Securities ID code:6859

## ESPEC CORP.

# Results Briefing for the Fiscal Year Ended March 31, 2023

May 24, 2023 Satoshi Arata Representative Director and President

## Financial Result for the Fiscal Year Ended March 31, 2023

Although parts procurement difficulties and surging component prices continued, the electronics and automobile markets remained favorable.

Orders received and net sales reached record highs, while profits also increased substantially.

		Year on Year		Comparison with Forecasts (Revised in Oct. 2022)
Orders Received	0	Increased in all segments, particularly increasing substantially in the Equipment Business (mainly environmental test chambers)	0	Above forecast in the Equipment Business (mainly environmental test chambers) and the Service Business
Net Sales	0	Increased in all segments, particularly increasing substantially in the Equipment Business (environmental test chambers)	0	Above forecast in the Equipment Business (environmental test chambers) and the Service Business
Operating Profit	0	Increased substantially due to revenue growth, despite the impact of surging component prices and an increase in SG&A	0	Above forecast due to higher-than- expected net sales and a decrease in SG&A
Ordinary Profit Profit Attributable to Owners of Parent	0	Increased substantially due to the increase in operating profit	0	Above forecast due to the increase in operating profit

No revisions made to dividends from initial forecast (Interim: ¥24, Year-end: ¥45, Annual: ¥69)

<sup>\*</sup>Including a 75th anniversary commemorative dividend (Interim: ¥2, Year-end: ¥2, Annual: ¥4)

## Summary of Profits and Losses

					(Millions of yen)
	FY 2021 Results	FY2022 Revised Forecasts (Oct. 2022)	FY2022 Results	Year on Year	Comparison with Forecasts
Orders Received	51,303	59,000	59,521	+16.0%	+0.9%
Net Sales	41,852	52,000	52,892	+26.4%	+1.7%
Cost of Net Sales Cost of Sales Ratio	27,849 66.5%	34,200 65.8%	34,935 66.0%	+25.4% 0.5pt melioration	+2.2% 0.2pt deterioration
Gross Profit	14,003	17,800	17,957	+28.2%	+0.9%
SG&A	12,034	13,800	13,590	+12.9%	-1.5%
Operating Profit	1,968	4,000	4,366	+121.8%	+9.2%
Ordinary Profit	2,322	4,350	4,664	+100.9%	+7.2%
Profit Attributable to Owners of Parent	1,905	2,900	3,330	+74.8%	+14.9%
Return on Equity (ROE)	4.2%	Initial Forecasts 8.0%	7.2%	+3.0pt	-0.8pt

From July 2021, ESPEC THERMAL TECH SYSTEM CORP. has been included in the scope of consolidation.

## Performance by Segment

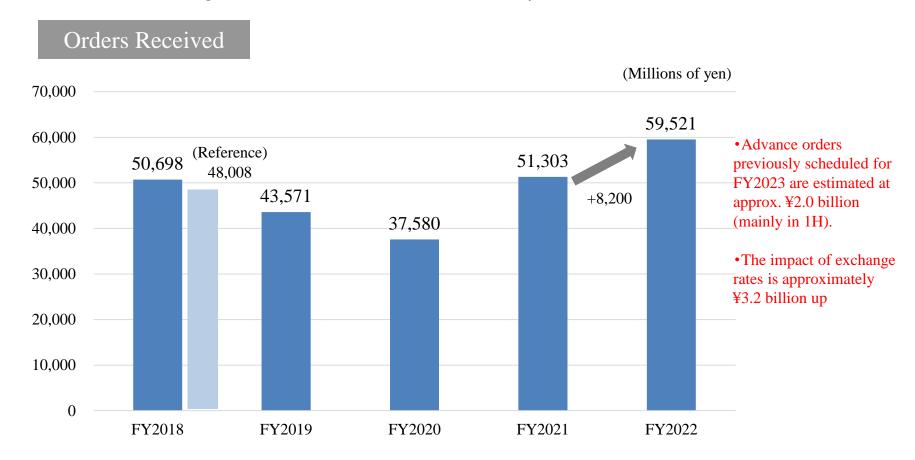
						(Millions of yen)
		FY 2021 Results	FY2022 Revised Forecasts (Oct. 2022)	FY2022 Results	Year on Year	Comparison with Forecasts
	Orders Received	43,535	51,000	51,446	+18.2%	+0.9%
Equipment Business	Net Sales	34,518	44,400	45,031	+30.5%	+1.4%
Business	Operating Profit	1,370	3,760	3,919	+186.0%	+4.3%
	Orders Received	6,771	6,720	6,963	+2.8%	+3.6%
Service Business	Net Sales	6,407	6,470	6,788	+5.9%	+4.9%
	Operating Profit	618	230	428	-30.8%	+86.1%
	Orders Received	1,265	1,580	1,469	+16.1%	-7.0%
Other Business	Net Sales	1,188	1,430	1,404	+18.2%	-1.8%
	Operating Profit	-23	10	16	-	+65.4%
	Orders Received	-269	-300	-359	-	-
Elimination	Net Sales	-261	-300	-330	-	-
	Operating Profit	2	0	1	-	-
	Orders Received	51,303	59,000	59,521	+16.0%	+0.9%
Total	Net Sales	41,852	52,000	52,892	+26.4%	+1.7%
	Operating Profit	1,968	4,000	4,366	+121.8%	+9.2%

From July 2021, ESPEC THERMAL TECH SYSTEM CORP. has been included in the scope of consolidation.

### Orders Received in FY2022

Orders-received were strong, as the electronics and automobile markets performed better than anticipated

Reached record highs for two consecutive fiscal years

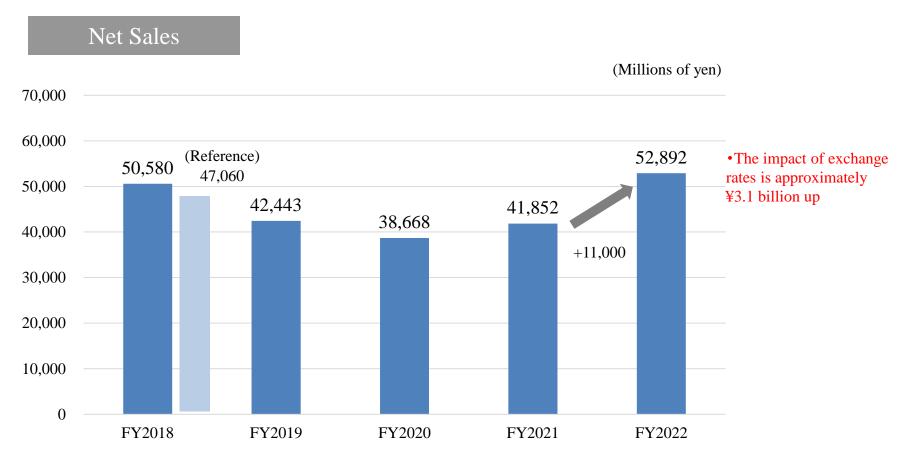


<sup>\*</sup>FY2018 was an irregular 15-month fiscal period for overseas consolidated subsidiaries.

<sup>&</sup>quot;(Reference)" figures showing a 12-month period have also been included.

### Net Sales in FY2022

Net sales rose substantially, reaching a record high, as all types of measures were implemented to secure production volume, despite the impact of parts procurement difficulties and the lockdowns in Shanghai in 1Q.

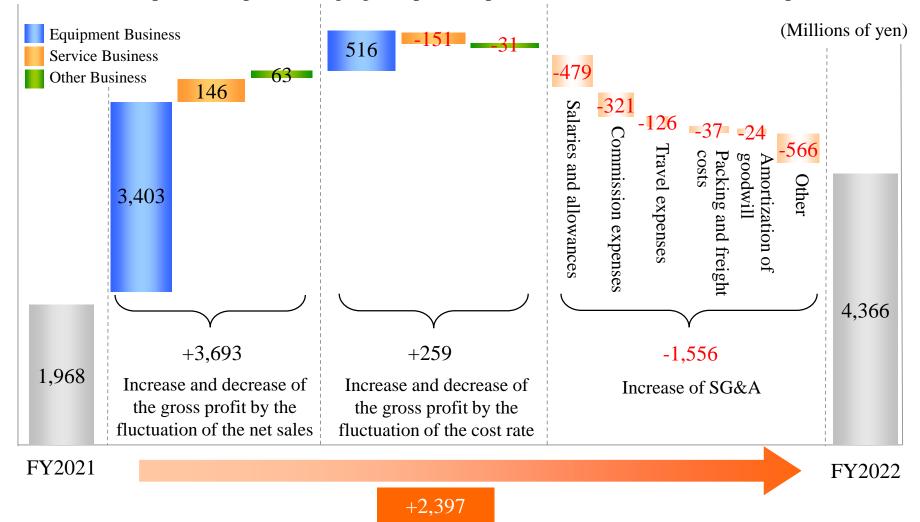


<sup>\*</sup>FY2018 was an irregular 15-month fiscal period for overseas consolidated subsidiaries.

<sup>&</sup>quot;(Reference)" figures showing a 12-month period have also been included.

