

Business overview by region

Sales by region

Japan

- Steady growth and high market shares for products that are related to R&D applications and environmental regulations.
- Plan to open a development and production base for the Automotive Test Systems and Process & Environmental Instruments & Systems businesses in Shiga Prefecture.

35%

Yen

Asia

- Expect high growth in China, India, and Southeast Asian countries.
- Use know-how accumulated in Automotive Test Systems, Medical-Diagnostic and Process & Environmental Instruments & Systems segment businesses in developed markets for expansion.

23%

U.S. dollars

Americas

- High potential for expanding market share in this market that represents 40% of global demand for analytical and measurement instruments.
- Focus on product development and marketing for the medical and semiconductor markets.
- The reagent plant in Brazil added capacity in the Medical-Diagnostic Instruments & Systems segment.

18%

Europe

- Sales increased thanks to the effects of the corporate acquisition and the business acquisition.
- The new R&D Center in Paris, France opened as a core product development facility in Europe.
- A development facility is scheduled to open in Montpellier, France with the aim of launching next-generation medical products.

24%

Euro

36%

Automotive Test Systems



Strong support for automotive development

HORIBA's automotive EMS (emission measurement systems) have been adopted as the primary standard by national certification bodies in many countries. This recognition has led to a commanding top position in the industry with an 80%* global market share. Business acquisitions have expanded our product lineup into complete turnkey systems for automotive development. These test systems are used at the forefront of research and development and quality control. Our test systems are indispensable for developing new types of engines, such as gasoline, diesel, hybrid electric powertrains and alternative fuel engines. We expect to experience an increase in demand for our automotive development instruments.* HORIBA's estimate

Risk factor	The global automotive industry's shifting R&D investments
Principal products	Emission measurement systems, automotive emission analyzers, onboard emission measurement systems, driveline test systems, engine test systems, break test systems, drive recorders
Major customers	Automobile manufacturers, automotive component manufacturers, multipurpose motor manufacturers, government regulatory agencies, oil companies, automotive maintenance and repair centers
Product applications	Development of new gasoline, diesel and hybrid powertrains, vehicle certification and quality control, in-use vehicle inspections

Medical-Diagnostic Instruments & Systems



Proactive product development in a large stable-growth market

HORIBA medical products are primarily blood testing instruments and reagents for the in-vitro diagnostics market, with over ¥2 trillion in global annual sales. The segment's business model is based on earnings generated from reagents sales. HORIBA sells its original small and medium-sized blood cell counters in the diagnostic market for POCT*. We are endeavoring to boost instrument sales which will lead to expanded sales of testing reagents.

*Point-of-care testing (POCT) is defined as medical testing by a physician at or near the site where patients are located such as a surgery ward, a hospital ward, or a clinic for outpatients.

Risk factor	Changes in medical insurance systems in different countries
Principal products	Equipment for blood sample analysis (hematology analyzers, equipment for measuring immunological responses, clinical chemistry analyzers, blood glucose measurement systems)
Major customers	Medical testing centers, small to medium-sized hospitals, medical practitioners
Product applications	Health and diagnostic testing, disease diagnosis

19%

Semiconductor Instruments & Systems



Contributing to improve yield in semiconductor manufacturing processes

HORIBA's main products are mass flow controllers; devices that control gas and liquid flows in the semiconductor, solar cell, and LED (light-emitted diode) manufacturing process. Semiconductor products also include many other types of monitoring equipment for semiconductor production. HORIBA provides customers with high-level solutions that support technical advances in processing, miniaturization, and yield enhancement.

Risk factor	Significant fluctuation in demand caused by the "silicon cycle" in the semiconductor industry and investments related to LEDs, solar cells, and other energy sources
Principal products	Mass flow controllers, chemical concentration monitors, reticle/mask particle detection systems, residual gas analyzers
Major customers	Semiconductor production equipment manufacturers, semiconductor device makers, semiconductor cleaning equipment manufacturers
Product applications	Flow control of gases and liquids, monitoring of cleaning fluid concentrations in semiconductor manufacturing processes, semiconductor and LCD quality control inspections

17%

Scientific Instruments & Systems



Achieve a good balance with unique analytical measurement technologies and business operations

HORIBA provides over 500 types of instruments in the leading edge of scientific technology. We command leading market shares thanks to our high-level of analytical technology know-how and enhanced customer support. The Scientific segment develops basic analytical and measurement technologies, which play key roles in providing new technologies to other business segments.

Risk factor	Investment trend of national government agencies and other institutions Demand fluctuation following changes in environmental regulations
Principal products	pH meters, Particle-size distribution analyzers, X-ray fluorescence analyzers, Raman spectrometers, spectrometers, gratings
Major customers	Manufacturers, research institutions, universities, government agencies, electric power companies
Product applications	R&D, product quality testing, criminal forensics

17%

Process & Environmental Instruments & Systems



Providing analytical and measurement instruments for compliance with environmental regulations

HORIBA provides environmental measurement solution technologies in a wide range of fields for environmental preservation in various parts of the world. Together with the provision of process measurement technologies which fulfill analytical needs in manufacturing development, we ensure public safety, security, and health.

