FUJIFILM

Jet Press 750S High Speed Model

PRODUCT BROCHURE

Powerful fourth generation B2 sheet-fed
digital inkjet press

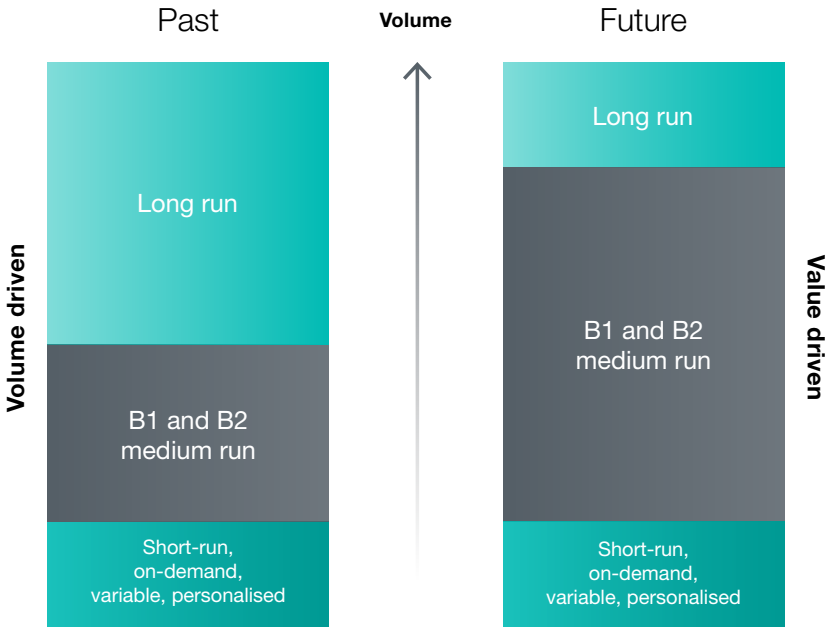
JetPress 750S

The market is changing

Offset printing meets a wide range of print requirements and has dominated the print market for many years. No single digital press has been able to address such a vast assortment of applications, cost effectively, at anything beyond short run lengths.

By adapting your business to this change through the adoption of new technologies tailored to this new world of print, forward-thinking printers can prepare for the future and position their businesses at the forefront of these developments. B2 inkjet is the perfect technology to address these changing market conditions, and the Jet Press 750S High Speed Model is without doubt the front runner.

Until now individual digital solutions were only able to address a limited range of print needs. No one press could meet all needs, from high value luxury packaging and other print with rich graphical and photographic content, to more affordable leaflets, manuals and short-term promotional work with lower quality demands.



The nature of print is changing, with the classic long run vs short run print model set to be turned on its head.

Concept created

Dimatix acquired

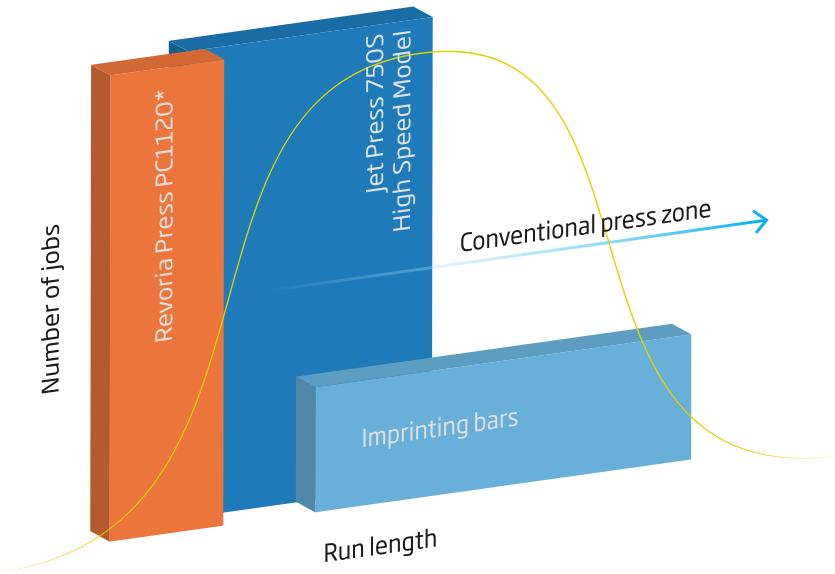
Technology launch

Jet Press 720 (Mk I)

2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012

Jet Press 750S High Speed Model: Transforming short-run print

To meet the needs of modern print buyers, printers have been forced to assemble digital presses of varying capabilities from a range of different manufacturers. This far from ideal situation leads to difficulties managing consumables and media, and balancing the abilities of each press to achieve an efficient production environment.

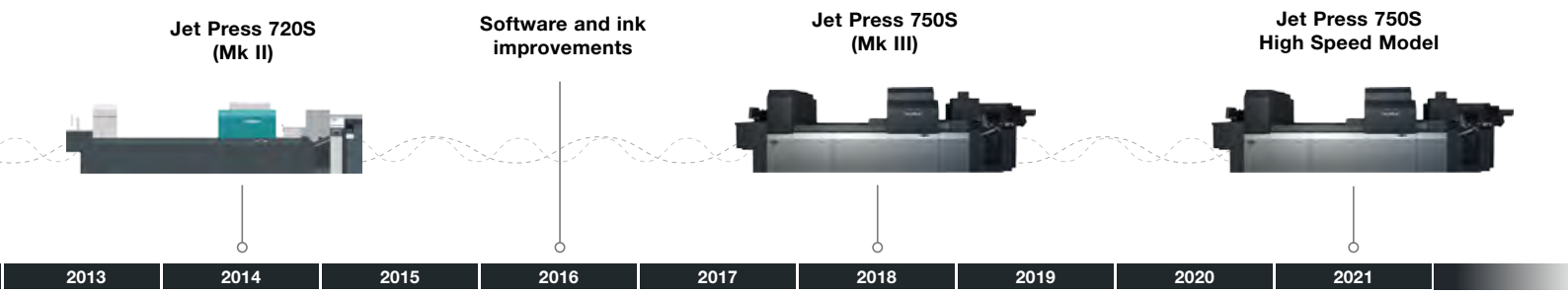


The potential of the Jet Press 750S High Speed Model to transform short-run printing is huge.
**Revoria Press is not available in all markets*

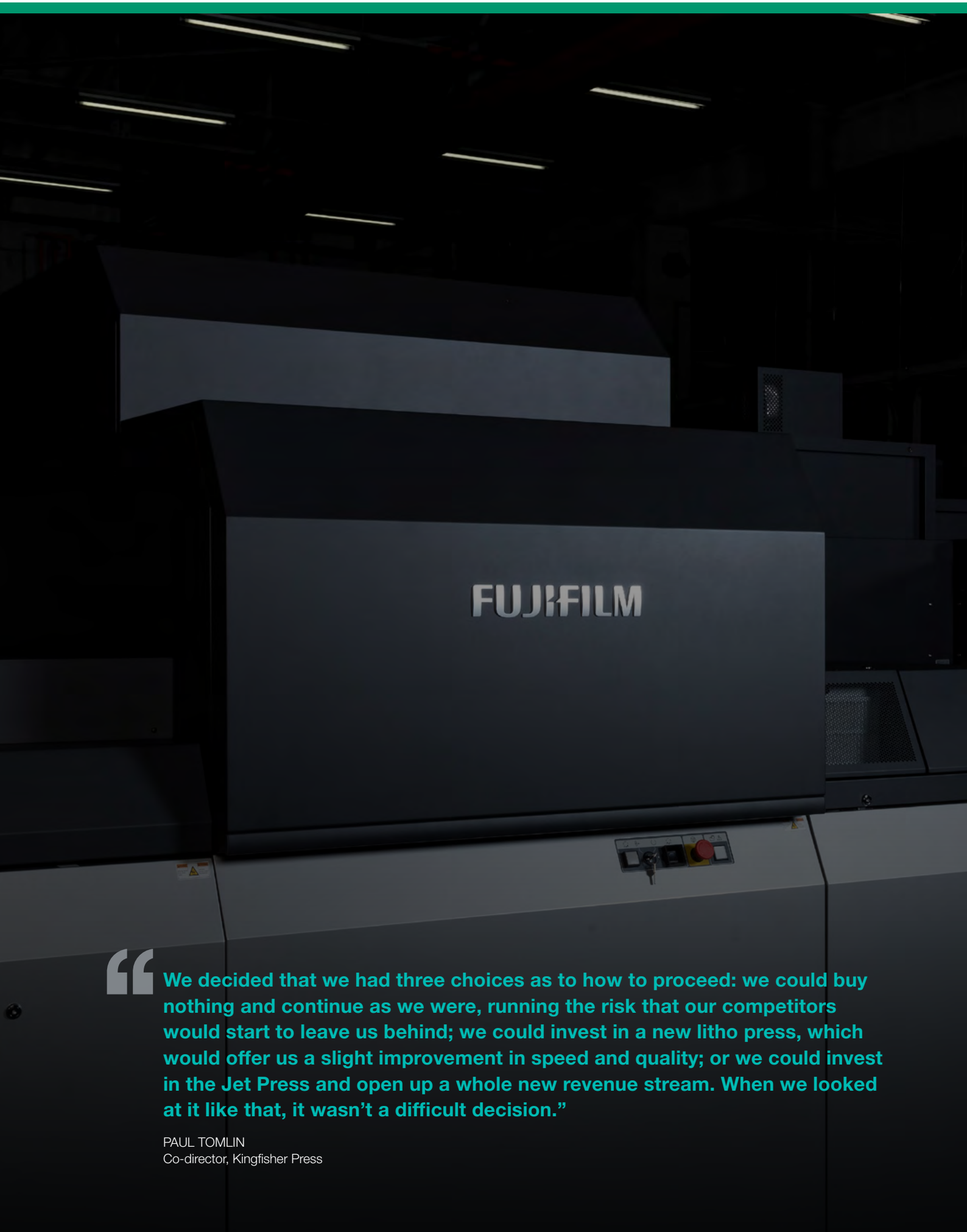
> **Ultimately, we are convinced that inkjet technology is the future for high quality, short run print."**
>
> SANDRA HAKET
> Co-owner, Impressed Druk en Print

