THE BUSINESS BENEFITS OF

Closed Loop Color Quality Management

TECHKON

PRINTING TO THE NUMBERS

Today's printing and packaging customers are placing ever increasing demands for color accuracy and color consistency on their print supply chain. Many ask printers to provide data proving the job adhered to color specifications agreed upon before the work started.

As a result, printing can no longer be considered a "craft" where "pleasing color" is good enough. Color reproduction cannot hinge on the eye of a few highly skilled pressmen.

Instead, it requires "printing to the numbers"; implementing a more predictable and repeatable process to ensure every job is delivered to your client's chosen specification, over time, across each press run, across multiple press runs, and across multiple presses.

THE QUALITY CHALLENGE; AND ITS REWARDS

Achieving these exacting requirements introduces significant business risk: longer make-ready times, increased waste and, ultimately, lower profit margins.

But printers that crack the code and can "print to the numbers" every time and over time reap significant rewards:

❶ They will increase profit margins

❷ They will achieve a higher level of color accuracy and repeatability

❸ They will maintain customers and gain repeat business

This paper discusses the business advantages of "Closed Loop", press side color management - technologies built and optimized for "printing to the numbers".

The goal is to help you transition to a reliable print solution that improves the stability of your print processes, *even if you are relying on older presses.*

USING A MEASUREMENT DEVICE IN THE PRESS ROOM

A Spectro-Densitometer is a crucial first step toward "printing to the numbers". By providing precise density, dot area, and color measurements relative to aim or reference color values, it lets operators easily control both process and spot color inks.

Spectro-Densitometer options typically range from handheld spot reading devices up to motorized, fully automated, systems that scan the complete color bar on a printed sheet in seconds and then display the measured data to the operator, broken down by individual ink zones.

But there's a downside to using a Spectro-Densitometer as an "instrument-only" or "open loop" solution. With handheld only solutions, it's simply too time consuming for operators to measure color patches from each ink zone across the sheet. Similarly, with open-loop scanning solutions, operators are forced to make manual ink keys adjustments themselves while the press continues to run. Make-ready sheets quickly pile up, wasting ink and paper.

That's why printers who go beyond the instrument-only option and implement a closed-loop color control system gain an even bigger advantage.
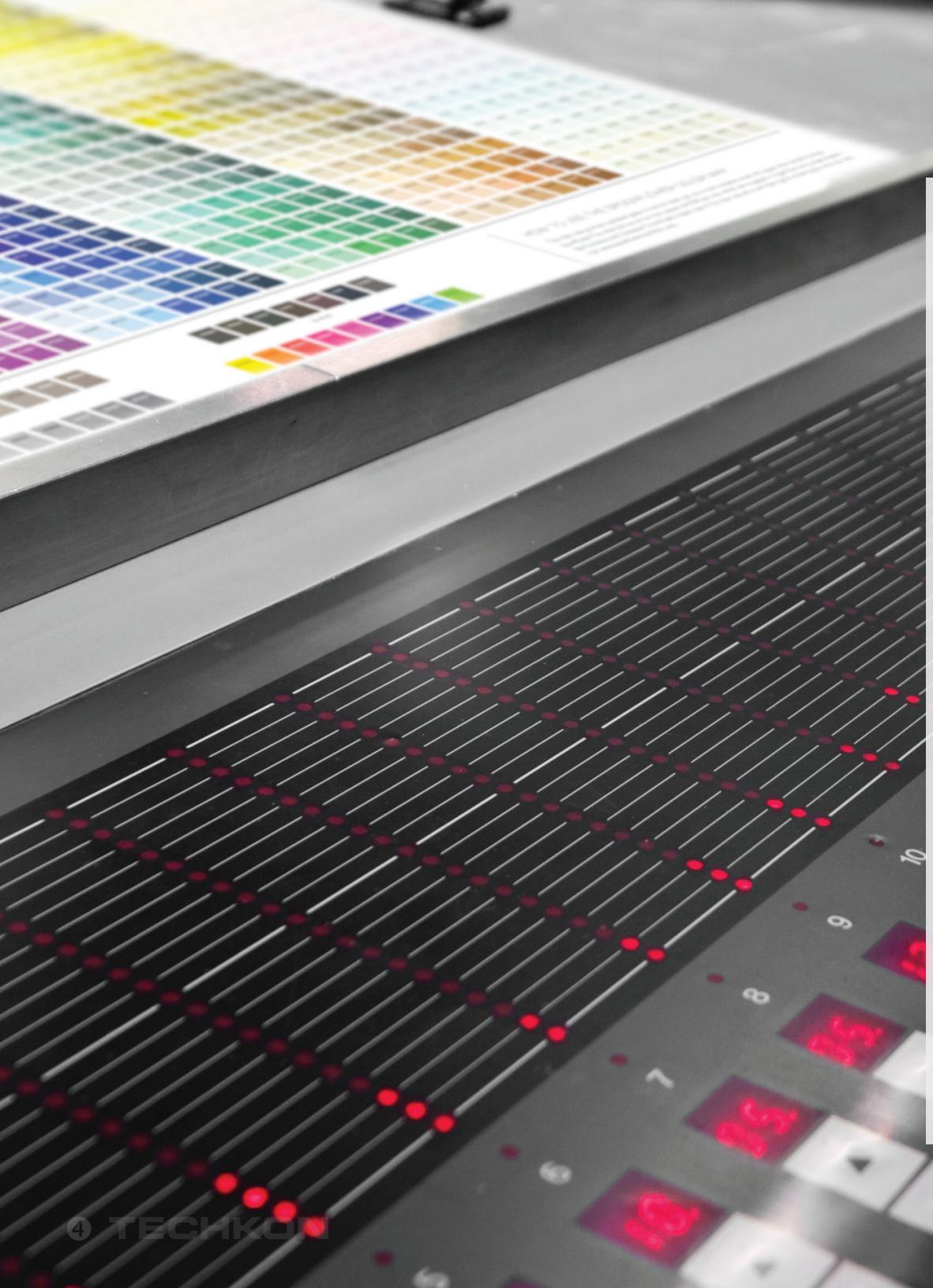
WHY CLOSED LOOP?

