## Q&A for FY2022 Results Briefing (Summary) Yaskawa Electric Corporation (April 10, 2023)

[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 What is the regional revenue ratio in AC servo and Drives for FY2022?

A AC servo: 34% in Japan, 24% in the Americas, 11% in Europe, 21% in China, 10% in Asia excluding China

Drives: 16% in Japan, 39% in the Americas, 11% in Europe, 24% in China, 10% in Asia excluding China

Q What is the percentage of AC servo and Drives in Motion Control revenue for FY2022? A 59:41

Q With regard to the graph of quarterly orders on P. 28, please tell us the regional and groupwide rate of change in each business in 4Q FY2022.

A · AC servo

YoY: -39 % overall Breakdown: Japan -36 %, the Americas -45 %, Europe -24 %, China -26 %, and Asia excluding China -69% QoQ: -12 % overall Breakdown: Japan -11 %, the America -24 %, Europe -4 %, China -8 %, and Asia excluding China -10 % • Drives YoY: -13 % overall

Breakdown: Japan -29 %, the Americas +10 %, Europe -50 %, China -14 %,

and Asia excluding China -12 % QoQ: -7 % overall Breakdown: Japan -7 %, the Americas -1 %, Europe -21 %, China -10 %, and Asia excluding China -15 % • Robotics YoY: -9 % overall Breakdown: Japan -25 %, the Americas +9 %, Europe -6 %, China -32 %, and Asia excluding China +50 % QoQ: -19% overall Breakdown: Japan -4 %, the Americas -1 %, Europe -1 %, China -55 %, and Asia excluding China +25 % \*YoY=year-on-year, QoQ=quarter-on-quarter

Q Regarding the utilization rate of each business, please tell us the results of 4Q and the plan for 1Q?

A 4Q results: AC servo slightly above 100%, Drives slightly above 120%, Robotics slightly below 70%

1Q plans: AC servo slightly below 110%, Drives slightly above 120%, Robotics slightly above 70%

- Q AC servo's orders in China were affected by resurgence of COVID-19 and Chinese New Year in 4Q. When do you think it will recover? What about the rest of the world?
- A We expect orders to bottom out in 4Q. Orders in March showed signs of recovery. This is also true globally. While there will be a recovery due to the trend of automation, we are cautious about semiconductors. We expect semiconductor orders to start improving at the end of the fiscal year, but we didn't reflect this in our revenue plan.

Q What is the switchover rate of Sigma-X?

- A As of February in 2023, the overall switchover rate was about 20% and that in China was 26%. The overall switchover rate is expected to increase to 30% and that in China to 75% by February 2024.
- Q Regarding Robotics, Mr. Ogasawara, former president, said that it had the ability to generate operating profit rate of 15%. Now, it is getting closer to that. How high do you aim for in the medium term? Explain this in conjunction with i<sup>3</sup>-Mechatronics business model.

- A We've been looking at 15% profit rate as one target, but we see 15% as a stepping stone at this point. As for the next target, please wait for the release of the new mid-term plan in May. We are targeting 13.9% for FY2023. It is not driven by i<sup>3</sup>-Mechatronics but the expansion of the field of robot use which will increase orders and production. The achievement so far is the establishment of an efficient production system. In FY2023, we have a structure that enables us to add value through production following volume expansion, including new orders as well as backlogs of orders. Furthermore, in order to connect i<sup>3</sup>-Mechatronics to added value, in FY2023, we will launch the new autonomous robot, "MOTOMAN-NEXT", on the market and will promote it globally with a focus on quality (providing value to customers), not quantity.
- Q The profit rate of Motion Control was 20% in the past, but it has fallen to around 15% due to difficulties in procuring parts and delays in launching new products. Can these challenges be resolved? Also, can you rely on China in the future like you have been until now? How does i<sup>3</sup>-Mechatronics contribute to Motion Control?
- A The current challenge is the soaring cost of components, which has a significant impact in terms of marginal profits. To solve this problem, we will accelerate the price pass-through appropriately. A more essential measure to improve operating profit is the practice of i<sup>3</sup>-Mechatronics. Customers have appreciated the value of our products, including their performance. Going forward, we must maintain the value of our products while increasing the value of our solutions. Because of that, we are transforming our business into a solution-based business combined with robots based on the i<sup>3</sup>-Mechatronics concept. We will increase our presence in markets where our strengths can be utilized. We will never compete in the volume zone of the FA field to increase our quantity.
- Q Former president, Mr. Ogasawara, increased profits through management that made customers win. What are Yaskawa's management challenges now? What are your absolute goals as president?
- A The point is to put i<sup>3</sup>-Mechatronics into practice. We will work to put this at the center of our actions. We have achieved some results, but the reality is that we have not fully connected it to our actions yet. Now, we finally have the products to realize the concept, which means we are in the phase of improving our ability to execute. The first product to be commercialized was the YRM controller which we believe will surely be necessary to meet our customers' needs for their own improvement and evolution. In addition to AC servo drives and AC drives which are already in the edge area of FA, MOTOMAN-NEXT will be launched to expand our business into areas that could not be automated before.

We will put emphasis on strengthening partnerships in sales as our policy, as well as product development, and turn the value of our contribution to customers into profit.