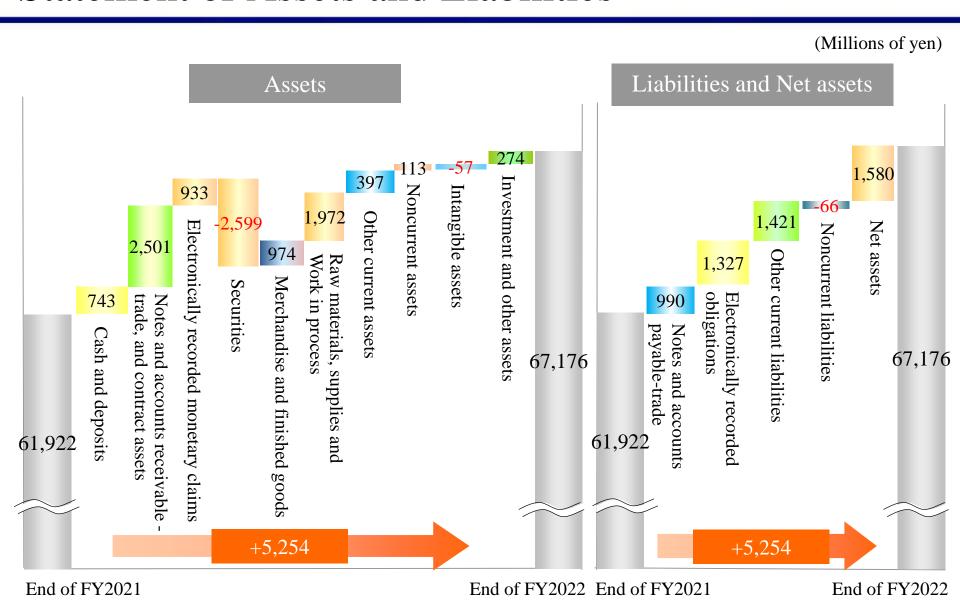
#### Analysis of Operating Profit Increase and Decrease Factors (YoY)

Operating profit increased substantially, mainly due to an increase in net sales in the Equipment Business, despite the impact of surging components prices and an increase in SG&A expenses.

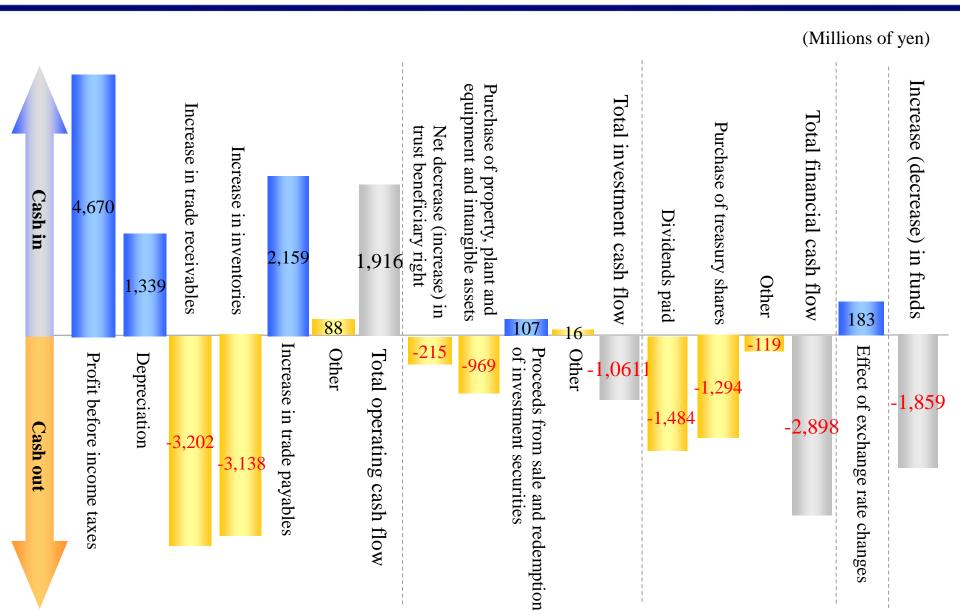


<sup>\*</sup>Totals have been calculated using the gross profit per net sales rate.

## Statement of Assets and Liabilities



## Statements of Cash Flows



## **Equipment Business**

(Millions of yen)

	FY 2021 Results	FY2022 Revised Forecasts (Oct. 2022)	FY2022 Results	Year on Year	Comparison with Forecasts
Orders Received	43,535	51,000	51,446	+18.2%	+0.9%
Net Sales	34,518	44,400	45,031	+30.5%	+1.4%
Operating Profit	1,370	3,760	3,919	+186.0%	+4.3%
Profit Ratio(%)	4.0%	8.5%	8.7%	1100.070	17.5/0

#### **Environmental Test Chambers**

- In Japan, orders received and net sales both increased year on year for both highly versatile standardized and customized products, despite the impact of parts procurement difficulties.
- Overseas, orders received were also strong. Net sales increased year on year in China, North America, Europe, Southeast Asia and Korea.

#### **Energy Device Equipment**

- Orders received substantially increased year on year due to strong sales of chambers for charge-discharge testing mainly in the Japanese market due to the expansion of investment for electrification of automobiles.
- Net sales remained level year on year due to the impact of parts procurement difficulties.

#### Semiconductor Equipment

Orders received and net sales were both on a par with the previous fiscal year, although they were impacted by factors such as delays in customer plans for mainstay burn-in chambers.

### Service Business

(Millions of yen)

	FY 2021 Results	FY2022 Revised Forecasts (Oct. 2022)	FY2022 Results	Year on Year	Comparison with Forecasts
Orders Received	6,771	6,720	6,963	+2.8%	+3.6%
Net Sales	6,407	6,470	6,788	+5.9%	+4.9%
Operating Profit Profit Ratio(%)	618 9.7%	230 3.6%	428 6.3%	-30.8%	+86.1%

#### After-Sales Service and Engineering

Both orders received and net sales increased year on year as a result of a strong performance in preventative maintenance services such as maintenance agreements, along with progress on obtaining previously difficult-to-procure parts for repair services.

#### Laboratory Testing Services and Facility Rentals

Orders received and net sales were both on a par with the previous fiscal year, due to a strong performance in laboratory testing services, centered on automotive rechargeable batteries.

### Other Business

(Millions of yen)

	FY 2021 Results	FY2022 Revised Forecasts (Oct. 2022)	FY2022 Results	Year on Year	Comparison with Forecasts
Orders Received	1,265	1,580	1,469	+16.1	-7.0%
Net Sales	1,188	1,430	1,404	+18.2	-1.8%
Operating Profit Profit Ratio(%)	-23 -2.0%	10 0.7%	16 1.2%	-	+65.4%

#### Environmental Preservation, Plant Production Systems

■ Both orders received and net sales increased year on year.

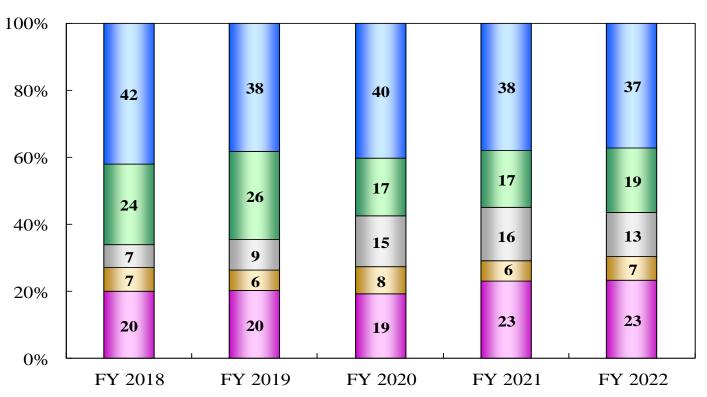
Forest creation and waterfront biotope restoration performed sluggishly, but plant research devices and plant factories increased year on year.

## Sales by Market

Growth was led by the IoT-related market (communication terminals, base stations, servers) and the next-generation automobile-related market (electrification, automation), both of which are cutting-edge technology fields.

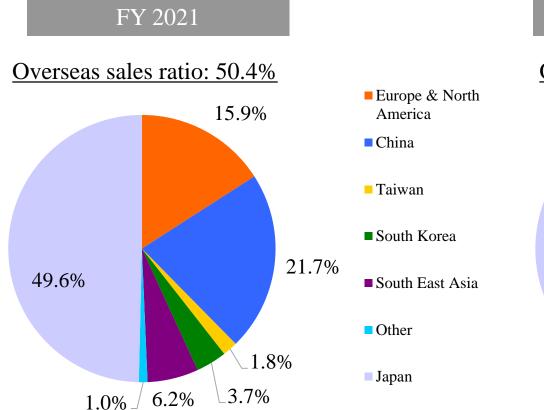


- Electronic device and equipment market
- Automobile market
- Semiconductor market
- Reserch institute market
- Other markets



## Sales by Region

The overseas sales ratio surpassed 50% for the second consecutive fiscal year. By area, the ratios went up in China and Europe & North America.

