# **HORIBA Report 2013 WEB DATA BOOK**

[Report Coverage]

Reporting period: January 1, 2013 to December 31, 2013 (This report also contains some data from fiscal year 2014.)

Reporting organizations: HORIBA, Ltd., HORIBA Advanced Techno Co., Ltd., HORIBA STEC, Co., Ltd., HORIBA Techno Service Co., Ltd., and a number of the overseas group companies

[Publication Date] May 31, 2014 [Planned Publication Date of Next Report] May, 2015 [Contact] Corporate Communications Office, HORIBA, Ltd. Tel: (81)-75-325-5073 (Dial-in)

## A-1 Initiatives for the Growth of the Analysis and Measurement Industry

## [Objective]

Recognizing the importance of analysis and measurement in the progress of science and technology, we strive not only to carry on the legacy of the technologies, but also to create new technologies in order to contribute to the growth of the analysis and measurement industry as a whole.

HORIBA

## A-1 Initiatives for the Growth of the Analysis and Measurement Industry



## Two HORIBA Products Certified as Heritage of Analytical and Scientific Instruments

Two of HORIBA's products, Infrared Gas Analyzer for Industrial Use GA-1 and Compact pH Meter C-1 CARDY, were selected to be part of 15 instruments certified as "Heritage of Analytical and Scientific Instruments" by Japan Analytical Instruments Manufacturers' Association (JAIMA) and Japan Scientific Instruments Association (JSIA).

The Heritage of Analytical and Scientific Instruments program was established in 2012 for the purpose of bequeathing the valuable analytical techniques, analyzers and scientific instruments that have contributed to the daily lives, economy, education and culture of the people of Japan as cultural heritage for future generations. The certified products are world-class instruments and technologies that are recognized as representing the power of science and that are to be passed on to the next generation.



Infrared Gas Analyzer for Industrial Use GA-1



Compact pH Meter C-1 CARDY

### **Masao Horiba Awards**

The Masao Horiba Awards were launched in 2003, a year that marked the 50th anniversary of HORIBA, Ltd., to support young researchers engaged in analysis or measurement-related research.

The theme for 2013 was "water quality measurement." A specific theme is set for each year, encouraging researchers in Japan and abroad to conduct unique research on that theme.



HORIB

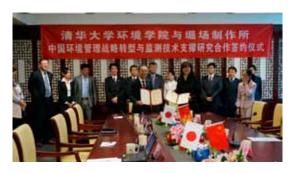
# A-1 Initiatives for the Growth of the Analysis and Measurement Industry



### HORIBA concluded a joint research agreement with Tsinghua University for environmental monitoring technology

On October 24, a signing ceremony was held for a master agreement on joint research at the School of Environment of Tsinghua University in Beijing, China. In that country, there is an urgent need for development of environmental legislation and of air and water-quality monitoring systems. HORIBA and Tsinghua University have agreed to conduct demonstration experiments of a measurement system using HORIBA's analysis and measuring technologies and know-how as part of the environmental monitoring research that the School of Environment of Tsinghua University is promoting. In the future, HORIBA and the university will jointly develop environmental monitoring systems that meet local needs, such as the measurement of fine particulate matter so called PM2.5 in the atmosphere and the monitoring of industrial wastewater.

Taking this as an opportunity, HORIBA, with its legal compliance experience in Japan, the United States, and Europe, will propose solutions for practical applications by providing its technologies to Tsinghua University, a top-level research institution in China that has a policy advisory role.



### The 1st HORIBA-BJAST Science Award Ceremony

Since the establishment of a joint R&D center in April 2012, HORIBA and the Beijing Center for Physical and Chemical Analysis (BCPCA) have promoted joint research into the contamination of air, soil, groundwater, etc. HORIBA also has established the HORIBA-BJAST Science Award with the Beijing Academy of Science and Technology (BJAST), to which BCPCA belongs, to support the research activities of many young researchers and develop analytical technology and new products suitable for the Chinese market, and held the first HORIBA-BJAST Science Award Ceremony on October 24. HORIBA has solicited surveys and research on the theme it has set for this year's Award, namely "air pollution," the biggest issue affecting people in China. The results were that three people received the Award. We believe it is very important for us to be able to select surveys and research into environmental measurement and intend to continue to uncover more research into environmental issues.



## A-2 Unique corporate messages

## [Objective]

From our unique perspective as an analytical and measurement instruments manufacturer, we provide the public at large with messages that stimulate interest in analysis and the global environment.

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## **A-2** Distributing Corporate Messages Online

### **Gaiapress**

HORIBA has been hosting the website, Gaiapress, since the early days of the Internet in 1996. This website presents information on a wide range of topics to promote a better understanding of nature, the environment, life and the mysteries of science. These topics provide opportunities for people to think about the value and potential of analytical and measurement technology and sensors, which play essential roles in our lives and business activities. Gaiapress is also highly sensitive to current social issues and is expanding its coverage of topics in response to readers' questions.

Based on our belief that scientific development always starts with the question "Why?" we will continue to promote communication with readers through Gaiapress.



**★** Gaiapress http://gaiapress.horiba.com/en/

### Let's Measure Things (Hakaruba)

Launched in 2013, HORIBA's "Let's Measure Things" website is designed to introduce readers to various things around us that can be made visible by measurement. We wish to add a sense of excitement to people's daily lives by allowing them to view things from fresh perspectives acquired by measuring familiar objects using analytical and measurement instruments. Based on HORIBA's unique approach as an analytical and measurement instruments manufacturer, we deliver knowledge regarding a variety of measurement-related themes.



★ Let's Measure Things (Japanese Only) http://www.jp.horiba.com/hakaruba/

## A-2 Prizes in Three Categories at the 2013 Japan B to B Advertising Awards

At the 34th Japan B to B Advertising Awards in 2013, hosted by the B to B Advertising Association Japan, HORIBA received gold prizes in two of the twelve categories, including the category for product catalogues and company brochures, and a silver prize in one category. As a result of wide recognition of its communication activities, HORIBA won prizes in a total of three categories.





Gold prize winner in the calendar category: Title: A Longing For Wings Advertising company: HORIBA, Ltd. Planned and produced by: L'union Publications, Inc./ Kousakusha

During the Edo period, birds were frequently used in handicraft designs, sketches, and illustrations of nature. In such artwork, in addition to birds familiar to contemporary Japanese people, rare species introduced from overseas as well as imaginary birds were also included. In this calendar, highly detailed birds depicted during the Edo period using amazing drawing techniques and vivid colors are laid out for each of the 365 days of the year against a background designed to resemble traditional Japanese paper. This work originated from the idea that at present, we must learn from the wisdom of our forebears, who drew paintings with ingenious skill using unique techniques and colors developed in an era when, unlike today, everything needed to be created from scratch. The themes of this calendar are "a longing for wings" and the birds of the Edo period, which were drawn with a longing for a world as yet unseen.



Gold prize winner in the company brochure category: Title: abiroh 2013 Advertising company: HORIBA, Ltd. Planned and produced by: L'union Publications, Inc./ Kousakusha

Our company brochure, abiroh, embodies the spirit of "Joy and Fun." This year's theme was "forecasting and prediction." From the perspective of applied sciences, which focus primarily on the present, forecasting and prediction are likely to be labeled mystical occultism. However, there is no doubt that forecasting and prediction have provided a basis for science since ancient times. Until the modern era, progress in science aimed to explain mysterious phenomena. Today, as scientific knowledge has become commonplace and people tend to lose interest in science, re-sharpening our innate sense of prediction may lead us to new discoveries.





Silver prize winner in the product catalogue (for single item) category:

Title: Compact water quality meter LAQUAtwin Advertising company: HORIBA, Ltd. Planned and produced by: SHIROBOSHI

This product catalogue's design concept is to allow readers to discover the world of water around us and to provide a sense of excitement for creating new visions in one's daily life. Designed at a size for holding in both hands, this work can be enjoyed like a photography book, allowing customers to feel close to the design concept. The familiar world of water, including rivers, lakes, soil, food and tap water, surrounds our daily lives. Effective use of water quality meters in this world of water allows us to visualize the various properties of water, which is essential for the lives of human beings, animals, and plants, and brings new surprises and excitement.

HORIBA

## HORIBA Awarded the Outstanding Advertisement Prize at the 40th Nikkei Sangyo Shimbun Advertising Award

HORIBA's series of advertisements in the Nikkei Sangyo Shimbun, Japan's largest business newspaper, was awarded the 40th Nikkei Sangyo Shimbun Advertising Award's (hosted by Nikkei Shimbun) Outstanding Advertisement Prize at the 62nd Nikkei Advertising Awards. Including this year, HORIBA's advertisements have won Nikkei Advertising Awards (including the 2010 Grand Prize) a total of eleven times.













### Award winner: HORIBA can replace supernatural powers

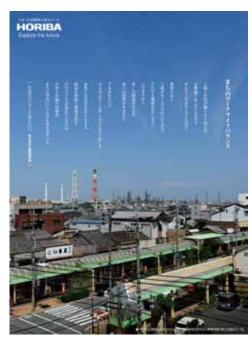
These advertisements compare HORIBA's technologies to the sensing abilities of a variety of animal species in order to deliver the message that the analysis technologies that form HORIBA's core competency play essential roles in humanity's progress. Animal species have evolved unique sensing abilities in different ways to preserve themselves. We humans may also have had sensing abilities for communicating with the natural environment in ancient times, but we have lost such abilities as convenient tools were invented. Analysis technologies, which compensate for such losses, are indispensable in humanity's progress.

## A-2 HORIBA's Advertisements about Air Pollution Awarded Two Advertising Awards

HORIBA's corporate advertisement about air pollution received the runner-up award in the Fourth Section (for advertisements 2.5-7 paragraphs in length) at the 48th Japan Industrial Advertising Awards (hosted by Nikkan Kogyo Shimbun, Ltd.) The same advertisement presented in the magazine Global Environment and Energy received the Bronze Prize for magazine advertisements at the 52nd Business Advertisement Awards (hosted by Fuji Sankei Business i). Since 2012, HORIBA's advertisements have received awards simultaneously at these two advertising award events for two consecutive years.



Runner-up Award in the Fourth Section at the 48th Japan Industrial Advertising Awards



Bronze Prize for Magazine Advertisements at the 52nd Business Advertisement Awards

### Award winner: Work-life Balance in an Urban Community

Among the four major pollution-related diseases in Japan, only Yokkaichi asthma occurs in urban areas. Visitors to Yokkaichi City find themselves in a landscape where industrial complexes and residential quarters coexist side-by-side, reminding visitors that the proximity of factories to houses caused the asthma. At the same time, visitors are also surprised at the fact that the environment in this same area has greatly improved. As a company engaged in the analysis and measurement of the global environment, we sincerely hope that the important implications of this urban landscape provide an opportunity not only to reflect on the past but also to think about the future of the global environment.

HORIBA

## A-2 TV Animation of the Animal Conference on the Environment

### **HORIBA** has supported the Animal Conference on the Environment, which has gained recognition worldwide

Animal Conference on the Environment began in 1997 on Gaiapress, a website hosted by HORIBA, to coincide with the Third Session of the Conference of the Parties (COP3) held in Kyoto. HORIBA has continued to participate in the running of the Animal Conference as official program partner, even though it is now managed independently.

This website is designed to teach children the joy of thinking by providing opportunities for them to consider environmental issues in a fun and enjoyable manner with the help of unique animal characters gathered from around the world. The stories posted on the website have also been published as four picture books and translated into different languages including South Korean and Taiwanese. In South Korea they are used as supplementary readers in elementary schools, and are gaining

widespread popularity in other countries as well. The program has received recognition in various arenas: in 2008 it was chosen for an affiliated event at the Tokyo International Film Festival: and in 2009 it was invited to participate in the Forum International Cinéma & Littérature in Monaco, where it received international acclaim by animated film makers in Europe. Between March and October in 2010, which was declared by the United Nations as the International Biodiversity Year, 20 episodes were broadcast in Japan of an animated series entit led "The Animal Conference on the Environment" (NHK Educational Channel), based on the stories told on our website. As official partner of the Animal Conference on the Environment, HORIBA will continue to create opportunities for children to experience the joy of thinking.



The Animal Conference on the Environment official website:

http://animalconference.com/en/index.html



© NURUE Inc

Various animal characters representing different countries around the world

# A-3 Corporate Citizenship Initiatives

## [Objective]

We serve as a responsible corporate citizen by performing an active, independent role in supporting the growth of society's next generation and in closely communicating, collaborating, and cooperating with local communities.

HORIB

## A-3 Initiatives for the Support for the Development of Society's Next Generation



### **Discover the Joy of Science Project**

Younger employees planned an event entitled the "Discover the Joy of Science Project" as part of the 60th anniversary commemoration program.

Held for two days with the participation of 17 students interested in science from high schools in Kyoto Prefecture, the event consisted mainly of science quizzes and experiments conducted using analytical and measurement instruments. The event was designed not as a science course where students learn from textbooks, but as a laboratory program in which students experience the joy and fun of science by making full use of their sensing abilities to study familiar objects. The participants were high school and technical college students, who are at a stage in life where they must think about their future careers. Designed by younger employees committed to providing opportunities for such students to develop interest in science and widen their range of career options, the event proved very popular among participants.



★ Discover the Joy of Science Project http://www.horiba.com/jp/social-responsibility/support-for-thedevelopment-of-societys-next-generation/analysis-is-discovery-report/

### Participating in the All Japan Student Formula One **Competition as a Sponsor Company**

As a sponsor company, HORIBA participated in the 11th All Japan Student Formula One Championship held at Shizuoka Prefecture's Ogasayama Athletic Park Ecopa. This championship aims to support students who aspire to become engineers in the future in acquiring manufacturing skills through carrying out planning, design, and manufacturing of automobiles. A total of 79 teams, including from China, India, Thailand, Indonesia, and other countries, competed in the championship.