- Q Why have production constraints not been completely eliminated in AC servo? What are the future measures and initiatives?
- A Most of backlog of orders in AC servo is no longer attributable to production delays in China, but some parts have been difficult to be procured in Japan. Filling this backlog of orders is an important issue for FY2023. The shortage of parts supply has certainly recovered except for some specific parts and we are also beginning to understand what will be the bottleneck when market conditions rise. Therefore, looking ahead, we are reforming supply chains to increase our purchasing power and centralizing global supply chains. Specifically, we are stabilizing our operations by centralizing parts procurement at the head office rather than at each site. Parts that are desperately lacking are covered by alternative designs.
- Q Revenue in the Americas in Motion Control is growing on a scale to become equivalent with China. What is the background of this and the outlook for the future?
- A This is because the company has maintained and expanded its oil and gas related business in Drives and in-store share in the semiconductor market in AC servo. In addition, the general motion market (3D printers, food processing equipment, etc.) has been growing steadily. In order to further expand this market, we will strengthen our solution proposal capabilities including robots by utilizing YRM controllers. We also have plans to release a YRM controller with local specifications, which we expect will have a significant impact.
- Q The profit rate for Motion Control seems to be high in China. If the Americas outgrows China in AC servo, will the total profit rate be maintained?
- A Profitability in AC servo in China is contributed by production in Shenyang for domestic demand. The contribution of production seems low in the Americas because we export most of the products to the Americas from Japan. For the correct understanding, we need to look at the entire value chain, including production in Japan. From that point of view, there is not much difference in profit rates.
- Q What is your view of demand for robots in the medium term? Will there be a change in demand due to restructuring of supply chain in the manufacturing industry, penetration of collaborative robots, etc? Can you expand the business beyond the market growth by

solution proposal including AC servo?

A Although demand for robots comes primarily from the automotive market, the overall growth of the robotics market will be driven by the expansion of areas other than automotive. While the automotive market is solid, sales ratio to the automotive market is relatively decreasing. On the other hand, this is the evidence of the increasing use of robots in areas other than automobiles.

We have to keep an eye on the development of collaborative robot because it can be a catalyst for new market expansion. We will accelerate the introduction of collaborative robots by promoting the absence of safety fences and the ease of operation. On the other hand, collaborative robot is a stepping stone and the prospective solution will be supported by MOTOMAN-NEXT. This is Yaskawa's unique technology and product strategy as well as sales strategy to catch up with the expanding markets.

- Q You plan to increase capital investment by 10 billion yen in FY2023 compared to FY2022. How will you update your production strategy in the medium term as supply chain will be rebuilt?
- A Our upcoming capital investment plan is mainly in-house production of parts. We will strengthen the supply chain by reducing China's share of parts procurement. Please wait for the release of the new mid-term plan in May for more details.
- Q Which region will you focus in Robotics? Asia and the Americas?
- A Although Asia has potential and we focus on it as an emerging market, Japan, Europe, and the Americas should be the main focus. In particular, the driving and deployment forces in Europe and the Americas are supported by their stability in technical capability and we can expect these regions to grow steadily. Japan seems to have an issue with speed.
- Q As you expand sales and production in demand areas such as Europe and the United States, will you also conduct R&D locally?
- A I have no intention of doing so. Although there are regional differences in use and demand, the platforms are identical. The unified platform is developed in Japan and deployed in products. Software and AI applications will be supplemented in each region to better meet customer needs.
- Q Will Yaskawa continue to focus on i<sup>3</sup>-Mechatronics while other companies are struggling with their approaches to automation in FA?
- A The concept of other companies and the scheme of i<sup>3</sup>-Mechatronics are different in the first

place. i<sup>3</sup>-Mechatronics expresses the process, way of thinking, and execution that constitute a customer's solution and does not corral the upper layers of the FA domain. With this concept, we will strengthen our ability to develop from solution to product, not from product to solution. We will also promote YRM controllers and digital twin thinking for data utilization in the cell domain, while acting with an integrated mindset in the motor and robot sales. Activities based on this idea have been carried out for 4-5 years and have not been denied, which has led to our confidence. From now on, we will accelerate the actual deployment of i<sup>3</sup>-Mechatronics to customers and produce results.

- Q You say that MOTOMAN-NEXT will be introduced into areas where automation has not yet been achieved. What are your expectations for the target industries and regions and how it will be used there?
- A There is no idea of which industries to be targeted, but MOTOMAN-NEXT will not be applied to areas where solutions are already known. I believe that areas where its value can be realized are those that cannot be solved by teaching or system software. For example, in the process of packing and shipping crops that have not been comprehensively automated, MOTOMAN-NEXT will be able to understand how each vegetable is placed and its condition, determine the requirements for placing amorphous materials in a box, reflect them in the plan of operation, resulting in a proper shipping state. I believe we can achieve flexible and robust performance. We will develop and target each industry as we gain experience.
- Q Regarding the competition in the robot industry, in terms of technical catch up and presence, how different are Asian companies (China, South Korea, Taiwan, etc.) compared to those from 5 to 10 years ago? Also, what changes do you expect in the future?
- A Based on my experience, I suspect there will be no major changes in the future. The data shows Asian companies are increasing shares but their markets are different from ours. Chinese local manufacturers are emerging in the markets of SCARA robot and collaborative robot, but Yaskawa is not going to follow them because they have to compete on cost and delivery. Collaborative robot market is one of the stepping stones and after that, further automation will be required, which Yaskawa is focusing on. It is also a great strength as a robot manufacturer to have an advantage in motors which are the main components of robots.
- Q Regarding AC servo, is there a fact that supply constraints affected production and Yaskawa lost market share to other companies?
- AAC servo drive is a core product of Yaskawa and there is no change in technology and market

position. I believe that it is important to strengthen our position as delivery issues are resolved in the future. In order to strengthen our ability to propose solutions, we will continue to use i<sup>3</sup>-Mechatronics as a basis and advance with YRM controller as a key. We will continue to focus on customers and strive to ensure that Yaskawa is chosen as the provider of automation solutions.