Risk factor	Demand fluctuation following changes in environmental regulations
Principal products	Stack gas analyzers, water quality analysis and examination systems, air pollution analyzers, environmental radiation monitors
Major customers	Manufacturers, government agencies, electric power companies
Product applications	Measurement of gaseous emissions, wastewater and water supplies, environmental pollution monitoring, environmental radiation measurement equipment

11%



Automotive Test Systems

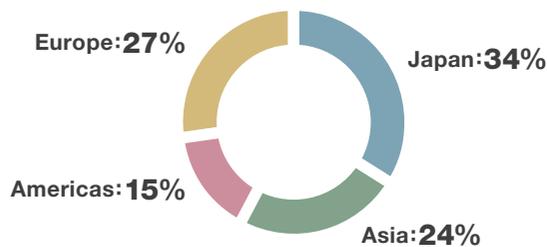
Sales breakdown

Sales breakdown by business divisions

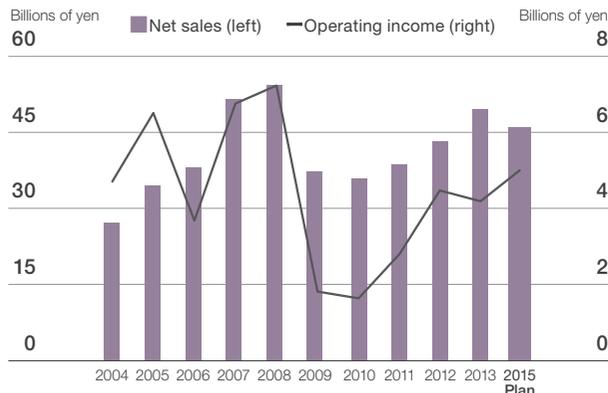
36%

Emissions business	67%
MCT business	30%
ITS business	3%

Sales breakdown by region



Net sales and operating income



MEXA has No. 1 global market share in emission measurement systems

Since introducing the first MEXA in 1964, HORIBA has been a pioneer in emission measurement systems. We have provided the global market with the latest technologies required for automotive development, meeting ever changing requirements. HORIBA's emission measurement systems command the top position in the industry with an 80%* worldwide market share and have been adopted as the primary standard by national certification bodies in many countries and by major global automotive manufacturers and their component suppliers. (*HORIBA's estimate)

We have delivered over 9,000 MEXA units to our customers. Anticipating a recovery in investment in the market, we plan to expand the sales of MEXA-ONE, which was introduced in 2012. We are committed to continuing support for automotive development by responding to increasing demand for the measurement of the emission characteristics of alternative fuels such as biofuel, and the measurement of emissions in more diverse applications such as construction machinery, ships, locomotives, and general purpose utility engines.

Fiscal 2014 Providing test and measurement systems for development of fuel-efficient vehicles

HORIBA increased sales in fiscal 2013, thanks to an increase in R&D investment by automotive manufacturers globally and the weakening of the yen. However, operating income was slightly lower than the previous year's level due to our increased investment in the development on the Intelligent Transport System (ITS) business.

In fiscal 2014, we are expecting automakers to continue their investment as competition within the industry intensifies. We will focus on improving the profitability of MEXA-ONE and expanding sales in the MCT business, providing efficient test and measurement systems for the development of new fuel-efficient vehicles.

Proposing HORIBA's total solutions for a wide range of applications

HORIBA offers a broad range of test and measurement systems for automotive development, including systems for vehicles, engines, powertrains, drivelines and brakes, as well as its mainstay MEXA-series emission measurement systems. This portfolio range enables us to respond to the diverse analysis and measurement needs of our customers. In addition to providing test and measurement equipment, HORIBA can also provide comprehensive support for test cell layout, design, and construction oversight of automobile R&D facilities. Through our unique business model, extensive product lineup, and project management know-how, we are aiming to grow sales and enhance profitability.

New Intelligent Transport System (ITS) business model

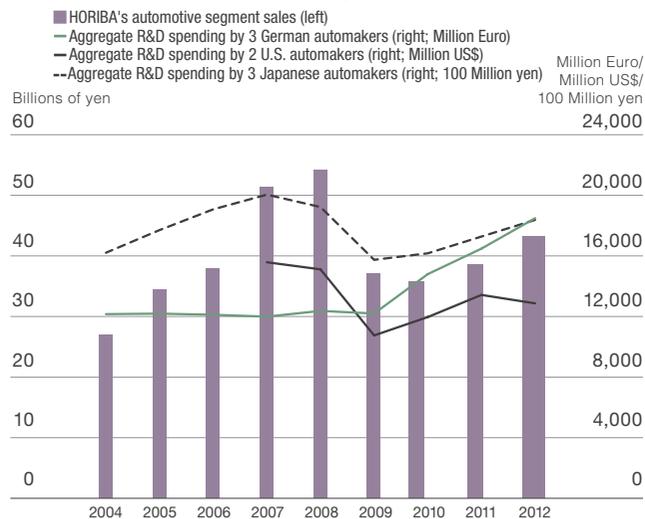
HORIBA started "HORIBA FLEET LINKAGE" services in November 2013. These services support safe driving and efficient fleet management. Cloud-stored data from HORIBA drive recorders and transport management systems (digital tachographs, etc.), is retrieved and analyzed to help fleet companies reduce fuel costs and manage their workload more efficiently.

HORIBA'S automotive business

HORIBA aims to expand sales and improve profit by focusing investments in emissions measurement systems and powertrain & driveline test systems.