HORIBA performed vehicle engineering tests during the championship, exhaust gas measurements after driving, and tire temperature measurements using radiation thermometers in order to provide participating students with opportunities to experience analysis and measurement technologies first-hand.



★ Let's Measure Things: Measuring tires (Japanese Only) http://www.jp.horiba.com/hakaruba/explore/2-tire

HORIBA

# A-3 Initiatives for the Support for the Development of Society's Next Generation



### **Environmental Delivering Classes**

In order to provide elementary and junior high school students with opportunities to learn about various phenomena in our daily lives, we hold environmental delivering classes, in which participants can conduct experiments using familiar materials and biodiversity seminars on the amazing sensing abilities of animals and plants. In 2013, we held 42 seminars, with a total of 2,480 participants.

We hold various event s to provide children with opportunities to learn about the joy of science and the wonders of animals through hands-on experience using HORIBA products.

(Examples of events held in 2013)

July 26-27 Kids Engineer 2013 (Nagoya) Octber 5 Komatsu Science World (Ishikawa) October 13 Kyoto Students' Festival (Kyoto) November 9-10 Youngsters' Science Festival (Kyoto)

Dec. 12-14 Eco Products 2013 (Tokyo)

### Providing a Delivering Class for Children with Hearing Disabilities

In August, at Kyoto Afterschool Day Service Center Niji for Children with Hearing Disabilities, we provided a delivering class for 22 children with hearing disabilities. This was our first time to host a class for children with hearing disabilities. We were very pleased to learn that the children enjoyed the many experiments conducted using instruments they had never touched before.







Eco Products 2013

## A-3 Initiatives for Dialogue with Local Communities and Society



### Volunteering for the "Kimchi from Our Hearts" Event

On November 30, Vice President and 30 employees of HORIBA STEC Korea made kimchi with locals in the "Kimchi from Our Hearts" event held at the Seongnam City Welfare Center near the office. Employees bought 400 kg of Chinese cabbage and pickles; employees and other volunteer members struggled to make kimchi from the morning onward. The kimchi they made was delivered to 80 households, including elderly living alone and impoverished families.

A new employee who participated in the event for the first time commented as follows: "My heart was full of joy at seeing elderly men and women looking so happy to receive kimchi. The atmosphere of the office improved and I feel very happy that I could do something good for the locals."



### Collaborating in the 2013 National Institute for Environmental Studies Summer Open Door Event

In July, HORIBA collaborated in the 2013 Summer Open Door Event held at the National Institute for Environmental Studies (Tsukuba City, Ibaraki Prefecture). This event is an open door program held by the institute in April and July each year to stimulate local residents' interests in environmental problems and deepen their understanding of environmental research as well as science and technology in general. Many local children participate in the event. HORIBA conducted an experiment to use a small exhaust gas analyzer to compare the concentration of carbon dioxide (CO<sub>2</sub>) contained in human breath and in automobile exhaust gas. On the day of the event, HORIBA's exhibit was busy with more than 500 visitors—a number far exceeding our expectations. This was a great opportunity to get many people interested in environmental problems and to have them experience the pleasure of measuring things first-hand.



## A-3 Initiatives for Dialogue with Local Communities and Society



### Thank You Letter from the Rikuzen-Takata Higashi Junior **High School Baseball Team**

In 2012, HORIBA employees held a charity bazaar to support the areas affected by the Great East Japan Earthquake. Using the bazaar' s proceeds along with a contribution from HORIBA, Ltd., we donated a pitching machine to the baseball team of Rikuzen-Takata Hirota Junior High School (currently, Rikuzen-Takata Higashi Municipal Junior High School) in Iwate Prefecture. The team won the 27th Iwate Prefecture Junior High School Freshman Soft Baseball Championships held on October 19 and 20, 2013. Subsequently, the team performed well in many baseball competitions and is currently striving towards a new goal. The Baseball Team Parents' Association sent us a report on the results of the baseball team's activities along with a thank you message for HORIBA.

### Participating in the "Beach Cleanup in Suma" event

The Beach Cleanup in Suma is held twice a year to pick up trash scattered along Hyogo Prefecture's Suma Beach in order to study its composition. This event is part of a global initiative, the International Beach Cleanup campaign, which targets beaches around the world. HORIBA employees have participated in this campaign since 2002.



HORIBA Report 2013

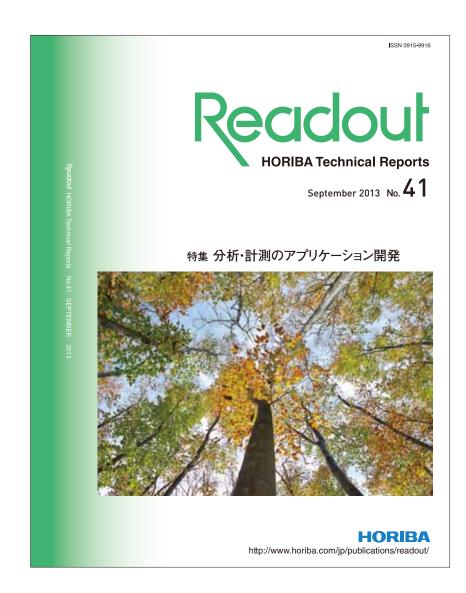
## A-3 Publication of technical journal "Readout"

### "Readout"

Readout is a technical journal issued by HORIBA. The name "Readout" represents our sincere desire - helping readers understand the company's proprietary products and technologies by offering information about them. Since its first issue in July 1990, the journal has been published biannually.

The journal, including back numbers, can be downloaded from HORIBA's website.

★ Technical journal "Readout" http://www.horiba.com/publications/readout/



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## Prevention and alleviation of environmental problems

## [Objective]

We abide by all environmental laws and regulations and strive to the utmost to improve and protect the environment by setting internal control standards based on our integrated management system.

HORIB

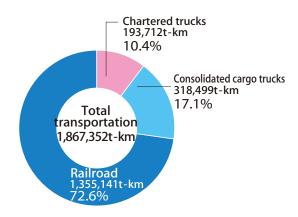
## **B-1** Initiatives for Reduction of CO<sub>2</sub> Emissions in Logistics

HORIBA is committed to reducing the amount of CO<sub>2</sub> emitted during transportation of products. We started transporting products by railroad between Kyoto and Tokyo as a measure for a modal shift in 2004. In 2006. we started to use railroad to transport reagents for medical products produced at our Aso Factory. In September 2013, we started transporting products by ship between Kumamoto and Tokyo in order to improve transportation efficiency as a group and to reduce CO<sub>2</sub> emissions.

Note: Data on railroad transport in this report includes ship transport results.

### Railroad Utilization Rate for the **Transportation of Products in 2013**

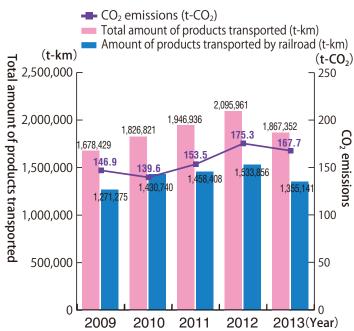
(Scope: Domestic production sites\*)



Note: Data on railroad transport partly includes ship transport (started September 2013) data.

### The Amount of Products Transported and the Amount of CO<sub>2</sub> Emissions

(Scope: Domestic production sites\*)



<sup>\*</sup> Domestic production sites include the HORIBA, Ltd. head office/factory and Biwako Plant, HORIBA STEC Co., Ltd. head office/factory and Aso Factory and HORIBA Advanced Techno Co., Ltd. head office/factory.

**Environment** 

## **B-2** Overview of the Environmental Impacts

We provide arange of analytical measurement instruments and peripheral equipment required for envronmental measurement. In order to fulfill social responsibilities, we also develop eco-design products with its life cycles in mind, which comply with environmental laws and regulations. At the same time, together with our suppliers, we make consistent efforts to conserve resources and energy during production. Our employees also have a strong interest in environmental issues. We participate in environmental volunteer work like cleaning and collecting trash in areas alongside river and around company offices, conducting environmental delivering classes in elementary and junior high schools, and working at environmental events organized by government organizations.

### **Environmental Initiatives**

In 2013, the HORIBA group companies in Japan adopted the following goals for environmental conservation under the Integrated Management System. We promote efforts to build safe and efficient clean factories and contribute to the protection of the global environment.

### Goals:

- 1 Develop energy and resource conservation activities in order to reduce CO<sub>2</sub> emissions per unit of sales
- 2 Maintain and expand zero-emission
- **3** Efficient use of chemical substances

### **Overview of the Environmental Impacts: Balance in Materials**

We work hard to obtain an overview of the environmental impact caused by the domestic HORIBA Group as a whole during each stage of our business activities. Due to the effects of extreme summer heat and start of full operation for expanded group company offices, our total energy consumption increased in 2013; electricity consumption increased 3% and gas consumption increased 11%. However, we reduced the amount of waste by 5%.

In 2014, we are scheduled to expand our group company offices as we did in 2013. However, we will continue to put efforts to reduce the total environmental impact of our activities, including initiatives for electricity and energy conservation.



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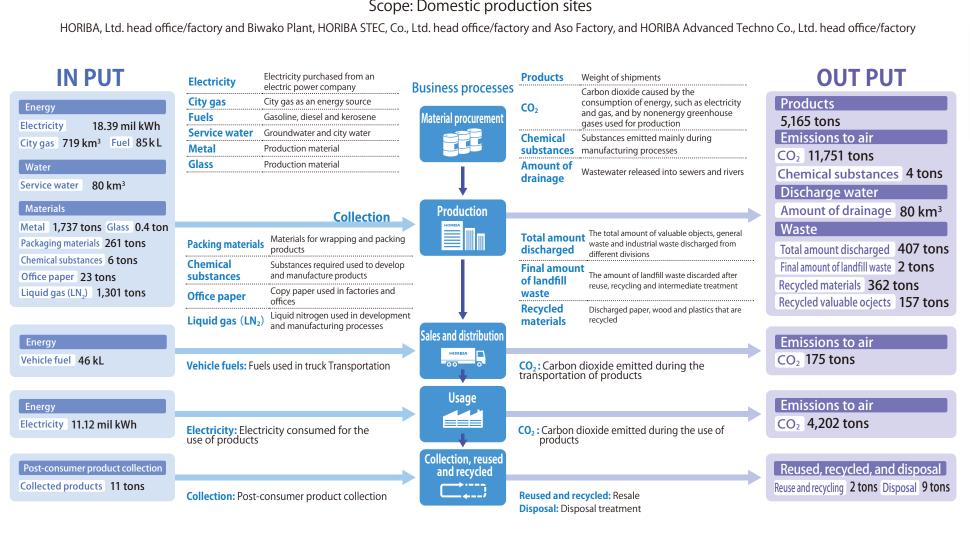
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## **B-2** Overview of the Environmental Impacts: Balancing Environmental Impacts



## Material Flow Chart for 2013 to Determine Environmental Impacts

Scope: Domestic production sites



## **B-2** Overview of the Environmental Impacts: Environmental Impacts in Production Sites

## **Group Companies** (Production Sites)

Company Name	Abbreviation	Location
HORIBA Instruments Incorporated Irvine Facility	HII (Irvine)	U.S.A. (California)
HORIBA Instruments Incorporated Ann Arbor Facility	HII (AnnArbor)	U.S.A. (Michigan)
HORIBA Instruments Incorporated Troy Facility	HII (Troy)	U.S.A. (Michigan)
HORIBA Instruments Incorporated Austin Office HORIBA Instruments Incorporated Santa Clara Office	HII (Austin/Santa Clara)	U.S.A. (Texas) U.S.A. (California)
HORIBA Europe GmbH	HE	Germany (Oberursel, Darmstadt)
HORIBA UK Limited	HUK	U.K. (Northampton)

Company Name	Abbreviation	Location
HORIBA ABX SAS	HMFR	France (Montpellier)
HORIBA Jobin Yvon SAS	JYFR	France (Longjumeau)
HORIBA (Austria) GmbH	НА	Austria (Tulln)
HORIBA, Ltd	HOR	Japan (Kyoto)
HORIBA STEC, Co., Ltd.	STEC	Japan (Kyoto)
HORIBA Advanced Techno Co., Ltd.	HAT	Japan (Kyoto)
HORIBA KOREA LTD.	HKL	South Korea (Kyunggido)
HORIBA INSTRUMENTS (SHANGHAI) CO., LTD.	HSC	China (Shanghai)

### **Environmental Impact of Group Production Sites in 2013**

	Item/Region			U.S	5.A				Europe					Asia		
	Group Company Name (Abbre	viation)	HII (Irvine)	HII (AnnArbor)	HII (Troy)	HII (Austin/ Santa Clara)	HE	HUK (Northampton)	HMFR	JYFR	НА	HOR	STEC	HAT	HKL	HSC
	Electricity consumption	MW•h	316	964	1,992	1,050	1,513	537	5,302	6,319	41	9,985	8,119	289	63	1,391
	City gas consumption	km³	-	45	75	4	528	13	-	460	7	471	248	0.02	-	-
I N	Water consumption	km³	10	7	3	-	2.1	0.7	26	11	216.0	42	35	3	0.1	5
P	Consumption of fuel oil & fuel for vehicles	kL	-	47	56	35	251	-	-	25	20	42	30	13	3	24
Ť	Quantity of chemicals consumed	t	-	-	-	-	4	-	37	-	0.001	6.1	-	0.06	-	-
	Office paper	t	1	2	8	2	8	1.0	24	4	-	19	3	2	1.9	0.4
	Packing materials	t	-	-	-	-	6	-	719	-	-	246	15	0	3	-
O	CO <sub>2</sub> emissions	t-CO <sub>2</sub>	193	874	1,463	850	1,446	270	265	1,345	54	6,311	5,262	178	27	525
T P	Wastewater discharge	km³	0	1	3	-	0.0	0.0	-	0	0.2	42	30	13	-	3
T	Waste emissions	t	117	31	29	-	41	-	170	105	9	301	92	13	0.9	12
	Number of employees	Person	68	125	80	58	479	159	560	307	24	1,447	413	148	25	99

<sup>\*</sup> Data on HORIBA Europe GmbH Oberursel and Darmstadt Offices were listed separately until Gaiareport 2010. Starting with Gaiareport 2011, data of these offices are combined into a single category.

