

Research Proposal

[2025 version of Photoconductor Market Forecast]

“Comprehensive Analysis of the Photoconductor Market Amid a Strategic Transition”

*—Detailed analysis of market trends in photoconductors,
substrates, and coating materials—*

**<Standard Edition>
(pre-order-based publication)**

**<Special Edition>
with a long-term forecast report
(pre-order-based publication)**



January 2025
Data Supply Inc.

<Overview>

I. Theme

[2025 version of Photoconductor Market Forecast]

“Comprehensive Analysis of the Photoconductor Market Amid a Strategic Transition”

=Detailed analysis of market trends in photoconductors, substrates, and coating materials=

II. Abstract

MFPs and laser printers constitute one of Japan's key industries, with Japanese manufacturers holding the majority of the global market share. However, in recent years, the rapid progress of paperless initiatives in offices has led to a notable contraction in the market. The COVID-19 pandemic in 2020 further accelerated this trend.

As a result of this market shrinkage, shipments of **photoconductors, a key component in the electrophotographic process**, have been experiencing a significant decline over the past few years. The future outlook remains grim. Declining print volumes in offices and the longer lifespan of photoconductors for MFPs have caused **replacement demand for photoconductors to decrease faster than anticipated by major manufacturers. This global trend is likely to continue accelerating.**

Amid declining demand for photoconductors, in-house manufacturers are increasingly facing a strategic crossroads. They may opt to purchase photoconductors from external suppliers to reduce costs or expand external sales to maintain production volumes. The industry has entered an era where such strategic shifts are inevitable.

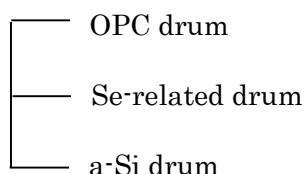
Across the MFP and printer industry, **there has been a surge in industry realignment activities, such as the integration of machine development and production between MFP manufacturers and the consolidation of procurement functions.** These movements are expected to have various impacts on the photoconductor market. In the third-party photoconductor market, Chinese manufacturers, which dominate in terms of unit share, continue to maintain a bullish stance. However, with the shrinking market for genuine products, it is inevitable that third-party demand will also plateau. As a result, **the consolidation of Chinese photoconductor manufacturers is expected to begin** in the near future.

The 2025 Photoconductor Market Forecast, marking the 35th edition of this series, will include **the Standard Edition (pre-order-based publication)**, which follows the traditional survey format, as well as **the Special Edition (pre-order-based publication)**. The Special Edition will feature a long-term trend report for the photoconductor industry through 2040, based on our proprietary calculations of the cumulative installed units, or MIF of MFPs and laser printers. We sincerely hope that this report will serve as a valuable resource for stakeholders in revitalizing and further developing their businesses.

III. Items and Makers

1. Items

1) Photoconductor



2) Aluminum substrate for photoconductor

3) Coating material

2. Makers

- | | |
|--|-----------------------------|
| 1) Photoconductor makers | (9 in Japan, 21 overseas) |
| 2) Photoconductor's substrate makers
(extrusion, drawing, burnishing) | (10 in Japan, 9 overseas) |
| 3) Makers of photoconductor's coating materials
(CTL/CGL/UCL/OCL) | (15 in Japan, 4 overseas) |
| 4) Hardware makers (MFP/LBP/PP) | (10 in Japan, 10+ overseas) |

IV. Research Coverage Period and Methodology

1. Research coverage period

- 1) <Standard Edition> Actual results from 2022 to 2024, estimates for 2025, and forecasts through 2028
- 2) <Special Edition> Actual results from 2001 to 2024, estimates for 2025, and forecasts through 2040

2. Regions <Standard/Special Edition>

Japan, North America, Europe, South Korea, China, and others.

