



# **FY12/21 2Q Financial Results Briefing Material**

RS Technologies Co., Ltd.

August 11, 2021



Code: 3445  
Tokyo Stock Exchange First Section

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# 1. Company Overview

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# Company Overview

- Holding the top market share (30%\*<sup>1</sup>) worldwide in semiconductor wafer Reclaim market
- Entering the prime wafer business through a joint venture with a Chinese state-owned company
- Expanding into semiconductor-related business fields expected to produce synergy through M&A

<b>Company name</b>	RS Technologies Co., Ltd.
<b>Date of establishment</b>	December 10, 2010
<b>Corporate principles</b>	“Respect the global environment, earn the trust of people, and constantly strive to create.”
<b>Businesses</b>	Silicon Wafer Reclaim, Silicon Wafer Oxide Film Coating, Silicon Wafer Sales. Solar Power Station. Purchase and sale of used semiconductor equipment. Sale of chemical materials and semiconductor parts. Technical assistance and education service on semiconductor wafer manufacturing process.
<b>Head office</b>	NT Bldg. 12F, 1-47-1, Ohi, Shinagawa-ku, Tokyo 140-0014 JAPAN
<b>Sanbongi Plant</b>	26-2 Yamazaki, Sanbongi Otonashi, Osaki, Miyagi 989-6313 JAPAN
<b>Capital</b>	JPY 5,438 million (As of June 30 <sup>th</sup> , 2021)
<b>President and CEO</b>	Nagayoshi Ho
<b>Consolidated subsidiaries</b>	RSTEC Semiconductor Taiwan Co.,Ltd. Founded in February 2014, Capital: NT \$300 million, Stake: 100%
	Beijing GRINM RS Semiconductor Materials Co., Ltd. (BGRS) Registered Capital US \$138 million, Stake 45%* <sup>2</sup>
	GRINM Semiconductor Materials Col, Ltd. (GRITEK) Registered capital: RMB 1billion, Stake 47.17%* <sup>2</sup>
	Union Electronics Solutions Co., Ltd. Capital ¥27 million, Stake 100%
	Shandong GRINM Semiconductor Materials Co., Ltd. (Shandong GRITEK, Dezhou, Shandong) Registered Capital RMB 1,500 million, Stake 37.74%* <sup>2</sup>
	DG Technologies Co., Ltd. Capital ¥100 million, Stake 100%

\*1. Estimated by us based on SEMI data.

\*2. The consolidated investment scheme in China is as follows. BGRS is the parent company, GRITEK is its subsidiary, and Shangdong GRITEK is GRITEK's subsidiary, and so the investments overlap. Please refer to p.47 “Business Scheme in Chinese market” for details.

# History

- World leader in wafer recycling business. Made a major Chinese prime wafer manufacturer a consolidated subsidiary and became a comprehensive wafer manufacturer.

<b>Dec. 2010</b>	Established RS Technologies with reclaimed wafers as its primary business
<b>Jan. 2011</b>	Operations begun at the Sanbongi Factory
<b>Nov. 2011</b>	Sanbongi Factory acquires ISO9001:2008 (quality management system) certification from UKAS
<b>Oct. 2013</b>	Solar power business begun at the Sanbongi Factory
<b>Feb. 2014</b>	RSTEC Semiconductor Taiwan established as a subsidiary in Taiwan (currently a consolidated subsidiary)
<b>Mar. 2015</b>	RST listed on the Tokyo Stock Exchange Mothers Market
<b>Jun. 2015</b>	Fab8 completed at Sanbongi Factory, with cutting-edge equipment allowing reclamation of 18-inch wafers
<b>Dec. 2015</b>	Tainan Factory completed for RSTEC Semiconductor Taiwan (currently a consolidated subsidiary)
<b>Sep. 2016</b>	RST moved to the Tokyo Stock Exchange First Section
<b>Dec. 2017</b>	Joint venture agreement concluded with General Research Institute for Nonferrous Metals (GRINM) and Fujian Kuramoto
<b>Jan. 2018</b>	Beijing GRINM RS Semiconductor Materials Co., Ltd. (BGRS) established; Chinese prime wafer manufacturer Youyan Semiconductor Material Company Limited (GRITEK) made a consolidated subsidiary
<b>May 2018</b>	Acquired 100% of shares at Union Electronics Solutions Co., Ltd. (distributor for Hitachi Power Semiconductor Device, Ltd.)
<b>Aug. 2018</b>	Established Shandong GRINM Semiconductor Materials Co., Ltd. (Shandong GRITEK), a consolidated subsidiary of GRITEK
<b>Jan. 2019</b>	Acquired 100% of shares of DG Technologies Co., Ltd.
<b>Dec. 2019</b>	A four-party joint venture agreement concluded with GRINM, Dezhou Huida Semiconductor Equity Investment Fund Partnership, and the City of Dezhou in Shandong
<b>Feb. 2020</b>	Established Shanghai Union Semiconductor Co., Ltd (Shanghai Union)
<b>Mar. 2020</b>	Established Shandong GRINM RS Semiconductor Materials Co., Ltd. (SGRS) and Beijing Gritek & IVT Technology Co., Ltd. (Beijing IVT)
<b>Oct. 2020</b>	Completion of a new factory in Shandong GRITEK, a production base for prime wafers in China
<b>May. 2021</b>	Establishment of DG Technologies' second manufacturing plant (Kurihara Plant) in Kurihara city, Miyagi
<b>June. 2021</b>	As a process of GRITEK'S IPO preparation, GRITEK changed company name in Chinese as well as business scheme



# Sanbongi Factory (RS Technologies, Reclaimed Wafer)

- Jan.2011: Began operation
- Jun.2015: Expanded No.8 Plant for manufacturing 18inch wafer



Company	RS Technologies Co.,Ltd
Est.	December 2010
Product	5,6,8,12 inch reclaimed
Capacity	8inch : 130k/month 12inch : 260k/month
Location	Osaki city, Miyagi
Certificated	ISO9001、ISO14001

# Tainan Factory (RSTW, Reclaimed Wafer)

- Feb.2014: RSTEC Semiconductor Taiwan Co.,Ltd (RSTW) established
- Dec.2015: Tainan Factory established



Company	RSTEC Semiconductor Taiwan Co.,Ltd
Est.	December 2015
Product	12inch Reclaimed
Capacity	12inch : 160k/month
Location	Tainan city, Taiwan
Certified	ISO9001、ISO14001



# Dezhou Factory (Shandong GRITEK, 8 inch prime wafer)

- Agt.2018:Shandong GRITEK was established
- Oct.2020:Dezhou Factory completed and began to produce prime wafer



Company	Shandong GRITEK Co.,Ltd
Est.	October 2020
Product	5,6,8 inch prime wafer
Capacity	5 inch : 50k/month 6 inch : 150k/month 8 inch : 130k/month※
Location	Dezhou City, Shandong Province
Certificated	ISO9001、ISO14001

※By the end of 2021, production of 130k/month will be achieved



# Guotai Factory R&D Center (SGRS, 12inch prime wafer)

- Mar. 2020: GRINM RS Semiconductor Materials Co., Ltd (SGRS) established
- 2021: Test line for 12 inch prime wafer (10k per month production) established



Company	GRINM RS Semiconductor Materials Co., Ltd
Est.	March 2020
Product	①12inch prime wafer ②12inch Reclaimed wafer
Capacity	①10k/month(Test line) ②50k/month(from 2022)
Location	※Dezhou City, Shandong Province

※ The photo above is Guotai Factory's R&D Center located in Beijing.

# DG Technologies New Factory Established

- In order to meet customers' demand, DG Technologies established their second manufacturing plant in Kurihara-city, Miyagi on May, 2021.
- Respond to increasing demand at 2 plants(Kamisu and Kurihara plants).

## Kamisu Plant



Plant	DG Technologies Kamisu Plant
Location	Kamisu-city, Ibaraki
Area	5,378m <sup>2</sup>

## Kurihara Plant



Silicon  
Shower  
Plate



Quartz  
Ring

Plant	DG Technologies Kurihara Plant
Location	Kurihara-city, Miyagi
Area	5,000m <sup>2</sup>

# GRITEK' IPO Preparation Status (Up to 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)

## Summary

- Third party allocation to Institutional Investors and RS Technologies from GRITEK
- Transfer of Share of equity method affiliate (SGRS) owned by RS Technologies to GRITEK (Stock Swap)

## Purpose

- Third Party Allocation to Institutional Investors To Keep variety of shareholders in STAR Market
- Third Party Allocation to RS Technologies To Strengthen the control of GRITEK by RS
- Share Transfer of SGRS to GRITEK To fit into the Chinese market as a strategy

