



Jet Press 1160CFG

PRODUCT BROCHURE



Discover our Jet Press 1160CFG

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FUJIFILM¹

Jet Press – setting new standards

With over 300 Jet Press 750S installations worldwide, and a growing range of presses, more and more printers and their customers are now realising what can be achieved with Jet Press inkjet technologies.

The 4th generation Jet Press 750S High Speed Model produces print quality that is better and more consistent than offset, truly setting a new standard in print quality.

The recent addition of the Jet Press FP790 to the Jet Press family, has brought Fujifilm’s groundbreaking inkjet technologies to the flexible packaging market. The Jet Press FP790 has been designed to help printers and converters adapt to changing market dynamics that are driving shorter print runs and product life cycles, with an inkjet press that delivers industry-leading quality at speeds that compete with mainstream flexo production.

Now, Fujifilm has added a third machine to the Jet Press line up, the Jet Press 1160CFG, bringing the best inkjet technologies to commercial web applications, delivering high quality at high production speeds. It is also a further development of Fujifilm continuous high speed inkjet presses that continue to be bestsellers in the Asia Pacific region.

Running at 160 or 80 metres per minute, the Jet Press 1160CFG has a unique paper stabiliser to ensure high coverage, 1200dpi quality print is delivered with consistent high quality and reliability.



Jet Press 1160CFG

Jet Press FP790

Jet Press 750S HSM

Precision paper handling for seamless printing

The key to the Jet Press 1160CFG's advanced capability is a unique Paper Stabiliser Unit that ensures high coverage, 1200dpi quality print is delivered with consistent high quality and reliability.

This unique technology eliminates the two major challenges associated with water-based inkjet technologies used in high speed presses:

- Controlling the behaviour of a range of paper types
- Effective drying of inkjet printed paper

Advanced Paper Stabiliser Unit

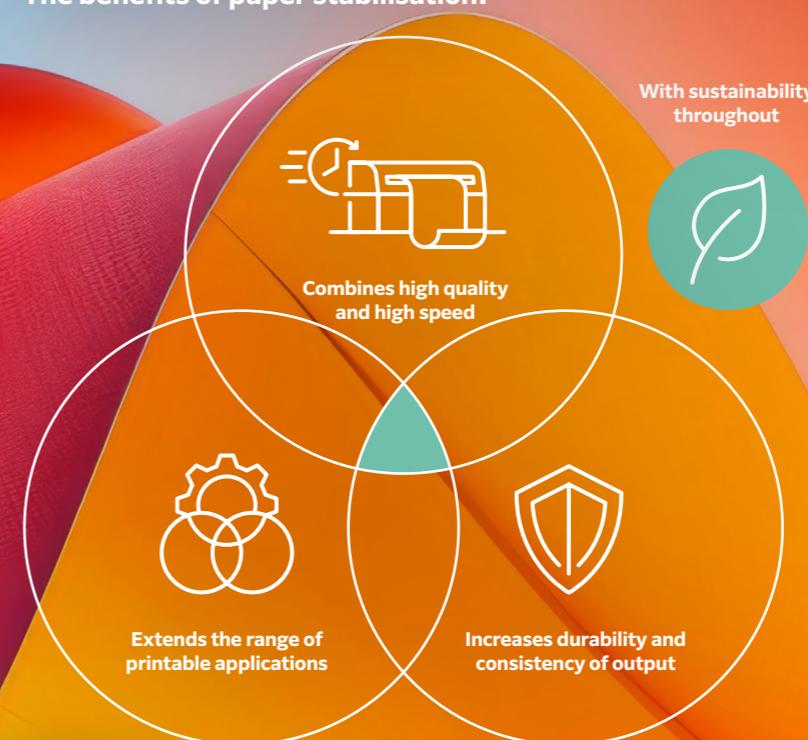
Paper is often the most difficult variable in the printing process to control. It can react differently depending on the local humidity, temperature and other outside factors.

The Paper Stabiliser Unit is not a pre-coat or priming station. There are no consumables to apply, replenish or pay for. The paper stabiliser does exactly that, eliminating the stress and shocks that paper normally experiences in other inkjet presses.

Precisely controlled heating and cooling of the paper before printing conditions the paper for a smooth, stress-free progression through the press, to give the best possible printed result.

Before entering the imaging section, the paper goes through a pre-drying process which minimises rapid paper expansion and contraction within the press. The paper stabiliser helps to reduce paper curling and misalignment, ensuring a smooth and stable paper feed, thereby increasing registration accuracy, improving print quality and reducing waste.