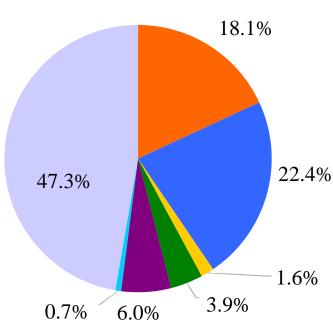


Total: 41,582 million yen

Overseas sales: 21,080 million yen

#### FY2022

Overseas sales ratio: 52.7%



Total: 52,892 million yen

Overseas sales: 27,884 million yen

## FY2023 Plan

- Although the business environment will remain uncertain, we expect to maintain a high level of orders received primarily in cutting-edge technology fields.
- Meanwhile, parts procurement still remains unstable and is projected to normalize from FY2023 2H onward.
- Against the backdrop of surging component prices, product prices will be revised further, and every effort will be made to normalize product delivery schedules and boost earnings power.

## Forecasts for FY2023

(Millions of yen)

	FY2022		FY2023 I	Forecasts	
	Full Year Results	1H	2H	Full Year	Year on Year
Orders Received	59,521	26,500	27,500	54,000	-9.3%
Net Sales	52,892	26,000	30,000	56,000	+5.9%
Gross Profit	17,957	8,750	10,250	19,000	+5.8%
Profit Ratio (%)	34.0%	33.7%	34.2%	33.9%	-0.1pt
SG&A	13,590	6,900	7,100	14,000	+3.0%
SG&A Ratio (%)	25.7%	26.5%	23.7%	25.0%	-0.7pt
Operating Profit	4,366	1,850	3,150	5,000	+14.5%
Profit Ratio(%)	8.3%	7.1%	10.5%	8.9%	+0.6pt
Ordinary Profit	4,664	1,950	3,150	5,100	+9.3%
Profit Ratio(%)	8.8%	7.5%	10.5%	9.1%	+0.3pt
Profit Attributable to Owners of Parent	3,330	1,300	2,350	3,650	+9.6%
Profit Ratio (%)	6.3%	5.0%	7.8%	6.5%	+0.2pt
Capital Expenditures	1,311	1,310	1,790	3,100	+136.3%
Depreciation Expenses	1,328	710	770	1,480	+11.4%
R&D Expenditures	1,041	820	670	1,490	+43.0%
Basic Earnings per Share (yen)	150.34	59.54	107.64	167.18	+11.2%

<sup>\*</sup>Return on equity (ROE): FY2023 target 7.5% (up 0.3-point year on year)

## Assumed exchange rate for FY2023

#### Assumed exchange rate

	FY2021	FY2022		FY2023
	Full Year Results	1H Results	Full Year Results	Full Year Assumption
U.S. dollars (yen)	112.40	134.04	135.51	130

\*Reference: Exchange rate sensitivity for FY2023

(¥1 depreciation against US\$1)

Net sales: Increase of ¥185 million

Operating profit: Increase of ¥35 million

## Recognition of the Operating Environment

Although the business environment is uncertain, demand is forecast to continue, mainly in cutting-edge technology fields such as IoT and next-generation automobiles.

Equipment Business	Environmental Test Chambers	Japan: Investments related to EVs and automated driving will remain strong, while investment related to IoT will hold firm, while settling down.  China: Investments will continue, particularly in EV- and IoT-related areas.  ASEAN: Semiconductor-related investment is uncertain and is forecast to decrease year on year.  North America: EV- and IoT-related investment will continue, despite concerns about an economic slowdown.  Europe: EV- and IoT-related investments will continue.		
SSS	Energy Device Equipment	Investment in rechargeable batteries is forecast to grow worldwide.		
	Semiconductor Equipment	Investment is forecast to recover from FY2023 2H onward.		
Service Business	After-sales Service and Engineering, Laboratory Testing Services and Facility Rentals	After-sales Service and Engineering: Expect similar level of demand as in the previous fiscal year.  Laboratory Testing Services: Favorable demand in cutting-edge technology fields, mainly for secondary batteries.		
Other Business	Environmental Preservation, Plant Production Systems	Forecasts recovery mainly in the environmental preservation (forest creation and waterfront biotope restoration).		

### Main Initiatives in FY2023

#### **Equipment Business**

- •Boost earnings power, normalize delivery schedules, and rapidly clear the order backlog
- •Strengthen response to the globally expanding battery market

#### Service Business

**After-sales Service**: Expand preventative maintenance services through "super support service plan," a new service

**Laboratory Testing Services**: Enhance testing services for cutting-edge technology fields, primarily automobiles.

#### Area Strategy

**Japan**: Increase sales and stimulate replacement demand through the launch of products that meet the needs of the EV, automated driving, and IoT fields.

**North America**: Address demand growth in the automobile market driven by the Inflation Reduction Act (IRA).

China: Increase sales to the EV and IoT markets through Group collaboration

Europe: Cultivate the automobile and IoT markets by enhancing the product lineup

**Korea**: Increase sales to major global companies

## Segment Financial Forecasts

(Millions of yen)

						(Millions of yell)
		FY2022		FY2023 I	Forecasts	
		Full Year Results	1H	2H	Full Year	Year on Year
<b>.</b>	Orders Received	51,446	22,550	22,950	45,500	-11.6%
Equipment Business	Net Sales	45,031	22,450	25,250	47,700	+5.9%
	Operating Profit	3,919	1,870	2,800	4,670	+19.1%
a .	Orders Received	6,963	3,350	3,650	7,000	+0.5%
Service Business	Net Sales	6,788	3,150	3,750	6,900	+1.6%
Dusmoss	Operating Profit	428	30	270	300	-29.9%
	Orders Received	1,469	750	1,050	1,800	+22.5%
Other Business	Net Sales	1,404	550	1,150	1,700	+21.0%
<b></b>	Operating Profit	16	-50	80	30	+81.3%
	Orders Received	-359	-150	-150	-300	-
Elimination	Net Sales	-330	-150	-150	-300	-
	Operating Profit	1	0	0	0	_
	Orders Received	59,521	26,500	27,500	54,000	-9.3%
Total	Net Sales	52,892	26,000	30,000	56,000	+5.9%
	Operating Profit	4,366	1,850	3,150	5,000	+14.5%

## Main Initiatives for ESG in FY2023

- E (Environment)
- Promote the 8th Medium-term Plan on the Environment (FY2022-2025)
- •Global warming countermeasure: Change to low-GWP refrigerant

Reduce CO2 emissions in business activities such as manufacturing

•Biodiversity conservation activities: Contributions through ESPEC MIC Corp.'s business

Promote conservation activities through the management of

"ESPEC's 50-Year Forest"

- S (Society)
- •Strengthen human capital: Bolster the management skills of managers, enhance the personnel evaluation system and training system, implement "One-on-One meetings," and train the next generation of executives
- •Promote diversity: Train female managers, facilitate the success of senior and non-Japanese employees
- G (Governance)
- •Strengthen Group governance, and develop and enhance the internal control system

### Investment Plans in FY2023

Strategic investment	1.6 billion yen
Ordinary investment	1.5 billion yen
Capital investment Total	3.1 billion yen

R&D expenditures 1.49 billion yen

#### Main investments

- •Expansion of laboratory testing facilities
- Update production facilities etc.

#### Main R&D Activities

ESPEC CORP.

- •Develop products for cutting-edge technology fields
- •Develop large-scale products for overseas markets etc.

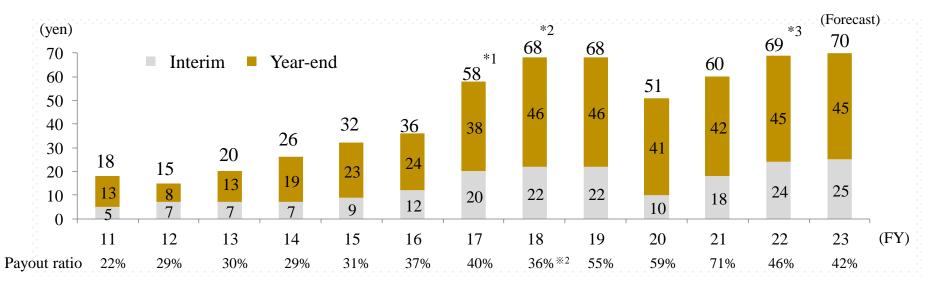
### FY2023 Dividend Forecast

#### Basic policy on profit distribution

Our basic policy is to determine dividends taking into account sustainability and the dividend payout ratio

- •In addition to a dividend payout ratio of 30%, we will add dividends with 1/3 of the excess amount of scheduled necessary funds as a baseline.
- •We will maintain stable dividends of ¥20 per year regardless of profit levels, but will conduct a reevaluation in the event that we record a loss for two consecutive periods.
- While taking into account a necessary level of internal reserves, we flexibly implement acquisition of treasury shares.

#### Dividend per share and dividend payout ratio



<sup>\*1.</sup> Includes a dividend of \(\frac{\pmathbf{Y}}{2}\) (interim dividend of \(\frac{\pmathbf{Y}}{1}\) and year-end dividend of \(\frac{\pmathbf{Y}}{1}\)) to commemorate the 70th anniversary of our foundation in FY2017.