# B-2 Overview of the Environmental Impacts: Environmental Impacts in Non-production Sites

### **Environmental Impacts in Non-production Sites**

(HORIBA, Ltd. sales offices and training and recreation facilities/HORIBA Techno Service Co., Ltd. service stations)

	Number of locations and ca	ategory		A, Ltd. sales 14 locations			echno Servic tations (26 lo		HORIBA, Ltd. training and recreation facilities (2 locations)			
	Item/Year		2011	2012	2013	2011	2012	2013	2011	2012	2013	
	Electricity consumption	MWh	836	590	557	380	409	395	240	258	233	
	City gas consumption	km³	0	1.2	1.2	1.2	3.9	2.5	0.3	0.4	0.3	
INIDLIT	LP gas consumption	km³	0	0	0	0	0	0	11	13	11	
INPUT	Fuel consumption	kL	58.6	80.7	55.9	194	183	189	-	-	-	
	Office paper	t	5.1	3.1	3.6	3.7	3.2	3.2	-	-	-	
	Packing materials	t	0.9	1.9	0.7	3.8	4.1	3.9	-	-	-	
OUTDUT	CO <sub>2</sub> emissions	t-CO <sub>2</sub>	452	413	343	596	587	592	173	206	185	
OUTPUT	Amount of waste generated	t	6.2	96.8	15.1	20.0	23.8	20.3	-	-	-	

Sales Offices (14 locations): Sapporo, Sendai, Fukushima, Utsunomiya, Tsukuba, Tokyo, Yokohama, Nagoya, Toyota, Hamamatsu, Osaka, Takamatsu, Hiroshima, Fukuoka Service stations (26 locations): Sapporo, Sendai, Fukushima, Utsunomiya, Ichihara, Kashima, Tsukuba, Kawaguchi, Tokyo, Kokubunji, Yokohama, Fuji, Hamamatsu, Toyota, Nagoya, Toyama, Yokkaichi, Osaka, Himeji, Kurashiki, Hiroshima, Yamaguchi, Takamatsu, Fukuoka, Oita, Kumamoto

Training and recreation facilities (2 locations): Takashima (Shiga Prefecture) and Kyoto



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## Energy Conservation and Initiatives to Reduce CO<sub>2</sub> Emission



Total CO<sub>2</sub> emissions generated by HORIBA group companies in Japan in 2013 increased by 6.3% compared to the previous year to 11,751 tons. Total CO<sub>2</sub> emissions per unit of sales decreased by 2.5% from 2012.

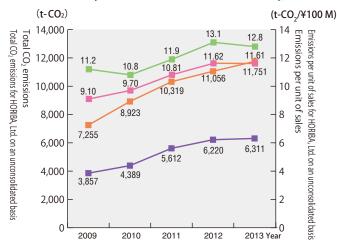
Also, CO<sub>2</sub> emissions for HORIBA, Ltd. alone increased by 1.4% compared to 2012 to 6,311 tons.

Emissions per unit of sales decreased 0.1% compared to 2012.

The major reasons for these increase were the increase in sales and the effects of extreme summer heat. However, we minimized the increase by continuing to implement electricity and energy conservation measures.

### Total CO<sub>2</sub> Emissions

- Emissions per unit of sales (t-CO<sub>2</sub>/¥100 M)
- Total CO<sub>2</sub> emissions (t-CO<sub>2</sub>/year)
- Emissions per unit of sales for HORIBA, Ltd. on an unconsolidated basis (t-CO<sub>2</sub>/¥100 M)
- Total CO<sub>2</sub> emissions for HORIBA, Ltd. on an unconsolidated basis (t-CO<sub>2</sub>/year)



### \*1 CO<sub>2</sub> emission factor:

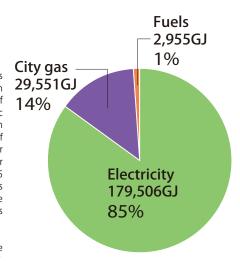
CO<sub>2</sub> emission factor values were calculated based on the average (0.378 kg of CO<sub>2</sub> per kWh) for all electric companies in Japan in 2000. The official values of the Kansai Electric Power Company are adopted for the Kyoto District for 2005 onward. Values for city gas are calculated using the official values of Osaka Gas Co., Ltd.

### \*2 City gas consumption:

Values are converted to those in standard conditions (0° C, 1 atmospheric pressure).

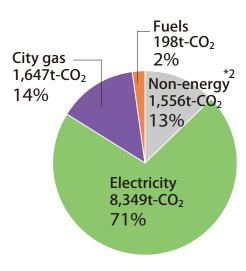
### Types of Energy Consumption in 2013

(Scope: Domestic production sites\*1)



### **Energy Types of Greenhouse Gas** Emissions (CO<sub>2</sub> Equivalent) in 2013

(Scope: Domestic production sites\*1)



<sup>\*1</sup> Domestic production sites include the HORIBA, Ltd. head office/factory and Biwako Plant, HORIBA STEC Co., Ltd. head office/factory and Aso Factory, and HORIBA Advanced Techno Co., Ltd. head office/factory.

<sup>\*2</sup> Non-energy: Sulfur hexafluoride, perfluoromethane, etc.

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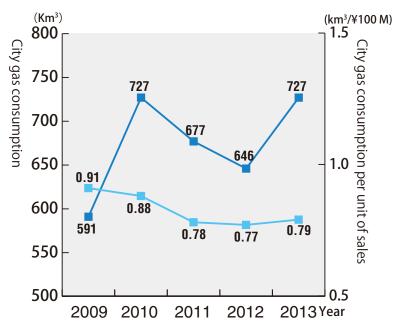
## **B-3** Energy Consumption



### **City Gas Consumption**

(Scope: Domestic production sites\*)

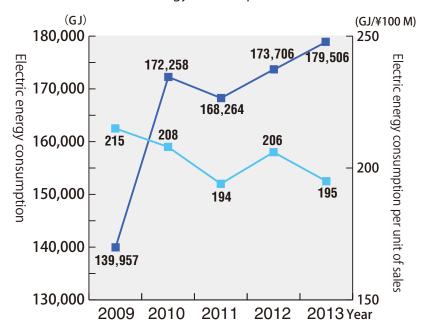
- City gas consumption per unit of sales (km<sup>3</sup> /¥100 M)
- City gas consumption (km³)



## **Electric Energy Consumption**

(Scope: Domestic production sites\*)

- Electric energy consumption per unit of sales (GJ/¥100 M)
- **→** Electric energy consumption (GJ)



<sup>\*</sup> Domestic production sites include the HORIBA, Ltd. head office/factory and Biwako Plant, HORIBA STEC Co., Ltd. head office/factory and Aso Factory, and HORIBA Advanced Techno Co., Ltd. head office/factory.

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## Monitoring of Wastewater and Use of Service Water

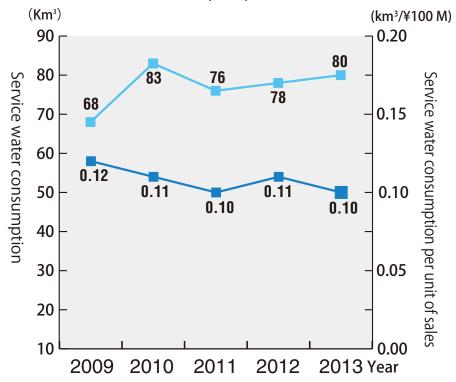
Due to continuous monitoring by our round-the-clock monitoring system, HORIBA, Ltd. has not caused accidents that have resulted in discharging wastewater exceeding the legal limit in over the past several years. We maintained this record in 2013 and we intend to maintain it for many years to come.

Meanwhile, in 2010, the amount of service water used by domestic group companies increased by about 23% compared to the previous year due to a rapid increase in the production. However, the amount decreased in 2011 and thereafter due to spillover effects from the electricity saving and energy conservation measures. In the future, we will continue to make more efficient use of water by monitoring the amount of service water used.

## **Service Water Consumption**

(Scope: Domestic production sites\*)

- Service water consumption (km³)
- Service water consumption per unit of sales (km³/¥100 M)



<sup>\*</sup> Domestic production sites include the HORIBA, Ltd. head office/factory and Biwako Plant, HORIBA STEC Co., Ltd. head office/factory and Aso Factory, and HORIBA Advanced Techno Co., Ltd. head office/factory.



# Wastewater Measurement Categories and Trends in Measured Values



Scope: HORIBA, Ltd. head office/factory

(Units: mg/L) except pH \* Under detection limit so omitted

	Danulation Catanama	Kyoto City	HORIBA	Measu	red Result (max	imum)	Detection
	Regulation Category	Regulations	Standards	2011	2012	2013	Limit Value
	рН	5 ~ 9	-	$6.5 \sim 7.9$	6.1 ~ 8.2	6.2 ~ 8.1	/
Ψ.	n-Hexane extract	5	3.5	0.3	0.4	2.4	0.2
a N≤	Phenol	1	0.3	0.02	*	*	0.01
nvironmental categories	Copper	3	0.9	0.035	0.075	0.068	0.002
ori	Zinc	2	1.0	0.15	0.10	0.39	0.002
es	Iron (soluble)	10	3.0	0.0400	0.0600	0.1800	0.0004
	Manganese (soluble)	10	3.0	*	*	0.21	0.01
	Nickel	2	0.6	0.01	0.02	0.02	0.01
	Boron and its compounds	10	3.0	0.2	0.2	0.3	0.1
	Fluorine and its compounds	8	4.5	1.3	1.9	1.0	0.1
	Cadmium and its compounds	0.1	0.03	*	*	*	0.005
7	Cyanogen compounds	1	0.3	*	*	*	0.1
Toxic	Lead and its compounds	0.1	0.07	*	*	*	0.01
substances	Hexavalent chromium	0.5	0.15	*	*	*	0.0004
osta	Arsenic and its compounds	0.1	0.03	*	*	0.005	0.005
) DC	Mercury and its compounds	0.005	0.0015	*	*	*	0.0005
S	Trichloroethylene	0.3	0.09	*	*	*	0.03
	Dichloromethane	0.2	0.14	*	*	*	0.002
	Carbon tetrachloride	0.02	0.014	*	*	*	0.002
	1,1,1-trichloroethane	3	0.9	*	*	*	0.0005

Note: Regulation figures are from Kyoto City sewage and drainage standards.

<sup>\*</sup> There has been no case over the past three years where factory wastewater has exceeded legal control standards

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## **B-3** Use of Chemical Substance

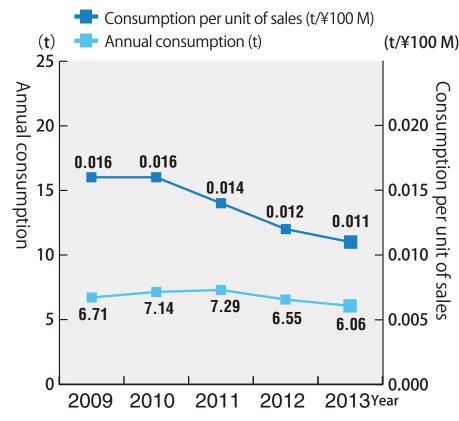


The total amount of chemical substances (measured by weight) used by HORIBA, Ltd. in 2013 was 6.06 tons, which is 0.49 tons less than 2012. Meanwhile, we have implemented measures regarding chemical substances specified in the revised PRTR Law since 2010. There are no chemical substances whose annual use exceeded the legally specified standard (1 ton; 0.5 tons for type I specified substances) in 2013. We will continue to revise our system in order to further reduce the risks involved in the use of chemical substances through our IMS activities.

