's father, Walter, in 1964, has also invested in computer-to-plate technology and several postpress devices from Heidelberg. Yet, "manual work" continues to play a significant role in the business. Baert's full service even includes the photography for postcard motifs.

For further information see www.drukbaert.be and www.heidelberg.com/hd/SM52

Birthday Celebration: Wiesloch-Walldorf Factory Turns 50

Germany. The world's largest printing press factory celebrated its 50th birthday in September. In honor of the anniversary, Heidelberg printed a brochure highlighting the early, but also current and future role of the Wiesloch-Walldorf factory in Heidelberg's network of manufacturers: With the help of the brochure titled "Precision in Series", readers can understand how High Tech is born at Heidelberg – from the ordering of the machines, to the manufacturing of components in Amstetten and Brandenburg as well as the assembly and production in Wiesloch-Walldorf, up to delivery to customers. A primary feature of the 36-page informational booklet is a flip book which familiarizes readers with the production of Heidelberg printing presses step-by-step. The brochure can be downloaded as a PDF from the "Information/Links" section of the Press Lounge at www.heidelberg.com or you can request a printed copy using the contact form on the Heidelberg website. "Precision in Series" is available in German and English.



Glimpse into the Work: In honor of the world's largest printing press factory, the brochure, "Precision in Series", highlights how a printing press is created at Heidelberg.

Prinect: News on the drupa

Heidelberg will be presenting an array of Prinect innovations at the drupa 2008 (05.29 – 06.11). Two of them have already been determined – the Prinect Postpress Manager and the Prinect Scheduler. The Postpress Manager also includes postpress in the JDF-based process integration. This, as well as the Prinect Integration System, Prinect Printready System and Prinect Pressroom Manager make Heidelberg the first provider to integrate all of a print shop's processes into one unified workflow. The Postpress Manager operates with folding machines in the TH/KH series, saddle stitchers from the Stitchmaster ST 350, the adhesive binder, Eurobind 4000, as well as the die cutters and folder gluers Dymatrix or Diana. In a second step, POLAR cutters are also connected. Postpress systems without on-line connections can also be integrated into the Prinect Workflow using data terminals. The new Prinect Scheduler is a production planning system integrated directly into the Prinect Cockpit. It supports those responsible for scheduling with flexible planning help – including semi-automated scheduling of complete orders and detailed planning of individual steps in production. If deadlines are at risk, this is reported in advance using an early warning system for cornerstones (for ex. availability of printing plates or paper). The work needed by management for planning is thus noticeably simplified and accelerated with information on current production status (using real-time feedback from online machines).

Detailed information at: www.heidelberg.com/hd/Prinect

POLAR – South African Milestone for Paarl Print

South Africa. It was 1953 when the first POLAR cutter arrived in South Africa. Now, 54 years later, the 1,000th machine is beginning operation in the Cape of Good Hope. This milestone machine, a POLAR 137 X high-speed cutter, is used by Paarl Print, a company whose roots stretch back to 1905. Paarl Print's latest cutter came in two versions – one version being an efficient means of production and the other a miniaturized decorative piece. The miniature version was a gift from POLAR to commemorate the occasion of the 1,000th POLAR sold in South Africa. Last year alone, customers from Heidelberg South Africa installed a total of 15 POLAR machines.



Milestone machine – Heidelberg representatives Jack Jessen and Brendon Atwell presented two versions of South Africa's one thousandth POLAR cutter to Mike Ehret and Kobus Nell from Paarl Print (from left to right).

For further information see www.paarlmedia.com, www.polar-mohr.com and www.za.heidelberg.com

WorldSkills: Heidelberg Supports Vocational World Championships



On the way to Japan: Heidelberg's chairman, Bernhard Schreier, (middle) greeted the eventual winner of the preliminaries, Sebastian Steurer (top, 2nd from left) in the Heidelberg Print Media Center at the German preliminaries.

Japan/Germany. The WorldSkills will take place in November in Shizuoka, Japan and is a type of "vocational world championships" in which trainees from all over the world have a chance to prove their abilities in the most diverse professional branches. Organizers expect around 850 participants from 45 member countries or regions to compete for gold, silver and bronze in 47 key professions at the 39th competition. The printing division, taking place for the first time as an official discipline, is energetically supported by Heidelberg: Heidelberg Japan is providing all machines for the competition – from a Suprasetter A74 to two four-color Printmaster PM 74s up to a high-speed cutter POLAR 92 X. Among others, Yasuhiro Suzuki and Sebastian Steurer will be competing on this equipment: The two trainees employed by Heidelberg customers, Toppan (Japan) and the Graphische Betriebe Eberl (Germany), emerged as winners at their national preliminary competitions.

New Three-Way Trimmer: Eurotrim 1000

Heidelberg is presenting the new Eurotrim 1000, an automatic three-way trimmer which makes the time-consuming set-up of cutting table and pressing dies a thing of the past: With the Eurotrim, the user simply enters all relevant parameters for production on the touchscreen. The compact machine's servomotors adjust all axes within a short amount of time. The Eurotrim manages up to 1,000 cycles per hour and cuts book blocks of up to 2.35 inches (60 mm) thick. It is best-suited for print shops or book binders which process short to average runs. The machine is available as a stand-alone or with the Eurobind 1300 as an integrated adhesive binder series which can deliver completed books in this "in-line configuration". The Eurotrim can also be ordered with an external suction device for removing paper trimmings as well as a roll delivery table for longer runs.



Extremely short make-ready times: The automatic three-way trimmer Eurotrim 1000 for short to average runs.

Luth Gruppen: Taking Prinect to the Hotel Room



Prinect on tour – because of the long distances in Norway, the local Heidelberg sales partner, Luth Gruppen, invited interested guests on Prinect tours in nearby hotels.

Norway. Norway literally means “the way north” and stretches across almost 14 latitudes, spanning numerous mountains and fjords. Some of these fjords run over 120 miles inland, making Norway’s coastline roughly half as long as the Earth’s circumference, or 13,000 miles (21,000 km). Distances within the country can thus be just as great, so Heidelberg’s Norwegian sales partner decided to simply accommodate its customers. The Luth Gruppen welcomed 43 customers from 20 companies to three nearby hotels to demonstrate the features of Prinect. The experts from Luth Gruppen traveled with a complete “Prinect Experience Tour”, including Prinance, SignaStation, MetaDimension, Printready System, a simulated CP2000 Center, and even an integration system running on three servers. The campaign was a success. “Customers realized we can solve many of their everyday problems using Prinect. That’s why this offering attracted such great interest,” says Luth “conciierge” Jeppe Nielsen.

For further information see www.heidelberg.com/hd/Prinect

New Folder Gluer: Easygluer 100



*Countless Possibilities:
The new folder gluer Easygluer 100
wins you over with its versatility.*

For those wanting to enter into the professional production of folding boxes, the new Easygluer 100 offers an interesting solution: In its basic configuration, the gluer processes straightline and lockbottom folding boxes as well as folding boxes with lids, runs with speeds of up to 984 feet/minute (300 m/min) – corresponding to a maximum of 50,000 folding boxes per hour – and can be fed grammages between 200 and 600 gsm as well as N, F and E flute corrugated board. There is also an

option for manufacturing 4 and 6-corner collapsible boxes. The Easygluer 100 can also be delivered with fixed folding elements in the lockbottom module, allowing special boxes or CD cases, for example, to be processed. In addition, the machine can reach peak performance with an optional alignment module, which not only ensures speedy and high-quality processing of straightline folding boxes or corrugated board, but also shortens the machine's make-ready time. Each model can be operated simply from a touchscreen and can be controlled comfortably from every position using a wireless remote control – which also contributes to reducing make-ready times.

Congratulations – Heidelberg Bulgaria turns 10

Bulgaria. It all started with service. In 1997, the focus at the newly set up branch in Sofia was on supplying Heidelberg's Bulgarian customers with service parts from Wiesloch-Walldorf within 24 hours. Heidelberg Bulgaria subsequently expanded its offering, which included establishing a consumables department in 2003, impressing more and more local customers with Heidelberg's legendary quality and thus achieving sales in 2004 of 9,727,000 US dollars (7 million euros) in 2004 already – and this with an upward trend since then. "And in 2007," says Bulgarian Heidelberg boss Nasko Krastanov assuredly, "we will continue to grow." The close relations which have in the meantime developed between Heidelberg Bulgaria, the city, and customers is also illustrated by the decision to name a street "Heidelberg Street" during the celebrations – and that filled Gabriel Todorov, manager of the Heidelberg customer Spertrum located on this street, with pride.



Ten Years of Heidelberg in Sofia: Surrounded by a Heidelberg delegation with chairman Bernhard Schreier (3rd from right) and Bulgarian head, Nasko Krastanov (2nd from right), Gabriel Todorov (middle) from Heidelberg's customer Spertrum celebrates the newly christened "Heidelberg Street".

Heidelberg FoilStar: Unique Cold Foil Application with 6 Webs



Simply magnificent: The enhanced FoilStar module from Heidelberg can process up to six foil webs and beginning fall is available not only for the Speedmaster CD 74, CD 102, but also for the XL 105.

Heidelberg is the only printing press manufacturer worldwide to offer its customers from the packaging, label and commercial business a cold foil module which allows partial foil to be applied: The enhanced FoilStar offers users the flexibility to employ one to six foil webs and enables printers to adjust foil needs precisely according to each current print job. In addition, the corresponding rolls can be freely positioned and different roll widths used simultaneously. The result: Depending on the print job, the user needs only half of the amount of foil normally required. Short make-ready times and low costs with the use of conventional offset printing plates, as well as processing speeds of up to 18,000 sheets per hour, excellent register precision, brilliant metallic effects and finishing possibilities on the most diverse kinds of printing stock are all a matter of course with the youngest cold foil module. The new module, suitable for the Speedmaster CD 74, CD 102 and the XL 105, is available this fall.

