Board Summary

HORIBA Instruments, Inc.  
9755 Research Drive, Irvine, CA 92618  
Brian Ebert, R&D Program Manager  
Instruments and related products manufacturing / R & D

Business Type: Expansion  
County: Washoe County  
Development Authority Representative: Nancy McCormick, EDAWN

APPLICATION HIGHLIGHTS

- HORIBA Instruments, Inc. is currently located in Sparks, NV. This location houses the Advanced Technologies Group, a unit of their Semiconductor Segment, which has been located in Nevada since 2003.
- The company is considering building a world class research center, in Reno, to support their clients in the Silicon Valley. This will entail the purchase of a building which will almost triple their existing footprint in the northern Nevada area.
- HORIBA Instruments, Inc. works with the University of Nevada Reno for the purposes of hiring new graduates, the promotion and sponsorship of post-graduate research, and potentially collaborative innovation/ revenue generation.

PROFILE

HORIBA Instruments Inc. is a global company and a world leader in gas and chemical analysis and process control. The company specializes in measuring technologies which span five business segments: Automotive, Process and Environmental, Medical, Scientific and Semiconductor. The company’s Nevada based Semiconductor unit pursues proprietary engineering projects in a wide range of areas including evaluation and analysis, purity of ultra-pure water, composition of liquids and gases, and more broadly, environment and safety. The company’s clients include Apple, Intel, and Samsung. HORIBA Instruments, Inc. operates as a subsidiary of HORIBA Group which is made up of 39 companies in 26 countries and currently has locations in the U.S, Canada, Brazil, Asia, Oceania, and Europe. Source: HORIBA Instruments, Inc.

SIGNIFICANCE OF ABATEMENTS IN THE COMPANY’S DECISION TO RELOCATE/EXPAND

HORIBA Instruments, Inc. Corporate Board of Directors has approved high level expansion plans in the company’s Semiconductor segment. The company’s commitment to investment and expansion in northern Nevada will be solidified if HORIBA can obtain approval for the abatements sought. The company’s projections show U.S. domestic growth in the range of 10-20% year to year. Source: HORIBA Instruments, Inc.

REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Statutory</th>
<th>Application</th>
<th>Sufficient</th>
<th>% Over / Under</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Creation</td>
<td>25</td>
<td>10</td>
<td>No</td>
<td>-60%</td>
</tr>
<tr>
<td>Average Wage</td>
<td>$21.35</td>
<td>$34.38</td>
<td>Yes</td>
<td>61%</td>
</tr>
<tr>
<td>Equipment Capex (SU &amp; MBT)</td>
<td>$15,327</td>
<td>$2,517,180</td>
<td>Yes</td>
<td>16323%</td>
</tr>
<tr>
<td>Equipment Capex (PP)</td>
<td>$15,327</td>
<td>$2,517,180</td>
<td>Yes</td>
<td>16323%</td>
</tr>
</tbody>
</table>

INCENTIVES

<table>
<thead>
<tr>
<th>Incentive Type</th>
<th>Requested Terms</th>
<th>Estimated $ Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Tax Abmt.</td>
<td>Abated to 2% for 2 years</td>
<td>$144,109</td>
</tr>
<tr>
<td>Modified Business Tax Abmt.</td>
<td>50% for 4 years</td>
<td>$16,247</td>
</tr>
<tr>
<td>Personal Property Tax Abmt.</td>
<td>50% for 10 years</td>
<td>$41,301</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$201,657</td>
</tr>
</tbody>
</table>

JOB CREATION

<table>
<thead>
<tr>
<th>Obligation</th>
<th>Contracted</th>
<th>24-Month Projection</th>
<th>5-Year Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>10</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>Building Purchase</td>
<td>$2,533,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTS / Building Improvements</td>
<td>$1,687,158</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$866,600</td>
<td>$2,533,400</td>
<td>$1,687,158</td>
</tr>
</tbody>
</table>

ECONOMIC IMPACT ESTIMATES (10-Year Cumulative)

<table>
<thead>
<tr>
<th>Source</th>
<th>Total</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Jobs Supported</td>
<td>41</td>
<td>18</td>
</tr>
<tr>
<td>Total Payroll Supported</td>
<td>$20,027,176</td>
<td>$749,162</td>
</tr>
<tr>
<td>Total Output Estimate</td>
<td>$73,859,102</td>
<td>$2,879,739</td>
</tr>
</tbody>
</table>

New Tax Revenue Estimates (10-Year Cumulative)

<table>
<thead>
<tr>
<th>Source</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Taxes</td>
<td>$609,225</td>
<td>$470,530</td>
<td>$1,079,755</td>
</tr>
<tr>
<td>Property</td>
<td>$62,783</td>
<td>$287,633</td>
<td>$350,416</td>
</tr>
<tr>
<td>Lodging</td>
<td>$0</td>
<td>$8,196</td>
<td>$8,196</td>
</tr>
<tr>
<td>State Taxes</td>
<td>$29,676</td>
<td>$28,322</td>
<td>$57,998</td>
</tr>
<tr>
<td>Property</td>
<td>$29,676</td>
<td>$166,769</td>
<td>$196,445</td>
</tr>
<tr>
<td>Modified Business</td>
<td>$114,100</td>
<td>$109,854</td>
<td>$223,954</td>
</tr>
<tr>
<td>Lodging</td>
<td>$0</td>
<td>$228</td>
<td>$228</td>
</tr>
<tr>
<td>Total</td>
<td>$645,460</td>
<td>$1,071,532</td>
<td>$1,916,992</td>
</tr>
</tbody>
</table>

IMPACT ASSESSMENT

<table>
<thead>
<tr>
<th>Source</th>
<th>Economic Impact per Abated Dollar</th>
<th>New Total Tax per Abated Dollar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$396</td>
<td>$9.51</td>
</tr>
</tbody>
</table>

EMPLOYEE BENEFITS

- Percentage of health insurance plan covered by company: 83%.
- Health care package cost per employee - $10,032 annually with options for dependents.
- PTO/Sick/Vacation, Merit increases, Bonus, Tuition Assistance, Retirement Plan / Profit Sharing / 401 (k)

NOTES

- Percentage of market outside of Nevada: 99%.
- The company is also considering Sunnyvale, CA, Sparks, NV and Houston, TX as potential locations.
January 31, 2017

Mr. Steve Hill
Executive Director
Nevada Governor’s Office of Economic Development
555 E. Washing Ave., Suite 5400
Las Vegas, NV  89101

Dear Mr. Hill:

HORIBA Instruments Inc. is a global company and a world leader in gas and chemical analysis and process control. They specialize in measuring technologies which span five business segments: Automotive, Process and Environmental, Medical, Scientific and Semiconductor. The existing Sparks location houses the Advanced Technologies Group, a unit of their Semiconductor Segment, which has been located in Nevada since 2003. The HORIBA Group is made up of 39 companies in 26 countries and they currently have locations in the U.S, Canada and Brazil, as well as in Asia & Oceania, and Europe.

HORIBA is interested in building a world class research center in northern Nevada to support their clients in the Silicon Valley. This will entail the purchase of a building in northern Nevada which will almost triple their existing footprint in the area. They plan to create a minimum of 10 new positions at an average wage of $34.38 per hour, and invest $2.5M in new equipment for the facility. As a knowledge-based business, they primarily employ highly trained and skilled engineers, managers, and scientists, and all positions in this proposed expansion will earn annual wages of $60,000 or more. Their total forecasted investment for this project will exceed $7.6M.

HORIBA is requesting assistance with this expansion in the form of a Sales and Use Tax Abatement, Modified Business Tax Abatement and Personal Property Tax Abatement, and qualify on 2 out of 3 of the statutory requirements.

EDAWN supports this application which will create new high wage positions in the region, and enable HORIBA Instruments to continue to build their reputation and grow their technical capabilities in the region. Their success will add to the growing list of world renowned high technology companies that are operating in the State and will contribute to the continued economic diversification of the region.

Respectfully,

Mike Kazmierski
President & CEO
EDAWN
Dale A. Poole Jr.
Senior Vice President and General Manager
HORIBA Instruments Inc.
605 Spice Island Drive #5
Sparks, NV 89431
January 30, 2017

Mr. Steve Hill
Executive Director
Nevada Governor’s Office of Economic Development
555 E. Washington Ave., Suite 5400
Las Vegas, NV 89101

Dear Mr. Steve Hill,

We are pleased the State of Nevada will consider HORIBA for the available business incentives. HORIBA International is a global company with five segments which include Automotive, Process & Environmental, Medical, Scientific, and Semiconductor. HORIBA Instruments Inc. here in the U.S. includes our Semiconductor Segment and the “Advanced Technologies Group” currently located in Sparks, Nevada and will be expanding into Reno in 2017. HORIBA is a world market leader in gas & chemical analysis and process control. Our customer list includes names like Apple, Intel, and Samsung.

Our Corporate Board of Directors has approved high level expansion plans in our Semiconductor segment. HORIBA’s commitment to investment in Reno will be solidified if HORIBA can obtain the i) Sales and Use Tax Abatement, ii) Modified Business Tax Abatement, and iii) the Personal Property Tax Abatement in the State of Nevada. Our projections show U.S. domestic growth in the range of 10-20% year to year.

We have been conducting business in the Reno/Sparks area since 2003; but in order to keep pace with the market, we are committed to making further investments to increase employee resources and build a world class research center to support customers in Silicon Valley. Supporting this growth, we will rely heavily on Nevada tax abatements, university engagement, and local school districts to educate our children, including transfer engineers and children from Japan. HORIBA is involved with University of Nevada Reno, not only for hiring new graduates but for the promotion & sponsorship of post-graduate research, and potentially collaborative innovation/revenue generation.

Our vision is to continue as ‘Disruptive Leader’ in the microelectronics industry. Having tax incentive support from the State of Nevada can help us achieve our goals & vision; therefore, we thoughtfully ask for your consideration in our application of Nevada EDAWN tax incentives.

Sincerely,

[Signature]

Dale A. Poole Jr.
HORIBA Instruments Incorporated
Parent Company – HORIBA Limited (Kyoto, Japan)
Date: 01/30/2017

Mr. Steve Hill  
Executive Director  
Nevada Governor's Office of Economic Development  
555 E. Washington Avenue, Suite 5400  
Las Vegas, NV  89101

RE:  APPLICATION FOR INCENTIVES -REQUEST FOR  
CONFIDENTIALITY OF RECORDS AND DOCUMENTS

Dear Director Hill:

On February 2nd, 2017, HORIBA Instruments Inc submitted an application to the State of Nevada Governor's Office of Economic Development ("GOED") requesting approval of economic incentives for the expansion operation in Washoe County, Nevada. The purpose of this letter is to request that any and all records and other documents in GOED's possession concerning initial contact with, research and planning for HORIBA be kept confidential.

Please be advised that HORIBA specifically deems the following information proprietary and confidential:

1. The detailed schedule of Employment List
2. The detailed schedule of Capital Equipment List

Thank you for your consideration. If you have any questions or require any further information, please do not hesitate to contact me.

Sincerely,

Dale Poole  
General Manager  
Horiba Instruments, Inc.
REQUEST FOR CONFIDENTIALITY DETERMINATION

Pursuant to Assembly Bill No. 17, 78th (2015) Session of the Nevada Legislature, and upon the request of applicant HORIBA Instruments, Inc. the Executive Director of the Office has determined the:

(i) The detailed schedule of Capital Equipment List, 5(A)
(ii) The detailed schedule of Employment List, 5(B)

are confidential proprietary information of the business, are not public records, and shall be redacted in its entirety from the copy of the application that is disclosed to the public.

