



CORPORATE PROFILE

EBARA CORPORATION

Looking ahead, going beyond expectations

Ahead  *Beyond*

Our promise is
to continuously raise the bar,
delivering products and services
that exceed our customers' standards.



Working to support
the lives of people through
manufacturing.



EBARA's products and technologies are synonymous with comfort and convenience.

One of the world's largest drainage pumps

4,200 mm diameter



Shinkawa-kako Drainage Pump Station, Niigata

EBARA works behind the scenes to create comfort and peace of mind for society.

Whether it's using water on the top floor of a skyscraper or feeling comfortable in a large building or station, EBARA is dedicated to supporting the comfort, convenience, and peace of mind that is often taken for granted.



Ventilation system for the Kuriko Tunnel, Tohoku-Chuo Expressway



Gonoike Biomass Power Plant, Ibaraki


Leveraging our accumulated technologies, EBARA is dedicated to tackling global environmental issues.

Our water, air, and energy technologies have allowed us to contribute to the development of infrastructure such as industrial facilities. Through these technologies, we have been able to help others reduce energy and prevent global warming.

We will continue to take on new challenges in support of future generations.

Not only have we supported the development of technology for rocket pumps, but we have also applied that technology to the development of industrial pumps and supported more advanced semiconductor manufacturing. As we move forward, we will continue to evolve to meet the challenge of supporting people's lives.





EBARA rises to
new challenges
all over the world.

One example of our global initiatives is bringing water to the heart of the desert. EBARA's technologies help to solve problems on a global scale.



Las Vegas water intake pump



Merlion fountain pump system

EBARA promotes the creation of an environment that allows people to live comfortably in various parts of the world.

Our technologies and products—including water supply equipment in Las Vegas, a city surrounded by desert, and seawater desalination plants in the Middle East—are helping to create comfortable environments around the world. We have also adopted the Joint Crediting Mechanism* legislated by the Ministry of the Environment, allowing us to help Asian countries reduce CO₂ emissions. Through our businesses, we are working on solving problems around the world.

* This project sees technology providers from Japan helping to reduce CO₂ emissions in partner countries.

The EBARA Group is constantly expanding its initiatives to help solve global issues.

Main EBARA Group Network

Asia
39
companies

North America
6
companies

Europe
6
companies

Middle East
2
companies

Others
4
companies

57 companies
around the world

Custom pumps for liquefied natural gas

No.1 global supplier

* Market research performed by EBARA.

EBARA is dedicated to supporting technical training rooted in on-site application.

Being able to solve the problems of both today and tomorrow depends entirely upon the ability of those living in various parts of the world to acquire the skills and knowledge necessary. EBARA Hatakeyama Memorial Fund was established in 1989 for the purpose of funding international cooperation through activities like technological training with technical seminars offered mainly in Southeast Asia. Today, we continue to provide technical support by developing human resources as necessary according to local needs.

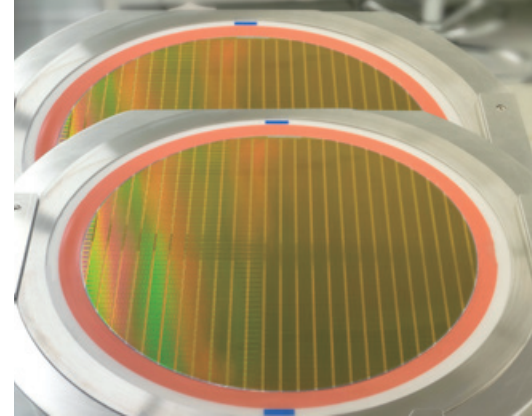


Technical seminar, Cambodia

Surpassing your imagination and expectations: EBARA's next stage.



EBARA continues to challenge the future by utilizing AI and IoT as we strive to facilitate the evolution of products and services.



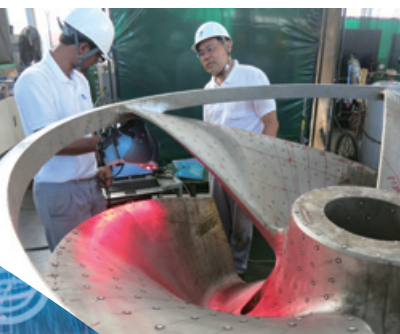
CMP systems and Dry vacuum pumps

No. 2 global supplier

* Market research performed by EBARA.

