# Heidelberg

# PRINTING WITHOUT A

QL-Art in Beijing

**AN EYE TOWARDS THE FUTURE** Investing correctly with Heidelberg Business Consulting

**GREEN PRODUCTION IN THE BLACK** Ecologically equipped machines save resources and money

## HEIDELBERG



#### Print Media as Brand Engine

After a rearranging of responsibilities in the executive board at Heidelberger Druckmaschinen AG, it is my honor to greet you for the first time in this space. In my current position as a Member of the Management Board of Marketing and Sales at Heidelberg, I am pleased to be able to present you the newest issue of the Heidelberg News in this editorial!

This first issue after drupa focuses on a trend that had perceptible effects at this year's leading trade fair: The complete printing value chain is growing increasingly closer together. For this reason, drupa 2008 was a true cornucopia for all actors in the print media industry – for prepress businesses, print shops and finishers, but also increasingly for print buyers, agencies and designers. To be successful as a print service provider in this professionalized landscape, you now need not only perfect technology, but also a greater degree of expertise. You need to provide clients with economically produced print media that supports their communication goals in the media mix as effectively as possible. In this issue of the Heidelberg News, you'll learn which solutions Heidelberg has ready and how some print shops have used them to become a brand themselves. I hope you once again find something of interest to you!

Yours

-Sing & auto

Jürgen Rautert Management Board, Marketing and Sales Heidelberger Druckmaschinen AG

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# How can I further reduce my costs?

"The difficulty lies, not in the new ideas, but in escaping from the old ones."

John Maynard Keynes, British economist and politician Am I really on the right track with the planned investment?

"For every problem there is a solution that is simple, neat and wrong."

Henry Louis Mencken, American publicist and author Have I really taken all important factors into consideration?

"If your only tool is a hammer, you see a nail in every problem."

Paul Watzlawick, psychotherapist, communication theoretician, author

# Say A. Guess B?

Changes and strategic realignments are often an ordeal full of false starts and missed opportunities. Hindsight is usually 20/20 – but the next time you end up facing exactly the same questions anyway. In such a situation it's helpful to learn from others such as external consultants who have heard and solved comparable problems countless times already. They can identify the pitfalls and give upcoming decisions a solid foundation. But even experts can't replace your own expertise. At the most, they can add to it.



Should I strengthen my core competencies or put new ideas into practice?

Is now the right time or would it be better to wait?

# What plans does the competition have?

"The definition of insanity is doing the same thing over and over but expecting different results."

Albert Einstein, German physicist

Which new technology is right for me?



Will I gain or lose market shares in the future?

"Five frogs are sitting on a branch. Four decide to jump. How many remain sitting? Answer: five. Why? Because deciding and doing aren't the same thing."

American children's riddle

Is the risk a bit too big for us after all?

Are we really too expensive? Or are the others just better at selling?

#### "How much do you waste?"

Ad slogan for the foundation of the world's first consulting agency by MIT professor Arthur D. Little in 1886 Why aren't my earnings higher?

Do we have enough expertise or do we need external support? How do I gain access to new suppliers?







Successful since 1877, Christian van der Fecht's family-owned business faced a turning point when Austria's print shops reached bottom in 2004. He would have easily found a buyer for his business in Wolfsberg. Even then, the print shop was still bringing in annual sales of almost 5 million dollars (3.2 m. euros). If he had done that, he would only have had his work as owner and publisher of the regional weekly paper the Unterkärntner Nachrichten to take care of from Monday to Tuesday. And the rest of the week he could have driven to the sea in Croatia with his wife and just enjoyed life. "At the time, I really did consider doing that because we were losing 10 percent in sales every year," says Christian. "But then I realized that after no more than a month I would have been bored to death."

estless Visionary. Sitting across from the Carinthian, it's hard to believe he ever thought about quitting his life as a printer even for a second. His hands are constantly in motion - they fiddle with a pen or a cigarette box, anxious to be employed. If Christian had to sit around idly, he would probably explode from force and energy. Quit? No. Instead, in 2004, he packed a suitcase, drove to drupa in search of new ideas, looked around and came back undecided. Back at home, he spread out all of the brochures he had taken with him on the kitchen table, thought things over, made a cup of coffee. "And then it was really simple: I was looking at the table and all of a sudden I saw that the idea is lying directly in front of me - all the brochures, fliers, and packaging, finished with hot foil stamping, UV coating and Iriodin. My wife and I looked at each other and were immediately sure that that was what we were going to do."

That sounds like a piece of cake. But four years later, when you look back and see what has become of the idea - only then do you realize the true momentousness of this kitchen scene. And all of a sudden you can see how two people decide to throw their entire lives upside down. How someone suddenly recognizes the signs of changing times, gathers all his energy together and completely reinvents himself. How he buys 129,167 square feet (12,000 sq. m.) of grass in the middle of Lavanttal between Saualpe and Koralpe, sits in an excavator on his 40<sup>th</sup> birthday and lifts out the first 65 feet (20 m.) of virgin soil himself. He is someone who says, "I don't explain to people how to build a ship. I tell them about the sea and awaken their longing until they say, 'OK, let's build a ship!'"

uality at all Costs. Christian allowed himself a large budget for the conversion to finishing and packaging specialists. He invested a total of 17 million dollars (11 m. euros) in the 37,674 square foot (3,500 sq. m.) print shop and administration building as well as in one of the most modern production lines in Europe. At the heart of the production is a six-color Speedmaster CD 102 Duo with three coating and drying units, UV, foil and carton equipment. Christian was the first to install these machines in Austria - and thanks to which he now possesses a truly unique selling point. "I built the entire concept for the print shop on the Duo with the goal of being able to carry out all high-quality jobs ourselves," says Christian, adding, "That's why I equipped the machine with every available feature and kept asking Heidelberg for more until they said, 'Alright Mr. van der Fecht, that's it now, no more - it's simply not possible to add anymore."

Next to the Duo is a six-color Speedmaster CD 102 with coating unit. In order to be able to process larger piles of paper and card, both printing presses are set about 24 inches (60 cm.) higher. The Heidelberg brand dominates in prepress and postpress as well. A fully automatic Suprasetter 105, a Diana Pro 114 and the die cutter Dymatrix 106 are just a few of the machines continuously in use. On top of that are various folders, the ST 400 saddlestitcher and a 137 XT cutter from Polar-Mohr with sheet elevator and fully automatic jogger. The entire print shop workflow is based on JDF and is regulated using Prinect. "My goal is absolute top quality," says Christian. "That can only be achieved when you have all production steps under control at all times and aren't dependent on the abilities or motivation of a sub-contractor. That's why it was clear to me right from the start that I would need a perfectly coordinated and holistic concept from one source, and Heidelberg was able to offer me that."

ushing Technical Boundaries. In the meantime, wellknown customers from the food and cosmetics branch trust in the finishing magician Christian, including Lindt & Sprüngli and Perfumes and More. Many regional businesses are also still a part of the established client base and have brochures, fliers or calendars finished at the print shop called Ploetz. Most of the orders, he says, now come in by word of mouth. "Word got around that there was someone who had conjured up this kind of print shop - not in Vienna, but in Carinthia, at the farthest edge of Austria," he says. "People want to meet someone as crazy as that."

When he digs out example after example of print jobs from the archive, however, it quickly becomes clear that there's a much more convincing reason for the company's growing popularity. Packaging,





• calendars, foils and books are spread out across the table and on the shelves, lending an impression of the countless possibilities offered by the CD 102, including pre-embossed with foil and then partially or fully UV coated. Others are lenticular foils with 3D and flip effects, Iriodin flowing from green into violet, hybrid coatings, amazing pictures full of contrast on black cartons, foils with opaque white and photo prints without any half toning. But Christian doesn't just strive to optically exhaust the spectrum of offset possibilities and pull things off that are usually only possible using screen printing. He's also forging new paths in terms of haptic features by imitating structures and colors from expensive original materials with inline finishing. For example a book cover that looks and feels as if it was woven out of thin straw. "The publishing company commissioned four print shops, but other than us, no one else was really able to pull it off," he says.

> **rom Printing Art to the Art of Printing.** Work such as this quickly gave Christian the reputation of being an innovator who sets new international standards, does a lot of things differently and finds solutions to things many don't even try. After the installation of his Duo, it took almost a whole year

until things were ready. He needed 12 months to expand his number of employees to the current 47 and master the new technology. The passionate art collector continuously works with internationally successful artists. With Harald Wiesleitner, for example, Christian developed a way to use multiple layers of printed foils to give additional depth to a series in which the artist originally painted over photographs. "We practically reinvented the pictures in the printing process and then exhibited the series four weeks later in the Viennese Museum of Young Art," Christian says. The exhibit was a great success, and the public took interest in the new artistic technique.

He's particularly proud of his cooperation with the painter Robert Schaberl (see box on page 12). "Reprinting the oversized circles, including brushstrokes, with six to 12 layers of Iriodin, clear varnish and metal pigments as realistically as possible - that was the greatest challenge we've had so far. Until then, no one had done something like that." He doesn't hesitate a second when asked if these kinds of projects aren't mainly a clever marketing strategy. "I of course hoped to penetrate Austria's creative scene with the art projects. And to a certain degree we did. But we also gained completely new experience and knowledge which help us in our daily work. Today we know how these kinds of printing techniques work and can therefore offer them to our customers in good conscience."

> he Best for the Best. A lot of what Christian and his employees learned during this time led to their acquisition of Lindt & Sprüngli as a customer. In 2007, the management of the worldwide renowned confectioner began looking for a new packaging printer and pinned down

Ploetz as an option. After visiting the print shop in Wolfsberg, they commissioned a test job and shortly thereafter sent the data for an eight-color flexoprinting job.



#### **COURAGE TO START ANEW** CHRISTIAN AND DAGMAR VAN DER FECHT

Until 2004, Christian and Dagmar van der echt "only" owned the oldest print shop in Carinthia, Austria. Today they are turning the European finishing market upside down with the most state-of-the-art print operation in all of Austria. In between was the pursuit of a new business model as well as an investment of 17 million dollars (11 m. euros) in a new print shop building and state-of-the-art technology from Heidelberg. All this took four years of hard work. The conversion to quality and packaging printing was well worth it. In the meantime, well-known businesses rank among the regular clientele at Ernst Ploetz Druck- und Verlagshaus GesmbH. For example, the business prints all packaging for the Austrian market for the chocolate maker Lindt & Sprüngli. The van der Fechts are happy about their most recent success as well: The print shop won a silver medal in the "Magazine" category in 2008 in the Sappi European Printers of the Year competition.



#### **CIRCLES OF ART** THE ARTIST ROBERT SCHABERL

In terms of technique, the circular images by Robert Schaberl (www.robert-schaberl.com) are quickly explained: In the Austrian artist's atelier, there's a 29.5 foot (9 m) long table; underneath is a turn table for the canvas. The 45-year-old then lies on his stomach, dips the paintbrush in one of the paint jars, lets the canvas rotate freely and paints a straight line. He repeats this using Iriodin, matt or clear varnish coating until he is satisfied. His art is a riddle. Some see enormous records in the monochrome circles with a radius of up to 6.5 feet (2 m). Others interpret the surfaces as a kind of art tunnel. The versatile artist himself remains silent in response to the meaning of his iridescent meditations on light, shape and reflection, whose color effect changes depende ing on the viewer's position. In the meantime Robert Schaberl is also sure – beauty has its price. The large circles aren't to be found for less than 33,000 dollars (20,920 euros) anymore today.

Prepress then prepared the data for the six-color printing and the carton was printed inline with UV and hot foil stamp. Some 60,000 pieces of packaging were printed within four days of receiving the data. "They really put us to the test and made us sweat," says Christian. "But when they saw the result, they were flabbergasted because the old supplier had needed six weeks for that." In the meantime, Ploetz produces all of the packaging up to format 3B for the Austrian market for Lindt & Sprüngli. Depending on the level of finishing, the Speedmaster CD 102 runs at speeds between 12,000 and 15,000 sheets per hour after which the sheets then land completely dry in delivery. With particularly high coating applications, the performance is reduced to 6,000 sheets so that the coating doesn't dry too fast and is evenly applied.

rilliant Colors Thanks to RGB. Those following the Ploetz print shop's steep ascent can't get around asking about their secret to success. Christian thinks a moment, lights a cigarette, draws the smoke in and releases it back out through his nose. "I'm a work animal. I create high quality printing 24 hours a day, seven days a week. I'm curious. And I'm a printer who has brought back the creative elements from our branch that were lost. I have brought back art to printing."

One example of this can be found in color management. Prepress works in RGB format as long as possible in order to make use of all the color information for later finishing. "Our tests with hexachrome have confirmed the advantages of this method," explains Christian. "The color brilliancy of blue, orange and green tones in a print with six colors and two additional ornamental colors is noticeably better. This can't be achieved with CMYK mode."

Christian is dedicated to taking part in the creative process as early as possible with packaging printing, too. Ploetz was the world's first print shop to adopt a CAD program from EskoArtwork, which turns a two-dimensional construction drawing into a 3D model with freely moveable elements. Employees in prepress don't just use this to test if the packaging works. They can also simulate the finishing effects customers want in a variety of different ways. In this way, a strikingly real image of the later carton emerges on the computer. "The customers can see whether the packaging design is how they imagined it or if changes are needed already very early on in the project," explains Günter Kargl, who built the company's packaging business with Christian. "In addition, we can also show them what other possibilities exist. Often clients change their minds because they like the new suggestion."

ight or Ten Colors in the Future. For a visionary like Christian, the future is no unknown territory. At the end of last year, he put a new window gluer from the Diana Pro 114 series into operation, with which he plans to produce a further 1.5 million folding cartons for Lindt Austria per year. "That's it for investment for now," he says. At least for three to four years. Then Christian could imagine acquiring an eight or ten-color Speedmaster with cold foil module for his print shop.



# <section-header>Image: Note of the example of the

"Finishing techniques are experiencing an enormous boom and constantly being further developed," Christian says. "I want to part of that and, as a printer, only produce the most demanding sophisticated jobs - and that for all of Europe." The company already reached an important milestone: It won a silver award in 2008 Sappi European Printers of the Year competition. The p shop Ploetz is drawing attention far beyond Austria's borders v its award in the "Magazine" category.

