

Segment Overview

The NLM Group offers high quality and high value added products and services ranging from aluminum materials to intermediate and processed products, a unique strength we have as a comprehensive aluminum manufacturer. This allows us to operate across a variety of business areas and provide comprehensive solutions that address customer needs. Businesses of the NLM Group are categorized into four segments based on manufacturing methods.

Consolidated
Financial Results
(FY2024)

Net Sales

550,180 million yen

Operating Profit

21,744 million yen

Ratio of Operating
Profit to Net Sales
4.0%

Aluminum Ingot and Chemicals Business ► P.25

This Segment develops and manufactures materials and raw materials, including many different chemicals especially alumina and aluminum hydroxides, aluminum alloys, and high-purity aluminum, which are used in various products. The Carbon Products Segment develops and manufactures products including carbon for blast furnaces and electric furnaces.

Main Companies and Segments

Nippon Light Metal Co., Ltd. (Chemicals Division, Metal Division)/
Nikkei MC Aluminium Co., Ltd./Nippon Electrode Co., Ltd.



Fabricated Products and Others Business ► P.27-28



For our transport equipment and engineering businesses, this Segment develops, manufactures, and supplies products for many fields, including automotive, truck bodies, railway, building and construction materials, food, and cleanrooms. In the infrastructure business, it is striving to increase the competitiveness of the Group's business, mainly through logistics and services.

Main Companies and Segments

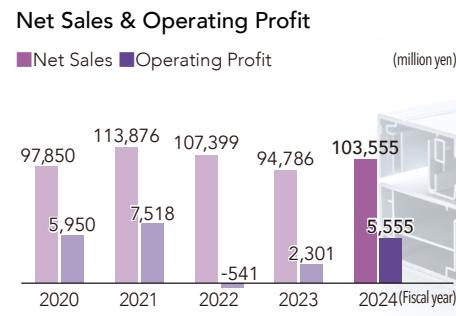
Nikkei Panel System Co., Ltd./Nippon Fruehauf Co., Ltd./Nikkei Logistics Co., Ltd./Nikkei Engineering Co., Ltd./Nikkei Aluminum for Mobility Company, Ltd./Nikkei Sangyo Co., Ltd./Nikkei Information System Co., Ltd.

Aluminum Sheet and Extrusions Business ► P.26

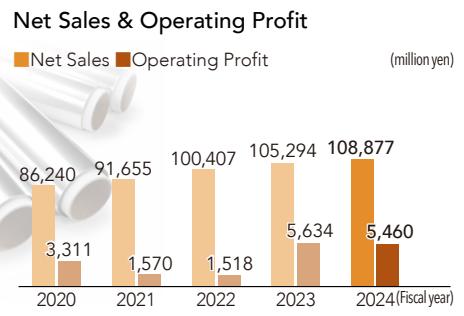
This Segment develops and manufactures rolled aluminum sheets and extruded shapes, supplying them to diverse fields such as transportation-related, electrical and electronics, building and construction materials, and environment and safety. In addition, the Electronic Materials Segment manufactures foil electrodes for aluminum electrolytic capacitors.

Main Companies and Segments

Nippon Light Metal Co., Ltd. (Rolled Products Division, Capacitor Foil Division)/Nikkei Aluminium Core Technology Co., Ltd./Riken Light Metal Industry Co., Ltd./Nikkei Extrusions Co., Ltd.



Aluminum Foil, Powder and Paste Business ► P.29



In the Foil Business, we have established our position as a leading manufacturer by manufacturing products, including packaging materials for food and medical products, foil for battery exteriors and products for etched circuits in the field of electronics, and aluminum powder and aluminum paste products for automotive exterior coatings and printing inks.

Main Companies and Segments

Toyo Aluminium K.K.

