## Samba JPC Printbar System lineup

These components are available for prototypes to production, according to customers' application requirements.

| Unit | Image | Main functions |
|---|---|---|
| **Printbar** | | ·Driving Samba printheads by the optimum waveform<br>·Simplifying the replacement of Samba printheads<br>·Keeping the distance between printing media and Samba printheads at an appropriate level<br>·Keeping Samba printheads at an appropriate location in a printbar |
| **Ink circulation unit** | | ·Maintaining inks' back pressure at an appropriate level<br>·Circulating inks under appropriate conditions<br>·Removing foreign materials from inks<br>·Degassing inks (optional vacuum pump required) |
| **Head cleaner** | | ·Using cleaning web to clean a Samba head's nozzles<br>·Supplying head cleaning solution to the cleaning web |
| **Capping unit** | | ·Keeping humidity around Samba printheads<br>·Supplying moisturising solution<br>·Discharging waste liquid<br>·Receiving ink purged from Samba printheads |
| **Image optimizing software** | | ·Providing a screen optimized for single pass printing<br>·Correcting streak and banding<br>·Measuring the relative position between Samba heads |
| **Inline scanner** | | ·Obtaining streak / banding correction pattern images<br>·Obtaining Samba head's position measuring pattern images |

## Examples of ink combinations

The Samba JPC suggests the use of inks optimized for Samba printheads, but customers may use their own inks.

| Application | Printing media | Ink type | Characteristics |
|---|---|---|---|
| Folding carton, commercial printing, publishing, etc. | Coated paper, uncoated paper | Water-based pigmented latex ink + Preconditioner | Ultra-high image quality, food safety |
| Commercial printing, publishing, etc. | Coated paper, uncoated paper | Water-based pigmented latex ink | High image quality, fast printing |
| Commercial printing, publishing, etc. | Uncoated paper | Water-based pigmented ink | Fast printing, low running cost |
| Flexible packaging, etc. | Plastic film | Water-based pigmented latex ink + Preconditioner | Ultra-high image quality, food safety |

*Preconditioner: Pre-conditioning solution developed by FUJIFILM to improve image quality without affecting the texture of printing media

## Printing conditions and printing speed

| Conditions | | | Printing speed |
|---|---|---|---|
| With preconditioner | With streak correction | 1200 x1200 dpi | 43m/min |
| | | 1200 x 600 dpi | 55m/min |
| Without preconditioner | | 1200 x1200 dpi | 60m/min |
| | | 1200 x 600 dpi | 75m/min |
| | Without streak correction | 1200 x1200 dpi | 110m/min |
| | | 1200 x 600 dpi | 160m/min |

*The printing speed listed above varies depending on the type of inks used and inkjet waveform.