The intent of any closed-loop control system is feedback. For a print job, this means comparing color information on the printed sheet to the specifications you agreed to deliver to your client, and making on-the-fly adjustments to consistently produce that color.

In practical terms, closed loop color management is an automated off-press feedback system. Before the press run begins, an Ink Presetting module can analyze the digital, imposed, image and automatically open and close ink keys on press, so printed densities will be even across the sheet at the start of the job.

Once the press is running, a Spectro-Densitometer scans an entire color bar, spanning all ink zone locations in one single measuring operation. Any required density adjustments are automatically sent back to the press console.

Quality management software checks that the press is 'printing to the numbers' correctly (density, TVI, graybalance, G7, CIELab, etc.) and, if not, automatically calculates and sends the necessary corrections directly to the press console with individualized ink zone corrections. (It's also possible to configure the system to allow the operator to review and confirm any corrections before they are sent to the console.)

The result is **accurate and consistent color** across the sheet, throughout the press run, across multiple press runs, and across multiple presses & print crews.

CLOSE THE LOOP,
OPEN UP YOUR BUSINESS

It's easy to see the business benefits of a closed loop color solution:

INCREASE PROFIT MARGINS

It's no secret that today's printers operate in a world of razor thin margins. Automation through ink presetting and closed loop color control introduces new levels of efficiency that dramatically reduce make ready times, save ink and paper, and immediately reduce your bottom line.

A HIGHER LEVEL OF COLOR ACCURACY AND REPEATABILITY

With closed loop solutions, press operators have instant access to the color accuracy of the job and are given the corrections necessary to achieve the best possible color match. In addition, maintaining color consistency through out the run is automated and the settings are stored within the software for job re-prints, which ensures color consistency over time, across press crews, and across different presses and print locations.

MAINTAIN CUSTOMERS AND GAIN REPEAT BUSINESS

Closed loop color control software logs print run data and creates reports providing proof that your customer's color specifications have been met. These logs can also be used as repeatable settings for future orders, building a level of confidence and trust that can only lead to happier customers and better printer-client relationships.

THE FAST TRACK TO GREATER PROFITS

We've talked a lot about the savings potential of a closed loop system. How about some real numbers?

Installing **PressLink**, Techkon's Closed Loop system, typically results in make-ready time reduction of **8 to 10 minutes per job.**

For a press that runs 10 jobs/day, 250 days/year and costs $200/hour, **the savings in make-ready time alone is worth $100,000 per year.**

In addition, paper savings of 100 sheets per job can be seen.

Assuming a cost of 10 cents per 40" sheet, this results in **$27,500 additional savings per year.**

MODERNIZE YOUR PRESS

Most new presses offer options for inline scanning systems with color management control, but what if you're working with older presses?

Older printing presses or poor press room color management practices might result in turning away or losing business just because you are not able to meet a customer's quality specifications or pricing expectations.

Luckily, delivering the right product at the right price, on every job, is easily within reach.

Techkon's PressLink is a cost-effective answer that enables a wide range of press makes and models to take advantage of an efficient closed-loop color control system.

Its remarkably fast ROI begins at setup. Automated image analysis and ink key setup quickly brings your press up to color and significantly reduces make ready times.

PressLink then gives operators quality control feedback during the run, and the software automatically adjusts ink keys to keep colors on target.

NEED MORE PROOF?

Printers who can demonstrate a process optimized for "printing to the numbers" are able to win more business, keep their customers happier, and enjoy a decent profit for each job they deliver.

NEXT STEPS
Want to calculate your potential savings? Use our instant **ROI Calculator**.

Interested in a closed loop system, but wondering if it will work in your environment?

CLICK HERE to answer some basic questions and we'll get you started.

Printers of all sizes and around the globe rely on Techkon's pressroom color management solutions.

They know they will meet or exceed specific customer or industry quality standards, such as ISO and G7, while avoiding excess waste of ink and paper.

And in a business with razor-thin margins, the make-ready and press-run savings made possible by Techkon products assure higher profitability on every job.

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