# **Industry Business**

#### Message from the Lead Officer



Noriyasu Kuzuhara Director, Executive Vice President & Executive Officer Industry Business

In the Industry Business, we provide leading products and services based on the technologies refined through our history of innovation and co-creation activities based on the trust of our customers, which we have won through the earnest engagement.

The technologies that form the basis of the value we provide are a combination of the optical, material, nanofabrication, and other core technologies that we have continued to refine over the years as we have evolved from our original business, plus the addition of Al and other technologies. While the technologies are important to our business, what makes our business unique is the process of converting the technologies into value. We believe value lies in "stories that are realized through applying the technologies" rather than the technologies themselves, and by providing that value, we aim to consistently be partner of our customers in driving their innovation.

This value provision is supported by our "customercentricity", that exists in development, manufacturing, and customer support, driven by dedicated and skilled human capitals. We will expand the Industry Business by increasing the number of stories that can be realized through value creation activities with customers across business units that combine our technologies and customer-centricity based on each customer's business domain. The Industry Business Development Center, which was established last year as the vanguard of this effort, is approaching each of our customers' business domains by utilizing our assets, such as global customer relationships, development functions, sales functions, and group companies, in addition to our technologies, in a cross-functional and multi-layered manner. In the display industry, one of our focus domains. we have already begun to see results in the expansion of new applications, and we intend to further expand going forward.

#### **Our Medium- to long-term Growth Strategy**

#### Achievement of material issues and development through co-creation with customers

In the Industry Business, based on our strengths in core technologies, we provide parts, materials, measurement, and inspection essential for customers through co-creation with our customers using our "customer-centricity", thereby contributing to the realization of social value, which we raise as material issues. For example, we are promoting initiatives to address such material issues as improving fulfillment in work and corporate dynamism through automating and labor saving in manufacturing and inspection processes, "using limited resources effectively" and "addressing climate change" by reducing losses through digitalization and developing new materials, and by advanced measurement and identification. In the Medium-term Business Plan, we have positioned the Industry Business as a strengthening business that will drive our mediumto long-term growth, and have prioritized allocating management resources to it

#### Three common "success requirements" for the Industry Businesses

The four business units that make up this business (sensing, performance materials, II components, and optical components) share three common success requirements. First, a certain size and stability of market: second, the ability to demonstrate superior capabilities and gain a high market share; and third, the ability to have a deep dialogue with customers in the manufacturing industry and maintain profitability by creating

#### Strengthening business development through a cross-business approach





Customer value chains Global customer relationship and development formation,

sales and group companies company-wide technology assets non-commoditized value. In addition, we have a deep and long-term cooperation with multiple customers and partners in the midstream of the value chain, which works as an entry barrier to minimize value deterioration. By meeting these requirements, our existing domains keep high profitability.

#### Enhance business development across businesses

For business development in the medium- to long-term, we are focusing on three domains that meet our success requirements. and in which new business opportunities are likely to emerge: displays, mobility, and semiconductor manufacturing. We aim to grasp changes in the markets of these domains and guickly respond to the issues and needs of customers operating in these domains. In each focused domain, we assign customer-front human capital who can look at the value chain and technology from the perspective of the market and customers beyond the conventional product-specific business units. In addition, our customer-front capabilities gain advanteges to guickly identify demand and develop new solutions by staying in close contact with the industry's leading brand owners. We are promoting new business development through co-creation with customers while leveraging our technological assets and customer relationships around the globe.

#### Achievements in business development through co-creation with customers

#### **Display**



**External environment:** Acceleration of development of new panel type in line with device evolution

 Through implementing a cross-business approach toward ICT brand owners, we received orders for functional films for next-generation small- and mediumsized displays non-polarizing plate applications

First installation in Japan of automotive visual

inspection equipment at Suzuki's Sagara Plant,

expanding the global pipeline including other

Mobility





#### **External environment:**

Suzuki plants



G

lance

Data Sectior

#### Sensing

#### **Market Environment Awareness**

#### **Opportunities**

- Changes in development and manufacturing processes due to the evolution of next-generation displays, and the expansion of applications to a variety of devices
- Renewal and installation of new automotive plant facilities in line with automation and DX trends in the manufacturing industry, process and labor saving in guality inspections