3. Methodology

- 1) On-site and in-person (or online) interviews with target makers
- 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. Study format: Multi-client study

2. Report preparation period: January and February 2025

3. Publication date

- 1) <Standard Edition> (April 18, 2025)
- 2) <Special Edition> (pre-order-based publication)

4. Report format: PDF format (the 2024 version consists of 246 pages)

5. Price: <Standard Edition>: \$5,200

<Special Edition>: \$6,000

6. Researchers

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7. How to apply

Please send us an email with your name, company, department, and phone number included to Data Supply Inc. at infods@datasupply.jp or any researcher shown above.

VI. Survey Items

A. Comprehensive Analysis

1. Worldwide production volume of photoconductors (2022-2028 forecasts)
Japan / North America / Europe / China / Others
2. Production volume of photoconductors by type (2022-2028 forecasts)
OPC / Se / a-Si
3. Production volume of photoconductors by application (2022-2028 forecasts)
MFP / PP, Printer / FAX
4. Production volume by shipment (for hardware machines / for consumable supplies)
(2022-2028 forecasts)
OEM (for hardware machines / for consumable supplies) / for third parties
5. Comparison of worldwide production volume of genuine and third-party photoconductors
(2023-2025 estimates)
OEM and third-party ratio by maker
6. Changes in the top 10 global producers (2021-2025 estimates)
Overall share / OEM share / third-party share
7. Worldwide production volume by region, maker, and type (2022-2028 forecasts)
Japan / North America / Europe / China / Others
8. Worldwide production volume by region, maker, and application (2022-2028 forecasts)
Japan / North America / Europe / China / Others
9. Production volume by OEM and third party (2024)
Global share / share by region
10. Strategy shift toward expanding outsourcing and external sales
11. Comparison of changes in production volume of photoconductors in Japan and China
12. Production trend of photoconductor's substrates
Japanese makers / overseas makers
13. Coating materials used by Japanese makers
CTL / CGL / UCL / OCL
14. Japanese and overseas production bases of photoconductors
Japanese makers / overseas makers

B. Photoconductor Market

1. Trends among Japanese makers
 - 1-1. Analysis of aggregated data
 - 1) Production volume by type and application (MFP / PP, Printer / FAX) (2022-2028 forecasts)
Domestic production / overseas production
 - 2) Production volume by type, region, and maker (2022-2028 forecasts)
Domestic production / overseas production
 - 3) Production volume by diameter and application (MFP / PP, Printer / FAX) and by type (2024)
 - 4) Production volume and value by diameter and maker (2024)
20 ϕ -260 ϕ
 - 5) Production volume and value by length (A4, A3, A2, A1, A0) and maker (2024)
 - 6) Production volume and value by diameter, length, and type (2024)
 - 7) Development trends in long-life photoconductors (A3) by maker
 - 8) Production volume by positive and negative charge (2024)
 - 9) Production plan of negative charge a-Si
 - 10) Japanese makers' production by application, type, and region (2023-2025)
 - 11) Supply relationships and volumes between hardware makers and photoconductor makers

1-2. Trends among individual makers (2022-2028 forecasts)

- Common research items ■
- Overall production volume and production value (2022-2028 forecasts)
- Current and future production volume by region, production base, type, and application (Japan and overseas) (2022-2028 forecasts)
- Trends in production bases (facility investment, changes in the number of production lines, and future production bases) • Production volume by diameter and application
- Production volume, value, and unit price by diameter and length (2024 results)
- Product lineup by diameter and length • Production volume by positive and negative charge
- Development of long-life photoconductors and future prospects
- Strategy shift toward expanding outsourcing and external sales
- Current status of small and large diameter photoconductors
- Current status, development, and purchase volume of coating layers and coating materials (UCL, CGL, CTL, OCL) • Coating methods
- Measures by genuine makers against third-party makers
- Production ratio of genuine (OEM) and third-party products
- Supply volume by shipment destination (2023-2025 estimates)
- List of worldwide production bases

- 1) Canon 2) Yamanashi Electronics (ETRIA) 3) FUJIFILM Business Innovation
- 4) Konica Minolta 5) Kyocera Group (1: Kyocera, 2: Kyocera Document Solutions)
- 6) Sharp 7) Mitsubishi Chemical 8) Fuji Electric

