

A SUPPLEMENT TO

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MONTHLY.

Print on its ear

Single-Pass, Two-Side Production
Shakes Up Commercial Market



Jprint
Akiyama Jprint Press

Akiyama

Jprint on its ear

Akiyama's Jprint press is shaking up many printers' longheld beliefs. Users, however, tend to understate its many benefits.

Says the long-time owner of a commercial shop on the East Coast, "It's inconceivable that most printers still print sheets the way their grandfather did, one side at a time. True, convertible sheetfed perfectors are available but they're very expensive and take up a lot of floor space, typically the length of two presses."

By contrast, he continues, the Jprint alternative he uses has a stacked, unitized configuration that's designed to print both the top and bottom of the sheet in a single pass, using the same gripper edge through all units. Akiyama offers this model in five widths (26", 29", 32", 40" and 44") and two-over-two, four-over-four, five-over-five and six-over-six units, which yield, respectively, four,

eight, 10 and 12 colors. It just announced availability of a 14-color Jprint press, a seven-over-seven configuration.

Dramatic boost in output

Adds the East Coast printer, who operates a five-over-five, 10-color Jprint rated at 13,000 sheets per hour but requests anonymity, "Straight-through sheet travel, two-side printing and extensive automation result in dramatic output, with quality and ink coverage that's absolutely comparable to anything on the market."

He says it's not unusual for a new Jprint to boost pressroom productivity by 50%, adding, "I understand one new user is putting in a 40-inch model and taking out three 40-inch multicolors." In his own case, because



In a single pass, the new 28x40" Jprint press can print five colors on each side of the sheet at 13,000 sph.

he's "never worked so hard to keep a press busy," he'd rather not acknowledge its presence, adding, "Jprint users are not anxious to reveal that profit margins can go way up, typically from the mid-single digits to well into the double digits."

The heart of the Jprint design is its compactness. In each press station, both the upper and lower printing units have their own plate, blanket, impression and transfer cylinders so they print both sides of the sheet simultaneously, without needing to reverse sheet travel or restack the paper. Without sheet handling, there's much less paper waste and much better register.

Use of the same gripper edge ensures accurate, repeatable register by eliminating sheet shift during high-speed transfers in perfecting presses and the need to backtrim the paper to square it up for second-pass printing. Using the same gripper edge also requires no margin allowance at the opposite end of the sheet, plus there's no need to invert the second-side plate image as required in conventional perfecting.

Future begins now

What further improvements are underway? Being announced at the Graph Expo 2006 show in Chicago (October 15-18) is a system for double aqueous coating in the last two Jprint units, reports Tony Takami, vice president of Akiyama International Corporation.

"This capability, which we'll make available by the end of the year, will help Jprint users meet the needs of their customers," he says. "We're also developing exciting products in close cooperation with our partners."

Takami concludes, "Today's challenges are just too important for printers to carry on in the same way. Commercial printers owe it to themselves, and most of all to their customers, to look closely at single-pass, two-sided printing."

Turn the page to read how printers are putting Jprint presses and Akiyama partner systems to work. ■

For more information:

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'Fine, Fast' Workhorse

Over the years, Compucolor earned a name in the New York metropolitan area initially by providing the lively entertainment industry with high-gloss, color-saturated postcards it produced overnight, then by cultivating a big market for catalogs, booklets, brochures and promotional materials like sell sheets.

"It was a logical expansion of the fine, fast color work we were supplying, although it required a wider variety of stocks and printing on both sides of the sheet," says Tom Weitzmann, founder and president of 50-employee Compucolor, located in Lake Success, NY, on the North Shore of Long Island.

As he sought to streamline capacity beyond the company's existing six- and eight-color convertible sheetfed perfectors, Weitzmann put in a call to an old friend, Robert Treadwell, regional sales executive for Akiyama. "He first told me about the Jprint design, specifically its great ability to print a wide range of substrates, both sides in a single pass, with minimal changeover," recalls Weitzmann.

He adds, "This concept held a lot of promise for us so last November we installed a five-over-five, 10-color 32-inch Jprint system. From the beginning it has proved to be a 'monster' press that really eats up the work. It produces so quickly that we had to expand the bindery to keep up."

Weitzmann runs the Akiyama press on two shifts, putting on the quick-turnaround, four-over-four postcard work as well as a lot of 12- and 16-page signatures for catalogs and brochures, in typical run lengths from 2,500 sheets to 200,000. "With automated plate changing, quick makeready and high output speeds, we average 50,000 to 60,000 two-sided sheets per shift; this means we can offer customers same-day production on smaller jobs or finish off a really long run in just two days," he says.

