Innovative Excellence
2013 InterTech Technology Awards

We'll Help You Advance with It!

Printing Industries of America's Center for Technology and Research is staying at the forefront of the technological advancements in the graphic communications industry. We help members stay abreast of the latest developments in color, print production, workflow, and regulatory concerns. Turn to The Center for Technology and Research team to provide the right solutions to help you maximize your pressroom efficiency and, ultimately, your profits.

Contact us when you need assistance with:

• Paper and Ink Problems
• Process and Quality Control Issues
• Color Management
• Operational Excellence and Lean Manufacturing
• Product Testing
• Workflow Automation
• Environmental, Health, and Safety
• Mailing Services
• Production Assessments
• Press Acceptance Testing
• Plant Layout
• Technical Training

Free Technical Resources
See a listing of technical resources, free-to-members, at www.printing.org/free. Member login required.

Learn more about The Center for Technology and Research at www.printing.org/ctr.
Printing Industries of America InterTech Technology Awards 2013
Past Award Recipients

1989
➤ Baldwin "Foam-Free" Circulator and Foam Eliminator Kit
➤ Blava In-Line Former™
➤ DuPont Bright Light Films w/X-STAT™
➤ DuPont 4CAST™ Digital Color Imager
➤ DuPont Lightspeed™ Color Layout System

1988
➤ Baldwin Automated Newspaper Blanket Cleaner
➤ Cosar AutoSmart™ Densitometer
➤ DuPont OptiSafe™ Optical Archiving System
➤ Kodak Signature™ Color Proofing System
➤ Dr. S. Thomas Dunn & Vendor Technical Committee of the Image Technology Committee

1987
➤ DuPont Print Manager
➤ Gavarti GA-C.A.T. Graphic Arts Comprehensive Abrasion Tester
➤ Hell Chromacom Proof Recorder 403
➤ Iris Color Ink Jet Printer
➤ Web Printing Controls MicroTrak CCR Closed-Loop Automatic Register Control System

1986
➤ Crosfield Data Compression/Satellite Transmission System
➤ Eikonix Designmaster 8000 Flatbed Scanner
➤ 3M Viking Lithographic Plates

1985
➤ 3M Onyx Cut-Film/Plate Material
➤ Eastman Kodak Ultratec Products
➤ Polychrome Laser-Scan Printing Plate
➤ Printing Research "Mark-Less" Super Blue System

1984
➤ Automation Auto-Count Waste Reduction System
➤ Crosfield Magnascan 640 Scanner
➤ Douthitt Option "X" Vacuum Frame
➤ George Hantscho Sabre Cylinders
➤ IBM 4250 Electro-Erosion Typesetter-Printer
➤ Quad/Tech TGS III Closed-Loop Register System

1983
➤ Baldwin Automatic Blanket Cleaner
➤ Coulter Systems KC-Gravure Color Proofer
➤ Crosfield Lasergravure System 700
➤ Stretch Devices Newman Roller Frame
➤ Rachwal Super 70 Projection Platemaker
➤ System Brunner

1982
➤ Gerber AutoPrep 5000
➤ Monotype Lasercomp Mark 2
➤ Butler Datamat Microprocessor-Controlled Splicer
➤ Hantscho Microregister Control
➤ Amgraph Microprocessor-Controlled Splicer

1981
➤ Harris Presfax System
➤ HurletronAltair Press Management System 700
➤ Mergenthaler Omnitech/2000
➤ Hazeltine Separation Previewer

1980
➤ Crosfield Magnascan 570
➤ Hell Chromacom
➤ Triple-III Automated Illustrated Documentation System
➤ Scitex Response 300
➤ AM International Electronic Ink and Moisture System
➤ Heidelberg CPC I and CPC II
➤ Roland Offset/Miehle CCI

1979
➤ Xerox 9700
➤ Harris Telecolor
➤ Opti-Copy Imposer
➤ Royal Zenith Dieboard Cutter

1978
➤ Hell Chromaskop
➤ Multinex Assembler
➤ Log-E Scan
➤ EOCOM Laserite
➤ Kollmorgen On-Press Monitor
➤ Chrona-lite Photopolymer Film
➤ Digiform Photocomposition System
Honoring Technology Excellence

We are honored to present and profile the eleven recipients of the 2013 Printing Industries of America InterTech™ Technology Awards. For thirty-five years, since 1978, this premier program has showcased important and emerging technologies that are likely to have a significant influence on the graphic communications industry. (A list of all the recipients through the years is available starting on page 14.)

The independent panel of judges deliberated over technology nominations ranging from presses and related enhancements to various mobile and Web-based software. Awards were bestowed upon technologies for digital press, large-format offset, flexographic plate imaging, printed product enhancements, and a substrate for printed electronics. The judges further recognized software solutions to facilitate color management, workflow for variable-data printing, and press training.

The InterTech competition is conducted annually by Printing Industries of America as a service to the industry. Each entry is judged against specific and rigorous criteria. First and foremost, the technology must be truly innovative—not just an evolutionary improvement on an existing product. Further, it needs to enable printers to operate much more efficiently or provide new products or services and offer a clear return on investment. Finally, it must be commercially available, yet not be in widespread use.

“The judges spend hours evaluating each technology submission and then come together to vigorously debate the ‘breakthrough’ nature and business merits of each technology,” said Dr. Mark Bohan, vice president, Technology and Research, Printing Industries of America. “Their judgments have proven to be a pretty good predictor of a technology’s future success. Our research shows more than 80% of past recipients have experienced marketplace acceptance.”

The InterTech Star, recognized as a symbol of technological innovation and excellence, is presented to the companies before an audience of industry leaders during the Premier Print Awards Gala Featuring the InterTech Technology Awards and web2awards, held during PRINT 13 in Chicago, Illinois.

### 2013 Recipients

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### 2013 Nominees

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### 2014 Competition

Manufacturers and suppliers interested in nominating an innovative technology for recognition are urged to submit entries in next year’s InterTech Technology Awards program. For details on how to apply, please go to www.printing.org/InterTech or contact Jim Workman at intertech@printing.org. The deadline for entries is May 30, 2014, with an early bird registration date of March 31, 2014.
Pressero with eDocBuilder
Aleyant Systems • Wheaton, IL • www.aleyant.com

Pressero is a next-generation Web-to-print e-commerce system offering marketing-oriented websites, online print ordering, file transfer, proofing, order management, approval, order and production status, and even functions that were formerly the domain of prepress, production, and MIS—such as file prep, workflow integration, and pricing. The judges were particularly impressed with its variable-data publishing functionality.

Product Personalization, Variable-Data Printing, and Interactive Designer. Pressero includes the powerful eDocBuilder variable-data publishing system, which is a simple authoring tool that makes it easier and faster to get customer documents online for customization and ordering. Using eDocBuilder, PSP customers can quickly proof and approve variable documents directly from a Web browser. The PSP receives a press-ready PDF file immediately after

An example of a postcard template driven by an xls or csv data file uploaded by the customer. Pressero includes the eDocBuilder system for creating and publishing online templates in both a form-based interface for maintaining maximum branding control as well as HTML5-based interactive designer templates for public retail storefronts.
the order is placed. It is integrated into the Pressero storefront system but also licensed separately for use with other e-commerce systems, including Magento and Prestashop.

**Customer Storefronts.** Customer storefronts (also referred to as “customer portals,” “business-to-business storefronts,” or “B2B storefronts”) provide a range of e-commerce capabilities and private sites tailored for each corporate customer. Print Service Providers (PSPs) can populate an unlimited number of B2B portals, products, variable-data templates, and user accounts.

**Retail Storefronts.** Retail Storefronts (i.e., business-to-consumer) provide e-commerce capabilities tailored for use by the general public, allowing the PSP and/or their corporate clients to sell online. Instant pricing calculators and integrated shipping work together with a guest checkout capability to give a professional-looking and easy-to-use storefront.

**Printers’ Informational Websites (Marketing-Oriented Websites).** An informational website is used to provide details about the printing company and its print services. There is no shopping cart or e-commerce. Having an attractive and informative website is no longer an option in today’s business environment.

**Automated Workflow Integrator.** A key link in the move toward “lights out” print production automation. With this desktop application, orders and files from Pressero storefronts can automatically be placed into production environments via hot folders.

**Significant Integration Capabilities.** Aleyant understands that systems need to communicate with each other to provide value to the PSP and its customers. Pressero’s focus on open architecture and XML-based Web services opens up integration possibilities with MIS, ERP, and other third-party systems. “It is a very positive way they developed the product to conform to standards, which is very important,” stated one of the judges.

A key customer of Aleyant stated, “From our viewpoint, Aleyant is a company who really gets the needs of printers operating in today’s marketplace and is offering very sophisticated functionality along with ease of use at a price point the average company can afford … letting more companies participate in Web commerce.”

