







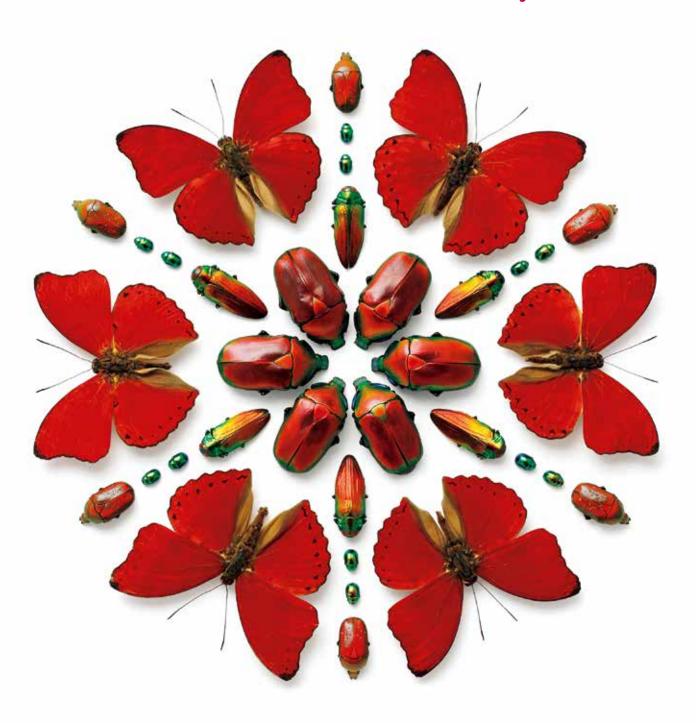








Komori Explores Print's Future H-UV: Quintessentially Komori





Feature

Top Executives on Print's Exciting Future

Chairman Yoshiharu Komori and President Satoshi Mochida lay out their view of printing's future and the roadmap for Komori in adapting to a landscape of dizzying technological change. More innovations, new business challenges, and flexible combinations of digital and offset are all in the picture.

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Feature

The H-UV Revolution: Pioneers Flourish

The background to the H-UV revolution that's given offset a new lease on life in commercial printing. Plus, the voices of H-UV users detailing the many unique ways that this breakthrough technology fits their business model perfectly. Also, the Q & A from a crucial printing forum in London where experts spelled out the real advantages of H-UV technology.





User Profiles

Every User Needs a Special Configuration

H-UV users in the U.S., Turkey, India and Germany along with a conventional printer in Bulgaria find that a new Lithrone is the ideal move to build on success and address new needs. Printing companies have specific requirements, and so Komori offers nearly unlimited flexibility in configuring the right machine for the business model and the printing application. Customers acknowledge this essential attribute.





Topics and Shows

Renewed KGC and Shows Galore

K-Supply at Komori International Europe upgraded, KGC at the Tsukuba Plant renewed to reflect new priorities, an assortment of exhibitions and special events wins acclaim, a new training dojo opens, and a Pepio series flatbed gravure offset press shows its capacity for real mass production. Change proceeds apace.



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Calendar

The Flawless Beauty of the Insect World

The 2015 Komori Calendar stays with the theme of Flawless Beauty but ventures into the realm of insects, presented with stunning impact by the artist Christopher Marley. Elevating the beauty of the photographs to an even loftier echelon is the intent of the printed work. Comments from the art directors.





Printing specification of this issue: All pages printed by four-color process H-UV. Cover laminated with matt polypropylene film.

Top Executives on Print's Exciting Future

Ready to Drive a Vital Transformation



Yoshiharu Komori, Representative Director, Chairman and CEO

In looking back at 2014 and forward to 2015, we see that the global economy has continued on its track of slow growth. The growth rate in China, which had been expanding vigorously, will likely decline somewhat as a result of a policy shift toward sustainable stable growth. The outlook for Europe is a continuation of slow growth thanks to the end of the business downturn, and the underlying trend in the U.S. economy is one of recovery. In Japan, while the effect of the increase in the consumption tax was a matter of concern, slow growth is expected, and an increase in exports is forecast as a result of the fall of the yen in the forex market.

In the printing industry, although printing demand has leveled off and the size of the market has shrunk in developed countries because of the widespread uptake of infocommunications technologies, demand for the replacement of existing printing facilities with cutting-edge printing presses to strengthen competitiveness is becoming stronger.

We at Komori Corporation – amid this economic climate and these industry trends - reaffirm our determination to drive innovation that brings about change rather than kowtow to change elsewhere.

New management setup

At the annual general meeting for shareholders on June 24, 2014, I was appointed Representative Director, Chairman and Chief Executive Officer, and Satoshi Mochida was appointed Representative Director, President and Chief Operating Officer. Under this new organizational structure, Komori will continue to advance the best solutions for improving the profitability of our customers. In addition, we will use the

We at Komori Corporation...reaffirm our determination this year to drive innovation that brings about change.



technological and developmental strengths that we have attained since the founding of the company not only to create innovations and to build and to maintain a rock-solid position in the printing machinery market but also to develop technologies that open new possibilities and to foster projects that contribute to everyone's profitability.

Expanding the international network

Last year Komori engaged in new and diverse activities, including establishing an overseas plant and subsidiaries, developing new products, participating in international exhibitions, expanding new businesses and remodeling the Komori Graphic Technology Center.

In April we established Komori Machinery (Nantong) Co., Ltd. The facility is aimed at further expanding sales in the Chinese market. It will also enhance cost competitiveness and serve as a risk hedge against foreign currency fluctuations. Production of devices for Komori Group products has already begun, and Komori corporate culture is being introduced. Also, a quality assurance system comparable to that in Japan is being implemented to ensure the highest quality products. In addition, two subsidiaries were created – Komori Southeast Asia Pte. Ltd. in Singapore in June and Komori Malaysia Sdn. Bhd. in November. The tempo of business development is being stepped up to gain traction in the markets of the ASEAN nations, where economic growth is remarkable due to the increase in population and the growth in personal consumption, and demand for printing is expected to expand.

Exhibition visitors impressed

In the area of product development, we are devoting maximum effort to the Lithrone GX40 dedicated packaging press. Demand is also forecast to rise considerably for our innovative H-UVequipped web offset press. Both of these presses were unveiled at the Tsukuba Plant this year. The reaction from Japanese and overseas customers was exceptionally enthusiastic.

Turning to international expositions, Komori exhibited at ExpoPrint Latin America 2014, held in Brazil in July, and at the 5th All in Print China, held in Shanghai in November. We exhibited a six-color Lithrone S29 equipped with H-UV at ExpoPrint. At All in Print China, Komori demonstrated a four-color version of the new Lithrone G44, a fourcolor Lithrone A37 and the Impremia C61 digital printing system. At both shows, state-of-the-art technology and performance, high efficiency and excellent print quality attracted a great deal of attention and acclaim.

Komori is aiming at new market expansion by way of the printed electronics business. Screen printing press manufacturer Tokai Holdings became a subsidiary of Komori in May. Then in August, Komori announced the Pepio series of gravure offset presses for the mass production of metal wiring for touch panels developed jointly with the Industrial Technology Research Institute of Taiwan. A printed metal mesh-type touch panel was announced and a working sample was exhibited. Using the synergy of Komori expertise and technologies in a new field, our goal is to expand our customer base in these new markets.

Tie-up for currency printing

In the banknote and security printing machinery business, Komori received an order in October for two full lines of banknote printing equipment from the UK's De La Rue International Limited, the world's largest banknote and security printing company. This follows an order in 2012 and is a significant vote of confidence in Komori. We have also concluded an agreement with De La Rue covering comprehensive technological development in banknote and security printing based on tight cooperation between our companies.

KGC renewal takes shape

The Komori Graphic Technology Center was remodeled in October, complete with an arrangement that lets visitors experience the future of the printing industry and Komori's new strategic initiatives. The center provides optimum support to customers through various software technology systems, highlevel printing systems for productivity improvement, digital printing systems, color management systems and K-Supply products - printing materials and peripheral equipment.

Three strategic innovations

In 2015 Komori will strive to repay the trust of our customers by driving forward three innovations – the expansion of new businesses, the structural transformation that is the core of our growth strategy, and the innovation of monozukuri.

I thank you all for your understanding and support and wish you health and prosperity in the New Year.

Top Executives on Print's Exciting Future

Roadmap for Komori's Innovative Future



Satoshi Mochida, Representative Director, President and COO

In reviewing the past year, we see that technological innovation is pressing on throughout the printing industry — in particular, innovation that is a consequence of info-communications technology and digitalization spreading throughout the world. Demand for Internet and social networking services is also rising rapidly. The printing industry has of course been affected by these developments, and although the demand for printing in developed countries is sluggish, the outlook is beginning to look somewhat brighter as the printing industry reacts to these global changes.