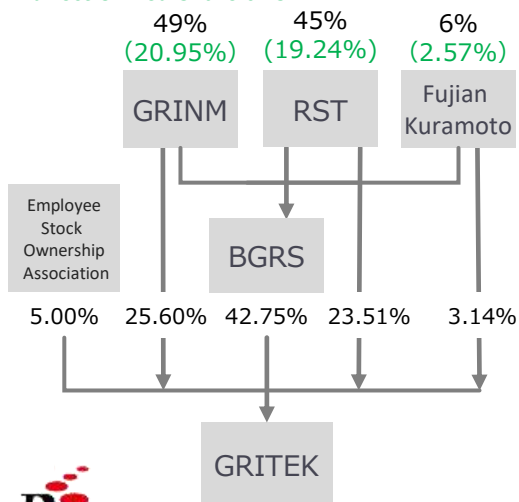
## Before

### 8 inch

### 12 inch

Owned Share of BGRS

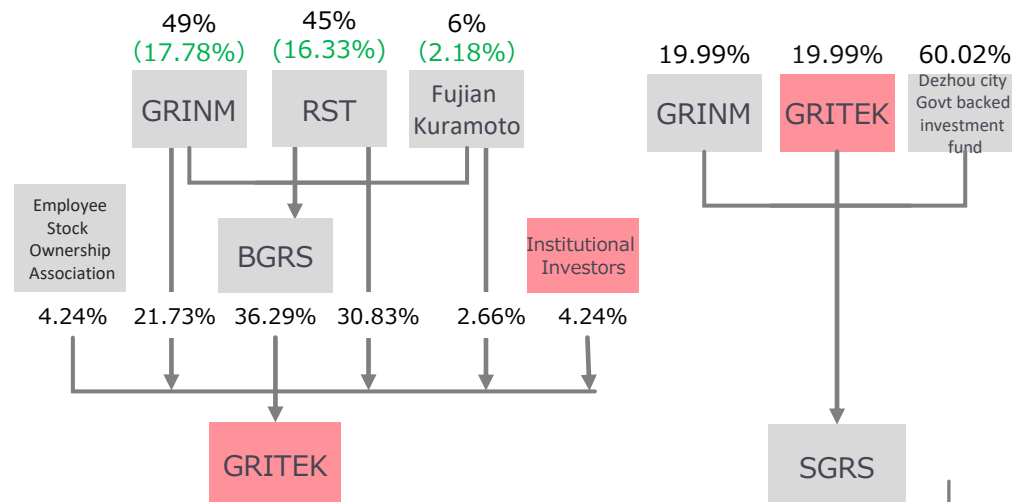
Indirect Owned Share of GRITEK



## Up to End of June

### 8 inch

### 12 inch



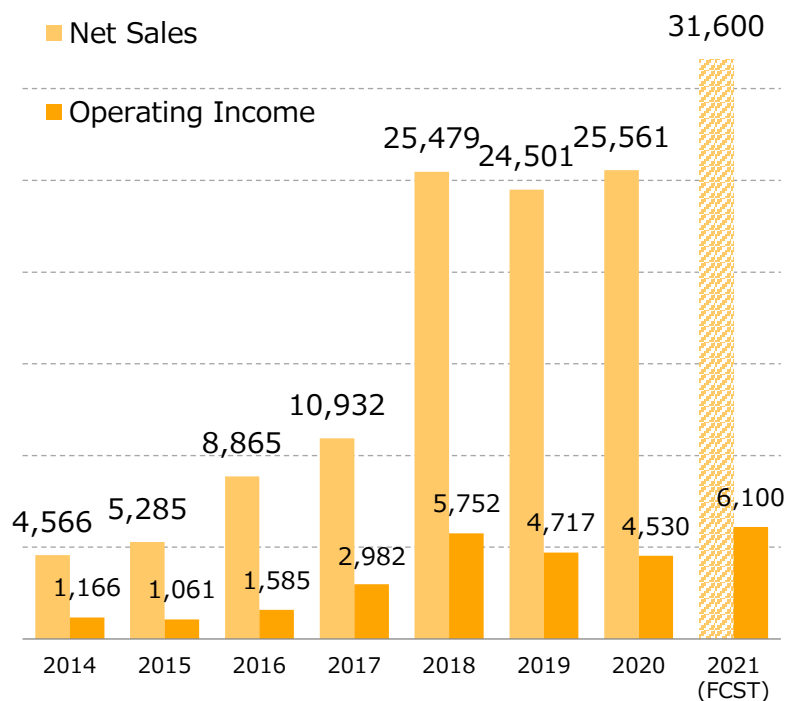


# RS Technologies Today

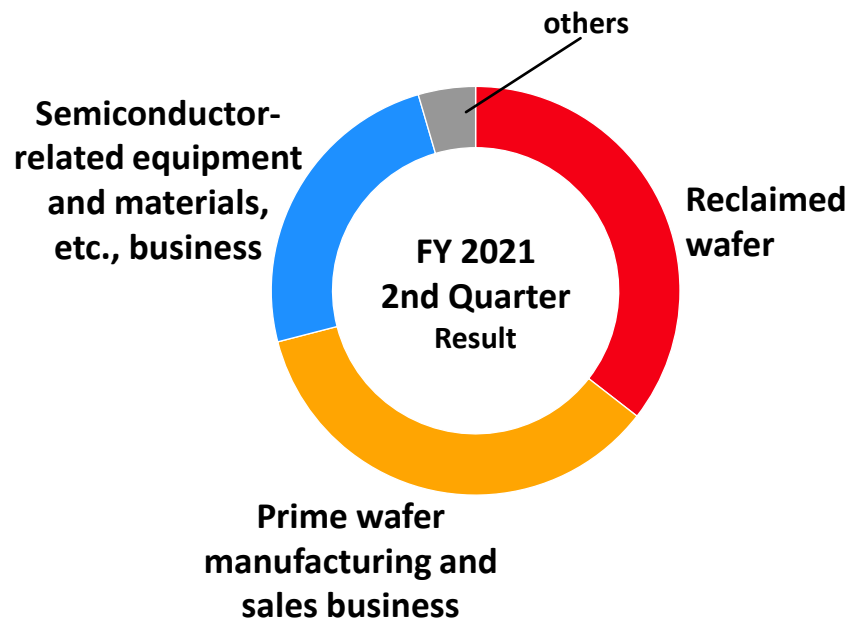
- A comprehensive wafer manufacturer in the Silicon Reclaimed Wafer and Prime Wafer business.
- Business has expanded into semiconductor-related equipment and materials, etc., business and solar business.
- The Company boasts the world's top share in Reclaimed Wafer business and is expanding its Prime Wafer business in China for its domestic use.

Consolidated Net Sales and Operating Income

(JPY Million)

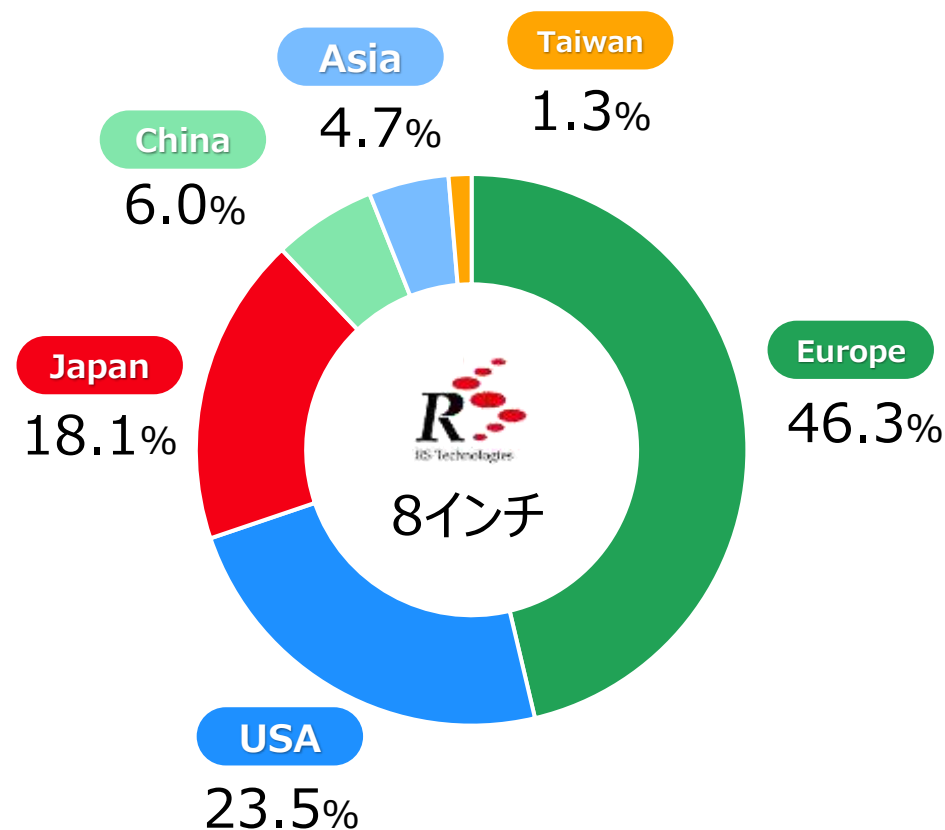
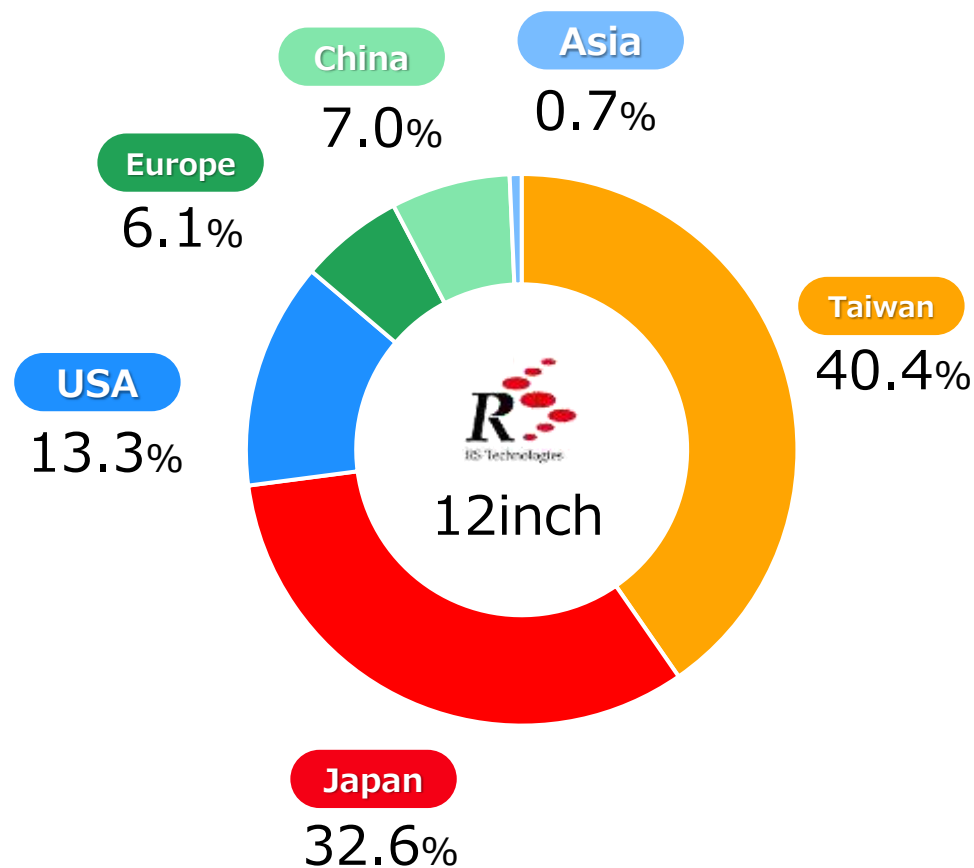


Sales by Business Segment



# Share of Total Shipments from the Silicon Wafer Reclaim Business

- The customers are major global semiconductor manufacturers, mainly in Japan, Taiwan, USA, and Europe.
- In 2022, production factory for reclaimed wafers increased in China along with one in Japan and Taiwan



## 2. FY 12/2021 2Q Results Summary

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# Summary of Financial Results (Cumulative)

- Both Net Sales and Profit increased YoY mainly contributed by Prime Wafer Business and Semiconductor-related Equipment, Materials, etc., Business
- Operating Income decreased YoY due to increasing R&D cost for prime wafer. However, ordinary income increased YoY because of subsidy for R&D costs
- Net income attributable to owners of the parent decreased YoY due to extraordinary expenses recorded in 1<sup>st</sup> Quarter of FY 2021

(JPY Million)	12FY2020 2Q	12FY2020 2Q (Plan)	12FY2021 2Q	YoY	Increase/ decrease	Initial Plan	12FY2021 Modified Plan	Compared to Modified Plan
Net Sales	12,653	13,100	15,559	+2,906	23.0%	+2,459	31,600	49.2%
Operating Income	2,580	2,200	2,464	△116	△4.5%	+264	6,100	40.4%
Operating Margin	20.4%	16.8%	15.8%	△4.6pt		△1.0pt	19.3%	
Ordinary Income	2,898	2,200	3,662	+764	26.4%	+1,462	7,300	50.2%
Ordinary Margin	22.9%	16.8%	23.5%	+0.6pt		+6.7pt	23.1%	
Net income attributable to owners of the parent	1,686	1,300	630	△1,056	△62.6%	△670	3,100	20.3%
EPS (JPY)	131.27	100.86	48.77	△82.50	△62.8%	△52.09	240.51	

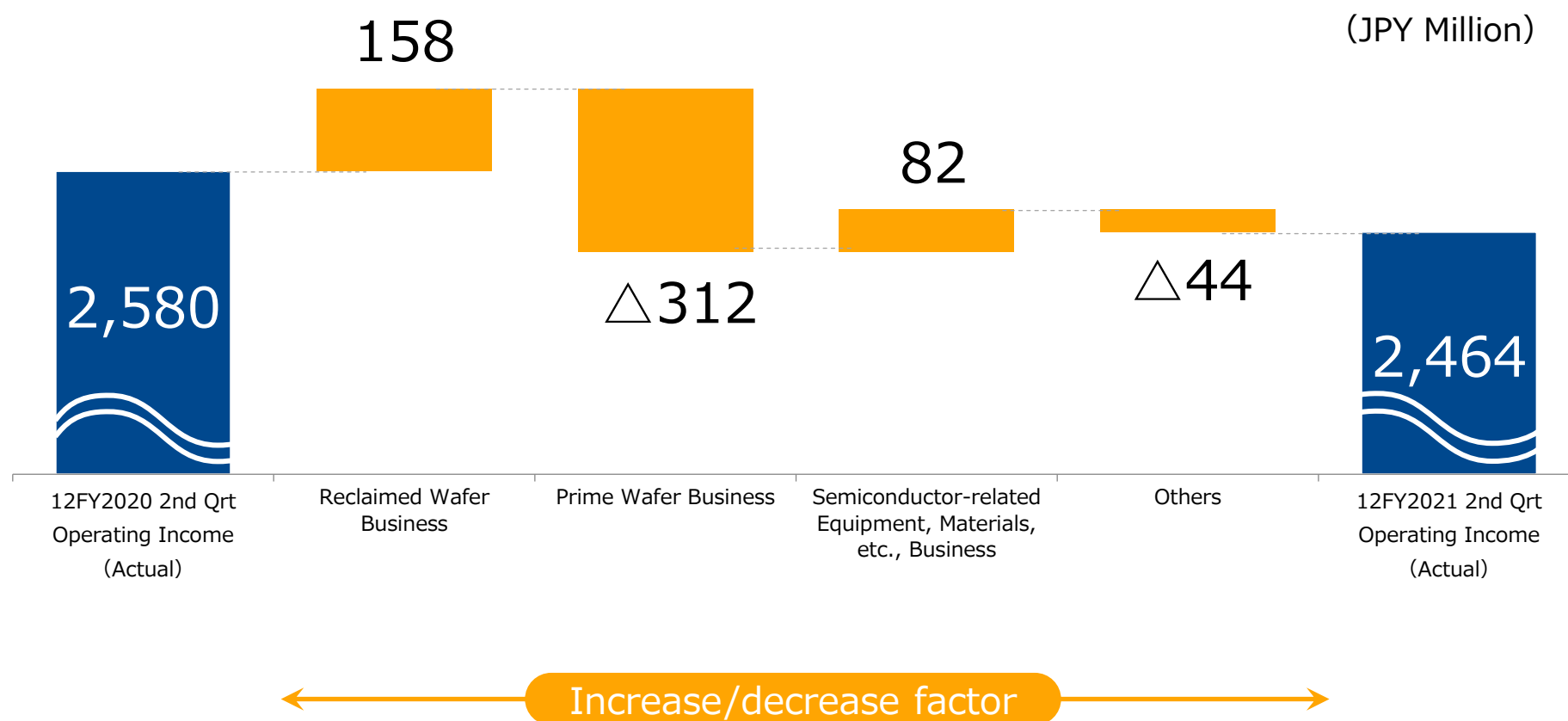
# FY21 2021 2Q Financial Results By Segment and Company (Cumulative)

- Reclaimed Wafer Business increased sales and operating profit with strong customer demand and capital investment
- Prime Wafer Business increased sales and make a profit due to new factory steady operation and completion of customer registration
- Semiconductor-related Equipment, Materials Business also showed steady sales and profit increase by putting more sales force

By Segment (Million JPY)	Reclaimed Wafer		Prime Wafer		Semiconductor-related Equipment, Materials, etc., Business		Others, Adjustment		Consolidated TOTAL	
		YoY		YoY		YoY		YoY		YoY
Net Sales	6,132	7.4%	5,980	25.2%	4,229	63.8%	△782	—	15,559	23.0%
Operating Profit	2,230	7.6%	561	△35.7%	176	87.2%	△503	—	2,464	△4.5%
%	36.4	0.1pt	9.4	△8.9pt	4.2	0.6pt	—	—	15.8	△4.6pt
By Company (Million JPY)	RS Technologies		Taiwan Subsidiaries		Chinese subsidiaries		Other subsidiaries		Consolidated TOTAL	
		YoY		YoY		YoY	elimination of intracompany transactions	YoY		YoY
Net Sales	6,681	27.9%	2,708	14.0%	5,841	22.7%	329	—	15,559	23.0%
Operating Profit	1,320	34.4%	762	△0.6%	485	△47.3%	△103	—	2,464	△4.5%
%	19.8	1.0pt	28.2	△4.1pt	8.3	△11.1pt	—	—	15.8	△4.6pt

# Analysis of Operating Income (Cumulative)

- Operating Income decreased due to increasing R&D costs by Prime Wafer Business YoY.





