



Mad for Monochrome

The ground-up innovation strategy behind the Xerox Nuvera® Family of Presses, and how every member works to keep your business in the black.



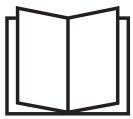
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Magnificent monochrome

Today's monochrome is thoroughly modern. Keypoint Intelligence–Infotrends estimates that monochrome documents produced in cut-sheet production environments will account for nearly 274 billion A4/letter page images in 2022 in the US and Western Europe. This is about 56% of all cut-sheet production digital print volume (color and monochrome).

274 BILLION A4/LETTER PAGE IMAGES BY APPLICATION TYPE*



28%

PUBLISHING (BOOKS AND MANUALS)

Examples: Monochrome is ubiquitous in publishing, including books and catalogs, instruction manuals, and some educational materials.



24%

PROMOTIONAL (DIRECT MAIL AND BROCHURES)

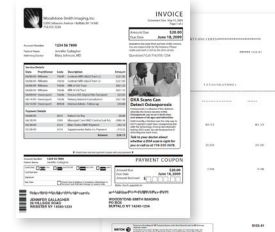
Examples: Postcards, letters, self-mailers, return envelopes.



14%

TRANSACTION (BILLS AND STATEMENTS)

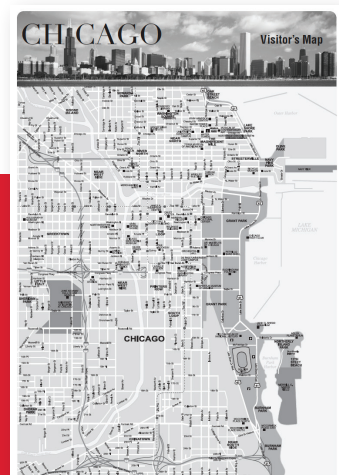
Examples: Financial statements, insurance documents, invoices, and utility bills.



14%

GENERAL OFFICE (REPORTS AND FORMS)

Examples: University, healthcare, and legal in-plant printing, (excludes pages printed on personal or workgroup devices)



A key consideration is that although digital printing has significantly lowered the cost of color printing (particularly for shorter runs), the lower overhead cost of owning and operating a monochrome printer or press ensures the continued viability of monochrome for the foreseeable future.

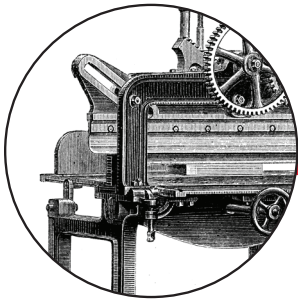
That lower total cost of ownership is a major benefit in a rapidly shifting market. In fact, Keypoint Intelligence-InfoTrends finds the 136-199 ppm cut-sheet monochrome print segment (Nuvera's sweet spot) to be the least impacted by current market trends.

Goodbye, Gutenberg.

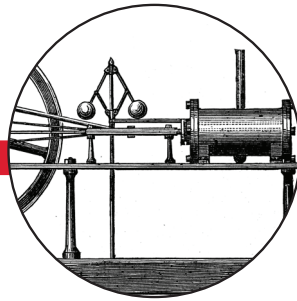
If commercial print was born out of Johannes Gutenberg's famous press, it's fair to say today's digital monochrome print market was born out of Xerox.

The launch of the Xerox 9700 – the world's first commercial laser printer – gave rise to the digital printing industry, which 40 years later, according to Smithers Pira*, generates more than \$120 billion in global annual revenues.

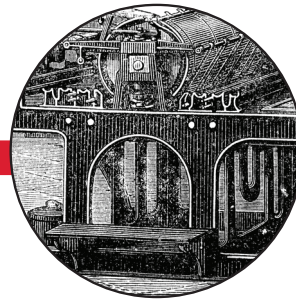
KeyPoint Intelligence cited the 9700 as the product that heralded the third wave of industrial automation (computer-driven printers) after steam-powered presses in the early 1800s and electric-powered presses later that century.



**GUTENBERG'S
PRESS**



**STEAM-POWERED
PRESS**



**ELECTRIC-POWERED
PRESS**



**COMPUTER-DRIVEN
PRINTER**

Hello, Nuvera.

The Xerox Nuvera® Family of Presses aren't color presses running K only. It traces a proud lineage all the way back to the first monochrome laser printer.

Purpose-built from the ground up to be the first and last word in digital monochrome, the Xerox Nuvera® Family of Presses is a modern marvel of engineering and technological mastery. But it doesn't end there.

Integrated technologies ensure sheet flatness, unique pass-through programming on tandem models keeps jobs moving even when there's printer fault in one engine, and Xerox® FreeFlow® Core combines forces with a Xerox® FreeFlow Print Server to automate and

optimize workflow. These, and other Xerox-developed innovations allow print operations—whether in-plant or commercial—to deliver on SLAs with the highest quality output while keeping costs in check and building customer loyalty.

