

# DI Presses in the In-plant

Scores of in-plants are installing direct imaging (DI) offset presses. Why do they feel DI technology is so well suited to their mix of work?



A brand new Presstek 52DI was just installed at Glasgow Caledonian University, in Scotland. With it here are (from the left): Andrew Scott, head of Print Design Services; Steven McCart, print production manager; Colin Gaffney, offset print operator; and Karen Kernan, offset print operator.

By Bob Neubauer

**E**VEN AFTER installing an HP Indigo 1050 digital color press four years ago, San Diego State University ReproGraphic Services still found it challenging to reach portions of the four-color market. Longer-run jobs were not cost effective on the 1050, so the in-plant was using its aging computer-to-plate (CTP) system and two-color presses to produce them. It was not the most efficient setup.

So in 2006, Leslie Rutledge, manager of the nine-employee in-plant, made the decision to install a Presstek 34DI direct imaging press. Life has not been the same since. The chemistry-free, waterless offset press images plates directly on the press, saving time, improving quality and decreasing costs.

“For our shop, it was the best decision I ever made,” declares Rutledge.

A growing number of in-plants agree with her.

Though introduced to the market back in 1991, direct imaging (DI) technology has lingered on the fringes of the industry; traditionalists were skeptical of it and progressives bypassed it for toner-based devices. Lately, though, DI seems to be gaining traction; numerous in-plants have installed DI presses in

recent years, viewing it as a cost-effective way to enter the four-color market.

That was the case at California State Polytechnic University, in Pomona, where the in-plant added a Presstek 34E DI to stem the flow of four-color work to outside printers—work the in-plant couldn’t previously handle with its one- and two-color presses.

“The 34E DI enables us to produce four-color work in-house,” explains Daiken Fiore, manager of Graphic Communications Services.

“We needed to get into four-color,” adds Dave Nelson, director of Printing Services at Illinois State University, in Normal, Ill., where a Heidelberg Quickmaster DI 46 has been in place for nearly a decade. “We were a two-color shop, and this was the most compact and, frankly, least risky way to get into four-color.”

One of the newest DI installations took place last month at Glasgow Caledonian University, in Scotland. The in-plant added a Presstek 52DI.

“Ninety-five percent of our work is four-color brochures, leaflets, flyers, booklets, posters etc., and we were printing using a two-color press,” explains Andrew Scott, head

of Print Design Services. He touts many advantages of DI technology, including “effortless perfect registration,” excellent image quality, consistency of color and the ability to “de-skill” the whole prepress and printing process, which will make it easier to recruit less skilled staff. And then there are the “green” benefits.

“The DI is the most environmentally friendly printing process available today,” he contends. “The waterless process and the automation greatly reduces the use of harmful chemicals.” Plus, he adds, waterless printing means faster drying times.

### So Why Doesn't Everyone Have One?

With all this acclaim though, why haven't DI presses caught on even more? Numerous in-plants have added CTP in the past couple years; why didn't they skip that step and go directly to a DI press?

A quick poll of recent CTP buyers reveals one obvious answer: they need to make plates for multiple presses.

“Our four-color [press] was only five years old,” says Doug Fenske, director of Printing at Minnesota State University, Mankato. It's one



**At the Missouri State Printing Center, press operators Jim Morris (left) and Jeff Claypool stand with their shop's Ryobi 3404 DI press.**

of five presses for which the shop's new Fuji CTP system is making plates. Replacing it with a DI was simply not an option, Fenske says.

“The cost of upgrading a press is humongous compared to a CTP device,” he says.

“It's not a technology that we really investigated too far, to be honest,” admits Lisa Hoover, director of Administrative Services

## The Advantages of DI

In the summer of 2008, InfoTrends surveyed 80 DI press users, the majority of whom also operate a conventional offset press and a toner-based production color printer. Some key findings of the study were:

- Makeready on a DI press takes less time than a conventional offset press. On average, 34 cm DI presses achieve makeready 23 percent faster than conventional offset, while 52 cm presses achieve makeready 38 percent faster.
- Users consider DI presses to be most suitable for run lengths between 500 and 20,000 press sheets, though run lengths between 250 and 499 were fairly evenly mixed between toner and DI.
- 80 percent of respondents said that DI printing allowed them to increase their business by bringing in new customers.
- 71 percent said they can now produce applications that they were unable to produce previously.
- The most important advantages of DI over conventional offset were print quality and ease of use/automation. Close behind were durability, throughput and makeready times.



