Cubik

Single-pass Inkjet for Tableware Decoration

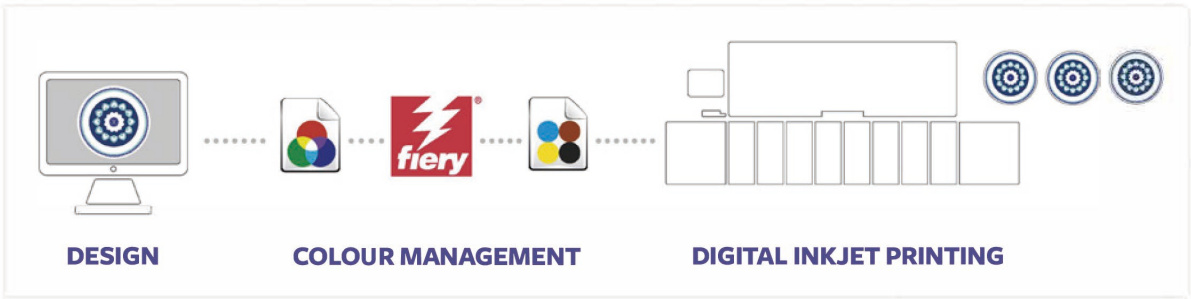
The power of digital printing comes to tableware decoration

Digital inkjet printing turns tableware into a **profitable opportunity**

Digital inkjet printing is a new option for tableware decoration that allows you to print direct to ceramic plates and dishes. Inkjet is a contactless technology where droplets of ink are deposited onto the plates in a single pass as they pass under the printheads through the printer.

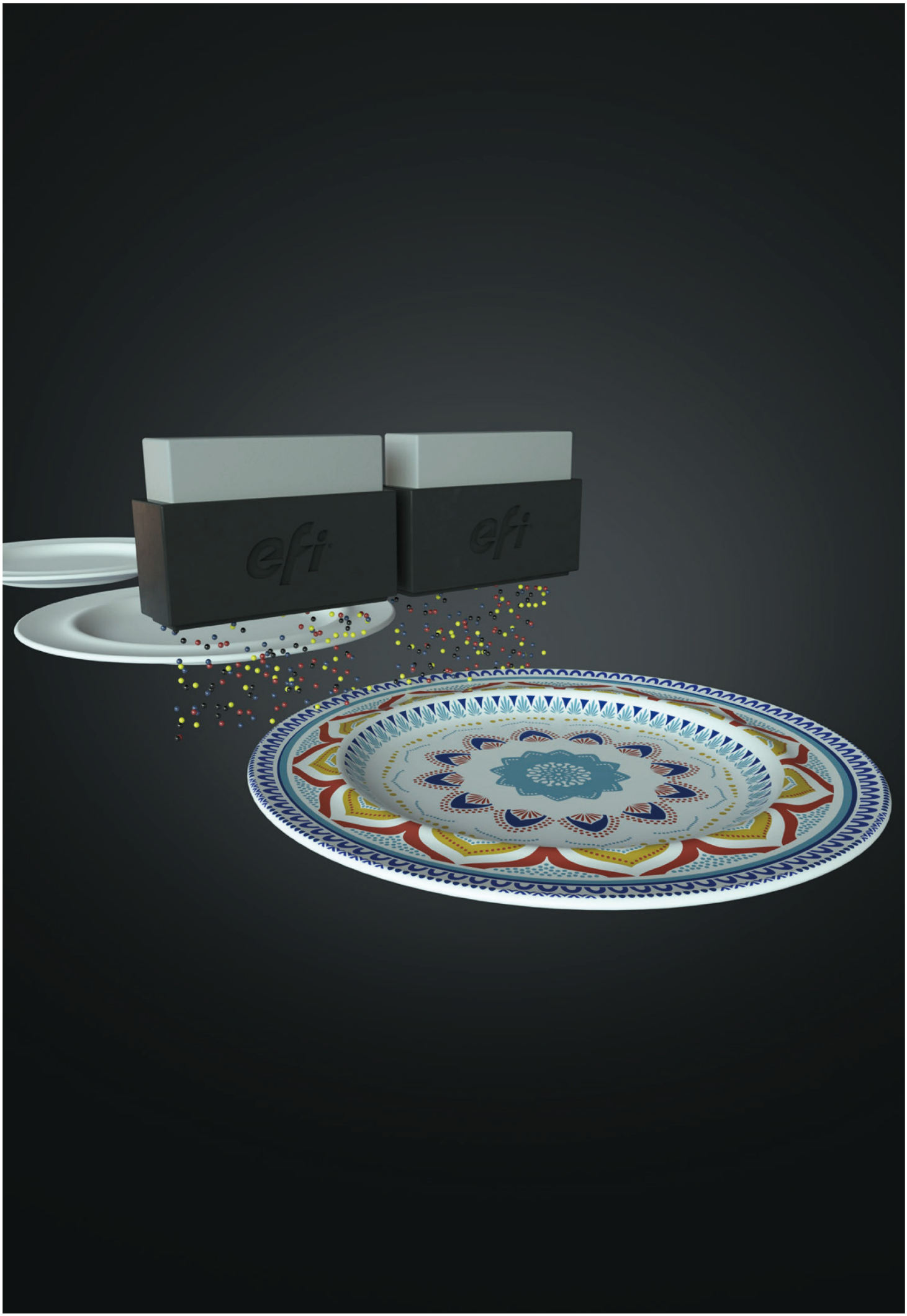
- Eliminate the need for engraved plates and silicone pads
- Print edge to edge
- Print on reliefs

