

Our Products

Our Products

Providing optimal products and solutions that meet the needs of the times.

To respond to diverse and changing customer needs, IDEC provides a broad range of products and solutions centered on its control technology. We are committed to supporting the future of manufacturing and daily life by continuously providing new value through the use of core technologies we have innovated over many years.



Industrial Switches Business [▶P17](#)



Industrial switches



Emergency-stop switches



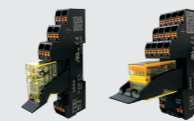
Industrial switches



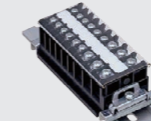
Joysticks



Industrial Relays & Components Business [▶P19](#)



Industrial relays



Terminal blocks



Circuit protectors



Switching power supplies



LED illumination units



Automation Business [▶P21](#)



Programmable logic controllers



Teaching pendants



Operator interfaces

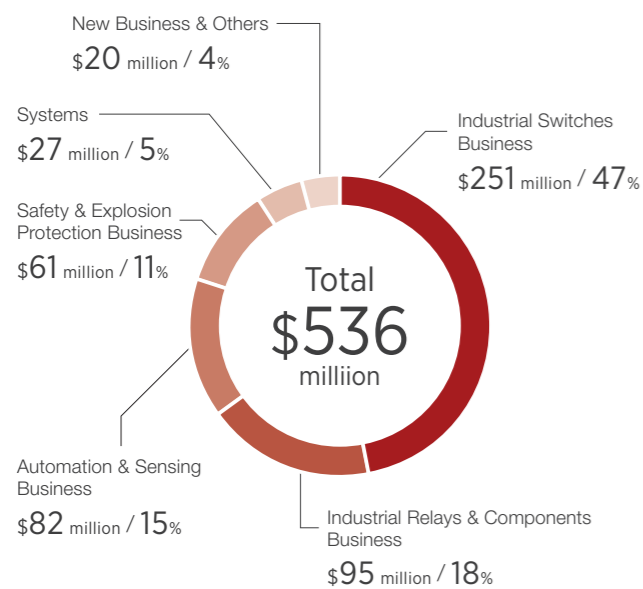
Sensing Business [▶P21](#)



Sensors



FY2020 Sales ratio



Safety & Explosion Protection Business [▶P23](#)



Safety laser scanners



Interlock switches



Enabling switches



Explosion protection operator interfaces



Explosion protection control boxes



Explosion protection network camera systems



New Business [▶P25](#)



Collaborative safety robot systems



Environmental energy-related business



Next-generation agricultural solutions

* Names of product group have been changed since FY2020.

Note: Amounts in U.S. dollars are calculated at the prevailing exchange rate as of March 31 2020.

Note: Exchange rate (1 U.S. dollar): FY2020 (¥108.83)



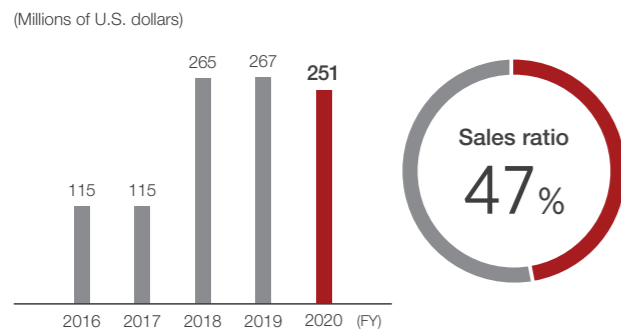
Industrial Switches Business

Creating an optimum environment for humans and machines as a leading company of industrial switches.

Leveraging control technologies developed and applied since its founding, the IDEC Group contributes to realizing a safer and more ANSHIN society by providing innovative solutions worldwide, not only for the factory automation (FA) industry but also in familiar daily-life situations.

With the aim of becoming the number one global company in industrial switches, the IDEC Group provides diverse solutions that bring together humans and machines. We do this through dedicated pursuit of quality, durability, and safety in our products, and through offering a product line-up that boasts versatility in design and ease of use.

Sales trends



Note: Amounts in U.S. dollars are calculated at the prevailing exchange rate as of March 31 in every fiscal year.
 Note: Exchange rate (1 U.S. dollar): FY2016 (¥112.69), FY2017 (¥112.20), FY2018 (¥106.27), FY2019 (¥111.01), FY2020 (¥108.83)

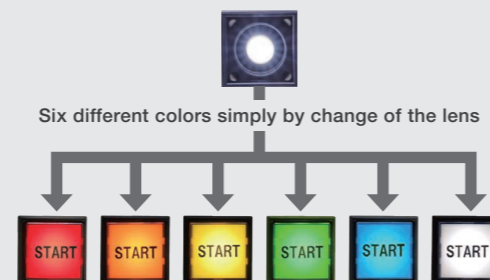
Business overview for FY2020

Sales to major industries, including products such as machine tools and robotics, generally decreased from the previous year. Sales in regions, principally the Americas, Europe, and Asia Pacific, also decreased partly because changes in foreign exchange rates and the market environment led to a slowdown in sales by APEM, which had recorded favorable sales up to the previous fiscal year.