# Summary of Financial Result (April to June)

- Prime Wafer Business and Semiconductor-related Equipment, Materials, etc., Business Contributed to the increase in net sales
- Net sales contributed to the increase in operating income and net income attributable to owners of the parent increased YoY.

(JPY Million)	12FY2020 2 <sup>nd</sup> Quarter	12FY2021 2 <sup>nd</sup> Quarter	YoY	差額
Net Sales	6,470	8,875	37.2%	+2,405
Operating Income	1,407	1,709	21.5%	+302
Operating Margin	21.7%	19.3%		△2.4pt
Ordinary Income	1,490	2,471	65.8%	+981
Ordinary Margin	23.0%	27.8%		+4.8pt
Net income attributable to owners of the parent	860	1,170	36.0%	+310
EPS (JPY)	66.83	90.60	35.6%	+23.77

# FY21 2021 2Q Financial Results By Segment and Company (April to June)

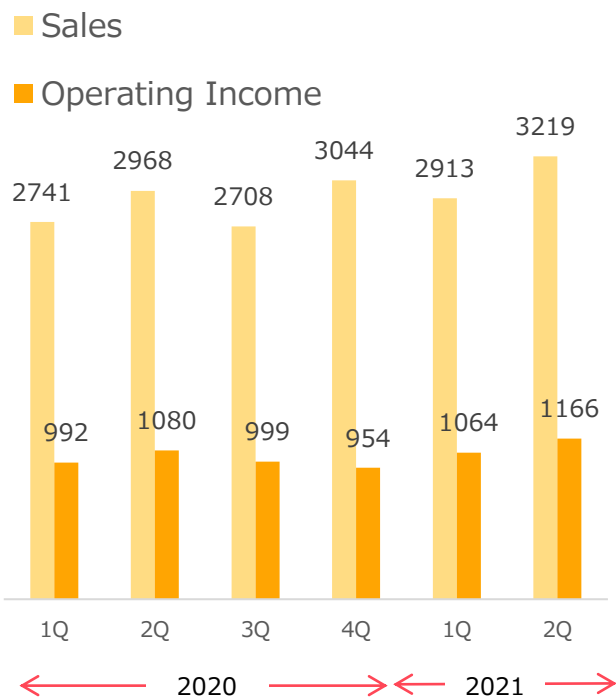
- Reclaimed Wafer Business increased sales and operating profit with strong customer demand and capital investment
- Prime Wafer Business increased sales and make a profit due to new factory steady operation and completion of customer registration
- Semiconductor-related Equipment, Materials Business also showed steady sales and profit increase by putting more sales force

By Segment (Million JPY)	Reclaimed Wafer		Prime Wafer		Semiconductor-related Equipment, Materials, etc., Business		Others, Adjustment		Consolidated TOTAL	
		YoY		YoY		YoY		YoY		YoY
Net Sales	3,219	8.5%	3,700	47.0%	2,331	92.3%	△375	—	8,875	37.2%
Operating Profit	1,166	8.0%	771	34.8%	95	—	△323	—	1,709	21.5%
%	36.2	△0.2pt	20.8	△1.9pt	4.1	5.6pt	—	—	19.3	△2.4pt
By Company (Million JPY)	RS Technologies		Taiwan Subsidiaries		Chinese subsidiaries		Other subsidiaries		Consolidated TOTAL	
		YoY		YoY		YoY	elimination of intracompany transactions	YoY		YoY
Net Sales	3,590	32.7%	1,420	14.5%	3,637	45.2%	228	—	8,875	37.2%
Operating Profit	734	43.3%	370	△5.1%	723	21.5%	△118	—	1,709	21.5%
%	20.4	1.5pt	26.1	△5.4pt	19.9	△3.9pt	—	—	19.3	△2.4pt

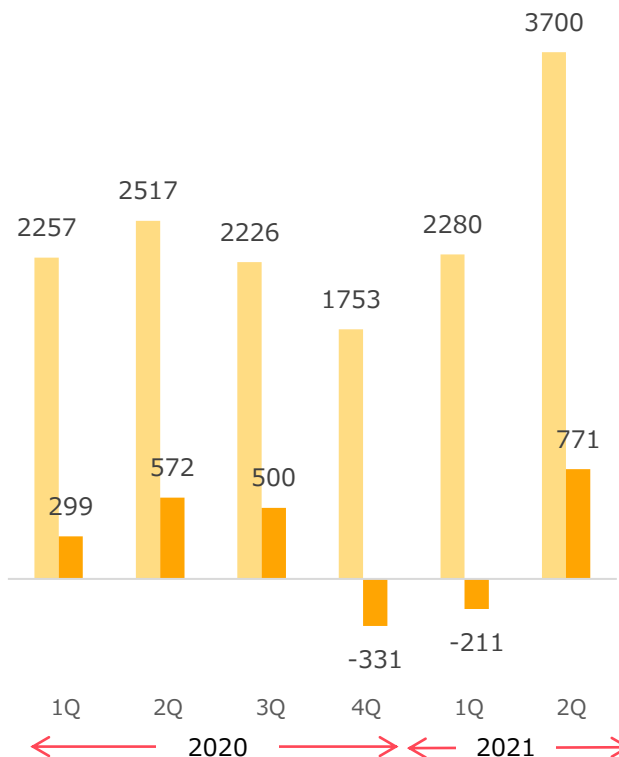
# FY21 2021 2Q Financial Results By Segment

- Reclaimed Wafer Business shows steady growth in sales and operating profit with strong customer demand
- Prime Wafer Business increased sales and make a profit due to new factory steady operation and completion of customer registration
- Semiconductor-related Equipment, Materials Business also showed steady sales increase by putting more sales force

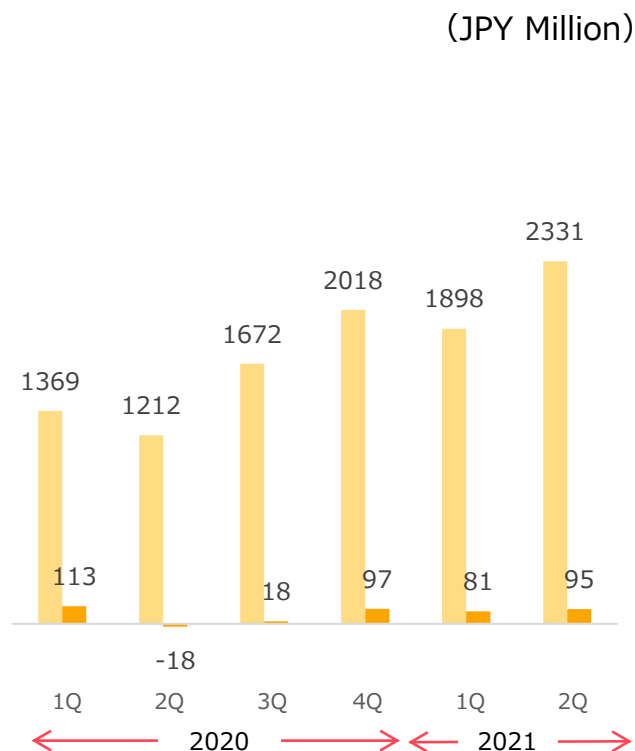
Reclaimed Wafer Business



Prime Wafer Business



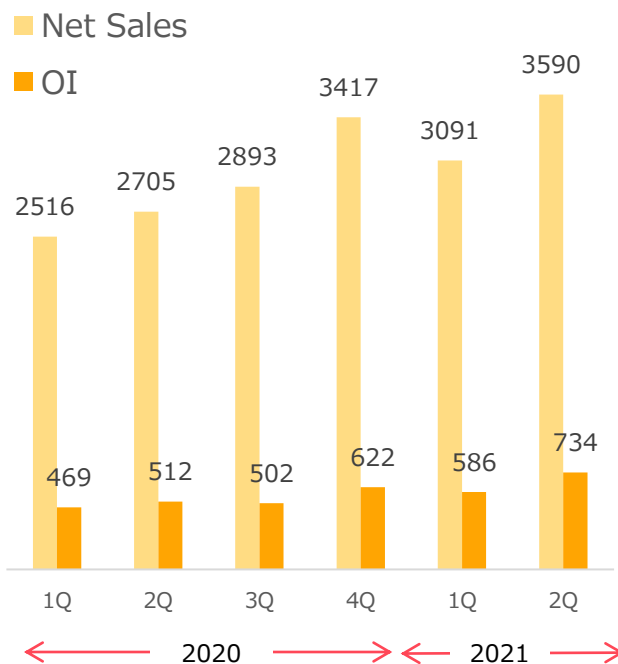
Semiconductor-related Equipment,  
Materials Business



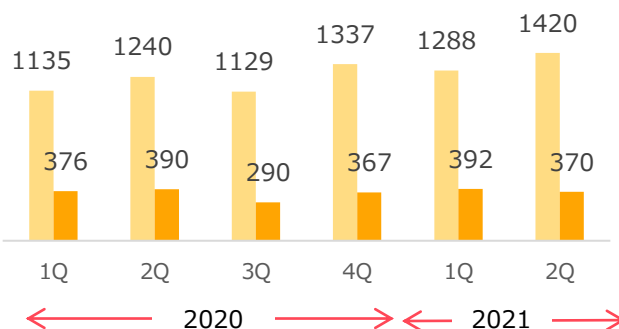
# FY21 2021 2Q Financial Results By Company

- RS Technologies shows steady sales growth by Reclaimed Wafer Business and Semiconductor-related Equipment, Materials, etc., Business
- RS Taiwan also shows steady sales growth due to strong customer demand and capital investment.
- GRITEK completed customer registration. Operating rate at the factory began to improve. By the end of 2021, it is estimated that sales and profit will increase.

## RS

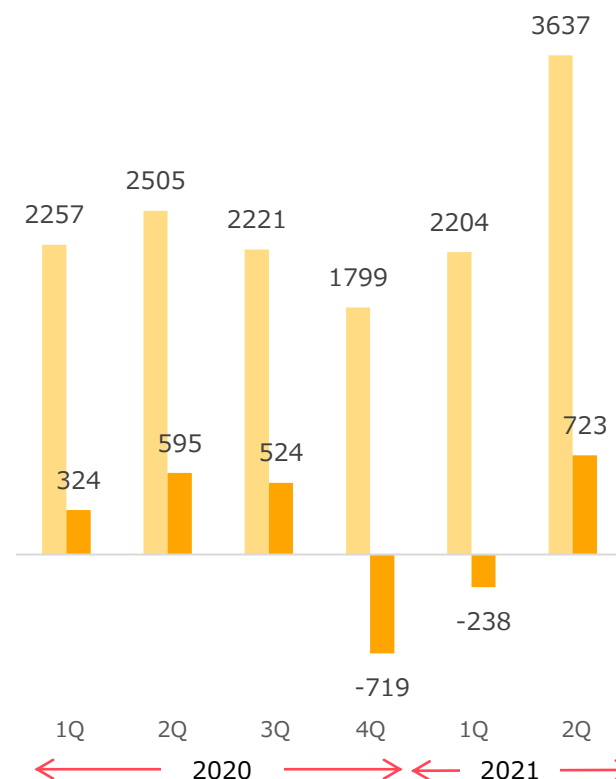


## Taiwan Subsidiaries



## Chinese Subsidiaries

( JPY Million)





# Balance Sheet and Cash Flow Statement

■ Equity : + JPY 7.4 billion (JPY 40.4 billion→JPY 47.8 billion)

■ Cash flow from operating activities : +JPY 3.3billion

(Profit before tax : +JPY 2.3billion、non-cash : +JPY2.6billion, Corporate Tax : ▲JPY 1.7billion, Others : +JPY 0.1 billion)

## Consolidated Balance Sheet

(JPY Million)	12 FY2020	12FY2021 2 <sup>nd</sup> Quarter
<b>Assets</b>		
Current Assets	32,626	39,887
Cash and Deposits	19,082	24,465
Account Receivable	6,321	7,418
Goods & Products	2,116	1,765
Fixed Assets	26,124	31,127
Tangible Fixed Assets	24,146	26,896
Intangible Fixed Assets	527	506
Investment etc	1,451	3,725
<b>Total Assets</b>	<b>58,750</b>	<b>71,014</b>
<b>Liabilities</b>		
Current Liabilities	12,631	13,559
Account Payable	2,871	3,149
Short-term Debt	1,522	3,256
Fixed Liabilities	5,754	9,649
Long-term Debt	1,613	5,369
<b>Total Liabilities</b>	<b>18,385</b>	<b>23,208</b>
<b>Equity</b>		
Equity	40,365	47,806
<b>Equity &amp; Liabilities</b>	<b>58,750</b>	<b>71,014</b>

## Cash-flow Statement

(JPY Million)	12 FY2020	12FY2021 2 <sup>nd</sup> Quarter
Cash flow from operating activities	6,377	3,287
Cash flow from investing activities	△9,188	△7,504
Cash flow from financing activities	△776	8,725
Effect of exchange rate change on cash and cash equivalents	134	893
Net increase(decrease) in cash and cash equivalents	△3,453	5,401
Cash and cash equivalents at beginning of period	21,363	17,910
Cash and cash equivalents at end of period	17,910	23,311

# Extraordinary Expenses (Share-based compensation expenses)

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## Background

In February, 2021, some of GRITEK's share owned by BGRS were transferred to Employee Stock Ownership Associations.

