RIKEN KEIKI

CORPORATE PROFILE

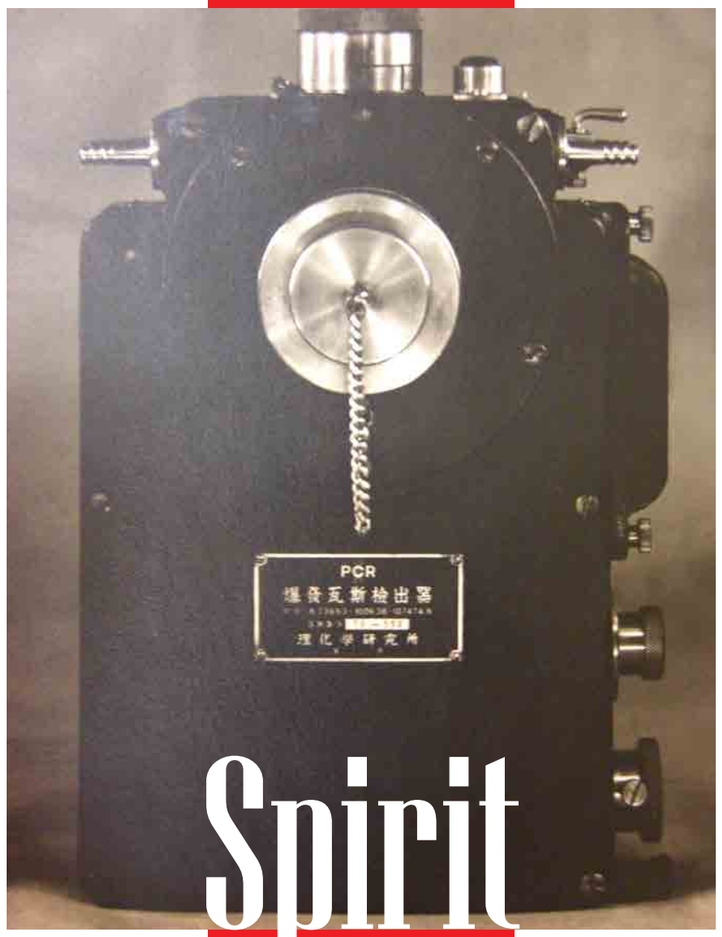
MISSION: INVISIBLE

Safely Seeing the Unseen Danger

The safety and the sense of security of today's society is not just a given.
The various types of large-scale infrastructure, on which the comfort and convenience of urban living are based, are supported by robust systems that ensure their safety and functionality.
Similarly, it is also essential in the various industrial fields that serve as the basis of society's progress and prosperity to take adequate measures to protect people and the environment from potential dangers and risks.
In particular, the unseen dangers of an explosion of flammable gases and deadly pollution by toxic gases are constant threats in the core industries using the energy sources of petroleum, liquefied natural gas, nuclear power, and hydrogen, and the safety and the security of society can only be said to be protected once these can be detected in advance to ensure visible sense of security.
As an organization established in 1939 with roots in the Japanese national science and research institute, the RIKEN KEIKI Group has remained committed to creating safe working environments for workers.
Our vital mission is to detect unseen dangers and provide a sense of security as a leading company developing and manufacturing industrial gas detection and alarm equipment.

Pioneering

THE ROOTS & HISTORY



Spirit

The passion our predecessors in the early days of RIKEN KEIKI had was the pioneering spirit that opened new avenues into the unknown. The Institute of Physical and Chemical Research* (RIKEN) was established in 1917 as Japan's first scientific research institution exploring physical and chemical research and applications. As the chief researcher, and later appointed the company's second president, Jiro Tsuji utilized the theory and technology of refractometers using interference of light waves developed by RIKEN. His in-depth research succeeded in the development of the world's first optical interferometer method gas detector at the beginning of the Showa era (1920s-1930s). At the time, Western countries were still using gasoline safety lamps, which detected gases by how flames flicker, as the gas detectors in oil tankers and coal mines where explosions were relatively common. This unwavering passion of engineers achieving revolutionary breakthroughs has been passed down to today throughout our more than 80-year history since our founding in 1939, and it will be continued to be passed down as the proud spiritual heritage of RIKEN KEIKI.

