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We are honored to present and profile the nine recipients of the 2009 Printing Industries of America InterTech Technology Awards. For 31 years, since 1978, this premier program has showcased important and emerging technologies that are likely to have a significant influence on the graphic arts industry. (A list of all the recipients through the years is available at www.printing.org/InterTech.)

Twenty-one technologies were submitted by 16 domestic and international companies. Recipients will be presented their award during the 2009 Premier Print and InterTech Technology Awards Gala, September 13, in Chicago, coinciding with the Print 09 show.

An independent panel of judges, whose identities are anonymous, deliberated over a cross-section of technologies—ranging from color workflow and process controls to digital and offset presses. The judges said recurring themes among this year’s crop of applicants were “process efficiency, integration, and improved manufacturing performance.” Great strides in technology were demonstrated in four primary areas, according to Mark Bohan, PhD, who coordinates the program: 1) innovative workflow integration and implementation; 2) digital press design; 3) color matching across devices and management of color data; and 4) improved user operation resulting in reduced makeready time and cost. Bohan is VP, technology and research at Printing Industries of America Center for Technology and Research.

The InterTech program 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 more efficiently or to provide a new set of services and offer a clear return on investment. Finally, it must be commercially available—not beta/premarket—yet not have achieved market adoption.

Recipients of this prestigious award have not only had a major influence on the graphic communications industry, but also consistently prove to be successful in the commercial marketplace. More than 80% of past recipients have experienced commercial success in the marketplace.

The technologies selected to receive the 2009 InterTech Award, in alphabetical order by company, are: Oris Press Matcher (CGS Publishing Technologies); NexPress Dimensional Printing System (Kodak Graphic Communications Group); Prinergy Digital Workflow (Kodak Graphic Communications Group); System100 Software (Ebiz Products LLC); Taskero Universe Color Path Verified Technology (Fujifilm Graphic Systems U.S.A.); Prinect Press Center (Heidelberg USA); Diamond Color Navigator (Mitsubishi Lithographic Presses); Xeikon 3300 Digital Color Label Press (Punch Graphix Americas); and Flex-Production Control System (SoftSolutions, Inc.).

In addition, descriptions of the additional 12 technologies that applied for the award are presented. A PDF of this year’s booklet is available online at www.printing.org/InterTech and as a digital publication at www.graphicartsonline.com.

**2010 Competition**

Companies interested in sharing their latest innovative technologies with the industry are urged to submit entries in next year’s InterTech Technology Awards program. For complete details on how to apply, please go to www.printing.org/InterTech. The deadline for entries is June 1, 2010, with an early bird registration date of March 31, 2010.
As part of the Oris Media Factory, Press Matcher was recognized as a color-matching facilitator. The InterTech judges commented that this color-management software allows for quick and easy color matches across multiple devices and across processes—matches that don’t depend on the user’s experience level. It accurately and automatically transforms color data within digital files so that the resulting printed output is consistent and gamut-optimized over multiple runs. Visual matching occurs across multiple digital devices as well as between offset and digital presses.

Press Matcher is an improvement over conventional, ICC-based color matching, which can be inaccurate, subject to device inconsistencies and often requires time-consuming tweaking to produce acceptable printed results. The CGS product takes significant time out of the prepress process, and, as shown in the blind evaluations by printers, produces good color matches in minimal time. Press Matcher’s average difference vs. industry specifications such as GRACoL can be as low as 1Delta E, which can be device and environment dependent. Used by companies of different sizes, the technology allows for a new level of consistency to be achieved and brings color management into a whole new realm: color manage once; output many.

Press Matcher Pro, for higher-volume shops, uses the color management technology of Oris Color Tuner, the CGS contract proofing system, to produce high-resolution files for CTP systems, digital presses and other devices. The results are standardized color across multiple platforms, bringing high-quality, consistent color to all print projects, regardless of how or where they are printed.

Press Matcher Pro employs hot folders to transport and process digital files from any Windows or Mac OS computer on a network. Each hot folder can be configured to handle the color requirements of a particular RIP or output device. Automatic FTP, email notifications and many other workflow features are standard. Ink and toner optimization is available as an option.

Press Matcher also can be used to color manage wide-format output, ensuring that customer’s signage and point-of-sale materials remain color-consistent with conventionally printed collateral. Press Matcher offers the same accuracy as the Pro version but is specifically designed for directly driving medium-volume digital printers and copiers.

The GLS Companies, Minneapolis, is a G7 Certified Master Printer using the Pro program. “In late March and early April, HP and CGS conducted a three-day GRACoL implementation process on our HP Indigo 5000 and 3050 presses and met all our requirements for color quality and consistency,” says manufacturing VP Mike Farr. “Press Matcher has enabled us to maintain consistent color control matching from press run to press run between the two HP Indigo presses, as well as between offset and digital.”

Color quality is a major selling point for Belk Printing, Pineville, NC, too. “Ninety percent of our print revenue comes from two 40” offset presses and 10% comes from an iGen3 digital press,” notes manufacturing VP Chris Reynolds. But each day’s output was noticeably different. “A single iGen3 output, used as a proof for customer approval, could not be replicated on the full press run,” Reynolds says.

