

# DIGITAL PRINT MAKER

## RIHAC REVISITED

The cost of inkjet printing can be a deterrent to high volume outputs which is where the bulk delivery systems could be an advantage. Trevorn Dawes follows up on his original appraisal of the Rihac system with the results of his own fading tests.

**T**he temptation to consider third-party inks, in either cartridge or bulk ink form, is ever present when the cost of genuine ink cartridges is so high. In the January/February 2009 issue of *Camera* I took a look at the Rihac ink system which uses external bulk ink tanks. Since then I've been conducting some basic longevity tests to see how the prints I originally made with the system would hold up compared to those made with the printer's branded inks.

When it comes to inkjet printing I've always stayed with the recommended inks primarily because I could rely on consistent quality and make prints that weren't going to fade away in just a few months. This policy has worked admirably using a variety of Epson, Canon and Hewlett Packard printers from A4 format to A1, either personally owned or as machines for review. My only regret has been the cost of replacement cartridges, especially with the more-expensive-to-run A4 and A3+ printers.

After several associates kept hammering away with strong recommendations I decided to give the Rihac inks a trial on a popular A4 printer. The published report had ticks for quality and high praise for economy (around 90 percent on the genuine cartridges), but the only doubt remained in the longevity department and that was something I couldn't resolve in the few weeks before working with the Rihac inks and compiling the original article.

In order to fully satisfy my curiosity I prepared a set of prints with the genuine inks and another set with the Rihac inks and taped these to a large piece of cardboard. Half of each print was covered. The cardboard was placed close to a window, but in a position that it did not receive direct sunlight. This can be regarded as rather brutal treatment for any print and hardly the way a print should be handled. It isn't







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that won't cause clogging problems and image quality isn't an issue, especially if you know how to apply manual overrides to the 'canned' printer profiles or can organise some personal ICC profiles. As I've just noted, image permanence doesn't equate with the genuine inks while any issues with printer warranties as a result of damage possibly caused by the use of third-party inks is something of a minefield.

I've continued to use the Rihac inks in an A4 format printer for the tasks I don't need to do on a 24-inch wide printer. Tasks like rough prints, dummy book layouts, greeting cards and calendars. None of these are intended for long-term usage, but I know the prints are good enough for a few years and so I'm happy to enjoy the cost benefits. When you consider most genuine inks for smaller printers cost about \$2.00 per millilitre, but the on-going cost of Rihac bulk inks averages out at 13 cents per millilitre, it's a set of sums difficult to ignore. The high cost of genuine cartridges lies in the method of delivery rather than the ink itself, but even so the bulk method stands out.

We might ask why the big three inkjet printers don't offer bulk ink systems of their own to knock out the alternative ink competition. It's a fair question.

There is a broad observation to be noted regarding the whole business of inkjet printing. Many photographers would dearly like to be making their own prints in fair volume, but are well aware that inks are discouragingly high in cost. If you can reduce ink outlay by as much as 90 percent with a reputable bulk ink system and still achieve good quality then the concern about image longevity may not be a problem. The exceptions here would be for things like family history records, exhibition-quality prints for long-term display and prints for commercial sale. These are the applications where I continue to use the recommended inks and recognise the extra performance they deliver in this key area. 📷

1. The Rihac bulk ink kit shown positioned close to the printer. In my set-up the printer and ink tanks are contained in an open timber box to keep everything together and to allow easy portage. A black box is normally placed over the ink set to shield the inks from light.

2. Photographs prepared with both Rihac and the recommended inks taped to a board and half of each print covered. The board was placed close to a window, but not in direct sunlight. Inspections on a monthly basis were made to check the differences between the protected and unprotected areas of the prints.

brutal treatment. With that attribute established, it would be fair to say that Rihac inks are well suited to uses that don't require the print to last for a long time. The range of such applications is extensive enough.

When it comes to prints intended for competition or even images for framing, the ink costs are inexpensive enough to write off any damage or loss. A bulk ink system like Rihac does, I believe, have a worthwhile place in the scheme of things.

I cannot comment on other alternative cartridges or bulk ink systems, but I do know some are pretty terrible and it's very much a case of 'yer pays yer money and takes yer chances'. No inducements have been received from Rihac and I'm satisfied enough to call a spade a spade and extend a recommendation. I do so with emphasis of limited longevity that will nevertheless be adequate for most short-term projects.

### Cost Considerations

Rihac is currently conducting its own fading tests more in keeping with the methodologies employed by Wilhelm Research. It will certainly be interesting to see these results, especially if direct comparative tests are made with the inks from Epson, Canon and Hewlett Packard.

The 'big three' in inkjet printers are unlikely to welcome other ink alternatives and may well caution against drawbacks such as potential clogging problems, poor image quality, lack of image permanence and problems with printer warranties. The Rihac inks are finely-ground dyes

a particularly scientific approach and one that the Wilhelm Research Inc. would frown upon, but it was my way of making comparisons I could see and understand.

### Small Change

After 16 months of this exposure, not surprisingly some changes did occur and more in the matte papers than in the gloss materials. Although the difference between the protected and the unprotected halves of the prints was noticeable, it was not sufficient to warrant throwing prints away. Of some significance was the observation that the changes occurred with both the Rihac inks and the recommended inks.

Rihac has never claimed that its bulk inks will match the longevity of recommended printer inks, but what we all need to appreciate is that they will endure for a few years at least provided storage or display doesn't involve