HIOKI E.E. CORPORATION Financial Results Briefing for the Fiscal Year Ending December 31, 2018

(Securities Code: 6866)

February 2019



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1. Company Overview

HIOKI

Overview

Name
HIOKI E.E. CORPORATION

Businesses
Development, manufacture, sale, and repair of

electrical measuring instruments

■ Founded June 1935

Incorporated
January 1952

■ Capitalization ¥3,299 million

Representative Kazutoshi Hosoya, President & CEO

Head Office 81 Koizumi, Ueda-shi, Nagano Prefecture

Group companies HIOKI Forest Plaza Corporation; HIOKI USA Corporation; HIOKI (Shanghai)

Sales & Trading Co., Ltd.; HIOKI SINGAPORE PTE. LTD.; HIOKI KOREA CO., LTD.; HIOKI INDIA ENGINEERING PRIVATE LIMITED; HIOKI EUROPE

GmbH; HIOKI TAIWAN CO., LTD.; PT. HIOKI ELECTRIC INSTRUMENT

Employees
967 (consolidated-basis, including part-time workers)

(as of December 31, 2018)



HIOKI Product Organization and Fields of Use

HIOKI meets customer needs ranging from advanced R&D to production lines and on-site electrical work in every industry with 300 products.

Overall organization

R&D

Production lines

Field maintenance

Automatic testing equipment

Data recording

equipment

Power generation and distribution Transport equipment

Machinery manufacture Transport equipment manufacture



Power equipment inspections Elevator maintenance

Electronic measuring instruments

Field measuring Transport instruments

Peripheral equipment and other

Alternative energy Materials, environment



Electronic component manufacture Medical device manufacture



Package and board manufacture

Electric device manufacture

Environment Energy

Electronic devices equipment



Electrical and power equipment inspections Communications equipment testing

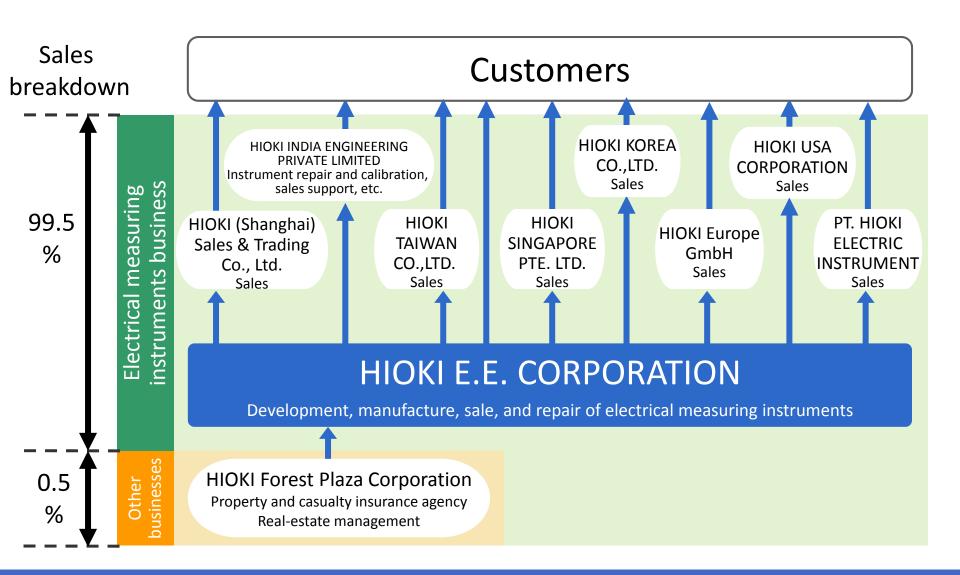


Accessories for products shown above

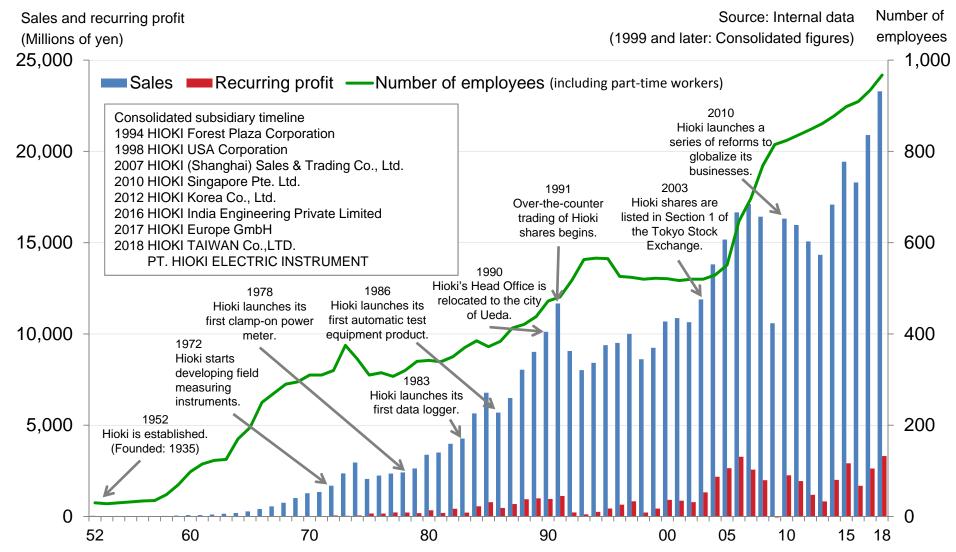
*The width of each application category illustrates its relative contribution to HIOKI's sales.



HIOKI Group Business Diagram



Performance and Employee Head Count since Hioki's Establishment





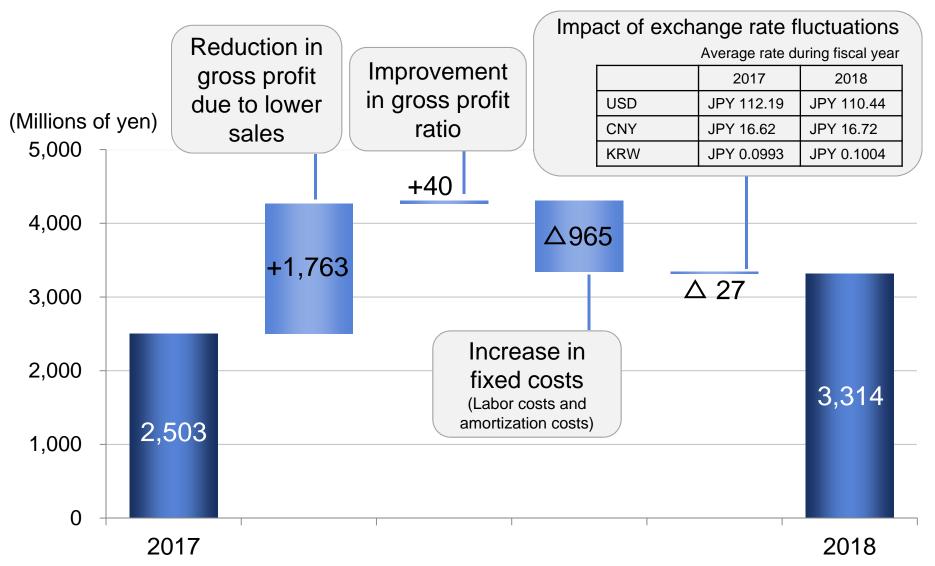
2. Financial Results Overview

HIOKI

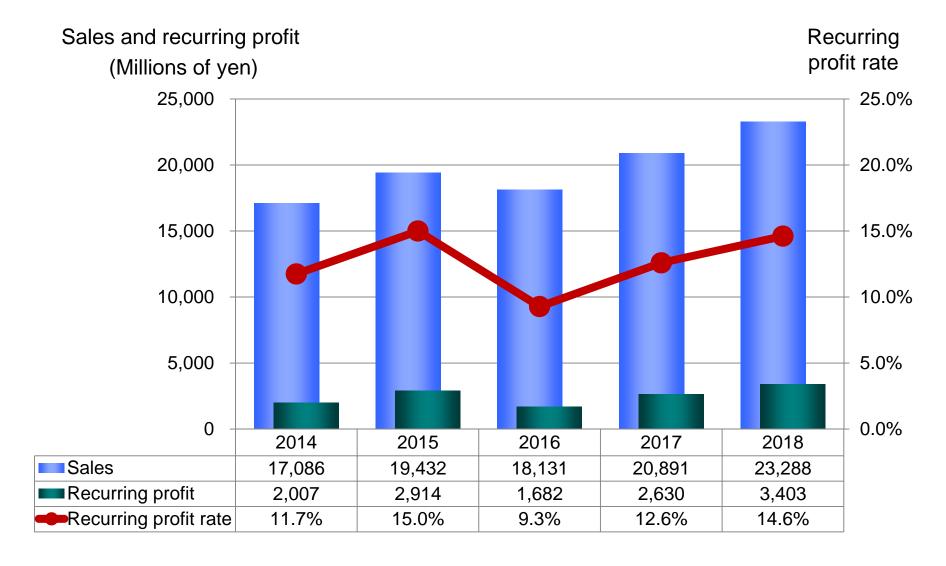
Overview of 2018 Results

	2017		2018		
	Results (millions of yen)	Percent of sales (%)	Results (millions of yen)	Percent of sales (%)	Year-on-year (%)
Sales	20,891		23,288		111.5%
Cost of sales	12,030	57.6%	12,924	55.5%	107.4%
Selling, general, and administrative expenses	6,357	30.4%	7,049	30.3%	110.9%
Operating profit	2,503	12.0%	3,314	14.2%	132.4%
Recurring profit	2,630	12.6%	3,403	14.6%	129.4%
Net income	1,998	9.6%	2,774	11.9%	138.8%
Earnings per share	¥146.67		¥203.63		

