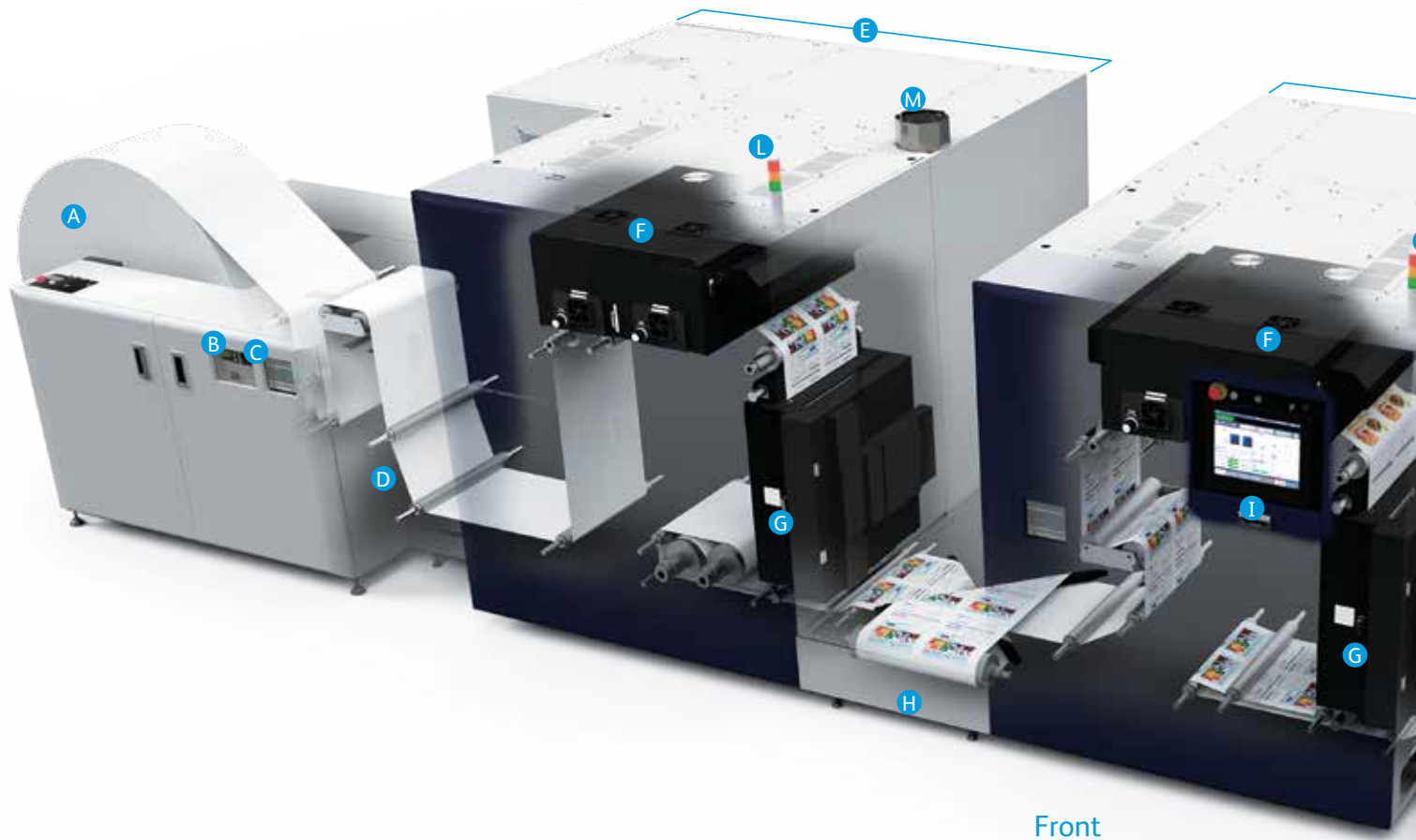# Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System

Endless Opportunities for
Sustaining Growth

FUJI Xerox

Seamlessly connects your business to the future of digital print

Front

When it comes to printing of direct mailers, newspapers, or even books, you want it looking great, you want it cost effective, and you want it fast. The new Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System allows you to do all that and more. Beyond being a great printing architecture, the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System comes with a host of tools, services, and solutions to help your business soar to greater heights

A Unwinder

The paper feeder supplies continuous roll paper to the inkjet unit. It can be installed to feed paper either upwards or downwards. In addition, it adjusts the paper-load position semi-automatically so that paper is fed to the same position throughout the print run.