With the Jprint's strength in four-over-four printing, Weitzmann began using Compucolor's two convertible presses more for straight printing since changing them over to perfecting could take as much as two hours with makereadies. "Also," he says, "on those presses we'd find that the top and bottom of the sheet weren't printing exactly the same, that there were marking problems and that we needed to hand-pick jobs that they can print well. Thankfully, the Jprint gives us no trouble in any of these areas."

Weitzmann reports, "The new press rips right through signature work and performs extremely well on 12-pt. card stock. We couldn't be happier with the Akiyama Jprint press; it gets running quickly, there's no marking on two-sided jobs and, best of all, we don't have to think twice about any work we put on it." ■

Printing to Educate



To produce more than 40 versions of the basic study booklets used by 213,000 young students in the U.S. presently enrolled in the unique after-school instructional program known as the Kumon Math and Reading program, Steven Dummitt oversees about 30 people in a two-shift printing and binding facility and a distribution center in Hebron, KY.

"In producing these 20-page exercise worksheets, each month we print more than two million sheets, front and back, on our two-over-two, four-color Akiyama Jprint press," says Dummitt. "This volume fulfills only about 60% of our needs; we outsource the balance. Just 18 months ago, we were operating at a level of about 1.3 million sheets per month."

The booklets, printed on 40-lb. uncoated text, are sent to inventory or shipped as needed directly to any of about 1,800 Kumon franchisees in North America.

Bringing printing home

Kumon Publishing North America launched its distribution center in January 1993, when Dummitt came on board. "Back then, we farmed out all of our print production," he explains. "When we decided to bring printing inside a few years ago, I visited Japan, where the Kumon learning system was created 50 years ago by Toru Kumon. His after-school centers are now estab-

lished in 44 countries, with millions of students and a network of tens of thousands of franchisees."

While in Japan visiting Kumon print facilities, Dummitt encountered the Jprint press design. "Later I toured the Akiyama factory and watched the 32-inch model we were considering buying as it printed our lightweight newsprint-type paper at full press speed of 13,000 sheets per hour," he recalls.

"The demonstration was very impressive," Dummitt adds. "The press we installed in late 2004 was the first Jprint model in the Kumon network outside Japan."

Specially matched inks

In the pressroom at Kumon Service North America, operators mount plates and print the text on each side of the sheet using black or purple colors from Toyo Ink specially matched to the lightweight stock. Says Dummitt, "We tried several types of ink but Toyo came out the best in terms of quality and performance on the paper we use. We're glad to spend money on quality so we've been very happy with the Toyo inks."

Operators use the second Jprint printing unit to apply a unique varnish-type compound to select areas on each side of the sheet. "In the glue binder, the compound blocks adhesion and allows easy release between standard 20-page sets," explains Dummitt, "which enables workers in our distribution center to separate booklet blocks into the specific number of exercise worksheets to fill an order."

By January, a third shift will likely be added in the pressroom and bindery, to bring more single-color work in house. Longer term, Dummitt says he's eyeing a five-over-five, 10-color press, to take on more color work, which already represents about 20% of volume. ■

Above right, operator Michael Knight inks press; below, he and team leader Thomas Mock check Jprint console.



For more information:

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The Big Squeeze

Eighteen months ago, Larry Winkler recalls that he was certain that cycle time would become one of the most critical issues for every commercial printer.

"Many, many presses can print very high quality and every printer has to offer good service and good prices," says Winkler, president and CEO of Millbrook Printing, Grand Ledge, MI. "So to serve customers and remain profitable, today it's all about doing anything and everything to compress the time a job stays in the plant, whether it's for 1,000 copies or 200,000."

Thus armed, Winkler set about creating efficiencies in the showcase-quality marketing and advertising materials, publications and catalogs his 44-employee company produces for publishers, ad agencies, associations and other printers. "All solutions led to one-pass production," he says.