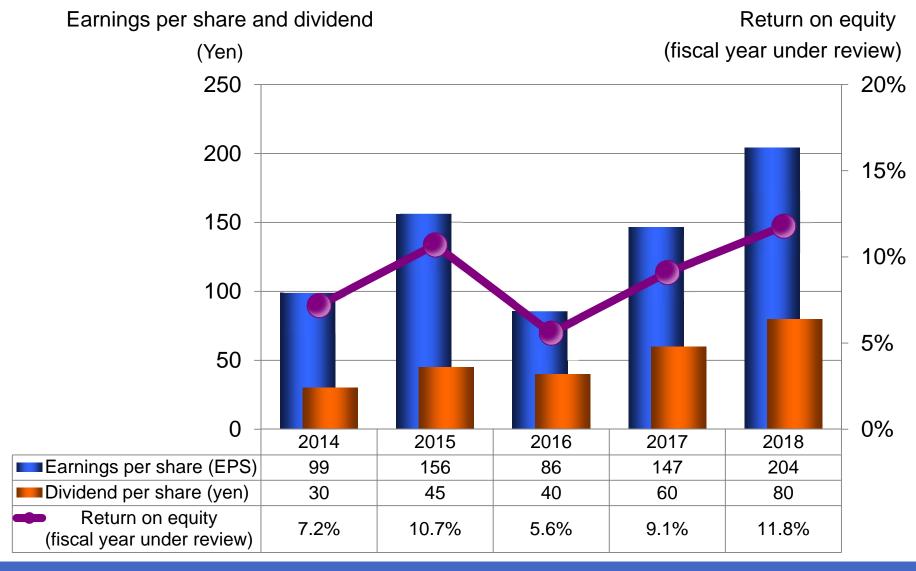
Factors Affecting Operating Profit in 2018



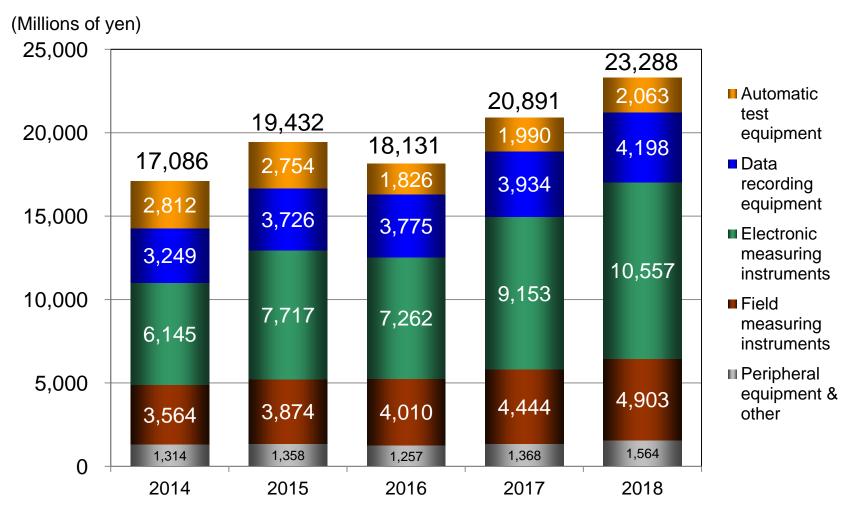
Trend in Sales and Recurring Profit



Trend in Earnings per Share and Dividend



Trend in Sales by Product Category



^{*}Some product categories changed in 2016. Results for 2014 and subsequent years have been stated in terms of the new categories.

2018 Overview by Product Category

Automatic test equipment

- Progress in miniaturization technologies is accelerating as semiconductor circuit boards used in products such as mobile devices adopt increasingly dense pattern layouts. HIOKI continued to meet customers' advanced technological requirements on a case-by-case basis.
- Growing demand for automating testing on populated circuit board production lines, particularly in China and Southeast Asia, drove solid sales growth.

Data recording equipment

- The overseas launch of our flagship Memory HiCorder (which was launched in Japan in October 2017) combined with domestic Japanese sales to contribute to significant sales growth.
- We launched a new Memory HiCorder designed for use in multipoint measurement of electronically controlled devices.
- Loggers used in battery and other fields continued to generate strong sales.

Electronic measuring instruments

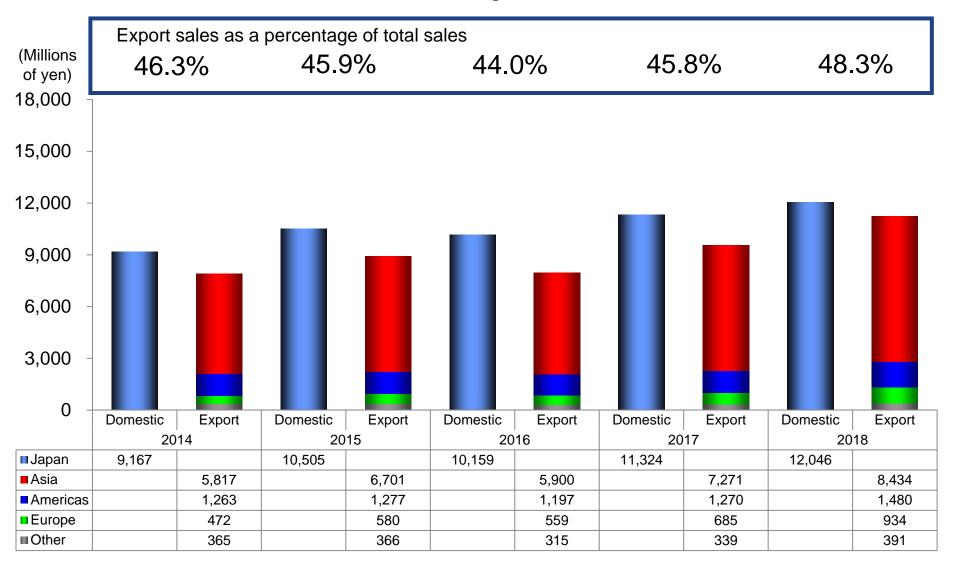
- We launched a series of new products in the automotive and battery markets, including highprecision current sensors, multichannel switching equipment, and battery testers capable of testing high voltages.
- Sales of circuit element measuring instruments such as LCR meters grew significantly as the adoption of electronic devices in automobiles and the development of smartphones with increasingly sophisticated functionality spurred demand for electronic components.

Field measuring instruments

- We strengthened our product line by launching a sensor-type clamp ammeter designed to streamline measurement in locations such as increasingly high-density distribution panels.
- Sales grew steadily as development of products with wireless communications functionality and updates to enhance smartphone app functionality boosted convenience.



Trend in Export Sales



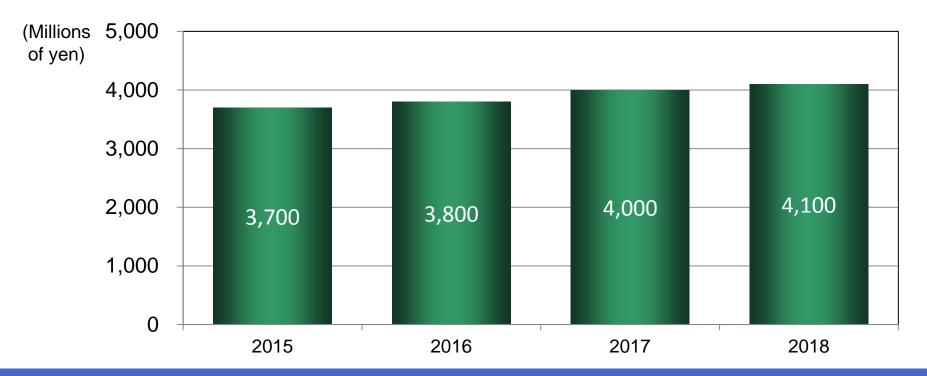
Environmental and Alternative Energy Markets

(Sales of Related Products)

Market trends

Demand for measurement solutions in applications that prioritize power circuit quality and safety is rising as adoption of renewable energy grows. Such demand drives sales of inspection-use measuring instruments such as power quality analyzers and PV megohmmeters.