Segment Overview

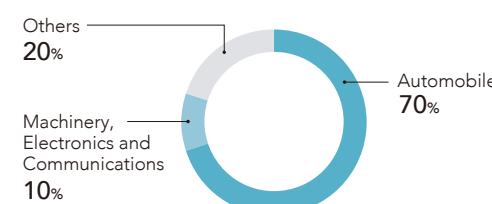
Aluminum Ingot and Chemicals Business

Executive Officer, Head of Chemicals Business Group
Ken KinoshitaSenior Executive Officer, Head of Metal Business Group
Yoshiaki Ito

Net Sales & Operating Profit



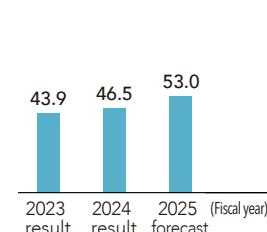
Sales ratio



Chemicals Business Group

■ Business Performance

Net Sales (billion yen)



■ Analysis of Present State (SWOT Analysis)

The Group is expected to contribute to social value, such as DX and decarbonization, in response to the changes in the global environment, but the soaring raw material and fuel costs and the aging of manufacturing equipment must be addressed.

S (Strength)	<ul style="list-style-type: none"> A wide array of products and close relationships with many diverse business partners Use of renewable energy, with the source of much of our power being hydroelectric
W (Weakness)	<ul style="list-style-type: none"> Aging of manufacturing equipment Securing and cultivating human capital, and technology succession
O (Opportunities)	<ul style="list-style-type: none"> Growing demand for measures to address heat affecting materials related to eco-friendly vehicles Enhancing domestic demand network for high-performance semiconductors and lithium-ion batteries associated with growing concerns about economic security
T (Threats)	<ul style="list-style-type: none"> Unstable procurement of imported aluminum hydroxide and other raw materials Falling demand due to main customers in Japan reducing production

■ Business Policies, Strategies, and Future Outlook in the 2023 Mid-term Plan

Policy

- Investing resources aggressively in growth areas, including areas related to digital technologies
- Expanding business domains in the area of the global environment and other areas.
- Stabilizing profit from core businesses

Strategy

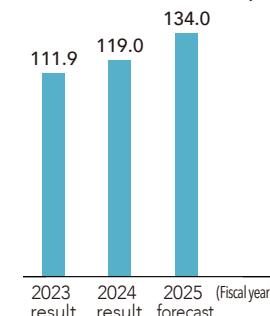
- Enhancing the product development, marketing, and production capabilities for xEVs, secondary batteries, and semiconductor manufacturing equipment
- Developing eco-friendly products
- Reinforcing the structure for stably supplying products through ongoing capital investments

The Chemicals and Alumina Segments will invest resources in anticipation of expanding demand for xEVs, secondary batteries, semiconductor manufacturing equipment, etc., and continue to strive to secure a revenue base through stable supply of products in the commodity area, especially water treatment and refractory materials. The Chemicals Segment will proceed with capital investments with our eyes open to market trends, so that we can certainly tap into demand while ensuring the stable supply of products is our top priority, with a focus on the field of basic chemicals. The Carbon Products Segment is expected to see a recovery in the order volume for its main product, carbon blocks for blast furnaces, and its business performance trending favorably. Additionally, from the second half of the fiscal year, the heat treatment business for lithium-ion battery anode materials commences full operation. This is projected to generate stable revenues from FY2026 onward.

Metal Business Group

■ Business Performance

Net Sales (billion yen)



■ Analysis of Present State (SWOT Analysis)

Due to the decarbonization trend, we face the tasks of enhancing our initiatives to build a circular business model, responding to changes in the business environment, and capturing new demand.

S (Strength)	<ul style="list-style-type: none"> Aluminum material-related technologies A wide product lineup including products that have the largest market share 	W (Weakness)	<ul style="list-style-type: none"> Aging of manufacturing-related equipment, etc. Insufficient ability to process scrap (reducing reliance on new aluminum ingots)
O (Opportunities)	<ul style="list-style-type: none"> Expansion of demand for products related to eco-friendly vehicles Attention focused on recycled aluminum as a low-carbon material 	T (Threats)	<ul style="list-style-type: none"> Decrease of demand for products related to internal combustion engines reflecting the switch to eco-friendly vehicles Shortage of scrap resulting from the growth of recycling-related demand

■ Business Policies, Strategies, and Future Outlook in the 2023 Mid-term Plan

Policy

- Enhancing initiatives to achieve carbon neutrality
- Promoting the effective utilization of aluminum materials
- Capturing demand for aluminum and developing overseas and new businesses

Strategy

- Procuring low-carbon materials and establishing recycling technologies
- Building a circular business model
- Developing new technologies, new products, and new businesses and expanding overseas operations

In 2025, our metal business made a capital investment in CMR Eco Aluminium Pvt. Ltd., which operates a recycled aluminum business in India. We will establish a supply system for recycled aluminum billets, and accelerate initiatives for contribution toward a decarbonized society and sustainable value provision. The secondary alloy business will develop alloys with properties such as high strength, aiming to expand in the area of materials for car body structures. We will also develop recycling technologies to secure a stable supply of scrap, our raw material. For the overseas business, in addition to business development at existing sites, we will expand revenues utilizing our third site in India (Nikkei CMR Aluminium India), established under our leadership in central western India.