Driving three key innovations

Komori Corporation is looking squarely at the market environment that encompasses printing and will endeavor to contribute to our customers' greater prosperity by driving forward three innovations — the expansion of new businesses, the structural transformation that is the core of our growth strategy, and the innovation of *monozukuri*.

Our activities in 2015 will be mainly oriented toward strengthening the foundation of the offset printing press business, our mainstay line. 'On-demand technologies,' which are at their core original Komori technologies such as H-UV and KHS-AI, have been highly assessed, and we have earned the voices of satisfaction and repeat orders from many customers. These on-demand technologies have been installed on package presses and web offset presses, and orders are on track to exceed 500 machines. A revolution in offset printing is truly under way. Mobilizing the technological and developmental strengths we have accumulated since Komori's founding,

'On demand technologies,' which are at their core original Komori technologies such as H-UV and KHS-AI, have been highly assessed ... A revolution in offset printing is truly under way.



we will redouble our drive for innovation and propose solutions that impact the customer's bottom line. Further, Komori is advancing the expansion of three specific businesses: banknote and security printing machinery, digital printing systems and printed electronics production equipment.

Leadership in currency printing

With regard to the banknote and security printing machinery business, Komori is the only manufacturer of currency printing presses in Japan. We have supplied printing presses for currency and securities to the central banks and private currency printers in 14 countries, primarily in Asia. In particular, as a result of supplying equipment to the UK's De La Rue International Limited, with whom we have concluded an agreement covering comprehensive technological cooperation, the quality and reliability of our currency printing presses has risen significantly. Komori will endeavor to further expand this market.

Ready for the digital tomorrow

In the digital printing systems business, Komori has shown the Impremia C series digital on-demand printing system at various exhibitions. The high efficiency and performance as well as the excellent print quality of these machines have been very well received. We are developing the Impremia IS29 UV inkjet digital printing system jointly with Konica Minolta. We are also working to commercialize a new digital printing system that will use nanographic printing technology - on license from Landa Corporation of Israel.

Advances in printed electronics

Turning to the printed electronics business, we have developed and are supplying the Pepio series of gravure offset presses for printing very fine lines for application in touch panels. Offering a design with the high integrity and operating efficiency that only a press manufacturer can realize, these presses have won praise for their potential to significantly reduce costs and enhance competitiveness. We have also developed a gravure offset printing system for metal wiring for touch panels. In the future, we will expand sales of this system, which allows mass production with low initial cost and advantageous running costs. We will also develop a support structure for this system.

Broadening the PESP range

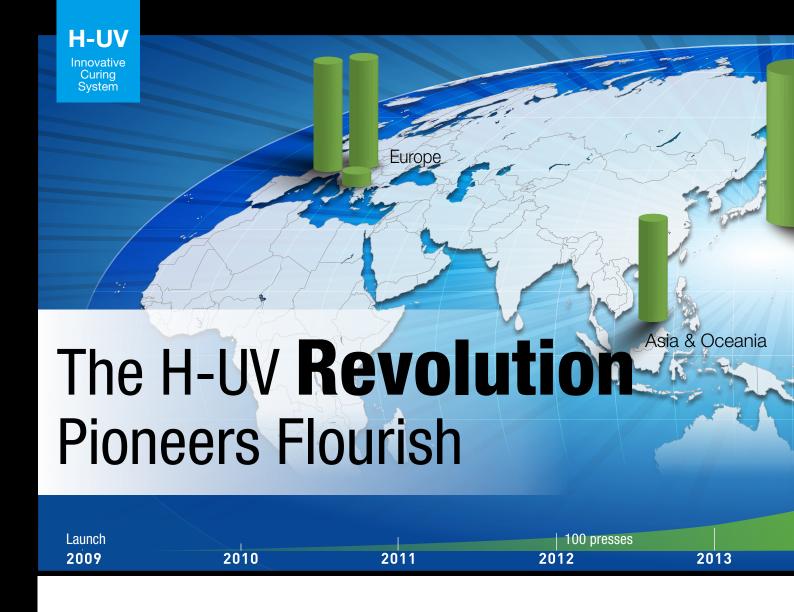
For the structural transformation of Komori, we are advancing change through development of our Print Engineering Service Provider (PESP) business. Up to now Komori's business has been the manufacture, sales and service of mainly offset presses. It will now be expanded to include related equipment, printing materials, consumables, software and preventive maintenance programs. Ultimately Komori will build total solutions from a broad range of products and services. Printing materials that we have recommended in the past – items such as H-UV ink, rollers, blankets, pretreated cloth, dampening solution and cleaning liquid – will now be available as K-Supply products. In the future, Komori will not only actively create solutions through product development and strengthened customer relationships but also launch regular sales of PESP products that are suited to the age of digitalization and IT.

Further, the Komori Graphic Technology Center, which provides a full range of printing-related information, technologies and solutions, will offer powerful support for sales of solutions and develop the requisite synergies. Ultimately KGC will be a place for listening to customers and reflecting their voices in the manufacture of products.

Innovation in monozukuri

As far as monozukuri innovation is concerned, Komori will fundamentally transform production practices to achieve productivity improvements and manufacturing cost reductions, allowing us to rapidly supply products and services in response to changes in the marketplace.

As always, the starting point for Komori is listening to ideas from the customer's perspective. By seeking greater convenience for customers and providing total solutions for business success, Komori will concentrate its energies on fulfilling customers' expectations. In the New Year, we ask for your continued guidance and encouragement.



on the way 500 to 500 presses

Core driver of OffsetOnDemand:
Komori's H-UV technology
a roaring success worldwide

On October 6, 2009, Komori premiered the innovation that would transfigure printing — the H-UV Innovative Curing System, configured on an unassuming four-color Lithrone S32 at JGAS. This show set off a chain of events that is still unfolding, changing the very shape of the industry. Komori has done it before — with the development of fully automated plate changing 25 years ago, for example — and will do it again in the future. But the H-UV revolution that Komori has unleashed over the past five years is a unique, multidimensional transformation of the commercial offset printing industry that truly stands apart.

Developed by KGC, H-UV was adapted over the next few years to the leading ranges of Komori presses – the Lithrone S29 series, the A37 series, the G40 series in both straight and perfecting models, and the Lithrone GX40RP series in both sheet and cardboard specifications.

In February 2011, the Japanese Society of Printing Science and Technology presented Komori with the Technology Prize for its development of H-UV. And then in July of that year, Komori received the prestigious Printing Industries of America InterTech™ Technology Award. A few months later at IGAS and at drupa the following year, wider audiences saw the



potential of H-UV and registered their approval with orders that rocked the industry. And in March 2014, Komori unveiled a 16-page System series web configured with the H-UV system. The rest is history.

As of September 30, Komori has shipped more than 400 H-UV-equipped presses. Indeed, these machines account for roughly 70 percent of total production of H-UV-configurable models. More than 150 installations overseas incorporate the H-UV system. Thus, now is the time to fill in the background to this extraordinary printing technology development and hear from the pressrooms and boardrooms of H-UV adopters.

Proven productivity powerhouse

By now, most of the Komori family is familiar with the essentials of H-UV technology: the energy output of a single H-UV lamp is precisely aligned with the required curing range of high-sensitivity H-UV inks. Much less electrical power is needed to dry the sheets and heat emissions are drastically cut. The visual pop and stunning effects expected from UV ink but with minimal dot gain, high ink gloss and true dot shapes. No powder spraying — and none of the troubles that often accompany this process. No ozone emissions and none of the odor associated with conventional UV. No 'dry back.' H-UV color doesn't change over time. Heavy ink coverage is

no obstacle. Dramatic color effects on uncoated and matt stocks. And the ability to print on just about any substrate that will feed in the press — heavy stock such as cardboard, metallized paper, foils, and even plastic and film substrates that are susceptible to heat deformation with conventional UV.

But for printers, the biggest difference in the bottom line comes from the fast turnarounds of instant drying and the business growth that these many capabilities make possible. H-UV eliminates the compromises. As printing continues to evolve — with digital and inkjet playing a larger role and nanography beckoning on the horizon — H-UV has given offset, the proven bedrock platform of the commercial industry, a robust new lease on life. Just ask an H-UV user.





H-UV lights up early adopters

Highproductivity

Schröerlücke, Germany

The productivity with H-UV is enormous, along with stunning print quality, which more than compensates for the higher H-UV ink prices. The sheets leave the press dried and ready for postpress. H-UV is clean, environmentally friendly and productive – and very costeffective compared to conventional UV technology. It was a good investment. Thanks to Komori and H-UV, we gained a competitive advantage over other printers. We deliver top quality with very short lead times. We don't have any problems on a huge variety of substrates, including plastics, and we have lots of new options for more added value.

-Eckart Stork

The Komori difference

H.R.G., Czech Republic

What really mattered to us was that we were totally confident that Komori had real experience with H-UV technology and that it had already made so many H-UV installations around the world. Such additional benefits as low energy use, automated plate changing, fast makeready systems and lower material waste rates are very beneficial bonuses, for sure, but it was the faster job throughput and Komori's thorough H-UV knowledge and experience that were critical to us.