Accelerating the evolution of society by challenging new technologies and businesses.

The semiconductor field is indispensable for an advanced information society. EBARA's products are an essential part of any production line geared toward further improving the functionality of semiconductors. Precision machinery business is a mainstay of EBARA's contributions to information infrastructures.



Function improvement proposals using 3D scanners



Water supply pump unit with near-field communication (NFC) functionality

Utilizing state-of-the-art technology, we aim to create products and services that exceed expectation and imagination.

We are implementing new initiatives that take advantage of state-of-the-art technology, from AI-based production efficiency improvements and IoT-based malfunction predicting to water supply pump operation monitoring via smartphone and function improvement proposals using 3D scanners. These endeavors are being applied to products and services that had never before been thought of.

Looking forward to the next 100 years together with society and customers.

Our goal is to become a company that continuously grows and evolves. By providing technologies and products that meet a wide variety of needs, we will contribute to the advancement of society and our customers. Together, we can achieve global and lasting growth. For the EBARA Group, our path is aligned with that of our customers.



Our technological capabilities are our solid foundation on which we will build our business and expand throughout the world to achieve our mission of supporting industry, life, and the creation of a sustainable society.

We shall continue supporting infrastructure worldwide with Passion and Dedication.

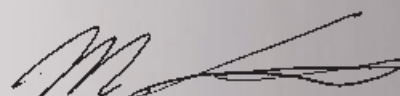
Since our establishment as a pump manufacturer in 1912, EBARA Group has provided products and services related to water, air, energy, the environment, and the semiconductor field, based on our unchanging spirit of "Passion and Dedication". Through our business, we have continued to support infrastructure and life all around the world. Our strengths lie in our technological capabilities that allow us to develop products that solve issues for our customers and society and our abilities to provide these products worldwide with the requisite services and support. We will continue to maximize our strengths and act in accordance with our unchanging spirit as we support the development of our future society and the environment.

We shall reach for greater heights and continue to take up new challenges.

In recent years, the global business environment has been undergoing rapid change and I believe that in these turbulent times, EBARA Group's mission is "Technology. Passion. Support the Globe". As President, Representative Executive Officer, I plan to improve sensitivity to market demand, tackle necessary changes and take action quickly at all levels to continue on our "unlimited challenge towards growth". We will continue to increase and expand our presence all over the world to achieve our goal of becoming a world-class industrial machinery manufacturer with "passion," "dedication," and "tenacity," and cultivate a corporate culture that encourages competition and embraces challenge where each employee can develop to their full potential and make the most of their abilities regardless of gender, nationality, or other factors.

The EBARA Group has existed for over 100 years and we are determined to keep contributing to society as a whole by making maximum use of our technologies, expertise and the talents of each and every employee to provide products and services that solve issues facing customers and society for the next 100 years to come.

Masao Asami
President, Representative Executive Officer
EBARA CORPORATION





The EBARA Way

Founding Spirit

“Netsu to Makoto” (Passion and Dedication)

Both employees and the Company shall strive for growth with passion and dedication to bring forth originality and ingenuity, rather than simply fulfilling the task at hand.

Corporate Philosophy

We contribute to society through high-quality technologies and services relating to water, air, and the environment.

CSR Policy

We will strive to foster trust with all stakeholders by carrying out all tasks with high ethical standards.

EBARA – the cornerstone of society, industry and people's lives.

From residential and commercial to industrial, agricultural and power generation markets, Our products and technologies can be found in every setting. Through our businesses, we bring people comfort and security.

Water transportation at facilities utilizing seawater

Duplex stainless steel pumps



Operating of processed gas at petroleum and chemical plants

Compressors



Producing clean vacuums necessary for ultra-fine processing and precision analysis

Dry vacuum pumps



Seawater desalination plants

Petrochemical plants

PV LED factories

LNG tankers

Semiconductor factories

Power plants

Safe transportation of LNG (liquefied natural gas)

Cryogenic pumps



Nano-level planarization essential for semiconductor manufacturing

CMP systems



High-temperature, high-pressure water supply for power plants

High-pressure pumps



The EBARA Group develops business under three main companies: the Fluid Machinery and Systems Company, which handles products such as pumps, compressors, and refrigeration and heating equipment; the Environmental Engineering Company, which constructs and manages waste treatment facilities; and the Precision Machinery Company, which handles mainly semiconductor manufacturing-related devices and equipment.

