

Q&A for FY2021 2Q Results Briefing (Summary)

Yaskawa Electric Corporation

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[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 FY2021 1H?

A AC servo: 29% in Japan, 14% in the Americas, 10% in Europe, 32% in China,
15% in Asia excluding China

Drives: 17% in Japan, 32% in the Americas, 13% in Europe, 29% in China,
10% in Asia excluding China

Q What is the percentage of AC servo and Drives in Motion Control revenue
for FY2021 1H?

A 63:37

Q What is the segment breakdown of each cause of change in supplemental material
(P. 12) for analysis of changes in operating profit from FY 2020 1H to FY 2021 1H?

A Effect of changes in forex rates: Motion Control +2.5 billion yen and Robotics
+2 billion yen.

Profit increase due to revenue increase: Motion Control +13.9 billion yen, Robotics +7.4
billion yen, System Engineering +0.9 billion yen, and Other -0.5 billion yen.

Decrease in added value: Motion Control -3.4 billion yen, Robotics -1 billion yen, System
Engineering +0.2 billion yen, and Other +0.1 billion yen.

Increase in total expenses: Motion Control -4.7 billion yen, Robotics -3.7 billion yen,
System Engineering -0.1 billion yen, and Other +1 billion yen.

Other: Motion Control -0.9 billion yen, Robotics -0.2 billion yen, and Other +0.2 billion yen.

Q What is the segment breakdown of each cause of change in supplemental material (P. 17) for analysis of changes in operating profit from FY 2020 to FY 2021 forecast?

A Effect of changes in forex rates: Motion Control +3.6 billion yen and Robotics +3 billion yen.

Profit increase due to revenue increase: Motion Control +26.3 billion yen, Robotics +14.9 billion yen, System Engineering +0.6 billion yen, and Other -1.2 billion yen.

Decrease in added value: Motion Control -1.9 billion yen, Robotics +0.4 billion yen, System Engineering +0.2 billion yen, and Other +1.1 billion yen.

Increase in total expenses: Motion Control -10 billion yen, Robotics -6.9 billion yen, System Engineering +3.1 billion yen, and Other -1.3 billion yen.

Other: Motion Control -0.4 billion yen, Robotics -0.4 billion yen, System Engineering -0.1 billion yen, and Other -0.2 billion yen.

Q With regard to the graph of quarterly orders on P. 25, please tell us the regional and groupwide rate of change in each business in 2Q FY2021.

A •AC servo

YoY: +99 % overall

Breakdown: Japan +98 %, the Americas +103 %, Europe +102%, China+79 %, and Asia excluding China +132 %

QoQ: -7 % overall

Breakdown: Japan +13 %, the America +3 %, Europe -15 %, China -27 %, and Asia excluding China -5 %

•Drives

YoY: +75 % overall

Breakdown: Japan +76 %, the Americas +68 %, Europe +108 %, China +65 %, and Asia excluding China +81 %

QoQ: +2 % overall

Breakdown: Japan +25 %, the Americas +6 %, Europe -8 %, China -10 %, and Asia excluding China +1 %

•Robotics

YoY: +50 % overall

Breakdown: Japan +51 %, the Americas +53 %, Europe +70 %, China +36 %, and Asia excluding China +47 %

QoQ: -5 overall

Breakdown: Japan +4 %, the Americas +8 %, Europe -11 %, China -12 %, and Asia excluding China -8 %

*YoY=year-on-year, QoQ=quarter-on-quarter

Q Regarding Motion Control, revenue is on the decline in China, but was there a production constraint in 2Q?

A We haven't stopped production in the first half. While orders are higher than expected, we deliver according to the customer's delivery date. Neither AC Servo nor Drives had a significant impact in the first half.

Q At the previous peak in FY2017, there was no sudden drop in revenue in China. I thought you had wanted to produce more, but you couldn't.

A The level was in line with production and sales plans, and there was no problem with production.

Q What is the reason behind the increase in added value in the second half?

A The consolidation effect of development functions that occurred in the 1Q is eliminated in the second half, resulting in an increase of approximately 3 billion yen. The impact of inventory fluctuations and effects of new products are also included. In the second half of the fiscal year, although material and logistics costs are affected by the increase, we will offset to some extent by transferring prices. The added value is planned to increase by about 5.3 billion yen in the second half.

Q The upward revision will bring FY's earnings forecast to a record high, but is it adding an upswing to orders in the first half? What are your assumptions about the uncertainty of China Evergrande?