### \* PRTR (Pollutant Release and Transfer Register) Law:Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

### Trend in Quantity of Chemical **Substances Consumed**

(Scope: Domestic production sites\*)



# **B-3** Major Chemical Substances Handled



Scope: HORIBA, Ltd. head office/factory

Unit: kg

CAS No.	Substance (IUPAC)	Annual	Amount Ha	andled	Amo	unt Transfe	rred	Am	ount Recyc	led	Main Application
CAS Nu.	Substance (IOPAC)	2011	2012	2013	2011	2012	2013	2011	2012	2013	Main Application
67-63-0	Isopropyl alcohol	404	148	504	126	92	60	0	0	6	Clean printed circuit boards
64-17-5	Ethanol: more than 99.5%	406	345	220	99	113	56	0	0	0	Clean components
67-64-1	Acetone (dimethyl ketone)	403	406	148	382	360	127	0	0	1	Cleaning
507-55-1	HCFC — 225 ; Product: H-997	125	50	57	0	0	0	0	0	0	Solvent/Product inspection
62-56-6	Thiourea	23	33	19	0	0	0	0	0	0	Regents production
7439-92-1	Lead solder	165	211	126	0	0	0	107	105	106	Printed circuit boards
7664-93-9	Piranha solution	62	75	75	62	75	75	0	0	0	Semiconductors
7803-57-8	Hydrazine monohydrate	26	17	15	26	17	15	0	0	0	Product inspection
1330-20-7	Xylene	11	106	88	11	106	88	0	0	0	Clean semiconductors/components

\*CAS No.: Numerical identification numbers for chemical substances managed by the Chemical Abstracts Service, a division of the American **Chemical Society** 



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# **B-3** PRTR Substances Managed in 2013



Scope: HORIBA, Ltd. head office/factory

Minimum target treatment quantity: 10 kg

0.11		Annual	A 11 17	Amount Remove	Am	ount Emi	tted	Amount Transferred	Amount Recycled	
Ordinance No. *1	Substance	Amount Handled	Added to Product	Compounds Neutralized/ Decomposed/ Synthesized	Air	Water	Soil	Industrial Waste	Transferred Outside	Main Application
305	Lead compounds	126.2	20.7	0.0	0.0	0.0	0.0	0.0	105.5	Soldering printed circuit board
80	Xylene	88.2	0.0	0.0	0.0	0.0	0.0	88.2	0.0	Clean components, semiconductors
185	Dichloropentafluoropropane (HCFC-225); product name H-997	57.2	0.0	0.0	57.2	0.0	0.0	0.0	0.0	Solvent/Product inspection
300	Toluene	39.4	0.3	0.4	38.2	0.0	0.0	0.4	0.0	Product development
82	Silver and its water-soluble compounds	27.2	2.0	1.9	0.0	0.0	0.0	0.3	23.0	Soldering printed circuit board
30	Linear Alkylbenzene Sulfonic acid and Linear Alkylbenzene Sulfonate (LAS)	27.1	0.0	0.0	0.0	0.0	0.0	27.1	0.0	Semiconductors
394	Beryllium and its compounds	20.8	20.8	0.0	0.0	0.0	0.0	0.0	0.0	Product components
374	Hydrofluoric acid and its watersoluble salts	20.8	0.0	0.0	0.0	0.0	0.0	20.8	0.0	Semiconductors
245	Thiourea	18.5	18.5	0.0	0.0	0.0	0.0	0.0	0.0	Reagent production
20	2-aminoethanol	11.3	0.0	0.0	0.0	0.1	0.0	11.2	0.0	Semiconductors
	Total	436.7	62.3	2.3	95.4	0.1	0.0	148.0	128.5	

<sup>\*</sup> PRTR (Pollutant Release and Transfer Register) Law: Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

<sup>\*1</sup> Ordinance No.: Numbers given in Table 1 of the Enforcement Ordinance for the Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

**Environment** 

## **Category Environment**—**Energy and Resource Conservation**

## Atmospheric Measurement Categories and Trends in Measured Values (at vents and site perimeters)



### Scope: HORIBA, Ltd. head office/factory

Measurement Category		Unit	Kyoto Prefecture	HORIBA	Measured Result (maximum)					
		Offic	Regulations	Standards	2011	2012	2013			
	Xylene	Vol ppm	300	28	< 2	< 2	< 2			
At vents	Fluorine compounds	mg/m³N	5	3.5	< 0.5	< 0.5	< 0.5			
At vents	Hydrogen chloride	Vol ppm	20	6	< 1	< 1	< 1			
	Nitrogen oxide (NOx)	Vol ppm	100	30	< 10	< 10	< 10			
	Xylene	Vol ppm	3	-	< 0.3	< 0.3	< 0.3			
At site	Fluorine compounds	mg/m³N	0.05	-	< 0.01	< 0.01	< 0.01			
perimeters	Hydrogen chloride	Vol ppm	0.2	_	0.11	0.12	0.05			
	Nitrogen oxide (NOx)	Vol ppm	1	_	0.014	0.025	0.017			

**Note:** Regulation figures are based on ordinances to protect Kyoto Prefecture environment.

<sup>\*</sup>There have been no cases where the amount of hazardous substances to the air exceeded the amount decided by the law over the past three years.

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## **B-3** Initiatives to Reduce Waste



HORIBA, Ltd. achieved its zero-emission goal in the second half of 2006 and maintained it until the end of 2009. However, in 2010, we were unable to meet our zero-emission requirements due to the disposal of unrecyclable old equipment, which we had no choice but to deliver to landfill. From 2011, we achieved our zero-emission goal by rectifying this situation.

In 2013, the entire domestic HORIBA Group achieved our goal of zero emissions.

### \* HORIBA's definition of zero emissions:

"The total amount of landfill waste must not exceed 1 percent of total waste generated."

### **Total waste generated:**

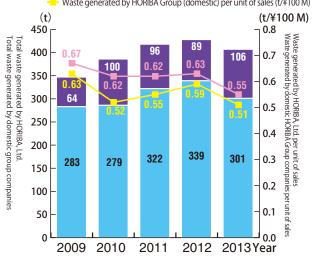
A generic term for waste discharged from all divisions because it is no longer required (includes valuable resources, general waste and industrial waste).

### **Total amount of landfill waste:**

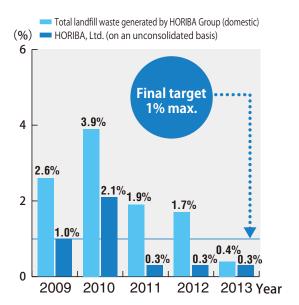
The total amount of waste delivered to landfill after the process of reuse, recycle, or intermediate treatment (including neutralization, change into nonhazardous substance, and incineration).

### **Total Waste Generation and Waste** Generation per Unit of Sales





### Trend in Total Amount of Landfilled Waste



### Scope:

### **Domestic production sites:**

HORIBA, Ltd. head office/factory and Biwako Plant, HORIBA STEC, Co., Ltd. head office/factory and Aso Factory and HORIBA Advanced Techno Co., Ltd. head office/factory

### Domestic group companies:

HORIBA STEC, Co., Ltd. and HORIBA Advanced Techno Co., Ltd.

### **HORIBA Group (domestic):**

HORIBA, Ltd., HORIBA STEC, Co., Ltd. and HORIBA Advanced Techno Co., Ltd.

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# **B-4** Environmental Accounting



The results of environmental accounting for HORIBA, Ltd. in 2013 among business area, in global environmental protection costs decreased by 41% compared to 2012. This is because large facility investments was limited. However, we have invested necessary facilities, like energy management systems. Meanwhile, in terms of environmental protection effects, energy consumption during product use and greenhouse gas emissions increased by approximately 45%. This is because large-size eco-design products that were newly introduced to the market have begun to increase to sales.

**Environmental Accounting Standards:** 

- 1) Investment/expenditure classification: Based on financial accounting standards
- 2) Costs: Includes personnel, management and R&D expenses (excl. depreciation)
- 3) i) Personnel costs: Average labor costs  $\times$  no. hrs environmental protection activities
- ii) R&D economic benefit: Contribution of eco-friendly products to operating income
- 4) Based on Environmental Accounting Guidelines by the Ministry of the Environment (2005 version)

### Costs of Environmental Protection (by Business Activity)

Scope: HORIBA, Ltd. head office/Biwako Plant/13 sales offices and it's training center, HORIBA Techno Service Co., Ltd. 24 service stations Accounting period: January 1, 2013 to December 31, 2013

(Millions of yen)

	ı	Econo	Economic Effect (Internal)					
	Category	Key Actions	Amount Invested	Total Cost	Total	Year-on-year Comparison (%)	Benefits of Amount	Remarks
(1) (	Cost in Business area		13.8	62.6	76.4	83.1	112.7	
	1. Cost of pollution prevention	Maintained existing exhaust and drainage facilities; providing regular and preventive maintenance	0.0	7.2	7.2	100.4	12.8	Power-saving in facilities, effective operational benefits
Details	2. Cost of global environmental protection	Switchover of all air conditioners from electricity to gas, Promoting switchover to energy-efficient facilities, and other initiatives	13.8	8.2	22.0	59.1	35.6	Conversion to energy-efficient facilities, modification of equipment, effect of electricity conservation
	3. Cost of resource circulation	Water conservation and Promoting zero emissions activity	0.0	47.2	47.2	99.3	64.3	Reduction of water consumption, etc.
	Upstream and Instream cost	Promoting green purchasing, and collection and reuse of used products	8.7	10.1	18.8	68.2	6.2	Promotion of green purchasing and reuse of collected used products
(3) A	Administration cost	Improved operational efficiency of environmental management systems, Promoting ecotraining and other initiatives	0.0	83.6	83.6	92.1	1.8	Benefit of environmental advertisements, etc.
(4) F	R&D cost	Promoting design for environment, the leadfree initiative, and other initiatives	32.9	573.6	606.5	80.3	901.0	Expansion of eco-friendly products, contribution to operating income
(5) (	Cost of social activities	Actively Promoting awareness-raising activities related to environmental technology and other initiatives	0.0	13.1	13.1	88.3	0.1	Support of environmental improvement, promotion of enlightenment initiatives
	Cost of environmental ediation	N/A	0.0	0.0	0.0	0.0	0.0	N/A
	al cost of environmental tection		55.4	743.0	798.4	77.5	1,021.8	

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# **B-4** Environmental Accounting

### **Effect of Environmental Protection**

Scope: HORIBA, Ltd. head office/factory/14 sales offices and it's training center, and HORIBA Techno Service Co., Ltd. 26 service stations Accounting period: January 1, 2013 to December 31, 2013

	Effect of Environmental	Protection			
Category	Environmental Performance Indicator (unit)	2012 (standard)	2013	Difference from Standard (Environmental protection benefits)	
	Total energy input (GJ)	139,544	139,556	12	*1
	Power consumption (GJ)	110,333	109,018	△ 1,315	*1
	City gas consumption (GJ)	18,714	20,614	1,900	*1
Effect of resources	Fuels (diesel, kerosene and gasoline)	10,497	9,924	△ 573	*1
invested related to	Core production elements input (iron, SUS, aluminum, copper and glass) (t)	886	1,737	851	
environmental protection	Recycled resource input (t) Office paper and packing materials (cardboard, wood and polystyrene)	300	277	△ 23	
protection	Water input (km³)	47	47	0	
	Groundwater input (km³)	15	16	1	
	City water input (km³)	32	31	△1	
	Greenhouse gas emissions (t-CO <sub>2</sub> )	7,425	7,429	4	*2
	Greenhouse gas emissions through electric energy consumption (t-CO <sub>2</sub> )	5,675	5,612	△ 63	*2
	Greenhouse gas emissions through city gas consumption (t-CO <sub>2</sub> )	1,046	1,152	106	*2
Effects to environment	Greenhouse gas emissions through fuel consumption (t-CO <sub>2</sub> )	704	666	△ 38	*2
and waste	Total waste generated (t)	460	337	△ 123	
generation by environmental	Final waste at landfill (t)	1	1	0	*3
protection	Total water drained (km³)	47	47	0	
	Water quality (BOD/COD) (mg/L)	N/A	N/A	-	
	NOx and SOx emissions (t)	N/A	N/A	-	
	Malodor (max. density) (mg/L)	N/A	N/A	-	

o is to beceniber	5., 25.5				
	Environmental Protec	tion Benefits			
Category	Environmental Performance Indicator (unit)	2012 (standard)	2013	Difference from Standard (Environmental protection benefits)	
	Energy consumption during operation (GJ) (Total of eco-friendly energysaving products)	37,901	54,833	16,932	*1
Effects in terms of	Greenhouse gas emissions during operation (t-CO <sub>2</sub> ) (Total of eco-friendly energy-saving products)	1,468	2,124	656	*2
goods and services generated	Hazardous substances emitted during disposal of used products and recycling of containers and packaging (t)	3	9	6	
	Amount of used products, containers and packaging recycled (t)	8	2	△6	
	Amount of product packing materials used (t)	276	255	△ 21	
	Greenhouse gas emissions from transporting products (t-CO <sub>2</sub> )	165	154	△11	*2
Other effects of	Products transported (t-km)	2,034,761	1,790,102	△ 244,659	
environmental	Soil contamination (m²)	0	0	-	
protection	Noise (dB) *at night	55	54	△1	
	Vibration (dB) *in evening	Less than 30	Less than 30	-	

<sup>\*1:</sup> GJ (gigajoule): Converted and calculated at 0.00976 GJ/kWh (from the April 1, 2006 public notification of the Energy Conservation Center).

### **Economic Benefits from Environmental Protection Activities**

(Millions of yen) **Economic Benefits from Environmental Protection Activities (Substantial Benefits) Effect** Amount Sales of solder residue, metal waste, etc. generated in production processes 1.7 Gain on sale of recycled products 108.9 110.6 Total

<sup>\*2:</sup> CO<sub>2</sub> emissions factor: Calculated assuming 0.378 kg of CO<sub>2</sub> per kWh, which is the average of all electric companies in Japan. The official value of the Kansai Electric Power Company is used for the Kyoto District.

<sup>\*3:</sup> Only for HORIBA, Ltd. head office/factory

# **C-1** Establishment of partnerships with production partner companies

## [Objective]

We maintain relationships of trust with our suppliers and learn from each other based on the awareness that our activities would be impossible to carry out without their cooperation and support.

Suppliers

# **C-1** Fair Transaction

### **Purchasing and Procurement Policy**

Giving consideration to the global environment and local communities, we place value on collaborative and trusting relationships with suppliers that are based on fair transactions. In addition, to strengthen the connection with suppliers in Japan and other countries , we implement supply - chain management and maintain active communications with suppliers so that we can grow up together.

When purchasing parts, materials, or equipment, we follow Japanese and foreign laws and regulations as well as social codes and when selecting suppliers, we make objective assessments based on indicators of quality, price, delivery, environmental friendliness, and CSR activities in order to ensure fair and just market transactions. We also implement purchasing policies that place high priority on ensuring compliance and reducing environmental impact, including exchanging memorandums with our suppliers to cease any possible relations with antisocial groups, requesting that they support restrictions on trade of conflict minerals, and recommending the use of reusable packaging to deliver parts and materials.

### HORIBA Group Purchasing and Procurement Policy

### 1. Partnerships

We shall build long-term relationships of trust with suppliers and aim to achieve harmonious relationships through mutual collaboration.

### 2. Fair and just market transactions

We shall strengthen the connection with suppliers in Japan and other countries; we shall choose suppliers by making objective assessments based on indicators of quality, price, delivery, environmental friendliness, and other factors to promote fair and just market transactions.

