

# Machinery Business

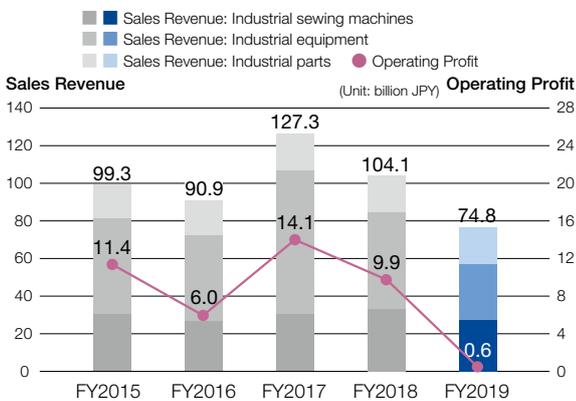
# Machinery

## Business Objectives

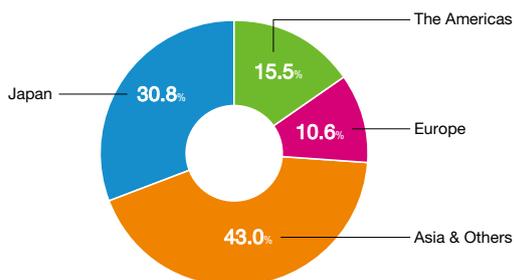
- **Industrial Sewing Machines:**  
Develop new products that accommodate customer needs and expand our customer base
- **Industrial Equipment:**  
Expand our customer base in the auto/general machine market by enhancing the product lineup and further reinforcing sales/service platforms
- **Industrial Parts:**  
Contribute to strengthening of the industrial area by increasing revenue of the reducer and high-precision gear businesses

## FY2019 Operational Highlights

### Transition of Sales Revenue/Operating Profit



### Sales Revenue by Region



### Sales Revenue: 74.8 billion yen (-28.2% y/y)

#### Industrial Sewing Machines 27.6 billion yen (-15.3% y/y)

Despite continued growth in global demand for garment printers, sales revenue from industrial sewing machines overall decreased due to a cautious stance toward investment in industrial sewing machines and sluggish demand mainly in China and the rest of Asia.

#### Industrial Equipment 29.8 billion yen (-42.4% y/y)

Sales revenue from industrial equipment for auto/general machine-related industries overall decreased dramatically due to sluggish demand mainly in China and the rest of Asia, and an almost complete collapse of sales in the IT industry.

#### Industrial Parts 17.3 billion yen (-12.1% y/y)

Sales revenue from industrial parts decreased in Japan due to a slowdown in production activity, and increasing constraints on capital expenditure, in manufacturing industries overall, and overseas due to sluggish demand mainly in Asia.

### Business Segment Profit: 0.7 billion yen (-92.9% y/y) Operating Profit: 0.6 billion yen (-93.8% y/y)

Profits decreased dramatically due mainly to the decrease in sales revenue from industrial equipment.

### Industrial Sewing Machines

#### Brother's Strengths

In 2018, we launched the NEXIO BAS-360H and 365H programmable electronic pattern sewing machines employing Brother's unique bridge type mechanism\*. With their high-speed sewing capability and superior design accuracy, these machines have been receiving good reviews from companies manufacturing products like airbags and shoes. The GTX, a new garment printer of Brother, achieves high printing speed and high-resolution printing quality by employing the inkjet technologies Brother has accumulated through the development of office printers.

\* A mechanism for transverse movement of the needle (head unit), which enables a smaller footprint for installation

### Industrial Equipment

#### Brother's Strength

Brother's industrial equipment was developed through our manufacturing of machine tools needed to make key parts of sewing machines in-house. In 1985, Brother released the CNC Tapping Center.

It has been well received by our customers because it is compact in size yet offers high productivity and environmental performance for processing parts needed by the automobile and IT industries.

After the launch of our next-generation machine tool brand, SPEEDIO, in 2013, we have released models that can process bigger parts, models with lathe turning functionality, and peripheral devices for SPEEDIO machines, such as the optional BV7-870 loading system for automated transfer and delivery of processed parts. In this way, we are expanding our customer base.