Further information may be found at: www.heidelberg/hd/FoilStar

Fotorotar AG: 90 Percent Less Waste

Switzerland. Since March 2007, the Swiss Fotorotar AG has been gathering experience with a five-color Speedmaster SM 52 plus coating unit using Anicolor technology. The 140-person company, located in Egg near Zurich, tests the Anicolor machine in their daily production of pamphlets, brochures, and magazines. A great deal of small print items are also part of the mix. "After four months, our machine had more than a million sheets under its belt," says the technical manager, Otto Brunner, "it has exceeded all of our expectations!" Compared to conventional machines, make-ready times were cut by 70 to 80 percent and start-up waste by 90 percent. In cooperation with Prinect Color Management, Fotorotar was often able to send the 20th sheet to postpress – with constant quality throughout the entire run. "With runs of under 1,000 copies, printing costs sank by roughly 30 percent thanks to Anicolor. And because of the short make-ready times and minimal waste, even the shortest runs of 50 to 60 copies now pay off," says Fotorotar's business manager, Jürg Konrad. The five-color version series of Anicolor tested by Fotorotar should be available for delivery in the first quarter of 2008.

Further information may be found at: www.fotorotar.ch and www.heidelberg.com/hd/Anicolor



Excited by their five-color Speedmaster SM 52 plus coating with Anicolor technology: Field testers Jürg Konrad and Otto Brunner (from left), managers from the Swiss Fotorotar AG.

For Hotmelt or Polyurethane Adhesives: Eurobind 600 and 1300

Heidelberg now offers new, highly automated solutions for postpress with the perfect binders in the Eurobind 600 and 1300 series. Both types possess a touchscreen where all relevant production information can be entered, and all parameters for block thickness are automatically set, which noticeably shortens make-ready times. In addition, both series offer innovative spine preparation stations which ensure not only high quality, but also flexibility and tidiness. The 600 series, which operates with a horizontal cover feeder, addresses smaller to middle-sized businesses with runs of one to 5,000 books per order; the 1300 models with vertical cover feeder are suitable for runs between 1,000 and 10,000 books per job. They are available as hotmelt or polyurethane variations. Thus, the scope of operation for perfect binders – depending on configuration – ranges from notebooks and instruction manuals to magazines and illustrated volumes as well business reports or image brochures. The hotmelt version can also be equipped with a premelter which increases productivity; this device is already integrated into the new polyurethane application system.



Ideal for smaller and medium-sized businesses: The new single-clamp perfect binder Eurobind 600, as is also true for its big brother, the Eurobind 1300, is available with either hotmelt or polyurethane application technology.

Further information may be found at:
www.heidelberg.com/hd/Eurobind

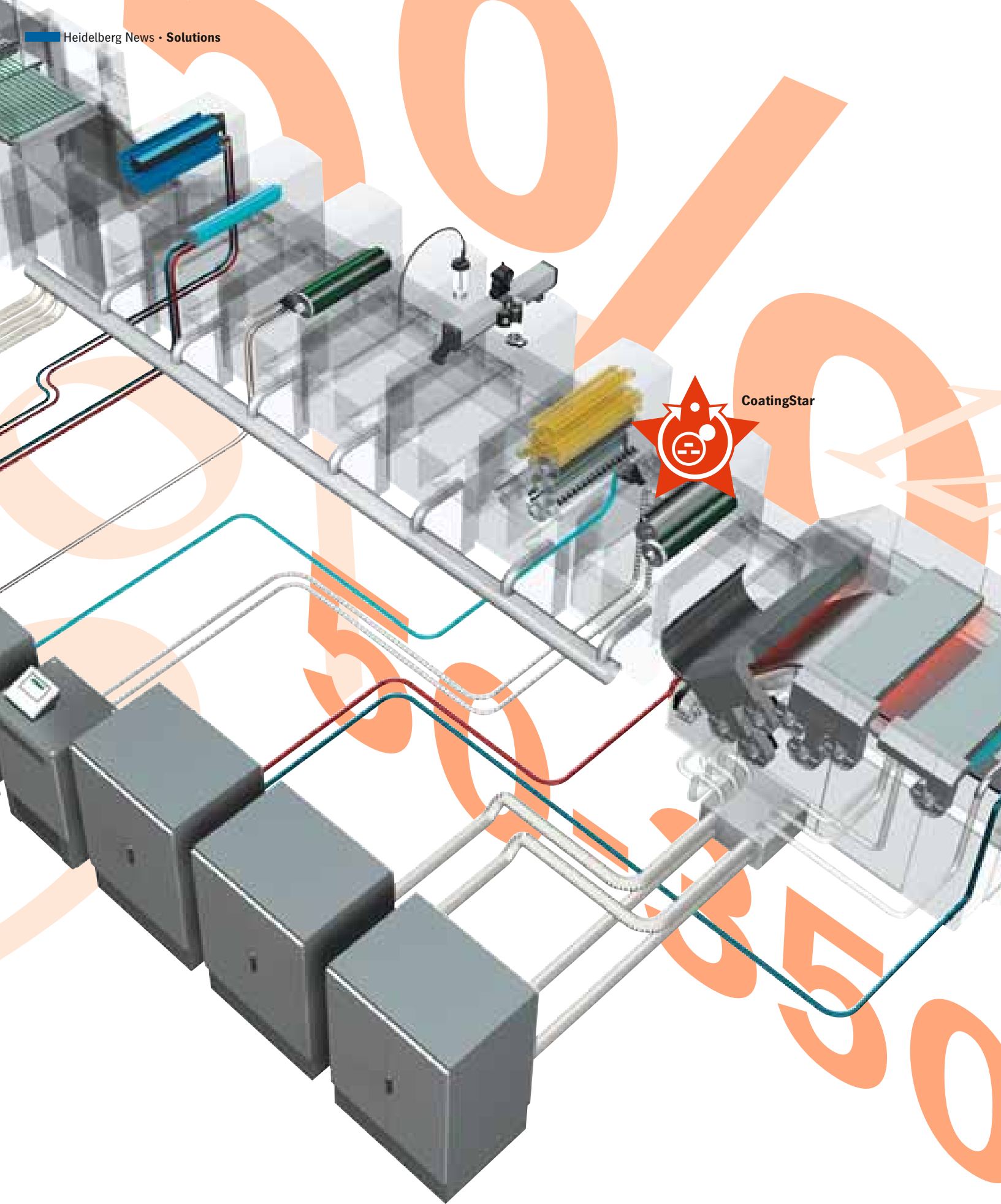
PMA and DEG: Tutoring for Vocational School Teachers



Signing the contract for the support of vocational school teachers in newly industrializing economies: Detlev Dierkes, Bernd Schopp and Dr. Jürgen Rautert as representatives of Heidelberger Druckmaschinen AG as well as Peter Peters and Marco Christ from the DEG (from left).

When it comes to the “newly industrializing economies”, opportunities for further training are very limited for vocational school teachers. This deficiency naturally has an effect on the training of young people in the print media industry as well. For this reason, the Print Media Academy (PMA) and the Deutsche Investitions- und Entwicklungsgesellschaft mbH (German Investment and Development Company – “DEG”) created a pilot project intended to improve print training at trade schools in India, South Africa, the Ukraine and eastern Turkey. In conjunction with the contract between Heidelberg and the DEG, spanning over two years, ten teachers from each country are to attend a four-week intensive course at the PMA as well as at the industry-wide training center from the Chamber of Trade in Muenster. The teachers will be familiarized with basic information, the newest technology and current training material. Heidelberg employees will support teachers in putting their training into practice at their respective schools. The project is financed by Heidelberg and the DEG – and thus in part by resources from the “Public Private Partnership” program of the Federal Ministry for Economic Cooperation and Development.

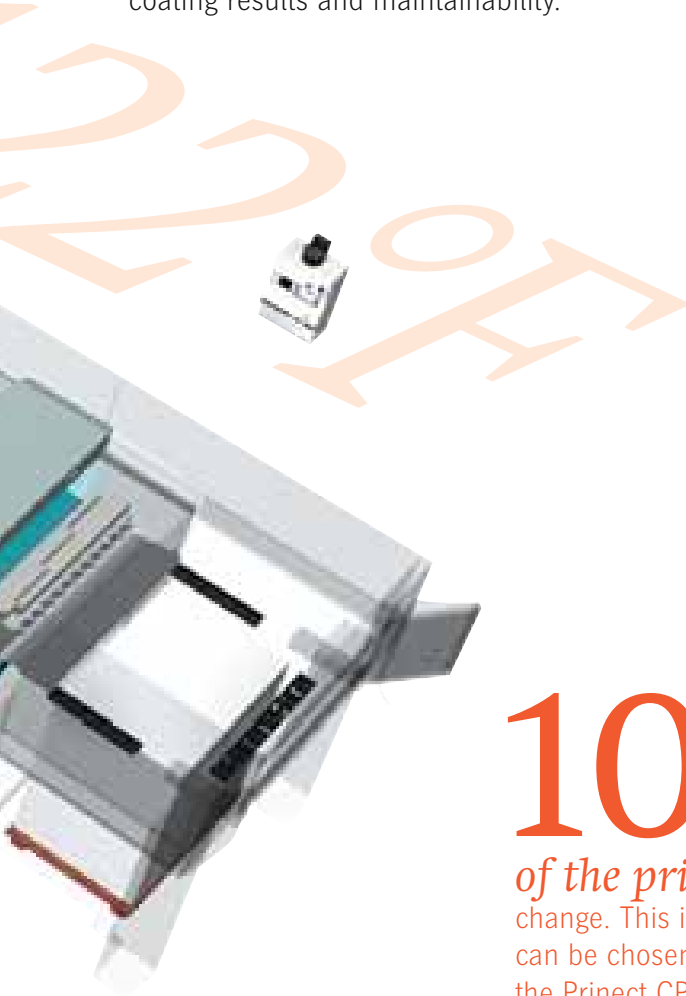
Further information may be found at: www.print-media-academy.com and www.deginvest.de



COATINGSTAR

The Professional's Choice of Pumps

Coating is “in”. More and more print shop customers are looking for that special something for their print products. But how can the most diverse coatings be applied quickly and with the best quality? The solution is “CoatingStar”: The coating pump for all coating types and coating units distinguishes itself through short make-ready times, consistent coating results and maintainability.



