

## Q&A Summary of the IR Business Briefing of Furukawa Electric Co., Ltd.

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Contents: Automotive Products business

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Q: In recent years, some new vehicles no longer use wire harnesses. What is the status of bidding and orders for your strategic products directed at the mid-2020s?

A: Orders through 2025 have almost all been determined, but the vehicle platform will undergo a change from 2025-2027. The trend is the replacement of ICE and HEV vehicles with BEV. Currently, we are competing for orders for models through 2027. However, for BEV, due in part to the fact that customer specifications have not yet been finalized, competition for these orders will occur going forward. We will work to maintain and expand the B domain indicated on Page 10 of the provided materials (high voltage wire harnesses and junction boxes (JB)).

Q: What advantages and disadvantages will the future technological changes cause to your business?

A: Even with EV, the engine will simply change from a motor to batteries, so there will be no particular impact on our business. Therefore, there will be no major drop in aluminum wire harness sales. Conversely, it will present an opportunity to increase engine related sales, including high voltage wire harnesses and high voltage junction boxes.

Q: Is it correct to expect that sales will consistently increase going forward?

A: As shown in the graph on the left hand side of Page 10, sales will increase slightly through 2025. From 2025, the A domain will be replaced by the B domain. Our main battle will occur from 2025.

Q: Your competitors are also actively pursuing high voltage wire harnesses. What strengths do you possess in the high voltage area (fiber laser welding shown in Page 13, as well as metals and polymers technology)?

A: By using our high-speed and fine processing technology with fiber lasers in the connection area, which is the key to the performance of high-voltage harnesses, enables the production of compact, highly reliable products (this technology is also applicable to a terminals). Metal technology is required at joints, and we provide optimally balanced electrical, mechanical and thermal functionality. Regarding polymers, we possess strengths in realizing high heat resistance and high flexibility in the jacket resin used to cover fat, rigid conductor wires.

Q: Will increased added value per vehicle resulting from increased use of high voltage products result in a higher profit margin? Also, why does Page 9 discuss no new products or businesses for high voltage products?

A: The business model for high voltage wire harnesses is based on in-house manufacturing of the copper, resin, junction box, connectors and other components, so they have higher added value compared to low voltage wire harnesses.

The high voltage products shown on Page 9 are already being delivered for HEV. However, BEV required even larger currents and higher voltages compared to HEV, so they have been positioned as new products from 2027 (and should have been included on this page).

Q: In response to the rising wire harness related costs, what progress have you made in incorporating the higher costs in the sales price? I believe it will be difficult to recoup all of the higher costs, but will you be able to achieve profitability on par with past years?

A: Concerning materials procured from the marketplace, 100% of the higher costs have been shifted to the customer through the implementation of market-based pricing. In addition, customers have agreed to bear part of the maritime shipping and electronic component costs, and overall, over half of the higher costs have been passed on to the customer. We will continue to incorporate the higher costs in the sales price as necessary this year with the aim of passing on 60-70% to the customer. The cost of maritime shipping and some raw materials are returning to normal levels, and ultimately, we want to fully eliminate the burden on our business.

Q: Concerning wire harnesses, a number of changes are occurring, including replacement by FPC and consolidation of the ECU units. Do you view wire harnesses to be a growth industry

in the future, and do you expect the number of harnesses and monetary value per vehicle to increase?

Also, will your customer base (of mainly Japanese automobile manufacturers) change as a result of the shift to EV?

A : Concerning wire harness, although the number of circuits may decrease slightly as a result of ECU consolidation, autonomous driving will result in more circuits. As our customers' vehicle platforms undergo a change from 2025-2027, existing products will decrease slightly while replacement products (high voltage products, etc.) will increase. The details will change, but the overall market and our products will be maintained and grow.

Concerning the customer base, there will be no change of primarily Japanese automobile manufacturers for our wire harnesses, but we are delivering SRC and other components to Chinese automobile manufacturers. While gathering information, we are conducting activities aimed at cooperation (including for wire harnesses) in the future.