-Leoš Tupec

Short turnaround

Ofset Yapimevi, Turkey

It definitely helps with meeting delivery deadlines as sheets can be processed as quickly as digitally printed sheets. The quality of the image is enhanced both in terms of increased dynamic range and rub resistance. H-UV creates pleasingly strong colors even on uncoated and matt-coated papers, which become much easier to handle. Visually, the contrast between the coarse structure of uncoated paper and the saturated color image creates a punch that print on coated paper cannot achieve.

-Refik Telhan

Graphic **effects**

Toppan, Japan

Dot gain is less with H-UV inks and the gloss levels are significantly higher, which are definite pluses for graphic expression. In fact, the range of expression is remarkably broader with H-UV. With ordinary UV ink, we would add a layer of gloss coating but sometimes even this did not produce sufficient glossiness. Now the high gloss level attained by the H-UV inks actually allows us to consider using a matt varnish.

-Akihiro Takamoto

High **print quality**

Cassochrome, Belgium

All of our guests were extremely impressed by the exceptional printing quality and by the time saved. What used to take at least three days to accomplish can now be done in one day. For printers like us, who make small, high quality runs, H-UV is a huge advantage. We now have very quick turnarounds, allowing us to tackle one job after another and meet extremely tight deadlines.

-Laurence Soens



Less waste

CMYKhub, Australia

We compared Heidelberg LED UV, Ryobi LED and Komori H-UV presses with the differing drying options. After much consideration, we opted for the Komori H-UV eight-color Lithrone G40P perfector machine. We felt it was the most efficient on consumables and paper use, and the internationally installed base gave us more confidence. H-UV makes sense—it minimizes marking by the perfecting drum and slow-down wheels ... and is better for the environment.

-Trent Nankervis



Instant drying

Atomi, Japan

I'm not a press operator myself, but I knew that the biggest problem in the pressroom was powder and smears on printed work. When work was passed to the finishing department, scratches and smears due to printing with conventional inks were common, so I thought that instant drying would be an extremely good solution to these headaches.

-Masahiro Arita

Packaging applications

McCallum, U.S.

Forty percent of our work is commercial and packaging production, so our customers are looking for the high quality enhancements and special effects that can be created with UV applications on uncoated paper and specialty substrates, like strike-through varnishes for packaging applications. Everything in our world today is on demand and has to be turned around very quickly. When it comes to putting ink on a substrate, Komori's H-UV system is very appealing because the entire printing process is powderless.

-Terry Storms



Users challenged to extend

their creative and entrepreneurial horizons

Added value

PPA-Mahé, France

H-UV is a very special technology that has nothing to do with what we knew before. These presses use very high sensitivity inks that dry instantly while being passed under a special H-UV lamp. Now we can print on all special substrates and on all creative papers, including the Arche series, rubber substrates, plastics and even prelaminated papers. There are very few printing houses that can compete with us on all these substrates. Also, we can print with a screen frequency of 300 lpi, close to photographic quality. We can print many products that we weren't even aiming for before. And nothing thrills us more than intricate creations — printing on nonstandard substrates, embossing, cutting, folding, gluing — everything! Also, the workshop is now operating 24/7, including weekends and holidays.

-Eric Broche

Excerpts from previous issues of On Press

Forward Thinking Printing Focus on H-UV



A panel discussion entitled "How H-UV is the new generation litho printing" was held on July 10 in London's Stationers' Hall as a part of the Forward Thinking Printing Forum. The event was devised to provide inspiration to the printing industry for the future.

Printers, vendors and industry analysts gathered for a one-day forum intended to provide printers with the insights and inspiration needed to navigate successfully in the years ahead. The panel on the H-UV Innovative Curing System stood out as the highlight.

Representing Komori were Steve Turner, Director of Sheetfed Sales, Komori UK; Uli Sause, Baldwin Technology's Key Account Manager for Komori; and Mark Plummer, Managing Director of Platinum Print — the first UK company to install an H-UV-equipped Lithrone.

Gareth Ward, Editor and Publisher of Print Business Media, chaired the event. He introduced H-UV as "new generation offset technology with a unique twist — providing benefits such as flexibility, immediate drying, reduced CO_2 emissions and elimination of spray powder." Komori took the stage to explain the significance of the H-UV process in a discussion that drew the loudest applause of the day. The following is a selection of the questions tabled by the chairman and the responses from the three Komori panel members.

Gareth Ward: To start, I'd like to ask Komori UK's Steve Turner for the background to the development of Komori's H-UV process.

Steve Turner: At the outset, we started exploring ways of developing offset's core techniques to assist the printer in attaining faster all-round production speeds, primarily as a response to the accelerating print-on-demand market. The limitations of classic UV, which, while enabling quick drying, also uses considerable power and emits ozone and heat, were never ideal in a commercial print environment. So we researched alternative drying techniques that captured the upsides but eliminated the downsides of conventional UV. This was the approach in Europe.

GW: Mark Plummer, when you installed your four-color Lithrone S29, you were the first in the UK to acquire the H-UV



From left: Gareth Ward, Editor and Publisher of Print Business Media; Steve Turner, Director of Sheetfed Sales, Komori UK; Mark Plummer, Managing Director of Platinum Print; and Uli Sause, Baldwin Technology's Key Account Manager for Komori

process. Why did you go down that route?

Mark Plummer: I had 25 years' background in production at Platinum Print, and I became acutely aware of just about every production issue that could arise. Now, as MD, I had to answer the question, how do we grow the business and maintain delivery promises and quality when we can't calculate precisely how long jobs will take to dry?

GW: How has H-UV been for you so far?

MP: Very good. As with all new technologies, you have to adapt to the differences such as plate handling and production scheduling, but we turned the corner very quickly.

GW: Steve, what's been driving the interest in the H-UV process and where is it strongest?

ST: As of today Komori has received orders for more than 400 H-UV presses around the world, with sales initially to printers in Japan. There, printers tend to use uncoated materials and are limited by minimal floorspace to accommodate slow-drying sheets. Now 70 percent of new Komori presses sold in Japan are H-UV equipped, and in Europe it's already approaching 50 percent. What's driving this? Basically, whatever the material being used, the inks cure so fast that the sheets can be taken immediately to the next process, whether that's reverse side printing or finishing. The quality is excellent, and the feel of the sheet is smoother since there's no spray powder. So turnaround is faster, the work is better, and the production costs are lower!

Interestingly, in Europe now, the enhancements that the H-UV process can facilitate are proving increasingly popular, with fifth units and also coating units being added specifically to provide added value finishes such as drip-off, high gloss and spot varnishing. In France, for example, over 50 percent of H-UV-equipped presses have such specifications.

GW: Uli Sause, your company, Baldwin Technology, worked with Komori in the U.S. and Europe to develop the H-UV lamp. What path did that development take?

Uli Sause: Looking back at classic UV, traditionally systems would be installed as additions to standard presses. Usually this would be on highly specified presses and mostly for dedicated packaging applications where the inherent characteristics of higher dot gain, the requirement for a series of interdeck UV lamps, ozone extraction systems and significant heat generation were accepted and could be cost-justified in that sector. Like Komori, we saw the need for a fast drying system that would be suitable for the commercial offset market. From the start, we both recognized that this meant creating a new process, not just an adaptation of existing products. So we engaged closely with Komori and carefully chosen consumables manufacturers to find the optimum cost effective, environmentally conscientious solution. That combined research is what finally created the H-UV process.

GW: Steve, any comments?

ST: I agree. Fast drying was the primary aim, but certainly not the only one. In addition to improving the environmental side, in particular no heat or ozone generation, and keeping running costs low, we wanted a process that





ensured stable color. With the H-UV process, the color you see on the sheet in the delivery is exactly the way it stays.

GW: Mark, how does all this affect your business?

MP: In the past, on most jobs, we made an allowance of an hour pass time to verify the sheet. Now it's instant, even on work with high ink densities and on uncoated or any other materials. And, additionally, there's greater sharpness of color than on jobs printed without H-UV curing. We have no partly dry sheets lying around, and that makes for greater efficiency on the shop floor.

GW: Steve, what about costs?

ST: Several aspects to mention here. First, there's only one lamp required on a straight press, whatever the size or configuration. And only two on perfecting presses — one after the first set of units and, as with straight presses, one in the delivery. So the initial cost and the power used are both lower than with classic UV. Second, except for added value purposes such as special effects and spot varnishing, there's never a need to specify further units or coaters for the purpose of sealing or aqueous coating. So the capital outlay is minimized. Power consumption is appreciably lower, too.

GW: But what about the inks and their costs? Uli, would you like to answer?

US: The required density levels are lower with H-UV inks. With H-UV, the ink sits on top of the paper, and as a result you achieve a higher optical density with the same amount of ink, or, alternatively, require less

ink to achieve the same density when compared to standard inks. So you achieve more with less!

GW: Do the inks need photoinitiators?

