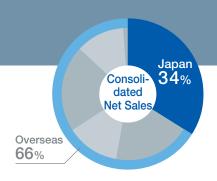
#### **Business by Region**

The ways in which "evolving glocal management"," set forth in the mid-term business plan Dash 25, are manifested as measures and results in respective regions

\* The construction of a system, which, in addition to management with a global mindset, can provide the best, locally-oriented accommodations anywhere in the world.

# **JAPAN**



#### Review of FY2016

While the strong yen advanced in FY2016 compared to a year earlier, sentiments were generally favorable in overseas markets with a focus on China, which led to a bullish tone among Japanese companies that have strengths abroad once the impact of the foreign exchange rate had been disregarded. Under such market conditions, Yaskawa produced steady results from strong demand in automobile-related markets and precisely captured needs among steel and iron plants and water and sewer systems for updates in their facilities. While each division produced solid results, the domestic market for PV inverter continued to remain sluggish, resulting in stagnant sales in Japan. Meanwhile, on the back of a labor shortage due to dwindling birth rates and an aging society, increasing needs for automation had been evident in food processing and manufacturing, areas that Yaskawa sees as growth markets, and together with its customers, the company proceeded in accelerating its initiatives for automation.

#### Outlook

As Japan prepares to host the Tokyo Olympic and Paralympic Games in 2020, increasing needs for redevelopment in city areas and public investment are anticipated by its domestic market. Lead by the growth of export companies that have captured the needs of electronics markets which are expanding globally, the Japanese economy is expected to continue its gentle recovery. And amid moves to improve productivity as part of work style reform being pushed by the government, further investments are expected in automation and robotics, including the use of IoT and AI.

Amid such conditions, Yaskawa will launch new products in the areas of AC servos, AC drives, and robots, its leading divisions, to offer its customers solutions of high added value that will differentiate their equipment and production facilities from their competitors'. It will strengthen its initiatives with customers as it aims to become a solution provider with a broad range of offerings in the area of food products.

#### TOPICS

#### Regional contribution activities

#### Sponsoring Kitakyushu Marathon

The city of Kitakyushu, where Yaskawa headquarters are located, has been hosting the Kitakyushu Marathon since 2014 to mark the 50th anniversary of its establishment. Yaskawa has been supporting the event as a main sponsor for four consecutive years, with employees and their families taking part in volunteer activities, setting up booths around the venue, and boosting the excitement of the marathon, together with the local community.



Volunteer activities at a water station



Yaskawa booth at the venue

# **CHINA**



#### TOPICS

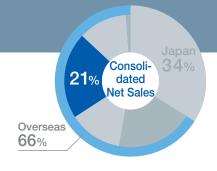
#### Regional contribution activities

## Robot Center Receives Visitors from Educational Institutions

Since opening its Shanghai Robot Center in 2014, Yaskawa has been receiving visitors from many educational institutions including junior high schools, vocational schools, and universities. Photo shows students from Department of International Studies of Shanghai Southwest Weiyu Middle School on a visit where they appeared fascinated by the various movements of the robots and the demonstration products for AC servos and AC drives. The heated inspection tour continued at the adjacent After Service Center that offers follow-up services for the repair and maintenance of Yaskawa products.



Students on a tour at Shanghai Robot Center



#### Review of FY2016

While the average growth rate for China's GDP in FY2016 stood at 6.7 percent, slightly below that in the previous year, aggressive investments were seen in manufacturing facilities for the high-tech market including smartphones. Needs were also present for automation (labor saving) at the manufacturing scene led by government on the back of rising labor costs, a falling birth rate, and an aging population, resulting in a record results for Yaskawa Electric (China). In particular, significant growth was seen in sales for its AC servo & controller business for EMS\* that process and assemble electronic parts on contract and for machine tools.

\* EMS: Electronics Manufacturing Services; companies that design and manufacture electronic equipment without having their own brands.

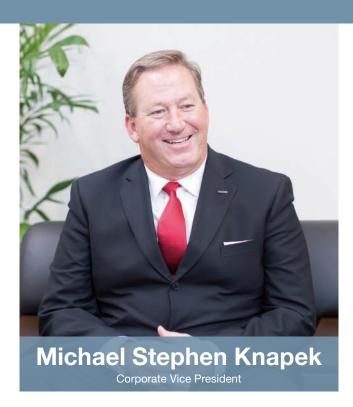
#### Outlook

Strong demand continues to be anticipated in FY2017 following FY2016 with a focus on the AC servo & controller business. Yaskawa Electric (China) plans to respond to these rapidly increasing needs and significantly bolster manufacturing capacity at its AC servo plant in Shenyang. Introductions of robotics are moving forward in non-autorelated areas such as EMS and assembly processes for household appliances amid expectations of huge increases in demand. To take full advantage of this business opportunity, Yaskawa will boost production capacity at its robot factory in Changzhou as well as launch a new organization in collaboration with its AC servo & controller business to aim for an increase in market share.



AC servo factory in Shenyang

# THE AMERICAS



#### TOPICS

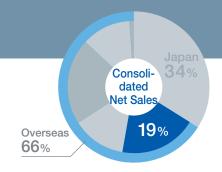
Regional contribution activities

## Hosting of Students during National Robotics Week

In celebration of National Robotics Week, Yaskawa America invited about 400 students from high schools, universities, and career centers on a tour of its robotics operation. The students had the opportunity to see live robotics demonstrations and learn about future careers in automation.



A tour of the facility of Yaskawa America Inc.