*Name at founding of RIKEN KEIKI

1938–1964
Independence from RIKEN

1938 **Business launched to manufacture and sell RIKEN gas detectors**

RIKEN Sangyodan purchased Fukoku Machinery Co., Ltd. to manufacture and sell optical gas indicators, photo-elasticity apparatus, and other precision equipment invented and developed at the Tsuji Laboratory of the Institute of Physical and Chemical Research (RIKEN).

The manufacture and sale of optical gas indicators and photo-elasticity apparatus commenced following the acquisition of patent licenses belonging to Tsuji Laboratory.

Kenichiro Hayashibe becomes the first president of the company with JPY450,000 in capital and a workforce of approximately 100 employees.

1939 **Company founded as RIKEN KEIKI Co., Ltd.**

1944 **Jiro Tsuji appointed company's second president**

Jiro Tsuji-company's second president (1896 - 1968)

The Minister of Munitions commandeered the factory as a munitions factory. A modern lens factory was completed to support military production.

Relocated part of the factory to Tokamachi in Niigata Prefecture as a precaution against air raids.

1946 Approved by the Ministry of Commerce and Industry as a major important factory for the manufacture of coal mining safety equipment.

GHQ approved reversion to civilian production and the company became a designated gas indicator manufacturer, contributing significantly to improved safety in coal mines.

1952 Passed gas indicators certification examination of the Agency of Industrial Science and Technology (AIST) Resources Research Institute.

Type 17 and Type 18 gas indicators were developed and introduced to the market.

1959 Combustible gas alarm and detector (catalytic combustion type) were developed and introduced to the market.

1961 **Listed on Second Section of the Tokyo Stock Exchange.**

1965–1989
Period of sensor and product range expansion

1965 GP-105 catalytic combustion type fixed automatic gas alarm was developed and introduced to the market.

GP-105

1966 Head office No. 1 building completed (rebuilt in 1983).

GP-300 catalytic combustion type portable automatic gas alarm was developed and introduced to the market.

GP-300

1967 OX-1 oxygen monitor was developed and introduced to the market.

GP-400 automotive exhaust gas (CO) monitor was developed and introduced to the market.

OX-1

1968 **Hideo Oshima appointed third president.**

Hideo Oshima-company's third president. (1911–1990)

Hideo Oshima not only worked alongside Jiro Tsuji in his research activities upon joining RIKEN but also supported his management efforts at RIKEN KEIKI after joining the company.

1969 GX-1 oxygen deficiency and explosive gas alarm was developed and introduced to the market.

GX-1

1970 The Nara Factory began operations to expand the manufacturing division (spun off as RIKEN KEIKI NARA MFG. Co., Ltd. in 1972).

FP-200 hydrogen sulfide detector was developed and introduced to the market.

1971 **RIKEN SERVICE Co., Ltd. established to spin off and expand the Service Division.**

Thereafter, the company established RIKEN KEIKI HOKKAIDO SERVICE Ltd. (merged with RIKEN SERVICE in 2010), RIKEN KEIKI CHUBU SERVICE Co., Ltd., RIKEN KEIKI CHUGOKU SERVICE Co., Ltd., RIKEN KEIKI KYUSHU SERVICE Co., Ltd. (the three companies merged to form RIKEN KEIKI NISHI-NIHON SERVICE Co., Ltd. in 2011), and RIKEN KEIKI KANSAI SERVICE Co., Ltd.

1974 Completion of head office No. 3 building.

Nippon Telegraph and Telephone Public Corporation (present-day NTT) approved GX-1B and GX-110 toxic gas detectors as its certified products.

GL-100 gas leak detector was also developed in collaboration with Tokyo Gas Co., Ltd. and certified by the Ministry of International Trade and Industry (present-day Ministry of Economy, Trade and Industry).

1975 EC-231 carbon monoxide detector was developed and introduced to the market.

1976 BL-1000 bus line gas leak monitoring system was developed and introduced to the market.

1977 Head office No. 4 and No. 5 buildings completed.

1978 Portable automatic suction type combustible gas detector was developed and introduced to the market.

1980 Ultra-compact portable toxic gas and combustible gas detector was developed and introduced to the market.

LP gas alarm for fishing vessels was developed and introduced to the market.