HORIBA business divisions	Gasoline & diesel	Hybrid	Electric	Market size (Billions of yen)
Emissions business	Emissions measurement			40
MCT business	Engine performance tests			100
	Drivelines tests			30
	Vehicles, wind tunnel balances, brake tests			15
ITS business	Motor, battery measurement			
	Safety and ITS			10

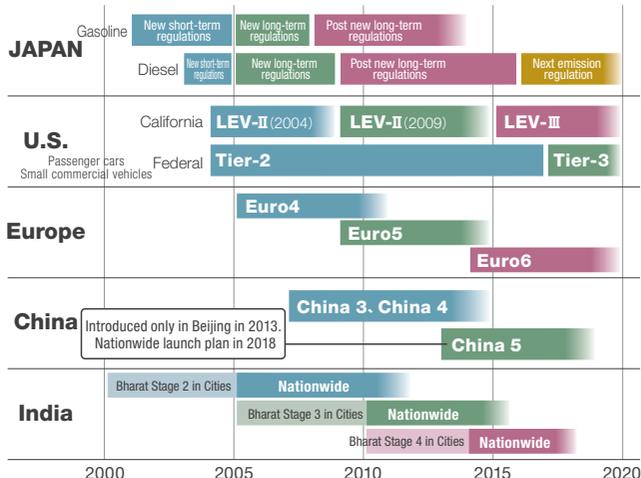
HORIBA's automotive segment sales and major automakers' R&D spending



Source: HORIBA's survey based on companies' disclosed materials

Trend of automobile-related regulations

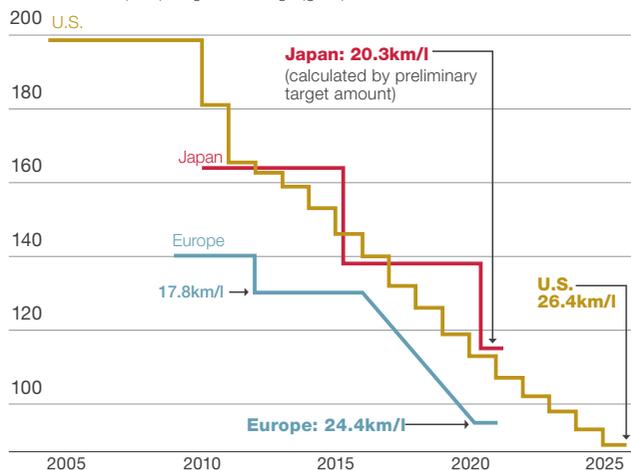
1. Progression of emission standards by region/country



Sources: HORIBA's survey based on materials of the Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; Japan Automotive Manufacturers Association Inc.; and others

2. Automotive fuel efficiency (CO₂ emission) standards of Japan, U.S., and Europe

Carbon dioxide (CO₂) weighted average (g/km)



Sources: HORIBA's survey based on materials of the Ministry of Economy, Trade and Industry, Japan Automotive Manufacturers Association Inc., and others

Major products and market shares

NOTE: Market shares quoted are estimates by HORIBA.

Emission measurement systems

80% 38%

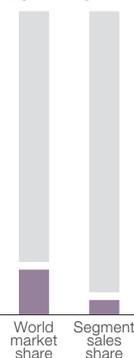


These systems continuously and simultaneously measure a wide range of gaseous and particle components in emission gases over a broad range of concentrations. They are widely used in R&D and engine/vehicle certification in the automotive industry.



Driveline test systems

15% 5%



The driveline is an extremely important part of the overall powertrain that transmits energy from engines or motors to the vehicles' tires. HORIBA's driveline test systems will use the latest simulation technology for a wide range of powertrain and driveline testing applications. HORIBA's strength is demonstrated by providing flexible systems based on custom and open solutions.





Medical-Diagnostic Instruments & Systems

Sales breakdown

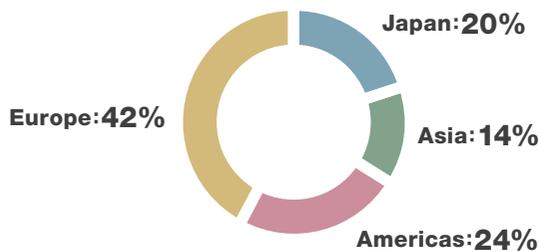
Sales breakdown by business divisions

19%

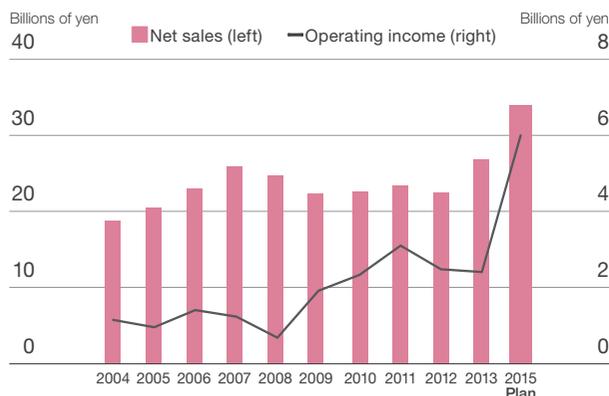
Testing reagents	53%
Medical diagnostic instruments	38%
Service and maintenance	9%

The ratio of reagents sales at HORIBA's Medical-Diagnostic Instruments & Systems segment has been stable at around 50-55%. Going forward, while an increase in sales in Asia may temporarily lower the sales ratio of testing reagents, we view positively such a temporary decline in the ratio which occurs in line with higher instruments sales growth.

Sales breakdown by region



Net sales and operating income



Stable business model supported by sales of reagents

The business model for HORIBA's Medical-Diagnostic Instruments and Systems segment features expansion in the installed base of HORIBA medical-diagnostic instruments such as hematology and chemistry analyzers to generate stable profits from growing reagent sales.

Our products are used in blood testing, biochemical and other clinical areas that are directly linked to assessing and diagnosing personal health. As such, the business is less sensitive to economic fluctuation, when compared to most other industries. Another characteristic of this segment is that currency risk has been diversified by having two bases for development and production, namely, Japan and France. Going forward, we aim to diversify risks and improve profitability by expanding exports of high-share distinctive and differentiated products from Japan.

