

Graphic Packaging Uses SHOTS simulator To Cut Start-Up Time by 50%

Graphic Packaging International, Ft. Smith operation, is a manufacturer of high-quality folding cartons, using both sheetfed offset and flexography. Once a small, independent operation, it is now part of the 8,000-employee, 45-plant packaging giant. It runs 24 hours a day, seven days a week.

Although the operation has a legacy of high-quality operation, with seasoned press operators, Dennis Capps, the company's pressroom trainer, was aware of the potential growing pains of being part of a large operation. He wanted to speed his training process and help the press operators to understand the process well enough to do their own troubleshooting.

"Troubleshooting is a lost art," says Capps. "Presses have become push-button operations, and most of the time, everything works great. But what happens when you push the button and the problem isn't solved?"

The Big Pay-Off

To better equip its press operators for the future, Graphic Packaging installed a Sinapse's Sheetfed Offset Simulator, SHOTS, in the fall of 2004. The simulator offers a series of graduated exercises that train operators to analyze and solve basic print problems and teach them how the printing process actually works. The simulator comes with a series of pre-defined problems, which printers can update with their own sample problems to suit their individual needs.

"You can tell people how to do things, but oftentimes, they are visual learners. They need to see something happen," says Capps. "This is all very well and good in many training situations, but on-the-job training in the pressroom can cost you hundreds of dollars an hour. The simulator teaches you how to think, how to troubleshoot, and solve problems without taking up time on a real press."

SHOTS has paid off for the Ft. Smith operation in a big way. When the company dramatically expanded, including the addition of five new presses, in May, 2005, start-up time could have been much longer. But because the plant had purchased SHOTS, start-up time was cut dramatically.

"When they built us a new building, we went from two sheetfed presses to seven," says Capps. "And yet, in just four months, we've turned out more than 20 million impressions. In one of our other plants, it took a year and a half to get up to speed. Already, we are exceeding their performance."

"Hands on" Approach to Training

Capps uses a very "hands on" method of training. Once the trainees go through orientation, he pairs them with a mentor for four to six weeks, where they serve as a general press helper. About half to three-quarters through that time, the operator steps back and the trainee begins doing the job himself. After six months, Capps begins putting them through SHOTS and they start learning the skills of a pressman.

Even on the simulator, Capps always pairs trainees with more experienced operators. "I pair them with an experienced person who knows the system and has done the exercises so they start learning the terminology and get up to speed very quickly," he says. "You can't throw too much at people to quickly or they forget it. Then, practice over and over again reinforces it."

Capps is an active participant in the training, and as trainees learn, he relates what they are seeing on the press back to the training exercises on SHOTS. "I say, 'Remember when you did this up there?' Then I have them do the same thing. It's been a very effective approach," he says.

Incorporating SOP in the Simulator

Because SHOTS teaches analysis and troubleshooting, not standard operating procedure, Capps keeps machine-specific SOPs on the company's intranet and integrates them into the simulator interface. This way, when operators run into problems on the press, they can access them from the press workstation, print them out, and follow the instructions.

"SHOTS help them recognize, hey, this is a roller problem," Capps observes. "But it doesn't teach them how to change the rollers. By making the SOPs accessible from the workstation, this allows them to take what they've learned on the simulator, and then put it into practice. Everything ties together."



Brian Peerson (right) and trainee Jerry Tedford

Benefit of Workbooks

Graphic Packaging is one of the first sites to receive Sinapse's SHOTS Workbooks to complement the simulator training. These workbooks are based around the PIA training program, reinforcing training on the simulator and providing step-by-step instructions on its use.

The workbook contains 150 exercises which introduce the simulator and follow the PIA Training Wheel, covering safety, feeding, inking, plates, and other critical aspects of the printing process. This allows printers to use the simulator as a support tool for GATF training, as well.

Despite the comprehensive and step-by-step nature of the workbooks, Capps prefers not to use them. "I want trainees to struggle with these problems a little bit, so I keep the workbooks squirreled away," he says. "SHOTS teaches them to think. I don't want to make it too easy!"

SHOTS improves Print Process Performance

Needless to say, Capps is a big fan of the simulator, and now that the company has some experience under its belt, he is looking forward to developing even more and more complex problems to stretch his operators even further. "Normally, it takes anywhere from three to five years to develop a good pressman from zero," he says. "The SHOTS program is very aggressive, and I feel that I can bring trainees up from zero to independent pressman in 18 months."