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# **IN-PLANT GRAPHICS**

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## **A New Age of Print**

**San Diego State University  
ReproGraphic Services has left  
outdated technologies behind and  
moved into direct imaging offset and  
on-demand digital color printing.**



**Leslie Rutledge, manager  
of ReproGraphic Services,  
stands with Eric Sarmiento  
and Jimmy Tang by the in-plant's  
Presstek 5334 DI digital press.**

# A New Age of Print in San Diego

SAN DIEGO STATE UNIVERSITY HAS LEFT OUTDATED TECHNOLOGIES BEHIND AND MOVED

By Betty LaBaugh



**S**AN DIEGO State University is an academically rich, urban university with more than 34,000 students, award-winning professors, top-notch research facilities and a location that serves as the gateway to Latin America. Like most universities—especially in California—SDSU is also very conscious of its environmental footprint and constantly monitors and works to reduce its impact on the environment.

In April of 2005, the university hired Leslie Rutledge to transform its in-plant, ReproGraphic Services. Her years of employment with commercial printers and graphic arts vendors made her the right person for the challenge.

“When I walked in the door on April 4, 2005, which is one of the busiest times for the shop, I found a shop that was operating with manual, paper-based processes and was having difficulty delivering to its potential,” says Rutledge, now manager of ReproGraphic Services. “The shop was wildly busy but not operating efficiently.”

Rutledge and her team of eight began by analyzing the current state of the in-plant and coming up with recommendations for revamping it. Key among those recommendations was replacing the shop’s outdated, chemistry-based computer-to-plate system and its two-color presses with a better solution to meet the demand for high-quality four-color printing.

Over the next 12 months, SDSU ReproGraphic Services did exactly that, installing an HP Indigo 1050 digital press and a Presstek 5334 DI press. The result was a completely digital workflow.

## The Way We Were

SDSU had one of the first CTP systems in San Diego, an ECRM TigerCat, but by the time Rutledge took over, that device was a little out of date.

“I was very concerned that one day we would show up for work and it simply would not be working,” she reveals. “I wanted to be proactive in replacing it.”

Although the SDSU print shop had installed Printer’s Plan, from SoftUSE as its MIS system, it had been put to limited use. While new jobs were entered into the Printer’s Plan system, employees would then use the same information to write a paper job ticket by hand. This made it difficult to track jobs through to completion to ensure that deadlines were not missed.

Another area of opportunity for improvement was the business card ordering process.

**Graphic designer Jimmy Tang and Leslie Rutledge, manager of ReproGraphic Services, have been pleased with the quality produced by their Presstek 5334 DI press.**

“We were outsourcing business cards using the old-fashioned process,” Rutledge says. “We would send copy to our provider. They would typeset it, fax us a proof, and we in turn would fax the proof to our customer. Then, some three to six weeks later, the customer would receive their cards. Not only was this a time-consuming process, but it could be error prone.”

### Beginning the Transformation

Since the university’s fiscal year began in July, one of the first things the SDSU ReproGraphics team did was make June 30, 2005, the cutoff date for handwritten job tickets. SDSU upgraded the Printer’s Plan software and built a bridge from Printer’s Plan to the university’s Oracle software (its financial



**Top: Operator Eric Sarmiento with the Presstek 5334 DI press. It was installed on a Monday and producing live jobs by Wednesday.**

## ITS IN-PLANT INTO DIRECT IMAGING OFFSET AND ON-DEMAND DIGITAL COLOR PRINTING.

management system) for streamlined information exchange.

“Just one example of how that has helped us is the ability to automatically transfer job data to Oracle for accurate chargebacks,” Rutledge says. “Manually keying our 29-digit chargeback codes into Oracle was a nightmare with plenty of room for error. And it was a task that consumed three people full-time. Now it is all automatic.”

Next, the team began investigating digital printing as a four-color alternative to the two-color presses. The team believed there was opportunity in variable data printing, and a significant volume of its jobs were very short run. So in July of 2005, the in-plant installed an HP Indigo 1050, and was able to quickly ramp up the volume.

“HP rates that machine at 100,000 impressions a month,” Rutledge says. By the end of January 2007, the in-plant had already racked up 2,659,216 impressions on it, she says—an average of about 152,450 per month. “It has been a big success for us.”

While the 1050 went a long way toward solving the shop’s four-color woes, there was still a production gap to be addressed. Letterhead had to be offset printed due to toner’s propensity to melt when run back through laser printers.

“We have over 200 departments in the university, and each has its own customized letterhead,” Rutledge says. “Additionally, there were a number of longer-run applications that were not cost-effective to produce on the Indigo. And we still had the issue of our antiquated CTP system and the inefficiencies of using a two-color press to produce these jobs.”

### The DI Decision

With that in mind, the in-plant began looking seriously into replacing its two-color presses.

