

# Heatset Simulator Levels the Playing Field at Quebecor World

What do you do when your unionized printing plant is switching from mechanized coldest to computerized heatset and you want to do employee competence evaluations as part of that transition?

Not only are pressmen learning a new printing process, but they are interacting with the press in an entirely new way. Instead of changing press conditions by pushing buttons, they are diagnosing symptoms based on a computer screen. How can you separate a pressman's understanding of a printing process from his or her ability to adapt to reading a computerized console?

Then there is the issue of luck. If you are conducting evaluations on a live press, certain issues may arise on one shift but not another. How can you ensure that everyone is working on a level playing field and that the evaluations are fair?

This was the question posed by the management of Quebecor World Saint-Romuald to The Québec Institute of Graphic Communications (ICGQ) in Montréal in preparation for the site's transition from coldset to heatset. ICGQ's answer? Use a Sinapse Heatset press simulator.

## **Creating a Level Playing Field**

ICGQ, which does employees evaluations as part of its member services, has been using the Heatset simulator from Sinapse Graphic International for two years. The simulation resides on its server, giving the organization the ability to run multiple simulations for press operators, but it speeds the evaluation process and ensures that testing is comprehensive since it does not depend upon the variable conditions in the pressroom.

At Quebecor World Saint-Romuald, 24 pressmen needed to be evaluated. Not only was Quebecor making the move from coldset to heatset, but it was investing in a lot of add-ons, including closed-loop color control. Management wanted to establish its press team's existing competence level and create a comprehensive ongoing training initiative based on real-world skills.

Before The Québec Institute of Graphic Communications does any evaluations, however, it contacts the union, if one is involved, as a matter of policy. "This way, we know that everybody is comfortable and that we will get the employees' full cooperation," says André Dion, General Manager of ICGQ.

In Quebecor's case, the union was thrilled. It immediately recognized that, by using the simulator, the playing field would be much fairer than if the evaluations were conducted on press.

## **Separating Process from Computer Skills**

Training on the simulator also separates out each pressman's printing knowledge from his ability to work and analyze problems from a computer screen rather than adjusting things manually on press.

"Some people adapt easily to working on a centralized computer console and others don't," says Dion. "Using the Heatset simulator, we are able to document operators' current skill levels, and if they need more training, whether it needs to be in the centralized control aspects or the printing process itself."

Although the Heatset simulator is designed to test (and train) on all aspects of press operation, from roller pressure to ink/water balance, Quebecor World was only concerned about evaluating ink color and register to determine how quickly press operators will be able to make-ready the new press. For this reason, it also wanted to include the X-Rite Munsell Hue Test to test press operators' color perception.

### **The Evaluation Process**

In total, the evaluations were carried out over a period of about a week. Simulator evaluations required one trainer and took approximately two hours per pressman—one hour to teach them how to use the simulator and one hour to go through the test. Five exercises were used in the training, taking operators over the full range of the press. Three exercises were used in the final exam. An additional hour was required for the Munsell Hue Test.

Once complete, these evaluations gave Quebecor World a very important set of information:

It knew the strengths and weaknesses in the skills of individual pressmen. If Quebecor World saw a pattern of weakness within an entire team, it knew that a larger training issue needed to be addressed.

It is now preparing a training program to address any weaknesses revealed during the evaluation process. It is also developing a continuous improvement program that will likely include the purchase of its own simulator.

The evaluations have also helped to identify the people who have the best ability to learn and grow professionally. Quebecor World is planning to purchase a second press, so these evaluations will help to determine which pressmen have the best opportunity for advancement.

### **Accurate Reflection of Real-world Conditions**

Everyone involved in the evaluations has been very impressed with the realism of the Heatset simulator. "There are some real-world conditions that are hard to simulate, but overall, the simulator very closely represents what pressmen actually experience," says Michel Martineau, trainer for ICGQ. "For things like color and register, it's dead on."



For this reason, Martineau says, the simulator evaluations served an important training function, as well:

"With today's automated equipment, press operators no longer go into the units and make corrections. They simply pick up a signature, go to their control panel, and try to get the copy as close as possible to the color proof. Because they don't get to see the inner workings of the press as much as they used to, the simulator helps them to develop their judgment by answering the question, 'If I make this correction, will it correct the problem or should I stop the press and make adjustments?"

A secondary benefit has been to sensitize pressmen to the cost of errors. The Heatset simulator tracks, not just results, but the path the pressmen used and the number of steps it took them to get to there. Once these factors are known, the simulator also calculates the "cost" of the simulated production run. This way, pressmen know just how much time it took them to make the corrections and how much the "error" cost their employer—in this case, Quebecor World.

From a training perspective, ICGQ also likes that the simulator's multimedia function allows trainers to attach any type of file, including

PowerPoint, video, or whatever might be composing a press (slitter, units, ink train, blankets, folder), to create a standard procedure in the client's pressroom. "It takes a little bit of time and imagination from the trainer," says Martineau, "but there is tremendous benefit to be gained from it."

Overall, the experience was extremely positive for all involved. Even Quebecor World's in-house union was left with extremely positive impressions. It is now lobbying to have the Sinapse Heatset simulator involved in all future training, whether Quebecor World Saint-Romuald purchases its own simulator or not.