The digital printing process for tableware decoration



Digital inkjet printing is a simplified/streamlined decoration process from file design to kiln:

1. File design
2. Colour management
3. Prototyping and proofing
4. Single-pass inkjet printing
5. Firing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Set your table with the power of EFI

EFI™ is a global technology company leading the worldwide transformation from analogue to digital imaging with products that increase competitiveness and boost productivity.

EFI develops breakthrough technologies for industries where imaging is a core part of the finished product, and offers a wide range of printers, inks, and colour management software.

EFI Cubik is an industrial digital inkjet ecosystem for tableware decoration that makes the adoption of inkjet printing technology easy with all the elements needed for the brilliant decoration of tableware.

Inks

An ink set that results in defined decorations and a wide colour range. Colours available: blue, cyan, red brown, yellow, ochre, black and white

Colour management software

The Fiery® proServer is EFI's dedicated colour management software for ceramic inkjet decoration. Colour management considers manufacturing conditions to guarantee colour consistency from batch to batch and have full control of the printed results.

Single-pass inkjet printers

- Ready to operate in industrial environments 24/7
- Available in 710 mm printing width
- Able to decorate pieces up to 30 mm high
- Optional artificial vision system at the entrance of the printer adjusts the graphic to the exact position of the plate and manages different shapes (round, oval, and rectangular)
- Printing speed up to 50 linear m/min

Benefits of inkjet printing for tableware decoration

Streamlined process

- No need for engraved plates, silicone pads or decals
- Reduced inventories
- No ink mix stock
- Fast set up and model changes
- No highly skilled operators needed
- Higher productivity
- One set of inks for a wide colour range

Time to market

- Faster prototyping
- Easy and fast new product development
- Colour consistency
- Cost-effective small lots
- Flexible

Boost business

- New, value-added products
- Enhanced decoration possibilities
- Differentiation
- Customisation


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Cubik: The proven industrial printer that's **low maintenance** and **easy to operate**

PRINTER ENTRANCE

- Adjustable guides ensure smooth article conveyance
- A dual laser detects both the position and height of each piece so that the printing bars adjust their position to the plate's height
- An optional artificial vision system at the entrance of the printer helps adjust the graphic to the exact position of the plate

