



Cretaprint

Single-pass Inkjet
for Tableware Decoration

The Power Of Digital Printing Comes To Tableware Decoration

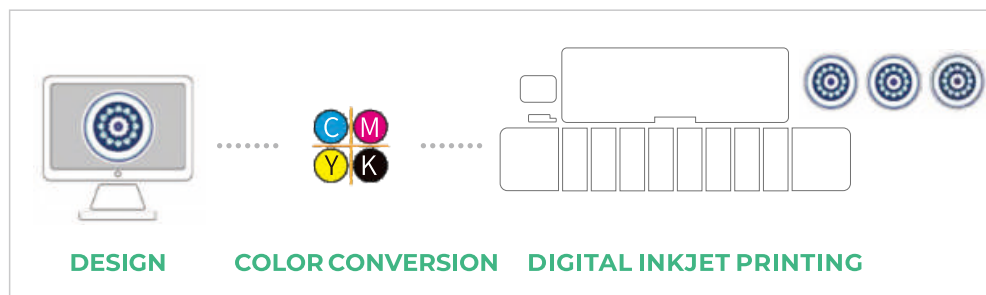


Digital Inkjet Printing Turns Tableware Into A **Profitable Opportunity**

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 Prototyping and proofing
- 3 Single-pass inkjet printing
- 4 Firing



Set Your Table With The Power of DPI

DPI is a global company focused on designing and manufacturing industrial inkjet systems for the building materials, ceramics, and textile industries, whose mission is to empower customers via cutting-edge digital printing solutions delivering exceptional quality, high productivity, enhanced sustainability, and greater profitability.

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

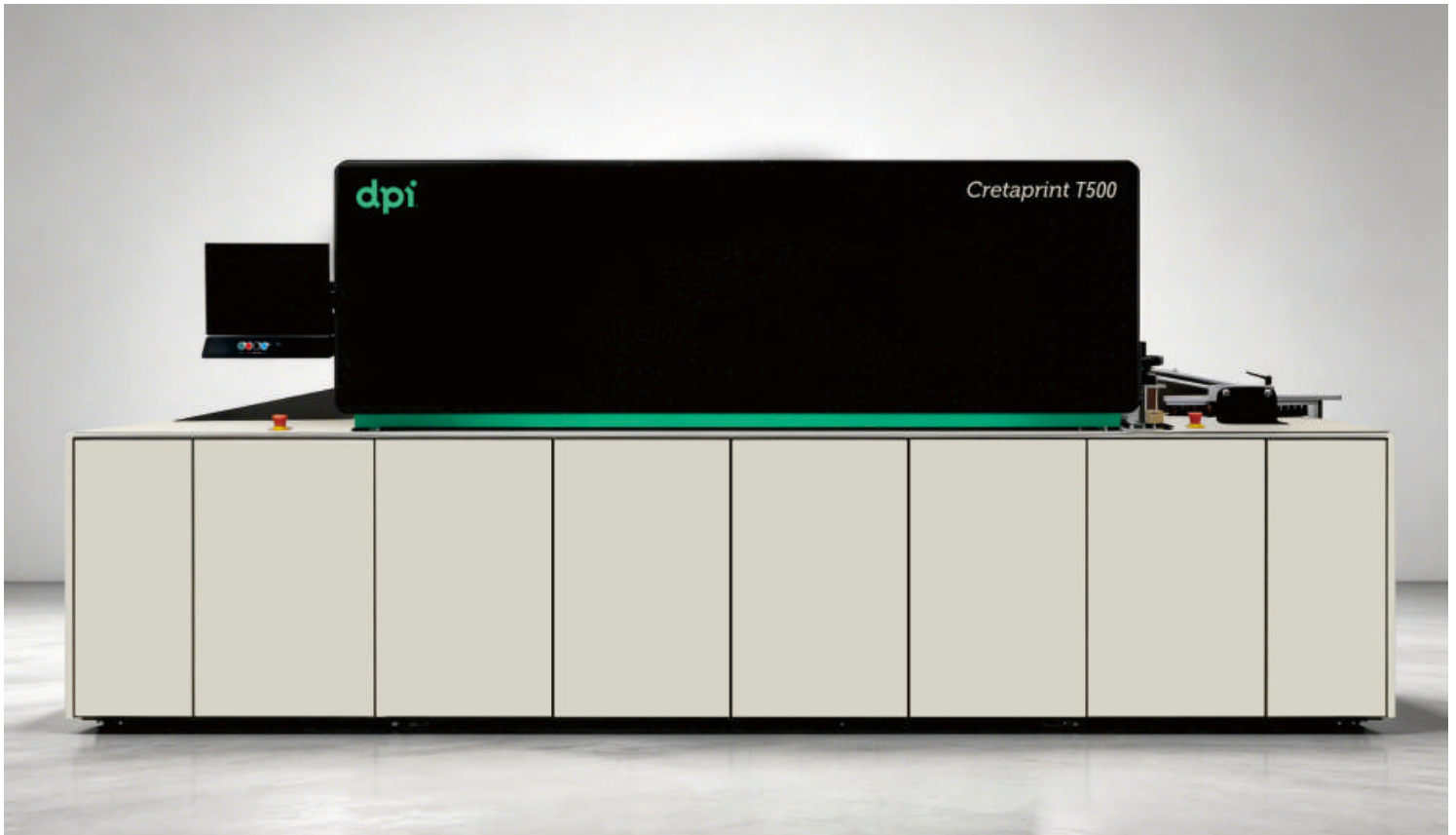
An ink set that results in defined decorations and a wide color range. Colors available: blue, cyan, red brown, yellow, ochre, black, white, etc.



