Intellectual Capital Strategy

Active participation in international standardization activities

In addition to market globalization, the development of new technologies such as ICT and collaborative robots is also progressing, and creating a safe working environment where no one is left behind has become a new societal issue. By resolving societal issues through social rulemaking, such as in international standardization activities, IDEC will continue to contribute to the realization of a sustainable society based on safety, ANSHIN, and well-being.

Related material issues

- Productivity improvement
- Safety, ANSHIN, and well-being

Resolving societal issues through social rulemaking

IDEC has been involved in the formation of social rules for many years, through active participation in international standardization activities. From the 1960s to the 1990s, IDEC expanded its market mainly by utilizing existing rules. Since the 1990s, IDEC has actively participated in technical committees of the International Electrotechnical Commission (IEC) and the International Organization for Standardization (ISO), proposing and promoting international safety standards in response to new technological developments in the global society. IDEC has been active in shaping the rules by proposing and promoting the development of international safety standards.

Since 2017, we have focused on activities to create rules based on new ways of thinking, such as Vision Zero and well-being, to achieve our purpose: create the optimum environment for humans and machines, and achieve safety, ANSHIN, and well-being for people around the world.

We have defined our international standardization activities in the following three categories, and have established a dedicated unit, the International Standardization and Collaborative Safety Department, within our head office to promote a variety of activities. Among the three categories, we are particularly focusing on “strategic creative” and “strategic proactive” international standardization activities, which we advocate to the world with Japanese leadership. We are also aiming to achieve further growth of our business through continuous human resources development through OJT (on-the-job training).

Types of international standardization activities at IDEC

Strategic creative approach	Activities that create new rules and mechanisms such as international standards and certifications for people, products, and services
Strategic proactive approach	Activities that involve taking the initiative to change or revise existing international standards, or utilizing obtained information to expand business operations ahead of other companies
Passive reactive approach	Activities aimed at continuing current business operations, such as ensuring conformity with international standards during product development and design modification

IEC standardization activities

As a Japanese representative at the Advisory Committee on Safety (IEC ACOS), one of the six technical advisory committees of the IEC, IDEC introduced Collaborative Safety (Safety 2.0) and proposed the need to develop an IEC Guide on Collaborative Safety. Consequently, the development of the IEC Guide was approved in 2022, and it is expected to be officially published in the near future following voting by each national committee.

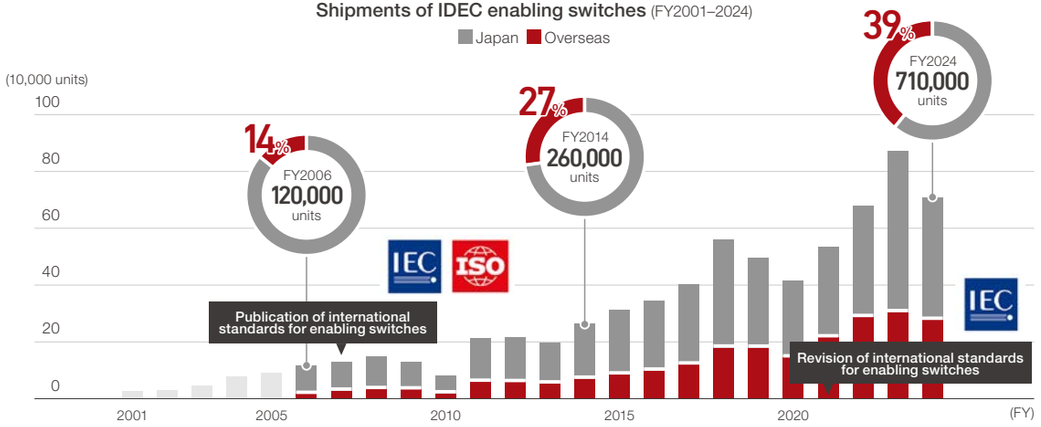
In addition to the aforementioned, IDEC has registered as an expert in various international standardization committees, and participated in the development of international standards. Through these endeavors, we have made significant contributions, such as in the development of a standard for three-position enabling switches, for which IDEC has a global market share of over 90%, and in the revision of the standard for emergency-stop switches. Cumulative shipments of enabling switches have exceeded 7.1 million units by FY2024, and have grown significantly overseas since the creation of the international standard. These contributions have led to improved safety, ANSHIN, and well-being not only at manufacturing sites but also across a wide range of industries, including the construction sector.

ISO standardization activities

IDEC has been participating in the working group for the technical committee on robot safety to develop the ISO 10218 series of international standards relating to the safety of various industrial robots (including collaborative robots), robot cells, and related systems.

With the expansion of the automotive and semiconductor industries, the automation of manufacturing, and the increase in processes requiring the substitution of human labor due to the decrease in the working population, the use of industrial robots is increasing worldwide. In line with this, there is a need for HMI and safety-related products to ensure the safety of operations involving both humans and robots. IDEC contributes to the development and revision of standards with the product and safety knowledge it has accumulated through the supply of various HMI and safety-related products that are effective in increasing safety, ANSHIN, and well-being.