2/10/2017
Date

Steven D. Hill
Executive Director

Empowering Success
**Section 1 - Type of Incentives**

Please check all that the company is applying for on this application:

- Sales & Use Tax Abatement
- Modified Business Tax Abatement
- Personal Property Tax Abatement
- Other: ____________________________

**Section 2 - Corporate Information**

<table>
<thead>
<tr>
<th>COMPANY NAME (Legal name under which business will be transacted in Nevada)</th>
<th>FEDERAL TAX ID #</th>
</tr>
</thead>
<tbody>
<tr>
<td>HORIBA Instruments Inc.</td>
<td>33-0820160</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CORPORATE ADDRESS</th>
<th>CITY / TOWN</th>
<th>STATE / PROVINCE</th>
<th>ZIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>9755 Research Drive</td>
<td>Irvine</td>
<td>California</td>
<td>92618</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MAILING ADDRESS TO RECEIVE DOCUMENTS (If different from above)</th>
<th>CITY / TOWN</th>
<th>STATE / PROVINCE</th>
<th>ZIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TELEPHONE NUMBER</th>
<th>WEBSITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>949-250-4811</td>
<td><a href="http://www.horiba.com">www.horiba.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPANY CONTACT NAME</th>
<th>COMPANY CONTACT TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dale Poole</td>
<td>Sr Vice President / GM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E-MAIL ADDRESS</th>
<th>PREFERRED PHONE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:dale.poole@horiba.com">dale.poole@horiba.com</a></td>
<td>408-718-0439</td>
</tr>
</tbody>
</table>

Has your company ever applied and been approved for incentives available by the Governor's Office of Economic Development?  
Yes [ ] No [ ]

If Yes, list the program awarded, date of approval, and status of the accounts (attach separate sheet if necessary):

**Section 3 - Program Requirements**

Please check two of the boxes below; the company must meet at least two of the three program requirements:

- A capital investment of $1,000,000 in eligible equipment in urban areas or $250,000 in eligible equipment in rural areas are required. This criteria is businesses. In cases of expanding businesses, the capital investment must equal at least 20% of the value of the tangible property owned by the business.
- New businesses locating in urban areas require fifty (50) or more permanent, full-time employees on its payroll by the eighth calendar quarter following quarter in which the abatement becomes effective. In rural areas, the requirement is ten (10) or more. For an expansion, the business must increase employees on its payroll by 10% more than its existing employees prior to expansion, or by 25 (urban) or 6 (rural) employees, whichever is greater.
- In urban areas, the average hourly wage that will be paid by the business to its new employees is at least 100% of the average statewide hourly wage. In rural areas, the average hourly wage will equal or exceed the lesser of the county-wide average hourly wage or statewide average hourly wage.

Note: Criteria is different depending on whether the business is in a county whose population is 100,000 or more or a city whose population is 60,000 or more (i.e., "urban") area, or if the business is in a county whose population is less than 100,000 or a city whose population is less than 60,000 (i.e., "rural") area.

**Section 4 - Nevada Facility**

<table>
<thead>
<tr>
<th>Type of Facility:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Headquarters</td>
<td>Service Provider</td>
</tr>
<tr>
<td>Technology</td>
<td>Distribution / Fulfillment</td>
</tr>
<tr>
<td>Back Office Operations</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Research &amp; Development / Intellectual Property</td>
<td>Other:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERCENT OF COMPANY'S MARKET OUTSIDE OF NEVADA</th>
<th>EXPECTED DATE OF NEW / EXPANDED OPERATIONS (MONTH / YEAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>99%</td>
<td>May-2017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NAICS CODE / SIC</th>
<th>INDUSTRY TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>334513 / 541715</td>
<td>Instruments and Related Products Manufacturing / R&amp;D</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DESCRIPTION OF COMPANY'S NEVADA OPERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D / Manufacturing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROPOSED / ACTUAL NEVADA FACILITY ADDRESS</th>
<th>CITY / TOWN</th>
<th>COUNTY</th>
<th>ZIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>3740 Barron Way</td>
<td>Reno</td>
<td>Washoe County</td>
<td>89511</td>
</tr>
</tbody>
</table>

WHAT OTHER STATES / REGIONS / CITIES ARE BEING CONSIDERED FOR YOUR COMPANY'S RELOCATION / EXPANSION / STARTUP?  
Sunnyvale, California / Sparks, Nevada / Houston, Texas
### Section 5 - Complete Forms (see additional tabs at the bottom of this sheet for each form listed below)

Check the applicable box when form has been completed.

- (A) Equipment List
- (B) Employment Schedule
- (C) Evaluation of Health Plan

### Section 6 - Real Estate & Construction (Fill in either New Operations/Startup or Expansion, not both.)

<table>
<thead>
<tr>
<th>New Operations / Start Up - Plans Over the Next Ten Years</th>
<th>Expansions - Plans Over the Next 10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1. Are you currently/planning on leasing space in Nevada?</td>
<td>Part 1. Are you currently leasing space in Nevada?</td>
</tr>
<tr>
<td>If No, skip to Part 2. If Yes, continue below:</td>
<td>If No, skip to Part 2. If Yes, continue below:</td>
</tr>
<tr>
<td></td>
<td>What year(s)?</td>
</tr>
<tr>
<td></td>
<td>Annual lease cost of space:</td>
</tr>
<tr>
<td></td>
<td>Due to expansion, will you lease additional space?</td>
</tr>
<tr>
<td></td>
<td>Expanding at the current facility or a new facility?</td>
</tr>
<tr>
<td></td>
<td>How much expanded space (sq. ft.)?</td>
</tr>
<tr>
<td>Do you plan on making building improvements?</td>
<td>Do you plan on making building improvements?</td>
</tr>
<tr>
<td>If No, skip to Part 2. If Yes *, continue below:</td>
<td>If No, skip to Part 3. If Yes *, continue below:</td>
</tr>
<tr>
<td>When to make improvements (month, year)?</td>
<td>When to make improvements (month, year)?</td>
</tr>
<tr>
<td>Part 2. Are you currently/planning on buying an owner occupied facility in Nevada?</td>
<td>Part 2. Are you currently operating at an owner occupied building in Nevada?</td>
</tr>
<tr>
<td>If No, skip to Part 3. If Yes *, continue below:</td>
<td>If No, skip to Part 3. If Yes *, continue below:</td>
</tr>
<tr>
<td>Purchase date, if buying (month, year):</td>
<td>Current assessed value of real property?</td>
</tr>
<tr>
<td>How much space (sq. ft.)?</td>
<td>Due to expansion, will you be making building improvements?</td>
</tr>
<tr>
<td>Do you plan on making building improvements?</td>
<td>If No, skip to Part 3. If Yes *, continue below:</td>
</tr>
<tr>
<td>If No, skip to Part 3. If Yes *, continue below:</td>
<td>When to make improvements (month, year)?</td>
</tr>
<tr>
<td>When to make improvements (month, year)?</td>
<td></td>
</tr>
<tr>
<td>Part 3. Are you currently/planning on building a build-to-suit facility in Nevada?</td>
<td>Part 3. Do you plan on building or buying a new facility in Nevada?</td>
</tr>
<tr>
<td>If Yes *, continue below:</td>
<td>If Yes *, continue below:</td>
</tr>
<tr>
<td>When to break ground, if building (month, year)?</td>
<td>Purchase date, if buying (month, year):</td>
</tr>
<tr>
<td>Estimated completion date, if building (month, year):</td>
<td>When to break ground, if building (month, year):</td>
</tr>
<tr>
<td>How much space (sq. ft.)?</td>
<td>Estimated completion date, if building (month, year):</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Please complete Section 7 - Capital Investment for New Operations / Startup.

* Please complete Section 7 - Capital Investment for Expansions below.

BRIEF DESCRIPTION OF CONSTRUCTION PROJECT AND ITS PROJECTED IMPACT ON THE LOCAL ECONOMY (Attach a separate sheet if necessary):

N/A
### Section 7 - Capital Investment (Fill in either New Operations/Startup or Expansion, not both.)

<table>
<thead>
<tr>
<th>New Operations / Start Up</th>
<th>Expansions</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much capital investment is planned? (Breakout below):</td>
<td>How much capital investment is planned? (Breakout below):</td>
</tr>
<tr>
<td>Building Purchase (if buying):</td>
<td>Building Purchase (if buying):</td>
</tr>
<tr>
<td>$0</td>
<td>$2,533,400</td>
</tr>
<tr>
<td>Building Costs (if building / making improvements):</td>
<td>Building Costs (if building / making improvements):</td>
</tr>
<tr>
<td>$0</td>
<td>$1,687,158</td>
</tr>
<tr>
<td>Land:</td>
<td>Land:</td>
</tr>
<tr>
<td>$0</td>
<td>$866,600</td>
</tr>
<tr>
<td>Equipment Cost:</td>
<td>Equipment Cost:</td>
</tr>
<tr>
<td>$0</td>
<td>$2,517,180</td>
</tr>
<tr>
<td>Total:</td>
<td>Total:</td>
</tr>
<tr>
<td>$0</td>
<td>$7,604,338</td>
</tr>
</tbody>
</table>

Is the equipment purchase for replacement of existing equipment? Yes

Current assessed value of personal property in NV: $76,637

(Must attach the most recent assessment from the County Assessor's Office.)

### Section 8 - Employment (Fill in either New Operations/Startup or Expansion, not both.)

<table>
<thead>
<tr>
<th>New Operations / Start Up</th>
<th>Expansions</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many full-time equivalent (FTE*) employees will be created by the end of the first eighth quarter of new operations?:</td>
<td>How many full-time equivalent (FTE*) employees will be created by the end of the first eighth quarter of expanded operations?:</td>
</tr>
<tr>
<td>Average hourly wage of these new employees:</td>
<td>Average hourly wage of these new employees:</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>How many FTE employees prior to expansion?:</td>
<td>How many FTE employees prior to expansion?:</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Average hourly wage of these existing employees:</td>
<td>Average hourly wage of these existing employees:</td>
</tr>
<tr>
<td>$40.51</td>
<td>$40.51</td>
</tr>
<tr>
<td>Total number of employees after expansion:</td>
<td>Total number of employees after expansion:</td>
</tr>
<tr>
<td>28</td>
<td>28</td>
</tr>
</tbody>
</table>

* FTE represents a permanent employee who works an average of 30 hours per week or more, is eligible for health care coverage, and whose position is a "primary job" as set forth in NAC 360.474.

### Section 9 - Employee Health Insurance Benefit Program

<table>
<thead>
<tr>
<th>Package includes (check all that apply):</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Overtime</td>
</tr>
<tr>
<td>☑ PTO / Sick / Vacation</td>
</tr>
</tbody>
</table>

BRIEF DESCRIPTION OF ADDITIONAL COMPENSATION PROGRAMS AND ELIGIBILITY REQUIREMENTS (Attach a separate sheet if necessary):

Company paid Life, AD&D, Short/Long term disability - Eligibility is the 1st of the month after hire date

<table>
<thead>
<tr>
<th>Health Insurance Costs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of health insurance for company (annual amount per employee):</td>
</tr>
<tr>
<td>Health Plan annual out-of-pocket maximum (individual):</td>
</tr>
</tbody>
</table>

Percentage of health insurance coverage by:

| Company: | 83% |
| Employee: | 17% |

[Signature page follows]
Section 10 - Certification

I, the undersigned, hereby grant to the Governor's Office of Economic Development access to all pertinent and relevant records and documents of the aforementioned company. I understand this requirement is necessary to qualify and to monitor for compliance of all statutory and regulatory provisions pertaining to this application.

Being owner, member, partner, officer or employee with signatory authorization for the company, I do hereby declare that the facts herein stated are true and that all licensing and permitting requirements will be met prior to the commencement of operations. In addition, I and/or the company's legal counsel have reviewed the terms of the GOED Tax Abatement and Incentives Agreement, the company recognizes this agreement is generally not subject to change, and any material revisions have been discussed with GOED in advance of board approval.