Target products: Remote measurement systems, power meters, PV megohmmeters, battery testers, power quality analyzers, current sensors, loggers



Electronic Components and Automotive Markets

(Sales in Related Categories)

Trends in the electronic components market

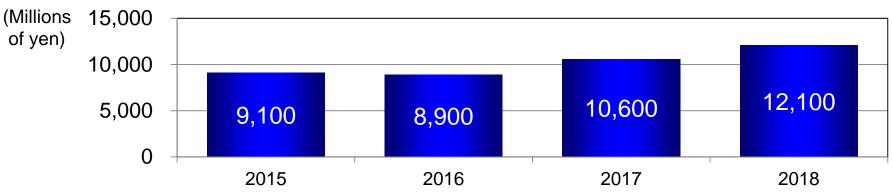
Demand for automotive-use electronic components remained strong in the face of increasing adoption of electric drivetrains and electronic systems in automobiles, stimulating brisk capital investment. We expect to see rising demand for super megohmmeters and LCR meters.

Target products: Automatic test equipment, super-megohmmeters, LCR meters, resistance meters, battery measuring instruments

Trends in the automotive market

Demand remained strong for measuring instruments and sensors with large-current, high-precision, and wideband capability thanks to increasing adoption of electric drivetrains in automobiles. Demand stemming from battery-related applications for automobiles remained strong. We met a broad range of measurement demand in connection with R&D, production, maintenance, and other processes.

Target products: Automatic test equipment, super-megohmmeters, LCR meters, resistance meters, power meters, battery measuring instruments, memory recorders



^{*}Some product categories changed in 2017. Results for 2015 and subsequent years have been stated in terms of the new categories.

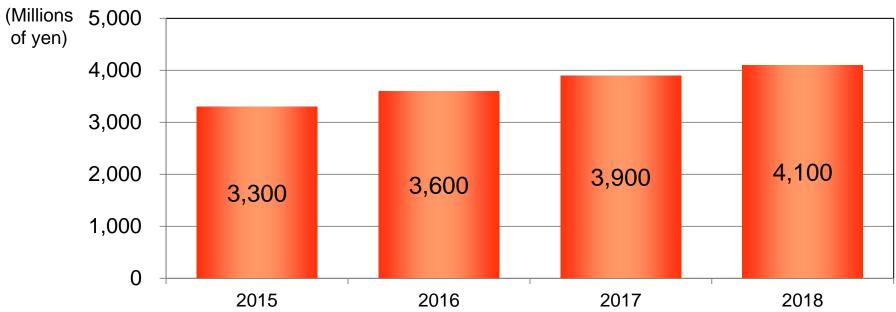


Infrastructure Market (Sales in Related Categories)

Trends in the infrastructure market

Demand for instruments used in electrical work and equipment maintenance rose, and the boost in domestic demand caused by infrastructure construction in advance of the Tokyo Olympics continued. We expect to see increased demand for clamp ammeters designed to offer enhanced convenience and measuring instruments with wireless communications capability.

Target products: Digital multimeters, clamp-on current meters, grounding resistance meters, phase detectors, etc.



^{*}Some product categories changed in 2018. Results for 2015 and subsequent years have been stated in terms of the new categories.





3. Mid-term Business Plan and Strategy HIOKI

Hioki's Vision

A company that continues to operate into the indefinite future

Striving to achieve sustained growth and development

Continuing to play an essential role in society

Achieving Hioki's Vision

- Transforming Hioki into a high-value-added company
- Increasing productivity

Recurring profit ratio of 20% or more International sales as 50% or more of total sales

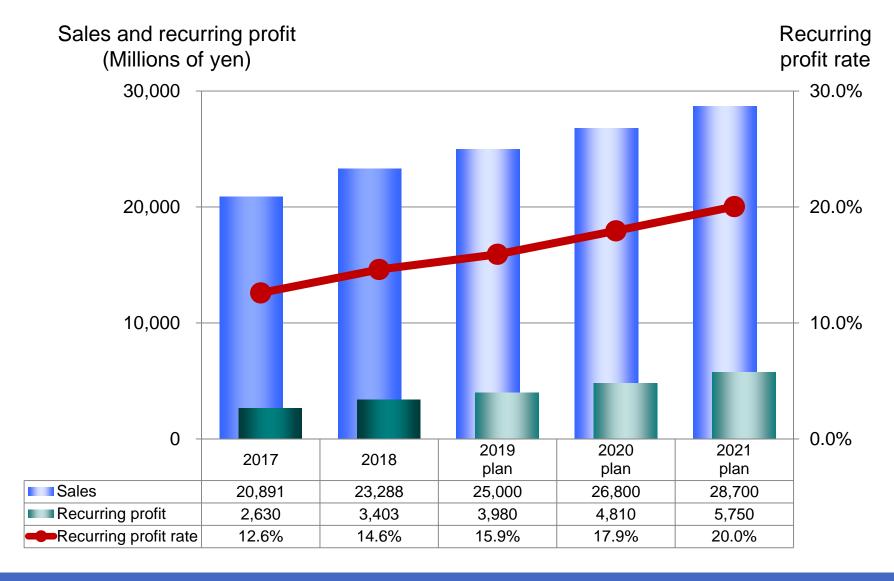
Priority Initiatives

- Product development (business development)
- 2 Market expansion (overseas market expansion)
- 3 Productivity growth
- 4 Employee growth

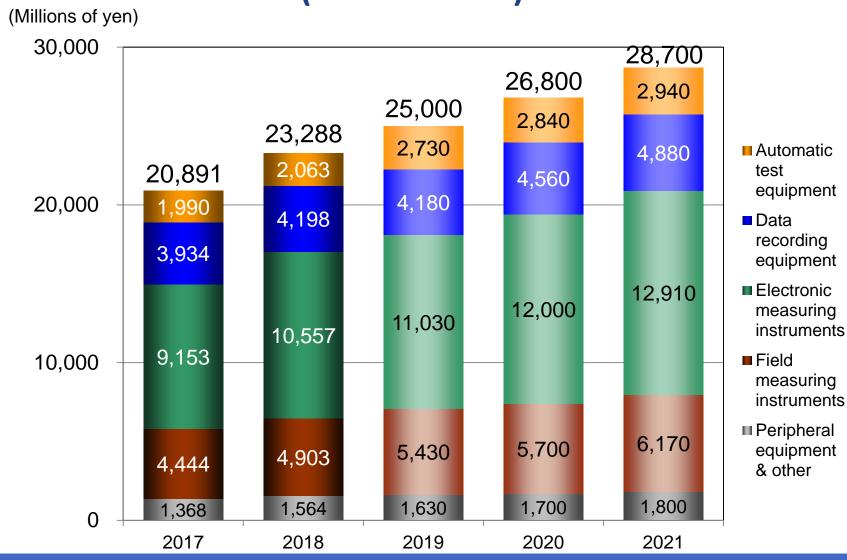
2019 Results Forecast

	2018		2019		
	Results (millions of yen)	Percent of sales (%)	Plan (millions of yen)	Percent of sales (%)	Year-on-year (%)
Sales	23,288		25,000		107.3%
Cost of sales	12,924	55.5%	13,440	53.8%	104.0%
Selling, general, and administrative expenses	7,049	30.3%	7,710	30.8%	109.4%
Operating profit	3,314	14.2%	3,850	15.4%	116.2%
Recurring profit	3,403	14.6%	3,980	15.9%	116.9%
Net income	2,774	11.9%	3,050	12.2%	109.9%
Earnings per share	¥203.63		¥223.83		

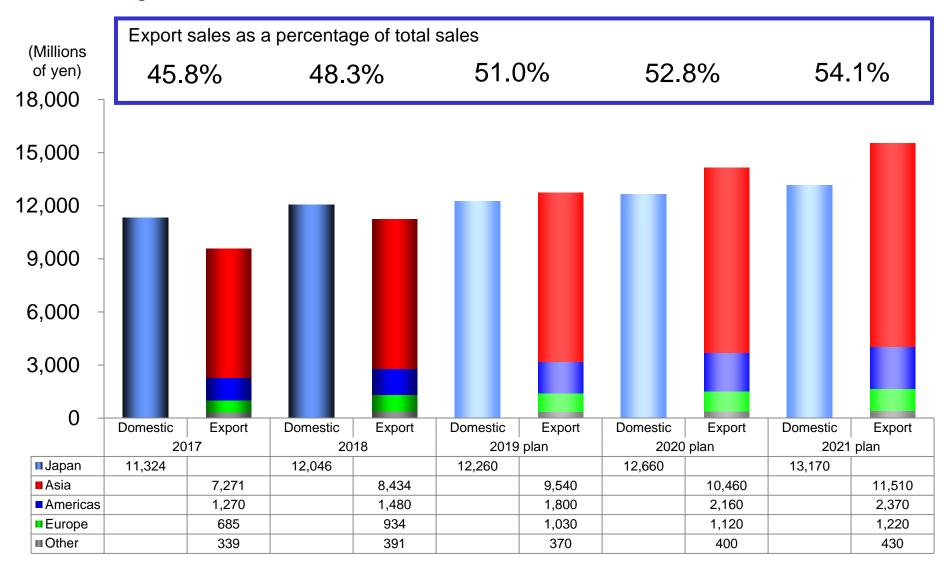
Mid-term Business Plan (2019 to 2021)