TOPIC

Industrial switches incorporating the industry's first six-color LED bulb

We have developed an LED bulb that can emit six different colors and have installed it in industrial switches and pilot lights. This was the first such instance in the industry. The LED bulb adopted in the φ22 HW/CW control unit displays any of six different colors simply by change of the lens. Until now it was necessary to have six bulbs and lens for six colors. The new bulb enables reduction of operator work time needed for color change and inventory control. This is but one way whereby we contribute solutions to problems in manufacturing sites by our technology-rich product line-up.



Main application venues

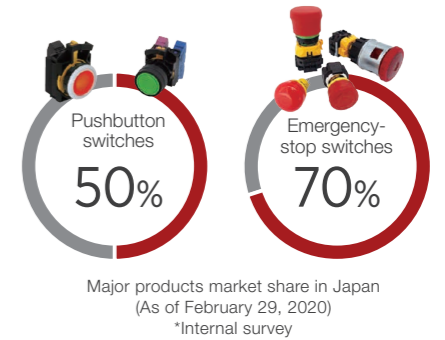
Stylish control panels for a variety of devices and special vehicles

Emergency-stop switches required to have high safety for installation in manufacturing lines

Business strategy

IDEC's main products have a dominant market share in Japan

Since 1958 when we began sales of industrial switches, we have developed diverse product line-up and continuously carried out design reviews and quality improvement. Customers' reactions to such efforts have enabled us to acquire high market shares in Japan. Going forward, we will continue to develop products needed for the times, so as to differentiate ourselves from peers and enhance our competitiveness.

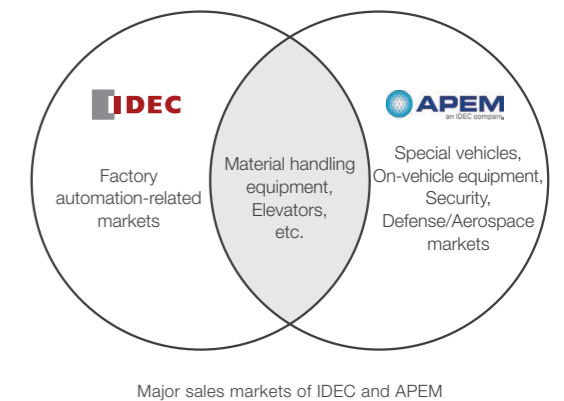


Advancing as a global leader in industrial switches

In recent years, increased diversity of work sites, together with changes in the specific requirements of work by operators, have resulted in more stringent demand for technologically-advanced methods of assuring a safe, simple, and smart. Responding to this requirement, IDEC continues development of products that enable greater safety. IDEC is also engaged in enhancing a line-up of products that feature a push-in connection style – a wiring method that requires less wiring, less space, and provides greater reliability.



In 2017, APEM Group of France, a well-known company with high market shares in Europe, joined the IDEC Group, which has strength in Asia. This has led us to achieve a more optimal geographical portfolio: We use APEM's broad-based sales network in Europe to expand sales of IDEC products, while strengthening APEM's product line-up in order to enter into new markets in the Americas and Japan. In addition, as APEM's major sales markets differ from those of IDEC, the companies are able to complement each other in terms of respective products having market strengths and an established geographical presence. We therefore intend to create global synergies and promote business expansion. As a leading company in industrial switches, the IDEC Group is determined to create new products and solutions that respond to the needs of society and innovate the HMI (Human-Machine Interface) environment for improvement in productivity of customers.





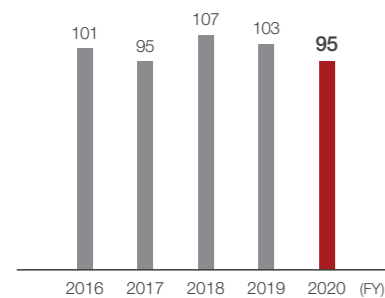
Industrial Relays & Components Business

Using a full line-up of products to help customers overcome challenges.

