

Translation

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Q&A Session Summary from the Financial Results Briefing for the Nine Months Ended November 30, 2023

Today OXIDE Corporation held a financial results briefing for analysts and institutional investors. The following is a summary of the responses to the main questions asked by those in attendance. To promote clarity, some additions and corrections have been made to the original transcript, and are included in this summary.

- Q. The size of the downward revision seems too large. Why did you make such a large downward revision?
- A. The main factor contributing to the downward revision is the decrease in Semiconductor business sales in the third and fourth quarters. The selling price of OXIDE's laser system is tens of millions of yen per unit. We planned to ship approximately 50 systems in the fourth quarter and proceeded with the manufacturing process, and we were scheduled to recover from the decline over the full year. Improved components were delivered by the current vendor and we conducted reliability evaluation on these from the end of last year to the start of the year. The state of evaluation to date is that the initially expected yield has not been obtained with the modified components actually installed in lasers. Recently, it was found that just over ten components are expected to pass OXIDE's stringent reliability evaluation, resulting in this downward revision.
- Q. Explain the specific defect with the components in detail.
- A. The component defect is that the performance of a component required to generate an DUV laser becomes unstable while being used. The DUV lasers sold by OXIDE require long-term stability because they are continuously used for one year in semiconductor fabs such as those of Intel, Samsung and TSMC. Although the existing components of the current vendor have no problems with performance at the time of delivery, it was found that performance becomes unstable when they are used for a prolonged period of time. We performed statistical analysis of the failure, and analyzed the time dependency of the failure rate. As a result,

it became clear that the ten-day continuous operation test previously conducted to determine whether products are acceptable or defective is inadequate, and that a one-month test is required. For this reason, from the end of the second quarter, only the components that passed the one-month continuous operation tests have been installed in OXIDE laser system and shipped as products.

Q. Based on disclosures in the second quarter financial results, it was my understanding that the defective component issue had been resolved. Is that not the case? Please explain why the current vendor has not been able to resolve the issue.

A. Since a decline in yield in the third quarter last year, we have proceeded to clarify the causes of the defect and identified the physical phenomenon that cause the defect in the second quarter of this fiscal year. This is a combined factor of material and structure, and it was found that the defect does not occur if either of these is suppressed. Due to the current vendor responding that it is difficult to modify the material, we proceeded to make modifications with focus on structural measures, and began by prototyping five units as proof-of-concept units. We transitioned to mass production because no defects occurred in any of the five units.

When making the transition from the proof-of-concept prototypes to mass production, there were problems in manufacturing such as variation in production. The improvements confirmed in the proof of concept were not applied and not properly built into the products. We are currently working with the current vendor to determine whether there were any defects occurring in component assembly and whether there are any differences in the manufacturing conditions compared to the proof-of-concept units in the process of manufacturing mass-produced products.

Q. What level is the yield of the second vendor's components compared to that of the current vendor? Also, are there any issues with the production capacity of the second vendor?

A. As explained earlier, the physical phenomenon causing the defect was identified in the second quarter of this fiscal year. This is a combined factor of material and structure, and it was found that the defect does not occur if either of these is suppressed. The second vendor has adopted a design that does not cause defects in both of the material and structure based on OXIDE's guidelines. For this reason, similar defects will not occur in principle. The second vendor has succeeded in mass production of the components based on OXIDE's design. The results of the evaluation of first five units were good. Next, we purchased ten units, and at the present time, they have passed long-term reliability evaluation with a yield of 100%. Since then, we have ordered an additional 16 units, which are scheduled to be delivered in sequence. We plan for the delivery of 100 units next fiscal year, and are in talks about increasing production. For the present time, it seems that we can secure the number of units required for manufacturing, but we are in discussions about increasing production to meet customers' requirements.

Q. I would like to hear you dig deeper into the engineering problem. What is the specific bottleneck?

A. In order to suppress defects, we changed the structure of a certain part. However, we have been unable to

properly reproduce the anticipated implementation and the designed shape as a product in mass production. We are verifying problems in the manufacturing process one by one to determine why the problem occurred.

- Q. Sales in the Semiconductor business decreased by 300 million yen in the third quarter compared to the second quarter. Meanwhile, companywide operating profit deteriorated by 500 million yen. Why is the decrease in operating profit larger than that in sales? Also, could you explain why sales in the Semiconductor business will increase by 300 million yen in the fourth quarter, while companywide operating profit will also increase by 300 million yen?
- A. During the second and third quarters, we made more purchases than necessary to secure yield. Furthermore, the defective components required an internal testing process, further increasing the number of man hours required. Considering the above factors, there was a significant difference compared to normal mass production costs. Furthermore, we have also provided reserves based on a substantial provision for product warranties. The expenses arising from the fourth quarter onwards being recorded in the third quarter are a factor in the significant difference in profit compared to the change in sales.
- Q. You will have a deeper relationship with KLA through the third-party allotment to that company. Could you explain the current conditions and future outlook in business with KLA.
- A. In 2023, we fell slightly short of our initial plans due to a drop in the semiconductor market as a whole. However, although demand for newly used single crystals, maintenance demand was as initially scheduled. In 2024, we expect an increase from 2023 due to a recovery in the semiconductor market.
- Q. Please explain the impact of Raicol's performance on consolidated financial results and the outlook for the future financial results of Raicol.
- A. Raicol's statement of income has been included in the consolidated results from the second quarter of the current fiscal year. The second quarter was generally as planned and the third quarter was slightly weak. Raicol's fiscal year is two months apart from the OXIDE's non-consolidated financial results, and Raicol's October to December results are consolidated into OXIDE's fourth quarter results, and its performance is strong in the fourth quarter. Although falling slightly short of the plan for the cumulative total for the full year, Raicol's non-consolidated net sales are expected to increase by around 10% year on year. In particularly important areas of business, Aerospace & Defense sales are expected to increase by approximately 14% and Quantum Physics sales are expected to increase by approximately 16%. In future, we will proceed to expand business synergies between Raicol and OXIDE. We will also accelerate collaboration with Raicol in the Semiconductor business.
- Q. What caused the softening of Raicol's performance in the third quarter?
- A. A softening in demand from certain customers in the green energy area in which Raicol is engaged as a new area was a factor.

