We continue to create new value by leading the way in addressing the challenges of social change

Since the foundation of our predecessor in 1962, we have been developing, manufacturing, and selling functional materials in sync with the changing times and supporting the evolution of digital technology. From now on, on the basis of our corporate vision of "Value Matters Unprecedented innovation, unprecedented value," we will provide society with cutting-edge technologies and solutions while contributing to the digitalization of society as a whole and the resolution of social issues.

1987

1962 Section of the Tokyo Stock Exchange (TSE) Sony Chemicals Corporation established



2000

Sony Chemicals Corporation was delisted from TSE. Became a wholly owned subsidiary of Sony Corporation 2006

Company name changed to Sony Chemical & Information **Device Corporation**

2012

Company name changed to Dexerials Corporation, and business launched



Company

1977



Commercialized Anisotropic Conductive Films (ACF) ahead of industry peers

ACF is a film-type conductive adhesive with uniformly dispersed conductive particles that exploit electrical properties to conduct two components vertically while keeping mechanical performance by adhesion

1994

Started production of Surface mounted type fuses

Started mass-producing the secondary protection devices that immediately interrupt overcharge or overcurrent in lithium-ion rechargeable batteries first in the world



2002

Started selling of Anti-reflection films

Dry-type Anti-reflection films, which realize outstanding low reflection property and abrasion resistance with nano-level thinfilm thickness control technology and multi-layer structure



2007

Started production of Optical elastic resins (SVR®)

Optical clear resin is embedded in air gaps in devices such as smartphones and tablet PCs to help realize slim profiling and improved visibility of displays



2008

Started production of Inorganic polarizers for projectors

Excellent thermal and light resistance, contributing to longer life and higher brightness in projectors, head-up displays, etc.



2015

- Listed on the First Section of the Tokyo Stock Exchange (TSE)
- Dexerials Kibou Corporation started business

2020

Dexerials Precision Components Corporation established

2021

Headquarters relocated to Shimotsuke-shi, Tochiqi

2022

- Kyoto Semiconductor Co., Ltd. became a subsidiary of **Dexerials Corporation**
- Transitioned from the First Section to the Prime Market of the TSE

0

2023

Introduced "job-type personnel system" for management-level employees in Japan



2014

Started production of "DxShield®," an eye shield material for medical use

Moth-eye type film, which realizes anti-reflection and high transparency with its nano-level fine concavo-convex structures formed on the surface



2016

Commercialized "ArrayFIX®" Particle-arrayed ACF

2016

Tochigi Technology Center started operations

ACF is a conductive adhesive capable of stably connecting many wires even in a narrow area by arraying conductive particles in resin at targeted positions

2020

- Developed Anti-reflection film "HD Series"
- Developed "Jettable SVR." Optical elastic resins corresponding to inkjet coating

2021

Commercialized the Phosphor Film "PS Series"

This film achieves dynamic range expansion, wider color gamut, and slim profiling of liquid crystal displays with direct LED backlighting





Communication with stakeholders*

* Achieved on 36 occasions as of the end of September 2023

TOPICS

Reception Hall newly constructed at Headquarters and Tochigi Technology Center:

A facility for communication with stakeholders

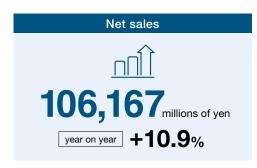
In March 2023, the Reception Hall was completed within the Headquarters and Tochiqi Technology Center site for the purpose of facilitating communications with our stakeholders, including customers, shareholders/investors, the local community, and employees.

Equipped with a hall that can accommodate up to around 150 visitors, we have set up an interactive exhibition area that enables more people to gain a deeper understanding of our Group's overall corporate activities. In June 2023, the 11th Annual General Meeting of Shareholders was the first to be held there. The facility is also used as a forum for communication with a variety of stakeholders, including domestic and international customers, students participating in seminars and internships, and the local chamber of commerce.

In addition, Oya stone and Nikko cedar were used as building materials, these being local specialties of Tochigi Prefecture where our headquarters is located. Modeled after films, one of our mainstay products, the external appearance of the Reception Hall reception is unique to our Company. With the installation of solar panels and nature-based ventilation, this environmentally friendly facility meets ZEB* standards.

