



Register in less than 100 copies

Nano register mark virtually invisible

Amidon Graphics

When Mike Amidon, vice president of production at St. Paul, Minn.-based Amidon Graphics first saw Imaging Technologies Inc.'s automatic register control system, he knew he found a system he could bank on.

"It's a much quicker installation and the entire system will require a lot less maintenance."

"We know about other vendors and their register control systems, and we liked them OK, but with I-Tech we're talking about a completely new technology, and we believe it will be a

lot more responsive to our needs," Amidon said. "Plus, the installation will be much simpler."

To that end, the I-Tech deployment will require only two cameras, located at the top and bottom of where the web exits the press. What's more, I-Tech's novel system won't require Amidon to install any additional rollers to support the web as it travels from the press to dryers; the advanced, high-speed cameras monitoring registration have been designed to accommodate any bounces in the web as it leaves the press.

"We'll mount the camera and that's about it," he said. "It's a much quicker installation and the entire system will require a lot less maintenance." The family-owned commercial printer produces a wide variety of products on its Harris M-100 five-unit press, Amidon said, from brochures to cover wraps.



I-TECH's cantilevered design at Amidon Graphics

While the seven-year-old machine is currently equipped with a register control system from another vendor, the system doesn't satisfy Amidon's needs.

Among its major shortcomings: It forces press crews to widen each web by an additional 1/4-inch in order to accommodate the system's requirements. With paper costs soaring through the roof, Amidon said the last thing his company needs is to consume paper unnecessarily.

"Saving that quarter inch of paper will be a big benefit, as will the more accurate registration," he said, adding that Amidon's customers will get the biggest benefit from the I-Tech system.

"We do lots of 4-color and the I-Tech system will not only help us improve our registration but it will also allow customers to send us files with more stylish layouts and designs. That will give our customers more flexibility, and that's what we want to do."

Check out and training for this system started on August 4, 2008. By August 29, 2008, Amidon had agreed to make their final payment and order another system. Here is the feedback from Amidon Graphics:

Dave Geisenhoff, Press Operator:

"I have used several register control systems in the past from other vendors. The I-TECH system provides the tightest register control".

Kevin Suchy, Pressroom Supervisor:

"Better, faster, smarter is all true. Our waste has dropped dramatically over our previous system".

Dean Suchy, Press Operator:

"By far better than our previous register system". We are to target between 100-200 impressions. In addition, placing the register control between the last print unit and the dryer is a more stable location and has helped us lower our waste and time".

Ken Hagel, Press Operator:

"The support has been incredible. Being able to communicate over the Internet has saved us tremendous time and waste".

Mike Amidon, Vice President of Operations:

"It has performed so well, we bought another one".

Mo. paper 1st to use new register control system

By **Chuck Moozakis**

Editor-In-Chief

The Columbia (Mo.) Daily Tribune is upgrading the performance of its press by installing a register control system from a start-up vendor.

The Daily Tribune (daily, 18,131; Sunday, 22,478) tapped San Jose, Calif.-based Imaging Technologies Inc. to equip its Goss International Corp. Universal 45 press with the system, said Jack Waters IV, the paper's general manager. It's the first newspaper to install the system, which I-Tech is formally introducing this month at Graph Expo.

"The system is built on a new platform that was very appealing to me," he said of the I-Tech equipment. "We were very impressed."

Wiring the system began last month, with the first four cameras, across two towers, to be operational before Oct. 1. Waters said the remaining 20 cameras will then be installed following a short evaluation period.

Better quality

The Daily Tribune was looking for ways to improve the print quality and reduce the waste generated by its seven-year-old press, Waters said.

The singlewide press, configured as 12, 4-color towers, is used to print the Daily Tribune, a regional edition of The New York Times, and dozens of other publications.

"We knew the I-Tech register system would help us reduce our waste and improve our print quality," Waters said. "We bought the system so we can further upgrade our processes and bring an even better quality product to market. This system will also let us focus our attention on other production areas such as ink and water balance and not have to devote additional time on register."