Fluid Machinery and Systems Company

Pumps Business

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Compressors and Turbines Business

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Chillers Business

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Environmental Engineering Company

Environmental Plants Business

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Precision Machinery Company

Precision Machinery Business

P. 18

Creation of optimal cold water for factory processes and air conditioning

Centrifugal chillers



Stable delivery of water to inhabited spaces

Packaged booster pump



Various applications related to water

Standard pumps



Incineration of solid waste and local energy production

Incinerators



Municipalities from floods and other water-related disasters

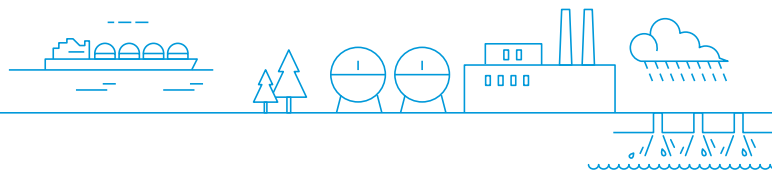
Drainage pumps



Tunnel ventilation

Fans





Pumps Business

Contributing to the world's stable supply of water resources and energy through technology and optimal operations.

Main products

- Large-scale pumps
- High-pressure pumps
- API pumps
- Cryogenic pumps
- Standard pumps
- Fans

Service & support

- Inspections/repairs
- Spare parts
- Modification proposals (prolonged life cycle, energy savings and enhanced functions)
- Remote monitoring



EBARA provides highly efficient and reliable pumps for water treatment facilities such as water supply/sewerage facilities and seawater desalination plants, energy-related facilities such as oil and gas facilities and power plants, and various other buildings, condominiums, and industrial plants. EBARA is also dedicated to developing and providing energy-saving products that further conservation of the global environment. In responding to a diverse range of needs, EBARA uses tailored support to ensure long product life and optimum equipment operation.



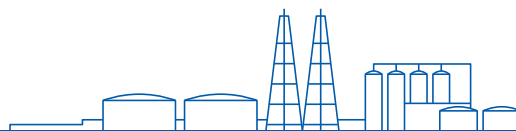
Large-scale pumps

EBARA's pumps are used for water supply and sewerage, where stable operation and efficiency for prolonged periods is critical. EBARA supplies these pumps to social infrastructures around the globe.



Standard pumps

EBARA offers a range of pumps that meet an array of needs, including water supply and drainage and transport of various liquids to factories.



Compressors and Turbines Business

Engineering products found at the heart of global energy and oil-refining infrastructure.

Main products

- Centrifugal compressors
- Axial compressors
- Steam turbines
- Gas expanders

Service & support

- Technical supports
- Spare parts
- Repairs
- Field service
- Equipment upgrades



Elliott compressors and turbines—essential elements for purifying liquefied natural and petroleum gases and for the manufacture of petrochemical products—are developed under the Elliott brand. The Elliott Group utilizes sophisticated technology to create high-quality, reliable products in addition to detailed technical support delivered throughout the world. With the ability to quickly respond to requests such as processing changes, the Elliott Group aims to be the ideal partner for reducing costs and ensuring long service life of a customer's plant.



Centrifugal compressors

Compressors are the heart of refineries and petrochemical plants. These products compress the gas generated from crude oil, natural gas, etc. EBARA offers a diverse lineup to meet the needs and processes of customers.



Steam turbines

High-temperature, high-pressure steam is converted into rotational energy that drives compressors and generators. This improves productivity through process optimization.



Chillers Business

Promoting energy conservation and CO₂ reduction through optimized air-conditioning and heating systems.

Main products

- Centrifugal chillers
- Absorption chillers
- Screw modular chillers
- Square/round type cooling towers

Service & support

- Maintenance/inspection/periodical check
- Equipment overhauling
- Malfunction pre-check
- Remote monitoring services

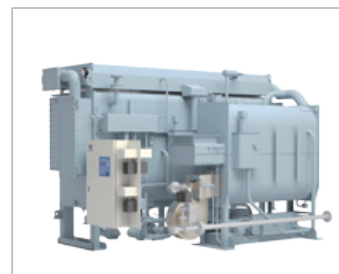


EBARA delivers heating equipment required for air conditioning in buildings/public facilities and factories, and for cooling in manufacturing processes. EBARA is dedicated to advising customers on optimum heat source systems while consistently providing the most suitable system of production, installation, and maintenance. Through detailed service provided as a kind of product, EBARA will maintain and manage the performance and functions of the equipment over an extended period as EBARA promotes not only optimization of cold environments but also reductions in costs, energy consumption, and CO₂ reduction.



