

## Market Report

[2024 version of Inkjet Printing Market Forecast]

# “The Latest Market Trends in Inkjet Technology Expanding from Printing to Manufacturing”

=Comprehensive analysis of the commercial and industrial inkjet market (hardware, ink, and printheads) =



Fujifilm's Jet Press FP790: a water-based inkjet press for the flexible packaging market



Canon's varioPRESS iV7: a B2 sheet-feed inkjet press for the commercial printing market



HIINK's HYK-SP1600: a single-pass digital textile printer



<Overview>

I. Theme

**[2024 version of Inkjet Printing Market Forecast]**

**“The Latest Market Trends in Inkjet Technology Expanding from Printing to Manufacturing”**

*= Comprehensive analysis of the commercial and industrial inkjet market (hardware, ink, and printheads)=*

II. Abstract

**Inkjet technology**, which enables precise control over printing on a wide range of materials, **has seen a notable rise in adoption across various fields and applications in recent years**. Inkjet technology is gaining attention as a potential game-changer in the paper printing market, including advertising, commercial, and packaging printing, as well as in non-paper printing markets like textiles, ceramic tiles, construction materials, and metals. Its applications extend beyond printing to manufacturing, including additive manufacturing (AM) and printed electronics (PE).

A review of recent industry trends reveals that, **while inkjet technology as a whole continues to evolve with higher-performance heads and improved ink quality, the market has not achieved the growth that the industry had hoped for**. While some applications, such as commercial and packaging printing, continue to see market growth, others, such as signage and textiles, are still recovering from the significant post-pandemic decline. In the inkjet consumables business, major printer and ink manufacturers in Japan, the U.S., and Europe have focused on the development of water-based pigment inks for a variety of applications in recent years. However, there has been little progress in their full-scale adoption in the various markets.

Inkjet technology is regarded as **a technology that can reduce environmental impact**, as it improves material utilization and reduces waste. It is also expected to bring innovation to manufacturing as **a microfabrication technology that can be used with a variety of materials**. In addition to printer manufacturers looking to expand their global reach, small and medium-sized integrators with extensive knowledge and expertise in inkjet technology will work with head and ink manufacturers to create innovations in a variety of fields and applications. Given the unique nature of this industry, **inkjet technology is poised for growth over the medium to long term**.

The 2024 edition of the Inkjet Printing Market Forecast is the eighth in the series. This year's report offers a professional and objective outlook on the future of markets including signage and graphics, textiles, transactional printing, commercial printing, label and packaging, marking and coding, ceramic tile and building materials, and 3D printing. It is our hope that this report will help to invigorate the industry.

III. Items and Makers

1. Surveyed Markets

Graphics Market	Wide-format printers (A2 and up) for photos, proof, and posters printing and the market mainly handling sales of inks for wide-format printers.
Technical Market	Wide-format printers (A2 and up) for CAD and GIS (Geographic Information System) printing and the market mainly handling sales of inks for wide-format printers.
Signage Market	This primarily refers to the market for wide-format printers (A2 and above) used for large outdoor signage and the sale of inks for these printers. It also includes related markets, such as UV printers for decorating smartphone cases and various types of cards, as well as latex printers for indoor wallpaper printing.
Textile Market	This market primarily focuses on the sale of DTF (Direct to Fabric) printers that print directly onto fabric, sublimation printers that use transfer paper, and DTG (Direct to Garment) printers for T-shirt printing, as well as the sale of inks for these printers. In recent years, the market has expanded beyond apparel to include home textiles, such as curtains and bed covers.
Transaction Market	It mainly refers to a printing market of high-speed and mass variable data processing such as credit card bills/statements. The market has spread to include DM printing based on customer information.

Commercial Printing Market	The market is mainly formed by printing of corporate promotional tools such as catalogs and leaflets, but this reports extends to include publication printing such as books and magazines, among others.
Labels Printing Market	This market is centered on the sale of adhesive label printers that produce labels placed on consumer products and the sale of ink. Only printing machines costing 10 million or more per unit are covered and small-sized or desk-top machines are not included.
Packaging Market	This market primarily focuses on the sale of large-format printers and inks for folding carton, flexible packaging, and corrugated board. This report covers only high-volume production printers and excludes smaller devices intended for proofing purposes.
Marking & Coding Market	This is a market centered on sales of printers and inks for product information printing (production date/place of origin/barcode) on cardboard and labels.
Ceramic Printing Market	The market is mainly comprised of the sale of hardware machines and ink for ceramic tile and related product printing.
Building Material Printing Market	The market is mainly comprised of the sale of hardware machines and inks for building material printing such as wall coverings and exterior walls.
3D Printing Market	This is a market centered on 3D printers and their materials, as well as services utilizing inkjet technology.
Other Markets	They include display, solar cells, electronic circuit boards, lithium-ion secondary batteries, bio, anti-counterfeiting, food, nail art, medical, direct-to-shape (DTS), etc.

## 2. Surveyed Makers

- 1) Hardware makers (Over 300 makers in Japan and abroad)
- 2) Printhead makers (17 makers in Japan and abroad)
- 3) Ink/ dispersions makers (Over 150 makers in Japan and abroad)
- 4) Others (integrators and parts makers among others)

## IV. Research Period and Methodology

### 1. Research period

The research period is set from 2019 to 2027 and target regions are Japan, North America, Europe, China, and other regions.