Dale Poole
Name of person authorized for signature

Sr. Vice President / GM
Title

Signature

January 27, 2017
Date

Nevada Governor's Office of Economic Development
555 E. Washington Ave., Ste 5400 • Las Vegas, Nevada 89101 • 702.486.2700 • (Fax) 702.486.2701 • www.diversifynevada.com
# Site Selection Factors

**Company Name:** HORIBA Instruments Inc.  
**County:** Washoe County

## Section 1 - Site Selection Ratings

Directions: Please rate the select factors by importance to the company’s business (1 = very low; 5 = very high). Attach this form to the Incentives Application.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of qualified workforce</td>
<td>1</td>
</tr>
<tr>
<td>Labor costs</td>
<td>1</td>
</tr>
<tr>
<td>Real estate availability</td>
<td>3</td>
</tr>
<tr>
<td>Real estate costs</td>
<td>3</td>
</tr>
<tr>
<td>Utility infrastructure</td>
<td>4</td>
</tr>
<tr>
<td>Utility costs</td>
<td>4</td>
</tr>
<tr>
<td>Transportation infrastructure</td>
<td>1</td>
</tr>
<tr>
<td>Transportation costs</td>
<td>1</td>
</tr>
<tr>
<td>State and local tax structure</td>
<td>3</td>
</tr>
<tr>
<td>State and local incentives</td>
<td>5</td>
</tr>
<tr>
<td>Business permitting &amp; regulatory structure</td>
<td>3</td>
</tr>
<tr>
<td>Access to higher education resources</td>
<td>1</td>
</tr>
</tbody>
</table>

**OTHER FACTORS & RATINGS:**
Equipment Schedule, Detailed

The Office has determined the detailed equipment schedule as described in this application constitutes confidential proprietary information of HORIBA Instruments, Inc., and is not a public record.
Employment Schedule, Detailed

The Office has determined the detailed employment schedule as described in this application constitutes confidential proprietary information of HORIBA Instruments, Inc., and is not a public record.
5(C) Evaluation of Health Plans Offered by Companies

Company Name: HORIBA Instruments Inc.  
County: Washoe County

Total Number of Full-Time Employees: 10

Average Hourly Wage per Employee: $34.38
Average Annual Wage per Employee (implied): $71,510.40

Annual Cost of Health Insurance per Employee: $10,031.64

Percentage of Cost Covered by:  
- Company: 83%
- Employee: 17%

Health Plan Annual Out-of-Pocket Maximum: $2,250

Generalized Criteria for Essential Health Benefits (EHB)

[following requirements outlined in the Affordable Care Act and US Code, including 42 USC Section 18022]

| Covered employee's premium not to exceed 9.5% of annual wage | 2.9% | MMQ |
| Annual Out-of-Pocket Maximum not to exceed $6,600 (2015) | $2,250 | MMQ |

Minimum essential health benefits covered (Company offers PPO):  
- (A) Ambulatory patient services
- (B) Emergency services
- (C) Hospitalization
- (D) Maternity and newborn care
- (E) Mental health/substance use disorder/behavioral health treatment
- (F) Prescription drugs
- (G) Rehabilitative and habilitative services and devices
- (H) Laboratory services
- (I) Preventive and wellness services and chronic disease management
- (J) Pediatric services, including oral and vision care

No Annual Limits on Essential Health Benefits

I, the undersigned, hereby declare to the Governor’s Office of Economic Development that the facts herein stated are true, and that I have attached sufficient plan information for GOED to independently confirm the same.

Dale Poole  
Name of person authorized for signature

Sr. Vice President / GM  
Title

Signature  
1/27/2017  
Date
SECRETARY OF STATE

STATE OF NEVADA

NEVADA STATE BUSINESS LICENSE

HORIBA INSTRUMENTS INCORPORATED
Nevada Business Identification # NV20131408167

Expiration Date: July 31, 2017

In accordance with Title 7 of Nevada Revised Statutes, pursuant to proper application duly filed and payment of appropriate prescribed fees, the above named is hereby granted a Nevada State Business License for business activities conducted within the State of Nevada.

Valid until the expiration date listed unless suspended, revoked or cancelled in accordance with the provisions in Nevada Revised Statutes. License is not transferable and is not in lieu of any local business license, permit or registration.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Great Seal of State, at my office on May 24, 2016

BARBARA K. CEGAVSKE
Secretary of State

You may verify this license at www.nvsos.gov under the Nevada Business Search.

License must be cancelled on or before its expiration date if business activity ceases. Failure to do so will result in late fees or penalties which by law cannot be waived.
HORIBA Report 2015
[Year ended December 31, 2015]
Everything begins with measurement

HORIBA, since its foundation, has achieved continuous growth providing “measuring technologies.”

We will continue to grow by keeping our Corporate Philosophy in mind.

HORIBA's Corporate Motto “Joy and Fun”
Originate from the belief that if we take interest and pride in the work that occupies most of the active time in our lives, in the place where we spend the large part of each day, then as a result our satisfaction with life will increase, and we will be able to enjoy our lives even more. Taking interest and pride in our work leads us to “Joy and Fun.”

Business Operations
Our mission is to contribute to the progress of science and technology, and the preservation of the global environment and resources through the provision of highly original products, analytical and measurement solutions, and engineering services.

Customer Responsiveness
We maintain a philosophy of pursuing cutting edge technology in order to supply products and services that consistently satisfy customers’ requirements.

Responsibility to Shareholders and Investors
We recognize that maximizing the returns to shareholders by consistently raising HORIBA’s long-term corporate value is one of the priority objectives of management. Our basic policy is to target total returns (the combination of dividend payments and share buybacks) to shareholders to be at a certain ratio of HORIBA’s consolidated net income, and consistently deliver them.

Employees
We are proud of the entrepreneurial spirit that has led to the creation of HORIBA Group companies. Each group employee is made aware of this heritage and we actively encourage ideas and innovations from individual employees.

Corporate Philosophy
See the entire text on page 83.

HORIBA, since its foundation, has achieved continuous growth providing “measuring technologies.”

We will continue to grow by keeping our Corporate Philosophy in mind.

Net sales — Operating income

Results up to 1977 are on a nonconsolidated basis and results from 1978 on are consolidated.

1945
Masao Horiba establishes HORIBA RADIO LABORATORY

1950
HORIBA pioneers the first made-in-Japan glass electrode pH meters

1953
HORIBA, Ltd. is established Masao Horiba becomes the first president

1955
Listed in the Second Section of the Osaka Securities Exchange

1960
Established Standard Technology Co., Ltd. (now HORIBA STEC, Co., Ltd.)

1964
Launch “MEXA,” a global brand for automotive exhaust gas analyzers

1965
OLSON-HORIBA, INCORPORATED, a joint venture company, is established in the U.S.
HORIBA begins overseas expansion

1970
Listed in the Second Section of the Tokyo Stock Exchange

1971
Listed in the Second Section of the Osaka Securities Exchange

1974
Established Standard Technology Co., Ltd. (now HORIBA Advanced Techno Co., Ltd.)

1975
Establish COS Co., Ltd. (now HORIBA Advanced Techno Co., Ltd.)
Deliver emission gas analyzers to the United States Environmental Protection Agency (EPA)

1978
Masahiro Oura becomes the second president

Net sales exceed ¥10 billion
Net sales exceed ¥50 billion

Net sales exceed ¥100 billion

Net sales exceed ¥150 billion

Operating income ¥19.3 billion

1980
1985
1990
1995
2000
2005
2010
2015

1980
Standard Technology Co., Ltd. (now HORIBA STEC Co., Ltd.) launches mass flow controllers

1982
Listed in the First Section of the Tokyo Stock Exchange and the Osaka Securities Exchange

1987
Form an alliance with a hematology analyzer manufacturer ABX S.A. (France)

1988
Acquire MCT (Mechtronics) business of Carl Schenck AG in Germany

1990
Acquire ABX S.A. (now HORIBA ABX S.A.S.) in France

1992
Atsushi Horiba becomes the third president

1996
Establish HORIBA Techno Service Co., Ltd.

2000
Launch “One Company Matrix Management”

2004
Launch the Mid-Long Term Management Plan [2006-2010]

2005
Acquire MCT business of Carl Schenck AG in Germany

2006
Launch the Mid-Long Term Management Plan [2011-2015]

2008
Launch the Mid-Long Term Management Plan MLMAP2020

2010
Launch the Mid-Long Term Management Plan MLMAP2020

2015
Masao Horiba, Founder, passed away

2000
Establish HORIBA Techno Service Co., Ltd.

2002
Develop on-board emission measurement systems for vehicles in operation

2004
Launch "One Company Matrix Management"

2005
Acquire MCT (Mechtronics) business of Carl Schenck AG in Germany

2015
Acquire MIRA, Ltd. (now HORIBA MIRA, Ltd.) in U.K.

1998
Announce the “LC-270 CRP,” the world’s first hematology and CRP analyzers

1997
Acquire Instruments S.A. (now HORIBA Jobin Yvon S.A.S.) in France

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Acquire MIRA, Ltd. (now HORIBA MIRA, Ltd.) in U.K.

2016
Launch the Mid-Long Term Management Plan MLMAP2020
Sales and profits reached all-time highs in 2015

In 2015 (ended December 31, 2015), HORIBA posted its second consecutive year of record-high sales and profits, with consolidated net sales of ¥170.8 billion (up 11.7% year-on-year) and operating income of ¥19.3 billion (up 12.5% year-on-year). The Semiconductor Instruments & Systems segment was the main earnings driver, with its contribution driven by robust capital expenditure by the semiconductor industry in Asia and an increase in our global market share for mass flow controllers, our mainstay product (from 52% in 2014 to 55% in 2015). Meanwhile, the Automotive Test Systems segment recorded a decrease in operating income due to one off increases in expenses associated with a major acquisition and a move to a new base in Shiga Prefecture which is next to Kyoto Prefecture. The Scientific Instruments & Systems segment and the Medical-Diagnostic Instruments & Systems segment both recorded a year-on-year increase in operating income, but the Process & Environmental Instruments & Systems segment recorded a decrease in operating income.

Our previous business plan, through 2015, built a base for a major advance

In the previous plan (Mid-Long Term Management Plan [2011-2015]), our targets were ¥150 billion in sales, ¥20 billion in operating income and ROE of 11% or more. In 2015, partly due to the impact from the depreciation of the yen, sales significantly exceeded the target but the actual operating income and ROE (10.2%) fell slightly short. The major reason was concurrent investments: construction of a new facility, HORIBA BIWAKO E-HARBOR, and the acquisition of U.K.-based HORIBA MIRA, Ltd. By business segment, the Semiconductor Instruments & Systems segment significantly exceeded the plan and three segments - Automotive Test Systems, Process & Environmental Instruments & Systems, and Scientific Instruments & Systems largely achieved the targets. However, the Medical-Diagnostic Instruments & Systems segment recorded operating income of ¥2.4 billion in the final year, which was far behind the initial target of ¥6.0 billion.

I am also pleased to report that we have made satisfactory progress in the previous plan’s strategies: namely, full implementation of “One Company Matrix Management;” investment in highly profitable businesses; expansion of the business model so as to be better driven by customer viewpoints; and acceleration of global product development and production. However, profitability of the Medical-Diagnostic Instruments & Systems business and speedy improvement in profitability of the acquired businesses remain major challenges. In addition, a higher depreciation burden, caused by capital expenditure and business acquisitions, is emerging as a new challenge.

Launch of the new Mid-Long Term Management Plan MLMAP*2020, “ONE STEP AHEAD”

The MLMAP2020, which began in 2016 under the slogan “ONE STEP AHEAD,” incorporates our determination to move one
In HORIBA BIWAKO E-HARBOR’s Sky Atrium with central staircase

We have made investments for the future

In July 2015, we acquired U.K.-based MIRA, Ltd. by investing ¥15.5 billion, a record-high amount for HORIBA. Having been in business since 1946, MIRA was a distinguished company hosting R&D bases of 30 automotive-related companies and employing about 500 engineers within its research facilities. HORIBA plans to transfer its cutting-edge analysis and measurement technology to MIRA so as to accelerate its business growth in development of next-generation mobility. After investing approximately ¥10 billion, HORIBA BIWAKO E-HARBOR started full operation in May 2016. By means of consolidating gas measurement technology development, design, and production teams and launching an integrated production line with production partner companies, we aim to improve the time-to-market of new products and double our production volume. The SKY ATRIUM, a soaring staircase area in the middle of the building, is designed to help facilitate communication among employees’ When we eliminate the barriers between development, design and production teams and partner companies, and when each other’s work or know-how becomes more evident to others, I am confident that new value will emerge.