The evolution of the Jet Press

The Jet Press 720S was the first B2 inkjet press to gain a foothold in this market, and was ahead of the game in terms of productivity and quality. And with over 250 Jet Press installations worldwide, more and more print buyers are now recognising what you can achieve with the inkjet technologies built into this groundbreaking press. But with the steady increase in the number of short run jobs, and the introduction of the Jet Press 750S, capable of printing 3600 sheets per hour, and more recently the launch of the Jet Press 750S High Speed Model, more and more jobs are going to fit the sweet spot of this industry-leading press.



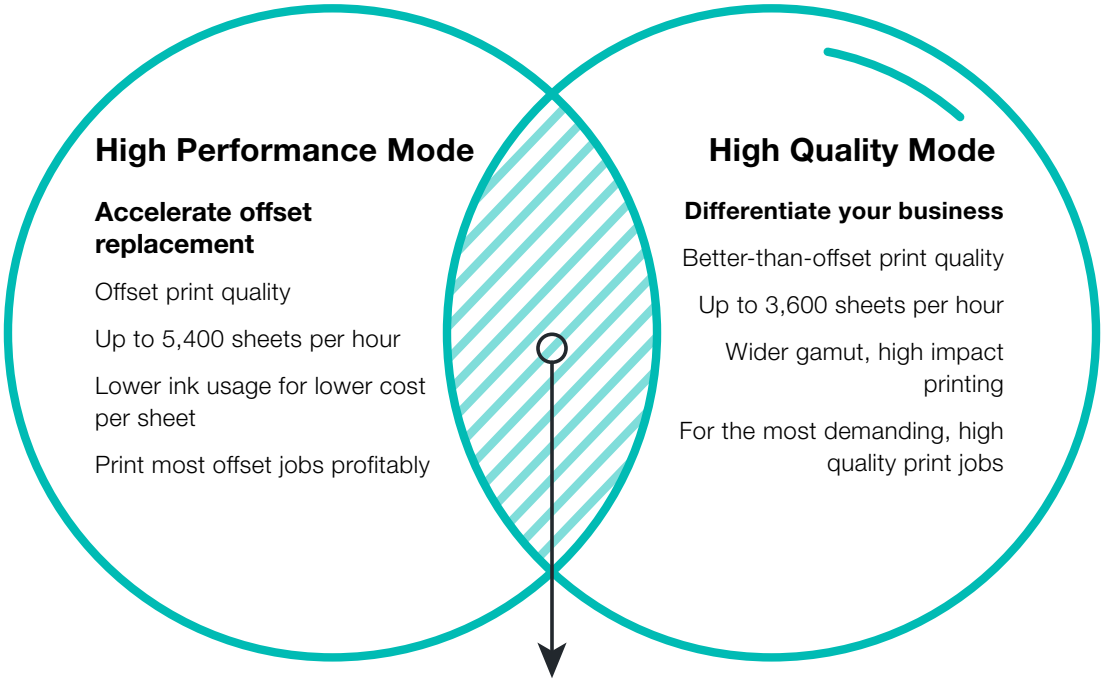
JET PRESS 750S HIGH SPEED MODEL
B2 SHEET-FED INKJET PRESS



“We decided that we had three choices as to how to proceed: we could buy nothing and continue as we were, running the risk that our competitors would start to leave us behind; we could invest in a new litho press, which would offer us a slight improvement in speed and quality; or we could invest in the Jet Press and open up a whole new revenue stream. When we looked at it like that, it wasn’t a difficult decision.”

PAUL TOMLIN
Co-director, Kingfisher Press

Jet Press 750S High Speed Model: Two presses in one



Characteristics common to both modes:

Accurate sheet-to-sheet registration

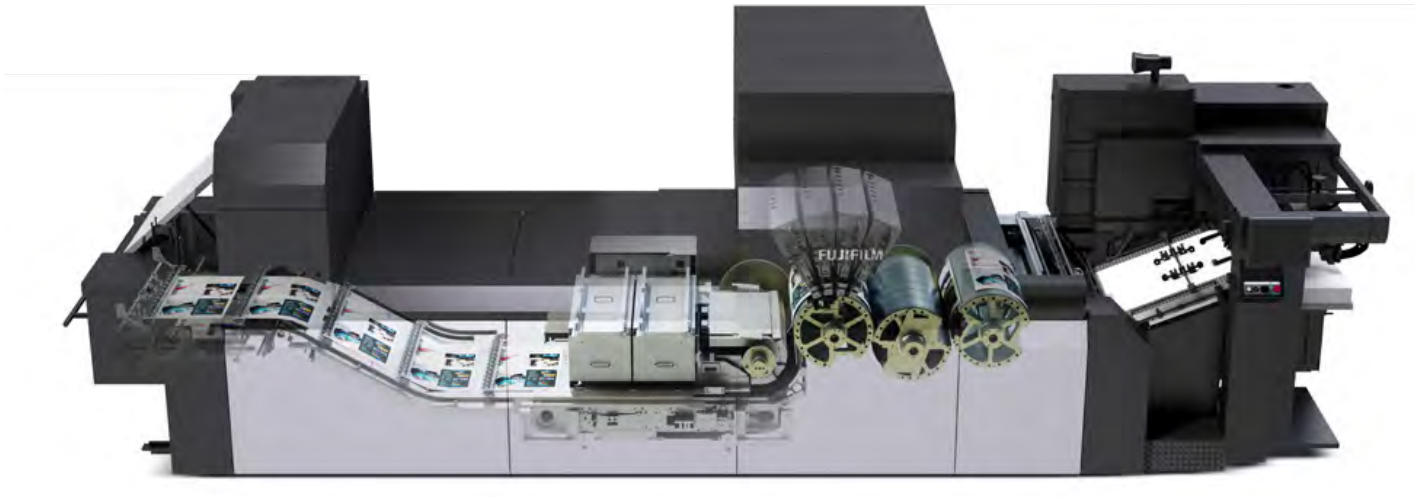
High up time and reliability

No pre-press or make readies

Variable data & personalisation

In high performance mode, it's a 5,400 sheet per hour B2 digital press that delivers offset quality and press reliability, but with lower ink consumption and therefore cost per sheet. This doubles the number of profitable digital print jobs you can print, simplifying and speeding up your production.

In ultra-high quality mode, it's a 3,600 sheet per hour press that delivers print quality better and more consistent than offset, with a wider high-impact colour gamut. This allows you to compete for print jobs of the absolute highest quality, setting you apart from your competition.



Next generation Samba printheads

Samba modular printheads are the powerful heart of the Jet Press 750S High Speed Model. The result of many years of painstaking R&D development and manufacturing expertise, these high performance printheads are now the benchmark by which all others in the industry are judged. The Jet Press 750S High Speed Model now features the very latest Samba printheads to provide better productivity, quality and reliability.