<sup>\*2.</sup> FY2018 was an irregular 15-month fiscal period for overseas consolidated subsidiaries. The dividend payout ratio for a 12-month period is 39% (reference).

<sup>\*3.</sup> Includes a dividend of ¥4 (interim dividend of ¥2 and year-end dividend of ¥2) to commemorate the 75th anniversary of our foundation in FY2022.

#### TOPICS 1

#### [For the first time in Japan]

Defect Analysis Service for Battery Packs and Modules Installed in Automobiles

- •In November 2022, ESPEC launched a service for analyzing defects of automotive rechargeable battery packs and modules installed in automobiles.
- After the packs and modules are dismantled, they are diagnosed electrically and visually to identify the defective area.
- •ESPEC provides analysis services as an impartial third-party organization, and helps to ensure the performance and safety of automotive rechargeable batteries.



Glovebox for dismantling cells

Expanded Lineup of RF Anechoic Box Type
Thermostatic Chambers Support Temperature
Characteristics Testing of 5G Communication Devices

- •ESPEC developed four new types of RF anechoic box type thermostatic chamber to check communication performance and safety of 5G-compatible wireless transmitter/receiver modules, communication terminals and base stations.
- •Wireless testing in temperatures from -40° C to +100° C were made possible due to being equipped with a shield function (shields from radio waves) and the anechoic chamber function (that prevents reflection of radio waves within the chamber).



RF Anechoic Box Type Low Temperature Chamber

#### TOPICS 2

## Signed an agreement for promoting SDGs with the University of Hyogo

- •In August 2022, ESPEC signed an agreement with the University of Hyogo aimed at promoting SDGs.
- •Both parties will collaborate by harnessing their knowledge and technology in areas such as biodiversity conservation, education and human resource development, and environment and energy.



The signing ceremony
University of Hyogo's President Isao Ota (right)
ESPEC Representative Director and Chairperson Masaaki Ishida (left)

## Biodiversity conservation activities "ESPEC's 50-Year Forest" tree-planting festival

- •Launched forest creation for "ESPEC's 50-Year Forest" using the "corporate forests" system under the Ministry of Agriculture, Forestry and Fisheries in Sanda City, Hyogo Prefecture
- •The first tree-planting festival was held in November 2022. Seeds were selected based on carbon fixation and biodiversity functions. Approximately 200 people including employees participated and planted roughly 4,000 trees.



The first tree-planting festival 12,000 trees are scheduled to be planted over two years in a 3.6 ha plot of land

## **External Recognition**

#### 2023

- Mar. Selected for the First Time as a Supplier Engagement Leader, the Top Rank in the CDP Supplier Engagement Ratings
- Feb. Ranked 372th in Toyo Keizai Inc.'s 2023 CSR Corporate Ranking

#### 2022

- Dec. A score of B for the third consecutive year in the CDP Climate Change 2022

  Questionnaire
  - Selected as a "GRADE AAA" company website (overall ranking) for the third consecutive year in the All Japanese Listed Companies' Website Ranking 2022 by Nikko Investor Relations Co., Ltd.
  - Awarded a Bronze Prize in the Gomez IR Website Ranking 2022 by BroadBand Security, Inc.
- Nov. Rated 4 stars in the Nikkei's 4th SDGs Management Survey
  - Rated 3.5 stars in Nikkei's 6th Smart Work Management Survey
- Oct. Ranked 155th in the Nikkan Kogyo Shimbun's 18th Corporate Power Ranking (sponsored by the Ministry of Economy, Trade and Industry)
- Aug. First Awarded as an excellent company in the Gomez ESG Website Ranking 2022 by BroadBand Security, Inc.
- July Ranked 334th in Toyo Keizai Inc.'s 2022 SDGs Corporate Ranking
- Apr. First Selection as Part of FTSE Blossom Japan Sector Relative Index



















FTSE Blossom Japan Sector Relative Index These materials contain forward-looking statements, including the Company's present plans and forecasts of performance, that reflect the Company's plans and forecasts based on the information presently available. These forward-looking statements are not guarantees of future performance, and plans, forecasts, and performance are subject to change depending on future conditions and various other factors.

**INQUIRIES:** 

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Sustainability Management Department

Yasutoshi Nakagawa (General Manager),

IR & Public Relations Group

Natsuko Okawa and Hana Kaigawa

Quality is more than a word



## Reference

- Company Presentation and Business Overview
- Sustainability Initiatives

## Company Profile

#### <u>Industry-leading manufacturer of environmental test chambers</u>

Name ESPEC CORP.

Head Office 3-5-6, Tenjinbashi, Kita-ku, Osaka

Representative Satoshi Arata

Established July 25, 1947

Incorporated January 13, 1954

Paid-up Capital ¥6,895 million

Issued shares 23,781,394 Shares

Employees 1,691 (consolidated)

Main Business Manufacture and Sales of Environmental Test Chambers,

Energy Device Equipment, Semiconductor Equipment and

Plant Factory.

After-sales Service, Laboratory Testing Services and others.

Share of Environmental Test Chambers

Over 30% worldwide, Over 60% domestic

(As of March 31, 2023)

**Head Office** 

<sup>\*</sup> Market shares are ESPEC estimates

### Global Network

## Consolidated Subsidiaries 13 companies

(Global 9 companies, Domestic 4 companies) Global Network 50 locations 44 companies

Business Facilities in Japan: 16 Domestic Agencies in Japan: 46

**ESPEC NORTH AMERICA. INC \*** 

U.S.A

#### **EUROPE**

●ESPEC EUROPE GmbH
-ESPEC IKLIM KABINLERI
SATIS VE MUHENDISLIK
LIMITED SIRKETI

#### JAPAN

**ESPEC CORP.** \*

- **ESPEC TEST SYSTEM CORP.**
- **ESPEC ASSIST CORP.**
- **ESPEC MIC CORP.**
- **©**ESPEC THERMAL TECH SYSTEM CORP.

#### **ASIA**

- SHANGHAI ESPEC ENVIRONMENTAL EQUIPMENT CORP. \*
- ●ESPEC ENVIRONMENTAL EQUIPMENT (SHANGHAI) CO., LTD.
- **©ESPEC TEST EQUIPMENT (GUANGDONG) CO., LTD. \***
- **©ESPEC TEST TECHNOLOGY (SHANGHAI) CO., LTD.**
- **ESPEC (CHINA) LIMITED**
- **ESPEC KOREA CORP.** \*
- **©**ESPEC ENGINEERING (THAILAND) CO.,LTD -ESPEC ENGINEERING VIETNAM CO., LTD.

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-: Non-consolidated Subsidiaries

\*Denotes company with production functions.

•: Consolidated Subsidiaries

## Summary of ESPEC Business (Per Market / Use)

		Main Products	Market	Use	Sales Composition (FY2022)
Equip	Environmental Test Chambers	<ul> <li>Temperature &amp; humidity chamber</li> <li>Thermal shock chamber</li> <li>Bench-top type temperature &amp; humidity chamber</li> <li>HAST chamber</li> <li>Walk-in type temperature &amp; humidity chamber</li> <li>Combined temperature &amp; humidity chamber</li> <li>HALT &amp; HASS test chamber</li> <li>FPD equipment</li> </ul>	Electronic component     and equipment market     Automobile market     Semiconductor market     Pharmaceuticals, Cosmetics,     Foods market     LCD and Organic Electro- Luminescence market	<ul> <li>For R &amp; D</li> <li>For credibility and evaluation</li> <li>For production and inspection</li> </ul>	
Equipment Business	Energy Device Equipment	<ul> <li>LIB charge-discharge cycle evaluation equipment</li> <li>LIB safety evaluation system</li> <li>Fuel cells evaluation system</li> </ul>	<ul><li>Next generation automobile market</li><li>Secondary batteries market</li><li>Fuel cells market</li></ul>	<ul> <li>For R &amp; D</li> <li>For credibility and evaluation</li> <li>For safety evaluation</li> <li>For production</li> </ul>	85%
	Semiconductor Equipment	•Burn-in system •Semiconductor evaluation system	• Semiconductor market • Automobile market	<ul><li>For production and inspection</li><li>For development and evaluation</li></ul>	
Se Bu	After-sales Service and Engineering	• After-sales service • Construction around equipment	•Electronic component and equipment market	_	
Service Business	Laboratory Testing Services and Facility Rentals	• Laboratory testing services • Resale • Equipment rental • Calibration	Automobile market     Semiconductor market	•For R & D •For credibility and evaluation	13%
Other Business	Environmental Preservation	Reforestation (Tree planting), Waterfront biotope restorate			
SS	Plant Production Systems	Plant factory, Equipment for growing plants			2%

## History of Environmental Test

#### What is Environmental Test

Test to analyze and evaluate effects of environmental factors such as temperature, humidity, pressure, and vibration on various industrial products like electronic components in order to ensure product quality.

#### 1950s

The environmental test was JIS-standardized in Japan for consumer products.