### 3. Environmental considerations

We shall establish Green Procurement Guidelines and promote purchasing of environmentally friendly parts and materials.

### 4. Information confidentiality

We shall not disclose information obtained through transactions to third parties without approval.

### **Requests to suppliers**

In order for HORIBA Group to fulfill its social responsibilities in business activities, carried out through the supply chain, we request that our suppliers abide by the following rules:

## 1. Compliance with relevant laws and regulations

Comply with laws, regulations, and social norms applicable in the countries and regions where suppliers engage in business.

### 2. Environmental considerations

Follow the HORIBA Group's Green Procurement Guidelines to provide parts and materials having minimal environmental impact.

## 3. Promotion of cost reduction (VA/VE activities)

Reduce costs through ongoing cost reduction activities.

## 4. Stable supply of good-quality products by deadlines

Provide a stable supply of products of the specified quality by the deadline and follow appropriate change control procedures (suspension of production and changes in specifications).

### 5. Promotion of reduced lead times

Reduce lead time quickly and flexibly in response to market changes.

### 6. Stable management

Maintain healthy, stable business management for long-term transactions and disclose business policies and the management status.

### 7. Technical skills

Make steady efforts to improve skills and to create innovative technologies.

### 8. Information security

Protect confidential information obtained through transactions.

### 9. Promotion of the use of IT

Prepare IT environments and promote the use of IT.

### 10. Exclusion of anti-social groups

Do not do business with companies having relationships with anti-social groups.

Suppliers

# **C-1** Fair Transaction

### **Promotion of global procurement**

To achieve high productivity, HORIBA Group companies in countries around the world work together to aim at parts standardization, joint purchasing, and quality improvement by applying common indicators. To ensure the export control mandated by the Foreign Exchange and Foreign Trade Act, export control committee members play a central role in establishing close cooperation with the export control division and providing periodic training. Thus we work to promote global procurement in compliance with relevant laws and regulations.

### **Green Procurement**

We are promoting environmental load reducing production throughout all the product life cycle. To achieve this, Procurement Group must procure parts and materials which can reduce the effects on the environment. We strive to promote green procurement\* primarily by revising as necessary our Green Procurement Guidelines, which we issued in 2003, so that those guidelines meet statutory regulations and keep pace with social trends as well as by inviting our suppliers to briefing sessions and training programs and also giving priority to suppliers intent on pursuing environmental initiatives during purchasing.

### **Green Procurement Guideline**

The HORIBA Group asks our partner companies to comply with the below and meet the requirements of components, devices and materials which consist of the products HORIBA Group produces and sells.

Requirements for Procured Materials	The HORIBA Group requests a warranty stating that "banned substances" are not contained, or are contained at a concentration of less than the regulated value, in procured materials, except in cases where an exemption applies.  The HORIBA Group may request you to submit information as to whether "controlled substances" are included in procured materials.
Requirements to Partner Companies	The HORIBA Group may request you to construct an environment management system and/or a system to control chemical substances in products in factories and offices where products are developed, manufactured and sold.

### **Response to Issues on Conflict Minerals**

HORIBA Group will correspond to issues on conflict minerals(\*1) with engaging in consultation with our suppliers and customers.

- \*1. In the United States, the SEC (Security and Exchange Commission) adopted a rule on disclosure requirement of conflict minerals (\*2) to US-publicly traded corporations and foreign private securities issuers, in order to execute Section 1504 of Dodd-Frank Wall Street Reform and Consumer Protection Act in August, 2010, since a source of funds for armed groups and anti-government organizations has been formed by importing metals mined from the area.
- \*2. Conflict minerals (gold, tin, tantalum, tungsten)are minerals extracted from the Democratic Republic of the Congo or its adjoining countries.

HORIB

### **C-1** Relations with Production & Assembly Partner Companies

Our business activities are carried out with the cooperation and support of all our suppliers, especially our partners who provide materials and parts required for product manufacturing. We work and aim to improve our technology with our suppliers based on the trust and contribution to society as a leading company.

#### **Relations with Production & Assembly Partner Companies**

We consider suppliers as "production cooperative partner companies" who can work and grow together. We maintain strong relationships with not only our material suppliers but also with our outsource assembly companies. We have created an organization with our suppliers named the "HORIBA Group Production Partner Companies' Association" for the HORIBA Group companies in Japan. We try to improve each other by adopting "Co-evolution, Harmony and Coexistence" as our motto.

In 2013, we worked with production partner companies together with the following events:

- Quality lectures at HORIBA COLLEGE
- HORIBA product workshops
- Craftsmanship competition
- · Improvement activity report sessions
- · QC activity conferences

For example, at the HORIBA product workshops, we showed our production partner companies the level of quality that is expected of HORIBA products by having them learn about HORIBA products and observe the products at our factories with their own eyes in order to allow them to see how the parts, which they supply us with, are used for the HORIBA products and what roles such parts play.

Thus we endeavor to raise both our own and their quality awareness, improve production sites and increase technological capabilities by establishing close cooperation and coordination between our suppliers and HORIBA through encouraging learning from one another.



Scene from a HORIBA factory tour (June 2013)

### Frequent communication **HORIBA**

Contract-related compliance

### Corporation, mutual enlightenment & amity Co-evolution Coexistence Technological improvement & business rationalization **Productivity improvement** Stronger management foundations

**HORIBA Group** Cooperators Organization of Manufacturing

Quality activities Small group activities Training activities



# D-1 Improvement in customer satisfaction

### [Objective]

We always provide high-quality products and appropriate services in a timely manner in order to increase customer satisfaction and earn our customers' trust.

We will continue to assist customers with using our products for many years to come by more actively responding to individual customers' requests and analysis needs.

## D-1 Customer Support Center

### **Customer Support Center**

At our Customer Support Center, we respond to inquiries and requests regarding products that we receive from customers.

Among the various HORIBA products, inquiries about pH meters, which are sold in particularly large numbers, account for approximately 60% of all inquiries. Most of these are handled via toll-free calls and e-mail.

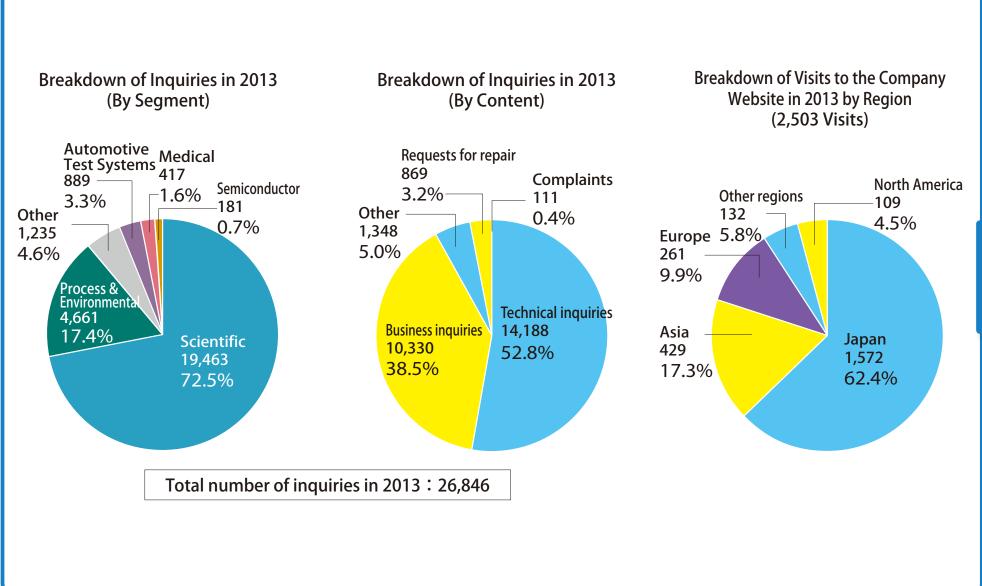
We released new products in September 2013, namely the portable-type pH/water quality analyzer LAQUAact D-70/ES-70/OM-70

series and a new pH electrode. As a result, although the total number of inquiries about HORIBA products decreased compared to last year, we received more inquiries regarding pH meters than last year.

In order to respond to inquiries about other products as quickly as possible, we are working in collaboration with the HORIBA Analytical Application Center, our sales divisions, and HORIBA Techno Service, which serves as a service division for HORIBA Group companies.

We also feed back information received from customers, including their comments and requests about HORIBA products, to our development divisions with a view to developing better products, thereby raising the overall level of customer satisfaction.

# D-1 Number of Customer Inquiries and Visits to the Company Website



# D-1 Service System

### Service system by HORIBA Techno Service Co., Ltd.

In 2000, HORIBA's service division was spun off into HORIBA Techno Service Co., Ltd., a wholly owned subsidiary of HORIBA, Ltd. HORIBA Techno Service has actively developed networks not only in Japan but also in countries around the world. HORIBA Techno Service holds the International Service Meeting(1), where members from around the world who are engaged in service work gather together to enhance and improve their service plans; the company also provides technical training programs(2) for new products. In addition, the company dispatches service engineers overseas and accepts trainees from overseas to improve service quality through mutual technological exchange. We will continue to provide appropriate services that meet local needs as well as offer security and reliable support to customers globally.

### (1) International Service Meeting

We hold the International Service Meeting annually in order to maximize the strengths of our service team, which includes as many as 1,100 members from group companies. In 2013, service engineer representatives (13 from overseas and 25 from Japan) attended this meeting to participate in animated discussions.



# (2) Motor exhaust gas analyzer MEXA-ONE technical training

In 2013, we released a new version of our flagship product, our motor exhaust gas analyzer model MEXA-ONE. Thus, to provide technical training, we assembled service engineers from Japan and seven other countries that play crucial roles in global customer support services. Using a program designed to enable engineers to understand the features and performance of the hardware and software used in the new product and to improve their field service skills, we conducted effective training to create a system for providing appropriate services to customers globally.



HORIBA

# D-1 Exhibitions and Networking

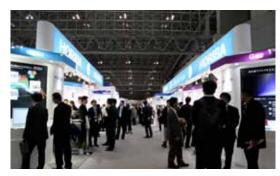
HORIBA Group companies participate in a total of about 40 exhibitions each year to actively advertise their new products and technological expertise. At the same time, the Group places great importance on further improving its hospitality. It does this by for example through initiatives such as the HORIBA Hospitality Suite. This provides HORIBA with invaluable communication opportunities not only to listen directly to customer views and reactions but also to deepen its relationships with its customers.



Automotive Engineering Exposition 2013, Japan's largest automotive engineering exhibition



JASIS2013, Asia's largest exhibition featuring the latest analysis and scientific equipment



SEMICON Japan 2013, the world's largest exhibition on semiconductor production systems and materials



Automotive Testing Expo Europe 2013 (Stuttgart, Germany), a trade fair of the European automotive measurement industry



#### **HORIBA Hospitality Suite**

We organize IR seminars, presentations for investors, and other events concurrently with exhibitions, so that we can let as many people as possible know about HORIBA.

The HORIBA Hospitality Suite is an event that we hold during exhibitions. We invite customers and other people involved in relevant industries to provide them with an opportunity to network and to strengthen our relationships with customers.

# **D-1** Quality Improvement Initiatives

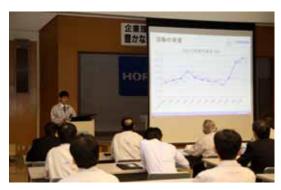
### **Quality Improvement Initiatives**

The HORIBA Group's quality assurance activities cover the following three stages: the first stage, covering product planning to design; the second stage, covering material procurement to manufacture; and the third stage, covering shipment to aftersales services. In order to satisfy the needs of our customers, we strive to develop the highest quality standards in the world at each stage, in addition to producing safe and Eco-Design products of outstanding quality.

To this end, we are working to reduce a total quality costs in a balanced manner of prevention, assessment and loss.

- Design review as an important function to ensure product quality
- Stepping up change order control to maintain consistent quality
- On-the-site assessment to examine whether customers' needs are being met
- Reliability assessment tests on essential product parts
- Organizing Product Quality Improvement (PQI) competitions to eliminate issues (1)
- Organizing the Craftsmanship competition (2)

We also collaborate with HORIBA Group and suppliers to establish a comprehensive quality assurance system so that we can provide customers with high quality products with consistency throughout the world.



#### (1)Product Quality Improvement (PQI) competitions

The Seventh HORIBA Group PQI Competition was held on October 22. This year, a wide range of quality improvement initiatives were developed, such as total commitment to reducing the defective product rate, focus on technological improvements, and focus on worksite improvements. To show individual companies' activities, which are usually unknown to outsiders. various data was displayed at the competition venue, including the numerous themes proposed this year by the HORIBA Group and our production partners. daily improvement activities, and selection results.

The HORIBA Group and its partner companies are committed to quality improvement activities in order to build a system for working together in harmony.



#### (2)Craftsmanship competition

On July 18, we held our sixth Technical Olympics in which members from the HORIBA Group and our production partners compete with one another. This event allows group company members to develop world-class professional skills and awareness as well as to raise their skill levels through mutual competition with partner companies. A total of 62 people, including 27 from the HORIBA Group and 35 from 10 of our assembly partner companies, participated in the competitions. Engineers displayed their skills and competed at a high level with one another. Companies competed in four categories—lead-free soldering, screw tightening, inspection, and a skills test; in addition, they also competed in terms of overall ranking across all categories (excluding the skills test).

Starting this year, product inspection was added as a competition category; in this competition for identifying the differences between harness drawings and actual products, participants competed using their skills to detect defects and identify

As was done last year, we also administered a practice examination for the skills certification test so that participants could ascertain their skill levels before taking the actual test. By sharing knowledge of basic manufacturing skills among all members, we are able to establish processes for eliminating faulty products, and aim to produce reliable and high-quality products for our customers.