Segment Overview

Aluminum Sheet and Extrusions Business



Senior Executive Officer,
General Manager of the Sheet &
Extrusion Business Group
Masahito Saotome

Net Sales & Operating Profit

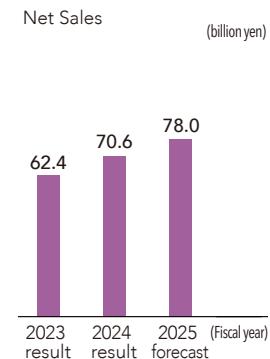


Sales ratio



Sheet & Extrusion Business Group (Sheet Segment)

■ Business Performance



■ Analysis of Present State (SWOT Analysis)

Our alloy development capability for eco-friendly vehicle battery materials and other products has enhanced customer convenience and decarbonization value. Recovery of demand for Thick gauge plates for semiconductor manufacturing equipment is lagging.

S (Strength)	<ul style="list-style-type: none"> Ability to develop alloys intended for high-value-added sectors Customer convenience ensured through the small-lot production of many products and quick delivery
W (Weakness)	<ul style="list-style-type: none"> Delay in the establishment of a production system for expanding the processing business Insufficient profitability of overseas business
O (Opportunities)	<ul style="list-style-type: none"> Recovery of demand for Thick gauge plates for semiconductor manufacturing equipment Expansion of demand related to batteries for eco-friendly vehicles
T (Threats)	<ul style="list-style-type: none"> Rapid fluctuation of raw material prices Paradigm shift in batteries for eco-friendly vehicles to the use of all-solid-state batteries, etc.

■ Business Policies, Strategies, and Future Outlook in the 2023 Mid-term Plan

Policy

- Developing and providing high-value-added products for use in growth areas
- Expanding business domains to include the processing business
- Promoting carbon neutrality initiatives

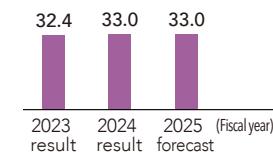
Strategy

- Expanding sales of Thick gauge plates for semiconductor manufacturing equipment and automotive battery materials
- Developing new fabricated products through cooperation within the NLM Group
- Promoting recycling from sheet to sheet and developing low-carbon products

In FY2024, the sales volume of sheets for semiconductor manufacturing equipment increased as the gradual recovery trend continued, and aluminum sheets for lithium-ion battery cases also strong sales. Both net sales and operating profit greatly exceeded the previous term as a result of higher sales prices that reflected the aluminum ingot market price and the revision of processing fees. Presently, a delay is observed in the anticipated recovery in the expansion of Thick gauge plates for semiconductor manufacturing equipment, but aluminum sheets for lithium-ion batteries are keeping stable sales volume, driven by an increase in quantity especially for China. Moving forward, in addition to the existing business, we will promote the ongoing development of novel processed products based on our proprietary specialized technologies to expand the net sales and profit of the Sheet Segment.

Sheet & Extrusion Business Group (Extruded Products Segment)

■ Business Performance



■ Analysis of Present State (SWOT Analysis)

Creation of new products for solving social issues in industrial fields and acceleration of carbon neutrality initiatives are key to addressing the shrinking domestic extruded product market.

