

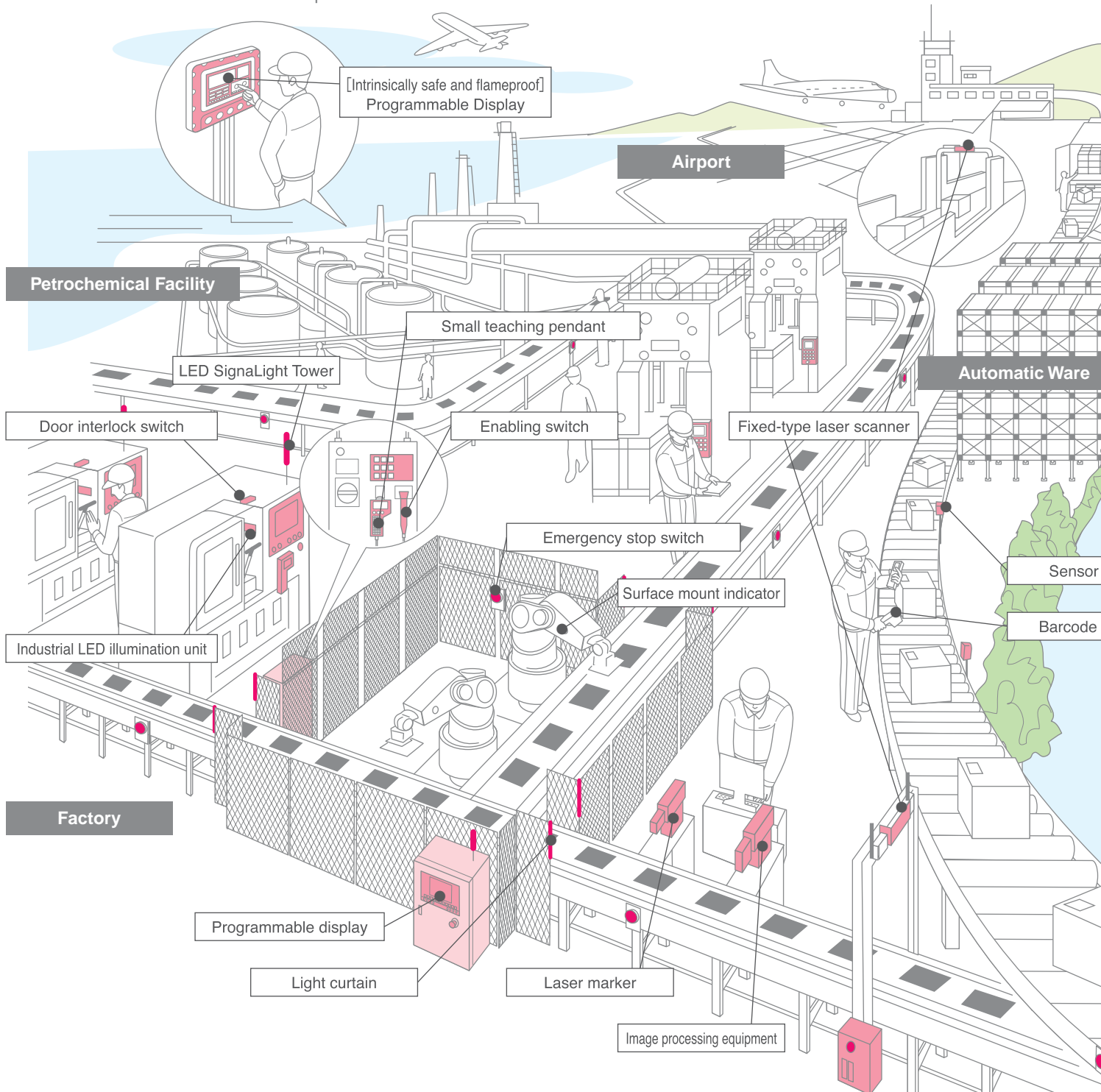
IDEC at work

## Making Places Safer and More Comfortable

Control equipment is used in many places. It connects people with machines by conveying operator instructions to the machine, controlling the machine and updating the operator on the condition of machine.

You can find IDEC Group products in all these places, including machinery and equipment such as machine tools, semiconductor manufacturing equipment, assembling robots and manufacturing and conveyor lines in factories, automatic ticket vending machines in train station, elevators, multi-story parking lots, and controls of lighting and air-conditioners in offices and shops.