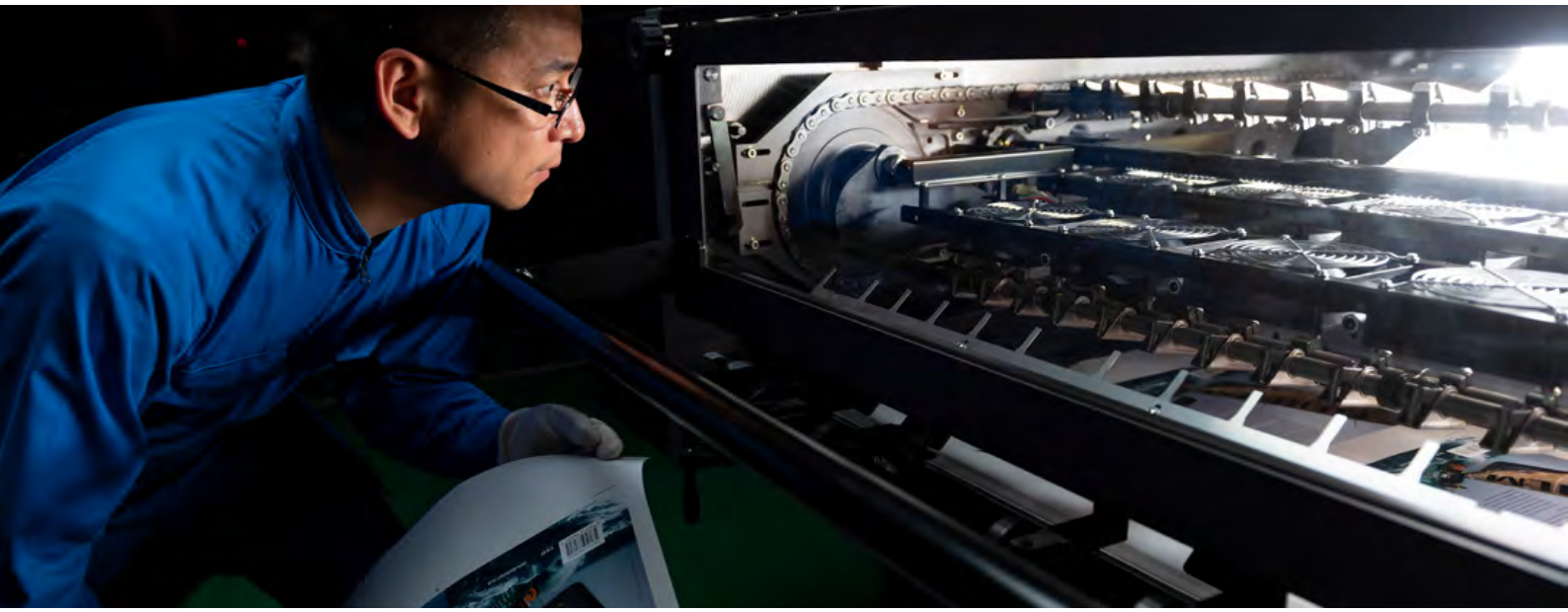

YASKAWA
YASKAWA
YASKAWA

Productivity

With a productivity of 3,600 sheets per hour in High Quality mode and 5,400 sheets per hour in High Performance mode, the Jet Press 750S High Speed Model is quite simply the fastest 4 colour, B2 sheet-fed inkjet digital press available.

This means the Jet Press allows you to take on more work and get more sheets on the floor than with multiple other digital presses. So if you produce a lot of short or medium run print, the Jet Press will revolutionise your business, improve the service you offer your customers and enhance your competitive edge.

And as the Jet Press is upgradeable, you could start with the Jet Press 750S Standard Model, and upgrade to the High Speed Model as your business evolves, giving you the ultimate flexibility.



THE FASTEST B2 SHEET-FED, FULL COLOUR DIGITAL PRESS AVAILABLE

Overall productivity is governed by more than just the top-line press speed. Job productivity can be defined as the combined effect of the following:

1. **Pre-press preparation**
2. **Press up-time**
3. **Press print speed**
4. **On the floor productivity**

Pre-press preparation

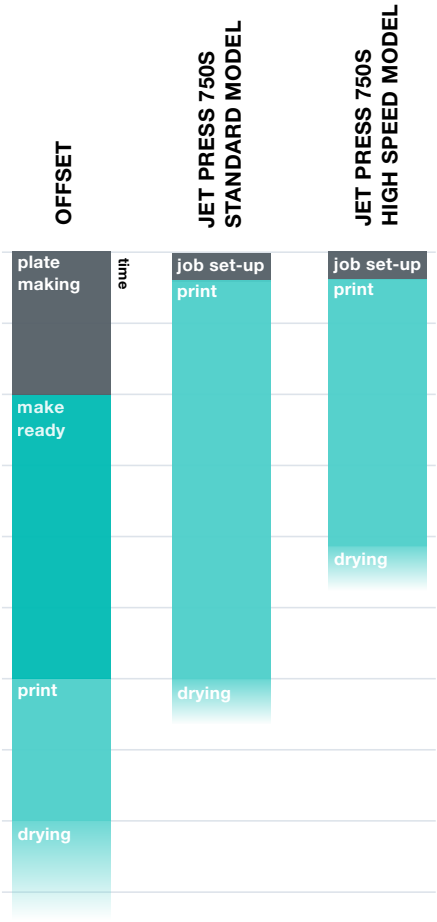
1

The Jet Press 750S High Speed Model eliminates all the preparation and set-up time of an offset press. There are no plates to produce, no platesetters or processors to maintain, no make readies, no run up to colour, no waste sheets and virtually no pressroom consumables. It operates in the most efficient way possible – just send the PDF to the press and print.

In addition, the Jet Press takes advantage of software improvements to ensure productivity is maximised. Job management is so efficient, that jobs can be prepared by XMF while the press is printing, ensuring continuous operation and no down-time. This even applies to data-hungry collated or personalised variable data jobs.

“The Jet Press is so easy and quick to run that we can produce a day’s worth of proofing in a few minutes, with the same quality and on the same paper stock as the final job. It’s the fastest proofer we’ve ever had and it speeds up the approval process downstream too.”

JOHN EMMERSON
sales director, Emmerson Press



With the Jet Press 750S High Speed Model, the production time is much lower.

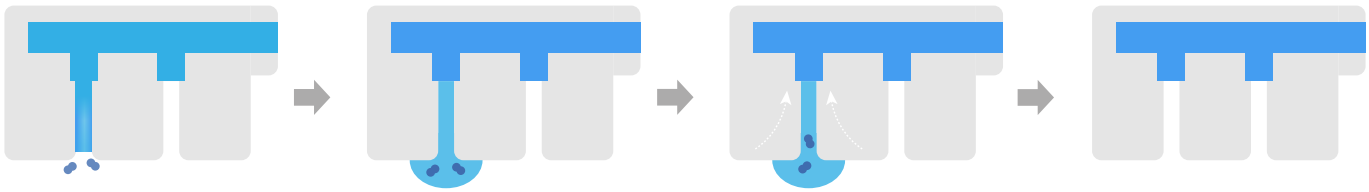
Straight-forward operator use

The Jet Press 750S High Speed Model is also incredibly easy to use. This is partly down to the simplicity of the operator interface, but also down to the consistency of results, with minimal operator set-up and intervention required to achieve remarkably consistent, high quality print. It is also possible to switch between High Quality and High Performance modes very easily with a simple software change, without making any hardware adjustments. Certain job management and press functions can also be carried out remotely via an iPad (optional extra).

Press up-time

2

The second element critical in determining overall press productivity is the up-time or time the press is available to print. The up-time of the Jet Press 750S High Speed Model is unprecedented for a digital press, with reliability figures comparable to an offset press, as it is built on an offset chassis with ultra-reliable paper handling technologies, combined with next generation Samba printheads. Up-time figures above 90% are typically quoted by current Jet Press customers. This is because the press features a new printhead self-cleaning process. This includes a process called “Overflow Cleaning” which reduces the head cleaning frequency by carrying out the cleaning at times when the press is between jobs or the printhead assembly is moving back to the maintenance position.



1. Dried ink, dust or other contaminants on the print head nozzle plate can build up to cause mis-directed droplets or eventually block nozzles completely.

2. To remove these at an early stage a small amount of ink is secreted from the nozzle to “pick up” the contaminants.

3. The process is then reversed and ink is drawn back into the head.

4. Contamination is removed by the ink filtration system

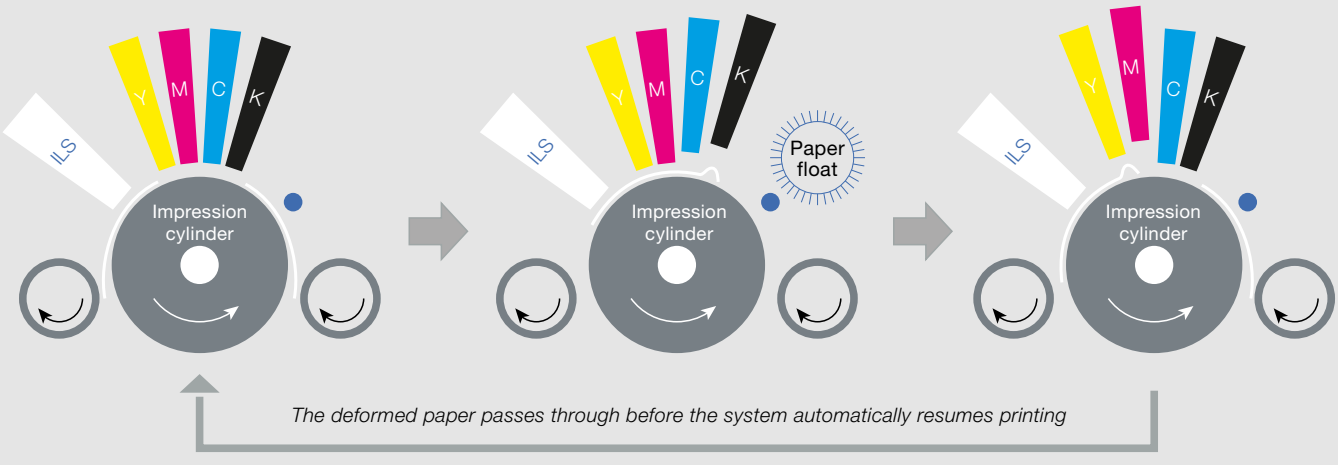
Stable paper feeding

The printhead assembly in the Jet Press 750S High Speed Model also features an Active Head Retraction (AHR) system to reduce the impact of any paper deformations on press operation. This system lifts the printbars from the drum when a paper deformation is detected (where the deformation is <3mm). This new system minimises the impact of paper deformation, and limits the number of times paper jams occur, maximising press up-time and productivity.