HORIBA BIWAKO E-HARBOR plays a role in the transfer of our core technology, diligently accumulated in Kyoto over a period of 70 years, into the hands of a new generation of engineers, who will spearhead the fostering of new development capabilities. This facility also has an R&D laboratory to be used to demonstrate the latest automotive measurement equipment and other experiments. Moreover, we are planning to enable customer training, demonstration and application development. We thus aim to create a place where we can create value together with our customers.

step ahead of our existing business and to cross over a barrier by acquiring new perspectives. We have chosen a “drone” as our plan’s symbol, as the drone represents ability to flexibly control itself, break stereotypes, and add an entirely new dimension to the concept of flight. Even though one of five rotors (our five business segments) of the drone may temporarily decelerate, the remaining four rotors should enable the drone to keep flying. This resonates with the core of HORIBA’s well-balanced management that aims for growth in all five business segments, and ensures growth even when one segment temporarily lags.

The MLMAP2020 priority measures call for application of HORIBA technology in new business fields and new markets, for growth by a Super Dream Team based on balanced management, matrix organization and the HORIBA Stained Glass Project, and raising capital efficiency and maximizing corporate value. We have set numerical targets for 2020: sales of ¥250 billion, operating income of ¥30 billion, and ROE of 10% or more. The targets in operating income ratio are 20% for the Semiconductor Instruments & Systems segment and 10% for all other business segments.

In order to realize the MLMAP2020, it is critical that the Automotive Test Systems and Semiconductor Instruments & Systems segments, our two major businesses, remain earnings drivers. The Automotive Test Systems segment we plan to maintain its top share in emission gas analyzers and seek to generate return on the investments made in HORIBA BIWAKO E-HARBOR and HORIBA MIRA. The Semiconductor Instruments & Systems segment should also maintain its high share in mass flow controllers and at the same time expand in many aspects. In addition, we will apply HORIBA analysis and measurement technology to new fields, so that we can create a third business pillar.
We will enhance our capital efficiency and cash flow management

We will emphasize capital efficiency and cash flow in the MLMAP2020. Historically we have emphasized ROA as one of our Key Performance Indicators (KPI), but this time we are setting capital efficiency targets for each group company and each business segment, and emphasizing cash flow management. In January 2016, we expanded our ERP (Enterprise Resource Planning) system worldwide. This will facilitate our close management of the balance sheet and cash flow for each business segment. We anticipate positive impacts to be generated in inventory management and reduction in time to recover return on our investments. At the same time the new system will enable us to quickly respond when a problem occurs. I believe establishing the system will eventually lead to quicker management judgments and more thorough implementation of efficient operations in all divisions, which include not only development, production, and other functional divisions but also administrative divisions. Ultimately we will improve our corporate value.

Our “Super Dream Team” will help accelerate corporate growth

We have promoted the “balanced management” of operating multi-businesses, which helps alleviate the impact from change in the economic cycle and enables us to make continuous investment, and “matrix organization,” which facilitates agile execution of strategies by using two axes of business segment and region. Moreover, quality and operating efficiency have been improved by introducing the “Blackjack Project”, which began in 1997 with the objective of changing the awareness and activities of employees. Then we began the “HORIBA Stained Glass Project” in 2014 so as to create an environment that values diversity. There is no doubt that implementing these initiatives have led to motivation of our employees to become more capable and more responsible team members. What I envision as ideal is an organization in which people with diversity can make the best of their strength and talents and exercise strength as a team. We have named it the “Super Dream Team.” HORIBA’s philosophy to respect each other, and our corporate culture of “Joy and Fun”, have inspired and been integrated into our overseas group companies. I think an accurate understanding of HORIBA's corporate culture by our newly-joined group companies is invaluable for their management and business development. I firmly believe that the “Super Dream Team,” when realized, will materialize significant potential for enhancing corporate value.

We are proud to be a company that supports many industries

None of HORIBA’s business segments, while generating sales of tens or hundreds of billion yen, are big in size. Nevertheless, we are proud that we are part of the foundation for global industrial development by providing cutting-edge analysis and measurement instruments, or “mother tools” that support, in particular, the automotive and semiconductor industries. I am convinced that we should never stop challenging ourselves by entering new markets or developing and applying new technology. We must continue gaining market share and increasing profitability for each business, which inevitably result in expanding our corporate scale. I believe that will be HORIBA’s ideal path.

We will deepen our dialogue with all stakeholders

In its business activities HORIBA, since its origin, has been fully committed to owners (shareholders), customers, employees,
and society, and has been engaged in dialogue with stakeholders in various ways. In 2011 we signed the United Nations Global Compact, a set of universally accepted principles in the areas of human rights, labor, environment, and anti-corruption. We ensure that when we conduct business we are rooted in each country and region, together with local employees, and understand the relevant diverse cultures, customs and values to ensure that we make a positive social contribution wherever we do business.

I welcome opportunities to engage in constructive dialogue with stakeholders and explain our business strategies to them. This HORIBA Report and our website introduce not only our business and financial information, but also our “Invisible Values,” (page 31) which are not shown in the financial statements, so that HORIBA’s corporate values are well understood.

Our basic policy on returning profits to owners (shareholders) is to target total returns to shareholders at 30% of HORIBA’s consolidated net income (the combination of dividend payments and share buybacks), allocating the remainder to reserves for capital and strategic investment in human resources and technology. In fiscal 2015, we paid a record-high annual dividend per share of ¥70 and bought back 218,000 shares (¥999 million; 0.5% of shares outstanding). For fiscal 2016, we are currently forecasting an increase of annual dividend per share to ¥75.

I am proud that all of our business activities are contributing to the realization of a comfortable and sustainable society. This has not been changed as our company culture has been inherited from our very foundation to the present, and is consistent with our fundamental way of thinking regarding Corporate Social Responsibility. We are committed to working with a sense of challenge and the “Joy and Fun” spirit, raising the satisfaction of owners (shareholders), customers, suppliers, employees, and all other stakeholders, and contributing to society in order to improve our corporate value. I sincerely hope that you all agree with our management policy and will continue to support us for many years to come.

Chairman, President & CEO  
Atsushi Horiba
Upon completion of the Mid-Long Term Management Plan [2011-2015], HORIBA has formulated a new Mid-Long Term Management Plan, MLMAP2020, for the five-year period from fiscal 2016 to fiscal 2020.

**MLMAP2020 Outline**

**Feature** New Mid-Long Term Management Plan

Applying HORIBA Technology in new business fields and new markets and to move “ONE STEP AHEAD”

**Measures**

1. Applying HORIBA technology in new business fields and markets and becoming a true partner in analysis and measurement
2. Accelerating corporate growth by its Super Dream Team based on balanced management, matrix organization, and the HORIBA Stained Glass Project
3. Raising capital efficiency to maximize corporate value

**Targets**

- **Net sales**: 250 billion yen
- **Operating income**: 30 billion yen
- **ROE**: 10% or more

* Assumed exchange rates for 2020: 115 yen per U.S. dollar; 125 yen per euro

**Review of the previous Mid-Long Term Management Plan [2011-2015]**

<table>
<thead>
<tr>
<th></th>
<th>Previous plan targets</th>
<th>Results</th>
<th>Achievement rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net sales</strong></td>
<td>150 billion yen</td>
<td>170.8 billion yen</td>
<td>+13.9%</td>
</tr>
<tr>
<td><strong>Operating income</strong></td>
<td>20 billion yen</td>
<td>19.3 billion yen</td>
<td>-3.1%</td>
</tr>
<tr>
<td><strong>ROE</strong></td>
<td>11.0%</td>
<td>10.2%</td>
<td>-0.8p</td>
</tr>
</tbody>
</table>

**What we did**

- **Achievements**
  - Fully implemented One Company Matrix Management
  - Completed implementation of shared services* five segments and regions
  - Fully implemented ERP (Enterprise Resource Planning) systems in all group companies
  - Invested in highly profitable businesses
  - Aggressively invested in the Automobile business (BIWAKO new facility; HORIBA MIRA, Ltd.)
  - Strengthened R&D and production systems in the Semiconductor business (Kyoto, Aso, Fukuchiyama)
  - Business acquisition in the U.S. [P&E]; Photon Technology International, Inc. [Scientific]
  - Accelerated establishment of global product development and production systems
  - Expanded capacity of reagent plants in the Medical-Diagnostic business (China, India, and Brazil)

- **Challenges**
  - Improve profitability in the Medical business / Speed up improving profitability of the acquired businesses / Manage an increase in depreciation burden caused by large-scale investments

* Shared services is to centralize specific work of more than one division of the company or group with the aim of raising productivity and cost reduction.
Applying HORIBA technology in new business fields and markets and becoming a true partner in analysis and measurement

The company intends to achieve strategic growth in each business by promoting combined use of technology and sales network of each business segment, while further growing the Automotive Test Systems and Semiconductor businesses. HORIBA will also actively make new investments and pursue M&A opportunities into business fields and markets with great growth potential, including fuel cells and other alternative energy sources, the bio-life science field, and the water analytical and measurement field. HORIBA thus plans to achieve targets of each business segment and to create new business pillars.

Apply HORIBA’s analytical technology into growth markets, by promoting mutual use of technology and sales network of each business segment

Accelerating corporate growth by its Super Dream Team based on balanced management, matrix organization and HORIBA Stained Glass Project

In keeping with the management principle of the “HORIBA Group is One Company,” HORIBA has implemented well-balanced matrix management and has achieved a high order of integrated group operation during the previous mid-long term plan. In order to further advance this organization, we will continue to promote diversity, through the HORIBA Stained Glass Project, to realize the Super Dream Team of its human resources with diversity and to accelerate renovation in existing business and creation of new businesses (see details on page 33, “Invisible Values: Organizational Structures”.

Raising capital efficiency to maximize corporate value

Under the previous plan, HORIBA made numerous investments towards future growth, established new facilities and acquired businesses. In order to make effective use of those assets, each group company and each business segment will set its capital efficiency targets and make efficient management so as to realize strategic growth.
HORIBA aims to expand the water measurement business by eliminating barriers between three business segments that are engaged in water analysis and measurement business (the Process & Environmental, Semiconductor, and Scientific segments) and by promoting mutual use of their technology and sales network. Resources in Japan will be integrated in HORIBA Advanced Techno Ltd., an expert in water and liquid measurement, which will respond to all water-related customer demand, from domestic-use water to industrial-use precision water and pollution testing.

By integrating business segments and adding the flexible capacity of a group company focused on a specific field, HORIBA plans to double sales in the water measurement business from approximately ¥10 billion in 2015 to ¥20 billion by 2020.
Looking back at the business segment growth in 2010-2015, all segments’ sales grew and generated operating income. In particular, the Semiconductor Instruments & Systems and Automotive Test Systems segments grew significantly but sales and operating income of the Medical–Diagnostic Instruments & Systems segment fell short of expectations.

The business portfolio target for 2020, under the MLMAP 2020, envisions well-balanced growth and profitability in all business segments. In addition to seeking business growth of each segment, we will promote mutual use of technology and sales network of each business segment, which also means challenging new businesses and new applications. The operating income ratio of 10% or more in all business segments is also a part of the new plan’s targets.

MLMAP2020 Symbol

The new plan’s symbol is a drone, which can autonomously operate with open viewpoint. The symbol reflects HORIBA’s determination of not simply reacting to outside changes but of proactively acting to make a breakthrough.

Vertical axis
Operating income ratio in the final year

Horizontal axis
Compound Average Growth Rate in sales

Size of circle
The size of the bubbles represents sales proportionately.