2. Trends among overseas makers

2-1. Analysis of aggregated data

- 1) Production volume by type and application (2022-2028 forecasts)
- 2) Production volume by type, region, maker, and application (2022-2028 forecasts)
North America / Europe / China / Others

2-2. Trends among individual makers (2022-2028 forecasts)

- Common research items ■
- Current and future production volume by region, production base, type, and application (2022-2028 forecasts)
- Production volume of genuine (OEM) and third-party products (2023-2025 estimates)
- Latest shipment trends

Production region	Country	Maker
North America	USA (2)	Eastman Kodak, Lexmark International
Europe	Netherlands (1)	Xerox Manufacturing (Nederland) B.V.
Asia	China (14)	APS Photoconductor (Shanghai), Green Rich (Guangzhou) Optoelectronic Technology, Guangzhou A&G Optoelectronics Technology, Guangzhou Aotusi Office Equipment, HG Technologies, Huaian Gantech Opto Electronics, Hubei HanMei Photoelectricity Science and Technology, Hunan Zhijian Copier Remanufacturing (COPITEK), Suzhou Goldengreen Technologies, Xinyinkaier New Material, Zeloq (Shenzhen) Technology, Zhejiang Ouya Precise Mechanical & Electrical, Zhuhai AlphaChem Technology, Zhuhai TianYing Technology
	South Korea (2)	JID Tech, KR OPC
	India (1)	OPC Technology Japan Pvt.
	Bangladesh (1)	Neo Bangla

C. Photoconductor's Substrate Market

1. Comprehensive data summary
 - 1) Makers in the photoconductor industry (substrate / drawing / processing / coating)
 - 2) Business relationships between substrate and processing makers
 - 3) Business relationship chart between substrate and photoconductor makers
 - 4) The expanding adoption of Chinese products and future outlook
 - 5) Production volume by maker (2022-2028 forecasts)
 - 6) Production volume by diameter and length (2024) 20 ϕ -260 ϕ , A4-A0
 - 7) The worldwide supply volume to Japanese photoconductor makers by supplier and production base
2. Trends among individual makers (2022-2028 forecasts)
 - Common research items ■
 - Production volume by region (by production base) (Japan and overseas)
 - Production volume by type, diameter (20 ϕ -260 ϕ), application, and length (A4-A0)
 - Production volume of turned and unturned tubes
 - Photoconductor makers' worldwide shipment volume by production base
 - Handling of color application (runout, roundness, and surface roughness, etc.)
 - Relationships with processing and drawing makers
 - Trends in production technology (turned and unturned tubes)
 - Price trends and profitability
 - Current status and future outlook of production bases
 - 1) Resonac (formerly Showa Denko) 2) UACJ Extrusion Corporation 3) Nikkeikin Act 4) Fuji Aluminum Tube Manufacturing
 - 5) Others (Guangdong Hoshion Aluminium, Cyma Precision Aluminium, Dongguan Handin Precision Aluminum, Jiangyin Chaojingda Aluminum & Plastic, Guangdong GoldEx Light Alloy, Ningbo Keno Aluminium, Chang Zhou Yi Fei Machinery, Vina Washin Aluminum)
 - 6) Drawing and processing makers
Nihon Shinkan, Hanamura Industries, Sohwa, Naito Manufacturing, Nakatani Shoko, Well Sure, Kyowa Precision Products, and others

D. Coating Material Market

1. Overview
2. CTL market (2020-2024)
 - 1) Production volume of binding resin by maker (Japan and South Korea)
 - 2) Characteristics by material and production volume by material
 - 3) Price trends and profitability
 - 4) Major supply relationships of binding resin (Japan / South Korea / China / Taiwan)
 - 5) Trends among individual makers
Mitsubishi Gas Chemical / Teijin / Idemitsu Kosan / Mitsubishi Chemical / Unitika / Others
3. CTM market (2024)
 - 1) Worldwide market / shipment volume by in-house and CTM maker (Japan and South Korea)
 - 2) Types of CTM and production volume by material
 - 3) Price trends and profitability
 - 4) Trends among in-house and specialized makers
In-house maker / Takasago International Corporation / Nisshoku Techno Fine Chemical / Hodogaya Chemical / South Korean and Taiwanese makers
 - 5) Major supply relationships
4. CGL / CGM market (2024)
 - 1) Binding resin (materials, prices, and profitability)
 - 2) CGM materials and makers (in-house and specialized makers)
5. UCL / OCL materials (2024)
 - 1) Makers 2) Materials 3) Challenges (profitability)