It protects cars from corrosion, makes fingernails glamorously colorful and is even a recurring feature on some clothing items. We're talking about different kinds of coatings. In printing, the multifaceted coating material is also highly sought-after. But not all coatings are the same. Some buyers of print items want to give their print products that necessary gloss; others want to simulate a particular structure, or sometimes the goal is simply to improve the surface feel. Regardless of whether dispersion, special-effect, or UV coatings are applied, high-quality coatings are almost

10 min

of the printer's time is saved per coating change. This is because up to eight washup programs can be chosen and started at the push of a button in the Prinect CP2000 Center.

always desired – and the sooner the better. “The CoatingStar is designed for fast coating changes and optimal coating quality. Its features make it the ideal coating pump for industrial users,” explains Martin Hirning from product management for peripherals at Heidelberg. The CoatingStar's secret to success: It operates entirely without pulsation. This means

that the coating flows completely evenly into the coating unit, thanks to the two chambers which simultaneously draw in and dispense coating. In the case of conventional diaphragm and hose pumps, however, the pulsation can lead to fluctuations in the application of coating. According to Martin Hirning, “Pulsation leads to varying pressure on the chamber doctor blade and generally increases undesired frothing. It's as if you tried to push a marble through a garden hose at constant speed with just your hand. It's impossible to do this totally evenly.” ▶

Fast cleaning. One of the CoatingStar's special features are the two annular-piston pumps which operate completely independently of one another. Up to 264 gallons (1,000 l) of water or solvent can be pumped into the coating unit per hour with their help. In this way, hoses and coating pan are clean in no time. Its fast cleaning is supported by two other factors as well: The printer can heat the water for washing up to 122 °Fahrenheit (50 °C) in order to also remove tough, dried-on coating residue. This makes cleaning the screen rollers easier. In addition, a hookup to fresh water for automatic subsequent cleaning accelerates the process. Cleaning time sinks by up to 20 percent in comparison to conventional coating pumps.

Fully automatic washup program. All good washing machines have various wash settings. After all, a silk blouse needs to be cleaned differently than a cotton t-shirt. And since the most diverse kinds of coatings exist, up to eight washup programs can be chosen in the Prinect CP2000 Center, thanks to the CANopen connection. Using the teach-in function, these are very easy to program. Each washup program can be started at the push of a button. This saves the printer up to ten minutes of work per coating change. A further advantage: All of the washup programs run fully automatically – from washing with industrial water to cleaning with fresh water and up to suction cleaning.

Nearly maintenance-free. The annular-piston pumps work without the use of gaskets, are anti-solvent and run without maintenance. “The printer just has to add a bit of water to the heating circuit regularly,” explains Martin Hirning.

In addition, because there's no pulsation, hardly any foam is created, which allows the coating to be distributed even more evenly. Coating results are therefore easy to reproduce.

More gloss. Not only the lack of pulsation is responsible for the high quality in coating, but also the even heating of the coating with an integrated plate heater. This can heat coating up to 122 °Fahrenheit (50 °C) as well, which allows the coating to be better distributed

122 °F

(50 °C) is the temperature the coating can be heated to using an integrated plate heat exchanger. This ensures consistent results in both UV and conventional printing.

20%

less cleaning time is needed compared to conventional coating pumps. Washing water heated to up to 122 °F (50 °C) and a fresh water line for automatic subsequent cleaning, among other things, help to achieve this.

in UV printing and melt on the sheet better. Last but not least, heating the coating ensures consistent results in conventional printing, particularly when the coating is stored in the cold. The CoatingStar also provides for a constant distribution of coating pigments by producing excess pressure in the pressurized chamber doctor blade (50-350 mbar). The pressurized chamber doctor blade can thus fill the screen rollers completely evenly.

Little coating residue. Additional features of the CoatingStar promote fast coating changes: Since the annular-piston pumps run forwards as well as backwards, coating residue in the hoses and coating unit can be pumped back into the supply container. This doesn't just make cleaning easier, but also reduces the amount of leftover coating to be disposed of. “Particularly in the case of expensive special-effect coatings, the printer saves an accordingly large amount of money,” says Martin Hirning.

50–350 mbar

is the amount of excess pressure produced in the pressurized chamber doctor blade. Thus, the pressurized chamber doctor blade can fill the screen rollers completely evenly, which leads to a constant distribution of coating pigments.

264 gal./h

(1,000 l/h) water or solvent can be pumped into the coating unit thanks to the two annular-piston pumps. Hoses and coating pan are clean in no time.

For especially fast coating changes, for example between dispersion and UV coating, it is also possible to supply a coating unit with two coating circuits through two coating supply units. Changing coatings between incompati-

ble coatings then only takes a few minutes anymore, rather than more than hour. This is because the printer simply has to choose the desired coating supply unit at the Prinect CP2000 Center.

Simple Operation. Thanks to the CANopen connection, the CoatingStar is also very easy to operate from the Prinect CP2000 Center. For example, printers can monitor the fill level of all containers. This prevents an overflowing or lack of washing agent, and the coating container can also be monitored for emptiness. In addition, the level in the coating pan can also be controlled through the Prinect CP2000 Center, and if the flow pump has too high a level or the return flow pump not enough, they can be turned off as well. Thus, not only is there little froth, but overflowing is also prevented. To reduce deterioration, the pressure drops automatically when the machine is not in operation.

350 units

is the number of CoatingStars which have already been installed on the Speedmasters XL 105, SM 102, CD 102 and CD 74 all over the world – without a single pump malfunction yet.

Rapid Amortization. “Print shops save a lot of valuable work time with the accelerated coating change, minimal operation and maintenance needed, and high degree of automation,” explains Martin Hirning. Due to this saving potential, the investment in the CoatingStar pays off already after less than a year. Upgrades in the coating supply area are therefore also financially attractive. This is why printers worldwide have already installed 350 CoatingStars on their Speedmasters XL 105, SM 102, CD 102 and CD 74, without a single pump malfunction yet. ■

Facts & Figures

www.heidelberg.com/hd/CoatingStar

What choices of coating pumps are there?

Diaphragm Pumps

- Pulsation
- Average operating expenses due to deterioration of the diaphragm
- Lower output at equal size

Hose Pumps

- High pulsation
- Fast coating changes since the pump isn't in contact with the coating
- High maintenance costs from hoses which have to be replaced regularly
- Hose's pump capacity decreases continuously from the start
- Risk of contamination if hose breaks

Annular-piston Pumps

- No Pulsation
- Short make-ready times during coating changes because of high pump volume and warm water washup program
- Low-maintenance operation due to gasket-free annular-piston pumps
- Extremely long-lived annular-piston pumps
- Comfortable operation through the Prinect CP2000 Center (CANopen)
- Individually adjustable washup program



Up to 264 gallons (1,000 l) of water or solvent can be pumped into the coating unit per hour thanks to the long-lived annular-piston pumps.

SPEEDMASTER SM 74

The Silent Lover

Your dream partner has the ideal figure, reads every wish off your lips and not only answers all your needs, but spoils you beyond your wildest dreams? Fabrice Dapoigny from France has found such a perfect liaison (relationship): His sweetheart is humble, doesn't always have to stand in the limelight and prefers to shine with inner qualities than diva-like allures. We're talking about Dapoigny's Speedmaster SM 74.

The Speedmaster SM 74 embodies the threshold between the commercial sector and industrial offset printing like hardly any printing press before. This is probably why it enjoys such great popularity: With over 170 long perfecting presses with 4/4 or 5/5 technology, they serve as a benchmark for customers all over the world. On top of that is its unusual flexibility: It is available with up to ten inking units and various types of coating units and drivers. And so it works as unimpressed as unnoticed in the shadow of its big brothers, like the Speedmaster SM 102 or even the Speedmasters CD 74 and CD 102. Wrongly so, finds Fabrice Dapoigny, manager of the print shop Fem Offset from Choisy Le Roi, because the Speedmaster SM 74 is for him both a beauty as well as a real workhorse, "I can no longer imagine a production without it."

Technology in detail and at its very best. The Speedmaster SM 74 possesses a suction tape feeder with central suction tape. Sheet transfer from the forwarding sucker to the suction tape thus takes place in tape speed. Furthermore, the pneumatic pull lays are maintenance-free and can be preset using a motor. In addition, the machine boasts an electromechanic and inductive double sheet detector.

For Fabrice Dapoigny, the feeder's simple operation is particularly important, "I can set up the machine for the most diverse printing stocks extremely fast with it. We print grammages from 60 to 400 gsm. The corresponding necessary input we take care of on the touchscreen of the Prinect CP2000 Center – and done! I've almost forgotten everything that used to be necessary for job changes already." The French print shop near Paris already has a four-color Speedmaster SM 74 with perfecting device in operation, but begin-

ning this year has also been using a four-color Speedmaster SM 74 with coating unit. In the meantime, the 15-person business has come to appreciate this coating unit as much as the technical novelties of its youngest dream partner.

Easy to operate. The Speedmaster SM 74 wins over its French operator primarily with its relatively easy and exact operation, because simple handling saves time and also helps to avoid mistakes. At the same time, this in turn also improves productivity, "Operating the machine is extremely easy, even though the technology behind it is very complex," reports Fabrice Dapoigny and then adds, "We have it running predominantly at maximum speed – and that with absolute reliability. Regardless of whether the runs are short or long, it delights us with a constant high quality. The Speedmaster SM 74 has never let us down!"

In the Speedmaster SM 74's inking and dampening system, the point of lateral oscillation, as well as the method of oscillation itself, can be infinitely adjusted. "Because of its ink flow, the inking and dampening system is ideal for full-surface work, but just as good when less ink consumption is desired," confirms Fabrice Dapoigny. Even oscillating inking form rollers are included in the basic configuration, as well as the speed compensated continuous dampening system Alcolor. "The quickly achievable ink-water balance remains stable throughout short runs. The inking and dampening system masters tricky forms with low ink consumption or those which otherwise would tend towards ghosting without compromise. In addition, the Speedmaster SM 74 proves itself with a precise register and a clear print image," says Fem offset manager Fabrice Dapoigny. ▶

HEIDELBERG
Speedmaster



In the printing unit, the Speedmaster SM 74 offers the epitome of high tech: AutoPlate, remote parameterization of circumferential, lateral and diagonal registers, corrosion-resistant cylinders, a wash-up device for blanket cylinders as well as impression cylinders, and motor-driven printing pressure.