“The up-time, at around 90%, is exceptional and has allowed us to significantly reduce our delivery times, something many of our customers have noticed and commented on.”

MARIO PERL – Vice president of production & supply chain management, posterXXL

The print bars are lifted away from the impression cylinder when a paper deformation is detected



Press print speed

3

The Jet Press 750S High Speed Model is able to transition between 3,600 sph High Quality mode at 1,200 x1,200 dpi and 5,400 sph High Performance mode at 1,200 x 600 dpi incredibly quickly. It is the first digital press to offer a practical digital alternative that challenges the capabilities of offset to produce a broad range of print affordably and at comparable speeds.

To achieve this, the Jet Press 750S High Speed Model introduces dual modes to the standard 750S press: High Quality mode achieves the same quality as the Jet Press 750S standard model at speeds of up to 3,600 sheets per hour.

High Performance mode is capable of reaching speeds of up to 5,400 sheets per hour, for the production of general print jobs.

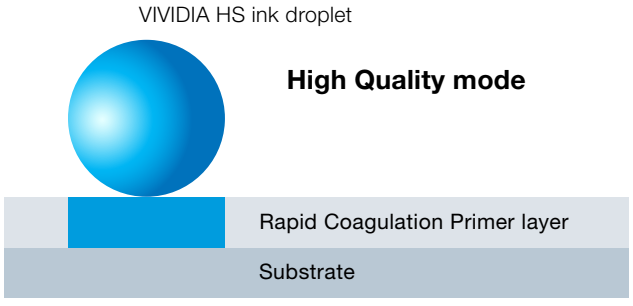
High Quality mode at 3,600 sph

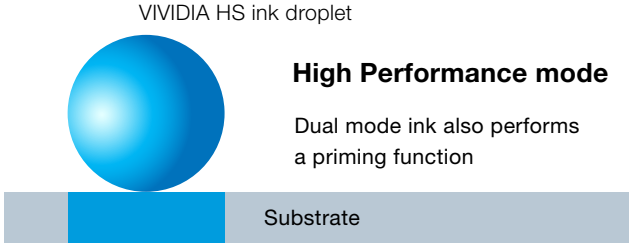
High Performance mode at 5,400 sph

High Performance mode saves on the use of Primer (RCP) and reduces ink consumption with a resolution of 1200 x 600 dpi

New dual mode VIVIDIA HS ink

The Jet Press 750S High Speed Model is now able to take on more jobs, more cost effectively at greater speeds thanks to Fujifilm's development of a new water-based VIVIDIA HS ink optimised for both print modes. When ultra-high quality is required, the Jet Press coats the sheet with a Rapid Coagulation Primer (RCP) to enable ultimate dot control and provide the highest possible definition. For less demanding work, where higher speed or affordability is key, the VIVIDIA HS ink is deposited directly onto the substrate without the need for an RCP layer.





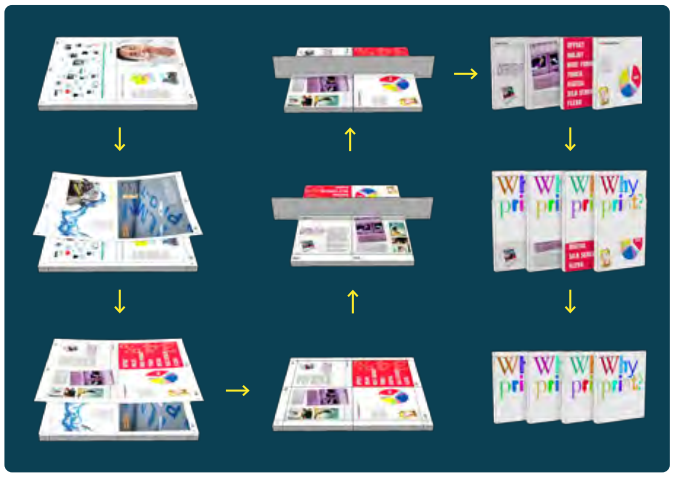
Productivity on the press floor

4

The final element that determines productivity is the time required to take the printed sheets and finish them. The Jet Press 750S High Speed Model has a number of features that help optimise this process.

High productivity book printing

Whether it's just a few books printed cut and stack, as shown below, or a longer run in folded sections, the Jet Press can print all sheets in collated order, removing the need to handle stacks of different sections. That makes folding easier to manage and eliminates the gathering stage completely. Another bonus is that books can be bound as soon as the first sheets are printed when the Jet Press is operating in collated print mode. As a result, the press and the binder can both be running the same job at the same time, a real advantage for fast turnaround work.



Optimised sheet dryness

Due to the new drying mechanism, more print jobs emerge from the press dry. With the wide variety of paper types and thicknesses that can be the printed using the Jet Press, the new drying system means more types of paper and more print jobs are dry when they emerge from the press, meaning that either the back side can be printed sooner, or the job can be finished more quickly.

"And, because we often print collated, the finishing time of many of the jobs we print on the press can be reduced by several hours."

HENNING ROSE
CEO, Wegner GmbH

Be more productive with the Jet Press 750S High Speed Model

The High Speed Model is effectively two presses in one, and as it is easy to switch easily between modes, it offers much greater flexibility for printers to produce a wider range of digital work for their customers. Balancing performance with cost helps shift more jobs profitability from offset to digital. The Jet Press can also be upgraded in the field, offering an upgrade path for current owners. New owners could decide to start with the standard model then upgrade to the High Speed Model as work and demands increase.

> **With 30% of our run lengths now less than 700, 40% between 700 and 1,500, and 30% over 1,500, it was clear we could improve the efficiency and profitability of our shorter run work by investing in Fujifilm's Jet Press."**

BAS GRAVESTEIJN
director, Impressed Druk en Print

THE FASTEST B2 SHEET-FED, FULL COLOUR DIGITAL PRESS AVAILABLE

1

Pre-press preparation,

Zero make readies

2

Press up-time

Typically >90%

3

Press print speed

Up to 5,400 sheets per hour

4

On the floor productivity

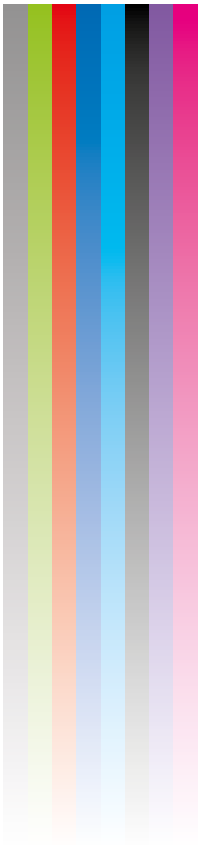
Dryer sheets, quicker finishing

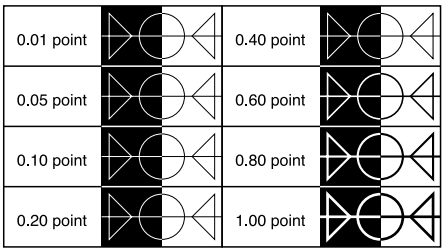
Ultra-high quality

The Jet Press 750S High Speed Model takes the print quality produced by a digital printing system to new heights thanks to a combination of fundamental Fujifilm technologies. The end result is stunning, vibrant colours, superb skin tones, extraordinary fine text and line detail, and incredible flat tints, all produced on standard coated or uncoated offset paper.

However, the perception of print quality is not only limited to the technical specifications. There is a tactile, emotional and physical element to a piece of high quality print that sets it apart. The Jet Press is the only digital press that delivers on both the technical and the intangible qualities that buyers of offset print are so used to, setting it apart from any other press.

In many cases, Jet Press owners end up printing more on the press as their customers love the quality so much, they specify their work to be printed only on the Jet Press.





