

The True Cost of Plates for the Small Printer

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A Summary

Many studies have been done to show that a digital CtP workflow has many financial and quality advantages over traditional film-based workflows. Unfortunately, the cost of a CtP device and plate-making infrastructure may not be the best solution for a low-volume printer. This study analyzes the costs a printer who makes 360 plates per would incur for imaging plates on and off press.

Calculating Cost-Per Plate And Chemistry Costs:

Let's look at the dollars-and-cents costs associated with two configurations. Below are calculated the actual finished plate costs using a Presstek-enabled DI Offset Press with PEARLdry plate media, compared to a conventional offset press, CTP platesetter, special CTP plates and processing consumables.

	DI Offset Press With Presstek PEARLdry Plates	Conventional Offset Press With Special CTP Plates & Consumables
Consumable cost-per-plate =	\$9.50/plate	\$ 4.00/plate
Platesetter lease cost =	0	\$3,600/month ¹ \$120.00/day
Chemistry cost / month =	0	\$2,000/month ² \$ 67.00/day
Cost of 12 processed plates/day =	\$114.00 PEARLdry	\$173.58 CTP Plates³
Cost per plate =	\$9.50	\$14.470

Notes:

1. Assumes lease of \$120,000 CTP platesetter.
2. Typically, processing chemistry must be replaced monthly, whether used or not.
3. Net cost of plates includes apportioned platesetter and chemistry costs.

Results

The conventional offset press with a CTP platesetter, special plates and chemistry consumables will wind-up costing the printer **nearly 60% more per finished plate** than will a DI offset press and Presstek PEARLdry media. This DI offset press saving is *in addition to* the earlier described make-ready cost-savings of the DI offset press.

Other Economic Advantages A Printer Can Gain By Choosing A DI Offset Press:

a. Streamline Printing Capabilities To Align With 21st Century Demand

A printing business that owns an older conventional offset press will tend to hang onto it in the belief that this legacy investment "isn't costing the firm anything." So, why not keep it around in case a job comes in that it can do?

The trouble is, that press *is* costing the business *plenty*. For one, it's occupying floor space, which costs money. For another, simply because the press is there, prepress and support equipment needed to make plates for it will also be there. So, more floor space will remain occupied by under-used contacting frames, step-and-repeat and camera equipment. A processor is needed to make plates, so more floor space will be occupied by it.

And, fresh chemistry will be needed in the processor monthly, typically at a cost of \$2,000.

The business would be able to move into much smaller, lower-cost quarters if all of this equipment was replaced by a DI offset press. Shedding older, under-utilized conventional offset presses and all their film-based prepress and support equipment makes complete economic sense, particularly as the new trend to shorter-run color makes that equipment more and more obsolete.

b. Avoid A CTP Investment That "Locks-In" Use Of Conventional Offset Presses

A printer with one or more conventional offset presses may become persuaded that "CTP" will upgrade his profitability by eliminating film-based prepress. So, the printer leases a \$120,000 CTP platesetter, orders special CTP plates, and installs a special processing line and chemistry to make the CTP plates. Having now made that investment in order to feed plates to his conventional offset presses, the printer is "locked into" a 20th century business model not aligned with 21st century demand trends. He will later discover that he is operating with higher costs than he should, and find he is not as profitable as he ought to be. The causes will be high CTP costs and low conventional press utilization.

Yet, having invested in CTP, the printer will be disinclined to reverse that decision, sell-off the conventional presses and other obsolete equipment,

move into a smaller, lower-cost plant and install a DI offset press. Though this would be the optimum path to correct his business strategy and offers economic advantages he surely needs, the printer will likely remain locked into a business model that will make him increasingly vulnerable to competitors having lower costs, until he can no longer operate profitably.

DI Offset Press Summary of Economic Advantages

- ***Reduced Finished Plate and Make-Ready Costs with a DI Offset Press***

As can be seen from the earlier plate/chemistry-cost calculation, a conventional offset press with a CTP platesetter, special plates and chemistry consumables will wind-up costing the printer nearly **60% more per finished plate** than a DI offset press and Presstek PEARLdry media. Imagine that your competitors have those high costs and you don't. Now, remember that this DI offset press saving comes to you *in addition to* all the earlier described make-ready cost-savings.

- ***Significantly Lower Plate Waste with a DI Offset Press***

Typically, plate waste with CTP runs 10-15% and is due to errors, changes and scratches incurred in handling. Because Presstek PEARLdry media is imaged at the last minute, safely inside the DI offset press, in a fully automated process, waste is much lower.

- ***The Advantage of a Predictable 10-Minute Make-ready Time for Job Estimating and Scheduling***

A conventional offset press can take anywhere from 30 to 90 minutes in make-ready and there's no way to know in advance which job will take the most time and which the least because the human operator is directly involved in the process. But, with a DI press, the operator merely initiates the action. Make-ready is automatic and takes just 10 minutes.

- ***DI Offset Press Strategic Fit with Future Trends in Demand***

The DI offset press precisely fits the shorter-run color demand trend of the 21st century and provides economic cost and pricing advantages that not only will enable the printer to use pricing as a competitive tool, but also as an account defense, when necessary.

- ***Higher Utilization with a DI Offset Press***

Since the primary trend in color printing is toward more and more shorter-run color jobs, the advantages, fast turnaround, and pricing flexibility of the DI offset press allow a printer to be as competitive as necessary to penetrate new accounts and acquire jobs that will ensure tight press scheduling and maximum press utilization. This will maximize profitability.

- ***Higher Productivity / Smaller Floor Space Need With A DI Offset Press***

Speed in make-ready allows more jobs to get on and off press per shift, giving high press utilization. A printer running one shift is operating 21 days per month, which makes the cost-per-day much more attractive for a DI press. Also, only one operator is needed to run a DI offset press, so productivity is very high compared to a conventional offset press. And, because it's "all-in-one" printers need less floor space.

- ***Higher ROI Potential with a DI Offset Press***

Return On Investment (ROI) is a measure of the net income a firm is able to earn with its total assets. ROI is calculated by dividing net profits after taxes by total assets. From this definition, it will be seen that the lower the operating cost of a press, and the greater its utilization, the higher its net income will be to the firm. This is the ROI rationale of the DI offset press. If conventional offset presses with high operating costs and low utilization are eliminated from the firm, the ROI will actually *increase* and the firm will operate more efficiently.

For complete study email marketing@presstek.com

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