

RS Technologies

3445

Tokyo Stock Exchange Prime Market

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Summary

Orders have been strong since the start of the year and excellent results are expected to continue in FY12/22 supported by the weak yen

RS Technologies Co., Ltd. <3445> (hereafter, “the Company”) conducts reclamation processing of silicon wafers, a major material for semiconductor chips, as its main business, and has the largest global market share with approximately 33% (the Company’s estimate) in 12-inch (300 mm) and 8-inch (200 mm) reclaimed wafers, which are the main sizes. The Company entered integrated production and sales of prime wafers in China in 2018 and plans to begin 12-inch reclaimed wafer business at affiliate companies in FY12/22. It is focusing on developing the semiconductor-related consumable materials business to be the third major income source.

1. In the FY12/21 results, sales and profits increased by double digits thanks to the active conditions in the semiconductor market

In the FY12/21 consolidated results, sales and profits increased significantly, with net sales rising 35.4% year on year (YoY) to ¥34,620mn and operating income growing 51.8% to ¥6,874mn. Moreover, both set new record highs. The main factors were that against the backdrop of strong demand for semiconductors, results were excellent in the wafer reclaim business, and that results also grew significantly in the prime silicon wafer manufacturing and sales business (hereafter, prime wafer business) following the start of fully fledged operations at the new plant. Due to the recording of share-based payment expenses of ¥1,404mn* in extraordinary losses, net income attributable to owners of parent increased 17.0% to ¥3,303mn.

* The Company recorded the difference from fair value as share-based payment expenses, accompanied by the transfer of some shares to an employee stockholding association as part of IPO preparations for shares of its Chinese subsidiary. It did not incur any cash outflow.

2. The strong impression is that the FY12/22 results forecasts are conservative and there is plenty of room for results to exceed them

For the FY12/22 results, the Company is forecasting that net sales will increase 8.0% YoY to ¥37,400mn, operating income will rise 10.6% to ¥7,600mn, ordinary income will grow 0.8% to ¥8,900mn, and net income attributable to owners of parent will increase 45.3% to ¥4,800mn. Against the backdrop of the semiconductor market growth, sales and profits are expected to increase in each of wafer reclaim business, prime wafer business, and semiconductor-related equipment and materials, etc. business. In prime wafer business, the acquisition of certification for 8-inch wafers is forecast to be completed by 2Q, so further earnings growth is expected. The reason why the growth of ordinary income will only be small is the reduction in subsidy income following the transfer of the new plant in China. However, as the extraordinary losses recorded in the previous period will not be recorded, net income attributable to owners of parent is forecast to increase significantly and to set a new record high for the first time in four periods. Since the start of the year, orders have been strong, and regarding exchange rates, the yen has trended weaker than the Company anticipated*. Therefore, as long as semiconductor demand does not rapidly slow down going forward, at FISCO we think it is highly likely that results will exceed the Company forecasts.

* The anticipated exchange rates in FY12/22 are ¥110/USD, ¥17/RMB, and ¥3.8/NTD. The weakening of the yen by ¥1/USD is a factor increasing operating income by ¥20mn to ¥30mn a year.

Summary

3. Aiming for growth outpacing the semiconductor market

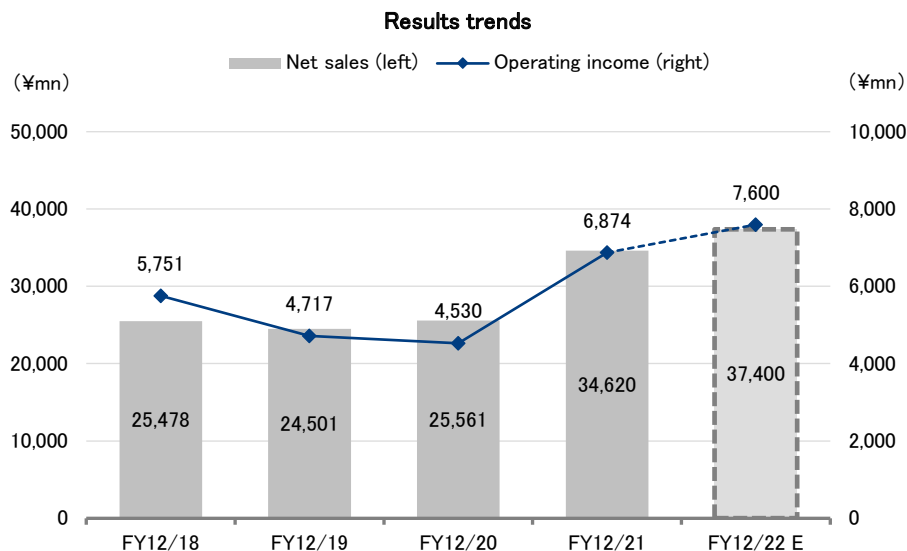
The Company's goals in FY12/25, the final fiscal year of the medium-term management plan, are ¥45,000mn in net sales and ¥10,000mn in operating income. The four-year compound annual growth rates (CAGR) are 6.8% for net sales and 9.8% for operating income. It is assumed that the annual growth rate of the semiconductor market is 5%, so it is aiming for growth above the market average. The forecasts are for net sales to grow in each of the three main businesses and for profitability to improve in prime wafer business and semiconductor-related consumable materials business. Consolidated subsidiary GRINM Semiconductor Materials Co., Ltd. (hereafter, GRITEK) has applied to be listed on the Shanghai Stock Exchange STAR Market for newcomer companies (referred to as China's NASDAQ), and it is likely to be listed in the summer of 2022 if the review proceeds smoothly. The Company intends to maintain it as a consolidated subsidiary after it is listed.

Also, GRITEK's equity-method affiliate GRINM RS Semiconductor Materials Co., Ltd. (hereafter, SGRS)* started shipments of 12-inch reclaimed wafers from 2Q FY12/22 and plans to start mass production of 12-inch prime wafers from 2023 onwards. For the time being, its effects on consolidated results will be negligible, but the intention is to make it a consolidated subsidiary once it reaches the stage of achieving profitability for 12-inch prime wafers. China has indicated that its national policy is to develop the semiconductor industry, so on considering that the semiconductor market in China will grow in the future, it can be said that the potential for growth is enormous in the medium to long term.

* The Company's investment stake in GRITEK is 19.99% and for its consolidated results, approximately 9% of SGRS net income is recorded in equity in earnings/losses of affiliated companies.

Key Points

- Against the backdrop of strong demand for semiconductors, in the FY12/21 results, achieved higher sales and profits that exceeded the Company forecasts
- Orders continue to be strong and the weak yen is also having an effect, so FY12/22 results may exceed the Company forecasts
- Is targeting net sales of ¥45bn and operating income of ¥10bn in FY12/25



Source: Prepared by FISCO from the Company's financial results

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■ Company overview

Started in the silicon wafer reclamation business and expanding to the prime wafer business and semiconductor-related equipment and materials, etc. business

1. History

RS Technologies Co., Ltd. was established in December 2010 in order to take over the silicon wafer reclamation business of Rasa Industries, Ltd. <4022>, which had withdrawn from the business, inheriting its equipment and technology. Since then, it has been developing its silicon wafer reclamation business and currently has two plants, the Sanbongi plant in Osaki City, Miyagi Prefecture and the Tainan plant in Taiwan (completed in 2015), which is owned by RSTEC Semiconductor Taiwan Co., Ltd., a subsidiary established in 2014.

Also, in 2017, the Company announced that it would be launching a prime wafer business in China, and in 2018, together with Chinese state-owned company General Research Institute for Nonferrous Metals (currently, Grinm Advanced Materials Co., Ltd.; hereafter, GRINM) and Fujian Kuramoto, it established a joint venture, Beijing GRINM RS Semiconductor Materials Co., Ltd. (BGRS). At the same time, BGRS invested in GRITEK, which was a subsidiary of GRINM that manufactured and sold silicon ingots and prime wafers, turning it into a wholly owned subsidiary. The investment ratios in BGRS are 45% for RS Technologies, 49% for GRINM and 6% for Fujian Kuramoto. Although its investment ratio is below 50%, Fujian Kuramoto is an investment company managed by a relative of the Company's President Nagayoshi Ho, so in actual terms, it owns more than 50%, and moreover, has appointed three of the five directors that comprise the BGRS Board of Directors. Therefore, it effectively holds the management rights and BGRS is deemed to be a subsidiary within its scope of consolidation.

The reason for the complex investment scheme for BGRS is that, if a Chinese company's investment ratio from local capital is 50% or above, it is treated by the Chinese government and local governments as a domestically funded company and is eligible to receive various types of subsidies and other funding. Such companies also receive preferential treatment in areas like capital investment and taxes, giving them competitive advantages over foreign-funded companies. In 2018, together with the city of Dezhou, Shandong, GRITEK established Shandong GRINM Semiconductor Materials Co., Ltd. (hereafter, Shandong GRITEK), a joint venture, as a new manufacturing base (investment ratios: GRITEK 80% and Dezhou 20%).