Fiscal 2014 Reinforce product supply system for achieving sales growth in Asia

In fiscal 2013, Medical-Diagnostic Instruments & Systems segment sales increased year-on-year, partly due to the positive impact of the depreciation of the Japanese yen. However, lower export margins on products manufactured in France and advance investment in expansion of the sales network in North America caused a slight decrease in profits. Meanwhile, in order to address a surge in demand in Asia, we accelerated our efforts to expand sales of hematology and CRP analyzer, which has been a strategic product of Japan in the Chinese, Indian and other Asian markets, with the aim of a higher market share and improved profitability.

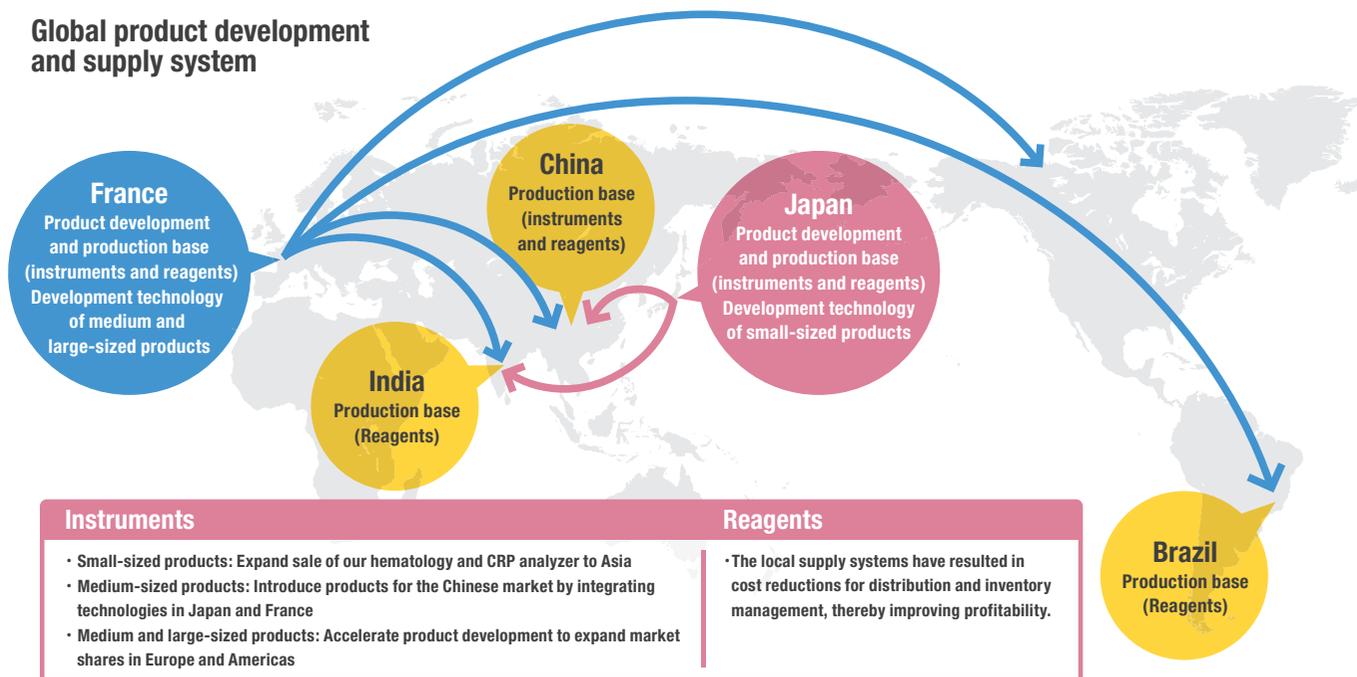
Our focus in fiscal 2014 is to strengthen the organization and speed up development of medium and large-sized products. In addition, we will strive to raise profitability when the expanded reagent plant in Brazil and a new reagent plant in India start full-scale operation.

Strengthen the organizational structure to develop next-generation products Aiming for stable supply of reagents

HORIBA ABX S.A.S. (France) will establish a new development base to accelerate the introduction of new products to expand the market share and address growing customer needs in Europe and Americas.

Regarding testing reagents, which are important profit sources in this segment, our strategy is to initiate local production of reagents in mass-consumption areas. The end result is to reduce costs of distribution and inventory management, to respond promptly to customer needs, and to improve profitability. We have been making steady progress accordingly. Reagent plants in Aso, Kumamoto Prefecture, and in China began operation in 2012 while a plant in India began operation and capacity expanded in Brazil in 2013.

Global product development and supply system



Joint initiatives to develop products for China, in Japan and France

We have been developing medium and large-sized products in France and small systems in Japan. In the case of “Pentra MS CRP”, a new medium-sized hematology and CRP analyzer, with the aim of selling in the Chinese market, we have succeeded in our development by merging the technologies of our bases in Japan and France. Triggered by the sharing of technological know-how through the development of the new product, our intention is to speed up new product development both in Japan and in France.



Pentra MS CRP

Business development by test category

Test category	Clinical chemistry	Hematology	Immunology	Coagulation
Market size	¥1 trillion	¥0.2 trillion	¥1 trillion	¥0.1 trillion
Hospitals	Large hospitals Testing centers	Hematology analyzer systems	Field in which HORIBA exhibits strength	
	Small and medium-sized hospitals	Clinical chemistry analyzers	Small and medium-sized hematology analyzers	CRP analysis
Private practitioners	Blood glucose measurement systems	Coagulation reagents		
Hospital units and surgery rooms (POCT*)				

*Point-of-care testing (POCT) is defined as medical testing by a physician at or near the site where patients are located such as a surgery ward, a hospital ward, or a clinic for outpatients.

Major products and market shares

NOTE: Market shares quoted are estimates by HORIBA.

Hematology analyzers

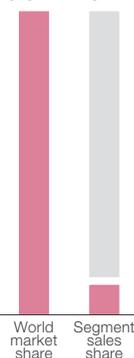
8% 80%



Blood tests are essential for diagnosis and assessing the health of people and animals. These analyzers check red and white blood cell counts as well as hemoglobin concentrations and platelet counts.