### 2. Methodology

- 1) In principle, on-site interviews will be conducted through direct visits to the target manufacturers.
- 2) Analysis and review of open literatures, materials, statistics, and other sources
- 3) Analysis of Data Supply's own proprietary database

## V. Format and Report Preparation Period

1. Research form: Multi-client study
2. Research period: August to October of 2024
3. Publication date: December 9, 2024
4. Report format: PDF format
5. Price: \$6,000-
6. Researchers

Mr. Yukio YAMAMOTO, Mr. Kosuke YOSHIDA, and Mr. Masafumi HARIU

Phone: +81-3-3831-9201

FAX: +81-3-3831-9204

E-mail: <yamamoto@datasupply.jp> <yoshida@datasupply.jp> <hariu@datasupply.jp>

Homepage: <http://www.datasupply.jp>

## 《Table of Contents》

**A. Comprehensive Analysis**

1. Overall trend of shipment value of industrial/commercial inkjet printing (2019-2027) .....	1
1) Overall (hardware machines, inks, others) .....	1
(1) JPY basis (2) USD basis	
2) Shipment value by application field (2019-2027) .....	3
(1) JPY basis (2) USD basis	
3) Shipment value by finished product business and integration business (2019-2027) .....	5
(1) JPY basis (2) USD basis	
2. Maker sales share in the finished product business (2023) .....	7
3. Digital applications versus analog applications in the printing market .....	8
1) Comparison of production technology 2) Digital and inkjet ratio in each market	
3) Demand (%) by region in each market	
4. Shipment trend in hardware machine market (2021-2027) .....	11
1) Shipment volume 2) Shipment value	
5. Overview of the ink market .....	13
5-1. Shipment trend by market (2021-2027): 1) Shipment volume 2) Shipment value	
5-2. Shipment trend by ink type (2021-2027): 1) Shipment volume 2) Shipment value	
5-3. Market share of shipment volume of inks by brand (2023)	
5-4. Ink technology trend	
1) Markets and applications of inks and the underlying technology 2) Key ink technology	
3) Ink technology by market	
5-5. Main materials of inks .....	24
1) Colorant (dye/pigment) 2) Resin 3) Organic solvent 4) Dispersant	
5) Surfactant (surface conditioning agent) 6) UV monomer 7) Photopolymerization initiator	
8) Polymerization inhibitor (stabilizer) 9) Anti-bacterial and anti-fungal agent for water-based ink	
5-6. Price trend in ink by market .....	29
6. Overview of the printhead market .....	30
6-1. Changes in shipment value (2021-2027) .....	30
6-2. Trend in printhead applications by market .....	31
7. Major acquisitions in the industrial inkjet market .....	32
1) 2002-2010 2) 2011-2020 3) 2021 and beyond	
8. Regulations and safety standards for industrial inkjet .....	38
1) Chemical substance regulations 2) International standards and safety standards for substrates	

**B. Individual Inkjet Market**

B-1. Graphics & technical market .....	45
1. Overall shipment value (hardware machines and inks: 2021-2027) .....	45
(1) JPY basis (2) USD basis	
2. Market overview (digital ratio and inkjet ratio) .....	47
(1) Graphics market (2) Technical market	
3. Demand ratio by region (2023) .....	48
4. Market share of sales of graphics & technical business by inkjet maker (2023) .....	49
5. Shipment trend by application of hardware machines (graphics/technical: 2021-2027) .....	50
1) Shipment volume (2) Shipment value	
3) Market share of shipment volume by maker (2023): (1) Overall (2) Graphics market (3) Technical market	
6. Shipment trend by type of inks (water-based pigment/water-based dye: 2021-2027) .....	55
1) Shipment volume (2) Shipment value (3) Shipment shares of inks by maker (2023)	
4) Trend in ink technology (5) Trend in ink price	
7. Trend in printhead applications .....	59
8. Summary of major makers .....	59
1) Japanese makers: Epson/Canon/Ricoh/Mutoh Industries	
2) European and US makers: HP (3) Chinese makers	
9. List of major machines of each company (5 companies) .....	60
B-2. Signage market .....	62
1. Overall shipment value (hardware machines and inks: 2021-2027) .....	62
(1) JPY basis (2) USD basis	
2. Market overview (digital ratio and inkjet ratio) .....	64
3. Demand ratio by region (2023) .....	65