Cutting waste is becoming even more



Photo: Columbia Daily Tribune

Columbia Daily Tribune Pressroom Manager Dan Griffith with General Manager Jack Waters, in front of the newspaper's Goss Universal press. The newspaper is the first one to install a color registration system from Imaging Technologies Inc.

critically important as newspapers like the Daily Tribune wrestle with the soaring cost of newsprint, which has increased by more than \$100 per metric ton in the past year.

"This system will reduce our waste by more than 25 percent," Waters said. With more than 15 different press runs a day, many of them short runs, Waters said the I-Tech system will let Daily Tribune press operators produce saleable copies in less time. I-Tech software, meantime, will let operators monitor performance of the system and give managers access to press run data from their offices.

Waters said I-Tech worked with the paper to customize installation, positioning wiring and other components in existing cabinets rather than requiring the paper to construct an additional wiring closet. Crews also engineered mechanisms to accommodate outfeeds on the top of four towers that will allow the cameras to pivot out of the way during web-up.

Refining system

I-Tech, founded in 2006, has been working for more than two years to refine the system, which relies on cameras and components designed to ensure register within a few hundred copies, said Bill Brandenburg, president of Paradigm Press Consulting, I-Tech's sales and marketing unit.

"We believe we are filling a void when it comes to register control," he said.

Amidon Graphics, a St. Paul, Minn.-based commercial printer, also installed an I-Tech register control system to replace a register control system that was already installed on the firm's Harris press, said Mike Amidon, vice president of production.

"We believe it will be a lot more responsive to our needs," he said. A third customer, Conley Printing Co. (which owns *Newspapers & Technology*) has installed an I-Tech ribbon control system. —NT



Conley Printing Co.

“This technology has improved our quality.”

Automating some production operations and ensuring high print quality were the driving forces behind Conley Printing Co.’s decision to purchase a ribbon control system from Imaging Technologies Inc.

“This is solid technology,” said Jim Dittmann, vice president of operations at the Beaver Dam, Wis.-based commercial printer. “It’s trouble-free.”

Conley installed the I-Tech control system late last year on a Baker Perkins G-16 press.

The 20-year-old, three-ribbon machine had no individual ribbon control, Dittmann said, forcing operators to manually oversee crossover alignment and other configurations.

“We had sidelay and cutoff control only on the full web,” he said. “Our objective was to save some time on make-ready and automate operations that formerly had to be done by hand.”

Like all commercial printers, Conley Printing strives to provide the best possible service to its customers. And that service, Dittmann said, includes giving customers the option to design brochures, inserts and publications with as many elements as they wish: from elaborate layouts to illustrations and photos that spread across multiple pages.

“This technology has improved our quality,” Dittmann said. “We can let our customers know they do an elaborate layout or a crossover with a 2-point rule and, thanks to the I-Tech ribbon technology, we have cross alignments that are dead-on.”

Conley’s deployment includes three I-Tech ribbon control cameras, along with the firm’s Windows server control software.

Among its other features, I-Tech’s ribbon control system is engineered to bring all ribbons in control tolerance within 300 impressions and features a simple design that eliminates the need for additional wiring or maintenance.

Dittmann praised I-Tech’s engineers for their work in designing the system. “I’ll tell you what was fun about it,” he said. “It was almost like going back to when technology was fresh. We had a group of engineers who wanted to make it work. We set objectives and scope and then they said this is how we will go about it and then they pulled it off.”

Tribune Publishing Company installs I-TECH *full registration down to 250 copies*

by Jack Waters,
General Manager

The Design Process

The installation process of the I-TECH Auto Register system here in Columbia, Missouri has progressed efficiently and effectively since project launch. After an on site visit to capture measurements, photos and site specifications, the I-TECH staff returned to their offices to prepare preliminary designs. Using common voice, email, ftp, and remote access communications, TPC and I-TECH personnel exchanged information needed to deliver, modify, and complete the designs for our facility. As I-TECH engineered and delivered component and wiring diagrams, we conferred online to view CAD images, evaluate them jointly, and make interactive design changes. Throughout the process, I-TECH has been very open to our recommendations and preferences while demonstrating expertise in the application and top flight design skills. The result of this process is a design we are thoroughly bought into and ready to implement.