The Company has also engaged in buying and selling semiconductor-related production equipment and materials since its founding, and is working to expand its business areas. For instance, in 2018, it acquired shares of Union Electronics Solutions Co., Ltd., a semiconductor trading firm, followed by shares of DG Technologies Co., Ltd., which manufactures and sells semiconductor-related consumable materials (quartz rings and silicon electrodes) in 2019 as wholly owned subsidiaries. Furthermore, in 2020, it established Shanghai Union Semiconductor Co., Ltd. and Beijing Gritek & IVT Valve Technology Co., Ltd. to expand sales of semiconductor-related materials, and established SGRS, which handles 12-inch wafer reclaim business and prime wafer business, jointly with GRINM and a fund affiliated with the Dezhou government. (The Company made SGRS into an equity-method affiliate, with a 19.99% investment ratio from the time of its establishment, and currently owns shares through GRITEK.) Through these businesses, the Company is actively developing operations in China.

The Company’s strength in reclaimed wafers lies in the large number of times they can be reclaimed through precision inspection and polishing technologies

2. Reclaimed wafers and prime wafers

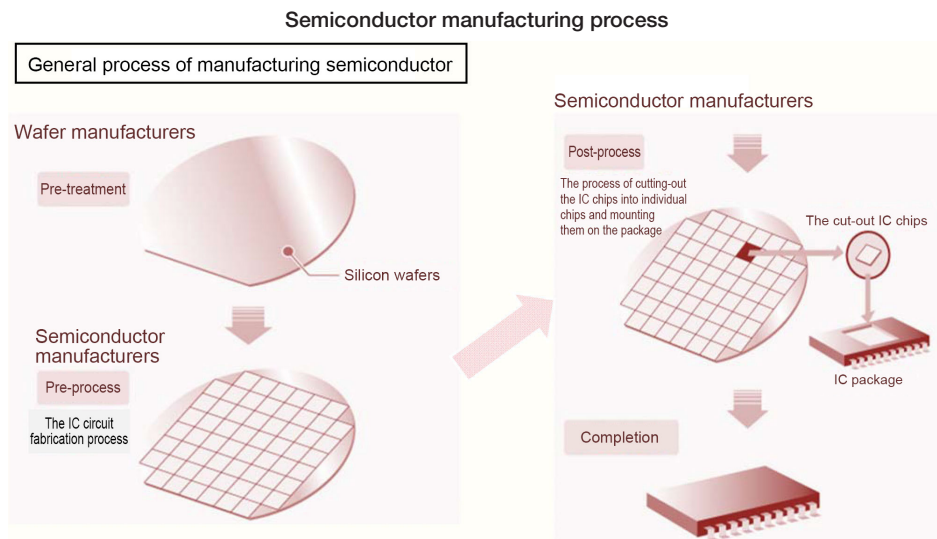
To appreciate the strengths and growth potential of the Company’s mainstay silicon wafer reclaim business and prime wafer business, it is essential to understand the semiconductor manufacturing process and role of silicon wafers as well as the manufacturing methods used to produce them. An explanation is provided below.

(1) Silicon wafers

A semiconductor is a substance that has electrical conductivity properties halfway between a conductor, which conducts electricity, and an insulator, through which electricity cannot pass. Using these properties, integrated circuits (IC) are manufactured to fabricate highly dense electric circuits. Microprocessing units (MPU), “the brain” of the PC, and memory to store information (such as flash memory and DRAM) are typical examples of semi-conductors. They are installed in various applications, including home electrical appliances, telecommunication devices, and automotive electrical equipment, and are also known as the “rice of industry.”

Various materials are used in the substrates of these semiconductors according to the required performance, with silicon being among the most widely used. An ingot (meaning a block) of single high-purity silicon is pulled from melted polycrystalline silicon and then sliced into disk-shaped objects called silicon wafers*. Semiconductor manufacturers fabricate detailed circuits on silicon wafers and manufacture semiconductor chips.

* The thickness of a single 12-inch wafer is determined as $775 \mu\text{m} \pm 25 \mu\text{m}$, and several hundred silicon wafers can be obtained from a single ingot.



Source: Prepared by FISCO from the Company’s results briefing materials

Company overview

Currently, silicon wafers are mass-produced in various sizes, including 5 inches (125 mm), 6 inches (150 mm), 8 inches (200 mm), and 12 inches (300 mm) in diameter. For state-of-the-art semiconductors that require high integration (miniaturization), 12-inch wafers are mass-produced. Furthermore, not all silicon wafers introduced into the semiconductor manufacturing line are used to manufacture semiconductor chips. Semiconductors are completed by repeatedly creating fine circuit patterns on the silicon wafer, so the manufacturing process is carried out in tandem with tests and evaluations to check the finishing conditions in each process. The silicon wafers used for tests and evaluation purposes have names such as “test wafers,” “dummy wafers,” and “monitor wafers,” (collectively referred to as “monitor wafers” hereinafter in this report), and are primarily made using reclaimed wafers. Conversely, the wafers that are actually processed for semiconductor chips are generally called “prime wafers” (called “prime silicon wafers” in the name of the Company’s business segment, but refer to the same thing).

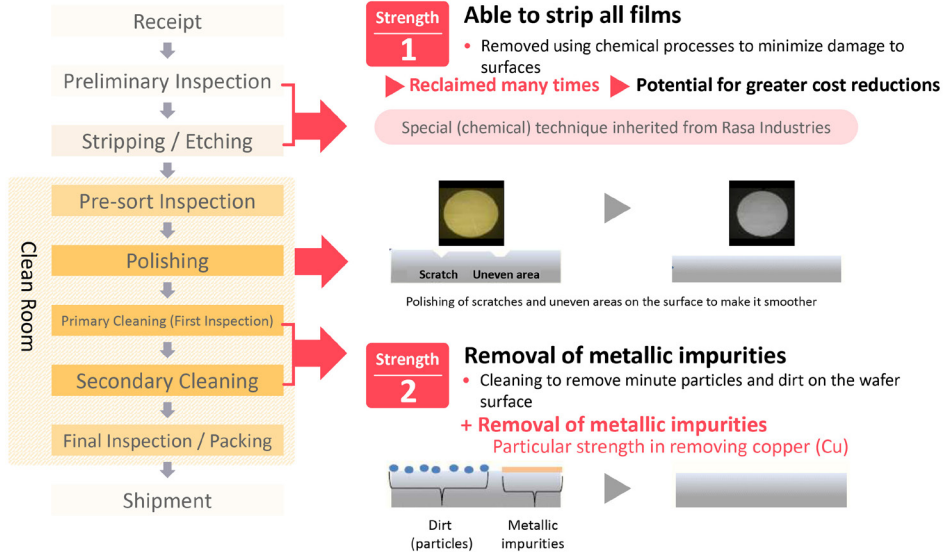
(2) Reclaimed wafers

Currently, the amount of monitor wafers used is estimated to be about 20% of the total amount of wafers deployed on the semiconductor manufacturing line. Although it is the standard to use a new wafer for the monitor wafer, semiconductor manufacturers recycle used monitor wafers through a reclaiming process business such as the Company and reuse them in order to reduce the costs of manufacturing semiconductors as much as possible. As the price of a reclaimed wafer is approximately 25% of the price of a new wafer, if the number of wafers introduced remains the same, it is possible to significantly reduce wafer introduction costs simply by using reclaimed wafers for the monitor wafers.

In the wafer reclamation process, an acceptance inspection is conducted and all elements, such as the insulating film formed in the semiconductor manufacturing process, are removed. After that, polishing is performed in a clean room to ensure that the surface of the wafer is completely flat, followed by precision cleaning, and then shipment. One of the Company’s strengths is its technological capabilities, as in the film removal process, it is able to strip all the film through a chemical process and perform precision polishing that keeps any damage to the wafer’s surface to the absolute minimum. This increases the number of times a wafer can be reclaimed to 20 or 30 times, which is around double the industry average. The thickness of a 12-inch prime wafer is approximately 775 μm , and it is said that up to around 630 μm can be used for a monitor wafer. Therefore, the less the amount of the wafer’s thickness that is removed by polishing in a single reclamation process, the higher the number of times it can be reclaimed. For example, if the wafer thickness is reduced by 10 μm in a single polishing, the number of times the wafer can be reclaimed is only 14 or 15, but if the polishing can be kept down to a reduction of 5 μm , this number increases to as high as 30. Another of the Company’s strengths is that it has technologies to remove metal impurities. In particular, it has been certified by many semiconductor manufacturers to remove copper (Cu) as the only supplier capable of polishing wafers to a degree of cleanliness that is as good as new. Although there is currently not a large demand to introduce processes that require the degree of cleanliness of reclaimed wafers that use copper (Cu), demand may rise depending on environmental changes in the future, such as tightening conditions for supply and demand of wafers and increased costs.

