Financial Capital

ROE
18.3%

Net sales
448.5
billion JPY

Operating
income ratio
12.1%

CFO Interview

We will realize sustainable growth by maintaining and improving our high levels of ROE through an appropriate capital policy and by boosting social contribution through our business initiatives.

Representative Director, Senior Managing Executive Officer
Shuji Murakami

What does the Yaskawa Group consider to be the most important management indicator in realizing the long-term business plan, Vision 2025?

Murakami: We are pushing forward initiatives for realizing numerical targets set forth in our Vision 2025 (FY2016-2025), in three steps (our mid-term business plan). In our current mid-term business plan "Dash 25" (FY2016-2018), which is the first step for that, we have been conducting business under the policy of "establishing a high-profit corporate structure," and have been partial to operating profit ratios, and conducted operations to improve profitability. We have been able to achieve our targeted operating income a year ahead of schedule by effectively pushing forward the measures that we had prepared in the previous mid-term business plan against a backdrop of a favorable market environment. The indicator that we view with the greatest importance in our business is growth in our operating profit in the mid- to long-term, and we would like to promptly achieve our targeted 100 billion yen in operating profit as set forth in our Vision 2025 by improving this in a continuous manner.

The Group's Principle of Management is "to leverage the pursuit of its business to contribute to the advancement of society and the well-being of humankind". Furthermore, as one of core tenets to realize this, it also advocates "to boost management and operation efficiency and achieve the returns necessary for the vitality and growth of the company".

Murakami: For our company to realize our business philosophy, it is necessary for us to contribute to society in a unique manner and to continue to exist. By obtaining revenue in accordance with that contribution, by reinvesting that, we will be able to make even greater contributions. We make it a major policy at our company to distribute the revenue that we have earned in three directions, to "invest in the future of the company (so we may make even greater contributions)," "offer appropriate returns to our shareholders" who support that, and "offer appropriate distributions to our employees" who support our corporate activities. Even if we produce high levels of profit, there is no meaning for our company to continue to exist under this corporate philosophy if we only pursue revenue for certain individuals and do not contribute to society.

As to our customers and our partners, the most important thing is to maintain good relationships that will improve mutual value through business, not through lowering prices, and that is the essential condition for continuing our business eternally. I believe that is what "the returns necessary for the vitality and growth of the company" refers to.

The Company bought back the own shares for the first time this fiscal year. Tell us about the background for this in correlation to your policy to distribute revenue in three directions.

Murakami: We achieved the objectives identified in Dash 25 a year ahead of schedule in FY2017, and the improvement in our profit ratio exceeded our initial expectations. This achievement led us to consider additional measures in the three directions I mentioned earlier; "investment in the future of the company," "returns to our shareholders," and "distributions to our employees" since it had created greater cash flow than what we expected. To be specific, we planned 10 billion yen to set up "Yaskawa Technology Center (tentative)" that we had announced in April as an investment for the future of the company, in addition to a total of two million shares as returns to our shareholders, worth more than nine billion yen of stock repurchases. As distributions to our employees, to increase the link with the Company profit, we included an additional bonus in FY2018 budget at around three billion yen.

Will the distribution of surplus cash continue?

Murakami: In Vision 2025, we are anticipating dividend payout ratio at 30% plus extras (30% by 2020) and capital investment (including M&As) at slightly over 6% of sales, however, our financial structure at present has become even stronger and we are in a virtually debt-free state in net cash*1. As profit ratios continue to further improve, there are possibilities of surplus cash being generated, even if we implement the dividends and the capital investment that I explained earlier. We will continue

to build an optimum capital structure to realize high levels of ROE by taking more aggressive initiatives in our growth investing corresponding to the performance of our company, improving total return ratios*2 through such measures as repurchases of our own shares, as well as considering and implementing appropriate profit distributions with an awareness of attractive returns for employees to secure the best human resources.

*1: A status where the values for cash and cash equivalents (savings, securities held over short terms) excluding interest-bearing debts (loans, company bonds) are in the black on a balance sheet.

*2: Ratio of the sum of dividends and stock repurchases divided by net profit.

Please tell us about your thoughts on "investing in the future of the company".

Murakami: We are planning capital investment in FY2018 at around 30 billion yen. That's more than double our budget for depreciation and amortization. If we invest within the size of depreciation we will maintain the status quo toward the future of our company, but the reason why we're investing at much greater amounts is that the areas of mechatronics, where we have our pivotal footing, as well as clean energy, which is a new market, is expected to continue to expand, and we expect that there is a lot of room for growth to further increase our revenue in the future. We intend to create returns that respond to the expectations of our shareholders by continuing to make aggressive investments in the time to come.

Please tell us about your thoughts on capital efficiency.

Murakami: In Vision 2025, our company sets its ROE target at above 13%. On the other hand, as to our weighted average cost of capital, we see this at around 9% and are always anticipating shareholders' equity costs at 10% while aiming to create greater profit. As a result of improved profit ratios in recent years, our ROE exceeded the target in Vision 2025, and stood at 18.3% in FY 2017, with significant growth.

