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Slash Ink Jet Printing Costs

InkSaver improves cartridge page yields--with some quality compromises.

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Ink jet owners know that their printers consume cartridges like an SUV gobbles gas. Strydent Software's new [InkSaver](#) software promises to boost pages per dollar by cutting ink use--without severely degrading image quality.

I tested InkSaver by comparing ink consumption and output quality, both with and without the software, on three top-quality ink jet printers: Canon's S750 Color Bubble Jet, Epson's Stylus C80, and Hewlett-Packard's Deskjet 995c. (InkSaver works only with recent ink jets from those three vendors.) My conclusion: InkSaver is convenient and works well enough to justify its \$35 purchase price, with some caveats.

Pages by the Penny

A set of ink cartridges for the Deskjet 995c costs \$65--\$30 for a black cartridge that HP says should print about 833 pages, and \$35 for a color cartridge that should print about 450 pages. This works out to about 3.6 cents per page of text and about 11.4 cents per page of color (7.7 cents for the color inks and 3.6 cents for the black ink used to control shading; see "[How to Figure Ink Costs](#)" for details).

Impact on Output

In tests without InkSaver, the page yield was slightly lower than HP's spec for black text and much lower for color, so actual costs were about 3.7 cents for text and 15.3 cents for color. With InkSaver set for 50 percent ink savings, I more than doubled black text pages and nearly tripled color output, so suddenly the black text page cost only 1.7 cents, and color cost 6.1 cents. InkSaver reduced page costs for the Epson and Canon printers too, but those savings varied ([see chart](#)). And the software had no noticeable impact on printing speed.

There were, however, two catches. First, not all documents look great painted with a partial bucket of ink. With InkSaver set to 50 percent savings, none of the three test printers yielded color graphics I found acceptable, though black text appeared fair on the S750 and almost tolerable on the 995c. At 25 percent, text looked fine on all three printers; and for color graphics, the HP 995c gets a full endorsement, while the Canon gets a maybe ([see chart](#)).

The second catch is that InkSaver may not always save as much ink as you would expect. When set for 50 percent savings, it boosted yield by half virtually across the board. Set at 25 percent, it boosted the color yield on all three printers; but on text, only the Epson C80 showed significant improvement.

InkSaver makes it easy to switch back and forth between settings via separate sliders for black and color (a degree of control you don't get with the economy/draft setting available on most printers). InkSaver can pay for itself after just a few cartridges. But since quality trade-offs vary by printer, your best bet is to download the free trial version and see how it works for you.

Buying Information

[InkSaver](#)



Strydent Software

Street: \$35

PRINTER	Text: Without InkSaver	Text: With InkSaver (25 percent reduction)	Text: With InkSaver (25 percent reduction)	Text: With InkSaver (50 percent reduction)	Text: With InkSaver (50 percent reduction)	Graphics ¹ : Without InkSaver	Graphics ¹ : With InkSaver (25 percent reduction)	Graphics ¹ : With InkSaver (25 percent reduction)	Graphics ¹ : With InkSaver (50 percent reduction)	Graphics ¹ : With InkSaver (50 percent reduction)
	Cost ²	Cost ²	Quality	Cost ²	Quality	Cost ²	Cost ²	Quality	Cost ²	Quality
Canon S750 Color Bubble Jet	2.2	2.1	Good	1	Fair	10.3	6.9	Marginal	4.4	Unacceptable
Epson Stylus C80	3	2.3	Good	1.8	Unacceptable	9.1	6.8	Unacceptable	4.7	Unacceptable
HP Deskjet 995c	3.7	3.3	Good	1.7	Marginal	15.3	10.1	Good	6.1	Unacceptable

¹ Light graphics, not full-coverage photos. ² Cost per page (cents). Click here for details on how we [calculate ink costs](#) per page.

How to Figure Ink Costs

Calculating the cost of producing a page of text or graphics on your printer should be a straightforward matter of dividing the price of ink cartridges by the number of pages the cartridges print before they run dry. But there are some things you need to keep in mind to see if your cost per page is what your printer vendor promises.

First, vendors have informally settled on definitions of a standard page of text and a standard page of graphics in order to specify how many pages a cartridge should yield. For text, vendors figure that black ink covers 5 percent of the page; for graphics, the vendors figure 5 percent of each color--cyan (blue), magenta (red), yellow, and black. And that's the second wrinkle: Color prints use black ink to control shades and intensity.

Of course, if you print text with bold, heavy fonts, ink covers more than 5 percent of your page and you get fewer pages per cartridge. And art that covers a whole page with intense color uses much more ink than the vendors' test files. But to test yield with and without InkSaver installed on several popular printers, PC World stuck to the 5 percent rule. Here's an example of how we calculated the cost per page for one of the printers, Epson's Stylus C80.

The C80 has four separate ink tanks: a black tank that costs \$33, and cyan, magenta, and yellow tanks, each costing \$12. Without InkSaver, a single black ink cartridge produced 1100 copies of a page with 5 percent black coverage, so the per page cost for black text was \$33 divided by 1100, or 3 cents.

To calculate per-page costs for color, I printed pages with 5 percent coverage of each color separately (to circumvent the problem of different color cartridges draining at different rates). The yields per cartridge came to 1040 for cyan, 440 for magenta, and 540 for yellow.

I then figured the cost per page for each color (1.2 cents for cyan, 2.7 cents for magenta, and 2.2 cents for yellow), added them up (6.1 cents total), and then added the 3 cents per page for black for a total of 9.1 cents per page.