Single-pass inkjet printers

- Ready to operate in industrial environments 24/7
- Available with a maximum printing width of 520 mm
- Able to decorate pieces up to 200 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 30 linear m/min

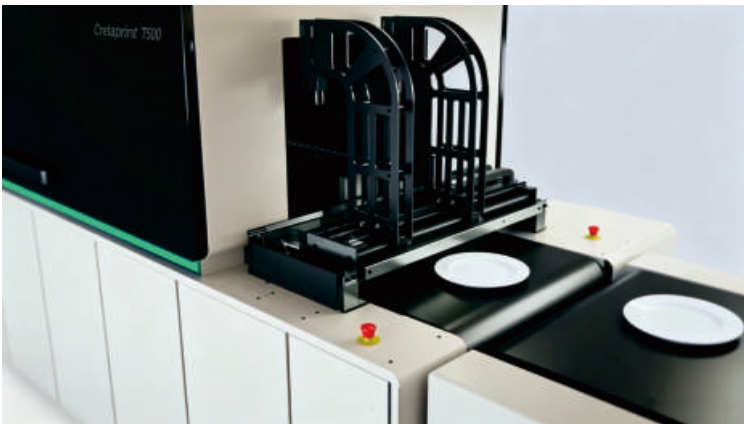
*Note: For substrate surface height difference compatibility, please contact DPI.



AI Vision System

AI vision technology delivers new levels of positioning accuracy and calibration efficiency for tableware printing. At the feed end, it detects each tableware blank on the conveyor and performs real-time pattern translation/rotation correction, ensuring designs fit product contours perfectly. No downtime, waiting, or rendering needed.

- Ensures patterns are perfectly centered on the tableware, eliminating misprints and ink waste while keeping the conveyor belt clean.
- Equipped with a HD camera system that captures comprehensive surface and position data of each piece, transmitting data in real time to dynamically adjust print patterns.
- Significantly reduces physical wear and breakage of tableware, minimizing production waste at the source.



