

PILOTS USE SIMULATORS - SO SHOULD GRAVURE PRINTERS!

BY STEVEN GOODER

I saw the early, pilot version of the simulator being demonstrated at the *Sinapse* H.Q. in Paris/F in the spring of 1998. It looked very promising then - but I wanted to see how far the project had progressed since then. I was not disappointed. ERA supported the promotion of this "training tool" during the IPEX exhibition and saw first hand the popularity and potential it has.

At a recent ERA Packaging Division Meeting in Avignon/F attendees were treated to a preview of the new *PackSim* training simulator for packaging gravure. This does for packaging presses what a flight simulator does for aeroplanes - but it costs a lot less and it runs on a PC.

It was pure coincidence that the presentation of the simulator came just after comments, made by several printers attending the meeting had suggested that finding qualified personnel was one of the industries main concerns.

Founder members

The simulator project was initiated by ERA's sister organisation the Gravure Association of America (GAA). A consortium was formed to finance and validate the simulator before it was released commercially. This group included printers such as *Westvaco*, *Hallmark*, *Graphic Packaging*, *Avery Dennison* and *Lawson Mardon*, and a varied group of suppliers including *Bobst*, *Daetwyler*, *Progressive Ink*, *Southern Graphic*. The prime contractor for the simulator construction was the French simulation specialist *Sinapse*.

You are in control

Specifying and constructing a model for packaging gravure has taken about two years. The audience attending the Avignon meeting saw the fruitful results of this exciting project. It has now become a viable commercial proposition. The *PackSim Gravure* simulator puts a complete press - from unwind, web conditioner, print units and rewind (or cutter/creaser) at the trainee's fingertips. It can simulate hundreds of print problems on different substrates and inks, including film, foil, paper, board with water-based or solvent inks.

Users are able to set up their own "production values" so that the viscosity, tension, temperature, blade pressures, in the simulated job, relate to the real values adopted by the printers in every day production. It is even possible to input your own scenarios - if you can see specific problems in the pressroom you can simulate them back into the training programme.

SINAPSE PRINT SIMULATORS

The philosophy behind the simulator is that you only learn by making mistakes - and the simulator is the place to be making them, not on the gravure press. Of course, there are lots of other reasons for using a simulator. Even fully trained staff can benefit from a few sessions with this software. Printers, generally, have no idea of the costs incurred in the production of low grade material. The waste is disposed of and the cost will only ever be known by a handful of people. This software will allow the trainee to see the costs of his actions during a training session, in real time (profit or loss). He or she will see how mistakes are usually very costly. This can only increase awareness on the part of the operator, which in turn usually creates an added sense of responsibility.

I asked some of the *PackSim* partners why they got involved and how they intended to use the simulator. ED DAVIS, operations manager of consumer packaging *Westvaco* said: "We consider training to be very important. In an industry with increasingly tight margins, any gain in productivity or quality is something we focus on. Large companies tend to invest capital in the best equipment, but fail in teaching their people how to use it. The *Packsim* training simulator is an investment in our employees. The benefits are significant. We plan to use our simulator for entry level training and advanced problem solving. What a great way to learn! Mistakes are free! There are no mad supervisors, bad material or unhappy customers! Certificates of expertise and "Team work" competitions are also possibilities. In short we believe there are excellent opportunities to standardise work procedures, improve quality, lower waste and increase output using the *PackSim* training simulator."

CHERYL KASUNICH, past Executive V.P. Gravure Association of America said: "At one stroke it solves many of the fundamental challenges and guarantees that production need never be interrupted for training. It eliminates the waste of materials and the threat of damage to equipment. Trainees are allowed to try out every conceivable variation in press control. Something that could never be tolerated on real production equipment".

How do people learn about gravure. Very few countries have schools that actually teach gravure printing. Most schools, at best, teach gravure as one of the print technologies - and almost none have a press. As apprenticeships decline in many regions, there is no longer any good way to train people without doing it on the press, on the job. At ERA we feel strongly that the *PackSim* simulator will make it possible to reintroduce gravure into print education.

A major challenge for the gravure industry in the next few years is to define "skills standards" for its personnel - what competent personnel in each area are expected to know. This is now being done in offset, and flexography is starting the same sort of push. We must not let gravure fall behind in this area. Along with this set of standards, we need to define a core curriculum that schools can implement to teach gravure. This curriculum can often be tied to a set of simulator exercises so that students and printers can put into practice what they are learning. The industry cannot grow without knowledgeable personnel. Let us all work together to make this happen.

For more information, contact: www.sinapseprint.com.