**Software as a Service (SaaS) and Cloud.** Pressero Web-to-print storefront solutions are delivered as SaaS and allow updates to the software more frequently than traditional software and is hosted in the Cloud. “This is a good turnkey Cloud solution using best practices,” noted a judge. A single version of the application, a single configuration (hardware, network, operating system), used for all “tenants” (our customers), and each of the customers can customize their own functionality, logo, color, content, and Web page layout.
Aproove

Aproove SA • Mons, Belgium • www.aproove.com

Aproove is a Web-based collaboration, job approval, and virtual proofing system for brand owners, agencies, design firms, and print service providers. It is capable of handling multiple complex print projects with unlimited secure logins, a robust combination of content management and graphic production features, and an interface that allows even unsophisticated users to participate fully in the review process. One judge commented, “This is as easy to use as Facebook.”

Aproove gives anyone involved in the creative process real-time interactive markup and communication across multiple sites—from initial concept to final production. Aproove is designed to integrate with any existing workflow and to handle a wide range of file formats, including separated plate files. Coupled with secured access and multi-level password protection, Aproove’s decision-tree process with streamlined job submission, versioning control, and custom email notification makes the management of complex creative projects simple and cost effective—all with no click charges or limit to the number of users. “Aproove saves us six to ten hours of our customer service team’s time per project, which is a significant reduction in time and headache … providing this functionality also...

Users enjoy ultimate flexibility in how a project is seen and shared between users. Edit, share, and approve individual sections, pages, or the entire document with just the click of a mouse.
helps to solidify the relationships with our customers,” stated a key Aproove customer. System features include:

- Streamlined job submission
- Decision-tree workflow
- Real-time high-resolution zoom and annotation
- Flexible file formats: PDF, DCS, TIFF
- Versioning control and display
- Unlimited users and administrators
- Secured access across multiple locations
- No click charges
- Hot folder job submission
- Scalable from a single user to thousands

Aproove is based on two component parts—a central Web server located where the customer desires, and an agent running on the local production file server. The Web server supports an unlimited number of users, and there is no limit to the number of agents feeding it. “The additional advantages are that the system can be hosted in the Cloud. Plus, it is scalable for different customer needs,” stated one of the judges.

Aproove is highly scalable and flexible through its use of unlimited free guest accounts. New team members can be brought into a project at any time—without the need to create an additional paid “seat” in the system. Guest account users are sent directly to the page and location that requires their input or approval. Such ad hoc users also do not need to have design or graphic production experience. “The fact that a new team member can be added for a specific project without effort is significant for large companies where multiple locations or individuals need to get involved in the approval process,” remarked one of the judges.

Aproove is platform-neutral and vendor-neutral and can fit on many devices. It can be easily integrated with any production environment and with any marketing resources or content management system. A judge stressed, “This is crucial for printers with equipment and systems from multiple vendors. It does not require brand owners, agencies, or printers to give up or compromise their existing workflows or infrastructure. Instead, it augments both sides and adds mobile client access on iOS and Android-based smartphones and tablets.

Features include real-time, high-resolution zoom and annotation with an intelligent notation tool. Users can immediately create notes, highlight images or text, and edit directly on the document. This allows everyone to have a say on the final piece while streamlining the time between edits and approvals.
POWERCOAT

When conventional papers are printed with conductive inks, several issues are generally raised—ink is too easily absorbed by the paper, causing unnecessarily high levels of ink consumption; surface roughness leads to low-resolution patterning and decreased conductivity; and yellowing and color fading, as well as altering of physical characteristics of certain substrates, can occur during sintering as the product is heated. “The technology solves many of the traditional problems of printing electronic components on paper,” stated one of the judges.

Arjowiggins Creative Papers has taken all these factors into consideration and developed a patented technology that turns paper into a powerful, ultra smooth, flexible substrate for even the most demanding printed electronics applications. Dubbed POWERCOAT, this product performed well on plastics while being 100% paper, recyclable, and sustainable. “This product provides opportunities in the growing field of printed electronics and has the potential for a wide number of different applications,” noted another judge.

POWERCOAT is ideal for roll-to-roll processing due to its high dimensional stability under mechanical tension. It makes high-resolution printing of fine patterns possible with fewer registration issues.

In addition, a five- to ten-times reduction in silver ink consumption has been demonstrated when using POWERCOAT in RFID antenna inkjet printing compared to conventional screen printing technology. Less ink means less of an impact on the environment and lower overall production costs. POWERCOAT allows higher printing speeds than most plastics because of its thermal stability. Therefore, production costs can be further decreased while productivity and efficiency can be improved. A customer stated, “The innovative...
characteristics of this substrate are very important, especially because of the reduced consumption of drying energy.

The key attributes of POWERCOAT include:

➤ Unprecedented surface smoothness
➤ High thermal stability
➤ Excellent sintering behavior
➤ Improved control over electronic layer adhesion
➤ Superior stability in roll-to-roll processing
➤ Reduced overall production costs as less ink is required for printing
➤ A recyclable and biodegradable solution for all your printed electronics needs

“This product gives printers what could be a new dimension to their product line—such as printing labels with RFID codes to potential use for inventory tracking,” remarked one of the judges.
Color accuracy and repeatability are the key requirements of any printing operation—from commercial and in-plants to specialty and signage shops. However, for smaller operations, installed color management can be too costly—or require color expertise that just isn’t available. Now, small- to medium-sized professional operations can achieve color consistency on their digital print devices or offset presses—and save money on toner or ink—with a simple, cost-effective, Cloud-based solution.

With just a few clicks of a mouse, ORIS Lynx delivers color-accurate results that stay true throughout the pressrun day after day. All you need is a Web browser and a measurement device. There is no requirement to invest in dedicated servers, device control, software, or maintenance—or in high-priced color consulting. “By using the Cloud, a company doesn’t have to install software on multiple workstations,” noted a judge. Even multiple devices at different locations can produce great results—consistent color you can sell,” said one judge. “This software has the potential to solve connectivity problems for companies with multiple plants.”

In addition, you save on toner or ink. With ORIS Lynx’s patented color management algorithms, colors are not only accurately reproduced, but also the relationship between the CMYK values is carefully calculated to produce an outstanding gray balance and an overall

The simple user interface means the focus is on color accuracy and repeatability versus installing another piece of software and needing to train a color expert.
reduction in the amount of toner or ink used. Device profiles are generated in the Cloud based on color specification and returned to the customer for use in the color device’s RIP or digital front end. ORIS Lynx uses either device links or ICC profiles to maintain color output and consistency over time. A customer stated, “We found that Lynx was by far the easiest to install and use, producing SWOP- or GRACoL®-level color consistency on multiple presses for a very reasonable price.”

ORIS Lynx is easy to use—even for those with no training in color management. The steps are:

➤ Log into the ORIS Lynx Cloud server using a plugin for your Web browser (either Firefox or Internet Explorer).
➤ From the browser plugin, print a test chart from your color printer and measure it with your spectrophotometer. The ORIS Lynx software will guide you.
➤ Select a color specification, like GRACoL or SWOP, plus a few other simple variables.
➤ The ORIS Lynx server will make all the calculations and send you a device link or ICC profile.
➤ You can fine tune the profile with one or two repetitions if need be.
➤ In the end you’ll have a reliable device link or ICC profile that controls the device’s output, producing great color day after day. That’s it!

ORIS Lynx is a professional-grade color management solution in the Cloud. “Using the Cloud like this is leading edge and how people should think about doing business,” stated one judge.

Whether your final output is from a digital printer, an offset press, a monitor, or even an iPad or an iPhone, color management has never been easier. ORIS Lynx’s advanced Cloud computing technology ensures exact color matching across all devices and on any substrate.
The introduction of the KODAK FLEXCEL Direct System, with its new multichannel laser diode array and media innovations, enables a step forward for the flexographic printing industry. This environmentally friendly and cost-effective technology is now available for a broader range of applications and types of customers (trade shops as well as printer/converters) and offers higher print quality than has previously been attainable with direct engraving. The FLEXCEL Direct System’s engraving device is faster and more accurate than traditional fiber diodes, such as YAG, and CO₂ direct laser systems. One customer noted the system is outperforming their dual-laser CO₂ systems by three to one in performance speed. Kodak’s proven multichannel laser diode array creates 1,280 watts (1.28KW) of power and leverages this high-power laser technology to enable engraving speeds up to 1.5 square meters per hour.

The simplicity of direct engraving requires minimal operator skills compared to LAMS (laser ablative mask surface) technology, and the FLEXCEL Direct System’s advancements in throughput open new doors for flexo service providers. Consider the business impact on a trade shop that can now provide faster response to customer orders with better quality and for more applications (ITR [in-the-round] and LAMS plate replacement). A printer/converter can now evaluate an in-house platemaking option with a simple, fast, and reliable system that does not require any chemistry treatment. One of the judges was very appreciative that the plate has eliminated chemical processing—a major advantage—and speeds up the production time.