The driers in Heidelberg's DryStar series are ideally coordinated with the Speedmaster SM 74's sheet travel, particularly in perfecting mode. This enables stable and reliable sheet travel. The DryStar driers were developed in cooperation with the leading manufacturers at Heidelberg to achieve the greatest possible harmony with the printing press. Also available for the version with a coating unit, is DryStar Coating, which combines infrared rays with hot air.

Jackets Provide Plus. Heidelberg is the first and only manufacturer to currently offer transport cylinder jackets processed using nanotechnology and in which a special ink-repelling coating is applied. Only with these coatings which serve to protect the fresh print – for transport cylinders and by request also impression cylinders after the perfecting stage – can productivity and quality be ensured and even improved. These specially coated, exchangeable jackets – known at Heidelberg as TransferJacket and PerfectJacket – save the printer up to 80 percent in cleaning time in some cases. In the case of perfecting presses, the jackets also ensure the familiar high quality in perfecting on both sides of the paper.

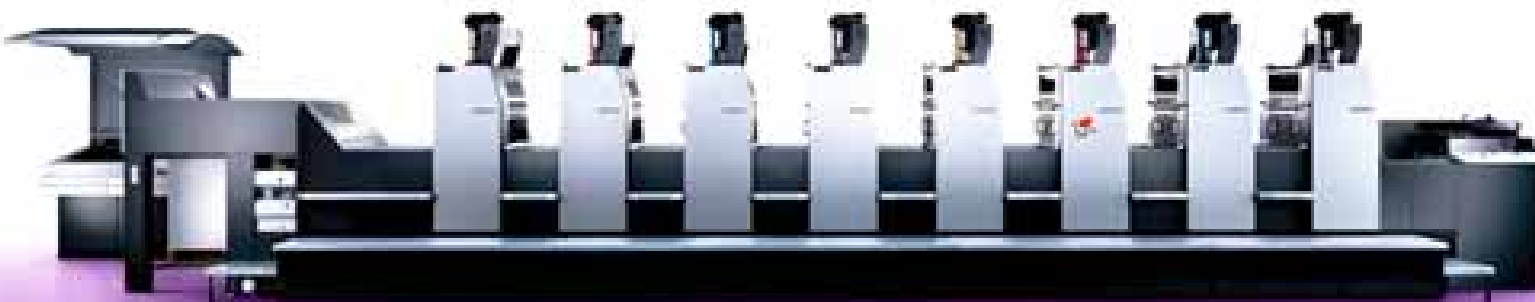
Whether as a two-roller system or chamber doctor blade coating unit, the Speedmaster SM 74 can be converted from one coating unit to the other in no time. The two-roller system is ideal when there are large variations between jobs in the amount of coating applied. The chamber doctor blade coating unit is ideal for very high, constant

amounts of coating. Helpful are special coating supply devices such as CoatingStar (more on page 38). Also offered is an optional inking unit temperature control. The French print shop opted for this since the quality is much easier to maintain and more stable.

Together forever. “Out of all of the printing presses we've ever had in operation, the Speedmaster SM 74 is my absolute favorite. It carries its qualities more inwardly, but when passion gets a hold of it, it no longer lets you go. I would never part from it – except of course for one that is younger, more beautiful and better – some time after the next drupa,” explains Fabrice Dapoigny convincingly, gesturing animatedly and with a wink of his eye. The personable Frenchman is sure that Heidelberg will continue caring for the Speedmaster SM 74 intensively. ■

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HEI TECH

For more than 150 years there has been only one company whose name is associated with the highest-level requirements of the print media industry: Heidelberg. Our Speedmaster SM 102, for example, stands for cutting edge technology in press. www.heidelberg.com

HEIDELBERG

SPEEDMASTER XL 145 AND XL 162, PART I

We didn't re-invent the wheel, we improved it!

A new era is beginning for Heidelberg at the drupa 2008: Starting May 29, the company will be presenting presses in formats 6 (40.2 x 55.9 in.) and 7b (47.2 x 63.8 in.) to the public for the first time ever. Heidelberg News spoke with the developer of the gigantic printing units for the Speedmasters XL 145 and XL 162, Gerd Merkel, about a special challenge: proving Heidelberg's tradition of masterful engineering in a new dimension and in only a very short time.



Developer Gerd Merkel took the idea of a modular printing unit assembly and made it reality.

»» THE SPEEDMASTER CD 74 AND XL 105 DID SOME OF THE PIONEERING. ««

Mr. Merkel, when did you first learn about the plans to build machines in formats 6 and 7b?

Gerd Merkel: It was in March of 2004. At that time, I was still active in the development of the Speedmaster CD 74 until my boss, Burkhard Maaß, suddenly came up to me and said, “We’re considering a large format. What do you think?” The idea was really exciting to me, of course. After all, with machines of this size, you begin to approach physical boundaries. When you have to work out the exact construction and design the corresponding parts, there’s no way it wouldn’t be thrilling.

And when exactly did you start researching?

Gerd Merkel: That went really fast. We began to work on the concept right after the drupa 2004. The time was ripe for this project, so we dug right in.

Which research areas were you assigned?

Gerd Merkel: My job was to make the idea of a modular printing unit assembly a reality. That included the entire configuration of sheet travel – so from feeder to offset, coating, and the drying unit as the case may be, and the delivery. I drafted the corresponding components, including all of the individual parts and in order to test the feasibility of my drafts, I was also assigned the planning and execution of tests. We also needed to consider optimizing assembly and production. We paid particular attention to the machine’s ergonomics because the new format class needed to be just as comfortable to operate as the smaller models after all – despite its size.

That sounds like a lot of work ...

Gerd Merkel: (laughs) That’s true actually, when I think back to our first full-scale model! It was impressive seeing the true dimensions of the machine. The wooden one-color press with coating was 49.2 feet (15 m) long, 16.4 feet (5 m) wide, and over 9.8 feet (3 m) high. That, of course, makes a very different impression, than my virtual 3-D models on the screen. By the way, it was with the wooden model that we noticed that we had set a handrail too high on the rise – but that’s another story. Back to the topic: Naturally, I didn’t develop the machine by myself. That’s no longer possible

with complex systems like this anyway. In fact, numerous colleagues from various departments were involved. Some concentrated specifically on the Preset Plus feeder or delivery, while others focused on the electrical drives. Another group of colleagues worked on hardware and software for the central control station, or Prinect functions. Finally some colleagues from assembly and production also added their valuable experience into the project – and naturally there were also service technicians and product managers involved as well.

And potential customers?

Gerd Merkel: They were also involved of course – right from the beginning as a matter of fact! We listened closely to the ideas and requests from publishing and packaging printers all over Europe, China and the US, so that we could incorporate their needs during the development phase of the machines.

What kinds of features do potential buyers expect from the new machines?

Gerd Merkel: High quality, reliability and productivity, short make-ready times, easy operation, flexibility...

... which sounds very familiar with the smaller format classes and raises the next question: Can the technical experience from the smaller formats be carried over to the new format 1:1?

Gerd Merkel: In some respects, yes. Particularly our models with capacities of 18,000 sheets per hour, so the Speedmaster CD 74 and XL 105, have done some of the pioneering for the Speedmaster XL 145 and 162. After all, both of these smaller models run at speeds today that required us to push the technical limits during their design. The renowned reliability of both of our racehorses proves that we really have full mastery of these threshold areas. There is no question that we gathered a lot of experience during the development of the CD 74 and XL 105 which has now been incorporated into the larger machines.

So what is the fundamental difference?

Gerd Merkel: In the dimensions. While that sounds really trivial, it nevertheless had a considerable impact on the development and construction. Think about the issue of “acceleration”. ▶





» THANKS TO THE MODULAR DESIGN, CUSTOMERS CAN CONFIGURE OUR LARGE FORMAT MACHINES INDIVIDUALLY. «

Because of the larger sheets, a lot more mass has to be put into motion – both in terms of the paper itself as well as in terms of the cylinders inside the machine. The heaviest cylinder weighs around 10,800 pounds (4,900 kg), has a circumference of about 9.8 feet (3 m) and is therefore four times heavier and larger than the biggest cylinder in a Speedmaster XL 105. This gigantic cylinder now needs to withstand enormous circumferential speed, shouldn't warp in the process, however, and isn't allowed to vibrate. In addition, it has to drive a very heavy or thick paper with almost no contact through a press as free of vibration as possible – until the sheet is stopped again at the end of the machine. And this is where the next challenge awaits: How do I bring the relatively high mass of the paper sheet to a standstill gently but efficiently – and without reducing the production capacity? In addition to all the corresponding rotating parts, there are numerous oscillating parts which are at work in the printing press, and because they are also big and heavy, they have to be designed to be that much more robust and stiff. This makes the whole thing tricky. However, in the end, a precisely printed sheet should come out which not only meets our own expectations for quality, but, most importantly, also those of our customers and, last but not least, our customers' customers.

And – does that work?

Gerd Merkel: (laughs) Splendidly, actually! We built the first test facilities last year in March, advanced quickly through the tests and we were able to print on the prototype by December of 2006 for the first time. This premiere was a six-color poster with coating, by the way. The press exceeded our wildest expectations and delivered an excellent job!

What did it feel like to see your “baby” in action for the first time?

Gerd Merkel: I can hardly describe it. Of course we had worked for two years to finalize everything to the best of our knowledge, which included generating 3D models, inspecting them

on the computer time and again, calculating strengths, simulating oscillations, drafting compensation gears, calculating deformations, qualifying and briefing suppliers, setting up test facilities, and testing individual components. In the end, everything has to work together – and that at a dress rehearsal in front of 400 people! So, the way I felt then must have been the same for Chuck Yeager before he broke through the sound barrier for the first time...

The test run took place in front of 400 people?

Gerd Merkel: (smirks) Yeah, I've never experienced such a large audience for a first printing. But you can't forget that this was a very historic moment for Heidelberg. We had also invited various suppliers whom we had worked very very closely with. Among them were representatives from companies that normally build parts for modern ship engines or shafts for the largest offshore wind turbines. Maybe it is easier to imagine the kind of dimensions we're talking about with this backdrop?

So, is it possible to consider a machine of these large-format dimensions “flexible”?