The Installation

Early on, TPC chose to use the smallest register marks available, and have modified our workflows to place the register marks in all products we produce. We've shared pdf images with I-TECH to gain approvals on register mark placement and confirm visibility. The minimal size of the I-TECH register mark was a key consideration for us, and we are pleased with the fact these marks are virtually invisible to our customers' readers.

It is important to us that this system be tightly integrated into our existing

press equipment and controls. Though TPC chose not to acquire the necessary ingredients to interface I-TECH controls with our press controls, we are working to install the I-TECH system as seamlessly as possible. Integration with the press controls is not necessary as this would bring us no performance advantage. As a matter of fact, the I-TECH register system gives us greater functionality than our original press controls package. Instead, the I-TECH system simply overrides the original press register controls – which are always on stand by as a backup.

A serious advantage to the I-TECH system and a purchase clincher for TPC is the simple, modular architecture of the system. Because its components are compact and built with current technologies, we are able to install the components within our existing press electrical cabinets, consoles, and raceways.

There are no remote cabinets in this system. The system communicates via standard Ethernet networking protocols and topologies and everything is mounted directly in our press consoles and press units. The wiring requirements are straightforward, simple, and reliable. Everything is PC-based and the controls run on Dell Microsoft Vista OS computers we specified and purchased directly from our preferred vendor. These system characteristics represent another advantage to the I-TECH system and a selling point in our purchase decision: We can self-maintain this system in its entirety. As a daily newspaper and commercial printer, we operate under a zero downtime policy and so we will spare adequate numbers of the low-cost components to quickly recover. These technologies require no outside maintenance support, and are consistent with others we presently own and maintain.

Our local machine shop



Pablo Montero, principal systems design engineer for I-TECH, working on the installation at Tribune Publishing

is using the detailed CAD designs provided by I-TECH to fabricate the mounting hardware. This means our machinist will be able to replicate parts in the future on demand. Other than these locally made parts, I-TECH shipped us all the components we needed to wire the press and install the system. This has been a straightforward task, without surprises, and our maintenance personnel are now full prepared to keep the system up and running.

Our installation approach is to rig full systems on two of our twelve towers.



I-TECH HMI application.

This allows us to qualify these first two towers and make modifications to our designs (if necessary) before installing the remaining ten. TPC staff began installing cable mid-September. We finished the installation of the first two towers early in October and have begun installing the remaining 10 towers with an expectation to complete the project some time in December.