COLOUR MANAGEMENT, WORKLOW AND SCREENING

BLEED-FREE INK COAGULATION TECHNOLOGY

LARGER GAMUT, ULTRA CONSISTENT WATER-BASED INKS

THE NEW STANDARD IN PRINT QUALITY

LATEST GENERATION SAMBA PRINTHEADS

REGISTRATION ACCURACY BETTER THAN OFFSET

REAL-TIME CLOSED-LOOP QUALITY CONTROL

High quality printing in both modes

The excellent quality of print produced by the Jet Press 750S High Speed Model in either High Quality or High Performance modes is made possible by a number of unique Fujifilm technologies.

It starts in the workflow

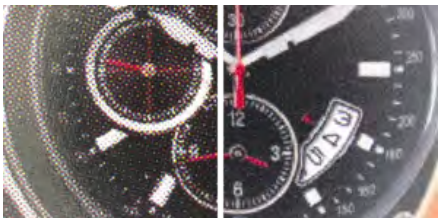
Quality starts in the workflow with print jobs automatically flowing through XMF's print production process. Print jobs are pre-flighted, colour managed, imposed and ripped for output automatically. If manual intervention is required, however, to make last minute changes to production such as late file revisions or imposing for different finishing equipment, all the tools to manage this are built right into XMF.

The Jet Press also takes advantage of unique Fujifilm FM screening algorithms that eliminate moiré and produce ultra-smooth tints.

COLOUR MANAGEMENT, WORKLOW AND SCREENING

For colour management, XMF ColorPath provides all the tools required to create and manage colour profiles that will allow the Jet Press to match any chosen colour standards as defined by FOGRA, G7 or other organisations. Colour consistency from sheet-to-sheet and job-to-job is second to none with the Jet Press, thanks to the consistency of the VIVIDIA ink formulations and manufacturing process. As such, most of the time there will be no need to adjust colour settings, but XMF ColorPath can be used to verify colour conformance to a given standard at any time. Want to start printing work on a new media type? Creating new profiles for new media takes no time at all whether the new media is coated or uncoated stock.

Comparison of screening technologies at 2x magnification



Print with standard AM screening

Jet Press print with FM screening

THE NEW S
IN PRINT

REGISTRATION ACCURACY BETTER THAN OFFSET

Registration, registration, registration

Quality is nothing without consistency. Because the Jet Press makes use of an offset paper feed mechanism, which adjusts automatically when the paper size is selected, registration accuracy is superb. This removes one of the limitations of current digital printing systems, where the tolerance from sheet-to-sheet limits the jobs that can be run. With the Jet Press, the registration and repeatability from sheet–to-sheet are second to none.

Industry-leading Samba printheads

There is no doubt that Samba printheads lead the industry in terms of performance. Fabricated using precision MEMS[1] technology, they can achieve 1,200 x 1,200 dpi when the Jet Press is in High Quality mode, and 1,200 x 600 dpi with the Jet Press in High Performance mode. However, they also take advantage of Fujifilm's unique VersaDrop technology, allowing the size and shape of each ink drop to be precisely controlled and placed on the paper. Thanks to VersaDrop technology, the ink droplets can be reproduced in four levels of greyscale, with the effective resolution therefore much higher.

The Jet Press features a new generation Samba printhead technology that achieves even greater accuracy and higher quality, thanks to higher frequency jetting and better stability. In addition, the new Samba printheads feature higher reliability and robustness for better long term performance.

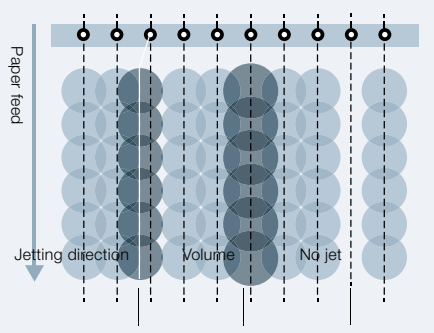
[1] Micro Electro Mechanical System

LATEST GENERATION SAMBA 1,200 X 1,200 DPI PRINTHEADS

STANDARD QUALITY

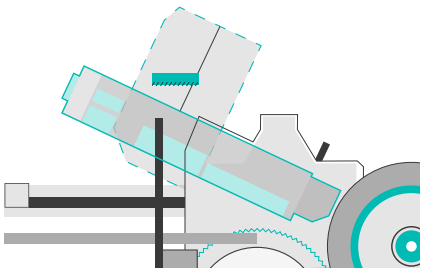
Automatic Nozzle Control

Quality is further enhanced through the use of a CCD sensor that makes any necessary alterations to the way the ink is discharged from the printhead in real time. The proprietary In-Line Sensor (ILS) system detects any nozzle and ink deposition inconsistencies, modifying the printhead nozzle map and ink deposition parameters in real time to correct deviations from the norm.



REAL-TIME CLOSED-LOOP QUALITY CONTROL

New position
Old position



Reading Accuracy at Higher Press Speeds

In the Jet Press 750S High Speed Model, this system has been moved to enable it to read the data directly without the need of a mirror, reducing the periodic maintenance required to clean the mirror. The resolution has also been doubled to enhance the reading accuracy at the higher press speed.

Ultra-consistent, dual mode, high performance ink

The performance of the ink through the printhead onto the printed sheet is critical to deliver benchmark quality in standard mode and high opacity when Jet Press prints in performance mode. So Fujifilm scientists made use of the company's advanced chemical technologies to develop a new water-based ink. The result is VIVIDIA HS – a new range of high performance CMYK ink colours that have each been painstakingly developed to match the Samba printheads and achieve the best consistent performance on the widest range of standard offset papers with or without primer. Ink grains as small as 0.5 trillionths of a litre, invisible to the naked eye, are discharged at high speed to deliver breathtaking print quality. In the Jet Press 750S High Speed Model, these inks have been refined even further, optimising the combined performance criteria of quality, drying and ink rub-off from sheet to sheet.

"There are a number of advantages to the wider colour gamut. Firstly, we can hit a much larger range of Pantone colours, which is essential on some jobs. We have also found that, as well as some colours being noticeably brighter, there is more contrast and detail in the images"

HENNING ROSE
CEO, Wegner GmbH

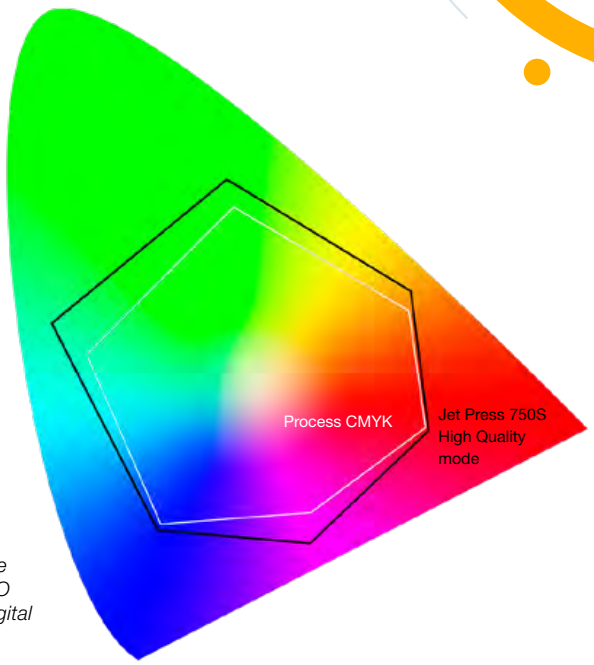
THE NEW S
IN PRINT

LARGER GAMUT, ULTRA CONSISTENT WATER-BASED INKS

A wide colour gamut

One of the key advantages of the Jet Press running in High Quality mode is its enhanced colour gamut – we call it 'MaxGamut' – that allows you to reproduce more spot colours and produce more vibrant print with just four CMYK inks, without having to add or swap special inks or toners to boost the colour.

Jet Press owners have told us that when their customers start to experience MaxGamut print, they start specifying the Jet Press to print their work. They have a unique advantage in the marketplace, as the quality surpasses other digital technologies and even what offset litho presses can achieve. This is a key differentiator that helps you stand out in a crowded and highly competitive market

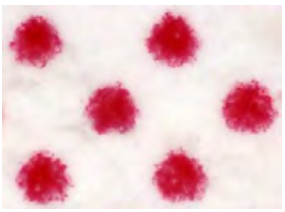


A wide colour gamut enables vibrant images to be reproduced and allows colour matching to the ISO 12647-2 standard, critical for mixed offset and digital production environments.

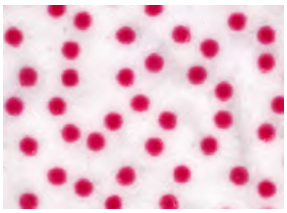
Rapid Coagulation Primer (RCP)

The natural tendency of an ink droplet is to spread when it hits the paper. In High Quality mode the Jet Press applies a Rapid Coagulation Primer (RCP) prior to ink deposition via an anilox roller, this ensures uniform ink formation whatever the paper type.
The RCP features a unique 'rapid coagulation ink' technology which prevents dot gain, and is a critical component in the formation of a high quality image.