Special Edition: Long-Term Forecast Report

1. Overall summary (2001-2024 results, 2025-2040 forecasts)
 - 1) Long-term trends in worldwide photoconductor production volume
 - 2) Long-term trends in photoconductor production volume by type (OPC / Se / a-Si)
 - 3) Long-term trends in photoconductor production volume by application (MFP & PP / printer & FAX)
 - 4) Long-term trends in photoconductor production volume by OEM and third-party
 - 5) Long-term trends in photoconductor production volume by Japanese and overseas maker
2. Individual makers' data (2001-2028)
 - 1) Long-term trends in worldwide photoconductor production volume
 - 2) Long-term trends in photoconductor production volume by type (OPC / Se / a-Si)
 - 3) Long-term trends in photoconductor production volume by application (MFP & PP / printer & FAX)
 - 4) Long-term trends in photoconductor production volume by OEM and third-party
 - 5) Long-term trends in photoconductor production volume by production region (Japan / overseas)

◆ Photoconductor Market Forecast (sample pages from the 2024 report) ◆

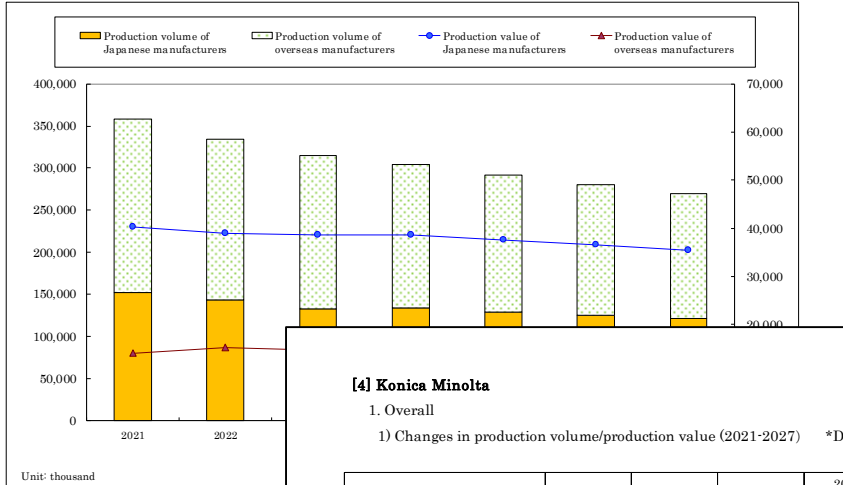
<Sample of the Standard Edition>

*Please note that the actual report includes numerical data.

A. Comprehensive Analysis

A-1. Worldwide production trend in photoconductors

1. Changes in overall production volume/value by Japanese and overseas maker (2021-2027)



< Production volume >

	2021	2022	2023	2024 (estimate)	2025 (forecast)	2026 (forecast)	2027 (forecast)
Production volume of Japanese manufacturers							
Production volume of overseas manufacturers							
Total							

< Production value >

	2021	2022	2023	2024 (estimate)	2025 (forecast)	2026 (forecast)	2027 (forecast)
Production value of Japanese manufacturers							
Production value of overseas manufacturers							
Total							

In 2023, the global photoconductor production volume was 53.18 billion units, or 98.3% of the previous year's value. As a result, both Japanese and overseas manufacturers were mostly resolved in the year, there were negative structural changes in the primary market (PM). As a result, both Japanese and overseas manufacturers saw a decline in volume. In terms of value, the decline was not as significant as in volume, especially aluminum.