The FLEXCEL Direct Imager utilizes Kodak’s proven high-resolution multichannel laser diode array technology to directly engrave elastomer material for flexographic printing.
The FLEXCEL Direct System introduces an option with the following features:

➤ **A smaller footprint** by about 35% compared to other direct-laser engraving systems and by about 70% compared to LAMS systems

➤ **Lower energy consumption** by about 30% compared to other direct-laser engraving systems and by about 35–50% compared to LAMS systems

In addition to introducing more power for higher-resolution engraving, Kodak’s multichannel laser diode array implements simple-but-precise energy control to accurately modify dot shape structure. Another FLEXCEL user stated, “The dot is finer, the highlights are better, and the engraving speed is dramatically increased. And best of all, the use of the machine is easy—like a CTP for flexo plates.”

By using different amounts of energy to shape the dot tip, shoulders, and relief, the FLEXCEL Direct System’s energy control mechanism provides a sharper and more solid dot structure for longer runs, better reproducibility, and avoidance of material “melting.” These features, combined with the very fine relief engraved on FLEXCEL Direct Media, reduce ink buildup on press and drive excellent printed results.

“All in all, FLEXCEL Direct System is a more innovative concept than other systems on the market,” stated a customer.
A continuing trend in package printing is the increasing complexity of jobs and the use of multicolor printing, plus reduced time to market, for seasonal products and other specialty promotional, geographic, or demographic products. The lack of technology to accurately and efficiently proof press behavior poses one of the biggest challenges for package printers. For example, flexo doesn’t overprint like gravure—ink thickness and trapping properties are very different. Consumer product companies (CPCs) have very high color accuracy expectations across printing processes and different converters. GMG OpenColor was built to resolve this complex packaging problem and provide better results than previously possible with less information. “GMG put a lot of research effort into developing OpenColor and it shows in the final product,” commented one of the judges.

Offering an accurate prediction of overprints, GMG OpenColor creates high-quality multicolor profiles simulating the printing behavior of diverse printing technologies, media types, and screening technologies—if necessary, without use of “proprietary chart-based” press fingerprinting. New spectral modeling algorithms are coupled with spectral ink measurements that analyze the properties of each ink color, as well as the substrate’s colormetric properties. This information is applied to a specific printing process (flexo, offset, gravure). Then process-specific information is added (ink sequence, trapping, etc.), and the final press condition is simulated on a proof.

GMG OpenColor offers the print provider a more reliable proof process, even with multicolor jobs. The prediction algorithm and on-the-fly profile calculation afford a fully automated background calculation process.
Measurements are centrally saved and categorized according to print variables. This lets operators build an archive of measurements and combine existing measurements with new profiles whenever a new combination of inks must be profiled. The OpenColor profile engine is even able to create a multicolor profile with single-step scales of spot colors on the substrate automatically. “The results obtained with GMG OpenColor meet our high expectations. In particular, there has been a major improvement in the simulation of the overprinting of spot colors in combination with each other or with CMYK process colors,” stated a customer. Accuracy is increased by adding more overprint readings.

A proof is the tool the industry uses to visualize job appearance, and OpenColor offers the customer a more reliable proofing process. “It would be fair to say that OpenColor has cut our color management and proofing time in half,” stated a customer. OpenColor can support up to fifteen arbitrary colors in one profile, is offered with standard targets, and is compatible with Hexachrome and other multicolor technologies. With OpenColor, GMG has developed specific spectral modeling algorithms for flexo, gravure, and offset printing as opposed to a ‘one size fits all.’

GMG OpenColor improves the color communication between all stakeholders in the supply chain who are using GMG’s high-end inkjet proofing to optimize their approval and communication processes.

With GMG OpenColor, prediction of spot colors and overprints becomes very accurate when creating proofs for this multicolor juice carton and comparing it to the printed piece.

Data for predicting print performance can be taken from a wide selection of measurements.
Past Award Recipients

The following is a list of past InterTech Technology Award recipients. For more information about all of the previous recipients, visit www.printing.org/intertechrecipients.

2012
- Kodak NexPress Red Fluorescing Solution, Eastman Kodak Company
- Enterworks® Enable, Enterworks, Inc.
- i-cut Suite, Esko
- J Press 720, FUJIFILM North America Corporation
- Prinect Performance Benchmarking, Heidelberg USA
- Keen MIS and Web-to-Print, Keen Systems, Inc.
- Color Control and Web Inspection System with AccuCam, QuadTech, Inc.
- SunPak™ LMQ, Sun Chemical
- iTect, Technique MIS
- Avatrex® Transportable Imaging, Utopia Digital Technologies
- SunPak™ LMQ, Sun Chemical
- i1Pro 2, X-Rite, Incorporated

2011
- Enfocus Switch, Enfocus
- Studio Toolkit for Shrink Sleeves, EskoArtwork
- KBA Flying JobChange, KBA North America, Inc.
- Komori H-UV™ Curing System, Komori America Corporation
- manroland autoprint APL, manroland, Inc.
- Memjet Technologies, Memjet
- TrueJet™ Digital Coated Papers, NewPage Corporation
- ISO 16612-2 (PDF/VT), NPES

2010
- KODAK DIGICAP NX Screening, Eastman Kodak Company
- KODAK PROSPER S10 Imprinting System, Eastman Kodak Company
- ZAC Automated Controller Technology Module, FUJIFILM North America Corporation, Graphic Systems Division
- Prinect Inspection Control, Heidelberg USA
- HIFLEX Webshop Web2Print System, HIFLEX Corporation of North America
- SUPER BLUE 3, Printing Research, Inc

2009
- ORIS Press Matcher™, CGS Publishing Technologies International
- KODAK NEXPRESS Dimensional Printing Systems, Eastman Kodak Company
- KODAK PRINERGY Digital Workflow, Eastman Kodak Company
- System100 Software, Ebiz Products LLC
- Heidelberg Prinect Press Center, Heidelberg
- Diamond Color Navigator, Mitsubishi Lithographic Presses (MLP U.S.A., Inc.)
- Flex-Production Control System, SoftSolutions, Inc.

2008
- Alwan Dynamic DeviceLinks
- EskoArtwork Neo
- Heidelberg POLAR P.A.C.E. Cutting Systems
- Heidelberg Prinect Impress Control
- HIFLEX Management Information and Web2Print Systems
- Inca Onset Digital Printer
- KODAK FLEXCEL NX Digital Flexographic System
- MetaFX Technology
- Sun Chemical Platinum White
- Xaar 1001 printhead

2007
- AGFA :Energy Elite Dual Layer “No Bake” Plate
- Kodak Traceless System
- Enviro Image Solutions UV Printing Blanket Refurbishment
- Esko DeskPack 3-dx
- Fujifilm C-Fit Image Intelligence Software
- Global Graphics Font Emulation in Harlequin® RIP
- Heidelberg Anicolor Inking Unit
- Heidelberg Speedmaster XL 105
- KBA Sensoric Infeed System
- MAN ROLAND 700 DirectDrive
- Océ VarioPrint® 6250 Digital Printer

2006
- Adobe PDF Print Engine
- Microsystems Microcip Software Module
- DALI MISTRAL
- Esko WebCenter
- GFI Innovations MAGNUM Ink Formulation Dispenser
- Goss Zero-slip Nip Technology
- KBA Genius 52 UV Sheetfed Offset Press
- MAN Roland InlineFeeder Prindor
- PrintSoft DeskDirect
- Sun Chemical Liberty Sheetfed Inks
- Océ VarioPrint® 6250 Digital Printer

2005
- Böttcher America Chameleon
- Kodak Colorflow Custom Tools
- Kodak NexPress Fifth Imaging Unit Solutions
- Kodak PDF Compare and PDF Merge
- Flint Ink Arrowlith™ UV
- Genesis SpeedyDry, SpeedyDry
- Goss® Automatic Transfer™ Feature
- Heidelberg Stahlfolder TH/KH Series
- HumanEyes 3D Software

Continued on page 35.
The Speedmaster XL 145 and XL 162 set new standards when it comes to outstanding productivity and consistently high quality. Thanks to their Twin Gripper Delivery and Remote Fan-Out Control features, recipients of the 2013 Intertech™ Technology Award, you can enjoy the benefits of the most efficient, cost-effective presses in the VLF class. More information at www.us.heidelberg.com

Heidelberg USA, Inc.
Phone 888-472-9655 • E-Mail info@heidelberg.com • www.us.heidelberg.com
XL VLF Press with Twin-Gripper Delivery and Remote Fan-Out Control

Heidelberg USA • Kennesaw, GA • www.us.heidelberg.com

The Heidelberg Twin-Gripper Delivery, in combination with the innovative Remote Fan-Out Control, brings true peak performance to large-format perfecting. Advantages include printing with minimal gutters, as well as dramatically shortened makeready time and paper waste. Additionally, all register adjustments are made remotely (including adjustments to the tail edge of the plate) and presets are based on the current status of the ink fountain. With these technologies users can potentially save $1 million per year in paper cost and time savings.