Fourteen months ago, Belk purchased Press Matcher Pro. “We were able to successfully manage the iGen3’s color consistency and reduce color shift which creates a reliable baseline starting point for all digital print jobs,” says Reynolds. The firm also has made up for occasional shortfalls in offset print runs by matching offset color quality to a degree that meets customer satisfaction. “In short, Oris Press Matcher has enabled us to fully benefit from our investment in digital print,” concludes Reynolds.
Created by a printer for printers, System100 is browser-based business process management software designed to eliminate reruns, bottlenecks and other waste in small to medium-sized manufacturing businesses. It was developed by Philip Beyer, owner of Beyer Printing, Inc., Nashville, who cites that printing operations report an average of 3% to 5% rework and another 3% to 5% in non-conforming events. His System100 brings these ratios to below 1% by bringing order to workflow through a systematic approach—empowering people to work at maximum efficiency.

InterTech judges were impressed by how this technology acts as a kind of brain trust for all the technical aspects of a business. Take workflow, for example: System100 breaks down production statistics such as the number of operators per sheetfed press in a given plant and how many shifts are running per week. Other solutions tend to merely focus on sales information and how to track and manage it. This, however, builds on the skills and capabilities of the technical staff within a printing firm.

With System100 technology in place, this expertise and knowledge does not leave the company when the people do. There is a structure in place to address problems when they occur, investigate their causes, suggest remedies and then alter workflow—all in one seamless operation. Part of this process is a series of auto triggers to ensure that “system-busting” problems are addressed promptly and not ignored or neglected.

Not MIS, System100 is offered as a monthly hosted service or purchased as stand-alone software. The multifunctional private intranet is accessible, with permissions, virtually anywhere. Its dashboard approach to interdepartmental communication includes job descriptions, daily routine checklists, policies, procedures, quality control checklists and other valuable documents. Six key concepts are targeted for increased profitability: lean manufacturing, sustainability, data analysis, employee engagement, process automation and change management.

Beyer started his printing business in 1988 and, by its fifth year, “I realized I didn’t own a business; it owned me,” he says. “We reached a certain size and the floodgates of chaos opened. The business was too big for me to keep all the information in my head, and too small to hire people to handle the chaos.” Does this sound familiar to any printers out there?

“In commercial printing, the process from data entry to shipping is extremely complicated,” Beyer notes. “Each job is custom, and the variables seem almost infinite. I worked thousands of hours for 10 years to systematize virtually every aspect of our organization, from top to bottom.”

“After implementing a single, unified system, we were able to cut waste by 36% in less than a year and saved more than $23,000,” reports Beyer. Five years ago, “We operated at 99.55% error-free production.”

Beyer named his software System100 “because it is a complete circuit, a comprehensive system that is 100% and nothing less,” he explains. “In my sixth year of building the system, I received many comments and questions from customers and vendors about how clean and organized our company was. I have been asked by my customers, and many other companies now, to speak to their employees on how we set up our system.”

His desire to take System100 to other businesses led Beyer to write a book, System Busters: How to Stop Them in Your Business, and develop a program that can be customized for any business or organization.
Fujifilm Taskero Universe ColorPath Verifi ed Technology

Fujifilm Graphic Systems U.S.A., Hanover Park, IL, 800.621.1049, www.fujifilmgs.com

Taskero Universe Colorpath Verifi ed is a process-based business solution that keeps the entire color workflow in control. No other product offers a complete solution for verifying your color workflow and providing you data for informed business decisions. Taskero Universe Colorpath Verifi ed, a.k.a Colorpath Verifi ed, has helped print providers retain and attract business by allowing them to integrate more tightly with their print buyers.

The Intertech judges commented on how this technology suite is a paradigm shift in how print fi rms use data to control production. With Colorpath Verifi ed key data is posted to a central, secure website. Easy access to this centralized data and automated email notifi cation of errors helps stop minor issues from becoming major problems.

International mega printer Consolidated Graphics (CGX) has streamlined its color management across several of its plants by using these monitoring and analysis tools. With a combination of digital, sheetfed and web offset presses, CGX says it has found the product to be “invaluable to management and to customers.”

CGX is using Colorpath Verifi ed in conjunction with its suppliers as well. “The greatest advantage has been the ability to monitor and trend suppliers’ inks and paper,” notes Cory Sawatzki, CGX manager of graphic technologies. “We have a very tightly color controlled environment, and we’re able to read data and identify trends on everything in our pressroom.”

As soon as a press goes into production mode, the program begins collecting and analyzing data, verifying that the job is staying within the specifi ed tolerance set at the press console. Taskero collects the raw data—including information on performance across all ink keys, color conformance and even paper performance—and then aggregates it and delivers real-time reports via the web or a PDF.

“We are monitoring multiple proofing devices and multiple presses at fi ve sites on a global level,” adds prepress manager Bryan McMillan, “and we can view them from any computer that has web access capability. The data and reporting we see at a glance would have taken weeks, even months, to replicate and was inconceivable.”