(The share transfer plan was disclosed in a disclosure document on November 19, 2020)

## RST's understanding and interpretation

RST requested GRITEK's valuation to a third party ( the asset evaluation organization assigned by China Securities Regulatory Commission). Based on the valuation result assessed by the third party, RST regarded the valuation (market value net equity) as fair value and transferred some of GRITEK's share to Employee Stock Ownership Association.

## Auditing firm's understanding and interpretation

Auditing firm regards quotation from Chinese institutional investors (quoted valuation submitted in April 2021) as fair value.

## Outcome • Impact

- Extraordinary Expenses (JPY 1,348 Million) is appropriated based on the difference between transferred value and the fair value determined by auditing firm
- No Cash-out from this event
- No impact on net asset from this event  
(Because of this extraordinary expenses, retained earnings decrease while capital surplus increases.  
Therefore, there is no impact on net asset)

# 21FY 2021 Financial Outlook

- The Full Business Year forecast was revised upward based on the cumulative results in 2Q and the outlook for 3Q and beyond.

(JPY Million)	12FY2020	12FY2021		
	Full Business Year	Full Business Year		
	Actual	Previous Forecast	Forecast	Increase/decrease
Net Sales	25,561	29,200	31,600	+2,400
Operating Income	4,530	5,900	6,100	+200
Operating Margin	17.7%	20.2%	19.3%	△0.9pt
Ordinary Income	5,252	5,900	7,300	+1,400
Ordinary Margin	20.5%	20.2%	23.1%	+2.9pt
Net income attributable to owners of the parent	2,824	3,100	3,100	-
EPS (JPY)	219.15	240.51	240.51	-
Annual Dividend	JPY 20	JPY 20	JPY 20	-

※Previous Forecast in 2021 was disclosed on February 12<sup>th</sup> 2021, and Forecast in 2021 was disclosed on August 4<sup>th</sup> 2021.

### **3. Mid-Term Investment Plan**

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# Capital Investment Plan: Reclaimed Wafer Business

- Factory in Japan and Taiwan will increase production capacity and one in China will execute stable mass production.
- By increasing investment amount for Taiwan factory, the factory will produce 220k wafers/month

## Japan

**Total investment: JPY 1.4 bil.**

- Expand production capacity for 12-inch reclaimed wafers.
- 2020 to 2022: JPY 1.4 bil. (40,000 wafers)

### 12-inch reclaimed wafer production capacity (per month)

2020	2021	2022	2023
260k	280k	300k	300k

FY2021	FY2022	FY2023
JPY 900 million	JPY 500 million	TBD

## Taiwan

**Total investment: JPY 2.5 bil.**

- Expand production capacity and conduct refinement for 12-inch reclaimed wafers.
- 2020 to 2023: JPY 2.5 bil. (60,000 wafers)

### 12-inch reclaimed wafer production capacity (per month)

2020	2021	2022	2023
160k	180k	190k	220k

FY2021	FY2022	FY2023
JPY 800 million	JPY 700 million	JPY 1 billion

## China

**Total investment: JPY 3.6 bil.**

- Invest a new 12-inch reclaimed wafer production base.
- Phase 1 investment (2020 to 2023): JPY 3.6 bil. (50,000 wafers)
- Phase 2 Investment (2024~) investment -TBD (50,000 wafers)

### 12-inch reclaimed wafer production capacity (per month)

2020	2021	2022	2023
0k	0k	50k	50k

Phase 1 investment

FY2021	FY2022	FY2023
JPY 3 billion	JPY 500 million	JPY 100 million



# Capital Investment Plan: Prime Wafer Business

- 8 inch prime wafer: Targeting to produce 130k wafers per month
- 12 inch prime wafer: Executing R&D to produce 10k wafers per month

## China (8 inch)

### Action to take:

- Quick startup of Shandong Factory
- Execution of stable mass production

### 8-inch prime wafer production capacity (per month)

2020 → 2021  
**80k** → **130k**

FY2021	FY2022	FY2023
- *1	TBD	TBD

\*1: completed investment in 2020

## China (12 inch)

### Action to take:

### Test line investment: JPY 4 bil.

- R&D for 12-inch prime wafer mass production.
- Aim for mass production set-up for 300k wafers through a test line for 10k.

### 12-inch prime wafer production capacity (per month)

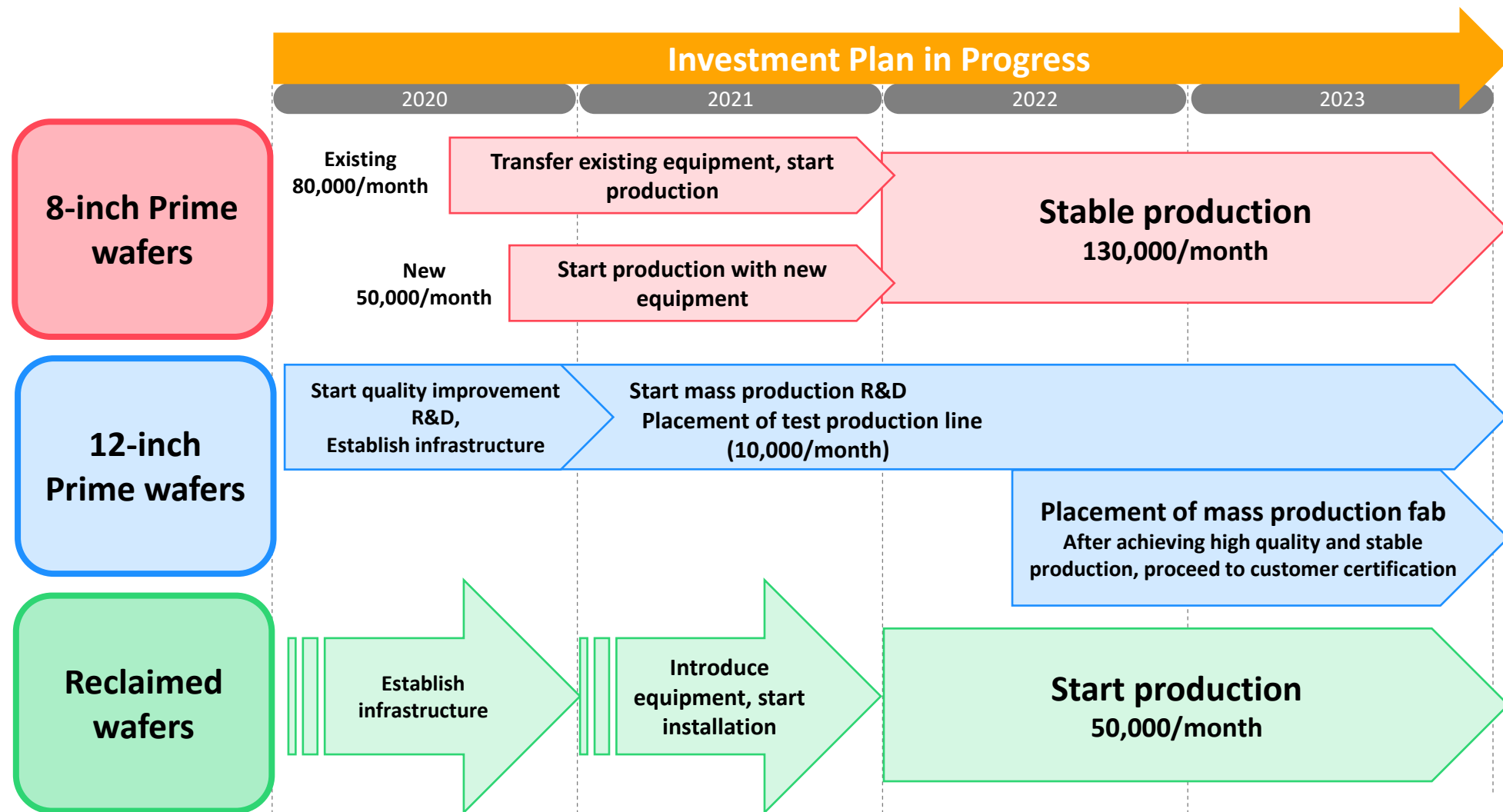
2020 → 2021 → 202X  
**0k** → **10k\*2** → **300k**

FY2021	FY2022	FY2023
JPY 4 bil.	TBD	TBD

\*2: Test line for mass production R&D

# Investment Plan in Progress for China (Schedule)

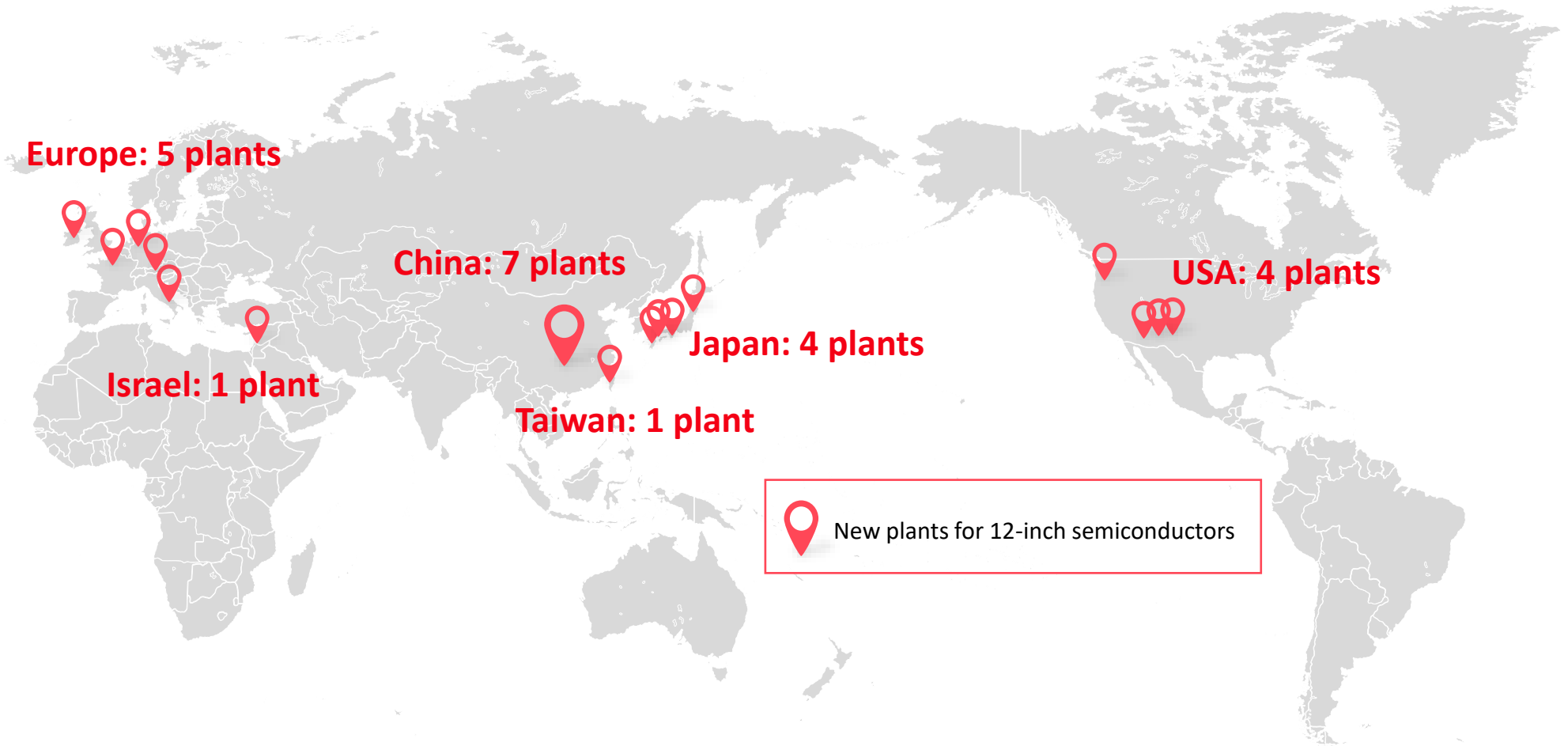
- Producing 130k wafers per month for 8 inch prime wafers, executing R&D to produce 10k wafers per month for 12 inch are scheduled. In parallel, reclaimed wafer business in China also will begin.