US: H-UV inks polymerize in the same way as standard UV inks. The difference with the H-UV process is that the reactive components and the lamp output are matched to increase efficiency. In addition, the photoinitiators have been further developed to give multifunctional properties such as a higher molecular weight and therefore are less likely to migrate.

GW: What about metallics and other consumables, Steve?

ST: No problem with metallic! And we're proud to say we're prescriptive about what key consumables the printer uses — inks, blankets and fount solutions — so we can give a total commitment that the H-UV process will always deliver!

GW: What about recycling of paper printed through the H-UV process?

ST: In fact, it's simpler, because the H-UV ink binds as a film on the surface of the paper, meaning the ink separates from the paper more easily.

GW: Uli, what about lamp life?

US: The H-UV lamp material and filling are very special. Of course, the lamp is a consumable, but Komori and Baldwin give a substantial warranty on the time the lamp will function at maximum effectiveness. Replacement is also easy and quick.

GW: We've not discussed LED yet, Uli. Would you like to comment?

US: LED works over a very narrow wavelength so operational tolerance is limited. LED inks require a very targeted narrow band of radiation. When the required wavelength is missed or is blocked,

No problem with metallic! And we're proud to say we're prescriptive about what key consumables the printer uses — inks, blankets and fount solutions — so we can give a total commitment that the H-UV process will always deliver!

-Steve Turner

there's a minimal curing effect! Current LED systems are monochromatic, which means that only a narrow band of UV light is emitted. It's difficult to formulate the ink as only a small selection of photoinitiators reacts in the area where the LED emits. Secondly, the pigments in the inks absorb UV light — at the same time reflecting visible light — so there is an inherent conflict between the photoinitiators that require UV for the curing process and the pigmentation that absorbs the radiation. The broader range of H-UV does not have this issue. The wider range of photoinitiators available for H-UV inks and coatings gives certain properties to the ink and coating that currently cannot easily be addressed by LED because the suitable wavelengths are not available. LED clear coats still tend to change color and go yellow after exposure to LED UV.

On the other hand, UV inks, such as those used in the H-UV process, operate over a wider wavelength band, and so the ink formulation can incorporate a large variety of different photoinitiators with different properties that ensure complete curing without tainting.

GW: Steve, what about H-UV on perfecting presses?

ST: On perfecting presses, H-UV curing has its own further set of benefits because the first side is completely dry before the reverse side is printed. So, for four-over-four work, no fifth unit is required to carry machine sealers. On the reverse side of the sheet, no white space needs to be allotted for sheet transportation, so smaller sheet sizes can be utilized and full-out images can be carried on both sides of the sheet. These advantages mean more flexibility with design and pagination.

With H-UV curing on perfecting presses, no ceramic jackets are required, thereby ensuring that color representation on both sides of the sheet is a precise match. Additionally, there are no jacket replacement costs or subsequent loss of production while jackets are being replaced.

GW: A final word from you, Steve?

ST: We've said a lot about Komori H-UV here, but what stands out to me as the continuing theme on the other presentations here today has been the need for printers to have something to market, something which differentiates them from other printers.

The Komori H-UV process provides exactly that.

Note: Figures are as of July 2014.

Equipment/materials differ by area and are localized by testing/verification.



"As MD, I had to answer the question, how do we grow the business, maintain delivery promises and quality when we can't calculate precisely how long jobs will take to dry?"

—Mark Plummer



"With H-UV, the ink sits on top of the paper, and as a result you achieve a higher optical density with the same amount of ink"

—Uli Sause



"So turnaround is faster, the work is better and the production costs are lower!"

-Steve Turne

NextPage makes a bold statement

Driving into the SubTropolis in Kansas City, Missouri, for the first time is an adventure. Billed as the world's largest underground storage facility and housing more than 50 businesses, this subterranean mecca is home to NextPage and its eight-color Lithrone G40P perfector with H-UV.



Gina Danner, CEO

Gina Danner, CEO, says, "The beauty of being in 'the cave' is that it allows for the ultimate in green manufacturing, maintaining temperatures between 65 and 70 degrees year-round. It's energy efficient and when we were looking for a press, the eco-friendly eightcolor Lithrone G40P perfector with H-UV was the perfect fit for our business. Plus, saying your company is in a cave is a real icebreaker people think it's pretty cool."

Making the most of change

NextPage is the result of the merger of three Kansas City area companies - MailPrint, Graphic Services and L&L Manufacturing, and at the helm are Gina Danner, CEO; Eric Danner, President; and Larry Wittmeyer, Vice President. When the companies merged, Danner and company knew it was time to refocus their business to meet changing market needs. "We watched as printing companies were going out of business. Printers were trying to make the transition to marketing service providers, but they had no idea what that meant. Many of them were older owners, with no succession plan and mired in debt. We took a look at the Kansas City market and decided we wanted to define what print is in this region," says Gina Danner. One of the advantages that the team felt they had over the competition was that they had always run their businesses conservatively. "At MailPrint we saw the signs that the industry was starting to see a decline. So we weren't surprised when the fall came. We were prepared, and by being fiscally responsible we were able to keep our business on an even keel. When the market stabilized and started to change, we knew we wanted to make a bold statement." This led to the birth of NextPage. As they began their quest to rebrand the company, a new press became a requirement. "We were running half-size presses, and we knew that in order to achieve the goals of our new NextPage brand, we had to make a significant statement to the marketplace, and that meant moving into the 40-inch market." The company started their search looking for a late-model used press, but not finding what they needed, decided to



pursue a new press acquisition. This search led them to Komori. "The decision to buy Komori was really a brand decision. We chose Komori because it was best in class. We originally were looking at a six-color 40-inch press, but when Eric and Larry went to Chicago for a demonstration, they saw the eight-color Lithrone G40P with H-UV. They asked themselves - What would 'the brand' tell us to buy? They knew that this machine would set us apart from the competition and make a bold statement to the marketplace."

Rebranding for a new market

Changing their brand was a challenging task, says Danner, and required the company to take a hard look at what they really wanted to do. "It was fundamentally taking a 25-year-old company and creating a manufacturing, sales and technology start-up." The process started with creating a vision statement, a mission statement, a brand promise and a definition of their corporate values. Danner specifically doesn't refer to NextPage as a marketing service provider because "it's almost cliché and lacks definition." What NextPage does provide is "more," and that includes marketing automation, database management, augmented reality, and of course, print. "Our bottom-line goal is to help our clients make more money."

One of the biggest challenges has been changing the culture of their company. "You're bringing employees from three different companies together and trying to get them to all buy into a brand new way of doing business." NextPage does this through a variety of employee communication tools that keeps its staff informed about the company and also allows for peer-to-peer recognition. "Our management team members are brand ambassadors, and we reinforce what the NextPage brand means in an ongoing fashion. Change is scary for a lot of people, and we want to make sure everyone is comfortable and on board with our corporate vision. People want to be led, and they want excitement and growth and that's what we're trying to provide."

Moving up to a new platform

The installation of the Lithrone G40P was also an adjustment. "Early on we realized that the new Komori was like a 747 aircraft and our press crews were used to flying prop planes. You don't just walk in and immediately know how to run a completely automated, computer-driven press." Danner says that while the learning curve might have been steep at first, their crews are now appreciating the benefits of the automation. "We have reduced our makeready waste from about 500 sheets to around 100 sheets per job, and are making our first pull for color at 30 sheets." Customers are also appreciating the benefits of H-UV. Danner says a customer required a job printed on uncoated stock but still wanted vibrant color. "The colors popped beautifully, and the same job was also run on a press in Canada that did not have H-UV. The differences were striking – we had a very happy customer."

NextPage plans to double their business in the next five years, through careful planning and the execution of specific growth strategies, while continuing to build a strong management team - and their Lithrone G40P is a part of that growth plan. "Our goal is not to be a huge commercial printer, but to be more about how print plays a role in helping us create branded products for our customers." With a strategy firmly in place, for NextPage the sky is the limit – even if their company is underground!



28 years of dedication to innovative technologies

"No doubt you can establish a good printing house just by investing in quality machines and software. However, producing customer-specific prints and tailormade printed materials requires commitment!" says Sadettin Kasikirik, CEO of Olusur Printing House in Istanbul, Turkey.



Sadettin Kasikirik, CEO

Every business has its own culture that shapes how it does things. However, two factors apply to all business: in every industry, customers are always at the center of the enterprise, and today companies must focus more on investment in innovative tools and their ROI.

These two concepts explain how Olusur Printing House became an internationally preferred printing company 28 years after starting out as a small reproduction shop. Then called Olusur Graphic, the company pioneered in the field of digital retouching using high-end scanners. Later it entered the printing business and became one of the few printing houses in Turkey to print UV and 3D work. The exciting pursuit of innovative technologies, however, soon brought Olusur to a

fundamental crossroads: either continue to dart back and forth like a flight of swallows following every new trend in the industry or become completely devoted to reaching the pinnacle of accomplishment in the field. The answer was self-evident, and in 2003 Olusur purchased its first Komori press, a six-color Lithrone S40 with coater.