FUJIFILM Corporation

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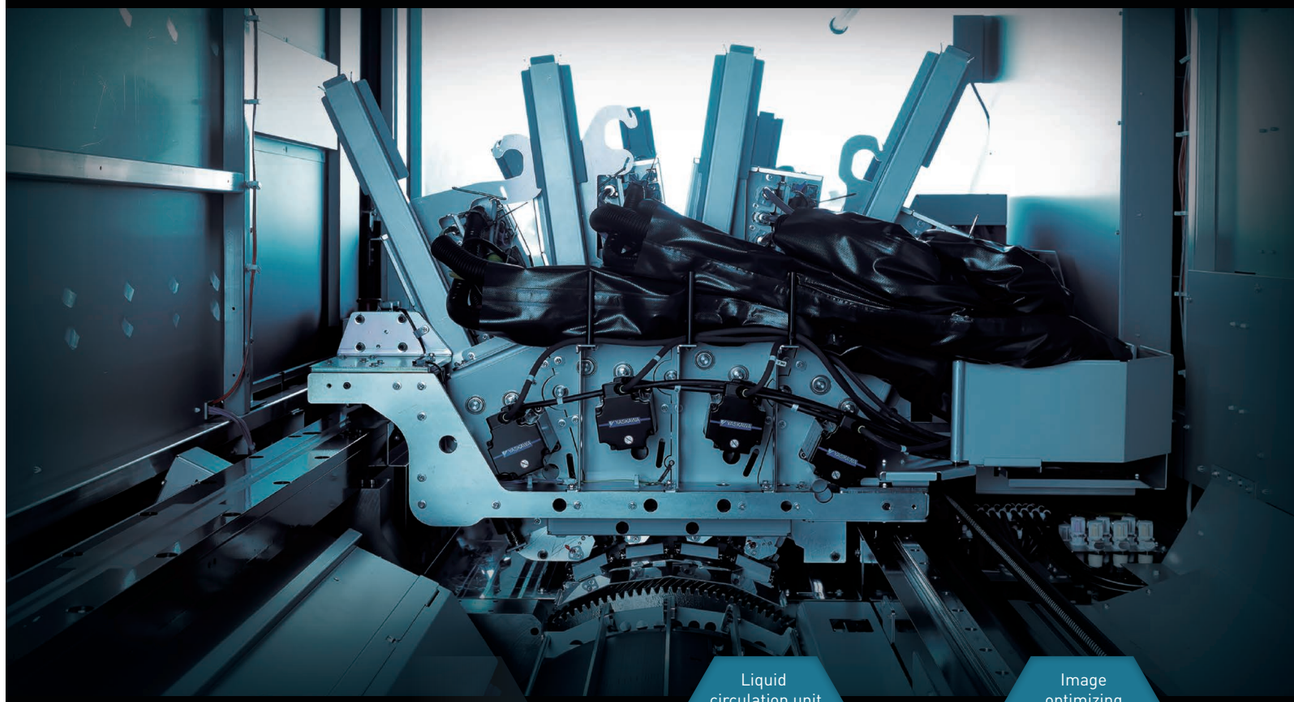
June 2024

FUJIFILM
Value from Innovation

Inkjet components with high-quality, high-speed and high-reliability to revolutionize the performance of digital printing presses



# Samba JPC Printbar system

## Proven by Jet Press

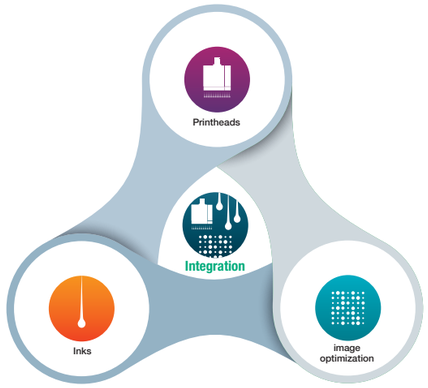
FUJIFILM INKJET TECHNOLOGY

# Components designed for the world-renowned Jet Press inkjet technology, available for the development of digital printing presses

Samba JPC is an print engine built with technology FUJIFILM has perfected with its Jet Press 720S. Use Samba JPC to shorten the development cycle of 1200dpi single-pass inkjet printers with premium image quality. These print engines can be customized to meet customers' needs.

## FUJIFILM Group's advanced inkjet technology, FUJIFILM Inkjet Technology

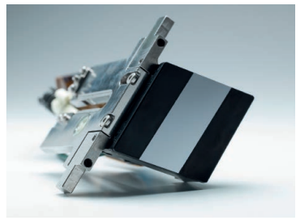
FUJIFILM carries out R&D of all core technologies in-house, including the technologies for printheads, inks and image optimization, and combines them in an optimum form to create innovative systems such as the Jet Press. The FUJIFILM Inkjet Technology, renowned for its high performance and advanced reliability, is now used not only in commercial printing but also in package printing, signage / display, and other non-printing industrial fields.



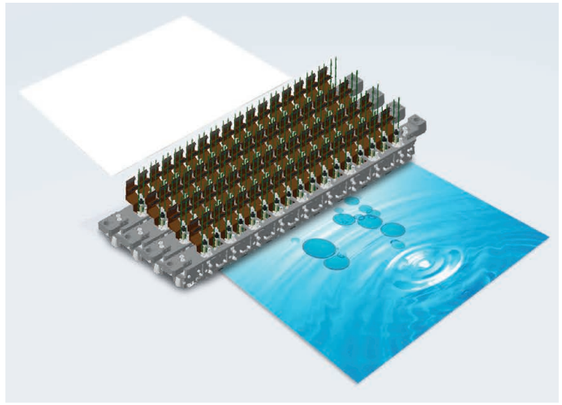

Integration of FUJIFILM's three major strengths (three core technologies)

## Samba printheads with ultra-high density, advanced precision and high speed

FUJIFILM Dimatix, an industrial printhead manufacturer that boasts the technological capability of the world's largest scale and highest level, plays a key role in the development of printheads, the key component of inkjet printers. It applies its proprietary ink circulation mechanism and advanced MEMS technology to deliver the world's highest level of printhead performance, jetting high-performance inks accurately with high speed and stability.