# New Demand in Reclaimed Wafer Business:

## Plans to construct new 12-inch semiconductor plants

- There are plans to construct new semiconductor plants to cope with the high demand for semiconductors for memory, CPU, computerization of automobiles, etc., in Europe, USA, Japan, etc.
- Meet new reclaimed wafer demand by capital investments in Japan, Taiwan, and China.

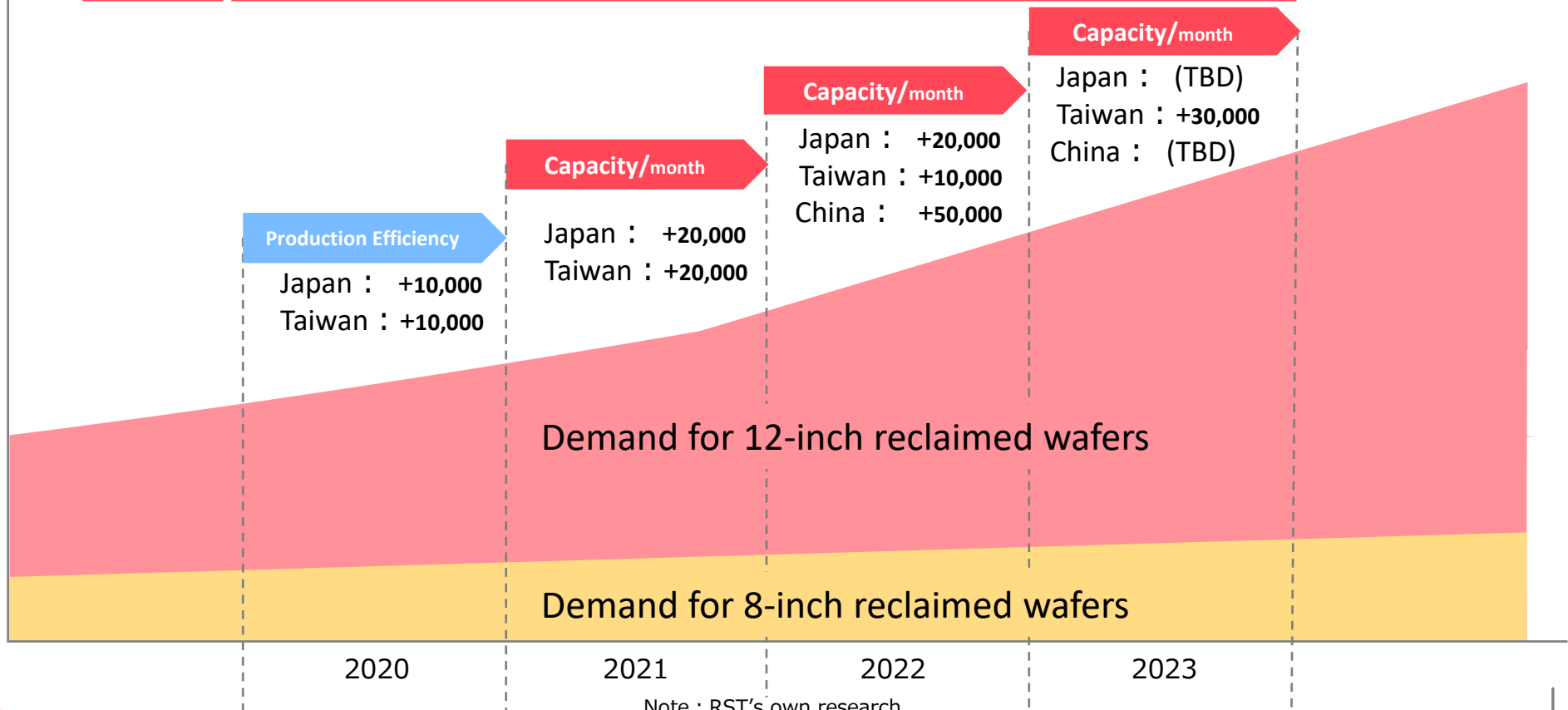


Note: RST survey

# Reclaimed Wafer Demand Outlook

- Between 2021 and 2023, production capacity of 12 inch reclaimed wafers is expected to increase:  
Japan: +40,000, Taiwan: +60,000, China: +50,000

Production	2020	2021	2022	2023
Japan	260K	280k	300k	300k
Taiwan	160K	180k	190k	220k
China	0	0	50k	50k
Total	<b>420K</b>	<b>460K</b>	<b>540K</b>	<b>570K</b>



# Third Engine of Growth : DG Tec's Growth Strategy (1/3)

- DG Technologies manufactures consumable parts for semiconductor equipment
- In January, 2019, DG Technologies became a consolidated subsidiary of RS Technologies

## Company Profile



Name	DG Technologies Co., Ltd
Est.	October 26, 1981
Business	Consumable parts for semiconductor equipment
Address	3-4, Sunayama, Kamisu-city, Ibaraki
Capital	JPY 100 Million
CEO	Nagayoshi Ho

## Product

Quartz and Silicon Consumable Parts  
For Etching Equipment



Silicon Plate



Quartz Ring

## Main Customer

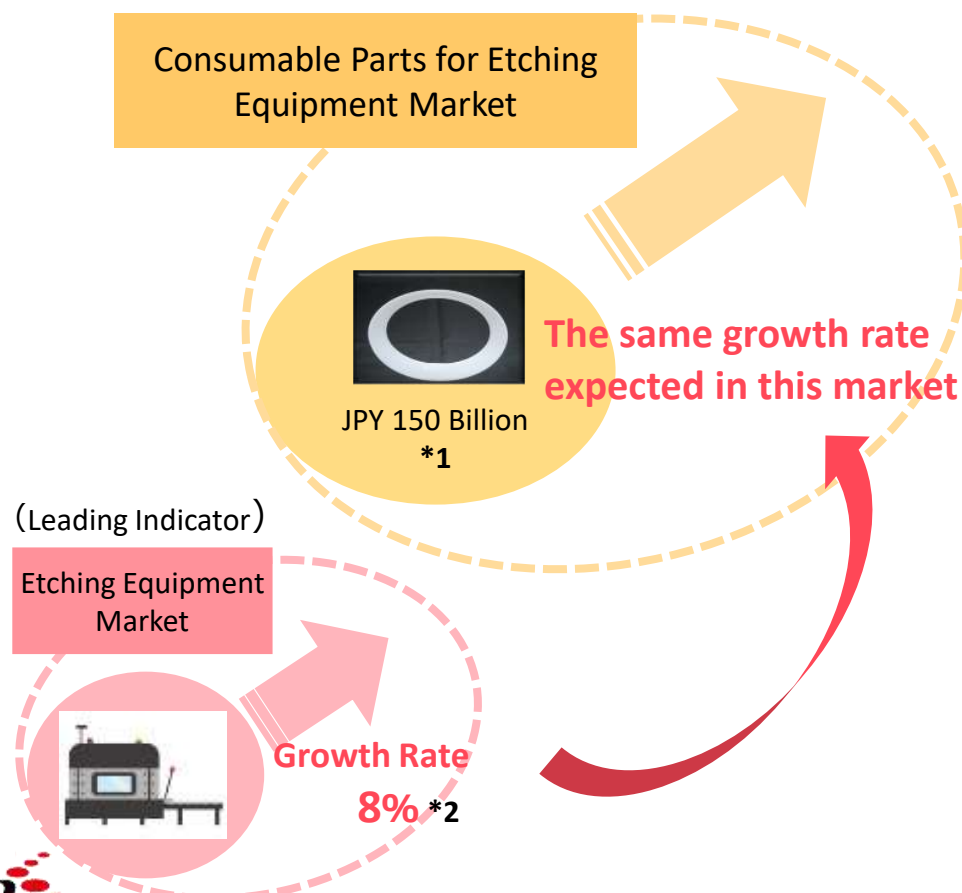
Semiconductor Manufacturers  
Semiconductor Equipment Manufacturers



# Third Engine of Growth : DG Tec's Growth Strategy (2/3)

- Market for Quartz and Silicon Consumable Parts for Etching Equipment is expected to reach 150 billion yen and is expected to continue stable growth.
- By executing the Growth Strategy, DG Tec targets to become top provider in the market

## Market Forecast



## Growth Strategy

- ◆ **Strengthening Sales Activities**  
⇒ Cross-selling DG Tec's parts to RST's existing customers
- ◆ **Reinforcement of Production Capacity**  
⇒ Execution of CAPEX helps DG Tec meet customers' required quantities and delivery time of products.
- ◆ **Improvement of Production Efficiency**  
⇒ Optimization of human resources and production planning leads to overall production efficiency
- ◆ **Optimization of Procurement**  
⇒ Purchasing raw materials from GRITEK creates cost advantage.

# Third Engine of Growth : DG Tec's Growth Strategy (3/3)

- In order to meet customers' demand, DG Technologies established their second manufacturing plant in Kurihara-city, Miyagi on May 30, 2021.
- Both Kamisu and Kurihara plants manufacture Silicon and Quartz parts

## Kamisu Plant



Plant	DG Technologies Kamisu Plant
Location	Kamisu-city, Ibaraki
Area	5,378m <sup>2</sup>

## Kurihara Plant



Silicon  
Shower  
Plate

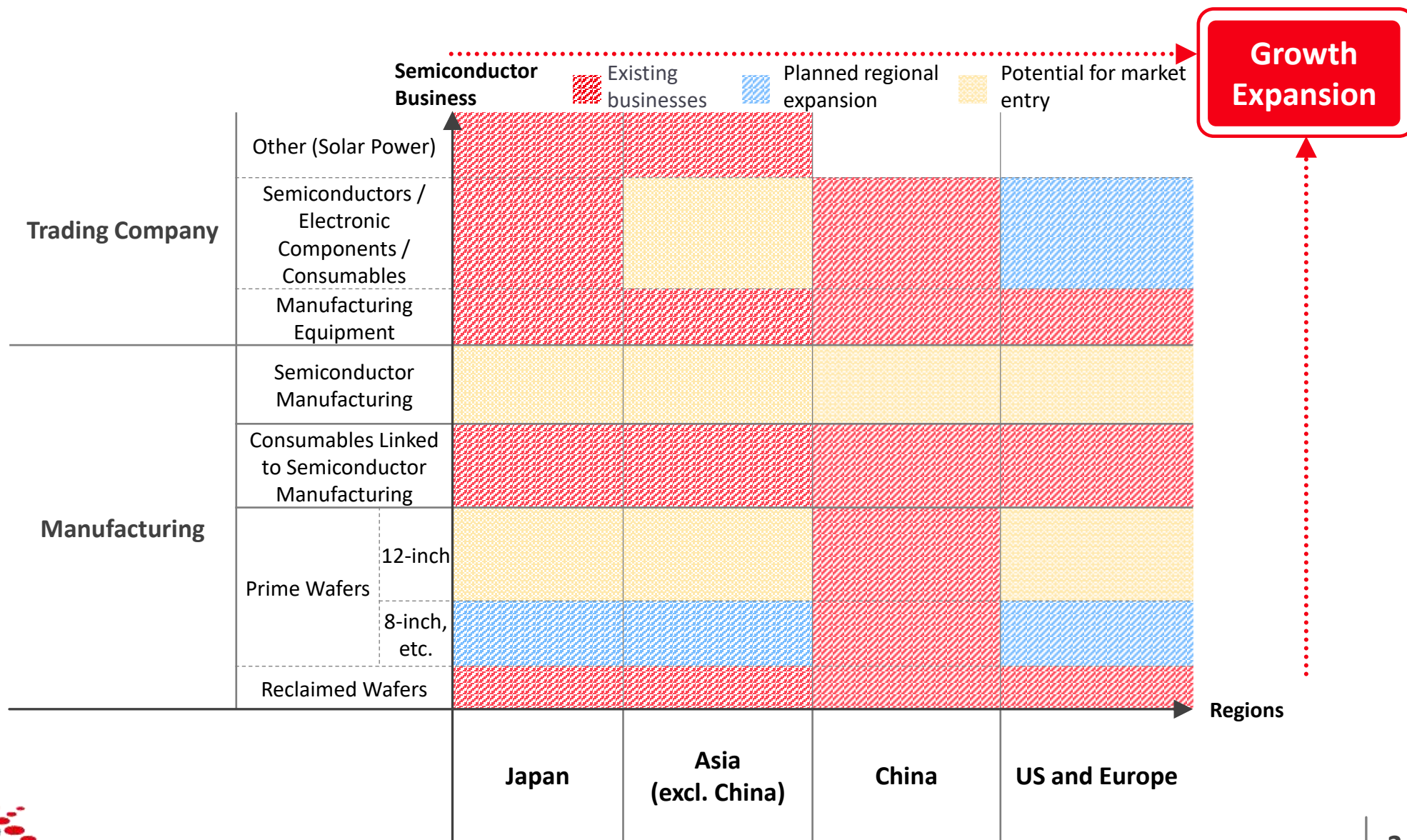


Quartz  
Ring

Plant	DG Technologies Kurihara Plant
Location	Kurihara-city, Miyagi
Area	5,000m <sup>2</sup>