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 color range



Time to market

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



Boost business

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



The Proven Industrial Printer That's **Low Maintenance** and **Easy To Operate**

FRAME AND SEPARATED PRINTING BARS

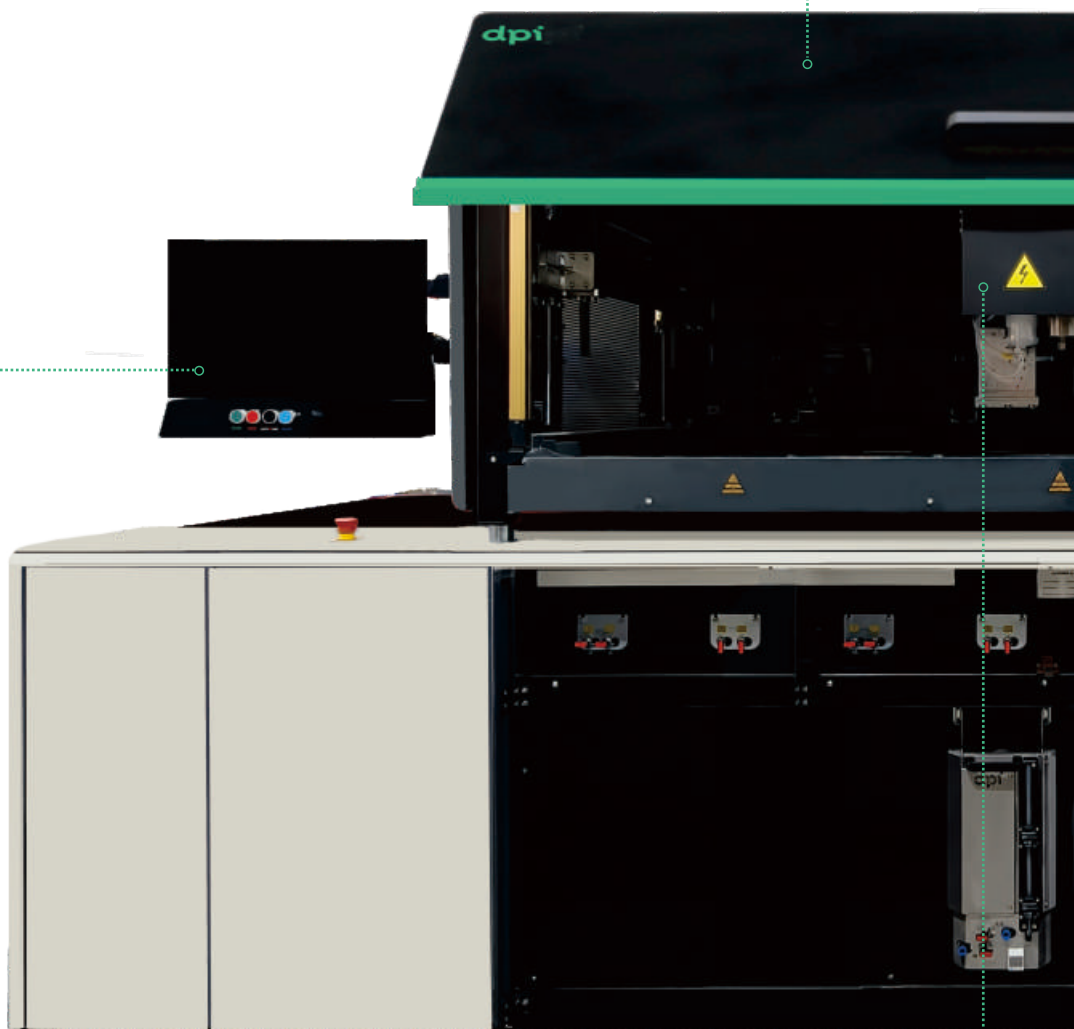
- Compact and reduced frame, holding up to 8 printing bars
- Sliding bars are accessible for daily operations and maintenance tasks
- Vacuum system between printing bars for a highly efficient steam and mist extraction