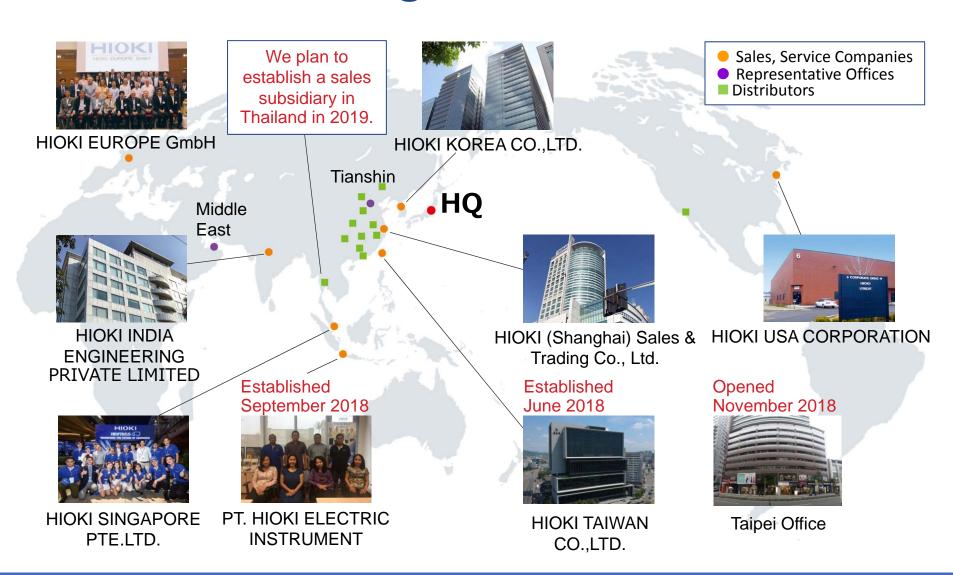
Mid-term Sales Plan by Product Category (2019 to 2021)



Export Mid-term Sales Plan (2019 to 2021)

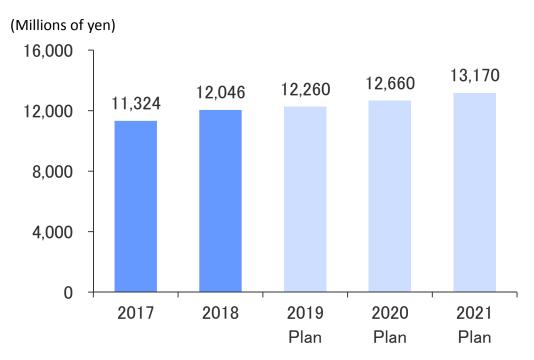


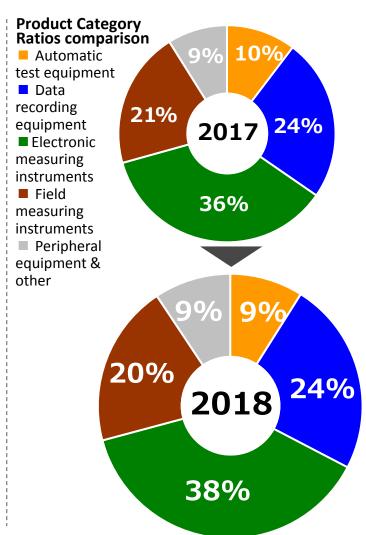
Pursuing Globalization



Actual and plan sales by geographic region: Japan

- We opened the Kanazawa Sales Office, and we're working to develop and maximize the potential of the market in the Hokuriku region.
- •Sales in the automotive, electronic component, and battery markets were robust. We expect the infrastructure market to grow in connection with the Tokyo Olympics.

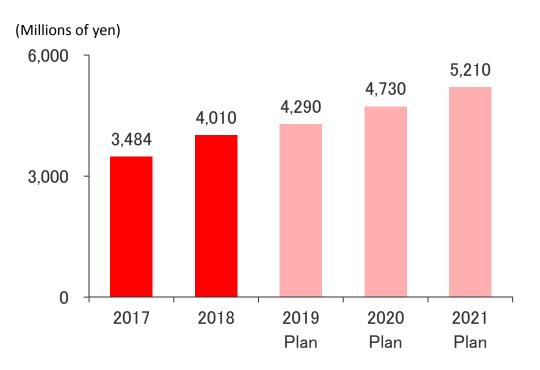


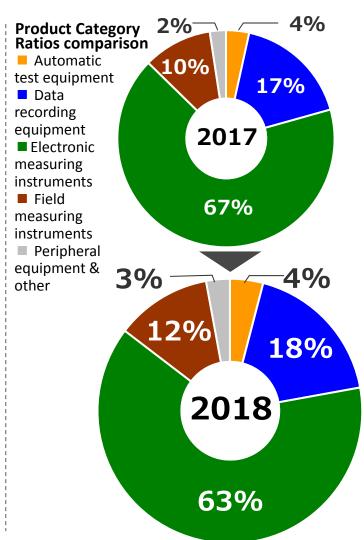




Actual and plan sales by geographic region: China

- Continuing a trend from 2017, conditions were favorable in the EV, battery, and energy markets. Electronic measuring instruments drove up sales.
- We promoted products for R&D in the areas of fuel cells and 5G mobile communications.

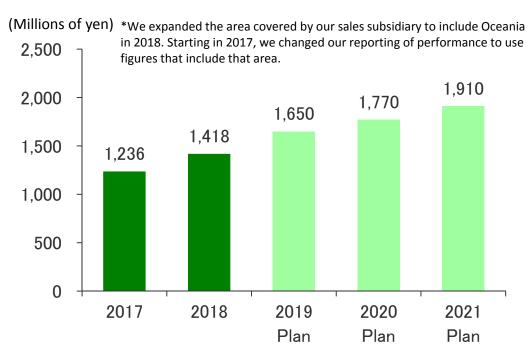


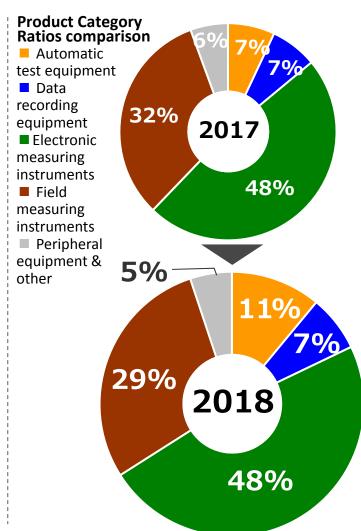




Actual and plan sales by geographic region: Asia (including Oceania)

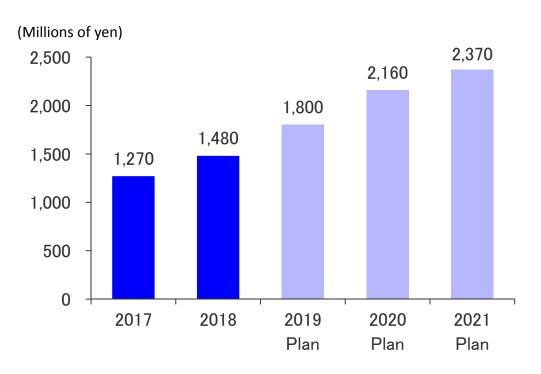
- We began operating a local subsidiary in Indonesia and will work to ensure the HIOKI brand penetrates the market in each of the region's countries.
- Conditions in the automotive market were favorable, and demand for electronic components and automatic test equipment rose.