1981 Repco 472R wheel balancer was developed and introduced to the market.

レプコ472R

1986 AC-1 atmospheric photoelectron spectrometer was jointly developed with RIKEN and introduced to the market.

AC-1

IF-774 optical interferometric calorimeter was developed and introduced to the market.

1987 Overseas joint venture launched with capital participation in EPI SYSTEM Co., Ltd. (present-day RIKEN KEIKI TAIWAN Co., Ltd. and a wholly-owned subsidiary from 2002).

RM-570 fixed gas monitors using bar meter was developed and introduced to the market.

1990–2014
Refining quality and expanding after-sales service

1990 RIKEN KEIKI ESAN MFG. Co., Ltd. was established in Esan, Hokkaido (present-day Hakodate City) to expand the manufacturing division (merged with RIKEN KEIKI in 2008).

1992 FP-250 toxic gas monitor was developed and introduced to the market.

1994 RKI INSTRUMENTS Inc. was established in the USA with capital participation (spun off as subsidiary in 2017).

1995 **Listed on First Section of the Tokyo Stock Exchange.**

1996 ISO 9001 international standard acquired as a quality assurance certification

RK INSTRUMENTS(S) PTE LTD. established in the Republic of Singapore with capital participation (spun off as subsidiary in 2018).

1997 ISO 14001 international standard acquired as an environmental management certification.

2000 GX-2000 portable suction-type four-gas detector was developed and introduced to the market.

2001 GX-2001 portable suction-type four-gas detector was developed and introduced to the market.

GX-2001

FI-21 optical gas concentration meter was developed and introduced to the market.

2002 Gas Watch series of wrist-watch-style gas monitor was developed and introduced to the market.

GW-2X

2003 FI-800 optical interferometric gas concentration meter was developed and introduced to the market.

2008 GX-2009 portable gas detector was developed and introduced to the market.

GX-2009

GD-70D fixed gas detector was developed and introduced to the market.

GD-70D

2009 RIKEN KEIKI COMMERCIAL (SHANGHAI) Co., Ltd. established as sales subsidiary in China.

2011 AC-5 atmospheric photoelectron spectrometer was developed and introduced to the market.

2013 CO-FL1 Hantei Meijin carbon monoxide monitor was developed and introduced to the market.

OHC-800 explosion-proof calorimeter was developed and introduced to the market.

2014 FI-8000 optical interferometric gas concentration meter was developed and introduced to the market.

2015
Advancing to the next generation

2015 **The development and production division was relocated to the Development Center completed in Kasukabe City, Saitama Prefecture from the headquarters.**

Three maintenance service subsidiaries were merged with RIKEN KEIKI.

GX-6000 portable gas monitors, capable of detecting six types of gas simultaneously,

SDWL-1 series of fixed wireless gas detectors (compliant to ISA 100.11a wireless communication standards) were developed and released into the market.

2017 The subsidiary RIKEN KEIKI GmbH was established in Germany to expand shares in the European market and provide maintenance and servicing.

OX-08 drop-in type portable oxygen monitor was developed and introduced to the market.

2018 **Completion of new head office.**

2019 The world's smallest and lightest portable gas monitor GX-3R was developed and introduced to the market as a four-gas detector, as well as its advance model, the GX-3R Pro, which is equipped with Bluetooth for the first time in Japan.

A new type of gas detector, GX-2100, which uses diffusion type detection as a hazardous gas detector for manhole pit work, was developed and introduced to the market.

2020 **Production center was completed as a production base for gas detectors**

Among the world's smallest and lightest portable gas monitor GW-3 was developed and introduced to the market.

2021 GD-84D multi gas detector for semiconductor plant, SD-3 gas detector with a signal converter, and AC-2S atmospheric photoemission yield spectrometer were developed and introduced to the market.

GD-84D

SD-3

Cutting-Edge

RIKEN KEIKI handles more than 100 different types of gas alarms and environmental monitoring products. We further advance and refine credible technologies underpinned by experience and a proven track record in the pursuit of reliable quality for early detection and dependable operation to prevent accidents caused by gases in the world as well as products compatible with a diverse range of industries.

Aiming for a Sustainable Future

SUSTAINABLE DEVELOPMENT GOALS

As a global enterprise developing business both in Japan and overseas, RIKEN KEIKI promotes management conscious of the Sustainable Development Goals (SDGs) adopted at the United Nations Summit in 2015.