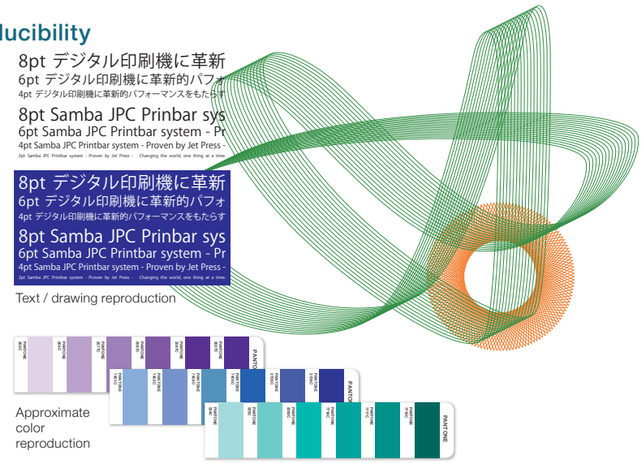


Samba printhead



## Samba printhead's outstanding image reproducibility

Photo reproduction




Text / drawing reproduction



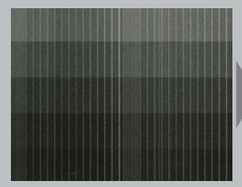
Approximate color reproduction

# Samba JPC Printbar System Capabilities

## FEATURE 1

### Streak and banding correction

The use of unique screening technology, optimized for single-pass printing, corrects streak and banding at a high level of accuracy. The system detects nozzle-related streak, such as the bent discharge of inks from aged nozzles, and compensate for it with surrounding nozzles to maintain advanced printing quality for an extended period of time. Streak correction and banding correction reduce hardware downtime, boosting productivity. This also results in less-frequent replacement of printheads allowing low cost of ownership.



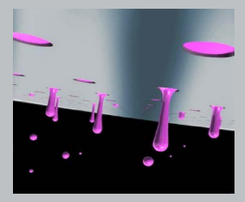
**Before streak / banding correction**
(with numerous nozzles intentionally turned off)

**After streak / banding correction**
(with numerous nozzles intentionally turned off)

## FEATURE 2

### Automatic adjustment of printhead position

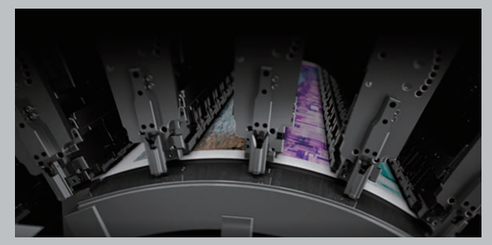
The Samba JPC now features the auto printhead position adjustment function. Using a test pattern obtained from the inline scanner, the system automatically adjusts a replaced printhead to the optimum position. It simplifies the work of printhead replacement while significantly reducing downtime.



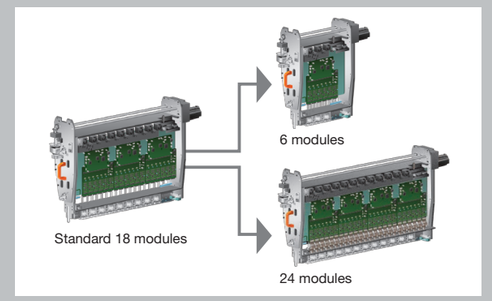
## FEATURE 3

### Enabling quick system development

A highly reliable print engine is essential in boosting output stability. Yet, developing such a unit requires extremely advanced technology, long and costly development. The Samba JPC is packed with proprietary technologies that help maintain a printhead at the optimum condition. The system enables fast development of highly reliable printing devices that maintain advanced drop accuracy.



## FEATURE 4

### Customizable design to meet customer needs

The Samba JPC is available as a standard unit with the printing width of 30 inches (762mm). A printbar may be also designed with any number of printhead to suit customer needs. Peripheral components can also be designed and manufactured.