

The Expansion of Ricoh's Inkjet Technology

“Pushing the boundaries of inkjet to open new worlds” Ricoh’s inkjet technology is based on more than 50 years of continuous research and innovation. It started out as technology to be used in office printing. Now it is used in numerous commercial areas. It has even developed into industrial solutions, deployed in a variety of applications encompassing food, clothing and housing. Ricoh keeps expanding the printing possibilities, delivering new value and new experiences for our customers across the globe.

<https://www.ricoh.com/technology/inkjet/>

Industrial printing

Ricoh’s inkjet printheads range from high-resolution to large droplet. The RICOH MH SERIES offers a wide range of ink compatibility with high durability. The RICOH TH SERIES provides a compact footprint. The inkjet printhead and ink technologies developed over several years are now deployed as solutions. Ricoh enables printing on many different media for a broad range of solutions.

Key Technologies

- Multi-drop control technology
- Latex ink
- UV-Curable Inkjet Ink

Combination of Ricoh’s inkjet printhead technology along with that of Hitachi Printing Solutions

RICOH MH SERIES

2008
RICOH MH2420
Ricoh’s first print head with a bi-pitch laminated piezo actuator

2010
RICOH MH2620/2820
Increased droplet size and enhanced definition for 3D printers

2012
RICOH MH5420/5440
Higher resolution due to multiple-rows of longer nozzles

2015
RICOH Pro VC60000
Dual print heads boasting 1,200 dpi on offset coated paper

2012
RICOH MP CW2200/CW1200 series
Multifunction printer based on GELJET technology, capable of handling A0-sized sheets

2016
RICOH MP CW2201/CW1201 series

2006
imaggio MP C1500 series
The office-use A3 multifunction printer features GELJET technology

2003
IPSIO G505/G707
The first printer featuring the GELJET technology. The core technology of Ricoh’s inkjet printer was installed

2012
IPSIO SG 3100/2100/2010L series

2017
RICOH SG 5100/3200/2200 series

2019
RICOH Handy Printer

e.g. Printing on medicine bags at pharmacies

Commercial printing

With high quality printing on a wide range of media at high speed, Ricoh helps you expand your business. The RICOH Pro VC70000 continuous feed inkjet printer achieves both high image quality and high productivity that is close to offset printing, through newly developed inks and new drying technology.

Key Technologies

- Inks designed for offset coated paper
- Drying technology
- Undercoating
- Protector Coating
- 2.13-inch, 1,200 dpi dual heads
- Dynamic Print Head Positioning

Bi-pitch laminated piezo actuator

Wide printers featuring the GELJET head and ink system

Delivering GELJET heads to DTG printers

Inkjet Printed Battery

Digital manufacturing of rechargeable battery with ink-based components using precision inkjet printing technology

3D Printing

Providing solutions based on inkjet technology and material technology

Bioprinting

Applied in inspections and the production of human tissue through precise ejection of live cells

Manufacturing innovation

Applying ink and inkjet technology to printed electronics

INNOVATIONS

Ricoh’s ideas and core technologies continue to bring about innovations in many fields. Opportunities are increasing for Ricoh to deliver new value to society.

Labels and packages

Delivering Inkjet systems

2014
RICOH Pro L4160/L4130

2016
AnaJet mPower i-series
Ricoh inkjet head installed (AnaJet acquired)

2016
RICOH Pro L4160/L4130
RICOH latex ink launched

2017
RICOH Ri100
Featuring GELJET technology

2018
LAC acquired

2017
RICOH Pro T7210*1

2018
RICOH Pro L5160/L5130*1

2019
RICOH Ri1000*1
High-productivity and extra large print area (A3+)

2020-2021
RICOH Pro L5130/Pro L5160
Optional color inks provide accurate color reproduction

2016
RICOH MH5220
Higher resolution due to staggered print heads (1,200dpi)

2017
RICOH MH5421F/5421MF
High ink discharge stability based on the ink circulation structure

2019
RICOH MH 5320/5340
High durability and high-productivity

2020
RICOH TH5241
Unique, highly integrated design using MEMS*2 technology achieves compactness

2021
RICOH TH6310F
High-definition printing using MEMS*2 technology and high image quality printing with wide print gap*3

2022
RICOH MH5422/5442
High durability and high precision

*1 Available outside Japan
*2 Micro Electro Mechanical System
*3 Printing that requires a distance between printhead and media, such as printing of uneven media.

Vehicle Art Robo

Tire Printer

Bottle Printer

Gas Cylinder Printer

Digital Painting

2023
RICOH Ri 4000*1
Print on 100% polyester material

Textiles
Entering the direct-to-garment (DTG) printer market

Sign Graphics / Decoration
Signage and posters

Industrial building materials, interiors, housing building materials, automotive, upholstery, and more

Sheetfed

CF (Continuous Feed)

WF (Wide Format)