#### 1970s-1990s

"Reliability" and "quality control" became important issues in product development. Demand increased dramatically due to a rapid shift toward computerization and the use of electronic components.







#### Present

Demand is expanding in the development fields of IoT and next-generation automobiles against the backdrop of digitalization and decarbonization.



Consecutively selected as a winner of Ministry of Economy, Trade and Industry (METI) "Global Niche Top Companies Selection 100" (FY 2013, FY 2020)

#### 1961 Japan's First Environmental Test Chamber



Low Temperature & Humidity Chamber "Lucifer"

## Worldwide Market Share No.1



Over 60% domestic

Over 30% worldwide

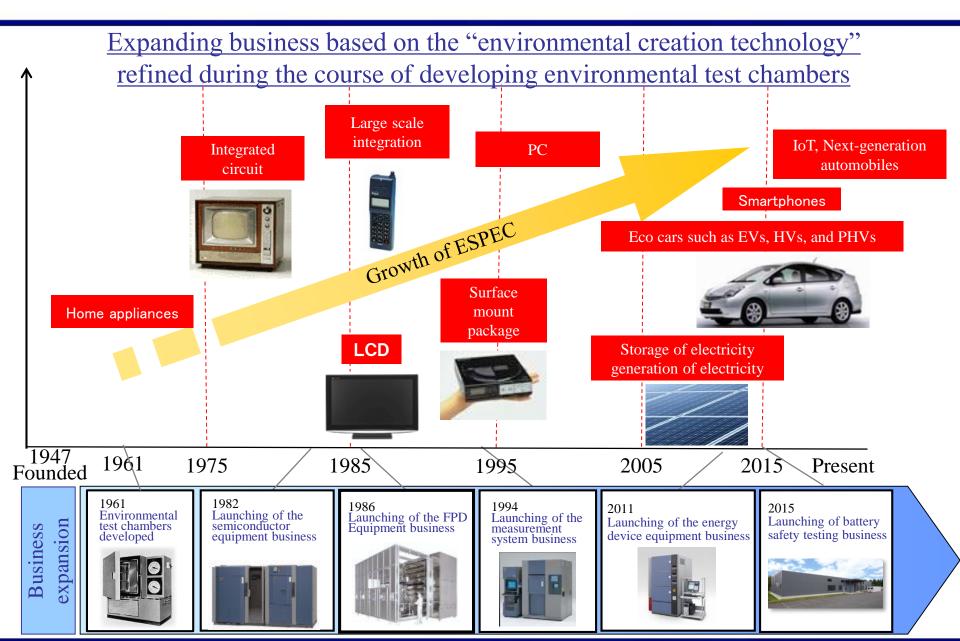


Temperature & Humidity Chamber

\* Market shares are ESPEC estimates

"Platinous J series"

#### Transition in Business



## ESPEC's Strengths

Top Market Share

Technological Capabilities
Product and Service
Capabilities

Global Structure

Share of Environmental Test Chambers:

Over 30% worldwide, Over 60% domestic (ESPEC estimates)

First in Japan to develop environmental test chambers, rapidly established a brand in Japan and overseas and have held the top market share for many years

- •Developed a variety of products with high quality and meeting customer requirements
- Production technology capabilities that enable high-mix, low-volume production
- Total solutions for environmental tests, including products, laboratory testing services and technical support, and after-sales service capabilities

Provide products globally that comply with the needs of respective countries through an extensive global network

Consolidated subsidiaries: 13 (9 overseas, 4 domestic)

Overseas production bases: North America 1 company,

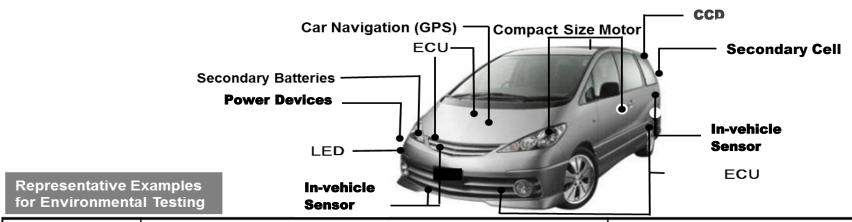
China 2 companies, South Korea 1 company

Overseas network: 50 locations (countries or territories),

44 companies

#### Equipment Business Usage Case with Environmental Test Chambers

Ensure reliability of new technologies and new products by repeatedly testing each component, module and finished product



Device	Process/Test Condition		Our Products
[Power Device]	Inspection	■Thermal shock test: - 40°C⇔+125°C	Thermal shock chamber
		■High temperature exposure: + 175°C、+ 85°C	(Compact size) Oven
		■Burn-in test	Burn-in chamber
[In-vehicle Sensor]	Inspection	■Temperature cycle test of printed circuit board: - 40°C ⇔+ 110°C	Temperature & humidity chamber (Platinous) /Oven
		■ Temperature characteristic test after soldering:  Linear change between -30°C and +85°C	Burn-in chamber, Rapid-rate thermal cycle chamber
	Evaluation	■ Thermal shock test : -30°C⇔RT⇔+80°C、-55°C⇔+155°C	Thermal shock chamber
[CCD/CMOS]	Production	■ Diffusion Test: +150°C	Compact size Oven
		■ Drying after cleaning: +85°C	Clean Oven
	Evaluation	■Screening: +85°C	Temperature chamber (Platinous) / Burn-in chamber
	Inspection	■Temperature and humidity test: +85°C/+85%rh、+60°C/90%rh	Temperature & humidity chamber (Platinous)
		■Acceleration test: + 120°C / 100%rh	HAST chamber
		■ Thermal shock test : - 40°C ⇔ + 125°C、- 20°C ⇔ + 85°C	Thermal shock chamber

# Equipment Business Main New Products

Release Date	Name of product	Features
Feb. 2023	Expanded Anechoic Box Thermostatic Chamber Lineup	• Supports temperature characteristics testing of 5G communications devices • Expanded four types with larger internal volume to support larger test products
Apr. 2022	Environmental Stress Chamber AR Series Featuring R-473A Low-GWP Refrigerant	•Greatly reduces GWP values (an 88% reduction), and also enables energy conservation during operation *GWP: Global Warming Potential
Jun. 2021	Ultra-Low-Temperature Freezers	•Used for small lot storage to -75°C for items such as COVID-19 vaccines
Apr. 2021	Freezer for Temperature Controlled Transport	<ul> <li>Optimal for small-lot transport and storage of items such as COVID-19 vaccines</li> <li>Vibration resistant, energy efficient and portable</li> </ul>
Feb. 2021	Vacuum Low-Temperature Heating Cooker – Model Change	•Enables precise control of not only temperature but also the degree of vacuum
Aug. 2020	Expanded Environmental Stress Chamber AR Series Lineup	•Expanded the series with launch of four new models as rapid-rate temperature cycle type products, bringing the total lineup to 32 models across the series
Mar. 2020	Transportation Evaluation System	•Recreates transport environments for pharmaceuticals and medical devices •Applications in biopharmaceutical R&D and medical equipment quality control
Feb. 2020	Walk-In Type Temperature (& Humidity) Chamber for Drive-In Series	•Recreates various weather environments in a large space accommodating two vehicles
Feb. 2020	Walk-In Type Temperature (& Humidity) Chamber for High-Power Series	•Compatible with international IEC standards and LV124 German Automotive Manufacturer Testing Standards

## Equipment Business New Product Introduction (1)

(Released in Feb. 2020)

■ Walk-In Type
Temperature (& Humidity) Chamber
for High-Power Series

#### Feature:

- •Compliant with IEC International Standards and German Automotive industry standard LV124 (Can perform rapid temperature change testing at 3K/minute with the specimens inside.)
- •Low GWP coolant (R-449A) as standard equipment

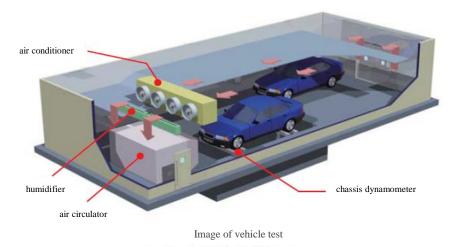


Walk-In Type Temperature (& Humidity) Chamber for High-Power Series

# Walk-In Type Temperature (& Humidity) Chamber for Drive-In Series

#### Features:

- •Closely recreates various weather environments in a large space of approximately 500 m<sup>3</sup> accommodating two vehicles to perform actual vehicle testing
- Multiple environmental factors can be recreated simultaneously, including temperature and humidity, sunlight, rain, snow, fog, and wind



Walk-In Type Temperature (& Humidity) Chamber for Drive-In Series

# Equipment Business New Product Introduction (2)

For the medical field

(Released in Apr./Jun. 2021)

Freezer for Temperature Controlled Transport Ultra-Low-Temperature Freezer

#### Features:

- •Freezer for Temperature Controlled Transport: Supports small-lot transport and storage of items such as vaccines; vibration resistant, energy efficient and portable.
- •Ultra-Low-Temperature Freezer: Capable of small-lot storage to -75°C; Two types of freezers, floor and table.