Q : As the automobile industry undergoes a transformation, I believe it will be difficult to achieve future growth without acquiring new customers. What barriers to entry do you feel exist in relation to acquiring new customers?

A : Our products can broadly be divided into "wire harnesses" and "functional components". Our functional components are already being delivered to automobile manufacturers in the United States, Europe, China and India. On the other hand, for wire harnesses, we lack sufficient in-house design personnel who are able to respond to the different design methods of each customer in each country. Therefore, in order to acquire new (overseas) customers, we would need to merge with or acquire a company already capable of performing such design.

Q : You are aiming to largely increase operating income toward FY25, and in addition to normalization (from the current situation), I feel that increased revenue from each product will contribute to earnings. The net sales plan for each product is shown on Page 18, but what products do you expect will most contribute to operating income?

A : The situation has been changing recently, and the past several years were terrible. Going forward, wire harnesses will be the product that most contributes to increased profits. Also, radar, BSS and high voltage products, which to date have not yet achieved a scale at which the fixed costs can be absorbed, will also start to provide profits in FY25. We can achieve our FY25 profit target through increased profits from wire harness and other components.

Q: Concerning the improvement to profitability, what is the breakdown of the contribution from the return to normal operations and product replacement? Also, what initiatives have you implemented for increasing capital efficiency directed at improving ROIC?

A: We are targeting a profit margin of 5% in FY25. Of this, 2/3 will be from the return to normal operations, and 1/3 will be from product replacement. We are making investments based on the expectation of higher net sales from fixed orders, and we will recoup these investments by FY25. It typically takes 2-3 years from receiving an order to starting mass production, so development and investments occur in advance. We will reap the benefits from the upfront investments.

Q: Given that you do not have a large share of the wire harness market and that wire harnesses are a labor intensive product, I believe increasing productivity will be key. Will you further automate production in the future?

A: The production process can roughly be divided into 3 steps. ①Preliminary processes (Cut the conductor wire→ Strip each end→ Attach terminal→ Insert connector) have already been 100% automated. ②End processes (bundle the wires into a harness) cannot yet be automated. We expect to be able to automate ③Inspection process in the near future through the use of imaging inspections and AI. The difficulty in automating ②End processes originates from the product design. In order to install the harness in the customer's vehicle, the wire harness is individualized for the particular vehicle model and there is usually a part of the wire harness that is difficult to make. For this reason, we participate and submit proposals from the vehicle design stage. Not all of our proposals are accepted, but we will thoroughly discuss with the customer and work toward realizing automation. This will also increase the quality of our products, as well as reduce manpower and costs.

Q: (For ②End processes,) As a result of design changes, what percentage of automation do you aim to achieve?

A: Our current target is about 70-80%. We are working toward planned implementation from 2025-2026 vehicle models.

Q: Concerning the net sales plan by product shown in Page 18, you expect wire harness sales to increase by 20% in FY25 compared to FY22, but what impact will the shift to lightweight and aluminum have on improving the profit margin? I understand that as the use of aluminum wire harnesses increases, shipment volumes of your connectors will increase

and use of other companies' connectors will decline, leading to higher profit margins. Will terminals grow in proportion to the increased adoption of aluminum wire harnesses? Also, from 2027, will it be necessary to further expand capacity in line with wire harness growth?

A: The reason that increased adoption of aluminum wire harnesses leads to higher profit margins is that the terminals are produced in-house. The connectors are also manufactured in-house and contribute to profits. In addition, mixed aluminum and copper wire harnesses provide both lightweight and cost merits (difference in substrate price) for the customer, and we will work to acquire part of those cost merits. Because we already made the upfront investments in aluminum wire harnesses and terminals when 70-80% of the orders for FY25 were finalized, our current manufacturing capacity will be sufficient through FY25. Thereafter, the current products will undergo a model change, and the need for additional investments may arise.

Q: For radar, BSS, SRC and other components, have the orders through FY25 been finalized? Also, are more vehicle models adopting your radar?

A: The number of vehicle models adopting our radar is increasing. Also, more than 90% of orders for FY25 are firm orders.

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