Offset AM 175 lpi



Jet Press 750S



Halftone dot comparison (magenta 20%)

BLEED-FREE INK COAGULATION TECHNOLOGY

XMF ColorPath

Predict spot colour matching prior to printing

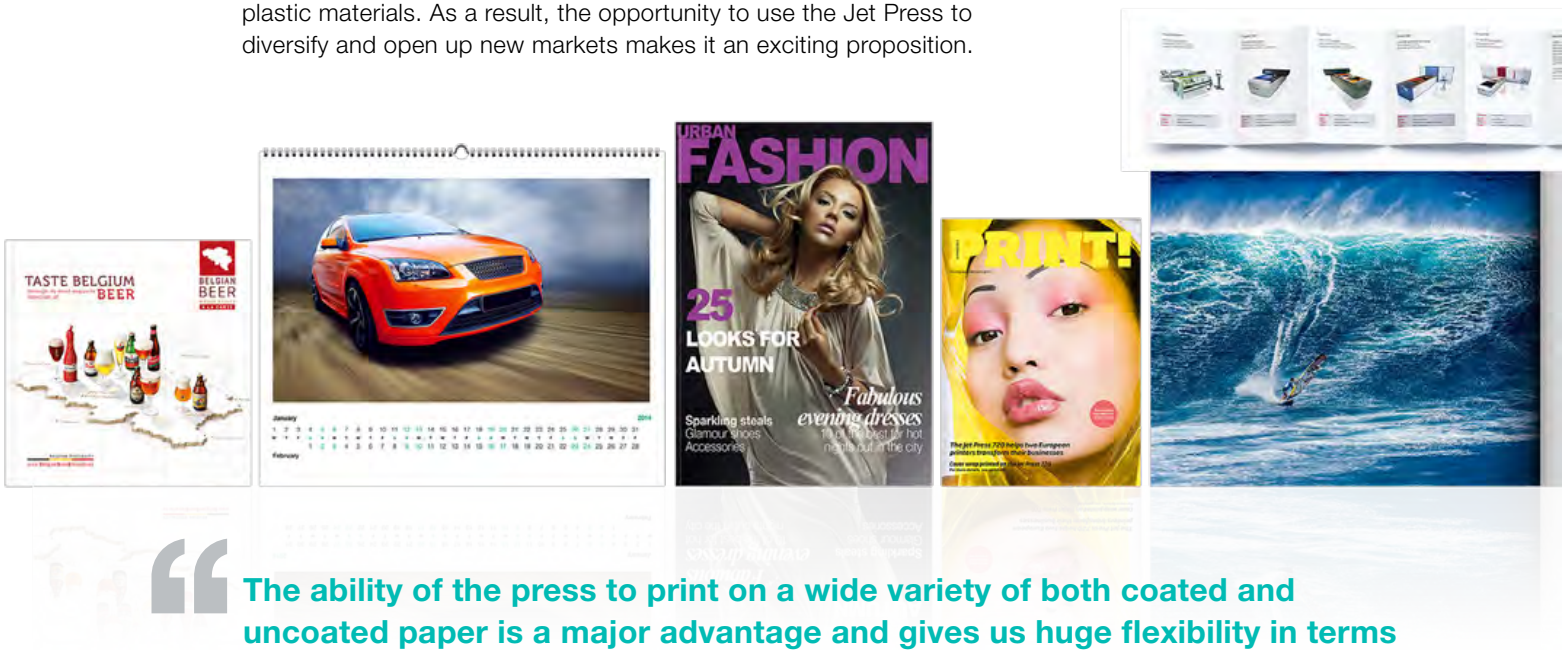
One advantage of MaxGamut on a Jet Press running in High Quality mode is its ability to accurately reproduce a high percentage of Pantone colours. Via a simple calibration process within Fujifilm's XMF ColorPath Brand Colour Optimiser module, it is possible to profile the entire Pantone library for any chosen media type. This will ensure that each and every Pantone colour will be printed as accurately as physically possible.

What is unique to Brand Color Optimiser is the ability to see how accurately a Pantone colour will be printed before actually printing. This quality control tool provides assurance that a specific Pantone colour on a chosen media can be printed accurately within a specific Delta E variance, or in rare cases will indicate a specific Pantone colour is outside the gamut of the Jet Press. This means decisions about printing a specific job can be made up front, and no time is wasted trying to achieve what is not possible.

Depending on the media used for printing, up to 90% of the Pantone library of 1872 colours can typically be printed with a Delta E of 3 or less providing an exceptional colour match on a four colour press.

Versatile

The Jet Press 750S High Speed Model is able to print on a wide range of substrates. As well as coated and uncoated offset paper, the press can print on carton board, photo canvas and some plastic materials. As a result, the opportunity to use the Jet Press to diversify and open up new markets makes it an exciting proposition.



“The ability of the press to print on a wide variety of both coated and uncoated paper is a major advantage and gives us huge flexibility in terms of what we can offer our customers. This is helping us to differentiate our service offering in a highly competitive market”

BAS GRAVESTEIJN
Director, Impressed Druk en Print

Print on standard coated & uncoated offset paper

The Jet Press 750S High Speed Model is unlike many other digital presses in that it can use an assorment standard offset paper, removing the need to use specialised coated digital paper on many occasions. This means, for example, that a printer can take advantage of current paper stocks, simplifying inventory and reducing costs. But it also means that jobs printed on the Jet Press are potentially more cost-effective than those printed on other digital presses, as the paper is less expensive.

The use of offset paper also makes the Jet Press much more versatile as it can take advantage of a multitude of different paper types and effects. In particular, the result on uncoated paper in High Quality mode is stunning, with the effect of vibrant VIVIDIA inks on uncoated paper producing print with much greater impact than offset, with the additional benefit of the sheets being completely dry.

The Jet Press in High Quality mode can achieve benchmark quality independent of paper type thanks to its integrated Rapid Coagulation Primer (RCP) system. This system coats the sheet with an ultra-thin, invisible film, providing a consistent environment for the coagulation of ink droplets and guaranteeing the highest print quality whatever the paper type.

A wide range of application possibilities

Coffee table books

The quality, format size and ability to print on standard offset paper make the Jet Press ideal for the production of short run coffee table books.

Photography portfolios

High quality photography portfolios and photobooks are perfect for the Jet Press, with the wider colour gamut able to deliver breathtaking images.

Brochures

Short run brochures are perfect for the Jet Press, with the ability to personalise and print multiple language versions quickly and easily adding extra value.

Posters

High quality art posters are ideal for the Jet Press, with the wide paper choice (coated and uncoated) and superb quality delivering perfect results time after time.

Variable data direct mail

The Jet Press features a barcode system and high powered data servers to print every page on the fly, guaranteeing front and back page matching every time.

Book covers

The Jet Press is perfect for single sided book jackets, with the consistent high quality and wide colour gamut helping books stand out from the crowd.

Calendars

With the ability to print on a wide variety of paper, high quality calendars up to B2 in size can be created quickly and easily, with personalisation an added bonus.

“A large proportion of our work is photographic printing on canvas, and the Jet Press is perfect for this, delivering high quality print at a speed that simply would not have been possible for us prior to our Jet Press investment. But it doesn’t stop there – we use it to produce a wide range of products, including our famous retro photos, premium photo books and personalised calendars. We have found it to be such a versatile machine that we can send almost any job to it.”

MARIO PERL
Vice president of production and supply chain management, posterXXL

Printing on canvas

Thanks to improvements in the vacuum drum and ink chemistry, the Jet Press 750S High Speed Model can be used to print on canvas substrates, with the quality of results stunning. This adds another versatile option that allows owners of the Jet Press to explore new applications and revenue streams.

Suitable for offset post-press enhancements

A sheet printed by the Jet Press can be dropped into existing finishing equipment and treated with the type of post-press enhancements that can be applied to an offset sheet. As a result, digital print can be treated like offset print more than ever before.

Print on 90 micron light-weight stock

The Jet Press can print on 90 micron standard offset paper, and so is ideal for applications like light-weight fold-out maps or leaflets.