Additionally, Colorpath Verifi ed can be customized for the printer’s end user. Through a secure, password-protected interface, printers can create reports and give their customers access to whatever data they choose.

“Colorpath Verifi ed has also given us the ability to allow our clients to see their product running under a Delta E standard, and it’s completely reassuring for them,” explains Sawatzki.

“They are able to see the values of the reads, taken over time, and evaluate them to ensure that their product is delivered within the color space specifi cations originally agreed upon.”

Colorpath Verifi ed’s robust monitoring and data collection gathers enough information to create a variety of reports, aimed at every level of management. At CGX, it has allowed managers to investigate troubled areas and identify where problems are occurring. “We can ascertain if the problem is [the] operator, machine or supplies very quickly. By have a trending report available, we have the back-up to show any party that the problem is valid and needs attention,” Sawatzki says.

Colorpath Verifi ed verifi es, monitors and collects data about displays, proofers, wide format devices, digital presses, offset presses, and environmental conditions. It is tightly integrated with presses that utilize the X-Rite Intellitrax-S or Komori PDC-SII technology. This integration allows us to automatically, in the background collect data from the supported presses without the press operator performing extra steps. Colorpath Verifi ed Press is also compatible with Mitsubishi, Sakurai, Akiyama, Ryobi and Shinohara presses.
Heidelberg Prinect Press Center Features Big-Screen Console

Heidelberg USA, Kennesaw, GA, 888.472.9655, www.us.heidelberg.com

The Prinect Press Center was designed to allow all tasks—from job preparation and press setup to print sheet measurement and evaluation—to be accomplished faster, more accurately and with greater reliability. This platform makes it easy for operators to keep track of the entire printing process, including the activation/deactivation of printing, dampening, inking and coating units. It is also possible to preset the printing speed, record “okay” sheets and waste, control sheet travel and regulate dryer settings as well as the volumes of blast and air suction.

InterTech judges were particularly intrigued by the Wallscreen interface, a unique component that provides the user with an animated overview of all press processes in one location, allowing the user to see and control a job from one large, high-definition screen instead of having to access several smaller ones. “This makes a real difference, especially among second- and third-shift crews,” says Mark Bohan, Printing Industries of America VP of technology and research. “In the opinion of our judges, Heidelberg’s Prinect Press Center redefines the operation of a sheetfed press by simplifying and streamlining the interaction of the user with the press…” Judges felt that the Prinect Press Center helps to drive down makereadies and improve control by focusing on the unique user interface. The technology is a solution to a problem that has challenged the industry for a number of years.

Intellistart navigation is a process-oriented operating program that provides makeready improvement by automating tasks and preparing for the next job while the previous one is finishing. Any necessary changes required are recommended to the operator, who can allow the system to apply the changes automatically or, at his or her discretion, can confirm the changeover sequences using the wizard-guided user interface. The result is up to 70% fewer operations needed to set up the press for the subsequent job. The system can even be programmed to automatically activate wash-up programs and switch off the press at the end of a shift. Depending on the number of jobs and their complexity, annual production capacities can be increased by as much as 8%; however, the biggest benefit is realized by the reduction of unintentional errors resulting in wasted time and materials, says Heidelberg.

The Prinect Press Center raises the bar on performance, efficient production and user-friendly operation of sheetfed printing presses. Ergonomics are reflected in the platform design. Its large, diagonal sheet deposit board, combined with standard daylight lamps, ensures optimal viewing conditions. The 19” touchscreen LCD monitor features clear operator guidance, visualization of up to 12 printing units without scrolling the screen, can be moved side-to-side and angled vertically. The Wallscreen also functions as an impressive print approval tool and enables the display of electronic scheduling, color measurement results, and the visualization and adjustment of dynamic sheet breaks on perfecting presses.

The Press Center is also a streamlined interface to the JDF-integrated Prinect workflow, as well as a variety of widely available Print Management Information Systems. As a result, operators can retrieve complete job and production data at any time, adopt preset data, and initiate printing processes. Production reports are always up to date, as the Prinect Press Center provides the management information system (MIS) and Prinect Pressroom Manager with continuous production data. Press reports are also available through the use of a simple Internet browser, making production data readily available to approved recipients.
Kodak NexPress Dimensional Printing System is a 3D special effect process that takes place inline. It produces raised text and images that can be set variably to specific heights. The result is a tactile effect creating a dimensional feel mimicking the surface of items depicted in the image. For instance, customers can print a photo of an orange that feels like the real fruit’s skin, or paneling that feels like actual wood grain. (See the March 2009 front cover of Graphic Arts Monthly for a concrete example.)

Dimensional Printing is the only cut sheet inline digital, tactile printing system on the market. Available as part of the NexPress Fifth Imaging Unit Solutions, it combines Kodak Intelligent Dimensional Coating Solution and Dimensional Clear Dry Ink.

Using Dimensional Printing helps print providers create a competitive advantage by offering a unique capability that extends digital color printing into new application areas—enabling them to differentiate and take advantage of the opportunity to sell higher value.