Company overview

Wafer reclamation process



Source: Prepared by FISCO from the Company's results briefing materials

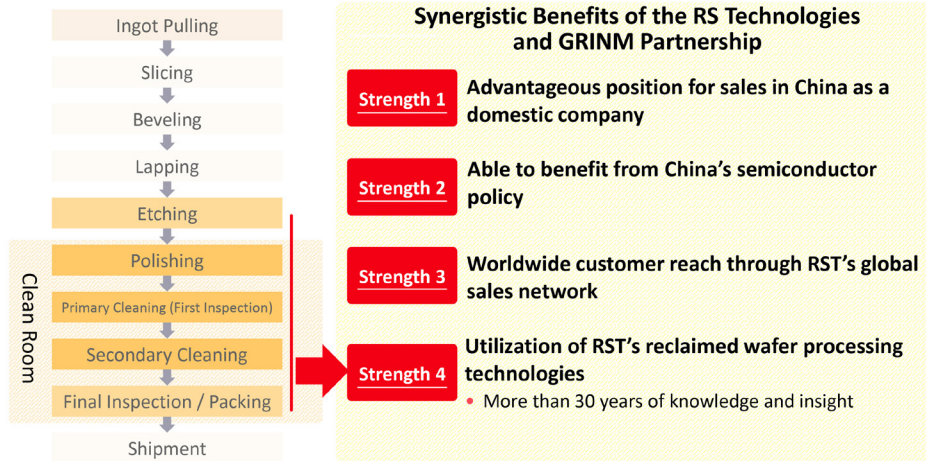
(3) Prime wafers

Prime wafer is another way of saying a new wafer. Wafer processing consists of front-end processing, which includes silicon crystal ingot pulling, and back-end processing, which includes slicing wafers from ingots into disk-shapes and polishing the surface of the wafers. While all these processes require advanced technology, the success of silicon wafer manufacturing businesses depends largely on front-end processing yields. Production yield does not merely refer to the number of units that can be produced per hour. The more important factor is the number of good quality prime wafers that can be produced from one silicon crystal ingot. This is because even for new-product wafers, the grade is determined by quality (homogeneous purity, oxygen concentration, resistance value, etc.) in the same way, and if certain standards are not met, they are sold at a low price as monitor-use wafers.

Shandong GRITEK of China manufactures and sells prime wafers. One of its strengths is that, as previously stated, it can utilize various preferential treatment systems as a domestically funded company, and that the Company could benefit from various Chinese government measures given that the semiconductor industry is being developed as a national policy. In technology, the Company leverages its industry-leading technology capabilities cultivated over many years in the wafer reclamation business in back-end polishing and cleaning processes. It appears to have its work cut out for now in simply dealing with increases in semiconductor production in China. But looking to the future, it is aiming to improve the quality of its products to the global standard and to sell to the semiconductor manufacturers around the world through the Company's sales network.

Company overview

Prime wafers



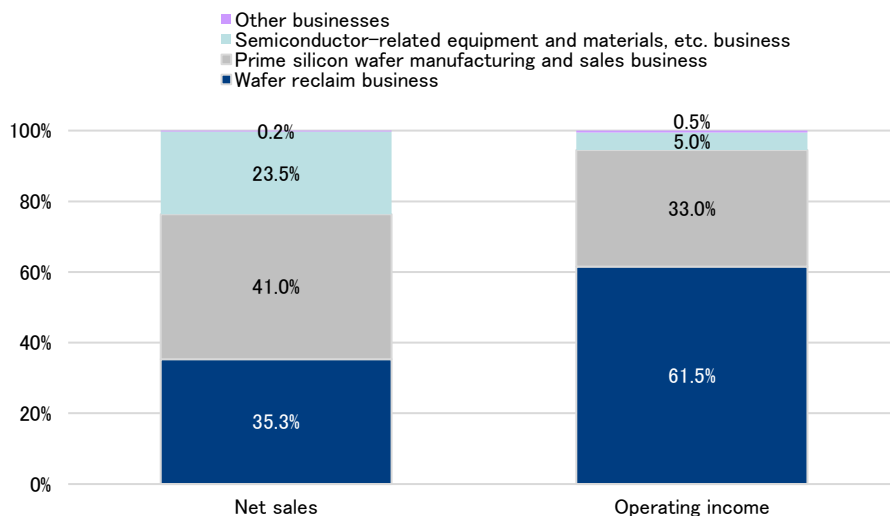
Source: Prepared by FISCO from the Company's results briefing materials

The wafer reclaim business has a leading share of the 12-inch wafer market, at approximately 33%, and its main customers include TSMC and Kioxia

3. Business description

The Company classifies its business operations into three business segments, specifically the wafer reclaim business, prime wafer business (prime silicon wafer manufacturing and sales business), and semiconductor-related equipment and materials, etc. business, and discloses information on each segment. Looking at the composition of results by business segment in 1H FY12/21, the wafer reclaim business provided 35.3% of net sales and 61.5% of operating income, and the prime wafer business provided 41.0% of net sales and 33.0% of operating income. These two businesses are the Company's core earnings drivers.

Composition of results by segment (FY12/21)



Source: Prepared by FISCO from the Company's financial results

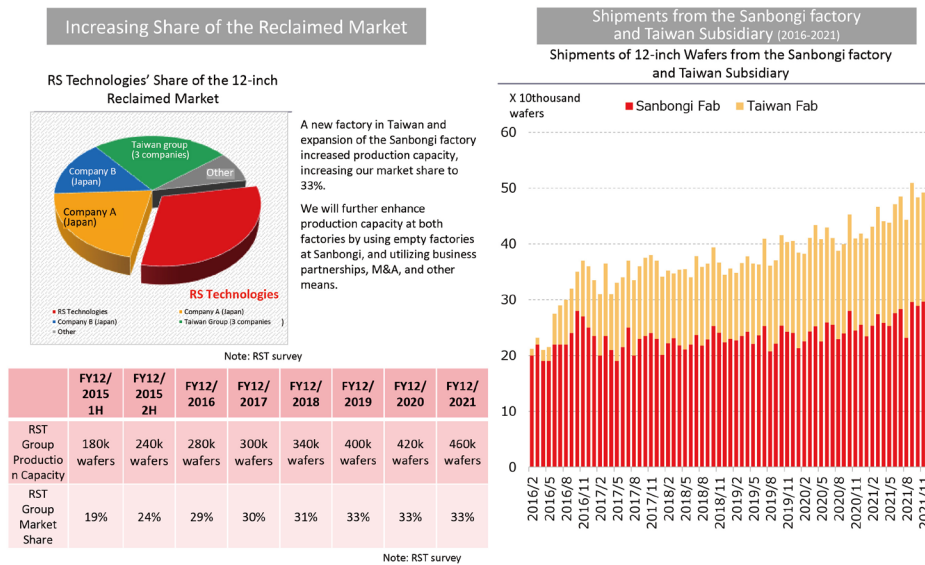
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Company overview

(1) Wafer reclaim business

The wafer reclaim business is conducted by the Company and its Taiwanese subsidiary. At the end of 2021, the monthly production capacity for mainstay 12-inch wafers by the Company was 280,000 wafers (it has a production capacity of 130,000 wafers for 8-inches) in Japan, while its Taiwanese subsidiary has a capacity for 180,000 wafers, for a total 460,000 wafers (an increase of 40,000 wafers compared to the end of the previous year). In terms of the composition of sales, the 12-inch wafer provides the majority, around 85%. According to the Company's estimate, it has the leading share globally on a volume basis, approximately 33%. It has two competitors in Japan—HAMADA HEAVY INDUSTRIES Ltd. and MIMASU SEMICONDUCTOR INDUSTRY CO., LTD. <8155>—while its overseas competitors are three Taiwanese-owned companies. These six companies form an oligopolistic market that hold roughly 90% of the global market share.

Monthly output volume in the wafer reclaim business and share of the 12-inch reclaimed wafer market

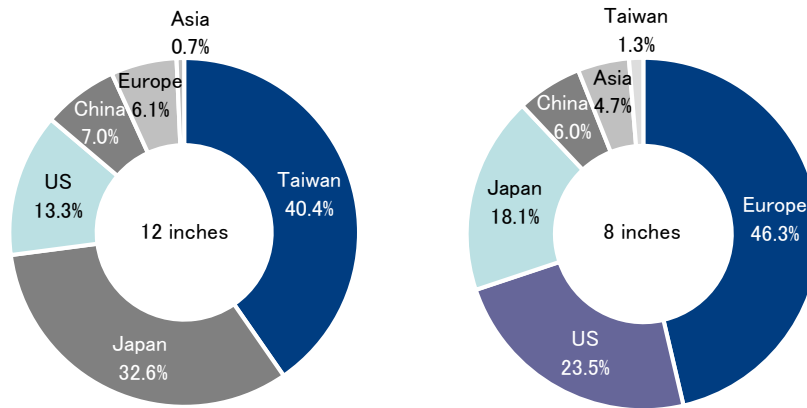


Source: Prepared by FISCO from the Company's results briefing materials

Furthermore, the breakdown of the number of wafers shipped by region (FY12/20) is as follows. For 12-inch reclaimed wafers, Taiwan provides 40.4% and Japan 32.6%, so these two countries provide around 70% of the total. Meanwhile, 8-inch reclaimed wafers stand out for having higher numbers for Europe and the US, at 46.3% and 23.5%, respectively (with a nearly identical sales composition ratio in FY12/21 results). The Company's main customers include major semiconductor manufacturers, such as TSMC <TSM> in Taiwan, Sony Semiconductor Solutions Corporation and Kioxia Corporation in Japan, Intel <INTC> and Micron Technology, Inc. <MU> in the US, and STMicroelectronics International N.V. <STM> and Infineon Technologies in Europe. Shipments of 12-inch reclaimed wafers for China were previously from Japan and Taiwan. But this will be sequentially shifted to SGRS, which will start mass production from 2022, and the strategy is to use the resulting excess capacity at the plants in Japan and Taiwan to cover the demand from other regions.