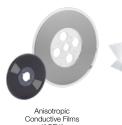
* Net Zero Energy Building (ZEB)-compatible buildings: Buildings that produce as much primary energy as they consume over the course of a year through energy-saving and renewable energy features

Overview FY2022





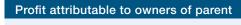








Anti-reflection films Optical elastic reproduced utilizing (SVR) *3 sputtering technology*2





20,685 millions of yen

year on year **+24.1**%

EBITDA



39,101 millions of yen

year on year **+20.4**%

ROIC



24.4%

year on year +1.9pt

ROE



30.3%

year on year +1.8pt

Total payout ratio (before amortization of goodwill)



56.6%

Ratio of outside directors

57.1%

Number of internal directors

Number of outside directors

Ratio of mid-career hires



46.9%

Three-year retention rate for new graduates employed

Sold of the second

90.9%

Number of engineers



595

^{*1} The 2022 share for amount of ACF for large-sized and small- to medium-sized displays according to the "Current Status and Future Outlook for Display-related Markets 2023" issued by Fuji Chimera Research Institute, Inc.

^{*2} The 2022 share for amount of surface treatment film (dry coat) according to the "Current Status and Future Outlook for Display-related Markets 2023" issued by Fuji Chimera Research Institute, Inc.

^{*3} The 2022 share for total amount of Optical Clear Resin (OCR) used in bonding displays according to the "Current Status and Future Outlook for Display-related Markets 2023" issued by Fuji Chimera Research Institute, Inc. Optical elastic resin (SVR) is the product name for Dexerials' optically clear adhesives.

Strategy

Business Seaments

(Note) Each business corresponds to a segment among the disclosed results and net sales include inter-segment sales.

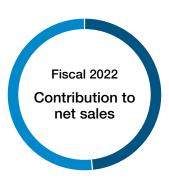


Optical Materials and Components Business

Net sales **55,384** millions of yen **51.8%**

Operating 17,969 millions of yen

EBITDA 20,142 millions of yen



Electronic Materials and Components Business

48.2%

Net sales 51,495 millions of yen

This business is classified into five categories: Anisotropic Conductive Films (ACF), Surface mounted type

fuses, Adhesive materials, Micro devices, and Optical semiconductors. Due to our advanced technology

and high quality, we have a large share of the global market for ACF, our mainstay products, which we

Operating **16,106** millions of yen

EBITDA 18,958 millions of yer



This business is classified into two categories: Optical films and Optical resin materials. These categories comprise of Anti-reflection films, Phosphor films, Optical elastic resins (SVR), and Smart precision Adhesive. In particular, our proprietary technology for Anti-reflection films, our mainstay product, has been highly praised in the fields of consumer IT products and displays for automotives.

Main Products [Category]

Anti-reflection films [Optical films]



The dry-type Anti-reflection films realizing outstanding low reflection property and abrasion resistance with nano-level thin-film thickness control technology and multi-layer structure, contribute to improved visibility of mobile devices and automotive displays. Moth-eye type films utilizing our microfabrication technology feature low reflectance and high visual transmittance and are used for automotive head-up displays as well as eye shielding for medical use.

Phosphor films [Optical films]



Our phosphor film "PS Series" has been developed by dispersing green and red phosphors into films. Incorporating this product into the backlight of a display enables higher quality displays with excellent color expression using blue LEDs as the light source.

Main Products [Category]

Anisotropic Conductive Films



Anisotropic Conductive Films are conductive adhesive materials that exploit electrical properties to conduct two components vertically while keeping mechanical performance by adhesion. These products are used to connect electronic components that make up display panels, camera modules, etc. Our lineup also includes Particle-arrayed ACF that is mountable in narrow spaces, and pre-cut ACF that is converted into shapes that match circuit boards and the terminal layout.

were the first in the industry to develop and put into mass production in 1977.

Surface mounted type fuses



Self-control protectors (SCP) that reliably protect lithium-ion rechargeable batteries from anomalies such as overcharge or overcurrent are standard fuses for secondary protection devices. We also offer a lineup of power current protector (PCP) fuses for high current applications that specialize in protection from overcurrent while maintaining their small and thin design.

Optical elastic resins (SVR) [Optical resin materials]



Elastic resin with high optical permeability fills gaps in the displays of devices such as smartphones and tablet PCs to realize slimmer profiling and improved visibility. Our lineup also includes a PSA-transformable Optical elastic resin (hybrid SVR) for small- and mediumsized flat panel displays (FPD) whose adhesive properties are transformed by temporary UV curing to realize excellent workability equivalent to that of optical clear adhesives.