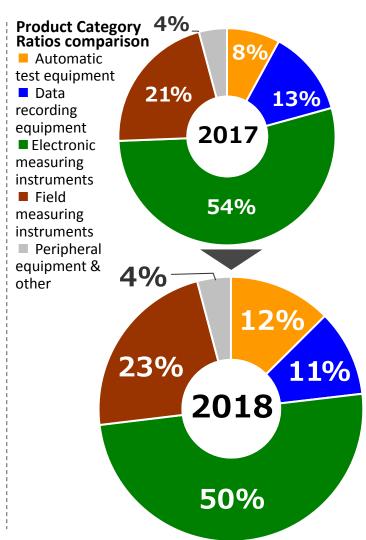




Actual and plan sales by geographic region: U.S.A. (North and South America)

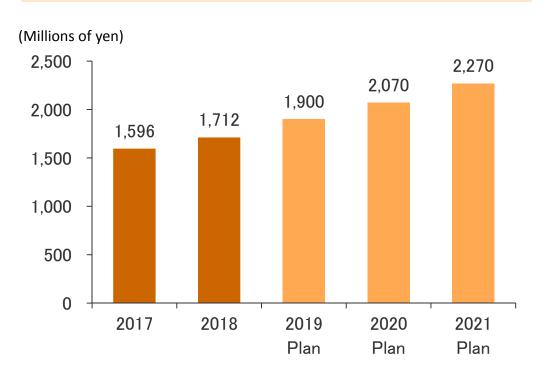
- •Investment in the EV and battery markets was brisk.
- We expect the size of the markets for solar panels and power supply maintenance to grow going forward, and we will work to increase sales of field measuring instruments and power quality analyzers.

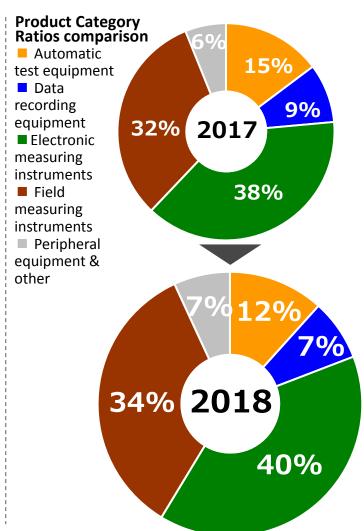




Actual and plan sales by geographic region: Korea

- Sales of products for use in the automotive, battery, and electronic component markets were brisk.
- We will continue to work to expand sales of products such as measuring instruments designed for use on production lines and high-precision current sensors.

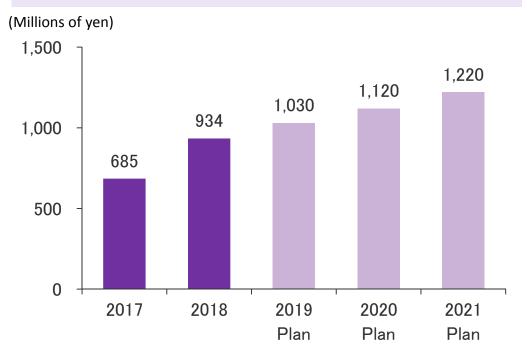


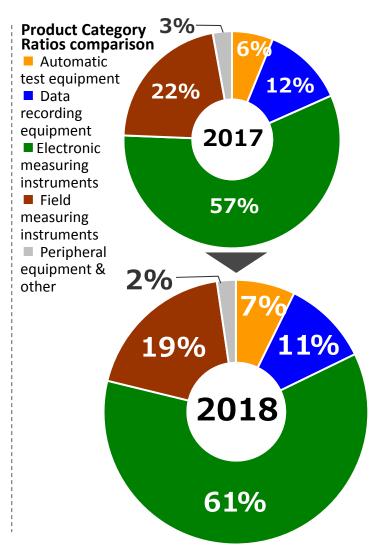




Actual and plan sales by geographic region: Europe

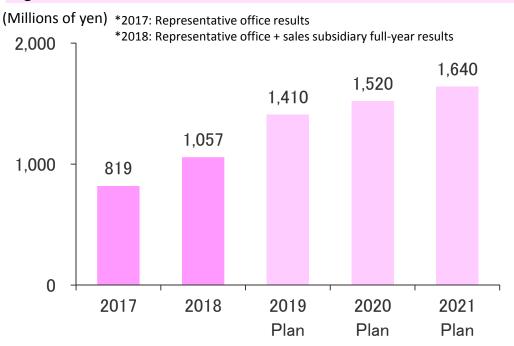
- We established a sales subsidiary in Europe in 2017. Efforts to increase penetration of the HIOKI brand and to build a sales network have made progress, and sales have grown steadily.
- •We will work to expand sales of products such as power meters and high-precision current sensors in response to the increasingly widespread adoption of electric drivetrains in the automotive market.

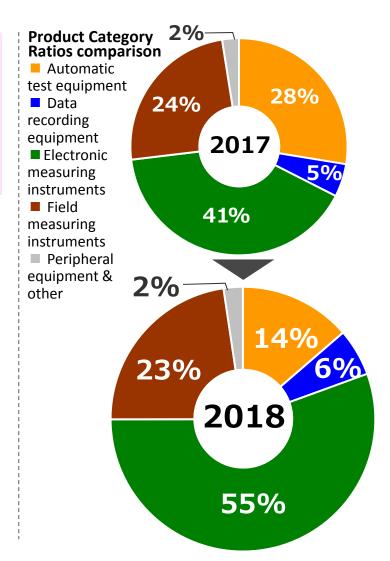




Actual and plan sales by geographic region: Taiwan

- We established a sales subsidiary in Taiwan in 2018. Our Taipei Office opened in November, and we're working to fully tap the potential of the Taiwan market.
- •Sales of electronic measuring instruments and field measuring instruments have been strong. We expect demand for automatic test equipment for use in testing circuit boards to grow.





Actual and plan sales by geographic region: Other

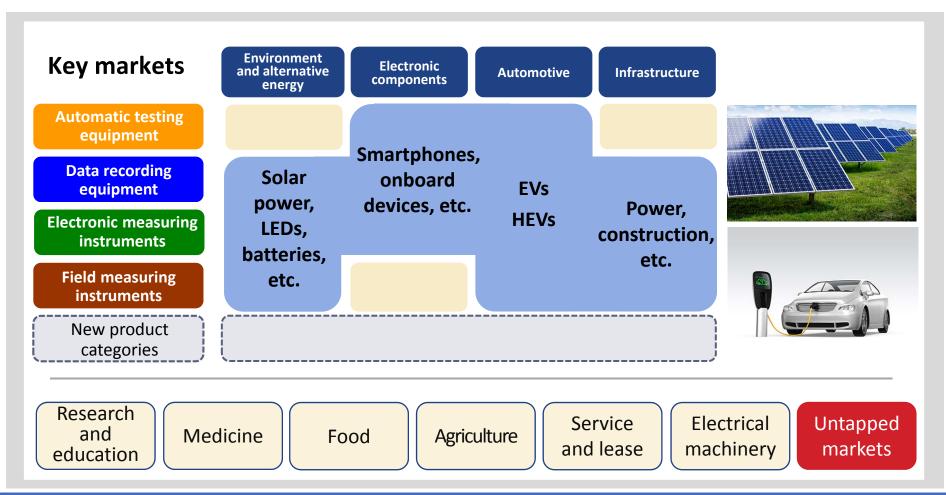
India ¥290 million Working out of our facility in Gurugram, we offer sales, technical support, and after-sales service throughout India. Going forward, we will further strengthen our sales support and repair structures in the fast-growing Indian market.

Middle East ¥270 million We're focusing on expanding the HIOKI brand in the maintenance industry, where power, oil, gas, and construction are major segments. Going forward, we will work to expand sales of power meters as there is a pressing need in the region to implement energy-saving measures.

Figures: From 2019 plan

Hioki's Expanding Products and Markets

We're working to grow and develop by expanding product launches in every market and by creating new product categories.



Creating customer value through unique products and services



- Delivering unique customer value
- Boosting creativity and developing high-added-value products

Providing distinctive products to customers worldwide from Hioki Innovation Center

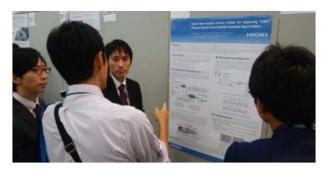
Technological initiatives overseas







This program was established by the European Association of National Metrology Institutes to bolster research and innovation. We're currently participating in meetings to define a standard governing the use of lithium-ion batteries.





Japan

The 31st International Electric Vehicles Symposium and Exhibition & International Electric Vehicle Technology Conference 2018

EUS 31 is one of the world's largest international electric vehicle symposia. It will be the first time for the event to be hosted in Japan in 12 years (North America, Europe, and the Asia Pacific region take turns hosting it), and the first time ever for HIOKI to give a presentation.





America

This international non-profit works to improve measurement and calibration technologies.

It has more than 1,500 members around the world, and HIOKI has been a member since 2018.

Priority initiatives



Priority market 1: EV market



Priority market 2: Battery market



Priority market 3:

IoT support in the field

EV technology trends

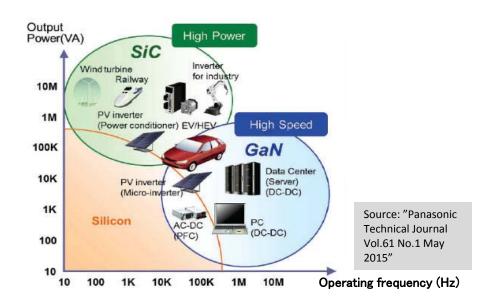
Rapid charging

Larger currents as larger vehicles move to electric drivetrains



- Charger capacity has been increasing with each passing year.
 - 120 kW \rightarrow 200 kW \rightarrow 350 kW
- Large trucks and buses are moving to electric drivetrains.

