CODING & MARKING

Xaar 501 GS8
Xaar 502 GS15O
Xaar 128

Outstanding print quality

Industrial reliability

Highest productivity

XAAR

Digital secondary packaging printing using inkjet and mineral-oil free inks

Xaar provides the premium offering in digital inkjet to the coding and marking sector with its printheads offering superior print quality and its wide range of approved inks and fluids. This enables companies to achieve faster line speeds, increase throw distance and print more accurately onto porous and semi-porous surfaces – offering a low cost of ownership alternative to thermal inkjet. For example, the Xaar 502 GS15O printhead has the ability to print up to 6 grey levels with 15 pL as the smallest drop size to achieve high-contrast printing onto brown cardboard.

Due to concerns regarding the contamination of food from inks used on secondary food packaging and the use of recycled paperboard, the packaging industry is striving to avoid the use of materials containing mineral-oil hydrocarbons. SunJet's IK822, black MOF (mineral-oil free) ink is approved and optimised for use with the Xaar 128, Xaar 501 and Xaar 502 printheads families. The main benefit of MOF ink is its safer formulation which reduces the concern around toxicity and handling. MOF ink also has the ability to break down easily during recycling, which is of particular interest to environmentally conscious brand owners and retailers.

Whilst proactively providing a solution ahead of potential legislation, Xaar approved MOF ink has also been developed to meet the requirements of coding and marking companies. Containing premium grade pigment, this new type of ink delivers high quality and optical density on a wide range of absorbent substrates. Xaar approved MOF ink provides coding and marking customers with the knowledge that the ink has been validated, approved and enhanced to give unrivalled print performance and trouble-free operation.

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Why digital?

Production changeover

– Digital printing offers a high degree of flexibility enabling changes to printed data in-line, reducing production down time. Data such as serialised barcodes and real-time date stamps can be varied per batch or even for single items.

Variable data

– Combining variable and fixed data in one print process delivers production efficiencies, and enables traceability, localisation or personalisation of the product or packaging.

Reduced inventory

– There is no need to hold extensive stocks as items can be printed on-demand in the quantities required.

Branding

– Greyscale digital inkjet enables printing of high contrast barcodes alongside late stage marketing in lighter or lower ink usage images such as promotional messages or brand logos.

Why inkjet?

High quality print finish

– Digital inkjet printing can deliver high contrast sharp lines and alphanumerics enabling consistent, accurate machine and human reading.

Substrate flexibility

– Digital inkjet printing is compatible with oil-based, solvent-based and UV inks, so that printing onto a wide range of substrates is possible.

Non-contact printing

– The non-contact nature of digital inkjet techniques means no damage to packaging when printing, reduced possibility of damage to the printhead and higher throw distances enabling more production flexibility.

Why Xaar?

Xaar's printheads for the Coding & Marking 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 performance giving more uniform drop formation delivering even colour density across the print swathe

– The Xaar 128 now comes with a programmable circuit which offers advanced control and tuning of the printhead to better manage ink characteristics and print quality.

Industrial reliability

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

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

– Internal temperature management allows the printhead to work with a wide range of fluid viscosities in varying ambient temperatures ensuring high reliability all year round

– The Xaar 501 and Xaar 128 have a robust metal body with recessed nozzle plate protects against costly damage from media crashes or other mechanical impacts.

Highest productivity

– Xaar printheads achieve reliable and optimised digital print performance to maximise production uptime and throughput

– All Xaar-approved inks go through the XaarDOT fluid optimisation process, offering the additional benefits of a printhead warranty and the piece of mind that each ink has been optimised for performance and its application.

Xaar 501   Xaar 502   Xaar 128