Programmed approach to excellence

Then, to ensure that it met all required environmental criteria for a first-rank printing house, the company commissioned an



international consultancy to assure compliance with the highest-level industry standards. "Training our staff in environmentally sound working practices has always been one of our main priorities," says Mr. Kasikirik. "When our customers visit our plant, they admire our dedication to the business, and they can see that we are always ready to go to great lengths to offer them the best solutions. However, it is when they see with their own eyes what and how we print that they decide to place their orders.

In 2013 Olusur installed a six-color Lithrone G40 with coater not only to meet rising demand from its customers but also to further its environmental focus. "One of our most important concerns is the environment. The Komori Lithrone G40 is the perfect platform for addressing this concern in our work. This press consumes less energy and produces lower carbon emissions. For this reason, we are happy that we chose the Lithrone G40. When we compare this machine with our other press, the six-color Lithrone S40 with coater, the new press features more innovative concepts. The Lithrone G40 with coater features H-UV technology, which is a real breakthrough in the printing industry. Actually, when we purchased the Lithrone S40, we decided to add three drying units. Now, we have the Lithrone S40 and the Lithrone G40 alongside each other," explains Kasikirik.

State-of-the-art finishing line

Another remarkable facet of Olusur is its considerable investment not only in prepress and press systems but also in postpress capabilities. "As a full-service printing house, our mission is rendering the best services to our customers from the outset," says Kasikirik. For this purpose, the company brought in Müller Martini in 2003 for the installation of a large line for wire stitching and soft covers: Aster equipment to handle automatic book

thread sewing; Renz machinery for spiral binding; and an MBO system for folding were Olusur's preferences for offering turnkey projects to its customers.

Sustainability is another guiding criterion in Olusur's corporate values. The company was awarded FSC certification, the international standard that demands exacting adherence. Later the company obtained the ISO 12647-2 FOGRA (Fogra Graphic Technology Research Association) Certificate. Kasikirik explains: "In 2006 we became the first printing house in Turkey to obtain a FOGRA Certificate in digital proofing. Now we are proud to announce that we have been able to lower color deviation to almost zero by optimizing delta E values."

Talent drives design unit

Olusur recently decided to add a design department in order to present to customers the potential of an end-to-end production cycle. Kasikirik explains the Olusur approach to maintaining its leading position: "Once again, when we decided to launch our design shop, we employed the most talented staff in the industry and purchased the most innovative equipment. Now we are in a position to offer designs at the beginning of the project, print the products and deliver the entire job anywhere in the world."

To maintain its preeminent position in the domestic market, Olusur has always given weight to an international client base. "Dedicated staff and close monitoring of innovations in the industry help us serve international giants," says Kasikirik. "Thanks to our location here in Istanbul, our customers find it highly economical to have their material printed by Olusur. We can combine our high quality printing work with fast and very low-cost transportation, which is very advantageous for our European customers."



From left: Sadettin Kasikirik, CEO, and Hamdi Kaymak, Managing Director, Aras Grup

Legriffe partners with Komori and bucks market trends

Three brothers left the farm to seek their fortune in the western Indian city of Ahmedabad. More than 25 years later, they're running two Lithrone S29s and looking ahead to further growth thanks to wise strategic choices made long ago and their faith that Komori 'will stay on top of all the new trends' to keep their enterprise growing. That future is looking good.



From front to back: Ashok Patel, Atul Patel and Alpesh Patel, Directors

An entrepreneurial, highly focused first-generation business, Legriffe was founded when Ashok Patel left his rural village in pursuit of success in a commercial line of work. Ashok had just graduated from college and was the eldest son of a farming family. Giving up the family business, he set out to look for greener pastures in the city of Ahmedabad in Gujarat state. In 1987 he started his business as a silkscreen printer with capital of less than 2,500 US dollars.

Today Legriffe is one of the most envied printers in Gujarat, in part because Ashok was joined by his two very able younger brothers, Atul and Alpesh. They began printing business cards and other stationery items for their customers. But eventually they could not keep up with their customers' demand for packaging using silkscreen printing. They purchased a Komori four-color Lithrone 26

in 2001. Today Legriffe is the proud owner of two Komori Lithrone S29 machines.

Legriffe made a point of always listening to the requirements and demands of its customers. Its main focus was to print short runs or very small print jobs rather than bulk volumes.

Finding an 'empty business slot'

The market in Gujarat, dominated by pharmaceuticals manufacturers who exported very high-value drugs, was distinguished by a demand for small print volumes with Pantone special colors. There were, however, never many printers interested in printing these orders. Legriffe found an empty business slot and buyers were soon lining up to get short runs printed from them.

All three brothers run the business together with great coordination, complementing each other, each looking after different verticals within Legriffe. Alpesh manages prepress; Atul oversees print quality and consistency; and Ashok directs sales and management of the business.

When the demands of customers increased and Legriffe had difficulty achieving sufficiently high productivity, the brothers decided in 2007 to purchase a four-color Lithrone S29. Since then they have typically printed short runs with tight turnarounds, averaging around 30 jobs a shift.

Because their prepress and printing is of a high caliber, Legriffe insists on high quality final output since they are targeting added value customers and advertising agencies.

Legriffe has always set stringent standards for themselves and has worked continuously to meet even higher standards. When demands for speedy delivery and high quality grew, Legriffe purchased a five-color Lithrone S29 with coater, IR, H-UV, UV and the Komori drying system in order to print added value jobs and charge a premium despite the generally declining print prices. Today some customers travel nearly 300 kilometers to get quality printing from Legriffe.

Always quick to acquire new expertise, Legriffe actively took on training at various levels from Insight, the Indian distributor, and Komori. Some key members of the Legriffe staff have been to KGC at Komori's Tsukuba Plant to polish up their skills. Atul says, "We are always open to enhancing the abilities of our staff. Komori instructors have also visited Legriffe often to improve our skills and help us perform better."

Commitment to Komori 'built on mutual growth'

"Service has been the backbone of our success, and we have followed the textbook approach to maintaining our Komori presses," Atul adds. Legriffe opted for their second Komori because they found the Lithrone a very easy machine to maintain, with almost no need for spare parts, in contrast to most of their peer group who were using German products that imposed a high total cost for spare parts. And Ashok notes that the service performance of Insight has been impeccable and their 24/7 service has been unfailing.

Thanks to Komori, Legriffe has not only kept itself ahead of the competition but has also grown, even though market trends have been sliding. Legriffe is always hungry for growth, and Komori has provided all the tools needed for Legriffe to succeed. Ashok is thankful to Komori: "The innovative technology found in KHS-AI and the H-UV system is now paying dividends. We depend on Komori to stay on top of all the new trends to keep our company ahead."

In Ashok Patel's words, "I don't know when I fell in love with Komori, but I believe that our company's progress would not have been possible without Komori. The commitment from Legriffe to Komori is built on mutual growth and prosperity."



Gieselmann breaks the mold with Lithrone G40 H-UV

The installation of a new five-color Lithrone G40 with H-UV and coater is an important investment for printer Gieselmann to enhance both quality and cost competitiveness and to secure an edge in the printing markets of the future.



In 1949 the typesetter Hans Gieselmann and his father Johannes established a small print shop in a residential building in Bielefeld, which is located in the eastern part of the German federal state North Rhine-Westphalia. What began as a small letterpress operation is today a modern sheetfed printing company with a digital printing section and a subsidiary in Potsdam, near the capital Berlin. A total of 90 employees produce high quality products to serve the commercial and publishing markets in Germany and Europe.

It's still a family-owned business today. Gieselmann's daughter, Henrike, is a fully trained prepress specialist, and his son, Henner, studied printing technology at the University of Leipzig. Both of them have been responsible for the business since the mid-nineties. Henrike Gieselmann manages production at the headquarters in Bielefeld, and Henner Gieselmann handles the subsidiary in Potsdam,



which was established in 1991, right after the fall of the Berlin Wall, and is equipped with the same technology as the plant in Bielefeld.

A strategic machine

This Eastern Westphalian printer is known far beyond its home region for its modern and cost-effective print production. Customers particularly appreciate its reliability, flexibility and high print quality. Thus it is not surprising that Gieselmann continued to expand its existing business relationship with German Komori distributor Hubertus Wesseler, based in Georgsmarienhütte near Osnabrück, and opted for a future-oriented solution in the field of sheetfed offset printing.

The installation of the new Komori five-color Lithrone G40 with H-UV sheetfed offset printing press with a combined dual curing system (H-UV and UV), KHS-AI, PQA-S, in-line coater and extended delivery is part of a new business strategy. Taking into account the continuous growth and turnover, the printer wanted to offer more added value to the customer. This is an important investment for Gieselmann to enhance both quality and cost competitiveness and to gain an edge in the printing markets of the future. Also part of the strategy is maintaining a 40-inch 10-color press from 2009, which is still used for longrun production at Gieselmann.