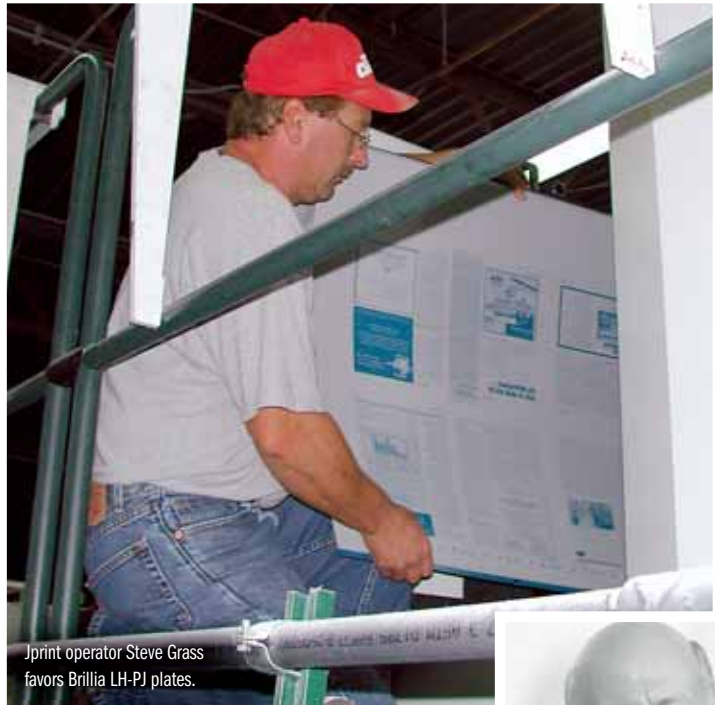
So Winkler visited the international PRINT 05 equipment show in Chicago just about a year ago and booked an order for the 40" five-over-five, 10-color Jprint press Akiyama was demonstrating at speeds up to 13,000 sph.

"To tell the truth," confides Winkler, "we sealed the deal before the show opened, based on Akiyama print demos using our actual job files. I'm glad to say that in the first nine months of operation, our new press—the first Jprint in the mid-Midwest region and the highlight of a multimillion-dollar investment—has proven itself to be a 'keeper.'"

In addition to cycle time, job turnaround and print quality, Winkler says, "We appreciate the press's closed-loop color control capabilities, the single gripper edge that helps ensure precise plate registration and its compact size. Its small footprint enables us to use that space more efficiently."

Platesetting and plates

Millbrook's focus on efficiency includes platesetting, plus Fujifilm Brillia HD LH-PJ thermal plates, which Millbrook technicians have proven are the best consumables for the Jprint and the company's 40" six-color sheetfed and 36"-wide nonheatset web press. Technicians laud the plate's batch-to-batch consistency, excellent ink/water balance and high-quality tone reproduction



Jprint operator Steve Grass favors Brillia LH-PJ plates.



Larry Winkler strives to cut cycle time at Millbrook Printing.

Winkler adds, "While we were ready for great performance from the Jprint, we soon wondered how we ever did without it. In my nearly 41 years with Millbrook Printing, this is the best press we ever purchased."

12% increase in sales

How good is it? Winkler replies, "On \$8 million in sales, we're on track to achieve a 12% increase in sales over last year, directly as a result of the Jprint system."

He concludes, "Printers prosper by helping make customers profitable. Reduced cycle time is our new competitive edge and allows us to continue to help our customers improve their bottom lines." ■

For more information:

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Collateral Advantage

“Our two-over-two, four-color 40-inch Jprint press is a perfect match to the short-run, full-color production we provide to our high-end clientele in the entertainment, automobile and electronics markets using our two 28-inch six-colors,” says Rick Morimura of B&G House of Printing, Gardena, CA.

He adds, “We pride ourselves on being a boutique operation, but these same clients also need a steady supply of instruction guides, assembly manuals and repair booklets of 300 to 400 pages, printed in black-and-white or two colors.” The booklets require B&G to produce 20 to 25 individual forms per job, 16 pages at a time, in runs from as few as 300 copies to more than 5,000.

Morimura, B&G’s VP of sales and administration, continues, “Since our clients are always updating and revising their manuals and guides, this single- and two-color work has become a very steady business for us. After several years of successful production, we think the Jprint press is not only a perfect complement but the ideal system for quickly producing these manuals and guides in short runs.”

The two-shift ESOP operation employs 24 people and serves area clients and LA-based national accounts, as well as customers in such diverse locales as New York City and San Francisco. It is also equipped with two conventional Bestech six-colors from Akiyama.

Favoring press efficiencies

“Our Jprint features fast plate mounting, quick job set-up and streamlined makereadies, plus straightforward two-sided production at up to 10,000 sheets per hour, all carried out by just one operator,” says Morimura.

Prior to adding the unique press nine years ago, B&G printed single- and two-color work on a conventional two-color perfecter from another manufacturer. “It was painfully slow and required a crew of two,” says Morimura. “Our Jprint was one of Akiyama’s first two-over-two presses on the West Coast.”