Company overview

**Breakdown of shipment volume
 wafer reclaim business by region
 (FY12/20)**



Note: The composition is basically the same as in FY12/21
 Source: Prepared by FISCO from the Company's results briefing materials

(2) Prime wafer business

Prime wafer business is covered by Chinese subsidiary GRITEK. A little less than 40% of its sales consist of prime wafers, while consumable material and ingot sales make up the remaining a little over 60% (FY12/21). Prime wafer monthly production capacity at the end of December 2021 totaled 50,000 5-inch wafers, 150,000 6-inch wafers, and 130,000 8-inch wafers at the Dezhou plant. Chinese semiconductor manufacturers are the main customers for prime wafers, and customer volume has risen to 60–70 companies. These customers primarily manufacture analog semiconductors used in consumer electronics, automobiles, and other products. The Company sells consumable materials and ingots in overseas markets as well, and ships some consumable materials to DG Technologies, which makes semiconductor-related consumable materials in Japan.

(3) Semiconductor-related equipment and materials, etc. business

The semiconductor-related equipment and materials, etc. business includes sales of semiconductor manufacturing equipment and semiconductor materials as well as parts that are purchased and sold by the Company and sales by subsidiaries Union Electronics Solutions and DG Technologies. It mainly purchases the semiconductor manufacturing equipment from Japanese semiconductor manufacturers and others (including some used products), and primarily sells them to semiconductor manufacturers in China, South Korea, Taiwan and other markets.

Union Electronics Solutions is a semiconductor trading firm that mainly handles power semiconductors from Hitachi Power Semiconductor Device, Ltd. and MCUs from Renesas Electronics Corporation <6723>. It opened a Shanghai office in 2020 and plans to expand sales of semiconductor-related products after the spread of COVID-19 infections settles down. DG Technologies manufactures and sells semiconductor-related consumable materials (quartz rings and silicon electrodes, etc) for dry etching equipment, which is a type of semiconductor equipment. Customers include major domestic and overseas semiconductor device manufacturers and domestic and overseas semiconductor manufacturers. As production sites, it only had the Kamisu plant (Ibaraki) but opened a new site with the Kurihara plant (Miyagi) in May 2021 to address robust demand.

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Company overview

(4) Other businesses

The sales of other businesses are comprised of revenue from electricity sales from the solar power generation business started in 2013 (power generation capacity of approximately 1.59 MW) and technical consulting services and other services provided by the Company in the semiconductor wafer manufacturing process. However, its effect on results overall is negligible.

Business trends

Against the backdrop of the strong demand for semiconductors, in the FY12/21 results, achieved higher sales and profits that exceeded the Company forecasts

1. FY12/21 results summary

In FY12/21 consolidated results, the Company reported ¥34,620mn in net sales (up 35.4% YoY), ¥6,874mn in operating income (up 51.8%), ¥8,832mn in ordinary income (up 68.1%), and ¥3,303mn in net income attributable to owners of parent (up 17.0%). Net sales and ordinary income set all-time highs as half-year values, and both exceeded the revised company plan that was announced in August 2021.

FY12/21 results (consolidated)

	FY12/20		Revised plan*	FY12/21			
	Results	% of sales		Results	% of sales	YoY	Achievement
Net sales	25,561	-	31,600	34,620	-	35.4%	9.6%
Cost of sales	16,881	66.0%	-	22,750	65.7%	34.8%	-
SG&A expenses	4,150	16.2%	-	4,995	14.4%	20.4%	-
Operating income	4,530	17.7%	6,100	6,874	19.9%	51.8%	12.7%
(Subsidy income)	839	-	-	1,836	-	118.6%	-
Ordinary income	5,252	20.5%	7,300	8,832	25.5%	68.1%	21.0%
Extraordinary income	-630	-	-	-1,404	-	-	-
Net income attributable to owners of parent	2,824	11.1%	3,100	3,303	9.5%	17.0%	6.6%
Capital investment	12,409	-	-	5,975	-	-51.8%	-
Depreciation expenses	1,674	-	-	2,942	-	75.7%	-
R&D expenses	933	-	-	1,307	-	40.1%	-

* Revised figures announced in August 2021

Source: Prepared by FISCO from the Company's financial results and securities report

Benefiting from the growth of the semiconductor market, net sales were strong and increased in each business, 10.9% YoY in the wafer reclaim business, 68.8% in the prime wafer business, and 34.7% in the semiconductor-related equipment and materials, etc. business. In particular, in the prime wafer business, sales increased significantly due to the expansion in production following the start of operations at the Dezhou plant in October 2020. In profits, depreciation expenses increased ¥1,267mn YoY, while R&D expenses rose ¥374mn. But these increases were absorbed, including by the effects of higher sales and the improved operating rate, so profits increased by ¥704mn in the wafer reclaim business, ¥1,497mn in the prime wafer business, and ¥171mn in the semiconductor-related equipment and materials, etc. business.

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Business trends

Subsidy income, which is non-operating income, increased from ¥839mn in the previous period to ¥1,836mn. This was mainly due to increases in expenses in the prime wafer business, which comprised plant relocation expenses (from the Beijing plant to the Dezhou plant), expenses to launch the Dezhou plant (employee recruitment expenses and infrastructure expenses) and R&D expenses. R&D expenses included prototype expenses to obtain 8-inch wafer certification. The reason why non-operating income/expenses increased more than the Company forecast was that its estimate of subsidy income was conservative.

The Company recorded ¥1,404mn in share-based payment expenses under extraordinary losses. This stems from the difference between the price per share for the transfer of a portion of GRITEK shares owned by BGRS to GRITEK's employee shareholding association as part of preparations for the GRITEK IPO in February 2021 and the fair value acknowledged by the corporate auditor. The difference was recorded as share-based payment expenses. This case does not involve a cash outflow and does not affect net assets (a decrease in retained earnings due to the recording of extraordinary losses was offset by an increase in capital surplus).

Looking at results by major companies, non-consolidated operations performed well at ¥13,082mn in net sales (up 13.4% YoY) and ¥2,855mn in operating income (up 35.5%). In order to respond to strong customer demand, monthly production capacity of 12-inch reclaimed wafers was increased by 20,000 wafers from the end of the previous year to 280,000 wafers. The improved productivity was also a factor behind the earnings growth. At the Taiwanese subsidiary, net sales increased 24.6% YoY to ¥6,036mn and operating income rose 11.7% to ¥1,593mn. Monthly production capacity of 12-inch reclaimed wafers was increased by 20,000 wafers at the end of the previous year to 180,000 wafers, which was the main reason for the higher sales and profits. However, the profit margin declined slightly, mainly due to the increase in depreciation expenses.

Results grew sharply at the Chinese subsidiary, with net sales increasing 68.0% YoY to ¥14,758mn and operating income rising 244.8% to ¥2,500mn, marking record-high results since business started in FY12/18. Net sales increased with the start of operations at the new plant, progress made in customer certification for 8-inch prime wafers, and strong demand up to 4Q, including for 6-inch wafers, ingots, and consumable materials. Monthly production capacity of 6-inch wafers was 150,000 wafers, but to respond to strong demand, the 8-inch manufacturing line was used to increase the production volume up to 200,000 wafers in 4Q. Looking at how results trended on a quarterly basis, earnings increased from 2Q alongside the rise in the operating rate at the new plant. In 4Q, net sales were ¥4,903mn, an increase of 22.1% compared to the same period in the previous fiscal year, but in contrast, operating income was ¥1,017mn, an increase of only 1.9%. This was caused by an accounting method in which expenses relating to subsidy income were recorded all together in 4Q, and on an actual basis, it appears that operating income also grew by more than 20% compared to the same period in the previous fiscal year. The product certification of 8-inch prime wafers is somewhat lagging behind, at slightly more than 70% of products as of the end of 2021. This comes as a result of insufficient opportunities to meet with customers due to the impact of the COVID-19 pandemic, but the outlook is for certification to be obtained for all products by 2Q FY12/22.

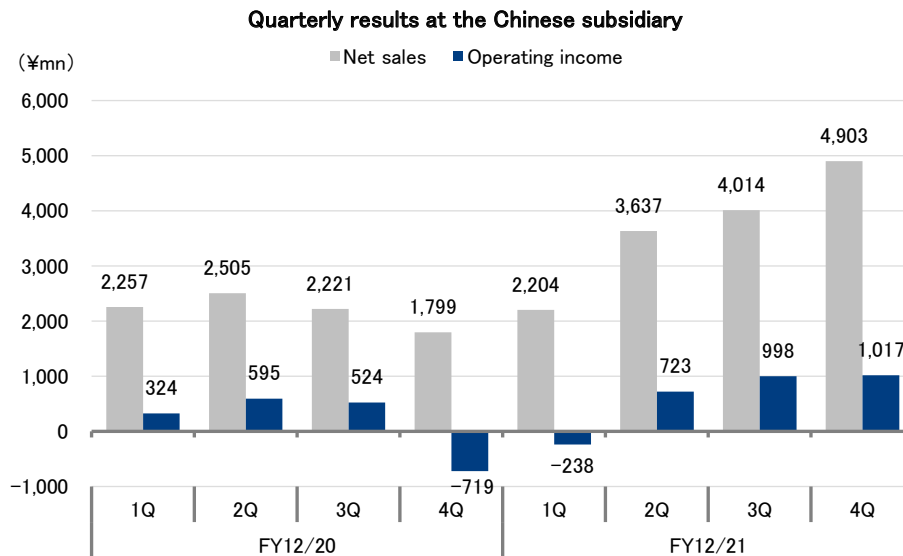
Business performance trends by company in FY12/21