4. Market share of sales of signage business by inkjet maker (2023) .....	66
5. Shipment trend by type of hardware machines (solvent/UV/latex: 2021-2027) .....	67
1) Shipment volume 2) Shipment value 3) Market share of shipment volume by maker (2023):	
(1) Roll-to-roll type (solvent + UV) (2) Flatbed UV machine (large) (3) Flatbed UV machine (small)	
(4) Latex	
6. Shipment trend by type of inks (solvent/UV/latex: 2021-2027) .....	71
1) Shipment volume 2) Shipment value 3) Market share of shipment volume of inks by maker (2023)	
4) Trend in ink technology 5) Trend in ink price	
7. Trend in printhead applications .....	76
8. Summary of major makers .....	77
1) Japanese makers: Mimaki Engineering/Roland DG/Canon (formerly Océ)/Epson/Mutoh Industries/Ricoh/ Fujifilm 2) European and US makers: HP/EFI/Agfa-Gevaert/Durst	
3) Chinese makers: Beijing JHF Technology/Bengbu Wan Lida Digital Color Printing Equipment/Fei Yeung Union/Gongzheng Group/Guangzhou Nuocai Digital Products/Guangzhou Xucheng Electronic Technology (XULL)/Human Digital Technology (Shanghai)/Nanjing Fortune-lit Digital Technology Industry/Shanghai ALLWIN Digital Technology/Shanghai Huidi Digital Technology/Shanghai Teckwin Technology Development/Shanghai Wit-Color Digital Science & Technology/Shenzhen HANDTOP Tech/Shenzhen Runtianzhi Digital Equipment (Flora)/Sky Air-ship Digital Printing Equipment/Wuhan Yili Electronics (YiliJet/XENONS)/Xunlong Electromechanical Technology (Yaselan)/Zhengzhou New Century Digital Print Technology	
9. List of major machines of each company (88 companies) (92 companies) .....	81
 B-3. Textile market .....	 95
1. Overall shipment value hardware machines and inks: 2021-2027) .....	95
1) JPY basis 2) USD basis	
2. Market overview (digital ratio and inkjet ratio) .....	97
3. Demand ratio by region (2023) .....	99
4. Market share of sales of textile business by inkjet maker (2023) .....	100
5. Shipment trend by type of hardware machines (direct-to-fabric/sublimation transfer printer/DTG printer/DTF printer: 2021-2027) .....	101
5-1. Overall: 1) Shipment volume 2) Shipment value	
3) Market share by maker (2023): (1) Market share of shipment volume of digital textile printer (direct textile printing/sublimation transfer) (2) Market share of shipment volume of sublimation transfer printer (3) DTG printer (for mass production) (4) DTG printer (desktop) (5) DTF printer	
6. Shipment trend by type of inks (2021-2027) .....	106
6-1. Shipment trend in inks by type of hardware machine .....	106
1) Shipment volume 2) Shipment value	
6-2. Shipment trend by type of inks (water-based pigment/water-based dye) .....	108
1) Shipment volume 2) Shipment value	
3) Market share of ink shipment volume by make (2023): ① Digital textile printer ink ② Sublimation transfer printer ink ③ DTG printer ink ④ DTF printer ink	
4) Trend in ink technology 5) Trend in ink price	
7. Trend in printhead applications .....	114
8. Summary of major makers .....	115
8-1. Major digital textile printer makers .....	115
1) Japanese makers: Konica Minolta/Epson (Robustelli)/Mimaki Engineering (La Meccanica)/Kyocera/ Seiren 2) European and US makers: MS Printing Solutions (Dover Group)/Reggiani (EFI)/Durst	
3) Chinese makers: Atexco/HOMER/HIINK/BYDI/WENSLI/DPI/Hopetech/Others	
8-2. Major sublimation transfer printer makers .....	117
1) Japanese makers: Epson/Mimaki Engineering/Others	
2) Chinese makers: Human Digital Technology (Shanghai)/Shanghai ALLWIN Digital Technology	
8-3. Major DTG printer makers .....	117
1) Japanese makers: Epson/Brother Industries/Ricoh	
2) European and US makers: Kornit Digital/Others	
3) Chinese makers: CNTOP/Nocai/HPRT/PRINTPRETTY/SHENLAN	
8-4. Major DTF printer makers .....	119
1) Japanese makers: Mimaki Engineering/Roland DG/Ricoh/Others	
2) Chinese makers: Enjoyprint/LINKO/PO-TRY/Others	
9. List of major machines of each company (68 companies) .....	120
9-1. Digital textile printers/sublimation transfer printers (41 companies)	
9-2. DTG (22 companies) 9-3. DTF (5 companies)	

B-4. Transaction market .....	126
1. Overall shipment value (hardware machines and inks: 2021-2027) .....	126
1) JPY basis  2) USD basis	
2. Market overview (digital ratio and inkjet ratio) .....	128
3. Demand ratio by region (2023) .....	129
4. Market share of sales of transaction business by inkjet maker (2023) .....	130
5. Shipment trend of hardware machines by size (2021-2027) .....	131
1) Shipment volume  2) Shipment value	
3. Market share of shipment volume by maker (2023): (1) Continuous-feed machine (2) A3 sheet-feed machine	
6. Shipment trend by type of inks (water-based pigment/water-based dye: 2021-2027) .....	134
1) Shipment volume  2) Shipment value  3) Market share of shipment volume of inks by maker (2023)	
4) Trend in ink technology  5) Trend in ink price .....	137
7. Trend in printhead applications .....	137
8. Summary of major makers .....	138
1) Japanese makers: Canon (formerly Océ)/Ricoh/Screen/Miyakoshi/Kyocera	
2) European and US makers: HP/Kodak	
3) Chinese makers: Founder Electronics/Inkj Digital/Flora/Spande/Others	
9. List of major machines of each company (15 companies) .....	140
 B-5. Commercial printing market .....	 141
1. Overall shipment value (hardware machines and inks: 2021-2027) .....	141
1) JPY basis  2) USD basis	
2. Market overview (digital ratio and inkjet ratio) .....	143
3. Demand ratio by region (2023) .....	144
4. Market share of sales of commercial printing business by inkjet maker (2023) .....	145
5. Shipment trend by type of hardware machines (continuous-feed machines/sheet-feed machines: 2021-2027) .....	146
1) Shipment volume by size  2) Shipment value by size	
3) Market share of shipment volume by maker (2023): (1) Continuous-feed machine (2) Sheet-feed machine	
6. Shipment trend by type of inks (water-based pigment/UV: 2021-2027) .....	150
1) Shipment volume  2) Shipment value  3) Market share of shipment volume of inks by maker (2023)	
4) Trend in ink technology  5) Trend in ink price	
7. Trend in printhead applications .....	154
8. Summary of major makers .....	154
1) Japanese makers: Canon (formerly Océ)/Fujifilm/Konica Minolta/Screen/Ricoh/Komori Corporation	
2) European and US makers: HP/Kodak/Landa	
3) Chinese makers: Founder Electronics/Inkj Digital/Flora/HanGlobal/SHIELD/Spande	
9. List of major machines of each company (20 companies) .....	157
 B-6. Labels & packaging market .....	 159
1. Overall shipment value (hardware machines and inks: 2021-2027) .....	159
1) JPY basis  2) USD basis	
2. Market overview (digital ratio and inkjet ratio) .....	161
1) Label market  2) Corrugated packaging market  3) Flexible packaging market	
3. Demand ratio by region (2023) .....	164
4. Market share of sales of labels & packaging business by inkjet maker (2023) .....	165
1) Overall  2) Label printing market  3) Packaging printing market: (1) Corrugated cardboard (2) Folding cartons  (3) Flexible packaging	
5. Shipment trend in hardware machines by application (labels/corrugated cardboard/folding cartons/flexible packaging: 2021-2027) .....	168
1) Shipment volume  2) Shipment value  3) Market share of shipment volume by maker (2023):	
(1) Label market  (2) Packaging market: (2)-1. Corrugated cardboard  (2)-2. Folding cartons (2)-3. Flexible packaging	
4) Corrugated cardboard printing module .....	174
HP/Riso Kagaku	
6. Shipment trend by application and type of inks .....	175
1) Shipment trend by application (labels/corrugated cardboard/folding cartons/flexible packaging: 2021-2027) .....	175
(1) Shipment volume  (2) Shipment value	

