## Q&A for FY2023 2Q Results Briefing (Summary) Yaskawa Electric Corporation (October 10, 2023 (Tue.))

[Speakers]

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(Note):

Motion Control: Motion Control segment AC servo: AC servo & controller business (Motion Control segment) Drives: Drives business (Motion Control segment) Robotics: Robotics segment System Engineering: System Engineering segment Other: Other segment

- Q It is great to see that profit increased even though it was expected to decrease due to severe market conditions in AC servo. It seems that the effect of the increase in added value was significant, but which segments had the large effect?
- A Of the +4 billion yen in price transfer for the increase in added value, +3 billion yen is for motion control and +1 billion yen is for robotics. Since the last fiscal year, we have made efforts to pass-through prices by taking into account the rising cost of materials, and we began to gain results. In addition, we have seen the results of the solution concept i<sup>3</sup>-Mechatronics (iCube Mechatronics), in which customers buy robots at fair prices. Moreover, the normalization of the production of drives has led to revenue.
- Q Is the outlook of AC servo for semiconductor and Chinese markets are dismal than it was in the first quarter?
- A Orders for AC servos and drives increased significantly between 2021 and 2022 during the COVID-19 pandemic, but many of these orders were placed in advance due to supply chain disruptions. We recognize that the current situation has been normalized and the situation has become normal. Orders for semiconductors are still uncertain, but there are signs of bottoming out in the Americas and parts of Asia. We are not optimistic but expecting a gradual recovery towards the end of the year/ the end of the fiscal year. On the other

hand, we see the Chinese market as flat. It will be difficult for the GDP to grow by +6 to +7% as it did before but the market will move forward while maintaining solid consumption.

- Q Do you think there is no problem in the Chinese market due to the presence of backlog orders? Or is it on a downward trend in terms of revenue?
- A There are some backlog orders and we have weak but new orders as well. The demand is not strong, but there is also demand related to solar power generation and EVs. We are capturing the demand from competitive customers and maintaining a certain level, and we don't have an image that demand will turn downwards.
- Q How do you evaluate the landing of 2Q?
- A It was on the expected line. Compared to the previous fiscal year, the company performed well despite the negative impact of the fall in "other earnings". The improvement in robot profitability was partly due to internal efforts such as inhouse manufacturing.
- Q You expect that the order trend will become flat and improve toward 3Q. Please explain what do you see as the bottom? Could you also mention your outlook?
- A Our order picked up in 1Q due to a big robot project, but we recognize that the current situation is becoming normal from where our company stands. We are not optimistic about 3Q and after, but we are planning the level of plus alpha from 2Q.
- Q In terms of order for Drives, there seems to be an adjustment for prior orders. What is the assumption after 3Q?
- A Prior loading due to supply chain disruptions has gradually become normalized. Demand in industries like semiconductors, manufacturing and infrastructure in general is still weak, so we expect the economy to continue at current levels for a while.
- Q You cite the Chinese economy as the reason for the downward revision in Robotics, but what is the assumption after 3Q?
- A Chinese economy as a whole has a slow recovery, but movements in the new energy sector continue. Although capital investment related to EVs has not

been strong as it was before, the demand for automation and labor-saving in the automobile industry shows signs of resilience. We are not optimistic, but cautious about the current situation. We are preparing with our customers to make sure that we can capture the opportunity as demand recovers.

- Q There has been an adjustment in EV-related demand throughout the market. What are the reasons why Yaskawa has been less affected by this situation? Is it due to the effect of your efforts?
- A Our robotics revenue to automobiles is stronger for parts manufacturers such as Tier1 and Tier2 than for OEMs. In this area, investment in EVs has continued reasonably well, and orders related to EVs have been moving steadily in 2Q. We are not pessimistic about the capital investment related to EVs.
- Q Please explain about production and inventory? 2Q production has normalized, but how much has it increased since 1Q? What is the production forecast for the second half based on current inventory levels?
- A In terms of inventory, we maintain the current status and are not changing the overall volume or amount in the second half. However, as a breakdown, the inventory of parts, which had been missing due to the inability to procure parts in the past, is on an improving trend. Therefore, in the second half of the year, we plan to produce standard products in line with the next increase in demand and maintain a certain amount of product inventory.
- Q I would like to know the breakdown of the impact of price pass-through of +7.7 billion yen in the breakdown of changes in operating profit of the full-year forecast.
- A About 60% of +7.7 billion yen is for Motion Control and the remaining 40% is for Robotics. We will continue to promote price pass-through and aim to achieve the operating profit target of 70 billion yen.
- Q The impact of increase in added value is +12 billion yen in the breakdown of changes in operating profit of the full-year forecast and the amount excluding the impact of normalization of raw materials and logistics costs and price pass-through should be +4 billion yen. It was estimated around -2.5 billion yen at FY2022 4Q results announcement. I would like to know why this figure increased to +4 billion yen.