(¥mn)

	RST (non-consolidated)		Taiwanese subsidiary		Chinese subsidiary		Other subsidiaries	
	Results	YoY	Results	YoY	Results	YoY	Consolidated eliminations	YoY
Net sales	13,082	13.4%	6,036	24.6%	14,758	68.0%	744	-
Operating income	2,855	35.5%	1,593	11.7%	2,500	244.8%	-74	-
Operating income margin	21.8%	3.5pt	26.3%	-3.1pt	16.9%	8.6pt	-	-

Source: Prepared by FISCO from the Company's results briefing materials

Business trends



Source: Prepared by FISCO from the Company's results briefing materials

Results were strong in the wafer reclaim business, while both the prime wafer business and semiconductor-related equipment and materials, etc. business performed well

2. Developments by business segment

FY12/21 consolidated results

	FY12/20 Results	FY12/21 Results	YoY	
			Change	Rate of change
(¥mn)				
[Net sales]				
Wafer reclaim business	11,461	12,717	1,256	10.9%
Prime silicon wafer manufacturing and sales business	8,755	14,780	6,025	68.8%
Semiconductor-related equipment and materials, etc. business	6,272	8,450	2,177	34.7%
Other businesses, adjustments	-927	-1,328	-	-
[Operating income]				
Wafer reclaim business	4,027	4,731	704	17.4%
Prime silicon wafer manufacturing and sales business	1,041	2,539	1,497	143.9%
Semiconductor-related equipment and materials, etc. business	211	382	171	81.0%
Other businesses, adjustments	-749	-778	-	-

Source: Prepared by FISCO from the Company's financial results

(1) Wafer reclaim business

The wafer reclaim business recorded ¥12,717mn in net sales (up 10.9% YoY; includes internal sales and transfer value (same below) and ¥4,731mn in operating income (up 17.4%). The semiconductor market continues to expand, centered on memory and logic, and in this situation, in order to respond to strong demand from customers, the Company has strengthened the production capacity of 12-inch reclaimed wafers and improved production efficiency at the plants in Japan and Taiwan, while in addition the slight price rises spread in 2H, and these were the main reasons for the higher sales and profits.

Business trends

(2) Prime wafer business

The prime wafer business delivered ¥14,780mn in net sales (up 68.8% YoY) and ¥2,539mn in operating income (up 143.9%). The main factors were that, as previously stated, operations started at the Dezhou plant and progress was made for customer certification for 8-inch wafers, and that sales, including of 6-inch wafers and ingots, grew across 2H. Monthly production capacity for 6-inch wafers was 150,000 wafers, but to respond to strong demand, the 8-inch manufacturing line was utilized and the production volume was increased to 200,000 wafers in 4Q. Alongside the increase in the capacity of the 8-inch manufacturing line, there were increases in depreciation expenses and R&D expenses for customer certification, but these increases were absorbed by the effects of the higher sales and the level of operations.

The new Dezhou plant has a total monthly output capacity for 8-inch prime wafers of 130,000 wafers, with facilities transferred from the Beijing plant and the newly built production line producing 80,000 and 50,000 wafers, respectively. As of December 2021, the operating rate was more than 70%, but this is expected to improve even more alongside progress being made in customer product certification.

(3) Semiconductor-related equipment and materials, etc. business

The semiconductor-related equipment and materials, etc. business recorded ¥8,450mn in net sales (up 34.7% YoY) and ¥382mn in operating income (up 81.0%). This segment enjoyed a large increase in semiconductor-related equipment procurement sales due to reinforced sales operations and upbeat sales of consumable materials for dry etching equipment handled by DG Technologies. In consumable materials, the Company launched a new plant in Japan in May 2021, its second one, contributing to increased sales. The new plant deploys automated equipment in the inspection process and other areas and offers higher productivity than the existing plant.

Property, plant and equipment increased due to active investment, while net cash is at a record-high level and financial soundness is being maintained

3. Financial condition and management indicators

Looking at financial conditions at the end of FY12/21, total assets increased by ¥20,307mn YoY to ¥79,057mn. The main factors behind the changes were increases of ¥8,684mn in cash and deposits, in addition to increases of ¥3,196mn in notes and accounts receivable - trade and ¥1,252mn in raw materials and supplies in current assets. In non-current assets, property, plant and equipment increased ¥4,877mn due to the active investment to strengthen capacity, while investment securities rose ¥2,277mn because of the additional investment in equity-method affiliate SGRS.

Total liabilities were up ¥5,661mn from the previous fiscal year-end to ¥24,046mn. In current liabilities, trade accounts payable decreased ¥1,189mn, but notes and accounts payable - trade increased ¥1,445mn, and short-term borrowings and the portion of long-term borrowings to be repaid within a year rose ¥1,497mn. In non-current liabilities, there was an increase of ¥3,483mn in long-term borrowings. Moreover, net assets increased ¥14,646mn from the previous fiscal year-end to ¥55,011mn. This increase mainly reflected an increase of ¥3,045mn in retained earnings due to the recording of net income attributable to owners of parent, in addition to foreign currency translation adjustment of ¥2,357mn and an increase in non-controlling interests of ¥9,701mn due to third-party allocation of shares by GRITEK.

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Business trends

Looking at the cash flow trends, cash flow from operating activities had ¥9,337mn in net inflow, while cash flow from investing activities totaled ¥15,614mn in net outflow primarily due to purchase of property, plant and equipment of ¥8,999mn and purchase of SGRS shares of ¥2,014mn. Cash flow from financing activities was ¥8,070mn in net inflow with ¥5,900mn in proceeds from long-term borrowings and ¥2,593mn in proceeds from share issuance to non-controlling shareholders. As a result, cash and cash equivalents increased by ¥3,731mn YoY to ¥21,641mn.

Looking at management indicators, while the equity ratio, which reflects soundness, declined from 40.5% at the end of FY12/20 to 36.2%, the interest-bearing debt ratio climbed from 13.2% to 28.3%, mainly due to an increase in interest-bearing debt for use in capital investments. But if looking at net cash (cash and deposits – interest-bearing debt), it has reached a record-high level, rising from ¥3,703mn at the end of the previous period to ¥19,649mn, and it can be judged that the Company is maintaining its financial soundness. On the other hand, for the profitability indicators, ROE declined slightly from the previous period due to the recording of extraordinary losses, but both ROA and the operating income margin rose.

Consolidated balance sheet and management indicators

	(¥mn)				
	FY12/18	FY12/19	FY12/20	FY12/21	Change
Current assets	26,074	32,760	32,626	45,851	13,224
(Cash and deposits)	14,879	22,156	19,082	27,766	8,684
Non-current assets	10,516	15,873	26,123	33,206	7,082
Total assets	36,591	48,634	58,750	79,057	20,307
Current liabilities	4,979	7,252	12,630	14,218	1,587
Non-current liabilities	2,474	5,400	5,754	9,827	4,073
Total liabilities	7,453	12,652	18,384	24,046	5,661
(Interest-bearing debt)	2,812	3,634	3,136	8,116	4,980
Net assets	29,137	35,981	40,365	55,011	14,646
[Stability]					
Equity ratio	49.6%	42.7%	40.5%	36.2%	-4.3pt
Interest-bearing debt ratio	15.5%	17.5%	13.2%	28.3%	15.1pt
[Profitability]					
ROA	25.2%	12.7%	9.8%	12.8%	3.0pt
ROE	30.6%	15.6%	12.7%	12.6%	-0.1pt
Operating income margin	22.6%	19.3%	17.7%	19.9%	2.2pt

	FY12/18	FY12/19	FY12/20	FY12/21
Cash flow from operating activities	2,669	9,015	6,377	9,337
Cash flow from investing activities	-22	-6,107	-9,188	-15,614
Cash flow from financing activities	9,550	4,206	-776	8,070
Period-end cash and cash equivalents	14,652	21,363	17,910	21,641

Source: Prepared by FISCO from the Company's financial results

Forecasts

Orders continued to be strong while the weak yen is also having an effect, so the FY12/22 results may exceed the Company forecasts

1. FY12/22 forecasts

For FY12/22 consolidated results, the Company forecasts ¥37,400mn in net sales (up 8.0% YoY), ¥7,600mn in operating income (up 10.6%), ¥8,900mn in ordinary income (up 0.8%), and ¥4,800mn in net income attributable to owners of parent (up 45.3%). The outlook is for sales and profits to continue to increase in each of the three businesses. The reason ordinary income is expected to increase to such a small extent is because subsidy income is forecast to decrease. The main decrease factor will be the portion of plant relocation expenses that were included in the subsidy income of ¥1,836mn in FY12/21. Conversely, the share-based payment expenses of ¥1,404mn that were recorded in extraordinary losses will not be recorded, and therefore the increase rate of net income attributable to owners of parent will grow.

Ordering conditions from the start of the year until the middle of March were strong in all three businesses, and it seems that the full operating conditions are continuing. The initial forecasts seem conservative when considering factors including a rebound in 4Q FY12/21 at the Chinese subsidiary to the previous major growth. It is possible in the future that results will be affected by temporary negative factors, depending on the situation in Ukraine and COVID-19 conditions in China. However, at FISCO we think there is plenty of room for results to exceed the forecasts as long as there is no impact on operating conditions at plants and because the yen continues to be weaker than anticipated in exchange rates. The anticipated exchange rates are ¥110/USD, ¥17/RMB, and ¥3.8/NTD, and the yen weakening by ¥1/USD is a factor increasing operating income by ¥20mn to ¥30mn a year.