The question then presents itself if someone with these kind plans still has time for himself, his wife and his two sons who already out of the house. "For a long time I was going a bit ci from so much work," says Christian. It's gotten better in the me time. Just recently, the former dirt bike rider bought a Harley-Da son. In addition, says Christian, he's definitely going to start glid Probably, anyway - because as soon as he says that, the "work anin shows it face and just doesn't seem to know how and why some would put up their feet even one day of the week. "There isn't much time left over. You have to get something up and running, have visions, have to organize things. And when you don't pursue idea 100 percent, you might as well just forget it again right away

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# MAO'S HEIRS SHOW THEIR COLORS

QL-ART, CHINA // "Faster, higher, stronger" – Beijing has long internalized the Olympic motto. Hardly any other mega metropolis is changing its face so rapidly, so impressively. But it's not only the work of architects that is record-breaking. China's printers are also "artists," as the commercial print shop QL-Art proves.





A Chinese girl strikes a self-confident and open-minded pose at Tiananmen Square.



uoliang Zhu is a businessman with body and soul. That's not unusual for the Chinese – especially for those born in the year of the rooster like Guoliang. According to Chinese horoscopes, "roosters" are born leaders: intelligent, communicative and always passionate about their work. You can't describe Guoliang much better than that. For example: to celebrate a particular occasion, he invited a few friends to an exclusive restaurant in downtown Beijing. Ambience, food, service – everything was first-rate. Only the menu didn't fit in: pale colors, poor paper, and even register problems could be seen. On the spur of the moment, Guoliang handed the dumbfounded head waiter his business card and revealed himself as print shop owner. "Perhaps the restaurant would like to order a few new menus soon," Guoliang said with a mischievous smile.

Guoliang has a lot of sense about what kind of business the company pursues. That's why books, illustrated volumes, magazines, fashion brochures and corporate brochures, all in high quality, become typical jobs for QL-Art. Many of the Beijing commercial print shop's

#### "WE'RE OF COURSE HAPPY ABOUT THE ECONOMIC LIBERALIZATION AND THE NEW POSSIBILITIES ASSOCIATED WITH IT." GUOLIANG ZHU

customers are artists. The fact that they feel well taken care of at QL-Art must lie in the philosophy of its three founders, Guoliang (38), Qi Bai (40) and Haiying Wang (40). "Printing is an art for us, a process of creation at the end of which a unique product should emerge," says Guoliang.

So the company name, QL-Art, is fitting. The initials "QL" stand for **Q**i Bai and Guo**L**iang Zhu. Haiying Wang's initial exists in the company's Chinese name but not English name. But that's OK with him. The only thing that counts for him is the here and now of daily life in the print shop. And in this respect, he is happy as a clam in his position as production manager. Qi directs the technology and administration departments and Guoliang, as Sales Director and General Manager, is the head of QL-Art. Qi and Haiying are the perfect cast of characters for their positions, and not just according to their horoscopes: As typical "monkeys," they use their resourcefulness to solve even the most difficult problems – whether having to do with appointments, technical issues or anything else. In so doing, Qi is the perfectionist and Haiying the harmonizing force.

**Friends from College.** The three met in 1987 at the Beijing Institute of Printing where they attended college together. "We've been good friends ever since and have never lost sight of one another," says Qi. This is true although they initially went their own ways after completing their studies and worked in different print shops. While life took Qi to Shenzhen in the south of China, Guoliang and Haiying remained in Beijing with a population of 12 million.

#### How was QL-Art founded?

**Guoliang Zhu:** "After we had all gathered work experience, the idea arose to do something ourselves. None of us wanted to work as an employee at another company long-term. In the summer of 1995, we then bought an 18-year-old, one-color GTO 46 and used it to start our own print shop. Back then, the company was still called "Quick Printing Department of Capital Normal University Printing Factory."

A somewhat unusual name for a print shop, wouldn't you say? **Guoliang Zhu:** Yes, that's true. Earlier, print shops were not allowed to be privately owned. Officially, we were therefore a department of the state-owned Capital Normal University. That didn't affect daily business at all though. Nevertheless, we're of course happy about the economic liberalization and the new possibilities associated with it. When private print shops were legalized in 1998, we renamed ourselves QL-Art.

Why did you become a printer?

**Guoliang Zhu** (laughs): I have my middle school teacher to thank for that. At school, I was very good in math. It was therefore clear to him that I had to go to college. He also recommended the Beijing Printing Institute to me. I followed his advice and am very happy with the decision."

**Well-paid employees.** Guoliang has every reason to be satisfied. He loves his job and the business is doing well: QL-Art achieved turnover around 7.8 million dollars (5 m. euros) in the fiscal year 2007; the number of employees has risen by eight times since 1995. Of the 150 people currently employed there, 15 work in prepress, 30 in the pressroom and 70 in postpress. The sales department has 14 people and the rest work in administration and management. Added to that are 80 employees from the Xi'an subsidiary opened in 2001. Xi'an is a city in northwest China famous for the discovery of 8,000 life-sized terracotta soldiers.

The pressroom is in operation six days a week around the clock in two shifts. Employees earn quite well, too. While a Chinese worker usually earns an average of about 60 U.S. cents (40 euro cents) per hour, an operator in the print shop easily makes 1.56 US dollars (1 euro). In addition, at QL-Art, not only the managers, but also other





QL-Art isn't only distinguished by its precision in prepress and comprehensive quality tests in finishing. Customers also value the orderly pressroom where a spotlessly clean Speedmaster SM 74+L awaits its next job.



• employees, receive internal trainings on safety, company guidelines, software and workflow. QL-Art has effective support from the Print Media Academy in Shenzhen. Guoliang, Qi and Haiying describe their ideal employee: "Learns fast and loves his work."

Two-Digit Growth Rates. Not only QL-Art is growing fast. The overall economic boom and the strong export business have lent wings to China's entire print industry. Between 2001 and 2005 alone, the branch grew by 14.6 percent. And the two-digit growth is expected to continue until at least 2010. Approximately 3.4 million people currently work in the country's almost 60,000 print shops. Packaging (35 percent) and books (25 percent) make up the largest percentage of printing. And the numbers are enormous: In 2004 alone, China's printers produced around 9,500 magazines with a total run of 2.85 billion - including magazines like "Duzhe," of which roughly 10 million copies are sold per month.

#### "PRINTING IS AN ART FOR US, A PROCESS OF CREATION AT THE END OF WHICH A UNIQUE **PRODUCT SHOULD EMERGE."**

GUOLIANG ZHU

Many print shops, especially small businesses, position themselves first and foremost through inexpensive prices. QL-Art has chosen another path. "When the service and quality are good, customers are thoroughly ready to pay somewhat more," says Guoliang, adding, "As a general rule, we also store the print products and deliver them exactly when the client needs them. Regardless of where." Four large delivery trucks are in constant operation for speedy transport right to the customers' premises.

Ranking among QL-Art's roughly 600 customers are many global corporations like Google, McDonald's, Samsung, BMW and HP. The expectations on quality and flexibility are accordingly high. Sony Ericsson, for example, orders around 100 different five-colored cell phone instruction manuals per week - with 100 to 10,000 copies per manual. The cell phone manufacturer sends its PDF files directly to the print shop's CtP system using QL-Art's online service. "This enables

us to deliver already the same day," explains Haiying. "Sony Ericsson is very satisfied. They used to commission three different print shops for this complex production."

#### How long have you been using a CtP solution?

**Guoliang Zhu:** Since 2002 – a CtP system from Heidelberg. That made us the first Heidelberg CtP user in Beijing. At the beginning, customers were still skeptical. They knew little of the technology. Until now, however, already 90 percent prefer to make use of the CtP solution. Our two Topsetter 74s have an accordingly high workload.

Do you also have a Prinect solution in operation? Guoliang Zhu: Yes, we've been using a Prinect solution for

almost four years. These include Prinect Integration System, Prinect Pressroom Manager, Prinect Digital Print Manager, Prinect Printready, Prinect Meta Dimension, Prinect Meta Shooter, Prinect Prepress Interface, Prinect CP2000, etc. All of them are great tools for us. In addition, we have an ERP system introduced in 2002 which we use to process orders and do calculations. All in all, they are the coordinator and improver of our workflow, and most importantly, they make our quality stable and continuously enhanced. Of course, our working efficiency, on time delivery, customer satisfaction, our profit - everything is therefore guaranteed.

*What about printing presses?* 

**Guoliang Zhu:** We started with a GTO 46. Ever since then we've been faithful to Heidelberg. First we bought a two-color GTO 52, then mainland China's first five-color Speedmaster SM 52 with coating unit. At the end of 2005, a four-color Speedmaster SM 74, also with coating unit, was added to that. Several more investments were made subsequently. The last acquisition was in November 2007 - a Speedmaster SM 74-5+L installed in June 2008. Just in time for the Olympics.

Taking Part is what Counts. Not only top athletes have to deliver peak performances if they want to qualify for the Olympics. That's true of print shops as well. Only a few printers get selected by the Olympic committee as service providers. "We're printing five-colored catalogues for a manufacturer of Olympic souvenirs," says Qi proudly. "The souvenir manufacturer took a very close look at us before we got the job." QL-Art isn't just taking over printing the catalogues but finishing them, too. And it is ideally prepared. Included in their range of services are all types of folds, perfect binding and threadstitching as well as automatic banding, saddle stitching, UV coating, creasing, cutting and stamping. In order to ensure the best quality, tests are often run on the machines to check paper and inks. The machines are constantly maintained and serviced. Furthermore, a stable workflow helps maintain quality, and all consumables are purchased solely from renowned vendors.

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# Beijing 2008 A City Puts on the Ritz

**ON 08/08/2008 AT 08:08 O'CLOCK**, the starting gun for the Olympics summer games in Beijing will be fired. The time was chosen intentionally: In the Middle Kingdom, eight is considered to be a lucky number. because it is pronounced similar to the Chinese word "Fa" meaning "Fortune." Nevertheless, the Chinese place a lot less trust in luck than in hard work.

n every corner of Beijing, there is a whir of building and welding, hammering and polishing. Roughly 300,000 construction workers are continuously in operation around the clock. Some 37 sports complexes need to be ready by the opening ceremony, and 19 of them have been built completely from scratch. The Olympic stadium cost 473 million dollars (300 m. euros). It was baptized "bird nest" by locals and opened in April. The construction owes its nickname to its outer shell - a 42,000 ton, intricate steel frame.

Nothing Left to Chance. Part of the modernization measures are the extension of the subway network from five to eleven lines. The



A model of Beijing shows the planned continued development of the Chinese capital.

megacity is expecting 2.5 million visitors, after all. Organizers want to enable a comfortable commute between the competition complexes and the city center – assuming the guests can still acquire one of the Olympics tickets. Almost The "bird's nest," Beijing's new Olympic stadium.

all of the seven million tickets have already been sold. The airport in Beijing, likely to be the most intensively traveled in the world during the games, is currently not worrying those who are responsible. While predictions are estimating around 1,700 landings and takeoffs per day, even the smallest detail has been precisely planned. Roughly 10,000 computers are simulating all conceivable breakdowns in order to prevent actual damage from cable breakdowns or computer viruses.

Beijing wants to achieve clarity in terms of the weather as well. That's the goal of the ambitious project "Nice weather with sunshine." For this purpose, 135 specially trained farmers will shoot chemical pellets into the air which are intended to dissolve clouds in no time. The country has many years of experience in "weather making," after all. According to official information, around 250 billion tons of rainwater is said to have been won in 2001 and 2007. Within the "Good Manners" this way since 1999.



**Exemplary Friendliness.** Athletes from about 205 countries are predicted to travel to Beijing - more than ever before. To encourage true international understanding, many



"Good-luck dolls" – the Olympic mascots

city residents are diligently learning foreign languages. The number of multilingual city inhabitants doubled to 35 percent between Campaign," the Chinese are also preparing themselves for friendly interaction with guests from all over the world.

The foundation for the games has been laid. And alongside all of the planning, maybe the five Olympic mascots are also doing their part: the fish "Beibei," the big panda 'Jingjing," the Olympic torch "Huanhuan," he antelope "Yingying" and "Nini," the wallow. They're known as the "Fuwas" after all – the "good-luck dolls." 🗖

**From Printer to Advisor.** If you're a man in China and want to marry, the rule of thumb says you should already own your own house. But this isn't the sole reason why QL-Art had a new company building built in 2002. Guoliang, Qi and Haiying were already long married at that point. In the old, rented company headquarters in west Beijing, there simply wasn't enough room, even without further growth. The company managers therefore sought a larger print shop location and built a new hall. As of 2003, production now takes place in the "Tianzhu Airport Industrial Zone," one of the largest industrial areas in Beijing. "Here we have everything we need. Plenty of space, good access to public transportation and independence from landlords. Furthermore, we're now in the east part of the city where a lot of our most important customers are located," says Haiying. The new company building, with a total of 38,750 square feet (3,600 sq. m.) is four times as big as the old one. Alongside the change in location came a change in QL-Art's service concept - the "printing advisor" concept was born.

What's the idea behind the "printing advisor" approach?

**Guoliang Zhu:** To offer clients first-rate advice. We don't want to just carry out their pre-existing wishes - we want to show their own customers, and we receive more demanding jobs," says Qi. The one-day training classes are very popular and have been held them alternatives, too. We recommend different paper or present options in printing and in postpress to them. More and more regularly three times a year since 2005. print jobs are being printed with water-based coating for instance. Networking Hot Spot: The Golf Course. Besides movable type Not only does it feel better, it's also better for the environment, and our customers love it. printing, gun powder, the compass and paper are probably the most

Does it also help improve employees' capabilities?

**Guoliang Zhu:** That's for sure. We encourage communication among our employees in all departments. Printing advisors aren't just sales people with direct customer contact. Printers and finishing specialists and the sales people should talk interactively. Together, we want to find the best solution for the customer. That's why expertise, good communication and the ability to work in a team are demanded equally for all employees.

What do your customers say about this?

**Guoliang Zhu:** They appreciate our consultation approach and notice the difference between QL-Art and other print shops. We owe numerous new customers to the printing advisor concept. Although the concept is only three years old, we still want to improve significantly here.

**Showing What You've Got.** In order to win clients and promote customer loyalty, QL-Art hosts open houses in the print shop as soon as a new machine has been added to the pressroom – so about once a year. "We want our customers to see what new technological possibilities we have," explains Qi. "Primarily, we invite print experts from advertising agencies, who easily understand the advantage of the new technology. Roughly 20 percent of visitors are customers from the industry and service branches." An open house lasts one to two days and usually attracts 200 to 400 visitors.