Smart precision Adhesive [Optical resin materials]



Our "SA Series" of Smart precision Adhesive comprise a lineup of adhesives that use various curing systems, including UV curing, thermosetting, and UV + thermosetting. This series accomplishes low-temperature, fast curing, along with low shrinkage, and is ideal for precision affixing during assembly such as camera modules and optical pickups.

Thermal conductive sheets [Adhesive materials]



Thermal conductive sheets conduct the heat generated from IC chips such as CPUs to the cooler to protect devices from high temperatures. We offer high performance-type sheets featuring high thermal conductivity and flexibility, high performance and insulation-type sheets, and standard-type sheets.

Optical communication devices [Optical semiconductors]



Optical communication devices are indispensable in the evolution of mobile communication systems and the expansion of optical networks. Our lineup includes ultra-high-speed photodiodes suitable for 5G communication products, light receiving modules, and vertical cavity surface emitting lasers (VCSEL).

Inorganic polarizers/Inorganic waveplates [Micro devices]



These optical devices have excellent durability to withstand long hours of use in high temperature and high light intensity environments, and achieve high transmittance and low reflectance. They boost the brightness and contrast of projectors and optical units that use laser light sources.

The use of Dexerials products is extensive and diverse

Projectors

Dexerials products help to bring convenience, safety, and reliability to our lives through their use in the electronic devices we use every day.

Dexerials Integrated Report 2023 | Where You Can Find Dexerials



Smoke detectors

Optical semiconductor devices

Our optical semiconductors are used in commonly used sensing systems by converting light and electrical signals.









The film laminated on a PC screen reduces reflections, allowing people to focus more on their work.



Chapter 02

Value Creation

Story





For more details about our products, please refer to our



For more details about our Group products, please refer to the Kyosemi website.

Smartphones



Anisotropic Conductive Films (ACF)

ACF is a vital material for electronic display components, this material has become the de facto standard.



Optical elastic resins (SVR)

SVR is a liquid type optical clear resin that improves display visibility by filling the air gaps between display areas and top plates.



Automotives

Surface mounted type fuses (SCP)

SCP is a specialized fuse component for lithium-ion batteries used in cordless devices. They keep safety by interrupting the circuit if any abnormality occurs during battery charging or discharging.





Robot vacuum cleaners

Story

Our Product ACF: An essential material for smartphones



Anisotropic Conductive Film (ACF)

This film-type conductive adhesive material is made by dispersing conductive particles in a resin. Sony Chemicals Corporation, Dexerials' predecessor, was the first company in the world to commercialize this product, which is now used in almost all digital devices with displays, including smartphones.

Features

- Adhesion, conduction, and insulation functions in a single material
- Ability to connect multiple electrical circuits with a single connection
- Better than soldering for connecting extremely small circuits (fine pitch interconnections)
- Ability to make reliable connections at low temperatures (110-180°C)

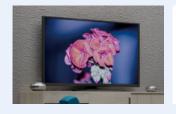
The creation and expanding role of **ACF**

ACF was developed over 40 years ago in 1977 as a film-like material suitable for creating electrical connections in electronic components, including ICs. The first ACF, which used carbon fibers measuring around 100 microns as conductors, was employed in systems



with low heat resistances, such as calculator displays.

Our ACF products have since evolved dramatically in step with the expansion of the LCD panel market. Particularly significant was the explosive increase in demand for ACF in the early 2000s as the shift from CRT to LCD televisions started in earnest. Another factor was the development of increasingly sophisticated display technology following the emergence of smartphones. ACF played a vital role in the evolution of displays and remains an essential material that significantly influences display performance.







Pioneering the future with ACF

Dexerials has a long track record of technological achievements, including the launch of Particle-arrayed ACF in 2016. The shift from particle dispersion to particle arraying technology was a significant step in electrical connection design because it opened the way to create finer-pitch circuit connections. This technology has already transformed how our customers design their products and inspired new ideas. From now on, we will continue to support our customers in creating new value while pursuing further technological innovation.







