

Financial Information

HORIBA, Ltd.

August, 2020

(This material was prepared for the 2020Q2 financial results briefing performed on the 20th Aug., 2020)

Contents

- 2020 First Half Results
- 2020 Forecast
- Outlines by Business Segments
- Our Contribution to Social Issues
 Topics of 2020 First Half
- Shareholder Return
- Financial Data
- Corporate Profile



Contents

- 2020 First Half Results
- 2020 Forecast
- Outlines by Business Segments
- Our Contribution to Social Issues
 Topics of 2020 First Half
- Shareholder Return
- Financial Data
- Corporate Profile

Review of 2020 First Half

External Events

- ◆ Economic contraction, driven by COVID-19 effects
- Downturn in the automotive industry
- Gradual recovery in capex by semiconductor makers
- Heightened interest in life science

Internal Events

- ◆ Continued business activities as much as possible despite the COVID-19 restrictions on public movement in various countries
- Implemented various emergency measures



2020 First Half Results

(Billons of Yen)

	2019	2020				
	1st half Results	1st half Forecast (as of Jun. 9)	1st half Results	vs 2019	vs Forecast	
Sales	91.6	84.0	84.9	-6.6	+0.9	
Operating Profit	8.2	5.5	6.6	-1.6	+1.1	
O.P.%	9.0%	6.5%	7.9%	-1.1p	+1.4p	
Ordinary Profit	8.0	5.5	6.7	-1.2	+1.2	
Net Income Attributable to Owners of Parent	5.7	4.0	4.8	-0.9	+0.8	
USD/JPY	110.06	110.00	108.23	-1.83	-1.77	
EUR/JPY	124.32	120.00	119.31	-5.01	-0.69	



2020 First Half Results by Segment

(Billons of Yen)

	Sales					Operating Profit				
	2019		2020			2019		2020		
	1st half Results	1st half Forecast (as of Jun. 9)	1st half Results	vs 2019	vs Forecast	1st half Results	1st half Forecast (as of Jun. 9)	1st half Results	vs 2019	vs Forecast
Auto	34.3	26.5	27.1	-7.2	+0.6	1.5	-1.3	-0.2	-1.8	+1.0
P&E	9.1	8.5	8.6	-0.4	+0.1	0.6	0.2	0.4	-0.2	+0.2
Medical	12.6	11.0	10.4	-2.2	-0.5	0.7	0.1	-0.0	-0.7	-0.1
Semi	22.7	26.0	27.4	+4.7	+1.4	5.3	6.5	6.4	+1.0	-0.0
Scientific	12.6	12.0	11.3	-1.3	-0.6	-0.0	-	0.1	+0.2	+0.1
Total	91.6	84.0	84.9	-6.6	+0.9	8.2	5.5	6.6	-1.6	+1.1

2020 First Half Results (B/S, CF)

B/S

- ◆Total assets were ¥309.6bn, down ¥5.4bn, owing to decrease in trade notes and accounts receivable.
- ◆Total liabilities were ¥140.5bn, down ¥2.9bn, due to decrease in accounts payable.
- ◆Equity ratio: 54.4%

(compared to the end of Dec. 2019)

CF

- ◆Operating CF: Cash in ¥15.3bn due to operating profit and collection of accounts receivable.
- ◆Investing CF: Cash out ¥5.0bn due to acquisition of tangible fixed assets.
- ◆Financial CF: Cash out ¥3.0bn due to payment of dividend.

Free CF + ¥10.3bn



Contents

- ■2020 First Half Results
- 2020 Forecast
- Outlines by Business Segments
- Our Contribution to Social Issues
 Topics of 2020 First Half
- Shareholder Return
- Financial Data
- Corporate Profile

2020 Forecasts

General



[Impact of COVID-19]

Economic activities are expected to resume after lifting of restrictions but the future remains uncertain.

Lingering impacts from COVID-19 are of concern.

Auto



The spread of COVID-19 is likely to depress automotive sales.

Automotive-related manufacturers are expected to reduce R&D spending.

P&E



Emerging countries may slow down introduction of environmental regulations.

Falling crude oil prices may result in reduction in investment by the oil industry.

Medical



The number of tests performed at hospitals is projected to continue declining, along with an anticipated decrease in the number of patients who visit hospitals.

Semi



Semiconductor manufacturers' capital expenditures are expected to pick up.

Medium- to long-term demand for semiconductors is solid.

Scientific



Energy-related demand will be sluggish, while demand in the pharmaceutical and life science sectors will be solid.

Demand for semiconductor-related measurement technologies is expected to grow.