On the other hand, there is also a need to consider returns on shareholder capital based on market prices and the current PBR is around five times, with extremely high expectations for growth woven into our stock prices. I think that we do need to speed up the deployment of our measures for the Vision 2025 and maintain and improve the rate of our earnings growth in a continuous manner.

As for the capital management, we are always aiming for efficient management to minimize costs related to foreign exchange and funding by optimizing the capital structure and the fund movements among Group companies as well as promoting local production in the regions where demand is increasing and controlling inventory levels in an appropriate manner.

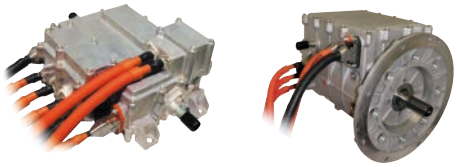
We will also steadily move forward with the development of appropriate allocations of management resources and our business portfolio for a stable earnings model that does not rely excessively on capital investment in specific industries.

Lastly, please offer a message to your stakeholders.

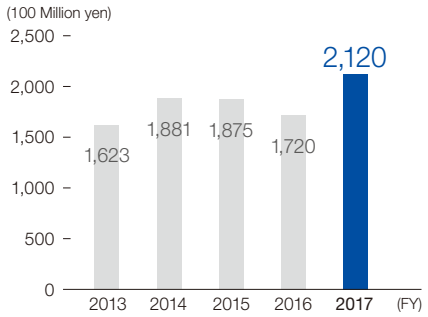
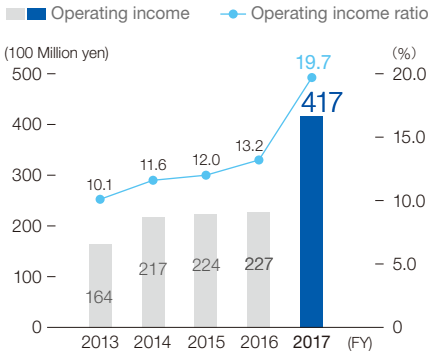
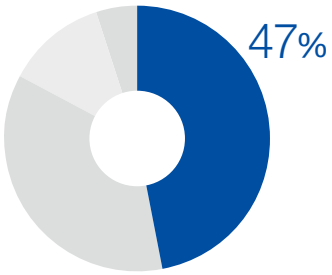
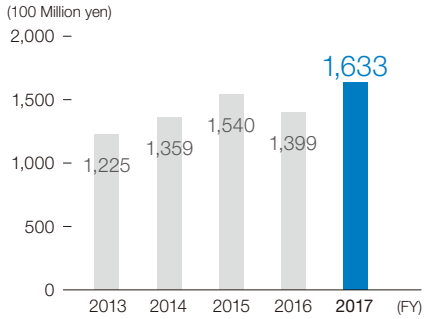
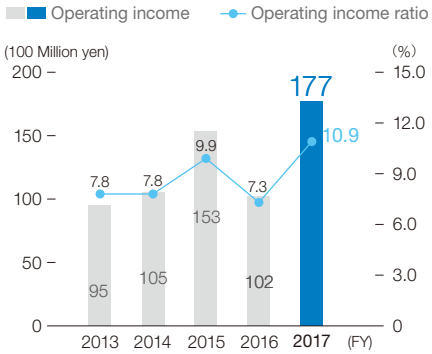
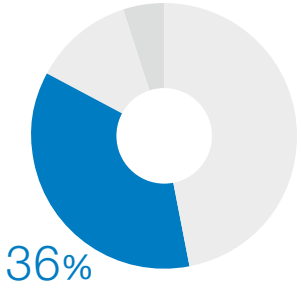
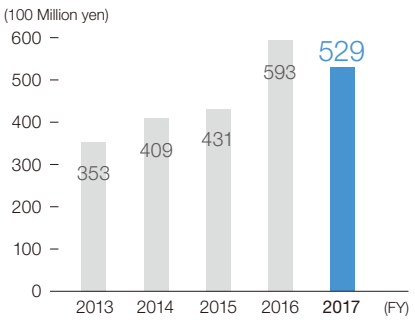
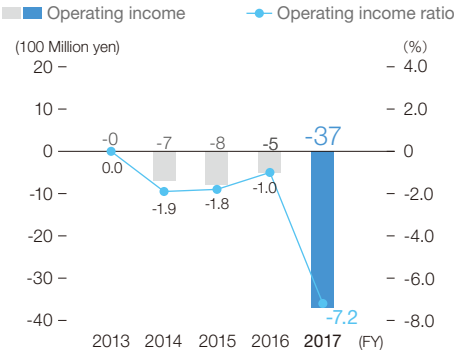
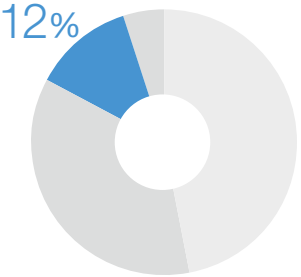
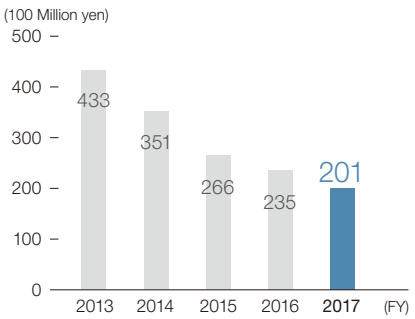
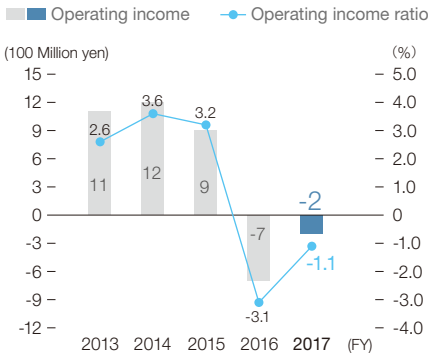
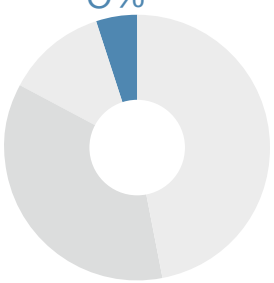
Murakami: Through our business, our company contributes in resolving social issues such as the shortage of manpower due to a declining birthrate and an aging population and issues of a global scale such as global warming. We also move forward a wide range of initiatives aimed at improving people's quality of life by offering value through leveraging our technologies. While there are new businesses that have yet to reach profitability, we will continue to realize profitable growth through continuous selection and concentration and aim to become a company that is able to achieve sustainable growth and can make more contributions to society and offer more returns to its stakeholders.