* InfoTrends/KeyPoint Intelligence Cut-Sheet Monochrome Application Volume by Major Category (US and Western Europe)



The Xerox Nuvera® Family of Presses is the direct descendant of the Xerox 9700, by way of the DocuTech™ and DocuPrint™ series and nearly two decades of continuous adaptation and reimagination of what it takes to be the “best of the best” when it comes to high-volume digital monochrome print.



**9700—FIRST
XEROGRAPHIC LASER
PRINTER**



**9700 MICR—FIRST
MICR LASER
PRINTER**



**DOCUTECH® 135
PUBLISHER**



**DOCUPRINT® 96MX
AND 135MX**



How do you keep your business in the black?



WORK FASTER, WITH MORE FLEXIBILITY.

The demand for **shorter runs and faster turnarounds** continues to drive growth in digital printing.

- The latest data indicates that there has been a 72% increase in need for faster turnaround times in the past year alone.¹
- In the same time frame, there's been a 61% increase in demand for short runs.¹

Advanced automation is becoming a priority due to its potential to drive **efficiency up and costs down.**

- 60% of marketing service providers say workflow automation is their top priority.²
- 46% of print shops now say they are interested in improving their overall turnaround time, driving in part a compound annual growth rate of 7.3% in the print software market from 2017 to 2022.³

ADAPT. AUTOMATE. WIN.

Much of the ability of a press to help keep your business in the black hinges on how it drives potential profit through productivity. In today's digital print environment, productivity—and thus profit—goes hand in hand with automation.

The degree to which your press can leverage automation to enable smoother workflows, faster turnarounds, flawless output, and finishing accomplished with fewer human touchpoints, determines its overall value to your operation.



Nuvera employs both active and passive automation technologies to fine tune and simplify rapid production and hands-free finishing of all the applications best suited to monochrome environments.

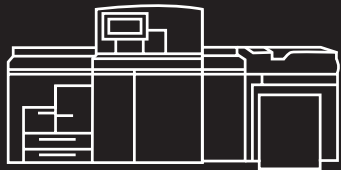
¹ FESPA Print Census

² Print Production Software Market Forecast: 2017 – 2022, InfoTrends

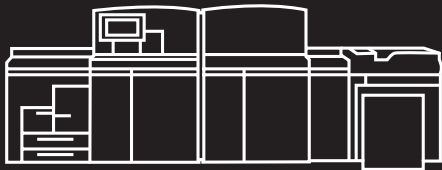
³ Production Print Services in North America: Understanding Industry Transformation, Keypoint Intelligence/InfoTrends

Nuvera by the numbers.

PRODUCTIVITY




Up to 157 ppm
Single engine rated speed



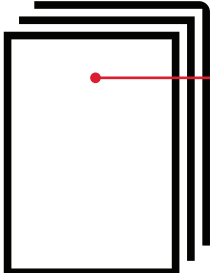
Up to 314 ipm
Tandem engine rated speed

1 M to 4 M

Average Monthly Print Volume (AMPV) range



11,600
Maximum sheet feed capacity



44 gsm to 300 gsm
Stock weight range

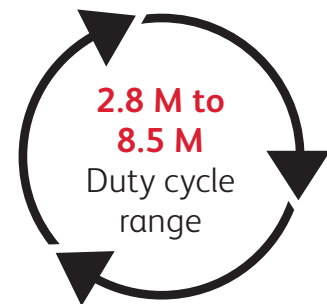
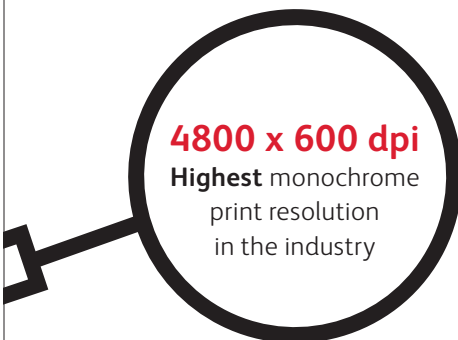



IMAGE QUALITY




4800 x 600 dpi
Highest monochrome print resolution in the industry



256
Levels of gray

99.5%
Highest Magnetic Ink Character Recognition (MICR) read rate in the industry

Solid Lines to 70 microns



Impeccable image-to-sheet and front-to-back registration
Achieved through proprietary touch-free Translating Electronic Registration (TELER) technology

Crisp, readable text to 4 pts

ECONOMICS



25+
Inline feeding, finishing and stacking options



FASTER
Resolution of issues with Direct Communication to Service



FEWER
Paper jams and lost production hours with Simple Jam Clearance



374
Patents to date, upholding Nuvera's investment protection promise

Brain and brawn.