B&G had already taken the next step, going direct-



Les Fujita (left), pressroom manufacturing VP, and systems manager Steve Whitt say the Screen PlateRite 8100 CTP system handles B&G’s busy workload.

to-plate for its six-color presses, then last year it gave up film altogether in a smooth transition to a Screen PlateRite 8100 system, according to Darren Matsuda, prepress VP. “With all the copy in digital form, updates of manuals and guides are a snap for us,” says Matsuda. “We keep a tremendous churn going in the prepress department to feed the pressroom.”

Single-shift book production

“Our CTP and Jprint combination is extremely efficient,” adds Les Fujita, pressroom manufacturing VP. “In less than one shift, depending on the run length of a given job, we may print 30 forms, front and back, using a single operator and including mounting plates, makeready and making final adjustments, produced in one or two colors, no matter.”

Fujita adds, “We sometimes wonder how anyone can produce a 400-page manual any faster, even using the most automated toner technology available today, and it’s ink on paper, which clients continue to favor.”

President Ben Matsuda, who founded B&G House of Printing in 1975, says there are no immediate plans to add a five-over-five or six-over-six Jprint. “That would take us into a market that’s quite saturated in our area and take us away from our boutique-type clientele, which we serve very successfully everyday.” ■

For more information:

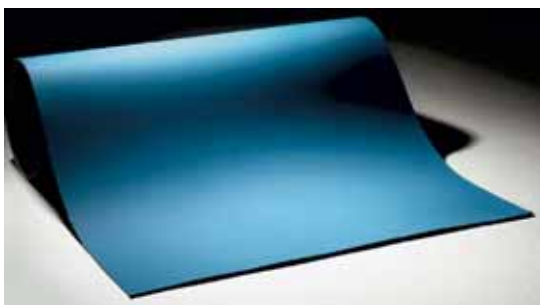
Screen (USA), Inc.
Rolling Meadows, IL
(800) 372-7737
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Kinyo S742 printing blanket for the new Jprint single-pass press from Akiyama International

kinyo
VIRGINIA INC.

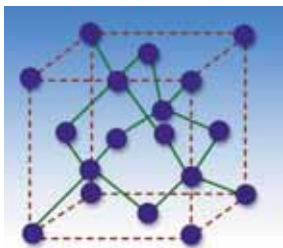
In today's demanding environment, does it make sense to have your press operators try and "make" the offset blanket work well with your new press? Of course not! Far better to select a blanket that's specially designed to be the best fit for your Akiyama press. The result: your operators spend more time printing and less time troubleshooting. Use the Kinyo S742—engineered for the Akiyama Jprint press.

Based on years of experience and extensive research and development, Kinyo knows what blanket features are needed for the Jprint two-side printing press. After much testing, Kinyo is pleased to offer the S742 premium-quality sheetfed blanket.



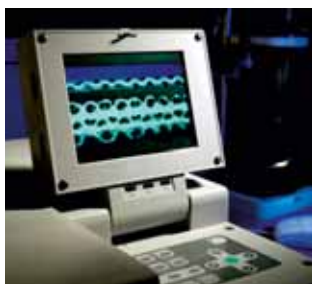
The Kinyo S742 Printing Blanket

This exciting new product is engineered for single-pass, two-side printing on the Jprint press. From the high tensile-strength/low-stretch fabric using premium-grade cotton to the soft compressible layer, the S742 carcass is designed to deliver the highest smash resistance and quickest rebound.



Specially Formulated Rubber Compound

Kinyo developed the rubber formula to deliver maximum ink transfer while ensuring quick release. Its special blend of polymers eliminates ghosting and associated memory issues that can plague long runs or specialty inks.



Superior Surface Finish

Through years of experience and the development of specially designed machinery, Kinyo has established a reputation as the leader in surface profile and gauge consistency. Each blanket surface is profiled to deliver the best print quality for a particular printing media. This profile ensures both dot sharpness and quick release.



About Kinyo

Kinyo Virginia, Inc. is a printing blanket manufacturer located in Newport News, VA. It is a subsidiary of Kinyosha, which is based in Tokyo and is recognized as one of the world's leading blanket manufacturers, with over 75 years of experience.

Like all Kinyo printing blankets, the new S742 blanket for the Jprint press from Akiyama is distributed in North America solely through DYC Supply Company.