Industrial relays and components is a collective term for various electronic devices incorporated inside control panels and control boxes that are used in the operation and control of machinery and manufacturing lines. They are in use in a wide variety of settings, such as manufacturing sites, elevator controls and other equipment control of systems in buildings, automated warehouses, industrial machinery, and semiconductor manufacturing equipment. Responding to ever-growing needs for “smarter” facilities and equipment, space-savings, and quality stabilization, IDEC adds new technologies to various devices installed inside control panels, thereby providing more-efficient, highly-convenient, operator-friendly production environments, and assisting customers which finding solutions to various challenges.

Sales trends

(Millions of U.S. dollars)



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Business overview for FY2020

Due to a decline in capital expenditures, being affected by the U.S.-China trade friction and the impact of the COVID-19 pandemic, sales of industrial relays, terminal blocks, and other products decreased in Japan, Asia Pacific including China, and the Americas.

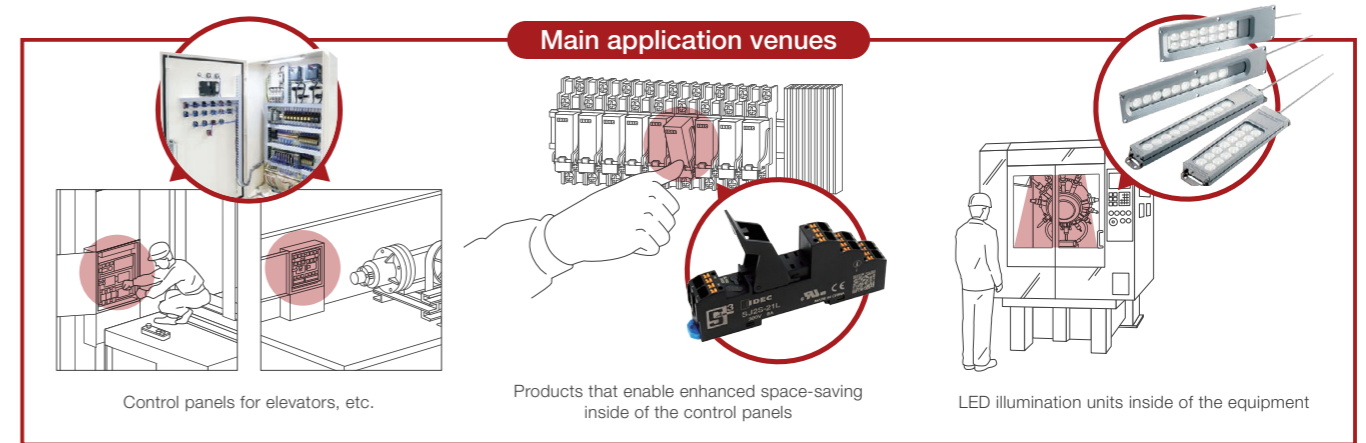
TOPIC

Strategic partnership with Weidmüller Interface GmbH & Co. KG

In March 2019, IDEC entered into a strategic partnership with Weidmüller, a world leader in development, manufacturing, and sales of electrical connectivity devices and terminal blocks. IDEC acquired exclusive sales rights of Weidmüller’s DIN rail terminal blocks in Japan and is advancing the strategic partnership in developing various products that use advanced push-in technology as well as promoting other joint development through use of the partner’s technology.



Innovation by **IDEC** **Weidmüller**

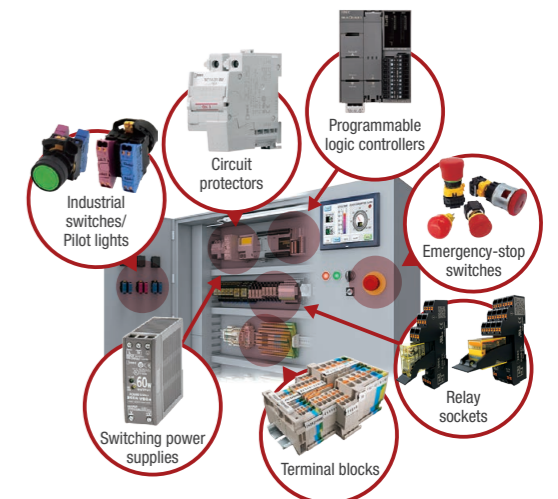


Business strategy

Trend in control panels

We are promoting the push-in wire connections to replace traditional screw terminal connections for diverse products. This is because the push-in style works well and is a high importance for manufacturing operations that are hampered by a labor shortage.