#### Review of FY2016

FY2016 was a year when competition became fierce for Yaskawa's mainstay area of motion control on the back of stagnant investment activity in oil- and gas-related markets caused by sluggish oil prices, and slack growth in the machine tool market. Meanwhile, automobile-related markets with a focus on spot welding and handling applications were bullish, which led to steady growth for the robotics market. Amid such conditions, the company focused on expanding sales to the semiconductor and packaging markets for the AC servo business; HVAC, pumps, and food processing markets for the drives business; and the auto and logistics markets for the robotics business. As for its robotics business, Yaskawa made efforts to boost local development capacities by developing new applications and new products, which had conventionally taken place in Japan, in the United States.

#### Outlook

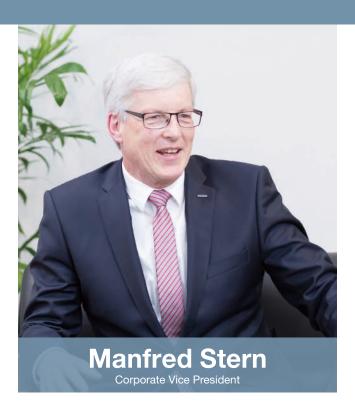
A recovery is anticipated for investment demand in the oil and gas markets in FY2017, and if the U.S. economy transitions favourably under the policies of the new administration, it will spread to economies in neighboring countries, boosting expectations for business growth in the Americas. While the sale of new cars faces a slump, capital investment, chiefly for auto parts manufacturers, will continue in line with model changes. Yaskawa will continue its efforts to improve sales and profits by strengthening its approaches on the key markets mentioned above and

by boosting sales through distributors. It will also promote warehouse automation and other new application markets. Furthermore, it will quickly launch new collaborative robots with high expectations from major auto manufacturers, home appliance manufacturers and other customers in a wide range of areas, and accelerate the growth of this field.



Collaborative Robot MOTOMAN-HC10

# EUROPE



#### TOPICS

#### Regional contribution activities

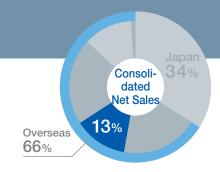
## Participation in The Baltic Sea Circle Rally, a Charity Event

Between June and July 2016, two engineers at Yaskawa Europe drove a distance of more than 7,500 km to Nordkapp (North Cape), the northernmost point of Europe, collecting funds for charity. The collected funds were used to support an organization that is dedicated to child welfare and the eradication of child poverty.



At Yaskawa Europe where the rally started





#### Review of FY2016

While uncertainty continued to prevail in Europe on the back of geopolitical risks and other such factors, machinery export trends to the United States and China were favorable with the low Euro. Based on this, business conditions were generally steady in Germany, France, Italy, and Nordic regions. Amid such conditions, Yaskawa boosted its sales to Tier 1 automotive companies and machine builders, armed with its new software MotoLogix, which enables control of robotics through PLCs, and its bundled solutions with PLCs from VIPA GmbH, a European subsidiary of Yaskawa. It also enhanced its market presence by laying out a growth strategy for the Yaskawa Group in Europe at an announcement of the construction of a new robotics factory in Europe.

#### Outlook

While the impact on the economy from negotiations ahead of BREXIT and the outcomes of elections in major EU nations will require close attention, Yaskawa foresees a continued favourable environment with a focus on the German economy. Amid such conditions, it will capture steady demand in Tier 1 automotive companies and in the general automation market, and tie it in to growth. Specifically, it will boost sales in focal application markets such as food products and packaging, elevators, and metal processing through its AC servos, AC drives, robotics, and the MICRO PLC, a new product offered by VIPA GmbH, and also strengthen its approach on growth markets like machine builders and logistics markets. Yaskawa will also take steps to shorten lead times through local production and cultivate new areas with its collaborative robots which receive high market expectations.



## **ASIA EXCEPT CHINA**



#### TOPICS

#### Regional contribution activities

#### Free seminar held at Thai Robot Center

Yaskawa Electric Thailand held a free seminar for nonprofit organizations to contribute to the development of human resources and the promotion of the next generation of the industry sector. More than 50 people from the Technology Promotion Association Thailand-Japan visited Yaskawa's Robot Center in March 2017 where they watched and experienced

demonstrations and seminars on the latest robotics technology.



Seminar held at Robot Center



# Consolidated Net Sales Overseas 66%

#### Review of FY2016

While the business environment in the six leading ASE-AN countries (Indonesia, Thailand, Malaysia, the Philippines, Vietnam, and Singapore) and South Korea varied for each country, sales based on local currencies were generally firm. Sales were particularly strong in South Korea on aggressive capital investments made in the areas of semiconductors and OLEDs\*. Rapid growth was seen in Vietnam in accordance with investment in infrastructure and the advancement of plants by South Korean and Japanese manufacturers. As for Singapore, demand for infrastructure continued in line with the governmentled relocation of harbor cranes. Meanwhile, while needs for automation at the manufacturing scene were on an increasing trend in Thailand, Indonesia, and India, investment related to automobiles, the main business in these countries, were sluggish.

\* OLED: Meaning the same thing as organic electroluminescence, OLED is an application of the technology of light-emitting diodes and is thinner, lighter, and requires less electricity than LCDs. Expectations mount on the use of OLEDs for next-generation smartphones.

#### Outlook

Compared to the previous fiscal year, expectations are present in FY2017 for capital investment in auto-related markets in Thailand and India. Meanwhile, the markets, including auto-related markets, are anticipated to remain stagnant in Indonesia. Investments in infrastructure and the advancement of plants at foreign manufacturers are becoming accelerated in Vietnam and Yaskawa believes that robots and AC drives are likely to spread. High-tech industries, with a focus on South Korea, are expected to continue to be strong, and investment activities are becoming invigorated in areas outside auto such as the processing of food products, eyeing less manpower and energy conservation, where Yaskawa will aim for increased sales by boosting its offer of systems which combine robots and AC servos.