Advantages of H-UV

One of the most remarkable innovations in recent times is Komori H-UV technology. Hubertus Wesseler, together with Gieselmann, is convinced that the newly developed H-UV curing system will help to improve efficiency and attract an entirely new customer base. The system fits perfectly into Gieselmann's

differentiation strategy. Compared with conventional UV, the space requirements and the environmental impact of H-UV are very low. Printed sheets are completely dry and immediately ready for finishing processes, and production is much more efficient than before. H-UV eliminates all quality losses related to drying, like blocking and ink drydown, as well as issues related to powder spraying. The sheet surface is scratch resistant and a protective varnish is almost never necessary.

Two shifts with lots of changeovers

The OffsetOnDemand concept and H-UV offer higher quality and drastically shorten the entire production chain. Powder-free sheetfed offset printing and immediate further processing of all products after printing without coating provide both an improved haptic product experience and a clean production environment. For Wesseler, the timely delivery of the Lithrone G40 – six months after the order – marks the third installation of an H-UV press within a short period. The installation, including intensive training of five Gieselmann employees on the presses of a Dutch Komori user, took less than three weeks. Now the Lithrone G40 is already running two shifts with lots of job changeovers – and happy operators.



From left: Dennie Hirschfeld, Operating Manager; Dirk Teuber, General Manager, Hubertus Wesseler; Henrike Gieselmann, General Manager; Werner Bauer, Operating Manager; Hans Gieselmann, Owner; Dirk Belau, Sales Manager, Hubertus Wesseler; Rudolf Lillmannstöns, Financial Director; and Tobias Schurr, Sales Manager, **Hubertus Wesseler**

Stellar growth: A tour de force in Bulgaria's print market

Founded in 2008 by Emil Petkov, Roprint began with a single heatset web offset press and a small but dedicated team. Six years, 114 employees and three Komori presses later, it has become established as one of the most prominent and fastestgrowing printing houses on the local market.



Emil Petkov, Owner and CEO

Emil Petkov first discovered Komori in 1995 at Graph Expo in Chicago where the high-performance presses at the Komori stand left a long-lasting impression. Ten years later, as the executive director of what was then the country's largest polygraphic complex, he became the first person to bring Komori to Bulgaria via the purchase of a secondhand System 40 web offset press from PrinterMan in Madrid. This foray made way for other Komori presses to enter the country and raise the local industry standard. Soon convinced of Komori's unwavering quality, Petkov was encouraged to look for another press as the business flourished, resulting in the purchase of a heatset System 38 web from a printer in Leeds, UK, and a used four-color Lithrone 40 from Stockholm.

It was only natural that when he set out to start his own company in 2008, Petkov's mind first turned to Komori. "It was actually the opportunity to purchase a System 40 web from Oslo in 2007 that opened up the possibility of starting Roprint in the first place," he recalls. Roprint's first System 40 was followed by another, which Petkov bought in 2010 from a printer in Athens, Greece, setting the foundation of the company as a forerunner in the local heatset offset market.

From one shift to three

In 2012 Roprint applied for an EU grant and was subsequently approved, enabling the company to actively enter the sheetfed printing market with a five-color Lithrone G40 in 2013. The outstanding performance and print quality of the press saw the company's productivity grow quickly. The number of shifts went from one to three, with the prospect of having four by the end of the year.

Installed in November 2013, the Lithrone G40 was the company's first brand new press but the second B1 sheetfed machine and the sixth Komori press in succession purchased by Petkov in his capacity as a pioneer in the Bulgarian printing industry. This addition of the Lithrone G40 perceptibly raised Roprint's profile on the local market, with a number of new clients, including some of the highest circulation, upmarket monthly magazine titles, turning to the company with an ever growing variety of orders. "It is a matter of trust. Komori provides us with the essential foundation, allowing us to offer high quality products time and time again and to maintain a consistent standard as our client base grows," says Petkov. "Komori has provided us with a proven basis for expanding our services and, as long as the local market continues to grow, we know we can take the next step with Komori." Komori Service

K-Supply: A new concept for a new Komori service

At Komori International Europe, a new line of pressroom products undergoes a rigorous assessment for optimal performance with Komori presses to improve printers' efficiency and profitability.



Pursuing the targets of its kando philosophy, over the last four years Komori oriented its business model toward becoming a Print Engineering Service Provider (PESP). Indeed, the new markets of security printing, printed electronics and digital as well as H-UV printing could not be successful without the additional services newly available within our range of K-Supply products.

> Philippe Fiol **Group Business Development Director** Komori International Europe

While successful business is impossible without innovation and diversification, all end-users increasingly demand that suppliers meet the challenge of their rising expectations. Each Komori customer is unique, so Komori International Europe is adapting our approach to each printer's specific needs to provide unique solutions from a wide range of new products and services. To create this service, we selected not only the best partners, strong enough to accompany us on long-term projects, but also the best technological solutions. Thanks to this approach, K-Supply was born and now comprises a unique line of printing materials and peripherals, tested and approved for optimal use with Komori presses, to improve printers' efficiency and profitability.

K-Supply provides customers with the ability to easily order at best prices pressroom supplies for use with Komori presses, and particularly H-UV machines. K-Supply is supplemented by an entire line of value added support, including service programs, training,

press efficiency audits, press upgrades and more. With our K-Supply offer, Komori customers can now enjoy the convenience of one-stop shopping for consumables and replacement parts.

K-Supply product approval process

All potentially eligible K-Supply products are carefully selected and tested by the New Business Development Group of Komori International Europe. To guarantee premium quality, the Komori Graphic Center-Europe in Utrecht plays an essential role in the evaluation process for every individual product. A product will therefore be officially added to the Komori K-Supply list only when its quality level has been accepted and a general contract has been signed with the corresponding partner. In some cases, products in our portfolio in the same category come from different suppliers, but each product has been carefully selected to optimize the print efficiency of Komori presses.

Approved K-Supply products

The list of approved European K-Supply products is constantly evolving because our team is continuously testing new products in close cooperation with all its innovative world-leading partners. Today Komori International Europe offers a broad range of products as approved K-Supply items available through various ordering plans.







Komori International Europe offers a rich list of K-Supply products



Komori Graphic Technology Center

Renewed KGC for a Reborn Komori

Five years after it was opened in 2009, the Komori Graphic Technology Center (KGC) was remodeled this year, complementing its reorganization and an expanded mission statement. Essentially, KGC was deepened in 2014. An arrangement has been completed that allows visitors to experience the future of the printing industry and Komori's new strategic initiatives. Total support of customers is provided through diverse printing software solutions, high level printing systems to improve productivity, and digital printing systems and color management solutions as well as the K-Supply range of printing materials and peripherals.

In addition to providing solutions for 'customer manufacturing departments' as in the past, KGC has been repositioned as a facility for solving issues in collaboration with customer sales departments and clients based on ideas for final products.

Streamlined organization

KGC's functions have been reorganized into three units. The Demonstration Center will put on presentations of Komori's latest presses in a range of configurations, exhibiting integrated printing systems as a virtual printing plant. The Printing College and Training will improve customer printing skills through participatory, hands-on training. It will also offer on-site diagnostics and consulting as well as environmental



KGC

Demonstration Center Printing College & Training Printing R&D Center

initiatives. The Printing R & D Center puts forward new technologies such as H-UV to customers, develops K-Supply products through joint research with other manufacturers, carries out R & D of printing technologies that match future needs (including digital printing systems), and suggests optimal printing systems that employ color management systems.

The entrance to the remodeled KGC opens to a dramatic foyer that leads to a Welcome Zone with a central monitor showing information on KGC, Tsukuba and Komori, and five columns, each introducing a different theme: Package Printing, Commercial Printing, PESP, Environmental, and Workflow Solutions.

In addition to a new lineup of presses and peripherals, the new KGC provides two guest rooms where customers can meet with Komori staff to map out their own demonstrations and take in briefings on particular products.

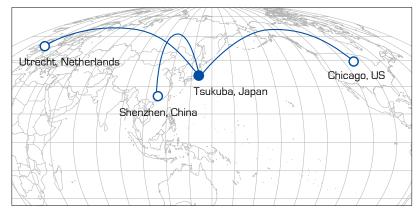
Global scope

There are, of course, three other KGCs worldwide: KGC-America in Chicago, Illinois; KGC-Europe in Utrecht, the Netherlands; and KGC-China in Shenzhen, China, all of which operate under the general direction of the Tsukuba KGC.

The Center will continue to evolve in the future as new products join the Komori lineup, such as the upcoming K-Station 4, and additional postpress hardware is installed. The general aim is development in parallel with the reborn Komori - oriented toward the solutions business, including PESP products, printed electronics, and a future combining offset and digital output devices. Whatever the subject and however complex the application, KGC will continue to be the go-to facility leading the industry and responding meticulously to customer needs.