-2005
A rocket launch, symbolizing HORIBA’s development, sales, and other functions being unified and rising to great heights

2006-2010
A balloon floating upward in the sky, symbolizing HORIBA’s business growth and asset streamlining

2011-2015
A yacht moving forward by capturing winds, symbolizing HORIBA’s growth driven by five business segments capturing business chances
In July 2015 HORIBA acquired MIRA Ltd. (now HORIBA MIRA, Ltd.), the United Kingdom vehicle engineering consultancy and testing services provider. By including MIRA in the group, HORIBA’s business has expanded from analysis and measurement equipment to the automobile engineering field, offering technical development services, testing and certification services, and advanced facilities.
Synergies with HORIBA

Creating added value in the exhaust emissions and MCT* business

Incorporation of leading-edge testing systems in each business

Broader scope of business by expansion to overall vehicle development services

Global expansion

Broader economies of scale in sales

Business development of next-generation mobility solutions such as autonomous, self-driving vehicles

New opportunities to use the proprietary analysis technology of HORIBA's five business segments

* MCT: Mechatronics

HORIBA MIRA's management and leaders of HORIBA's Automotive Test System segment

At the training center "FUN HOUSE" in Shiga Prefecture in November 2015

Growth through acquisition

Accelerating market expansion and corporate value creation

Mainly with the aim of acquiring business resources (human resources and technologies), HORIBA's investment has targeted companies that were not able to fully utilize their creative resources. They include companies that have application or technology that are complementary to those of HORIBA, and companies that are underinvested in R&D or human resources. During the process of acquisition, we respect the corporate culture of the company to be acquired and work to find a way to grow together. After acquisition, we encourage adoption of HORIBA's motto, “Joy and Fun,” by our new associates.

Characteristics of HORIBA's M&A strategy

Acquire companies with whom HORIBA is familiar and have a good relationship.

Do not take what seems to be an easy path of seeking better economics of scale or improved efficiency through restructuring

Make certain that HORIBA's employees are directly involved in the investment process such as due diligence in assessment of enterprise value

Improved post-acquisition performance of companies and business lines HORIBA acquired

HORIBA acquired ABX S.A. (now HORIBA ABX S.A.S.) in 1996, Jobin Yvon S.A. (now HORIBA Jobin Yvon S.A.S.) in 1997, and the MCT (Mechatronics) Business from Carl Schenck AG in Germany in 2005. Comparing results from their first year after acquisition to those of 2015 indicates steady growth. While the time spent from acquisition to profit generation is less than satisfactory, we will continue to pursue growth opportunities via acquisition in all business segments.

<table>
<thead>
<tr>
<th>Sales (left)</th>
<th>Operating income (right)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billions of yen</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>3</td>
</tr>
<tr>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>-1</td>
</tr>
</tbody>
</table>

Aggregate results in the year after acquired

ABX S.A.
Jobin Yvon S.A.
MCT Business

Aggregate results in fiscal 2015

HORIBA ABX S.A.S.
HORIBA Jobin Yvon S.A.S.
MCT Business
HORIBA has achieved a higher ROE through earnings growth and efficient use of assets

Sunao Kikkawa
Senior Corporate Officer and General Manager of Finance & Control Division

Aim for both business growth and shareholder return

Since its foundation, HORIBA has regarded shareholders as one of its most important stakeholders. In 1974, when a majority of companies paid fixed dividends, we were the first listed Japanese company to start paying shareholder dividends based on a payout ratio and have continued this practice without interruption for over 40 years (See Corporate Philosophy on page 83). We are determined to continue returning profits to our owners (shareholders) and at the same time stay aggressive in investing to raise corporate value.

Dividend Payments and Total Return Ratio

In 2013, when we were implementing the previous Mid-Long Term Management Plan [2011-2015], we changed the dividend policy from one targeting 30% of nonconsolidated net income to one targeting total returns (the combined amount of dividend payments and share buybacks) to shareholders at 30% of consolidated net income. If we recalculate the 10-year dividend payment record up to fiscal 2012, when the dividend policy targeted a payout of 30% of nonconsolidated net income, using the new dividend policy of the total return ratio based on consolidated net income, our payout ratio would have been 20.8%. Thus, we believe that our new dividend policy has allowed us to return more to our owners (shareholders) and at the same time stay aggressive in investing to raise corporate value.

Framework to pursue higher capital efficiency and higher profitability

In recent years, we have established large-scale production bases and have acquired businesses abroad so as to build a strong global base for further growth. We are now promoting a framework for each group company and each business segment to set a capital efficiency target for efficiently generating earnings by effective use of assets. From January 2016, the ERP (Enterprise Resource Planning) system, that consolidates 85% of group companies, was launched. This is allowing us to make management judgments faster. By making best use of the system, we aim to achieve higher earnings growth driven by efficient use of assets.
Basic capital policy

1. Achieve higher ROE by consistently raising corporate value on the basis of our long-term strategy

To return profits on investments made by shareholders, HORIBA gives priority to raising corporate value over the long term. As stated in our MLMAP2020, we aim to achieve ROE of 10% or more by 2020. ROE is one of our most important management metrics.

2. Link shareholder return to earnings growth.

HORIBA targets total returns (the combination of dividend payments and share buybacks) to shareholders at 30% of consolidated net income. This target reflects due consideration given to ensuring a stable business base and retaining earnings for business development.

3. Flexibly manage funding

HORIBA finances investment for business growth to optimally benefit long-term corporate value enhancement, with overall consideration given to investment project, cost of capital, funding environment and terms, equity ratio, liquidity in hand, and other factors.

Challenges in MLMAP 2020

HORIBA consistently invests in equipment, ERP, R&D, and human resources from a long-term perspective, without depending on performance of a single fiscal year. In the previous Mid-Long Term Management Plan [2011-2015], we invested mainly in overseas R&D facilities and reagent production facilities (new construction and capacity expansion). From 2014 our focus was shifted to setting up bases in Japan. In 2015 we invested the highest amount for one production base, in building HORIBA BIWAKO E-HARBOR, and the highest amount for an acquisition, U.K.-based MIRA Ltd., now HORIBA MIRA Ltd. These are the primary reasons that our investing cash flow increased significantly in 2015, compared to previous years, resulting in negative free cash flow.

In 2016 our plan is to aggressively invest in the Automotive Test Systems and Semiconductor Instruments & Systems segments. Investment in HORIBA MIRA, which owns test tracks and testing facilities, will be resumed after having been flat prior to our acquisition. For 2016 we are projecting to generate negative free cash flow as we did in 2015. We recognize that higher depreciation burden, caused by the many capital expenditure under MLMAP2020, and improvement in capital efficiency of HORIBA MIRA and other businesses are among our challenges. We will focus on enhancing capital efficiency of each group company and each business segment and raising return on investment.

### Free cash flow

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating cash flow</th>
<th>Investing cash flow</th>
<th>Free cash flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2015</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Sunao Kikkawa
Senior Corporate Officer and General Manager of Finance & Control Division

Sunao Kikkawa joined HORIBA, Ltd. in 1974. He was assigned to HORIBA Instruments Incorporated (U.S.) in 1982 and returned to HORIBA, Ltd. in 1988. He was appointed General Manager of the Accounting Department in 1996 and Senior Corporate Officer in 2007. He has been a key person in globalizing HORIBA's accounting operations along with the Group's globalization and maintaining compliance with international accounting standards. At present he is engaged in raising efficiency in capital strategy and group administrative operations as Senior Corporate Officer and General Manager of the Finance & Control Division.
### Automotive Test Systems

<table>
<thead>
<tr>
<th>Principal products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission measurement systems</td>
</tr>
<tr>
<td>Automotive emission analyzers</td>
</tr>
<tr>
<td>Onboard emission measurement systems</td>
</tr>
<tr>
<td>Driveline test systems</td>
</tr>
<tr>
<td>Engine test systems</td>
</tr>
<tr>
<td>Brake test systems</td>
</tr>
<tr>
<td>Drive recorders</td>
</tr>
<tr>
<td>Vehicle development engineering</td>
</tr>
<tr>
<td>Testing engineering</td>
</tr>
<tr>
<td>Lease and management of R&amp;D facilities</td>
</tr>
</tbody>
</table>

HORIBA’s automotive EMS (Emission Measurement Systems) are adopted as the primary standard by national certification bodies in many countries and have an **80%*** global market share. HORIBA provides the EMS and other measurement systems for automotive development and vehicle development engineering, enhancing the R&D efforts and quality control of automotive manufacturers and automotive component manufacturers around the world.

* HORIBA’s estimate

### Process & Environmental Instruments & System

| Stack gas analyzers                                                               |
| Water quality analysis and examination systems                                     |
| Air pollution analyzers                                                           |
| Environmental radiation monitors                                                  |

HORIBA provides environmental measurement solution technologies associated with environmental regulations throughout the world. Together with providing process measurement technologies, which fulfill analytical needs in manufacturing development, we ensure better public safety, security, and health.

### Major risk factors

- The global automotive industry’s shifting R&D investments
- Demand fluctuation following changes in environmental regulations

### Major customers

- Automotive manufacturers, automotive component manufacturers, multipurpose motor manufacturers, government regulatory agencies, oil companies, automotive maintenance and repair centers, vehicle and engine development companies, finished vehicle testing companies, in-use vehicle testing companies
- Manufacturers, government agencies, electric power companies

### Product applications

- Development of new gasoline, diesel and hybrid powertrains, vehicle certification and quality control, in-use vehicle inspections
- Measurement of gaseous emissions, wastewater and water supplies, environmental pollution monitoring, environmental radiation measurement equipment

### Sales by business segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive</td>
<td>37%</td>
</tr>
<tr>
<td>Process &amp; Env.</td>
<td>10%</td>
</tr>
</tbody>
</table>

### Sales by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>31%</td>
</tr>
<tr>
<td>Asia</td>
<td>26%</td>
</tr>
</tbody>
</table>

Yen | U.S. dollars

With the aim of realizing sustainable growth, HORIBA pursues balanced management without overly relying on a particular region or currency.
Medical-Diagnostic Instruments & Systems

- Equipment for blood sample analysis
  - Hematology analyzers
  - Equipment for measuring immunological responses
  - Clinical chemistry analyzers
  - Blood glucose measurement systems

Semiconductor Instruments & System

- Mass flow controllers
- Chemical concentration monitors
- Reticle/mask particle detection systems
- Residual gas analyzers

Scientific Instruments & System

- pH meters
- Particle-size distribution analyzers
- X-ray fluorescence analyzers
- Spectrometers
- Raman spectrometers
- Gratings

HORIBA medical products are primarily blood testing instruments and reagents for the in-vitro diagnostics market, with over ¥5 trillion in global annual sales. We have strength in small-sized blood testing instruments are used near the site where patients are located such as a surgery ward, a hospital ward, or a clinic for outpatients.

HORIBA contributes to the semiconductor industry by supplying mass flow controllers, which are devices that control gas and liquid flows in the semiconductor, solar cell, and LED (light-emitted diode) manufacturing processes, and other monitoring systems.

HORIBA provides over 500 types of instruments for use at the leading edge of scientific technology and commands leading market shares in niche markets. The Scientific Instruments & Systems segment develops basic analytical and measurement technologies, which play key roles in providing new technologies to HORIBA’s other business segments.

Changes in medical insurance systems in different countries

Significant fluctuation in demand caused by the “silicon cycle” in the semiconductor industry and investments related to solar cells, LEDs, and other energy sources

Investment trend of national government agencies and other institutions

Demand fluctuation following changes in environmental regulations

Medical testing centers, small to medium-sized hospitals, medical practitioners

- Semiconductor production equipment manufacturers, semiconductor device makers, semiconductor cleaning equipment manufacturers

Manufacturers, research institutions, universities, government agencies, electric power companies

Health and diagnostic testing, disease diagnosis

- Flow control of gases and liquids, monitoring of cleaning fluid concentrations in semiconductor manufacturing processes, semiconductor and LCD quality control inspections

R&D, product quality testing, criminal forensics

16% Americas

21% Europe

16%
HORIBA’s automotive EMS (Emission Measurement Systems) are used by national certification bodies throughout the world and command an installed base market share of 80%*. HORIBA provides complete test and measurement solutions for automotive development to the world’s leading automotive manufacturers, including test systems for chassis, engines, power trains, and brakes. In July 2015 HORIBA acquired MIRA Ltd. (now HORIBA MIRA, Ltd.), the U.K. registered vehicle engineering consultancy and testing services provider. By including HORIBA MIRA in the group, HORIBA’s business has expanded from analysis and measurement to the Engineering Consultancy & Testing (ECT) business. We are now able to respond to diverse customer demands related to automotive development including vehicles performance autonomous vehicle development and general vehicle R&D.