QL-Art offers advertising agencies yet another service: Their customer advisors can participate in training at the print shop. "They learn how print can be implemented more effectively. The creative heads in the branch thus gain competence in consultations with



Olvmpics printer Zhu is looking orward to having the Games practically on his doorstep.

well-known Chinese inventions. But golf, too? Old paintings and reports from the Middle Ages are said to now prove that the Scottish national sport emanated from the Middle Kingdom. The only thing that's certain is that Guoliang didn't want to follow in his ancestors' footsteps when he swung the golf club for the first time two years ago. He was looking to do some networking on the green. It works splendidly from time to time. And in the meantime, he really likes the game. His goal for 2008: He wants to improve his handicap from 30 to 20.

Guoliang also has high ambitions for QL-Art. "We want to continue to grow step by step and remain a reliable partner with very high expectations of quality and service for our customers," he says. The stars are on his side. On February 7, 2008, the year of the rat began and is said to be particularly promising for business success. Who knows? The Chinese horoscope certainly got it right with the rooster and the monkeys.  $\blacksquare$ 

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# SEÑOR 10,000 PERCENT

**GRUPO PEOSA, MEXICO //** Rafael Riebeling Cordero took over direction of Grupo Peosa 12 years ago. Since then the print shop's group revenue has increased by more than a hundred times – by 10,000 percent. In so doing, the 32-year-old has made the business with headquarters in Guadalajara the second largest packaging printer in Mexico and the fifth largest in Latin America. And this comet-like rise is by no means meant to be the end.

Like father and son: Rafael Riebeling Cordero (32) and his uncle Javier Cordero Staufert (63) always make important decisions together.



orld champions have found their fortunes in Guadalajara. When the Soccer World Cup took place for the first time in Mexico in 1970, the later champion, Brazil, played five of its six games in the country's second largest city – winning all of them. In 1986, Mexico was once again host of the World Cup, and, again, Brazil played its first games in Guadalajara. Rafael Riebeling Cordero grew up in Guadalajara and can still remember the last World Cup practically in front of his doorstep well. He also remembers sitting

in front of the TV full of nervous anticipation when Mexico went up against Germany in the quarter final - and then lost the game. At the tender age of 11, Rafael did not guess that another export from Germany would one day make him a winner.

Today Guadalajara boasts three million people. In the entire metropolitan area it's almost five million. The city, laid out like a chessboard, lies 5,249 feet (1,600 m) above sea level and directly along the famous Pan-American Highway. With Mexico's third-largest airport, the city draws numerous foreign businesses with big names such as Hewlett-Packard, IBM, Xerox and Siemens. ▶ ▶ The presence of multinationals with typically American origins is hardly surprising. Although the United States isolates itself from its southern neighbor with walls and fences, at the same time, it also uses the country as an extended workbench because of the low cost of labor. This has set off a robust upswing all around Guadalajara. With the influx of high-tech businesses from North America, numerous component suppliers and service providers soon followed in their footsteps. More than 60,000 people now work in the electronics industry in Guadalajara. No wonder Guadalajara is also nicknamed the "Silicon Valley of Mexico."

Rafael is one of these service providers that profit from the economic boom in the "Perla del Occidente" (Pearl of the West). The 32-year-old has been at the head of the Grupo Peosa, one of the country's largest packaging printers, for 12 years. More than 1,000 employees in three locations, two in Guadalajara and one 124 miles (200 km) further east in Leon, print more than a billion folding cartons and

cardboard boxes. With sales nearing 60 million dollars (40 m. euros), the business is the country's second largest and Latin America's fifth largest in packaging printing.

#### FROM CLASSROOM TO PRESSROOM. Twelve years ago, things

were very different. Only 35 employees were working in the print shop which earned around 500,000 dollars (333,000 euros) and printed exclusively shoeboxes - "not too challenging a task," says Rafael today. During this time, his uncle, Javier, was in charge of the printing business. For Grupo Peosa's owner, the print shop was secondary; his main interest was in trade and real estate. Today, the 63-yearold businessman owns two large automobile businesses and four luxury hotels, one of which is on the Mexican Caribbean coast in the touristic stronghold of Cancun. The entire group of companies is made up of more than 3,600 employees.

In 1996, uncle Javier asked his nephew if he wanted to direct the Peosa group's print shop. Back then he was 21, studying business administration at the university in his home town and didn't have to think long. He was more interested in the practical side of things than theory anyway. He traded the classroom for the pressroom. "My uncle gave me a big opportunity," Rafael says with deep gratitude, almost humility. "Who I am, what I have, what I'm capable of - I owe that all to him," he adds. For Rafael, Javier had always been more than just a "normal" uncle. When Rafael was 2 years old, his father said "adios" to the family. Javier, his mother's brother, became a kind

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Sergio Zavala doesn't get thrown off track easily: Even during peak order times, the experienced production manager always has an overview.

of surrogate father for him during this time. To this day, the uncle - a large, broadshouldered, take-the-bull-by-the-horns business man and the smaller, somewhat reserved, hard-working nephew-son - have a markedly heartfelt relationship with one another.

When he took over, Rafael set out to familiarize himself with his new tasks. Already shortly thereafter uncle and nephew flew to Europe to buy machines - partly new, partly used. The business flourished. Within only five years, sales exploded by four times. The roaring growth wasn't without reason: The new print shop boss channeled his focus into packaging printing. "If you want to be very good in an area and, at the same time, still achieve a large volume" he is convinced, "you have to concentrate on one area."

The uncle and nephew team continued to push this development. Around the turn of the century, they began expanding strongly and investing accordingly. In May of 2001, they acquired their first Heidelberg press, a CD 102 with six colors

and coating unit. "When visiting other print shops in Mexico, as well as in Italy and Spain, we kept coming across Heidelberg machines and only ever heard good things about them," Rafael explains. Two years later, the same model with eight colors followed and in the fall of 2006, a XL 105 with six colors and coating - the first XL 105 in Mexican packaging printing - was added to that. The most recent acquisition was in October of 2007 - Mexico's first Offline Coater CD 102-LYX for UV coatings. Up until then, finishing was sent out of house. For almost a year now, they have kept it in-house. All together, 10 printing presses with a total of 51 printing units are installed at Grupo Peosa's facilities.

#### PERPETUAL FOCUS: INVESTMENT AND INNOVATION. In post-

press the team of two decided on several Heidelberg folders and gluers from the ECO 105 and Diana Pro 105 series. All machines run in three shifts, around the clock, seven days a week. "That increases our productivity and lowers production costs," explains the company's manager. Mexico offers packaging printers good conditions. Around 400,000 tons of cardboard boxes and folding cartons are printed each year. "In our company, it's 25,000 tons," Rafael calculates, adding, "So there's still quite a bit of market share for us to win." With a market share of 5 percent and annual revenue of 58 million dollars (36.7 m. euros) most recently, Grupo Peosa is close on the heels of the market leader. In the mid term, the young print shop manager doesn't want to content himself with that and plans to

push ahead. How? "By continuing to invest in new technology," he Mexico has 108 million mouths to feed and an additional million says, adding, "And increasing our customers' and employees' satisis added to that each year - yet another argument in favor of focusing faction." The term investment is written with a capital "I" at Grupo on food packaging printing. Worldwide renowned food multination-Peosa anyway: Roughly 29 million dollars (18 m. euros) has been inals commission print orders from Grupo Peosa: Nestlé packaging for vested in new production facilities and equipment since the turn of chocolate and cream-filled sandwiches, Unilever for cornstarch and the century. In terms of new innovations, Riebeling has his eye on gelatin and Kraft for desserts, rice cakes, cookies and chips. In adthe extra large format from Heidelberg. "With large presses, we're dition, the trend in Central America's largest and economically even more productive. That's why I'm going to take a closer look at strongest country is going in the direction of higher quality packagthe presses at drupa," he concludes. "Maybe we'll make a decision ing and thus a higher added-value for print shops. Grupo Peosa's about it next year." With "we," the duo Rafael and Javier is meant. No choice of a press with UV coating is proof of that. big investment decisions are made at Grupo Peosa without intensive discussions with his uncle, and his blessing as well. products fresh longer since the climate is so hot. For this reason,

#### **GROWTH MARKET FOOD.** New acquisitions such as these are designed to raise customer satisfaction. Many customers are multinational companies that produce and commission print jobs all over the world. This means that the quality can't lag behind that from print shops in the United States, Germany or Japan. Cordero does a lot of work for the IT industry in Guadalajara - for example for Hewlett-Packard and Xerox. The food sector is the second most important market segment for him. While significantly less food is packaged in emerging market countries like Mexico as in industrial countries, the percentage here is growing, too.



In Mexico there is also a trend toward food packaging that keeps Grupo Peosa also prints packaging made of foil. Javier didn't want to reveal too much on this topic except to say that metallic packaging is complicated to print. "It's much harder than it looks and begins with finding a suitable foil and fitting inks."

"The market is becoming more competitive," he adds. "We meet these challenges with our investments and innovations and give our customers exactly what they want." And that is a bit better and faster than many others. The company's patriarch is proud to rank among Latin America's "print avant-gardes." Grupo Peosa's enormous growth in the past years was primarily the result of a successful crowding out – clear proof of the business' abilities.



An afternoon in Guadelajara: Mariachi singers shortly before their next performance (above, with guitars and below, right in white). - Chatting in the hot sun during siesta (above).



Working hard for their money: A farmer from the region has come by horse to shop in the city, a flower seller shows her goods, a garage on the city's outskirts (below).



#### GUADALAJARA: THE "PEARL OF THE WEST"

With a population of around three million, Guadalajara may "only" be the country's second largest city, but for many it's considered to be the most Mexican. The "Pearl of the West," as locals call it, is the birthplace and center of the worldwide renowned Mariachi music. "Charreadas," the Mexican version of rodeos, also originates here, as is the case for the sombrero dance, "Jarabe Tapatio." Despite a wealth of traditions, modern culture is by no means missing. Guadalajara pampers visitors and locals alike with many superior concerts, ballets and theater performances. In addition, every year the national film festival takes place in the city founded in 1542.

## **MEXICO'S PRINT MARKET**

Between Ciudad all the way in the north and Tapachula in the south near the border with Guatemala, there are around 14,500 print shops in the country that is almost 772,200 square mile (2 m. sq. km.). Some 98 percent are small or very small print shops that together cover 30 percent of the entire production. A full 70 percent, however, is produced by large print shops each only accounting for 2 percent. Similar to other newly industrializing countries, the per capita consumption of print products is still relatively low. In Mexico, the figure is around 27 dollars (17 euros) per year. In comparison, it is 509 dollars (323 euros) in the United States, 345 dollars (219 euros) in Germany and the worldwide average is 70 dollars (45 euros). A total of 140,000 people work in the Mexican print industry, producing a total revenue of around 6.8 billion dollars (4.3 bn. euros).

▶ Companies like Panasonic, Avon and Kimberley-Clark, one of the world's largest producers of hygiene products, also trust in the pioneer's work. Manufacturers of hard liquors rank among the list of clients as well: Two hours away from the print shop by car is the city Tequila, home to the world famous liquor made from agave. The producing regions begin just several miles outside of Guadalajara. Like wine or corn fields in other places, here the fields full of the blue succulents stretch out into the horizon. Grupo Peosa prints labels and cartons for the country's most famous drink.

### GROWTH IN LINE WITH CUSTOMERS' DEMANDS. A large

number of Grupo Peosa customers have their headquarters in the capital, Mexico City. Cordero therefore spends one to two days a week in the mammoth city of 20 million inhabitants in the middle of the country. He needs an hour by plane to get there; the trip from the airport to customers often takes longer. "The customers always want new ideas, new developments, new technology," he tries to explain part of his secret to success. He adds, "And they get that from us." This includes not only finishing techniques like embossing, hot foil stamping or UV coating. At Grupo Peosa, a team of packaging designers works closely together with external designers. This means that it's possible to tell very early if and how creative ideas can be put into practice technically.

New technology and satisfied customers are two criteria Rafael focuses on in developing the business. A third point is just as important to him – satisfied employees. For the company's manager, this isn't just a flowery phrase but his conviction. He learned what responsibility means from his uncle Javier over the course of three decades. "He stood up for me," he says. "And I've assumed responsibility for my employees. I want this to be a good job for them, for them to be proud that they work for us."

Alongside state-of-the-art technology, another central key to success is driving home to employees how important their work is. "We have to make it clear to our people that we're a large, competitive business with globally active customers and that every single person is a part of this success," he emphasizes. "If they understand that, then they don't do their work because someone tells them to, but out of their own conviction."

Such an attitude is not necessarily typical in a newly industrializing country. But at Grupo Peosa there are quite a few things that are different from other print shops at this latitude. All rooms – not just the pressroom – are incredibly clean and organized. All employees and visitors wear caps like surgeons in the OR do. Maybe this sense of order lies in Rafael's family history. His great grandparents immigrated to Mexico from Germany – a country often associated with order and cleanliness. He doesn't know exactly where they



were from though. The first part of this family name, Riebeling, is reminiscent of these roots. In many Spanish-speaking parts of the world it's common to have two last names – the first from the father, the second from the mother.

Germany is present with a seal of quality on Grupo Peosa's products. It is in accordance with the ISO 9001:2000 standard issued by the Technischer Überwachungsverein (TÜV), the technical monitoring association. As Javier says, it's not enough for the processes in a print shop to be good. "It also has to be a clean and safe environment." Only then is it possible to work correctly and well. "Here everything is where it should be," his nephew adds, "and we're proud of that. Being well-organized makes us more productive." There's a system to employee work uniforms, too. Depending on which department they work in, they have different colored work T-shirts: Employees from produc-



Director Arnulfo León, warehouse worker Joathan Chávez and fork lift truck driver Abundio Ismael Martínez have the huge warehouse under control.

tion wear blue, those from quality control wear red. Grey sta for warehouse, beige for shipping. Those in yellow are out of p at the printing presses that are producing particularly deman jobs: They're still in training.

#### SOON THE NUMBER ONE IN LATIN AMERICA? In term

increases in productivity, the motto at Grupo Peosa is the old say – "a cowboy's work is never done." Something can always be proved, Rafael knows. Currently there are components from di ent manufacturers in the pressroom, for example. That may cha The direction seems to be decided on already, too. "From all the viders, we have the best relationship with Heidelberg," he sha "The company knows what customers expect. There's no other vider of machines that can print 15,000 – 18,000 – sheets per h with this quality." He also values "the respectful and understand interaction with customers" he gets from Heidelberg.