The push-in connection allows for various tasks to be executed efficiently, while maintaining a certain quality level, in case of installing many types of panels or conducting their regular maintenance. The connection style realizes significant reduction in man-hours needed for wiring and maintenance work and enables devices to be designed and made in reduced sizes. The push-in connection style is already common in Europe, and is now expected to be increasingly adopted in the U.S. and Japan.



IDEC's broad range of products compatible with the push-in connection and support services

As new products of the push-in connection style, IDEC launched industrial relay sockets of the SJ/SU Series. We plan to further expand products using the connection style.

In order to support adoption of products compatible with the push-in connection, we also provide sales, rental, and calibration of various machine tools needed for such adoption, such as automatic crimping machines that can crimp Ferrule terminals and wires with higher quality and in a shorter time than generally available using manual operation machines.

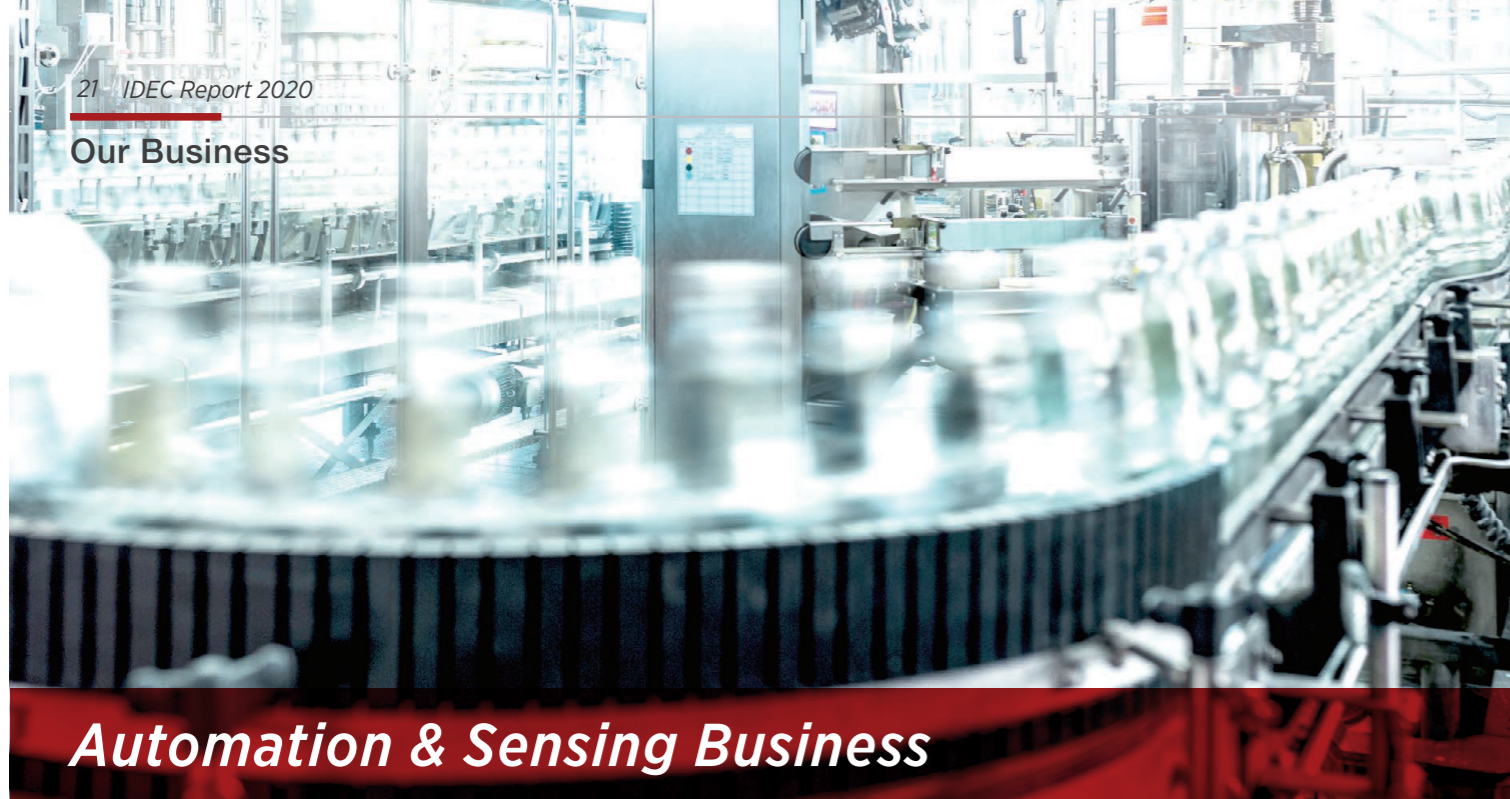


Thoughts focused on the same goal

Since the late 1970s, IDEC has continued to instill and pursue “Save and Safe”, as part of its corporate DNA. Along with the rapid advancement in machine intelligence and demand for environmental durability and high reliability in recent years, we need to face societal challenges such as Japan’s shortage of workers. To solve these issues, we have set as our goals “Safe, Simple & Smart = S³ (S cube connect)”, with the aim of providing society with products and services that bring about greater innovation and lasting quality.