Exchange rate

(Yen)

	2019		2020					
1st half Full year		Full year	Previous	recare			2H	Forecast
1st half	ruli yeai	Forecast (as of Jun. 9)	1Q	2Q	1H	ΖΠ	(as of Aug. 11)	
USD	110.06	109.03	110	108.86	107.60	108.23	105.77	107
EUR	124.32	122.03	120	120.08	118.54	119.31	120.69	120

1 yen O.P. sensitivity for 2020 Forecast (Yen appreciation/Full year)

USD -210 million yen

EUR -10 million yen

2020 Forecast

(Billons of yen)

	2019	2020				
	Results	Previous Forecast (as of Jun. 9)	Forecast (as of Aug. 11)	vs 2019	vs Previous Forecast	
Sales	200.2	187.0	188.0	-12.2	+1.0	
Operating Profit	20.9	15.0	15.0	-5.9	-	
0.P.%	10.4%	8.0%	8.0%	-2.4p	-0.0p	
Ordinary Profit	20.5	14.5	14.5	-6.0	-	
Net Income Attributable to Owners of Parent	15.4	10.5	10.5	-4.9	-	
Net Profit per Share (Yen)	367	248			-0	
ROE	9.3%	6.1%	6.1%	-3.2p	-	



2020 Forecast by Segment

(Billons of yen)

	Sales				Operating Profit					
	2019		2020			2019		2020		
	Results	Previous Forecast (as of Jun. 9)	Forecast (as of Aug. 11)	vs 2019	vs Previous Forecast	Results	Previous Forecast (as of Jun. 9)	Forecast (as of Aug. 11)	vs 2019	vs Previous Forecast
Auto	81.0	68.0	68.0	-13.0	-	6.4	0.5	0.5	-5.9	-
P&E	19.5	17.5	17.5	-2.0	-	1.6	0.5	0.5	-1.1	-
Medical	25.3	23.0	22.0	-3.3	-1.0	1.3	0.2	-	-1.3	-0.2
Semi	47.1	52.5	54.0	+6.8	+1.5	10.7	13.5	13.5	+2.7	-
Scientific	27.1	26.0	26.5	-0.6	+0.5	0.7	0.3	0.5	-0.2	+0.2
Total	200.2	187.0	188.0	-12.2	+1.0	20.9	15.0	15.0	-5.9	-

Contents

- **2020 First Half Results**
- 2020 Forecast
- Outlines by Business Segments
- Our Contribution to Social Issues
 Topics of 2020 First Half
- Shareholder Return
- Financial Data
- Corporate Profile



Auto

First Half Results and 2020 Forecasts

(Billions of yen)

— O.P.

2020 First Half Results

EMS, MCT¹

Delayed shipment and acceptance of products because of measures to restrict the movements of people and goods by various countries and regions

 $\underline{\mathsf{ECT}}^2$

Stagnant operations due to restrictive measures

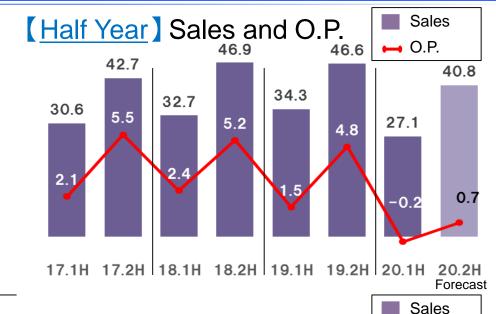
1: Mechatronics

2: Engineering Consultancy & Testing

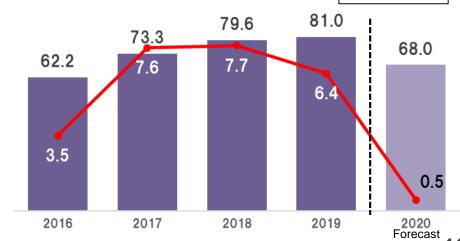
2020 Full Year Forecast

EMS, MCT, ECT

- To be impacted by reduction in R&D spending by automotiverelated manufacturers.
- Expect diversification of powertrains for next-generation vehicles and acceleration of CASE³ to boost R&D in the medium- to long-term.







3: Abbreviation of Connected, Autonomous, Shared, and Electric



P&E

First Half Results and 2020 Forecasts

(Billions of yen)

Sales

2020 First Half Results

【Stack gas analyzers, Air quality monitoring, Process】

- Sales decrease in Japan, owing to COVID-19 effects
- Increase in production of Infrared Thermometers (Water quality)
- Sales decrease in Asia, owing to the spread of COVID-19



[Stack gas analyzers]

- Expect an increase in replacement demand in Japan. (Water quality)
- Demand will remain sluggish in Asia and also be sluggish in Japan. [Process measurement equipment]
- Demand will remain sluggish due to falling crude oil prices.







Medical First Half Results and 2020 Forecasts

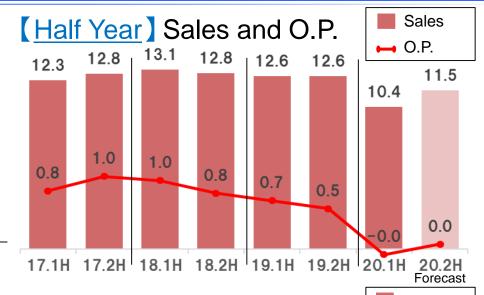
(Billions of yen)

2020 First Half Results

The number of tests performed at hospitals decreased as the spread of COVID-19 led to a decrease in the number of patients who visit hospital; consequently, segment sales decreased.