At a Glance

The Yaskawa Group deploys the technology and knowhow of the highest global standards to its products and services through business activities in the three core business segments of Motion Control, Robotics and System Engineering.

	Business Overview	Products
MOTION CONTROL ○ AC servo & controller business ○ Drives business	AC servos are incorporated in production equipment for electronic parts, semiconductor products, etc., that require high precision. AC drives are used in social infrastructure, such as HVAC, escalators and elevators, and contribute to energy-saving.	AC servo Σ-7series and machine controller MP3300   Yaskawa AC drive new series
ROBOTICS ○ Arc and spot welding robots ○ Painting robots ○ Handling robots ○ Clean/vacuum transfer robots for semiconductor and LCD-manufacturing equipment	The segment supplies vertical articulated robots as key products to contribute to the automation of welding, painting, assembly, transfer, etc., at production sites of automobile-related markets and various other fields.	 Arc-welding robot MOTOMAN-AR1730  Collaborative robot MOTOMAN-HC10DT  Robot controller YRC1000
SYSTEM ENGINEERING ○ Steel plant business ○ Social system business ○ Environment & Energy business ○ Industrial electronics business	The segment mainly targets the market of various large-scale plant facilities, such as steel plants and water treatment plants, as well as large-scale cranes for which stable operation is essential. It also offers electric products for large-scale wind turbines, solar generation and marine application in environment & energy business.	 Medium-voltage matrix converter  PV inverter  Generator and converter for large-scale wind turbines
OTHER ○ Motor drive system for electric vehicles ○ IT-related services ○ Logistics	The segment covers information-related businesses and businesses such as logistics services, etc.	 Motor drive system for electric vehicles

* · Revisions were made to the division of businesses segments starting FY2017. The PV inverter business, which was previously included in Motion Control, is included in System Engineering. Value and profit ratios of each segment for FY2016 reflect this change. The change is not applied to values and profit ratios for the period up until FY2015.
· The Company changed its accounting period starting FY2017 from March 20 to the last day of February. As a transitional year for this change, FY2017 was from March 21, 2017 to February 28, 2018.

	Net Sales*	Operating Income (Loss)*	Percentage of FY2017 Net Sales
			
			
			
			

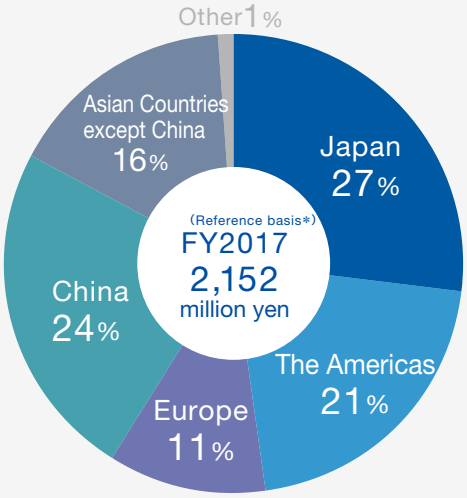
Motion Control

AC Servo & Controller Business

Enhancing machine performance as major components incorporated in production equipment

Executive Officer
General Manager, Motion Control Div.
Akira Kumagae

Sales Breakdown by Region



* • Reference-basis figure based on an assumption that the accounting period remained unchanged (from March 21, 2017 to March 20, 2018)
• Total figure for the Motion Control segment, which is comprised of AC Servo & Controller business and Drives business

Strengths of Our Business and Differentiation

- In 1958, Yaskawa was the first in the world to develop the Minertia Motor, which became the original form of servo motors today. The company continues to maintain the best performance and product quality in the world as well as top global market share.
- With business deployments founded on sturdy roots in each of its global regions, Yaskawa maintains solid relationships of trust with top machinery manufacturers. Together with its customers, Yaskawa always pursues state of the art technologies as it contributes to the development of leading-edge industries of each era through the advancements and the high standards of performance of its equipment.
- Yaskawa conducts in-house development and manufacturing of encoders, motors, amplifiers, and controllers which are necessary for servo drives.
- The company optimizes the procurement of parts and production within demand areas for highly competitive Q (quality), C (cost), and D (delivery).