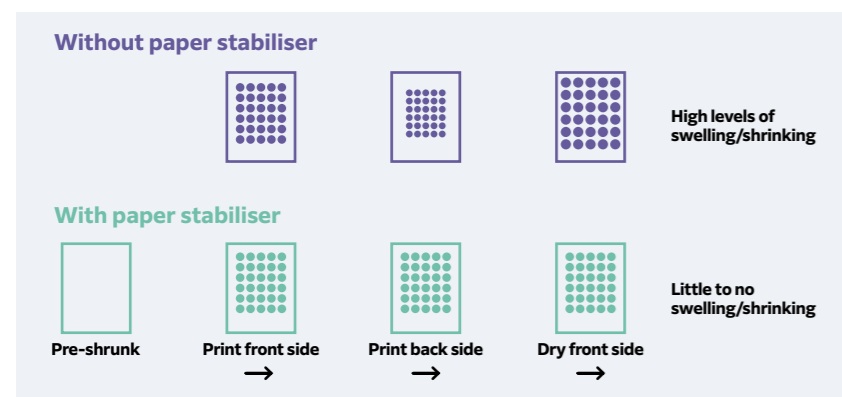
The benefits of paper stabilisation:



Multiple benefits of paper stabilisation

The Jet Press 1160CFG won't shrink away from a challenge

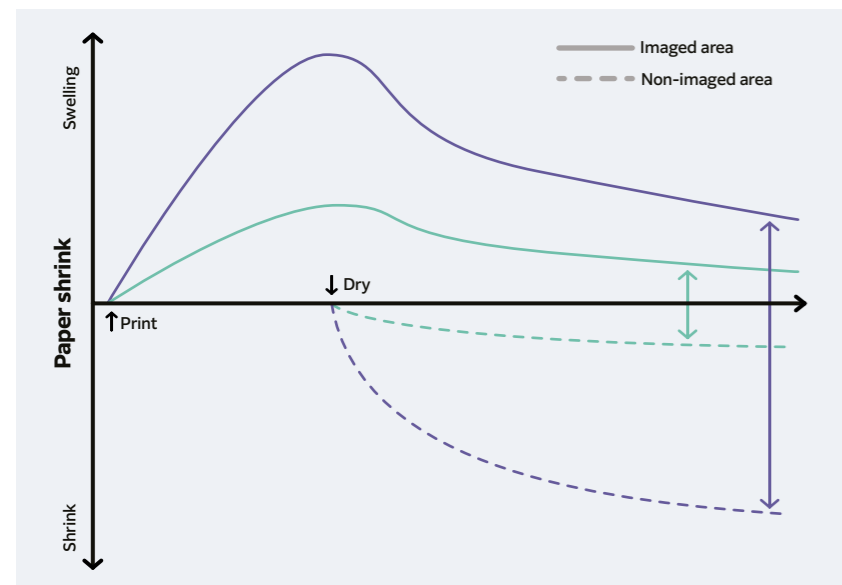
The paper stabiliser reduces the cycle of paper shrinking and swelling with each round of printing and drying. Dimensional stability is dramatically improved leading to accurate and reliable front to back registration.



Early intervention from the paper stabiliser reduces the stresses and strains on the paper as it is printed. Swelling and shrinking is eliminated improving the condition of the paper throughout the print process.

Minimise wavy sheets and books

The chance of producing wavy books is reduced too. This is essential for high quality print on coated stocks with higher ink coverage, which are the most susceptible to waviness. The phenomenon of swelling and shrinking is even more pronounced between areas of heavy ink coverage and non-image areas. The stresses of heating and cooling, wet and dry, are significantly reduced with the Jet Press 1160CFG, leading to flatter sheets and books. Less stress means flatter books.