Launched at drupa 2012, the Twin-Gripper Delivery secures both the front and the tail edge of the sheet. As the sheet approaches the delivery pile, a separate slow-down system takes the tail end of the sheet and positions it on the delivery pile. Scratching and marking in the delivery, common with large-format presses, are now eliminated—as are corridors for sheet-brakes—saving almost two inches in sheet width. It also allows easy handling of lightweight substrates. “Being able to handle 40-lb. paper in a large press is huge,” remarked one of the judges. A customer stated, “With this unique delivery technology, we are producing edge-conforming piles . . . and all the while producing scratch-free and mark-free sheets.”

Lightweight paper tends to stretch during the offset printing process due to paper growth and fan-out, which can force the operator to stop the press and manually adjust the tail clamps of the plate. While a portion of the fan-out can be predicted and compensated for in prepress, another portion, depending for instance on paper...
batch and environmental/print-related factors, is still unpredictable. Employing the Remote Fan-Out Control, the former manual adjustments are now made directly from the press center console, saving up to six minutes per unit that is corrected.

“The automation of the tail clamps is unique and greatly improves efficiency. Removing the need to stop the press for manual adjustments saves significant makeready time,” stated a judge. Before the plates are ejected, the press automatically moves all tail clamps back into the zero position—compared to the traditional manual process.

In combination with the InterTech-Award-winning Prinect Press Center with IntelliStart, as well as Prinect Inpress Control (Inline Spectro Color and Register Measurement and Control), the Speedmaster XL VLF presses are the cornerstone of the new efficiently operated print shop.
The HP Indigo 10000 Digital Press is a game-changing 29-inch digital press. The HP Indigo 10000 Digital Press maintains the quality, substrate versatility, and production flexibility established by HP Indigo digital press technology. The press's wider B2 format enables print service providers to profitably capture more short-run commercial applications. Bringing the proven HP Indigo capabilities to the conventional 29-inch format, it makes it possible for the first time to cost-effectively produce high volumes of short-run jobs of any commercial application, up to 29 inches, with the proven HP Indigo quality, substrate versatility, and production flexibility. Many technological breakthroughs were developed to achieve this quantum leap.

Print quality is one of HP Indigo’s strengths. The HP Indigo ElectroInk and digital offset process deliver print quality that is interchangeable with offset for any application with crisp line work, attractive images, and smooth vignettes. A very thin ink layer gives uniform gloss between ink and substrate. Up to seven colors support an extended color gamut, including HP Indigo ElectroInk White, optimal on-press Pantone emulations, and true spot colors. This print quality, which cannot be met with other digital presses—inkjet or toner—is delivered while printing duplex and supporting the widest substrate range: 45-lb. text to 150-lb. cover, including coated, uncoated, colored, metallic, recycled and specialty papers, and paperboard for folding cartons. The HP Indigo 10000 Digital Press is the fourth generation of Indigo presses.

Printing 3,450 sheets per hour or 4,600 in Enhanced Productivity Mode (EPM), the HP Indigo 10000 Digital Press can produce more than two million color sheets per month. The 29-inch width enables efficient imposition and low costs, significantly increasing the break-even point versus offset. The combination of speed with efficient imposition delivers two and a half times the productivity of existing digital sheetfed presses. A customer commented, “We can now deliver formats that our clients and their creative partners love, like 6pp a4, wallets with pockets, and B2 posters in runs of just a single copy, providing a new world of possibilities.”

The HP Indigo 10000 Digital Press easily integrates into offset shops, is compatible with standard offset sheet sizes, offset palette feeding, and conventional finishing.

Key innovations:
- Paper feeding is robust, versatile, and offers a unique offset-like palette feeder. It offers versatile configurations—palette and/or two or four drawers.
- The paper handling system feeds 29-inch sheets across the broadest media range with a low jam rate.
- Laser writing head—a single unit covers the entire image area, supporting 29-inches at high speed.
- The Quality Automation Suite ensures print quality and consistency:
  1. A spectrophotometer with a movable sensor performs highly accurate automatic calibration.
  2. Registration cameras: front-to-front, front-to-back, and color plane registrations (CPR) allow for on-the-fly closed-loop adjustments.
4. Fully integrated end-to-end workflow solutions are geared to handle a significantly higher volume of jobs, (e.g., B2-focused DFE and HP SmartStream Production Center, and inline and near-line fully automated digital finishing solutions by HP Indigo partners, such as the innovative Horizon SmartStacker, designed especially for the HP Indigo 10000 Digital Press). Finally, the HP Indigo 10000 Digital Press has been developed with environmental sustainability in mind (e.g., 25% lower imaging oil waste; lower carbon footprint; regenerative braking system; power management system; modular part replacement; reused heat, reduced electricity footprint; and recyclability of all packaging).
MGI’s JETvarnish 3D builds on the wide commercial success of the JETvarnish inkjet spot UV coater, giving graphics professionals a dual set of digital tools to maximize profitability and differentiate from their peers—traditional spot UV coating and now new 3D raised effects—together for the first time in one production unit.

“Spot UV and 3D together is very cool, plus it makes 3D effects available to printers both large and small,” remarked one of the judges.

With a maximum sheet size of 20×42 inches, JETvarnish 3D is ideal for shops with offset, digital, or screen presses and features spot-UV coating as thin as 3 microns at speeds up to 3,000 20×29-inch sheets per hour. Plus, it now offers new 3D raised effects up to 100 microns in thickness. These tactile effects allow end users to differ-
entiate their brands and add a new dimension of visual appeal to a wide range of projects, such as book covers, brochures, business cards, pocket folders, postcards, packaging, photo books, greeting cards, announcements, and more. “The JETvarnish 3D continues to produce a magical and irresistible effect on our customers,” noted a user. Another customer noted, “What really caught our attention was the JETvarnish 3D’s raised effect capabilities ... we can add 3D effects directly to both digital and offset prints without lamination.”

The JETvarnish 3D’s 100% digital process requires no plates, screens or expensive makeready. For the first time, graphics professionals can provide proofs with spot UV or 3D effects to their clients, and if changes are required, it’s as easy as a click of the mouse. MGI’s integrated software suite includes SpotVarnish Editor, which allows the operator to edit the spot UV mask on the fly and eliminates wasted time going back to prepress to make simple changes. The Job Cost Calculator is a powerful tool that can estimate coating consumption for each job down to the microliter, resulting in accurate cost estimates before printing the first sheet.

Variable-data capabilities (via the optional RIP) make the JETvarnish 3D the perfect complement for personalized marketing campaigns, giving digital jobs the additional “wow” factor. MGI’s ARC camera system ensures precise registration on printed sheets down to the pixel, so all jobs will have maximum marketing impact.

As today’s run lengths continue to shrink and digital print volumes continue to increase, the JETvarnish 3D offers projects and budgets of all sizes the opportunity to receive the premium finishing techniques once reserved for long runs on offset or screen presses. Clients receive visually stunning pieces that elevate their brand to a new level in quantities of 1, 10, 100, or tens or hundreds of thousands. “MGI’s JETvarnish 3D has truly been a door opener to new business opportunities,” stated a customer.
Scodix Metallic™
with Scodix SENSE™

Scodix, Inc. • Israel • www.scodix.com

The Scodix SENSE™ technology unleashes the power of enhancements, creating a printing experience that touches the senses and creates differentiation. The digital enhancement is produced by the Scodix Digital Press S series and the Scodix Rainbow™ Station, made possible by Scodix’s patent-pending technology. The core of the Scodix SENSE™ technology is its advanced jetting block and multiple independently controlled inkjet nozzles that produce UV polymer in small drops. Dedicated software algorithms allow the two CCD camera systems to Rotate, Scale and Position (RSP) the Scodix print enhancement with pinpoint accuracy, scanning every substrate sheet to deliver the PolySENSE™ to its exact location.

Utilizing Scodix’s advanced RSP, enhancement and inkjet technology; Scodix Metallic™ is the technology that allows print enhancement

An example of a Scodix print enhancement.
with metallic coloring by simply utilizing the CMYK color process from Scodix SENSE™. Performed in a digital one-pass print process, print service providers are able to offer their customers metallic colors without the need for outsourcing, hot or cold foil process, or the setup of traditional processes, plates, molds, and other costly or time-consuming elements. “The value of traditional metallic printing is well-chronicled ... and Scodix Metallic not only simplifies the application but dramatically reduces both time and costs ... by an average of three to ten times compared to traditional methods,” stated one customer.