# RS Technologies' Aims

## Steady expansion of business domains and regions



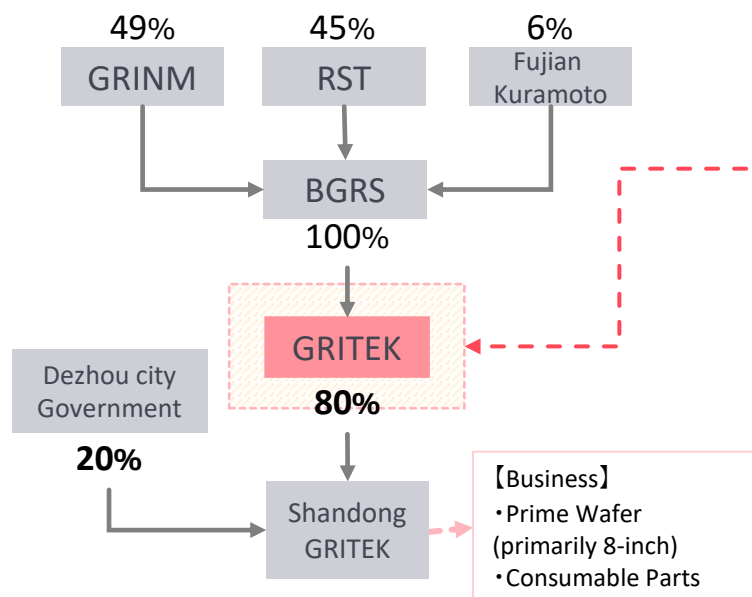
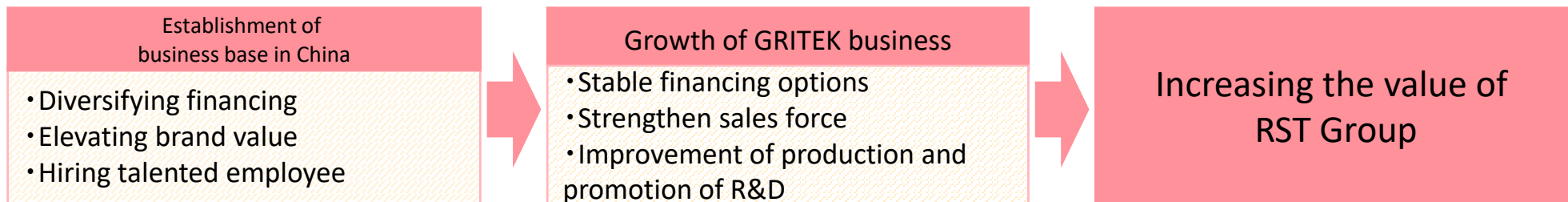
## Appendix 1

**Subsidiary in China, GRITEK, preparing for IPO on STAR Market:  
(Published Information)**

# Subsidiary in China, GRITEK, preparing for IPO (Published in Sept, 2020)

- In September, 2020, RST decided to prepare for GRITEK's IPO
- By conducting IPO, RST aims to elevate the value of GRITEK and expand their business

## The Purpose of IPO



## IPO Subject : GRITEK

- 1999: Established, manufacturing prime wafers
- 2018: Became consolidated subsidiary of RST
- 2020: Starting production of prime wafers at Shandong

## Market : STAR Market

- Officially known as Shanghai Stock Exchange Science and Technology Innovation Board (Also known as Shanghai's NASDAQ )
- Opened on July 22, 2020 led by Chinese government.
- Compared to other equity market, listing requirement and procedures become eased and simplified.
- Mainly start-up tech companies in the market
- Starting with 25 companies. Now, about 130 companies have been listed.



# GRITEK's Status for IPO (Published in Nov. 2020)

- Board of Directors held on Nov. 19, 2020 approved share transfer of GRITEK's share as a part of IPO process.

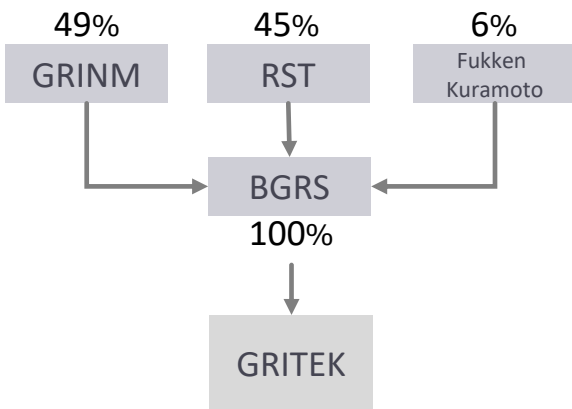
## Summary of Share Transfer

- **Current Status** : BGRS holding 100% of GRITEK's Share
- **Share Transfer Scheme** : BGRS transferring GRITEK share to GRINM with 25.60%、Fukken Kuramoto with 3.14%、Employee stock ownership association with 5.00%、 and RST with 23.51%

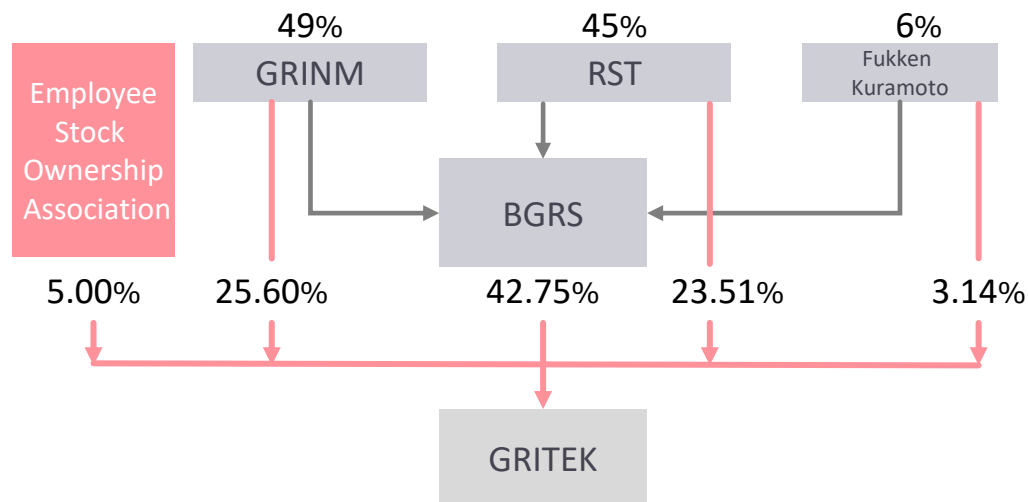
## Purpose of Share Transfer

- Employee Stock Ownership Association stimulates GRITEK's employees' motivation
  - Maintaining business relationship with GRINM
- ↓
- Increasing RST Group's enterprise value

## BEFORE Share Transfer



## AFTER Share Transfer



## Appendix 2

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# Strengths of CEO Nagayoshi Ho

- President and CEO Nagayoshi Ho has knowledge gained from over 20 years in Japan, as well as strengths in worldwide sales, business networking, partnerships, and financing.
- President Ho has assembled a team of professionals from a broad range of fields including advanced technology and finance.



Nagayoshi Ho, center front (taken September 2016 at TSE)

## Nagayoshi Ho

Born 1970 in Fujian Province, China

Completed Josai International University Graduate Program

Specialty fields:

M&A, business alliances

(successful M&As with more than 10 companies)

-----  
1998 Established Eiki Shoji Co., Ltd.

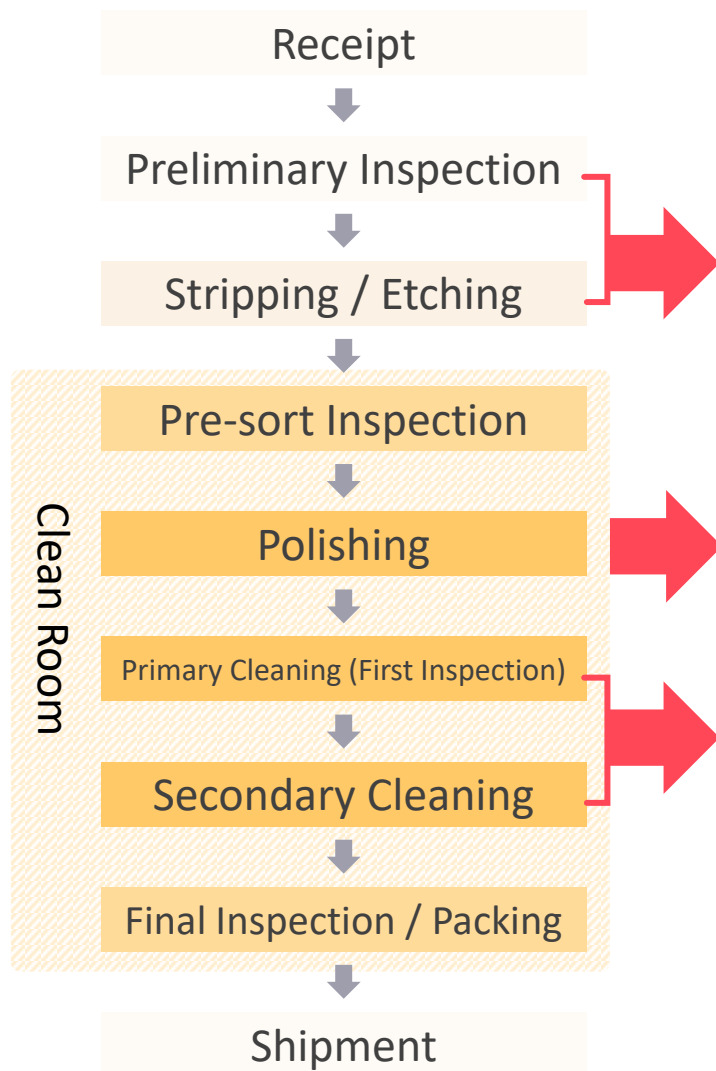
2010 Established and appointed president of RTS  
(current position)  
-----

Favorite maxim: Where there is a will, there is a way  
-----

### Supplementary information:

Nagayoshi Ho came to Japan after graduating high school. He has invested in more than 20 companies in Japan and abroad. In addition to semiconductors, he has experience investing in a range of businesses, including investment funds, trade, hotels, IT, and agriculture. He has traveled the world promoting his belief that Japanese manufacturing is the best in the world.

# Reclaimed Wafer Business (1/2)



**Strength**  
**1**

## Able to strip all films

- Removed using chemical processes to minimize damage to surfaces

► **Reclaimed many times** ► **Potential for greater cost reductions**

Special (chemical) technique inherited from Rasa Industries



Polishing of scratches and uneven areas on the surface to make it smoother

**Strength**  
**2**

## Removal of metallic impurities

- Cleaning to remove minute particles and dirt on the wafer surface

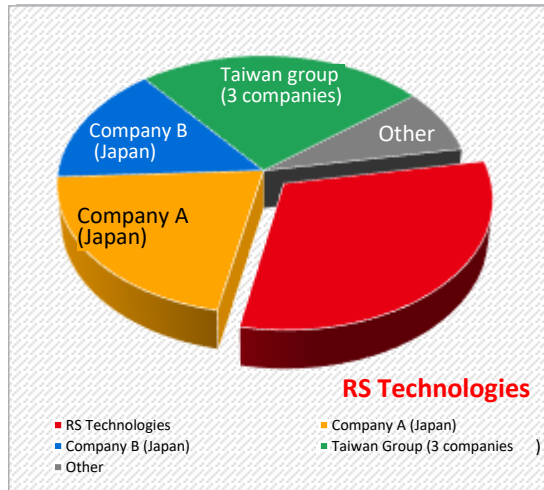
+ **Removal of metallic impurities**  
Particular strength in removing copper (Cu)