Gerd Merkel: Well, in the case of machines of this size, there are hardly any “off the rack” models anyway. So each of our large-format customers can have things customized to best fit their job range. For this reason we also implemented a type of platform strategy or “modular building style”: For the girder, for example, it's completely irrelevant if a printing, coating or drying unit is placed on top of it. Dependencies “upwards” simply don't exist in this respect. This approach pervades throughout the entire concept of the machine. We paid a lot of attention to making sure that its geometry poses as few limits as possible. This, in turn, opens up many more possibilities for production.

You mentioned the machine's good operability. What exactly does that involve?

Gerd Merkel: It begins with really simple things. The printer can carry out settings for the inking form rollers from only one ▶

side of the machine so he doesn't have to go very far. The impression cylinder washup device is also ergonomically well-positioned since it is easily accessible through a third operating level, and the washing unit itself can be easily pulled out of the printing unit thanks to a gliding system without time-consuming hassle. The fundamental factor in terms of "user friendliness" is definitely the comprehensive automation though. As already suggested, job data can be saved with a multitude of variables and thus the corresponding pre-settings as well. Even the sheet distance control in all units can be addressed with a preset function, with which sheet travel is also automatically monitored and controlled. The printing units can also be remotely controlled from the central control station, which allows printing plates to be set up fully automatically. But I don't want to give away any more than that just yet.

From your perspective, is the new series more of an evolution or a revolution?

Gerd Merkel: There are parts of the machine that were specially developed for this size. Yet, most of the features have already proven themselves in other Speedmaster models. So it's more of an evolution which has the advantage that even in the prototype of a new series, the experience of over 150 years of print engineering is behind it.

Are you talking about a type of "creation's crowning glory"?

Gerd Merkel: (laughs) Right now within the world of Heidelberg – if you say so ...

And externally?

Gerd Merkel: ... we certainly didn't re-invent the wheel, but we definitely improved it!

Mr. Merkel, it has been a pleasure talking with you today, and we are looking forward to continuing this story! ■

(Part II appears in the next addition of Heidelberg News).

About Gerd Merkel

He (50) was originally a technical drafter, who later continued his education as a design engineer. The ardent marksman has been working at Heidelberg since 1975 when he began working in the development department for the printing units MO and GTO. In the mid-1980s he became team leader for the MO and GTO printing units before taking over the creation of the printing and coating units for the Speedmaster SM 74 at the end of the 1980s. At the end of the 90s the CD 74 was added. Merkel's personal highlights include the enhancement of the machine control for the MO and GTO from the single lever control to the electric and pneumatic actuators as well as the design for the printing and coating units of the SM 74 and CD 74 of course. In addition, the automatic plate changing system, AutoPlate, traces back to Merkel. He has been working on the printing units for the XL 145 and XL 164 since spring of 2004.



PRINECT

The Gift of Sovereignty

An opinion still prevails in many print shops that the investment in a perfect IT infrastructure is only relevant for large businesses. A bias which turns out to be a misconception, as the BVD Druck + Verlag AG from the Principality of Liechtenstein proves: While it certainly is not one of the industry giants in terms of IT resources and process integration, it's a real "Goliath".

Liechtenstein supplies roughly 30,000 people with work out of a total population of 35,000. The principality isn't famous and celebrated for its particularly low unemployment rates however, but rather because it is an important international haven for banks: Insurance companies, endowment funds, and credit institutions are well-represented here, thanks to the advantageous regulatory framework. The financial industry, in turn, is the foundation for print shops since financial institutions constantly need brochures, fliers or other print products – not in gigantic quantities, but with higher quality.

BVD and the other print shops in the principality cannot live on the bank orders alone, however. Acquiring customers abroad is therefore essential – and in Liechtenstein's case, that begins practically right behind the gates of its capitol: Above the idyllic Vaduz, the medieval castle which houses the royal family serves as a landmark, as does the high mountainous border region to Switzerland and Austria. It is a postcard scene but there is a catch: Within the nearby alpine region there are numerous superbly-positioned printing businesses, not to mention ones located further away in neighboring Germany and Italy. So how does BVD owner Peter Göppel

successfully run a print shop in Liechtenstein? Göppel's answer does not include "hyper-quality" nor "cheapest production" or even "subordinate itself to one large customer", but simply involves "integration".

Integration? "Right," confirms Göppel, who thinks that Liechtenstein's geographical location has its positive aspects: "As we all know, necessity is the mother of invention, and this creative spirit promotes innovation. In our particular case, these innovations can also gladly be a bit before their time – whether in terms of our equipment, or in terms of the ideal workflow within our business."

Göppel's motivation for innovation turns out to be the following: Anyone having to go through countless tunnels or over endless switchbacks to bring their products to customers – and on time no less! – is well-advised to produce faster than the competition located closer to the customers. Somehow



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compensating for the time lost in the transportation of the print items is imperative. On the other hand, other print shops also have very fast machines in operation. Thus, in addition to the increased speed, superior quality also has to be delivered. But how can you be faster than others and still manufacture first-rate print creations?

This is where integration provides a decisive advantage: Thanks to the complete integration of the business components with Prinect, a “print shop with a built-in turbo” has emerged in Liechtenstein. This turbo draws its strength primarily from the added transparency of every print shop process: Relevant production data can be analyzed and used for planning and calculations at all times – at the push of a button and in a matter of seconds. “Company information is recorded and transparent, each order is correctly calculated and every step of production is as calculated as possible,” explains Göppel. In the future, the resourceful Liechtensteiner even wants to allow his customers to see things from his perspective: Each

customer will be able to track the current status of their respective orders at any time; nothing – including tunnels and switchbacks – will impair customer contact.

For that to happen, BVD will have to dig in again even though the business just finished an enormous project a short time ago: In prepress, a CtP device from Heidelberg was installed, and their employment of the Prinect Printready Sysem, Prinect Signa Station as well as Prinect MetaDimension tuned to perfection. In the pressroom, there is a two-color and a five-color Speedmaster SM 52 as well as a five-color and a ten-color Speedmaster SM 74. Additionally, the company also offers digital printing and BVD also has a saddlestitcher ST 400, the adhesive binder Eurobind 4000, a die cutter with integrated foil embossing and various other machines in operation. Since 2001, the company has been investing heavily in the area of networking and integration. “For us, integration ▶



means connecting the business aspects with the production aspects so that you can complete each order with the best quality at the highest level of productivity and efficiency – and that with little personnel expenditure and maximum profitability,” explains Göppel as if he were saying a mantra.

The customer should come back, not the product. BVD’s absolute strength is their focus on multiple-color, high-quality print products in short to average runs. This is where Göppel wants to demonstrate their expertise, advise customers and achieve the fastest pass times possible. This is why he also attends to the internal integration so intensively, but also warns of glitches in the beginning, “Only take steps that are well thought-out and that are as small as possible. Excite the respective employees about the project. Allow for setbacks, never give up and – very important – don’t lose sight of the goal,” advises Göppel. If it has not been done already, you should name one or several employees responsible for IT, and if needed, even create a new IT department. “Integration is a continuous process and will

never be completed. That’s the reality. Whoever thinks they’re on the safe side with fast machines alone is mistaken. People who exactly analyze and optimally link their entire chain of production will have enduring success. Businesses that have not started with their networking or integration today, will have a hard time surviving the next ten years,” predicted Göppel.

The management information system, Prinect Prinance, plays a key role in this aspect. BVD uses it to calculate every order in advance. “Because we are able to measure and analyze more parameters than ever before, we are simply able to see much more clearly. Static reports on sales volume, customer analyses, product groups and waste can be obtained very accurately. Production feedback on the calculations allows us to carry out reliable problem analyses and exact post calculations,” notes Göppel summarizing a few of the advantages of his personal integration model.

On the operational side, it also makes sure that jobs are quickly planned, ripped data corresponds to the printing plates’ response and laborious data controls fall away because color conversions from RGB or Pantone to CMYK proceed automatically. Automated spreading and chocking (trapping) also accelerates the work at BVD. In addition, the Prinect Signa Station delivers color and JDF data from prepress to the printing press almost magically but with extremely convincing reliability and a near unearthly speed.

Thus, in the end, BVD needs noticeably fewer work steps to process a print job. Because of the overall high degree of automation, make-ready times have been drastically reduced. Characteristic curves for coated and uncoated papers on the basis of Heidelberg’s Print Color Management contribute to this at BVD as well. Manual contact with the ink zones is thereby hardly needed anymore, hence the good sheet comes out of the

machine must faster. And this reduces waste. Even the time-consuming manual collection of data for post calculation at the end of the production chain is no longer necessary thanks to the central data management.

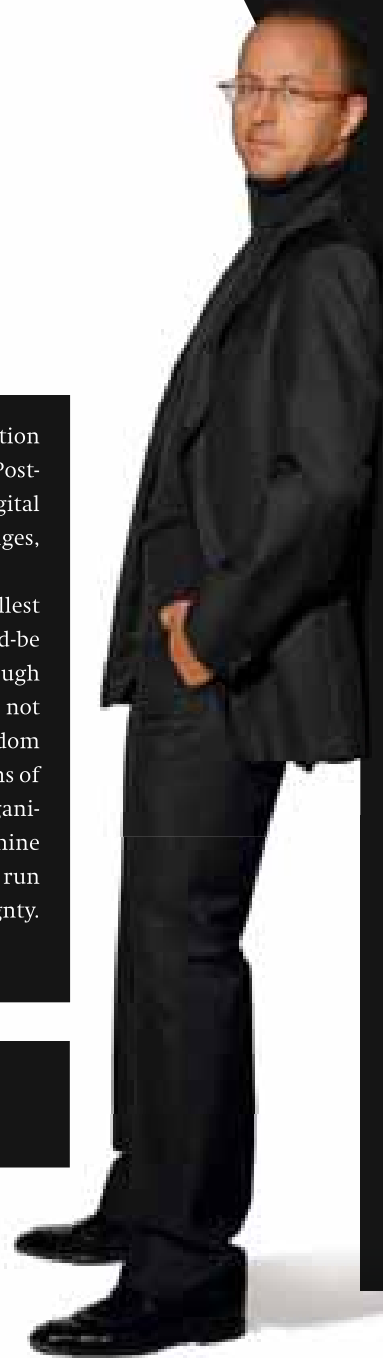
That's why Göppel's tip to peers who still have the project of integration ahead of them is, "Live integration at all levels. Generate even better statistics and constantly use and apply the results of integration."