The 2009 InterTech judges felt this technology is a game-changer, opening up new markets for digital printing and allowing personalization in regards to images, content and texture. Dimensional print is well suited for a variety of markets, including commercial printing and photo products, and can be used for a variety of applications including direct mail, marketing collateral, promotional materials, greeting cards, business cards, invitations, certificates and photo books. Its 3D effect grabs readers’ attention and makes product images literally lift and pop off the page. The technique creates a “wow” creative factor for the printed piece, making it stand out in a competitive marketplace. This, after all, is what marketers constantly seek.

In his nomination letter for Dimensional Printing, Tony Seaman, director of the University of Mississippi Publishing Center, lauded the impact that the technology has had on its business. The university hosted the first 2008 Presidential Debate and used Dimensional Printing to create a raised presidential seal and other elements for invitations, pocket folders and sponsor programs.

“We’ve seen an overall growth in our digital printing volume, and we believe the Kodak Dimensional Printing System is certainly contributing to this growth,” Seaman says. “It is opening doors and helping grow our volumes by establishing us as an innovative and dependable partner to our clients. It gives us a competitive advantage and helps us deliver much more than a standard digital print job.”

Another user, marketing services provider Think Patented of Dayton, OH, added the Dimensional Printing capability to the NexPress S2500 Digital Production Color Press it installed in January 2009. “We encourage our clients to really ‘feel’ the difference that Dimensional Printing can make on a direct mail piece,” says CEO Ken McNerney, who reports that about 10% of the output from the digital device utilizes Dimensional Printing—a number that is growing quickly each month.

The company has produced some exciting projects, including one for a client who wanted to reproduce the look and feel of an Old World style dimensional map and another for a fabric company that needed a mailer capable of reproducing the textures of the fabrics available. “It’s fun to see our clients’ faces when they first touch the printed piece,” McNerney says. “It’s one of those things that you have to feel to believe.”

Print industry expert Frank Romano adds, “In this economy, we need to find new business and value-added printing, and Kodak Dimensional Printing does that.”
Kodak Prinergy Digital Workflow

System: Rules Based Automation


Kodak Prinergy Digital Workflow is designed specifically for the needs and requirements of digital printing workflows, such as higher job volumes, variable data printing and short production runs. This year’s InterTech judges were impressed by the technology’s Rules Based Automation (RBA) aspect, which graphically maps order intent. Effective use of this feature eliminates manual processes (such as file handling), simplifies production and automates procedures regardless of the level of complexity.

A print service provider can apply RBA to interpret job intent, control job routing and manage a series of automated manufacturing processes. Human errors are reduced, touch points disappear and the process is much faster. This is absolutely critical in today’s digital print production process, where jobs have to be processed as efficiently as possible. When integrated with Kodak Unified Workflow Solutions, zero-touch automation is achieved.

Prinergy Digital Workflow provides centralized control over digital and conventional prepress systems, with the power, flexibility and control that have made Prinergy Workflow the long-standing leader in conventional print.

Prinergy Digital manages, schedules and drives digital printers and digital presses with unprecedented levels of workflow automation. It features Digital Press Management, a single centralized solution for driving digital presses. Now, one workflow can control input, processing and output with all popular digital presses, for efficient, automated production on all job sizes and run lengths.

For print service providers with more than one digital workflow system, Prinergy Digital provides an efficient strategy for controlling digital printers and presses with a single, integrated, JDF-based workflow system that connects to third-party digital color presses as well as to the NexPress, of course. It provides an intuitive and direct way for operators to dynamically sort and access jobs. From one station, an operator can plan and schedule print jobs for any number of presses. Before the job is launched, the operator can view the number of hours of printing that are scheduled for each digital press and track ink and paper status. It allows for centralized control over digital printing. This system optimizes the digital workflow and maximizes the available press capability. It also can route jobs to conventional offset printing presses, as required.

Furthermore, Prinergy Digital Workflow can be expanded with many other Kodak solutions. It tightly integrates with Kodak Web to Print Solutions, enabling print service providers to become marketing service providers by giving their customers easy, flexible ways to order marketing printed materials anytime via the Internet. Prinergy Digital, together with the Kodak InSite Storefront System and InSiteVariable Data Print System, provides an integrated environment that delivers total workflow automation—from the customer’s order right through to print output on the digital press.

“Prinergy Digital has become a big part of our production environment,” says Yves Gray of ING Belgium’s Digital Color Printing division. “It has proven to be very easy to integrate, very easy to use and very robust. Our operators felt comfortable with the interface right away, and the status reporting and live device feedback are helping us to become much more efficient—saving time and money on each job.”
Mitsubishi Diamond Color Navigator
With Color Wheel Selector


Diamond Color Navigator is a new color adjustment interface. It allows press operators to fine-tune color to match a proof or customer preference prior to and during printing by using their own intuitive color sense rather than attempting to interpret the necessary CMYK balance. If a sheet needs more blue in a given area, or less red, for example, press operators can use a color wheel selector rather than adjusting percentages on three sets of keys.