When asked about his vision for the Grupo Peosa in the year 20 Rafael doesn't seem surprised by the question. "I'm not entirely su he things aloud. "Maybe it is to be not only the number one pact ing printer in Mexico, but the number one in all of Latin Ameri But for him size isn't an end in itself. He adds, "For us it's more portant to be the best." Until he's reached this goal, he'll still h many 13- or 14-hour work days ahead of him, days when he less the house at short past 7 a.m. and seldom gets back before 9 p.m. also generally spends half the day on Saturday at the company.

There is little time left for hobbies. "No, I don't do any sports, says regretfully. "Not because I don't want to. I just don't know w I would have the time." The little free time he does have, he spe

with his wife, Sofie, and his little girl, Maria, born last December. "Time with my family is for me quality time and not quantity," he says quietly, but certain. When he leaves the print shop on Saturday at noon, he leaves his work behind him. He'd like to have three kids in total, Rafael tells and you can see his eyes shining, "ideally all girls." The first is already there. Wife Sofia has gotten used to the idea that she'll often have to do without Rafael in the future as well: Grupo Peosa is continuing to expand rapidly. Just recently a new building was constructed at the headquarters in Guadalajara, bringing in 30 percent more space. The print business has a total of 753,470 square feet (70,000 sq. m.) available for use there. "We own all of it," Rafael says proudly. "None of it is rented."

While Grupo Peosa can look back on a comet-like rise, it's looking difficult for Mexico at the upcoming World Cup in

tands place nding	South Africa. After a series of bitter defeats, the national team just missed qualifying for the Olympics. Now the country is looking for a new team coach. Rafael Cordero is nevertheless optimistic. "We have great players and we can achieve a lot with the right coach," the soccer fan believes. "Definitely the quarter final, maybe more. Because
ns of aying e im- iffer- ange. e pro- nares. c pro- hour hour nding	when we step up to compete, we also want to win."
2020, sure," ckag- rica." re im- have eaves n. He c. s," he when pends	Grupo Peosa Guadalajara, Mexico www.grupopeosa.com www.heidelberg.com/hd/CD102 www.heidelberg.com/hd/XL105 www.heidelberg.com/hd/DianaPro

# News & Reports

#### CLEANSTAR // EXTRA CLEAN

GERMANY. The newest generation of Heidelberg's process air extraction system. CleanStar, carries out its job so efficiently that the levels of ammonia and dust are even well below strict limit values. While the EU permits only up to 14 milligrams of ammonia per cubic meter of air, the new CleanStar reduces the corresponding emissions (resulting from drying dispersion coatings) to well under 10 mg/m<sup>3</sup>. And instead of the permitted 10 milligrams of dust per cubic meter of air, the CleanStar limits dust pollution around the delivery to only 0.2 mg/m<sup>3</sup>. The process air extraction system thus ensures not only a healthier work environment but also increased cleanliness in the pressroom. In addition, the closed blast air system in the delivery helps make sure that no lumps of powder are formed. These could fall onto the printed sheet and lower print quality. The new Clean-Star is available for the Speedmaster XL 105 and CD 102 beginning immediately. A version for the Speedmaster SM 102 is planned to follow within the year.

info// www.heidelberg.com/hd/CleanStar



A clean affair: The CleanStar outperforms comparable products and reduces dust levels to well below the legal limit.

#### FOR INDIVIDUAL PACKAGING // LINOPRINT

GERMANY. The need for increasingly smaller batches of labeling or decorating packaging is growing: In the pharmaceutical industry, blister packaging is expected to be labeled practically "per pill," the cosmetic branch is demanding inexpensive solutions for different language versions with small runs on fancy packaging and the food industry wants to publish individual messages on their bulk goods. With this in mind, Heidelberg launched the innovational project "Linoprint," a drop-on-demand system which can be used in all prevalent blister, carton and labeling machines. Unlike conventional inkjet solutions with only one controlled ink jet, Linoprint is based on the well-known Piezo principle and can thus achieve a resolution of 720 dpi and gray scale values on the printing stock. In the near future, even 1,200 dpi in four colors is expected to be possible. The built-in drying system ensures that the print image remains pin sharp even on smooth, finished surfaces. Linoprint products are expected to be available beginning in the fourth quarter of 2008. info// www.linoprint.de



Drop-on-demand: Linoprint delivers individual patterns and insignias on folding cartons, labels and blister packaging with pin sharp-quality.

#### AL-KAFAÀT // THE FIRST PRINTING SCHOOL IN LEBANON

LEBANON. The organization Al-Kafaàt ("abilities") opened the first printing school in Lebanon at the beginning of the year. In so doing, the nonprofit organization trusted entirely in Heidelberg. In the roughly 10,764 square foot (1,000 sq. m.) teaching print shop on the Europe School of Technology campus near Beirut, a Primesetter 74, a two-color Printmaster PM 74, a GTO, a MO and a T-Offset, among others, are in operation. The equipment is rounded out with a POLAR 92 EM cutting machine and a Stahlfolder TX 52 folder. Using this machinery, the students can not only prove their theoretical knowledge, but also produce real print jobs for the Al-Kafaàt foundation – for example flyers and brochures. This job-oriented training is intended to guickly produce the qualified workers that the local print industry so urgently needs.

#### DRYINGMONITOR // WORLD'S FIRST FOR PERFECT DRYING

GERMANY. The novel DryingMonitor is the first instrument that can advise printers by recommending ideal drying settings for print jobs with water-based coating. To do so, the system from the range of Star peripherals measures various parameters, such as the amount of water present from the coating, the amount of air, as well as the temperature and the humidity of the supplied and extracted air. Using the data delivered from the sensors in the coating unit and delivery as well as possible existing drying units, the DryingMonitor calculates the perfect settings inline. The result is that blocked piles resulting from not enough drying or yellowed coating from too much heat are a thing of the past. On top of that, you can save energy thanks to the optimized drier settings. The DryingMonitor will be available beginning in September for the Speedmaster XL 105; solutions for other series are in development.



Rising printers in the Middle East: The Al-Kafaàt foundation relies entirely on Heidelberg for training at Lebanon's first printing school



World's first: With innovative sensor and measuring technology, the DryingMonitor ensures perfect drying results on print jobs with water-based coating

#### HEIDELBERG ONLINE // SHOPPING TOUR ON THE COMPUTER SCREEN

**GERMANY.** As of the spring, German Heidelberg customers can now shop comfortably from the computer screens, too. The German Heidelberger Druckmaschinen Vertrieb Deutschland GmbH has opened its online shop. All fundamental service parts and consumables – from prepress to press and up to finishing - can be ordered around the clock via the Internet platform. In addition, current product and service information is also available on the Web site. After a one-time registration in the online shop, customers can even save their own individual "shopping list." This gets rid of having to reenter information for the same range of products for recurring orders. Heidelberg is enabling customers in a growing number of countries to shop comfortably online.

info // www.de.heidelberg.com



Now available for German customers, too: Heidelberg's online shop with service parts and consumables available around the clock

#### HEIDELBERG - NEXT TOP MODELS // SUPRASETTER AND SPEEDMASTER XL

GERMANY. The Suprasetter 145/162/190 and Speedmaster XL 145 and XL 162, developed together, have won what must be the most coveted "beauty award" in the engineering branch: The computer-to-plate and printing press series were distinguished in June with the "red dot design award" in the category "product design 2008." The success is even more impressive considering that a total of 3,200 products from 51 countries took part in the competition this time. The grown-up models from Heidelberg convinced the judges not just with their good looks, but also their level of innovation, functionality, ergonomics, long lifespan, ecological compatibility and their self-explanatory nature. Thanks to these typical Heidelberg qualities, the business has been able to win 16 "red dots" already since 1995.

info // www.red-dot.de www.heidelberg.com

#### PRINT MEDIA CENTERS // PIONEERS IN ENVIRONMENTAL PROTECTION

GERMANY. Heidelberger Druckmaschinen AG was the first printing press manufacturer ever to receive the "Eco-Seal" from the Forest Stewardship Council (FSC), an organization active internationally for the promotion of more responsible forestry. The award recognizes Heidelberg's demonstration centers in Heidelberg and in Wiesloch-Walldorf and underscores the environmental dedication Heidelberg has exhibited since 1992. The certificates prove that both Print Media Centers can produce their print products on paper from sustainably farmed forests. In this year alone, Heidelberg has used around 500 tons of such paper from controlled forestry. By certifying forestry, the resulting products, as well as the industries processing them, the FSC hopes to steer all participants in an economical, ecological and socially sustainable direction as well as reveal potential for improvement. info // www.fsc.org

#### CANADIAN ECO AWARD // GOLD FOR HEIDELBERG

**CANADA.** Heidelberger Druckmaschinen AG has won "Gold" in the "Most Progressive Environmental Process" category of the "Environmental Printing Awards" organized by the Canadian trade magazine PrintAction. The award is presented for the implementation of exceptional processes and technologies that minimize or completely eliminate environmentally damaging side effects. Richard Armstrong, President of Heidelberg Canada, accepted the award in front of more than 400 representatives from the entire Canadian print media industry, including printshops, ink and paper suppliers and customers. The diverse makeup of the crowd that attended the ceremony was no accident, since PrintAction is using the award to raise environmental awareness throughout the entire supply chain.

#### HALL 7 // WIESLOCH-WALLDORF CONTINUES TO GROW

GERMANY. Shortly after putting Hall 11 (for the Speedmaster XL 145 and XL 162) into operation, the next new construction began. Hall 7 is being built on a total space of 110,868 square feet (10,300 sq. m.) and is expected to be finished by the end of the year. Starting in February 2009, it is intended to hold the delivery assembly for the Speedmaster SM 102, CD 102 and XL 105. The new hall has been designed in such a way as to save resources. in part thanks to innovative heating and lighting technology. In so doing, Hall 7 also contributes to the environmental consciousness of the world's largest printing press factory.



Grown-up Beauties: The Suprasetter 145/162/190 and the Speedmaster XL 145 and XL 162 were distinguished with the "red dot design award" in the category "product design 2008"



"Eco-certificate" for demonstration centers: Both of Heidelberg's Print Media Centers were distinguished with the certificate from the Forest Stewardship Council.



"Gold" for Heidelberg: Richard Armstrong, President of Heidelberg Canada, accepts the award for "Most Progressive Environmental Process" from Nicole Rycroft, President of Canadian ecology group "Markets Initiative



Additional growth at the Wiesloch-Walldorf factory: Surrounded by Halls 5,6,9, and 10, Hall 7 is currently underway and is intended to house the delivery assembly for the Speedmaster SM 102, CD 102, and XL 105.

#### PRINECT PRINANCE // ADMINISTRATIVE ACCOUNTING WITHOUT BORDERS

CZECH REPUBLIC. Heidelberg's management information system. Prinect Prinance. is breaking across more and more borders. Prinance is now available in the Czech Republic, too. For this purpose, the Prague Prinect experts have translated the entire module into Czech and adjusted it to their local demands – for example by developing interfaces into financial bookkeeping systems characteristic for the country or aligning the option "Direct Access" with the Czech market. Direct Access enables print shops to offer their customers Web-based services like Web-to-print functions, a Web-shop or online warehouse retrieval, among other things. This allows customers to be more closely connected with the print shop's business processes. That makes the Czech Republic the 27<sup>th</sup> country with Prinect Prinance, all specially adjusted to suit a wide array of diverse conditions.



Economy and ecology are not mutually exclusive. In fact, environmentally-friendly printing makes good business sense. It helps you cut costs and project a positive image to the market. Your customers will be increasingly interested in discussing your green credentials. Let's work together to develop customized solutions: "Think economically, print ecologically." **www.heidelberg.com** 



# Black on White in Green

**GREEN PRINTING ...** *II* ... is not a temporary fashion. It is a serious trend. An environmentally friendly print production combines ethical responsibility with economic advantages. The best example is a Speedmaster XL 105-6+L with the full range of eco-equipment. In comparison to the standard model, it can save around 331,000 dollars (210,000 euros) per year.

hether passive housing, "Green IT," hybrid motors or organic groceries, ecological products are conquering the market across the board. Heidelberg has been actively pushing this development, too. Since 1992, environmental protection has been an official company objective. In the meantime, the range of environmentally sound print solutions is correspondingly wide and with sales increasing worldwide. More and more print shops are realizing that environmentally sound investments pay off. For one, tighter environmental regulations are to be expected in the future. For another, the number of print shop customers demanding environmentally friendly print products, in part to actively promote their image, is growing. For many, especially for businesses active worldwide, only "climate neutral business reports," for example, come into question. Or only paper from sustainable forestry, certified, for instance, by the Forest Stewardship Council (FSC) or by the Programme for the Endorsement of Forest Certification Schemes (PEFC). Print shops able to provide corresponding solutions have a clear advantage - and this will only increase in the future.

News - Solutions

**Amortization after two to three years.** "Green printing isn't just a sales argument to give print buyers, though," emphasizes Eike Frühbrodt, Director of Product Management for Peripheral Systems at Heidelberg. "Environmentally friendly production also reduces costs considerably. This realization isn't yet that widely known on the market." Heidelberg calculated how large the yearly savings potential really is using a six-color Speedmaster XL 105 with coating unit (see page 38). In comparison to the conventional model, the press with "green" equipment consumes around 20 percent less energy, and waste expenses are even reduced to a third. Savings in CO<sub>2</sub> production and waste accumulation were around 5 percent. The consumption of ink, alcohol, cleaning agents, water and powder are also reduced considerably.

At the end of the day, a business operating in three shifts can expect savings of a full 331,000 dollars (210,000 euros) per year with the use of full eco-equipment," says Frühbrodt. "The investments in environmental technology therefore amortize after around two to three years already." That doesn't even include the fact that productivity increases from reduced makeready times. The expanded opportunities for new customer acquisition aren't factored into the calculation either – as is the case for the additional savings potentials from the rapidly increasing prices for resources and energy.

Around 190 Tons Less Waste. The ecological figures are as impressive as the economic calculations. The most important environmental factor in sheet-fed offset printing is start-up waste. Assuming an average of 600 sheets per job, a printing press running in three shifts with format 3B has a total start-up waste of over 280 tons. This corresponds to CO<sub>2</sub> emissions of around 300 tons. The example of the "green" Speedmaster XL 105-6+L shows that start-up waste can be reduced to 400 sheets per print job. This reduction adds up to a total of 190 tons of paper saved per year. That's about 3,000 trees. These enormous eco-potentials can be achieved with the use of Prinect Prepress Interface or the Prinect Pressroom Manager to preset ink zones, Prinect Color Assistant to optimize color pre-settings easily as well with the color measuring and control systems Prinect Axis Control, Image Control or Inpress Control.