A Orders received in the 2Q were higher than expected, and orders received in September were also strong. Entering of October is not bad.

We will firmly link this order to revenue. Although we recognize that we have received orders in advance, we will supply in accordance with our customers' production and sales plans.

Although information from Chinese customers is used to understand the situation in the case of Evergrande, we believe that this is a domestic issue and has no direct impact on Yaskawa. However, the government will keep a close eye on the issue as it could develop into an economic problem if it continues for a long time.

China has experienced power outages in the past, and if there is no power supply during the day, we will conduct production flexibly, such as during the night. According to local information, there is no major impact such as the shutdown of the plant.

Q What areas of orders received in the first half of the fiscal year were higher or lower than expected compared to three months ago?

A All regions and major segments are good overall.

Q What is the breakdown of the factors causing changes in operating profit from 1Q to 2Q of FY 2021?

A Exchange rate impact +0.3 billion yen, of which Motion Control +0.2 billion yen, Robotics +0.2 billion yen
Revenue Impact +0.2 billion yen, of which Motion Control -2.0 billion yen, Robotics +2.2 billion yen, System Engineering -0.1 billion yen, Other +0.2 billion yen
Value added +2.2 billion yen, of which Motion Control +1.0 billion yen, Robotics +1.5 billion yen, System Engineering -0.0 billion yen, Other -0.3 billion yen
Overhead cost -0.9 billion yen, of which Motion Control -0.9 billion yen, Robotics -1.0 billion yen, System Engineering +0.3 billion yen, Other +0.7 billion yen
Other -0.8 billion yen, of which Motion Control -0.6 billion yen, Robotics -0.0 billion yen, System Engineering -0.1 billion yen, Other -0.0 billion yen

Q What are the 2Q results and the 3Q outlook for plant utilization?

A Overall 2Q results were over 130%.

AC servo: about 140%, of which China about 200%.

Drives: about 125%, of which China about 140%.

Robotics: nearly 110%, of which China about 110% and Slovenia 100% plus

The overall 3Q plan is around 135%.

AC servo: 140% plus.

Drives: about 120%

Robotics: about 90%

Robotics' base production capacity increases by 10 to 20%, so its utilization rate will decrease relatively.

Q What are the increases in procurement and logistics costs in the first half and second half?

A Cost increases in the first half of the year totaled about 1 billion yen for both procurement and logistics. In the second half of the year, we expect to spend around 2 billion yen and about 3 billion yen for the full year. In the second half, the breakdown of procurement and logistics is 50:50, and the costs are collected in the form of price pass-through or surcharge to some extent.

Q Is the price pass-through planned for the second half factored into the earnings forecast?

A 100% cannot be covered, but is woven.

Q Yaskawa has been able to meet the delivery deadline in China, but the operation rate of AC servo production is around 200%. In the long run, wouldn't it be necessary to make the next production increase? Is equipment input to Shenyang third plant progressing?

A After the establishment of the third plant, there was U.S.-China trade friction and COVID-19 crisis, and demand has been recovering since then. We are investing according to the amount of business. Next year, a new factory will be built next to the Changzhou robot factory. We will cope with an increase in quantity also by improving logistics efficiency in China.

Q What is the breakdown of the increase in the total overhead of the current full-year plan compared to the previous full-year plan?

A Labor costs rose in 2Q due to an increase in activity accompanying increase in revenue, as well as the suspension of layoff in Europe and the U.S earlier than expected. In the second half of the fiscal year, the Company expects to allocate strategic medium- to long-term compensation.

Q Have you revised the assumptions for orders in the second half in response to the upward revision of earnings forecast?

A The increase in orders for the full year is reflected.

Q Please summarize the results of the first half for temporary factors of impact of the consolidation of development functions.

A At the time of the announcement of 1Q financial results, there was an impact of 2.5 billion yen. In 2Q, an additional cost was incurred because the calculation related to inventory valuation of affiliated companies became larger than expected due to improved profit margin. The impact was 600 million yen, comprising 400 million yen for Motion Control and 200 million yen for Robotics. Combined with the first quarter, the total was 3.1 billion yen in the first half.

Q When will it be possible to produce orders worth 140 billion yen per quarter?

A That's a tough question. Accurate information is obtained by DX for the link between production and sales, optimization of procurement, etc. In order to cope with fluctuation risks, the increase of fixed assets will be controlled and we will adjust shifts in production. The company also plans to build a new factory in Changzhou and a new robot production

line in Japan, but advance orders are expected to some extent, therefore, we will make a production plan by grasping this well.