Through a single operation that employs two touchscreens, the operator can color balance an entire image or sections of the image or alter ink densities without the need for frequent trial and error by way of manual ink key adjustments. Less experienced operators are able to isolate very specific areas of the image that need adjusting and then select a specific shade from the color wheel rather than guessing which percentages of process colors will achieve the requested shade. The system then automatically moves all the appropriate keys on each print unit to yield the selected color.

The judges felt this new approach to color adjustment allows for more effective use of the press by all of the operators. The reduction in steps will also drive down costs through improved makeready times and effective control. Diamond Color Navigator technology is a great step forward in press control.

Printing companies that have adopted it are enjoying the rewards of significantly improved time savings, color accuracy and customer satisfaction. “Diamond Color Navigator can make a good press operator an excellent press operator,” says Alan Guttridge, owner of commercial shop Coastal Printing, Sarasota, FL. “Press operators can make specific color adjustments with a higher degree of certainty than with any other color system on press,” Guttridge notes. “Even operators lacking technical understanding of the visible color spectrum can produce accurate color quickly and efficiently without ever manually touching a key on the remote press console.”

Pete Mikos, manager of print operations at Northwest Mailing Service, Chicago, points out that Diamond Color Navigator permits real-time proofing of the adjusted image by the operator and customer. “A lot of our customers come in for press checks, and they have been very impressed with the results…” Mikos says. “They can immediately see how any adjustments will affect color and register by looking at the preview image on the touchscreen. It has been easier for our customers to work with the press operators because they are seeing exactly what the operator is changing,” he adds. “The customers can then give better direction to the operator in terms of color preference. This, in turn, has helped reduce the amount of time needed for press approvals.”

Diamond Color Navigator includes a hand-held spectrophotometer for color matching specific spots on the sheet. But, according to Guttridge, “The system goes beyond standard densitometry readings to deliver an accurate and more consistent product. It enables you to verify that the color in a specific area, such as a customer logo at the bottom of each page of a catalog, is the exact same color everywhere it appears,” he says. “You can adjust the color to an established standard on any part of the press sheet.”

Field data has revealed that, compared with conventional color matching, Diamond Color Navigator cuts color adjustment time in half, reduces press approvals from seven minutes to just under five minutes and trims the number of ink key moves from 137 to 29.
For the economical and environmentally friendly production of short- to medium-run labels and just-in-time jobs, the web-fed Xeikon 3300 Digital Color Label Press offers a significant improvement in printing quality with its unparalleled imaging resolution and productivity. It can print on scalable widths and a wide range of substrates from self-adhesive films, including co-extruded film, to unsupported film, paper, transparent and opaque foils, and paperboard with substrate weights ranging from 27-lb. text to 16-point board and 7.9” to 13” formats.

The Xeikon 3300 has no frame size restrictions, resulting in higher productivity and throughput. It features full rotary technology where the speed of the press is independent of the label size and the number of colors used.

This rotary printing technology allows the digital printer to effectively enter new markets and challenge existing processes for label production. As the judges commented, true 1200×3600 dpi (four bits per spot) resolution is one of the benefits of the device, coupled with the productivity that can be achieved. The high resolution allows the introduction of different features into the production, including security features and metadata, such as sequential numbers or barcodes.

With a top speed of 63 linear feet per minute, the Xeikon 3300 is designed to operate 24 hours a day. It includes five color stations—4-color process plus a fifth station for spot colors. The fifth color station can also be utilized for printing on transparent films using Xeikon’s one-pass opaque white toner and for security printing using Xeikon special security toner. Operating on the Xeikon Form Adapted (FA) toner, the 3300 is FDA-approved for use in certain food contact applications. Its dry toner electrophotography imaging process enables the use of conventional substrates without coating or pre-treatment and emits no VOCs or other hazardous substances. The printed output is fully recyclable.

“The Xeikon 3300…is truly an industry-leading digital color press in terms of its imaging quality, reliability, productivity and eco-friendliness,” says Jay Ziegler of label converter Tapecon, Buffalo, NY, which installed the press in early 2009. “In our experience, [it] is the only digital color label press with one-hit opaque white capability,” adds Ziegler.

John Roberds, president of Odyssey Digital Printing, Tulsa, OK, adds: “The Xeikon 3300 is a significant step forward that was necessary for the label and packaging market. The primary reason we purchased our 3300 [one year ago] is because of its unmatched image quality.” Advanced imaging heads have calibrated LEDs spaced every 21 microns across the web width. When combined with FA toner, the end result is better halftones and sharper image reproduction yielding photorealistic graphics.