Global rollout of KGC expertise and knowledge

Shanghai, CHINA ALL IN PRINT CHINA





The Komori theme was 'Efficiency Revolution – Komori's Total Efficiency' for the 5th All in Print China, the China International Exhibition for All Printing Technology and Equipment, held November 14–17 at the Shanghai New International Expo Center. Some 680 exhibitors from 21 countries participated in the show, which drew more than 100,000 visitors.

Komori exhibited the new four-color Lithrone G44, making its world debut at this show, a four-color Lithrone A37, the new Impremia C61 full color digital printing system, and a selection of CMS/K-Supply/DoNet solutions.

The Lithrone A37 showed its ability to easily print eight standard A4 pages with a color bar, thanks to its 640 x 940 mm maximum sheet size. The demonstration included a display of state-of-the-art color matching using K-ColorSimulator, Komori's easy-to-use color management solution, to produce a proof on the Impremia C61.

Komori wowed the All in Print China crowd with its versatile range of offset machinery and digital solutions.

Chicago, Illinois, U.S. **GRAPH EXPO 14**



North America's largest graphic arts exhibition, Graph Expo, took place at Chicago's McCormick Place convention center September 28-October 1, 2014. While the exhibition had a much smaller footprint that past Graph Expo shows, over 400 exhibitors had the opportunity to share their latest solutions with more than 19,000 visitors. On the Komori stand, customers had the opportunity to learn about the KomoriKare line of products and services, including many of the new K-Supply branded consumable products. At Komori America's Rolling Meadows Komori Graphic Center-America, over 40 companies also attended demonstrations on the eight-color Lithrone G40P perfector press equipped with Komori's H-UV Innovative Curing System and PQA-S sheet inspection system. "While we had a much smaller presence than in shows past, the interactions we had with customers were great," said Jacki Hudmon, Senior Vice-President of Sales for Komori America. "We were able to generate some solid press leads, and also highlight our KomoriKare products. It was overall a successful event for us."

ExpoPrint Latin America 2014 was held at the Transamerica Expo Center in São Paulo, Brazil, for one week beginning on July 16. Held once every four years, this exhibition is the largest display of printing equipment in Latin America, and it attracted nearly 49,000 visitors over its seven-day run.

To expand sales of H-UV-equipped presses in Latin America, Komori exhibited an H-UV-equipped six-color Lithrone S29 with coater and presented a wide variety of demonstrations. This H-UV machine attracted the interest and attention of visitors, and every demonstration was packed.

Three types of demonstrations were shown: work and turn printing by means of fast curing using printing paper; high added value printing with drip-off embossing using metalized paper; and fast curing of printing on polypropylene (PP). In addition, a demonstration of cutting and punching using a die cutter after printing was provided.

Furnax, the new Brazil distributor, held a reception on July 17. Some 200 guests from almost 80 companies attended the party, which made for a significant event for all the participants.

São Paulo, BRAZIL **EXPOPRINT LATIN AMERICA 2014**



The Tsukuba Plant held its second packaging open house on October 23 for printers from Japan and Asia, showing the two premier packaging printing presses – the six-color Lithrone GX40 with coater and the H-UV version of the eightcolor (4 x 4) Lithrone GX40RP reverse printing press, both with PQA-S and a lineup of PDC-SX-based options. A multilanguage seminar featuring experts from Komori and leading Japanese printers discussing trends in packaging design and subjects such as proofing and color management strategies rounded out a day focused on Komori's full-court press in this vital sector.

Tsukuba, JAPAN PACKAGING OPEN HOUSE





For the 20th Korea International Printing Machinery & Equipment Show, KIPES 2014, held just north of Seoul in Goyang, Korea, August 27-30, 2014, Komori and Korean distributor Iljin PMS organized a seminar that laid out the roadmap of new product development for the Korean printing industry. The seminar detailed global trends in the digital printing market and Komori's OffsetOnDemand and DigitalOnDemand initiatives as well as upcoming inkjet products.

Seoul, KOREA **KIPES**





Utrecht, THE NETHERLANDS KOMORI PERFECT PRINT DAYS





Organized in the Komori Graphic Center-Europe in Utrecht, the Netherlands, on June 17-18, 2014, Komori Perfect Print Days were a real success, gathering more than 100 European print quality addicts.

The presentations and live demonstrations on a conventional eight-color Lithrone G40P perfector equipped with the latest generation of print quality assessment devices convinced visitors of the exceptional benefits of the Komori inspection and density control systems. The audience focused particularly on the outstanding efficiency of the Komori PQA-S combined with KHS-AI and PDC-SX. With its ability to inspect every sheet, thanks to the high resolution cameras and LED light source, and offering the two essential functions of defect detection and color correction, the PQA-S impressed visitors as the ultimate tool for perfect print quality.

Ho Chi Minh City, VIETNAM LITHRONE A37 OPEN HOUSE





Vietnamese printers came together on August 22 at the Ho Chi Minh plant of Cong Ty Tnhh Sang Tao Tre to observe the printer's four-color Lithrone A37 being put through its paces. The open house drew around 30 guests from 25 printing companies in the area to see the demonstrations, including printing from 9,000 sph to the 13,000 sph maximum printing speed. Following the presentation, a party was held to give guests and hosts an opportunity for the casual exchange of opinions on the press shown at the event.

Rosemont, Illinois, U.S. LABELEXPO AMERICAS 2014





At Labelexpo Americas 2014, held September 9-11 at the Donald E. Stephens Convention Center in Rosemont, Illinois, Komori America partnered with INX International Ink Co. to jointly present the NW210-E intuitive inkjet UV digital narrow web press. Adaptable and compact, the NW210-E is designed to cost-effectively meet the growing need for both label and commercial print providers looking to expand their business opportunities. Built in collaboration with Spartanics and powered by the JetINX[™] print head drive and ink recirculation system, the NW210-E press offers flexibility and ease of use. Incredibly fast, it incorporates a low-heat UV-LED pinning and curing system for single-pass output at up to 80 feet per minute on a variety of label materials.

Tsukuba Technical Training Dojo

IMPROVING EMPLOYEE SKILLS





Komori has set up the Tsukuba Technical Training Dojo in the Tsukuba Plant with the aim of reinforcing training for Komori Group employees.

Full range of teaching for employees

The dojo provides training on sheetfed and web offset presses as well as digital printing systems to continually enhance and develop the mechanical and electrical assembly and service skills of Komori Group employees. Besides plant employees, intensive training of employees of overseas subsidiaries and distributors will also be provided, and certificates of completion will be awarded to those who finish the course.

Multilingual rollout for versatility

The dojo started training in Japanese in July and is preparing to begin instruction in English and Chinese in 2015.

As a dojo that fosters skills improvement flexibly to meet emerging needs, careful attention is being given to efforts that will boost the bottom line of customers through an improved quality of service.

PEPIO SERIES FLATBED MAKES WAVES



Bottom: Komori Booth at Touch Taiwan 2014

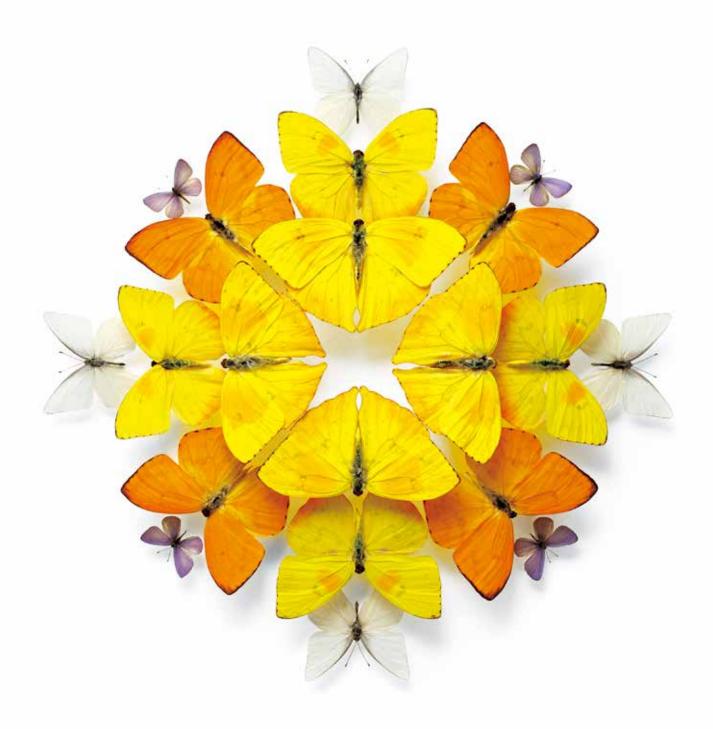
The Komori Group is devoting an increasing amount of resources to technologies aimed at the very promising printed electronics market. Ever since the announcement of the Pepio series of gravure offset presses at the Touch Taiwan exhibition in 2012, this range has been garnering greater attention in the industry.