# D-2 Eco-Design Products

### [Objective]

We strive to prepare in-house standards and management systems in concert with social expectations to conduct development of Eco-Design products and product manufacturing in consideration with various requirements.

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### D-2 Eco-Design Products

#### The RoHS\*1 Directive

HORIBA products broadly classified into the following categories shall meet the requirements of the new European RoHS Directive (2011/65/EU):

- 1. Monitoring and control instruments which are placed on the market from 22 July 2014;
- 2. In vitro diagnostic medical devices which are placed on the market from 22 July 2016;
- 3. Industrial monitoring and control instruments which are placed on the market from 22 July 2017;

HORIBA will comply with the RoHS requirements without delay. In 2013, we issued CE Declarations of Conformity for a total of eleven HORIBA products to demonstrate that they conform to the European RoHS Directive. Other countries implement similar requirements of the EU RoHS Directive. We are gathering regulatory information and proposing our opinion to the legislative procedure through the activities of our representative in Belgium as well as through business activities in industry.

### The EU REACH\*2 Regulation

Manufacturers of an article containing SVHC (Substances of Very High Concern) in a concentration above 0.1 % weight by weight (w/w) shall provide the recipient of the article with sufficient information.

In order to respond quicker to frequent inquiries from our customers on the substances contained in our products, we have installed a new system for managing data on the substances contained in each product part and material. As the number of SVHCs will likely increase in the future, we will continue our efforts to apply with the regulations as quickly as possible in cooperation with our suppliers.

#### The GHS\*3 Regulations

We supply chemical products, such as, analyzer calibration solutions and standard samples. Manufacturers are obliged by legal regulations to provide safety information on chemical products using Safety Data Sheets (SDS\*4) or labels. In July 2003, the United Nations adopted the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Based on this system, both developing and developed countries are now formulating chemical-related laws on their own. We believe that providing information in accordance with GHS, which is being adopted worldwide, is not only necessary to comply with legal regulations but also a part of our responsibility as a manufacturer to ensure occupational health and safety of customers. In 2013, we installed an SDS authoring system, which provides support services in 43 different languages for 50 countries. In 2014, we will fully utilize this system to further accelerate implementation of our GHS compliance initiatives



#### \*1 Restriction of Hazardous Substances

European Union Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic

#### \*2 Registration, Evaluation, Authorization and **Restriction of Chemicals**

Regulation of the European Parliament and of the Council concerning the use of chemical substances for the protection of human health and the environment in the European Union

**GHS**: The Globally Harmonized System of Classification and Labelling of Chemicals

**SDS**: Document used to provide information on the hazardous properties of chemical products and chemicals contained in products in order to ensure safe handling thereof.

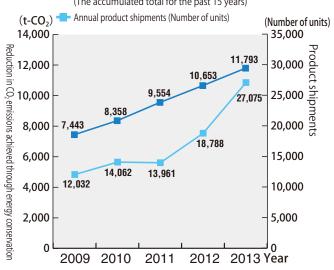
**Labels**: Labels are filled in with necessary information and presented (affixed or printed) on containers to provide information on the hazardous properties of chemical products.

In 2013, we shifted from qualitative assessments to quantitative assessments when assessing product performance in terms of energy and resource conservation, and we set a target of reducing energy consumption by more than 25% compared to that of conventional products. We have also mandated to set targets to be achieved and to specify high-priority issues during the initial (design) stage of the product development process.

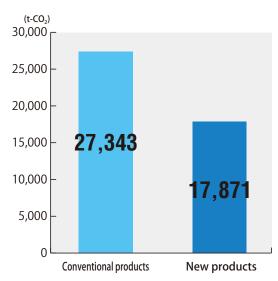
### CO<sub>2</sub> Emissions Reduction of Eco-**Design Products**

Scope: HORIBA, Ltd.

■ Reduction in CO<sub>2</sub> emissions achieved through energy conservation (t-CO<sub>2</sub>) (The accumulated total for the past 15 years)



### Comparison of CO<sub>2</sub> Emissions between New and Conventional Eco-Design **Products**



Calculated based on the cumulative number of units sold over the past decade

### D-2 Eco-Design Product: HORIBA, Ltd.



### **Eco-Design Produst: HORIBA, Ltd.** Portable pH/Water Quality Meter 'LAQUAact' series

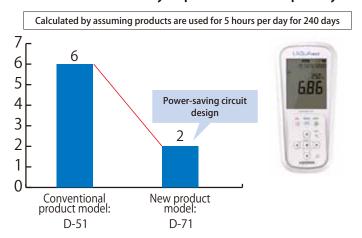
'LAQUAact' is a portable pH/water quality analyzer for use in not only laboratories but also factories and even outdoors with its remarkably easy one-hand operation. The body is made of the latest polycarbonate resin to increase its chemical resistance compared to that of conventional products. To meet a wide range of measurement needs, a large variety of pH electrodes are available including a low conductivity electrode designed to reduce response time to 60 seconds when measuring tap water, a hydrofluoric-acid-resistant electrode and a strong-alkali-resistant electrodes that offer longer product lives.

In addition, compared to conventional products, the numbers of batteries, hydrofluoric-acid-resistant and strong-alkaliresistant electrodes annually required are greatly reduced (see the figures for estimation). The conditioning kit enables customers to maintain low-electricconductivity electrodes for tap water in "good as new" condition.

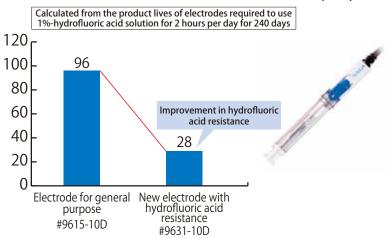
As a result, LAQUAact series reduces cost and time incurred in replacing electrodes and other consumables as well as the cost of disposal, which contributing to higher usability and lower environmental impact.



#### Reduction in battery replacement frequency



#### Reduction in the number of electrodes used per year



\* Results vary depending on actual usage and operating conditions.

HORIBA

## D-2 Eco-Design Product: HORIBA STEC, Co., Ltd.



### Eco-Design Product: HORIBA STEC, Co., Ltd. **Digital Mass Flow Controller XF-102/104 Series**

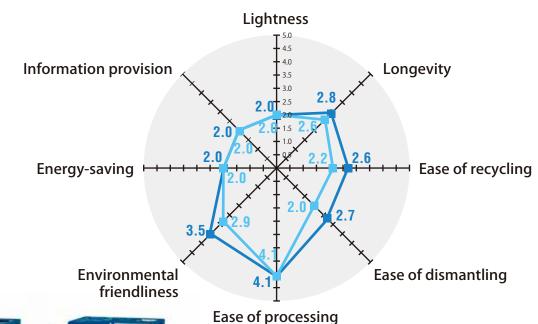
XF-102/104 Series Digital Mass Flow Meters are designed to be used in combination with vaporizers, such as the MV-2000 precursor vaporization system, to perform precision measurements of flow amounts of precursors used in semiconductor manufacturing equipment and other systems. Compared to the conventional LF-F series, they feature an approximately four-times faster response speed and 20% better measurement precision.

To realize an eco-design, the main body structure was revised so as to enable the use of stainless steel for the entire body and to contribute to material recycling. The models in the new series are also more environmentally friendly as a result of the elimination of the use of lead and other designated hazardous substances in compliance with the RoHS regulations.

As design rule of semiconductor will continue to decrease in the future, there will likely be increased needs for equipment that can highly accurately and speedily control the flow of new precursors such as aluminum oxides and hafnium oxides. HORIBA's new products are expected to contribute in this area.









XF-102

XF-104

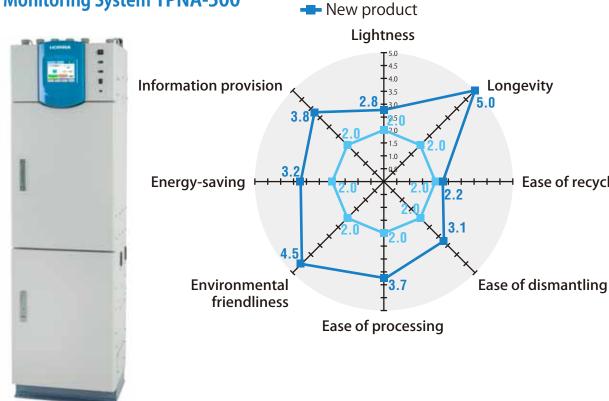
Ease of recycling

# D-2 Eco-Design Product: HORIBA Advanced Techno Co., Ltd.

### **Eco-Design Product: HORIBA Advanced Techno Co., Ltd Automatic Total Nitrogen/Phosphorus Monitoring System TPNA-500**

The TPNA-500 automatic total nitrogen/ phosphorus monitoring system is designed to automatically measure the concentrations of nitrogen and phosphorus contained in wastewater. This model can reduce product lifecycle costs by 30% compared to conventional models by prolonging the product lives of reagents used as well as by reducing the amount of waste liquid and consumption of electricity and pure water.

To realize an eco-design, we increased product life by prolonging the useful life of reagents, as mentioned previously, as well as by adopting a stain-resistant measurement system. Compared with conventional products, this model also features greatly improved environmental friendliness as a result of the elimination of the use of lead and other designated hazardous substances in its parts and in the production process.



Conventional product

# **E-1** Responsibility to owners and investors

### [Objective]

We appropriately distribute profits to our owners (shareholders) and periodically report on our management status to investors and stakeholders in order to maintain management transparency.

# **E-1** Two-Way Communication

### **Two-Way Communication**

To ensure that the market value (stock price) is consistent with the true value of the company, HORIBA provides information to owners (i.e., shareholders) and investors (through IR— investor relations) under the slogan "Accurate, timely and fair disclosure."

We deliver quarterly reports to owners, hold a general meeting of shareholders on a Saturday and hold shareholder-briefing sessions as a way of providing opportunities for shareholders to communicate directly with company executives. We update information on our official website as frequently as possible and work to improve the content of various information booklets for the purpose of providing individual investors with accurate information in a timely manner.

We also make great efforts to hold company briefing sessions and explain our business policies and financial results in easytounderstand language in order to gain as much support for HORIBA as possible. Furthermore, our president and executives hold biannual financial briefing sessions for institutional investors and take an active part in establishing face-to-face communication by visiting investors and developing overseas IR.

We conduct more than 300 interviews in addition to holding product briefing sessions at company exhibitions, thereby facilitating twoway communication with investors and providing detailed information on HORIBA's business philosophy, strategies and financial results.

### Change in the dividend policy: A policy of returning profits based on consolidated profits

Until the fiscal year ending in December 2012, we had a dividend policy of returning 30% of HORIBA. Ltd.'s unconsolidated net profits to owners. However, starting from the fiscal year ending in December 2013, in light of the expansion of our business and increase in group companies' profitability, as the total amount of returns to shareholders (dividends and share buybacks), we have changed our policy to allocate up to 30% of the HORIBA Group's consolidated net profits as dividends to owners.

### **E-1** Company Briefing Sessions and Information Disclosure

#### **Company Briefing Sessions**

#### 1 For domestic institutional investors

- Annual financial briefing session (February 15, 2013 in Tokyo)
- Mid-term financial briefing session (August 7, 2013 in Tokyo)
- Individual interviews conducted by the president, executives and staff members in charge (more than 300 times annually)
- Exhibition booth and briefing tours (four times annually)



Exhibition booth tour

#### 2 For overseas investors

- Visits to investors by the president (July 2013 in the U.S. September 2013 in London)
- Briefing by the president at an IR forum (March and December 2013 in Japan)
- Individual interviews by the president, executives and staff members in charge (more than 50 times annually in Japan)

#### For individual investors

- General meeting of shareholders (Saturday, March 23, 2013; a briefing session with executives after the general meeting held at the Kyoto Head Office)
- Briefing session for investors (November 2013 in Tokyo and December 2013 in Nagoya)





Briefing session for investors

#### **Information Disclosure**

- HORIBA Report (annual publication)
- Business report (semi-annual publication)
- Earnings digest (quarterly publication)
- Company website: Investor Relations (updated as needed)

#### **★** IR Information http://www.horiba.com/investor-relations/







**Business** report

# Respect for employees' human rights, personalities and individuality

### [Objective]

We consider each employee an invaluable asset and respect their personalities and individuality. We actively maintain communication with employees and create opportunities for education to develop each individual's potential to the maximum possible extent. We also provide an open and fair working environment.

### F-1 Basic Personnel Management Policies

Staying true to our company motto, "Joy and Fun," we are making efforts to create an open and fair working environment where all HORIBA Group company employees can challenge themselves through their work.



#### **Basic Personnel Management Policies**

#### **Open & Fair**

We believe in disclosing all necessary company information and personnel rules to every employee. This policy ensures open competition and allows free communication between executives and employees, managers and staff, and among employees themselves. We also believe that all employees should have an equal chance and rewards in proportion to their contributions in a fair work environment.

#### **Positive Evaluation System**

Challenges always involve the risk of failure. If employees do not accept a challenge, they get no points in our evaluation system, even if they do not fail. If they accept a challenge, they receive a positive evaluation; and if their challenge brings them success, they will get extra points. We determine employee evaluations by how they attack their challenges.

#### **Communication**

Information is not what you report to others, but what you share with others. We have designed communication systems to allow staff to express their opinions and make proposals instead of managers passing information to their staff in one-way communications.

#### **Birthday Parties for** employees



To facilitate communication between executives and employees, buffet parties are hosted by the President and other executives for employees celebrating their birthdays each month (head office: once per month; Tokyo: four times per year; Nagoya: three times per year; Fukuoka: once per year).

