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Calgary Herald goes stochastic

By Chuck Moozakis
Editor-In-Chief

The Calgary (Alberta) Herald hopped on the stochastic screening bandwagon, in the process becoming the first Canadian daily and one of the largest North American newspapers to employ the printing technology.

The Herald made the switch in September, according to Candace Bergman, quality assurance coordinator.

"Advertisers love it and we're thrilled with it," she said. "It's made a significant difference."

The Herald (daily, 129,000) laid the groundwork to convert to stochastic late in 2003 when it purchased two thermal Trendsetter News 150 computer-to-plate units from Creo Inc.

Some 17 newspapers use Creo's stochastic screening, ranging from The Bulletin in Bend, Ore., to The 128,000-subscriber News Tribune in Tacoma, Wash. The twice-weekly St. Albert Gazette was the first Canadian newspaper to employ the technology, according to Creo.

Bergman said the Herald examined other CTP platforms, but the "crispness of the printing dot" produced by the thermal imaging head convinced the newspaper to go that route. Creo employs a process dubbed SquareSpot to produce the dot.

Still, before the Herald could move to stochastic screening, the newspaper had to ensure its other prepress and press technologies could support the technology.

Although thermal infrared lasers produce high-quality dots as plates are exposed, reproducing those dots on high-speed newspaper presses takes extra work.



Trent Anderson, vice president of manufacturing and distribution, in the Calgary Herald's pressroom.
Photo: Calgary Herald

Different mode

That's because stochastic screening relies on a different way to reproduce images and graphics. In conventional AM screening, contrast and color are managed by varying the size - and not the number - of printing dots.

In stochastic, or FM screening, the dot's size remains unchanged. Instead, contrast and color are managed by how many dots are packed together. The more concentrated the dots, the more dramatic the color and contrast.

Conversely, the less dense the dots, the less vivid the color and contrast. With the Herald employing a stochastic screen comprised of 26-micron dots, precise resolution was essential, Bergman said.

To reproduce the stochastic screen accurately, the Herald's 23-year-old Goss Metroliner would have to be fine-tuned accordingly.

"Our primary goal was to get better control of the press itself," Bergman said. "It wasn't meant to print as much color as we do on a daily basis, and we also needed it to print under perfect conditions to produce stochastic," she said.

Bergman said Herald executives, led by

Trent Anderson, the newspaper's vice president of manufacturing and distribution, supported the initiative. "In addition, employees made the transition from conventional to stochastic seamless," she said.

Common ground

To ensure consistency, the Herald examined every part of the press and huddled with major suppliers Burgess Industries Inc., Sun Chemical, Alberta Newsprint Co., Creo, Southern Lithoplate, Ecotek Solutions and ProImage, which, provided workflow software.

In addition, it received advice from US Ink's color experts as well, Bergman said, as part of the paper's bid to be considered for membership in Ifra's International Newspaper Color Quality Club. Two Toronto newspapers, The Toronto Star and The Globe and Mail, attained membership for the 2004-2006 INQC.

"We had to make some alterations to the tone curves from the RIP stage because stochastic results in more gain than from conventional dots. We ran quite a few tests," she said.

On Sept. 2, testing ceased and the Herald printed its entire run with stochastic screening. "We haven't looked back since," Bergman said. "We've seen benefits in both registration and detail."

Bergman said the Herald is now in the process of tweaking its printing in order to further improve reproduction.

The paper, for example, is reducing ink laydown, from 240 to 220, to take advantage of the quicker drying time associated with stochastic screening.