S (Strength)	<ul style="list-style-type: none"> Development, manufacturing and sales through cooperation within the Group Extrusion technologies for large, long extrusion materials and integrated production line from materials to processing
W (Weakness)	<ul style="list-style-type: none"> Creation of new growth fields and new businesses Low profitability of businesses, including generic product businesses
O (Opportunities)	<ul style="list-style-type: none"> Creation of new needs related to solutions to social issues and initiatives regarding eco-friendly vehicles Relationships with customers strengthened through the promotion of horizontal recycling
T (Threats)	<ul style="list-style-type: none"> Significant fluctuation of the conditions in the raw materials market and the increase of the cost of labor and other fixed expenses Downsizing of the domestic market

■ Business Policies, Strategies, and Future Outlook in the 2023 Mid-term Plan

Policy

- Developing new products and finding new customers in areas around existing businesses and new areas and in new domains
- Propelling business transformation through DX
- Promoting carbon neutrality initiatives

Strategy

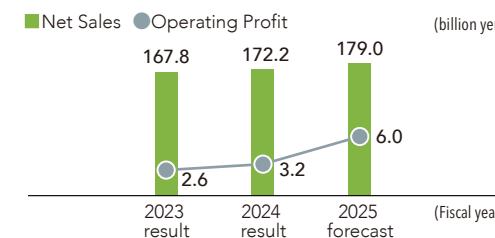
- Engaging in development efforts by cooperating within the business group
- Building a new organizational structure for entering new areas of business and propelling DX
- Expanding the scope of applications for green billets and horizontal recycling

In FY2024, the Extruded Products Segment saw the products for truck bodies selling more than the previous term and the demand for products for semiconductor manufacturing equipment recovering, albeit gradually. In addition, higher sales prices reflecting the aluminum ingot market and the revision of processing fees produced positive outcome. As a result, both net sales and operating profit exceeded the previous term. Recently, the market for semiconductor manufacturing equipment has declined and its recovery is lagging, but truck bodies, railways, and other fields are trending steadily in general. Overall, the profit is projected to be lower than the previous year, influenced by falling ingot prices. In the medium term, we will focus on the development of new products, while pursuing higher revenue through measures including remodeling of unprofitable products and streamlining of the organization.

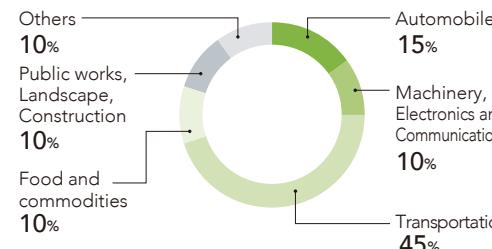
Segment Overview

Fabricated Products
and Others BusinessGeneral Manager of the
Engineering Business Group
Toshio YanagimotoSenior Executive Officer,
General Manager of the Transport
Equipment Business Group
Toshikazu Tanaka

Net Sales & Operating Profit



Sales ratio



Engineering Business Group

■ Business Performance

Net Sales (billion yen)

Year	Net Sales (billion yen)
2023 result	44.9
2024 result	45.1
2025 forecast	47.0

■ Analysis of Present State (SWOT Analysis)

Insulation panels are an energy-saving measure to support a decarbonized society. However, there are risk factors including raw material prices hovering at a high level and the labor shortage in the construction and logistics business.

S (Strength)	Largest market share in the domestic industry Comprehensive capabilities with expertise in sales, design, production and installation
W (Weakness)	Human capital development and operational efficiency improvement Limited points of contact with end users
O (Opportunities)	Demand for expanding existing and replacing aged low-temp logistics warehouses and food factories Growing demand for fireproof insulation panels
T (Threats)	Prices of raw materials staying high and an increase in revisions to construction plans Labor shortages in the construction and logistics industries

■ Business Policies, Strategies, and Future Outlook in the 2023 Mid-term Plan

Policy

- Materializing desired spaces
- Rebuilding the production system to solidify business continuity
- Stabilizing overseas business and increasing our competitive advantage

Strategy

- Enhancing property handling capability through establishing an internal system to improve order competitiveness
- Decisive shift to aggressive manufacturing
- Providing added value by leveraging experience and technologies developed in Japan

In the Panel System Segment, it is expected that demand continues for expanding existing or replacing aged low-temperature logistics warehouses and logistics bases for food factories, and business for medium and small properties for stores and kitchens trends steadily, supported by strong inbound demand. In the clean room sector, while large-scale investment related to AI semiconductors continues, capital investment appears to be cautious in response to the slowdown in the EV market, the tariff policy in the U.S., and other factors. In this term, we will enhance follow-ups for projects under inquiry, and focus on uncovering potential properties and reducing costs by differentiating ourselves through revision of sales strategy and strengthening of engineering functions. In the Landscape Engineering Segment, scaffolding products for road and bridge inspection are expected to tread strong amid the stagnating market, backed by steady demand for infrastructure maintenance.