We believe our business activities which aim to achieve the RIKEN KEIKI management philosophy to create safe working environments for workers are interlinked with realizing a sustainable society and contribute to solving social issues.

RIKEN KEIKI will make every effort to achieve the SDGs and realize a sustainable society in the future by actively developing high-quality and affordable products friendly to the environment.

Electronics

GD-84D series Smart Type Gas Detector Heads

- Gas detectors for new ideas at semiconductor plant
- Monitoring of gases equivalent to four gas detectors in a single unit
- Cost reductions of up to 75% for pipe and wiring installations with up to 50% less installation space (standard product comparison)

Steel

GW-3 series Portable Gas Monitors

- Among the world's smallest and lightest one/two-component portable gas monitor
- Broad line-up of six different models

Shipping and Shipbuilding

GX-9000 Portable Multi Gas Detector

- Built-in high-precision infrared enable measurements sustaining accuracy even in inert gases and nitrogen.
- This portable gas monitor has acquired the EU Marine Equipment Directive (MED) Certification

Civil Engineering and Construction

GX-2100 Toxic Gas Detector for Manhole Pit Work

- Adoption of a diffusion-type detection method (tip detector capable of direct gas detection)
- Detector with a non-explosion-proof construction and durable 10-meter drop structure

Oil refinery and Petrochemical/Energy and Power

SD-3 series Gas Detector with Signal Converters

- Compatible with various international standards regulating plant facilities overseas

FI-900
Optical Interferometric Gas Monitor with Flame-proof Enclosure

- No replacement necessary for ten years thanks to sensors with long-term consistency free of sensitivity deterioration
- Use of interference unique to gases enables measurements for a variety of gases

OHC-800
Explosion-proof Calorimeter

- The introduction of the proprietary RIKEN KEIKI Opt-Sonic calculation method (Pat. No. 5184983) enables high-precision measurements while inhibiting the influence of non-combustible gases
- A single unit realizes high-precision continuous measurements with fast response

AC-2S series
Atmospheric Photoemission Yield Spectrometers

- This new series satisfies diverse measurement needs in material and device development fields
- Easier atmospheric measurements without the need for a vacuum

Firefighting and Rescue/Volcanoes and Hot Springs

GX-3R/GX3R Pro Portable Gas Monitors

- World's smallest and lightest portable four-component (GX-3R) and five-component (GX3R Pro) gas monitors
- Gas detector equipped with Bluetooth for the first time in Japan (GX-3R Pro)
- This portable gas monitor has acquired the EU Marine Equipment Directive (MED) Certification

Guard & Protect

RIKEN KEIKI products are found everywhere there is a potential of combustible gas explosions, oxygen deficiency, or toxic gas in a variety of core industries whether the large-scale infrastructure supporting societal progress or the front lines of natural disasters, firefighting, and rescue.

RIKEN KEIKI guards and protects people and workplace at all types of sites by quickly detecting gas and other invisible hazards through the development, manufacturing, sale, and maintenance of gas detectors and alarms.

SENSOR TECHNOLOGY

Genealogy of Innovation

Core components of the RIKEN KEIKI products include a wide variety of the world's leading sensors from key RIKEN KEIKI optical interferometric products to new ceramic products using ultrafine particle oxidation catalysts.
More than 100 different types of RIKEN KEIKI products use these advanced technologies developed in-house.

Sensor Principles

Catalytic Combustion Method

Catalytic combustion sensors rely on the heat produced when a combustible gas burns on an oxidation catalyst.
This method is ideal for detecting the lower explosive limit (LEL)

New Ceramic Catalytic Method

New ceramic catalytic sensors rely on detecting the heat produced when a combustible gas burns on an ultrafine particle oxidation catalyst (new ceramic).This method measures over a broad range from several thousand ppm to LEL.

Semi-conductor Method

General-purpose semi-conductor sensors detect all manner of toxic to combustible gases. This method offers high-sensitivity with high output in a low concentration range.

Hot-wire Type Semi-conductor Method

High-sensitivity combustible gas sensors are ideal for detecting low-concentration gases. Low power consumption and compact dimensions also make it ideal for portable gas detectors.