The Results

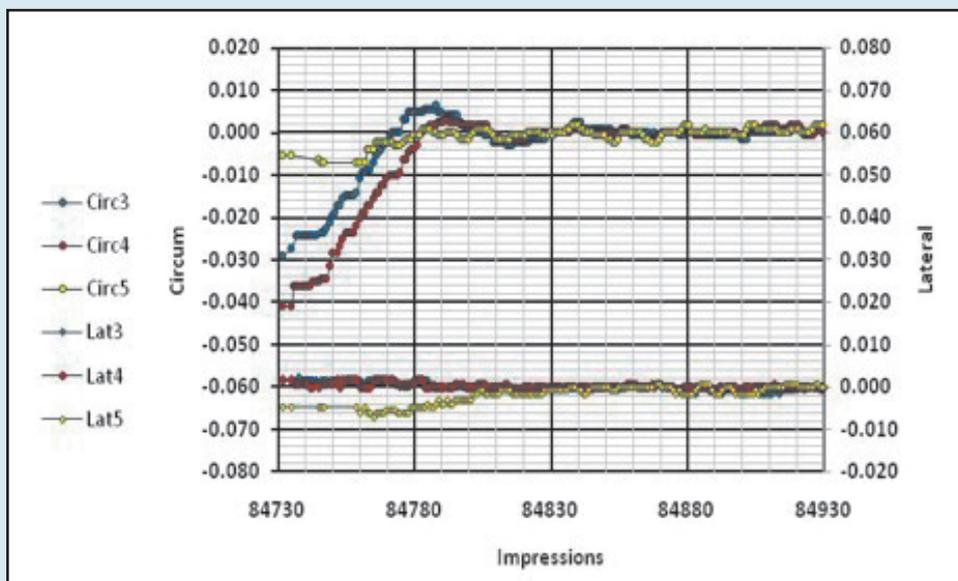
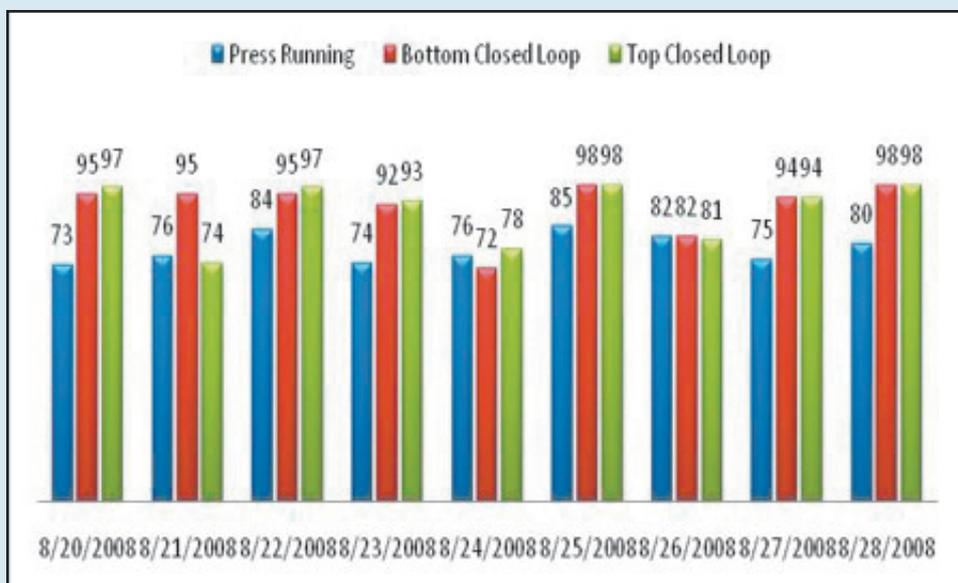
Our two-tower acceptance testing is just now getting under way and we've seen the I-TECH system bring our printed product to full registration within **250** copies and we believe this will improve as we continue to fine-tune the system. This represents a significant improvement over our historical, manual results. Printed materials remain in tight register throughout the run and our press operators have more time to focus on ink, water, and tension controls to further enhance outcomes. The significance of superior quality to our customers, and to our business is difficult to quantify, but stands as the primary reason we acquired the I-TECH system.



I-TECH camera installed on Tribune Publishing Universal press

We do what we say and we can prove it

Imaging Technologies has the capability to measure every impression on your press. It is for this reason we can take the emotion out of equipment start-ups. We offer a wide variety of Statistical Process Control reports to prove our compliance. No more guess work.





Company History

In late 2005, Paul Calinawan started Imaging Technologies, Inc. His decision to leave his former employer and start out on his own was based on the belief that he could build superior web handling and color measurement products for web presses in the Printing Industry. He hired Pablo Montero as Principal Design Engineer and in the summer of 2006, hired Jaap Salm as Senior Project Manager in charge of all the Windows based operations. In addition, Paul hired two programmers based in Manila, Philippines. Soon after, the team, using up-to-date design principles, hardware, and software developed a state-of-the-art ribbon and register system.

In July of 2007, Paul contracted with William Brandenburg of Paradigm Graphic Arts Consulting, Inc. as I-Tech's Sales Consultant. Bill brought to I-Tech over 20 years of capital equipment purchasing and sales experience along with an in-depth knowledge of Color Management and Measurement. Together, the I-Tech team brings to their products over a Half Century of combined Graphic Arts experience.