Q Has procurement been tight compared to three months ago?

A We work closely with suppliers to ensure that we do not stop our production lines.

Q There was a time when revenue peaked at 130 billion yen in a quarter. It's about 120 billion yen now. What's the background?

A Yaskawa has never been a bottleneck in customer production, but there are parts that do not come in, so we adjust production by using alternative parts. Σ -X does not use parts with high procurement risk, and in China, amplifiers are switched to Σ -X in advance.

Q You said that orders are very strong right now, but is this advanced orders of next year's demand? How do you see the future?

A We see some of the orders received at the moment are made in advance. Orders received on earlier dates are gradually leveled and it will return to a steady state. Therefore, the current high order status will be adjusted.

Q Is the reason behind early orders because Yaskawa is unable to produce as it wishes due to constraints on semiconductor parts procurement? Or are there other factors besides Yaskawa?

A In a situation where the whole industry is unable to make products, there are cases where an advanced order is placed because of a desire to secure parts, or where an order is flowing to Yaskawa because a competitor does not accept an order for a later delivery date. Yaskawa strives to deliver what customers need when they need it, and we will do our best to enable the entire industry to maintain its supply chain.

Q Will the backlog of orders be linked to revenue in the second half?

A I think it would be meaningless for Yaskawa alone to increase production and revenue. We will follow the flow of the entire industry so as not to become a bottleneck in the supply chain and cause inconvenience to customers.

Q Robotics is expected to have a profit margin of 11.9% in the second half. Motion control, on the other hand, doesn't reach past peaks, but why?

A Robotics is improving in capacity utilization due to an increase in revenue, and costs are not increasing. Selling prices are also stable.

Motion control is affected by higher distribution and material costs.

Q I expected that there would be more value added by replacing with new products.

A The effect of AC drive new series can be expected. Sigma-X will be introduced in earnest from the next fiscal year. YRM controller has just been put into the market, and the effect is yet to come.

Q What is the bottleneck in parts shortages compared to the previous peak in FY17?

A At the time of FY17, it was not possible to increase the number of machine tools rapidly, so the machined parts were a bottleneck. Unlike those days, there is a shortage of various parts including semiconductors.

At one point, there was talk of a shortage of semiconductors due to fire and cold weather, but now the shutdown of factories due to the COVID-19 lockdown in Southeast Asia, mainly Vietnam, is a big factor. There is a constant uncertainty about what will be in short supply, where different suppliers become bottlenecks on a daily basis rather than specific companies becoming bottlenecks.

Q In such a situation, is there anything that can be visualized or avoided by promoting digital management?

A We are promoting YASKAWA Digital Transformation (YDX), but we can not visualize the entire supply chain. However, if you look at the data that YDX collects on a daily basis, you can see that parts are stocked. It became possible to move in advance for securing parts. As a result, in 1Q, compared to some other companies, we were able to secure some stocks, but now the parts supply itself is unable to catch up with the demand, and the situation is becoming similar to those companies.

Q The Shenyang and Changzhou plants continue to have high operating rates, but there is uncertainty over real estate and electric power supply. What do you think of production capacity in the short to medium term?

A With regard to real estate and electric power concerns, the issue is not taken as seriously in China as it is reported in Japan and other countries. The real estate issue is seen as a frequent occurrence. In terms of electricity supply, China's domestic electricity supply is not stable on a daily basis, and it is not considered to be a major problem this time either. In addition, power is being systematically cut off and completely cut off in the question of how to distribute the total amount. Yaskawa has been able to respond by shifting operating hours to the time when electricity is available and by using generators. As for capital investment, the company is building a new plant in Changzhou in the belief that electric vehicles and semiconductors will continue to grow. We are also planning to further automate the line of Shenyang when we shift to Σ -X production. Necessary capital

investment will continue.

Q What exactly is the expansion of automation in production facilities in the Robotics business? (Supplement material page 7)

A The expansion of the automation domain means that the manufacturing method of the automobile changes by the shift to EV. Yaskawa products are for automotive production equipment, not automotive parts. Therefore, it is not directly linked to an increase or decrease in automobile production. With the introduction of hybrid cars and EVs, there have been significant changes in the way cars are made, such as efforts to improve productivity by shortening the production lines that are several hundred meters. This trend is described as an expansion of the area of automation.

