XAAR CASE STUDY

Award-winning Johnnie Walker bottle customisation with Kammann and Xaar



Koenig & Bauer Kammann, Germany
Diageo Johnnie Walker project

Overview

Kammann required a digital decoration process capable of delivering premium, high-impact customisation on glass bottles at scale. Using its K15 decorative print machine powered by Xaar printhead technology and Marabu high-viscosity UV inks, Kammann produced 5,000 uniquely printed Johnnie Walker whisky bottles for Diageo. The project demonstrated how digital inkjet can enable luxury personalisation, vibrant tactile finishes and efficient small-batch production for premium packaging.

The client profile

Koenig & Bauer Kammann specialises in decorative printing machines for glass, plastic and metal containers. The company has partnered with Xaar for more than a decade, using its inkjet technology to drive innovation across high-quality container decoration systems.

The project

The Johnnie Walker project required every bottle to be individually designed while maintaining the premium quality expected from a luxury drinks brand. The limited-edition collection featured 50 original artworks by pop artist Andy Gellenberg, enhanced using generative AI to create a one-of-a-kind visual identity.

Kammann needed to digitally decorate all four sides of each glass bottle with a 180 mm high image in just three passes, balancing visual impact, production efficiency and reliable inkjet performance.

The solution

Xaar's High Laydown and Ultra High Viscosity Technology enabled Marabu's high-viscosity UV inks to be jetted reliably at high temperatures. The technology supports fluids up to 1000 centipoise at ambient temperature, approximately 100 cP at jetting temperature.

This capability allowed smooth application, strong pigment load and a luxurious high-impact finish. The collaboration between Kammann, Xaar and Marabu combined machine expertise, printhead capability and ink development to create vibrant, tactile designs at scale.

The implementation

Kammann's K15 decorative print machine was used to print directly onto all four sides of each bottle in three passes. The process delivered the quality and efficiency needed for an exclusive limited-edition production run of 5,000 unique bottles.

The project won the Supreme category at the Digital Labels and Packaging Awards, highlighting the creative and commercial potential of digital print in premium packaging.



The impact

Outcome 1
Produced 5,000 uniquely printed Johnnie Walker bottles with premium, tactile decoration

Outcome 2
Enabled vibrant high-impact finishes using Marabu high-viscosity UV inks

Outcome 3
Supported more sustainable production by reducing material use and energy required for curing

"We're delighted that our printhead technology played such a key role in bringing this impressive collection to life. This project shows the creative and commercial potential of digital print, and the result is a powerful demonstration of how brands can harness customisation to elevate consumer experience."

Justin Noble
Director of Product and Applications, Xaar

Technical highlights

Key capabilities

- Ultra High Viscosity Technology
- High Laydown Technology
- Reliable jetting of high-viscosity UV inks

Compatibility points

- Direct-to-glass bottle decoration
- Premium container customisation
- Short-run, high-variation digital production

Deployment notes

- Used on Kammann's K15 decorative print machine to produce 5,000 limited-edition Johnnie Walker bottles for Diageo.

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