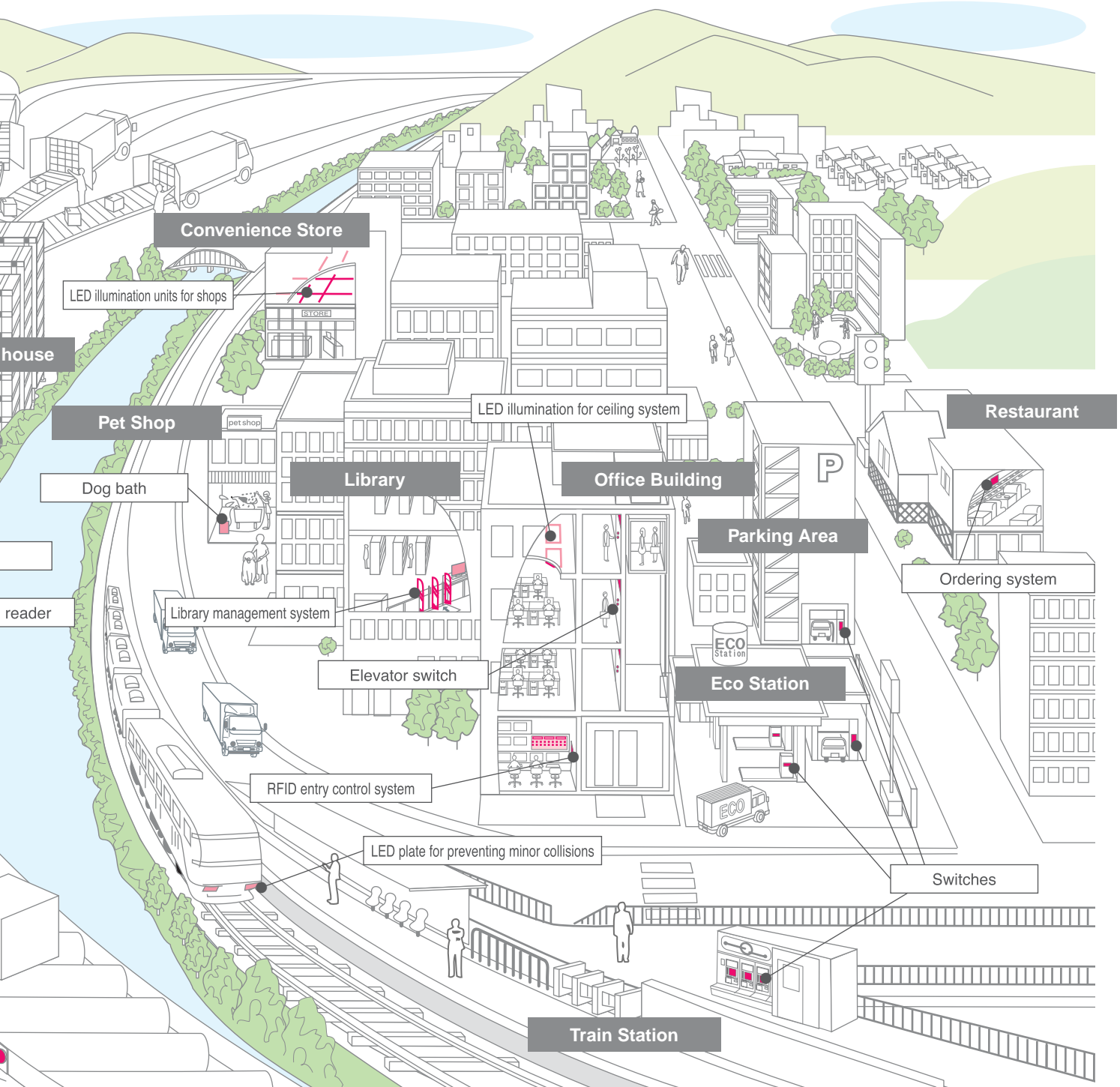
Introduction of Business ①



IDEC Technology Leads to the Future of Excellence At Work and AT Home.

No matter how much better machines may perform toward the realization of a highly advanced system, we believe the people who operate machines and systems should play a major role. That's why we should make places where people are living and working safer and more comfortable.

IDEC will expand the possibility of automation in any field by harmonizing technologies and information it has cultivated in the field of HMI (Human Machine Interface).