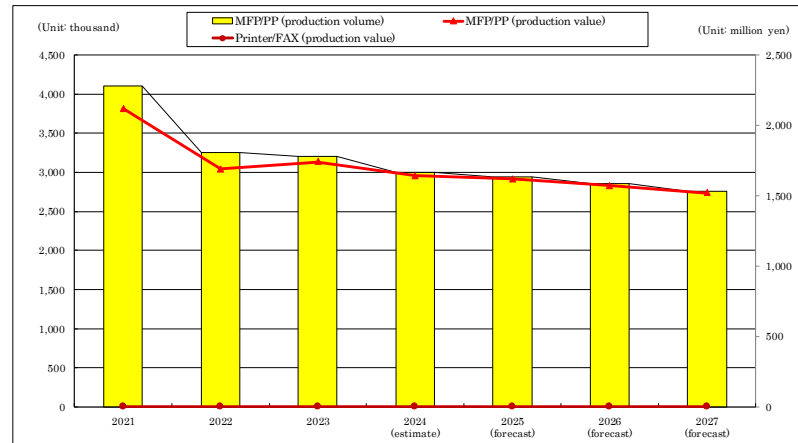
The future outlook is also grim. The decline in demand is expected to continue beyond 2024. As a breakdown, demand for hardware devices will maintain a certain level, but those for service parts are likely to decline. In particular, office print volume from low-speed devices is declining faster than from high-speed devices, and this is directly resulting in the decline in the volume of photoconductors from external suppliers to reduce costs.

[4] Konica Minolta

1. Overall

1) Changes in production volume/production value (2021-2027) *Domestic production only

Application	Year	2021	2022	2023	2024 (estimate)	2025 (forecast)	2026 (forecast)	2027 (forecast)
		%	%	%	%	%	%	%
Production volume (Unit: thousand)	MFP/PP							
	Printer/FAX							
	Total							
	%							
Production value (Unit: million yen)	MFP/PP							
	Printer/FAX							
	Total							
	%							



① Production volume/Production value

Konica Minolta's photoconductor production volume in 2023 was 3.2 million units, or 98.5% of the previous year's volume, and the production value was 1.74 billion yen, or 103% of the previous year's value (not including outsourced volume). The company saw a further decline from the previous year's large decrease as office print volume remained sluggish and replacement demand decreased due to the availability of long-life photoconductors.

The decline in the volume is expected to continue beyond 2024. As a breakdown, demand for hardware devices will maintain a certain level, but those for service parts are likely to decline. In particular, office print volume from low-speed devices is declining faster than from high-speed devices, and this is directly resulting in the decline in the volume of photoconductors.

② Production ratio by application

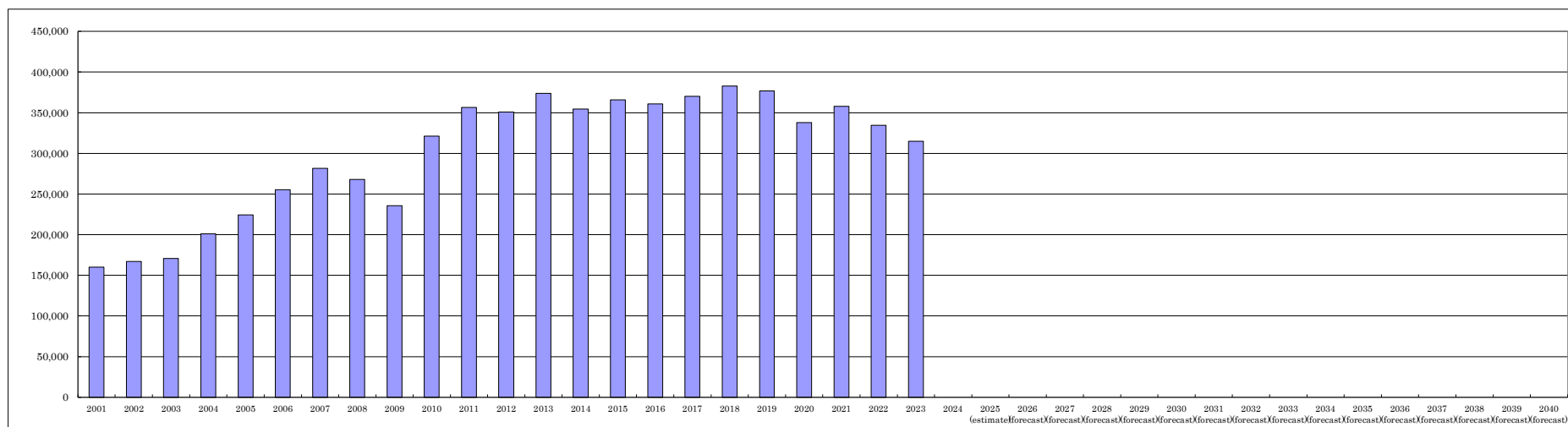
Konica Minolta manufactures only A3 photoconductors internally for MFP/PP. All A4 photoconductors, mainly for printers, are outsourced. Although the overall volume is decreasing, it would be cost-prohibitive to produce A4 products internally, so this production strategy will remain in place.