Analysis of Business Environment

Opportunity

- Although some fluctuation may be seen based on capital investment cycles in smartphone-related demand, which had been a key factor in pushing performance in FY2017, the demand is expected to remain strong. In addition to steady capital investment for semiconductors demand, the demand is diversifying to automated manufacturing facilities for items such as household appliances and communication devices, as well as manufacturing equipment for lithium ion batteries and LEDs, the company anticipates continued market growth in the time to come.
- Through significant increases in the volume of data communication due to shifts in communication standards from 4G to 5G, moves for various things to be linked online with IoT will further accelerate. Accordingly, because there will be a progress in digitalization and boosted performance of devices, and increased performance, smaller sizes, and diversification of components to be embedded within these devices, increases in capital investment for manufacturing these devices will tie in to major opportunities for growth for Yaskawa.
- The desire for more convenience and more intelligence in the process of manufacturing is becoming stronger than ever before. One such example is improved productivity through the use of AI. To make this possible, the analysis of data pertaining to the operation status of AC servos which are built into manufacturing equipment will be indispensable. As Yaskawa products offer not only the best quality and performance in the world but also enable a diverse array of data

to be obtained, such as data on the status of operations, we believe that the areas for the company to flourish will become even greater in the next generation of manufacturing.

Business Risks and Countermeasures

- While demand continues to rapidly increase on one hand, risks are also present on the other hand of a shortage of parts. Yaskawa makes efforts to maintain and improve its relationship of trust with its partners and is committed in spreading out its procurement sources through local procurement while ensuring the stable attainment of parts.
- As for the area of AC servo drives, while emerging manufacturers are beginning to appear on the scene, mainly in the Chinese market, Yaskawa continues to maintain number one global market share by maintaining an edge in product quality and in the technical aspect and by maintaining cost competitiveness through local production. In addition to these strengths, it maximizes its character as a robotics manufacturer that offers not only servo drives as single units but also proposals which include expertise on robots to further differentiate itself in the market.
- Initiatives are on the rise for collaborations that go beyond the frameworks of individual companies in aiming for the next generation of manufacturing. In response to these moves, Yaskawa will maintain an open position that is not partial to host systems in order to push forward collaborations with all types of companies for building win-win relationships.
- The emergence of an actuator that offers performance which can surpass the performance of motors and has the potential to replace motors is a risk for our company. While no such technologies have been confirmed to date, we will continue to pay close attention in our monitoring activities.

Results and Challenges for Mid-Term Business Plan Dash 25 (FY2016-FY2018)

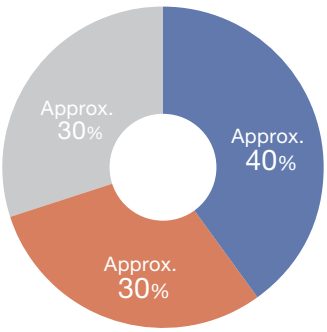
Results

- Major improvements have been posted in our income ratios due to increased switchover ratio to our flagship Σ-7 Series model and accelerated production in demand areas in China.
- Major increases have been achieved for Yaskawa's market share in the Chinese market on the back of its highly competitive products (the Σ-7 Series) and strong capacity for local performance from the perspectives of development and sales.

Challenges

- There is a need to speed up the process between development and mass production that matches the global increase in demand and the speed of changes within markets and to simultaneously make further improvements in work efficiency.
- Planned launches for initiatives such as the leveraging of IoT and AI are necessary in order to lead the revolutionary industrial automation. We will first need to verify the latest manufacturing technologies at Yaskawa Solution Factory (tentative name), our new plant in our Iruma site, which will begin operations in the first half of FY2018, and to tie the verified technologies in to products and to proposals for our customers in a concrete manner.

Sales Breakdown by Application (FY2017 Results)



- Electronics-related industries including semiconductor, FPD and electronic components
- Machinery-related industries including machine tool, metal processing, press machine and robots
- Other (Packaging, textile, injection molding, etc.)

TOPICS: Resolving Social Issues through Business

Needs for protecting the global environment and for improved working environments in the manufacturing scene have led to further focus on saving energy, cleaning up the environment, and reductions in pollutants.

Needs are rising for switches from conventional hydraulic operations to motor drives as clean sources of energy which can cope with needs for high performance in the area of large machinery as well, for example press machines and injection molding machines used as manufacturing equipment for automobiles.

In order to respond to such needs, Yaskawa will commercialize ultra-high-capacity servo drives which are energy-efficient and offer high rates of performance.