FY12/22 consolidated results forecasts

	FY12/21		FY12/22		YoY
	Results	% of sales	Forecast	% of sales	
Net sales	34,620	-	37,400	-	8.0%
Operating income	6,874	19.9%	7,600	20.3%	10.6%
Ordinary income	8,832	25.5%	8,900	23.8%	0.8%
Net income attributable to owners of parent	3,303	9.5%	4,800	12.8%	45.3%
Earnings per share (EPS) (¥)	255.56		371.29		

Note: The anticipated exchange rates are ¥110/USD, ¥17/RMB, and ¥3.8/NTD
 Source: Prepared by FISCO from the Company's financial results

FY12/22 results forecasts by company

	RST (non-consolidated)		Taiwanese subsidiary		Chinese subsidiary		Other subsidiaries	
	Plan	YoY	Plan	YoY	Plan	YoY	Consolidated eliminations	YoY
Net sales	13,500	3.2%	6,600	9.3%	16,300	10.8%	1,000	-
Operating income	2,900	1.6%	2,000	25.5%	2,600	8.0%	100	-
Operating income margin	21.5%	-0.3pt	30.3%	4.0pt	15.9%	-1.0pt	-	-

Source: Prepared by FISCO from the Company's results briefing materials

Forecasts

Looking at the results forecasts by company, the Company's non-consolidated results forecasts are for net sales to increase 3.2% YoY to ¥13,500mn and operating income to grow 1.6% to ¥2,900mn. The domestic monthly production of 12-inch reclaimed wafers is scheduled to be increased by 20,000 wafers, from 280,000 wafers at the end of 2021 to 300,000 wafers, and the forecast is for sales to continue to increase as long as the semiconductor market does not enter an adjustment phase in the near future. Conversely, the forecast is for the profit margin to increase only slightly compared to the previous period, mainly due to the rise in depreciation expenses. Sales of purchased semiconductor-related equipment are set to remain at the same level as in the previous fiscal year.

At the Taiwanese subsidiary, the forecasts are for net sales to increase 9.3% YoY to ¥6,600mn and operating income to rise 25.5% to ¥2,000mn. Demand is strong for 12-inch reclaimed wafers, centered on TSMC's and Micron Technology's subsidiaries, and monthly production capacity will be increased from 180,000 wafers at the end of 2021 to 190,000 wafers. The outlook is also for the profit margin, which had declined in the previous period, to recover and increase due to the effects of higher sales and improved productivity.

At the Chinese subsidiary, the forecasts are for net sales to increase 10.8% YoY to ¥16,300mn and operating income to grow 8.0% to ¥2,600mn. However, the strong impression is that the forecasts are conservative when considering factors such as net sales of ¥4,903mn and operating income of ¥1,017mn in 4Q FY12/21 and an expected increase in sales volume going forward due to product certification related to 8-inch prime wafers. Also, although the environment for 8-inch wafers is not one in which prices can be raised as there are many competitors, prices for 6-inch wafers can be raised as there are few competitors. The forecasts do not incorporate price increases, so this would be a factor supporting results exceeding forecasts.

Due to the expansion of production capacity at its new plant, DG Technologies, which conducts a semiconductor-related consumable materials business, is expected to see net sales increase 20% to 30% YoY and the operating income margin rise from low single digits in the previous period to high single digits. Also, while the impact on results as a whole will be negligible, the speed of earnings growth is expected to accelerate from FY12/23 onwards as a result of the effects of the increased capacity of the new plant contributing for the full fiscal year.

The equity-method affiliate SGRS has been gradually launching a 12-inch reclaimed wafers production line since 1Q FY12/22, and from 2Q, it started shipments for Chinese semiconductor manufacturers, and the outlook is that monthly production capacity will reach 50,000 wafers in 4Q. Previously, shipments to China were from the plants in Japan and Taiwan, but SGRS will become responsible for these shipments and the plants in Japan and Taiwan will respond to demand from regions other than China. Moreover, the 12-inch prime wafer development conditions are that the quality standard for monitor use has already been met, and going forward, the aim is to meet the manufacturing quality standard for the 28nm to 40nm circuit width, the volume zone for Chinese semiconductor manufacturers, and to start mass production from 2023 onwards. Sales of 12-inch reclaimed wafers and prime wafers produced by SGRS are not included in consolidated net sales, and instead approximately 9% of SGRS net income is reflected in equity in earnings/losses of affiliated companies.

Forecasts

Is targeting net sales of ¥45bn and operating income of ¥10bn in FY12/25

2. Medium-term management plan

The four-year medium-term management plan announced in February 2022 sets goals for FY12/25, the final fiscal year of the plan, of ¥45,000mn in net sales and ¥10,000mn in operating income. This will result in average growth rates in the four fiscal years through FY12/25 of 6.8% in net sales and 9.8% in operating income. Since the Company assumes 5% annual growth in the overall semiconductor market, it is aiming for growth that exceeds the industry average. Subsidy income, which is recorded in non-operating income/expenditure, is forecast to increase moderately from FY12/23 onwards due to the expansion of scale of the Dezhou plant.

Medium-term management plan

	FY12/21 Results	FY12/22 Plan	FY12/23 Plan	FY12/24 Plan	FY12/25 Plan	CAGR (FY12/21 - FY12/25)
Net sales	34,620	37,400	39,700	42,400	45,000	6.8%
Operating income	6,874	7,600	8,300	9,300	10,000	9.8%
Operating income margin	19.9%	20.3%	20.9%	21.9%	22.2%	-
Ordinary income	8,832	8,900	9,700	10,800	11,600	7.1%
Ordinary income margin	25.5%	23.8%	24.4%	25.5%	25.7%	-
Net income attributable to owners of parent	3,303	4,800	5,600	6,300	6,800	19.8%
Earnings per share (EPS) (¥)	255.56	371.39	433.28	487.45	526.14	19.8%

Note: The anticipated exchange rates are ¥110/USD, ¥17/RMB, and ¥3.8/NTD
 Source: Prepared by FISCO from the Company's results briefing materials

According to the most recent market forecasts (announced in November 2021) by World Semiconductor Trade Statistics (WSTS), the outlook is that the somewhat sluggish growth witnessed in the previous period will continue in 2022, with a semiconductor shipment amount growth rate of 8.8%. As demand is strong, particularly for vehicles and data centers, and the semiconductor shortage situation is continuing, major semiconductor manufacturers are expected to respond to the increase in demand by establishing new plants for 12-inch wafers. In the Company's survey, it is forecasting new plants at 33 locations worldwide and expects demand to increase for 12-inch reclaimed wafers and prime wafers. The Company's strategy is to grow earnings by increasing production capacity to respond to this demand and developing the semiconductor-related consumable materials business into its third major income source. The 12-inch reclaimed wafers and prime wafer businesses in China are being developed by equity-method affiliate SGRS, and while at the present time its impacts on results are negligible, the Company intends to make it a consolidated subsidiary at the stage when it becomes profitable.

(1) Wafer reclaim business

In the wafer reclaim business, the Company is increasing capacity in Japan and Taiwan and beginning mass production at the Dezhou plant of Chinese affiliate SGRS starting from FY12/22 in order to respond to robust demand for 12-inch reclaimed wafers. It is the first company to mass-produce 12-inch reclaimed wafers at three sites (Japan, Taiwan, and China). Also, the Company reviewed its investment plan in Japan to respond to strong demand and raised the previous target for production capacity in 2023 (announced in August 2021) from 300,000 wafers to 310,000 wafers. It also plans to increase capacity up to 320,000 wafers in 2024. The Taiwanese subsidiary has received strong enquiries from TSMC and Micron Technology group companies, so the plan is to increase production capacity to 250,000 wafers in 2024, an increase of 1.4 times compared to the end of 2021.

Forecasts

As a result, monthly output capacity for 12-inch reclaimed wafers for the entire Group should expand by about 1.3-fold, from 460,000 wafers at the end of FY12/21 to 620,000 at the end of FY12/24. If excluding the portion from the Dezhou plant, the estimate is an increase of around 1.2 times to 570,000 wafers. Net sales for this business in 4Q FY12/21 were approximately ¥3.3bn, and assuming the monthly production capacity of 570,000 wafers, prices, and operating rate will not change in FY12/25, net sales will be around ¥16.3bn for an annual growth rate of approximately 6%. The assumption for the growth rate of the semiconductor market as a whole is around 5%, so this is considered to be an appropriate level as the growth rate of 12-inch wafers is comparatively high. The operating income margin was 37.2% in FY12/21, and going forward, it is expected to be maintained at around the same level.

Plan to strengthen production capacity for 12-inch reclaimed wafers

Plant	Monthly production capacity at period-end				
	2020	2021	2022	2023	2024
Sanbongi plant	260,000wafers	280,000wafers	300,000wafers	310,000wafers (300,000wafers)	320,000 wafers
Tainan plant	160,000wafers	180,000wafers	190,000wafers	220,000wafers	250,000 wafers
Dezhou plant	-	0 wafers	50,000 wafers	50,000 wafers	50,000 wafers
Total	420,000wafers	460,000wafers	540,000wafers	580,000wafers (570,000wafers)	620,000 wafers

Note: Figures in parentheses are plan targets as of August 2021

Source: Prepared by FISCO from the Company's results briefing materials

Capital investment plans

Plant	(¥bn)				
	2020	2021	2022	2023	2024
Sanbongi plant	0.2	0.9	0.9 (0.5)	1.0 (undecided)	0.2
Tainan plant	0.2	0.8	0.9 (0.7)	1.1 (1.0)	1.0
Dezhou plant*	0.5	3.0	0.5	0.1	Undecided
Total	0.9	4.7	2.3 (1.7)	2.2 (1.1)	1.2

* The Dezhou plant is a plant of equity-method affiliate SGRS (investment ratio: 19.99%), and the Company was responsible for about 20% of the capital investment.

