Multipurpose digital ceramic decoration printer
EFI Cretaprint’s new generation of digital ceramic printers is much more robust and can hold up to 8 ceramic printing bars for decoration and special finishing purposes.

This is possible thanks to the design of its electronics, its cutting-edge software and its innovative system that allows working with different print heads in the same machine: some for printing and others with stronger ink discharge to apply special finishings.

This machine can be also used for glass decoration.

One of the main innovations introduced into all EFI Cretaprint 3G printer configurations is its single and compact chassis, which renders both the machine installation on site and subsequent updates simpler and faster. Thus, you will be able to maintain your inkjet printer always updated with the latest enhancements by our R&D Department.

However, the real beauty of this top-notch printer is that it provides more ceramic decoration options thanks to its decoration and application of special effects system, while perfectly fitting in your plant’s physical space.

With EFI Cretaprint new all-in-one-machine inkjets we offer you endless configuration options to best meet your requirements.

You can choose:
- Number of decoration bars.
- Number of special application bars.
- Printing width.
- Printing features suitable to your resolution, speed and ink discharge requirements.
- Print direction.
Print head protection

Whenever a bar is not delivering ink, it remains protected: A dual laser at the machine’s entrance detects both the position and the thickness of each piece. Thus, printing bars come down and adjust themselves to the tile’s height.

Meanwhile, the bars that will not apply any decoration or special effect remain above and protected.

Independent printing bars

Our new printers follow the modular concept typical of our inkjet printers: separate and independent printing bars.

This fact, coupled with the inter-bar aspiration system, prevents steam build-up and condensation in the print head.

Easy-to-access machine

Printing bars can be removed through an accurate and perfectly adjusted pneumatic system that guarantees the printing quality.

Once removed, the bars can be fully accessed to carry out both daily operations and preventive maintenance work. The printer may continue working while specific tasks are performed on any of its bars.
EFI Cretaprint was the pioneer in allowing ink recirculation in the print head, which can increase productivity as shown below:

- Fewer stops to clean the heads.
- Use of more viscous inks and, therefore, less ink consumption.
- Faster speed in the manufacturing line since tiles can be decorated at higher temperature.

EFI Cretaprint new printers’ ink system is an intelligent and simplified system to facilitate maintenance by workers and allow for a cleaner filling process. In addition, it introduces a new ink feeding mechanism that has been exclusively patented by EFI Cretaprint. A collector unit system is used to keep pressure distribution and flows constant. It also minimises potential sedimentation in the print head.

It includes additional features such as TAS (Tone Adjustment System), linearisation or ink consumption calculation. TAS is based on an intuitive interface that guides the user through the process of study and application of changes in tone or intensity to apply to a model. This feature for all our machines enable adjustments or variations on existing models in the system without use of external additional software or extensive knowledge in color management.
Electronics

The electronic design of our printers is based on the modular distribution of all their components, thus facilitating future upgrades and allowing full accessibility. The electronic system of our inkjet printers delivers high performance by using a main computer to upload image files and slave computers that manage the printing of said files. The result is increased graphical variability and non-stop manufacturing.

DTP

2 formats, 2 designs, 1 printer

Double Tile Printing is a new digital printing solution for the ceramics sector that allows simultaneous printing of two tiles of different formats and with different designs.

It is an ideal solution for multi-format printing. Double Tile Printing by Cretaprint allows total use of the machine’s resources and, in particular, it allows you to use the total printing width, leading to an increase in production speed without reducing the printing resolution.

Creatavision

The Creatavision system is an optional accessory of the EFI Cretaprint Digital Inkjet Printer. It allows associating each one of the designs of a model to different reliefs of a set of tiles. We can, therefore, perfectly fit-in a certain design with the tile’s relief, regardless of the order in which the tiles enter the system.

This module incorporates artificial vision hardware installed at the machine entry which allows recognizing and identifying the different tile reliefs and printing the associated design on each of them.

EFI Cretaprint Operation System

EFI Cretaprint’s exclusive software provides integral printer management capabilities. It uses the latest interface technology to optimise the printer’s capabilities across its options. It is a tactile system that is 100% updatable remotely, which enables the worker to handle all the elements fast and intuitively.

Serial UPS

Printers are fitted with a serial Uninterrupted Power System (UPS) that switches off the machine in a controlled manner in case of a power outage. Thus, it protects the heads mechanically as well as the data stored in the computers while keeping the ink recirculation to avoid sedimentation.