## Control Component Business

### Control Component Business

IDEC has an outstanding track record and a wealth of accumulated knowledge in the field of HMI, such as how to make the human-machine interface more comfortable and safer. This know-how has been put to superb use in manufacturing products that enable us to conserve many things and secure safety. IDEC's various user-oriented products have enjoyed an excellent reputation as a reliable brand throughout the world.

### Industrial Components



Various control units play a key role in the human-machine interface. These products enable us to conserve many things by reducing wiring and processes, and saving space and energy. At the same time, they are ergonomically-designed for maximum operating comfort. Giving comprehensive consideration to users and their working environments, IDEC has been supporting the creation of an optimal environment for people and machines.

《Main industrial components》

Control switches, Pilot lights, Timers, Relays, Sockets, Circuit protectors, Sensors, Communication terminals, Terminal blocks

### Security and Explosion-protected Components



IDEC was a pioneer in advocating the importance of a system based on the principle that Humans makes mistakes and machinery breaks down. It has led to various safety-related products. The Company has a wide range of explosion-protected products that prevent possible accidents from occurring in places where combustible gas is used, such as petrochemical plants.

《Main security and explosion-protected components》

Emergency stop switches, Enabling switches, Safety switches, Small teaching pendants, Safety relay modules, Safety controllers, Explosion-protected and related products

### LED Components



Based on LED-related applied technologies that IDEC has been accumulating since the development of LED illuminated control units for industrial use in 1981, IDEC has produced various LED-related products including industrial LED illumination units.

《Main LED components》

LED lamps, Super-bright LED illumination devices (Sunshine series), Industrial LED illumination units, Multi-color LED plates, LED arrays

### Automation Components



IDEC has a wide range of products including controllers, which function as the "brains" of the machinery and equipment; displays and pendants which provide the ideal interface between people and equipment; and various types of power supplies including those for LED illumination units.

《Main automation components》

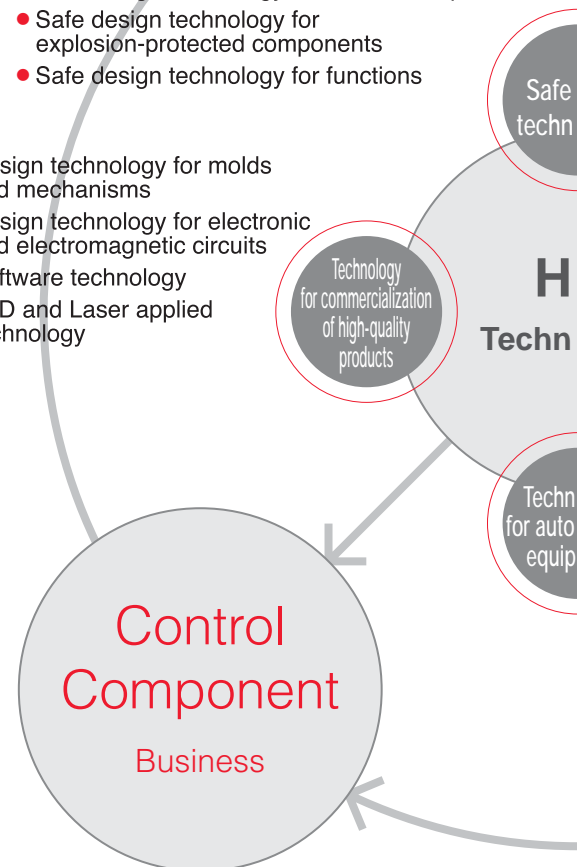
Programmable controllers, Programmable displays, Teaching pendants, Switching power supplies, Power supplies for LED illumination units

Engineers rewrote the design over and over before from the drawing board to the production line. In designing a product, we have one thing in mind—safety while making the product user-friendly. The history of each of our products is proof of our solid field of controlling products. An encounter with other people may change our lives. So dose an encounter with technology. Think Automation and beyond... Collaboration between people and new encounters with technology enable us to provide an optimal solution to our customers. The IDEC Group's new challenge has started.

