Business Overview

Automotive Products

Performance in 2022

Net sales: **117.0** billion yen

Sales volume: **952** million pieces

Main applications

- **Medium-sized motors**
  Power window lifter, power seat, electric parking brake and valve actuator
- **Small motors**
  Mirror, door lock actuator, air conditioning damper actuator and head light

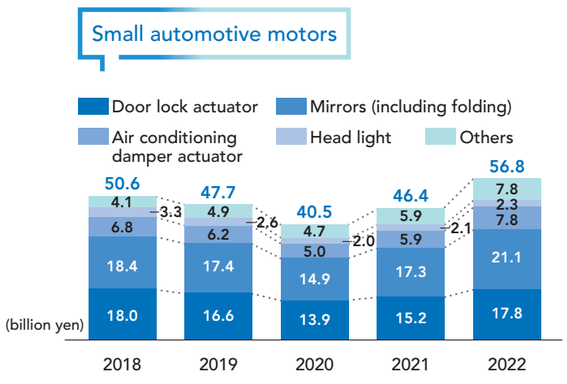
Main initiatives in 2022

Medium-sized automotive motors (power window lifter)	• Sales expansion to the fourth Japanese automobile manufacturer • Adoption of our products for EVs expanded due to their superior light weight and quietness
Medium-sized automotive motors (excluding power window lifter)	• Received orders for monitors for power seats from large Japanese and European customers. • Received orders for both units and motors for valve actuators for EVs from a major Japanese customer.
Small automotive motors	• Made progress in serving customers with new and existing products as new applications and markets such as electric vehicles gathered momentum.

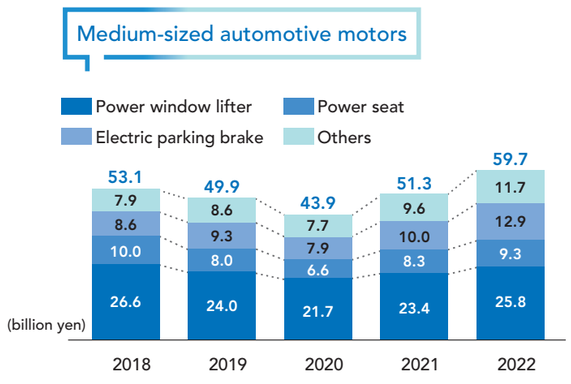
Sales trends by main applications (2018-2022)

Sales dropped due to sluggish automobile production volume chiefly in China in 2018 to 2019, and weak economic activities around the world and slowdown of the entire automobile market amid COVID-19 pandemic in 2020. From 2021 to 2022, supply chains remained in a state of turmoil, while price revisions and the weakening yen contributed to an increase in sales. We maintained a high market share in small automotive motors. We saw the market share growing in medium-sized automotive motors as they became adopted in more automobile models.

Small automotive motors



Medium-sized automotive motors



Priority activities in 2023

Medium-sized automotive motors (power window lifter)	• Start sales to the fifth Japanese automobile manufacturer and steadily widen the ranges of models of existing customers to which our motors are introduced • Develop new-generation motors for power window lifters and take steps to win orders
Medium-sized automotive motors (excluding power window lifter)	• Start mass production of new products for power seats for large Japanese customers, make preparations for mass production for large European customers and secure new orders • For motors for valve actuators for EVs, prepare for mass manufacturing for major Japanese and European customers and receive new orders from a major European customer. • Develop new applications for EVs, which are in a period of technological transformation, by combining unitization, small brushless motors and control technologies.
Small automotive motors	• Expand in markets where we have a large share of the market by enhancing existing product lines and launching products incorporating new differentiating technologies. • Gain more orders regarding new applications including EV charging cable locks and flush door handles

Expanding business in the area of motors for EV battery cooling applications

Orders were newly received for motors for EV battery cooling applications from a major Japanese customer in recognition of our technologies for creating compact, lightweight motors, our ability to provide units and our technological capabilities for motor control.

Changes in EV battery cooling systems

- It is becoming increasingly important to proactively control the temperature of driving batteries, which deteriorate more quickly at high temperatures, by replacing the previous air-cooled system with a water-cooled system to extend the service life of the batteries.
- Various cooling systems are expected to be used widely. Vehicles will range from models with one or two integrated valve actuators that are highly functional and capable of switching between multiple flow paths, to models equipped with simple-structured valve actuators mounted in multiple places. We provide valve actuators for both systems.

Our strengths in motors for valve actuator

- As an independent, specialized manufacturer of motors, we are responding to inquiries about motors for valve actuator from various carmakers.
- With specialized control technologies for motors and the ability to provide units for motors, we provide optimal units for motors for valve actuator which are necessary for ensuring a high level of position control.

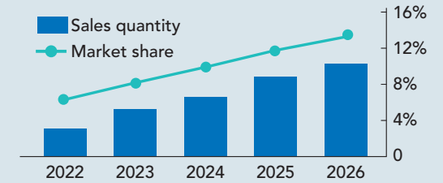
Valve actuators mounted on cooling systems

A highly functional, integrated valve actuator switches between various flow paths.

Multiple simple-structured valve actuators are used to switch between flow paths.

We provide valve actuators for both systems.