2015 results: Acquisition of MIRA led to an increase in sales and one off expenses.
2016 forecasts: Aiming for higher productivity with full operation of the new Biwako facility.

In keeping with an increase in capital and R&D investment by automakers, sales of emission measurement systems increased in Japan in 2015. In addition, the acquisition of HORIBA MIRA also boosted sales compared to the previous year. Segment operating profit, however, decreased year-on-year due in part to one off expenses related to the acquisition of HORIBA MIRA and the relocation to HORIBA BIWAKO E-HARBOR, construction of which was completed in Shiga Prefecture. In 2016 segment sales are expected to increase due to a full-year contribution of sales of HORIBA MIRA. In addition, the EMS and MCT (Mechatronics) businesses are projected to be robust. HORIBA BIWAKO E-HARBOR started full operation in May 2016 and strive to raise productivity so as to help improve profitability.

Mid-long term strategy: Emphasis shift away from a provider of products for automotive development and towards a development partner with engineering capability.

By capitalizing on synergies between the new ECT business and the existing automotive testing operations in the EMS, MCT, and Intelligent Transport Systems (ITS) businesses, HORIBA aims to expand its business competencies. In Europe, the Real Driving Emissions (RDE) regulation, on-road emissions testing of light vehicles with mandatory limits, will start in September 2017. Leveraging its 80% global share in emission measurement systems for laboratory testing, HORIBA will use its brand recognition to achieve a high market share in the RDE regulation business area.

* Estimate by HORIBA
These systems continuously and simultaneously measure a wide range of gaseous and particle components in emission gases over a broad range of concentrations. They are widely used in R&D and engine/vehicle certification in the automotive industry. The systems include large-scale systems installed inside a laboratory, in which HORIBA holds an 80% global share, and on-board types for road tests.

### Emission measurement systems

These systems continuously and simultaneously measure a wide range of gaseous and particle components in emission gases over a broad range of concentrations. They are widely used in R&D and engine/vehicle certification in the automotive industry. The systems include large-scale systems installed inside a laboratory, in which HORIBA holds an 80% global share, and on-board types for road tests.

**Notes:**
- Market shares quoted are estimates by HORIBA.

### Major products and market shares

#### Emission measurement systems

- **World market share:** 80%
- **Segment sales share:** 38%

**Note:** Market shares quoted are estimates by HORIBA.

### Automotive Test Systems: Market size and growth areas

<table>
<thead>
<tr>
<th>HORIBA business divisions</th>
<th>Vehicle development engineering</th>
<th>Testing engineering</th>
<th>Lease of R&amp;D facilities</th>
<th>Market size (Billions of yen)</th>
<th>HORIBA’s estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECT business</td>
<td></td>
<td></td>
<td></td>
<td>2,000~</td>
<td></td>
</tr>
<tr>
<td>EMS business</td>
<td>Emissions measurement</td>
<td></td>
<td></td>
<td>40~50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engine performance testing</td>
<td></td>
<td></td>
<td>100~120</td>
<td></td>
</tr>
<tr>
<td>MCT business</td>
<td>Vehicle body, wind tunnel balance, brake testing</td>
<td></td>
<td></td>
<td>15~20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Driveline testing</td>
<td></td>
<td></td>
<td>30~40</td>
<td></td>
</tr>
<tr>
<td>ITS business</td>
<td>Safety and ITS</td>
<td></td>
<td></td>
<td>10~15</td>
<td></td>
</tr>
</tbody>
</table>

### HORIBA’s Automotive Test Systems segment sales and major automakers’ R&D spending

- **HORIBA’s automotive segment sales**
  - Aggregate R&D spending by 3 German automakers (right: Million Euro)
  - Aggregate R&D spending by 2 U.S. automakers (right: Million US$)
  - Aggregate R&D spending by 3 Japanese automakers (right: 100 Million yen)

**Source:** HORIBA’s survey based on companies’ disclosed materials

### Trend of automobile-related regulations

#### WLTP

The Worldwide Harmonized Light Vehicles Test Procedure (WLTP) provides a global common technical regulation for measurement of exhaust emissions and fuel consumption for light duty vehicles. This will eventually replace the current test methods used in each country or region: the EU, Japan, and other countries will adopt the WLTP in the future.

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

#### Driveline test systems

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

**Source:** HORIBA’s survey based on materials of the Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism; Japan Automotive Manufacturers Association Inc.; and others
We supply a broad range of analysis and measurement instruments for analyzing air pollution, water quality and soil quality. We play an important role in gas measurement and monitoring of industrial liquid waste in the energy and heavy chemical industries, including the electric power, steel, and chemical industries; purified water management for medical and semiconductor use; and constant monitoring and control of water quality in the pharmaceutical, food, and cosmetics fields. In essence, HORIBA's contribution supports public safety, security, and health in addition to global environmental preservation.

**Sales breakdown**

- Stack gas analysis: 36%
- Water quality analysis: 32%
- Air pollution analysis: 15%
- Other: 17%

**Sales by region**

- Japan: 50%
- Asia: 22%
- Americas: 15%
- Europe: 13%

**Net sales and operating income**

- Net sales (left)
- Operating income (right)
- Operating income plan for 2020 (right)

**2015 results:** Robust sales of stack gas analyzers in Japan

**2016 forecasts:** Focus on sales to plant engineering companies

In 2015 sales of sales of stack gas analyzers for thermal power plants and factories were robust in Japan. In addition, an increase in capital expenditures in the gas plant market in North America and the depreciation of the yen against the U.S. dollar contributed to an increase in sales in the Americas. However, the relocation to the HORIBA BIWAKO E-HARBOR incurred expenses, resulting in a year-on-year increase in segment sales but a decrease in operating profit.

In 2016 we expect sales of stack gas analyzers to continue to be firm in Japan. In addition, using process measurement equipment business in North America as a foothold, we plan to increase sales to plant engineering companies and expand overseas.

**Mid-long term strategy:** Value creation in the context of environmental regulations and process measurement equipment

In the environmental and analytical instrument markets in emerging nations, HORIBA will develop business by utilizing its accumulated know-how and experience in Japan, Europe, and the Americas. We also aim to increase market share in the global water quality measurement business, by collaborating with the water-related business of our other business segments. As to our process measurement equipment business, we aim to expand business in the petroleum refining and petrochemical industries and intend to increase the recognition given to the HORIBA brand in Japan and overseas.
HORIBA has a leading market share in Japan in continuous emission monitoring systems used in plants and other facilities that generate gaseous emissions and soot. Our instruments have established a widely recognized credibility for robust and reliable sampling systems, which are essential in continuous measurement of a variety of gases. The analyzers are used in applications for power generation, petrochemicals, steel, paper, foods and pharmaceuticals.

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

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

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

HORIBA has been expanding for PM2.5-related monitoring. HORIBA’s sales and market shares have been growing simultaneously and continuously to expanding worldwide needs for remote incineration facilities. A single unit can measure all five gases, HORIBA has a leading market share in Japan and seeks sales growth in the global market.

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

### Target markets in water quality measurement business

**Water quality measurement is critically important in the water process cycle, to ensure environmental preservation and to support public safety, security, and health.** The target markets include water quality management of drinking water, industrial water, and water used in plants, as well as waste water discharged from plants. By engaging in water quality measurement, HORIBA plans to create value from the reduction of total costs and the process improvement.

<table>
<thead>
<tr>
<th>Areas</th>
<th>HORIBA’s Sales breakdown in 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental measurement</td>
<td>30%</td>
</tr>
<tr>
<td>Process management</td>
<td>10%</td>
</tr>
<tr>
<td>Clean water</td>
<td>20%</td>
</tr>
<tr>
<td>Sewage</td>
<td>40%</td>
</tr>
</tbody>
</table>

H-1 series of industrial water quality analyzers

<table>
<thead>
<tr>
<th>Areas</th>
<th>HORIBA’s Sales breakdown in 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effluent</td>
<td>32%</td>
</tr>
<tr>
<td>Final effluent</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Stack gas analyzers**

<table>
<thead>
<tr>
<th>Segment sales share</th>
<th>Japan market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>36%</td>
</tr>
</tbody>
</table>
Medical-Diagnostic Instruments & Systems

In the global market of in-vitro diagnostic; HORIBA provides instruments and reagents for blood sample testing throughout the world. The segment’s business model is based on recurring revenues generated from sales of reagents. We aim to ensure stable earnings by expanding our installed base of medical diagnostic instruments. In particular, HORIBA’s strength is in small and medium-sized blood cell counters in the diagnostic market for Point of Care Testing (POCT), such as small to medium sized hospitals, specialty clinics, test centers and surgery centers.

Contributing to a healthy life through in-vitro testing equipment

2015 results: Robust sales of new products in Japan
2016 forecasts: Accelerate product development for the global market

In 2015 the yen’s appreciation against the euro resulted in a decrease in the value of European sales expressed in yen. However, sales of the hematology and C-Reactive Protein (CRP) analyzers, which were launched in March 2015 in Japan, were favorable. As a result, segment sales and operating income increased year-on-year.
In 2016 we will continue to focus on expanding sales of hematology and CRP analyzers in Japan. In addition, R&D investment will continue in Europe for launching new medium- to large-sized products, which are currently under development.

Mid-long term strategy: Increase sales by launching new products and expanding into new areas

At present, HORIBA's strengths reside in having development bases in Japan and France and a local supply infrastructure of testing reagents in China, India, and Brazil, with their high expected demand for reagents. We aim to globally introduce small- and medium-size hematology and CRP analyzers, which are highly regarded in Japan, and to launch at an early date new medium- to large-sized products. Moreover, we are interested in cooperating with other companies through M&A and OEM arrangements, so as to expand into new areas in the in-vitro testing market.
Business development by test category
HORIBA aims to be positioned as a clinical solution partner by strengthening the data management and automation areas and expanding product development either by ourselves or through collaboration with other companies.

<table>
<thead>
<tr>
<th>Test category</th>
<th>Clinical chemistry</th>
<th>Hematology</th>
<th>Immunology</th>
<th>Coagulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market size</td>
<td>¥2 trillion</td>
<td>¥0.35 trillion</td>
<td>¥2 trillion</td>
<td>¥0.2 trillion</td>
</tr>
</tbody>
</table>

Hospitals

- Field in which HORIBA exhibits strength
- Clinical chemistry analyzers
- Hematology analyzer systems
- Small and medium-sized hematology analyzers
- Blood glucose measurement systems
- CRP analysis
- Coagulation reagents

Global product development and supply system

- France
- Product development and production base
- Development technology of medium and large-sized products

- India
- Production base (instruments and reagents)

- China
- Production base (instruments and reagents)

- Japan
- Product development and production base
- Development technology of small-sized products

- Brazil
- Production base (Reagents)

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Reagents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small-sized products</td>
<td>Expand sale of our hematology and CRP analyzer globally</td>
</tr>
<tr>
<td>Medium-sized products</td>
<td>Introduce products by integrating technologies in Japan and France</td>
</tr>
<tr>
<td>Medium and large-sized products</td>
<td>Accelerate product development to expand market shares in Europe and Americas</td>
</tr>
<tr>
<td>The local supply systems have resulted in cost reductions for distribution and inventory management, thereby improving profitability.</td>
<td></td>
</tr>
</tbody>
</table>

Expand the biochemical testing equipment line-up, with the aim for growth in Europe and Americas

In February 2016 we entered a sales alliance agreement with JEOL, Ltd. (Japan). This enables us to expand our product line-up for biochemical testing in Europe and the Americas, which represent 70% of the world’s in-vitro testing market. We aim to increase sales to ¥40 billion (up 40% from 2015), the target set in the MLMAP2020.