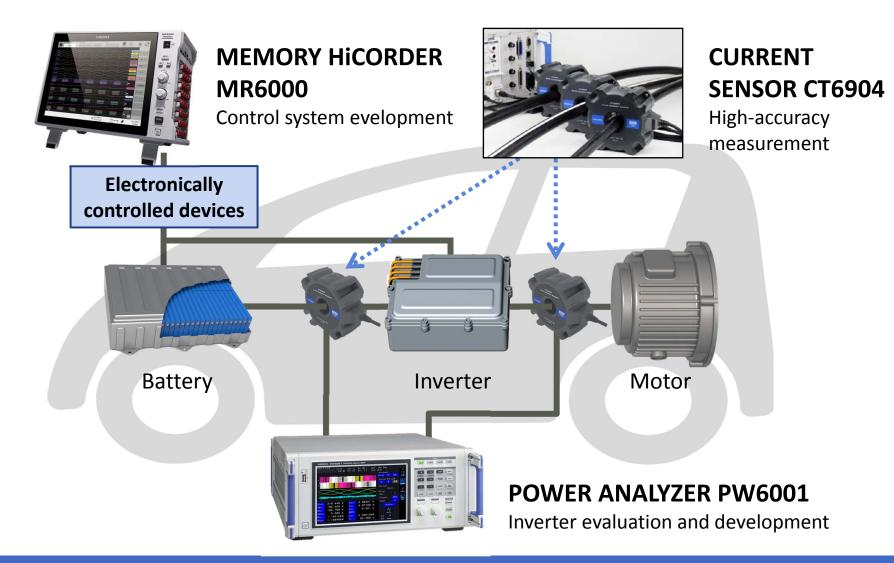
Higher switching frequencies made possible by next-generation semiconductors



- ■SiC SiC semiconductors are expected to enter into increasingly widespread use, increasing about 7 times from 2016 levels by 2025.
- ■GaN GaN semiconductors have been undergoing a gradual commercialization process (moving to mass production) since around 2015.

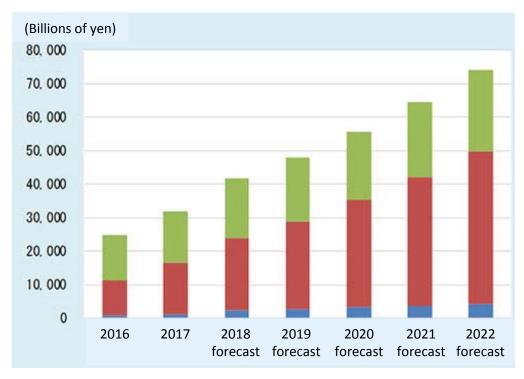


Products featuring world-class performance



Growth in the lithium-ion battery market

Worldwide



- For use in compact consumer products (cylinder-shaped, square, laminated)
- For use in xEVs
- Power storage systems, UPS use, mobile phone base stations

Source: "Survey of the Global Market for Lithium-ion Rechargeable Batteries" (Fuji Keizai Co., Ltd.)

China

In addition to passenger vehicles, special-use vehicles such as buses and trucks are moving to electric drivetrains. Going forward, the market for xEV batteries is forecast to grow dramatically.

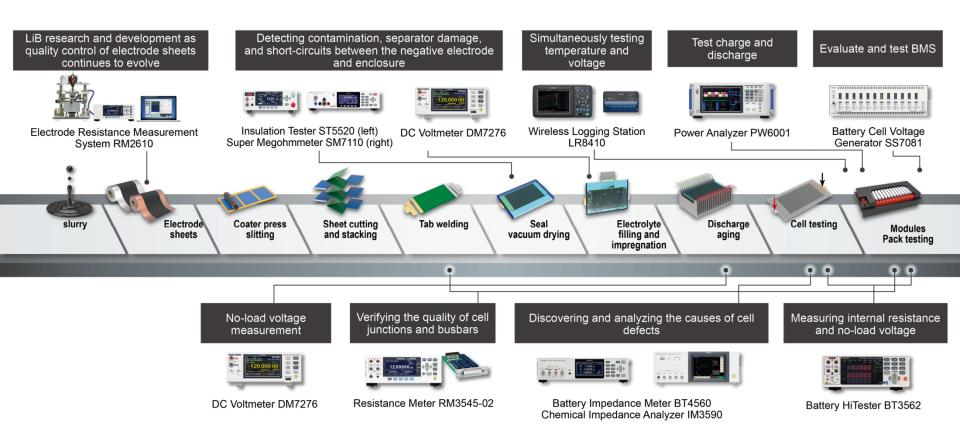
Europe

Use of lead-acid batteries is being discontinued.



Introduction to battery measuring instruments

Examples: Development of lithium-ion batteries and production process solutions HIOKI offers a broad range of instruments designed specifically for individual processes.



Products that meet market requirements

Maximum input voltage 1000V BATTERY HiTESTER BT3564



Batteries used in EV buses, trucks, and other vehicles are growing in terms of both size and voltage (750 V, etc.).



Demand for the ability to test high-voltage battery packs

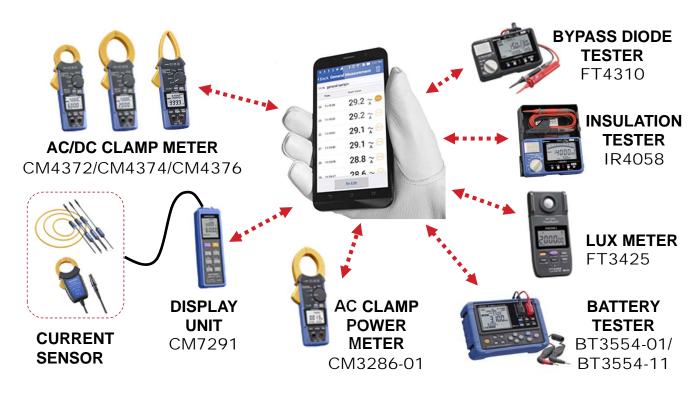
The BT3564 is ideal for use in shipping inspections and acceptance inspections of increasingly high-voltage battery packs designed for use in EVs and PHEVs.

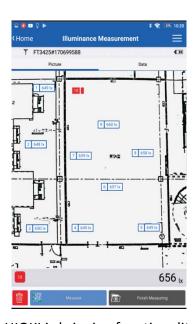
IT technology + measuring instruments

Free smartphone app **GENNECT Cross**



Instruments with Bluetooth® wireless communications



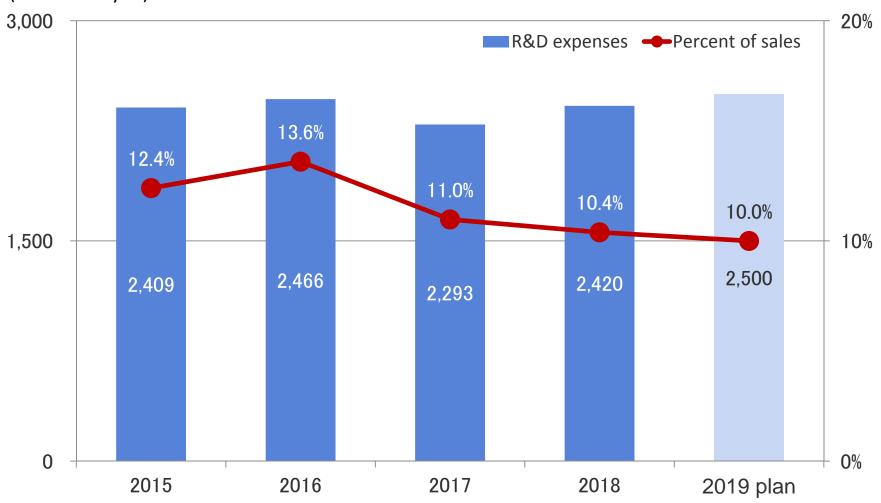


HIOKI is bringing functionality that allows measured values to be entered on drawings and photographs to all models.