2) Shipment trend by type of inks (water-based pigment/water-based dye/UV: 2021-2027) .....	177
(1) Shipment volume (2) Shipment value	
3) Market share of shipment volume of inks by maker (2023) .....	179
4) Trend in ink technology .....	180
(1) Label printing (2) Corrugated/folding carton printing (3) Flexible packaging printing	
5) Trend in ink price .....	181
7. Trend in printhead applications .....	182
Label printing/corrugated cardboard printing/folding carton printing/ flexible packaging printin	
8. Summary of major makers .....	183
8-1. Major label printing system makers .....	183
1) Japanese makers: Epson/Brother (Domino)/Screen/Canon (formerly Océ)	
2) European and US makers: Durst/Xeikon/Others 3) Chinese makers: HanGlobal/Others	
8-2. Major packaging printing machine makers .....	184
8-2-1. Corrugated cardboard .....	184
1) Japanese makers: Konica Minolta 2) European and US makers: HP/Barberán/EFI/Durst/BOBST/ Xeikon/Others 3) Chinese makers: HANWAY (HanGlory Group)/Wonderjet	
8-2-2. Folding cartons .....	185
1) Japanese makers: Komori Corporation	
2) European and US makers: Landa/MGI Digital Technology/Koenig&Bauer Durst/Agfa	
8-2-3. Flexible packaging .....	186
1) Japanese makers: Fujifilm/Miyakoshi/Screen/Think Laboratory/Tritek	
2) European and US makers: UTECO/W&H/Comexi/MTEX/Rigoli/PCMC	
9. List of major machines of each company (60 companies) .....	188
1) Labels (36 companies) 2) Packaging (24 companies): 2)-1. Corrugated cardboard (14 companies)	
2)-2. Folding cartons (4 companies) 2)-3 Flexible packaging (6 companies)	
B-7. Marking & coding market .....	192
1. Overall shipment value (hardware machines and inks: 2021-2027) .....	192
1) JPY basis 2) USD basis	
2. Market overview (digital ratio and inkjet ratio) .....	194
3. Demand ratio by region (2023) .....	195
4. Market share of sales of marking & coding business by inkjet maker (2023) .....	196
5. Shipment trend by type of hardware machines (CIJ/DOD: 2021-2027) .....	197
1) Shipment volume 2) Shipment value 3) Market share of shipment volume by maker (2023)	
6. Shipment trend by type of inks (water-based/solvent/UV: 2021-2027) .....	200
1) Shipment volume 2) Shipment value 3) Market share of shipment volume of inks by maker (2023)	
4) Trend in ink technology 5) Trend in ink price	
7. Trend in printhead applications .....	205
8. Summary of major makers .....	205
1) Japanese makers: Brother (Domino)/Hitachi Industrial Equipment Systems/Kishu Giken Kogyo/Keyence	
2) European and US makers: Veralto (Videojet)/Dover (Markem-Imaje)/Others	
9. List of major machines of each company (6 companies) .....	207
B-8. Ceramic tile & building materials market .....	209
1. Overall shipment value (hardware machines and inks: 2021-2027) .....	209
1) JPY basis 2) USD basis	
2. Market overview (digital ratio and inkjet ratio) .....	211
1) Ceramic tile printing 2) Building materials printing	
3. Demand ratio by region (2023) .....	213
4. Market share of sales of ceramic tile & building materials business by inkjet maker (2023) .....	214
5. Shipment trend by application of hardware machines (ceramic tiles/building materials: 2021-2027) .....	215
1) Shipment volume 2) Shipment value 3) Market share of shipment volume by maker (2023)	
6. Shipment trend by type of inks (oil-based/UV: 2021-2027) .....	218
1) Shipment volume 2) Shipment value 3) Market share of shipment volume of inks by maker (2023)	
4) Trend in ink technology 5) Trend in ink price	
7. Trend in printhead applications .....	221
8. Summary of major makers .....	222
8-1. Major makers of ceramic tile printers .....	222
1) European and US makers: Sacmi/Durst/KERAjet/EFI Cretaprint/System Ceramics/SITI-B&T/ Tecno Ferrari	

