

NZ's First Chemistry-free Plates at PrintHouse Nelson

Company: **PrintHouse Nelson**
Location: **Nelson, New Zealand**
Type: **Commercial Printer**
Size: **More than 20 employees**

Situation: **PrintHouse Nelson, a leading commercial printer based in New Zealand, was interested in bringing in a CtP system to replace its imagesetter. The original plan was to hang on to the imagesetter and use it as a backup to the new CtP system**

Solution: **PrintHouse opted for the :Acento CtP platesetter with :Azura plates, a chemistry-free system.**

Results: **The original plan has been slightly modified, as keeping the imagesetter as a backup was no longer viewed as necessary. The quality and convenience of the :Acento with :Azura so exceeded PrintHouse Nelson's expectations that the company has decided to do all of its prepress work using the Agfa system. Executives there have also been able to lower their prices thanks to the costs savings attributed to using a system that is chemistry-free.**



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New :Azura plates and :Acento CTP provide savings, improve quality, and benefit the environment

The prospect of eliminating harmful chemicals from the prepress process was a major incentive for commercial printer, PrintHouse Nelson – the first New Zealand company to take up Agfa's chemistry-free :Azura plate system. Packaged with an :Acento S platesetter, :Apogee X workflow, :Sherpa 24M proofer, and :Sublima cross-modulation screening, the new :Azura installation has already produced significant monetary and time savings and print quality improvements, at the same time as reducing the company's own impact on the environment.



General manager, Tony Woodall (left) & Aaron Tombs production manager with the :Acento S platesetter that images the company's :Azura plates.

"I'm not usually keen to be the first with something, but I'm happy to be in this case," says Tony Woodall, general manager at PrintHouse. "The new system has exceeded our expectations. With :Azura there are no chemicals required – and that was a real selling point to local council and us."

"It has also brought our prices down. There are additional costs with chemicals and film and we've been able to eliminate those."

Agfa's :Azura system uses ThermoFuse technology to physically bond images to the plate without chemical processing, eliminating process variables for reliable, consistent results. A negative-working plate combines a standard electrochemically-grained and anodised

aluminium base with a single coating of ink-accepting thermofusible (latex) particles.

During exposure to a standard thermal laser, the coating absorbs heat in the image areas, fusing the particles and bonding them to the plate.

Instead of washing with hazardous chemicals, the :Azura system uses a gumming solution to remove the unexposed particles from the plate which Woodall says can be disposed of safely.

PrintHouse evolved in 1994 from three Nelson print companies (General Print, Enterprise Print and Stiles) and most of its customers are local businesses. Utilising a number of one-, two- and four-colour A2 presses, and a range of finishing equipment, PrintHouse produces everything from adhesive labels and business cards to full-colour brochures and books.

The :Azura plates (available in sizes from 2-up to 8-up) are particularly suited to low/medium volume thermal CtP users like PrintHouse and provides 2-98 percent screen tints at 200 lpi with runs to 100,000. The plates are robust and scratch-resistant for easy handling and offer the convenience of daylight processing. They also work with existing press chemistry so inks, fountain solutions or alcohol substrates are all retained.

For Woodall the choice for :Azura was easy and the company now runs the chemistry-free plates exclusively.

“Chemicals cost money, they stink, and they’re not good to dump down the drain,” he says, “and the :Azura system is far more stable.”

The :Azura plates are processed on the :Acento S external drum thermal platesetter. The 32-channel :Acento, which can produce up to 20 plates an hour, offers resolutions of 1200-200 dpi and 2400-4000 dpi. It handles plate sizes from 324x370mm to 660x830mm (0.15mm to 0.3mm

thick). Separate loading and unloading bays mean one plate can be staged while another is imaged. Automatic inline punching within the device (with configurations available for all major presses) enables imaged plates to go directly to press.

Woodall says the decision to use manual plate loading was based on their plate volumes and was ‘more than enough’ for the company’s needs. The production speed and simple plate process is also an advantage, he says.

“Just load the plates and go – it’s that simple. We are processing a plate every six to eight minutes. Where previously it took two hours to get from disk to the press, now it is just 40 minutes, and with the plate register system the time for make-readies is much quicker,” he adds. “I think simple is always the best.”

Including :Sublima screening with the :Azura/:Acento system has also benefited PrintHouse. The company’s customer list includes many local designers who already report big improvements in print quality. “We have created a lot of interest with the designers,” says Woodall. “They are extremely impressed with the quality we are getting now – it is no comparison to where we were before.”

Agfa’s :Sublima combines the benefits of AM (amplitude modulated) and FM (frequency modulated) screening technologies – smooth gradations and highly controllable midtones, with fine detail rendering in shadows and highlights, and continuous-tone like reproduction.

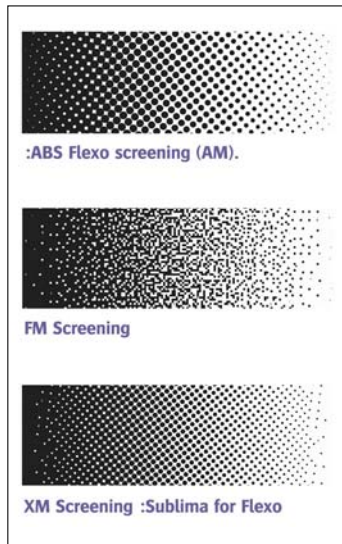
FM dots align along AM paths and replace AM dots at the precise point where the AM dot can no longer be held on a specific press, resulting in a smooth transition from one mode to the other with no visible crossover.

The :Sublima screening can produce a 1-99 percent dot at higher frequencies to capture fine details and vibrant colours and can achieve screen rulings to 340 lpi. Press characteristics are



A side view of the :Acento S platesetter (to right) with the :Azura C85 gumming unit at left.

also taken into account so that no dot will be produced that the press cannot hold. Therefore process tints, fine lines and delicate typefaces print like solids using four-colour process. Enlarging or reducing images does not effect the print quality.



“With :Sublima, the plate holds the dot better so there is less spread and this produces better fleshtones,” explains Woodall. Removing the film step from the process has also added to the quality improvement. When explaining the change to clients, Woodall likens the film step to photocopying a photocopy (not the original) – detail is lost with the extra step, just as it is when film is produced before the plate.

PrintHouse has been an Agfa customer for over a decade, a factor influencing the company’s choice of CTP system. “They have never let us down before,” says Woodall. “The changeover has been seamless – it only took a couple of days – and there have been no problems at all. We were going to keep the film imagesetter as a ‘just-in-case’ but we decided there was no need.”

Woodall believes PrintHouse is in a good position now to stay ahead of its competition, particularly larger mainland printers eyeing-off Nelson as a potential market.

“We are the largest print company in Nelson but it is an incredibly competitive environment. Holding market share is hard work but with the new equipment we can produce good quality at a good price. Everybody wants and expects top quality work, but price and service are still the bottom line. Our aim is to continue to be the best printer in Nelson.” ♦

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