Prinect Inpress Control, for example, measures and regulates both color and register while the press is in operation – and at all speeds. For this purpose, a spectrophotometric measuring unit is located on the last printing unit; in the case of perfecting presses there is an additional one placed before sheet reversal. Every unit measures process colors, special colors and the register in control bars. If it's necessary to adjust the register or ink zones, these corrections get forwarded directly to the Prinect Press Center. "The printer doesn't have to pull sheets and can adjust the press without interruption during print runs," explains Frühbrodt. In addition, the completely automatic print regulation also ensures high color stability over the entire run.

**Brand New Drying Technology.** The second largest expense factor in print production is energy consumption. A printing press in format 3B with six colors, coating unit and dryer has an average power consumption of 140 kilowatts. Its yearly electricity consumption corresponds to 290 tons of  $CO_2$  emissions. Of that, 26 percent of the energy is needed for running the press. 35 percent goes to the dryer, 20 to air supply, 8 to cooling and 11 to other units.

In order to further reduce the energy needed by the machine's largest power consumer – the dryer – Heidelberg lowered the radiators down to 3.1 inches (8 cm) from the sheet. "A dryer's infrared radiators work like a sunlamp at home: The closer you are to it, the more you feel the warmth," says Frühbrodt. And every centimeter less means about 5 percent less energy consumption. The so-called Y-dryer brings yet another impressive innovation to the world market: For the **SHORT INTERVIEW //** Fulmar Managing Director Keith Marley and Production Manager David Copson (from left) on the "dedication to green" at a leading British commercial print shop.



FULMAR COLOUR PRINTING CROYDON // GREAT BRITAIN

## *Mr. Marley, what made you start thinking about "green printing"?*

**Marley:** Climate change and environmental protection are issues that concern everyone. As a print shop, we feel it's part of our responsibility. Our customers feel the same way. Particularly high-profile companies listed on the stock exchange consider environmentally-friendly print products an absolute must. But small and middle-sized businesses are also climbing on the bandwagon more and more. It's like a domino effect which we prepared ourselves for early on. This allows us to keep existing customers and also gives us a competitive edge in the acquisition of new customers.

#### What concrete steps have you taken?

**Marley:** We are ISO 14001, FSC and PEFC certified, for example. As of June 2007, we have also been printing completely alcohol-free. In addition, thanks to our investment in the filtration and reprocessing system EcoClean, as well as other measures, we can boast a recycling rate of over 90 percent. That makes us one of the few climate neutral print shops in Great Britain.

So that means that you offer climate neutral print jobs? **Marley:** No. Our annual balance is climate neutral, not the individual jobs. For this purpose, the business CarbonTrust determines all of our climate relevant parameters. This includes the printing press, type of paper and all transportation. A "CO<sub>2</sub> finger print" is then created for an entire year. We then balance out the measured CO<sub>2</sub> impact by buying the corresponding emissions certificates.

How do customers react to your environmental dedication? Marley: Without the certificates, we wouldn't stand a chance with many customers anymore today. Printing alcohol-free without the quality suffering in any way is just as important and we've been able to employ this successfully as a marketing tool.

#### How do your employees react to this dedication?

**Copson:** They're enthusiastic about it because they see that saving doesn't have to mean sacrifice. Instead, it can be a meaningful and worthwhile investment. This motivates them in their own lives, too.

Heidelberg News • Solutions

SPEEDMASTER XL 105-6 WITH GREEN PRINTING EQUIPMENT VERSUS SPEEDMASTER XL 105-6 WITH STANDARD CONFIGURATION

90%	less ink residue: 0.2 instead of 2 tons per year	
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67% less waste: 94 instead of 283 tons per year

63% less IPA: 713 (2,700 l) instead of 1,902 (7,200 l) gallons per year

**63%** less VOC (IPA): 642 (2,430 l) instead of 1,717 (6,500 l) gallons per year

**50%** less waste water: 423 (1,600 l) instead of 845 (3,200 l) gallons per year

42% less powder emission: 77 (35 kg) instead of 132 (60 kg) pounds per year

40% less powder consumption: 1,190 (540 kg) instead of 1,984 (900 kg) pounds per year

21% less energy: 440,000 instead of 560,000 kWh per year

# 331,000 U.S. dollars (210,000 euros) Total Savings\*

t current German prices for paper, energy, etc.





first time, the drying system's hot exhaust air can be reused in a circular flow. This saves up to 30 percent of energy consumption. And progress is being made in UV technology as well. The new electronic power supply units reduce the dryer's standby consumption.

**Peripherals Save Energy.** Using additional Star peripherals allows you to save even more energy. The AirStar, for example, uses up to 50 percent less electricity than comparable air supply cabinets – and that with higher performance, thanks to the newly developed turbo radial blower. With the CombiStar Pro, the so-called "free cooling" saves energy by making use of the outside temperature. With temperatures of up to 64.4 °F (18 °C), the machine is cooled using a heat exchanger. A cooling unit only turns on when the outside temperature climbs higher than that. All together, this lowers energy consumption on the Speedmaster XL 105-6+L by about 20 percent.

**Perfect Balance.** As little as possible, as much as necessary: That's the motto at Heidelberg when it comes to energy consumption. The machines are designed to function quickly and reliably and deliver print products with a constant higher quality even when the most is demanded from them. That's why they also have higher specification values for power input than many competitor models. This doesn't actually mean that they need more energy for normal production, however. The opposite is actually the case. With the help of innovative control systems, the machines flexibly adjust their energy consumption to the respective demands. At the end of the day, this means they need even less energy per sheet than most competitor products. "Printers shouldn't orient themselves only by the maximum power input values in the operation manual. Instead, they should request actual performance data for the machines in operation," advises Frühbrodt. "Contrary to the familiar information on average gas consumption in cars, there is no standardized basis for measurement when it comes to energy consumption in printing presses."

**Alcohol – Choosing to Go Without.** Reduced alcohol consumption or even alcohol-free printing also helps protect the environment. This is because alcohol and washing agents are volatile and evaporate quickly. Under the influence of the sun, the emissions in the form of low-level ozone cause so-called summer smog. But this can be avoided. After all, almost all printing presses can be operated without the use of alcohol – or at least with minimal amounts of 2 to 3 percent. The conditions in the print shop determine how well it'll work. "Alcohol-free printing isn't a product, it's a project," explains Frühbrodt. "The print shop management has to be convinced about the decision and allow printers the time and

mistakes needed during the learning process." It's also necessary to find the right combination of dampening form rollers, dampening solution additive and ink. The dampening solution has to be impeccably clean and the water quality kept constant. Frequent use of special colors or printing on foil is nearing the boundaries. More than 50 Heidelberg machines in Europe are already running completely alcohol-free.

Green Development, Green Production. Heidelberg doesn't only offer its customers ecologically progressive products for their own businesses. Already beforehand during the development and manufacture of solutions for print shops, environmental protection is given great importance. For all development projects, Heidelberg's goal is to be significantly below the legal limit values for the operation of printing presses. Heidelberg has achieved this, as demonstrated by the "emissiontested" certificates from various testing and certification groups in Germany. In addition, all of Heidelberg's German sheet-fed offset production locations are certified according to the environmental management standard ISO 14001. On top of that, the company employs environmental protection officers in all factories. As a result, despite increasing production, the consumption of energy and water are steadily dropping. "The print industry can contribute a lot to environmental protection. That's why we've developed processes and products that benefit financially our environmentally conscious customers," says Frühbrodt.

Further Information on this topic can be found in the article "Business Model with Perspective" in the archive of Heidelberg's Global Online Newsletter (GON). Access to the Web site requires registration at www.heidelberg.com/hd/Newsletter. More information on environmental protection at Heidelberg at www.heidelberg.com/hd/Environment

THE JOB FOLDER SAYS A 6/6 color adhesive-bound brochure in format 8.1 x 8.1 inches (20.5 x 20.5 cm). Each of the 10,000 copies has 28 pages plus four cover pages. The 12-page mixed fold is between two cross folds with eight pages each. So far, so good. But the adhesive-bound brochure is especially thin (0.08 inches, 2 mm) and the color extends into the spine. And because the inner pages are to be fully covered in silver, it has to be mark-free – you don't want any scratches, after all.



Tempo, Tempo The Speedmaster SM 102-10P produces a total of 17,500 flat sheets in format 25.2 × 35.4 inches (64 × 90 cm) printed two-up in printing and perfecting mode respectively. Printing speeds are around 12,000 sheets per hour.



# operator should things get tight time-wise. But it won't.

Off to Folding The Stahlfolder TH 82/444 with delivery TS H 50 and with SPA-Twin is already waiting. First up is the mixed fold: 1/3 + 1/2 + 1/3. Since the sheet in the parallel folding unit is being folded asymmetrically, the TH 82/444 can show off its enormous operating performance. The machine gets to work at 16,000 sheets per hour. High-gloss nickel-plated sheet travel elements and coated buckle plate and deflector profiles ensure scratch-free production. Thanks to the mark-free delivery, freshly printed sheets are no problem either. For a cross fold (1/2 + 1/2), the perforation knives are set and the buckle plates put in the necessary position on the deflectors. Changeover takes a maximum of four to five minutes, while the machine configuration itself stays the same. Just one push of the button and then onwards at 12,000 sheets per hour.

A Fine Spine Fast or good? Both of course. The Eurobind 4000's PUR nozzles apply the adhesive evenly. Two nipping stations attach the cover. Cover alignment and the position of the scoring tool can be optimized while in operation. Unique: The nipping times can be increased independently of the machine speeds. The result is good stacking, high bond strength and absolutely top quality on the thin spine. At the end comes the three-side cut on the three-knife trimmer ET 4000 - with an output of 4,000 products per hour. That's it. Next job.

production is achieved.





# POSTPRESS

Printing presses light a fire under the rest of production: With speeds of 15,000, 18,000 and soon perhaps even more sheets per hour, they set an incredibly fast pace for later production steps to measure up to. The question thus presents itself: Is postpress even capable of keeping up with this rapid tempo? The following five examples show it is! With the right machines, achieving a "powerful postpress" is no problem. Especially since the new Prinect Postpress Manager accelerates postpress procedures even more. Still the question remains - which postpress chain is best suited to which order? And how can constant top quality be achieved even with maximum speeds and flexibility? You'll find the answers on the next pages where several high-performance machine combinations are highlighted – for demanding jobs in record time and at full...

# **JOB 01 //**

**On Time and Sharp** Fortunately, the freshly printed covers only have to go under the knife of the POLAR Cutting System L-R-115-T. That saves time. So does the fact that they are automatically piled onto a pallet after being cut thanks to the Transomat. Productivity can be doubled with the help of a second

**SUMMARY** The combination of machines on this job ensures fast production with the highest level of quality. The adhesive binder's full capacity is achieved. The automated changeover in the folder wins additional time. At the same time, a completely scratch-free

# **JOB 02 //**

THE JOB FOLDER SAYS The customer wants to print a 4/4 color, bound brochure in format A4, and a total of 50,000 copies. The brochure is 32 pages with pictures spilling across onto the next page. In addition there are four page covers. Pretty demanding: On the last bound page on the left-hand side, a product sample in the form of a CD needs to be glued on. On top of that, a four page advertisement envelope 2.8 × 11.7 inches (7 × 29.7 cm) is to be attached.

Off We Go The Speedmaster XL 105-8-P produces 113,000 flat sheets in format 25.2 × 35.4 inches (64 × 90 cm) printed one-up in printing and perfecting mode. Speeds are around 15,000 sheets per hour.

Clean Cut Once again the POLAR cutting system L-R-115-T only has to cut the covers. With the help of the Transomat, they are automatically transported to a pallet after cutting completely straight. There's no second operator needed on this job either - not even one and a half. That's it already.



Fully Automatic with Post Fold Continuing on: The new Stahlfolder KH 82/4-KZR L + TS H with pallet feeder acts as if it were made for the 16-page, A4 cross fold (11/2 + 11/2 + 11/2) The job is produced fully automatically with post fold for ideal and reliable opening of the signatures on the saddlestitcher. To do so, the connected side and front edge stops in the first and second cross fold have to be set. Once saved, the post fold for both cross folds can be called up again without much make-ready time. Despite spillover pictures, the continuous sheet stops in the buckle plate and the cross folds enable a high performance speed of 12,000 sheets per hour.

**Perfectly Timed** Fortunately, a **Stichmaster ST 450** is waiting at the next station and not just any saddlestitcher. Why? Because thanks to mobile product sample gluers in front of the first and second cover folder feeders, the product can be finished in one pass - including the CD onto the last even page. In the trimmer, the cut to achieve the end format size is synchronized with the brief standstill of the transport belt and product. In this way, the sensitive surface remains free of scratches. The stacker developed by Heidelberg then stacks the bound products cleanly and mark-free - 12,600 per hour. Done, next job!

SUMMARY The Stahlfolder KH 82 scores points with high production speeds. But above all else, the Stichmaster ST 450 can strut its stuff on this job: Thanks to freely positionable modules along the saddle chain, the product can be completed quickly in one pass. In addition, only saddlestitchers from Heidelberg are currently able to affix product samples, for example a CD, on the last left booklet side. THE JOB FOLDER SAYS The next job is a 5/5 color annual report in format A4 with a run size of 5,000 copies, each with 64 pages. Particularly challenging is that the cover should be hole-punched in such a way that it coordinates exactly with the position of the motif on the bound books. On top of that it is a Swiss brochure. That means - you can't just work quickly. You also have to make sure the cover and bound book are perfectly positioned.



Three, two, one ... The Speedmaster XL 105-10P produces 20,300 flat sheets in format 25.2 × 35.4 inches (64 × 90 cm) one-up. Some 15,000 matt coated sheets in the delivery per hour – and in no time we're done. We don't have forever, after all.



**Strong Entry** Thanks to the high level of automation, even very short runs can be processed economically with the entry level model Varimatrix 105 CS. Due to the variable chase, existing old cutting dies can be reused. For this job, the die cutter is only given the chance to show off on the cover. The hole-puncher with four blanks works at 7,000 sheets per hour.

Snip, Snap and Off Now switch on the POLAR cutting system L-R-137-T and the automatic jogger aligns the covers - exactly and precisely of course. After that, they're off to the high-speed cutter. Since the POLAR is needed for another job right away, two operators work at the machine. That makes things go twice as fast. After cutting, the covers are automatically and exactly stacked on a pallet with help from the Transomat. This makes you ready for the next steps faster.