2) Chinese makers: Foshan Meijia Ceramic Equipment/Hope Ceramics Machinery Equipment/Keda Clean Energy/Shanghai Teckwin Technology Development/Shenzhen Runtianzhi Digital Equipment (Flora)	
8-2. Major makers of printing machines for building materials	223
1) Japanese makers: Ricoh	
2) European and US makers: Axzyra/Azonprinter/EFI/Hymmen	
9. List of major machines of each company (18 companies)	224
9-1. Ceramics/tiles (13 companies)    9-2. Building materials (5 companies)	
B-9. 3D printing market	226
1. Overall shipment value (hardware machines & materials: 2021-2027)	226
1) JPY basis    2) USD basis	
2. Market overview (digital ratio and inkjet ratio)	228
3. Demand ratio by region (2023)	230
4. Market share of sales of 3D printing business by inkjet maker (2023)	231
5. Shipment trend by application of hardware machines (2021-2027)	232
1) Shipment volume    2) Shipment value    3) Market share of shipment volume by maker (2023)	
6. Trend in printhead applications	235
7. Summary of major makers	235
1) Japanese makers: Keyence/Mimaki/CMET/Ricoh	
2) European and US makers: Strataysys/3D Systems/HP/Desktop Metal/Colibrium Additive (formerly GE Additive)/ADDiTEC/Voxeljet AG/Digital Metal/TRIDITIVE/D3-AM/Xjet/SINTERTEK	
3) Chinese and Taiwanese makers: ALPHA/AMSKY/EasyMFG/FHZL/KOCEL/Laseradd/Longyuan AFS/Sailner	
8. List of major machines of each company (18 companies)	239
B-10. Industrial applications and other markets	241
1. Display	242
Inkjet OLED device maker (3 major companies): AIMECHATEC/Tokyo Electron/Kateeva	
2. Solar cells	246
1) Solar cell types and production volume    2) Perovskite solar cell	
3. Electronic circuit boards	251
1) Japanese makers (6 companies): Ishii Hyoki/Canon/SHIBAURA MECHATRONICS/Toray Engineering/MicroCraft/SIJTechnology	
2) Overseas makers (9 companies): Ceradrop/MicroFab Technologies/M-Solv/Nano Dimension/Notion Systems/Orbotech/PV Nano Cell/Schmid Group/SUSS Micro Tec	
4. Lithium-ion secondary batteries	255
5. Bio	255
6. Anti-counterfeiting	256
7. Food	256
8. Nail art	257
9. Medical	258
10. Direct-to-shape (DTS)	258
<b>C. Inkjet Printhead Market</b>	
1. Overall	259
1) Changes in shipment value by printhead method (2021-2027)	259
(1) JPY basis    (2) USD basis	
2) Changes in shipment value by market (2021-2027)	261
2. Changes in shipment value by maker (2021-2027)	262
1) Piezo head    2) Thermal head	
3. Breakdown of total shipment value by market (2023)	264
1) Piezo head    2) Thermal head	
4. Maker's share by market (2023)	266
1) Signage market    2) Textile market    3) Transaction market    4) Commercial printing market	
5) Labels & packaging market    6) Marking & coding market    7) Ceramic tile & building materials market	
8) Others	
5. Trend in inkjet printhead technology	270
1) Overview of the printhead technology    2) Ink recirculation technology    3) MEMS Technology	
6. Summary of each maker	272
[1] Seiko Epson    [2] Fujifilm Dimatix    [3] Ricoh    [4] Kyocera    [5] Konica Minolta    [6] SII Printek	
[7] Xaar    [8] RISO Technologies (formerly Toshiba TEC)    [9] HP    [10] Funai Electric	



- [11] Other makers: Brother Industries/Xerox/Kodak/Memjet/REALFAST-PRINTING)/AMSKY/Aotemeter/IUT  
 7. List of products by industrial inkjet printhead maker (11 companies) ..... 284

#### **D. Related Market (home & office inkjet printer market)**

1. Shipment volume/shipment value by home & office application (2021-2027) ..... 287  
 2. Market share by maker (2023) ..... 288  
 3. Shipment trend in inks (2023) ..... 289

#### **E. Individual Makers**

- E-1. Business summary of 18 major makers ..... 291

- [1] HP [2] Canon [3] Seiko Epson [4] Veralto [5] Dover [6] Fujifilm [7] Brother Industries  
 [8] Mimaki Engineering [9] EFI [10] Ricoh [11] Durst [12] Agfa-Gevaert [13] Roland DG  
 [14] Konica Minolta [15] Kornit [16] Screen [17] Kyocera [18] Atexco

- E-2. Corporate profile of each company (132 companies) ..... 361

- E-2-1. Japanese makers (34 companies) ..... 361

- [1] Iwatsu [2] SII Printek [3] Kao [4] Keyence [5] Kishu Giken Kogyo [6] Canon [7] Kyocera [8] Konica  
 Minolta [9] Komori Corporation [10] Sakata INX [11] CTC Japan [12] CMET [13] Shima Seiki [14]  
 Think Laboratory [15] SCREEN Graphic Solutions [16] Seiko Epson [17] General [18] Seiren [19] Dai  
 Nippon Toryo [20] DIC [21] Duplo [22] Toshin Kogyo [23] Tokyo Kikai Seisakusho [24] TOYOCOLOR  
 [25] Trittek [26] Hitachi Industrial Equipment Systems [27] Fujifilm [28] Funai Electric [29] Mimaki  
 Engineering [30] Miyakoshi [31] Mutoh Industries [32] Ricoh [33] Riso Kagaku [34] Roland DG

- E-2-2. Overseas makers (in alphabetical order) ..... 373

- ① North America (18 companies)

- [1] 3D Systems (U.S.A.) [2] BlueCrest (U.S.A.) [3] Buskro (Canada) [4] Colordyne Technologies (U.S.A.)  
 [5] Desktop Metal (U.S.A.) [6] Dover (U.S.A.) [7] Eastman Kodak (U.S.A.) [8] EFI (U.S.A.) [9] FUJIFILM  
 Dimatix (U.S.A.) [10] Graphic Solid Inks (U.S.A.) [11] HP (U.S.A.) [12] Mark Andy (U.S.A.) [13] Stratasys  
 (U.S.A.) [14] SUN Automation (U.S.A.) [15] Veralto (U.S.A.) [16] Videojet Technologies (U.S.A.) [17]  
 VIPColor (U.S.A.) [18] Xerox (U.S.A.)

- ② Europe (44 companies)

- [1] Aeoon (Austria) [2] Agfa-Gevaert N.V. (Belgium) [3] Aleph (Italy) [4] Arioli (Italy) [5] Axzyra (U.K.)  
 [6] Azonprinter (Croatia) [7] Barberán (Spain) [8] BHS (Germany) [9] Bobst (Switzerland) [10] Digital  
 Metal (Sweden) [11] Domino (U.K.) [12] Durst (Italy) [13] Engico (Italy) [14] FUJIFILM Specialty Ink  
 Systems (U.K.) [15] Gallus (Switzerland) [16] Hapa (Switzerland) [17] Hollanders Printing Systems  
 (Netherlands) [18] Hymmen (Germany) [19] Inca (U.K.) [20] IN2 Printing Solutions (Spain) [21] JETRON  
 (Turkey) [22] KERAjet (Spain) [23] Koenig & Bauer (Germany) [24] Kornit Digital (Israel) [25] Landa  
 (Israel) [26] Macarbox (Spain) [27] Markem-Imaje AG (Switzerland) [28] MAS S.r.l. (Italy) [29] Mouvent  
 (Switzerland) [30] MPRINT (Germany) [31] MS Printing Solutions (Italy) [32] MTEX (Portugal) [33]  
 NoeCha (Italy) [34] REA Elektronik (Germany) [35] SPGPrints (Netherlands) [36] swissQprint  
 (Switzerland) [37] Topjet (Italy) [38] Trojanlabel (Denmark) [39] Uteco (Italy) [40] Velox (Israel) [41]  
 Voxeljet (Germany) [42] Xaar (U.K.) [43] Xjet (Israel) [44] Zimmer (Austria)