- Safe** Products anyone can use with safety and security ANSHIN, from a company pursuing world-class safety
- Simple** Products appreciated by all our customers for their ease of connection regardless of worker experience
- Smart** Products that make labor-saving and space-saving a reality

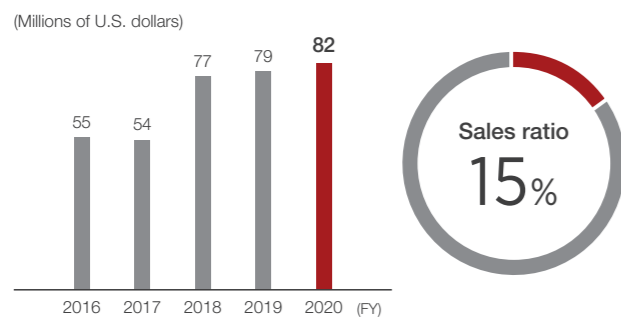


Automation & Sensing Business

Offering optimal solutions matching the era of IoT and Industry 4.0.

Along with a decline in Japan's working population and permeation of IoT, we see an increase in need to support remote monitoring and operations, and an increase in demand for key devices that promote work efficiency and automation. We have a diverse product line-up precisely related to that need and demand. IDEC solutions contribute to higher levels of automation and efficiency in manufacturing. These solutions include automation devices, such as programmable logic controllers that control machinery, equipment, and assembly lines as well as operator interfaces that create more comfortable operating environments; and sensing devices such as sensors that detect physical objects and changes in conditions, code readers and RFIDs with potential growth in demand for traceability application.

Sales trends



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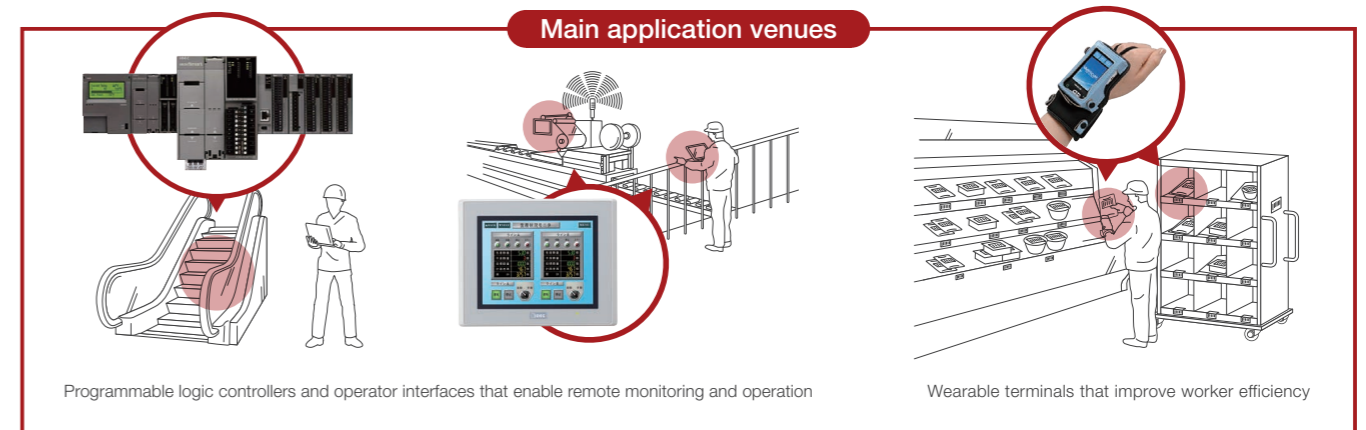
Business overview for FY2020

In Japan, sales of automatic identification devices such as barcode readers for retail were robust due to an increase in demand ahead of the consumption tax rate hike in October 2019. In the meantime, sales of automation devices, such as programmable logic controllers and operator interfaces, and diverse sensors and other sensing devices decreased due to the deteriorating market environment.