Scodix Metallic™ adds significant value to the growing basket of in-house print solutions. Eye-catching effects are now available to the short-run market without expensive materials and startup. The judges marveled at the technology’s potential for high-end packaging and marketing applications. “Scodix Metallic is a game changer for the entire commercial and packaging industry,” noted a large print service provider.

The Scodix technology reduces environmental impact by producing less waste and using less energy. It is nontoxic, recyclable, and releases no VOCs (volatile organic compounds), replacing traditional systems that use plates, molds, chemicals, and solvents. With all image data stored digitally for on-demand printing directly from a PC, the need for plates, molds, and storage space is completely eliminated, enabling printing professionals to print enhancements directly from the computer to the page in a single step with minimal setup effort.
DLMS (Direct Learning Management System)

Sinapse Print Simulators
Saint Aubin, France
www.sinapseprint.com

Distributed Learning Management System (DLMS) is a Cloud-based extension to Sinapse’s press simulators that allows trainers and administrators to manage and evaluate large numbers of trainees on site or across sites. It can act as a basis for a “local training/remote supervision” model. The language-independent system provides automatic analysis of a training session as well as high-level reports to track the results by trainee exercises and by time and production cost, ranking the performance of the trainees.

Using the DMLS a trainer can set up courses for trainees wherever they are and review high-level results for groups or individual results for trainees. The information can be accessed from anywhere on the corporate/educational network. WAN-IFRA (the world association of newspaper and news publishers) uses offset training with DMLS and has trained more than 300 pressmen from across India—as well as Sri Lanka and Saudi Arabia—and view the training as a practical means to give the trainees the feel of working on a real press. The judges noted that this is a unique tool and offers a great teaching tool.

Sinapse’s print simulators are effective learning tools in both classroom and on-the-job environments.
How DLMS Works

1. The instructor enrolls the trainees in the DLMS system and sets up their coursework, creates or modifies problem scenarios, press configurations, costs, multimedia links, and reference values—hundreds of predefined exercises are supplied.

2. The Management Functions lets trainers and administrators configure sites, groups, instructors, and trainees, generating a password for each user so they can access the coursework.

3. When the trainee logs on, they see what courses and exercises have been assigned. They can complete the exercise at any time and from any of the workstations in their local language. The press simulators let trainees practice problem solving and gain experience running a press in any available language.

4. The instructor can review the results from any station on the network or through their Cloud-based software to compare individual and group progress at any time, anywhere. The system is language-independent, meaning a review can be in any language, even if it is not the same as the trainee’s.

5. The Individual Results module automatically analyzes a trainee’s session and can compare it in detail to the same session completed by any other person (trainers, best in group, etc.)

6. The higher level Group Report automatically compares ALL session costs, times, and waste figures and shows rankings and averages. It can be used to evaluate, compare, and benchmark individuals and groups.

method for companies with multi-lingual employees in various locations. For example, a trainer in Montréal (French speaking) can supervise trainees in Mexico (Spanish speaking).

In addition, any trainee session can be compared against a “referent” session in terms of production cost, time, waste, and sequence of operations (analysis before action, unnecessary actions, lack of necessary operations...). This referent can be created by the trainer or can be chosen from among other trainees (same or different sites, same or different languages).

If the DMLS user is a trainee, he/she can access the simulator and the user and evaluation/benchmarking reports from their simulation workstation. If the user is a trainer or administrator, he/she can also access the user reports from any device with a browser. The judges commented on the sophistication and its potential as a powerful teaching tool. They also recognized the value of the DMLS being language independent—students can work in any language, instructors in another, and the results can be reviewed in yet a third.

Individual analysis and detailed comparison to referent sessions need simulation stations for their display; this will be available on browser-based devices in future versions.
Printing Industries Press

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2013 InterTech Nominees

The technologies on the following pages were nominees to receive an InterTech Technology Award. Each technology demonstrates the inventiveness and innovation that made it worthy of consideration. We encourage you to review the technologies, as together they are helping the industry be more cost efficient, produce better quality, offer quicker turnarounds, and reach new markets. (Nominees are listed in alphabetical order by company name.)

➤ DALIM ES
   DALIM SOFTWARE

➤ DGM/Insight Die Co-Ordinator
   Diversified Graphic Machinery

➤ KODAK NEXPRESS Long Sheet Pile Feeder
   Eastman Kodak Company

➤ KODAK SONORA XP Process Free Plate
   Eastman Kodak Company

➤ KODAK 700 Print Manager
   Eastman Kodak Company

➤ Harlequin RIP®
   Global Graphics Software

➤ HP SmartStream Production Center
   Hewlett Packard

➤ Facelift
   Hybrid Software USA

➤ locr maps
   locr GmbH

➤ Fountain Solution Control System
   Metafix Inc.

➤ inkjet CtPlate
   TUK Digital Graphics

➤ Xerox IntegratedPLUS Finishing Solution
   Xerox Corporation

➤ eXact spectrophotometer
   X-Rite, Incorporated

2014 Competition

Have a new and innovative technology that should be considered for a 2014 InterTech Technology Award? For details on how to apply, visit www.printing.org/InterTech or contact Jim Workman at intertech@printing.org. The deadline for entries is May 31, 2014.
**Award Nominees**

**DALIM ES**

**DALIM SOFTWARE** · Kehl, Germany · www.dalim.com

DALIM ES is a tool set for planning, executing, and controlling any aspect of media production, regardless of final output—print, Web, ebook, movie, etc. The combination of technical production aspects—along with the business workflow of multichannel content—facilitates productivity. ES offers an intuitive user interface in a standard Web browser along with apps on mobile devices.

Being able to set milestones—such as project setup, artwork delivery, prepress tasks, approvals—syncs workflow stages with business process lifecycles. Assigning deadlines to each milestone helps track progress in real time, anticipate delays, and reallocate resources if necessary. A dashboard view displays an operator’s intuitive “to-do” list, with the manual ability to change status upon completion.

The ES Core technology base is also the customer front end. It manages all users and projects, handles approval workflow parts and file management, and controls rendering of all required file previews.

As a standalone solution, ES can be used for project management and simple approval workflows. Documents can easily be shared confidentially. The built-in preflight ensures files will meet expectations. ES users can review or approve documents with a quick online preview, collecting comments and correction requests.

The TWIST Engine is a feature-rich digital production workflow, supporting a variety of file formats. With the TWIST Engine, ES’s business logic of collaborative project management and sophisticated approval cycles is extended with full file automation processes.

The DIALOGUE Engine option stores comments and correction requests on nearly any kind of media on a centralized database. Users can easily measure densities, check layers, and view single separations. Opacity and order of separations can be altered. With Apple iPhones and iPads, it lets clients stay connected using reviewing features.

To publish information across media—through print, the Web, and digital devices—the e-Publication option turns PDF documents into interactive digital publications as feature-rich iPad apps, interactive HTML5 website content, or EPUB documents for ebook readers.

**DGM/Insight Die Co-Ordinator**

**Diversified Graphic Machinery** · Red Bank, NJ · www.dgmana.com

The DGM/Insight Die Co-Ordinator is a great solution for die registration for hot foil stamping, embossing, and cutting/creasing/embossing, reducing press setup time by up to 50%. It replaces a manual measuring and positioning process with a machine vision camera linked to a computer to scan the sheet and plot the position of alignment marks on the honeycomb bed or chase using a computer-controlled X-Y table to position the camera head for die alignment to an accuracy of 0.01 mm.

Foil stamping and embossing dies are positioned on the honeycomb quickly and accurately by using scanned images and reference points directly from the printed sheet or digital images from a PDF. The DGM/Insight Die Co-Ordinator uses all the existing mechanical processes with enhanced computer controlled facilities, which can effect positioning with greater efficiency, ease, speed, and accuracy than can be performed manually. And it requires no modification to presses, honeycombs, dies, or hooks.

Normally, to control the position of the dies on the honeycomb, the operator manually measures reference points from cutouts on the printed sheet or from a film overlay and then positions the dies to match the image points on the printed sheet/or film—a labor-intensive and time-consuming process with accuracy limited by the skill of the individual operator. With the DGM/Insight Die Co-Ordinator, the operator places the printed sheet on the digitizer and clicks on registration points of interest on the sheet or creates the points from a PDF separation and then aligns the printed sheet on the table and autoscans the sheet.

The positions of each reference point are stored, and an inverted key-line is automatically generated from the scanned image. This process is repeated until all the alignment positions for the sheet are stored. With Die Co-Ordinator, accurate positioning and alignment can be performed offline by a non-skilled operator instead of on the press, reducing press setup time by 50% and simplifying the process.
KODAK NEXPRESS Long Sheet Pile Feeder

The KODAK NEXPRESS team was tasked with introducing the long sheet feature without impact to the inherent robustness of the press, maintaining color registration, substrate flexibility (800+), five-color print capability, and speed variations (83–131 ppm).