An ultra-high-capacity servo motor

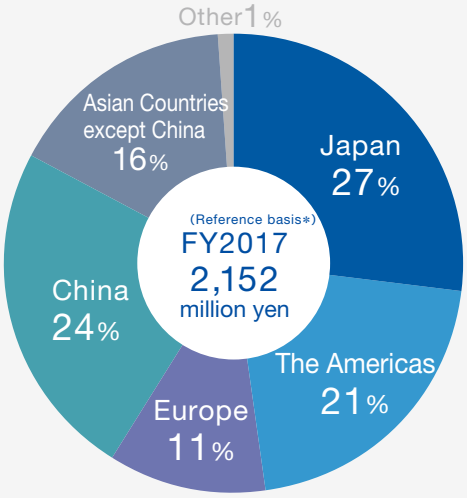
Motion Control

Drives Business

Contributing to sustainable development of society and industry by realizing energy-saving and higher performance of machinery through optimum motor control

Executive Officer
General Manager, Drives Div.
Nobuaki Jinnouchi

Sales Breakdown by Region



* • Reference-basis figure based on an assumption that the accounting period remained unchanged (from March 21, 2017 to March 20, 2018)
• Total figure for the Motion Control segment, which is comprised of AC Servo & Controller business and Drives business

Strengths of Our Business and Differentiation

- Ever since we released the first transistor AC drive in the world in 1974, we have always sought to commercialize the world's first technologies ahead of our competitors. Our efforts have contributed to optimizing motor control and improving energy efficiency.
- As a group of AC drive specialists, we utilize the application know-how we have gathered over the years to provide solutions for our customers' production sites. This enables maximum machine performance, which led us to obtain top market shares in each global region.
- We offer a wide selection of products from general-purpose models to dedicated models for specific applications in order to meet a broad spectrum of our customers' needs.
- We have expanded our production to five plants around the world. By reducing the amount of work hours, encouraging automation, and increasing the local procurement rate for parts, we have managed to keep our products highly competitive in terms of their performance and prices.

Analysis of Business Environment

Opportunity

- AC drives are utilized for a wide variety of purposes. These may include infrastructure investments such as cranes, elevators, fans, pumps, and air-conditioning systems for buildings, or equipment investments such as textile machinery, metal processing machinery, packaging machinery, and conveyors. We expect a stable market expansion linked to economic growth in various regions.
- The recoveries in the oil & gas-related demand in the US and infrastructure investment in China led to good sales results in FY2017. These markets are expected to maintain a high level of growth in FY2018 as well. In addition, the 2020 Tokyo Olympics in Japan are expected to spur the demand for air-conditioning equipment at hotels and commercial facilities.
- The demand for environmentally friendly electrical devices is increasing, and countries around the globe have been implementing energy conservation regulations such as the Top Runner Program* for motors. As a result, the use of AC drives is increasing rapidly on a global scale as a measure to adapt to these circumstances. However, even in Japan, where the ratio of industrial motors with AC drives is said to be relatively high, the numbers remain around 25%, which gives us a lot of room for growth in the future.

* This is a system that defines the reference target values and target fiscal year for the energy consumption efficiency of specific devices in order to promote efforts to increase energy consumption efficiency with a focus on devices.

Business Risks and Countermeasures

- In some markets, especially those in emerging economies, an increasing number of customers are looking for cheaper AC drives. To respond to such demands, we seek to find the right

balance between functionality, performance, and cost according to the needs of our customers in various regions. We provide products with an ideal cost-performance ratio for each region. In addition, we strive to reduce costs even further by optimizing our supply chain and other measures. At the same time, we seek to enhance our cost reduction proposals for the entire systems, which include peripheral devices.

- Emerging players such as the Chinese manufacturers require special attention. Their price competitiveness based on government subsidies and product quality improvement represent future risks for us. Therefore, we need to use the application know-how we have gathered over the years with the goal of improving our ability to provide solution proposals for production site issues of our customers. In this way, we aim at differentiate ourselves technologically.
- Relying on external suppliers of essential AC drive parts rather than insourcing those parts represents a risk for our company. We encourage measures to ensure such parts can be supplied in a stable manner.
- Some of our customers are starting to insource AC drives instead of purchasing them, which has been made possible by more sophisticated semiconductor devices. We focus on areas that require high technological capabilities and are characterized by relatively high costs of insourcing. Our goal is to appeal to our customers by emphasizing the potential to reduce costs by utilizing our products.

Results and Challenges for Mid-Term Business Plan Dash 25 (FY2016-FY2018)