Currently, I-Tech has 16 webs of ribbon and register control products either running or under contract.

I-Tech's Philosophy is simple:

"Imaging Technologies Inc. is a company that designs and manufactures printing press automation equipment using state of the art components and designs. The company's goal is to take the best that new technology has to offer in terms of speed and performance and offer this at the lowest price point in the Industry. Secondly, our goal is to provide the most robust product with the least 'back-end' impact on our customers." -Paul Calinawan

i-TECH – on the forefront of pressroom automation



Paul Calinawan studied architecture at the University of Santo Tomas in Manila. He immigrated to the US in 1986 where he studied software and hardware engineering design disciplines.

From 1990-1996, Paul held engineering positions in an industrial/residential alarm manufacturing company.

From 1996-2005, Paul held engineering positions at Graphics Microsystems, Inc.

In 2006, ITECH was incorporated with Paul as the President and CEO.



Pablo Montero graduated from Devry Institute of Technology with a Bachelor of Science in Electronics Engineering Technology.

From 1995 to 1998, Pablo held engineering positions at Ultratech Stepper Inc.

From 1998 to 2006, Pablo held engineering positions at Graphics Microsystems, Inc.

In 2006, Pablo joined I-TECH as principal systems design engineer.



Jaap Salm graduated from the University of Technology, Delft in 1984 with a Master of Science in Mechanical Engineering.

From 1984-1990, Jaap held engineering positions at Measurex Corporation.

From 1990-2006, Jaap held engineering positions at Graphics Microsystems, Inc.

In 2006, Jaap joined I-TECH as Senior Project Manager of Windows development.



William Brandenburg graduated from Iowa State University in 1983 with a Bachelor of Science in Civil Engineering.

From 1984-1992, William held manufacturing positions at R.R. Donnelley and Sons.

From 1992-1993, William was President of International Project Management.

From 1993-2006, William was Midwest Region Sales Manager for Graphics Microsystems, Inc.

In 2006, William left GMI and started Paradigm Graphic Arts Consulting, Inc. (PGAC, Inc.)

In 2007, PGAC, Inc. teamed up with I-TECH to provide sales and marketing support.

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*Nano Marks
...Big Results*

A Letter from the President . . .

The reality of a weakening economy is on every printer's mind. Because of ever-increasing commodities costs, printers are much more aware of how they spend their money. "Make do with what you have" seems to be the prevalent directive. So now, printers are looking at different ways to improve their current processes. Large capital expenditures are carefully scrutinized and equipment purchases, that provide quicker ROI, are greatly favored. This is where the I-TECH product line fits the bill.

I-TECH is a Silicon Valley company and it is innovation that drives us forward. Long gone are the days of film cameras, black & white televisions and rotary phones only to be replaced by their modern counterparts; megapixel cameras, HDTV, cell phones and of course everyone knows the power of internet connectivity. It's life. It's progress. These are the very kind of technological advances that our company has fully embraced. It is our mission to help bring these technological advances to our clients.

Our products are the result of a hundred incremental improvements over existing offerings in the market. The sum of all these improvements is what makes I-TECH products truly revolutionary. Coupled with excellent engineering designs, the advent of newer technologies has allowed us to create products that are faster and more reliable, with pricing that is well below the competition. Simply put, I-TECH offers the best performance-to-price ratio in this market.

In the course of our marketing research, we have come in contact with many printers who no longer want to settle for "good enough". After realizing the potential benefits of I-TECH products, they have come to the conclusion that they either need automation or that their current system is not up to par. Clients who have purchased our products are now reaping the payback with only a few short months of operation. And as an added bonus, they see our equipment consistently work hard to provide that last ounce of control perfection, helping deliver the highest quality print product possible.

With I-TECH, "better, faster, lower price point" is not just a cliché. It is a promise that forms the very foundation of our company. I-TECH has no gimmicks, just real world results.

Contact our sales team and let us demonstrate how I-TECH can help you.

Paul Calinawan
President and CEO