New global grand “Yumizen”

We launched a new brand “Yumizen” in 2015. The name Yumizen is created by combining Yumi (symbolizing You & Me and the Japanese word yumi (bow)) and Zen(front, virtue), and incorporating our wish to provide accurate and rapid test results for medical professionals through HORIBA’s analysis and measurement technology and ultimately for patients. In June 2015, we introduced small-sized hematology analyzers, Yumizen H500, for emerging markets. We will accelerate development in Japan and France, promote this new brand, and thereby expand business.
Contributing to yield enhancement and technology innovation in semiconductor manufacturing processes with HORIBA’s flow control and measurement technologies

HORIBA’s main products are mass flow controllers, which are devices that control gas and liquid flows in the semiconductor manufacturing process (front-end process). They have a leading global market share*, largely on the strength of their flow control technology that enables yield enhancement and miniaturization in the semiconductor manufacturing process. HORIBA, which also provides chemical concentration monitors, aims to contribute to the semiconductor industry by providing customers with high-level solutions that support technical advances in process technology.

* Based on HORIBA’s survey

2015 results: Robust investment demand by semiconductor manufacturers in Asia
2016 forecasts: Maintain market shares in Asia and North America

Due to an increase in capital expenditure by semiconductor manufacturers, particularly in Asia, sales to semiconductor production equipment (SPE) manufacturers surged in Asia and North America. In addition, the yen’s depreciation against the U.S. dollar resulted in an increase in the value of sales in the U.S. expressed in yen. As a result, segment sales and operating income recorded all-time highs.

While capital spending by the semiconductor industry is expected to remain at a high level in the first half of 2016, we believe we have to cautiously monitor their capital spending outlook in the second half of the fiscal year and respond promptly to the needs of our customers.

Mid-long term strategy: Enhance market positioning of mainstay products

We will further enhance our flow control technology, which has been accumulated primarily in mass flow controllers. We also aim to grow sales of chemical concentration monitors, used in semiconductor wafer cleaning processes. In addition, we will combine our flow control technology and analysis and measurement technology so as to enhance development of new products that satisfy customer needs.

Meanwhile, we intend to apply our flow control technology to other industries by promoting product development for energy, petrochemical, pharmaceutical, food and other markets.
Chemical concentration monitors

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

Mass flow controllers

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

HORIBA’s global market share for mass flow controllers

HORIBA has maintained more than 40% of the global mass flow controller market share since 2009. It is noteworthy that our market share has expanded since the 2009 economic downturn, by successfully meeting our customers’ needs through new product introductions and expanded production capacity. In our view, this is due to the success of our balanced management, which enabled us to maintain the capacity for new product development and production capacity during a downturn in demand. Our higher global market share has been driven by growth in sales of new products using pressure control process that respond to miniaturization of the semiconductor manufacturing process.

Enhancing semiconductor-related development capability and responding to customer needs

In April 2015 HORIBA Advanced Technology Center (Japan) opened within the site of HORIBA STEC, which plays a leading role in the Semiconductor Instruments & Systems segment. The Center aims to raise the level of precision and quality of HORIBA’s overall analysis and measurement equipment, not merely for the Semiconductor segment, by accelerating development of semiconductor sensors used in many of HORIBA’s products.

In addition, by utilizing HORIBA STEC Kyoto Fukuchiyama Technology Center, which is engaged in development of next-generation advanced material control equipment, and an R&D facility in Reno, Nevada in the U.S., we are establishing a structure for promptly accommodating the needs of our customers.
HORIBA provides solutions for data acquisition and analysis in niche markets to support advanced research that ventures into unknown territory in the quest for products and processes of the future. HORIBA’s analyzers are widely used not only in basic research, but also in foreign-object examination and defect analysis for pharmaceuticals, food, and electronic components, forensic science, archaeological surveys and others. Additionally, the Scientific Instruments & Systems segment develops basic analytical methods and core measurement technologies, which play key roles in providing new technologies to the four other business segments of HORIBA.

2015 results: Robust sales for R&D applications to universities in China
2016 forecasts: Aim to increase sales for R&D applications to private companies

In 2015 sales of instruments and systems for R&D applications to universities and other institutions in China were robust and the yen’s depreciation against the dollar resulted in an increase in sales in the Americas in yen terms. Consequently, segment sales and operating income increased year-on-year. In 2016 we anticipate sales growth following an earnings recovery by private companies, mainly in Japan. We also aim to further boost our fluorescence spectroscopy business in North America and promote sales of these instruments for medical research, drug discovery, biotechnology, and other sectors.

Mid-long term strategy: Incorporate customers’ views in product development and hence market creation

Our challenge is new value creation in analysis and measurement business, such as in energy, automobile, biotechnology, and drug discovery. We will not only remain active in sales in niche markets but expand applications of our products. In order to better understand issues of our customers and utilize such understanding for product development, we will accelerate development of customized products on the basis of joint projects with customers. We have already responded to customer needs by developing a custom-made instrument for a manufacturer of precious metals and a special device for a university laboratory engaged in advanced research.
Globally spread the technology of three bases: Japan, France, and the U.S.

Historically, segment growth was driven by product development utilizing strengths of our bases in Japan and France. Since we acquired Photon Technology International, headquartered in Canada, in 2014, our R&D capability in the Americas has improved. Going forward, we plan to grow business in life science and drug discovery, mainly in North America.

HORIBA’s analysis and measurement technologies are available globally and play an important role in R&D and process management worksites in all industries. As we believe our technologies still have considerable potential, we will promote more development and expansion into growth markets by utilizing industry-government-university cooperative programs. Our ultimate aim is to create new markets.

Aim to create new markets

HORIBA’s analysis and measurement technologies are available globally and play an important role in R&D and process management worksites in all industries. As we believe our technologies still have considerable potential, we will promote more development and expansion into growth markets by utilizing industry-government-university cooperative programs. Our ultimate aim is to create new markets.
Creating value by utilizing our “Invisible Values” is one of HORIBA’s important management themes. Of course, the “fruit” (earnings) and the “trunk with branches and leaves” (the balance sheet), are both visible and important values. However, we believe that the essence of good management is to grow strong thick roots, the invisible values in the rich soil of our corporate culture. We do not believe that management’s emphasis on maximizing short-term earnings and neglecting investment in invisible values will foster sustainable growth or increased corporate value.

Organizational structures
HORIBA operates five business segments in 27 countries. We believe it is important that our human resources in each business and each region promote their business. With that aim, we are spreading our “Joy and Fun” corporate motto into our global operation and promoting balanced management, matrix organization, and the HORIBA Stained Glass Project to build a Super Dream Team.
**Human resources**

At HORIBA, employees are considered not simply “employees” but “human resources” in the sense of resources that are assets. In order for all employees to achieve self-realization through “Joy and Fun,” we have set forth, shared, and been striving to realize HORIBA's five “Omoi” shown below. HORIBA’s strong organizational power is generated from the compelling desire of all highly-diversified HORIBA employees to practice HORIBA’s five “Omoi”.

1. To be a part of a collaborative community, at the forefront of new ideas and creations.
2. To achieve goals and make life memorable by fostering the highest intellectual potential.
3. To reach across the globe to expand learning that captures key business developments, wherever they occur.
4. To be proud of sharing what I do and what HORIBA delivers.
5. I want to participate all around and where I can be of help.

**Brands**

HORIBA works on growing “Invisible Values,” such as human resources, technology, and its corporate culture. “Invisible Values” are essential in generating future earnings and enabling enterprise continuity, while achieving numerical targets for net sales, profits, and other indicators. We believe that our persistent and continuous efforts on increasing the other four invisible assets, namely “human resources,” “technologies,” “organizational structure,” and “customers,” have greatly helped us to establish our brands, representing trust in HORIBA placed by our customers.

**Technologies**

Technological development is one of the most important drivers for value creation and the lifeline of a manufacturer such as HORIBA. To make an analogy, technical capability is a form of basic physical fitness, which cannot be maintained without continual training and exercise. Using this analogy, HORIBA needs to keep training in order to maintain the power to make a dash forward in a recovery phase of the economy.
Organizational Structure

Under the slogan of “HORIBA Group is One Company” since 2004, HORIBA has promoted “balanced management” and “matrix organization” to manage the Group companies as a single integrated entity. With the aim of further developing this system, we are using the “HORIBA Stained Glass Project” to promote diversity, organize a Super Dream Team of people with diverse abilities and characteristics, and accelerate the reinvention of our existing businesses and the creation of new businesses in keeping with the new mid - long term management plan MLMAP2020.

Organizing a Super Dream Team

Balanced management
We aim for a well-balanced management as a single, integrated entity, without excessive dependence on any one segment or region, in order to achieve sustainable growth of our five business segments. Even if the business environment of one business segment becomes stagnant, we are able to achieve sustainable growth by flexibly utilizing our management resources and ensuring a good balance in business investment.

Matrix organization
HORIBA uses matrix management across its five business segments and three operating regions. This is a global organizational framework for executive decisions on strategies and plans by business segment that removes barriers such as separation of countries, regions, or group companies. This framework has enabled a globally-integrated business operation. We will continue to exploit the benefits of the multiplier effect from successful examples and strengths in one segment or one region to others and improve HORIBA’s corporate values.

HORIBA Stained Glass Project
In January 2014, we launched the Stained Glass Project. Its mission is to make HORIBA stronger by the continual creation of new value through HORIBARIANs’ diverse talents and skillsets, regardless of their gender, age, nationality, disability, or other differences. Together with maintaining our balanced management and matrix organization, HORIBA aims to become a stronger organization that can promptly respond to any challenge in the environment, by relying on HORIBA-style diversity.
Encouraging group companies to enhance their technological prowess and distinctiveness to raise our market share

In recent years, core group companies in each business segment have been greatly contributing to HORIBA’s overall growth. Our basic policy in managing group companies is to respect each company’s distinctiveness and characteristics and give each a certain level of discretion.

One good example is HORIBA STEC Co., Ltd. which develops our world-leading mass flow controllers. As a result of dedication to developing products mainly for semiconductor manufacturing equipment companies, HORIBA STEC is playing a central role in R&D for flow volume measurement and control technology. It is the driver behind and a leader of our growth in the Semiconductor Instruments & Systems.

By encouraging individual group companies to grow and by uniting them all as the HORIBA Group, we aim to achieve sustainable growth.

Blackjack Project

The Blackjack Project, which began in 1997 with the objective of changing the awareness and activities of employees, has resulted in the submission of 806 suggestions and proposals for change in 2015. In addition to improvement in operational efficiency and cost reduction, personnel development and enhancement of organizational strength are among popular proposals, demonstrating one aspect of HORIBA’s corporate culture: organizational reform by employees.

We hold an internal World Cup competition among candidate proposals from each country where we operate and have employees. This competition also provides an opportunity to demonstrate to management and employees how we make our belief a reality. The Blackjack Project has the important function of sharing corporate culture, experience and knowledge and is one of our important initiatives to realize a Super Dream Team.
Diversity is a driver of corporate growth

HORIBA aims to be a company in which the diversity of its people can make the best of their strength and talents, regardless of their gender, age, nationality, special abilities, and other differences. At the end of 2015, the number of our employees reached 6,831. As our business has become more globalized and we have acquired more overseas companies, our people have also become more diverse. HORIBA’s Japanese employee ratio has declined to 38% of the total. This is not a result of shifting production offshore in order to use low-cost labor but rather a consequence of our growing need for highly skilled workers and specialists who embody special technology or know-how. This type of overseas expansion is quite unique among Japanese companies.