Non-freon centrifugal chillers

These chillers supply cold water for cooling in manufacturing processes and for air conditioning in large facilities. A new environmentally friendly refrigerant is used to ensure as little impact on global warming as possible.



Absorption chillers/heaters

These units supply cold or hot water for air conditioning in public facilities and factories. Equipped with a startup time reduction function, the units are environmentally friendly, conserving energy during startup and operation.



Environmental Plants Business

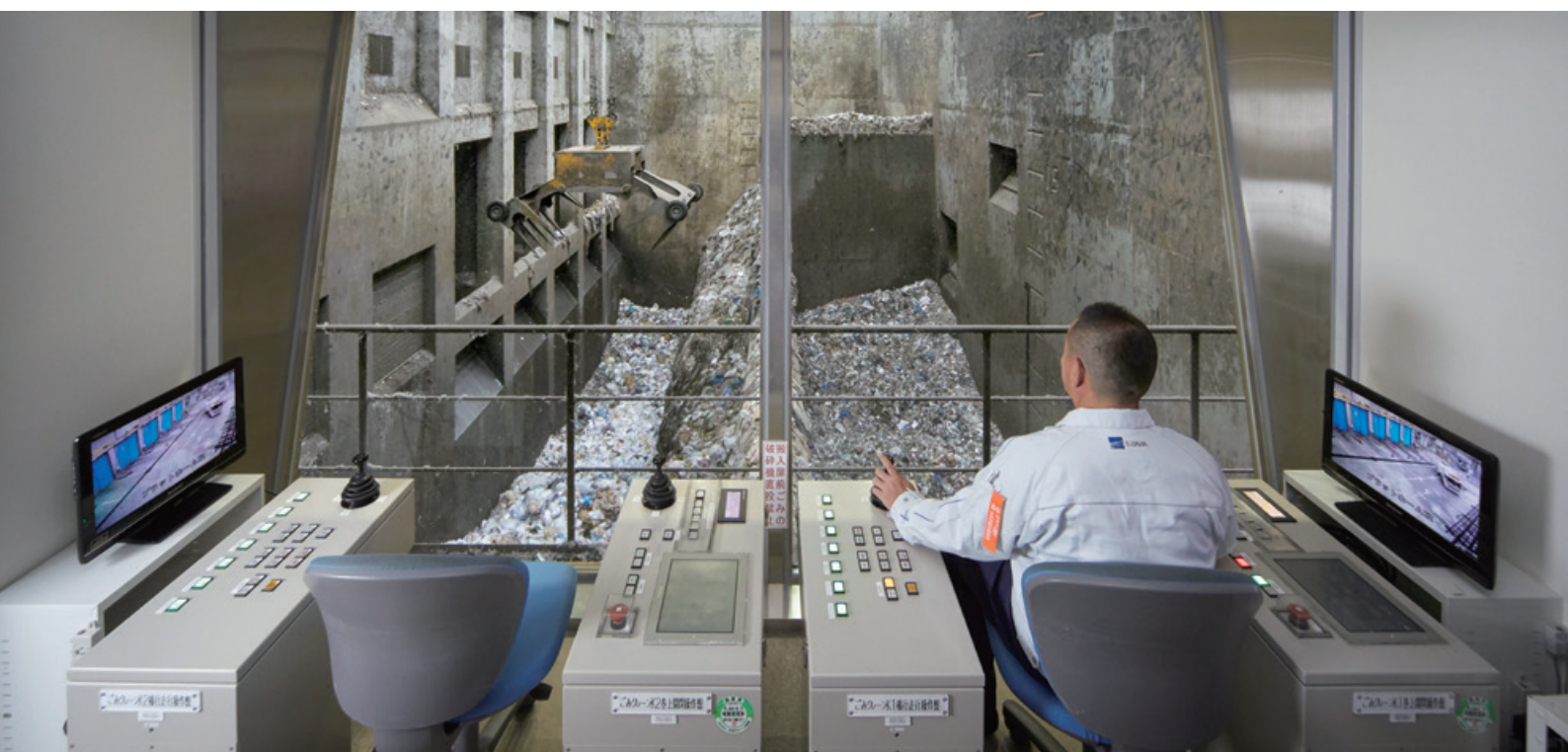
Aiming to lead the environmental plant business – from waste treatment to the local production and consumption of energy.