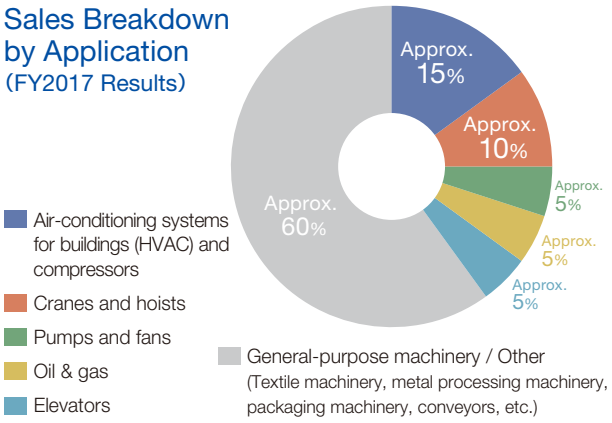
Results

- We managed to capture the business opportunities resulting from the recovery of our core markets, including oil&gas industry in the US and infrastructure market in China. This allowed us to significantly improve our performance in FY2017.
- Our sales style is based on offering technological proposals to solve our customers' issues by using door openers, including the GA700, which is the leading product in the new Yaskawa AC drive series, and the U1000 matrix converter, which really sets us apart from our competitors. We use this strategy to expand to new markets with a focus on machinery manufacturers. In order to link as many inquiries as possible to orders, we seek to offer our customers new value, which includes functions to monitor the operating status of the AC drive itself, functions to predict machinery or equipment failures, and functions to detect equipment malfunctions.
- In the Chinese market, where price competition is particularly intense, we have focused our efforts on promoting products for specific applications according to our customers' needs. We have sought to improve our price competitiveness to gain some competitive advantage over our rivals.

Challenges

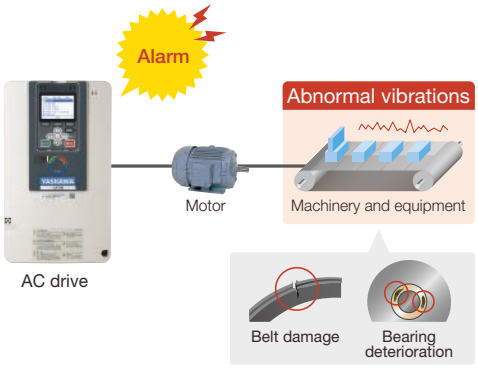
- We need to speed up our product development processes. We are reanalyzing the technological resources needed to solve any production site issues our customers are faced with and the resources we need to develop new products. We are also going to properly allocate those resources.
- One of the advantages of our AC drives lies in their capability of being connected to a large variety of industrial motors. However, we are still not able to combine our AC drives with a specific type of motor to create a product that truly stands out. In order to tackle this issue, we are going to maximize the synergistic effects inside the Yaskawa Group in order to increase the added value of motors and AC drives used in sets.

Sales Breakdown by Application (FY2017 Results)



TOPICS: Resolving Social Issues through Business

In recent years, the issue of workforce shortages in industrialized economies has exacerbated the need for sophisticated production systems and automation. As a result, the failure prediction function is now considered to be an essential new role of every AC drive. This function allows the AC drive to detect any abnormalities in the machinery or equipment on a production line and trigger an alarm before a malfunction occurs. The application scope of this function is expanding, for example, to detect clogged filters and deteriorated belts or bearings in conveying machinery by AC drives alone. Our AC drives are not only designed to make motor control more energy-efficient but to increase productivity by predicting malfunctions in machinery and equipment.

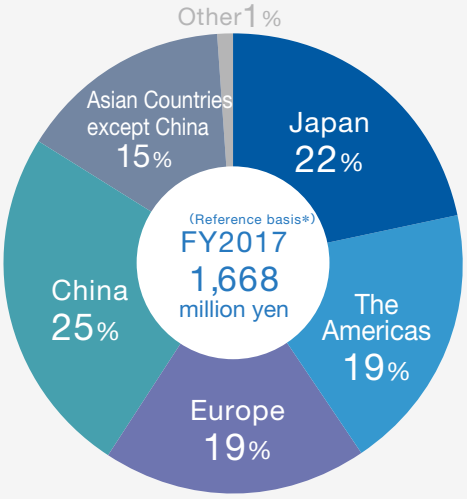


Robotics

Answering expanding automation needs of production sites to open up new opportunities of use

Executive Officer
General Manager, Robotics Div.
Masahiro Ogawa

Sales Breakdown by Region



*Reference-basis figure based on an assumption that the accounting period remained unchanged (from March 21, 2017 to March 20, 2018)

Strengths of Our Business and Differentiation

- In 1977, we developed the first all-electric articulated robot in Japan called "MOTOMAN-L10." Later on, we became one of the leading manufacturers of industrial robots, and have contributed to automating various fields of industry.
- Furthermore, our servo motor business boasts the largest market share and the most advanced technologies in the world. By insourcing our servo motors, which represent the most crucial performance component in robots, we have attained competitive advantage in the performance of our robots and reduced production costs.
- We offer the most diverse product lineup in the world, including robots for automotive industry, handling robots for general industrial fields, cleanroom robots for LCDs and semiconductors, and collaborative robots. These products allow us to meet a wide range of industrial automation needs.
- We are seeking to expand our operations to new markets in cooperation with the most prominent local manufacturers in various fields with a focus on China, where the demand continues to grow. In particular, we are seeking to expand our business by responding to a growing need for automation on production and assembly lines for home appliances and smartphones.