2020 Full Year Forecasts

- The number of tests performed at hospitals is projected to continue declining, along with an anticipated decrease in the number of patients who visit hospitals.
- Demand will recover in the medium- to long-term; sales to the domestic practitioner market and the hospital market are expected to expand.
- Demand for a new product, Banalyst,* is expanding.





Blood glucose/HbA1c measurement equipment



Semi

First Half Results and 2020 Forecasts

(Billions of yen)

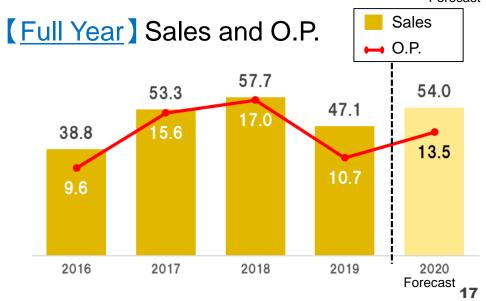
2020 First Half Results

- Demand fell from the memory chip bubble level in 2018, bottomed out in 2019, and entered a recovery trend.
- Increase in demand for high-performance PCs and data centers associated with the expansion of telework and digital business.

Sales (Half Year) Sales and O.P. **₩** 0.P. 28.5 27.4 26.5 25.4 24.7 24.4 22.7 5.3 17.1H 17.2H 18.1H 18.2H 19.1H 19.2H 20.1H 20.2H **Forecast**

2020 Full Year Forecasts

- Bookings and sales to semiconductor manufacturing equipment makers are expected to remain at high levels due to further miniaturization and 3D-integration.
- From a medium- to long-term perspective, semiconductor demand will increase due to the progress of 5G and IoT.
- Demand for various monitoring technologies will increase as manufacturing processes become complicated.





Scientific First Half Results and 2020 Forecasts

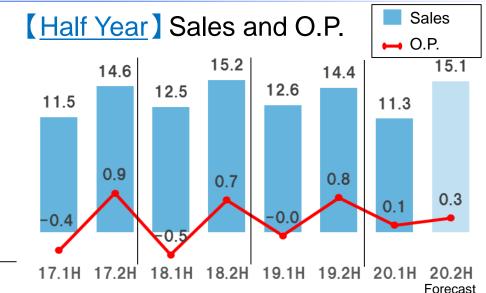
(Billions of yen)

2020 First Half Results

- Sales of Raman Spectrometers decreased in Japan as the spread of COVID-19 depressed corporate activities.
- Academic demand was also sluggish worldwide.
- Operating income increased, due to reduction in selling and other expenses.

2020 Full Year Forecasts

- Expect an increase in demand for optical components for semiconductor production equipment manufacturers and life science purposes.
- Expect demand expansion in life science research such as pharmaceuticals.
- Will launch a new product of Raman Spectrometers, "LabRAM Soleil™"





Contents

- ■2020 First Half Results
- 2020 Forecast
- Outlines by Business Segments
- Our Contribution to Social Issues
 Topics of 2020 First Half
- Shareholder Return
- Financial Data
- Corporate Profile



HORIBA's Contribution to Social Issues

Social issues revealed by the spread of COVID-19

Solution

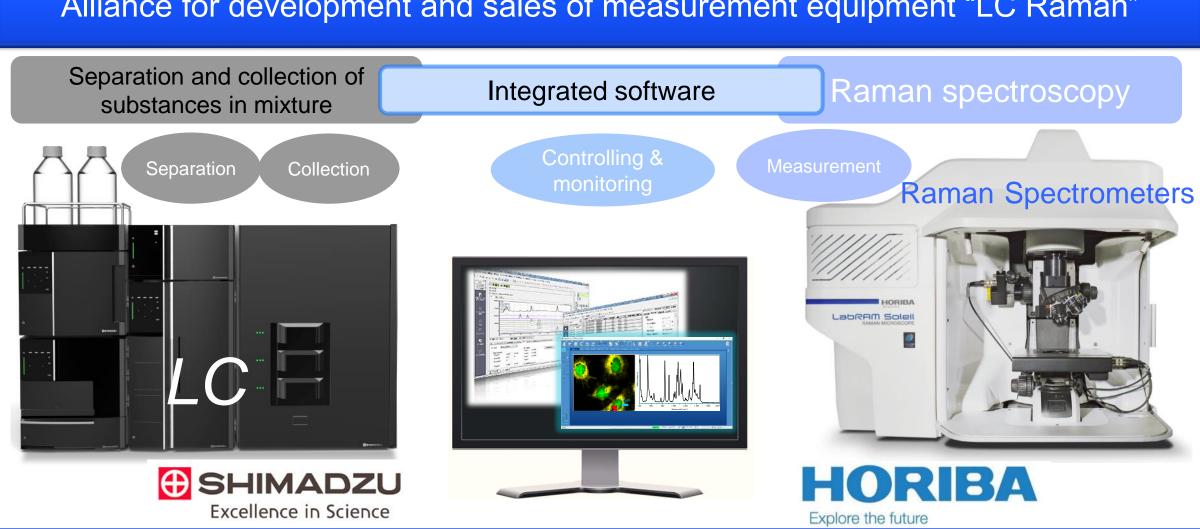
Coldiell									
	Three fields where HORIBA is focusing								
Market	Energy & Environment	Bio & Healthcare	Materials & Semiconductor						
Main Target	Mobility, Power generation, Environmental preservation, Water	Clinical diagnostic, Pharmaceutical, Drug discovery, Cells, DNA	Advanced materials, Materials for semiconductor						
	Market Oriented Business								