Transport Equipment Business Group

■ Business Performance

Net Sales (billion yen)

Year	Net Sales (billion yen)
2023 result	67.5
2024 result	72.1
2025 forecast	76.0

■ Analysis of Present State (SWOT Analysis)

There is growing demand for sustainable logistics measures, including low-carbon truck bodies, increased safety and reduced load in cargo handling, and the electrification of trucks.

S (Strength)	Ability to develop products in collaboration with the NLM Group and the Isuzu Group Largest share of the market in Japan (in terms of quantity)
W (Weakness)	Continuation of the reflecting of the soaring prices of materials and parts in sales prices Delay in the expansion of business in overseas markets
O (Opportunities)	Expansion of service businesses reflecting the diversification of logistics Cooperation within the Group regarding decarbonization and cold chain logistics
T (Threats)	Entry of overseas competitors and competitors from other industries into the commercial EV market Long-term downsizing of the domestic market

■ Business Policies, Strategies, and Future Outlook in the 2023 Mid-term Plan

Policy

- Developing differentiated products for sustainable logistics
- Providing added value by promoting the reduction of CO₂ emissions
- Expanding technologies which have been recognized in the domestic market to overseas markets

Strategy

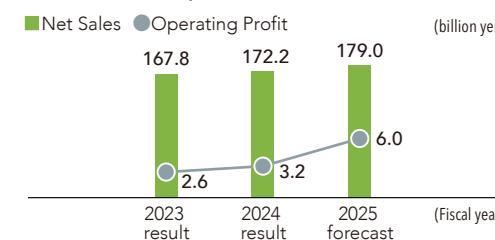
- Providing products as solutions to social issues, such as carbon neutrality
- Adopting low-CO₂ materials and promoting recycling
- Providing value-added products that cater to local needs

The truck bodies business in the Transport Equipment Business Group outperformed the previous term in net sales, affected by an increase in sales volume associated with the recovery in total truck demand, revision of sales prices, and other factors. In terms of profitability, although material costs remain at a high level, the effect of the sales price revision significantly improved the operating profit compared to the previous term. Going forward, we will continue to work on revising sales prices to appropriate levels, as well as cost reduction measures (e.g., lead time reduction, productivity improvement) and DX of business operations. Additionally, we will advance initiatives to develop products and services that contribute to our customers' carbon neutrality goals.

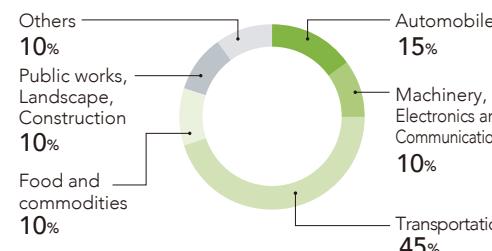
Segment Overview

Fabricated Products
and Others BusinessExecutive Officer,
General Manager of the Automotive
Parts Business Group
Toshiharu HatamotoExecutive Officer,
Head of the Infrastructure
Business Group
Iساو Shikine

Net Sales & Operating Profit

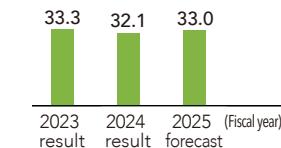


Sales ratio



Automotive Parts Business Group

■ Business Performance

Net Sales
(billion yen)

■ Analysis of Present State (SWOT Analysis)

Our strengths include the products and technologies necessary for the electrification of automobiles. We are facing the tasks of securing management resources, building a global supply system, and implementing prompt initiatives to reduce environmental impact.

S (Strength)	<ul style="list-style-type: none"> A system for the one-stop supply covering materials, methods, processing technologies, development, and mass production. A wide array of products and technical capabilities required for the electrification of automobiles
W (Weakness)	<ul style="list-style-type: none"> Insufficient infrastructure and supply capacity on a global scale Shortage of human capital who implement growth strategies
O (Opportunities)	<ul style="list-style-type: none"> Growing expectations for suppliers related to development, quality assurance, etc. Growing demand related to the reduction of the weight of vehicles and thermal management due to the electrification of automobiles
T (Threats)	<ul style="list-style-type: none"> Protectionist policies of countries and movement of Chinese companies Larger capability and shorter delivery times requested in business inquiry