The KODAK NEXPRESS Long Sheet Pile Feeder enables new applications with increased productivity. You can print sheets up to 14x36-inches on the Kodak NexPress Digital Production Color Press with the long sheet pile feeder from Baumfolder. The larger sheet size means you can produce even more applications to meet diverse market needs, including six- or eight-page letter, oversized brochures, dust jackets for large books, panoramic posters, point-of-sale materials, and other special applications.

Paper Handling

To achieve maximum productivity, the design uses dynamic frame modes for the best utilization of paper path for different sheet sizes. To feed longer sheets, an external pile feeder was introduced, which extended this functionality to older presses. The feeding path was designed so that while the sheet lead edge was controlled by one set of nip rollers, other rollers released the trail edge to move freely. A fixed nip roller in the input path was replaced by an articulating roller to release the trail-edge of sheets beyond 20.5 inches.

Additional redesign related to in-track timing of sheets. For both one- and two-sided printing, the press accelerates the sheet prior to reaching the Automatic Sheet Positioner (ASP) at the beginning of the printing cycle. The ASP uses this extra time to align sheets properly and check for multifeeds prior to releasing sheets to the transport web.

Accelerating sheets became a challenge for two-sided printing. The press was designed with a “fixed target acceleration point” within a tolerance to allow for time variance due to substrate performance and other variables. Long sheet introduced a “dynamic target acceleration point,” which now incorporates the length of the sheet, providing more tolerance for shorter sheets and less tolerance for longer sheet while still allowing distance to adjust for variance in sheet transport time.

KODAK SONORA XP Process Free Plate

KODAK SONORA XP Process Free Plates deliver the run length, imaging speeds, and print quality capabilities of mainstream processed plates, in addition to significantly reducing costs and environmental impact because they’re process-free.

The benefits of process-free are well-known in the printing industry. Printers not only completely eliminate the cost and environmental impact of processing, but they also get to press more quickly by removing the processing step and reducing the potential for variation that affects quality and efficiency. Until now, the limitations of process-free plate technology have unfortunately prevented widespread adoption by printers that need the productivity and print capabilities of mainstream plates to satisfy their customers.

SONORA XP plates provide an option for many of the world’s offset printing requirements, including sheetfed, heatset web, commercial coldset web, offset packaging, and short-run UV printers. They have the potential to shift the industry to process-free platemaking.

The SONORA XP Process Free Plate is a thermal plate that requires no processing equipment or chemistry, using press-ready technology to enable a printer to go directly from platesetter to press with no intermediary processing or clean-out step. The plate offers fast imaging speeds with laser energy required of 150 mJ/cm², so in most cases printers can take advantage of the maximum throughput capability of their platesetter. The plate is capable of run lengths up to 200K impressions on heatset and commercial coldset web presses, 100K impressions on sheetfed presses, 50K impressions for non-UV offset packaging applications, and 10K impressions for UV-ink applications. The plates also offer high-quality 20-micron FM screening capability on KODAK SQUARESPOT Imaging Devices and AM screening of 1–99% at 200 lpi.

The KODAK SONORA XP Process Free Plate enables printers to realize the operational, cost, and environmental benefits of process-free platemaking for a wider range of applications than possible with other process-free plates.
**Harlequin RIP®**

**Global Graphics Software • Cambridge, Cambridgeshire, United Kingdom • www.globalgraphics.com**

The new generation of Harlequin RIP for digital printing, the Harlequin Host Renderer 3 is used to create digital front ends (DFEs) that drive digital presses. It was developed to consume the vast amount of data a print job requires today and provides a solution for digital printing, including the ability to create PDF/VT-compliant solutions.

Independent speed tests conducted by Rochester Institute of Technology in 2012 found this Harlequin “digital” RIP to have so much processing speed that it not only reduces the risk of poorly constructed jobs slowing down production but exceeds industry requirements in keeping presses running at full speed.

This benefits print companies by providing a faster return on press investment and future-proofing their operation against the accelerating trend toward personalization of data.

Companies that have the Harlequin Host Renderer as the engine in their DFE can easily achieve speed without sacrificing the correct, predictable output and the high-quality color they need to get nodes to further reduce complexity in production. The powerful Fusion boards assemble the page on the fly during printing to match press speed and maintain a steady flow of data that drives efficiency. Furthermore, cached PDL elements can be archived, viewed, and managed offline.

The benefits for users include lower cost, smaller footprint, and lower energy use. This architecture, plus Kodak’s advanced processing techniques, maximizes the RIP’s performance while maintaining outstanding output quality.

The Harlequin technology consumes any VDP format existing in the market today and employs reusable VDP elements (images/text) stored on disk for ultra-fast VDP printing. This capability to process and print complex VDP jobs at rated engine speed is unique to 700 PM technology and reduces the need for RIPing elements repeatedly. And because the system is based on open industry standards, nearly all languages and formats are supported.
HP SmartStream Production Center

HP SmartStream Production Center is a software-based production management system designed to address the challenges of efficiently receiving, producing, and delivering high volumes of short-run print jobs. The system helps print service providers (PSPs) to meet aggressive customer deadlines by improving job status visibility, identifying and eliminating bottlenecks, and monitoring production to enable effective use of the PSP’s capital equipment.

First seen as a prototype at drupa 2012, HP SmartStream Production Center helps increase the productivity and efficiency for PSPs across entire print production operations. The system fits into any existing environment to automate and oversee production. It manages a high number of jobs submitted from multiple sources, including Web portals, MIS systems, and prepress tools, and then automatically routes them to multiple production platforms, including HP Indigo Digital Presses, non-HP digital presses, offset presses, and finishing equipment.

HP SmartStream Production Center tracks print jobs from start to finish in real time using job definition and job messaging formats (JDF/JMF), barcode scans, or manually entered data. The priority for each job is set, and the job is then placed in the queue which can easily be changed in the system by a simple drag-and-drop operation. Job clustering or batching helps reduce waste and lowers costs, thus boosting productivity. This allows priorities to be set according to changing deadlines and delivery dates. This makes it easier for owners and managers to allocate resources, such as operators and presses, with maximum efficiency.

Customizable dashboards offer full insight into the real-time state of production by displaying a comprehensive view of the print production status. All jobs, presses, and finishing devices are visible to the system. The dashboards also highlight urgent requests or errors to production managers as well as press operators on displays accessible on the production room floor or remotely.

Facelift

Facelift is a centralized, Web-based, cross-platform job ticketing and automation system that offers data access and entry of job information any time, anywhere, and from any data source. Facelift provides seamless integration between production workflows, MIS/ERP systems, Web-to-print portals, EDI ordering systems, third-party websites, internal and external databases, and virtually all sources of order information. Facelift provides total transparency of what is happening to a job at all points between the initial estimate request or online order and the final delivery of digital files, stock inventory, or printed materials.

Facelift allows printers to create their own templates which encompass each stage of the order’s life cycle, regardless of the printing process or product being produced. A drag-and-drop Web interface lets users graphically lay out and design production tickets with exactly the controls a job ticket needs: text fields, checkboxes, previews, file management, etc. Facelift provides a tool set for JDF integration between production workflows—which require very specialized parameters—and MIS systems—which typically have generic prepress instructions. Using the included Pipeline middleware tools, Facelift can act as an intermediary to map data between these systems without the need for custom programming. Facelift supports all types of print processes, including conventional print, digital print, packaging and labels, large-format, or even a combination.

Pipeline is Facelift’s middleware layer that maps data between a wide range of otherwise disparate and disconnected production systems without the need for custom programming. Pipeline connects directly to third-party applications that use databases and allows users to share data from each system to avoid duplication of data entry. It ensures a change in one system, i.e., a software upgrade, is self-contained and doesn’t affect other production systems. It also links Facelift job tickets and user data to its own embedded database which is especially useful for metadata—such as prepress instructions—not available from most MIS systems. Together, Pipeline and Facelift provide a real-time dashboard for up-to-the-minute management reporting and control of the entire order life cycle.
Fountain Solution Control System

Metafix Inc. • Montreal, Quebec, Canada • www.metafix.com

The Metafix Fountain Solution Control System (FSCS) is a two-part system consisting of the Fountain Solution Control Unit (FSC Unit) and MetaTrax, a proprietary Environmental Management System, designed to expand printers existing dedication to process improvement specifically for their fountain solution. With the Metafix FSCS, printers can expect improved quality and cost savings associated with the active measurement and management of their fountain solution.

The Metafix FSC Unit is connected to the existing dampening/recirculation system. A custom designed sensor array, featuring a Toroidal probe that resists fouling and does not require constant calibration, is used to measure conductivity, pH, temperature and all relevant fluid volumes. A second probe is used to measure the feed water to account for any variations in conductivity of the incoming water. The FSC Unit maintains a consistent, highly stable conductivity during the pressrun essential for optimal and predictable ink/water balance and consistent image quality. The FSC Unit can also measure and dose custom-blended additives into the dampening system. An optional recycling module can be ordered to capture and recover waste fountain solution, offering true zero discharge.