B Tension Controler

The tension controller assures that paper tension remains constant, helping to stabilise paper feed during high-speed printing.

C Edge Positioning Control

This monitors paper movement and positioning, it adjusts any misalignment of the paper path for a smooth printing process.

D Paper Dust Removing Roller

This adhesive roller removes paper dust from the surface of roll paper to keep the inkjet unit dust-free, reducing the occurrence of problems such as debris and inkjet malfunctions.

E Inkjet Unit

The inkjet unit performs printing on continuous roll paper as well as dries the printed paper.

F Print Head Box

The print head box houses the print head.

G Dryer

The dryer dries the ink on the printed output.

Controller

The controller provides capabilities to process input data and control the printer. With our unique developed RIP accelerator board built in it, the controller achieves faster data conversion, especially for PDFs.

Chiller

The chiller circulates water through the printer to cool paper after it has dried.

Air Compressor

This supplies air to each unit in the system, making it easier to perform certain operations such as loading and unloading paper.

Rear

Ⓗ Turn Bar

The turn bar reverses the print side while minimising stress on the paper.

Ⓘ Operation Panel

Featuring a touch panel, the system includes a GUI that displays easy-to-understand instructions such as how to operate the various units and run print jobs. It also lets you quickly check system status.

Ⓙ Rewinder

This winds the printed output from the inkjet unit. The unit can be installed to wind paper either upwards or downwards.

Ⓚ Touch Roller

A touch roller is included to reduce wrinkling that occur when output is wound up. It also may allow you to see both sides of output.

Ⓛ Attention Light

Stay abreast of the system status with the attention light. This alerts you when the system requires attention, allowing you to determine system status at a glance even from afar.

Ⓜ Exhaust Duct

The exhaust duct vents hot air and water vapor caused by drying of printed paper to outside of the machine.

Ⓝ Ink Pack Container

This is where ink packs, which supply ink to both ink containers, are installed.

Ⓞ Reserve Tank

Convenient buffer tanks store spare ink from the ink packs, allowing you to replace packs on the fly without interrupting print jobs, thereby increasing your productivity.
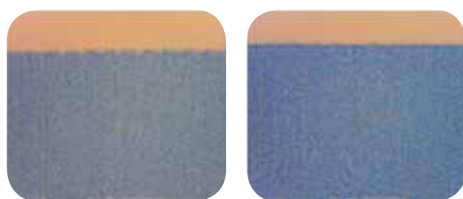
Quality Across Every Page

The Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System is built with state-of-the-art technologies to ensure high-quality print across every page. A crystal-clear resolution of 600 dpi is easily achievable with this printing machine that produces 4.2 billion drops of ink per second.

Achieve picture-perfect colour tone

To ensure we get your colour right, we have included the latest 2nd generation Piezoelectric Drop on Demand technology into the new Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System. The Piezoelectric system uses voltages to control the size of ink droplets so that the right amount of ink lands on the paper. Working seamlessly with all 40 of the 40kHz Print Heads, the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System produces more than 4.2 billion drops of ink per second to give you faster, high resolution, and clearer prints, every time. On top of that, the lifespan of your print heads are extended thanks to latest 2nd generation and the use of high-quality pigmented ink, thus minimising your downtime.

Acoustic across-talk caused the 1st generation print head to have some periodic image defects. Refer to the diagram below for a better comparison between the 1st and 2nd generation print head.

1st Generation Print Head   2nd Generation Print Head

For added assurance, our specialists are certified by Fogra Forschungsgesellschaft Druck e.V., a graphic technology research association, to ensure that the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System meets the international standards for producing high-quality digital print.
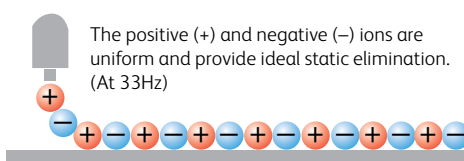
Enhance your printing performance

The Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System houses a Programmable Logic Controller (PLC) that controls the operation of the Inkjet Print Tower, Unwinder, paper transport, ink supply, as well as the Rewinder. Extremely robust, the PLC is capable of accelerating to a maximum speed of 100 metres per minute in just five seconds. Programmed to perform with superior reliability, the PLC will ensure speedy production without compromising on print quality.