Mid-Long Term Management Plan "MLMAP2023"



Cooperation with SHIMADZU

Alliance for development and sales of measurement equipment "LC Raman"





Creating Solutions by Cooperation with SHIMADZU

Development of applications in the drug discovery, food, and agricultural fields

	LC	Raman spectroscopy	LC Raman
Quantitative accuracy of target substances	Extract only the target to be measured from mixed samples	Not good at measuring mixed samples	
Ability to estimate unknown substances	Not good at identifying non-target substances	Ability to identify unknown substances from differences in molecular structure	

Expand fields that utilize life science technologies SHIMADZL **HORIBA Necessities of new** technologies in the materials and energy fields

Integration of LC and Raman enables the following:

- Search and collection of naturally-derived unknown functional substances → Apply for unknown compounds of drug discovery, food, agriculture, etc.
- Supporting new bio-markers' search for biological samples
- Support work on the structure of new materials and byproducts

- → Develop new health indicators and diagnostic methods
- → Develop highly-functional and low-environmental-impact materials



Our response to COVID-19

Joint development of COVID-19 antibody test chips

Part of the project "Development of a system for COVID-19 reliable rapid diagnosis" (Supported by METI and Japan Medical Research and Development Organization)

AIST

Established high-speed and highly-accurate immunoassay (measurement in 15 minutes at minimum)



HORIBA

Develop <u>equipment</u>
(to be used as a practical medical device)



VisGene*

Develop measurement application

* VisGene, Ltd. (Osaka U. venture)

Utilizing technologies developed by HORIBA

Immunoassay

An assay method that takes advantage of the property that the antibody formed in the animal body and its antigen specifically react

Reagents for measuring pesticides by immunoassay measurement kit SmartAssay series



In-Vitro-Diagnostics



Various tests to be performed on samples collected from the human body, such as blood

Centrifugal blood analyzer Yumizen M100 Banalyst

Aiming for launch as a fully-automatic measuring equipment



High value-added solutions for semiconductor manufacturing processes

A key point for improvement in yield: Detection of foreign substances

Expecting business expansion in the EUV process

Semicon. manufacturing processes

HORIBA's response

Reticle/mask manufacturing process

Blank mask inspection

Photolithography/ wafer process Inspection of three surfaces (Pattern, Glass, Pellicle)

Pellicle inspection

Various mask sizes/ board inspection

A clean product adjustment room started operation



- ✓ Area to develop prototypes and produce special products by the PR-PD Series foreign substance inspection equipment
- ✓ Started operation at HORIBA's headquarters in June 2020



PR-PD3EP

High-accuracy detection of foreign substances on EUV-process pellicles



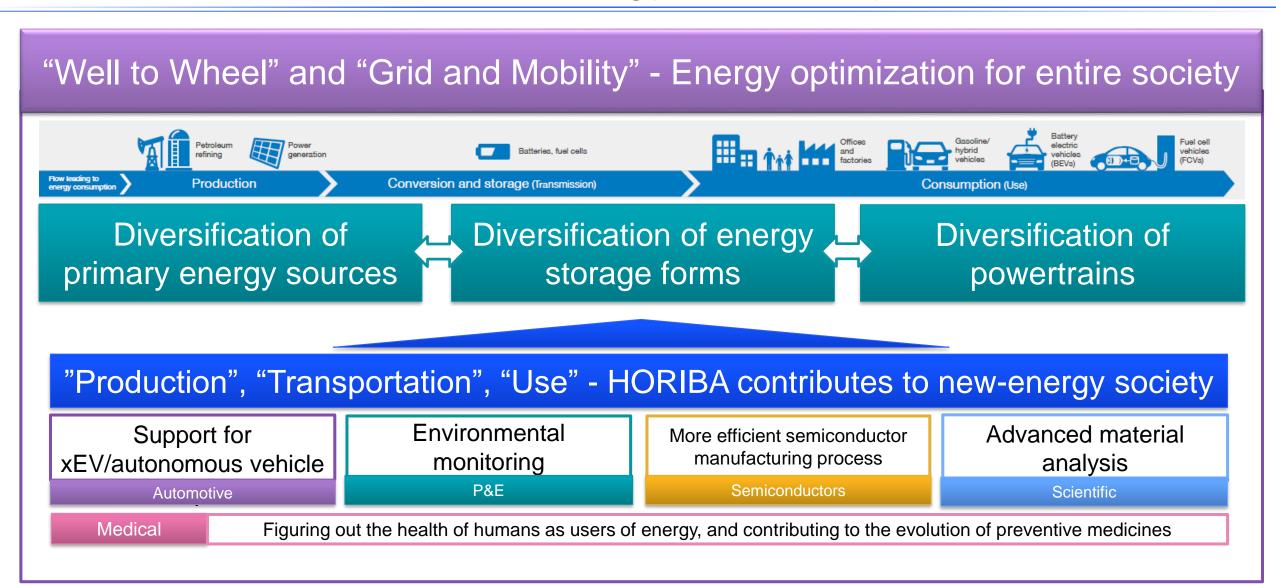
PR-PD2BLI

Inspection of blank masks at various stages of the mask manufacturing process

[Representative products]