Shorter work times and improved convenience in the field

Trend in R&D Expenses





Management Policies

- Providing high-quality products and service of the highest caliber
- Link our dividend to business performance based on the ideal of consistently returning ¥20 of profit to investors and with a view to achieving a dividend ratio of 40%
- Increasing the transparency and objectivity of management in accordance with our corporate governance code



4. Reference Materials

HIOKI

HIOKI's Corporate Vision



Management Vision

One and Only Products and Services

Management Policies

Eight Management Policies

The HIOKI Philosophy

Respect for Humanity

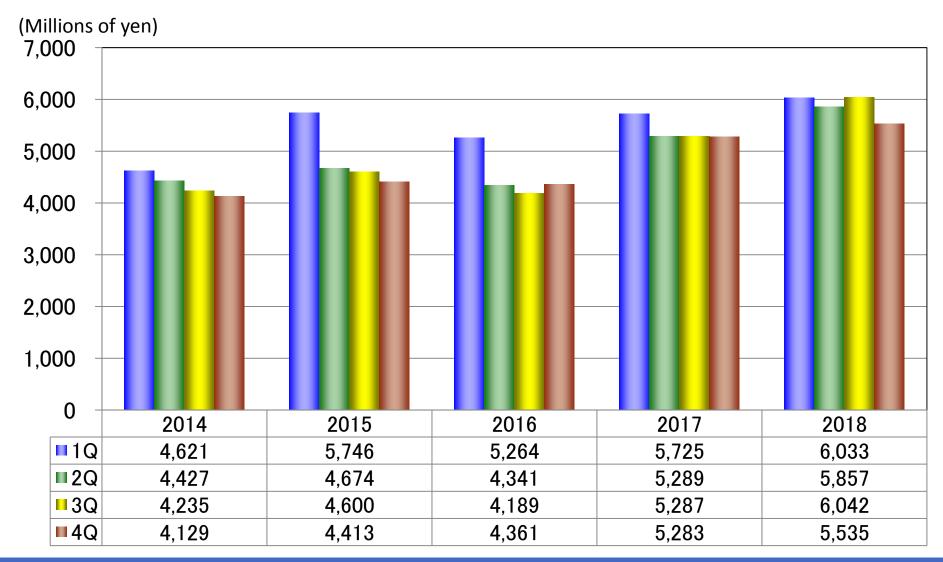
Developing potential and respecting individuality and aptitude

Contribution to Society

Practicing environmental management and fostering the development of the leaders of the future

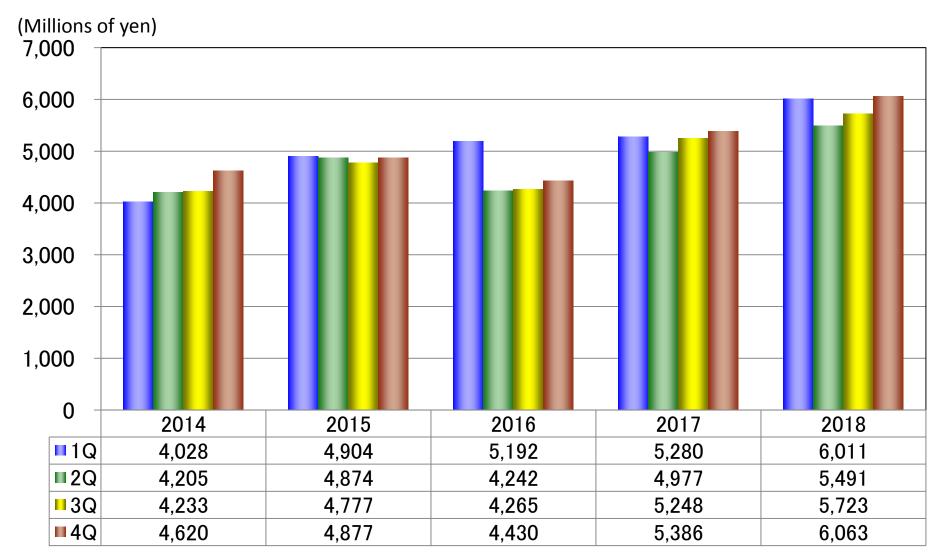


Quarterly Order Volume



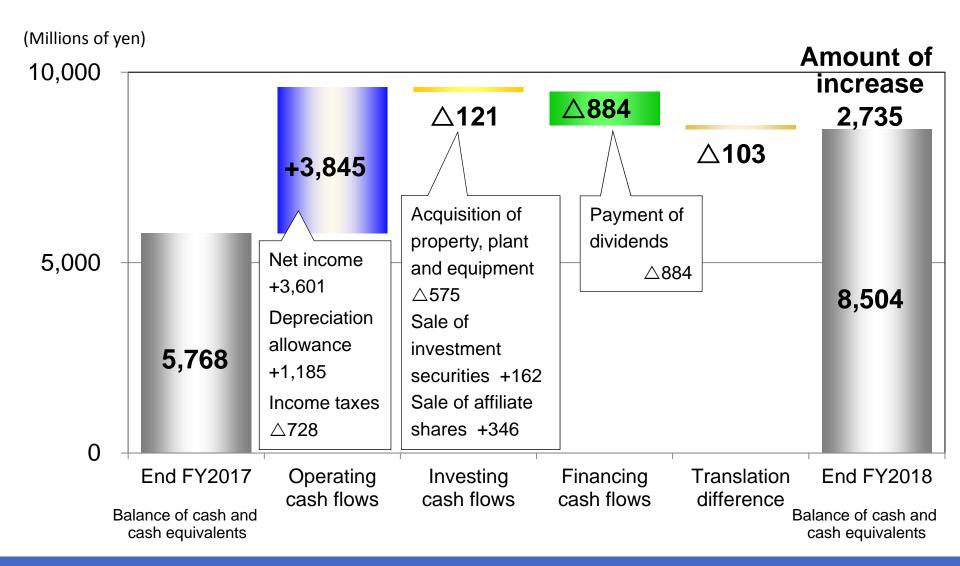


Quarterly Sales

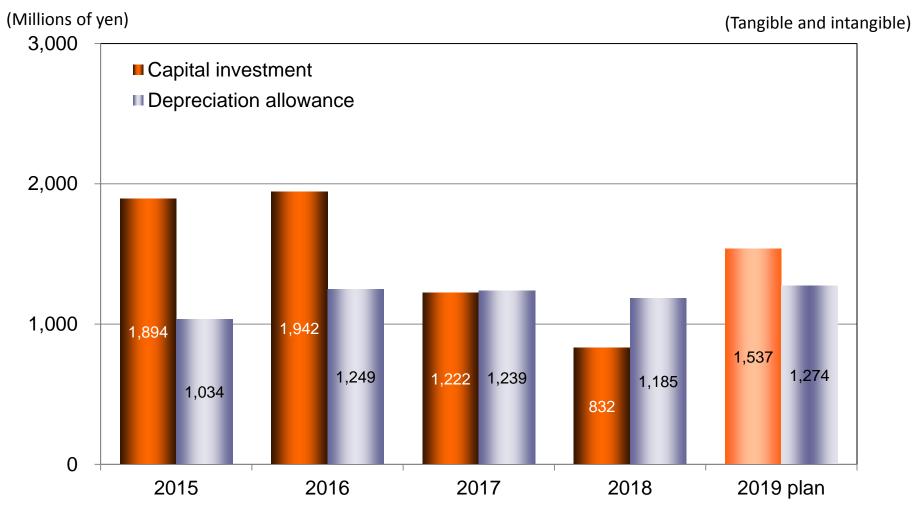




Cash Flows



Capital Investment and Depreciation Allowance



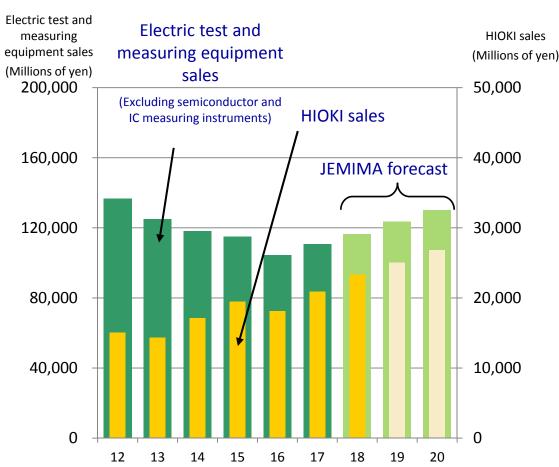


Business Environment in the Electrical Measuring Instruments Industry and Future Outlook

*Japan Electric Measuring Instruments Manufacturers' Association (JEMIMA) forecast

The industry is expected to grow at an average rate of 4.2% from FY2018 to FY2022.

Drivers of growth include the need for faster networks and increased capacity due to the introduction of 5G-capable smartphone and IoT devices that will become available worldwide starting in 2019, growth in the wearables market, progress in self-driving and remote medicine, and the need to distribute video from the Tokyo Olympics and Paralympics. These factors are expected to combine to increase demand for instruments used in design validation and maintenance applications.