<Sample of the Special Edition>

*Please note that the actual report includes numerical data.

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Production volume (K)
YoY	

Year	2021	2022	2023	2024	2025 (estimate)	2026 (forecast)	2027 (forecast)	2028 (forecast)	2029 (forecast)	2030 (forecast)	2031 (forecast)	2032 (forecast)	2033 (forecast)	2034 (forecast)	2035 (forecast)	2036 (forecast)	2037 (forecast)	2038 (forecast)	2039 (forecast)	2040 (forecast)
Production volume (K)
YoY



*** Back Issues of Photoconductor Market Forecast ***

Published Date	Title	Price	Total pages
2008.3	"The Comprehensive Analysis of Photoconductor Market Current and Future Views-"	\$5,200	300
2009.3	"The Comprehensive Analysis of Photoconductor Market -Reviewing the Market for Photoconductor-"	\$5,200	301
2010.3	"The Comprehensive Analysis of Photoconductor Market -Reviewing the Market for Photoconductor-"	\$5,200	309
2011.3	"The Comprehensive Analysis of Photoconductor Market headed for a v-shaped recovery"	\$5,200	297
2012.3	"The Comprehensive Analysis of Photoconductor Market that is Multinationalizing"	\$5,200	303
2013.3	The Comprehensive Analysis of Photoconductor Market Facing a Cost Cutting	\$5,200	299
2014.3	The Comprehensive Analysis of Photoconductor Market that Needs a Long-term Strategy	\$5,200	296
2015.4	The Comprehensive Analysis of Photoconductor Market that Seeks for Developing Profitability	\$5,200	305
2016.3	In Urgent Need of Review: Photoconductor Market in the Face of Reorganization of Office Equipment Industry	\$5,200	301
2017.4	Vital to Electrophotography: Photoconductor and its Transforming Market	\$5,200	294
2018.4	Future Prospects of the Photoconductor Market Moving toward Choosing Long-life Product	\$5,200	280
2019.4	China Overtakes Japan as Number One: What's Really Happening in the Photoconductor Industry	\$5,200	278
2020.4	The Future of the Photoconductor Industry: Seeking the New Chinese Market Strategy	\$5,200	270
2021.4	A Strategic Shift Is Required in the Struggling Photoconductor Industry	\$5,200	266
2022.4	The Outlook for the Photoconductor Market: An Integral Component that Maintains Its Important Role	\$5,200	254
2023.4	The Comprehensive Analysis of the Photoconductor Market: Its True Value Is Tested in Times of Change	\$5,200	254
2024.4	Comprehensive Analysis of the Photoconductor Market Facing the Industry Transformation and Restructuring	\$5,200	246

*Back issues and partial sections of the reports are also available. Please feel free to contact us for more information.