Nonstop Folding The new Stahlfolder KH 82/4-KZRL + TSH with pallet feeder is perfectly suited for the  $4 \times 16$  side cross fold (1/2 + 1/2 + 1/2) The knife settings in the first cross fold can be precisely adjusted and the perforation corrected while in operation. This means the machine can run non-stop and churns out 12,000 sheets per hour on this job.



**Glued and Done** Thanks to the modular construction and the installed optional back-stripping station. the Swiss brochure can be processed in one pass on the Eurobind 4000. The fully automatic cover gluer ensures an even, extensive glue application across the entire gluing surface. Alongside the side-glued bound book, the end product has a perfect spine form and the motif behind the punched cover is positioned exactly right. Everything's perfect - and that at the full speed of 4,000 products per hour. Grab a coffee and it's off to the next job.

**SUMMARY** The Varimatrix offers customers a high degree of flexibility with easy handling. The high tempo in the die cutter, folder and gluer allows the order to be processed with remarkable productivity in just a short amount of time.

# **JOB 03 //**

# **JOB 04 //**

**THE JOB FOLDER SAYS** A six-corner collapsible box in format 7.1 × 5.6 × 2 inches (18 × 14.2 × 5 cm) closed or 6.2 x 9.4 inches (50.75 × 24 cm) open needs to be produced - better said 120.000 of them. The box is six-color with dispersion coating. Careful: Because of the two-step embossing, the register demands in the die cutter are particularly high.



And Action! The Speedmaster XL 105-6+L charges ahead and sets an enormous tempo with 18,000 sheets per hour. It produces a total of 20,000 flat sheets in format 40.6 × 29.5 (103 × 74.3 cm). six-up in printing. All that on paper with 290 gsm.



Punching without Jams Two-step embossing? That's just the thing for the Dymatrix 106 Pro CSB! The new DySet Pro feed system aligns the sheet to the printed markings, prevents jams and thus ensures reliable sheet travel. Although the waste pieces are extremely narrow on this job, the register control in all four stations enables register-accurate sheet positioning. That means lower pins aren't even needed in the production, which reduces make-ready times significantly. The new quicklock frame and easy accessibility from the operator's side add to the short make-ready times. The die cutter performs this job at 9,000 sheets per hour.



**40,000 per Hour** The folder gluer Diana X 115 with Diana Feeder and Diana Packer produces more than 40,000 boxes per hour on this job. Set up for six-corner boxes requires many attachment parts. These are kept in the multifolder, which means that the parts don't have to be cumbersomely mounted and dismounted – they are simply folded up. The open frame design also promotes reduced make-ready times. It enables easy accessibility and thus fast set-up at every station. Good for quality: The new ejector module sorts out defective boxes reliably. Practical: The roller bars can be seamlessly repositioned in the machine direction. This high degree of flexibility enables the machine to be set up for very diverse types of boxes with very little handling. Next job!

**SUMMARY** The Dymatrix 106 Pro CSB's high net output at full performance is supported by the nearly jam-free sheet travel. At the same time, the Diana can exhaust its enormously high performance potential on this job. In doing so, the minimized make-ready times on both machines ensure additional productivity advantages.

THE JOB FOLDER SAYS For this job, a straightline folding carton in format 4.8 × 4.1 × 1.6 inches (12.2 × 10.5 × 4 cm) closed or  $13.3 \times 8.6$  inches ( $33.9 \times 21.9$  cm) open is to be produced. That may be a bit of an understatement – the entire run is around 240,000 pieces. The box is four-color plus the special color "grey" and sparkling effect.



Newbies with Ambitions The Varimatrix 105 CS's high level of flexibility and automation predestine it for small runs, above all else. With a listed performance of 7,500 sheets per hour it's certainly well-suited for high runs as well though. In addition, the format is ideal for the XL 105. A further advantage: The quicklock frame for tools with fine tuning and ergonomically centralized operating elements at the important stations also influence net productivity positively.

Fast and Gentle The Easygluer 100's 7.9 foot (2.4 m) prefolder and the 9.5 foot (2.9 m) folding station ensure a particularly gentle fold. Thanks to the individually controllable speeds of the folding belts. the glue result is also ideal. The blank alignment module saves make-ready time at the feeder. It also enables precise folding along the creaselines and perfect gluing. Remote control, touch screen and poweroperated adjustable transport makes for easy operation and wins additional time. All together that means a good 90,000 boxes per hour. Not bad.

**SUMMARY** Both the Varimatrix 105 CS and the Easygluer 100 prove themselves to be the ideal and economic entry into professional finishing of folding cartons on this job. Both machines distinguish themselves through a high level of automation, easy operation and enormous flexibility. That also makes them the perfect entry level models for commercial printing - especially because of their remarkable net productivity.

*II* Heidelberg has the right ingredients for speedy postpress. Not only the machines presented here are perfectly designed to meet the branch's demands: As a system provider, Heidelberg scores additional points with the Prinect Postpress Manager, which helps to integrate machines ideally into the daily production life of commercial and packaging printers. Machine and job data available in real time, an integrated planning table and analysis tools ensure complete transparency across the entire process chain. In addition, similar orders can be grouped. That reduces make-ready times, saves waste and increases cost control. Thanks to this ideal combination of high performance machines and software solutions, Heidelberg customers in postpress get exactly what they need: for even higher pro

# **JOB 05 //**

At its Limit The Speedmaster XL 105-6+LX3 UV prints a total of 20,000 flat sheets in format 29.4 × 41.3 inches (74.8 × 104.8 cm), each 12-up in printing mode on paper with 300 gsm. The printer

# Perfecting Perfection

**SPEEDMASTER XL 105-P //** Top speeds of 15,000 sheets per hour, the highest level of automation, no sacrifices on quality during perfecting – it's there at last – the Speedmaster XL 105 with perfecting device. The new machine then got the finishing touches from various field tests, including at the Druckerei Engelhardt & Bauer in Karlsruhe, Germany.

he rear side is scratched and smeared. Bernhard Konz examines the printed sheet very carefully and shows Rigo Fay the respective spots. Fay is the head of the German commercial print shop Engelhardt & Bauer (E&B) located in Karlsruhe. Konz works as technical director there. It is March 2007. On the prototype of the new 10-color Speedmaster XL 105-P that's undergoing field tests at E&B, a 4/4 color annual report is being printed. Fay and Konz consider the possible causes but can't explain the scratches and smeared spots right away. Up until now, the error hadn't appeared on a single individual print job on the brand new machine - even though the Karlsruhe team has been testing the perfecting press for four weeks already.

A few days later in Heidelberg: The experts from the printing press manufacturer reproduce the errors that showed up at E&B. With high speed cameras and state-of-the-art measurement techniques, the problem is quickly localized. The sheet travel in the area of the delivery's chain wheel shaft isn't working ideally - but only when the last printing unit isn't used for printing the sheet. Furthermore, the problem only occurs with a few printing stocks. Until the problem is solved, the printers from E&B make do by assigning the colors in such a way that the last printing unit always gets used for every job. After intensive tests by Heidelberg, everything is ready: Improved suction segment discs in the delivery now guide the sheet absolutely reliably and smear-free around the chain wheel shaft. Shortly thereafter the new discs are built into the 10-color perfecting press at E&B.

Fine-Tuning with Field Tests. "Before it gets released to the market, a series machine has to be one hundred percent technically mature," explains Heidelberg Product Manager Uwe Hochmüller, who accompanied and advised E&B during the field test phase. "In order to achieve this ripeness for the market, comprehensive tests are absolutely necessary – especially considering our own demands on 🕨





#### Doesn't smudge or scratch:

The modified suction segment discs ensure perfect sheet travel around the chain wheel shaft – even when no ink is applied in the last printing unit.

• quality," emphasizes Hochmüller. The example with the suction segment disc in the prototype at E&B underscores the importance of real-life tests very well. "Each of our new developments goes through scores of tests in-house of course. But as comprehensive as these tests are, it's simply impossible to simulate every conceivable print job on every available printing stock in the laboratory, so to speak," explains Darko Zimbakov, group leader in development at Heidelberg and responsible for the project XL 105-P since June of 2007. "That would be a bit too time and cost-intensive."

Generally, every new innovation by Heidelberg already has a "fitness check" lasting multiple weeks under its belt before it's even allowed to go to a field tester. To do so, Heidelberg simulates a print shop in-house and checks a broad range of ink, coating and printing stock combinations. The combination that made a change in the suction segment discs necessary, however, wasn't tried at Heidelberg but therefore at E&B. This enabled the error to be discovered and solved before bringing it to market. "Our machines are already very mature when they're released for field tests. They can definitely already be used as full-fledged production machines. In cooperation with the customers, though, our machines then get the finishing touches," concludes Hochmüller. To ensure that the printing presses are top-quality products right from the start, Heidelberg relies on the joint expertise of numerous specialists: Experts from mechanical engineering, development, software, simulation, measurement technology, test component manufacture, component testing, assembly, service, test print shops and product management all work together as a team to make the Speedmaster XL 105-P and its siblings technological masterpieces.

Quality Indistinguishable from Printing. Flashback: February 2007, in the pressroom at E&B. The freshly installed ten-color Speedmaster XL 105 with perfecting device is ready to print its very first job – a 5/5 color corporate brochure. Since Fay already had the straight version of the Speedmaster XL 105 for field tests three years ago, his expectations are accordingly high. The perfecting press' print quality is said to keep pace with its five-color and six-color Speedmaster XL 105 family members with coating. He is also expecting a noticeable productivity increase. After all, the perfecting press is said to print 15,000 sheets per hour and save valuable time in recurring jobs thanks to savable job data. When Fay inspects a sheet from the premiering job, he is thrilled with the result. That doesn't change in the next test weeks either. "The print quality in printing and perfecting mode is still absolutely identical. We haven't had to curb our expectations here at all," says Fay. E&B can produce all high quality products without exceptions on the 10-color perfecting press – from illustrated volumes to annual reports and up to art catalogues. "The quality is even top on forms with thick ink layer and on 4/4 color jobs with double sided print varnish," Fay continues. A further advantage is that E&B saves five minutes of make-ready time thanks to the fully automatic changeover - particularly when changing from very thin to very thick printing stock.



#### HIGHLIGHT 01 // THE PERFECTING DEVICE

The Speedmaster XL 105 integrates innovative perfecting technology into a continuous complete system designed to deliver constant top productivity, high quality and profitability. In so doing Heidelberg relies on tried and true elements like the three-drum perfecting unit including transfer in a gripper closure for register accurate and reliable sheet transfer. The innovative AirTransfer System and the exchangeable blanket packing for impression cylinders and variable transfer cylinders ensure that the double sided printed sheets are guided through the machine to the pile mark-free - and that at top speeds of generally 15,000 sheets per hour in perfecting mode. At the same time. all functions can be centrally controlled at the Prinect Press Center.



#### HIGHLIGHT 02 // SHEET TRAVEL AFTER PERFECTING

Heidelberg developed a completely new sheet travel system after the perfecting device for the Speedmaster XL 105-P. In so doing, the business placed the highest value on perfect sheet travel, preset abilities and being able to process as large a spectrum of printing stocks as possible. The variable AirTransfer System ensures perfect sheet transfer. Drum shells in and after the perfecting device extend during the changeover between printing and perfecting mode automatically. The sheet guiding plates before reversal are equipped with venture nozzles that can be regulated fully automatically from the Prinect Press Center. To do so, the printer only has to enter the strength of the printing stock. In order to achieve the highest print quality on both sides with high levels of ink application, the sheet guiding plates after reversal also possess so-called AirJet technology.

• Excellent Preset Abilities. "The Speedmaster XL 105 perfecting press is custom tailored to the needs of highly industrialized offset printing," says Hochmüller. "The Speedmaster SM 102, however, still remains the ideal perfecting press for print shops who don't need the capacity of the Speedmaster XL 105-P." In comparison to the Speedmaster SM 102, the Speedmaster XL 105 is up to 40 percent more productive. This is due in part to the 2,000 sheet higher performance speed, as well as the expanded preset abilities. The presettings based on characteristic data for the air blast and suction values in the feeder and presettings for sheet travel, perfection and delivery can be saved and therefore shorten make-ready times significantly. The advantages of the feeder and delivery are available on the Speedmaster SM 102 with additional components. "E&B has helped us enormously in improving the preset values," Hochmüller says. "The printers adjusted the preset values obtained during our tests to the real circumstances in the pressroom bit for bit." Here, too, it paid off that nearly the entire spectrum of printing stocks in combination with different print motifs are used.

Long-Term Testing of Components. January 2008. Technically speaking, the field test was over three months ago. Nevertheless, the field test team is meeting at E&B again to discuss the current state of affairs. During the test phase, the meetings took place every week to exchange new experiences with the printing press - now they only take place when there's something very unusual to discuss. Like today. Fay, Konz, two department managers, and two printers from the print shop are present. Heidelberg is represented by Hochmüller, who, as product manager, serves as a link between field test customers and development at Heidelberg.

Like all field test customers, E&B documented every print job in detail using a standardized form including information like: How long did set-up take, how fast could the type of paper be processed, how long was washing, how "well" did the job go, etc. Konz sketches out a recent problem that he had documented, "The sheets aren't getting deposited in the delivery completely straight anymore. There's probably something wrong with the sheet brake." Shortly thereafter, Konz's guess was proven right. A worn out suction belt on the dynamic sheet break was indeed at fault. "Before being put into operation at the field test customer's site, the endurance of all machine components is tested to their limits," explains Hochmüller. "But for some components, for example the suction belt, the wear and tear is very dependent on the printing stock being used. So in some cases, the wear is only noticeable after millions of print runs. That can only be roughly estimated beforehand."

Thanks to the tip from E&B, Heidelberg was able to further develop the suction belt and now uses a much tougher material. As a result, the suction belt's durability is five times higher. "The lifespan of the old suction belt was good, but not optimal," Hochmüller comments. In the meantime, Heidelberg has fitted all the Speedmaster XL 105 perfecting presses with the new suction belt even those already in place with customers. Heidelberg customers **>** 



"THE QUALITY IS EVEN TOP ON FORMS WITH THICK INK LAYERS AND ON 4/4-COLOR JOBS WITH DOUBLE-SIDED **PRINT VARNISH.**'

Suctions and suctions and suctions... Thanks to wear-resistant materials, the lifespan of the suction belt in the delivery was increased by five times. The geometry of the driving rollers was also optimized, since they influence the lifespan of the suction belt considerably.