**Dennis Payton, supervisor of printing at the University of Maryland, and Teresa Thacker, manager of Printing Services, show off their Presstek 34DI press.**

at Bucknell University, in Lewisburg, Pa. Her 23-employee shop installed a Presstek Vector TX52 metal plate CTP device late last year to make plates for the in-plant's two presses.

Impracticality aside, though, Hoover also acknowledges, when pressed, a lingering lack of trust in DI technology.

“It did seem like the technology just didn't catch on,” she says. This notion was intensified when Heidelberg stopped manufacturing DI presses in 2006.

“Heidelberg kind of abandoned it, and that made us say, ‘wow, there’s got to be some reason why they’re not supporting it any more,’” Hoover notes.

Though Presstek, which invented DI technology back in 1988, has never wavered in its support of DI, Heidelberg, which partnered with Presstek to bring the first DI’s to market, felt that demand was decreasing. It chose to focus instead on improving automation of *conventional* sheetfed offset presses, its core business.

Heidelberg’s decision is still a sore point for Dave Nelson, of Illinois State, owner of a Heidelberg DI.

“When Heidelberg finally got the DI really right, they ended up pulling it from the market,” he says.

Still, he remains a fan of the DI process.

“I’m a big believer in DI’s,” he says. The DI enabled his shop to get into four-color printing, he acknowledges, which really turned things around.

“It made us a contender,” he remarks.

He would love to get another DI, now that his shop’s press is nearly 10 years old, and he really likes the Presstek 52DI, but others in his shop feel a larger press would be more suitable. Ironically, the DI has been so successful at helping the in-plant dominate the four-color market, that the shop may now be too sophisticated for another DI, Nelson says. Plus, the in-plant added an HP Indigo a few years ago.

“It takes away some of the advantages of the DI,” he says.

### Is Toner Just As Good?

Indeed, this is another reason that many overlook the DI. A digital production printer like an HP Indigo or Kodak NexPress can handle short-run color, and offer variable data printing capabilities to boot, they say. Many in-plants believe in this strategy. But as San Diego State learned, a digital printer can’t cost-effectively do everything.

“Could I have done the longer runs on the Indigo?” asks Rutledge.



**The Heidelberg Quickmaster DI 46 at Illinois State University, operated here by John Getz, enabled the in-plant to enter the four-color market almost 10 years ago.**

“A lot of times, no, because I couldn’t have offered the same kind of pricing structure, because you pay by click charge on the Indigo.”

What’s more, points out Rutledge, the Indigo could not do letterhead, due to toner’s propensity to melt when run back through a laser printer.

“I do boatloads of letterhead,” she says. To print it, a DI offset press became a necessity.

Another in-plant that has both a DI and a high-speed digital printer is the University of Maryland. Its Presstek 34DI complements its NexPress 2100 plus, says Teresa Thacker, manager of Printing Services.

“I might be doing a cover on the DI and do the guts of a job on the NexPress,” she says. “It gives us more flexibility.”

Like Rutledge, she also points to the need for offset-printed letterhead as a key reason for getting the DI, in addition to its ability to more cost effectively print jobs of more than 1,500 impressions. Larger-format jobs, such as the tabloid-size newsletters the shop produces, go on its two-color, 40” press. The in-plant bought a Presstek Dimension 800 platesetter to make plates for it about the same time it added the DI and the NexPress. Thacker says her shop’s product mix make all three technologies viable.

She lauds the DI’s fast makeready and turnaround times, and its ability to produce good solids, without dot gain.

“It’s really turned our shop around,” she says.

### One Or The Other

For most in-plants, though, getting both a digital color printer and a DI is not an option. Rodney Vessell, Missouri State Printer, looked into getting a NexPress before deciding to add a Ryobi 3404 DI from xpedx. He was bothered by the click charges he would have had to pay on the NexPress.

“I wanted to be able to run as many jobs and as many impressions

### Find out More

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as I wanted, without having to pay," he says. "For about the same money, I'd be able to do as much work as I wanted to [on a DI], without those type of costs."

He and his staff love their Ryobi DI press.

"It's been a great press for us so far," he lauds. "This has really turned our place around." It allowed the shop to keep four-color work in-house. As for the DI's inability to do color VDP, Vessell says this has not been a problem.

"We have had very little call for color variable data print," he says. The shop does a lot of black-and-white VDP on its monochrome machines, he adds.

### DI's Drawbacks

Despite all its strengths, the DI press has its limitations.

"We're getting a lot of demand for coatings and spot varnishes, and that's not something the DI has ever done well," says Nelson, of Illinois State University.