The remuneration for this work at BVD is impressive. Earlier, over 60 percent of orders had a product value of under 253 US dollars (300 Swiss francs "CHF"), the sum of which thus accounted for only eight percent of the entire sales volume. These were usually very high quality, but also very short runs with an accordingly high amount of waste. Thanks to Prinect's help with integration, BVD was able to noticeably change this unfavorable cost structure. In the meantime, the business has cut down on the yearly paper consumption of roughly 1.6 million US dollars (2 million CHF) by a good three percent, or 50,550 US dollars (60,000 CHF). Furthermore, each individual print job takes a good eight minutes less time, and the automatic data collection saves another hour per day – which can then be used for the next order.

For this success, the Prinect Printready System, Prinect Signa Station, Prinect Meta-Dimension, Prinect Integration System and

Prinect Pressroom Manager are in operation at BVD. The introduction of the Prinect Post-press Manager as well as the Prinect Digital Print Manager were the latest challenges, with the Prinect Scheduler to follow.

In what is surely the world's smallest principality, Göppel and other would-be "print Davids" are exemplifying it through their own experience: True sovereignty is not a matter of size, but amounts to the freedom to decide and self-determination. In terms of printing, this means that only those organizations who have every process, machine and data flow securely under control can run their business with complete sovereignty. And this sovereignty is a true gift! ■



Facts & Figures

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BUSINESS MODELS, PART 1

The Day After Tomorrow Begins Today

What makes a print shop successful? Which business model is the best? Organizations wanting to be successful the day after tomorrow should start thinking about how to achieve that today. Here we offer two case studies designed to stimulate thought: After long planning and preparation, the German print shop Stach decided to specialize and currently processes fewer orders with significantly more success. Henry Luce from England, on the other hand, relies on his partnership with the franchise chain Kall Kwik.

Franchising

Specialization

Business model: Specialization
Stach GmbH, Arnsberg-Neheim, Germany

LESS IS SOMETIMES MORE

Ever since the German print shop Stach changed its business model, nothing is how it used to be. “Today we have much less work and stress, but we are considerably more effective and, most importantly, also more productive than before. We are also much more confident on the market and we no longer need to fight for every order at all costs,” explains manager Karl Heinz Ottersbach (50), who has been directing the business with Crista Stach (43) since September 2006.

Prior to 2003, the print shop from Arnsberg-Neheim, near Dortmund, Germany, produced primarily smaller standards jobs. Because of the degree of competition, these could only be won with service and fast delivery times. Company founder Georg Stach went for a change of strategies. The goal was to bring in more lucrative and more creative orders. The key to the plan was UV printing and high-quality coatings in short runs – on top of the speed factor, which has always distinguished the company that continues to be committed to offset printing.

Georg Stach knew exactly which printing press he wanted in order to realize his new business model. At the drupa 2004, he decided to purchase a six-color Speedmaster SM 52 with UV equipment along with a few other extras to enable fast production and an enormous breadth of coatings.

Range of Products Expanded. “Today we can create amazing effects with coating. We are also not afraid to take on tricky jobs with metallic effects or Iridin or produce on complicated materials such as plastics,” Otterbach says. This has expanded the print shop’s range of products noticeably. With the help of the coating unit with a doctor chamber blade system and the inking unit ahead of it, in which print varnishes can be used, spectacular results are achieved in coating brochures, envelopes and presentation portfolios. The print shop offers all of this features to its customers with great success.

The 35 x 50 (13.7 x 19.6 inch) machine format is an added success factor. It’s ideal for smaller jobs. In addition, it enables short production intervals, which allow Stach flexibility when it comes to carrying out short-term orders that need to be processed quickly. “We often print short runs of 1,000 adhesive labels or 500 presentation portfolios at a reasonable price. We process every order, including ones without coating, with the same dedication,” stresses Karl Heinz Ottersbach. Thanks to ideal logistics, as a rule, print products reach their customers across Germany – of which roughly 70 percent are agencies – the day after the order comes in. “Who needs digital printing anymore?” Ottersbach says in light of this short delivery time, offering food for thought.

Personalized Postcards. Another product which distinguishes Stach from the multitude of print shops is the coated postcard, which can be personalized. Once a week, only postcards are printed on combined forms with certain multiple-ups, often with a single-color back and four-color front with coating. In the process, 15 to 20 forms are generally accumulated per week, divided among roughly 60 postcard orders. “We have the perfecting device located after the first inking unit in the press so that we can produce the postcards in one pass. This not only saves us lots of time, but it also provides great possibilities as well: After we’ve printed the back in one color, the four colors come onto the front side. We can also use a special color in the fifth or sixth inking unit or apply different coating effects with the coating unit as well,” explains Ottersbach.

Coating Change at the Push of a Button. The special machine configuration ensures fast production processes. The Speedmaster SM 52 at Stach has a particular dryer set-up in the press and a special delivery, in which a cold air device and IR drying are housed. The cold air device prevents the freshly printed sheet from coming out ▶



Manager Karl Heinz Ottersbach and print shop director Dirk Vernholz (from right).

of the press still very heated. The advantage is that they can be further processed immediately and without distortion. The press is also equipped with two coating circuits, so that an extensive coating change doesn't always need to take place.

Motivated Employees. In the meantime, both of the old printing presses have been "retired", and the number of orders processed – earlier it was around 4,500 yearly – has dropped. Yet, profitability has increased significantly as a result of the more lucrative jobs. Over half of the products are additionally enhanced with special UV coatings. Thus, the 19 employees still have their hands full and print in three shifts. The new press has a positive impact on employee motivation because the team is constantly striving to exhaust the potential of their new Speedmaster. Out of this, a wealth of imagination arises – and word of this has quickly gotten around to customers, "Our customers are demanding much more elaborate products ever since the print shop made a very large leap in technical equipment and expertise," reports manager Ottersbach.

Strengthen Self-Promotion. What Stach underestimated, however, was the consultation with customers. "Just the communication. We now have UV printing – but that's not enough. Customers have to be nudged with ideas and convinced to also take advantage of these technical possibilities. But then they are happy when we explain what can be done and which high-quality print products can be

produced. This knowledge helps our agency customers to shine with their own customers in the end, of course," explains Ottersbach. Thus a business cycle has gained momentum at Stach, so much so that it almost found itself running independently. In order to keep this going, the print shop wants to market itself much more strongly in the future than it has. They have found it much easier to orient themselves with the new technology rather than to adjust their own external image to fit the technical development.

Ready for the Future. "We are still standing at the brink of all our possibilities regarding this press. I think we have a competitive edge and can continue to produce successfully with it for another four to six years. We are going to venture into the lenticular realm with new CtP equipment as well. And after 2012? Then we'll sit down with Heidelberg again and talk about taking the next leap in technology," says a convinced Karl Heinz Ottersbach. Maybe they'll come up with a new business model again.

Advantages of Specializing in Coatings

- **More profit**
thanks to the more lucrative (UV) orders
and higher productivity
- **Greater employee motivation**
since the challenge to exhaust technical possibilities
promotes printer creativity
- **New customers**
are won with the equipment, special knowledge
and greater range of products
- **Less pressure from competition**
many print shops cannot process particular
coating orders
- **Secure future**
with the far-reaching technical possibilities
of the new press

Business model: **Franchising** Henry Luce, Kall Kwik Exeter, Exeter, Great Britain

FAMILY BONDS

With the looming demise of the textile industry, Martin Luce decided to change careers around the end of the 1970s. He gave up his position as manager at a well-known British textile manufacturer and founded a print shop. He and his son, Henry, who runs the business today, owe a lot of their success to the franchise chain, Kall Kwik.

Exeter, located in southwest England, owes its commercial rise to textile manufacturing in the 17th century. Thanks to the textile industry, the region developed into one of the centers of trade and for a long time, work in this branch was a safe bet. Then came globalization, however, and little by little the textile manufacturers migrated in the direction of the Far East. Around the end of the 1970s, the slow death of the business was felt everywhere, and for Martin Luce, it was clear that his professional future was to be found in another industry. Printing, he realized quickly, had a future. Without knowledge of the field, but with a goal in sight and seed capital in his pocket, he threw himself into a new challenge – but not an unforeseeable adventure. He decided to become a franchisee at Kall Kwik. The American chain with British headquarters in London then provided guidance in setting up the business, purchasing machines and dealing with customers. That was in 1980.

Among the Top Ten. Roughly nine years later, son Henry followed in his father's footsteps and is still running the print shop today. In the meantime, the print shop with a good million pounds in annual sales and 15 employees has advanced to the top 10 within Kall Kwik family of franchisers – and that with around 170 franchise print shops in the United Kingdom.

Standing in the pressroom are a six-year-old, four-color Speedmaster SM 52, a Quickmaster and a Printmaster, an old AB Dick, a Polar cutting machine as well as various other postpress machines. Two imaging systems are at work in prepress. Even the logistics were perfectly managed: DHL is located right next to the new print shop building in Exeter's industrial area.

The print shop's original location in the cramped city center was kept as a branch office – and for good reason: On Fore Street, a lot of walk-in customers come by, order print items such as small brochures, menus, posters or business cards. Many of these orders are produced there directly using digital printing, which makes up about 20 percent of Luce's sales. A good 30 percent of orders for offset printing also come from the location in the city center.

What makes this particular franchise solution so ideal for a successful businessman like Henry Luce? Though he was initially a bit surprised at the question, Luce finally answers that he personally could not imagine any other alternative business situation for himself. He mentions that his print shop profits from an established name which is known throughout all of Great Britain. In addition, when it comes to advertising and marketing, Luce receives support



Owner Henry Luce believes he is in good hands as a franchisee.

through the unified corporate identity of Kall Kwik. Since marketing is often a weak point for smaller print shops in particular, Luce is appreciative of this service.