- ③ China (26 companies)

- [1] ALLWIN (China) [2] Atexco (China) [3] BYDI (China) [4] Enjoyprint (China) [5] Fei Yeung Union  
 (China) [6] Flora (China) [7] Fortune-lit (China) [8] Founder (China) [9] Gongzheng Group (China) [10]  
 HIINK (China) [11] Hanglory (China) [12] HOPETECH (China) [13] HPRT (China) [14] Human Digital  
 (China) [15] JHF (China) [16] LINKO (China) [17] Nuocai (China) [18] SKYJET (China) [19] Teckwin  
 (China) [20] WENSLI (China) [21] Wit-Color (China) [22] Wonderjet (China) [23] XSJ (China) [24] XULI  
 (China) [25] YASELAN (China) [26] YiliJet (China)

- ④ Other regions (10 companies)

- [1] Biporin (Indonesia) [2] COLORJET (India) [3] DGI (South Korea) [4] Dilli (South Korea) [5] DyStar  
 (Singapore) [6] ERAjet (Hong Kong) [7] Inktec (South Korea) [8] Jetbest (Taiwan) [9] KISCO (South  
 Korea) [10] pigment.inc (Australia)

- E-3. List of industrial inkjet-related makers (564 companies) ..... 407

- E-3-1. Printer makers (348 companies) ..... 407

- E-3-2. Integrators (41 companies) ..... 415

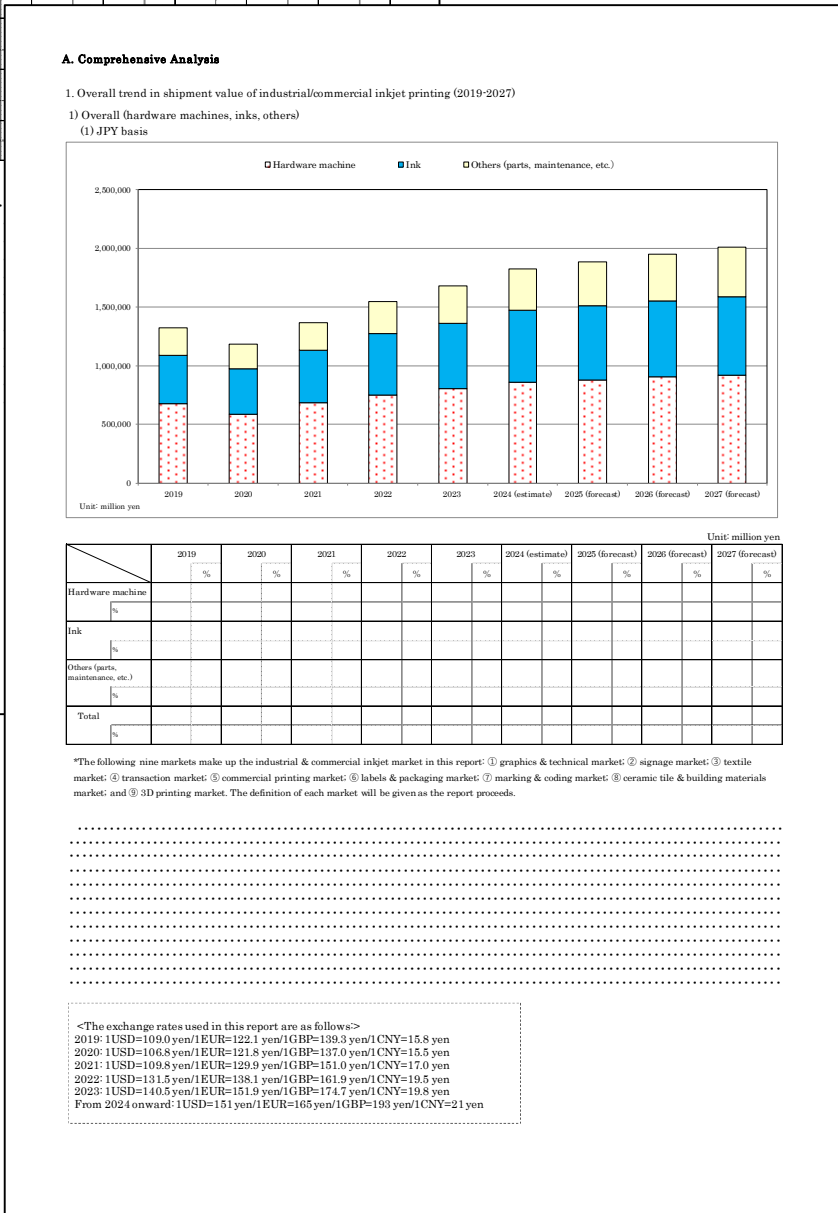
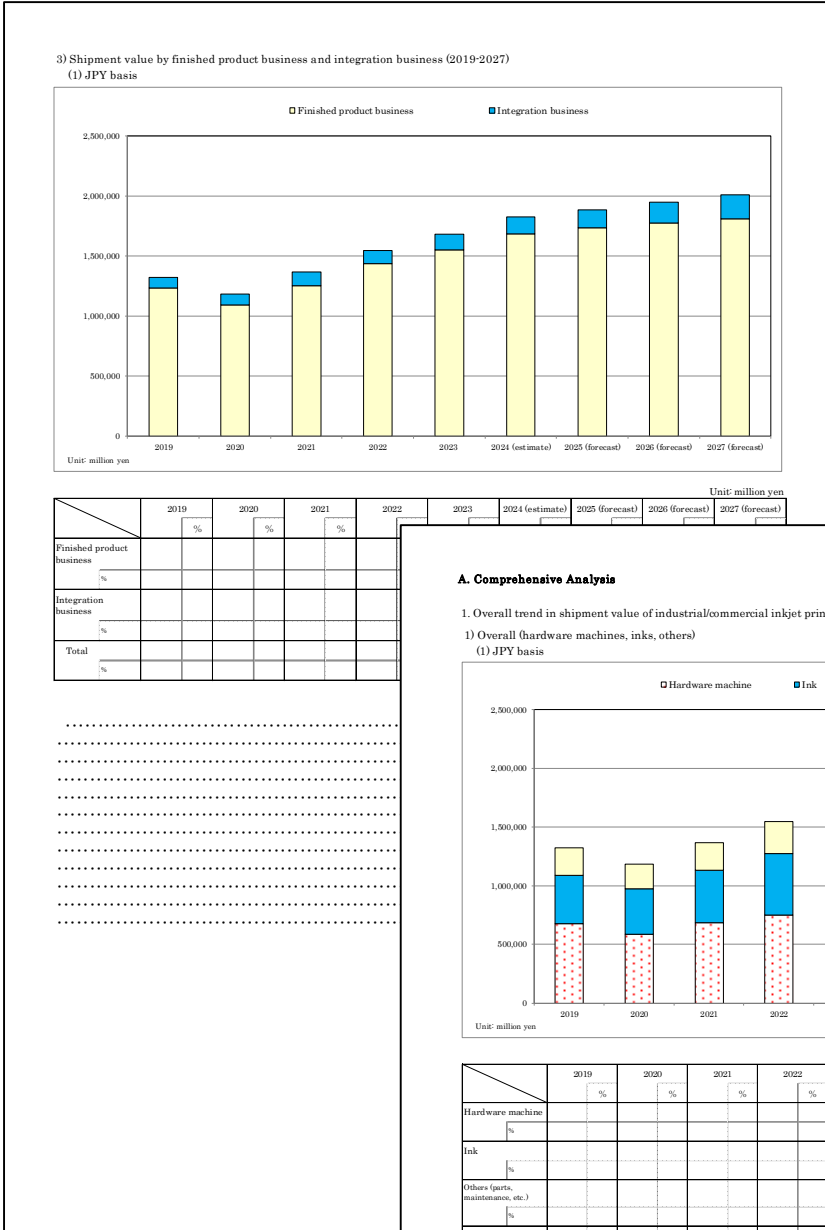
- E-3-3. Printhead makers (17 companies) ..... 416