Newly formulated ink quality

The new Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System ink boasts a wide gamut of capabilities. Using high-quality pigmented ink, this robust printing machine will deliver superior quality prints with water-fast capabilities, ensuring your prints will never smudge should it ever comes into contact with water. On top of that, your print will remain its superior colour for many years to come.
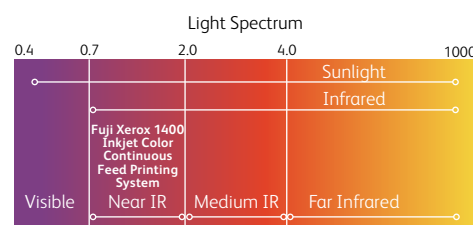
Printing with precision

Located in both Tower A and B of the printer, the Ion Neutralisers eliminate static electricity from the paper before the Print Head starts printing. Without any static electricity left on the paper, each drop of the ink will land exactly where it should, thus ensuring that the high quality of the image is consistent across every print.

The positive (+) and negative (−) ions are uniform and provide ideal static elimination. (At 33Hz)

Dry it with efficiency

When a printer produces high-quality prints at a rapid pace, it is paramount to ensure that the ink on the paper dries fast enough to avoid smudging during the collation process. To that end, we installed a carbon heater, a type of near infrared heater, in both towers of the printing machine to help speed up the drying process. Using carbon as a heat element, the dryer dries only the printed area, thus minimising the use of energy, rendering this machine to be more environmentally friendly. Also, the carbon heater reduces the electromagnetic radiation and minimises interference with other devices using less metal shielding, resulting in a lighter machine.

Light Spectrum

0.4	0.7	2.0	4.0	1000
			Sunlight	
			Infrared	
	Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System			
Visible	Near IR	Medium IR	Far Infrared	

Give Your Productivity a Boost

In this competitive business world, productivity is everything. Fuji Xerox took that into consideration when designing the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System. With this new printing architecture, you can be assured that your print jobs will be completed with the highest level of performance and efficiency.

Print it fast, print it sharp

The Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System impresses with a rapid printing speed of 100 meters per minute, as well as clarity in resolution at 600 dpi. These are achieved by combining two robust print engines to work seamlessly as one parallel-printing machine, thus giving you the ability to achieve more. Printing 1,600 copies of broadsheet-sized newspapers requires only one hour, while 60 seconds is all it takes to produce 1,312 A4 2-up personalised mailers.

Automated paper positioning tool for precise printing

Other than high-quality prints and high-speed printing, the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System also ensures that the printing alignment and registration are kept in order. The Unwinder and 2nd tower of the printing machine are packed with Edge Positioning Control (EPC), a system that detects the paper's position and adjusts the running paper accordingly so that the image will be printed at the correct position.

The right paper tension for perfect print registration

Creases on paper may cause unsightly prints. To prevent that, the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System uses a tight tension system that stretches all the way from the Unwinder to the Rewinder to provide you with accurate registration. Fuji Xerox also understands that a tension system that may cause papers to be torn, thus disrupting your printing process and eating into your productivity. That is why a Speed Monitoring System is installed in the printer to promptly notify you should there be a break in the web. This way, you can ensure that your productivity level never falls below 100%, and that your uptime will always be maximised.

A self-cleaning print head

As a key component of the printing machine, the Print Head needs to stay clean at all times in order to be efficient. The Automatic Print Head Cleaning System will help to maintain the Print Head, thus ensuring that every image produced is of the highest quality.

Ink Saving Mode

Using the right amount of ink reduces wastages. The Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System helps you to achieve that by optimising your ink density to match the ink consumption to your print requirements. Choose between three modes, namely Light, Normal, and Deep. No matter what mode you choose, you can be sure that your image output still remains its high quality.
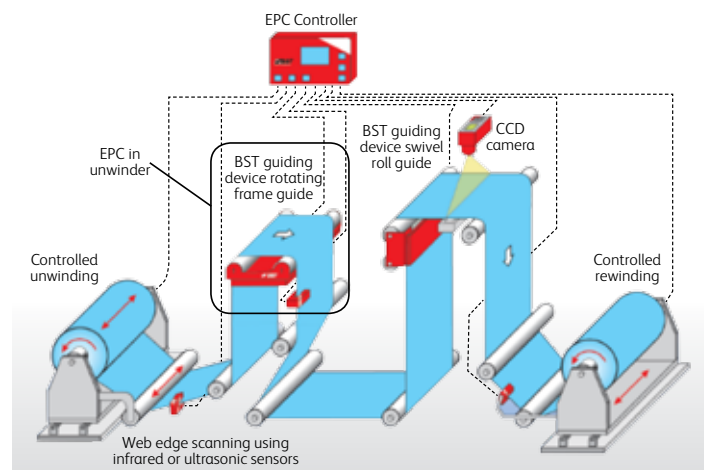
Print more, print faster

A smart printer, the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System combines two print engines to work seamlessly as one parallel printing architecture to help you to increase your productivity.