TRANSPORT SYSTEM

High precision conveyor belt system with optimal power control and an automated cleaning system

INK DELIVERY SYSTEM

- Total ink recirculation avoids pigment sediments and removes air in the system
- Constant temperature and pressure control

INKJET PLATE

High precision plate for plug and play that assures better printhead alignment and simplifies future adjustments

AUTOMATIC NOZZLE CLEANING SYSTEM

- Non-contact wiping head cleaning system generates significantly fewer permanently missing nozzles
- It also reduces downtimes, thus increasing productivity

INK TANKS

- Slide, accessible tanks
- Level and temperature control
- Easy clean and refill

FRAME AND SEPARATED PRINTING BARS

- Compact and reduced frame, holding up to 8 printing bars
- Sliding bars are accessible for daily operations and maintenance tasks
- Vacuum system between printing bars for a highly efficient steam and mist extraction

USER INTERFACE

- Multi-language and touch screen
- Intuitive user interface with direct access to main functions, printing bars and transport system
- Alarm status is always on screen

User applications:

- TAS for automatic tone adjustment
- Fine tuning for banding compensation
- Nozzle out for clogged nozzle compensation
- ID printing for master plates and traceability

ELECTRONICS AND SOFTWARE

- Proprietary electronics and powerful software for data processing
- Bidirectional communication with printhead enables constant feedback

TECHNICAL SPECIFICATIONS

MACHINE SPECIFICATIONS	
Maximum print width	710 mm
Number of inks	Up to 8
Print direction	Right / Left
Minimum substrate thickness	3 mm
Maximum substrate thickness*	30 mm
Print speed	Up to 50 m/min
Centering print precision	<0.3 mm

**Other upon request*

MACHINE ASSEMBLY	
External power supply	Variable (380/400/440/480V)
Max. power consumption (8 colours)	18 KVA
Electrical phases	3F+GND
Power connection frequency	50/60 Hz
Pneumatic connection	2 lines 8,5 bar each
Cabin recommended temperature	22-26 °C
UPS included	Yes

PRINTER DIMENSIONS	
Width	1650 mm
Height	1950 mm
Length	4000 mm

CABIN DIMENSIONS*	
Width	3700 mm
Height	2800 mm
Length	5500 mm

**Cabin is not supplied but is mandatory*

SOFTWARE	
Image file type	TIFF, RPF and PSD
Rendering time	VARIABLE
Image loading time	1 - 15 s (depending on image size)
Image changing time during production	1 s
Parallel RIPing and printing	Yes
Number of images per model	100
Print an image without stopping	Yes

PRINTHEADS	
Printhead width	108.3 mm
Number of nozzles	1536
Native resolution (dpi)	360
Drop size (pL)	13 - 98
Greyscale levels	Up to 8
Firing frequency (kHz)	10,2 - 28
gr/m2	Up to 45

Printer in development, specifications subject to change without notice.

We fuel success!

DPI is committed to developing industrial-grade digital inkjet printers, with an elite entrepreneurial team deeply involved in the digital printing industry for many years, EFI has authorised DPI as the global operator of EFI Cretaprint in ceramic building materials. For more information, please visit www.dpitech.cn

Let's be brilliant. Together.

We understand you want breakthrough technologies to lead you through your digital journey. That's why we're passionate about driving your business growth with a scalable portfolio of products, solutions, services, support, and world-class partnerships for the manufacturing of signage, packaging, textiles, ceramic tiles, building materials, commercial print, and personalised documents with a wide range of printers, inks, digital front ends, and workflow software. Our unwavering commitment is to increase your profits, cut costs, improve productivity, and optimise efficiency — job after job, year after year. We're obsessed with your success. And we definitely believe we have the right people, technology and experience to help your business achieve its goals. Visit www.efi.com or call 0808 101 3484 (UK only) for more information.

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