### Industrial Parts

#### Brother's Strength

In 2013, Brother acquired Nissei Corporation, which has a high market share for reducers and high-precision gears in Japan, as its consolidated subsidiary, and entered into the industrial parts business, which can give us opportunities to provide high added value for customers.

As for gear motors, our core products of reducers, we offer an extensive product lineup, and have the ability to deliver products within a short period of time and handle special order items flexibly and are responding to various customer demands. As for high-precision gears, we develop and manufacture products used for robots and machine tools mainly. By executing the entire process from product designing to manufacturing consistently, we create high-precision and high-quality products. Thus, our products have a high reputation in the market, especially for our cutting technology for bevel gears\*.

\*Cone-shaped gears that transmit motion between two intersecting axes

#### Market Trends and Brother's Business Strategies

- Develop automated products and strengthen proposal-making capabilities
- Expand the lineup of garment printers

With sluggish demand impacted by the economy, and escalating price competition in the market, Brother is leveraging its unique technologies to differentiate itself from others. While production costs are rising, we will continue bringing new products to market that meet increasing automation and labor-saving needs, we will strengthen our ability to make proposals, and we will help customers improve productivity. The garment printer market has been growing steadily.

We will expand our garment printer lineup to meet the needs of high-PV users.

#### Market Trend and Brother's Business Strategies

- Expand sales in the auto/general machine market and stabilize Brother's business foundation
- Enhance our product lineup and reinforce sales/service platforms

In the short term, automobile production volumes have fallen globally, and the global economy has stagnated, so it is possible that the market situation will not recover soon. However, in the medium- to long-term, we expect an increasing speed of adoption of labor-saving devices and automation, and expanding markets mainly in auto/general machine-related industries.

In such a market environment, we will continue to expand our product lineup, and develop products that meet labor-saving and automation needs, and products that will encourage faster replacement of large machine tools. We will also continue to invest, without impact from short-term business fluctuations, to strengthen our sales, marketing, and services as we expand our business mainly in the automobile market.

#### Market Trend and Brother's Business Strategies

- Enhance profitability of the core business (reducers, high-precision gears)
- Pursue synergy with other machinery businesses

In the reducer market in Japan, we expect increased sales of low-voltage gear motors and high-precision reducers in addition to solid sales of standard model gear motors. However, price competition is increasing as the market matures. Going forward, we will target high profits through expanded development and sales of high-precision, high-rigidity reducers and high-precision gears for robot manufacturers, which is a market expecting greater demand.

As for creation of synergy effects with other machinery businesses, we will strive to boost the competitive edge of our products in the industrial area through efforts such as provision of high-precision, high-rigidity reducers for industrial equipment and execution of product co-development within the group.

Main Product Lineup



Machine Tool



Industrial Sewing Machine



Garment Printer



Reducer



Gear

Solving Social Issues Through Business

Contributing to CO<sub>2</sub> emissions reduction and operational efficiency improvement



In factories, there are demands for both reduced environmental impacts, by reducing CO<sub>2</sub> emissions for example, and for increased productivity. The SPEEDIO series of compact machining centers employ a range of power-saving technologies, including a power regeneration system that converts kinetic energy into electrical energy during deceleration. Compared to general machining centers, the series has tremendously low power consumption that contributes to large reductions in CO<sub>2</sub> emissions. With both turning<sup>\*1</sup> and milling<sup>\*2</sup> functionality in a single compact machining center enabling two types of processing, there is no need to change tools between the two processes, which contributes to greater work efficiency. Also, the optional loading system for SPEEDIO machines automates the transfer and delivery of processed parts, which reduces simple tasks for machine operators and leaves them free to concentrate on the more complicated tasks.

The SPEEDIO series reduces CO<sub>2</sub> emissions, which provides social value that contributes directly to Goal 13 (climate action) of the SDGs. It also enables high productivity and machine operators can be moved to more complicated stations, which contributes to Goal 8 (decent work and economic growth) of the SDGs. Going forward, Brother will continue to help solve social issues with the SPEEDIO series.

\*1 A machining process in which a cutting tool cuts a rotating workpiece  
 \*2 A machining process in which a rotating cutter, such as a drill, cuts a fixed workpiece