Main products

- Waste treatment facilities and equipment
- Waste incineration power plants
- Waste recycling facilities
- Biomass power generation facilities

Service & support

- Operation maintenance and management
- Remote support
- New energy related business



EBARA has established over 400 waste treatment facilities in Japan and overseas through integrated systems that cover design, construction, maintenance, and operation. Engaged in managing operations at some 80 facilities, EBARA provides safe and stable management utilizing remote support services. EBARA also helps develop local electricity production by returning power generated from waste incineration to surrounding public facilities.



Musashino Clean Center

This clean-looking urban waste treatment facility produces energy that is supplied to city hall and other establishments, while the Center hosts various activities.



Remote Support Center

This center is used to monitor the operation status of the waste treatment facility in real time to optimize operations.



Precision Machinery Business

Sharply responding the challenges and speed of innovation in leading-edge semiconductor manufacturing technology.

Main products

- CMP systems
- Plating systems
- Bevel polishing systems
- Dry vacuum pumps
- Turbo molecular pumps
- Gas abatement systems

Service & support

- Maintenance
- Spare Parts Supply
- Equipment upgrades
- Dry vacuum pumps overhauling



Semiconductor devices are indispensable for IT infrastructures such as personal computers, smartphones, and cloud services. EBARA's technology can provide solutions for nano-scale manufacturing process of sophisticated semiconductor devices which requires miniaturization and high integration. Even while responding to advanced expectations of leading edge semiconductor manufacturing, EBARA is keeping up with rapid progress of technological innovations and accelerating semiconductor innovation. In addition, EBARA is strengthening the proposal capabilities with the aim of providing better service and support by utilizing advanced technology.



CMP systems

CMP system enables nano-level planarization by polishing device surface of semiconductor wafers with slurry. This equipment is essential for stacking circuits in advanced semiconductor devices.



