FUJİFILM

Samba™ Mini 4300 Imprinting System: Overview

Industrial inkjet system for variable data imprinting

Fujifilm's Samba Mini 4300 Imprinting System offers variable data printing at industrial production speeds. It uses inkjet technology, with images or information printed as text, logos, QR or barcodes, or any other form of customization. In the era of mass customization, imprinting is a great opportunity to add value.

Key features

▶ Print images up to 1.7 inch (43 mm)

▶ Fine text or solid color capability

▶ Customized brand colors

▶ System comprises up to 4 monochrome print modules

▶ UV-curing, LED UV or aqueous inks

▶ Inks available for indirect food contact packaging

▶ Up to 500 feet (152 meters) per minute

▶ Ideal for in-line integration into existing facilities

Adding value boosts profits

Custom ink colors for individual brands

Fujifilm can supply custom colors that are purpose-designed to give strong vibrant images either as solid blocks of color or as ultra-fine detailed images. These custom colors can be formulated for individual brands. This guarantees a match with house colors used on the rest of the print and on other branded images, no matter which print process is used.

The power of mass customization

Digital inkjet technology has one outstanding feature – it works with variable data. Print elements such as text or graphics can be changed on the fly, without stopping or slowing down the production or packing line.

Operators can imprint changing contents, recipes and ingredients on small production volumes where it wouldn't be economic to adjust the main label. Promotion flashes can be added for individual retailers. Other common imprints include version, language, batch, and locality indications.

No compromise on quality

The Fujifilm inks used by Samba Mini 4300 Imprinting System can be designed to be chemically identical to those use on the main part of the print. This means that the imprint matches the quality of the background. Colors are vibrant and durable, reflecting the quality the brand owner has designed into the product presentation.

Fujifilm's legendary status in image reproduction

Fujifilm inks are precisely tuned in an integrated system to ensure consistency and outstanding reliability. Research, development and manufacture are all carried out in-house. Inks are optimised for Fujifilm Dimatix printheads and Fujifilm image optimization software. By integrating print engine, inks and image optimization, controlling the whole system, Samba Mini 4300 Imprinting System offers stunning print quality and industry-leading reliability.

Fujifilm technology delivers the complete solution for variable data imprinting

Start with the little picture

Fujifilm's Samba Mini 4300 Imprinting System comprises up to 4 individual single-color inkjet print modules producing images up to 1.7 inch (43 mm) in width. Modules are configured in line (that is, not stitched side-by-side).

Industrial strength

The Samba Mini 4300 print modules are capable of producing 500 feet (152 meters) of print per minute. The system components have proven themselves around the world to offer exceptional reliability in production environments both separately and as part of an integrated system.

Foolproof image alignment

To ensure the imprinted image appears in precisely the right spot, even at speed, line speed is tracked with an encoder, and the print can be be triggered by a pre-printed register mark. In this way, every individual imprinted image is printed accurately and located where it belongs, making accrued misalignment impossible, and reducing wastage.

Easy to integrate

The Samba Mini 4300 Imprinting System has a tiny footprint, and can be installed as a new facility or integrated into an existing packing or filling line without disturbing production facilities. The system is straightforward to operate, so the need for lengthy, in-depth training is minimized.

Simple to manage and control

The system can be operated either as a standalone process or using standard control interfaces on an existing line. For operators, optional monitor and keyboard are available to control production parameters. The GUI is Windows®-based, giving access to all the system features through and easy-to-use touch-screen. Different interfaces can be set for different levels, such as operator, supervisor or engineer to give control where it's needed.

Industry-leading print modules for high speed

The system uses Dimatix Samba print modules. These industry-leading components feature the flexibility of piezo-electric drop-on-demand technology with the high throughput of continuous ink flow.

Continuous ink flow uses patented RediJet® recirculation system. This ensures the print heads are quickly primed, with faster time to print, negligible ink wastage and outstanding reliability.

UV-curing and aqueous ink technology

The Samba Mini 4300 Imprinting System can deploy both UV-curing and aqueous inks. This ensures the system is suitable for imprinting in any scenario, from industrial packaging through to food contact material.
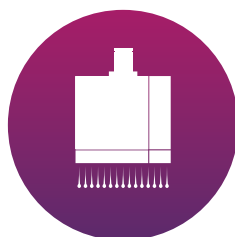
A range of UV-curing inks is also available with this system. These inks are dried using LED of conventional UV lamps precisely tuned to the exact frequency needed by the ink. LED is a low-energy technology that's ideal for heat-sensitive processes and locations.

Aqueous inks may also be suitable for indirect-contact food contact materials, and can be the preferred solution for porous materials including paper based stock.

Fujifilm has a comprehensive range of technologies, products and services for the creation of new inkjet systems
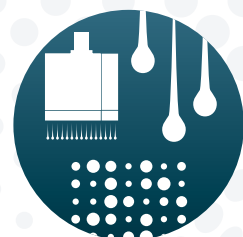
Inks   Printheads   Image optimisation   Integration

Technical specification

Samba™ Mini 4300 Imprinting System	
Print modules	Up to 4 separate units
Colors	Up to 4 - one per module
Ink types	UV-curing, LED UV, aqueous
Ink delivery	From sub tank with recirculation
Imprint image	Up to 1.7 inch (43 mm)
Image format	Most graphics files inc. TIFF, JPEG, PDF, EPS, AI, PSP, BMP, binary, grayscale
Resolution	1200 dpi
Drop size	3 picoliters
Control system	Windows® 7 GUI
Interface	USB 2.0 and TCP/IP
Power	Universal AC 110 – 240V, single phase, 50/60 Hz, 10 Amps
Print module dimensions	(HxWxD) 23 inch (580 mm) x 7.5 inch (19 mm) x 3.6 inch (9.2 mm)

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