#### Ranked among the Best Workplaces in **Japan for Eight Consecutive Years**

The results of the eighth survey on Best Workplaces in Japan, conducted by Great Place to Work® Institute (GPTW) Japan, showed that HORIBA, Ltd. ranked among the top 11 companies. Since the survey started in Japan, HORIBA, Ltd. has been chosen among the best workplaces for eight consecutive years. GPTW Japan defines the best companies to work for as companies where employees can trust their managers and administrators, work with a sense of pride, and enjoy camaraderie with their co-workers. The survey includes a questionnaire for company executives concerning the company system and corporate culture, as well as questions for a random sample of employees. Employee responses account for two-thirds of the survey, thereby allowing employees' opinions to be more strongly reflected in the final evaluation. The results of the questionnaire conducted among our employees showed many positive responses to survey questions, such as "Our company makes great contributions to local communities and society."

At HORIBA, we work in line with the company motto, "Joy and Fun," and have basic policies of "open & fair" , "positive evaluation" and "communication". Based on these policies, we will continue to maintain a corporate culture that makes HORIBA one of the best companies to work for in Japan.

# F-1 Promotion of Diversity

HORIBA considers its employees to be important assets, and we appoint personnel to different jobs based on standards for evaluating abilities, achievements, commitments, and goal achievement processes in accordance with our basic personnel management policies, which support open and fair competition.

### **Appointment of female managers**

Against the backdrop of our global corporate activities, we will continue to employ diverse personnel using the percentage of female managers as a key indicator of diversity.

#### [Number and Percentage of Female Managers]

Targeted companies	No. of female managers	% of female managers
4 domestic companies	11	4.9%
15 major overseas companies*	91	12.5%

<sup>\*</sup> Companies targeted for company-wide internal controls on financial reporting

### Promotion of the employment of people with disabilities

In order to provide greater employment opportunities for people with disabilities, we collaborate with Job-placement offices to accept employees through on-the-job training.

In 2013, we employed four handicapped persons.

### **Employment of Personnel from Overseas**

We employ skilled personnel irrespective of nationality in a wide range of areas, including research and development as well as administration and sales. Personnel of various nationalities (Canadian, Indian, Chinese, South Korean, Russian, etc.) are working both inside and outside our companies.

We also take the initiative in recruiting new graduates. This year, we employed graduates with foreign citizenship, including those who graduated from school in 2014, for a seven consecutive year (a total of thirteen graduates, including those from China, South Korea, Indonesia, Myanmar and Ukraine).

### **Launching of the Stained Glass Project**

In January 2014, we launched the Stained Glass Project so that HORIBA employees with diverse abilities can work together for ongoing activities aimed at creating a more vibrant, stronger organization by accepting one another's abilities and individuality. This project is supported by our belief that unique corporate value is generated by employees having diverse experiences, values, individuality, and restrictions; such employees create new value in their efforts to play leading roles in the coming era through their diversity.

## F-1 Work-life Balance

#### **Support for Work-life Balance**

In response to changes in employees' family circumstances, we have introduced the employees with shorter working hours system and the work from home system to maintain and improve employees' work-life balance. We are also working to make these systems known to all employees and to provide training for managers in order to create a work environment where employees can easily apply for our work-life balance support programs, including childcare leave.

#### **Employees who started taking childcare leave**

#### **HORIBA** Group companies in Japan

HORIBA, Ltd.; HORIBA Advanced Techno Co., Ltd. HORIBA STEC, Co., Ltd.; and HORIBA Techno Service Co., Ltd.;

(Unit: person)

		2009	2010	2011	2012	2013
	No. who gave birth	19	28	24	33	32
Women No. on childcare leave		18	28	26	33	32
	No. of managers	0	1	0	0	0
Men  No. on childcare leav	No. on childcare leave	3	3	3	5	5
	No. of managers	0	0	1	0	0

Nearly 100% of women who gave birth took childcare leave and returned to work.

#### **HORIBA Open House**

Since 2002, every year we have held a HORIBA Open House event, in which we invite employees' families to see the workplace at HORIBA.

In 2013, we organized the event for the Aso Factory in Kumamoto and it was attended by around 60 participants.





### F-1 Human Resource Development

#### **HORIBA COLLEGE**

HORIBA COLLEGE offers 280 training courses designed to raise participants' levels of knowledge, skills and business literacy, and to support individual employees in building independent careers. More than 2,500 employees participated in the project in 2013.

We are developing global "human assets," i.e., personnel who are able to flexibly respond to changes in the business environment and develop different strategies.



Built in a rich natural environment, FUN HOUSE is used for various training programs and meetings, including HORIBA COLLEGE programs.

#### **Open Application Overseas Training Program**

HORIBA, Ltd. launched an open-application overseas training program in 1984 to allow our employees to develop international ways of thinking by working in HORIBA Group companies abroad. Then, in 1999, this program was made available to all employees of HORIBA Group companies. In 2013, including those on the Overseas On-the-job Training Program, we sent 15 Japanese employees to our overseas bases and we have sent 15 Japanese employees as well in 2014. A total of more than 190 employees have participated in such overseas training so far and worked on the global stage.



#### **Employees sent to overseas business sites** for training (cumulative total through February 2014)

Target: HORIBA Group companies in Japan HORIBA, Ltd.; HORIBA STEC Co., Ltd.; HORIBA Techno Service Co., Ltd.; and HORIBA Advanced Techno Co., Ltd.

Area	Country	No. of persons
Americas	U.S.A.	78
	Brazil	4
Europe	Austria	1
	France	46
	Germany	30
	U.K.	10
Asia	China	10
	India	4
	South Korea	10
	Singapore	7
	Taiwan	3
	Vietnam	1
Total		204

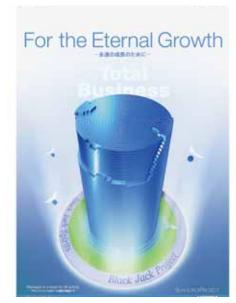
HORIBA

### F-1

## Business Operation Improvement Initiatives—Blackjack Initiatives

#### Blackjack Initiatives Aimed at Improving Employee Awareness and Behavior

Blackjack initiatives, which are aimed at improving employees' awareness and behavior, cover a wide range of activities, from greeting campaigns by new employees to activities for improving quality, cost and delivery. Employees express their "omoi" (convictions) to all company members and strive to achieve their own ideals with the help of their supporters, regardless of affiliation or age. Fifteen years have passed since the Blackjack project was introduced and many project themes have been proposed during this time. Blackjack initiatives are developed by all HORIBA group companies around the world and form the basis of their business activities. The initiatives are an important part of HORIBA-style management for boosting quality standards, fostering corporate spirit, developing human assets and stimulating organizations.



Symbol of Blackjack initiatives, which represents the growth of the "omoi" of individual employees based on strong mutual bonds





Blackjack Award World Cup

The participants for the final presentation at the Blackjack Award World Cup, which recognizes the best initiative for the year.

# F-2 Assurance of safety, health and comfortable work environments for employees

### [Objective]

We give the highest priority to human safety and health in all of our business activities and take an active part in raising each employee's awareness of safety and health issues in order to promote physical and mental health.

# F-2 Declarations of Occupational Safety and Health



### **Declarations of Occupational Safety and Health**

In addition to the Physical and Mental Health Promotion Declaration and the HORIBA Group Safety Declaration issued by top executives, HORIBA has adopted a policy of "promoting physical and mental health to create comfortable, vibrant workplaces" as one pillar of its Integrated Management System (see G-1). Also, all HORIBA Group companies actively engage in occupational safety and health initiatives, including obtaining OHSAS 18001 certification (for occupational safety and health).

#### Physical and Mental Health Promotion Declaration (May 7, 2012)

To stay true to the "Joy and Fun" motto, the HORIBA Group promotes its employees' physical and mental health in order to help them live fulfilling lives with a sense of purpose in both life and work as well as to realize comfortable and lively workplaces.

Chairman, President & CEO, HORIBA, Ltd.

#### Physical and Mental Health Promotion Action Guidelines (May 7, 2012)

To realize the Declaration on the Promotion of Physical and Mental Health, the HORIBA Group is committed to three types of prevention and four healthcare measures.

#### Promotion of three types of prevention

Primary prevention: Promote physical and mental health; prevent illnesses and injuries.

Secondary prevention: Take measures for early detection and treatment of illnesses/injuries; prevent development of

serious symptoms.

When employees become ill or injured, health management staff in or outside the workplace shall Tertiary prevention:

not only observe confidentiality and prevent recurrence of such illnesses or injuries after employees return to work, but also make efforts to minimize the disadvantages incurred by the employees and

their workplaces.

PDCA: HORIBA's health promotion divisions collaborate with the HORIBA Group's Safety and Health

> Committee to set medium-term targets, and develop action plans for the primary, secondary, and tertiary prevention and indicators to measure the effectiveness of the plans. The divisions evaluate

the achievement of the indicators and reflect evaluation results in new action plans.

#### **◆** Enhancement of four healthcare measures

Self-care: Each HORIBARIAN pays attention to his/her level of health and stress, quickly and appropriately

dealing with any unwelcome health conditions.

Superiors routinely monitor the working situations and levels of health of their employees to Line care:

become aware of at an early stage those who are suffering from unwelcome health conditions.

Care by internal health management staff: Internal health management staff members assist each HORIBARIAN in promoting

his/her health by providing necessary information and advice.

Care by outside experts: Through collaboration with external institutions of experts, HORIBA has developed a system for

each HORIBARIAN to use freely and confidentially.

Work-life balance: In addition to enhancing the four healthcare measures, HORIBA assists each HORIBARIAN in

promoting his/her health in collaboration with his/her family as necessary.

\* Horibarian: The common designation for all employees of the HORIBA Group

#### **Basic Principle:**

We strive to place the highest priority on ensuring human safety in all aspects of our business activities and also attempt to ensure product safety. HORIBA Group executives and employees as well as partner company employees are responsible for placing the highest priority on safety, regardless of profits or delivery times.

#### **Action Guidelines:**

We shall act based on the following guidelines.

- **1.** We shall qualitatively and quantitatively analyze factors that compromise safety and make continuous improvements in order to actively promote the safety of people working at our company.
- **2.** We honestly recognize that there some factors in our products that may compromise the safety of customers as well as of the employees of HORIBA and our partner companies, so we make positive, continuous efforts to improve safety.
- **3.** To improve safety, we comply with regulations, agreements, and conventions as well as establish our own independent standards to meet requirements.
- **4.** We provide curricula for various safety education programs in order to improve the knowledge, skills, sensitivities, and ability to take action of HORIBA executives and employees as well as of our partner companies' employees.
- **5.** We actively participate in product safety improvement activities undertaken and promoted by customers, other companies, and the public at large.
- **6.** We keep HORIBA executives and employees as well as our partner companies' employees well informed of safety improvement activities in order to raise their safety awareness; we also release information on our safety improvement activities to the public as needed.

Atsushi Horiba Chairman, President & CEC HORIBA, I td.

and.

## F-2 Annual Safety and Health Plan for 2013



### **Annual Safety and Health** Plan for 2013

In 2013, in accordance with the HORIBA Group policy, "HORIBA PREMIUM -Create First Class Value for MLMAP-", we formulated an annual safety and health management plan for the HORIBA Group. In order to achieve our annual goals, all group employees made united efforts to implement safety and health programs.

### **Annual Safety and Health Plan for 2013**

#### **Annual Slogan**

Stay true to our corporate motto, "Joy and Fun," and promote physical and mental health to realize comfortable, lively workplaces.

#### **Annual Targets** [Safety and health]

- (1) Prevent employment injuries Eliminate employment-related and traffic accidents, employment-related illnesses, and commuting injuries
- (2) Promote traffic Safety

Eliminate fatal accidents, traffic accidents caused by employees which result in the injury or death of the victim(s), and traffic accidents caused by employees (those which result in injury or death on the part of the victim(s) as well as those where losses are sustained due to employees' negligence)

#### [Occupational health]

- (1) Safeguard employees' health
  - Ensure a 100% consultation rate for health examinations, increase the number of employees undergoing secondary examinations
- (2) Promote employees' mental health
  - Reduce the number of persons with newly developed mental disorders to less than that of last year
  - Reduce the number of persons suffering from recurrence of mental disorders to less than that of last year

#### **Annual Goals and Achievements**

#### [Safety management]

#### (1) Employment injury prevention

- Established a group chemicals management subcommittee and group safety manager liaison committee
- Established group rules on forklift driving (provide training at all sites with forklifts)
- Provided enhanced safety management education (chemicals; high-pressure gas; electricity; radiation; X-rays; lasers; and dangerous objects) (7 courses attended by a total of 975 employees)
- Started use of the group patrol database
- Provided general disaster prevention training for 2013 (closing fire doors of target buildings

and using emergency alarms; training regarding initial emergency response; smoke house experiences, etc. in the head office district)

- Provided foreman training (overnight training at the training center (attended by 34 employees))
- Provided training for newly recruited employees
- Provided support for employment of the handicapped

#### (2) Traffic safety

- Implemented programs developed by the group-wide vehicle management subcommittee

(commendations for safe driving of skilled drivers; re-education for employees who have caused accidents; installation of the company driving management system in company-owned vehicles; preparation of a safety management manual for managers; development of tools for advertising the five rules for safe and ecological driving (stickers/posters), etc.)

- Held lectures on safe driving (automobile course attended by 717 employees; motorcycle course attended by 128 employees; and bicycle course attended by 426 employees)
- Support for employment of the disabled (safe driving instructions for car commuters, etc.)



Forklift driving training



Smoke room experience

### F-2 Annual Goals and Achievements

#### **Annual Goals and Achievements**

### [Occupational health] (1) Safeguarding of employees' health

- Implemented Physical and Mental Health Promotion Project activities (enhanced health training in the head office district and other areas; Health Improvement Challenge 2013 program (attended by 429 employees), etc.)