Thermal Conductivity Method

Thermal conductivity sensors rely on differences in thermal conductivity to detect target gases. This method is ideal for detecting high-concentration gases (vol%).

Potentiostatic Electrolysis Method

Potentiostatic electrolysis sensors are capable of selectively detecting target gases. This method is ideal for detecting toxic gases.

Membrane-type Galvanic Cell Method

These sensors apply the galvanic cell principle to detect oxygen. This method does not require an external power supply and offers outstanding consistency in performance over the long term.

Non-dispersive Infrared Method

These optical sensors rely on the unique infrared absorbing characteristics of the detection target gases for outstanding consistency in performance over the long term.

Interferometer Method

These optical sensors offer accuracy and outstanding long-term consistency. These sensors also have an extensive history as key products in RIKEN KEIKI's history.

Chemical Tape Method

The chemical tape detection method uses a cellulose tape impregnated with a color former to detect gases based on the tape color caused by a chemical reaction.

IMS Method

The IMS method relies on the size, weight, and other characteristics of a swarm of gaseous ions in an electrical field with ionized particles for measurement to identify each type of gas by the speed of movement.

BUSINESS STRUCTURE

Integrated System

RIKEN KEIKI has a fully integrated organization to handle everything from research and development to after-sales services. Our expert knowledge and technology in each process combined with our advanced technical experience and know-how respond to diverse industry needs and requirements as well as contribute to societal progress and safety.

Comprehensive Evolution of Business from Research and Development to After-sales Services

Planning

We investigate needs and product trends in each market and examine customer requirements and feedback to evaluate the direction of product development.
This allows us to determine the best direction from several important options as our final development theme.

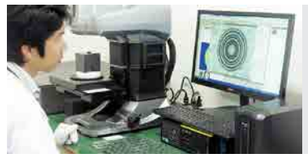
Research and Development

We adhere to this final development theme when deciding on and designing product functions and specifications according to the needs in each market.
RIKEN KEIKI only moves into the production phase after sufficient verification and validation during the design stage.

Production

We establish production systems that achieve the necessary quality, price, and delivery time for consistently stable manufacturing.

Quality Control



We only ship products which have passed stringent inspection according to our quality standards at the Quality Control Center.

Sales

Our sales representatives who are versed in unique market needs and technologies with in-depth product knowledge propose products which accommodate customer requirements.

World-wide Service and Support

A mature global network of affiliated companies and distributors across all the world, carefully handle a variety of inquiries about maintenance and servicing.

RIKEN KEIKI Co., Ltd. Development Center (L) / Production Center (R)

[Development Center]
Building area: 4,344㎡
Total floor area: 15,166㎡
Floors: 5 above ground
Completed September 2014
(opened for use in January 2015)

The Development Center is our core development site for strengthening technological development capabilities and enhancing production technology.

Development Center/
Production Center
Location: Kasukabe City, Saitama Prefecture
Site area: 16,016㎡

[Production Center]
Building area: 2,348㎡
Total floor area: 9,841㎡
Floors: 6 above ground
Completed July 2020
(opened for use in September 2020)

The Production Center is our new production facility for gas detector sensors, which are core components of RIKEN KEIKI products.
The adoption of a base isolating structure prevents delay in the supply of sensors due to earthquakes.
This ensures the business continuity of our business.

Challenge & Responsibility

The demand for gas detectors as products essential for safe operations in various industries will never come to an end.
RIKEN KEIKI has a duty to supply products without interruption in order to respond to this demand.
More advanced technical development capabilities and faster product development are also critical to satisfying diverse needs.
Our Development Center and Production Center located in Kasukabe City, Saitama Prefecture, came into fruition for the purpose of continually delivering the highest level of safety.
RIKEN KEIKI built these new development and production facilities as one measure of its comprehensive Business Continuity Plan (BCP) to provide the latest products offering the greatest safety.

Treading around the Globe

The RIKEN KEIKI Group has been running the business offices handling sales, manufacturing, and maintenances in all over Japan. As for overseas, there have been the affiliated companies in North America, South America, Europe, and Asia, along with the sales distributors in the Middle East, Oceania, and Africa, thus making a huge business network covering the almost entire world.
Now, aiming for the bright future, we RIKEN KEIKI will continuously expand our business network not only here in Japan but throughout the rest of the world.