# Reclaimed Wafer Business (2/2)

## Increasing Share of the Reclaimed Market

### RS Technologies' Share of the 12-inch Reclaimed Market



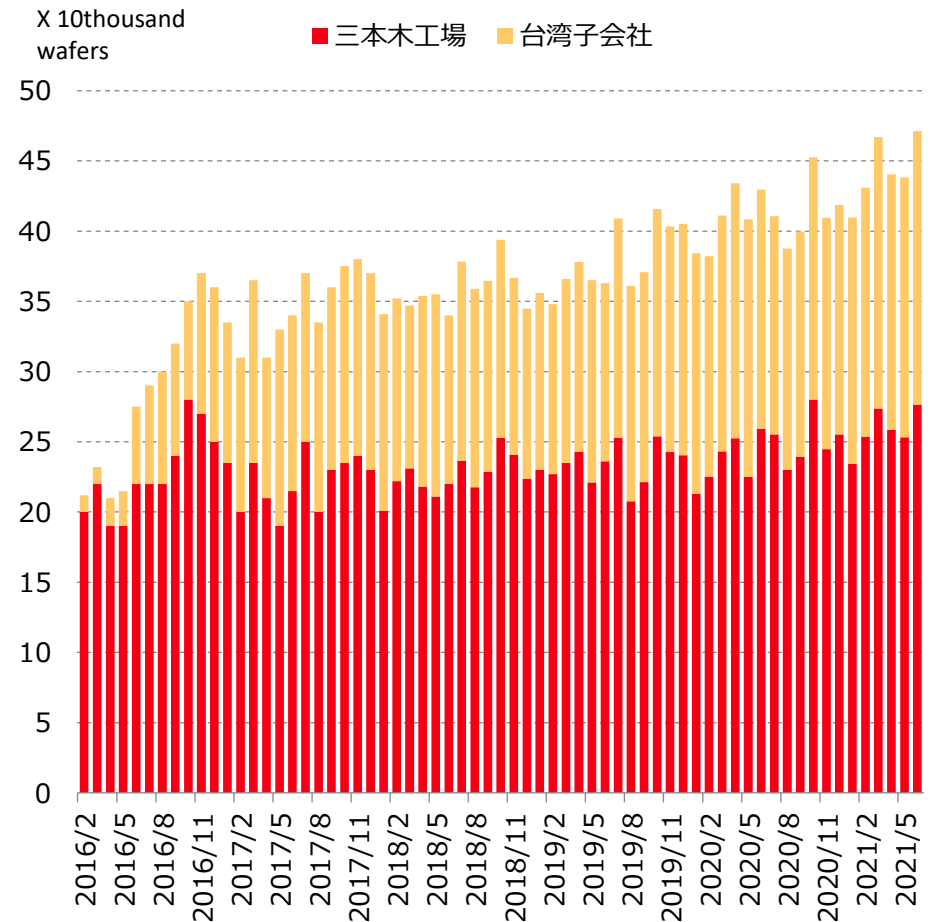
Note: RST survey

	FY12/ 2015 1H	FY12/ 2015 2H	FY12/ 2016	FY12/ 2017	FY12/ 2018	FY12/ 2019	FY12/ 2020
RST Group Production Capacity	180k wafers	240k wafers	280k wafers	300k wafers	340k wafers	400k wafers	420k wafers
RST Group Market Share	19%	24%	29%	30%	31%	33%	33%

Note: RST survey

## Shipments from the Sanbongi Factory and Taiwan Subsidiary (2016-2021)

### Shipments of 12-inch Wafers from the Sanbongi Factory and Taiwan Subsidiary



# Manufacturing Factories for Reclaimed Wafer

- Sanbongi and Tainan factories produced reclaimed wafers
- By 2022, Dezhou factory will produce reclaimed wafer (50k/month)

## Sanbongi Factory



Location	Osaki-city, Miyagi
Product	5,6,8, and 12 inch
Capacity	8 inch : 130k/month 12 inch : 260k/month
Certified	ISO9001, ISO14001

## Tainan Factory



Location	Tainan-city, Taiwan
Product	12 inch
Capacity	160k/month
Certified	ISO9001, ISO14001

## Dezhou Factory



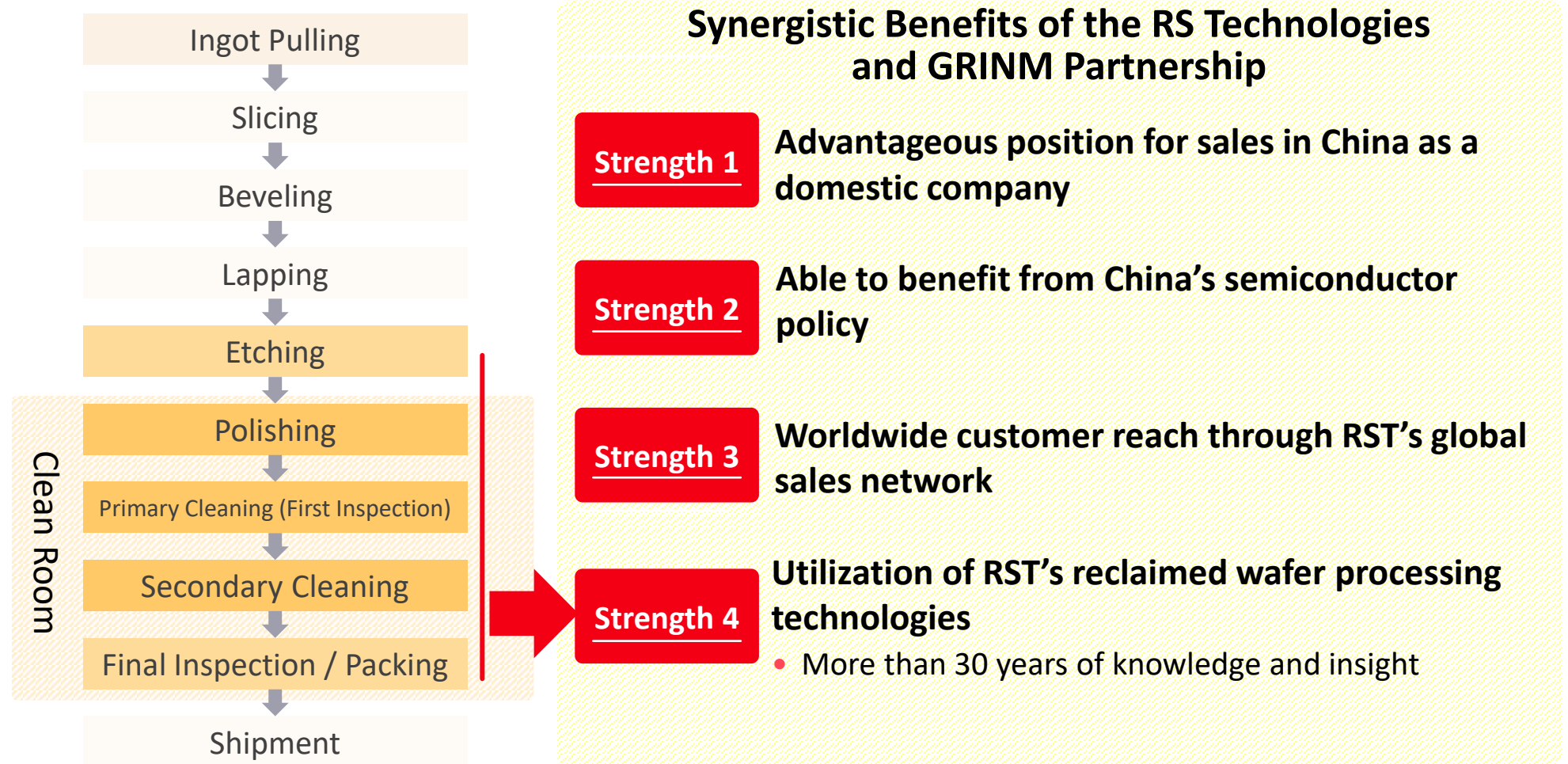
Location	Dezhou-city, Shandong
Product	12 inch
Capacity	50k/month ※
Certified	ISO9001, ISO14001

※it will begin to manufacture in 2022



# Foray into Prime Wafer Business

- RS Technologies has established a joint venture with Chinese state-owned company General Research Institute for Nonferrous Metals (currently, Grinm Advanced Materials, hereafter, GRINM) and is developing its semiconductor business as a domestic Chinese company.



# About RST's Joint Venture Partner in China (**GRINM**)

- Established in 1952, GRINM is the largest state-owned research institute in the field of non-ferrous metals in China.
- Out of the roughly 13 million companies in China, about 300 thousand are state owned. Out of these, about 88 are directly owned by the central national government and GRINM is one of these.
- GRINM is a research institute through which government, industry and science come together. Nonferrous metal policies of the central national government are transmitted through GRINM.
- GRINM established operating companies that serve as evidence of its successful research. Currently, 34 of these companies exist.
- GRITEK, a subsidiary of Beijing GRINM RS Semiconductor Materials Co., Ltd. (BGRS), an RST joint venture, was established as GRINM's first operating company in 2001.



# Alliance with the City of Dezhou in Shandong, China

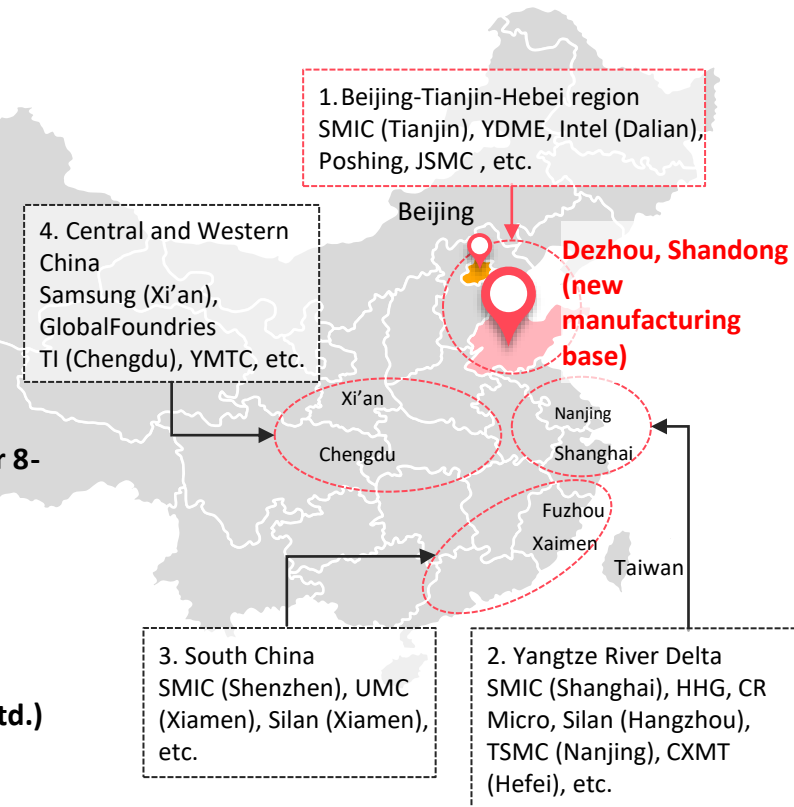
## Subsidiary established for factory construction

### Background of Partnership

1. Worldwide invitations for major semiconductor manufacturers to set up factories in the area are gaining momentum. Several semiconductor manufacturers are located nearby, making the area a prime location (see image on the right)
2. GRITEK will be able to offer plentiful benefits, including low-cost company housing and reduced utility expenses
3. Science and engineering universities are located nearby, providing favorable circumstances for acquiring superior human resources
4. Land expandable to a maximum of about 500,000m<sup>2</sup> (initially 200,000m<sup>2</sup>) has been procured, allowing for adequate response to future business progress in China

### History and current status

1. Established new company (Shandong GRINM Semiconductor Materials Co., Ltd. ) for 8-inch wafer business on August, 2018.
2. A four-party joint venture agreement concluded with General Research Institute for Nonferrous Metals (GRINM) , Dezhou Huida Semiconductor Equity Investment Fund Partnership, and the City of Dezhou in Shandong in Dec. 2019.
3. Established new joint venture (Shandong GRINM RS Semiconductor Materials Co., Ltd.) for 12-inch wafer business in March 2020
4. Dezhou City New Factory Completion Ceremony held on October, 2020



# Manufacturing Factory and R&D Center for Prime Wafer

- In October, 2020, Dezhou factory began to produce 8 inch prime wafer
- In Guotai Factory, R&D Center for 12 inch prime wafer was established. In 2021, test line to produce 10k wafers per month in order to execute mass production.

