

Expanding Market Opportunities withHigh-Speed Web-Fed Inkjet and the Canon ProStream 1800 Press





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In today's demanding market, success in the printing industry requires three things: application flexibility, cost efficiency, and productivity — all at extremely high quality and the lowest possible cost. Until recently, however, printers have not had technology that allowed them to meet all of these requirements in a single machine.

Traditionally, offset has met the need for high quality imaging, media flexibility, and long run lengths, but not variable data. Toner has met the need for high-quality imaging, media flexibility, and variable data, but with a ceiling on monthly volumes. Inkjet has met the need for data-driven jobs at volume, but without the ability to meet the high-end color and quality needs of the most exacting clients.

For jobs that require all of these capabilities, printers have had to run multiple production workflows to produce all components, then combine them at the end of the process. For those without the right technologies in-house, outsourcing is often the solution. Either way, the result is added time and cost, making these printers noncompetitive for certain jobs or drastically reducing profitability. For others, it creates such a competitive disadvantage that they are locked out of certain markets altogether.

Enter the Canon ProStream 1800 inkjet web press. With its groundbreaking innovations, those market barriers no longer exist. With award-winning quality, blazing speeds, and wide media flexibility, combined with automated set-up that enables effective production of short-run jobs, the ProStream 1800 offers commercial and in-plant printers what they have been missing.

The results? You can produce a wider variety of applications faster, less expensively, and at the same or better quality as offset and toner. This means you can go after markets that were previously out of reach.

PUSHING THE BOUNDARIES

The Canon ProStream 1800 is leading a larger revolution in technology. High-speed inkjet is nothing less than a game-changer for print shops, whether they are in the commercial or inplant space.

According to Keypoint Intelligence, in the U.S. alone, page volume for high-speed inkjet will reach more than 200 billion pages (A4/Letter) by 2022, representing over 12% (CAGR) growth in five years. This growth can be expected to accelerate as printers embrace the opportunities that high-speed web-fed inkjet technology offers. These opportunities are being driven, not just by the productivity of these presses, but the vastly expanded range of applications they can produce, as well.

In the early stages of high-speed inkjet adoption, applications run on these presses were largely restricted to transactional, direct mail, and book printing. However, significant technological



advances have revolutionized the capabilities of high-speed inkjet, enabling it to break the barriers to high print quality and substrate flexibility. This has rendered these presses capable of producing the full range of commercial printing, from high-quality direct mail to books, opening the door to unlimited growth.

Indeed, a NAPCO Research survey found that inkjet owners see the No. 1 benefit of investing in high-speed inkjet as "expanding into new business." This is noteworthy, considering that high-speed inkjet is known for its extremely low running costs and high running speeds.

The vastly improved print quality of these presses — now rivaling or exceeding that of offset — is playing a major role in their ability to meet these expectations. In prior years, the number of high-speed inkjet presses that could produce the level of quality necessary for most exacting clients was limited. Today, led by the Canon ProStream 1800, the installed base of these presses is radically expanding.

How can these presses expand your market opportunities?

HOW CAN THESE PRESSES EXPAND YOUR MARKET OPPORTUNITIES?

1. BREAK INTO HIGHER VOLUME MARKETS

High-speed inkjet is known for its fast-running speeds and productivity. With presses like the ProStream 1800, you can break into premium and high-volume direct mail, books, catalogs, and magazines, instead of being shut out of those high-volume jobs.

The ProStream 1800 has a monthly duty cycle of up to 3.7 million B2 sheets or 37 million letter impressions. Use this capacity to break into higher volume markets such as financial, retail, and healthcare. Even if you are not a large shop, you can take on large contract jobs just like your larger competitors. This results, not only in higher revenues, but the type of recurring revenues that enable you to plan for the future.

Key applications:

- High-quality direct mail
- Transactional and transpromotional printing
- Check printing
- Packaging
- Short-run and long-run books
- Contract work



2. TARGET SHORTER RUNS

The low running costs of web-fed inkjet mean that these presses are not just for long runs. Thanks to high levels of automation, web-fed technology is surprisingly cost-effective at shorter runs, too. Jobs are being produced on demand, with tight turnarounds, in shorter and shorter runs.

A Keypoint Intelligence analysis of cross-over points between offset and high-speed inkjet found inkjet to be more cost-effective than offset at only 1,500 96-page magazines or catalogs and up to 15,000 pieces for an 8.5x11" brochure or 6x11" direct mail postcard. This means that, whether you are breaking previously static jobs into multiple shorter, more targeted runs, or whether you are running multiple shorter run jobs for different clients one after the other, the short-run capabilities of web-fed inkjet are real profit-makers. The efficiencies of high-speed web-fed inkjet are not just in the printing. When you are printing direct mail, for example, you are saving time on setups, but you are also saving time on pre-sorts, co-mingling, and transportation. It doesn't cost more to run variable, and these jobs can be run in sort order.