■ Business Policies, Strategies, and Future Outlook in the 2023 Mid-term Plan

Policy

- Enhancing the value of business by developing new products
- Developing technologies in response to trends in the automotive industry
- Capturing demand of products for electric vehicles, which is growing in individual countries

Strategy

- Developing new products incorporating multiple technologies
- Securing diverse human capital and horizontally deploying technologies that are our strengths
- Rebuilding a global structure with bases in Japan, U.S., China, and Thailand which can respond to changes in economic and tariffs policies

Future Outlook

Nikkeikin ALMO, to which the automotive parts business is consolidated, improves the comprehensive proposal capability and business value by building a supply system that does not adhere to specific manufacturing methods. Additionally, against the increasingly complicated needs for automotive parts, we will consolidate our functions and allocate human resources efficiently to improve the advancement and promptness of our responses. Also in FY2025, we will strive to develop a resilient management foundation to synergize our business as quickly as possible, and develop new products incorporating multiple technologies. Overseas, we will aim to expand our business with a focus on business for EVs, by expanding domestic technologies to other production sites and strengthening the cooperation between our sales and development teams, in addition to working on the development and sales expansion at our new plant in the U.S. Further, we will promote CO₂ emissions reduction initiatives through implementing energy-efficient furnaces and recycling aluminum in cooperation with customers.

Infrastructure Business Group and the other Business

The role of the Infrastructure Business Group and Other Segments support role. This includes tackling regional issues, supporting the businesses of each NLM Group site, including their administrative and indirect functions, and fulfilling logistics and information system functions. Organizations that are familiar with particular regions and specialized in each function contribute to not only the smooth business activities of the Group as a whole but also the increase of the competitiveness of the Group's businesses and its medium- to long-term growth.

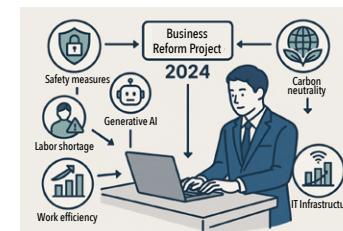
■ Logistics Segment

The Logistics Segment bears the function to stably supply wide-ranging products that the Group handles, from aluminum raw materials to fabricated products, utilizing 22 sites and 15 warehouses across Japan. In accordance with the revision of two logistics-related laws and the Subcontract Act, we have been working with consignors in the Group to reduce waiting and loading/unloading time and improve loading efficiency, which also resulted in a reduction in the number of vehicles with wait time exceeding two hours. For long-distance transportation, we are utilizing our Atsugi, Tochigi, and Kyushu Sales Offices as relay points. Going forward, in addition to continuing to comply with relevant laws and regulations, we will aim to improve operational efficiency through digital technology, reduce environmental loads, and further improve logistics quality. We will also strengthen our cooperation with consignors to build a sustainable logistics system.



■ Information System Segment

The Information System Segment responds to social requests including safety measures, quality improvement, and achievement of carbon neutrality, and participates in the Business Reform Project launched in 2024 to address issues such as labor shortage and the delay in business operation digitalization. Actively utilizing generative AI and other leading technologies, we promote efficiency improvement and advancement of business operations to reduce burdens at the worksite and speed up the decision making process, and engage in activities to lead the transformation for the whole Group. Additionally, we focus our efforts on the stable operation and governance of our information system infrastructure and information security measures, playing a core role in our IT strategy to support sustainable growth.



Segment Overview

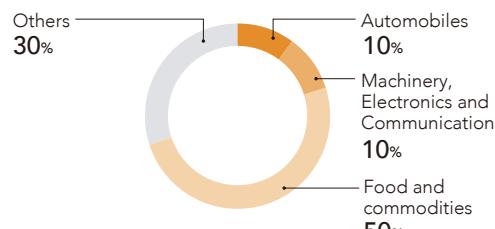
Aluminum Foil, Powder
and Paste Business

Senior Executive Officer,
Head of the Aluminum Foil
Business Group
Kaoru Kusumoto

Net Sales & Operating Profit



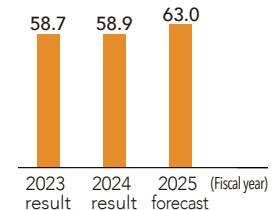
Sales ratio



Aluminum Foil Business Group (Foil Segment)

■ Business Performance

Net Sales (billion yen)



■ Analysis of Present State (SWOT Analysis)

The EV market is expected to expand, but is stagnating at present. Our current goal is to achieve growth in the Indian pharmaceutical packaging materials market while firmly maintaining our domestic market share.