Note: Figures in parentheses are plan targets as of August 2021

Source: Prepared by FISCO from the Company's results briefing materials

Looking at the capital investment plan, capital investment for the Group as a whole peaked at ¥4.7bn in FY12/21 in order to start mass production at the Dezhou plant, and it is forecast to be ¥2.3bn in FY12/22 and ¥2.2bn in FY12/23. To respond to strong demand, these amounts are increases from the previously announced values (August 2021) of ¥600mn and ¥1.1bn. The scheme for the Dezhou plant was for the Company to be responsible for approximately 20% of the capital investment as it is an affiliated company. The Dezhou plant will establish a structure with a monthly production capacity of 50,000 wafers by FY12/22. In China, the plan to establish new 12-inch wafer semiconductor plants will continue in the future, so it is possible that demand for reclaimed wafers will increase at a speed higher than anticipated. Therefore, the Company has in its sights increasing monthly production capacity to 100,000 wafers at some stage from 2024 onwards.

Forecasts

As a new competitor in 12-inch reclaimed wafers in China, the Chinese subsidiary of Ferrotec Holdings Corporation <6890> completed a plan with monthly output capacity of 120,000 wafers and appears to have started mass production in 2021. Nevertheless, FISCO believes the Company is capable of sustaining its high share in China going forward because of technology and quality advantages. Specifically, these advantages include precise film separation technology and polishing technology capabilities that are capable of restricting wafer surface damage to a minimum and increasing reclaimed usage to a rate that is roughly twice the industry average. These technological capabilities are unrivaled by other companies. Therefore, even if entering a phase in which price competition temporarily intensifies, at FISCO we think that the Company will maintain its market share at a level of slightly more than 30% in the medium term.

(2) Prime wafer business

In the prime wafer business, monthly production capacity for 8-inch wafers at the Shandong GRITEK Dezhou plant will reach 130,000 wafers. By 2Q FY12/22, product certification will have been completed for all customers, and the plan is to aim for full operations while improving production efficiency. Therefore, toward FY12/25, the forecast is for the operating income margin to rise alongside sales growth.

On the other hand, the situation at SGRS is that it is progressing R&D toward mass production of 12-inch prime wafers by using a test line with a monthly production scale of 10,000 wafers. It has already met the quality standard and is conducting sales of monitor-use wafers. Going forward, it intends to meet the quality standard for prime wafers and progress installation of a mass production line with a monthly production capacity of 50,000 wafers by 2H FY12/22 at the earliest, aiming to start mass production and acquire product certification from customers during FY12/23. Conducting capital investment for a production capacity of 50,000 wafers will require funds of around ¥25bn, but the Company will be responsible for approximately 20% of this amount.

Regarding sales strategy, the plan is to meet the quality standard for prime wafers with a circuit width of 28nm to 40nm, the volume zone for the Chinese market, and to start with sales to Chinese semiconductor manufacturers. It seems that it has already met the quality standard for 40nm products. As the policy to expand production capacity, it is considering not only new investment, but also options to acquire manufacturing equipment at low costs, such as through M&A, and it is aiming to acquire a top share in the Chinese market by implementing a low-price strategy. Also as the next step, it plans to meet the quality standard for 14nm to 20nm prime wafers, the volume zone for the global market, and conduct sales to major semiconductor manufacturers by utilizing price competitiveness achieved through production in China. In its wafer reclaim business, the Company conducts transactions with the majority of the major semiconductor companies, so if it can meet quality standards and construct a stable supply structure, it is considered that adoption of its products will proceed smoothly due to its competitive pricing advantage. The Company is targeting acquiring a 30% share of the 12-inch prime wafer market in the future.

In the Chinese market, 12-inch prime wafers are being sold by major overseas companies. Despite large amounts of capital investment by local Chinese companies, it appears that they have failed to meet quality standards and have not reached the stage of mass production. It seems they are struggling to achieve ingots with homogenous purity and quality (oxygen concentration, resistance value, etc.) and high yields. The Company has invited engineers from major silicon wafer manufacturers to share their expertise with local staff, and quality improvements are being steadily progressed. For the polishing and cleaning processes, which are the processes after manufacturing, there are no problems as it can utilize its wafer reclamation technologies, so it seems completely possible mass production could start during FY12/23. Also, an enormous investment of ¥100bn will be required to build the targeted monthly production capacity of 300,000 wafers, so it has in its sights M&A, including of competitors in China, and it is thought that investment funds to increase capacity will be contributed jointly with its joint venture partner GRINM and a fund affiliated with the Dezhou government.

Forecasts

Investment plan for prime wafers in China

Shandong GRITEK (consolidated subsidiary) 8 inches	2020	2022
Monthly production capacity	80,000 wafers	130,000 wafers
Capital investment value (¥bn)	¥14bn	Undecided*

* Investment already carried out up to FY2021

Investment plan for prime wafers in China

SGRS (equity-method affiliate) 12 inches (test line)	2020	2021	202X
Monthly production capacity	-	10,000 wafers*1	300,000 wafers
Capital investment value (¥bn)	¥0.5bn	Undecided*2	Undecided

*1 Test line for R&D to realize mass production

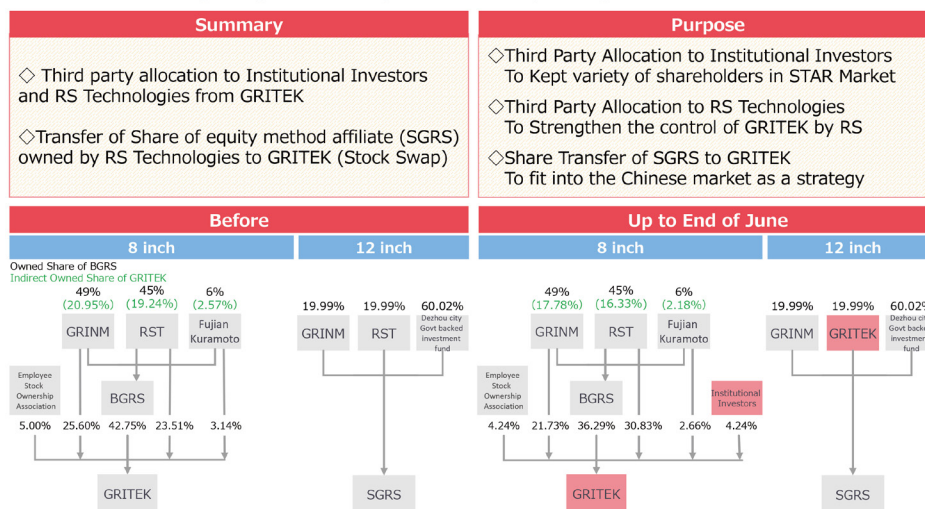
*2 Investment already carried out up to FY2021

Source: Prepared by FISCO from the Company's results briefing materials

The subsidiary GRITEK has applied to be listed on the Shanghai Stock Exchange STAR Market for newcomer companies (referred to as China's NASDAQ), and if the review proceeds smoothly, it is likely to be listed by around August 2022 (with listing costs of several hundreds of millions of yen expected to be recorded in 2Q or 3Q). The aims of listing its shares are to achieve even further growth through strengthening its business foundation by diversifying fundraising, improving brand power, and recruiting excellent human resources. At the same time, the aim is to improve the enterprise value of the RS Technologies Group. For this, even after it is listed the Company will substantially hold the majority of controlling rights and it intends to maintain it as a consolidated subsidiary. As part of the series of preparations for GRITEK's listing, GRITEK conducted fundraising in May 2021 through a third-party allocation of shares (to the Company and institutional investors), and the Company transferred its holding of SGRS shares to GRITEK (a share exchange). As a result of this share transfer to GRITEK, the Company's holding ratio of SGRS shares has declined from the previous 19.99% to approximately 9%. Regarding the results of SGRS, costs will be incurred to launch production of 12-inch prime wafers, but it seems profitability for 12-inch reclaimed wafers can be achieved at a comparatively early stage. At the present time, its results are reflected in consolidated results as equity in earnings/losses of affiliated companies, but as the Company's holding ratio is small, it seems that its effect on results is negligible.