#### Market growth rate (2023-2025)

• Demand for efficient use of limited resources and response to climate change

#### Risks

 Decline in demand due to customers' capital investment cycles

Light source color / object color	+4%
Automotive visual inspection	+15%
Hyperspectral imaging (HSI)	+10-15%

#### **Strategy and progress**

In the sensing business, we have been providing light and color measurement to various industries based on our technology for quantifying color. Based on light source color measurement, in which we have secured a share of more than 50% in display measurement, and object color measurement, which is used in a wide range of industries, we have expanded the scale of our business while also making strategic acquisitions. Aiming for further business growth, we are building a new earnings pillar in the areas of automotive visual inspection and hyperspectral imaging (HSI) technology, which measures wavelengths invisible to the human eye.

In the light source color / object color measurement field, we aim to expand our earnings by embracing technological innovations in display technology as an opportunity. We expect long-term growth in light source color measurement and stable growth in object color measurement and a recovery in demand as we move toward fiscal 2025.

In the area of automotive visual inspection, we expect to expand our pipeline by contributing to the automation of quality inspections on production lines with our strength in Al-powered image analysis technology, and we anticipate sales growth over the medium term. In measuring instruments based on HSI technology, we aim to expand the use of inspection and sorting applications in a wide range of areas including the recycling field, where market growth is anticipated.

Going forward, we will continue to capture inflection points in each industry and support manufacturing quality improvement, loss reduction, and resource recycling.

#### Strategic KPI (vs. FY2022)

	FY2023 Results	FY2025 Target
Revenue growth rate of visual inspection and HSI industrial applications	+5%	+22%

## **Performance Materials**

#### **Market Environment Awareness**

#### **Opportunities**

- Demand for new functions and expansion of applications for various devices due to the evolution of next-generation displays
- Increased demand for films due to larger display sizes
- New production line construction and widening at polarizer manufacturers

#### Risks

- Declined demand in display market due to economic slowdown
- Shrinking market for existing products due to changes in display technology
- Rising costs due to soaring energy and raw material prices

#### Market growth rate (2023-2025)

Large TVs (LCD+OLED)

#### Strategy and progress

Our business develops films for a variety of displays, including large TVs, small and medium-sized mobile displays, and automotive displays. Konica Minolta's strength in film-casting technology lies in the high level of freedom in terms of materials and the ability to add additives that add functionality to the material. By taking advantage of this technology, Konica Minolta has built a genre-top position in long, wide, and thin films.

In the large TV market, polarizer manufacturers are accelerating the shift to wider lines. In this business, we aim to capture this demand with two new resins, SANUQI film and SAZMA film, to expand our market share. In addition, while utilizing existing lines, we are adding a widened line capable of producing larger widths, thereby increasing production capacity while meeting demand for wider films.

In the area of small and medium displays, we have built a genre-top position in thin protective film for LCD polarizers. In addition, we will strive for growth by capturing needs downstream in the supply chain and developing new products based on two key elements: direct co-creation with customers and material formulation technology, which is one of our strengths.

In addition to growth in these two areas, we will also work to solve social issues by improving the efficiency of manufacturing throughout the supply chain, such as by helping to reduce end materials and manufacturing losses when changing rolls by increasing film lengths.

#### Strategic KPI

	FY2023 Results	FY2025 Targets
Revenue composition ratio in new resin for large display panel areas	8%	20% or more
Revenue composition ratio in new resin for small and medium-sized display panel areas and new business area	1%	10% or more

+4%

#### IJ Components

#### **Market Environment Awareness**

#### Opportunities

Risks

- Growing demand for inkjet printing as the shift from analog printing to digital printing accelerates
- Changes in manufacturing processes and process and labor saving at manufacturing sites
- Demand for effective use of limited resources and reduction of environmental impact
- Changes in development and manufacturing processes due to the evolution of next-generation displays

#### Market growth rate (2023-2025)

• Decrease in demand from customers due to economic recession

Growth areas (industrial + +48% print-on-demand applications)

#### **Strategy and progress**

The strength of this business's IJ (inkjet) printheads lies in its ability to provide heads that are highly compatible with various inks by leveraging our chemical technologies that we have developed through our photographic film business, which is our founding business.