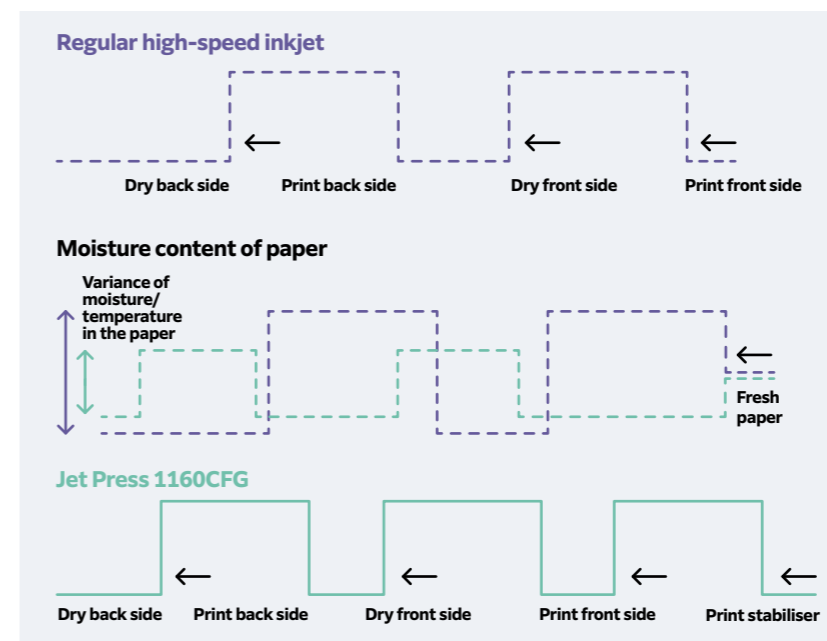
Stabilised paper, represented by the green line, swells and shrinks less as it carries less moisture overall from the start of printing the first side, to the end of drying the back side.

Media flexibility

The Jet Press 1160CFG paper stabiliser helps expand media compatibility including common offset stocks. You can also print on both thinner and thicker stocks, meaning you can take advantage of current paper stocks, simplifying inventory and reducing costs.

Prints beautifully on offset coated paper

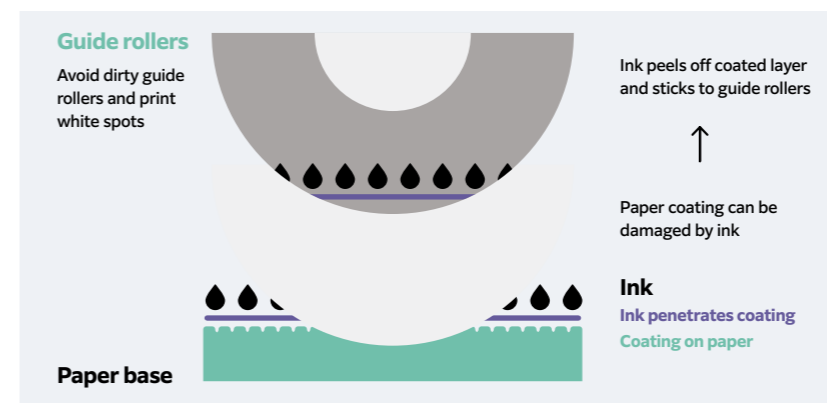
The newly developed aqueous pigment ink prints beautifully on both coated and uncoated paper without a primer.



By reducing moisture levels before printing, the Jet Press creates a less volatile environment for the paper with lower changes in temperature and moisture content. Paper stabilisation reduces issues at the time of printing and down the line during post processing and finishing.

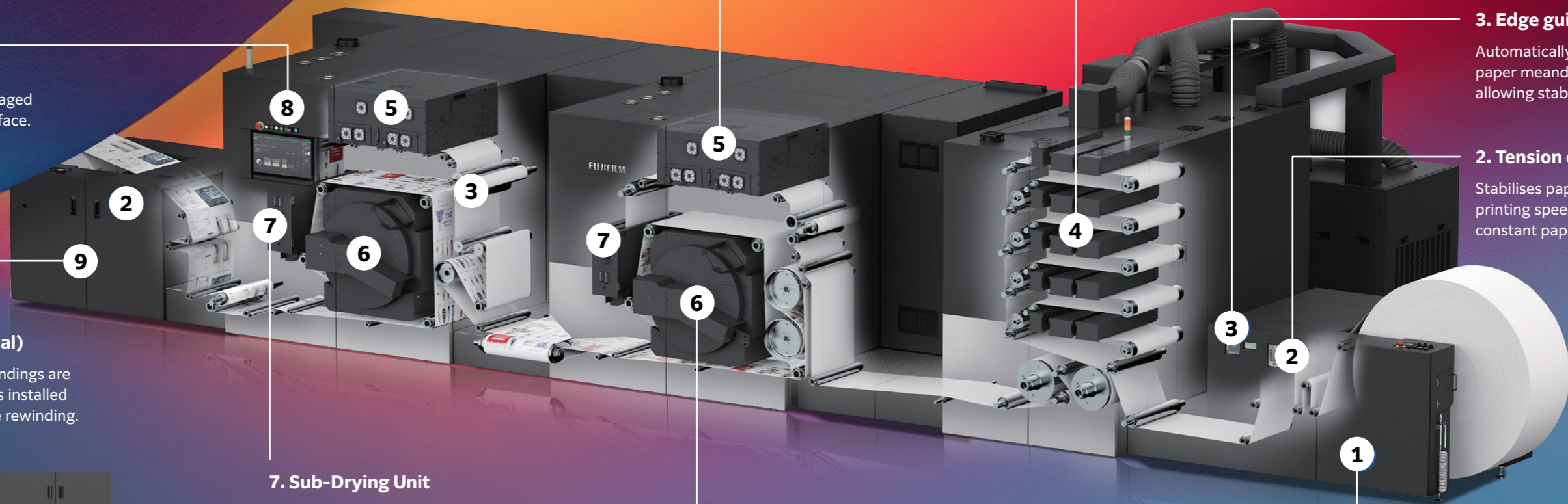
Avoid dirty guide rollers and print white spots