A new alliance between Xeikon and Kodak enables label printers to extend their web-based businesses with the branded online ordering of tags, labels, and other print products. It also simplifies and streamlines production, from order origination on the web, via Kodak Web to Print Solutions, to final output on the Xeikon 3300 Digital Color Label Press. “We’re always looking for ways to maximize both value and efficiency for our customer base and this alliance fits perfectly with our mission,” said Michael V. Ring, Vice President of Sales & Chief Marketing Officer of Xeikon’s North American operations. “It will allow us to offer our customers complete solutions for their packaging and label needs and, in turn, increase their own value within their respective markets.”
Flex-Production Control System: Middleware for Print API


Flex-Production Control System (Flex-PCS) is a workflow engine for connecting existing equipment with existing front-office MIS applications integrating JDF workflows with those that do not support this. The open application programming interface (API) for the technology allows integration with many application and disparate systems in JDF and non-JDF environments. SoftSolutions’ Flex-PCS provides a “rules engine” for automated production workflows.

Its Open System (OS) interface enables virtually any front-office Management Information Systems (MIS) and virtually any shop-floor equipment to share accurate, real-time information more cost-effectively. If end-users are able to export their existing MIS data to Microsoft Excel, it can be ported live into Flex-OS. Likewise, any legacy equipment with an electronic counter can be connected in real-time to the Flex-OS platform.

Flex-PCS provides the bridge that can connect with machine counters and weigh scales to automate count control and job costing and then integrate with existing MIS and estimating systems. Budget to actual reporting and real-time alerts and notifications provide a powerful extension to MIS systems and both legacy and new equipment.

The judges said the open API approach is something the industry has been searching for, and this system solves many of the integration problems. SoftSolutions’ product strategy allows for full integration across the whole production environment independent of the existing device capabilities. This expands on the real-time feedback of the existing MIS to provide actual production data that can be used to optimize and manage based on the machine, consumables used or operators.

The Flex-OS interface enables the free flow of data necessary for Computer Integrated Manufacturing. Flex-OS enables workflow automation beyond prepress, across both press and postpress equipment using international standards such as JDF and JMF.

A growing number of graphic arts end-users ranging from Sheridan Book to Arkay Packaging to Edwards Brothers to Cenveo have licensed Flex-PCS to capture real-time Job Costing from existing and new equipment in the context of Job Estimating data from existing MIS systems. Likewise, a growing number of strategic partners such as Timsons Press, PrintStream, Muller Martini, Prestige Scheduler and Hiflex are leveraging Flex-OS to accelerate and simplify their data integration solutions for customers seeking real-time visibility on performance metrics via any standard web browser.

“We already offer a data integration solution into SoftSolutions’ Flex-Production Control System,” says Laurence Snyder, president of software partner Streamline Solutions, San Rafael, CA. “We are now able to subscribe to real-time JMF updates from a growing list of print equipment that SoftSolutions is adding to their Open Flex-OS platform. We are also responding to market demand for real-time job status and job costing using the Direct Machine Interface (DMI) to legacy equipment via the Open Flex-OS platform.”

In June, the Cadmus division of Cenveo selected Flex-PCS to monitor real-time performance metrics directly from an existing high-speed web press. Two weeks later, it expanded to its second press.

The Flex-DMI data collector integrated with a Cadmus PLC programmed directly to the outputs of the triple-delivery web. A basic Flex-MIS data connector was configured to load job data directly from a custom DB2 database. The Flex-Timesheet brought this data together on an electronic job ticket that required minimal operator input: Just click on the Job Number, then let the machine record accurate MR time, run time, downtime, waste and speed against MIS estimates.

Also this past June, after running the Flex-PCS pilot program, book printer Edwards Brothers, Inc. awarded SoftSolutions a contract to expand Flex-PCS across its Ann Arbor, MI and Lillington, NC facilities to monitor real-time production results against front-office job estimate targets.
In-house Digital Printing Facility

Bridge Publications, Inc., www.bridgepub.com

Located in Los Angeles, Bridge Publications is the world’s largest all-digital, print-on-demand publishing house. As the publisher of best-selling sci-fi author L. Ron Hubbard, who wrote *Dianetics*, Bridge manufactures all nonfiction Scientology books, lectures and course packs for the Americas and Asia.

With on-demand printing from HP Indigo and Xerox iGen3 digital presses, as well as from DocuPrint 1050 Continuous Feed and Nuvera 100 EA printers, some 80 million copies of Hubbard’s books and lectures have been produced and distributed in the past five years, more—than in the previous 50 years—and some 60 million of them in the past two years alone. Colors are matched using Creo Color Management Systems.

The full-service plant’s capabilities include hard covers (in 16 languages), in traditional sizes as well as oversized, produced on a Muller Martini Diamant 30 bookline; trade paperbacks in 50 languages; lecture transcripts; home-study courses; and course room materials: a total of more than 1,200 printed items. Foil stamping and embossing are done in-house. To date, more than 5 million printed products have been sold since the plant became operational in January 2007, ensuring profitability and meeting ROI expectations in less than 12 months.

Bourg BB3002 PUR Perfect Binder

C.P. Bourg, www.cpbourg.com

For short-run softcover finishing, the CP Bourg BB3002 single-clamp binder is a versatile perfect binder and the first to fully automate short-run manufacturing to bind all types of books and manuals. The BB3002 PUR enables economical production of bound “books of one” or hundreds, on demand.