Format size is another potential problem. Marlin Keim, Printing & Duplicating supervisor at Millersville University, in southeastern Pennsylvania, looked seriously at DI presses before purchasing a used five-color Adast offset press recently.

"It was hard not to want one of those," he admits. "It was going to do everything we wanted it to do, except sheet size."

In San Diego, Rutledge also notes that her Presstek 34DI's 12x18" format size\* prevents the shop from doing oversize jobs, but the in-plant has found a way to deal with that.

"We give such a good price that most customers are willing to design within that format," she says.

SDSU ReproGraphics' DI press has been very busy this spring printing commencement program covers for seven different colleges, with print runs ranging from 2,000 to 7,000.

"The covers are unique in that they have the college name on

each," Rutledge reports.

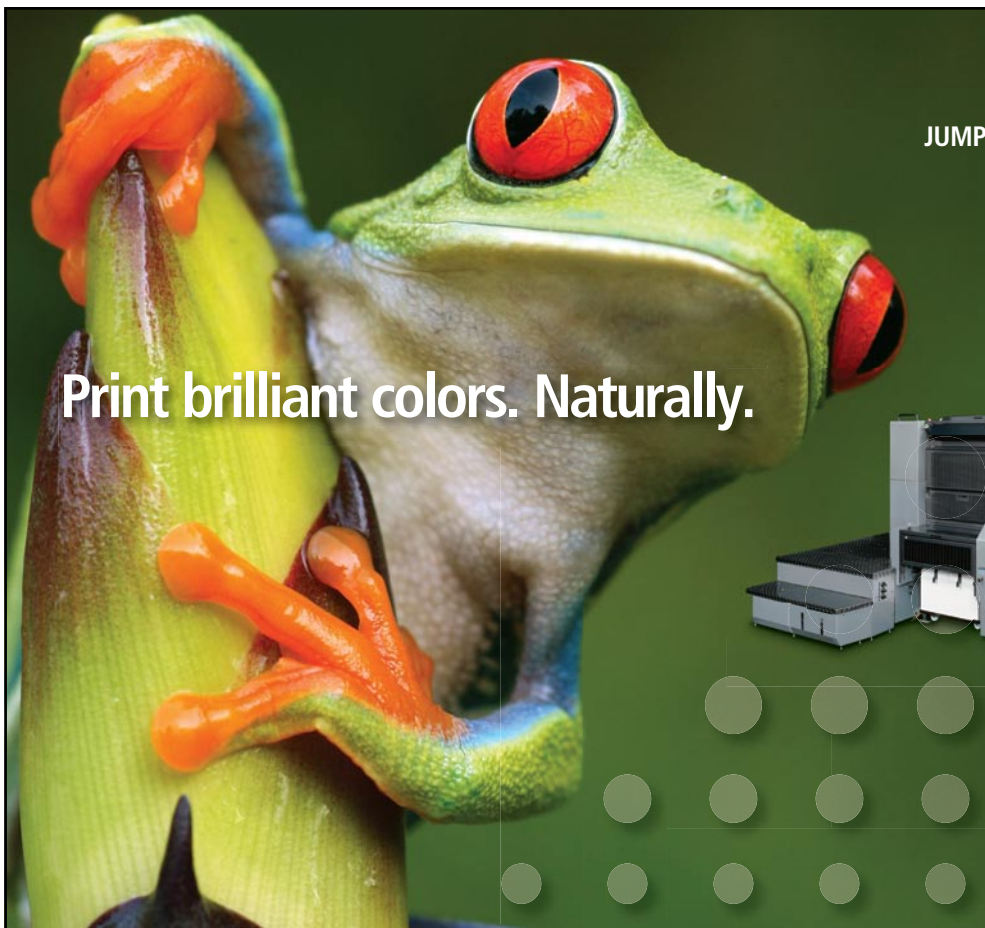
Though these in-plants and many others are strong believers in DI technology, not everyone has the right applications for it. The best candidates are those in-plants who see a demand for four-color in runs between roughly 500 and 20,000, but can't currently produce it cost effectively due to antiquated CTP/imagesetting and press equipment.

As for the future of DI presses, those who use them feel it is very bright indeed.

"I believe in it 100 percent," proclaims Thacker, of the University of Maryland. "I can see this really growing."

Adds Vessell, of the Missouri State Printing Center, "I'm actually thinking of getting another one. It's just a nice piece of equipment because it's affordable and you can do pretty nice four-color work." **IPG**

\* Presstek's 52DI handles a maximum sheet size of 20.47x14.76".



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