Hematology and CRP analyzers

100% 10%

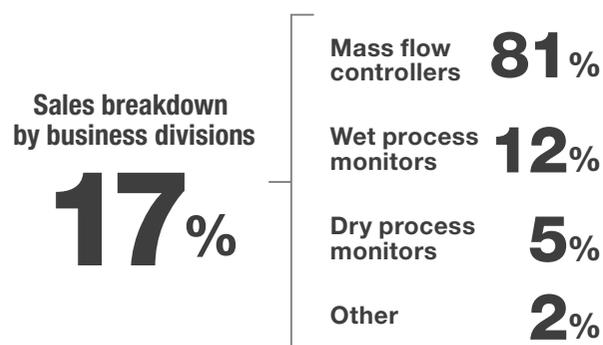


This is the first analyzer in the world to simultaneously measure blood cell counts and C-Reactive Protein (CRP), which the body produces in response to internal inflammation, thus facilitating faster and more accurate diagnosis.

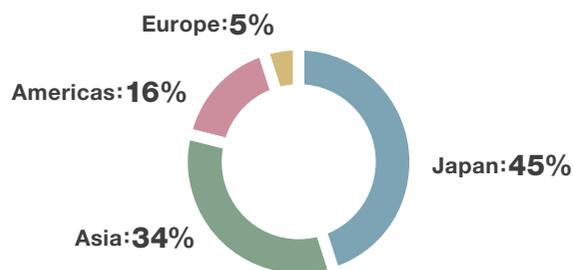


Semiconductor Instruments & Systems

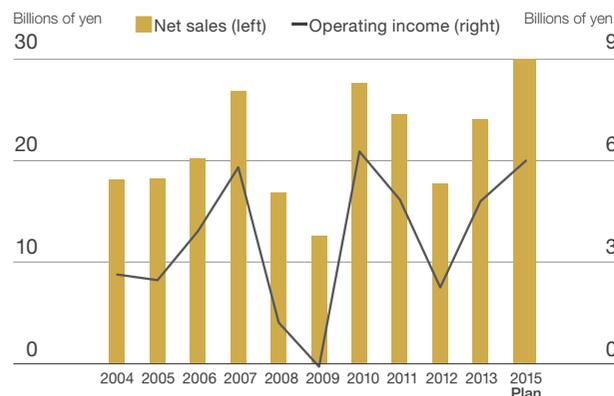
Sales breakdown



Sales breakdown by region



Net sales and operating income



Products that fulfill the needs of new markets and new applications

HORIBA has products used throughout the semiconductor manufacturing process such as mass flow controllers which are essential for dry chamber semiconductor manufacturing equipment, and chemical concentration monitors, which are used in semiconductor wafer cleaning and etching processes. In particular, our mass flow controllers have a leading 48%* global semiconductor market share. These highly sophisticated products satisfy customer requirements for improved productivity and performance enhancements in next-generation miniaturized manufacturing processes. HORIBA aims at further raising its market share. (*HORIBA's estimate)

Fiscal 2014 Response to strong demand and focus on developing next-generation products

In the first half of fiscal 2013, a rapid recovery in demand for semiconductors triggered favorable sales of mass flow controllers to makers of equipment for manufacturing silicon semiconductors and other products. We rapidly increased production for a broad range of products at our Aso plant, which had just completed a capacity expansion in 2012. HORIBA's global share of mass flow controllers is inching up, partly because our overseas customers in semiconductor manufacturing equipment-related makers are shifting more production to Asia.

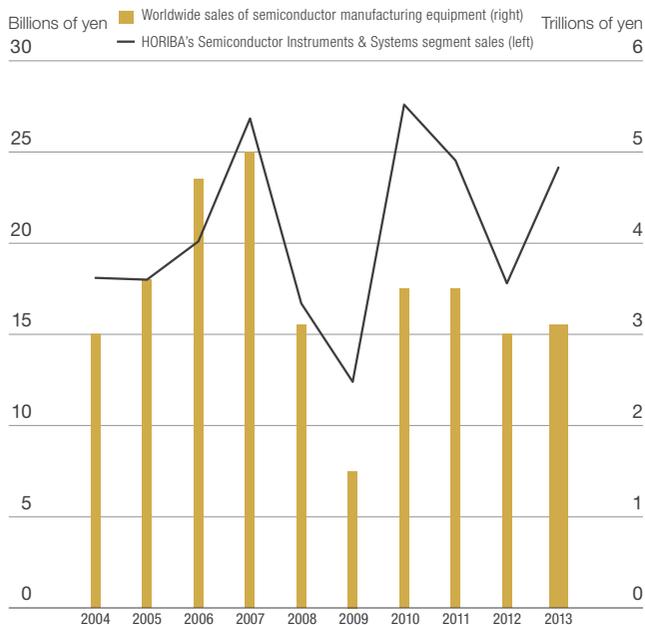
In fiscal 2014, we expect high levels of demand to persist for the first six months, but moving toward the second half of fiscal 2014, we need to watch carefully the investment outlook for semiconductor makers, particularly in South Korea and Taiwan. Another area we are focusing on is a potential increase in demand from makers of manufacturing equipment for solar cells and LEDs.

Expansion of sales in Asia, supported by strong trust from global semiconductor makers

Much of HORIBA's service strength lies in its capability to support customers in Asia. Our strategy is to expand our market share by earning more credibility not only from semiconductor, solar cell, and LED manufacturing equipment makers, but also from semiconductor device makers by developing enhanced, quality products that satisfy anticipated customer demand.