- A We don't disclose the detailed breakdown, but it includes the effects of i<sup>3</sup>-Mechatronics which materialized in the first half and we expect this to happen also in the second half. It also includes the effects of changes in inventory.
- Q Chinese market has deteriorated in the last three months. How do you analyze this?
- A We are not pessimistic over Chinese market. Although the market is inactive, we believe that we can achieve our target by steady filling of order backlogs and new orders, so our full-year forecast remained unchanged. We see the current situation of Chinese market as normal and will firmly grasp the needs of customers who are actively investing in growing markets such as solar power generation and EVs. We will also follow the shift of production site from China to Asia. In terms of profits, we will now focus on North America as the ratio of China is decreasing.
- Q I have an impression that demand for automation using robots is currently being adjusted. What is the outlook for global demand over the next 1 or 2 years, including AC servos?
- A The current macro environment seems a little subdued considering the trend in China. In Europe and the United States, although the economic indicators are not good, we are able to capture the market accurately so it will be firm. In the United States, demand for automation in the general industries is expanding, although we used to find markets almost exclusively in the automobile industry. Although China has influenced the increase and decrease in volume, stable investment in automation in Japan, the United States, and Europe is expected to secure steady demand for robots. The growth rate cannot be specified, but investment related to EVs is also expected to be positive. In terms of demand in China, we don't expect it to decline significantly, but we are not optimistic to expect high growth. It is assumed to grow steadily without fluctuating wildly.
- Q Increase in added value in the breakdown of changes in operating profit of the full-year forecast has been significantly increased from the previous plan. The effects of i<sup>3</sup>-Mechatronics seem to be included. Could you give me the breakdown?
- A The additional price increase implemented at the beginning of this fiscal year was included in the first half results and it will progress more in the second half. We

also include the effects of i<sup>3</sup>-Mechatronics as quality improvement in Robotics. We have increased the price of products repeatedly ordered since last year, also we have been improving gross margins on system projects by providing high added value to customers. The effect of this was about 1 billion yen for Robotics in the first half, and it is expected to be about 3 billion yen for the full year. We also included the effect of in-house manufacturing and automation of about less than 1 billion yen. As a result, we plan to greatly increase the added value from the initial plan.

- Q Are the effects of i<sup>3</sup>-Mechatronics realized mainly with customers in the solar power panel industry?
- A Projects related to solar power generation panels are mainly Motion Control. The penetration of i<sup>3</sup>-Mechatronics in various regions and industries such as Europe, the United States and China, mainly as robot system projects has progressed, which result in the sales with higher added value.
- Q How much do you expect to increase profitability with the launch of new products such as "YRM-X series" and "MOTOMAN NEXT"?
- A The effect of switching to new products, such as "Σ-X series" and AC drive series, is 1.1 billion yen in the full-year forecast. We do not include i<sup>3</sup>-Mechatronicsrelated products, which are scheduled to be released in the future, and expect the effect of those from next year. On the other hand, it is difficult to say how much impact "YRM-X series" and "MOTOMAN NEXT" will have to profitability at this moment, but we have high expectations as the next action. "YRM-X series" will be an opportunity for us to grow capital investment centering on controllers and gain added value in Europe and the U.S., as there are no competitors. "MOTOMAN NEXT" is positioned as a strategic product that expands the functional area of robots for investment, and since it is a robot that incorporates added value as a peripheral function, we believe we can set a value 1.5 times higher than the ordinary industrial robots. We intend to increase sales ratio of "MOTOMAN NEXT" and further increase added value.
- Q We assume that AC drive's order backlog will remain until the end of this fiscal year, but what about AC servos? If orders do not pick up next spring, we fear that the trend of revenue increase will be interrupted. What are you looking forward to for the next year, a recovery in the semiconductor market or China?