- E-3-4. Ink/dispersions makers (list of their target fields) (158 companies) ..... 417

# Sample

## Extract from < Comprehensive Analysis >

\*Tables are filled with numbers and comments in the real report.



# Sample

## Extract from < Comprehensive Analysis >

\*Tables are filled with numbers and comments in the real report.

### 5-5. Main materials of inks

#### 1) Colorant (dye/pigment)

As the main material for inks, colorants are indispensable for image formation. Color materials can be broadly classified into dyes and pigments. Dyes purified for inkjet can be easily turned into ink by dissolving them in a solvent, whereas regular carbon black and organic pigments need a dispersant and dispersing equipment to make them into fine particles.

By chemically modifying the pigment surface and adding carboxyl and sulfone groups, they can be self-dispersible. The pigment dispersion process is full of expertise and is covered by pigment makers and dispersant makers.

#### <Major pigment/pigment dispersant maker>

Company name	Note
DIC	
Kao	
TOYO COLOR (artience Group)	
Dainichiseika Kogyo	
Sanyo Color Works	
SunChemical (DIC Group)	
BASF (pigment business acquired by DIC)	
Sudarshan Chemical	
Mitsubishi Chemical	
Tokai Carbon	
Orient Chemical	
Cabot	
Orion Engineered Carbons	
Toyo Aluminium	
Oike & Co., Ltd.	
Alliance Organics	
ShriRaj Industries	

#### <Major dye maker>

Company name
Nippon Kayaku
FUJIFILM Imaging Colorants
Archroma (acquired Huntsman business)
Alliance Organics
ShriRaj Industries

#### 2) Digital and inkjet ratio in each market

	Digital ratio	Inkjet ratio
Graphics	80-90%	Nearly 100%
Technical	Nearly 100%	70-75%
Signage	70-80%	Nearly 100%
Textile	22-25%	96-97%
Transaction	Nearly 100%	80%
Commercial printing	Around 9%	10%
Labels	13-14%	25-30%
Corrugated cardboard	6-7%	100%
Flexible packaging	Around 1%	Less than 1%
Marking & coding	80%	40-45%
Ceramic tiles	85%	100%
Building materials	Less than 5%	100%
3D printing	3D method: less than 1%	5-10%

The table shows the percentage of digital and inkjet printing coverage in each market. Markets with a digital application rate of 20% or less and an inkjet application rate of 30% or less are colored.

Among these, commercial printing, labels, flexible packaging, and 3D printing markets have 20% or less inkjet application rate and 30% or less inkjet application rate. Companies are aiming to introduce their inkjet technologies into these markets. Textiles and corrugated cardboard printing have a high inkjet application rate and their digital application is expected to make further progress.