Sign graphics applications, such as outdoor advertising, and commercial printing applications are expected to continue to be in demand as a core field that supports profits. In particular, demand for large-size signage printers is increasing in Southeast Asia, India, and other regions where economic growth continues. Konica Minolta's inkjet heads are highly regarded for their durability and high productivity, and we expect stable growth in this area in the future.

In industrial fields such as pattern-formation applications in the manufacturing process of printed circuit boards and displays, IJ systems are replacing conventional methods to save labor and reduce material loss. This market is expected to grow at an annual rate of 10% or more and is positioned as a growth area. Industrial applications, where special inks are frequently used, require highly durable heads, and we are leading the market with our chemical technology, which is one of the strengths of this business.

This business has been deeply involved in customers' development sites to provide fine-tuned support. Going forward, we will continue to promote IJ by not only providing support for the head and optimal ink matching, but also promoting workflow innovation in collaboration with our customers to help them enhance the value of their products.

#### Strategic KPI

	FY2023 Results	FY2025 Target
Revenue composition ratio in growth areas (industrial + print-on-demand)	39%	60%

# Optical Components

#### **Market Environment Awareness**

#### Opportunities

- Rapid increase in semiconductor needs, changes in manufacturing processes, and higher precision requirements affected by fluctuations in the international situation
- Decrease in the number of lens manufacturers that can stably supply lenses in the middle range (UV to visible) of semiconductor manufacturing

#### Risks

- Decrease in customer demand due to economic recession
- Temporary slowdown in semiconductor industry growth
  Substitution risk due to new technological development
- Semiconductor +11% manufacturing equipment

Market growth rate (2023-2025)

#### Strategy and progress

Based on the optical technologies that we have cultivated in photographic-related businesses since our founding, this business offers a wide range of optical products, including pickup lenses for optical discs and optical units for high-luminance projectors used in movie theaters. In this context, we aim to shift to high-growth areas by focusing on industrial applications with higher required precision, with our strengths in precision processing technologies including polishing, material technologies that are rare among optical manufacturers, and high-end optical design technologies ranging from geometrical optics to wave optics.

Semiconductors, for which demand is expected to increase over the long term, use many optical components within the manufacturing process. This business already supplies leading semiconductor manufacturing equipment companies with products in the middle range of wavelengths from visible light to ultraviolet light. We have also been building collaborative relationships with equipment and glass manufacturers for more than ten years and will continue to promote product development in response to their needs. For medium- to long-term business expansion, we have expanded into the area of DUV/VUV, which are ultraviolet rays with shorter wavelengths, and have begun capital investment, including the introduction of next-generation technologies, to capture market share in this area as well.

We will continue to proactively gain capabilities to reinforce our foundation for creating new value and develop ultra-high-precision products, thereby contributing to corporate vitality and higher quality of life by solving social issues.

#### Strategic KPI

	FY2023 Results	FY2025 Target
Revenue composition ratio in industrial applications area	17%	50% or more

#### **Industry Business**

## Value Co-creation with Customers – Case 1

Contributing to the industry's challenges in the face of increasing display sizes by applying our cultivated technologies to develop longer and wider products

# Display industry facing increased losses and costs as displays continue to grow in size

In protective film for LCD polarizers, we offer "long films," which are more than double the conventional roll length, and "wide films," which are much wider than the current mainstream films at widths of up to 2.6m.

In recent years, polarizer manufacturers have been faced with loss due to decreased efficiency in the use of protective polarizer films for LCDs and with increased costs for transportation, materials, etc., as displays have become larger. With the aim of minimizing losses, costs, and environmental impact throughout the supply chain, we sought to increase the length and width of our films. Initially, however, customers had concerns about switching from a product with a proven track record in terms of quality and processability, and proposals for longer lengths and wider widths were not readily accepted. However, persistent dialogue directly relevant to customer value led to co-creation, we were able to achieve the adoption of our long and wide films.