Without the paper stabiliser, ink can attack the paper coating by penetrating deep into the paper base. This leads to a weak surface that can be picked off the sheet making guide rollers dirty and leaving white spots in the print.



Stabilised paper has a more robust surface, avoiding white spots and providing better rub resistance of the finished print.

A look inside



5. Printhead unit

The printhead supports 1200 x 1200 dpi. A single dot can be deposited using up to three gradations, allowing smoother density transitions. In addition, the printhead is water-cooled, enabling highly stable print quality.

4. Paper Stabiliser Unit

The pre-drying process regulates the amount of moisture in the paper, enabling printing in the highest quality mode at 80 metres per minute^{*1} even on thick coated paper^{*2}. The drying technology also minimises waviness and wrinkles on thin paper by reducing paper expansion and contraction.

^{*1} 1200x1200 dpi resolution
^{*2} Up to 250g

3. Edge guide

Automatically adjusts paper meandering, allowing stable printing.

2. Tension controller

Stabilises paper feed even at high printing speeds by maintaining constant paper tension.

1. Unwinder

Both upper and lower windings are available as roll feed position. Operations are simple for lifting and lowering heavy paper rolls. Paper alignment can also be controlled easily and quickly.

6. Dryer

Two types of drying technology are installed: heated drum and hot air dryer.

7. Sub-Drying Unit

Each tower has IR heaters installed, which efficiently dry the ink, minimising paper deformation.

Slack Web Unit (Optional)

The Jet Press 1160CFG can also be connected to 3rd party finishers (loose tension type) by using the slack web unit. The unit applies tension to roll paper instead of the rewinder.

8. Control panel

Digital Front End and machine control are managed with a touch screen interface.

9. Rewinder (Optional)

Both upper and lower windings are available. A touch roller is installed to prevent wrinkles while rewinding.



10. Ink Pack Cart

Four-colour ink packs are installed at the back of the printer. Each ink pack weighs approximately 20 kg, but replacement can be performed easily using the cart.

Built for your business

Key scenarios where the Jet Press 1160CFG may fit in your business

You need to produce short to medium run, high quality colour books, journals, brochures and catalogues

The Jet Press 1160CFG has the quality and speed to produce high quality publications on light to heavyweight stocks. Its unique features overcome the common challenges facing other, less capable high speed inkjet presses.

You need to fulfil direct mail campaigns in medium to high volumes on quality stocks

Direct mail is changing to compete in an ever-more challenging communications environment. As campaigns become more creative and targeted, the Jet Press 1160CFG has the capability to run higher quality mail pieces at high speed with greater consistency.

You need to move jobs away from analogue processes that are less capable and efficient

Offset printing presses are ideally suited to long run, static jobs but are increasingly being used for short to medium run work. Presses become stacked with inefficient work leaving little time for the jobs that pay. Jobs moved to the Jet Press 1160CFG can be produced on the same paper stocks at comparable quality using technologies exclusive to Fujifilm.

Fujifilm is ideally placed to maximise the benefits of this exclusive system with:

- A heritage in inkjet printing over the last 25 years.
- A long history of continuous inkjet printing, with the highest market share for the supply and service of these presses in the Asia Pacific region.
- A deep understanding of the print industry with over 90 years experience - from the supply of offset plates and film to the latest digital technologies.