MetaTrax captures the data generated by the FSC Unit via an Internet connection and converts it to usable information. Detailed daily reports document the conductivity, pH, temperature, and fluid volume data. This data is constantly compared to user-established parameters, and MetaTrax issues an alarm via email or SMS if the operating parameters are no longer in balance, eliminating problems before they affect the pressrun.

Maintaining proper control of your fountain solution is a critical function in the pressroom. Implementing the Metafix Fountain Solution Control System is like having a highly trained chemist managing your dampening/recirculation system. Combining the measurement and management capabilities of the FSC Unit with the reporting tools of MetaTrax gives printers a powerful combination of quality improvement tools and substantial cost savings.

locr maps

locr GmbH • Braunschweig Niedersachsen, Germany • www.locr.com

Print and marking service providers are well aware that personalized communications achieve better response rates for their clients. But many of these providers don’t have the customer information needed to utilize personalization or the technical expertise to create such campaigns. locr maps solves both challenges.

locr maps is a Cloud-based solution that lets users include personalized maps for print and online use in their marketing campaigns. The maps can be fully personalized and individualized, adding the recipient’s location and other points of interest, as well as incorporating company logos or icons for an even more memorable experience. All recipients get their own individualized map, showing their home location and the promoted business.

To include this level of personalization, providers only need the recipient’s street address and the technical expertise that already exists from performing digital printing at their organization. From that, locr maps provides licenses to professional print for cross marketing opportunities or to use them fully animated in personalized videos or PURLs.

Including these personalized maps creates a connection that lets the viewer visualize themselves moving to a new destination—a destination that, in this case, has been provided by the marketer. Marketing campaigns using locr maps have proven to be more successful in terms of conversion rates than regular personalized mailings.

Consider the range of industries that benefit from that type of connection—tourism, automotive, events, retail stores—and you will see the potential these maps have for generating a higher response rates.

Customers are typically print or marketing service providers using variable-data print software to combine the maps with other variable content. locr maps is integrated with leading solutions like GMC Inspire, XMPie, and Pageflex, but maps can also be retrieved using a Web-based front end.
inkjet CtPlate

TUK Digital Graphics
Middlesex Harrow, United Kingdom
www.TUKdigitalgraphics.com

The digiLUXE™ inkjet CtPlate System provides the bridge between the declining offset graphics and the fast-rising digital graphics sectors of print. The technology is comprised of four components.

inkjet CtPlate. A dimensionally stable plate with a specially flexible hydrophilic coating that is receptive to different marking fluids. While predominantly designed to be used with the “standard, generally available” EPSON inkjet K3 and UltraChrome inks used with the EPSON Stylus-PRO printers, CtPlate is equally compatible with, for example, the Glunz & Jensen iCTP system, the DotWorks Tango system, and others. This renders the CtPlate as the only alternative to proprietary solutions.

simplyRIP. Dot shape, screening algorithms, repeatability, and consistency are critical factors in determining quality. While the majority of long-time press operators have an eye for such matters, the generational shift brings a lack of experience and the need for straightforward tools for the job. simplyRIP integrates these tools into press-button technology.

iDotmeter. The iDotmeter is an online (to the simplyRIP) device, taking advantage of the press-button technology of the RIP, making linearization and calibration of the imaging engine with the press output and the RIP a simple 1-2 step flexible process.

ProBlack. Available as an alternative to the standard K3/UC EPSON inks, the ProBlack ink provides for increased flexibility in imaging. Having been designed specifically for the CtPlate and CtFilm, the ProBlack ink will increase the print impression capacity of the CtPlate depending upon the type and condition of the press. In the case of the CtFilm, ProBlack will enable a D-max in excess of 5.0, which then makes the film suitable for high-end screen, offset, and flexo printing.

Xerox IntegratedPLUS Finishing Solution

Xerox Corporation
Webster, NY
www.xerox.com

Booklet jobs come in all shapes, sizes, and impositions with varying finishing options, including trimming, folding, and stapling. With the Xerox IntegratedPLUS Finishing solution, all booklet job preparation and finishing setup is automatic, increasing productivity and profitability. The solution is modular and scalable, allowing customers to use the components that fit their shop today with the flexibility to expand. The solution consists of prepress automation software, production printers, and networked third-party finishers, all working together to enable end-to-end workflow automation. Customer requirements, engineering development, integration, and testing are all coordinated to create a tightly integrated specific solution for each customer.

Software. FreeFlow is the core Xerox software technology. Prepress automation includes automated order entry, booklet preparation, job routing, and finishing—from Web ordering to final output. During prepress, the software handles dynamic imposition, printer, and finishing ticketing, and creates a custom banner control sheet that provides critical job information to provide specific finisher instructions when using offline finishing workflows. The C.P. Bourg Workflow Manager enables configuration of the JDF-enabled finisher and releases offline jobs from the FreeFlow software using the handheld scanner.

Hardware. Workflows can drive either a continuous inline path for short production runs or offline finishing for medium to long runs. Unique to this solution is the Xerox-exclusive JDF-enabled Xerox Dual-Mode Sheet Feeder (BSFEx) by C.P. Bourg. This sheet feeder sits between the press and the finisher. It can pass printed pages through when in the inline finishing mode. It can accept pages from other print engines via media cart in an offline mode. In dual-mode, jobs can be printed to its stacker while the finisher operates at its rated speed finishing any job loaded with sheets printed from another printer.
The eXact platform solves the problem of color measurement of printed materials made from substrates that contain optical brightening agents (OBAs) while providing a way for printers and converters to improve profitability by helping employees to gain access and understand sophisticated color control.

eXact is a handheld instrument that provides illumination for conditions M0 (no filter, UV included), M1 (daylight, D50), M2 (UV cutoff filter, UV excluded), and M3 (polarization filter), and allows people to easily access the advanced measurements and understand their significance. It permits accurate measurement on substrates that not only contain optical brighteners but also fluorescent inks.

The spectrophotometer measures the visible spectrum from 400 nm to 700 nm at 10 nm intervals, giving printers and converters the appropriate tools to measure and record work-in-process using all industry standards, including ISO, G7, PSO, and Japan Color. It is fully compliant with ISO 13655:2009 and provides accurate color communication that can be used across all supply chain partners, from design through converters. By pinpointing where measured colors reside in the color space, the eXact's data can be used to predict how a color ink will appear under different lighting conditions, on a variety of substrates, and with different standard-observer angles.

X-Rite designed an instrument that was compact, lightweight, versatile, and geared to a new generation of employees who are versed in wireless and smartphone technology. The instrument was outfitted with a large color touchscreen and micro processing power running intuitive software that could be customized to handle any workflow. On-board memory was included to store color standards, tolerances, and samples, so operators could make pass/fail decisions without connection to a computer, and the instrument can be configured with Bluetooth technology to transmit time-stamped data wirelessly to a PC for advanced data storage and analysis.
Past Award Recipients

Continued from page 14.

2005  (Continued)
➤ KBA Rapida 205 Sheetfed Offset Press
➤ LithoTechnics Metrix™ v1.5
➤ MAN Roland TelePresence
➤ Maratek Environmental Solvent Saver
➤ Müller Martini SigmaLine
➤ Pageflex Storefront™
➤ Xeikon Print Protector
➤ X-Rite Pulse ColorElite Systems

2004
➤ BOISE Cascade SPLOX™ “Speed Loading Box”
➤ ENCAD NovaJet® 1000i
➤ Finishing Expert, FOLDRite™
➤ FloClear™ Fountain Solution Recycling System
➤ Genicad Supergraphix™
➤ Heidelberg Speedmaster 52 with Inline Die-Cutting
➤ International Paper Hammermill® Color Copy Gloss
➤ MacDermid Rollin® Stabil-X Offset Blanket Technology
➤ Max Daetwyler Vision 3 Engraving Head
➤ Presstek Applause No-Process Thermal Printing Plates
➤ US Postal Service CONFIRM Service
➤ Xerox iGen3™ Digital Production Press
➤ XMPie PersonalEffect™

2003
➤ Artwork Systems Plate Cell Patterning™
➤ CGS ORIS Color Tuner 5.0
➤ CreoHyperFlex™
➤ Epson Stylus® Pro 7600/9600
➤ Esko FastVariants
➤ Goss Digital Inking System
➤ Heidelberg, Magnapak
➤ Heidelberg ST 400 Automated Saddle
➤ Integrated Color Solutions Remote Director™
➤ Kodak Matchprint Virtual Proofing System, Version 1.0
➤ Komori Lithrone S40
➤ RealTimelmage RealTimeProof™ Express
➤ Xerox SquareFold Booklet Maker

