# A period of transition

Silver halide photo printing is facing its first serious challenge in over 150 years, but it's still got a lot going for it, especially for high volume installations.

David Small, national sales manager for Noritsu Australia, says reports of the death of the silver halide minilab are premature. He concedes that the market is shrinking "but there is still a market there."

His trump card supporting the health of silver-based photo printing is Noritsu's new HD versions of the QSS 37 series, which can print at 640dpi, as opposed to the standard 300-320dpi of current silver halide minilab printers. (The HD machines can also be switched to 320dpi operation.)

"The image quality achievable from digital photography has encouraged further development. I don't think this will be the last development. I would be surprised if there weren't a few more models coming," he said. Noritsu has already installed one of these state-of-the-art machines at pro lab, Bond Imaging, in Melbourne.

Small says there is little discernible difference in quality printing 6x4s at 640dpi, "but for larger prints, using RAW files, the quality is incredible.

"This is the pinnacle of silver halide printing technology," he said.

Independent Photo Supplies, which distributes Noritsu equipment with Tetenal tablet chemistry - and a good deal else - to independent photo specialists around Australia and New Zealand, is also a fan of silver halide, particularly for larger

"For large volumes - more than 20,000 prints a month - silver halide is the way to go," says managing director, Stuart Holmes.

"Last year people like Ted's were looking



Independent Photo Supplies managing director, Stuart Holmes.

at dry technology. Ted's installed all dry equipment in one store - HP and Kodak APEX - and now they've taken them out and gone back to Noritsus using CPAC chemistry in four major stores.

"That's a decision which has ramifications for the next few years. It makes us confident silver halide is a viable product into the future.

"It's horses for courses, dry labs have their place. One of our customers has taken out his wet minilab simply because of the relatively large footprint. He feels he can make more money with a dry lab, using the extra space for retailing."

As for the new HD equipment, Holmes observed; "I don't think Noritsu would be spending money developing new equipment if there wasn't a market for it.'

Noritsu is now the world's leading minilab manufacturer by a country mile, as it also makes Fuji Frontier equipment both wet and dry labs - in addition to its Noritsu badged machines. "Noritsu is a manufacturing company," explains Small. "We have no issues supplying anyone."

However, the Noritsu and Frontier labs are dissimilar in one critical area: software. The computer software to drive the otherwise identical systems is different, with Fuji using its own tried and trusted Frontier software. A senior Fujifilm minilab executive is on the record as claiming Fuji's software is superior to its competitors: "We feel our image intelligence is more advanced and we will continue to use the Fuji systems on all Frontiers, regardless of who makes the back end," he said.

The Noritsu inkjet printers are the first genuinely viable alternative to silver halide printing. They produce similar quality images, at a range of sizes and at a cost which is closer to silver than the third alternative - dye sub technology. They are a combination of Noritsu and Epson technology. Small likens it to, say, Dell



Noritsu Australia national sales manager, Dave Small.

using Intel computer chips in their PCs. "It's purely a technical alliance with Epson. We use an Epson printhead and do a lot of work on it. It's not a standard printhead, nor standard ink."

He emphasised that in addition to quality which is hard to pick from silver halide, the Noritsu inkjet technology produces prints which are fade resistant for 95 years and extremely water resistant. "We think that our technology is unique and there are still some big developments to come. We believe inkjet is going to get even better," said Small. Holmes was on the verge of importing DNP Nexlab dye sub photo printers last year, but after having a close look at the just-released Noritsu D701, changed his plans.

"We looked at the Nexlab from every angle, but just felt the D701 and its technology has a lot more room to grow.

"There's three in the range already, and who knows what else is in the melting pot?

"Dye-sub is really yesterday's product. It's too limiting in the range of sizes and it only prints to not much larger than A4. Not surprisingly, Small agrees: "Dye sub has reached its pinnacle. It's never going to get much better."

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# **New gear at PMA**

We look at new minilab solutions from PMA 09 which are likely to be released in the Australian market. Most of this equipment will be on show at PMA Imaging Technology show in June.

## **Fujifilm**

Fujifilm announced the Frontier Dry Minilab DL42SD, and Frontier Dry Minilab DL430 dry inkjet minilabs.

The Frontier DL42SD is custom-made for custom photo books. It is offered with an optional automatic double-sided print unit and paper cassette. The Frontier DL430 has a dual roll paper capability that allows printing of multiple sizes or surfaces to occur simultaneously for efficient, increased production.

Fujifilm also introduced a number of software advances to support the new machines, including the latest version of Fujifilm Frontier Workflow Management Software "MS". The enhanced MS software

Fujifilm Frontier DL42SD.



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## What's a print cost?

Using Noritsu equipment as a guide – the exercise would be roughly the same with Fuji Frontier equipment – the price differential between a D701 and the entry-level Noritsu QSS wet lab is around \$40,000. If the cost of producing a 6x4 inkjet print was a full 10 cents greater than producing a 6x4 silver print (a fairly extravagant assumption in favour of silver halide) then a retailer would have to produce 400,000 prints before the silver halide minilab paid back the extra dollars in purchase cost.