HORIBA's Thoughts on Energy in Society





Approach to Capital Investments and R&D

Capital Investment

- Continue strategic investment from a long-term perspective
 - ✓ Continue large-scale capital investment such as construction of new facility in China
 - ✓ Scrutinize renewal investment and others and implement from the most urgent

2020 Forecast: ¥17.5bn

R&D Investment

- Continue investment, looking ahead of demand recovery period
- Consider priority of investment

2020 Forecast: ¥16.0bn



Construct in Jiading, Shanghai (Architectural rendering)

Construction of a new facility in China

- Start operation in 2021
- Total cost: approx. ¥9.0bn
- New base for development, production, and after-sales service



Construct in the same premises as HORIBA HQ, Kyoto (Architectural rendering)

Building a new HQ for HORIBA TECHNO SERVICES

- Start operation in Dec. 2020
- Total cost: approx. ¥3.8bn
- Promote service business such as product maintenance and contract testing by constructing a new company building



Construct in Magdeburg in Germany (Architectural rendering)

Construction of a new facility of HORIBA FuelCon

- Construction to be completed at the end of 2021
- Total cost: approx. ¥3.5bn
- Expand a production area that responds to demand

Contents

- **2020 First Half Results**
- 2020 Forecast
- Outlines by Business Segments
- Our Contribution to Social Issues
 Topics of 2020 First Half
- Shareholder Return
- Financial Data
- Corporate Profile

Shareholder Return

Dividends per share and Share buybacks

2018 Results 145yen [Interim 50yen/Year-end 95yem]

2019 Results 130yen [Interim 50yen/Year-end 80yen]

Ordinary dividend: <u>125yen</u> Commemorative dividend for the 65th anniversary of the company foundation: <u>20yen</u>

2020 Forecasts 75yen [Interim 30yen/Year-end 45yen]

(remains unchanged from disclosure on 9th June)

Basic policy

- > Dividend payment + Share buyback = 30% of Consolidated net profit to be targeted
- Remaining earnings are retained internally for strategic investment (i.e. facilities, M&A)

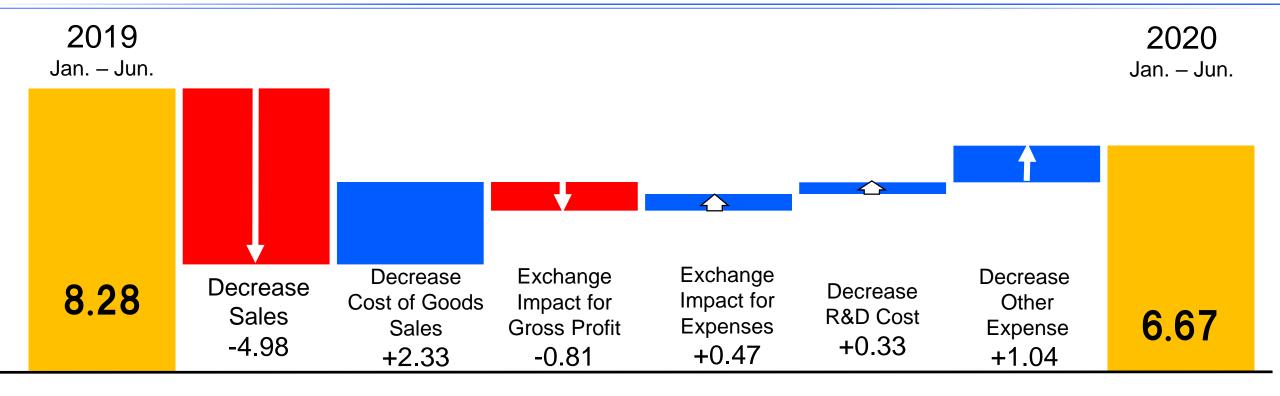
Contents

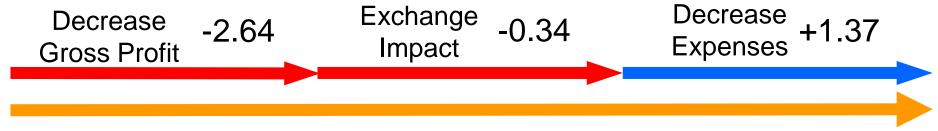
- **2020 First Half Results**
- 2020 Forecast
- Outlines by Business Segments
- Our Contribution to Social Issues
 Topics of 2020 First Half
- Shareholder Return
- Financial Data
- Corporate Profile