Forecast sales volume and market share of valve actuator motors



Opportunities and risks

Opportunities

- Increase in demand for compact and high precision motors helpful to energy conservation and noise reduction
- Increase in opportunities for stepping into new markets, including coolant valve actuators, following the shift of automobiles to electric vehicles
- Increase in the number of motors per automobile and in opportunities to enter new domains helpful to passengers' comfort amid the trend towards autonomous driving

Risks

- Impact of rising procurement prices of raw materials and parts on the earnings structure
- Impact of supply shortages of semiconductors and other parts
- Impact of delay in recovery of automobile production

Business Overview

Life & Industrial Products

Performance in 2022

Net sales: **39.6** billion yen

Sales volume: **353** million pieces

Main applications

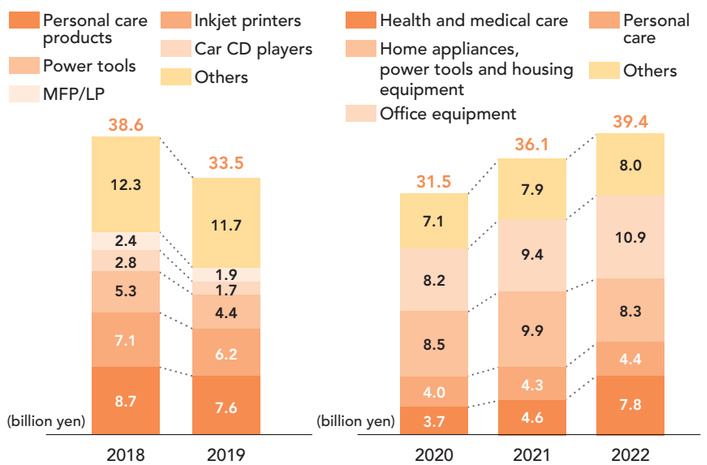
- Home appliances, power tools and housing equipment
  Vacuum cleaners and electric locks
- Office equipment
  Inkjet printers and multifunction printers
- Health and medical care
  Toothbrushes, artificial respirators and surgical tools
- Personal care
  Hair dryers and electric shavers
- Light electric vehicles
  AGV and AMR
- Collaborative robots

Main initiatives in 2022

- Expanded the lineup of brushless motors for light electric vehicles. Secured new orders for motors for AGV, AMR and motors for mobility and started mass manufacturing and sales of motors for stairway elevators.
- Commenced mass manufacturing and sales by adding a lineup of hollow brushless motors for collaborative robot applications.
- Progress was made in the PMI of Mabuchi Electromag. Expanded business in motors for medical applications and secured orders for high-speed brushless motors for power tools.

Sales trends by main applications (2018-2022)

From 2018 through 2020, we had a policy of focusing on profitability and selectively received orders for limited applications. With this impact and also an impact of COVID-19 pandemic for 2020, sales declined. In 2021, sales grew mainly in office equipment, the market for which was on a downward trend from a medium- and long-term perspective, as well as in personal care products with the help of stay-home demand under COVID-19 pandemic. For health and medical applications, sales surged following brisk sales of toothbrushes in the middle- to high-end range and the inclusion of sales of Mabuchi Electromag, which became a subsidiary. In 2022, price revisions and the weak yen produced a positive effect.



* New categories of the main applications for disclosure apply from 2020 onwards.
* AGV: automated guided vehicles AMR: autonomous mobile robots MFP: multifunction printers LP: laser printers

Priority activities in 2023

- Increase sales of brushless motors for light electric vehicles and collaborative robots further.
- Drive the development of new motors for medical applications in addition to increasing sales of the existing lineup of products for medical applications, including motors manufactured by Mabuchi Electromag.
- Expand sales of motors manufactured by Mabuchi Electromag to areas other than medical care.
- Reorganize Oken Seiko (currently, Mabuchi Oken) as a subsidiary and implement PMI.
- Push forward with the development of driving units for conveyors for industrial applications.

Making a leading company in rolling pumps into a subsidiary

In March 2023, we made Oken Seiko (currently, Mabuchi Oken) a subsidiary.
Taking advantage of the company's strengths in small pumps, we will enhance our ability to provide units and ability to propose solutions in the 3 M fields.

Features and strengths of Mabuchi Oken

1. High-level technological capabilities related to small pumps
   Unique technologies that enable long service life, low vibration and quiet operation
2. Customer base for products for medical applications, such as sphygmomanometers
   Stable trade relationships with major blue-chip customers in Japan and other countries
3. Domestic and overseas production systems with established track records
   Overseas production bases with lengthy track records and customer base

Objectives of reorganization into subsidiary

Enhancing our ability to provide units
- Standardizing unit options and providing them in various combinations to efficiently meet diverse needs
- Developing competitive units by pursuing optimal integrated design and production of motors and pumps

Expanding the 3 M fields
- Actively expand sales of small pumps chiefly in the 3 M fields with the use of our sales structure

Mobility
Lumbar support sensor cleaner

Medical
Medical sphygmomanometer

Efforts for medical equipment applications

Reorganized into a subsidiary in July 2021, Mabuchi Electromag has an advantage in the development and production of ultra-high-speed rotation, low-vibration and silent motors and sells motors chiefly for artificial respirators and dental treatment equipment. Harnessing the Mabuchi Group's sales resources and customer base, we carry out sales promotional activities for Mabuchi Electromag products around the world. In surgical operation equipment applications, brushless motors were newly adopted. In addition, we won new orders for brush motors for surgical drills and for surgical suturing instruments. Consequently, the post-merger integration is advancing. In the future, we will develop highly competitive products based on production expertise that achieves Mabuchi Motor's high quality and low costs in an effort to increase our market share.

Opportunities and risks

Opportunities

- Increase in demand after accelerated replacement with electric industrial equipment for reduced CO_2 emissions
- Increase in demand for smaller sizes, lower weight and higher efficiency in principal fields such as light electric vehicles, industrial equipment and medical treatment
- Increase in demand for motors for robots as a solution to the labor shortage

Risks

- Impact of rising procurement prices of raw materials and parts on the earnings structure
- Emergence of competitive low-cost manufacturers in China
- Impact of supply shortages of semiconductors and other parts