Physical and Mental Health Promotion Project members

- Provided integrated health examination in 2013 and health counseling based on examination results (enhanced health counseling in areas other than the head office district), etc.
- Held back pain prevention lectures; VDT health education; education courses on blood, etc. (3 lectures attended by a total of 140 employees)
- Provided women's support services (2 seminars by obstetricians; e-mail consultations (used by 3 employees); and special holiday medical treatment service by obstetricians (used by 17 employees))

#### (2) Prevention of mental disorders

- Provided integrated health examinations in 2013 (stress interview sessions held for the first time in the head office district and at the Aso Factory)
- Provided education on mental disorder prevention to team leaders (standard course)
- Offered in-house counseling services
- Published a health column in the company newsletter (pamphlets and the company intranet)

#### Other:

- Further developed safety and health promotion systems in individual departments in coordination with the Integrated Management System (IMS) (implemented internal audits on annual safety and health plans developed by individual departments as well as action guidelines based on the Safety Declaration)
- Provided fire and disaster prevention education as well as AED basic lifesaving lectures (attended by a total of 631 employees)
- Carried out self-organized firefighting team activities (appointment and discharge ceremonies, participation in the Minami Self-organized Firefighting Team Training Convention, group training convention, model performance, periodic training, etc.)



HORIBA Group Chubu district AED basic lifesaving lecture

#### **Awards:**

 Kenji Yamamoto received the 2013 Minister of Health, Labour and Welfare's Occupational Safety Award for Best Foreman



#### Memberships, etc.:

- Japan Red Cross Blood Donation Supporters (June 2013)
- Kyoto Prefecture Women's Body Maintenance Project (September 2013)
- Kyoto Prefecture Kyoto Health Promotion Company Certification System (December 2013)



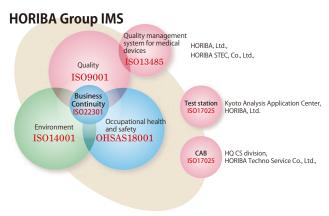
## G-1 Integrated Management System

### [Objective]

By using an Integrated Management System (IMS) that integrates the ISO9001 (quality management standard), the ISO14001 (environmental management standard), and the OHSAS18001 (occupational safety and health certification) and ISO22301 (business continuity management standard), we strive to realize a management system that effectively provides a basis for management across a wide range of areas, including quality, the environment, occupational safety and health, and business continuity.

# G-1 Integrated Management System

### **Integrated Management System (IMS)**



The HORIBA Group employs IMS (Integrated Management System), which integrates the ISO9001 (quality management standard), the ISO14001 (environmental management standard), and the OHSAS18001 (occupational

health and safety certification) from Japan Quality Assurance Organization (JQA). The HORIBA Group was granted the JQA Integrated Management System Certification (JQA-IG-0001-08). We are aiming to have our major overseas production bases obtain accreditation for ISO9001 (quality) and ISO14001 (environmental) management standards.

The Kyoto Analysis Application Center of HORIBA, Ltd. was approval as a test station for ISO/ IEC17025:2005 (RTL00880) (chemical testing) by the Japan Accreditation Board also the HQ CS division of HORIBA Techno Service Co., Ltd., one of our group companies, was accredited by the National Institute of Technology and Evaluation as a CAB for ISO/ IEC 17025:2005 (ASNITE 0033C) Calibration of Emission Test Facilities.

In March 2013, JQA granted HORIBA, Ltd.

and HORIBA STEC, CO., Ltd. the JQA Management System Certification (JQA-MD0010) for ISO13485 (quality management system for medical devices).

In February 2014, we newly obtained the ISO22301:2012, certification for business continuity management systems (JQA Management System Registration Certification JQA-BC0013) in the area of lifesaving medical products. Medical products were requested by many people in the affected areas after the Great East Japan Earthquake. This certification aims to create a system designed to cope with the risks surrounding the company by using the management system as well as to help improve risk resistance of HORIBA.

As you can see, the HORIBA Group is adopting a variety of management system standards to realize a more efficient and effective management system.

### G-1 Results of IMS Initiatives for 2013

#### **Results of IMS Initiatives for 2013**

In order to fulfill to our customers' expectations and our social responsibilities, we are attempting to use our management system in an efficient way to support complex operations focusing on our core business.

#### - Quality

HORIB

At HORIBA, we place high priority on improving our quality and are striving to increase customer satisfaction by providing products and services of the same quality all around the world. We also exchange information with our partner companies at the **HORIBA Group Meeting for Production Partner** Companies to improve the quality of our design, manufacturing, and purchasing processes. By the meeting, we are trying to achieve the goal of reducing the percentage of defected products.

#### - Environment

Our environmental initiatives included reducing CO<sub>2</sub> emissions at business sites by replacing old devices with more energy efficient models, and shifting to high-efficiency lighting.

Moreover, in addition to responding to the 2010 Revised Energy Conservation Act, we continued to respond to the government's and electric power companies' requests to conserve

energy after the Great East Japan Earthquake by controlling room temperatures during summer and winter, reducing the use of some lamps, turning off unnecessary lighting, stopping some elevators, and switching off equipment not in use.

Due to increase in sales and extreme summer heat, the total amount of energy consumption slightly increased compared to last year. However, in terms of energy consumption per sales, we were able to achieve our IMS objectives, which were established based on the Energy Conservation Act.

Other ongoing initiatives include promoting modal shifts in transportation, incorporating more eco-designs in new products, and giving concrete form to some of the ideas submitted during our in-house Energy Conservation Idea Contest and applying them to the HORIBA Group.

#### - Occupational safety and health

In 2013, there were no occupational accidents resulting in cessation of work time at any HORIBA Group company in Japan. In 2014, based on the HORIBA Group Safety Declaration and Safety Action Guidelines issued by top executives, to prevent accidents, we will eliminate occupational injuries by establishing PDCA cycle through risk assessment initiatives carried out at all group

companies in Japan. We will also make use of our safety and health education programs.

#### - Health management

We are striving to promote employees' health by focusing on the Mental and Physical Health Promotion Project, organized by employees across the group. We achieved our goal of raising the health examination consultation rate to 100%. In addition, fulltime occupational health staff, including an occupational physician and a public health nurse, provide guidance and interview to employees according to their working styles and lifestyles based on the results of periodic medical examinations.

In addition, we focus on manager and employee training to promote mental health and encourage the use of the Employee Assistance Program (EAP). In 2013, we also started a mental health check program to have public health nurses and medical nurses conduct medical interviews for all employees. Through these efforts, we are striving to realize a comfortable work environment for all employees to realize our company motto of "Joy and Fun".

### G-1 Results of IMS Initiatives for 2013

#### 2013 HORIBA Group IMS Policy, Items, and Objectives

Group IMS Policy	Group IMS Items	Group IMS Objectives	Group IMS Targets	Evaluation	
•• At the HORIBA Group, we meet	Class Value for MLMAP  IMS items	Reduce quality costs Increase rates of costs for prevention and assessment and decrease the rate of cost for loss (Reduce warranty costs)	Reduce warranty costs from last year	Δ	
customer needs through our first class quality products and services in countries all around the world.		Conserve energy and resources (1) Improve the energy usage efficiency rate by 1% compared with last year (2) Implement waste reduction activities	(1) Reduce CO <sub>2</sub> emissions by 1% compared with last year (2) Implement waste reduction activities	0	
We use our skills for the development of science and technology and for the conservation of health, energy, and the environment. At the same time, we comply with laws, regulations, and		the development hnology and for the health, energy, and a the same time, (Production aimed to increase [Safety management]	[Safety management] (1) Prevent employment injuries	(1) Prevent employment injuries [Reduce the number of employment injuries and employment traffic accidents, occupational sickness cases, and commuting injuries to zero]	Δ
social norms, promote harmony with stakeholders and contribute actively to society.		(2) Promote traffic safety	(2) Reduce the number of traffic accidents [accidents causing death, accidents resulting in injury or death, and self-inflicted accidents (resulting in injury or death to zero)]	Δ	
<b>3</b> We value employees' mental and physical health and promote cheerful and vibrant workplaces.		omote cheerful  B Promote the creation of safe and  [Occupational health]	(1) Ensure employees' health [Ensure a 100% consultation rate for health examinations; increase the consultation rate for secondary examinations]	0	
We formulate plans based on the HORIBA Group management policy to increase the enterprise value of our group and we continually work to		(2) Promote employees' mental health tion/	(2) Promote employees' mental health [Reduce the number of persons with newly developed mental disorders less than last year] [Reduce the number of persons suffering from relapses of mental disorders less than last year]	Δ	
improve them.		Increase customer satisfaction Improve ranking designated important customers' evaluations	Increase further customer satisfaction	0	

HORIBA

# G-1 Integrated Management System (IMS): IMS Priority Measures for 2014

#### **2014 HORIBA Group Policy**

HORIBA Premium—Create First Class Value for MLMAP—

Create High Quality Value—Toward Achieving Medium- and Long-term Management Plan 2015

#### **IMS Priority Measures for 2014**

To offer products that bring benefits to customers, by providing customers with information on chemicals contained in products quickly and ensure compliance with the RoHS Directive, we have added goals regarding maintenance and improvement of products' environmental performance to the list of priority measures for 2014 (4).

In April 2013, HORIBA executives issued the HORIBA Group Safety Declaration and developed Action Guidelines to be followed by all employees based on the basic principle of placing the highest priority on ensuring human safety in all aspects of business activities and also attempting to ensure product safety. Accordingly, in addition to the goals we have been working on over the past several years regarding quality, environment, and occupational health and security, we have also set goals regarding product safety assurance for 2014 (5).

#### 1 Reduce quality costs Increase rates of costs for prevention and assessment and decrease the rate of cost for

loss - Provide safe and secure products to

- Ensure customers quick responses
- Shorten periods for repairs

customers

- Provide all customers with products of high and consistent quality
- Improve design quality (including that of outsourced designs)
- Improve manufacturing quality (including outsourced manufacturing)
- Improve the quality of parts

#### 2 Conserve energy and resources

- Use energy and resources effectively
- Maintain zero emission
- Use chemicals effectively
- Develop new eco-friendly products compliant with the RoHS Directive 2011/65/EU

[Related information] B-3: Energy and Resource Conservation/D-2: Products Compliant with Directives and Regulations

#### 3 -1 Safety management

- Eliminate occupational injuries
- Promote traffic safety

#### 3 -2 Occupational health

- Maintain employees' health
- Prevent employees' mental disorders [Related information] F-2: Annual Goals and Achievements

#### Maintain and improve products' environmental performance

- Improve energy and resource conservation performance
- Quickly provide information on chemicals contained in products
- Ensure RoHS compliance for products designated in the CE Declaration [Related information] B-3: Energy and Resource Conservation/D-2: Products Compliant with Directives and Regulations

#### 5 Support the Safety Declaration Action **Guidelines**

- Act in accordance with the action plan [Related information] F-2: Declarations Regarding Occupational Safety and Health

# Integrated Management Syste

### G-1 2014 IMS Action Plan

#### 2014 HORIBA Group IMS Policy, Items, and Objectives

Group Integrated Management System (IMS) policy	Group IMS items	Group IMS objectives	Group IMS targets	
• At the HORIBA Group, we meet customer needs through our first class quality products and services in countries all HORIBA Group Policy for 2014:  HORIBA Group Policy for 2014: HORIBA PREMIUM—Create First Class		Increase rates of costs for prevention and assessment, and decrease the rate of cost for loss (Reduce warranty costs) Conserve energy and resources	Reduce warranty costs less than last year	
	(2) Implement waste reduction activities	(1) Reduce CO <sub>2</sub> emissions by 1% compared with last year (2) Implement waste reduction activities		
We use our skills for the development of science and technology and for the conservation of health, energy, and	d for the rgy, and me time, ions, and ony with ctively to  2 Enhance the HORIBA brand 3) Improve overall quality 4) Respond to customer demands promptly 5) Observe rules and codes of ethics both inside and outside the company  Promote the creation of safe and highly efficient Clean Factories 6) Contribute to environmental protection 7) Improve production/administrative efficiency 8) Strive for no employment and commuting injuries	[Safety management] (1) Prevent occupational injuries	(1) Prevent occupational injuries Reduce the number of employment injuries and employment traff accidents, occupational sickness cases, and commuting injuries to zero	
the environment. At the same time, we comply with laws, regulations, and social norms, promote harmony with		ment. At the same time, vith laws, regulations, and 2) Secure the business continuity and (2) Promote traffic	(2) Promote traffic safety	(2) Promote traffic safety Reduce the number of traffic accidents causing death, accidents resulting in injury or death, and self-inflicted accidents (resulting in injury or death to zero)
stakeholders and contribute actively to society.		[Occupational health] IBA brand (1) Ensure employees' health	(1) Ensure employees' health Ensure a 100% consultation rate for health examinations; increase the consultation rate for secondary examinations	
We value employees' mental and physical health and promote cheerful and vibrant workplaces.		4) Respond to customer demands promptly  aces.  5) Observe rules and codes of ethics both inside and outside the company  [Maintain and improve products' environment performance]		(2) Prevent employees' mental disorders Reduce the number of persons with newly developed mental disorder less than last year; reduce the number of persons suffering from relapses of mental disorders less than last year
We carry out risk management, and			· ·	(1) Provide products that bring benefits to customers
through our products and services make every effort to achieve steady growth		(2) Quickly provide information on chemicals contained in products (3) Ensure RoHS compliance for products designated in the CE Declaration	(2) Quickly provide customers with information on chemicals contained in products	
and business continuity in order to provide health, safety, and a sense of security to citizens of the community.			(3) Ensure compliance with the RoHS Directive	
We formulate plans based on the HORIBA		7) Improve production/administrative	(1) Ensure product safety	
Group management policy to increase the enterprise value of our group and we continually work to improve them.		[Safety Declaration Action Guidelines] (1) Act in accordance with the action plan	(2) Ensure service safety	
			(3) Ensure the safety of laboratories and clean rooms	