TOPICS

Handy-type operator interface with improved ease of operation

A new handy operator interface, HG1P, was launched in May 2019. While having a surprisingly light-weight structure, the interface has a high-resolution 4.3-inch display and its ergonomics-based design makes the interface easy to use and frees operators for other productive work. The HG1P is well suited for use as a teaching pendant for industrial robots due to its indication of ongoing actual operation and motion. It can also be used as a mobile monitor, replacing a conventional fixed control panel and leading to cutting the cost and space requirements of a control panel. Moreover, the HG1P is durable and well suited for diverse manufacturing sites: closer operation to the machine leads to more accuracy and stability of operation.



Business strategy

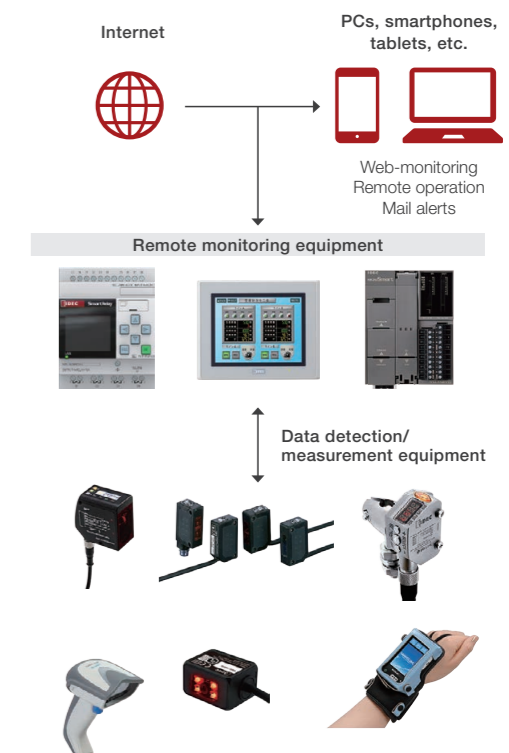
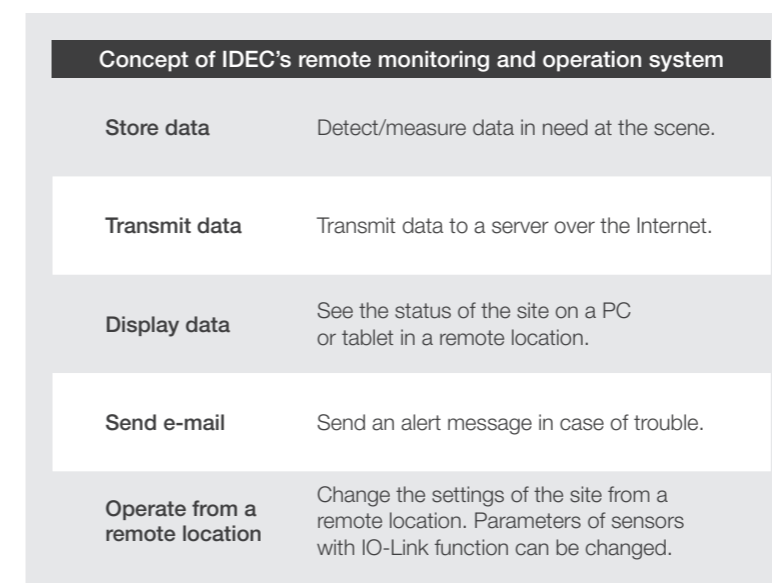
Enhancing the automatic identification devices business

In 2017, IDEC acquired Welcat, Inc. as a wholly-owned subsidiary, a company with outstanding technology in the field of automatic identification devices, such as code readers, and expanded the product line-up and sales channels. Further in April 2020, we integrated Welcat, Inc., which has strength in RFID, handy terminals and other wearable terminals, and in software development, into IDEC AUTO-ID SOLUTIONS CORPORATION, which is noted for its strength in products for retail and logistics. The integration is expected to accelerate business expansion, using the combined strength of both companies.



IDEC solutions that make IoT real

We are enhancing optimal functions that are so important in our new all-connected era, facilitating use of IoT for programmable logic controllers, operator interfaces, sensors, code readers, etc. This is another way our solutions contribute to solving diverse challenges that our customers face.





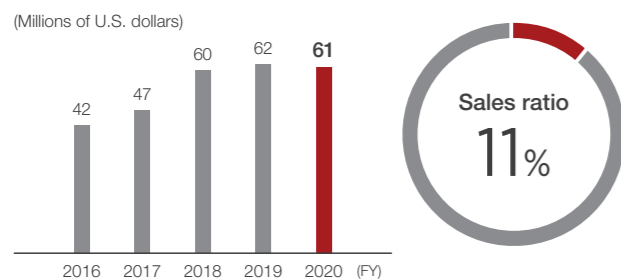
Safety & Explosion Protection Business

As a company that pursues and realizes world-class safety and ANSHIN*, IDEC provides solutions that enhance safety and productivity.