At the Aso plant, which is operated by the Semiconductor Instruments & Systems segment, we are building a system to adjust production with the needs of the Medical- Diagnostic Instruments & Systems segment. We are thus prepared to meet customers' delivery requirements during phases of expanding demand. Flexible plant management according to fluctuations in production demand is one of HORIBA's greatest strengths.

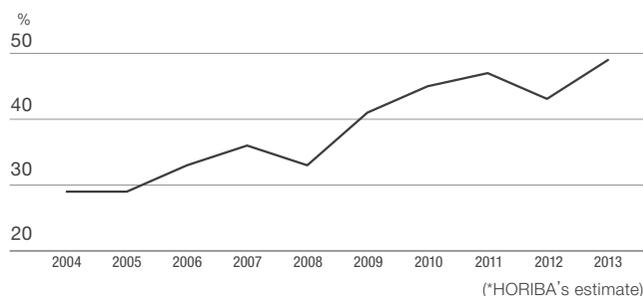
HORIBA's Semiconductor Instruments & Systems segment sales compared to worldwide sales of semiconductor manufacturing equipment



HORIBA's global market share for mass flow controllers

HORIBA has maintained more than 40%* of the global mass flow controller market share since fiscal 2009. It is noteworthy that our share expanded in the period from a downturn phase, which started in 2009 and lasted until a recovery in 2010, by successfully meeting our customers' needs through new product introductions and expanded production capacity. In our view, this is attributed to the success of our balanced management, which minimized the reduction in manufacturing investment and production capacity during a significant downturn in the market.

Our global market share rose to 48%* in fiscal 2013, as a result of an increase in the ratio of standard adoption at semiconductor manufacturers for new products and the shift of production to Asia by semiconductor manufacturing equipment-related makers. (* HORIBA's estimates)



Enhanced development facilities to accelerate response to customer needs

HORIBA STEC Kyoto Fukuchiyama Technology Center opened in 2013 as the first research-only facility. Its main focus is to develop mass flow controllers and next-generation advanced material control equipment.

Moreover, HORIBA Advanced Technology Center, which is under construction in a site adjacent to HORIBA STEC Co., Ltd., is scheduled to be completed by the end of 2014. By assembling our semiconductor sensor-related development teams at the Center, each group company's know-how will be brought together to enhance production technology. We also intend to accelerate development speed by promptly conducting actual gas and liquid tests on new sensors for use on manufacturing lines for mass flow controllers and other products. We will establish a structure to respond more quickly to the needs of semiconductors and semiconductor manufacturing equipment-related makers that are engaged in advanced research.



HORIBA STEC
Kyoto Fukuchiyama
Technology Center
(Fukuchiyama City,
Kyoto Prefecture)



HORIBA Advanced
Technology Center
(Kyoto City, Kyoto
Prefecture)

(Rendering)

Major products and market shares

NOTE: Market shares quoted are estimates by HORIBA.

Mass flow controllers

48% 81%



These high-precision gas and liquid controllers regulate flow rates in semiconductor manufacturing processes, typically in thin-film formation processes. They are indispensable components for high quality semiconductor and LED production.

Chemical concentration monitors

80% 12%

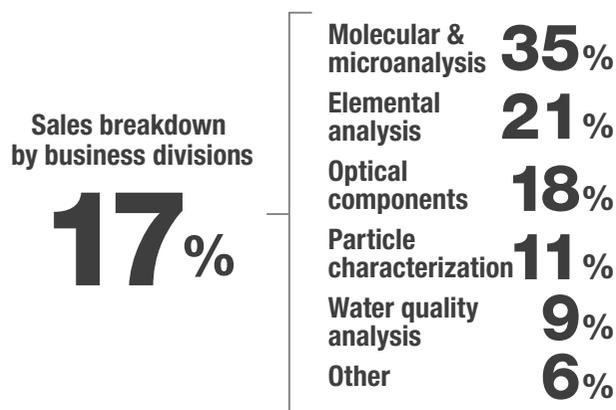


These compact units are used in semiconductor manufacturing to monitor concentrations of chemical cleaning agents. They ensure cleansing fluids are precisely delivered and properly used, thereby optimizing the cleaning process and boosting production yields.

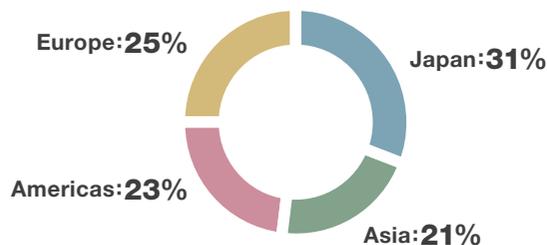


Scientific Instruments & Systems

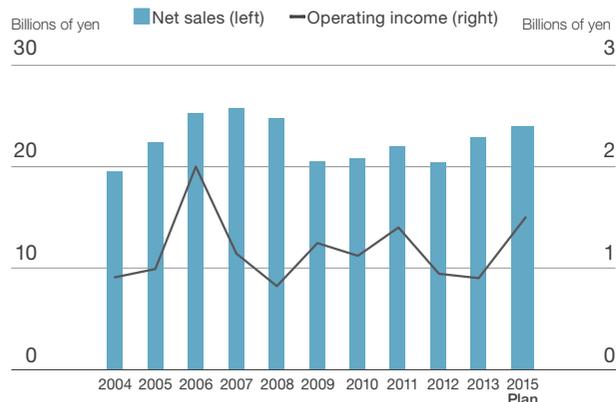
Sales breakdown



Sales breakdown by region



Net sales and operating income



HORIBA's technology for nano-level analysis provides essential sample measurement and characterization

Behaviors of nanometer sized atoms and molecules have been highlighted in microscopic analysis. HORIBA solutions for data analysis support advanced research that ventures into unknown territories where discoveries may lead to new materials or advanced, high-tech products. Additionally, HORIBA's analyzers are widely used in foreign-object examinations and defect analysis for food, drugs, electronic components, forensic science, and archaeological survey.