Operating Profit Analysis (vs 2019)

(Billions of yen)





Decrease Operating Profit -1.60



Impact of Fluctuation in Foreign exchange

Exchange rate impact (2020 First Half results)
Sales -¥1.64bn O.P. -¥0.34bn

2020 First Half results	vs 2019
Decrease Sales	- 1.64
Decrease Cost of Goods Sales	+ 0.83
Decrease Expenses	+ 0.47
Impact to Operating Profit	- 0.34

(Yen)	2019 1st Half	2020 1st Half	Diff.
USD	110.06	108.23	-1.83
EUR	124.32	119.31	-5.01

Exchange rate impact
for 2020 Forecast
1 yen impact of Sales and O.P.
(Yen appreciation)

Sales

USD -¥0.46bn

EUR -¥0.32bn

Operating Profit

USD -¥0.21bn

EUR -¥0.01bn

(Yen)	2020 Forecast
USD	107.00
EUR	120.00



Capital Investment, Depreciation, R&D

(Billions of yen)

	2019		2020)		2019	2020
	Results	Previous Forecast (as of Feb. 14)	Forecast (as of Aug. 11)	vs 2019	vs Previous Forecast	1st half Results	1st half Results
Capital Investment	12.8	20.0	17.5	+4.6	-2.5	5.1	6.1
Depreciation	8.7	9.5	9.5	+0.7	-	4.2	4.7
R&D	16.2	17.5	16.0	-0.2	-1.5	8.2	7.8
(To Net Sales)	8.1%	8.1%	8.5%	+0.4p	+0.4p	9.1%	9.2%

-PP&E:

2020 Topics Enhance the base of service business, investment to HORIBA MIRA, HORIBA FuelCon's new facility, a new facility in China

Scrutinize urgency and priority and make investment decisions



Consolidated Cash Flows

(Billions of yen)

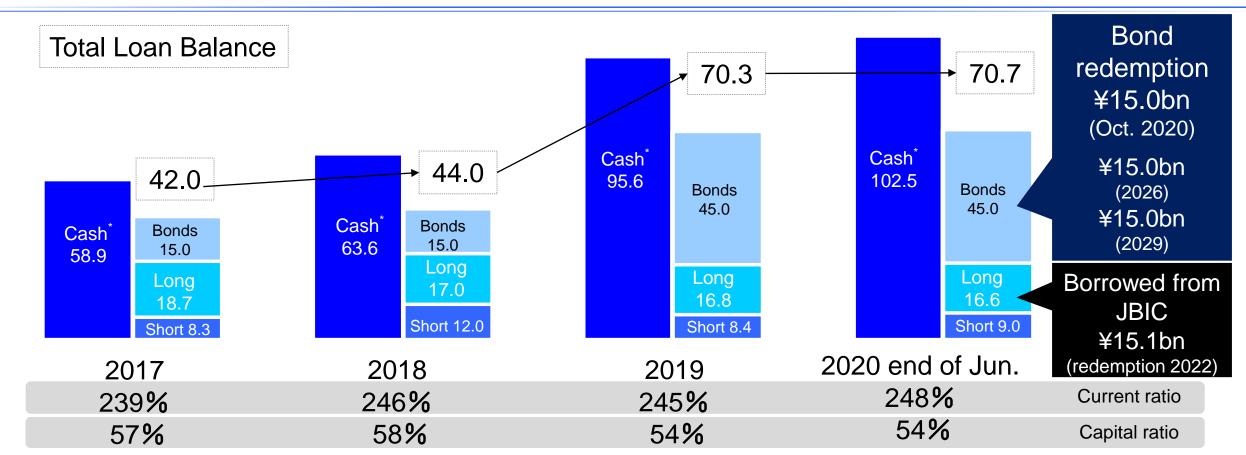
	2020 1st Half	2019 1st Half	Variation
Cash flows from operating activities	+15.38	+13.84	+1.53
Cash flows from investing activities	-5.00	-4.26	-0.73
Cash flows from financing activities	-3.09	-7.26	+4.16
Cash and cash equivalents at end of year	102.38	64.64	+37.74
Free cash flows	+10.38	+9.58	+0.80

HORIBA

Cash Balance

(Consolidated basis, each end of period)

(Billions of yen)



- Reduction of external borrowing through intra-group lending
- Recent issuer rating: R&I "A"(Oct. 2019), JCR "A+" (Aug. 2020)

Cash*...Cash and bank deposit at end of period

Contents

- **2020 First Half Results**
- 2020 Forecast
- Outlines by Business Segments
- Out Contribution to Social Issues
 Topics of 2020 First Half
- Shareholder Return
- Financial Data
- Corporate Profile

