# CERAMICS



# Release your creativity with Xaar

Over the last few years, the ceramics tile industry has extensively adopted digital inkjet technology for the tile decoration process. It has enabled tile manufacturers to replicate natural materials and produce highly creative and textured tiles as well as larger and thinner tiles. Xaar's revolutionary printhead portfolio is recognised as the 'breakthrough technology' that drove this digital transformation as it delivered enhanced print quality and printhead robustness.

Xaar's printheads are the benchmark against which all other single-pass printheads are compared. The printhead portfolio benefits from Xaar's unbeaten combination of TF Technology® ink recirculation and Hybrid Side-Shooter® architecture, delivering industrial reliability when using heavily pigmented and high viscosity fluids. The Xaar 1003 and Xaar 2002 families also incorporate the XaarGuard™ which ensures the longest maintenance-free production runs in the industry – typically once per shift or less.

Available in several drop size ranges, Xaar's printheads provide ultimate versatility in ceramic tile decoration. Tile manufacturers can select a printer set-up which meets their productivity, print quality and tile design requirements. Within the Xaar 1003 and 2002 families the GS6 prints very fine details, ideal for wall tiles; the GS12 balances detail and laydown to cover a wide range of ceramic tile designs; and the GS40 jets the highest laydown for special effects.

Xaar's market-leading portfolio of printheads are the result of Xaar's commitment to continuous improvement, ensuring its customers remain at the leading edge of print performance. For over 25 years, Xaar has led the way in inkjet innovation. With state-of-the-art manufacturing facilities in Europe, Xaar exports its products to manufacturers all around the world.

# Xaar Ceramics Printheads

Xaar 1003 family Xaar 2002 family



# **CERAMICS**

# Why Xaar?

## Xaar's market leading range of ceramic printheads

As Xaar's comprehensive range of printheads are designed in close collaboration with the ceramics industry, you can be sure to find a printhead perfect for your application.

### Ultimate versatility

Xaar's ceramics printheads are ideal for printing an extensive range of ceramic tile designs and patterns. Tile printers enabled with Xaar printheads can respond more quickly and cost effectively to design changes.

- Available in multiple drop sizes: 6 pL for printing very fine details ideal for wall tiles;
   12 pL for balancing fine details and high laydown to cover a wide range of ceramic designs;
   and 40 pL for jetting high laydown for special effects
- Easy integration, supported by Xaar's system components for fast time-to-market enabling quick integration of Xaar's printheads. All printheads can be driver by either the XUSB or XPM and each have Head Personality Cards (HPCs) that condition the power and signals specifically for each printhead type.

### **Production flexibility**

Xaar's portfolio delivers market-leading print quality, high productivity and high ink laydown to create ceramic tiles that are differentiated form the competition.

- Market-leading print quality, with up to 720 dpi and 8 grey levels, means that tile manufacturers can produce tiles for a wide range of applications
- 1000 or 2000 nozzles deliver high productivity with a broad range of oil-based ceramic inks.

### Industrial reliability

Xaar's ceramics printheads are designed to deliver maximum production uptime with minimum operator intervention which ensures high production output and a fast return on investment.

- Xaar TF Technology® ink recirculation ensures continuous ink flow at a high rate directly
  past the back of the nozzles; air bubbles and unwanted particles are carried away –
  maintenance is reduced to typically once per shift or less
- The XaarGuard<sup>™</sup> nozzle plate provides highly effective protection from mechanical impact so that production interruptions are minimised
- Actuator performance in each printhead is optimised with Xaar's Tuned Actuator Manufacturing. This process ensures full scalability with a simple and quick set up, streamlining printhead replacement, and achieves consistent print quality across long print bars with multiple printheads, at different greyscale levels
- The Xaar 2002 family of printheads have the new XaarSMART™ technology reporting ink temperature and printhead status in real time so that printer performance can be easily adjusted to deliver consistent print quality throughout the production run
- Xaar partners with the world's leading manufacturers to develop approved inks and fluids with optimised waveforms for precise and reliable jetting performance.