- A Capital investment situation in China is inactive, but active accounts do exist. Our focus is shifting from domestic demand in China to the global market, and our focus on the automotive and renewable energy sectors is getting stronger, so we want to capture the business opportunities that arise. However, the growth rate in China is expected to be lower than before, so we want to create a business structure that can generate more profits even at the current level of demand. In terms of AC servos, the semiconductor market is a key market. In addition to Japan, Europe, the United States, and South Korea, China's semiconductor industry is also likely to see capital investment. We cannot be optimistic, but we believe that it will lead to revenue in the next fiscal year, as we can see a gradual movement in the field of power semiconductors and advanced semiconductors in North America.
- Q What is your view on Drives business, which has many promising factors such as decarbonization-related products and the oil and gas market?
- A Our strength lies in North America. Investment to secure energy needs in the United States will certainly continue, and demand for air conditioning is also strong. In addition, demand for air conditioning in Asia is expected. Moreover, there is semiconductor-related demand such as vacuum pumps in China and Japan, too. If demand from the United States is properly captured, the current level of orders can be maintained. We will further expand the drives business centering on North America.
- Q I want to know the profitability of Drives business. As revenue is expanding, I believe Yaskawa is also taking steps to increase added value. As a result, I assume that the operating profit ratio may have risen to the same level as that of AC servos.
- A Previously, AC servo's marginal profitability was higher than that of AC drives, but AC drive's marginal profitability also increased to the same level. I believe AC servo's profit ratio will increase again if volume recovers.
- Q In the U.S. market, there are concerns about a decline in factory operations and sluggish consumption amid strikes in the auto industry. Should we be a little pessimistic about Yaskawa Electric's U.S. business in the future?
- A In the first half of this fiscal year, the robot market significantly slowed down due to the slump in the automobile market. However, Yaskawa's robot orders did not

significantly slow down because we secured non-automobile projects. We expect non-automobile demand to continue. In the automobile market, we expect the shift to EVs and the adoption of EMS to accelerate in the future, and we expect that changes in the supply chain will revitalize the manufacturing industry and increase investment in the United States.

- Q The return of domestic production and the transfer of production from China have been talked about as major themes, but when do you expect such a move?
- A Against the background of the slump in the semiconductor market and the delay in EV-related investment, there has been no noticeable movement. In Japan, we believe that the current plan will be visible in the figures about a year from now. On the other hand, if production is transferred from China to Asia, Chinese equipment will be transferred to other parts of Asia, so local demand will not increase rapidly. In order to follow this trend, it is important to conduct activities in China, and we would like to respond well to clients considering investment. The results will be reflected in Chinese figures.
- Q With the slowdown in growth in the Chinese market, do you see a change in the competitive environment?
- A Rather than thinking about how the market will grow and decline in the macro environment, we will focus on how to respond firmly to the accounts that we recognize as important. We will follow the globalization of our customers in China, including changes in the supply chain, and shift to a strategy that does not depend on volume in the Chinese market. Recently, there has been no significant change in the competitive environment with local manufacturers in China. For example, we were able to accurately capture demand of AC drives for vacuum pumps used in semiconductor manufacturing equipment. We recognize that Yaskawa is highly competitive in the semiconductor market.
- Q There seems to be a bottom-out sign regarding the latest semiconductor orders, but has it become more positive since the 1Q earnings announcement?
- A It is my impression that demand for investment in miniaturization and densification for AI as well as for power semiconductors has emerged rather than for memory and logic ICs, but this is still a very small part of the overall market, and it is not yet possible to feel the bottom of demand.

- Q What is your perception of semiconductor demand in China?
- A Domestic production of semiconductor manufacturing equipment has become important due to trade friction. Domestic production of cutting-edge semiconductor chips is not easy, but we expect demand to increase with future technological developments. On the other hand, legacy semiconductor needs continue, which I also see as potential for Yaskawa.
- Q You mentioned that there is an advantage for vacuum pumps used in semiconductor manufacturing equipment. Could you elaborate it?
- A We are demonstrating not only technological differentiation but also superiority based on Yaskawa's past performance in application and data utilization. In the future, we will develop a comprehensive approach using motion control and robots to build more results.
- Q What percentage of Robotics revenue are related to the adoption of i<sup>3-</sup> Mechatronics? What are your tips for thinking about the future, including customer attributes, applications, and geography?
- A i<sup>3</sup>-Mechatronics is a way of thinking where we deploy Yaskawa products such as robots and AC servo drive to improve customer productivity and add value. Since it is difficult to define "adoption," it is difficult to say the specific ratio. However, if we can share the existence value of Yaskawa products with our customers through i<sup>3</sup>-Mechatronics, we will be able to receive a fair price as the next project will proceed based on the premise of Yaskawa products. I have a feeling that such projects are increasing. Especially in the non-automotive sector, i<sup>3</sup>-Mechatronics is being adopted in many projects. In the future, we will carry out internal examination so that it can be explained quantitatively.
- Q In the future, as a means to increase profitability through the solution concept i<sup>3-</sup> Mechatronics, is it important to increase volume as well as to make value added proposals?
- A Certain volume is also necessary, but higher profitability is difficult to achieve only with volume, and it is necessary to increase added value. In terms of increasing volume, for example, in the beverage, food, and pharmaceutical sectors, there is a need for labor-saving. Providing total solutions to this area is the next step, and if this approach is successful, not only quantity but also quality will be enhanced as a result.