2002
➤ Adobe PDF Transit
➤ Arpeco Injector System
➤ Enfocus Certified PDF Technology
➤ Gerber Sector Coating Blanket Production System
➤ Graphics MicroSystems ColorQuick Press Analysis System
➤ MAN Roland JobPilot and PressMonitor
➤ Midwest Ink Hydro H20 Inks
➤ Muller Martini Prima AMRYS
➤ NexPress 2100 Digital Production Color Press
➤ PISCES-Print Imaging Sciences JetPlate Computer-to-Plate System
➤ Printcafe PrintFlow™ Dynamic Scheduling
➤ Timsons T48A ZMR Book Press

2001
➤ CIP4 Job Definition Format (JDF)
➤ Digimarc MediaBridge
➤ Heidelberg Ecocool
➤ Heidelberg Supertrap and Supertrap Plus
➤ Imation Matchprint™ Professional Server
➤ MAN Roland DICOweb
➤ Markzware MarkzNet™
➤ Océ Digi-Stitch® 2000
➤ Presstek Dimension Computer-to-Plate System

2000
➤ Collabria PrintCommerce™
➤ CreoScitex Digital Offset Press (DOP) Imaging System
➤ Fujifilm Acousto-Optic Deflector (AOD) Multi-Laser Beam Technology
➤ Heidelberg ImageControl
➤ Kodak Approval Recipe Color Software
➤ Mitsubishi Digital Register Analysis (DRA) 2000
➤ Preview™ Systems Preview System
➤ Sinarback Digital Camera System

1999
➤ Agfa Apogee
➤ Barco Samba Screening
➤ Croda Adhesives Integrated Label Technology
➤ Grafix Co Cure™ Process

Continued on page 36.
Past Award Recipients

Continued from page 35.

1999 (Continued)
➤ Heidelberg Polar Compucut with CIP3 Workflow
➤ Heidelberg Sunday 4000 Press with Autoplate®
➤ Markzware MarkzScout
➤ Max Daetwyler LASERSTAR
➤ Phase One LightPhase
➤ Quad/Tech, Inc. Color Control System (CCS)
➤ T/R Systems MicroPress® Cluster Printing System

1998
➤ Agfa Chromapress IntelliStream™ with Personalizer-X™
➤ Augment Systems AFX 410 Storage Server System
➤ Cortron eRIPides Digital Prepress Workflow
➤ Peerless KemFre™ Lithographic Printing Plate
➤ Polaroid Graphics Imaging PolaProof Digital Halftone Proofing System
➤ Creo PrintLink/Heidelberg CPC/Scitex InkPRO—CIP3- Compatible Systems

1997
➤ Barco/DuPont/Professional Computer Cyrel™ Digital Imaging System
➤ Creo Renaissance Scanning System
➤ Gerber IMPRESS™
➤ Heidelberg FMR
➤ Lantana Crackerjack™
➤ Linotype-Hell DeltaTechnology
➤ Océ DemandStream™ 8080DI 500 IPM Printer
➤ Polaroid Graphics Imaging Dry Tech Thermal Film
➤ Polaroid Graphics Imaging Fiber
➤ Presstek PEARLgold™ Lithographic Plate
➤ WAMINET® Digital Delivery Network

1996
➤ Bourg® In-line Perfect Binder BB2005
➤ Creo Thermal Laser Head
➤ Kodak Direct Image Thermal Printing Plate
➤ Graphics Microsystems ColorQuick
➤ Indigo E-Print® 1000 Digital Offset Color Printing Press
➤ Itek Graphix DPM 2000 Digital PlateMaster
➤ Polymag Tek Oscillating Web Cleaner
➤ Presstek PEARL™ Plates & PEARLsetter™ Series 52, 74, and Plus
➤ Prograph Customer Service Toolbox®/MagPRO®
➤ Sinapse Sheetfed Offset Training Simulator (SHOTS)

1995
➤ Adobe Color Central™ OPI and Print Server Software
➤ Baldwin IMPACT™ Automatic Blanket, Press Cylinder Cleaner
➤ COLORTRON™ Digital Color Sensor
➤ Heidelberg Computer-to-Press Digital Imaging Technology
➤ TechNova NovaDom™ Computer-to-Plate-to-Press System
➤ 3M Rainbow™ Desktop Color Proofing System
➤ Xeikon DCP-1 Digital Color Press

1994
➤ Agfa CristaRaster
➤ Creo Computer-to-Plate System
➤ Heidelberg Harris Sunday Press Technology
➤ MAN Roland 700 Press
➤ Polychrome CTX System

1993
➤ Aqua Dynamics Dampening Enhancement System
➤ Bötcher FEBO™ Glaze-Free/“Steady Set” Printing Rollers
➤ Kodak APPROVAL Digital Color Proofing System
➤ Komori Fully Automatic Plate Changing System (APC)
➤ Xerox DocuTech Publishing Series

1992
➤ Gerber Direct-to-Plate LE55 Laser Imager
➤ Graphic Systems Specialties R-C-L™ Fountain Solution
➤ Hoechst Celanese Ozasol® N90™ Digital Laser Plate
➤ Linotype-Hell RIP 60 with I.S. Technology
➤ Polychrome Waterless Lithographic Printing System

1991
➤ Accel Graphics Systems PTC Tempest Hot-Air Drying System
➤ Adobe Photoshop™
➤ Baldwin Stobb VSB-5 Automated Vertical Stacker/Bundler
➤ Heidelberg Speedmaster CP Tronic
➤ TRUMATCH System
➤ X-Rite 938 SpectroDensitometer with SpectroStart Software

1990
➤ LeapFrog™ Technologies DUST BUNNY™ wiping fabric
➤ PANTONE Color Toolkit
➤ Printware 1440 Platesetter
➤ Oxy-Dry Model BMW Automatic Blanket Washer
Past Award Recipients

1989
➤ Baldwin “Foam-Free” Circulator and Foam Eliminator Kit
➤ Blava In-Line Former™
➤ DuPont Bright Light Films w/X-STAT™
➤ DuPont 4CAST™ Digital Color Imager
➤ DuPont Lightspeed™ Color Layout System
➤ Printing Research HV Drying System and Plate/Blanket Coater

1988
➤ Baldwin Automated Newspaper Blanket Cleaner
➤ Cosar AutoSmart™ Densitometer
➤ DuPont OptiSafe™ Optical Archiving System
➤ Kodak Signature™ Color Proofing System
➤ Dr. S. Thomas Dunn & Vendor Technical Committee of the Image Technology Committee

1987
➤ DuPont Print Manager
➤ Gavarti GA-C.A.T. Graphic Arts Comprehensive Abrasion Tester
➤ Hell Chromacom Proof Recorder 403
➤ Iris Color Ink Jet Printer
➤ Web Printing Controls MicroTrak CCR Closed-Loop Automatic Register Control System

1986
➤ Crosfield Data Compression/Satellite Transmission System
➤ Eikonix Designmaster 8000 Flatbed Scanner
➤ 3M Viking Lithographic Plates

1985
➤ 3M Onyx Cut-Film/Plate Material
➤ Eastman Kodak Ultratec Products
➤ Polychrome Laser-Scan Printing Plate
➤ Printing Research "Mark-Less" Super Blue System

1984
➤ Automation Auto-Count Waste Reduction System
➤ Crosfield Magmascan 640 Scanner
➤ Douthitt Option “X” Vacuum Frame
➤ George Hantscho Sabre Cylinders
➤ IBM 4250 Electro-Erosion Typesetter-Printer
➤ Quad/Tech TGS III Closed-Loop Register System

1983
➤ Baldwin Automatic Blanket Cleaner
➤ Coulter Systems KC-Gravure Color Proofer
➤ Crosfield Lasergravure System 700
➤ Stretch Devices Newman Roller Frame
➤ Rachwal Super 70 Projection Platemaker
➤ System Brunner

1982
➤ Gerber AutoPrep 5000
➤ Monotype Lasercomp Mark 2
➤ Butler Datamat Microprocessor-Controlled Splicer
➤ Hantscho Microregister Control
➤ Amgraph Microprocessor-Controlled Splicer

1981
➤ Harris Presfax System
➤ HurletronAltair Press Management System 700
➤ Mergenthaler Omnitech/2000
➤ Hazeltine Separation Previewer

1980
➤ Crosfield Magnascan 570
➤ Hell Chromacom
➤ Triple-III Automated Illustrated Documentation System
➤ Scitex Response 300
➤ AM International Electronic Ink and Moisture System
➤ Heidelberg CPC I and CPC II
➤ Roland Offset/Miehle CCI

1979
➤ Xerox 9700
➤ Harris Telecolor
➤ Opti-Copy Imposer
➤ Royal Zenith Dieboard Cutter

1978
➤ Hell Chromaskop
➤ Multinex Assembler
➤ Log-E Scan
➤ EOCOM Laserite
➤ Kollmorgen On-Press Monitor
➤ Chrona-lite Photopolymer Film
➤ Digiform Photocomposition System
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