Employees’ breakdown by region

<table>
<thead>
<tr>
<th>Year</th>
<th>Total employees</th>
<th>Japanese</th>
<th>Non-Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>1,808</td>
<td>77%</td>
<td>23%</td>
</tr>
<tr>
<td>1998</td>
<td>3,044</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>2010</td>
<td>5,202</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Dec. 31 2015</td>
<td>6,831</td>
<td>38%</td>
<td>62%</td>
</tr>
</tbody>
</table>

Human resources

Value creation based on “Invisible Values”
**HORIBA Stained Glass Project: What we did in 2015**

**The theme for 2015: “Reinvent how you work”**

The main theme in 2014, the first year after launching the Project, was “Female employees’ performance.” In 2015, under the campaign named “Reinvent how you work,” we focused on how to balance ease of work with enhancement of productivity. Workshops and seminars were held at various locations in Japan. The workshops featured the topic of systems that may allow people to use diverse ways of working and at the same time enable productivity to improve. Seminars included a lecture on the successful examples at other companies. The number of participants in workshops and seminars totaled 750 in 2015, providing our executives and employees with a good opportunity to think about HORIBA’s way to “Reinvent how you work.” As one of the outcomes, the “paid absence by hour” system was adopted on an experimental basis by some group companies in Japan.

**Promoting women's career activities**

In Japan, the Act concerning Promotion of Women’s Career Activities (PWCA) came into force on April 1st, 2016. HORIBA, Ltd. thereupon formulated an action plan for promotion of women’s career activities in 2016. We aim to achieve our target through HORIBA Stained Glass Project and other initiatives.

**Target**

Raise the ratio of women participating in the decision making process of the entire company and each business segment to 20% or more

<table>
<thead>
<tr>
<th>Reference on HORIBA, Ltd.</th>
<th>Female employee ratio = 19.8% (January 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average ratio of female employees to participate in the training course for selecting executives = 15% (most recent three-year average)</td>
<td></td>
</tr>
<tr>
<td>Average ratio of female employees to participate in the global strategic meetings or budget meetings = 12.9% (2015)</td>
<td></td>
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</table>
Accelerating investments in basic analytical and measurement technologies and application development

The development of analytical technology and engineering technology is vital to HORIBA as an analytical and measurement equipment manufacturer. We have maintained R&D investment at the level of 7-8% of sales, even during economic downturns when our competitors reduced their investments. This strategy has helped to boost our market share during subsequent upturn phases. In 2009, during the global economic recession triggered by the financial crisis, the Semiconductor Instruments & Systems segment recorded losses. However, supported by stable earnings of the Medical-Diagnostic and Scientific Instruments & Systems segments, we were able to maintain the same level of overall R&D investment in the Semiconductor segment, which has resulted in the segment’s favorable operating performance today.

We firmly believe this investment policy will contribute to our future growth and profitability improvement. HORIBA aims to improve the efficiency of our R&D investments and realize a higher operating income ratio.

R&D expenditure and ratio of R&D expenditure to net sales

<table>
<thead>
<tr>
<th>Billions of yen</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.0</td>
<td>12.5</td>
</tr>
</tbody>
</table>

![R&D expenditure and ratio of R&D expenditure to net sales chart]

From core technology to product development

HORIBA strives to effectively allocate its R&D resources to specific analytical technologies, apply them to product development in five different business segments, and achieve product releases efficiently.

<table>
<thead>
<tr>
<th>HORIBA’s major analysis and control technologies (by scale of sales)</th>
<th>Automotive Test Systems</th>
<th>Process &amp; Environmental</th>
<th>Scientific</th>
<th>Medical-Diagnostic</th>
<th>Semiconductor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrared measurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Gas flow control</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Particle-size distribution analysis</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Spectroscopic analysis</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Liquid ion analysis</td>
<td></td>
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</tbody>
</table>
Creating competitive technologies and ensuring superiority by patents

Based on a variety of analysis and measurement technologies, HORIBA continues its research for optimal methods to satisfy customer needs and develop new technology. Our numerous unique technologies and intellectual assets have propelled our business growth. We firmly believe that technology development and its resultant intellectual property are the essential element of the HORIBA brand.

As an example, OBS-ONE, a portable emissions measurement system designed for engine/vehicle certification under real road conditions, which was launched in 2014, has utilized our proprietary technologies. We have protected our intellectual assets and have achieved performance other companies cannot imitate.

**HORIBA BIWAKO E-HARBOR, a new facility, began operation**

To lead global development and production, and achieve efficiency

**Full operation started in May 2016**

HORIBA’s gas measurement technology is used in major products such as our emission gas analyzers, which have become the world’s top brand, and stack gas analyzers. We are aiming to improve the time-to-market of new gas measurement products and efficiency of production by an organic integration of development, design and production to our new facility HORIBA BIWAKO E-HARBOR from our Kyoto headquarters.

**Together with our suppliers, we are active on the global stage, leveraging “craftsmanship unique to Japan”**

One of our important “Invisible Values” is to maintain strong ties with our regular production partner companies. One reason we have been able to increase our market share in the past, even when there has been a strong surge in demand, is our strong relationship with suppliers which has enabled us to respond very quickly to customer demand. In HORIBA BIWAKO E-HARBOR, our suppliers will work together with us on the same premises. Through this arrangement, we expect reductions in time and product transportation costs, by eliminating back-and-forth transportation of products during assembly process and others. We are steadfast in dedication to “craftsmanship unique to Japan” and to expand globally with our suppliers.

**“Technology Translocation (Sengu)”**

We intend to transfer our core technologies, accumulated in Kyoto over a period of 70 years, into the hands of a new generation of engineers that will lead to new development capabilities and the expansion of production capacity. We named it “Technology Translocation,” making it a driver toward technological innovation. The Japanese word “Sengu” translated as “translocation” refers to the tradition to passing on of skills to build a shrine from one generation of carpenters to the next.

**Naming of HORIBA BIWAKO E-HARBOR**

"E" of E-HARBOR stands for the capital letter of Engineering, Environment, Energy system, Engagement and Enhancement, and thus representing various aspects of our work. HORIBA aims to utilize expertise and insight from all over the world, and function as a center for generation of valuable information.
A true partner to our customers

**Analytical Technology Centers, with enhanced services, opened in 2016**

With the aim of raising customer satisfaction with more appropriate analysis technology proposals, the analysis service department of HORIBA, Ltd. was transferred to HORIBA Techno Service Co., Ltd., specialized in services and maintenance, and began operation there as the Analytical Technology Centers. At present, the Centers are located in Kyoto and Tokyo.

**Promptly responding to customers’ requests**

The Analytical Technology Center conducts contracted analysis of samples for our customers as well as demonstrations for a large selection of instruments. It also develops and sells standard samples, which are indispensable for stable operation of parts and instruments. Having obtained the ISO17025 accreditation, which testifies to its competence in providing accurate measurement and calibration results, the Center possesses the quantitative determination technology that forms a base for testing and calibration required by our customers. Together with the environmental measurement attestation services provided to third parties, such as testing of soil, industrial waste and quality of river water or factory waste water, HORIBA has strengthened its system to better satisfy a wide range of needs of our customers.

**Aiming for higher customer satisfaction**

By consolidating our human resources with solid analytical skills and professional knowledge on advanced analytical chemistry at the Analytical Technology Center, we are enhancing our analysis and measurement technologies which forms a base of our overall business. With our consolidated know-how and optimal services, we strive to become a true partner with our customers.

<table>
<thead>
<tr>
<th>Analytical Technology Center</th>
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<tbody>
<tr>
<td><strong>Analytical services</strong></td>
</tr>
<tr>
<td>Surface analysis, structure analysis</td>
</tr>
<tr>
<td>Contracted analysis such as elemental analysis Demonstrations.</td>
</tr>
<tr>
<td><strong>Contracted services</strong></td>
</tr>
<tr>
<td>Data sales, Measurement certification, Training, Contracted maintenance, etc.</td>
</tr>
<tr>
<td><strong>Calibration services</strong></td>
</tr>
<tr>
<td>Calibration of analytical and measurement instruments and systems</td>
</tr>
<tr>
<td><strong>Standard sample services</strong></td>
</tr>
<tr>
<td>Standard solution development</td>
</tr>
<tr>
<td>Sales of standard samples and catalysts, etc.</td>
</tr>
</tbody>
</table>

**A true partner in analysis and measurement to our customers**
This product is a process water measurement system designed to automatically measure chromaticity and turbidity in drinking water distribution plants. Chromaticity is an objective specification of the quality of a color. The product is used for water quality monitoring in the tap water purification process, based on the regulations on the Tap Water Testing Methods of the Water Supply Act, set by the Ministry of Health, Labour and Welfare.

By improving a measurement part and combining the rotary-type washer with a wiper, maintenance has become easier, resulting in a significant extension of the maintenance cycle. In addition, the physical construction is now less susceptible to temperature change; this has greatly reduced electricity consumption required for temperature adjustment (see figure on the right).
Corporate Governance System

HORIBA has adopted the type of organization defined as a “Corporate with Board of Corporate Auditors,” in the Companies Act. As of April 2016, the Board of Directors is comprised of eight members, including three independent outside directors, one of which is a woman. In fiscal 2015, the Board met 12 times to make decisions more promptly than in the past and augment managerial capability by a small number of members. To avoid managing with an introverted approach, HORIBA has, since the company’s origin in 1953, always appointed at least one director and one corporate auditor from outside the company.

In addition, HORIBA introduced a corporate officer system in 1998 to make smooth and agile executions of operations under the supervision and guidance of directors. At present (April 2016), 20 corporate officers, including one female and four non-Japanese, play an active role in Japan and overseas.

As of April 2016, the Board of Corporate Auditors is comprised of three corporate auditors, including two independent outside auditors. The Board of Corporate Auditors held 14 meetings in fiscal 2015. It performs objective and appropriate auditing and monitoring of executions by the Board of Directors, in cooperation with independent auditors, internal auditing (Group Internal Audit Office, which is positioned directly under the President), and independent outside directors. (See the list of directors, corporate officers, and corporate auditors on page 43).

Relationship with owners (shareholders)

Open general meeting of shareholders

Since its initial stock listing in the Second Section of the Osaka Securities Exchange in 1971, HORIBA has encouraged all shareholders to attend the annual general shareholders meeting. This annual meeting is held on a Saturday to facilitate public attendance. An informal get-together event is held afterwards to enable shareholders to talk directly with management.

Implementing shareholder return linked to earnings growth

HORIBA was the first listed Japanese company to start paying shareholder dividends based on a predetermined payout ratio in 1974. Since fiscal 2013, HORIBA has changed the base amount of profit returns to shareholders (the combined amount of dividend payments and share buybacks) from 30% of HORIBA, Ltd. nonconsolidated net income to 30% of HORIBA, Ltd. consolidated net income, so that shareholder returns are more directly linked to consolidated performance. In fiscal 2015, we paid an annual dividend per share of ¥70 and bought back 218,400 shares worth ¥999 million.
Anti-takeover measures

HORIBA has not adopted anti-takeover measures. HORIBA reviewed the “Basic Policy on the Persons to Control Decision-making over the Financial and Business Policies of HORIBA”, which is announced on our website stated below.
http://www.horiba.com/jp/investor-relations/ir-news/article/40961/ (Japanese only)

Constructive dialogue with owners

HORIBA abides by the “Basic Policy for Constructive Dialogue with Shareholders” as announced on our website (see below). We make efforts to explain our corporate policy, financial condition, and corporate culture to our owners, and ask for their understanding and continued support.
http://www.horiba.com/jp/investor-relations/ir-policy/ (Japanese only)

Directors’ compensation

Compensation for directors consists of base compensation (regular fixed-amount salary), earnings-based salary (bonus) linked to the earnings results of each fiscal year, and stock options (retirement allowance) linked to medium to long-term earnings performance. Compensation for outside directors, however, consists strictly of base compensation (fixed-amount salary), excluding compensation linked to earnings performance, given the nature of their assignment. The limits for compensation for directors and for outside directors are approved as a separate matter at the annual general shareholders meeting. The directors (not including outside directors) compensation of 2015 was ¥681 million in total.

Corporate governance structure chart

*1 Committees, etc. refer to committees and conferences that are established and registered based on the “Regulations concerning conferences and committees,” such as the Group Promotion Committee for Management of Public Subsidies and the Safety and Health Committee.

*2 The HORIBA, Ltd. Risk Control Committee discusses and approves issues and measures concerning risk control.