Print time is also reduced by simultaneously ripping (a process that converts texts and images into a raster image known as a bitmap) and printing, as opposed to the traditional method that commences printing only after all ripping is completed.

Service support anytime you need it

As a commitment to you and your business, Fuji Xerox will provide you with a suite of Remote Services to increase your reliability, uptime, and productivity. Our dedicated specialists will proactively analyse the engine for image quality and status to predict potential problems. In the unlikely event of a downtime, our specialists will be able to assist you immediately, thus minimising your downtime.

EPC Controller

EPC in unwinder

BST guiding device rotating frame guide

BST guiding device swivel roll guide

CCD camera

Controlled unwinding

Controlled rewinding

Web edge scanning using infrared or ultrasonic sensors

Printing just what you need, the way you want it

More than just a printing machine, the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System is a flexible tool that allows you to scale it according to your needs. Be it printing direct mailers, newspapers, or even books, the TransPromo and Transactional Printing Solutions that come with Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System can help you to better target your customers by producing customised and targeted promotional messages

The Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System can help you to produce high-value transpromo, direct mailers, newspapers, or even books. Read more to find out how this new printing architecture can help your business to scale to greater heights:

Transpromo and Transactional

If you are looking to reduce your costs, this print machine can help you to do so by eliminating the need for print shell. Doing so will help you to lower your supply chain expenses like storage and transportation of printed shell, label, as well as material handling. Also, migrating to this comprehensive printer to produce high quality print for your large volume of customers is hardly any hassle at all.

Be it printing direct mailers, newspapers, or even books, the TransPromo and Transactional Printing Solutions that come with the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System can help you to better target your customers by producing customised and targeted promotional messages. Transactional documents like bills can be transformed into useful and visually pleasant promotional kits with the help of TransPromo solutions. Response rates can also be boosted by customising the contents in your promotional application materials through Variable Data Print (VDP) solutions.

Direct Mailers

When it comes to engaging your customers, nothing comes close to making one-on-one contact with them. The best way to get your message across and achieving the responses you want is through customised direct mailers.

- Connect to your customers on a personal level by printing one-of-a-kind direct mailers.
- Capture the attention of your customers by producing targeted direct mailers with high-quality colour.
- Make your direct mailers stand out from others by customising them in any shapes, folds, or cuts.
- Produce up to 1,312 personalised direct mailers in just one minute.

Newspapers

With the advent of Internet and mobile technology, people are reading news on multiple platforms. Print runs for newspaper are decreasing each day, signifying the growth of opportunities for digital printing. Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System provides you with the right tool to capture this new business opportunity.

- Provide your readers with timely updates through high-speed printing.
- Reduce transportation cost and time by producing foreign titles locally.
- Boost your revenue by offering your advertisers with customised solutions like wrappers or inserts.
- Deliver newspapers with high-colour quality.

Books and Manuals

Whether you need a single book today, or 30 more tomorrow, you can customise each product and print only what you need when

you need it. More than just saving trees, the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System allows you to save on inventory management costs and the usual expensive start-up charges that come with low-volume printing.

- Print books in a very short turnabout time.
- Save precious time from having to compile books manually as the Fuji Xerox 1400 Inkjet Color Continuous Feed Printing System will automatically collate all the outputs.
- Test the popularity of titles or meet the demands of a niche market with short print runs.
- Reduce inventory costs by printing books or manuals only when required.

Grow your Business with Fuji Xerox

With decades of experience in books-on-demand publishing and variable data printing in transactional and service bureau environments, Fuji Xerox is committed to helping your business achieve greater heights. As a valued customer, you will have access to a host of Business Development Tools and Services.