For 8 inch prime wafer  
Dezhou Factory (Shandong GRITEK)



<b>Location</b>	Dezhou city, Shandong, China
<b>Product</b>	5,6,8 inch prime wafer Consumable parts for semiconductor equipment
<b>Capacity (Monthly)</b>	5 inch:50k, 6 inch:150k 8 inch:130k※
<b>Certified</b>	ISO9001, ISO14001

For 12 inch prime wafer R&D  
Guotai Factory R&D Center (SGRS)

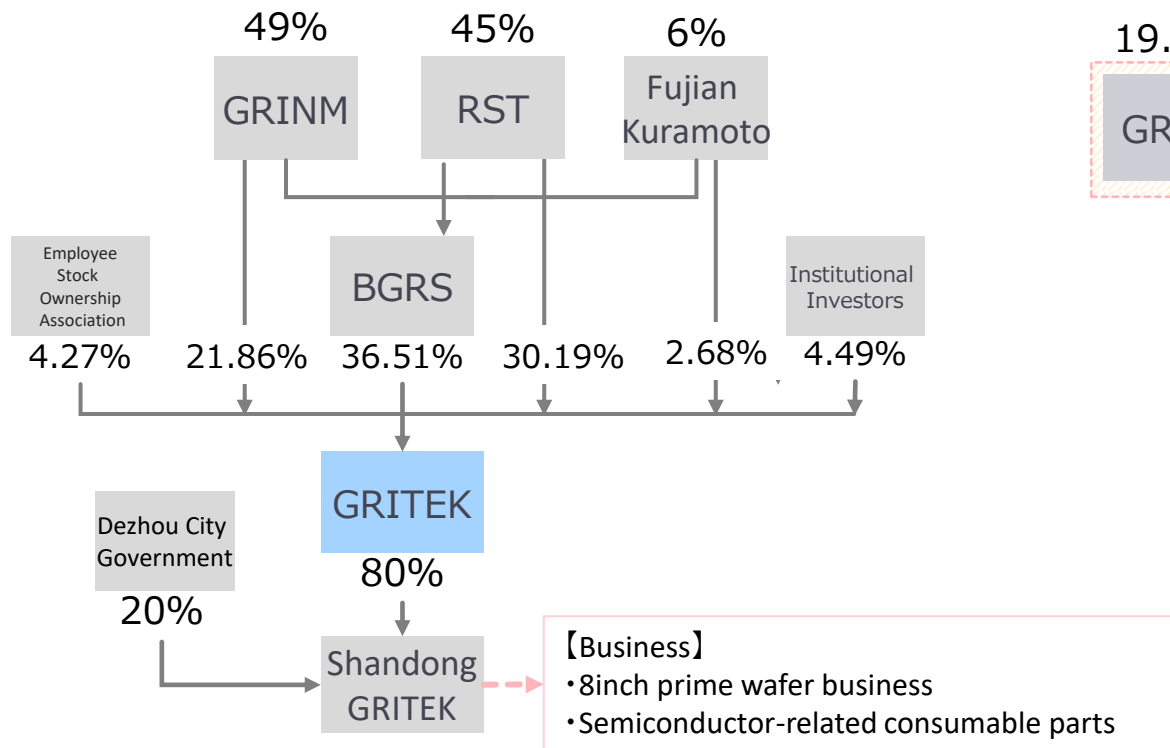


<b>Location</b>	Beijing, China
<b>Product</b>	12 inch prime wafer (R&D for mass production)
<b>Capacity (Monthly)</b>	12 inch:10k (Testline)

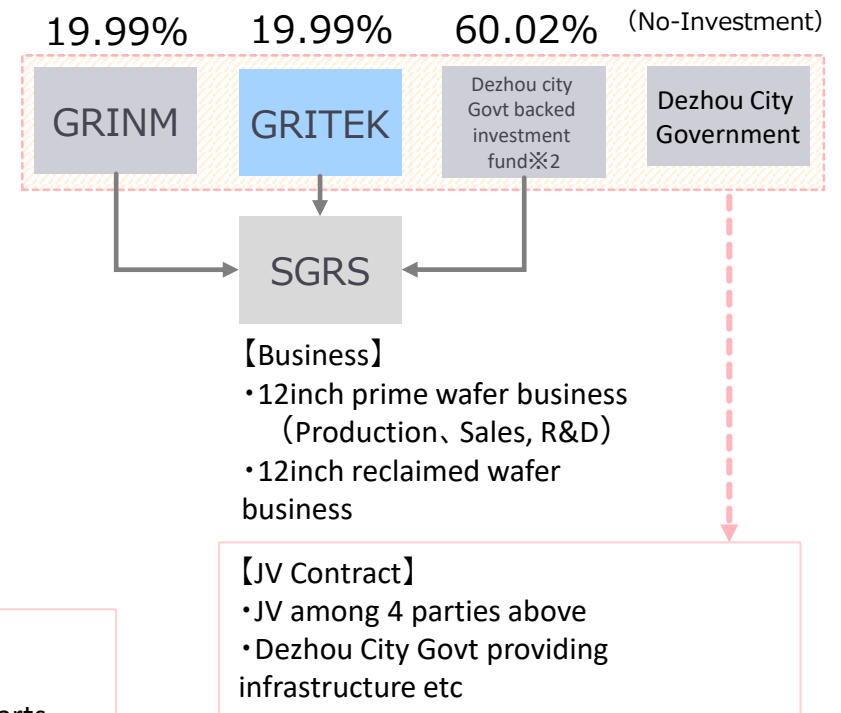
# Business Scheme in Chinese market

- As a part of IPO process, Board of Directors determined partial share transfer of GRITEK's shares owned by BGRS (disclosed in November, 2020), third party allocation by GRITEK and share transfer of equity method affiliate (SGRS) to GRITEK (disclosed in May, 2021)
- Below is the business scheme in details

## 8 inch prime wafer business scheme ※1



## 12 inch prime wafer business scheme



※1 The business scheme above is after execution of GRITEK's third party allocation and share transfer of equity method affiliate to GRITEK

※2 Dezhou Huida Semiconductor Equity Investment Fund Partnership





# Year-by-Year Results

(JPY Million)	FY12/2013	FY12/2014	FY12/2015	FY12/2016	FY12/2017	FY12/2018	FY12/2019	FY12/2020
Net sales	3,475	4,566	5,285	8,864	10,932	25,478	24,501	25,561
Gross profit	1,173	1,820	1,852	2,544	4,252	8,366	7,940	8,681
SG&A	471	654	791	958	1,269	2,615	3,223	4,151
Operating profit	703	1,166	1,061	1,585	2,982	5,751	4,717	4,530
Ordinary income	819	1,247	770	1,444	3,159	6,141	5,416	5,252
Net income*	525	664	143	861	2,113	3,620	3,035	2,824
Dividend (Yen)	-	-	-	10	5	10	15	20
Capital investment	338	3,503	4,665	209	95	1,328	4,809	12,409
Depreciation	87	103	326	682	714	1,298	1,814	1,674
Research and development expenses	1	6	11	85	183	501	449	929
Number of employees (Regular employees)	152	191	265	373	434	1,159	1,277	1,187

\*Net income attributable to parent company



# Principal Financial Statements

(JPY Million)	FY12/2013*	FY12/2014	FY12/2015	FY12/2016	FY12/2017	FY12/2018	FY12/2019	FY12/2020
<b>Assets</b>								
Current Assets	1,811	2,759	3,732	5,348	7,388	26,074	32,760	32,626
Cash and cash equivalent	397	1,190	1,842	1,952	3,243	14,879	22,156	19,082
Notes and accounts receivable - trade	681	696	795	2,531	2,916	6,958	6,047	6,321
Merchandise and finished goods	396	376	361	348	446	1,343	1,713	2,116
Non-Current Assets	508	4,064	5,845	5,333	4,843	10,516	15,873	26,124
Property, plant and equipment	461	3,918	5,667	5,152	4,674	8,963	14,635	24,146
Intangible assets	19	15	29	23	19	1,099	732	527
Investments and other assets	27	130	148	158	149	453	506	1,451
<b>Total Assets</b>	<b>2,320</b>	<b>6,823</b>	<b>9,577</b>	<b>10,682</b>	<b>12,231</b>	<b>36,591</b>	<b>48,634</b>	<b>58,750</b>
<b>Liabilities</b>								
Current liabilities	960	2,292	2,295	2,993	3,370	4,979	7,252	12,631
Notes and accounts payable - trade	138	151	186	283	398	1,554	1,614	2,871
Interest-bearing debt	136	827	1,216	1,538	1,276	976	1,730	1,522
Non-Current Liabilities	709	2,934	4,798	4,317	3,335	2,474	5,400	5,754
Long-term loans payable	615	2,925	4,079	3,620	2,767	1,848	2,232	1,613
<b>Total Liabilities</b>	<b>1,670</b>	<b>5,227</b>	<b>7,093</b>	<b>7,310</b>	<b>6,705</b>	<b>7,453</b>	<b>12,652</b>	<b>18,385</b>
<b>Net Assets</b>								
Net Assets	649	1,596	2,483	3,371	5,526	29,137	35,981	40,365
<b>Total Liabilities and Net Assets</b>	<b>2,320</b>	<b>6,823</b>	<b>9,577</b>	<b>10,682</b>	<b>12,231</b>	<b>36,591</b>	<b>48,634</b>	<b>58,750</b>

\*In the fiscal year ending December 2013, the financial results were non-consolidated.

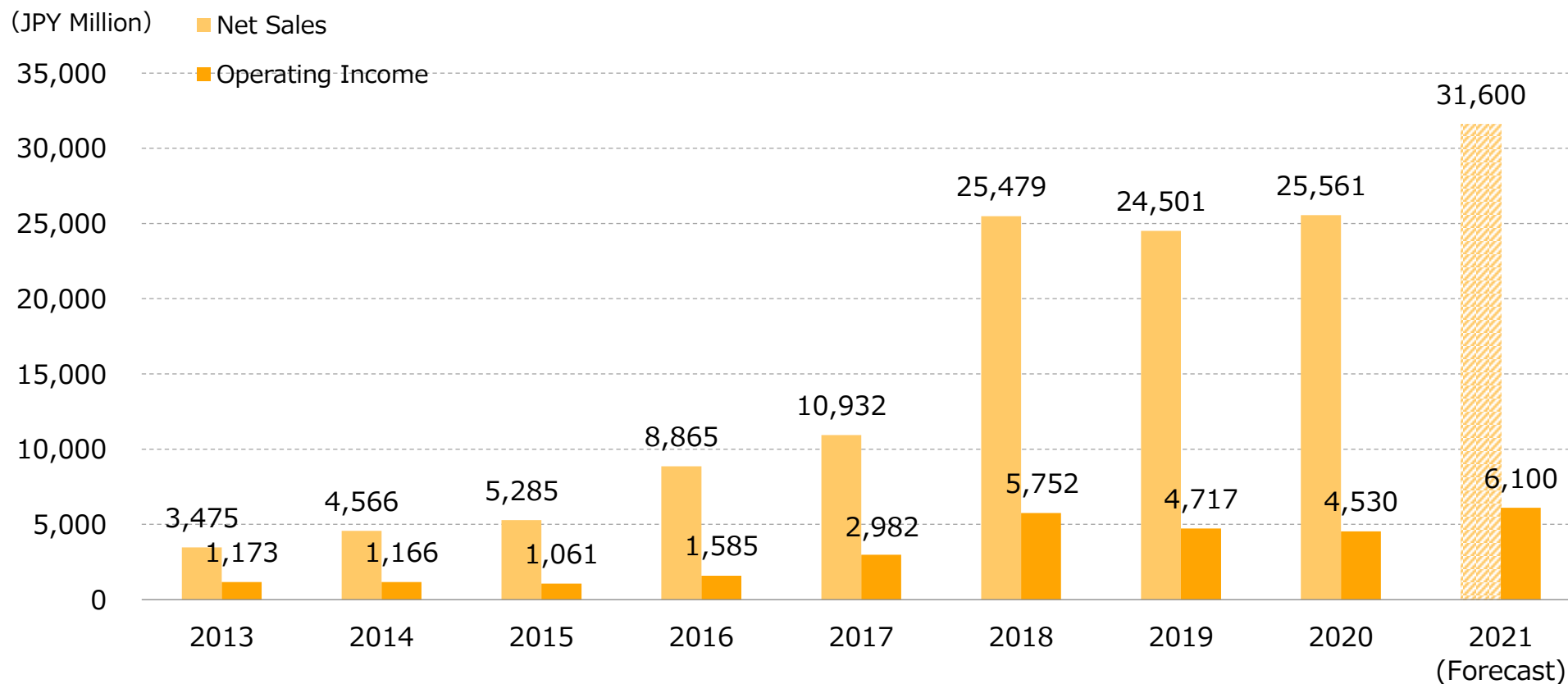
# Performance by Segment

(JPY Million)	FY12/2013	FY12/2014	FY12/2015	FY12/2016	FY12/2017	FY12/2018	FY12/2019	FY12/2020
Net sales								
Wafer business	3,347	4,414	5,107	7,144	9,487	10,973	10,776	11,461
Prime wafer manufacturing and sales business	—	—	—	—	—	11,918	10,058	8,755
Purchases and sales of semiconductor equipment business	—	—	—	1,654	1,393	2,918	4,047	6,272
Other, adjustments	127	151	178	66	52	△331	△380	△927
Segment profit								
Wafer business	916	1,444	1,377	1,765	3,396	4,011	4,081	4,027
Prime wafer manufacturing and sales business	—	—	—	—	—	2,048	1,503	1,041
Purchases and sales of semiconductor equipment business	—	—	—	230	130	366	171	211
Other, adjustments	△214	△278	△316	△409	△543	△675	△1,038	△749
Segment assets								
Wafer business	1,337	5,040	6,987	5,657	8,120	9,150	10,336	11,698
Prime wafer manufacturing and sales business	—	—	—	—	—	21,313	29,311	35,697
Purchases and sales of semiconductor equipment business	—	—	—	1,137	1,305	1,939	3,179	5,387
Other, adjustments	982	1,783	2,589	3,887	2,805	4,315	5,806	5,968

# Year-by-Year Results

- In February, 2014, RSTEC Semiconductor Taiwan (RSTW) was established and Tainan factory began to produce 12 inch reclaimed wafer in December, 2015
- In June, 2015, No 8 Factory (for 18 inch reclaimed wafer) in Sanbongi completed
- In January, 2018, GRITEK became a consolidated subsidiaries
- In October, 2020, Dezhou Factory in Shandong began to manufacture prime wafer

## Consolidated Net Sales and Operating Income



※ Forecast in 2021 was disclosed on August 4<sup>th</sup>.

The content of these materials was prepared based on generally recognized economic potential and certain assumptions considered reasonable by the Company but is subject to revision without notice due to changes in various business environments affecting management.

Materials and information provided for this announcement contain forward-looking statements. This information is based on assumptions pertaining to the current outlook, forecasts and risks, and contains uncertainties that could result in different outcomes.

Even in the case of new information, future events, or other relevant matters, the Company is under no obligation to update or revise the forward-looking statements contained in this material.