Fiscal 2014

Expecting recovery in sales to industrial markets Focus on government spending trends in various nations

In fiscal 2013, Scientific Instruments & Systems segment sales decreased from the previous year, due to a drop in demand in government spending in various nations. This is despite the positive impact of the depreciation of the Japanese yen in boosting sales in yen terms. In Japan, the supplementary budget induced demand for our high-end spectroscopic instruments and resulted in steady product sales.

In fiscal 2014, we foresee sales growth due to ongoing solid budget-induced demand for the research and development of scientific technology in Japan. A recovery in fiscal budgets is also expected in overseas markets. Additional sales from the newly-acquired fluorescence spectroscopy business (details on the next page) and growth triggered by economic recovery will also help realize steady sales.

Support for basic research in next-generation energy sources and R&D of HORIBA's other business segments

Demand is growing for products manufactured by HORIBA Jobin Yvon S.A.S. (France) for data analysis and basic research for organic and inorganic materials such as rare-earth metals and advanced lithium ion batteries, which are expected to become a core component in next-generation automobiles. Specific products include diffraction gratings, fluorescence spectroscopy and Raman spectrometers, which command a high global market share. We expect to increase our global sales and market share, as the markets respond to tighter regulations and more government spending, especially in the BRICs markets.

In the particle characterization market, the need to accurately measure finer particle-size distribution is increasing for R&D activities and quality management in a wide range of areas such as battery materials, automobile catalysts and pharmaceuticals. With our new product launches of 2013, with world top-class measurement precision, we aim at expanding market share in the high-growth Asian market.

In addition to product development, the Scientific segment continues to invest in basic research and provide new technologies to our other business segments.

Acquired fluorescence spectroscopy business of Photon Technology International

HORIBA acquired Photon Technology International (PTI), which operates in four countries and commands a high market share in high-end research fluorescence spectroscopy. After the acquisition, HORIBA has a combined 21% share*. We will use synergies between both companies to accelerate fluorescence product line growth. PTI has a long standing collaboration with a prestigious laboratory in the Faculty of Medicine and Dentistry of the University of Western Ontario in Ontario, Canada. PTI has been involved with this renowned university in the development of application software directly targeted to users' needs.

*Source: SDI report in 2012



Employees of Photon Technology International at an exhibition

Applications covered

Research on iPS cells and other regenerative medical therapies; drug discovery; and development of next-generation food and agricultural products

Products

Fluorometer, fluorescence microscopy, lifetime measurement equipment and optical components including spectrometers, light sources and lasers



Expanding functions of demonstration labs, which will support sales expansion in growth markets

With regards to the many products in HORIBA's Scientific Instruments & Systems segment, it is important to address the requirements of scientists and engineers for high precision and to provide diverse analytical applications. We are setting up demonstration labs in various parts of the world so that our customers can actually touch and experience products. We also provide services to analyze measurement samples brought in by customers as a way to expand the number of users.

In recent years, we have focused on setting up demonstration labs in Asia and opened the demonstration lab in Shanghai, China in 2013. We also plan to expand the lab in Brazil into a new location in 2014.



HORIBA's demonstration lab in Shanghai, China

Major products and market shares

NOTE: Market shares quoted are estimates by HORIBA.

Raman spectrometers

30% 17%



Raman spectroscopy is a spectroscopic technique that provides information about the molecular structure of molecules by measuring the vibrational modes of a molecule. The vibrational modes of a molecule, which are a molecular fingerprint offering a quantitative measurement, can be used to identify the chemical under analysis. In recent years, Raman spectroscopy has attracted attention for new applications in material research. Raman has a very weak light scattering mechanism, so a highly-sensitive and optimal optical design is necessary. HORIBA Jobin Yvon's outstanding know-how in optics-related technology has been successfully applied in the core development of our extremely high performance Raman spectrometers.



pH meters

50% 7%



HORIBA is recognized as one of the top pH meter brands beginning with a history of its development of Japan's first glass electrode pH meter in the 1950's. HORIBA offers a full pH product line to satisfy diverse customer needs ranging from desk-top models to support laboratory research to rugged instruments for field applications measuring river water, groundwater, and waste water.





Process & Environmental Instruments & Systems

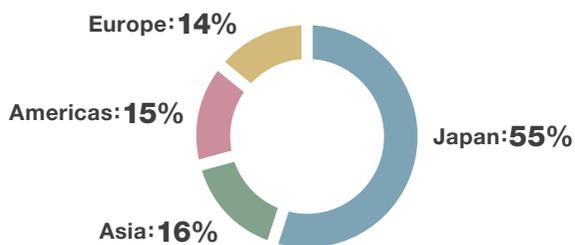
Sales breakdown

Sales breakdown by business divisions

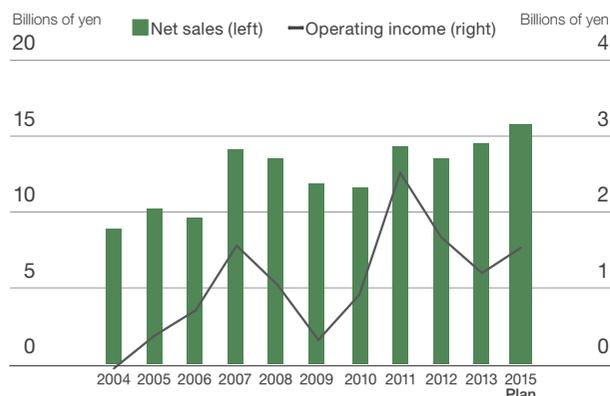
11%

Stack gas analysis	36%
Water quality analysis	32%
Air pollution analysis	14%
Other	18%