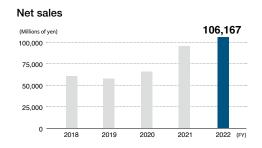


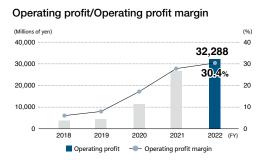
Financial Highlights

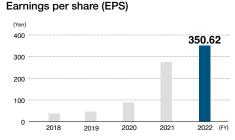
> P.80-81 Consolidated Financial Statements

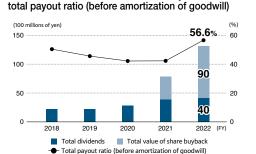
Consolidated financial performance indicators		FY2018	FY2019	FY2020	FY2021	FY2022
Net sales	(Millions of yen)	60,580	57,710	65,830	95,712	106,167
Operating profit	(Millions of yen)	3,724	4,617	11,339	26,642	32,288
Profit attributable to owners of parent	(Millions of yen)	2,284	2,734	5,329	16,669	20,685
Earnings per share (EPS)	(Yen)	37.73	45.05	87.60	274.61	350.62
Total assets	(Millions of yen)	87,586	86,279	95,201	128,785	126,379
Capital to asset ratio	(%)	56.0	57.5	56.0	49.5	57.7
EBITDA	(Millions of yen)	9,680	10,786	17,590	32,478	39,101
ROIC	(%)	3.3	4.4	11.4	22.5	24.4
ROE	(%)	4.6	5.5	10.4	28.5	30.3

^{*} The balance sheet of Kyoto Semiconductor Co., Ltd. has been consolidated since the end of March 2022, and the impact of the completion of the purchase price allocation (PPA) has been reflected retrospectively to the end of March 2022.

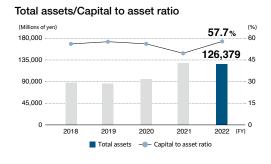


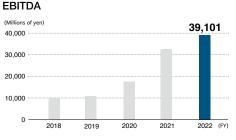


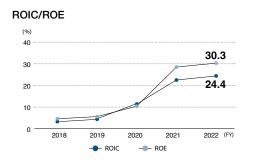


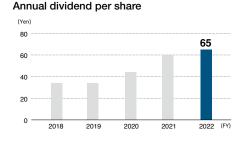


Total dividends, total value of share buyback, and







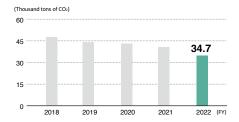


Non-financial Highlights

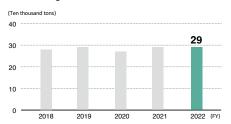
> P.82-83 Non-financial Data

Non-financial indicators		FY2018	FY2019	FY2020	FY2021	FY2022
CO2 emissions (Scope 1+ Scope 2) > P.46–49 Information Disclosure Based on TCFD Recommendations	(Thousand tons of CO ₂)	47.6	44.2	43.0	40.7	34.7
Water usage	(Ten thousand tons)	28	29	27	29	29
Waste emissions	(Ten thousand tons)	0.29	0.26	0.25	0.29	0.26
VOC emissions	(Tons)	46	37	36	34	30
Number of employees (consolidated basis) (non-consolidated basis)	(Persons)	2,005	1,999	1,772	1,915	1,943
	(Persons)	1,603	1,604	1,313	1,342	1,378
Composition of Directors and Number of Board of Directors (total/outside/female)	(Persons)	10/7/2	10/6/1	9/6/1	7/4/1	7/4/1
Percentage of employees with disabilities	(%)	3.40	3.40	3.37	3.30	2.68
Average rate of days of annual paid leave taken/ Average number of days of annual paid leave taken	(%)	67.2	68.4	60.0	58.9	72.7
	(Days)	15.3	15.7	13.7	12.8	16.3

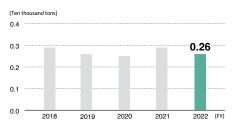
CO₂ emissions



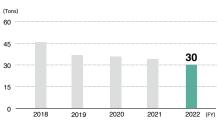
Water usage



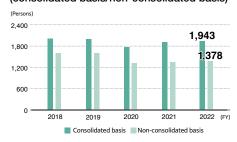
Waste emissions



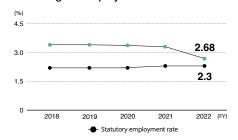
VOC emissions



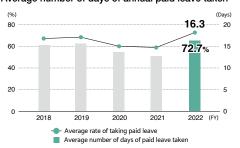
Number of employees (consolidated basis/non-consolidated basis/



Percentage of employees with disabilities



Average rate of days of annual paid leave taken/ Average number of days of annual paid leave taken



Number of female managers/ Ratio of female managers