Of course, minilab operators also sell enlargements, and the cost difference

Fujifilm
Frontier DL430.

feature set supports a wider array of devices such as the DL42SD, DL430, Fujifilm /Epson wide format Stylus Pro 7880 and the Xerox

feature set supports a wider array of devices such as the DL42SD, DL430, Fujifilm /Epson wide format Stylus Pro 7880 and the Xerox Phaser range. Fujifilm also showed a new dye-sub photo paper, Fujifilm Quality Thermal Photo Paper. Fujifilm says the new resin-coated paper provides easier handling and prints with the same level of whiteness as silver halide. The paper is optimised for use with Fujifilm's ASK 2500 Dye Sublimation Printer.

Fujifilm also released a new silver halide paper, Fujicolor Crystal Archive Professional Paper Deep Matte, which is specifically designed for digitally printed professional photographs. The new paper can be printed on large format digital printers and with the Frontier digital minilab series.

#### Kodak

Kodak announced new thermal printer options for its modular APEX retail printing system at PMA which will be available this year – the model 7010 with backprinting for additional order management and consumer messaging, as well as the model 7015, which combines backprinting with premium borderless 5x7 printing. Both printers enable the retailer to select gloss and one of two

different satin finish options from a single media SKU, simplifying retailer inventory management while providing consumers more choice. The APEX unit at PMA also featured a new three-printer 30-inch cabinet, which enables up to 900 4x6 prints per hour and 8x10 printing capability in a small footprint, and a new 70-inch configuration for up to 1800 prints per hour (Australian availability of all these new configurations is not yet confirmed).

Another component of the APEX system is the Kodak DL2100 Duplex printer, a relatively low-cost, add-on electrophotographic print system, which enables in-store creation of duplex products such as cards, calendars and photo books.

APEX now also connects directly to the Kodak Rapid Print Scanner for behind-the-counter scanning for collages and photo books, Kodak Picture Movie DVD and Picture CDs.

between the inkjet print and the silver halide print becomes a lot more dramatic the larger the print size, but nonetheless, inkjet seems to have a lot going for it.

- So how much does a silver halide print cost to produce? "It depends on who you are buying your paper from," quips Noritsu's Dave Small. Buying from what Small coyly terms a "traditional source" he says the cost is around 11 cents a print, while he says an inkjet print is around 13 cents.

"But you are really working for your 11 cents," he adds. "The 13 cent print is very simple to produce.

"You just turn it on in the morning and it

starts working. The ongoing costs are around \$7 – 8000 per year, while full maintenance coverage on a dry printer is \$3000 per year."

"Non-traditional" paper supplier Stuart Holmes, who distributes DNP paper and both CPAC and Tetenal tablet chemistry, says the price differential between wet and dry prints is much greater than Smalls' estimate; "silver halide is about half the cost of inkjet, I would say."

He also makes the point that there are plenty of good quality second hand minilabs around which will reduce that high initial capital investment, such as the Agfa D-Labs being replaced by Frontiers in Big W stores around Australia.



New lab manager software upgrades include optimised image rendering algorithms to produce orders faster and track delivery progress.

### Noritsu

Noritsu Koki announced the release of five new models in the QSS-37 range with 640dpi print capability – the QSS-3701HD, QSS-3702HD, QSS-3703HD, QSS-3704HD, and QSS-3705HD.

The QSS-37HD series has all the features of the current QSS-37 series. Aside from the new high resolution laser exposure system, all the main specifications are the same.

Maximum paper width is 12 inches, and the maximum paper advance length is 36 inches. Noritsu also announced the dry (inkjet) D703, the third in Noritsu's line of inkjet minilabs. A key feature of the new printer is that in addition to the internal paper roll, you can also choose to add a second roll to the front of the printer. This extra roll enables you to produce a wider variety of print sizes without having to change the paper. When the paper in one roll is depleted, the printer will

automatically begin printing from the other roll if the same paper size is being used for both rolls. The D703 also supports sheet paper in addition to roll paper. When setting both roll paper and sheet paper, it is possible to automatically switch between output from these two paper types.

Maximum print size is 10x36-inches (with a RIP). Throughput speed is up to 650 prints per hour, or 250 8x10s per hour. Noritsu says the D703 is best suited to low and midvolume stores. You can connect a wide variety of consumer kiosks, film scanners, CD/DVD writers and other input/output devices, making for a scalable system that allows you to add new services as needed.

According to Dave Small, the D703 may not reach Australia until early next year.

The D502 is slightly slower (500 prints per hour) than the D703 and D701, but has the significant advantage of automatic duplex printing of photo books, calendars, double-sided business cards, double-sided postcards and greeting cards.

It can be used as a main printer or linked to a QSS minilab or another printer. Noritsu also has its own Noritsu EZ Photobook

# "... automatic duplex printing of photo books, calendars ... and greeting cards."

Binding System to augment the D502. This includes a binder, a creaser and a cutter and uses a gluing system to bind the book.

The D502 supports sheet paper of various sizes, thicknesses, and paper surfaces. Glossy and semi-glossy paper can be used when making single-sided prints. When making duplex prints, thin semi-glossy paper can be used for photo book pages, plain thick paper can be used for photo book covers, and thick semi-glossy paper can be used for calendars and greeting cards. Noritsu supplies its own paper for the new printer.

The footprint of the D502 is a just 0.34 square metres (3.66 square feet). Only the front side needs to be accessed for maintenance, so it is possible to place the machine against a wall.



Noritsu D703.