Since founded in 1945, we have focused on safe environments for humans in their interaction with machines, and to that end we have developed many kinds of safety-related devices and explosion protection devices that are dedicated to safety, reliability, and ease of use. We have also provided solutions that help customers to enhance safety and productivity. We have developed a next-generation safety philosophy, "Collaborative Safety / Safety2.0" aimed at coordinating safety between humans and machines. This philosophy goes beyond dealing with keeping humans out of harm's way. We also provide cooperative safety equipment applications that allow the machines to sense any danger for humans and better control the safety environment. We also make efforts in promoting safety in other ways, such as to promoting standardize and doing consulting.

*ANSHIN: a sense of trust and assurance without any fear or stress

Sales trends



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Business overview for FY2020

Sales of interlock switches, safety laser scanners, and other safety-related devices decreased primarily in overseas markets due to a global decline in capital expenditures. Sales of explosion protection devices also fell in Japan.

TOPIC

Explosion protection devices that contribute to realizing safer, ANSHIN manufacturing sites

For over 70 years, we have been dedicated to research and development of explosion protection technology and have developed a wide variety of explosion protection devices that can be used at petroleum plants, chemical factories, and elsewhere, according to the need of the times.

In the sites where there is inflammable gas or liquid, ordinary control devices are not enough and explosion protection devices are indispensable for ensuring safety. In 2019 we began selling explosion protection mat switches that can detect intrusion and the presence of humans and objects. These switches, developed by integrating strengths and insights of the IDEC Group, have acquired the industry's first explosion protection certification awarded in Japan. We will continue development of products that prevent industrial accidents in a broad range of industries and contribute to the creation of safer, ANSHIN manufacturing sites.

The industry's first explosion protection mat switches that merited Japan's explosion protection certification



Main application venues

Enabling switches that ensure safety of production lines, etc.

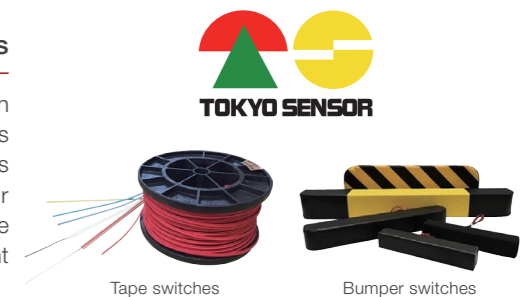
Safety laser scanners that can detect the presence of humans and objects within an area

Interlock switches that can detect whether doors or safety fence gates are opened or closed

Business strategy

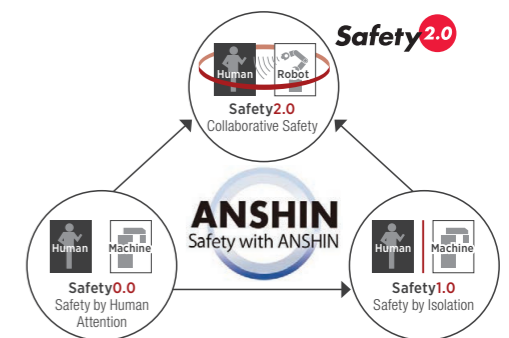
Focusing on becoming stronger in the safety and ANSHIN fields

Tokyo Sensor Co., Ltd., one of the major Japanese manufacturers of touch sensors, joined the IDEC Group in 2018, which allowed us to include tape switches and bumper switches, used for collision detection of automatic guided vehicles (AGVs) and other vehicles, broadening our product line-up, and improving our responsiveness to more diversified needs. In 2019 we executed an absorption-type of merger of Tokyo Sensor with the aim of raising efficiency by unified management of R&D, manufacturing, and sales and by promoting global sales expansion.



As a leading company in practicing "Collaborative Safety / Safety2.0"

Our definition of underlying concept of safety began with Safety0.0 that ensured safety by attentiveness and judgment of humans. Subsequently, Safety1.0 focused on applying safety measures to machines and ensuring safety by separation and operation suspension of machines. More recently, a collaborative concept of humans and machines in realizing both safety and productivity, Safety2.0, is being defined. For pursuit and realization of the next-generation safety philosophy "Collaborative Safety / Safety2.0", we are dedicated to development of products that help humans and machines work in a collaborative manner, with no separation by a barrier or safety fence, to improve both safety and productivity, by combining our safety technologies and knowhow with IoT and AI technologies. In 2019 we started using the Safety2.0 Qualification and Registration System, created by the Institute of Global Safety Promotion, in optimal product development and solution proposals in the Safety2.0 era. We are thus committed to helping realize a safer society.