Sales breakdown by region



Net sales and operating income



HORIBA supports global environmental measures and new energy industries

We provide analytical and measurement instruments for a wide variety of applications to measure air, water, and soil constituents. We supply these instruments to various industries whose work is essential for environmental emissions reduction and process monitoring. We play an important role in gas measurement and monitoring of industrial liquid waste in the electric power, steel, and chemical industries as well as energy industries including oil refining, and heavy chemicals; purified water management for medical and semiconductor use; and constant monitoring and control of water quality in the pharmaceutical, food, and cosmetics fields. In addition, HORIBA's accurate and accessible technology helps ensure public safety by providing accurate environmental radiological measurements, demand for which has expanded since the Great East Japan Earthquake of March 2011.

Fiscal 2014 Explore demand in Japan's water-related market Focus on demand trends for stack gas analyzers

In fiscal 2013, despite no significant change in private investment, demand for stack gas analyzers at thermal power plants was firm.

In fiscal 2014, we will focus on creating demand in Japan with our new water quality measurement instruments. In addition, we will continue to pay attention to demand growth for air pollution analyzers, triggered by PM2.5 and other problems, and we expect an increase in present sales and profits.

Aiming to become No. 1 in the global environmental regulation business

HORIBA is determined to grow its markets share in the global environmental analytical instrument markets, estimated at ¥150 billion, by utilizing its accumulated know-how and experience in Japan, Europe, and the Americas. We also aim to expand our market share in the water quality measurement field, by giving added emphasis to pH measuring technology, a HORIBA core business since its foundation in the 1950s. Moreover, we will further develop business by leveraging HORIBA's expertise in the environmental and analytical instrument markets in Asia and other emerging nations, where demand is projected to grow rapidly. In addition, the process measurement equipment business we recently acquired will be important for our development of business in various industries.

Target market: Environmental regulation market



Stack gas analyzers

HORIBA has a leading market share in Japan in continuous emission monitoring systems used in plants and other facilities that generate gaseous emissions and soot. Our instruments have established a widely recognized credibility for robust and reliable sampling systems, which are essential in continuous measurement of a variety of gases. The analyzers are used in applications for power generation, petrochemicals, steel, paper, foods and pharmaceuticals.



Air pollution analyzers

HORIBA's air pollution analyzers have won high acclaim in the field as highly reliable analyzers that demonstrate excellent precision and long-term stability at ppb* concentrations. They are used in over 50 countries to monitor air quality by municipal governments and private industries. Demand has been expanding for PM2.5-related monitoring.

* ppb: parts per billion. One part per billion denotes one part per 1,000,000,000 parts. This notation is mainly used for describing low concentration measurements.



Water quality analyzers

HORIBA's products are used for monitoring and control in water treatment processes. We have a wide-ranging water quality product line to measure pH, the basic water quality indicator, as well as chemical oxygen demand (COD), total nitrogen, and total phosphorous. Our products have been highly evaluated in the water quality analysis field by companies in the electric power, gas, petrochemicals, steel, paper, foods, and pharmaceuticals industries.

Customers' life cycle costing (LCC) approach in making proposals on water quality measurement

HORIBA aims at reducing life cycle costs (LCC) of products, in addition to improving performance. On top of a reduction in maintenance costs for customers, a decrease in LCC enables savings in energy, water, and waste, thereby helping to lower the environmental burden. We will continue to be active in making LCC proposals to expand our market share.

Target markets		
Sales breakdown in water quality measurement in 2013	Target area	
30%	Water quality measurement and monitoring in lakes and rivers	Environmental measurement
10%	Used in quality management and other process management in the electric power, chemical, and pharmaceutical industries	Process management
20%	Contribution to water quality management through HORIBA's sensitive analysis technology, which is required for water management at drinking water treatment plants, etc.	Water
40%	Monitoring activated sludge treatment process at sewage treatment plants, for industrial liquid waste, etc.	Sewage

Progress of the process measurement equipment business in North America

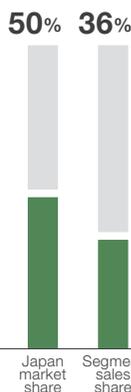
The process measurement equipment business, which was acquired from the U.S. company Cameron in February 2013, generated ¥1.2 billion in sales in fiscal 2013. At present, a new measurement demand is emerging in the U.S., where the shale gas revolution is taking place, as there is a switch from coal to gas as fuel for power generation.

By capturing such measurement demand, we expect the synergy effect to increase sales of HORIBA's stack gas analyzers. The Process & Environmental Instruments & System segment in the U.S. aims to generate sales of ¥6 billion by fiscal 2018.

Major products and market shares

NOTE: Market shares quoted are estimates by HORIBA.

Stack gas analyzers



These analyzers provide highly sensitive and precise measurements of NO_x, SO₂, CO, CO₂, and O₂ constituents in gases emitted by boilers and furnaces in thermal power stations and refuse incineration facilities. A single unit can simultaneously and continuously measure all five gases. HORIBA has a leading market share in this competitive market in Japan and seeks sales growth in the global market.



H-1 series of industrial water quality analyzers



These industrial water quality analyzers perform in a wide range of applications from pure water for semiconductor and food to water treatment to sewage and industrial wastewater. They confirm progress in wastewater treatment processes and control water treatment equipment. Moreover, we have developed pH electrodes that resist damage in harsh environment by strengthening their toughness, thereby reducing the frequency of electrode replacement and maintenance operations. By responding to expanding worldwide needs for remote monitoring services in water and sewage quality management and process monitoring, HORIBA pursues sales growth in the global market.