“I had been reading about DI presses in the trade magazines,” says Rutledge. “I was intrigued about what was happening with that product category. Another attraction of the DI was the fact that it does not use any chemistry, an important consideration here at



**Left: Ed Steitz runs a job on the Baum folder.**

the university.”

After looking at a number of options, SDSU decided to purchase a Presstek 5334 DI.

“I was impressed by the service and support that Presstek offered, including its remote diagnostics capability,” Rutledge says.

The ReproGraphics team was also impressed with the quality, especially the ability to print high line screens on coated stock, and with the speed of the press. Finally, SDSU did an evaluation of the applications the shop was printing to ascertain how much of its work could be produced using the DI’s 12x18” format.

“Between the HP Indigo and the Presstek DI, I knew we could produce about 90 percent of the work that comes our way, and the rest we could job out,”

## In-plant Snapshot

### San Diego State University

ReproGraphic Services  
Employees: Nine

#### Key Equipment

- Presstek 5334 DI digital press
- HP Indigo 1050 with Yours Truly variable data software
- Two Toshiba eStudio 900s
- Duplo DC-645 DocuCutter with business card and perforation modules
- Horizon MC-8a collator with SPF-1011 stitcher/folder and FC-1011 trimmer
- Baum folder with right angle attachment
- Polar Mohr cutter



**Top:** In the university copy center, Aubrey Greenhouse (right) shows student worker Tinebeta Mekonnen how to input a job. **Right:** Graphic designers Jimmy Tang (standing) and George Garcia work on customer files in the graphics department.



**In the bindery,** Ed Steitz makes an adjustment to the Standard Horizon collator.

Rutledge says.

SDSU also chose to front-end the DI press with Presstek's Facet RIP, powered by EFI.

"There wasn't much cost differential, and we wanted to have access to the advanced capabilities the EFI platform offers," she says.

Getting approval to invest in the DI wasn't difficult, according to Rutledge. To help justify the press, she was able to sell the shop's two two-color presses and its existing CTP system to offset the investment.

Her director, Lawrence Peralez, worked with university officials to explain the value of this leading-edge technology and the DI's chemistry-free operation; not only would it reduce the university's environmental footprint, it would decrease ongoing costs. And with the on-press imaging of plates offered by the DI press, the university would not need to replace its CTP unit, since both functions would be condensed into one platform.

### Smooth Installation

The press was installed on a Monday, Rutledge says, and by Wednesday the shop was producing live work.

"The installation process was very smooth, and the Presstek team was terrific," she adds. "It was the right decision for us, and we have never looked back."

A key objective in this transformation was to create a more efficient workflow, keeping the process as simple as possible. The shop now utilizes a PDF workflow, and all proofing is done on the Indigo.

"We don't use our ink-jet proofer anymore," Rutledge says.

With the DI press and Facet RIP in place, the in-plant is producing timely, high-quality four-color printing, including 8.5x11" trifold brochures, flyers, four-color invitations, 11x17" newsletters, perfect bound books, media guides for Athletics, calendars

and much more.

"We are even producing large volumes of NCR forms and 11x17" posters," she says. "The amount of work we are putting through the shop has increased, yet we still have more capacity."

### Long Runs Cost Effective on DI

ReproGraphics is also producing some longer-run work on the DI, which is still more cost effective than outsourcing it. Rutledge cites a 40,000 run of fact sheets for Enrollment Services and a 70,000 run of letterhead as recent examples.

In addition to its reproduction equipment, the in-plant also has a full bindery, with a Standard Horizon collator/stitcher/trimmer/folder and a Baum folder with a right-angle attachment. The shop's nine employees are all cross-trained, including the graphic designer, who can run the HP Indigo press and

handles variable data projects.

To promote the shop's new capabilities to the campus, the ReproGraphics team ran a campaign called "Blast Off into the Digital Age" and hosted a series of open houses.

"The turnout has been great, and seeing what we have to offer first hand has generated a lot more sales for the shop," Rutledge reports.

Since revamping the in-plant, on-time performance is now at 95 percent. ReproGraphics has also brought production of all business cards in-house and is in the process of implementing an online ordering front-end using Pelagon's PrintStore product.

Producing business cards in-house has reduced order time from three to six weeks to a few days—or even the same day—and significantly reduced the number of errors.

"In fact," Rutledge says, "rework due to quality issues has virtually been eliminated. We have produced almost 500 business card orders alone since we implemented the new internal process."

As is required with any new equipment purchase, the ReproGraphics team sent new material safety data sheets (MSDS) to the university's Health and Safety department and informed it which on-file MSDSs could be eliminated.

"They were so amazed at how much the environment had changed and how much cleaner it is," Rutledge says.

Reflecting on the changes that have transformed ReproGraphics, Rutledge is pleased with the results.

"When you walk into our pressroom, it hums with efficiency, and it is spotless," she says. "My team takes a lot of pride in our digital transformation, and it has injected new excitement and energy into the department."

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