Crossover Points Between Offset and High-Speed Inkjet for Common High-Ink-Coverage Applications	
Perfect-bound 64-page catalog	2,000 copies
Saddle-stitched 96-page catalog	1,500 - 2,000 copies
Perfect-bound 300-page book (50% color, 50% b/w)	1,700 pieces
Trifold 4/4 8.5x11" brochure	5,000 pieces (vs. full-size offset press)
Trifold 4/4 8.5x11" brochure	10,000 (vs. half-size offset press)
Single sheet, 4/1 postcard	7,500 pieces (vs. full-size offset press)

3. QUALITY THAT BREAKS BARRIERS

No more turning down jobs because inkjet doesn't offer sufficient quality. In head-to-head tests, today's web-fed inkjet can meet or beat offset quality, opening entirely new market opportunities.

The ProStream 1800 uses native 1,200 dpi piezo drop-on-demand printheads, but also proprietary polymer pigment inks with Canon ColorGrip conditioning fluid to create award-winning quality and ensure color consistency. Canon's optional Inline Quality Control, a high-performance camera system, provides automatic print quality assurance.

Does the quality of these presses really match or exceed offset? Yes. The ProStream 1800 has won awards from industry-leading organizations such as Buyer's Lab, Keypoint Intelligence, and InterTech. With a color gamut 40%-50% larger than offset, the ProStream 1800 has even gone head-to-head with six-color offset presses — and beat them.



With quality like this, you can win high-end catalog contracts, as well as jobs for coffee table books, glossy magazines, and others requiring brilliant, high-resolution color. Even corporate and spot colors are no longer off limits. Difficult spot colors can be produced with relative ease.

With the extraordinary color consistency of the Canon ProStream 1800, you can win bids based on your color consistency as well. Thanks to advanced workflow and color management, the Canon ProStream 1800 can reprint jobs weeks or months from now and your clients will not be able to tell the difference.

4. DATA-DRIVEN MARKETING AT SCALE

Marketers are increasingly turning to data-driven marketing, and with high-speed web-fed inkjet, printers benefit from the ability to run highly personalized jobs at scale. Shops currently limited to running variable data on toner presses are no longer restricted in the run lengths for which they can compete.

Toner shops can break into entirely new and higher volume variable data markets. Shops with older web-fed inkjet printers can target high-end applications requiring high-resolution color. Offset-only shops can add variable data and increase profitability by replacing two-step workflows (pre-printed offset shells overprinted with black laser) with a web-fed inkjet workflow in a single pass.

The value of transitioning to "white paper" workflows (white paper in, full-color variable out) cannot be overstated. These workflows allow you to offer faster turnarounds, full-color variable capability, and greatly increase efficiency by saving steps, time, and cost. They also give your clients greater marketing power, more flexibility, and cost savings by eliminating the need to warehouse offset shells.

5. MEDIA VERSATILITY OPENS NEW MARKETS

One of the biggest advances in high-speed inkjet technology is the expansion in the types of media it can run. No longer are these presses restricted to uncoated substrates or a limited library of pre-treated papers. The Canon ProStream 1800, for example, can achieve a very high level of print quality across standard offset coated, uncoated, and inkjet optimized papers from 40gsm to 300gsm. Even applications on glossy stocks, including calendars, posters, and point of sale applications, can be printed with ease.

What contributes to this media versatility?

- Air floatation drying system that dries all jobs evenly. By not coming into contact with the paper, the system protects the print image and preserves the gloss and paper surface.
- Artificial intelligence linked to a sensor that continuously makes adjustments to the drying system during the print run to ensure the best quality.
- Canon's relationship with more than 30 paper mills, which has enabled the color qualification of more than 800 papers across all segments. This includes book, transactional, direct mail, and commercial print.



• Three CSA Inkjet Media and Solutions Labs around the globe, with ink, color, and media scientists dedicated to continually improving print quality and color gamut.

The Canon Media Catalog enables inkjet press owners to show customers what their jobs will look like on different stocks. This lets you produce sellable work faster.

6. WIN JOBS BASED ON LOWER PAPER COSTS

For sheetfed shops shut out of jobs due to the inability to compete on cost, switching to highspeed web-fed inkjet can be a game-changer.

Paper represents from 40% to 60% of a job. Paper rolls can cost from 10% to 20% less than the same paper in sheet form. With web-fed inkjet, jobs that used to be cost-prohibitive now become profit centers.

In addition, because high-speed inkjet has infinite variable cut-off, you can optimize paper usage. Win bids on odd-sized jobs that previously created too much paper waste to allow you to be competitive.

