Ricoh announces development of new industrial print head using thin film PZT actuator

Ricoh Printing Systems America, Simi Valley, 27 June 2016 – Ricoh has today announced its development of a new inkjet print head for industrial applications using its thin film (PZT) piezo actuator\(^1\).

This head is driven by the high-stiffness actuator manufactured using Ricoh’s unique Sol-Gel process\(^2\). This enables the application of high quality multi-drop control\(^3\) as featured in the proven RICOH GH print head series. The original highly integrated design utilizes RICOH’s MEMS\(^4\) technology to realize 600dpi resolution with 1,280 nozzles configured in 4 x 300dpi rows. The ink paths are isolated to enable a single head to jet up to four ink colors.

Ricoh has a long and rich heritage in the world of inkjet technology dating back over 30 years. This experience enables Ricoh to bring a wide variety of inkjet printing systems to market, whilst also supporting partners in diverse industrial and specialty markets from Wide Format Graphics to 3D Printing and from Textile to Digital Enhancements and many more.

Ricoh will introduce the new print head through its own its inkjet printers and promote the adoption of this thin film PZT and MEMS technology to a wider range of industrial partners in order to meet increasing market demands.

\(^1\) A kind of piezoelectric transducers that creates mechanical deformation by the application of a voltage, used for jetting ink drops.
\(^2\) A method for producing solid material from the solution of raw materials.
\(^3\) A technology used for shading expression, making dot sizes variable by merging ink drops in flight.
\(^4\) Micro-Electro-Mechanical-Systems: a general term for miniaturized electro-mechanical devices or technology.