S (Strength)	<ul style="list-style-type: none"> Largest share of the domestic aluminum foil market High-level production engineering capabilities
W (Weakness)	<ul style="list-style-type: none"> Aging of production facilities Low cost competitiveness against aluminum foil manufactured overseas
O (Opportunities)	<ul style="list-style-type: none"> Growth of demand for LiB in association with the expansion of the EV market Expansion of the pharmaceutical packaging materials market in India and other countries
T (Threats)	<ul style="list-style-type: none"> Inflow of aluminum foil manufactured overseas Population decline and the shrinking of the domestic market

■ Business Policies, Strategies, and Future Outlook in the 2023 Mid-term Plan

Policy

- Responding to increasing demand for lithium ion batteries
- Continuing to supply general plain foils and general fabricated products
- Tapping into the growth of the Indian pharmaceutical packaging materials market

Strategy

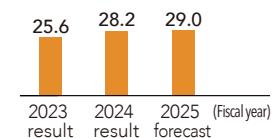
- Identifying demand and continuing with cost reduction measures
- Maintaining by providing customer services and ensuring stable supply
- Continuing to invest in the growth of SVAM TOYAL

Aluminum foils for lithium-ion battery exterior remained in an adjustment phase for the onboard vehicle application, while sale of processed foils for pharmaceutical packaging was slightly below the previous term. In FY2024, although net sales stayed on par with the previous term due to higher sales prices that reflected the aluminum ingot market, operating profit fell below the previous term. Aluminum foils for lithium-ion battery exteriors are showing signs of demand recovery, but the path forward remains unclear. We will continue to strive to establish a production system in line with the volume demanded by customers and reduce costs. We will also continue to tap into the growth of the Indian pharmaceutical packaging materials market. Further, using SVAM TOYAL Packaging Industries Pvt. Ltd. as our strategic hub, we will aim to advance into growth markets in India and beyond, such as the Middle East, Africa, and South America.

Aluminum Foil Business Group (Powder and Paste Segment)

■ Business Performance

Net Sales (billion yen)



■ Analysis of Present State (SWOT Analysis)

For automotive paint applications, the growing demand for eco-friendly products will be our business opportunity. Hopes are placed on the growth of demand for heat dissipation materials and products for laminate molding.

S (Strength)	<ul style="list-style-type: none"> No. 2 in terms of share of the global aluminum pastes for automotive paints Significant product development capabilities
W (Weakness)	<ul style="list-style-type: none"> An earnings structure that depends a great deal on the automotive market The weak profit structure of overseas subsidiaries
O (Opportunities)	<ul style="list-style-type: none"> Increasing environmental awareness and tightening of regulations Growing demand for heat dissipation materials, mainly reflecting the increase in 5G telecommunications equipment
T (Threats)	<ul style="list-style-type: none"> Changes in color trends of automobiles Price competition pressure from competitors

■ Business Policies, Strategies, and Future Outlook in the 2023 Mid-term Plan

Policy

- Continued expansion of sales of aluminum pastes for automotive paints
- Expansion of sales of aluminum nitrides as heat dissipation materials
- Development and expansion of sales of aluminum alloy powders for laminate molding

Strategy

- Focusing efforts on silica-treated products as eco-friendly products
- Identifying the demand and investing capital as necessary
- Securing production capacity by building alliances

For powder products, demand recovery continued for electronic aluminum powder and aluminum nitride for heat dissipation applications. Meanwhile, regarding paste products, our mainstay products for automotive paints sold well overseas. As a result, in FY2024, both net sales and operating profit of the Segment exceeded the previous term. Moving forward, for powder products, as demand for heat dissipation applications is expected to remain strong and growth is anticipated for aluminum nitride for filler applications in particular, we will take proactive measures including the enhancement of production capacity. For paste products, we will focus on silica-treated products, as demand for them is rising in Europe and China as eco-friendly products. Additionally, we will work on the sales promotion and development of colored aluminum and other effect pigments.