# We're IDEC

- Safe design technology for machinery
- Safe design technology for control components
- Safe design technology for explosion-protected components
- Safe design technology for functions

- Design technology for molds and mechanisms
- Design technology for electronic and electromagnetic circuits
- Software technology
- LED and Laser applied technology

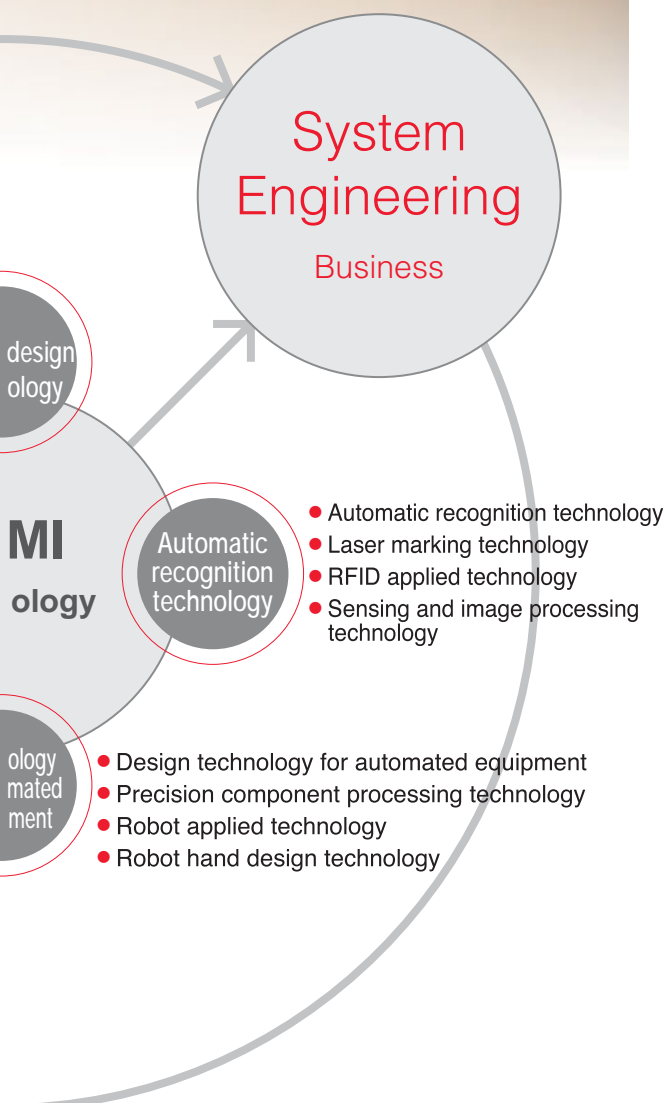


products were allowed to proceed

how to ensure the user's

technology in the

C .



## System Engineering Business

### System Engineering Business

Under a sales system that emphasizes the importance of face-to-face talks with customers, IDEC has been providing solutions that outperform competition by carefully watching and analyzing the workplace. Based on the solid technology it has cultivated in the control components business, IDEC has been expanding the possibility of automation in any field, creating new value.

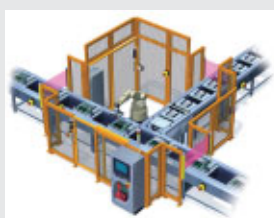
#### Technology Innovation



Example of LED lighting control system in the office

IDEC has been exploring the possibility of a new control system that combines basic technology and external technology. They are represented by B-to-B custom LED lighting fixtures that IDEC has produced by combining the entire Group's LED-related technology. This includes the highly-reliable LED package technology, technology for power supplies of our efficient LED illumination units, technology for light control systems, and design and manufacturing technology for lighting equipment.

#### Security, Explosion-protected and Standards Intelligence



Example of HMI environment modeling for enhanced safety

Based on abundant knowledge of various international standards including ISO12100 and its safety design concept, to which the Company has adhered since its founding, IDEC has been providing an optimal HMI environment model to customers from a comprehensive viewpoint. Utilizing the know-how and technology of explosion-protected related products that it has been providing, IDEC has been exploring a new business opportunity in the explosion-protected and control product business.

#### Traceability



Example of traceability in a conveyance line

IDEC can construct a system that integrates conveyance, marking, reading and sensing, and inspection on the shop floor by combining laser markers, code readers and image processing equipment. It also provides a tracing system that tracks down the flow of items in the distribution channel and manages the circulation history in the library.

#### Excellence in Next Generation Manufacturing Technology



Robot-controlled cell production system

The IDEC group has been accumulating various manufacturing technologies and machinery design technologies under its policy of developing manufacturing facilities in-house to seek high reliability and safety. Its robot-controlled cell production system is developed by a vertical integrated model. This is a space-saving and highly efficient assembling system based on IDEC HMI technology. The Group will strive further to develop cutting-edge manufacturing technology utilizing this knowledge.