A press that combines high quality and high speed

The Jet Press 1160CFG has two modes relating to speed and quality. A High Quality (HQ) mode running at a 1200 x 1200 dpi resolution and a High Performance (HP) mode with a print resolution of 1200 x 600 dpi.

Fujifilm hybrid ink technology, optimised for continuous feed printing

The Jet Press 1160CFG, combined with Fujifilm's hybrid ink, can print in both quality modes without the need for a primer. The patented hybrid ink formulation controls ink penetration, surface tension and coagulation to print at high speed with rapid drying, resulting in sharper dots and reducing strike through.

High definition and even dot shape for a better print result

Reducing moisture content during paper stabilisation improves dot shape and reduces graininess. The end result is higher productivity and a winning combination of better quality print, at higher resolutions, and at faster speeds.

Lower show through, the difference is striking

Another benefit of lower moisture content in the paper is reduced strike through on thinner paper stock. With less moisture due to the paper stabiliser, the ink stays nearer to the surface of the paper. Less penetration of the ink into the coating and paper fibres means lower show through.

This principle of early paper stabilisation with the Jet Press 1160CFG is far more effective than heated air or rollers alone during later stages of the print process. The result is a combination of high quality print and high production speeds with a consistency and efficiency not seen before in this type of press.



Consistent print that lasts

Great print needs to stay great and creating robust, long-lasting images needs great science. The Jet Press 1160CFG combines Fujifilm's renowned hybrid ink chemistry and the unique physics of the paper stabiliser to bring outstanding print durability to high-speed inkjet.



Many presses printing high resolution on coated stocks need to slow down to 50 metres per minute or less. When paper is stabilised on the Jet Press 1160CFG, lower moisture content means the paper surface can withstand more power and run at higher speeds.

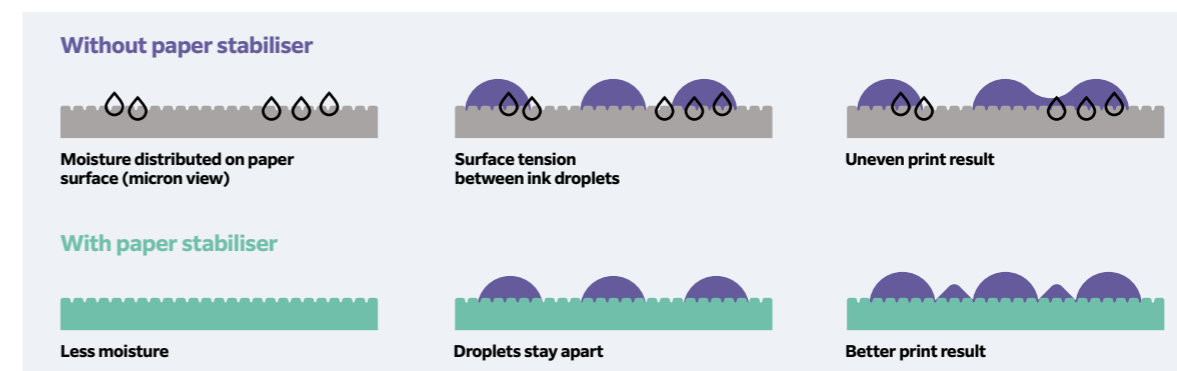
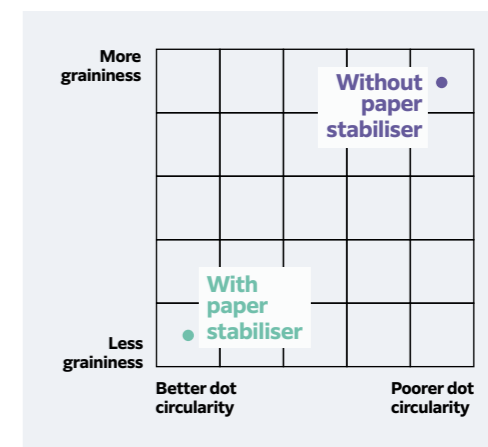


Image quality can suffer when jetting onto paper that has not been stabilised and moisture content is high. If the surface tension in the ink is disturbed by microscopic moisture elements in the paper, uneven dot shapes will make images appear grainy and text will be poorly defined too.



Control colour with cloud-based colour management

Deliver high quality, consistent and accurate colour output while optimising workflow efficiency and productivity.

XMF ColorPath, Fujifilm's cloud-based colour management system, allows printers to create optimised colour profiles and calibrations to print to various standards, and provides tools to ensure that over time the standards are continually adhered to, all while achieving superior print results and meeting the demanding requirements of today's print market.