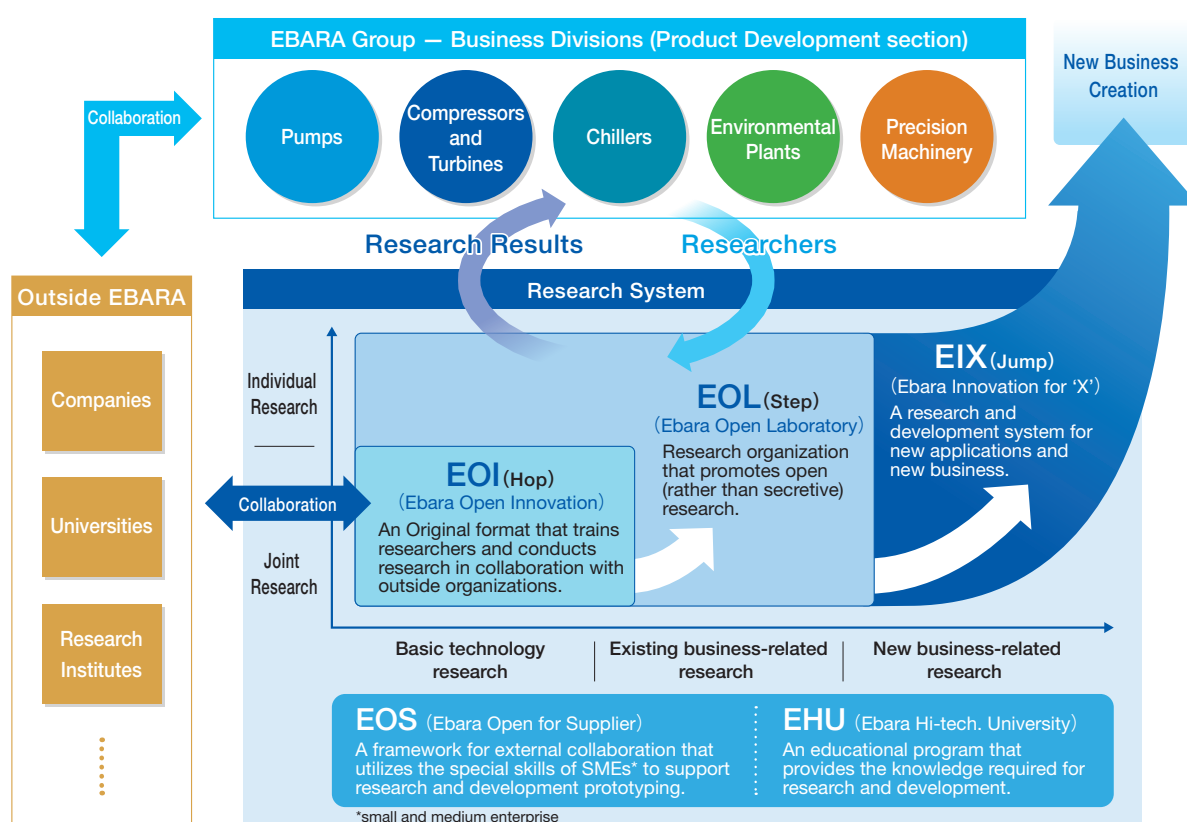
Dry vacuum pumps

Dry vacuum pump is one of the components which is operated with dry process equipment in wafer fab, and provides high level of cleanliness required for deposition and plasma processing.

Pioneering a new era through intellectual property, research and development.

Helping to solve social issues through collaborative internal and external research organizations.

While product development is performed by each business division, the development of the founding ideas is performed by the EOL, EBARA's in-house research organization. Engineers from each business division participate in the EOL and then strive to apply the results of the EOL research and development activities. EBARA's research and development system is continuously evolving—from EOI to EOL and EIX, while EOS, EHU, and other mechanisms supporting research continue to accelerate research and development activities.



Promoting strategic intellectual property activities to maximize utilization of group intellectual properties.

Strategic acquisition of intellectual property rights in line with global business development.

Through pre-litigation strategy (PLS)*, activities designed to extend the life of important patents, and other strategic acquisition of rights, EBARA is progressively shifting our focus from quantity to quality and ultimately to intellectual property that will underpin competitive advantages. By working closely with the business division, EBARA is globally acquiring the rights necessary for the development of our individual businesses.

* PLS (Pre-Litigation Strategy) Activities refers to the activity of holding patents in preparation for litigation.

Establishment of a global intellectual property risk management system.

EBARA promotes the establishment of a structure that minimizes intellectual property risks for the entire group, including overseas subsidiaries.

Improvement and protection of group-owned brands.

EBARA is dedicated to improving corporate value through technology branding activities and to protecting brands through proper management trademarks.

ESG management and Philanthropic activities

Addressing vital ESG* issues to achieve sustainable growth in partnership with society.

Since our founding, EBARA has continued to grow by using business activities to help solve social issues.

We are also a signatory to the United Nations Global Compact and participate in initiatives intended to promote human rights, labor standards, the environment, and anti-corruption.

* ESG is an acronym for environmental, social, and governance.

These three viewpoints are necessary for companies to ensure long-term growth.

WE SUPPORT



Key ESG Issues and Action Policies

EBARA has determined eight priority ESG issues that need to be addressed, and six policies in response to achieve the necessary solutions.

Eight Material Issues

Innovation in the areas of water, air, and the environment (E, S)

Improvement of social infrastructure (E, S)

Consideration for the environment (E)

Continuous improvement of governance (G)

Reliable product quality and responsible customer engagement (S)

Responsible supply chain (E, S)

Secure talented human resources, foster their capabilities, and maximize value (S)

Risk management (G)

Six Action Policies

- 1 Provide products and services that minimize the use of energy and resources
- 2 Expand the service and support (S&S) business, maximize product life, and minimize any product downtime
- 3 Minimize the amount of energy and resources used in business activities
- 4 Fulfill social responsibilities to supply chain, deliver reliable product quality throughout the product's life cycle, and achieve responsible customer engagement
- 5 Continuously improve governance structures, headed by the Board of Directors, practice thorough compliance, and strengthen risk management
- 6 Enhance diversity, improve work environments to empower employees to develop to their full potential, and provide opportunities to develop necessary skills

Contributions toward the SDGs (Sustainable Development Goals)

EBARA is committed to contributing to the achievement of the SDGs through a stable supply of water and through business designed to further various social and industrial infrastructures.



Solving regional problems and promoting social contribution activities that create a better society.