Business Segments

Automotive Test Systems



Process & Environmental



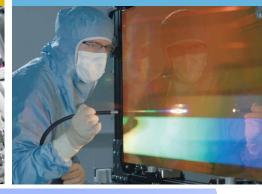
Medical



Semiconductor

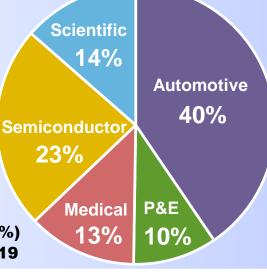


Scientific



Net Sales 200.2 billion yen

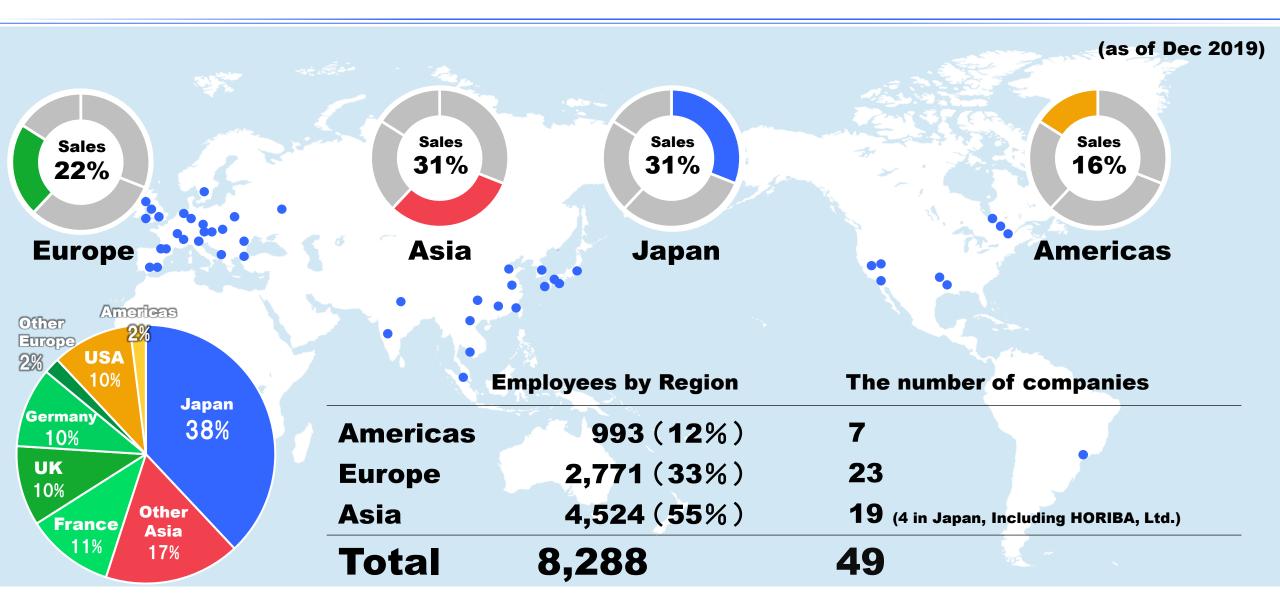
Sales by business segment (%) Fiscal 2019



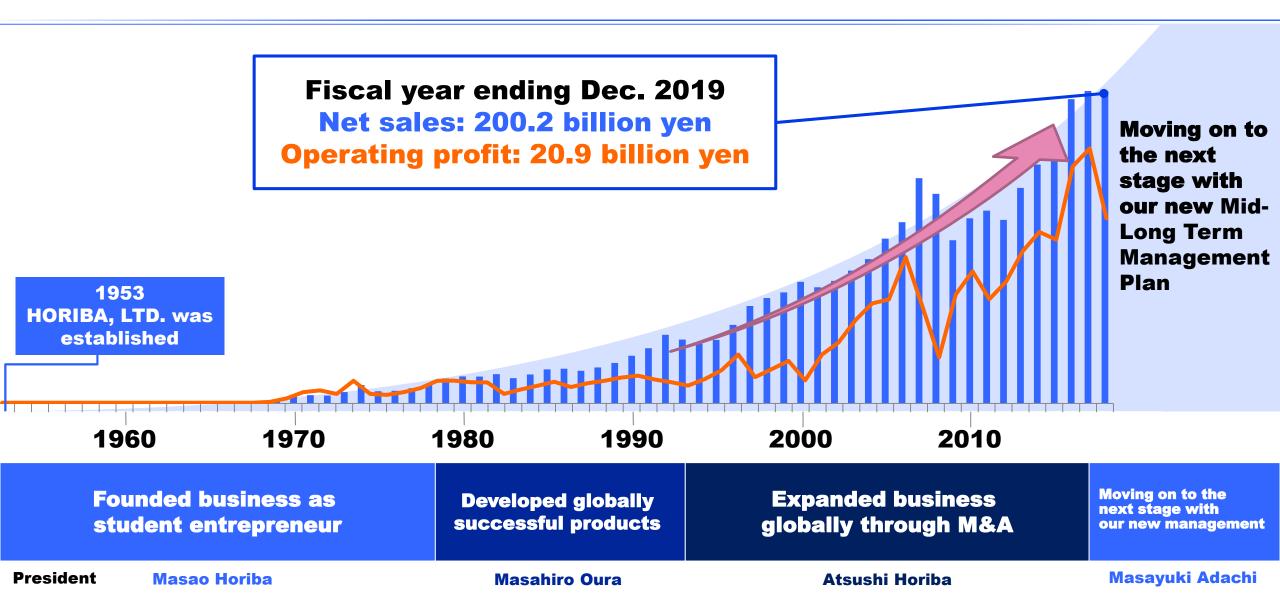
Expanding in New Domains and Moving onto a New Stage



Global Network



HORIBA's Steady Growth





- ◆ HORIBA MIRA Ltd.
- ◆HORIBA BIWAKO E-HARBOR

HORIBA MIRA Ltd.