Manage and monitor colour performance

The key to good colour management is the creation of accurate device link colour profiles, the ability to easily print to ISO standards, and above all to have a system that makes it easy to check and verify that standards are continuously being met. All of this and more is achieved with XMF ColorPath, Fujifilm's cloud-based colour management solution. Optimised curve data and ICC profiles can be quickly and easily created in the cloud and deployed for everyday production within XMF Workflow.

Key features

- Cloud-based colour management
- Align offset and digital presses to ISO or G7 standards
- Optimise ink usage while maintaining conformance to ISO and G7 standards
- Create optimised colour profiles to allow for GRACoL and FOGRA standard proofing
- Verify if digital proofs and prints are within the tolerance limits of industry standards

G7® and GRACoL® are trademarks of Idealliance Control your colour.

Working towards a more sustainable future

The Jet Press 1160CFG can replace traditional offset production for a variety of print jobs, therefore bringing the sustainability benefits of digital printing to a wider range of print production.

The many environmental benefits of digital print are well documented, including the elimination of make-ready waste between jobs, the removal of the plate production process, the requirement for fewer press chemicals, and smaller stock holdings due to the on-demand nature of digital print.

Technical specifications

Jet Press 1160CFG	
Printer configuration	Twin Engine Duplex
Colour capability	Full Colour
Printing method	Piezoelectric drop-on-demand inkjet method
Printing resolution	High Quality: 1200 x 1200 dpi High Performance: 1200 x 600 dpi
Halftone	3 levels per drop
Warm-up time*1	15 minutes or less (with the room temperature at 23°C)
Continuous print speed	High Quality: 80 m/minute (1048 ppm*2) High Performance: 160 m/minute (2096 ppm*2)
Paper width*3	Width 152.4 to 520.7 mm as standard with option available up to 546 mm
Paper weight*4	64 to 250 gsm
Paper feed	Unwinder connected (maximum roll diameter: 1270mm)
Paper discharge	Rewinder*5 connected (maximum roll diameter: 1270mm)
Feeding speed	Maximum 160 m/minutes
Operating noise*6	In operation: 79 dB(A)
Input power supply	Three-phase AC200 V +/-10 %, 50/60 Hz common Power Capacity: 87 kVA (Printer) Three-phase AC400 V +/-10 %, 50/60 Hz common Power Capacity: 208 kVA (Printer) Three-phase AC200 V +/-10 %, 50/60 Hz common Power Capacity: 26 kVA (Paper Stabiliser) Three-phase AC400 V +/-10 %, 50/60 Hz common Power Capacity: 104 kVA (Paper Stabiliser)
Dimensions*7	11.1m (W) x 4.355m (D) x 2.38m (H) (with rewinder) 10.3m (W) x 4.355m (D) x 2.38m (H) (with slack web unit, without rewinder)
Installation space*7	15.1m (W) x 6.3m (D) (with rewinder) 14.3m (W) x 6.3m (D) (with slack web unit, without rewinder)
Weight*7	13.105 kg (with rewinder) 12.555 kg (with slack web unit, without rewinder)

*1 Start-up inspection time and purge time are excluded. It may take more than 15 minutes depending on the installation environment.

*2 A4 size page x 2 layout and duplex printing. When printing a single document continuously. The continuous print speed may decrease due to conditions such as output data.

*3 A margin of 15 mm on left and right edges of paper is the unprintable area when the gripper roller is set on the edge area of the paper.

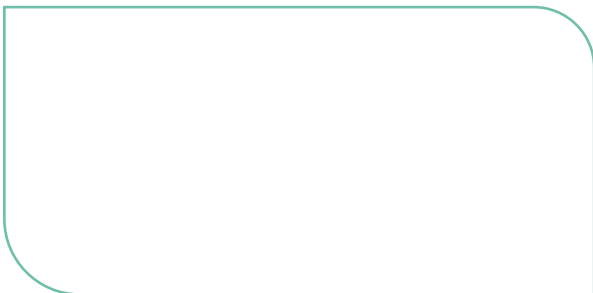
*4 It is restricted on printing speed with the paper over 157 gsm.

*5 Optional.

*6 Measurement based on the ISO11204 standard.

*7 Unwinder (standard), rewinder (optional), slack web unit and other necessary units are connected. Excludes roll paper (feed/rewind), attention light and chiller. Includes inks.

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