Status of preparations for listing the Chinese subsidiary (GRITEK) (as disclosed in May 2021)

- Board of Directors determined third party allocation by GRITEK and share transfer of equity method affiliate (SGRS) to GRITEK (disclosed in May, 2021)



Source: Prepared by FISCO from the Company's results briefing materials

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Forecasts

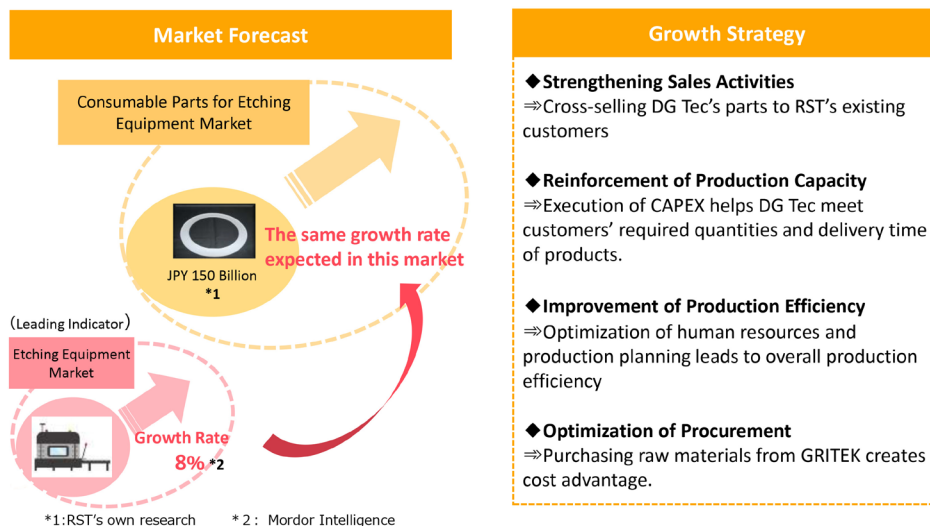
(3) Pursuit of growth in semiconductor-related consumable materials as a third major income source

To attain its goal of cultivating a third major income source outside the existing wafer reclaim and prime wafer businesses, the Company has clarified a policy of focusing on semiconductor-related consumable materials handled by subsidiary DG Technologies. Specifically, it aims to increase sales of consumable materials, including quartz rings used to hold silicon wafers in dry etching equipment and silicon electrodes.

The Company estimates that the market for semiconductor-related consumable materials is worth about ¥150bn annually and has set its sales goal to a 10% share (about ¥15bn) for the time being. Due to the operations of the new plant, net sales are forecast to increase from the ¥3bn range in FY12/21 to the ¥4bn range in FY12/22. In FY12/22 also, it is progressing installations of automation equipment and it seems full operations will be achieved in 4Q. The operating income margin will increase from low single digits in FY12/21 to high single digits, and it is expected to rise even higher from FY12/23 onwards when the effects of mass production will be realized. The Company is aiming to raise it to the 30% range in the future, which is the same level as in the wafer reclaim business.

Despite the presence of competitors in Japan, Taiwan, South Korea, the US, and other countries, the Company possesses strengths in quality and technology capabilities. Low production efficiency had been an issue previously due to small-lot manufacturing of a wide range of product types. However, the Company aims to improve production efficiency by installing automation equipment and optimizing personnel assignments. In materials costs, it has been acquiring silicon from group company GRITEK since FY12/20 to reduce costs. The Company aims to expand its sales share by reinforcing competitiveness with these measures and implementing cross-selling efforts to customers in the wafer reclaim business. Its long-term goal is a global share of roughly 30% with ¥45bn in sales. Techno Quartz Inc. <5217>, a competitor in quartz glass, reported ¥12.7bn in sales with an operating income margin of 19% in FY3/21, and FISCO thinks DG Technologies is also capable of attaining an operating income margin in the vicinity of 20% if it expands sales.

Growth strategy of DG Technologies



Source: Prepared by FISCO from the Company's results briefing materials

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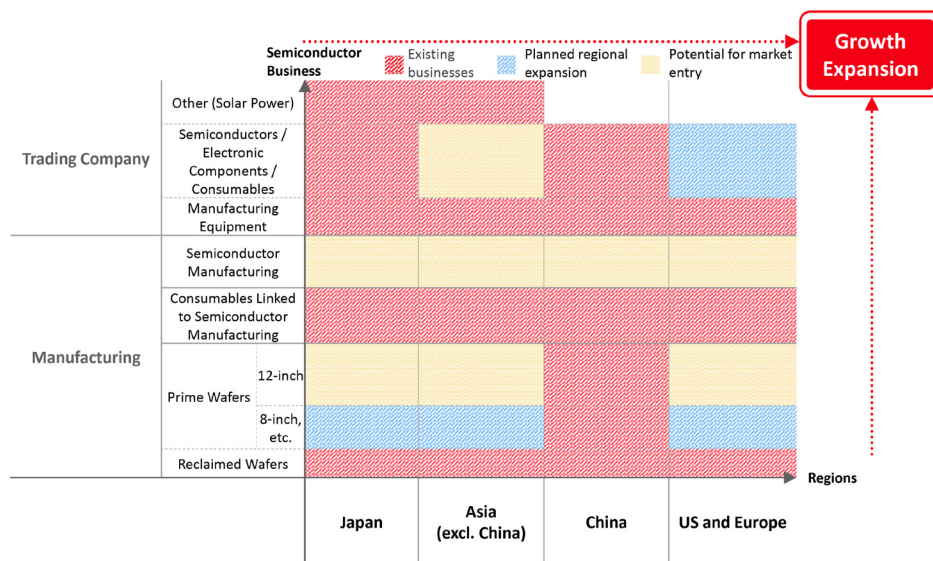
Forecasts

(4) Development of business areas and sales regions in the future

As its long-term strategy, the Company’s policy is to expand its business areas and sales regions. The new developments it is currently planning include sales of prime wafers produced in China to regions other than China. The Company wants to export products to the Japanese, US, and European markets at some point, though this is a long-term strategy because operations are busy handling demand in China for the time being. Also, as a trading company function, it conducts sales of semiconductors, electronic parts, and consumable materials in Japan, China, and other parts of Asia, and plans to sell these products in the European and US markets as well in the future. The Company intends to constructively review M&A deals in Japan and abroad if it finds opportunities with synergies in semiconductor wafer-related areas.

Since the Company is the leader in the 12-inch reclaimed wafers market at a roughly 33% global share (the Company’s estimate) and already has top semiconductor manufacturers worldwide as customers, it appears to be in a position that facilitates the creation of synergies through cross-selling. While the semiconductor industry experiences major upturns and downturns, the income trend should be relatively stable since the Company’s mainstay wafer reclaim business is rarely affected by downturns. From a medium- to long-term perspective, FISCO believes the Company’s strategy of accelerating earnings faster than the growth rate of the semiconductor market is feasible by making the wafer reclaim business, in which it has a high market share, into a stable earnings base, expanding the prime wafer business on the tailwind from growth in China’s semiconductor industry, and cultivating semiconductor-related consumable materials as a third major income source.

Regional initiatives targeted by the Company



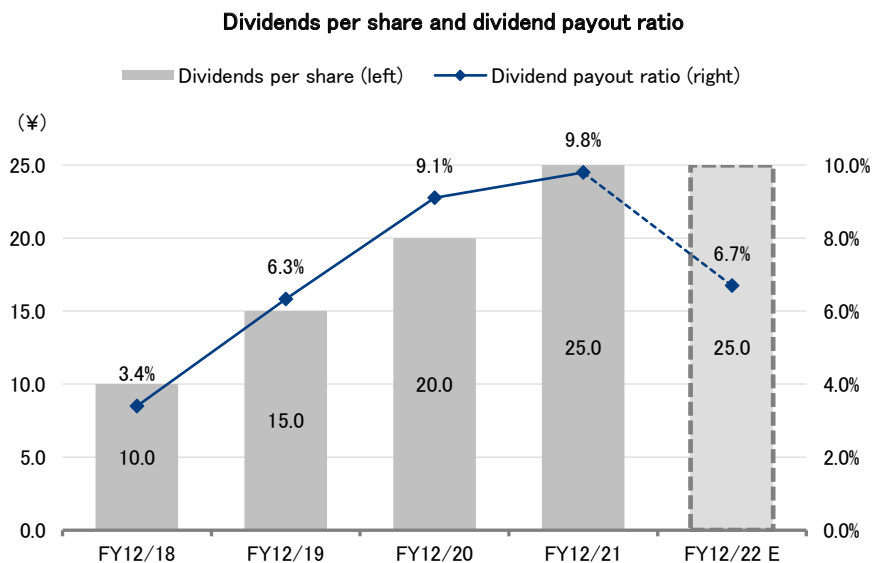
Source: Prepared by FISCO from the Company’s results briefing materials

Shareholder return policy

Aiming to continuously maintain dividend payments and improve the dividend level in accordance with results

Making fair returns to shareholders is an important concern of management, and the Company's basic policy is to return profits to shareholders by paying dividends. It demonstrates a flexible policy of paying out dividends after considering a comprehensive range of factors, including current profits, the targets of its medium-term management plan, and its financial strength. The Company plans to pay a dividend of ¥25.0 per share (a 6.7% dividend payout ratio), which is the same amount as the previous fiscal year, in FY12/22. However, dividend increases may be considered if earnings appear to be proceeding at a healthy pace, given the consecutive dividend hikes in the past four years and relatively low dividend payout of 6.7%.

In order to strengthen its corporate governance structure, the Company at its March 2022 General Meeting of Shareholders resolved to shift from being a company with an audit committee to being a company with an audit and supervisory committee. It will strengthen the supervisory function over the board of directors by appointing to the board audit committee members who will be responsible for auditing and supervising the directors' execution of duties. Also, by separating business execution from supervision, it is aiming to speed up decision-making and further improve enterprise value.



Source: Prepared by FISCO from the Company's financial results



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