Q. You have stated that you perform reliability tests for ten days or one month to determine whether laser components in Semiconductor business are acceptable or defective, but how do you guarantee reliability for one year?

A. Using an analytical method tracking how the failure rate changes over time, we have hypothesized the process (phenomenon) of failures and are statistically forecasting the failure rate into the future. Until now, we have spent over a year gathering data on relation between failures of defective parts and time, and statistically analyzed the failure rate into the future.

Using this data, we analyzed how many defects would occur in shipped products that underwent the original ten-day testing period when there are continuously operated for a further one year. As a result, we found that the ten-day test is inadequate, and that if no defects occurred in the one-month test, product could be used without problems for another year. This led to the decision to extent long-term reliability tests from the previous length of ten days to one month.

Meanwhile, as explained earlier, the second vendor has adopted a design that does not have material or structural problems causing failures. Furthermore, in the unlikely event of the defect phenomenon occurring, additional steps have been taken to further suppress this. For this reason, failures will not occur in principle with the second vendor's components. The reliability estimated based on the explained physical phenomenon matches actual data. At present, we are also conducting a reliability test in excess of 5,000 hours (approximately half a year), and no failures have been seen in that data. Therefore, we do not believe it is necessary to conduct the ten-day or one-month long-term reliability tests conducted by the current vendor. For this reason, we believe man hours for determining acceptable and defective products can be significantly reduced.

Q. You have stated that you are in talks with the second vendor for 100 units next fiscal year. Please explain the handling of increased production to secure production capacity in the second vendor and the need for additional investment at the second vendor.

A. At present, the second vendor has not built a production system for 100 units, but we have already begun talks aimed at an increase in production. If this goes as planned, we have heard that they will be able to achieve production capacity for 100 units next fiscal year. We have also heard that the second vendor will not need to make significant capital investment.

Q. How will you meet demand in the period until the second vendor's production capacity reaches the planned 100 unit level? Furthermore, I would like you to explain whether the yield problem and the deterioration of the cost ratio due to the current vendor will continue during that period.

A. At present we are receiving around five units per month from the current vendor. In addition to this, the current vendor's yield is not zero. Because there are also modified versions that have passed testing, we will meet customer demand using these. Furthermore, we purchased approximately 150 units from the current vendor from the second quarter to the third quarter, and significantly increased man hours in defect analysis

and manufacture of OXIDE's lasers. We believe that the cost ratio can be significantly improved going forward because we will be able to reduce the number of hours without time being required for these.

Q. It seems that you are using too much money such as M&A, R&D and capital investment for the size of the company. What are your thoughts on this?

A. As you have pointed out, we have made substantial investments in M&A, R&D and capital investment for the current size of the company, such as the acquisition of Raicol last March and active R&D. However, OXIDE's goal is not to achieve listing, but rather to further grow the company with speed, and to enhance corporate value, and we believe it is important to take appropriate risks to take on challenges. It is generally held that the rate of success in R&D is around 3 in 1,000. We have been able to succeed in new businesses with a very high rate of success by ascertaining market trends and whether we can successfully address what users really require. Going forward, we ask for your ongoing support because we would like to meet everyone's expectations by taking risks to the extent possible and continuing to grow.

Q. Is there a difference in the procurement cost between the current vendor and the second vendor?

A. At present, the procurement cost from the second vendor is around double that of the existing vendor. We are proceeding with talks to gradually lower procurement costs with the commencement of mass production. For this reason, we believe we can reduce procurement costs. Furthermore, the current vendor's yield was around 50% at most in past tests, and considering the current vendor's yield, the cost is equivalent to or lower than the existing vendor even now.

Q. Is it possible that OXIDE's share in customers will decrease due to this defect?

A. OXIDE's lasers are important parts of customers' equipment, and we have heard that they are difficult to replace. For this reason, we do not anticipate that OXIDE's share in customers will dramatically decrease at present.

Q. If production of equipment by customers is delayed due to your company's defect, is it possible that this will have an impact on advanced semiconductor manufacturers?

A. We have caused great inconvenience to our customers due to our defect problem. Based on customers' production plans, we will focus on proceeding with shipments in consultation with them such as using the second vendor's components, and endeavor to restore customers' trust.