Special Effects Bar

The newest solution for ceramic design. This new bar incorporates exclusive large drop print heads, allowing greater versatility and higher inks & glazes application.

Adding one or more special effects bars in a C3-P3 Cretaprint machine, allows creating special effects like:

- Metallic glaze, Matt Effect protection, Glossy Effect protection, Reactive Ink, Glue for Granilla, High Opacity Whites and even Glaze-Engobe Applications.

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**Fiery proServer**

**Achieve the Best Color Quality and Predictability with the Lowest Ink Consumption**

Used with Cretaprint digital ceramic printers, EFI™ Fiery® proServer produces the most accurate and consistent color quality for ceramic tile decoration and lowers your ink consumption — no matter what the production conditions. And with Fiery ColorWise® technology, you can even see an accurate prediction of final color on screen or inkjet proof without the need to wait for your final production equipment to produce a prototype.

- Achieve Stunning, Precise and Predictable Color with Fiery ColorWise Technology
- Reduce Ink Usage
- Produce Consistent Tile Colors in Any Production Condition
- Profit from Consistent Production Conditions
- Accurately Simulate Final Print Appearance, Right in Photoshop
- Use Low-cost and Lightweight Prototyping on Paper
- Benefit from Fiery proServer Today

Achieve superior color at lowest ink consumption regardless of print condition.

Compared to traditional methods, the Fiery proServer saved 25% of the ink used on this tile design.

If print conditions are significantly different, then a new common gamut can be created by proServer.

Use Fiery ImageEditor to make quick and easy visual adjustments of print-ready files, no matter how many channels, right at the Cretaprint engine.

Preview final color appearance right in Photoshop.

Make affordable, quick and accurate prototypes on an inkjet proofing device.
Great solution and flexible inkjet technology choice to fit your needs

Updated Technical Data

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<th>Inkjet technology</th>
<th>DoD with piezoelectrics CR3 / PR3</th>
<th>DoD with piezoelectrics CX3 / PX3</th>
<th>DoD with piezoelectrics CT3 / PT3</th>
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<tr>
<td>Printhead model</td>
<td>Xaar 1002/GS6</td>
<td>Xaar 1002/GS12</td>
<td>TTEC CF1L</td>
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<td>Print heads width (mm)</td>
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<td>Number of nozzles</td>
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<td>Native resolution (dpi)</td>
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<td>Drop size range (pl)</td>
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<td>12 - 84</td>
<td>12 - 92</td>
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<tr>
<td>Greyscale levels</td>
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<td>up to 8</td>
<td>up to 8</td>
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<tr>
<td>Firing frequency (kHz)</td>
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<td>6-12*</td>
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<td>jetting max drop volume</td>
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<td>gr/m² (25m/min)</td>
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<td>gr/m² (50m/min)</td>
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<td>Special decoration effects</td>
<td>Optional TTEC CF1 XL</td>
<td>Optional TTEC CF1 XL</td>
<td>Optional TTEC CF1 XL</td>
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</tbody>
</table>

* According to Xaar specifications

Technical Features:

Machine specs
- Number of inks: up to 8
- Print direction: right/left
- Max. tile thickness (mm): 30
- Max. tile length (mm): 3000
- Max. tile width (mm): C3 / P3 696/1365
- Print speed (m/min): variable
- Customizable aspects: Print resolution
- Centering printing precision: <0.3mm
- Anti-vibration chassis: ✔
- Vacuum between bars: ✔
- Remote access through Internet for updating and diagnostics tasks: ✔

Inks used
- Ceramic inks from main providers: ✔
- Optimal cleaning system for ceramic Ink printheads: ✔
- Recirculation: ✔

Dimensions
Length x width x high: C3 / P3 4920mmx1740mmx2122mm / 4910mmx2210mmx2125mm

Software
- Image filetype: TIFF (n channels)
- Rendering time: variable
- Image loading time: 30 sec
- Image changing time during production: <1s
- Parallel RIPing and PRINTing: yes
- Number of images per model: unlimited
- Print an image without stopping production: ✔
- Cretavision: reliefs recognition system: optional
- Double tile printing: optional
- Different printing modes: ✔

Fiery ProServer
- Full colour management: Optional

Machine assembly
- External power supply: Variable (220/380/400/440/480V)
- Max power consumption (8 colours): 18 kW
- Electrical phases: 3F+GND
- Power connection frequency: 50/60 Hz
- Pneumatic connection: 6 bar
- Cabin recommended temperature: 25-35°C
- UPS included: ✔