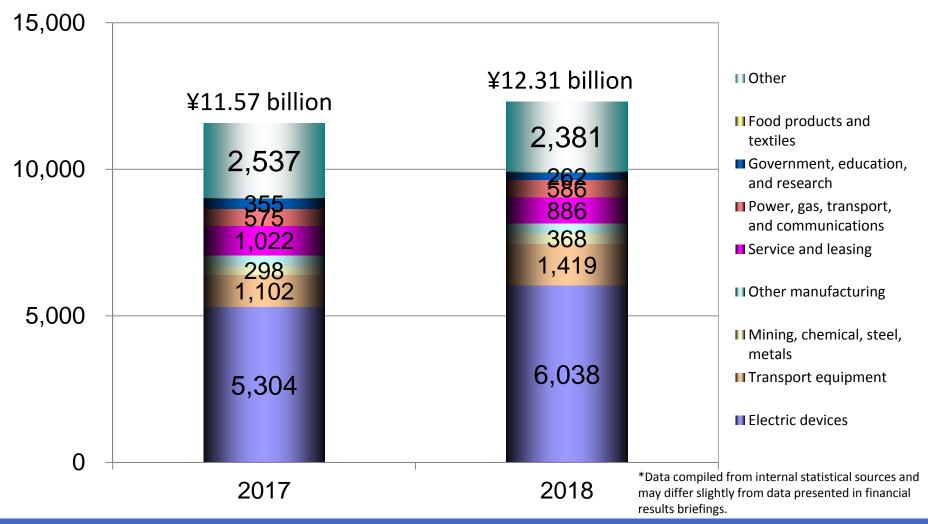
^{*} As defined by JEMIMA, electric test and measuring equipment accounts for about 30% of electricity meters. Under the JEMIMA classification scheme, HIOKI's products consist of general measuring instruments, obtained by excluding semiconductor and IC measuring instruments from the electric test and measuring equipment category.

^{*} Based on statistical data from the Japan Electric Measuring Instruments Manufacturers' Association. Sales figures for 2018 and subsequent years reflect JEMIMA forecasts (as of December 2018).



Trend in Sales (Domestic) by Industry

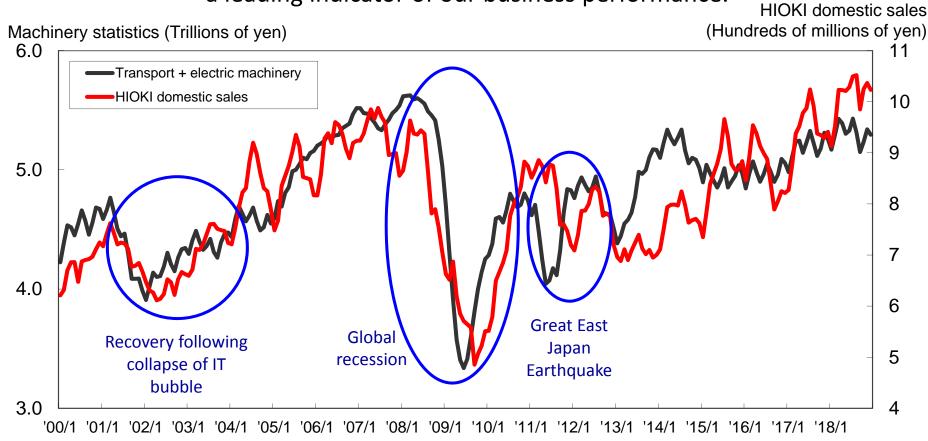
(Millions of yen)





Trend in Machinery Statistics and HIOKI Performance

We consider machinery statistics (for transport machinery and electrical machinery) a leading indicator of our business performance.



* Machinery statistics and HIOKI domestic monthly sales calculated as six-month moving averages. Machinery statistics reflect estimated production value based on the mining and manufacturing index.



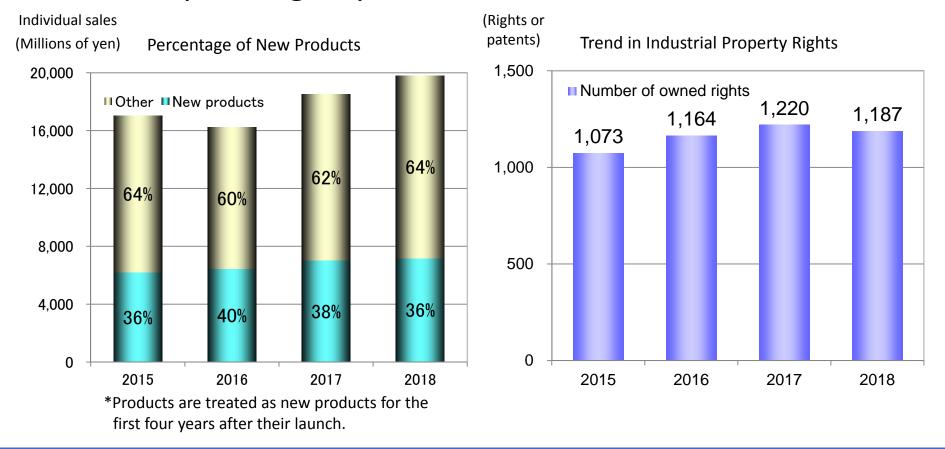
Improving Value-added Productivity

Concurrent engineering

In HIOKI's approach to Shared product development, Development concepts departments come together organically with the goal of improving productivity. Sales and Quality service Production

Development Capability: Unique Products Built around Core Technologies

- Patent program that motivates inventors
- R&D spending as percent of sales: Greater than 10%



Production Capability: Manufacturing Calibrated to Sales Velocity

Quality

Aggressively practicing a "Quality First" approach from the standpoint of the Three Reality principle based on the 5S philosophy

Cost

Enhancing initiatives at the source of development Minimizing cost through leveled production



Anticipating customer information and accommodating customer requests
Shortening delivery times for after-sales service

Sales Capability: Solutions-oriented Sales with a Customer Focus

Domestic Japanese sales

- Direct marketing targeting customers in Japan (about 55,000 companies)
- About 70 salespeople at 12 facilities in Japan
- About 20,500 sales visits per year



Global sales

- Eight group companies
- Two overseas representative offices
- Partnerships with international distributors (about 130 companies)



Assessing latent customer wishes and future needs



Automatic Test Equipment

Pass/ fail testing of electronic circuit boards

Principal products	Fields of use (applications)	
Populated circuit board testing systems	Testing circuit boards on which electronic components have already been mounted	
Bare board testing systems	Testing circuit boards with embedded active and passive devices or boards on which no components have been mounted (Including IC packages and flexible boards used in devices such as mobile phones)	



FA1240 FLYING PROBE TESTER



FA1811 Flying Probe Tester



FA1817 Flying Probe Tester

Reliable detection of latent defects on high-density circuit boards

Data Recording Equipment

 Recording and analyzing changes in electrical signals over time

Principal products

Fields of use (applications)

Memory recorders

Observing and recording waveforms for high-speed phenomena in an extensive array of applications ranging from the electric field to the machinery field



MR6000 Memory HiCorder

Developed in 1983

Data loggers

Monitoring and recording long-term changes in temperature, voltage, and other characteristics across numerous channels

Capable of capturing large amounts of data over extended periods of time





STATION

HIOKI

Electronic Measuring Instruments (1)

Evaluating and testing electronic components and devices

Principal products

Fields of use (applications)

Circuit element measuring instruments

Testing on electronic component production lines Evaluating the performance of materials

Fast, high-stability measurement in a compact, lightweight package



IM7585 Impedance Analyzer

Battery testers

Battery R&D and shipping inspections; measuring internal resistance and battery voltage

Extensive product line to accommodate a variety of batteries



Safety testers

Measuring the insulation resistance of electrical equipment and devices; withstand voltage testing

Broad product line for an array of applications



ST5520 Insulation Tester



Electronic Measuring Instruments (2)

 Power and power quality analysis in the environment and energy field

Principal products	Fields of use (applications)		
Power meters	Evaluating and analyzing inverters and motors Reducing energy use by electrical equipment; managing power		

PW6001 Power Analyzer

HIOKI developed the first clamp-type meter in 1978.

Power quality analyzers

Verifying the quality of dispersed power supplies such as alternative energy (solar and wind power, fuel cells, etc.) and cogeneration systems

Analytical devices capable of identifying the causes of power supply problems



PQ3100 Quality Analyzer

Current probes

Observing current waveforms

For use as oscilloscope sensors



CT6700 Clamp on Probe



Field Measuring Instruments

 Performing maintenance and inspections of electrical wiring work and equipment

Princi	nal	prod	ucts
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Fields of use (applications)

Clamp ammeters

Performing maintenance and inspections of electrical wiring work and equipment

A powerful brand with a long history



Performing maintenance and inspections of electrical work and equipment

A must-have instrument for electrical work

Digital multimeters

Measuring characteristics from voltage to current and resistance

Used in all applications



CM3289 AC Clamp Meter



IR4053 Insulation Tester for Photovoltaic Systems



DT4254 Digital Multimeter



Note on the Information in This Presentation

Plans, forecasts, strategies, and other information in this presentation relating to future business performance were compiled on the basis of currently available data and by their nature incorporate a certain degree of risk and uncertainty. Actual performance will be determined by a variety of important factors and may vary significantly.



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