Favorable conditions. In addition, he can also purchase all consumables economically through the franchise chain's London headquarters. Thus, he receives discounts which otherwise only large print shops would receive and that helps to increase his ability to compete. Now and then, even concrete orders come in from the headquarters, as was the case with a nationwide supermarket chain which was looking for a printer for a weekend insert. The challenge was that the insert had to correspond with local offers and needs. The supermarket company thus found an ideal partner in the Kall Kwik chain with its many locations. The supermarket also has a store in Exeter which Luce now prints for. In the event that other print shops within the chain ever acquire orders which they cannot produce themselves, there is always someone in the Kall Kwik group who is able to help, and in this instance, Luce is often employed as well, thanks to his top-notch equipment.

Furthermore, a new offer to expand their business model recently came from Kall Kwik: Equipped with the corresponding software through the "kdesigngroup," franchise partners can now offer their expertise in layout and creation with relative ease. Luce made took advantage of this and now offers these services to his roughly 300 customers through a new subsidiary. ▶

Franchising Advantages

- **Better market**
access with the franchise chain's established name
- **Low-cost purchase of consumables**
thanks to central procurement
- **Advertising support**
with the unified corporate identity of the franchise chain
- **Additional orders**
through contacts referred from headquarters
and other franchisees
- **New business options**
the franchise chain makes expertise in layout and
design available
- **More security**
the printer receives support in emergency situations
such as illness or machine failures

Familiar security. The businessman experienced special support when he fell victim to a bombing in Egypt during his vacation almost two years ago. In the chaos of injury, recovery and psychological problems, Kall Kwik headquarters offered him spontaneous help – even to take over management until he was feeling better. Though it never came to this, the assurance of such a safeguard considerably helps towards finding one's inner peace again, Luce describes the situation in retrospect. The relationship with Kall Kwik is very good – even familial.

What advantage would he have without his franchise family? His response is as ordinary as insightful, "That is as if you worked for a large chain frying hamburgers and suddenly decided not to carry their name anymore and offer your own hamburgers." Luce is convinced many customers wouldn't take part in that step and explains, "They want the same quality that a large restaurant chain guarantees, and that includes certain sauces, hamburgers and buns. They would also have higher costs in the event of a separation from the franchise partner because where do you get all those buns and hamburgers in the future? As a small local buyer, there is no discounted purchasing anymore." And that's what it would be like for him, too.

Few provisions, lots of advantages. Luce brings in again many times over the relatively small commission that has to be paid to the chain for membership. Each member pays headquarters the same percentage rate of sales. The advantages clearly outweigh the disad-

vantages. Yet he also mentions that a step in this direction should be carefully considered. "The franchise chains have good consultants who can show you the precise advantages and disadvantages. Those interested should simply make use of this offer," says Luce.

The businessman Luce views his future very positively. In one or two years, a decision will need to be made regarding an investment in a new printing press. Thus he's following the development of Anicolor technology very closely. When it comes to his business model – with short runs and a lot of job changes – the offset machine with its characteristic quality would be the ideal alternative to digital printing. The businessman makes these decisions completely on his own: Kall Kwik headquarters have no influence here at all. Luce places a lot of value on this fact because he is, after all, the unrestricted boss of his company and not an employee of the franchise chain.

On Luce's mind – even if not an acute problem – is the question of who will take over his family business. He hopes that one of his three daughters will follow in his footsteps – or at least meet a nice son-in-law that is interested. ■

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HEIDELBERG

TOPPAN PRINTING MUSEUM, TOKYO

ON GUTENBERG'S FRAIL IN JAPAN



The headquarters of the Toppan Printing Company are located in the Koishikawa Building in the middle of Tokyo – not on a single floor, mind you, but within the entire complex. The “print shop” in XXL format houses a truly remarkable printing museum, the only one of its kind on the island realm of Japan – if not in the entire world.



Museum director Izumi Munemura and vice director Riichi Hoshino.

A printing press which printed the Western alphabet using metal letters was used for the first time in Japan in 1580. Christian missionaries in the Jesuit order brought the printing press with them to Japan. Some 300 years later, an Italian, Eduardo Chiossone, taught four Japanese printing engineers in the Finance Ministry's print shop the art of engraving as well as how to manufacture printing plates for printing bank notes, stamps, and other commercial paper. In 1900, these same four engineers founded the Toppan Company, which translates as "letterpress" in English. Due to the privatized printing of commercial paper, as well as the printing of money, enormous emphasis was placed from the very beginning on printing with the most exacting quality. Soon thereafter, Toppan began printing high-value cigarette packaging, and so the company began its commercial ascent. Today, offset printing still accounts for nearly 80 percent of the global concern's turnover. The company counts among the 50 largest stock companies in Japan, and is listed in the Fortune 500. Excluding its subsidiaries, roughly 10,548 employees work directly for the company, and if subsidiaries are added, this number increases to 32,724. The modern Koishikawa Building in Tokyo was constructed to mark Toppan's Centennial.

Roughly 30,000 annual visitors. "The printing museum was founded in 2000, it is wholly-owned by Toppan, and receives no state support," emphasizes Riichi Hoshino, the museum's vice director. The museum logo is an ancient Japanese alphabetic character no longer recognized today: it means "eye". Visitors are invited, after



The Wave in the Ukiyoe style, an eight-color print famous in Japan.

all, to come and look and to be astonished – hence the symbol. Since its opening, more than 30,000 visitors answer this call annually – asking to have their "eyes" opened. Many of the visitors are Toppan's customers, school children and naturally, devotees of ancient documents. Anyone who thinks that in establishing this project, Toppan was involved in a somewhat less-than-admirable self-promotion can rest at ease; the printing museum is exceptional, and its presentation on the invention of printing and its importance is completely impartial. "The world, with all its striking modern achievements, including the flight to the moon would not have been possible without Gutenberg's invention of moveable type. Communicating experience and knowledge to a wider public only became possible with the letterpress; it provided the basis for a world filled with research, technology and development," explains Hoshino regarding the core idea animating the museum.

Individuals searching for an oasis of peace and culture at the center of the hectic Japanese metropolis will have found the right spot in Toppan; in the basement of the high-rise, visitors can immerse themselves in another time. Behind its modern façade, Toppan's building hides an outstanding collection of printed items. In the museum foyer visitors can admire the fabled Rosetta Stone, one of the most important textual documents from earliest history: with its assistance, the deciphering of Egyptian hieroglyphs became possible. A Gutenberg Bible is also on display as well as an array of CDs and credit cards. Almost all of the exhibits in the foyer can be touched; they are designed to communicate the "value" of writing to visitors. With few exceptions, most of the exhibits in this area are ▶



Replica of a wooden Gutenberg press from the 15th century.

reproductions. However, these “copies”, such as the Gutenberg Bible or the famous Rosetta Stone (the original is in London’s British Museum), are impossible to distinguish from their real counterparts. For Hoshino, what remains important is the atmosphere evoked: “Knowledge on paper or mediated through written characters is something extremely special and valuable. The transmission of knowledge by early man through cave paintings, and later chiseled onto stone, or set down on paper, marks the beginning of modern humanity,” Hoshino explains. Additional exhibit rooms in the museum display ancient Arabic sacred writings, Buddhist texts, and – naturally – original pages from the B42 Gutenberg Bible.

Experience printing and history. School field trips stream through the rooms, but many visitors who come simply want to learn more about printing and take pleasure in the printer’s art. “Our visitors are invited to experience printing and its history. An appreciation of the tremendous role played by printing stands at the heart of the museum, so that its influence on the history of mankind can be experienced,” says Izumi Munemura, the museum’s head of Curating and Planning. To this end, the museum cooperates with all the great printing museums in the world, such as the Gutenberg Museum in Mainz (Germany), the Vatican Library in Rome (Italy), the British Library in London (England), and with print museums in Korea and China as well as with the Smithsonian Institute (USA).

The entire exhibition is child-friendly, and it counts presenting printing technology among its goals. The paths taken by all important cultures to the discovery of printing are traced, including



Interactive pillars describe exhibition items when you lay your hand on them.

Islamic, Jewish, Christian, European, and Asian culture, as well as Japanese. An important Japanese exhibit – very famous in Japan – is an eight-color print of a single wave in the Ukiyoe method, each of its discrete colors is individually printed.

Interactive Experiential World. The oldest printed item on display comes from Japan – a scroll dating to approximately 770 A.D. Despite such ancient treasures, the displays do not seem musty. Each exhibit display case is fitted with a monitor: you can sit down, push a button, and the contents of the exhibit are explained. Add to this the interactive experiential world: at the touch of hand, large pillars placed in the corridors open to provide additional information on epochs and individual exhibit items.

In a composing room and print shop, where several printing presses stand representing various eras, visitors can even prepare their own small print works under the guidance of an expert printer. In addition, visitors can delve more deeply into further topics related to the world of printing by attending a three-dimensional show in the museum’s very own ultra-modern cinema.

Special Exhibit a Magnet for Visitors. In the past year, the museum arranged to bring a very special exhibit to Tokyo. It came on loan from the Museum Plantin-Moretus in Antwerp, the Netherlands. It included rare works from the “Biblioteca Palatina”, probably one of humanity’s most valuable collections of books. This collection was originally located in Heidelberg, Germany, but in 1622, as part of a war settlement, the collection was presented to the Vatican in Rome. ▶



A wooden miniature illustrates printing during Gutenberg's time.



In the print shop exhibit, moveable lead letters are still made by hand.



Director Izumi Munemura is a lover of old books.



The Toppan Museum is also a popular destination for school children.



Modern brand meets traditional printing artform.

Since then, most of the works have been stored in the Vatican, locked away from human eyes. Special exhibits of items selected from the collection are rare – they are far too precious, and the dangers of damage or even loss arising during transportation are far too great, something that can only be covered by extremely high insurance, which is too expensive for most museums. The success of this special exhibition was enormous, and similar exhibits are planned.

Toppan displays Japan's cultural heritage. The museum's most valuable exhibit is the Surugaban Letters made of bronze, declared part of Japan's cultural heritage, created between 1606 and 1616. They originate from the "fatal" Edo era. This phase of Japanese history lasted from 1603 to 1867. During these years, Japan sealed itself off from the rest of the world. It was hoped that Japan could preserve its culture and identity and not be influenced by foreigners. The exhibit items reflect a Japanese style of "typeset", which is Japanese letters with letter cases, as well as an edition of a "management book" which gives advice on how to manage the nation and which was printed using these letters. The book is a translation from the Chinese. A Japanese general who founded the Edo era, intended to use the book to assist in reforming Japanese society. The museum also displays an original page from the B42 – Gutenberg Bible, and a replica of an antique printing press made of wood on loan from the Plantin-Moretus Museum.