Q Is there such demand in each region?

A I think it will increase in the future. The concept is different from region to region, and I don't know which will be the mainstream, but the difference benefits Yaskawa.

Q What are the plans for the second half, including the introduction of new services and a new fee system?

A While this is nothing new in the process of absorbing a service subsidiary and connecting after-sales service to before-sales service, it will include an annual maintenance contract and remote maintenance using monitoring of the operating status of the connected robot service. The company plans to revise its rate structure so that it can increase its profit margin if the products do not break down.

Q In the second quarter, orders from China's AC servo drive have diverged from those from revenue. Has the power shortage since late August led to an increase in orders placed by customers?

A There seems to be no advanced order due to power shortage. Regardless of the electric power, customers order the parts in advance because they want to keep them. In China, orders usually fall between the first and second quarters, but the reason why they don't fall is because of the shortage of parts.

Q How much order is placed in advance by region?

A Japan and China receive the most orders in advance. It is rare in Europe and America.

Q What is the progress in 2Q regarding the new product switch?

A The transition from the 1Q to 2Q has been steadily progressing at the same level.

Q In the second half of the fiscal year, the solution factory concept will be firmly established as a means of enhancing productivity. Do you have figures for productivity improvement by business segment? Also, what do you think about future investments such as capacity building?

A In developing the solution factory concept, the assumption for total improvement is 10% plus. There are no figures, but the image is going as planned.

We will flexibly consider increasing production capacity, and actively increase the capacity of processed parts, which is a bottleneck to increased production, including in-house production.

Since the enhancement of system integration depends on people, it will be enhanced as necessary so as not to generate surplus.

The company has secured space next to its headquarters in Kyushu and in Changzhou, China, and is working on projects that will take time, but it is not in a hurry to deal with those that can be done immediately.

Volatility of production increases and decreases in China fluctuates on a quarterly basis, and demand decreases in the second half due to seasonality. However, equalization will be achieved by preparing inventories for the next first half. It is not necessary to have the equipment with the capacity adjusted to the peak.

Q Can Yaskawa win when you think about the battery supply chain? As players change, where does Yaskawa stand?

A We will differentiate ourselves in module production. There is no added value if you only move objects from right to left like a SCARA robot can, which we do not focus on.

There are also charging stations, battery exchange stations and other facilities at the base of EVs, so it's not just about batteries, but also infrastructure.

Q What is missing in the supply chain?

A At the time of the Great East Japan Earthquake, Japan ran out of raw materials and could no longer supply goods. The reason for this time is semiconductor and the lockdown of Southeast Asia. The parts that don't come in are changing every day. Although there is a slight delay in delivery, the revenue was almost as planned in the first half. We could have produced a few more billion yen worth, but it would have stuck somewhere in the supply chain.

Q Is it correct that Yaskawa's revenue plan is being hampered by the fact that manufacturers that are the slowest to supply in the market are bottleneck?

A Partly correct. Supply chain shortages will ease in the second half, but Yaskawa isn't the

only one with access to materials. I don't think the manufacturer with the slowest supply is the only cause. The Vietnamese government says the plant will be back in operation in January, and I expect the situation will be better when Southeast Asia is back to normal.

Q Even if orders are very strong in September and October, this level will not continue because there are many orders in advance. How do you see the transition from 2Q to 3Q orders?

A Opinions are divided even within the company, but I assume it will fall a little. Experience has shown that China tends to fall in the second half. In Japan, the number of orders placed in advance is increasing, but if the number of orders placed in China declines, Japan will also decline.

Actual demand itself is firm, but the situation of accumulated demand will be adjusted.

Q Do you think that revenue will increase in the next fiscal year even if orders in the second half fall to the actual demand level as the backlog of orders will be carried over to the next fiscal year?

A It's a difficult question, but the image is right. For the first half of next year, it will continue to grow as China prepares infrastructure for EV and 5G.

Q How will the trend of production innovation by automakers be positive? The battery market is likely to be positive, but I think the field of completed car manufacturers will be advantageous to other companies.

A There is no specific company that has an advantage, and when the manufacturing process changes, it benefits all the existing robot suppliers, and the share changes little by little. This market with high barriers to entry has few new entrants and is uniformly positive for existing suppliers. Yaskawa will roll out the Digital Twin and i³-Mechatronics, including peripheral servos. Since it is difficult to set up a net in every area, we will narrow down the focus area.