USER INTERFACE

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

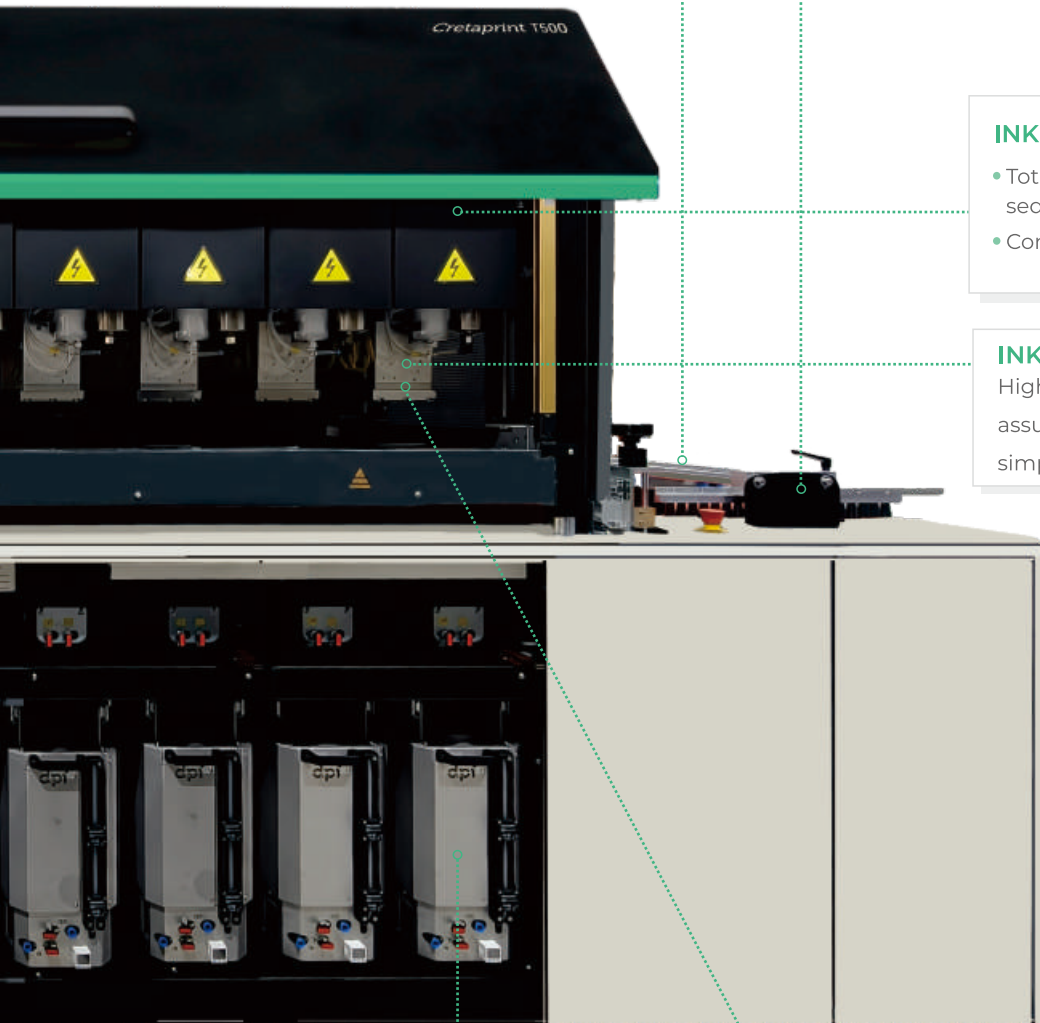
User applications:

- 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



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

INK TANKS

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

AUTOMATIC NOZZLE CLEANING SYSTEM

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



TECHNICAL SPECIFICATIONS

MACHINE SPECIFICATIONS*	T400	T500
Max. print width	412 mm	520 mm
Number of inks	Up to 12	
Print direction	Right/Left	
Min. substrate thickness	5 mm	
Max. substrate thickness	200 mm	50 mm
Centering print precision	< 0.3 mm	

*Other upon request

MACHINE ASSEMBLY	T400	T500
External power supply	Variable (380/400/440/480V)	
Max. power consumption (8 colors)	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	T400	T500
Width	1650 mm	1650 mm
Height	2550 mm	2300 mm
Length	5000 mm	5000 mm
CABIN DIMENSIONS*	T400	T500
Width	3700 mm	3700 mm
Height	3350 mm	3050 mm
Length	5500 mm	5500 mm

*Cabin is not supplied but is mandatory

SOFTWARE

Image file type	TIFF 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/m ²	Up to 45

Printer in development, specifications subject to change without notice.

Making Industry Smarter!

DPI is a global technology enterprise, specializes in the R&D, manufacturing, sales, and service of high-speed industrial digital inkjet printers. DPI delivers innovative digital printing solutions to diverse industries such as ceramics, building materials, textiles, and packaging. For more information, please visit www.dpi-t.com



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