Freezer for Temperature Controlled Transport



Ultra-Low-Temperature Freezer

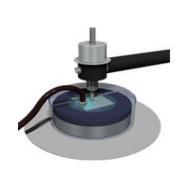
For material field

(Released in Dec. 2019)

Thermal Air Test System

#### Features:

- •Can be combined with various materials testing instruments to perform materials testing in actual usage environment with given temperature
- •Uses ESPEC's proprietary new method for cooling and heating test pieces efficiently





Example of set up with friction and wear testing machines and hardness meter (Left)
Thermal Air Test System (Right)

# Equipment Business Examples of Products Delivered (1)

(Delivered in Jul. 2018)

■ Walk-in Type Temperature (& Humidity) Chamber, for building materials

#### Uses:

Reproduce the environment inside apartments (temperature and humidity) and outdoors (weather such as rain, snow, and sunlight), conduct performance evaluations and durability tests of building materials for sash, balcony, etc.



Walk-in Type Temperature (& Humidity) Chambers, for use for building materials



Temperature (& Humidity) Chambers are movable so that building materials for testing can be easily changed



Furnished with irradiation equipment and watering (rain) equipment, to reproduce an outdoor weather environment

# Equipment Business Examples of Products Delivered (2)

(Delivered in Mar. 2016)

Smart System Research Facility,
Fukushima Renewable Energy Institute, AIST
(Koriyama city, Fukushima)

#### Product delivered:

Large Walk-in Type Temperature & Humidity Chamber

#### Uses:

Performance and safety evaluation for large power conditioners for solar power generation Supports heat generation loads of 100 kw and large weights (21 tons)



Large Walk-in Type Temperature & Humidity Chamber

National Laboratory for advanced energy storage technologies (NLAB), National Institute of Technology and Evaluation (Nanko, Osaka City)

#### Product delivered:

- 1. Walk-in Type Temperature & Humidity Chamber for chargedischarge testing
- 2.External short-circuit testing equipment (energy devices equipment)

#### Uses:

- 1.Evaluate the performance of storage batteries by repeatedly charging and discharging them
- 2. Evaluate safety by confirming that storage batteries will not catch fire or rupture if they short circuit



Walk-in Type Temperature & Humidity Chamber for charge-discharge testing

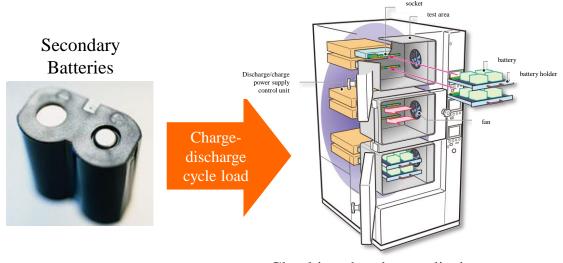
# Equipment Business Usage Case with Energy Device Equipment

#### Charge-discharge Cycle Evaluation Equipment

Equipment for ensuring the reliability and safety of lithium-ion secondary batteries for next-generation vehicles (e.g., hybrid and electric vehicles)



Charge-discharge Cycle Evaluation Equipment



Checking the charge-discharge characteristics of secondary batteries

Evaluating the performance and life of secondary batteries

ESPEC CORP.

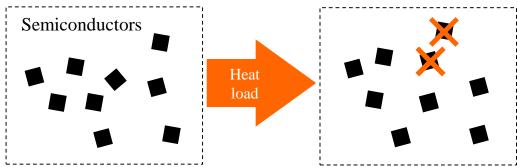
# Equipment Business Usage Case with Semiconductor Equipment

#### Screening

Eliminate defective products to maintain initial-period quality at the final inspection stage of semiconductor device manufacturing







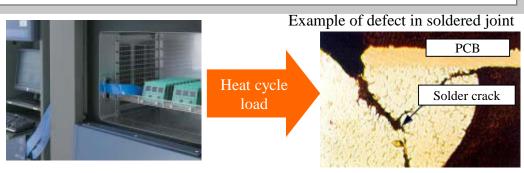
Elimination of latent early failures

#### **Reliability Evaluation**

Used to evaluate basic failure patterns to ensure reliability in the development of new technologies



Conductor Resistance Evaluation System



Electrical evaluation of reliability of joints in electronic parts

### Service Business

#### After–Sales Service and Engineering

Preventive maintenance of products, maintenance service, and the upgrading/improvement and installation/relocation of products

- Speedy response via one of the most extensive networks in Japan
- Launching services by utilizing the network function mounted in the equipment

#### Laboratory Testing Services and Facility Rentals

Laboratory testing, analysis, and evaluation; consulting; equipment rental; sales of used products; calibration of test equipment, etc.

- The company has four laboratory testing centers in Japan, one in Thailand, two in China. (Japan: Utsunomiya, Toyota, Kariya and Kobe, Thailand, China: Shanghai, Suzhou)
- •The centers are also recognized as official calibration facilities under the Japan Calibration Service System (JCSS).
- First in world Opened Battery Safety Testing Center.(in Sep. 2015)
- Providing a one-stop service for testing and certification application services compliant with United Nations regulations on the safety of automotive secondary batteries.
- Entered into business alliance with TÜV SÜD Japan Ltd., a third-party certification agency (in Oct. 2014).



<Battery Safety Testing Center>
(within the Utsunomiya Technocomplex)

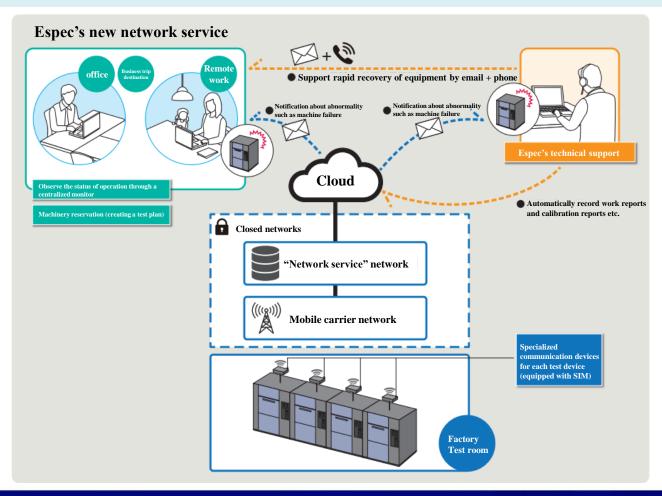
- First in Japan Acquire ISO/IEC 17025\* test facility certification simultaneously in the three fields of automobiles, trains and airplanes.
- First in Japan The Toyota Test Center addressing all test items set forth by the LV124 German Automotive Manufacturer Testing Standards.
- \* ISO/IEC 17025: An international standard in which an authoritative third-party organization certifies whether a test facility or calibration organization is capable of producing accurate measurements or calibration results.

## Service Business After-Sales Service

(Started in Apr. 2022)

"Network service" utilizing mobile communications and cloud computing.

Eases the burden on customers' tests and machinery management, and reduces equipment downtime.



# Service Business After–Sales / Laboratory Testing Services

# "Home-based online service" Supporting clients' telework-based testing operations

#### When using ESPEC products

Operate equipment and monitor samples from home

- Centralized management (monitoring and data analysis)
- •Receive operating status by email
- Monitor samples using in-chamber monitoring camera

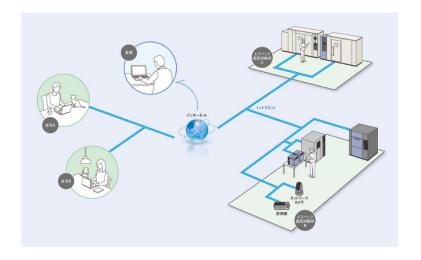


Image of in-chamber monitoring camera

#### When using laboratory testing center

Perform all tasks on behalf of clients, from the initiation of testing through the completion of tests and the return of test samples

- Remote consultation
- •No need to attend in person
- •Remote instruction



# Service Business Laboratory Testing Services

(Apr. 2021)

First in Japan to realize 100% green electricity for laboratory testing services Contributing to the reduction of CO<sub>2</sub> emissions in customers' supply chains

#### Laboratory testing centers in Japan:



Kobe Test Center



Utsunomiya Test Center



Toyota Test Center



**Battery Safety Testing Center** 

ESPEC CORP.



Kariya Test Center



# Service Business Laboratory Testing Services

(Sep. 2015)

(Sep. 2019)

World's first Battery Safety Testing Center compliant with United Nations regulations

First testing facility in Japan to address German Automotive Manufacturer Testing Standards Renovated the Toyota Test Center

Providing a one-stop service to support the implementation of 9 safety tests and applications for certification by certification agencies, as stipulated by UN ECE R100-2. Part II, a United Nations regulation.

Supporting Japanese automotive equipment manufacturers seeking to develop global operations by addressing all test items set forth by the LV124 German Automotive Manufacturer Testing Standards





**Crush Testing Equipment** (No. 1 Safety Test Room)

No. 2 Safety Test Room

Toyota Test Center

<within the Utsunomiya Technocomplex>

### Other Business

#### **Environmental Preservation**

Reforestation (Tree planting)

Recovery of local forest by selecting species and planting out seedlings using potential natural vegetation data.