Providing Engineering Service with World Leading Mobility Development Capability and R&D Location with Dedicated Facilities and Proving Ground

Business Offering 1. Vehicle development engineering

2. Test engineering

3. MIRA Technology Park

(Providing Unique R&D Location)

Established 1946

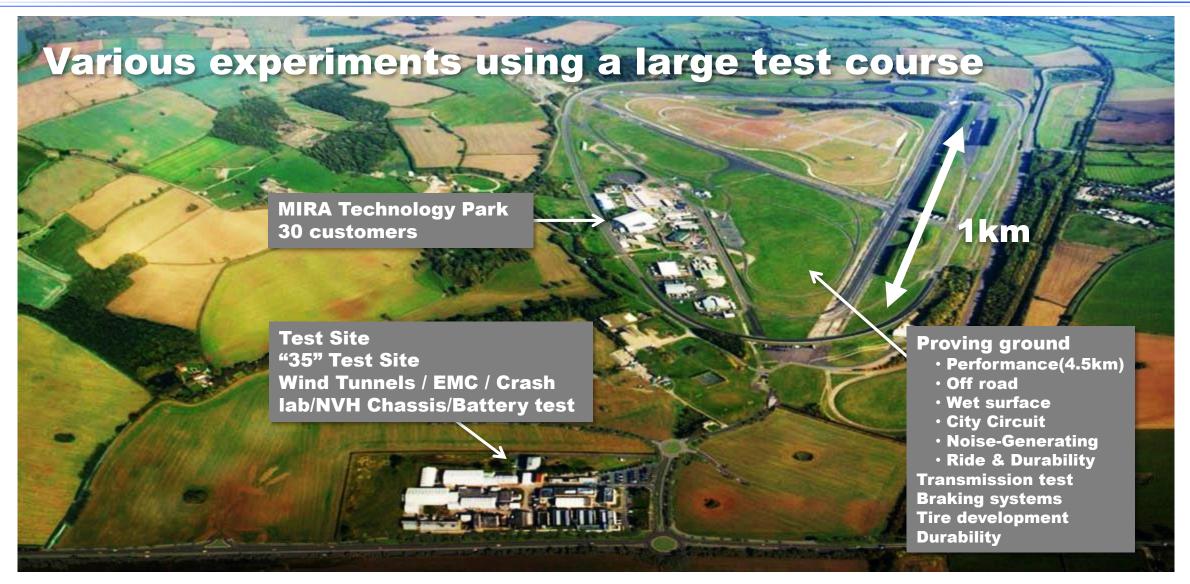
Head office Nuneaton, Warwickshire, UK

Major locations U.K., China, and India





MIRA Technology Park



HORIBA BIWAKO E-HARBOR

- Consolidating development, design, and production operations of gas measurement equipment at a single location
- Doubling of production capability and shortening delivery time to one-third by using a new production methodology
- Comprehensive engineering services from sales to development, production, and maintenance in the Automotive testing laboratory



- Profitability improvement of exhaust gas analyzers
- Presenting cutting edge automotive development technology

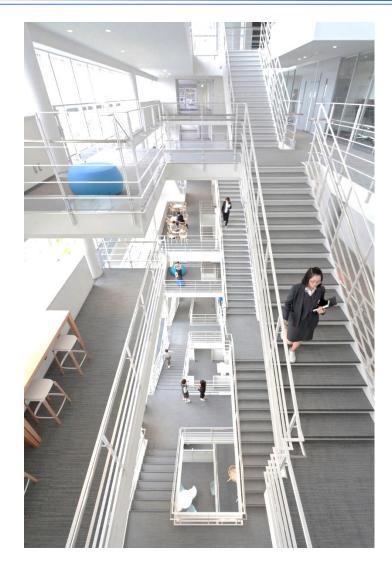




Total investment: 10.0 billion yen, Location: Otsu City, Shiga Prefecture, Full operation: May 2016



HORIBA BIWAKO E-HARBOR

















Thank you

Omoshiro-okashiku Joy and Fun

감사합니다 Cảm ơn ありがとうございました

Dzi e kuj e धन्यवाद

Grazie

Merci

谢谢

நன்ற

ขอบคุณครับ

Obrigado

Σας ευχαριστούμε

شُكُرا

Tack ska ni ha

D

Большое спасибо

Danke

Gracias