The museum is offered as a birthday present to the general society in order to stir interest in the art of printing. It hopes it can bring people to reflect on the subject of printing, to learn more about

printing's influence on daily affairs and history, and also demonstrate how valuable printing is in our daily lives. "We live in a digital world, but we should not forget our roots: how did our knowledge and our technological potential arise? We owe all this to the invention and spread of printing. This is where the roots of modern communication are, and it is the museum's job to make this clear," explains Hoshino. More than 2,000 m² (21,500 ft²) have been set aside for this purpose. It takes 14 employees – excluding reception, cleaning crew, or guards – to attend to the exhibits, manage the exchange with other museums, and oversee the whole administration.

What is particularly noteworthy, is that Toppan is not using the museum to advertise itself, but rather offers visitors and opportunity to learn more about printing and the history of writing in a museum setting, at no charge. This deserves respect. Individuals visiting Tokyo should certainly take the time to see what is arguably one of the most beautiful and impressive printing museums in the world. ■

Facts & Figures

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Tips & Tricks

Environmentally Friendly Cleaning

Using cleaning agents sparingly and minimizing water consumption are the first steps towards designing an environmentally sound washup program. In either case, the automatic washup systems from Heidelberg Druckmaschinen AG help ensure that wash procedures are carried out in an environmentally friendly manner.

In order to significantly reduce air pollutants in the pressroom and in the environment, low-emission cleaning agents have been on the market since the drupa 1990. These cleaning agents are made up of hardly volatile hydrocarbon mixtures, vegetable oil esters, or mixtures of these. When these products came on the market, however, technical problems regarding the compatibility of certain materials in the printing presses arose.

Thus, printing press manufacturers, working with the Fogra Graphic Technology Research Association, the Berufsgenossenschaft Druck und Papierverarbeitung (an institution for statutory accident insurance and prevention in the printing and paper processing industry), the German Printing and Media Industries Federation and IG Media came up with an agreement, the "Industry initiative for the reduction of solvent emissions in offset printing."

Its goals are to minimize solvent emissions in offset printing and thus protect people and the environment, and to limit the risk of damage to machines with a technical clearance test for cleaning agents.

Fogra's specialized laboratory is commissioned by cleaning agents manufacturers to perform this technical clearance test as a prerequisite for the smooth use of washing agents within the operation. They then test for Heidelberg Druckmaschinen AG,

■ the cleaning agent's physical-chemical parameters (including miscibility with water,

viscosity, temperature behavior, stability and iodine count),

■ the washing agent's compatibility with non-metallic materials (rollers, printing blankets, hose and seal materials) as well as

■ with metallic materials (machine coatings, metallic components, printing plates).

In a swelling test, three identical roller parts are immersed in the cleaning agent for 24 hours at room temperature. Often the cleaning agent causes the rubber material to swell, which means that an increase in mass and volume of the roller parts can be determined. If this gain surpasses set limit values, it can no longer be assumed that a smooth operation is possible. The test assembly for a swelling test with roller parts is depicted in Illustration 1. Since some types of cleaning agents can corrode the coating (Illustration 2), the interaction between cleaning agent and the machine coating is also tested.

Once the individual tests have been completed, Heidelberg receives a report from Fogra with the results from the clearance test and then decides if the product is suitable for use with its machines. If successful, the cleaning agent manufacturer receives a test certificate from Fogra (Illustration 3).

Products which have passed the test are compiled in a list which is continuously updated by Fogra. The most current version of this list can be found on Fogra's homepage: www.fogra.org/washes/index.html. Over 290 products from manufacturers all over the world have already been successfully certified for use in Heidelberg machines. ■

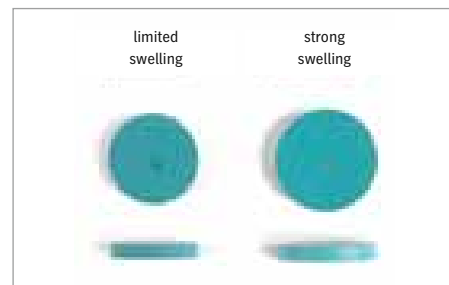


Illustration 1: Example with two cleaning agents: The first cleaning agent shows little interaction with the roller part (left), and the second cleaning agent shows a strong interaction.



Illustration 2: Corrosion of the machine coating after reaction to a particularly harsh cleaning agent.



Illustration 3: Example of a test certificate.

SPOTLIGHT

Make Way for the Data Bus

Do you understand technical jargon? Do you like to decipher hieroglyphics? No? Then you're like most other people. That's why we get to the bottom of technical terms using plain and simple English. Today we will be looking at the CANopen data bus system.

A printing press is pretty complicated. And today, an increasing amount of peripherals and technology need to work with the press problem-free. Consider the Coating Star on page 38. The introduction of new technology makes the operation of presses continuously easier and significantly improves quality.

The connection of every component in a printing press takes place in secret and unnoticed. Simply said, this happens over long strings of cables which are somehow connected with one another and generally come together at a control station such as the Printect CP2000 Center. Not every device is connected to every other one though; it would be much too complicated, on the one hand, and the cables needed for that would have to be extremely long and also extremely heavy. Therefore all information uses a shared data line. The Controller Area Network (CANopen) was created so that information from the various systems is compatible with one another and data can be exchanged. Translated into plain English, this means "local network of control units". And these interfaces work

somewhat like a communication network which allows the exchange of information and data to occur over just a single data line.

In order to prevent an endless tangle of cables in cars, ships, airplanes and modern machines, engineers and technicians developed an ingenious invention: Data travels over a data highway via a CANopen data bus. The neatly packaged data arrives one after the other at all control units – as exactly, orderly and punctually as a London public bus approaches each bus stop. All of this takes place through one "fat" main cable. If there is an entry at one station or in one program of a printing press, this is forwarded to every appropriate station. The corresponding data package then gets out, or on, at the designated necessary stops.

These processes happen in fractions of a second, of course. A kind of bus with the speed of light, so to speak. Thus, if a Speedmaster CD 74's speed is increased via an entry at the control station, the drier automatically adjusts itself and the powder spray device starts releasing more powder onto the sheets. Since Heidelberg is the only manufacturer

to consistently employ CANopen, our customers benefit from the easier operation of peripherals, simple saving of all settings at the control station and from remote access to peripherals with RemoteService.

For computer enthusiasts and speed fanatics, here are the exact numbers: Transmission speeds are around one megabit per second. The latest trend is the use of fiber optic cables which, when active, twitch with flashy and dramatic infrared light impulses – so you can also watch the CANopen data bus during high-speed transmission. ■

Facts & Figures

A CANopen bus is actually made up of a set of lines through which signals are transmitted. A computer system generally has multiple internal and external buses. The CANopen data bus is responsible for receiving and sending data. Heidelberg is the only manufacturer to consistently employ this technology, which enables the operation of peripherals from the central control station and offers customers additional functions.

Winner of the Readers' Survey – HN 261

1st Prize: Trip to Heidelberg

Christian Sacher, Gisler Druck AG, Altdorf, Switzerland

2nd to 5th Prize: iPod

B.S. Faouzi, Media Print Imprimerie, Sfax, Tunisia

René Jackowski, e-mark GmbH, Morbach, Germany

Jordi Sogas Coscó, Artimatge S.A., Vilafranca Del Penèdes, Spain

Jorge Becerril Romero, Litho Kolor S. A. de C.V., Toluca, Mexico


6th to 10th Prize: XL 105 model


Felide L. Reyes, Inkwell Publishing Company Inc., Pasig City, Philippines


Kumar Chopra, North India Printers Association, Ludhiana, India
Tanakrit Khomhom, Bank Management Group, Nakhon Pathom, Thailand


Otto Sprengel-Kegel, Imprenta Mercur S.A., Montevideo, Uruguay
Suvendrini Amaratunga, Print Collection (PVT) Limited, Mount Lavinia, Sri Lanka


HN Voices


 *Michael Thoms, Rosendahl, Germany:* Nice topics, but there are also small companies with small-sized Heidelberg configurations which defy the competition. Please report on the “small giants” on the market. A GTO or Printmaster can also make successful companies.


 *Chittranjan Choudhury, Calcutta, India:* Your article “What’s your UV-type” was so informative and interesting that we have started racking our brains about the possibility of going in for a SM 52/74 UV press to complement our existing press.


 *Okoth Anthony, Kampala, Uganda:* Inspiring articles. I nevertheless wish you would also cover stories about the print industry in Uganda. The lack of awareness has led the government to underestimate the national print industry. Hence, about 75% of jobs are printed overseas. And this even though we have the proper equipment from Heidelberg to handle those jobs.

 *Sebastian Boissieres, Wiesbaden, Germany:* Great to see the issue of climate change discussed from an ecological as well as economic perspective in the printing industry.

 *Mike Swift, Wellington, New Zealand:* A great read and our customers have commented on the publication’s great quality. The stories are always very interesting and relevant.

 *Ignacio Gaganone, Buenos Aires, Argentina:* Excellent information. The magazine is not just informative but also illustrates the possibilities with practical examples right away.

 *Joaquín Agullo Ferre, Alicante, Spain:* UV is a very interesting topic and opens up new markets.

 *Sami-Gabriel Fegali, Kuwait:* I agree with you that knowledge is the future and that we all have to transmit our experience to others. The exchange of ideas and expertise is a must.

 *Christophe Hubaut, Kain, Belgium:* As a small print shop which just acquired a Printmaster PM 52-2, it’s really motivating to also find articles in a trade publication about other small print shops like us for a change. We, too, like to stay posted on technological innovations.

IMPRINT

© Heidelberger Druckmaschinen AG
Issue 262, 2007

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

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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

100 countries

Languages

German, English, French,
Korean, Spanish

Cover photo

Greg Moquin, owner and director of Moquin Press

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