To tap the power of PUR adhesive for digital and mixed-production workflows, Bourg engineers collaborated with Nordson to develop communications links between the BB3002 EVA Perfect Binder and the Nordson VersaPail melter. Key features were extended to deliver optimal gluing efficiency.

An operator using the automated BB3002 PUR at 70% of maximum output can routinely produce 350 professionally bound softcover books per hour. Finished books range in thickness from two sheets (eight pages) to 2.36” and have cover dimensions with or without wings from 3.5×3.9” to 12.59×15.15” to meet its full-rated cover spec of 28×15.6”—the largest format in its class.

DiMS! Enterprise

DiMS! organizing print, www.dims.net

DiMS! Enterprise is an extension of the firm’s ERP/MIS software package that was specifically designed for printing companies with multi-plant operations. Fully integrated open architecture allows for the integration of all processes from CRM (customer relationship management) and estimating to planning and scheduling. The system calculates the easiest and most cost-effective manufacturing plan across all locations, also taking into account customer geography. Enterprise works with the printer’s workflow.

The key significance of DiMS! Enterprise is its ability to have a single entry point for a multi-site order, where the system will create and manage the inter-site purchasing, transport requirement, invoicing and financial transactions automatically. Users always have direct, 24-hour access to accurate data in real time.

The Enterprise system also features integrated electronic job tickets, job shop data collection, direct machine interface and JDF/JMF connectivity. Shipping is handled from parcel to truck scheduling.

Variable Sleeve Offset Printing

Drent Goebel America, www.drent-goebel.com

The VSOP press allows users to work with infinite variable repeat lengths in offset printing. The sleeve technology allows for quick and easy change-overs without having to completely switch out the hard steel cylinder insert of the print unit. In addition, cost savings add up to 85% versus traditional methods.

Because the repeat size is infinite, the web technology is functionally similar to a sheetfed press. Drent Goebel says VSOP print quality is comparable to rotogravure output.

Earlier this year, 400-employee Hammer Packaging, Rochester, NY, installed its second 33.5” VSOP press, this one printing in nine colors. “Both machines offer short makeready times, quick repeat size changes and low operational costs,” says president Jim Hammer. “The versatility of the machines is outlined by various curing principles (Electron Beam, Hot air and UV), choices in paper and film, repeat lengths, varnishes and more,” Hammer adds. “The more we do inline, the more freedom the designers get to create an attractive product.”
**Fiery Command WorkStation 5**  
**EFI (Electronics for Imaging, Inc.), www.efi.com**

Fiery Command WorkStation 5 (CWSS) is the latest version of EFI’s job-management solution—the industry’s most popular digital printing workflow. The software centralizes tasks via an intuitive, flexible interface that produces jobs faster, dramatically reduces operator mistakes, decreases waste and increases profitability for production printers. Available at no additional cost to Fiery device users on System 6 or later, CWSS already had been downloaded by more than 10,000 existing EFI customers as of mid-2009.

“I estimate I’m gaining 10% in productivity on each job [with CWSS],” says Tim Fazio, owner of PIP Printing in Brick, NJ. “The overall layout and interface are easier to use, especially on a laptop, and the software responds quickly to commands. One of the best new features is the Preview Pane,” Fazio notes, “which immediately lets me double-check the job setup without any effort. I print a lot of books, and Command WorkStation’s booklet features make it fast and simple to add preprinted covers, insert sheets from different drawers, fold and saddlestitch, etc.”

**ICE Intelligent Color Engine**  
**FineEye Color Solutions, www.fineeyecolor.com**

FineEye’s breakthrough ICE (Intelligent Color Engine) technology is at the heart of this firm’s products. ICE is a distinctive color-separation technology. Its color-aware software engine predicts and adjusts for key physical and chemical forces at play when ink meets paper on press.

The ICEserver system makes it possible to consistently print the highest quality color sans all the guesswork. Media maps are calculated to optimize and increase color gamut of the current printing condition or to match the gamut of industry specifications (GRACoL or SWOP), especially when ported to different media types and/or grades. ICEserver software optimizes PDF files for virtually any combination of paper and presses—offset, flexo and digital—while also reducing makeready time and materials and CMY inks by up to 40%.

Meanwhile, ICEmaker converts RGB to CMYK with greater accuracy and less effort. Extreme separation detail makes color edits a breeze, says FineEye.

**FLH-Z “Z” Thermal Plate Processor**  

Designed to provide greater prepress productivity, Fujifilm’s intelligent “Z” plate processor design improves production and quality as a result of a more tightly controlled processing environment. In this era of sustainability, the “Z” processor touts environmental efforts while not requiring a substantial workflow change.

Because the “Z” processor replenishes on an as-needed basis rather than traditional, less accurate methods, Fuji thermal plates are always processed under optimal conditions. The benefits are improved consistency and reduced chemistry usage, which mean lower costs as well as the environmental benefit of reduced effluent. No baking is necessary for the Brilla HD LH-PJ short- to medium-run plate or the Brilla HD LH-PL medium- to long-run plate.