7. ADD MORE COLOR

With high-speed inkjet, the cost per impression for both color and monochrome is nearly identical. This enables you to print full variable color on every page. Whether you are printing books or direct mail, high-speed web-fed inkjet provides significant opportunities to expand your market.

- Clients for whom color was previously cost-prohibitive can now print in color, including full-color variable.
- Add highlight color to invoices and statements, making them easier to read and understand. (This translates to fewer errors, reduced calls to the customer service center, and faster payments.)
- Add color to the interiors of books, creating greater value for your customers' products and increasing competitive differentiation.

8. INCREASE EFFICIENCY

"Do more with less." That's the motto of efficiency. With increased speeds of up to 436 fpm, the ProStream 1800 is 66% faster than its predecessor, the ProStream 1000, and boasts one of the highest resolutions and highest levels of print quality of any digital printing press at that speed.

The ProStream 1800 can produce up to 114,245 letter images or 11,300 B2 sheets per hour while maintaining superior print quality. This allows you to have the confidence to handle higher volumes of work both today and going forward.



Adding to the efficiency, high-speed inkjet presses have very little downtime. Once the paper profiles are dialed in, there is no calibration required. High-speed web-fed inkjet presses can run days or weeks at a time without intervention.

9. MIGRATE JOBS FROM OFFSET AND TONER

The quality, speed, and cost efficiencies of today's high-speed inkjet presses and technology enable you to migrate work from both offset and toner devices onto a single press.

Whether you are printing books or direct mail, you can often replace your toner, sheetfed, and heatset presses with a single web-fed inkjet press. While many printers may choose to keep their toner devices for ultra short runs and for jobs requiring specific stocks or mix of stock, some print operations find that it eliminates their need for sheetfed production entirely.

10. SHORTEN TURNAROUNDS

The high levels of automation of today's high-speed inkjet presses mean faster turnarounds than ever. This keeps your customers competitive by enabling them to react quickly to market needs.

The days of bulk campaigns a few times a year, or dropping a postcard into the mail two to three weeks after someone has shown interest, are long gone. Marketers expect to be able to send follow-up mailers to customer visits or phone calls within 24 hours. Generate triggered mailings based on anniversaries or calendar dates. Retarget website visitors who start forms but don't submit them, recapturing their interest before they move on to a competitor.

Even when you need to switch out the substrate, turnarounds can be surprisingly fast. Extremely high levels of automation mean that you only need to select the right media profile and run the job. With the Canon ProStream 1800, you can create your own customized profiles or choose from hundreds of downloadable media profiles that let you obtain the perfect color on approved stocks within minutes. Once the operator runs a linearization process to calibrate the machine to that profile, it never needs to be done again. Each time the same stock is run, the press recalls the settings and you're up and running.

11. EASE OF OPERATION

All of these benefits of high-speed web-fed inkjet are available without a skilled operator. With the extensive automation, color and paper profiling, and built-in intelligence, presses can be run by operators without advanced training and at lower pay scales than those running offset or toner presses. Furthermore, because today's web-fed inkjet presses do not require constant supervision, your employees can do other jobs while the press is running. This gives you flexibility in hiring and allows you to optimize use of your employees once they are trained.

12. FLEXIBILITY TO PIVOT

High-speed inkjet is truly transforming the printing industry. For printers looking to optimize their workflows for the future, high-speed inkjet enables higher productivity, yet shorter



turnarounds, and unparalleled flexibility at scale.

This technology also provides flexibility for the future. You might have great markets now, but things change. What will you do in the future? Will your technology be flexible enough to allow you to pivot? With high-speed inkjet like the Canon ProStream 1800, the answer is unequivocally, yes.

High-speed inkjet provides the perfect balance between high volumes, short run lengths, and outstanding print quality, along with the increased media flexibility that allows printers to produce virtually any commercial printed product, in any run length, with any turnaround requirement, both now and in the future. Whether you are going from static direct mail to short-run versioned mailings, to launching into the book market, to investing in specialty products like calendars and menus, high-speed inkjet provides the path forward.

ABOUT CANON SOLUTIONS AMERICA

At Canon Solutions America, our mission is to improve workflow efficiency and document processes for organizations of all sizes and industries. We have fulfilled this mission by earning the No. 1 position in total inkjet market share, both in the U.S. and worldwide, and also lead market share for web-fed inkjet. Through our cutting-edge technologies and media support, we know that no matter the application, we'll have your solution. In this market, Canon has been ranked No. 1 in the U.S. for web-fed, sheetfed, and total-high volume inkjet market share for the third consecutive year and recently won Keypoint Intelligence's "Outstanding Innovation Awards in Production Print."