Print on 340 micron heavy-weight stock

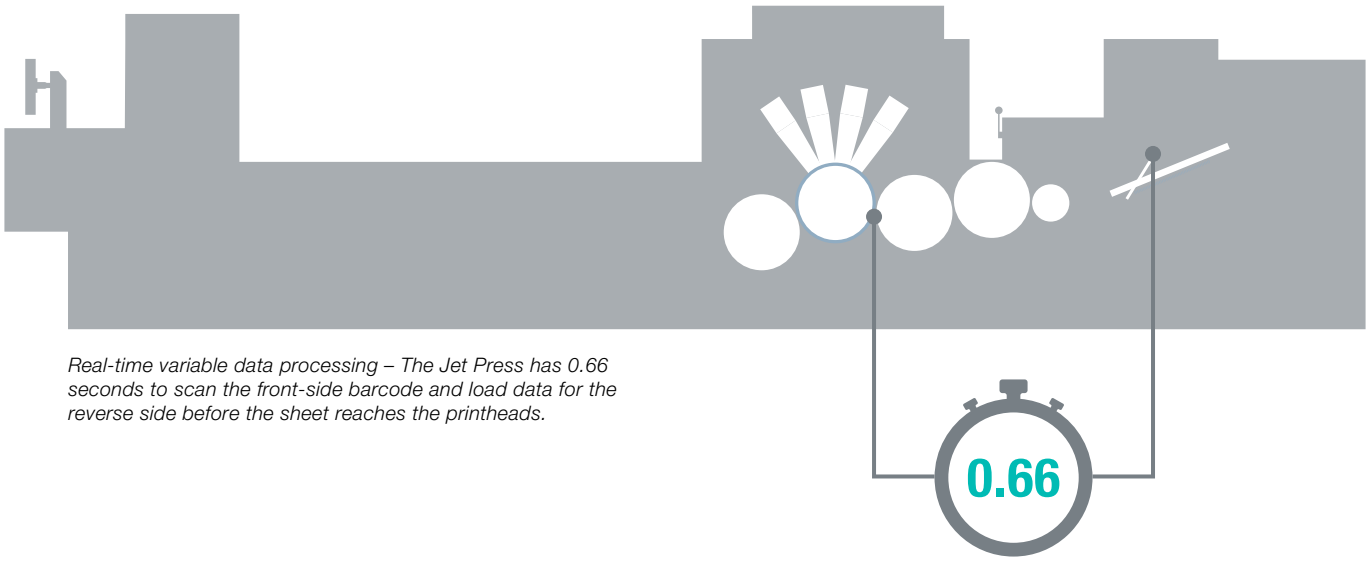
The Jet Press can print on 340 micron stock, and so is ideal for applications like folders and even promotional packaging boxes. For heavier-duty folding carton applications, the press can be modified to take board up to 600 microns thick.

Full speed double-sided variable data handling

One of the major advantages of the Jet Press 750S High Speed Model is its ability to handle variable data, with the press using a barcode system to guarantee front and back page matching. The barcode is printed in the non-image area of every sheet immediately after the paper leaves the input sheet stacker. Once the first side has been printed, the sheets are turned over and loaded into the sheet stacker once again. The press reads the barcode on every sheet as it leaves the stacker and downloads the correct page information before it prints the second side (in less than two seconds), guaranteeing front and back page matching.

The benefits of this capability extend beyond the obvious application of variable data personalisation. Jobs can also be printed 'collated' in page order to simplify and speed up the finishing process or improve the logistics for job distribution, making the production of versioned print jobs simple and straightforward.

The ability to handle variable data is a fundamental advantage of a digital press, and the Jet Press is no different.



Real-time variable data processing – The Jet Press has 0.66 seconds to scan the front-side barcode and load data for the reverse side before the sheet reaches the printheads.

Perfect for packaging

The packaging market is seeing a growing increase in the number of brand owners and specifiers who are looking to achieve greater shelf stand-out and differentiate their products from their competitors. At the same time they are also looking to reduce stockholdings, optimise supply chains and find digital press solutions that will allow them to more profitably print offset quality, customised packaging in much shorter and more frequent runs.

Delivering exceptionally consistent, high quality output ready for finishing on carton board or synthetic media, the Jet Press 750S High Speed Model already satisfies these requirements fully. In fact, around one third of all current European Jet Press customers already produce some form of packaging on the press. Capable of speeds up to 5,400 B2 sheets per hour and variable data printing at full speed, the new Jet Press is ideally suited to print versioned, short run packaging material to coincide with specific events, localities or store promotions.

Support for heavier weight folding carton stock

As an option, the Jet Press can be modified to accommodate heavier weight folding carton stock from 0.2 – 0.6mm in thickness. This makes it ideal to print short run packaging applications.

Finishing solutions

Jet Press printed sheets have been tested and found to be compatible with a wide range of analogue and digital coating, foiling, lamination and cutting solutions. An automatic bridge is also available to connect to online coating solutions.

Traditionally, clients in the packaging industry have doubted the ability of a digital press to match the quality of litho or flexo printing. However, our customers have been hugely impressed with the quality of what we have produced for them using the Jet Press. The Jet Press is now the benchmark platform in this sector."

MOHAMED TOUAL
CEO, Packaging for Professionals

Food safe ink

Fujifilm is able to offer a food safe ink for use on the Jet Press 750S Standard Model, making it the first B2 digital press approved to print primary food packaging. This new, low migration, aqueous food safe ink complies with stringent primary food contact regulations, including Swiss Ordinance 817.023.21 and European Commission Regulation 1935/2004, and has been specially formulated to work with inline (via a bridge) and nearline UV or aqueous coatings.

“Packaging buyers want consistency and solid and bright colours, and the Jet Press delivers all of this. We believe packaging will grow in tandem with our commercial printing operation over the next few years, and the Fujifilm machines are essential to our success in this sector.”

FRANCISCO MARTINEZ
CEO, Celebrate Print GmbH

A powerful press requires a powerful workflow

Phoenix imposition and planning software

For companies looking to diversify into packaging, the Jet Press folding carton solution can also incorporate Phoenix imposition and planning software from tilia Labs. This software optimises the way jobs are planned, or ‘ganged’, for printing and can automate this process based on various priorities such as maximising the speed of production throughput or minimising substrate waste. The support for true shape nesting and any angle rotation, combined with the automated AI planning engine, means Phoenix planning is both quick and efficient.

FUJIFILM WORKFLOW xmf ColorPath

Spot colour capability and XMF ColorPath Brand Color Optimiser

One of the key advantages of the Jet Press in High Quality mode is its enhanced colour gamut that allows more spot colours to be printed with just four CMYK inks, without the expense of special inks or toners to boost the colour. This makes it ideal for the production of folding carton packaging. In addition, via a simple calibration process within Fujifilm’s XMF ColorPath Brand Colour Optimiser module, it is possible to profile the entire Pantone library for any chosen media type to ensure that every Pantone colour will be printed as accurately as possible.

What is unique to Brand Color Optimiser is the ability to see how accurately a Pantone colour will be printed within a specific delta E variance, before actually printing. This means decisions about printing a specific job can be made up front, and no time is wasted trying to achieve what is not possible.

A fourth generation press engineered to produce high quality print all day, every day

The Jet Press 750S High Speed Model has been built to produce high quality print all day, every day. The benefits of an offset paper handling system are obvious, and take advantage of technology that has evolved over many years to be ultra-reliable. But there are also many improvements in the Jet Press detailed on this page that improve quality even further, improve variable data handling, speed up job downloads, reduce the necessity for system downtime and minimise breaks in production due to press maintenance.

Sheet stacking

The final printed sheet emerges in the delivery area in the same way as a traditional offset press.

Paper cooling

Before the sheets leave the press, they pass under a bank of fans designed to optimise the sheet temperature and ink drying performance.

Optimised drying system

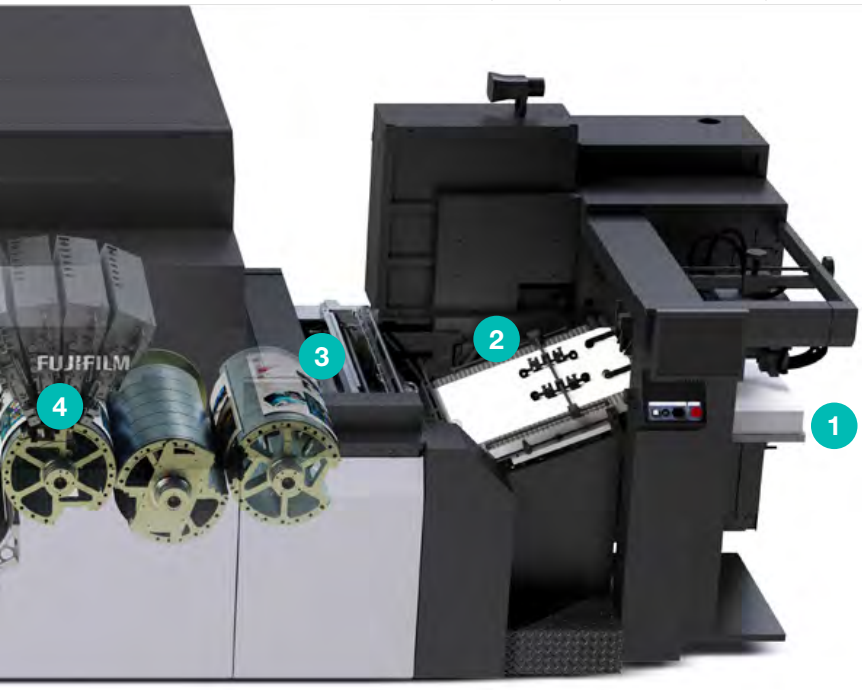
The drying system features a transport belt heated via rollers, with a vacuum applied to the sheet as it passes through this section. Drying is carried out via the heated belt and hot air applied from above. The vacuum ensures the heat is applied uniformly, keeping the sheet stable, and optimising the drying process.