The FLH-Z processor is available in 33.5”, 49”, 59” and 65” (LH-PJ only) sizes, making it suitable for the entire thermal market. This processor is dedicated for use with Fuji Thermal CTP plates. The intelligent replenishment control system is a result of a continued partnership with Glunz & Jensen.

**AutoPilot Is Like a “Super CSR”**  
**Hiflex Corp. of North America, www.hiflex.com**

Hiflex AutoPilot is an advanced JDF tool within Hiflex MIS. Operators enter basic sales specifications, such as the type of paper, number of impressions, number of colors, etc. Then, by pressing the AutoPilot button, Hiflex delivers a complete printing and folding sheet layout, automated procurement details, a complete estimate and the most efficient production plan possible for 80% of the work of a general commercial printer. AutoPilot uses Hiflex’s core JDF data-structure to provide unparalleled automation to its users, significantly reducing administrative overhead for every order produced.

Hiflex MIS is configured to a printer’s specific rules and equipment and, using AutoPilot, generates production plans and JDF files used to automate prepress, press and postpress. It is used at many printing establishments integrating systems from vendors such as Kodak, Agfa, Screen, Metrix, KBA, Heidelberg, manroland, Muller Martini, MBO and Horizon.
Award Applicants continued

ColorFlow Software
Kodak Graphic Communications, www.graphics.kodak.com

Integrated color control across all devices—monitors, scanners, halftone and inkjet proofers, and digital and conventional presses—is achievable using one software solution across the entire production environment: ColorFlow from Kodak. This software aligns color across hardware, enabling integrated control with the Kodak Prinergy Workflow System.

ColorFlow delivers Color Relationship Management that unifies all elements, such as ICC profiles, curves and spot color recipes, managing the relationship between them and the device print conditions. Tight integration with the workflow and between devices enables automatic updates when production variables occur or when a print condition is redefined. Color control can be automated through Prinergy’s job process templates and can be further enhanced by the sophistication of database rules-based automation.

ColorFlow is fully integrated with Prinergy v.5 and enables efficient setup of complex color workflows with an intuitive user interface. Designed to simplify the tasks of busy prepress professionals, the software supports open standards.

okBalance Gray Balance Control Software

okBalance is a closed-loop color control system jointly developed by manroland and System Brunner as an option for manroland’s closed-loop color measurement system, ColorPilot (formerly known as CCI). Its worldwide adoption stems from printers demanding tighter quality-control standards such as ISO 12647-2 and the emphasis placed on gray balance as described in GRACoL 7.

okBalance software provides a process analysis called PrintConsult, which indicates whether the printed sheet has achieved “standard” conditions. It rates the quality of gray balance in mid-tones and shadows along with the tone value increase and solid ink densities of the individual process colors, indicating when there is a weakness.

The definition of the approved sheet includes the freedom to choose control based on solid ink density (as is the case with all other closed-loop measuring devices) or to control the color during production based on gray balance with okBalance. Process variables that disturb the look of an image due to color casts are automatically resolved by continually working to maintain the gray balance.

Versamark VL2000 Inkjet Printing System
Kodak Graphic Communications, www.graphics.kodak.com

The Kodak Versamerk VL2000 Printing System is designed for data centers with transpromo volumes of more than 1 million images per month. Operating at a maximum production capacity of 1,090 letter-sized impressions per minute, the VL2000 provides a cost-effective solution for printers that serve their customers with short runs of high-quality documents as well as longer run transaction and promotional materials.

The Versamark 700 Print Manager is a front end digital press controller that expands workflow choices and currently supports the VL2000 Digital Printing System.

“We are always pushing our equipment to the limits, and the new 700 Print Manager will help us get the most productivity from our digital printing devices,” says Tom Fenske, controller at Fenske Media Corp., Rochester, NY, which installed the first 700 this past June. “It’s critical in a demanding production environment to have a powerful, open solution.”

QTI SpectralCam Scanner
QuadTech, Inc., www.quadtechworld.com

An enhancement to QuadTech’s Color Control System, the SpectralCam scanner delivers accurate L*a*b* and densitometric measurements by detecting and analyzing color bars as small as 1.6mm high—at full web press speeds. Unlike traditional point-source inspection sensors, this technology captures 10 to 15 patches with a single snap of the camera, enabling the Color Control System to make quick and accurate ink-key adjustments.

It provides accurate ISO/ANSI Status E and Status T density, dot gain, trap and print contrast measurements.

The combination of SpectralCam and the Data Central Colorimetric Reporting option lets users accurately measure and verify L*a*b*, TVI and other critical print data—providing printers with the ability to easily monitor the consistency of their process and document compliance to ISO 12647-2 and other standards.

QTI says SpectralCam enables web offset printers to achieve exceptional results faster, more efficiently and cost-effectively.
www.GetPrinected.com
Connect your business like never before.

The ability to get your shop working together as one cohesive machine will determine the scale of your future success. The secret that can help you achieve total integration – Prinect. For more information, call a Prinect expert today at 1-888-472-9655 or visit GetPrinected.com.