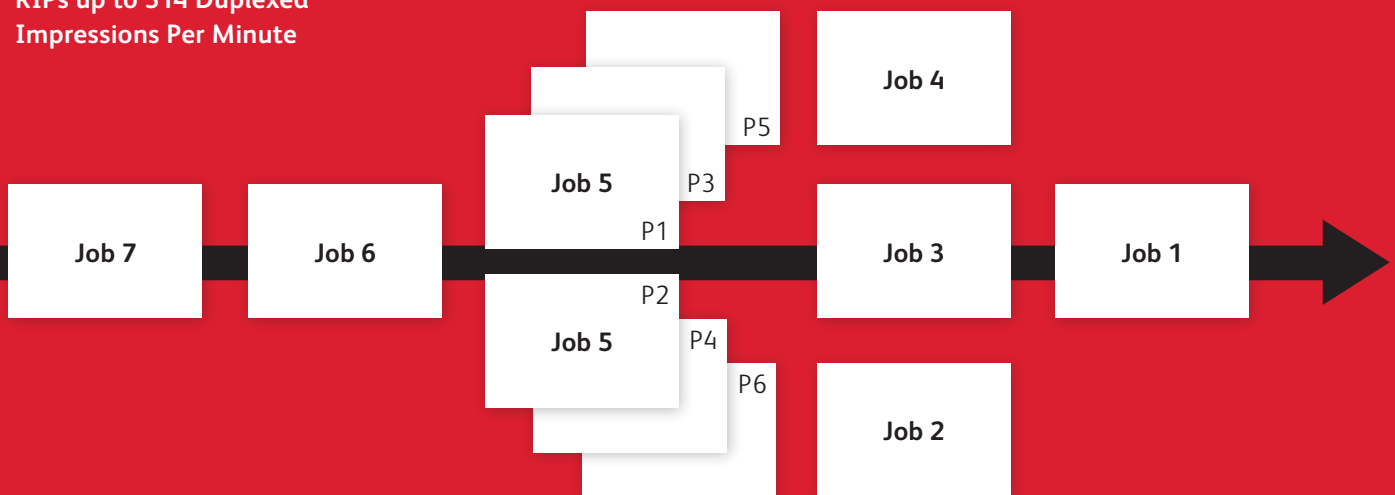
With its powerful, 3+ GHz quad core processor and loads of onboard technical innovations, Nuvera continues to evolve as printshop needs adapt to a changing market.

More jobs equal more money. It's a simple equation—but complicated by the time/productivity factor. Xerox Nuvera® Family of Presses is designed to loosen tight margins by giving print operations a leg up when it comes to speed and productivity.

READY TO RIP.

The Xerox® FreeFlow Print Server has a superpower: the ability to perform parallel RIP. The proprietary software leverages all that brain power to boost image processing performance and print speed. Perfect for long jobs with many non-repeating images (think yearbooks, textbooks and product manuals) or any complex job—especially if you have several with low run lengths.

3.0 GHz Dual Core Processor
RIPs up to 314 Duplexed
Impressions Per Minute

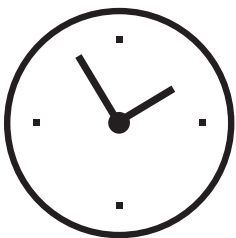


Essentially, the FreeFlow Print Server with Parallel RIP optimizes performance and productivity in one of two ways:

- By RIPing multiple jobs simultaneously, or
- By breaking down large jobs to RIP multiple pages within that job simultaneously, across multiple RIPs

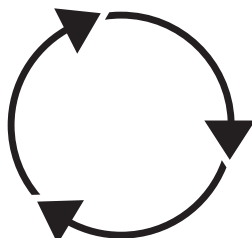
It takes two to tandem.

The Xerox Nuvera® 288/314 Press, with its unique tandem architecture, is double plus good. Among the most unique – and powerful – innovations in the Nuvera arsenal are its dual-engine “tandem” configurations. But that name is almost too simplistic. You couldn’t get the same result by simply linking two Nuvera print engines together. It’s what’s under the hood that makes the difference—enabling breakaway speeds that set Nuvera apart on several fronts.



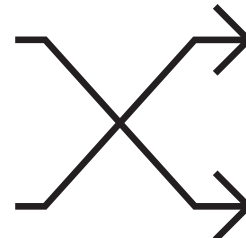
CONJOINED PAPER PATH

A single straight paper path between the two engines allows one blazing fast engine to print the first side of a page, while its twin prints the other. It’s a faster solution for duplexing because there’s no need to circle back—a straight shot right through to stacking and/or finishing.