Analysis of Business Environment

Opportunity

- In the field of automotive industry, investment growth and advancement of production technologies associated with the expansion of EV (electric vehicle) production represent great business opportunities for our company. In addition, there are now more opportunities to utilize robots in areas where automation has not developed yet, such as assembly processes or conveying operations between work processes.
- Workforce shortages have become a global issue. The problem of understaffed production sites has been exacerbated by the current situation, and a widespread introduction of robots to production lines currently seems like a viable solution. In Japan, the market for ready-made meals such as production of meal boxes and similar fields of industry that used to rely on human workforce are trying to cope with this situation by stepping up automation efforts.
- Application of robots are expected in the biomedical fields including the medical and pharmaceutical industries. Application of robots are steadily expanding into new markets.
- In addition to conventional automation technologies, the utilization of digital data at production sites has become even more important for creating smart factories and improving productivity. Furthermore, the possibilities to utilize IoT and

AI technologies are being explored through collaborations based on open innovation. As a result, business schemes are undergoing significant changes, which may lead to new business opportunities. In addition to robots, production sites are also equipped with manufacturing devices and processes that include our servo motors. We believe we can further expand our business operations in the future with our special capability to create solutions for our customers by utilizing the data from those devices and processes.

Business Risks and Countermeasures

- One of the crucial components in our robots is a speed reducer that we obtain from particular suppliers. As the global demand for robots grows, we are aware that the supply of components might be at risk. We are going to utilize our special servo motor technologies to further improve their performance as joint drive modules. In addition, we will strive to build a stable supply chain by expanding our seed technologies.
- The rapidly increasing demand for robots may put a strain on the supply. In addition to enhancing the equipment at our plants in Japan, we are also expanding our plants in China and building a new plant in Europe. We are actively seeking to invest in equipment in order to expand our production capabilities. Our goal is to maximize our production efficiency by optimizing our inventory and implementing seamless production.
- There is a risk of local robot manufacturers becoming the dominant force in the rapidly expanding Chinese robot market. We are going to provide local robot manufacturers with our controllers and servo motors, which represent the core technologies in robots. At the same time, we will seek to cooperate with local robot manufacturers in our business operations to share the market with them, ensure growth, and respond to the market demand.

Results and Challenges for Mid-Term Business Plan Dash 25 (FY2016-FY2018)

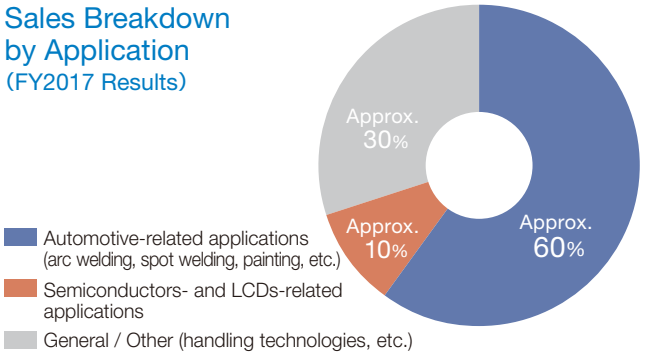
Results

- We have launched the YRC1000 global standard robot controller, which is compatible with various voltages and safety standards around the world. This controller enables even more accurate and faster movements than the previous models. We have also updated our robot series and added a brand new product lineup in order to improve the compatibility of our products with various types of production line structures.
- We have launched the MOTOMAN-HC10 collaborative robot. Safety fences, which used to be mandatory for the installation of conventional robot models, are no longer necessary. The new model is therefore easier to install and suitable for a wider range of purposes.

Challenges

- We need to find a proper way to respond to a growing market demand, which is linked to a rapid market expansion. We also need to increase our sales volume by further increasing our market share. Furthermore, we are going to implement a number of measures to materialize the i³-Mechatronics concept and increase our sales volume. In addition, we will strive to increase our profitability by improving our production efficiency.

Sales Breakdown by Application (FY2017 Results)



TOPICS: Resolving Social Issues through Business

The new YRC1000 robot controller is faster and more accurate than previous models. It is also about 50% smaller and significantly more compact to reduce the amount of space required for production equipment. In addition, robots with a maximum payload of more than 50 kg are equipped with a "power supply regeneration function," which returns the energy generated when the motor decelerates to the power supply. This function serves to reduce energy consumption* by utilizing power in an effective manner. Power supply regeneration efficiency is particularly high in large handling robots, which can significantly reduce energy consumption.

*: The degree to which energy consumption can be reduced varies according to the robot type, its purpose of use, and operating conditions at the customer's production site.

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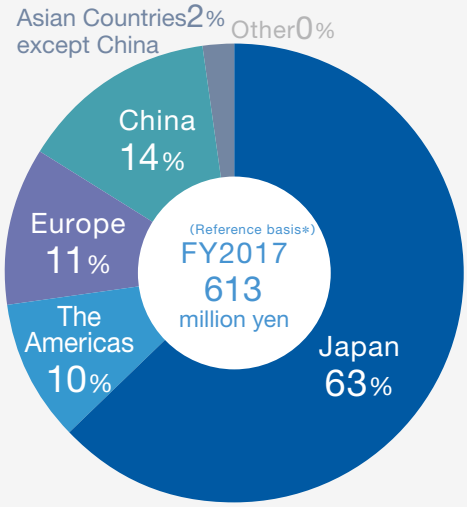
Hiroyuki Ougi

Sales Breakdown by Region



*Reference-basis figure based on an assumption that the accounting period remained unchanged (from March 21, 2017 to March 20, 2018)