By developing social contribution activities that utilize our three areas of business and technology under “The EBARA Way” based on technical support and educational support, EBARA is dedicated to fulfilling our corporate philosophy of contributing to society through various water, air, and environment-related means.

Technical Support

Utilizing Business Activities

EBARA Hatakeyama Memorial Fund



To allow communities to utilize our technology and know-how, we held technical seminars since 1989, primarily in Southeast Asia. We also donated educational pumps to universities.

Internships, plant/company tours



EBARA strives to ensure local communities understand our business practices by providing plant and factory tours to students and the general public, and also various internships.

Educational Support

Fostering Human Resources

Supporting the Contest for Challenge, Creativity and Teamwork



The Japan Institute of Invention and Innovation is dedicated to nurturing young talent who will be responsible for the future of science and technology. EBARA proudly served as a supporter.

Supporting the Japan Science & Engineering Challenge (JSEC)



JSEC is a science and technology research contest for high school and vocational school students in Japan. EBARA supported the contest and presented the EBARA Award for research excellence.

Co-host of Mirai Rikejo



Source: Rikejo Magazine, Vol. 50

In active support of women in science and engineering, EBARA is a co-host of the Mirai Rikejo “Monozukuri Cafe” for junior and high school girls.

Community–Society Symbiosis | Meet Social Needs

EBARA Plant Summer Festival



EBARA summer festivals held at each of our business establishments gives us the opportunity to engage not only with stakeholders but also with members of the community.

Disaster area support activities



To provide information on and industrial support for areas affected by the Great East Japan Earthquake, EBARA hosts the Reconstruction Support Market, which sells specialty products from Iwate, Miyagi, and Fukushima at the company's cafeteria.

International Volunteer Activities



As an activity that employees can perform regularly, EBARA helps donate picture books to children throughout Asia.

Sports promotions



Women's Japan Basketball League team, the Tokyo Haneda Vickies, conducts basketball clinics and other outreach activities. EBARA supports these activities as a main sponsor.

Over a century of challenges and continuous innovation.

With the goal of providing excellent products based on the spiral pump theory of world-renowned Dr. Ariya Inokuty, EBARA's founder—Issey Hatakeyama—founded the Inokuty Type Machinery Office in 1912.

In 1920, the company's name was changed, and EBARA CORPORATION was born.

Since then, the EBARA Group has dedicated itself to discovering new ways to create a better world for the future.

1910s

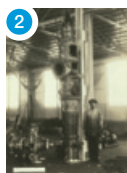
- 1912 Inokuty Type Machinery Office founded
- 1915 Order for record-breaking large-scale pump at Tokyo's Asakusa Tamachi pump station ①



Tokyo's Asakusa Tamachi pump station

1920s

- 1920 EBARA CORPORATION established
- 1921 First blower (a centrifugal blower) manufactured
- 1924 Japan's first axial pump manufactured ②
- 1925 EBARA lends its talents to domestic production of water pumps ③



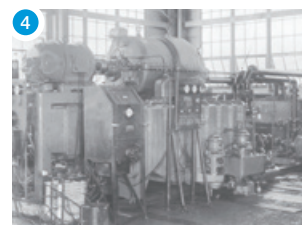
Axial pump
(400 mm diameter)



Water pumps

1930s

- 1930 Japan's first centrifugal chiller produced ④
- 1931 Japan's first quick water filtration device produced



Centrifugal chillers

1910 1920 1930 1940 1950 1960 1970 1980

1950s

- 1955 Standard pump business begins following standardization and mass production of small size pumps

1960s

- 1961 Entered the waste treatment business with delivery of the first stoker-type waste incinerator
- 1965 Fujisawa Plant opened as the first facility in Japan to mass-produce standard pumps ⑤



Fujisawa Plant upon completion

1970s

- 1975 Sodegaura Plant is established with the goal of expanding EBARA's compressor and turbine business
- 1978 First fluidized-bed incinerator designed for municipal waste delivered
- 1979 Seawater desalination plant pump delivered to Jubail, Saudi Arabia ⑥



Seawater desalination pump
for Saudi Arabia

1980s

- 1985 New projects initiated in the semiconductor industry with the start of the precision machinery business
- 1986 First roots-type dry vacuum pumps delivered
- 1989 First internally circulating fluidized-bed boiler (ICFB) delivered