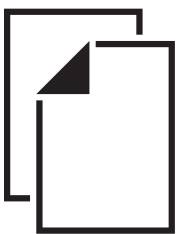
HOLD THE JAM

Since Nuvera is built for productivity, Xerox engineers made certain the paper path would be completely accessible. Jams, when they do occur, are easily cleared with full job recovery.



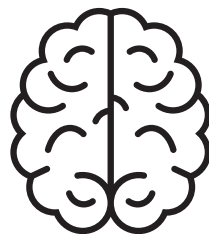
DOUBLE REDUNDANCY

Although the two engines are artfully combined, they are still able to function independently with Pass Through Programming. In most cases, when one engine requires a soft shutdown, the other engine can continue printing at full speed—providing bonus uptime when other presses would completely idle.



CLOSED-LOOP IMAGE BALANCING

Advanced image balancing software combines with the high addressability printing system to ensure overall image uniformity, as well as an exact match between engines.



SHARING A BRAIN

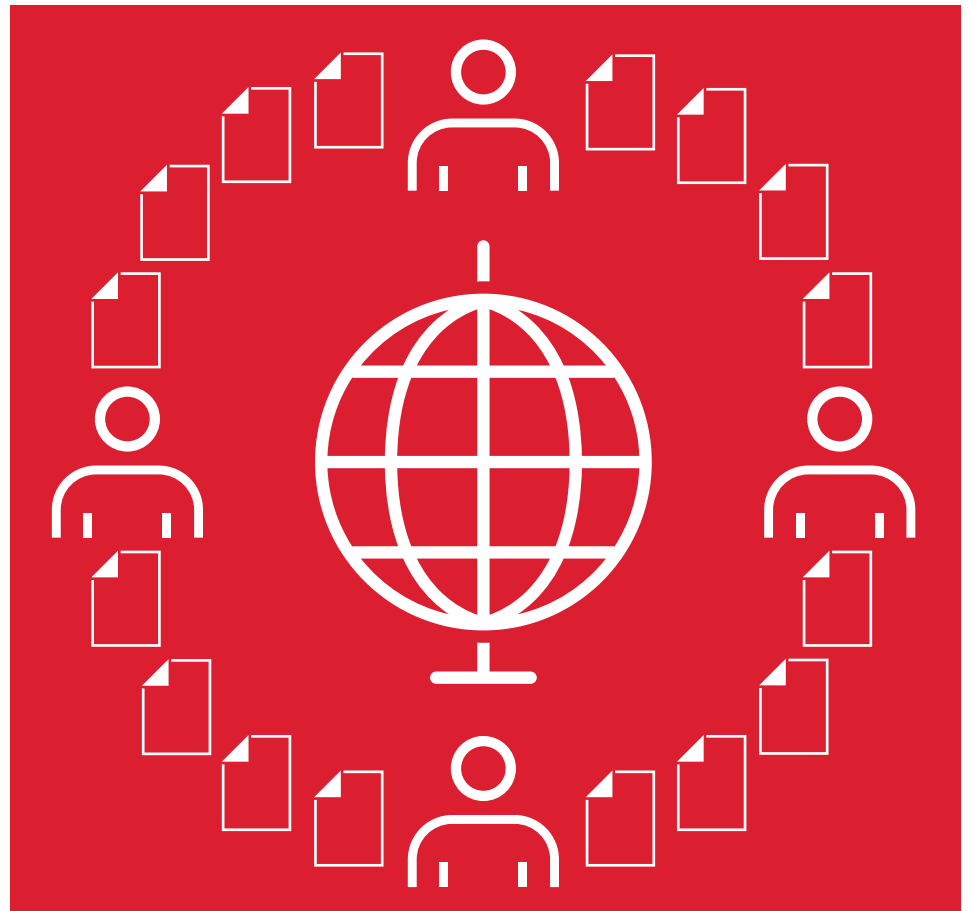
FreeFlow Print Server’s onboard stock library and Nuvera’s straight duplex paper path work in sync to accommodate a wider variety of media, jam-free and image-perfect. Constant communication between brain and “body” – paper handling vacuums, rollers, fusers – keeps the entire system in perfect balance.

35 billion.

That's the number of pages Xerox Nuvera® Family of Presses ran worldwide in a recent year. That's four monochrome sheets in the hands of every person on the planet.

With those kinds of numbers under (and around) their collective fuser belts, there's no question the Nuvera family is the world's most prodigious family of monochrome production presses. You don't run numbers like that if you don't fulfill your promise every hour of every day.

It's certainly no accident that Nuvera is the "best of the best." Its technologies have had decades to mature and advance. Its sole purpose is to excel at producing the monochrome applications that continue—and will continue—to drive business-to-customer communication in the real world.



Find out more from your Xerox Rep, or visit xerox.com/Nuvera