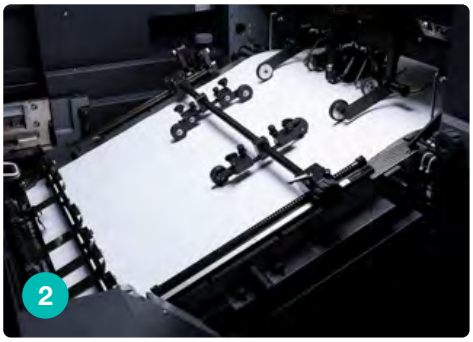
Ultra-high capacity data servers

The servers are capable of transmitting variable data alongside printed output, facilitating efficient variable data production at the full press speed of 5,400 sheets per hour.

Paper feed

Traditional sheet-fed paper feed mechanism ensures high registration accuracy and reliable operation.





Variable data scanning

To handle double sided variable data applications, a barcode is printed in the non-image area of every sheet. When the sheet is backed up, the barcode is read and the press downloads the right data for that sheet before printing.

Nozzle correction

Every sheet is scanned by the In-Line Sensor (ILS) with the system making any necessary alterations in real time.The system is mounted just after printing to ensure any adjustments are applied dynamically throughout the run.

New Samba printheads

The paper is fed onto the imaging cylinder where it is held by grippers and a vacuum, and four Samba print bars deposit the CMYK inks in a single pass. The unique vacuum system significantly enhances print quality and consistency.

Paper priming

The primer unit applies an ultra-thin film Rapid Coagulation Primer onto the paper via an anilox roller mechanism (in High Quality mode). The reaction of the primer and the water-based ink produces incredibly sharp dots and vibrant images on standard B2 coated paper.

Exceptional environmental performance

There are a number of significant environmental benefits with the Jet Press 750S High Speed Model. These include a reduction in raw materials, hazardous pressroom consumables and paper waste, along with the complete elimination of the plate production process. All these benefits mean that the Jet Press has a much lower carbon footprint than an equivalent offset press.

Reduction in raw materials and paper waste

The advantage of digital print in terms of optimising the number of printed copies produced and minimising the over-runs is a key benefit of the Jet Press. In addition, the number of make readies is also considerably reduced. On some short-run jobs on older traditional sheet-fed presses, the number of make ready sheets can represent a significant percentage of the total run, up to 25% in some cases. This problem is eliminated with the Jet Press as the make ready waste is virtually zero.

Elimination of plate production, water and waste

The Jet Press eliminates all the elements involved in the production of plates. This includes the plates, platesetters, processors and associated chemistry, water and waste. Each one of these elements of a plate production system has a significant carbon footprint in terms of its life cycle, from design, manufacture, transport and use to eventual disposal.

Reduction of hazardous pressroom consumables

The Jet Press also removes the need for a number of the pressroom consumables used on a typical offset press, for example founts, sprays and potentially harmful VOC washes, and of course significantly reduces the requirement for water. The Jet Press requires only two consumables in addition to the water-based ink: a wash for the inkjet printheads and the Rapid Coagulation Primer solution applied to the paper prior to printing.

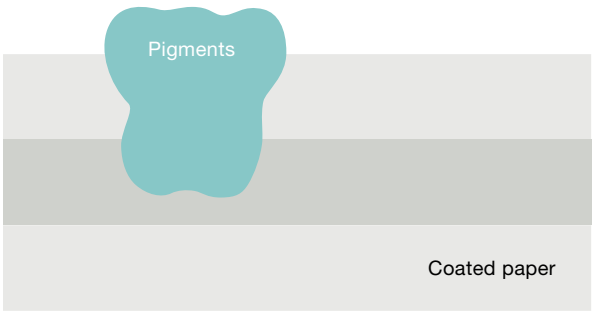
Lower carbon footprint

Fujifilm carries out a life cycle carbon footprint analysis for all the products it manufactures, a process which takes into account product design, manufacture, transport, use and eventual disposal. As a result, the company estimates that the carbon footprint of the Jet Press 750S High Speed Model compared to an equivalent B2 sheet-fed press (internal estimate) is approximately 25% less.

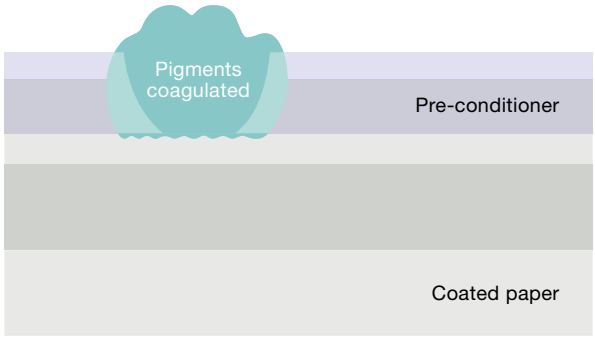
Recyclability of Jet Press print

Sheets can be easily recycled

The environmental performance of the Jet Press 750S High Speed Model is further enhanced by the ability of sheets printed by the press to be easily recycled. With normal water-based inks, ink pigments can sink into the structure of the paper, making them much more difficult to deink. The VIVIDIA HS ink pigments used on the Jet Press do not sink into the structure of the paper, making them much easier to remove during the deinking and recycling process. The use of the Rapid Coagulation Primer in High Quality mode enhances deinkability even further.



Normal water based inks



Jet Press in High Quality mode

Score	Evaluation of deinkability
71 to 100 points	Good deinkability
51 to 70 points	Fair deinkability
0 to 50 points	Poor deinkability
Negative: failed to meet at least one threshold	Not suitable for deinking

The results of trials carried out by the International Association of the Deinking Industry (INGEDE) on sheets printed by the Jet Press 750S High Speed Model on coated paper indicate levels of deinking on a par with offset inks, with up to 100 out of a possible 100 points in High Quality mode and 96 out of 100 in High Performance mode. These results represent a milestone in the ability to remove the ink from an inkjet printed sheet.

Technical specifications

Jet Press 750S High Speed Model	
Printing	
Printheads	Next generation Samba printheads
Colours	4 colour, CMYK, extended gamut (High Quality mode)
Resolution	1,200 x 1,200 dpi (High Quality mode) or 1,200 x 600 dpi (High Performance mode), VersaDrop technology with 4 level greyscale
Productivity	Up to 3,600 B2 sheets per hour (High Quality mode) or 5,400 B2 sheets per hour (High Performance mode), static and variable jobs
Workflow	XMF Workflow V6.x or later, or a third party workflow with XMF Processor
Varable data capability	Yes, thanks to barcode system and high capacity data transfer
Substrate	
Maximum sheet size	750 mm x 585 mm
Printable area	733 mm x 567 mm
Thickness	0.09 mm - 0.34 mm When configured for heavier, folding carton stocks: 0.2 mm – 0.6 mm
Type	Standard offset coated and uncoated paper Canvas Heavier duty folding carton board Some plastics
Physical	
Dimensions	7.35m (L) x 2.65m (W) x 2.05m (H)* * The height when cover is open is 2,293 mm
Space requirements	10m x 5.2m x 3m including space for ancillary equipment
Required weight bearing load	More than 2.2 tonnes/square metre
Power requirements	330A/ 200-230VAC
Operating environment	20 – 28°C, 40 – 60% RH
Options	
Full sheet scanning	
Remote tablet operation	
Heavier duty stock capability (0.2 - 0.6mm)	
Paper conditioning unit	

Jet Press 750S High Speed Model	
Inks, Primer and Wash	
Inks, Primer, Wash	VIVIDIA HS CMYK inks (High Speed Model) VIVIDIA CMYK inks (Standard Model) Rapid Coagulation Primer (RCP) Nozzle cleaning wash
Shelf life	2 years under recommended warehouse conditions
Packaging	Inks, RCP and Wash in 10 litre packs
Fujifilm's food safe ink is compliant with the following regulations and standards:	
Compliant with Food Contact Materials - Regulation (EC) 1935/2004	
Compliant with Swiss Ordinance on Materials and Articles in Contact with Food (SR 817.023.21) as listed in annex 2 and 10 (lists A and B) - 01.05.2017 edition	
Independently tested and certified as compliant with Commission Regulation (EU) No. 10/2011 on plastic materials and articles i ntended to come into contact with food	
GMP (Good Manufacturing Practice) is installed and implemented as part of Fujifilm's ISO 9001 Standardintended to come into contact with food	
(EC) No. 1907/2006 (REACH) - no with more than 0,1 weight from appendixes XIV and XVII acc. (Reference date: July 2017)	
Independently tested and certified to be compliant with EN 71-3	
Compliant with Regulation (EU) 528/2012 (Biocide Regulation)	

Please contact your local Fujifilm partner or visit www.fujifilm.com/uk/en/business/graphic

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