Waterfront biotope restoration

Reconstruction of natural environment, development of vegetative revetments, and water quality improvement using aquatic plants.

■ Urban greening

Provision of roof and wall greening systems that use moss to effectively alleviate heat island effect.







#### Plant Production Systems

Provision of various cultivation environments employing advanced environmental control technologies to control light, temperature, humidity, carbon dioxide, etc.



Plant factory



Phyto-toron

## Other Business Plant Production Systems

# Joint Development with NARO Cultivation Environment Emulator

- •Obtained\* a patent jointly with the National Agriculture and Food Research Organization (NARO) and others in October 2022.
- Precisely reproduces seasonal carbon dioxide concentration, temperature, humidity, etc.
- •Contributes to development of crop production technologies adapted to climate change.



**Cultivation Environment Emulator** 

# Produced a high value-added vegetables using deep sea water

•Production and sales of vegetables high in minerals with the use of deep sea water at a plant factory near Haneda Airport.





Interior of the plant factory and factory-produced vegetables "mineraleaf"

<sup>\*</sup> ESPEC MIC Corp. jointly obtained the patent with the National Agriculture and Food Research Organization (NARO), Riken and the Agri Open Innovation Institute.

# Other Business Examples of Products Delivered

### Arid Land Research Center, Tottori University

(Delivered in Mar. 2016)

#### Products delivered:

Experimental System for Analyzing Responses of Dryland plants to Climate Changes (2 units) (Simulates the climates of arid lands, including high temperature, low humidity, strong sunlight, and high winds)

#### Uses:

Plant cultivation experiments and experiments to develop efficient water-usage technologies in arid lands, research to solve issues facing arid lands



Experimental System for Analyzing Responses of Dryland plants to Climate Changes



Experiment in progress (Testing wheat for drought stress)

# Introduction to technology development building

(Strengthen Technology Development Capability)

Objective: Strengthen technology development capabilities by encouraging open innovation and promote preservation of biodiversity

Concepts: "Open innovation,"

"Open communication,"

"Coexistence with the natural environment"

Location: Kanokodai, Kita-ku, Kobe, Hyogo (in Kobe R&D Center)

Start of operation: May 2020

(Construction started in June 2019)

Building area: 1,580m<sup>2</sup>

Gross floor area: 4,557m<sup>2</sup> (Three story building)



Rooftop green space using native species



Technology development building

# Introduction to ESPEC's All Weather Simulation Chamber (in the Kobe R&D Center)

(Mar. 2021)

### Opened the world's first All Weather Simulation Chamber Encouraging open innovation and strengthening environmental creation technology

Replicates dynamic climate environments with high-precision control and variation of seven environmental factors (temperature, humidity, snow, fog, rain, sunlight and wind)

All Weather Simulation Chamber

**E**xamples of tests in dynamic environments





(1)Tests to replicate the change from sleet to snow

Snow with different amounts of water content can be replicated, including snowfall at temperatures around 0°C, which is close to snowfall in a natural environment. By controlling the snow quality and temperature, the laboratory replicates the change from sleet to snow. The laboratory can confirm the performance of automated driving sensors for which snow accretion has become a problem.



Test chamber: Width 6 m x Depth 9 m x Height 3 m A black coating is applied to suppress the diffuse reflection of light.



(2)Experiment to replicate the change from rain to fog

The laboratory controls the thickness, temperature and humidity of fog and replicates the change from rain to fog. The laboratory can confirm the performance of automated driving sensors in response to the effects of fog.

## About ESPEC's SDGs and ESG Initiatives

# About ESPEC's Sustainability

Guided by our corporate philosophy,

"THE ESPEC MIND," ESPEC will help to solve social and environmental issues through businesses centered on environmental creation technology, with the aim of achieving sustainable growth.

# Corporate Philosophy

Our important values that have been passed on since our inception "THE ESPEC MIND" (Excerpt)

The Origin

Aim for better value exchange as a public institution

Mission

Provide more certain Seikankyo (living environment) via environmental creation technology

Style

Progressive, Reliable, Open, Fair

Declaration

What ESPEC promises society

"compliance," "culture," "human rights," "the environment," "education/enlightenment."

# Sustainability Policy and Materiality

Looking toward sustainable growth, we formulated a sustainability policy, and identified materiality (important issues) that must be addressed in order to produce social and economic value.

### Sustainability Policy

- By putting our corporate philosophy (THE ESPEC MIND) into practice, we are working to create and improve both social value and economic value.
- By maintaining a good exchange of value with our stakeholders, we are aiming for continuing growth.
- Based on ESPEC Vision 2025, we will contribute to solutions for the global environment and social issues through our business activities, centering on Environmental Creation Technology.
- We will engage in active disclosure of information related to sustainability.

### Materiality

- •Innovations in business structures
- •Preservation of the global environment
- •Developing human resources and vitalizing workplaces
- •Strengthening functions
- Strengthening governance
- Promoting diversity and respecting human rights

### ESPEC's Contribution to the SDGs

ESPEC will contribute to the realization of a sustainable society by supplying products and services centered on environmental creation technology in a wide range of fields, including advanced technologies.

#### **ESPEC**

#### The Value ESPEC Provides

- Supply products and services centered on environmental creation technology
- Provide environmental preservation services
- Provide plant factories to address global warming and extreme weather

#### Strengths

- Business domains essential to the development of society
- •Global leading brand and high-quality products and services based on a unique technologies
- Global production and sales networks

# Customer products and technologies













#### Automobiles

(EVs and automated driving)

- •Electronic components(semiconductors)
- •IoT

- •AI
- Batteries
- Pharmaceuticals

•Food

- Materials
- •Environmental
- •Agriculture etc.

preservation

### Society

Realize a sustainable society



- •Realize a safe and secure society through the development of automated driving and preventive safety technologies for automobiles
- •Contribute to the solution of environmental and energy problems through the development of energy-saving technologies and EV technologies
- Alleviate personnel shortages and improve productivity through the development of IoT-related technologies
- Preserve biodiversity through the environmental preservation business, including reforestation (tree planting) and waterfront biotope restoration
- Support research on the creation of new plant species to cope with extreme weather and provide a stable supply of food through plant factories.

### ESPEC's Businesses and the SDGs

#### Equipment Business







Contribute to the development of advanced technologies through the supply of products and services leveraging environmental creation technology

• Supply products and services that contribute to the development of advanced technologies to solve social and environmental issues

#### Environmental Test Chamber

Supply environmental test chambers that artificially replicate environmental factors such as temperature and humidity, thereby ensuring the reliability of products

#### Energy Device Equipment

Supply evaluation systems for secondary batteries and fuel cells installed in eco cars

#### Semiconductor Equipment

Supply products such as burn-in chambers and systems for semiconductor inspection and measurement and evaluation systems

#### Pharmaceutical Equipment

Supply products such as freezers for COVID-19 vaccines and stability test chambers used for quality control of items such as pharmaceuticals and food



Temperature & Humidity Chamber "Platinous J series"



Drive-In Chamber for Vehicle Testing



Burn-In chamber for semiconductor inspection



Advanced Battery Tester for secondary batteries

### ESPEC's Business and the SDGs

# 9 MUUSIRY, INNOVATION AND INFRASTRUCTURE



#### Service Business

Contribute to the development of advanced technologies through the supply of products and services leveraging environmental creation technology

- Supply products and services that contribute to the development of advanced technologies to solve social and environmental issues
  - After-sales Service and Engineering Conduct product maintenance and preventive maintenance so that customers can use systems with peace of mind.

#### Laboratory Testing Services

Provide laboratory testing services based on technologies and testing expertise developed through environmental tests.