Shipments of IDEC enabling switches (FY2001–2024)



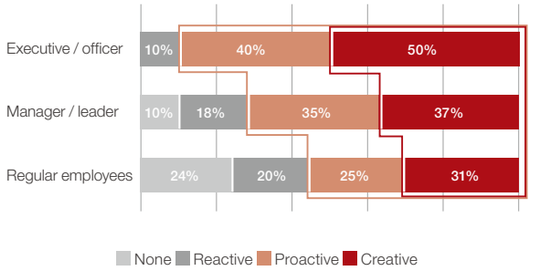
Human Resource Development

IDEC considers international standardization activities to be an essential strategy for surviving in the global market. We are also focused on employee training and education. We distribute a variety of information via our intranet and company newsletters, and also stream videos explaining our activities to date.

As a result of these efforts, there is a high level of internal awareness of our activities. In a questionnaire on the types of international standardization activities in which they would like to be involved in the future, the majority of regular employees answered that they would like to be involved in “proactive” and “creative” activities.

Video introducing IDEC’s international standardization activities

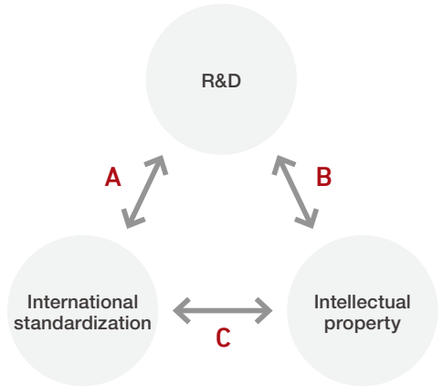
Results of an internal survey on the types of international standardization activities in which employees would like to participate in the future



OPEN & CLOSE Strategy

As part of our intellectual capital strategy, we are engaged in business activities based on the OPEN & CLOSE Strategy. In addition to international standardization, we operate a development promotion system in which R&D and intellectual property are integrated with international standardization as a trinity.

This trinity includes the following kinds of activities.



A

Leading the world in the creation of international standards through collaboration between standard-setting authorities and developers, and active participation in international standards activities.

B

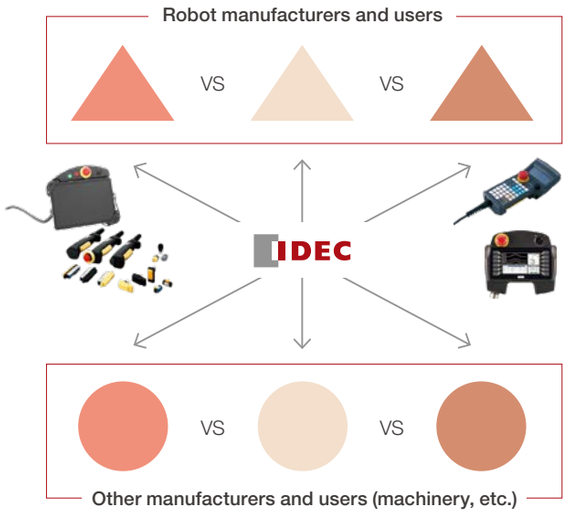
Developing distinctive technologies and fostering development focused on achieving a substantial market share through proprietary technologies, while considering standardization prospects.

C

Intellectual property personnel analyze standardization trends and construct patent maps, and apply for intensive strategic patents for the creation of international standards.

The OPEN & CLOSE Strategy essentially means keeping a closed area of the company’s core technology that generates profits, while leaving other technologies in the open domain. Instead of competing in an area where many companies are competing, it is important to build barriers to entry through intellectual property (IP) and international standardization in areas where we can be a unique entity.

For example, in the case of enabling switches, we have not only obtained patents for key technologies, but also actively participated in international standardization efforts. Consequently, our enabling switches have been adopted by many robotics and machinery manufacturers in Japan and overseas, resulting in a global market share of over 90%. This approach has led to an unparalleled market dominance and remarkable profitability.



In recognition of our activities, we are honored to receive the Prime Minister’s Commendation and the Ichimura Prize

IDEC experienced a bitter loss of market share both in Japan and overseas, because the creation of the international standard for switches—one of its main products— was spearheaded by overseas manufacturers, resulting in the exclusion of a typical Japanese round-hole panel mounting size for switches at that time. From this experience, Dr. Toshihiro Fujita, Chief Safety, Health and Well-being Officer, recognized the criticality of conducting international standardization activities from Japan. He has since taken a leading role in Japan-led international standardization activities, by facilitating communication and cooperation between numerous European and US companies, standardization organizations, and certification bodies.

In recognition of his activities, Fujita received the Prime Minister’s Commendation for Industrial Standardization from Ministry of Economy, Trade and Industry in 2022. In addition, Takao Fukui, Masaki Nobuhiro, and Fujita received the highly prestigious Ichimura Prize in Industry for Excellent Achievement Award, which recognizes technology developers who have contributed to the advancement of science and technology and the development of industry in Japan. The presentation ceremony, attended by Princess Akiko, was held in April 2024.

Ichimura Prize in Industry for Excellent Achievement Award