Graphics

Digital inkjet graphics printing

The graphics sector covers the digital printing of advertising materials – including the production of indoor and outdoor signage, exhibition panels, posters, billboards, fleet and building wraps. Xaar has a proven track record of providing inkjet technology to this sector and brings industrial design and robustness whilst maintaining outstanding print quality and productivity.

The graphics sector was one of the first to be revolutionised by first generation inkjet printheads, replacing traditional printing techniques such as screen printing. The sector has evolved as the end-user expectations on flexibility, print quality and productivity have increased.

Wide-format graphics printers typically operate in scanning mode to ensure excellent image production on materials such as vinyl, textile, paper, foam board or rigid laminate. A carriage with multiple printheads makes numerous side-to-side passes over the substrate, whether on roll-to-roll machines or flatbed units.

Xaar's technology and approved inks for the graphics industry offers the utmost flexibility, with solvent solutions that are durable and fade-resistant for outdoor applications and UV-curable or eco-solvent inks for indoor signage.

Xaar 501 GS8
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Xaar 502 GS15S
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Xaar 128
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Xaar 1201
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XAAR®

Graphics

Why digital?

Faster and cheaper set-up

- With digital inkjet printing there is no costly screen production, making it economical to print short runs – including one-off individual items. This makes more frequent advertising changes economically viable.

Customised graphics

- The lower cost of very short print runs makes the production of customised graphics much more viable and enables end users to react more rapidly to trends and design changes.

Shorter lead times

- The ability to print images faster and at lower cost (reduced inventory) has driven the on-demand business model in the graphics sector.

Why inkjet?

Scaleable technology

- With digital inkjet printing, multiple printhead passes enable both small and large graphics to be printed on machines between 1 and 5 metres wide. Traditional screen printing, by contrast, is fixed in both width and repeat length so cannot be scaled up this way.

Smaller footprint

- Up to six-colour screen printing requires a separate print station for each colour. This is not necessary with digital inkjet systems, where additional colours can be enabled by adding extra printheads with potentially no change in the machine footprint.

More flexibility

- Inks that were only an option for screen printing – including whites, spot colours, varnishes and metallics – are now available for digital inkjet printing.

Ease of operation

- Simple to use digital inkjet printers do not require the same level of skilled knowledge to operate compared to screen printing machinery and are easier to maintain.

Why Xaar?

Xaar's printheads for the graphics sector deliver excellent and consistent print performance enabling users to achieve high quality without compromising on speed.
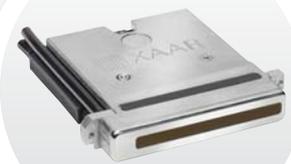
Outstanding print quality

- The unique PrecisionPlus architecture of the Xaar 501 and Xaar 502 printhead families build on Xaar's incredibly successful Hybrid Side Shooter® architecture which optimises the actuator's stability, robustness and performance giving more uniform drop formation delivering even colour density across the print swathe

- 8 greyscale levels and a drop size down to 2.5 pL allows the Xaar 1201 printhead to deliver cost effective, exceptional print quality with a range of eco-solvent or aqueous inks.

Industrial reliability

- The Xaar printheads are designed to deliver industrial reliability and robustness resulting in increased production up-time even in harsh environments

- Optional with the Xaar 501 and Xaar 502 is Xaar's revolutionary TF Technology® which recirculates ink to keep nozzles clear of unwanted particles and air bubbles and prevents sedimentation when using high viscosity or heavily pigmented inks. This radically improves reliability even in the most demanding production environments

- Internal temperature management allows Xaar printheads to work with a wide range of fluid viscosities in varying ambient temperatures ensuring high reliability all year round

- A robust metal body with recessed nozzle plate protects against costly damage from media crashes or other mechanical impacts.

Flexible and easy integration

- Xaar's printheads offer a flexible range of ink supply options and easy printhead integration to ensure maximum versatility, fast manufacturing and minimum servicing time

- The agile Xaar 128 has a compact footprint and weight of only 16 grams, ideal for printer designs where weight and size are key factors

- The Xaar printheads have a simple and accurate mounting system enabling multiple printheads to be mounted together with minimal adjustments. This enables fast installation, ideal for multi-pass scanning application solutions in a compact and cost-effective print engine.

Xaar 501

Xaar 128

Xaar 1201

XAAR®