Technical support using IT





Capable of performing various safety tests for secondary batteries compliant with United Nations regulations and other standards

Battery Safety Testing Center

## ESPEC's Business and the SDGs

# Environmental Preservation Business







# Contribute to biodiversity preservation

A business to restore natural environments through projects such as reforestation (tree planting) with local native plant species and waterfront biotope restoration to rehabilitate natural river ecosystems Contribute to the prevention of global warming and biodiversity preservation



A forest restored along the approach to Rinno-ji Temple in Sendai



Waterfront biotope restoration on the Sumida River Terrace in Tokyo

# Plant Production Systems Business



# Contribute to a stable food supply to address global warming and extreme weather

Supply plant factories that artificially replicate plant growing environments and enable vegetables to be grown systematically even under extreme weather conditions

Contribute to a stable food supply by supplying systems that can be used in research into drought-tolerant plants



Plant factory using deep sea water Produce and sell vegetables high in minerals



Experimental System for Analyzing
Responses of Dryland Plants to Climate Change
(Arid Land Research Center, Tottori University)

# Contribute to SDGs in the Supply Chain

#### **Procurement**

- Conduct supplier evaluations, including factors such as the environment and compliance
- Address unforeseen conditions through business continuity management
- Curtail increases in effluents at the time of procurement



#### Development and design

 Develop and design environmentally friendly products with features such as energy efficiency, low GWP, reduced emissions of chemical substances, and reduced environmental impact during disposal









#### Production and logistics

- Reduction of CO<sub>2</sub> emissions
- Appropriate management of chemical substances and emissions mitigation
- Reduction of water intake amount and appropriate management of wastewater
- Effluent reduction and recycling
- Environmentally friendly logistics









#### Sale of products and services

- Supply products and services that contribute to the development of advanced technologies to solve social and environmental issues
- Supply environmentally friendly products and services
- Promote the environmental preservation business such as reforestation (tree planting) and waterfront biotope restoration
- Promote the plant production systems business















#### Disposal

- Product collection
- Chlorofluorocarbon gas collection
- Recycling and resale





#### Foundation supporting the supply chain

- Improve customer satisfaction and ensure product quality and safety
- Respect for human rights Promote the success of diverse human resources
- Provide appropriate information disclosure and communication
- Fair management with transparency













# Products and Services that Contribute to Resolving Environmental and Energy Issues

Product lineup to evaluate the performance and durability of secondary batteries, fuel cells, solar batteries and power devices



Secondary Battery Charge-Discharge Evaluation System



Fuel Cells Evaluation System



Temperature Cycle Test System for Solar Battery Modules



Power Cycle Test System for Power Device

World's first Battery Safety Testing Center Supports the implementation of testing and certification application services compliant with United Nations regulations on the safety of automotive rechargeable batteries.



**Battery Safety Testing Center** 

Laboratory testing services using 100% renewable energies (domestic)

# **Biodiversity Preservation Initiatives**

# Kobe R&D Center, a hub for biodiversity preservation activities Developed rooftop green space using only plant species native to the northern Rokko region

The site has a forest of approximately 30,000 trees comprising native plant species, planted and grown by employees; rooftop green space using plant species native to the northern Rokko region on the roof of the technology development building; and a biotope made up of two ponds and a stream. ESPEC MIC CORP., which manages the environmental preservation business, conducted the tree planting and construction.





Received 2022 the Kansai Director-General's Award of a Regional Bureau of Economy, Trade and Industry (FY 2022), at the National Award for Greenery Factory sponsored by METI



Acquired the FY 2022 ABINC Certification of the Association for Business Innovation in harmony with Nature and Community (ABINC)\*.

ESPEC CORP.

# Promotion of Diversity

#### Initiatives to promote women's success



From the Ministry of Health, Labor and Welfare:
The Company received the "Kurumin" certification,
which is granted to companies that support child-rearing.
And the highest ranking of the certification mark
"Eruboshi" based on the Act on Promotion of Women's
Participation and Advancement in the Workplace.



The female leadership development program

# Opened ESPEC Smile Farm, a plantation staffed by workers with disabilities

- Opened a farm staffed by workers with disabilities within a rented farm operated by a company to support the hiring of people with disabilities in November 2021.
- 4 individuals were hired to work at ESPEC Smile Farm, specifically 3 staff members with disabilities and 1 farm foreman.
- The cultivated vegetables were donated to local children's cafeterias and distributed to employees.



Employees picked vegetables as a team

# Employee Education/Donation System

# Employee Education System Enhancement

- Implement training sessions to share the corporate philosophy
- Implement a Global Trainee Program aimed at developing human resources who are capable of working in international settings
- Enhance the education program to support management executive education and selfdevelopment



On-site training in the Global Trainee Program (U.S.)

# ESPEC Smile Club: a donation system featuring employee participation

- •The matching gift system in which the company matches donations made by employees as part of activities to promote SDGs.
- •Donated to an organization that conducts CSR activities related to children and medical care.
- •In April 2023, donated to support the areas affected by the Turkey-Syria earthquake. We donated a total of 860,600 yen to Save the Children Japan and Médecins Sans Frontières Japan.



# Contributions to Society

# ESPEC Foundation for Earth Environment Research and Technologies

- Provides funding support every year for research, technology development on global environmental conservation
- Grants totaling ¥138.4 million have been provided to a total of 273 groups over the past 25 years since the Foundation was established.
- Held a ceremony to commemorate the 25th anniversary of founding in September 2022



FY2022 award ceremony and 25th anniversary commemorative ceremony

# Tree Planting Ceremony at "Millenium Hope Hills" in Iwanuma, Miyagi Prefecture

- A disaster recovery project started in 2013
- The project has cumulatively planted about 350,000 trees that will form a forested coastal tide embankment across a roughly 10km stretch of coastline in the city of Iwanuma.
- Group company ESPEC MIC CORP. supported the project.
- The final tree planting ceremony was held in June 2021 (first part) and May 2022 (second part).

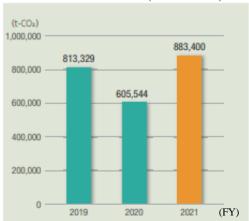


**Tree Planting Ceremony** 

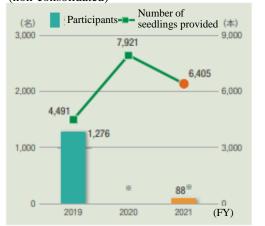
### Non-Financial Data 1

Greenhouse gas emissions

Total of SCOPE 1 + 2 + 3 (consolidated)



Number of participants in ESPEC Midori-no-gakko schools (ESPEC Green School) Number of seedlings provided for green curtains (non-consolidated)



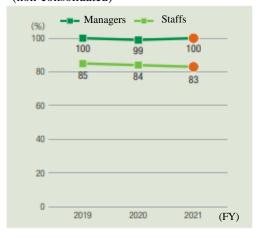
\*Events cancelled or frequency reduced due to spread of COVID-19.

Greenhouse gas emissions

Total of SCOPE 1 + 2 (in-house emissions) (consolidated)



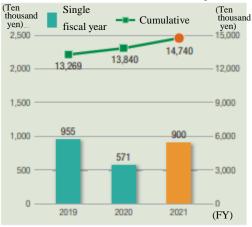
Certification acquisition rate for the Certification Test for Environmental Specialists (Eco Test) (non-consolidated)



# Total amount of effluents (non-consolidated)

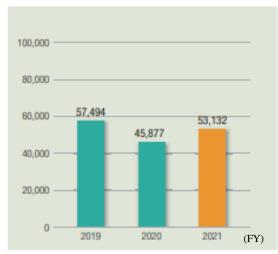


Grants from the ESPEC Foundation for Earth Environment Research and Technologies



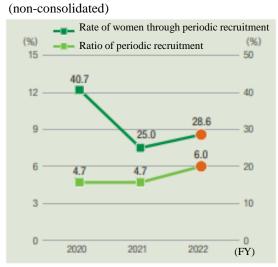
## Non-Financial Data 2

Number of trees planted through environmental preservation business



\*Actual results for ESPEC MIC CORP.

Ratio of female managers
Rate of women through periodic recruitment



\*As of April 1, 2022

Employment rate of persons with disabilities (non-consolidated)



\*As of March 31, 2022

(FY)		2019	2020	2021
Number of registered members of the "Test Navi" information website for engineers		19,570	20,931	22,154
Number of employees		1,512 (consolidated) 786 (non-consolidated)	1,526 (consolidated) 780 (non-consolidated)	1,628 (consolidated) 770 (non-consolidated)
Ratio of	Women	Not applicable	100%	100%
employees taking childcare leave	Men	7.0%	12.5%	30.8%
Rate of annual paid leave acquisition (non-consolidated)		73.4%	65.8%	69.1%
Frequency of workplace accidents* (non-consolidated)		0.62	0	1.34
Rate of health check examination (non-consolidated)		100%	100%	100%

<sup>\*</sup>Number of lost time incident victims/Total amount of work hours x 1 million hours

# **External Recognition**

#### 2023

- Mar. Selected for the First Time as a Supplier Engagement Leader, the Top Rank in the CDP Supplier Engagement Ratings
- Feb. Ranked 372th in Toyo Keizai Inc.'s 2023 CSR Corporate Ranking

#### 2022

- Dec. A score of B for the third consecutive year in the CDP Climate Change 2022

  Questionnaire
  - Selected as a "GRADE AAA" company website (overall ranking) for the third consecutive year in the All Japanese Listed Companies' Website Ranking 2022 by Nikko Investor Relations Co., Ltd.
  - Awarded a Bronze Prize in the Gomez IR Website Ranking 2022 by BroadBand Security, Inc.
- Nov. Rated 4 stars in the Nikkei's 4th SDGs Management Survey
  - Rated 3.5 stars in Nikkei's 6th Smart Work Management Survey
- Oct. Ranked 155th in the Nikkan Kogyo Shimbun's 18th Corporate Power Ranking (sponsored by the Ministry of Economy, Trade and Industry)
- Aug. First Awarded as an excellent company in the Gomez ESG Website Ranking 2022 by BroadBand Security, Inc.
- July Ranked 334th in Toyo Keizai Inc.'s 2022 SDGs Corporate Ranking
- Apr. First Selection as Part of FTSE Blossom Japan Sector Relative Index



















FTSE Blossom Japan Sector Relative Index Quality is more than a word