Strengths of Our Business and Differentiation

- In our steel plant business, we provide sophisticated systems with our unique drive technologies and a high level of reliability based on years of experience. We participate in projects already at the equipment planning stage, and provide thorough support throughout the product life cycle, which includes offering technological proposals for improving efficiency and providing after-sales services. As a result, our products are now installed in all blast furnaces that are currently in operation in Japan. This demonstrates how much our customers trust us.
- In our social system business, we provide systems for water and sewer networks and other infrastructure facilities. We provide labor-saving solutions that utilize AI technologies to optimize the water cycle*, reduce energy consumption, prevent disasters, and solve other issues. These services have enjoyed a very positive reception among our customers.
- Our environment and energy business focuses on providing solutions for issues related to global environment and energy. We are seeking to expand our business operations related to large-scale wind turbines and solar power generation through our subsidiaries in Finland and the US, which we acquired in 2014, since those two countries represent the largest markets for these services. In addition, we provide high-quality products that reduce costs in total systems in order to offer solutions for large-capacity facilities that have emerged as a result of lower power generation costs in the field of renewable energy sources.

* This is a process during which water moves from oceans and other reservoirs through evaporation, precipitation, downward flow, or infiltration. The water mainly circulates to river basins as fog, clouds, surface water, or groundwater.

Analysis of Business Environment

Opportunity

- The customers we do business with in our steel plant and social system businesses require a high level of service to implement labor-saving measures and maximize efficiency. We believe the latest AI and IoT technologies we use can help us further increase the demand for the solutions our company provides in the future.
- In our environment and energy business, the capacity of power generation equipment is increasing. We are planning to increase our market share by leveraging our high-capacity products, including generators and converters for large-scale wind turbines and PV inverters for solar power generation.
- As a result of the efforts to fight global warming, the ratio of power obtained from natural energy sources (wind and solar) is expected to rise from 5% in 2016 to at least 20% in 2040 on a global scale. In addition, since energy policies in various coun-

tries around the world, including Taiwan and Korea, are moving away from nuclear and coal power, the demand for wind and solar power generation is expected to increase in the future.

Business Risks and Countermeasures

- As power generation costs for renewable energy sources are decreasing, there is a risk that more and more customers will start looking for cheaper products. We will seek to maintain and increase our added value by providing outstanding products through cost reduction and boosting reliability.
- Some of our customers that produce wind turbines are starting to insource electrical devices through processes like M&A. However, we ensure a steady flow of orders by offering products that are highly competitive both in terms of costs and performance.
- Domestic infrastructure investments related to our social system business are decreasing. In some cases, private companies are hired to build and also manage water and sewer systems. We are focusing our attention on the trends in local government policies in order to respond to these changes.

Results and Challenges for Mid-Term Business Plan Dash 25 (FY2016-FY2018)

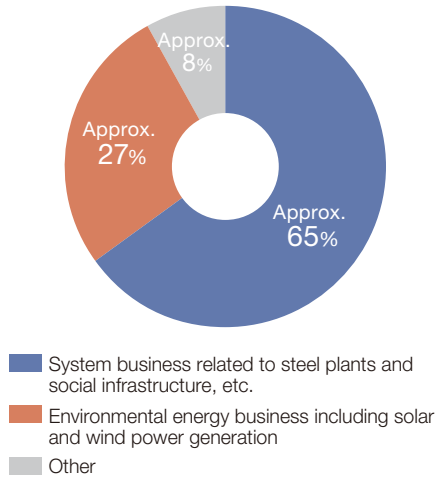
Results

- In our steel plant business, we have managed to maintain a steady flow of orders related to updating deteriorated electrical devices. In addition, we have delivered systems that boast high levels of stability and flexibility and managed to shorten idle periods for equipment. We have also sought to make our company stand out by proposing solutions that utilize our robots and the latest AI technology in order to meet our customers' demand for labor-saving.
- In our social system business, we have increased our added value by offering new systems for water and sewer facilities such as remote monitoring systems and chemical dosing systems that utilize AI, IoT, and other latest technologies.
- The large-scale wind turbine business has been growing steadily. Our European subsidiary in Finland received a large order for electrical devices used for offshore wind turbines.

Challenges

- The profitability of our solar power generation business is still low. To tackle this issue, we decided to decrease fixed costs by moving our production operations related to PV inverters to the AC drive plant owned by Yaskawa America in the previous fiscal year. In order to make our products more competitive, we need to launch new products as soon as possible and offer them at competitive prices to make them attractive for global markets.
- In addition to an increased demand for equipment updates, our marine drive business is expanding as our customers are seeking to replace their existing ships with hybrid or electric propulsion ships to prepare for the emission control for ships that will be strengthened in 2020. We need to enhance our production system to properly respond to these new demands in an efficient manner.

Sales Breakdown by Application (FY2017 Results)



TOPICS: Resolving Social Issues through Business

Exhaust gases from ships contain pollutants that cause acid rain and respiratory diseases. Therefore, there is increasing need for solutions that are friendly to the environment. We have been utilizing our technologies for PM motors, converters, and AC drives in order to decrease the sulfur oxide (SOx) content in exhaust gases from ships, and reduce the impact on the environment.


Electrical devices for ships