**"THE PRINT QUALITY IN PRINTING AND PERFECTING** MODE IS ABSOLUTELY IDENTICAL. WE DON'T HAVE TO CURB OUR EXPECTATIONS HERE AT ALL."

RIGO FAY, MANAGING DIRECTOR OF ENGELHARDT & BAUER

TIPS FOR OPTIMIZATION FROM CONVERSATIONS VITH OUR FIELD TESTERS.'

print shop's production costs are reduced when the wear parts last longer," Hochmüller adds.

**Around 70 Improvements.** In the end, the field tests benefit all users. "Our customers receive technically mature machines and we as manufacturer can test them under real conditions and receive valuable tips for optimizing them from conversations with our test customers," says Hochmüller. Heidelberg made around 70 improvements to the Speedmaster XL 105-P thanks to the energetic help from E&B. Fay also sees the advantages of taking part in the development, "We're happy to get to know technological innovations early on and, above all else, be able to use them." He was particularly excited about testing the new perfecting press. The business' previous experiences strengthened their resolve to change over to Speedmaster XL 105 presses. "Right now we have three Speedmaster XL 105s in operation and are as productive as we were before with four presses and the same array of orders," says Fay. In the meantime, E&B has printed more than 36 million sheets on the ten-color perfecting press. And because no machine lasts more than five years at E&B, Fay may buy the next XL perfecting press soon. The Speedmaster XL 105 with perfecting device has definitely convinced him in any case. "Top print quality and the highest productivity simultaneously. What more could you want?"

**Engelhardt & Bauer** Druck- und Verlagsgesellschaft mbH 76131 Karlsruhe, Germany center@ebdruck.de www.ebdruck.de

#### The Field Testers from Karlsruhe

Engehlhardt & Bauer produces on an area of 53,820 feet (5,000 sq. m.) and have various Heidelberg machines in operation - including a new tencolor Speedmaster XL 105 with perfecting device, a five-color Speedmaster XL 105, a six-color Speedmaster XL 105 with coating unit, a two-color Speedmaster SM 52, a six-color Speedmaster SM 52 and a five-color Speedmaster Anicolor with coating unit. The business manufactures all kinds of commercial products in sheet-fed offset for customers from the advertizing industry, graphic studios, publishing companies and associations. It also produces for parties, institutions, art and culture organizations. E&B particularly enjoys producing high quality products such as art books. annual reports or illustrated volumes. With 145 employees, E&B earned an annual revenue of 31.4 million dollars (20.2 m. euros) in 2007.

**Further information** 

on this topic can be found in the article "A Class of its Own" in the archive of Heidelberg's Global Online Newsletter (GON). Access to the archive requires registration at www.heidelberg.com/hd/Newsletter More information on the Speedmaster XL 105-P at www.heidelberg.com/hd/XL105P

Up and down – time and again: Thanks to the improved geometry of the bolts and air ducts, • therefore profit from field tests even when they are already over. "A



#### HIGHLIGHT 03 // THE PRESET PLUS DELIVERY

Heidelberg further optimized the Preset Plus Delivery to specially fit perfecting presses. In order to automatically preset format and air settings in the delivery, the printer only has to enter the format and the thickness of the printing stock at the Prinect Press Center. The suction segment discs ensure secure sheet travel. Then the dynamic sheet brake slows the sheets down, even at the highest speeds. The blast air system supports exact pile formation. This, in turn, enables finishing to take place sooner. Thanks to preset features in the delivery. print shops win three to five minutes of additional production time. Manual changes can be made centrally at the Prinect Press Center and at the delivery control station, as well as saved for recurring orders.



#### HIGHLIGHT 04 //

#### **POWDERSTAR AP 500 DUO** AND CLEANSTAR

Minimal powder, less pollution, increasingly less cleaning needed - the PowderStar AP 500 Duo from Heidelberg is the ideal supplement for perfecting. The powder sprayer is made up of three spray tubes with a total of 24 nozzles which distribute the powder. An additional bar applies powder from below. Because of the relatively higher application pressure in comparison to conventional systems, less powder gets whirled around. The noticeably evenly distributed powder increases powder efficiency. The process air purification system CleanStar snatches the misplaced powder and sucks it up with four suction points placed around the delivery pile. The delivery air system's automatic self-cleaning as well as additional brushes for cleaning gripper rods and chains optimize the CleanStar's efficiency.

# The Searchers

**HEIDELBERG SERVICE: BUSINESS CONSULTING //** New printing presses have to suit the business model they're in – both today and tomorrow. In order to invest correctly, the technological, organizational and economic demands need to be analyzed carefully – ideally with a competent partner like Heidelberg Business Consulting.

#### EXAMPLE 01 // INCREASE IN PRODUCTION: UP TO 90 PERCENT

Grevener Druckhaus Cramer has made a name for itself well beyond the German borders thanks to its excellent expertise in color management. In their search for the ideal new investment, the print shop brought in help from Business Consulting in Heidelberg. The consulting experts were commissioned to examine the business advantages of an upcoming exchange of machines and support the management in their investment plans. From three existing Heidelberg printing presses, the management first made a pre-selection. The consulting experts were given the task of exchanging at least one old machine for a new four or five-color Speedmaster. In so doing, future market developments also needed to be taken into consideration.

Business Consulting analyzed the actual production and job data from the last twelve months as well as current market data and ran through various scenarios. Management followed Business Consulting's recommendation and installed an eight-color Speedmaster SM 102 perfecting press as well as a five-color Speedmaster XL 105 with coating unit. To the print shop's surprise, this exact combination proved to be the ideal solution: Within three months of putting the presses into operation, job capacity and sales increased by 10 to 15 percent. In comparison to before, productivity per order increased by 50 to 90 percent.

here seems to be some truth to the accursed seventh year. Not only do many couples put their marriage to this test then - print shops also have to cope with a serious relationship crisis during this phase. On average, businesses exchange their old machines for a new model after seven years at the latest. This is the only way to remain able to compete and absorb the increasing pressure for quality and price. Nevertheless, many companies quickly reach their limits when it comes to choosing the ideal investment. After all, the acquisition also lays the foundation for future development. Chances and risks therefore have to be calculated as exactly as possible. There's no room for misjudgments.

Planning and Investing Securely. In order to safeguard their investment plans, print shops are relying increasingly on competent guidance like that from Heidelberg Service Business Consulting. "We support businesses that are currently in an investment phase and need a well-founded basis for decisions," Oliver Dittmar, Head of Business Consulting, describes the goals of the service division.

The comprehensive consultation services extend well beyond sheer printing considerations. At the focus is a holistic approach which examines the intended release of old machines in connection with the respective business model, economic factors and processes on-site. An investment recommendation is thus created in close cooperation with the customer. It is tailored to the customer's individual needs and minimizes the risk of false purchases. "We can't see into the future either of course," says Fabrice Raballand, Head of Business Analysis. "But we do bring a considerable expertise in the branch with us that gives the decision process an objective foundation and thus eases it significantly."

In Three Steps to Success. In Germany, Austria and Switzerland alone, Business Consulting has led over 144 projects in print shops with 20 to 500 employees. On top of that comes those in Australia, the United States, Brazil and Great Britain. Surprised faces aren't seldom here, "Many print shop operations arrive at different results than we do because they consider only a part of the relevant business data or just go by their gut feeling," explains Dittmar, adding, "A clear and objective picture only arises when all important parameters are calculated into the evaluation."

Nevertheless, such an analysis and consultation project generally doesn't last longer than five man-days. The service division from Heidelberg uses a three-step concept here. First, the experts from Business Consulting create an exact picture of the current situation in the business. The actual business and production data from one business year serve as the foundation. These are then evaluated with the help of various parameters, for example based on run size, formats or colors. Other numbers - such as the machines' performance, makeready times and level of capacity, as well as processes, shift models, hourly wages and general business costs - are all taken into consideration in the calculation as well. In the second project phase, the experts from Business Consulting build on this and run through the various investment scenarios and, if necessary, strategy adjustments.

#### FXAMPLE 02 // **NEW CAPACITIES** FOR NEW BUSINESS

A commercial printer with 50 employees had previously produced on a four-color Speedmaster CD 102 and a two-color Speedmaster SM 102 with perfecting device. The problem was that the presses were constantly working at full capacity even with operation in three shifts. This meant that the management had to give away some orders to subcontractors – and the corresponding revenue was therefore made by the others. In order to balance out production bottlenecks and be able to process more orders themselves, the print shop planned to invest in an additional five-color Speedmaster SM 52 with coating unit. Business Consulting was brought in to double check the plan with objective facts. This process demonstrated that the management was on the right track with their idea. In addition, after continuing analysis of the shift operation, customer spread and simulated increase in capacity, it was suggested to enter into label printing.

Today, the business's third press is also running at full capacity thanks to the corresponding rearrangement of orders. At the same time, the new investment lends some relief within daily production. Because of the additional capacity, the print shop was able to expand its service range and open up additional sources of revenue for itself. In the meantime, the business is also successfully active in label printing. Profitability improved as well: Orders previously carried out externally are now covered by the print shop in-house.

#### EXAMPLE 03 // **HIGH PRODUCTIVITY** AND FAILURE SAFETY

The Rheintaler Druckerei und Verlag AG (RDV), with 130 employees, is active in classical commercial printing. In addition, RDV produces a total of 20 trade journals published at regular intervals. With the goal of increasing productivity amidst a tough price war, the management began looking for a high-performance replacement for an aged printing press.

The business' management discussed various possible solutions with Business Consulting including covering the entire volume of orders with a single eight or ten-color press in the future. Business Consulting advised against this possibility because the risk of production downtimes, in case a machine broke down and there was no backup, were too great. The ensuing comparison of various machines ended in favor of a four-color Speedmaster XL 105 with coating unit. The new press has been in operation since January 2008 alongside a four-yearold five-color press with coating unit. Additionally, RDV decided on installing the color measuring system Print Image Control. In comparison to the previous machine, the XL 105 produces with twice the output. With the help of the improved color workflow, the print shop was also able to further optimize its business processes. The machine's higher capacity is now fully utilized during operation in three shifts.



"WE CAN INTEGRATE EVERY HEIDELBERG MACHINE INTO THE CUSTOMER'S VIRTUAL PRODUCTION PROCESS. THAT MEANS THAT CUSTOMERS CAN QUICKLY SEE WHAT EFFECTS THEIR INVESTMENT DECISIONS WOULD HAVE ON DAILY LIFE IN THE PRINT SHOP."

OLIVER DITTMAR. HEAD OF BUSINESS CONSULTING





#### EXAMPLE 04 // **QUALITY AND FLEXIBILITY** WITH EXPANSION POTENTIAL

A commercial print shop with 130 employees and an array of orders in the upper-guality class had been producing with five sheet-fed offset presses without perfecting mode. Within the last five years, the portfolio of customers and orders had changed dramatically. Around 80 percent of printing volume was now being printed double-sided. In order to strengthen their ability to compete, the print shop therefore decided to adjust their array of machines and commissioned Business Consulting to look for the ideal solution. In addition, they also wanted to increase the printing volume by 20 percent.

The analysis of orders and equipment by Heidelberg Business Consulting lead to the conclusion that all machines had to be taken out step by step. First the management replaced two presses in exchange for two eight-color Speedmaster XL 105s - both with double-sided jobs in one pass and therefore considerably more productive. At the same time, they profited from a higher printing volume. Because a large portion of the jobs could be produced efficiently without perfecting technology, the print shop's next step was to replace three other old machines. In exchange, two five-color Speedmaster XL 105s with coating unit and a four-color Speedmaster XL 105 were put into operation. The use of presses with state-of-the-art technology reduces make-ready and maintenance time significantly. The business therefore profits from further productivity increases here as well.



#### EXAMPLE 05 // **NEW TECHNOLOGY**, **NEW POSSIBILITIES**

For the Medienhaus Appenzell in Herisau, Switzerland, it was high time to invest in new printing presses. Both the two and six-color machines had grown old and were in need of repair. Their limited capacity couldn't be made up for by working overtime and the management had to send increasingly more jobs out of house.

In their hunt for the ideal solution, Business Consulting first examined the print shop's range of orders and equipment. Next, the consultants examined carefully the product cost analyses as well as the employee structure. Based on the data gained, the team then simulated various investment scenarios. The results spoke clearly for a five-color Speedmaster CD 74 LX. The machine unlocks additional capacity thanks to the higher performance as well as shorter make-ready and non-productive time. A further advantage is that the coating unit enables special applications to be produced. This lets the print shop not only support its customers in the production of high-quality finished products, but also leave enough of a buffer for continuingly increasing demands on quality. Daniel Schneider, Managing Director of the print shop says, "With the help of Business Consulting, we gained great insight into our business and received a lot of help in the decision-making process. Without the experts from Heidelberg, we may very well not have the right machine standing in our pressroom."

• To do so, the teams from Heidelberg use the special simulation software BizModel (more on that in the info box). This enables them to calculate the influence a changed order structure or a new machine would have on the current situation. "We can integrate every Heidelberg machine into the customer's virtual production process and show how it changes productivity, capacity and profitability," explains Dittmar. "That means that the customers can quickly see what effects their investment decisions or a re-adjustment of the business model would have on daily life in the print shop." In the third project phase, the results are presented and discussed in joint workshops.

Regional Services in a Global Market. Business Consulting's services are available to print shops globally and are coordinated by Heidelberg. However, they aren't identical worldwide. "Print shops receive exactly the support from Heidelberg that they want," explains Raballand. "These wishes vary depending on market demand, however, and that's precisely what we adjust to." While there is an evenly high demand for services like logistic, print shop, architecture and investment planning worldwide, there is an additionally high degree of interest in Great Britain, the United States and Australia in further services. That includes detailed revenue and margin analyses for various customers - A, B and C. This enables a financial regrouping of customer portfolios, for example. "The ABC analysis allows us to offer more comprehensive support to the print shops

#### **BizModel**: **Real-Life Simulations for Success**

The simulation projects by Heidelberg Business Consulting generally last five man-days. For this purpose, the project team first compiles all necessary data from the management information system. This data serves as the foundation for analyzing individual order spectrums, the range of equipment as well as the customer portfolios, subdivided into A, B and C customers. In order to counterbalance seasonal fluctuations. the job portfolio is analyzed over an entire year when possible. As the next step, the project team defines possible scenarios and uses the simulation software BizModel to sketch out the associated effects on all areas of the business. This reveals the impact a strategic or investment decision would have on prepress, the pressroom and finishing as well as the entire workflow. The customer can compare various investment options and make an accurate decision based on actual numbers. As a supplement to the previously described simulation projects, Business Consulting offers its customers additional modules, including market trend analysis, marketing and sales analyses as well as SWOT analyses. This enables additional optimization potential to be identified.