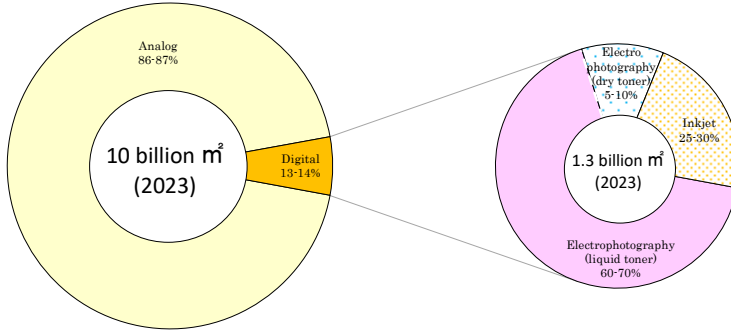
# Sample

## Extract from < Individual Inkjet Market >

\*Tables are filled with numbers and comments in the real report.

### 2. Market overview (digital ratio and inkjet ratio)

#### 1) Label market

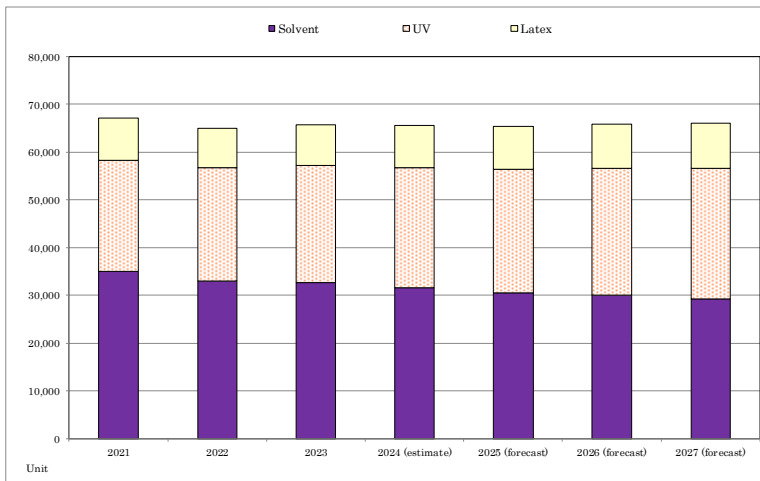


<Label printing market demand  
The total demand in the label printing market is estimated to reach 10 billion m² per year. Among this, demand for digital printing is growing in ink shipments, it is estimated to reach 1.3 billion m², or about 13-14% of the total demand. Digital printing is established as one of the main drivers of further growth expected in the future.

<Demand volume by digital printing technology  
Among digital printing technologies, inkjet printing is the initial wave of sales targeting medium-sized businesses that are still in operation in the market. Inkjet printing method has become the dominant technology, accounting for 70% of digital printing demand. In contrast, inkjet digital printing is popular among small and medium-sized businesses that are still in operation. In the case of inkjet, sales have been growing steadily, and hybrid models that incorporate inkjet and laser printing are also being developed. Models equipped with Memjet technology are estimated to account for 300-400 million units of printing demand. For dry toner printers, adoption is expected to increase, and runs (5-10% of digital printing). UV printing for thin labels that are sensitive to heat is also being developed, and demand for them remains steady.

### 5. Shipment trend by type of hardware machines (solvent/UV/latex: 2021-2027)

#### 1) Shipment volume



	Year	2021	2022	2023	2024 (estimate)	2025 (forecast)	2026 (forecast)	2027 (forecast)
	%	%	%	%	%	%	%	%
Solvent	%							
UV	Roll-to-roll type							
	Flatbed (large)							
	Flatbed (small)							
	Total							
	%							
Latex	%							
	Total							
	%							

.....  
 .....  
 .....  
 .....  
 .....

Extract from < Inkjet Printhead Market > < Individual Makers >

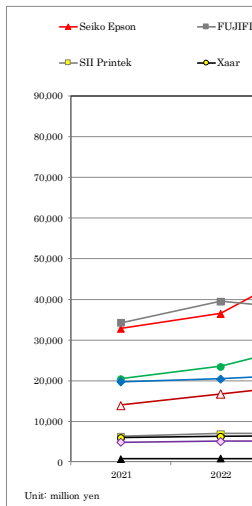
\*Tables are filled with numbers and comments in the real report.

2. Changes in shipment value by maker (2021-2027)

1) Piezo head

Unit: million yen

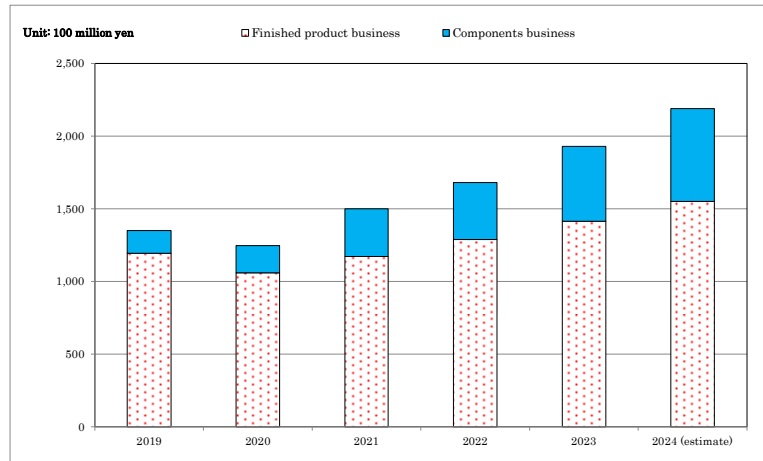
	2021		2022		2023		2024 (estimate)		2025 (forecast)		2026 (forecast)		2027 (forecast)	
		%		%		%		%		%		%		%
Seiko Epson														
FUJIFILM Dimatix														
Ricoh														
Kyocera														
Konica Minolta														
SII Printek														
Xaar														
RISO Technologies (Formerly Toshiba TEC)														
Others														
Total														



[3] Seiko Epson

1. Sales trends in the industrial and commercial inkjet business

1) Sales transition by finished products and components (2019-2024)



Unit: 100 million yen

	2019		2020		2021		2022		2023		2024 (estimate)	
		%		%		%		%		%		%
Finished product business												
Components business												
Total												