#### Contributing to customers' productivity improvement through problem-solving and appeal to value with our cultivated technologies

proving fulfillm

corporate dynamisn

Performance

Materials

In lengthening films, we have succeeded in reducing deformation defects during rolling by utilizing our solvent flow film-casting technologies cultivated from TAC films to produce films with slip properties. In expanding widths, we have achieved flexibility in width selection without major equipment changes by using a new production method of original film formation and post-process stretching based on our core technologies of film formation and optical design.

Long and wide films are products that contribute to the reduction of various losses and costs by promoting workflow efficiency, such as in logistics and storage until products are delivered to customers and the reduction of task-switching during production for both the Company and its customers. We will continue to be a trusted partner to our customers and help them meet their challenges in the display industry.

#### Longer films minimize losses, cost, and environmental impact throughout the supply chain



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Related material issues

climate char



#### Voice



Tomohiro Yamamoto (right) Quality Assurance Department

Tomomasa Furuyama (left)

Product Development Department, R&D Division

Performance Materials Business Unit

# Building relationships with customers is the first step in providing value

In the process of transitioning to longer and wider products, we identified and effectively approached our customers' key personnel in their various departments and continued to talk about the ideal supply chain, which ultimately led to recognition of the benefits of our longer and wider products. Since then, we have received comments from customers such as, "We expect to reduce logistics and process losses by up to 30% by using longer films," and "We hope that Konica Minolta will lead to a smarter supply chain overall." We feel that our strength lies in the fact that we can instantly grasp the problems of our customers and build relationships that allow us to work together to find solutions to those problems. We intend to continue to devote ourselves to being a company that sincerely addresses the problems of our customers and provides true value.

#### **Industry Business**

### Value Co-creation with Customers – Case 2

Sensing

Contributing to the improvement of the efficiency and quality of automotive manufacturing processes with automated visual inspection solutions

#### Co-creation of a quality inspection solution for automotive production lines with Ford Motor Company

Eines is a leading manufacturer of visual inspection for the automotive industry, founded in 1992 and located near Ford's plant in Spain, a key location in Ford's European production, and has developed and implemented solutions in close contact with its customers.

The automotive industry has been facing a labor shortage since that time, and there is a growing need for automation of production lines. In particular, vehicle quality inspections at the end of the production line are highly dependent on human visual inspections, which place a heavy physical burden on inspectors, and the subjective visual inspection results in inconsistencies in accuracy, which can pose a risk of damaging brand value.

Eines co-created with Ford Motor Company an All-in-One In-line Quality Control System that integrates and

#### **Eines Systems Company history**



automates multiple quality inspections in the automotive production line. They have presented one solution to the challenges faced by the industry.

Related material issues

in work and

corporate dynamism

Ensuring social safety

and security

#### Contributing to solving issues in the automotive industry and expanding business globally in the Konica Minolta Group

This system automates three types of inspections: gap step measurement, spec check, and surface damage inspection, achieving objectivity without variation in inspection accuracy due to differences in inspectors. The system frees inspectors from simple tasks and harsh environments where they spend long hours doing visually inspections. In addition, the integration into a single system not only reduces a plant's occupation area and energy consumption, but also ensures worker safety with tunnel-type equipment that has no moving parts. In addition, the three inspection functions can be updated individually to suit customer requests or changes in target vehicle models, allowing for long-term use. We have improved quality while minimizing our customers' environmental impact and costs, giving them a competitive advantage.

Eines expanded the solutions it built in Spain to the European region and became part of Konica Minolta in 2019, adding Konica Minolta's optical and imaging AI technologies to Eines' development capabilities to further add value to its solutions and expand its business globally. Konica Minolta will continue to provide diverse inspection know-how and technologies to automotive production processes, contributing to further development and efficiency in the industry. Voice



Antoni Perera i Vernetta Eines Vision Systems Engineering Manager & Business Unit Leader

#### Increasing the level of trust with our customers and striving to further improve quality control processes

I lead a dedicated team focused on research and development, leveraging my engineering expertise and in-depth knowledge of the market. I find it very rewarding to be involved in evaluating new technologies and developing prototypes, from which more competitive and innovative products are created, pushing our company to the forefront of the field.

We have been working with Ford for over 30 years to implement solutions and deliver results in our customers' production environments based on our trustful business relationship. We will continue to work closely with our customers to develop innovative solutions to further improve their quality control processes.

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