#### "WE CAN'T SEE INTO THE FUTURE EITHER. OF COURSE. BUT WE DO BRING WITH US CONSIDERABLE EXPERTISE IN THE BRANCH THAT GIVES THE DECISION PROCESS AN **OBJECTIVE FOUNDATION AND THUS EASES** IT SIGNIFICANTLY."

FABRICE RABALLAND. HEAD OF BUSINESS ANALYSIS

there than on the European continent, particularly in terms of strategic questions," says Raballand. "In Europe, such a thorough examination of the business is hardly ever requested, because very few businesses want to talk openly about prices and revenue. That's very different in the Anglo-American region."

Business Consulting has set quite a few goals for itself for the future. The service division is currently running a pilot project to examine how Prinect can be used for the changeover from an operation with three shifts to two shifts. In other pilot projects, Business Consulting is advising customers in the areas of financial simulation, marketing and sales analyses as well as production benchmarking. "We want to continue to grow and expand our range of services in order to be able to support print shops even better," says Dittmar. "After all, a business like Heidelberg needs successful customers above all else. And that's what we're working on." ■

# Bestseller Print

**PRINT CAMPAIGNS //** If you want your advertising message to be heard above the hullaballoo of the media, you have to dip deep in your pockets. Increasingly higher sums of money are flowing into the new online media forms – a questionable decision, as two campaigns in Europe and the United States demonstrate. It seems classical print media advertising has more influence on a positive brand image and still sells better than the virtual competition, too.

hould I or shouldn't I? When it comes to purchase decisions, most people still prefer to place their trust in printed material. And with good cause: Brochures, catalogues, magazines and mailings can be picked up and looked at time and again. You can take your time browsing through them over a cup of coffee and delve deep into the brand environment. Despite these undisputed advantages, many managers' faith in print advertising seems to be dwindling. According to projections, businesses will be investing a record sum of 480 billion dollars (304.3 bn. euros) in their worldwide marketing activities this year. Of this, the percentage dedicated to online advertising is steadily on the rise - and thus decreasing the gap between it and print advertising. It's true that print is also profiting from the current boom in advertising. Nevertheless, many managers consider digital channels like the Internet, in combination with laptops, PDAs and cell phones to be the future of advertisement and shift their budgets accordingly.

**Brands You Can Touch.** In many cases, there is a preconception at the root of this problem – namely the idea that while print is wellsuited for image promotion, it doesn't sell. In order to clean up this false image, the European Association of Fine Paper Manufacturers (CEPIFINE) launched the first Europe-wide campaign for printed advertisement in the fall of 2007. The goal of "PrintSells" is to publicize the positive influence of print advertising on a brand's REPORT

credibility and versatility. Responsible for the program is United Print Chain, a European cooperative association made up of the graphic industries, printing ink manufacturers, publishers, mail service providers, paper manufacturers and the printing press industry. Heidelberg is also supporting the campaign, because it makes marketing managers aware of print as a modern and, above all else, effective, medium.

"PrintSells" uses brochures, direct mailings, and ads in trade journals to target roughly 450,000 managers from 13 European countries in the fields of brand policy, communications, marketing and advertisement. The campaign is intended to show them that printed advertisements offer tangible advantages. "Print is a modern. dynamic medium and superior to every other form when it comes to emotionally addressing customers and direct brand success," says Frank Leerkotte, campaign director and managing director of CEPI-FINE. "No other medium can present a brand in such a way that when it's put in users' hands, it also wins over their heart, so to speak," Leerkotte continues. In order to support this statement, "PrintSells" informs business managers about the advertising impact of mailings, magazine ads and printed corporate communication as well as the prospects of success from these actions at the point of sale (POS). In so doing, the campaign leaders rely on print's classic strengths with creative motifs and elaborate print effects. They also offer comprehensive information with case studies and academic studies.

**Users Prefer Printed Advertisements.** The campaign shows that people prefer to read important company information on paper rather than on the computer screen. While 86 percent of investors read business reports electronically, 61 percent of them read the printed version as well – and almost half absolutely want to be able to hold the business report in their hands. There are a whole range of arguments here: It takes 20 to 30 percent longer to comprehend the same information content on the computer screen than in print. In addition, people's memory of a brand is much poorer when only seen online. Furthermore, every detail of printed business communication conveys the company's personality and values – from paper to typography and design and up to text layout. Thus the study concludes that even a perfect Web site cannot provide this in such an individual and emotional form.

Ikea is a good example of this. With "only" 237 locations all over the world, the Swedish furniture manufacturer produced around 192 million catalogues in 2006. That gave the business the highest run of catalogues worldwide. Not only did the furniture store deliver the catalogues to customers' homes in 27 languages and 35 countries for free, it also displayed them in the store locations. "The catalogue • is the most important element in Ikea's marketing mix and proved extremely successful in luring customers to the furniture stores and our homepage," says Per Hörnell, Division Manager for catalogue procurement at Ikea.

POS materials rank among the most successful mediums of communication at Nordea, the largest financial service provider in Scandinavia, as well. "Customers come to the counter and ask specifically for services which we advertized in our brochures," explains Jukka Pertulla, Marketing Executive Vice President at Nordea. It's therefore clear to Scandinavian bankers: "Print is a worthwhile investment."

Advertising with Multiplier Effect. "PrintSells" also delivers solid arguments for classical ads. A striking 65 percent of users consider ads to be an important and informative part of a magazine. In addition, market research results show that in 50% of cases, product or service purchases stem directly from an ad. Additional arguments for advertisements in magazines and newspapers come from the United States, or better said, from "The Print Council." In the United States, the equivalent of the European United Print Chain has been campaigning for printed advertisement already since 2003. In so doing, it also relies on the persuasive power of various studies. Its Web site www.printinthemix.com is a clearinghouse of research on print media effectiveness designed to collect and summarize research on the effectiveness of print advertising and marketing.

One such study highlights the multiplier effect of magazines. Glossy magazines are read by an average of two to three people. In addition, every fifth reader passes a specific article on to an acquaintance. A comparison of consumer attitudes toward advertisements in magazines, TV and the Internet brings interesting results to light. Magazines are the winner in all aspects. Advertising in magazines is found to be more inspiring and trustworthy for consumers than other media forms, such as the Internet. Magazines particularly top their electronic competitors when it comes to placing advertising messages in a purposeful and active manner. Such insights leave their mark on some advertisers: Procter & Gamble increased their budget for ads just recently.

Workhorse in the Marketing Mix. A particularly large problem for businesses is the increasing difficulty in making themselves heard in the omnipresent roar of the media. Each European sees an average of 200 television commercials per week. He hears 150 radio advertisements and receives 200 spam emails. Consumers are thoroughly overwhelmed by this flood of information. That's why most electronic advertisement messages go down without a trace. Print, on the other hand, scores points. "PrintSells" demonstrates that the desired attention can be best obtained from European users with a direct mailing. Why? Because the average European only gets two of them per week so far - and 80 percent of the population even likes getting them. Thus the conclusion is that an advertising message can be placed precisely and controllably into the target group with a direct mailing.

Added to that is the fact that consumers remember an advertising campaign much better when it is supported by direct mailing. The success of TV, radio, magazine and billboard advertising increases in combination with a fitting advertisement mailing. Boots Pharmacy in Great Britain is a good example of this. With a media mix of TV and magazine advertising as well as direct mailings, consumer awareness of the make-up "No. 7" by Boots could be increased by 25 percent. Sales figures also rose directly after the mailings were received. Sales grew on average by 21 percent, the market share by 2 percent. Let's hear one more person say that print doesn't sell...

Message Received. The evaluation of the "PrintSells" campaign took place in the form of interviews. These show that the campaign was successful in anchoring the manifold arguments for print advertising in managers' minds. Almost all interviewees were able to reproduce one of the many arguments for print; on average, they could name even more than two. Furthermore, around 90 percent agreed that print advertising is an important and particularly welldirected part of the marketing mix and lends itself ideally to coordinating with online advertisement. Clearly, "PrintSells" has every reason to celebrate. Want to see more? A new run of the campaign is planned for this fall. ■

#### Further information

on "PrintSells" and the campaign in the United States can be found on the respective homepages. You can also order or download the discussed studies as well as further descriptions of case studies. "PrintSells" offers brochures with valuable tips and tricks on the four forms of advertising. All of this information is of interest to print shops as well. The studies serve as practical arguments to help convince print shop customers of print's effectiveness. www.printsells.org www.theprintcouncil.org www.printinthemix.com

## Ink and Dampening Solution in Balance // Part 1

**IDEAL PRINT QUALITY** requires a stabile balance of ink and dampening solution in all printing units. To achieve this goal, Fogra developed a unique tool – the dampening control test form.

All printers want to set up their printing presses for the respective order as best as possible. Previously, machine set-up - and therefore indirectly also the regulation of the balance between ink and dampening solution - took place by measuring the ink density of the control patches on the edge of the printed sheet. Up until now. a suitable tool for testing and documenting the correct printing press settings was missing.

#### Creating Uniform Print Conditions

Fogra therefore developed a dampening control test form which makes it possible to check and correctly regulate dampening solution application. With the test form and the corresponding adjustments, stable printing conditions can be achieved reliably in the printing presses.

Visual control patches show whether the inking and dampening units are nearing critical conditions. Thanks to the test form, printers recognize immediately if the print result will be even across the entire sheet format. In addition. they also see how big the differences are from printing unit to printing unit and can correct the settings accordingly.

#### **Identical Print Test Procedures**

The print tests take place in all inking units according to the same procedure: First, the solid colors are set with as high a concentration as possible only by varying the inking ductor rate - without changing the usual mechanical settings. As soon as the target density range has been reached in all zones, dampening can be reduced to the point of smearing as well as full toning in one next step. If the printer wants to find out the range of dampening, over-dampening can also be tested. The ductor rates in the dampening unit are increased in separate, individual steps until a clear ghosting appears.

#### Suitable for Nearly all Types of Presses

An ideally adjusted balance of ink and damp ening solution shows only minimal deviations in tonal value analysis at various levels of dampening. Illustrations 1 and 2 show the printed sheet in the case of an ideally set printing press with over-inking and under-dampening. Illustration 3 depicts the printed sheet from a machine with poorly set dampening unit. The Fogra dampening control test form is

suitable for nearly all types of printing presses and smooth printing stocks, that can be used including all combinations of inks, dampening solution additives, plate types, printing blankets and roller materials.

How can print shops get the test form? You can get more information on the test form, costs for the service or an appointment for consultation from Ulrich Schmitt., Tel.: +49-(0)89-43182-337. schmitt@fogra.org.

Part Two of this article provides other examples of unfavorable or faulty settings that can be quickly recognized and corrected with the help of the test form and will appear in the next issue of the Heidelberg News.

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#### Illustration 1

decent

Ideal print results with the Fogra dampening control test form, with over-inking and ideal dampening on a small format printing press

A. Adda

Illustration 2:

Convincing results using the test form with clear under-dampening on a small format printing press

Illustration 3 Unfavorable result with clear under-dampening



MEN AT WORK // EPISODE 2 MARCO BREVE. LEIMEN. GERMANY

# The Perfecting Professional

MARCO BREVE CAME TO COLORDRUCK in Leimen near Heidelberg more than 20 years ago as an apprentice. Today he works as a printer there and is responsible for a Speedmaster SM 102 with eight colors, perfecting device and coating unit. The 37-year-old lives less than a thousand feet away from ColorDruck in his own house which he shares with his wife and five children between the ages of two and 18. Breve has Italian ancestors. His father is an ex-professional soccer player and left Sicily in 1965 for Germany as a guest worker.

Your father was a professional soccer player in Sicily. Did you play soccer as well? Yes, of course. It's in our blood. I used to play in the fifth division. My 4-year-old son plays on a children's team, too. The two of us often go to the home games of 1899 Hoffenheim.

#### What do you enjoy most in your work?

Working on the new machine that we got last March, naturally. But for me the best thing is satisfied customers with happy faces after they give the go-ahead for final printing.

#### What is the greatest challenge in your job?

Producing multi-colored products with pigment inks that get finished inline. For example, product brochures for the automobile industry, where you have to reproduce the original colors for the various car varnishes.

#### What do you eat for breakfast, lunch and dinner?

If I am on the early shift, then I only have a cup of coffee and two cigarettes in the morning. Depending on whether I'm on the early or late shift, I either eat lunch or dinner at home.

#### Do you often vacation in Italy?

Yes, we visit Sicily regularly. But I prefer to go to Turkey. It's so beautiful there. Vacation is affordable even for a family of seven.

#### What is your biggest dream?

A finca in South America, preferably in Brazil. I've never been there, but I imagine it's beautiful (laughs). Let's see, maybe my wife and I will emigrate one day when all the kids are out of the house.

# **HN** Voices

Sarah Braband, Berlin, Germany // Very successful and appealing as always. Could you maybe discuss prepress more intensively in a later issue?

John Okelo, Nairobi, Kenya // Nice to know that most print shops started off with humble beginnings. Please include even more portraits of smaller print shops in developing countries in the future.

**T** Faheem Agboatwala, Bombay, India // Keep it up! I particularly like reading your Tips and Tricks section.

E Maria Jesus Garcia Capa, Zamora, Spain // I look forward to each issue. Your magazine is truly excellent – not just because of its ideal presentation, but above all else because of the well-balanced mix of diverse articles.

💷 Luciano Palmares, Goiânia, Brazil // Thanks to Heidelberg News, I am constantly up-to-date on worldwide market development.

The Marie-Joe Raidy, Beirut, Lebanon // Elegant layout, good print quality and interesting articles. I would like to see an article from the Arab world.

Hansruedi Vogel, Pratteln, Switzerland // The Heidelberg News is a highlight time and again!

|+| John Hueston, Ontario, Canada // Simply wonderful, as always.

#### WINNER OF THE READER'S SURVEY - HN 264

1<sup>st</sup> Prize: Trip to Heidelberg

#### 2<sup>nd</sup> to 5<sup>th</sup> Prize: iPod

#### 6<sup>th</sup> to 10<sup>th</sup> Prize: XL 105 Model

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