DYC Supply Company
Virginia Beach, VA
Contact: Frank Renda
Phone: 1-800-446-8240
E-mail: frankr@d-y-c.com
www.d-y-c.com

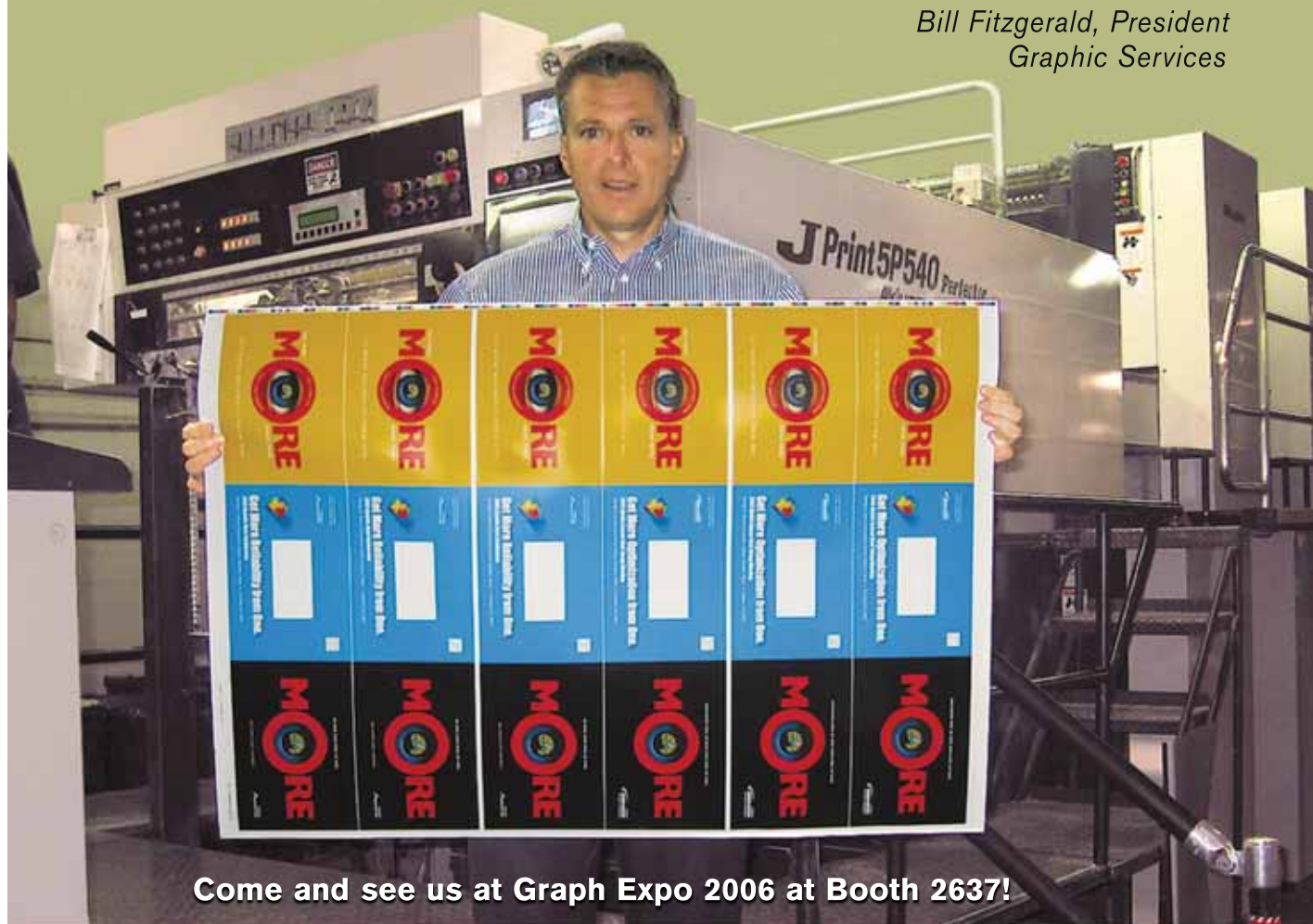
"I really wouldn't want my competitors to find out about this press"

"Although I owe it to my friends at Akiyama to do this ad"

Wet on wet in one pass is powerful to our customers and profitable to our company. One make ready instead of two enables our customers to make only one trip for a press check. This speeds up production and also cuts down on any possible problems created from a second pass through the press.

The Jprint's straight through design is unique, registration and marking problems associated with flipping the sheet are never a factor as with many other perfectors. This has also given our customers confidence in the quality we reproduce. The two Jprints that we have purchased have doubled our production as well as our company size.

*Bill Fitzgerald, President
Graphic Services*

A photograph of Bill Fitzgerald, President of Graphic Services, standing in front of a large industrial printing press. He is holding a large sheet of printed material that features a grid of 18 panels, each with the word "MORE" in a stylized font. The press behind him is labeled "J Print 5P540 Perfector".

Come and see us at Graph Expo 2006 at Booth 2637!



Akiyama International

CALL 1-800-233-7960 OR VISIT WWW.AKIYAMA.COM FOR INFORMATION