Business Development Services

Fuji Xerox provides you with a host of business development consulting services to create a winning business plan, help you to transform your business with more value, calculate precise return on investments, or even develop new applications to effectively grow your digital printing business. Fuji Xerox's Business Development Services, with a dedicated team in each country, is positioned to help you to make the transition to inkjet printing and ultimately succeed.

Colour Management System

Fuji Xerox has many years of experience in colour through a broad range of cut-sheet and continuous-feed printers. With years of experience getting the right tone of colour is never easy, considering how colour can be a moving target at times. Fuji Xerox's Colour Management System can help you to better grasp the concept of colour management so that repeated and accurate colours can be achieved quickly and easily.

Premier Partner

As a premier partner at Fuji Xerox Global Network of Premier Partner, a tight-knitted community that is made up of innovative printers in the world, you will receive valuable insights, news, and trends within the printing industry. You will also get to list your business on a customisable page on our global directory. Enjoy exclusive rates to conferences and networking events organised by Fuji Xerox, as well as access to premium content on InfoTrends and WhatTheyThink.com.

Specifications for 1400 Inkjet Color Continuous Feed Printing System

Specifications

Item	Description
Printer configuration	Twin Engine Duplex
Colour Capability	Full Colour
Print head	Piezoelectric drop-on-demand inkjet 2,656 nozzles/head 40 kHz drive frequency
Print Resolution	600 × 600 dpi
Drop size	4 levels per drop 5, 8 and 11 picoliters
Warm-up Time*1	16 minutes or less (when the room temperature at 20 to 26 °C and the humidity at 30 to 60% RH)
Continuous print speed*2	Duplex 1,312 pages/minute (equivalent to printing on A4 cut sheet, 2-up in duplex)
Paper sizes*3	Width 152.4 to 520.7 mm
Paper weight*4	64 to 157 g/m²
Paper feed	Paper feed unit connected (maximum roll diameter: 1,270 mm)
Paper discharge	Paper discharge unit connected (maximum roll diameter: 1,285 mm)
Paper feed speed	Maximum: 100m per minute
Noise level*5	During operation: 82 dB (A) or lower
Power Supply	200V AC ±10%, 230A, 50/60Hz
Power Consumption	80kVA
Dimensions (W × D × H)	Width 8,200 × depth 2,490 × height 1,780 mm Width 9,400 × depth 2,490 × height 1,780 mm (with the inspection unit)
Installation space	Width 11,200 x depth 6,388 mm Width 12,400 x depth 6,388 mm (with the inspection unit)
Weight	7,630 kg 8,536 kg (with the inspection unit)

*1: Start-up inspection time and purge time are excluded. It may take more than 16 minutes depending on the installation environment.

*2: When printing a 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.

*4: The range indication does not necessarily guarantee performance for every paper type. It is recommend using Fuji Xerox recommended papers. For details on other paper type, please contact your Fuji Xerox sales representative.

*5: Measurement based on the German BG (Berufsgenossenschafte) standard.

External Controller (1400 Print Server 2)

Item	Description
Position	External
CPU	Intel® Xeon® Processor E5-2630 v2 (2.6 GHz) × 4
Storage devices	Hard disk drive: 1TB x 2,500GB x 32, 300GB x 28 DVD ROM Drive
Memory	96GB (Maximum: 96GB)
Server OS	Windows Server® 2008 R2 for Embedded Systems English Version (Service Pack 1)
Installed fonts (PostScript®)	170 European fonts 12 Japanese fonts (Ryumin L-KL™, Middle Gothic BBB™, Bold Mincho A101™, Bold Gothic B101™, Jun 101™, Midashi Gothic MB31™, Midashi Mincho MA31™, Shin Gothic L™, Shin Gothic M™, Shin Gothic B™, Heisei-Minchou™ W3, Heisei-Kaku Gothic™ W5)
PDL	Adobe® PostScript® 3™, VIPP, PPML
Data Format	Adobe® PDF version 1.7
Connectivity	Ethernet 1000BASE-T/100BASE-TX/10BASE-T Optional: 10Gb Ethernet SFP
Network protocol	TCP/IP (LP/LPR/FTP/IPP)
Power Supply	200 to 240 VAC, 15A, 50/60 Hz (single-phase two-wire with ground, four power sources)
Power Consumption	3.2kVA
Size	600 x 1,000 x 1,358 mm (L x W x H)
Weight*1	210 kg

* Standard configuration. (without UPS)

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