1990s

- 1990 First bump plating device delivered
- 1992 First CMP system delivered

2000s

- 2008 Number of cumulative standard pumps produced at the Fujisawa Plant reaches 15 million
- 2009 World's most advanced ultra-high-efficiency centrifugal chillers released ⁷



Centrifugal chillers

Ahead Beyond

2010s

- 2010 Futtsu Plant established, taking over transferred functions of the Haneda Plant
- 2012 100th anniversary celebration
- 2014 New CMP system announced
- 2015 One of the world's largest high-pressure pumps delivered to a seawater desalination plant in San Diego, USA
- 2016 New dry vacuum pump for the semiconductor industry launched
- 2017 Submersible motor pump with one of the world's highest output capability delivered to a pumping station delivering public water to Las Vegas, USA ⁸
- 2018 Number of cumulative dry vacuum pumps delivered from the Fujisawa Plant reaches 150 thousands ⁹



Las Vegas underwater motor pump



Sales of 150 thousands dry vacuum pumps

Group Network

Affiliated Companies

[Fluid Machinery and Systems Company]

EBARA DENSAN LTD.
 EBARA FAN & BLOWER CO., LTD.
 Ebara Byron Jackson Co., Ltd.
 E-Square Co., Ltd.
 EBARA REFRIGERATION EQUIPMENT & SYSTEMS CO., LTD.
 Elliott Group Holdings, Inc.
 Elliott Ebara Turbomachinery Corporation
 EBARA REFRIGERATION EQUIPMENT&SYSTEMS(CHINA)CO.,LTD.
 EBARA BOMBAS AMÉRICA DO SUL LTDA.
 EBARA VIETNAM PUMP COMPANY LIMITED
 EBARA PUMPS EUROPE S.p.A.
 EBARA PUMPS IBERIA, S.A.
 SUMOTO s.r.l.
 Ebara-Densan Taiwan Manufacturing Co., Ltd.
 EBARA PUMPS PHILIPPINES, INC.
 EBARA ENGINEERING SINGAPORE PTE. LTD.
 PT. EBARA INDONESIA
 EBARA (THAILAND) LIMITED
 Ebara Machinery (China) Co., Ltd.
 Ebara Pumps Malaysia Sdn. Bhd.
 EBARA GREAT PUMPS CO., LTD.
 EBARA PUMPS MIDDLE EAST FZE.
 EBARA INTERNATIONAL CORPORATION
 ELLIOTT COMPANY
 EBARA DENSAN (KUNSHAN) CO., LTD
 EBARA DENSAN (SAMOA) MFG. CO., LTD.
 EBARA MACHINERY ZIBO CO., LTD.
 Ebara Pompy Polska sp. z o.o.
 HOOD-EIC, LLC
 EBARA Pumps RUS Limited Liability Company
 EBARA PUMPS SOUTH AFRICA (PTY) LTD
 EBARA PUMPS AMERICAS CORPORATION
 Ebara Thermal Systems (Thailand) Co.,Ltd.
 EBARA PUMPS AUSTRALIA PTY. LTD.
 EBARA DENSAN (QINGDAO) TECHNOLOGY CO., LTD.
 EBARA FLUID MACHINERY KOREA CO., LTD.
 PT. Ebara Turbomachinery Services Indonesia
 EBARA PUMPS SAUDI ARABIA LLC
 EBARA BOMBAS COLOMBIA S.A.S.
 EBARA MACHINERY INDIA PRIVATE LIMITED

[Environmental Engineering Company]

Ebara Environmental Plant Co., Ltd.
 Chubu Recycle Co., Ltd.
 Swing Corporation
 EBARA QINGDAO CO., LTD.

[Precision Machinery Company]

EBARA FIELD TECH. CORPORATION
 EBARA Precision Machinery Europe GmbH
 EBARA PRECISION MACHINERY KOREA INCORPORATED
 Ebara Precision Machinery Taiwan Incorporated
 SHANGHAI EBARA PRECISION MACHINERY CO., LTD.
 EBARA TECHNOLOGIES INCORPORATED

[Administrative Subsidiaries]

EBARA AGENCY CO., LTD.
 Ebara Shohnan Sports Center Inc.
 EBARA MEISTER CO., LTD.
 ECE Co., Ltd.
 EBARA EARNEST Co., Ltd.
 Ebara America Corporation



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