Becoming a company that pursues and realizes world-class safety and ANSHIN

"Collaborative Safety / Safety2.0" is a comprehensive approach that intends to improve safety and productivity from four aspects: technology development; human resources development; management; and social rule-making. Through collaborative technology development with other companies, development of Robot Safety Assessors and other professionals on safety, participation in the "Vision Zero" campaign to improve "Safety, Health, Wellbeing" at work, and promotion of international standardization initiatives, we are creating and globally expanding a new trend in safety and ANSHIN, overcoming barriers of different industries.



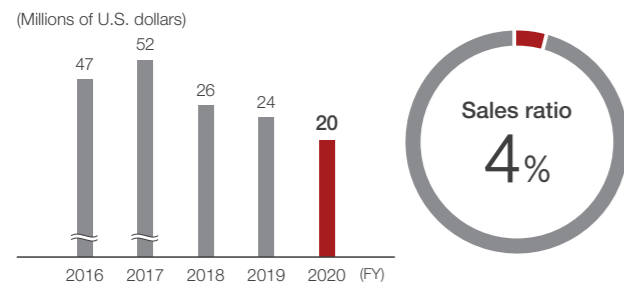


New Business

Contributing to resolving societal challenges through a variety of solutions utilizing control technologies.

The IDEC Group's new business segment is growing mainly by growth of two business lines: the collaborative safety robot system business led by IDEC FACTORY SOLUTIONS CORPORATION; and the environmental energy-related business led by IDEC SYSTEMS & CONTROLS CORPORATION. Through these we are making group-wide efforts to tackle societal challenges, such as a labor shortage for industrial sites and climate change.

Sales trends



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Business overview for FY2020

The environmental energy-related business recorded a decline in sales from FY2019, but achieved record-highs in operating income and operating income margin. Sales of the collaborative safety robot system business were robust, partly due to an increase in adoption of systems targeted at diverse companies, including medium-sized ones.

Business Strategy

Collaborative safety robot system business

Evolving from a base in safety-related devices and safety systems, which are among our strengths, we have created systems that combine various makers' collaborative robots, vision sensors, artificial intelligence (AI), and autonomous mobile robots (AMR), as well as diverse application packages, to satisfy customer needs.



Collaborative safety robot systems



Operation of the collaborative safety robot website

Environmental energy-related business

By leveraging our long-cultivated control technologies and environmental technologies, we contribute to resolving globally-ongoing diverse societal challenges. Specific examples include self-consumption solar power generation and other renewable energy; supply of electric power as part of business continuity plan (BCP) measures; next-generation agricultural solutions; and store solutions that have integrated some of these and may even encompass the entire supply chain from production to logistics and stores.



Renewable energy



Next-generation agricultural solutions



Corporate Social Responsibility (CSR) Activities Integrated with Management

The IDEC Group positions our founding principle, "Management with respect for humanity", as our most important base and are committed to maximizing the happiness of all stakeholders.

In order to promote this, we are engaged in CSR activities that are based on "The IDEC Way", the IDEC Group CSR Charter, and the Ten Principles of the United Nations Global Compact. CSR activities are identified as one of our managerial priorities and the CSR management system has been established.

CSR Promotion System

In April 2018 the IDEC Group established the CSR Committee, chaired by the CEO, to fulfill its corporate social responsibility in realizing a sustainable society. Under the CSR Committee, "ESG+Sa+Q" five specialized committees – Environment, Social, Governance, plus two areas of our strengths, Safety and Quality – were established, each in charge of promoting a particular area of CSR activities. Each specialized committee, chaired by an executive officer, consists of individuals with expertise and experience, and tackles measures according to their respective themes.

The CSR Committee, meeting twice a year (April and October in FY2020), reviews and approves overall CSR activities and the initiatives of each specialized committee. These initiatives are disseminated to all employees via the CSR Leaders Meeting and the CSR Workshop Training.



CSR throughout the supply chain

The IDEC Group promotes CSR procurement in cooperation with suppliers, with the aim of contributing to the sustainable development of society. At one of IDEC's major factories in Suzhou, China, the suppliers exchange meeting has been held each year since 2017 and a CSR Procurement Briefing was held in 2019. We presented the importance of CSR procurement throughout the supply chain, asking for suppliers' understanding and cooperation in the promotion of responsible procurement, according to the IDEC Group CSR Procurement Guidelines.



CSR Procurement Briefing held in Suzhou, China (November 18, 2019)

IDEC Group CSR Procurement Promotion Plan