KOREA
RIKEN KEIKI KOREA CO., LTD.

CHINA
RIKEN KEIKI COMMERCIAL (SHANGHAI) CO., LTD.
RIKEN KEIKI (CHANGZHOU) ELECTRONIC TECHNOLOGY CO., LTD.

U.S.A.
RKI INSTRUMENTS, INC.

GERMANY
RIKEN KEIKI GmbH

TAIWAN
RIKEN KEIKI TAIWAN CO., LTD.

MALAYSIA
RIKEN KEIK (IM) SDN. BHD.

SINGAPORE
RIKEN KEIKI ASIA PACIFIC PTE. LTD.

Hakodate Factory

Sales Offices
Service Stations

Headquarters

RIKEN KEIKI
NARA MFG. Co., Ltd.

Development Center
Production Center

Get the latest informaiton from here

As of September 1, 2025

TOP MESSAGE

RIKEN KEIKI Co., Ltd. was established in 1939 to commercialize and mass produce optical interferometric combustible gas detectors designed by the Institute of Physical and Chemical Research (RIKEN), which was Japan's first scientific research institution and subsequently designated a National Research and Development Agency. These detectors were designed to avoid the oil tanker explosions that were a common occurrence in the 1920s.

Since then, through the independent development and supply of industrial gas detection and alarm equipment and various sensors, we've played an important societal role in safeguarding industrial workers from the various hazards as well as disasters associated with gases.

Changes in society to the present day have led to steady growth in the need for gas detection and alarm equipment. Demand for such has expanded beyond workplaces handling petroleum, liquefied natural gas (LNG), nuclear power, hydrogen and other energy sources into fields such as semiconductor plant, steel mills, construction and civil engineering sites, shipping and shipbuilding facilities, and response facilities for natural disasters.

We adhere to the enduring theme described in our management philosophy: realizing environments in which people can work with peace of mind. Under an integrated system combining research and development with production, sales, and after-sales service, we're committed to enhancing core competences in gas sensor technologies and product development while delivering high-performance, high-quality products that safeguard lives and property from the invisible hazards posed by gases.

In addition to ongoing efforts to ensure health and safety in the face of industrial risks and other risks around the world, we will continue to pursue sustainable management to fulfill our social responsibilities.

COMPANY PROFILE

Company Name	RIKEN KEIKI Co., Ltd.
Established	March 15, 1939
Capital	2,565.5 million yen
Location	Headquarters: 2-7-6 Azusawa, Itabashi-ku, Tokyo 174-8744 Japan [General Affairs Section Administration Department] TEL.03-3966-1121 FAX.03-3966-3066 [Global Sales Department] TEL：03-3966-1113 FAX：03-3558-9110 [Domestic Sales Department] TEL.03-3966-1111 FAX.03-3558-0043
Main Sales Items	Combustible gas detectors and alarms Gas detectors and alarms to prevent oxygen deficiency accidents Toxic gas detectors and alarms Combined gas detectors and alarms Various monitors and other such devices for environmental measurements
Main Financing Banks	Mizuho Bank, Ltd., Sumitomo Mitsui Banking Corporation, MUFG BANK, Ltd., Resona Bank, Ltd., Mizuho Trust & Banking Co., Ltd., and Sumitomo Mitsui Trust Bank, Limited
Stock Exchange Registration	Prime Market of the Tokyo Stock Exchange
Managing Underwriters	Nomura Securities Co., Ltd. and Mizuho Securities Co., Ltd.

RIKEN KEIKI Co., Ltd.

"Creating safe working environments"

CORPORATE PROFILE

RIKEN KEIKI Co., Ltd. Headquarters
(Itabashi-Ku, Tokyo)
Site area: 3,382m²
Building area: 1,182m²
Total floor area: 5,176m²
(Head office and annex buildings)
Floors: 4 above ground; 1 below ground

Completed October 2018 (opened for use in October 2017)
Our headquarters has been located at this site since our founding in 1939.
This site is the central hub of the RIKEN KEIKI Group. Today, the head office building houses the Sales Department, the Engineering Department, and the Administration Department.

www.rikenkeiki.co.jp/english

VEGETABLE OIL INK
Printed with environmentally friendly vegetable oil ink.

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