Komori's latest production equipment enables the mass production of circuits on substrates with high-definition fine lines - which up to now could only be made by photolithography - with low initial investment and extremely competitive running costs by means of reductions in the scale of the facilities, number of machines and quantity of materials consumption.

11.6-inch tablet with metal mesh touch panel

At Touch Taiwan 2014 in August, Komori and the Industrial Technology Research Institute (ITRI) jointly exhibited production technology for printing fine metal lines of L/S = $30/30\mu m$ and 5µm metal mesh to enable a narrow bezel on film for touch panels. The two companies displayed the operation of an 11.6-inch tablet featuring a metal mesh touch panel made entirely by printing, the result of joint research.

Six weeks later for CEATEC, held at the Makuhari Messe in Chiba City, Japan, this exhibit was again presented to a very warm reception. Both shows yielded a significant number of concrete inquiries.



FLAWLESS BEAUTY

Honored many times over the past few years, the Komori Calendar, based on the timeless theme 'Flawless Beauty,' has used motifs from nature to challenge the creative powers of the artists charged with rendering a work of art in print. This year it was printed using the pinnacle Komori sheetfed machine – a Lithrone series press equipped with H-UV and coater. Deep knowledge of inks, varnishes, coatings and special colors along with mastery of the techniques used for the many special graphic effects and embellishments are here exemplified with members of the phylum Arthropoda, the invertebrate animals we know as insects.

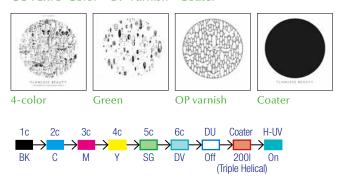
SUBLIMATING TO A MORE PERFECT BEAUTY

The 2015 Komori Calendar endeavors to sublimate the inherent beauty of the subjects photographed into an expression of more perfect beauty by means of added value printing on the Lithrone. Throughout many advance tests, the focus was on how to express in print works that are composed of butterflies and beetles arranged in an elegant jewel-like form – realizing in full the beauty and delicacy of the butterflies and the brilliance and solidity of the beetles.

In capturing the real lustrousness of the beetles with gloss coating and the roughness and calm gracefulness of the butterflies' wings with drip-off coating and varnish as well as matt varnish, a threedimensionality is achieved through the textural differences.



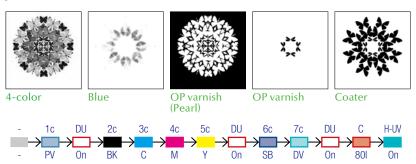
COVER: 5-Color + OP Varnish + Coater



For the cover's white base background, the texture of the paper is kept as is, and the splendor and brilliance of the insects are expressed with gloss coating. Pattern coating applied with a flexo plate is used for the title characters and the circle around the insects. Drip-off coating and varnish are applied to the background (without the edges of the insects), producing a three-dimensionality by contrast of light. By adding a fluorescent green to some of the beetles, we sought to approach the iridescent coloring of these winged creatures. We hope that the viewer not only appreciates the beauty of the insects when they are observed individually but also sees the beautiful colors as an object when viewed from a bit farther away.



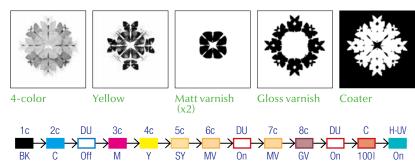
JAN-FEB: 5-Color + OP Varnish (Pearl) + OP Varnish + Coater



For this page, polarizing coating is used for the first time in the series. Coating that produces a variety of effects depending on the angle of view is applied on the white and blue butterflies. Also, for the embossing, the number of lines used in the application of coating was adjusted to make the embossing rougher than in past years. The wings of the dragonflies have drip-off coating and varnish, and the look of the veins is expressed three-dimensionally.



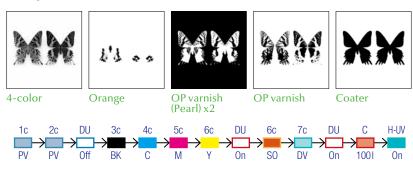
MAR-APR: 5-Color + Matt Varnish + Gloss Varnish + Coater



We selected a photograph that is extremely simple in terms of color tones, consisting of yellows and whites. A special color is used to bring out depth within the yellows, and a range of tones running from bright yellow to firm, textured orange is smoothly rendered. Also, on this page we paid attention to the threedimensionality produced by differences in texture. The design uses coating to accentuate the matt texture toward the center, so that the whole seems to be floating up toward the viewer.

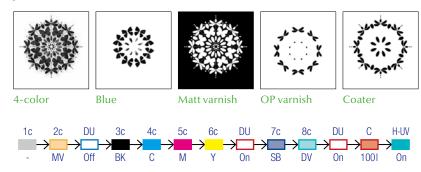


MAY-JUN: 5-Color + OP Varnish (Pearl) + OP Varnish + Coater



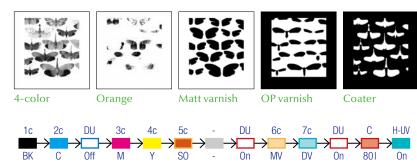
The butterflies are boldly lined up on a background that uses two coats of pearl varnish. Gloss coating is applied to the shadowed parts of the butterfly on the left and a drip-off coating and varnish are used on the colors. The reverse treatment for the butterfly on the right creates a left-right contrast. By giving special orange a fluorescence, there is a definite presence amid the airy, vivid colors, and the dripoff produces an overall three-dimensional impression that matches perfectly the texture of the minute scales and hairs.

JUL-AUG: 5-Color + Matt Varnish + OP Varnish + Coater

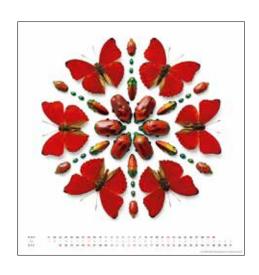


The vibrant colors of the backs of beetles are accents in a scene keynoted by blue-violet color tones. Embossing by drip-off coating and varnish is used on the wings of the dragonflies, and three-dimensionality is revealed by textures. A bluish special color gives the blue-violet color tones vividness, and matt varnish is applied to the butterflies to make the sheen of the beetles produced by gloss coating stand out even more. An observer feels as if he were actually in the scene.

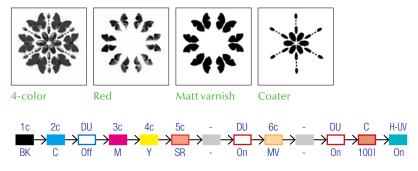
SEP-OCT: 5-Color + Matt Varnish + OP Varnish + Coater



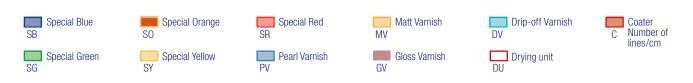
Rough embossing created with drip-off coating and varnish runs around the periphery of insects, making the colors bright and the shapes distinct, resulting in a page with impact. A special orange variegates the colors - white, yellow, blue, orange and red - of the insects, and rough embossing creates an expression of such armor-like hardness that the viewer might be forgiven for thinking the real thing is comparable. A definite texture comes from applying matt varnish to the wing parts, giving the picture even greater depth.



NOV-DEC: 5-Color + Matt Varnish + Coater



A page composed of red varieties of butterflies and beetles. Dependable special colors were selected to bring out depth in this field of similar colors. By strengthening the wing parts of the butterflies with matt varnish, the texture of the beetles produced by gloss coating is intensified, and an overall balance is attained. In addition, by applying spot gloss coating, depth is created in parts with little color difference.



CHRISTOPHER MARLEY

MY CHIEF OBJECTIVE in working with obscure organisms is to foster a deeper appreciation for the masterful design found everywhere in the natural world. This passion began for me with insects. Though an avid naturalist from my youth, for most of my life, insects were to me all that was wrong with nature. I could not find beauty or appreciation in them – only abhorrence. However, once I looked at them from the perspective of a designer, I was immediately affected by how cleanly and precisely they fit my own artistic standards of purpose and sleek utilization. Delving a bit deeper into the insect world, I was shocked to discover how much latent elegance and lustrous beauty I had been unable to see. As my intense emotions regarding insects switched polarity, a driving passion was born to share my newfound perspective. In order to bring others to this alternate view, I needed to take these enigmatic creatures as far as possible out of their natural context,

where I had studiously avoided them for so many years. I undertake this by first prepping the insects in the most cleanly symmetrical forms possible and displaying them in a perfectly antiseptic, inorganic presentation: effectively diminishing the fear of reprisal that large bugs tend to inspire. In some cases, little else is required to form an appreciable tribute to these architectural marvels. The spatial relationships of the insects I group together must also be as linear and geometrically proportioned as possible. This creates another layer of contextual incongruity, further helping to divorce one from the innate negativity that often accompanies insectual interactions. This is also where the combinations of color and texture begin to form an almost irresistible palette. The various color schemes and divergent textures in my work are essential to showcasing the broad range of radical variety in the insect world.