

A radically new approach for jetting water-based fluids reliably

In November we launched our new and revolutionary industrial aqueous compatible printhead, the Xaar Aquinox. Built on our ImagineX platform, this printhead has been developed to respond to market requirements for a truly reliable, robust printhead that can print a much wider range of inks including high viscosity and high pigment loading.

This is our first printhead to feature our new, patented aQ Power Technology to deliver enhanced reliability when printing with water-based inks. aQ Power is a combination of technologies, which work together to increase lifespan and durability:

- an updated internal printhead architecture
- a new advanced material set
- a novel technique for ejecting the ink droplets.

The Xaar Aquinox offers a radically new approach to how water-based inks are jetted. It also incorporates our industry-leading TF Technology fluid recirculation and Ultra High Viscosity capability. This means that Aquinox can reliably jet inks at viscosities at ten times more than a typical printhead allows.

Fluids of up to 100cP at jetting temperature can be reliably jetted therefore overcoming current constraints on ink formulations, so our customers can develop and print with the ink they want.

Xaar Aquinox

Markets

The Xaar Aquinox and our Ultra High Viscosity Technology is of interest to OEMs developing machines for a broad range of applications, which include:

Textiles

- Being able to jet high pigment loaded inks with high viscosities means water usage, energy consumption and CO₂ emissions can be reduced
- These benefits, combined with the long-life span of the printhead, increase the efficiency of end user businesses while delivering a more sustainable solution at a lower total cost of ownership.

Packaging

- The Xaar Aquinox enables a new generation of inks that achieve the required colour saturation with less fluid, allowing increased print speeds
- Xaar's Ultra High Viscosity Technology opens new possibilities for ink formulation, improving adhesion, reducing drying time and energy consumption whilst controlling dot spread on even the most challenging of substrates.

Ceramics

- Aquinox supports printing aqueous glaze as well as colour, providing the opportunity for a truly digital end to end aqueous solution.

Across many markets we see Aquinox and our Ultra High Viscosity Technology breaking new ground, enabling new applications that were previously not possible with inkjet.

