

# CKD Environmental/Social Contribution Products Spreading through Society

Contributing to SDGs through business activities



**CKD**



# President's Message

We at CKD have since our founding been a pioneer in fluid control and automation, contributing to automation and efficiency in our customers' manufacturing in Japan and abroad. We aim to become a "World FA Total Supplier" and to develop into a truly global corporation, as we work to resolve still more societal issues. The objectives of the SDGs hold the same ideals as the CKD corporate philosophy of "realizing the creation of a prosperous society." We intend to promote our business activities with a thorough understanding of the 17 goals and 169 targets.

From here on, as well, CKD shall engage in responsible corporate activities, continue to grow into a "people-friendly corporation," and work toward the realization of a sustainable society.

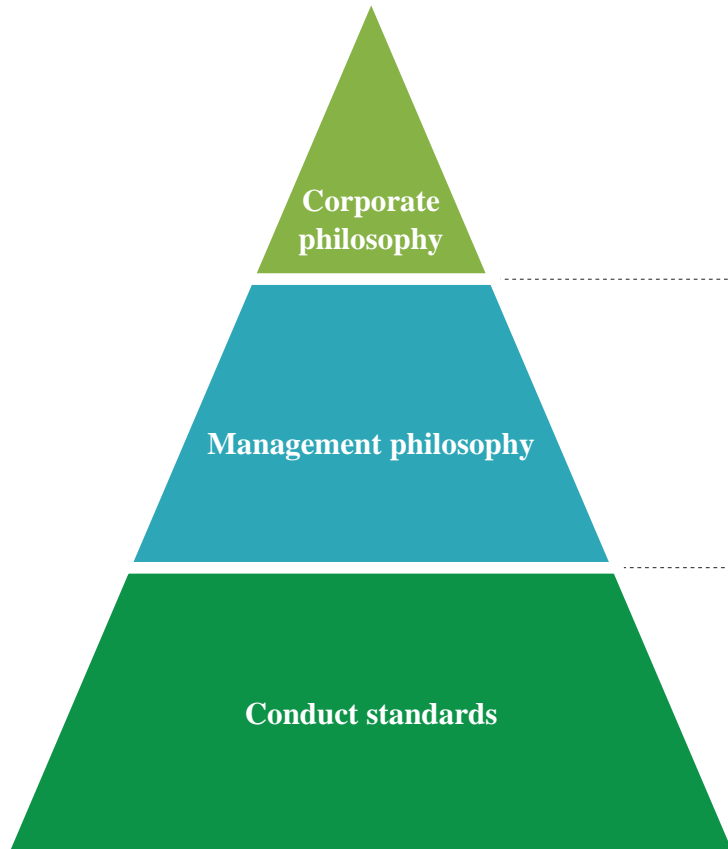
Representative Director Chairperson  
of the Board and Chief Executive Officer  
**Kazunori Kajimoto**

President and Chief Operating Officer  
**Katsuhito Okuoka**

# Initiatives on SDGs

CKD works through automation and flow control business areas to revolutionize technology and create values that lead to solutions of various societal issues. We shall continue with integrity our initiatives toward the attainment of the SDGs, to contribute to the realization of our corporate philosophy of "creating a prosperous society."

Business areas	Societal issues	Focus domains	Core technologies	Business departments	Initiatives on SDGs
	■ Rapid changes in business environment	Foodstuffs	Automation technology	<b>Automated machinery business</b> Innovative and Inventive Design Excellence Award received	2
	■ Advancement/diversification of manufacturing due to IoT	Medical		<b>Device business</b> Good Design Award received	3
	■ Rising automation needs	Rechargeable batteries			5
	■ Expanded demand for unit systems due to equipment standardization/labor shortages	Electronic parts			7
	■ Human and robot cooperation, shift to unmanned factories, and full utilization of AI	Automobiles	8		
	■ Accelerating motorization	Machine tools	9		
	■ Expansion of semiconductor demand	Semiconductors	12		
					17



With creative knowledge and technology, we work to revolutionize fluid control and automation to contribute to the creation of a prosperous society.

- 1

Awareness of societal responsibility
- 2

Consideration for the global environment
- 3

Thorough customer orientation
- 4

Taking on a technological revolution
- 5

Corporate culture with emphasis on human resources

1

Awareness of societal responsibility

2

Sincere action

3

Compliance with the law

4

Disclosure of information

5

Environmental conservation

6

Customer orientation

7

Taking on a technological revolution

8

Emphasis on human resources

9

Appropriate business execution and reforms

10

Exhibition of organizational strength

ESG areas	Societal issues	Direction of progress	Materiality	Initiatives on SDGs
	■ Climate change ■ Environmental pollution ■ Energy problems ■ Drying up of water resources ■ Waste disposal management ■ Labor force shortages ■ Diversity promotion	■ Corporate philosophy ■ Management philosophy ■ Conduct standards	■ Corporate governance ■ Compliance ■ Development of low-environmental load products ■ CO <sub>2</sub> emission suppression ■ Reduction of water usage volume ■ Prevention/reduction of waste generation ■ Provision of products focusing on safety and quality ■ Challenge Technological Innovation ■ Stakeholder engagement ■ Reduction of chemical substances affecting the environment ■ Occupational safety and health ■ Human resource development/next-generation development ■ Taking on new businesses/new markets	3, 4, 6, 7, 8, 10, 11, 12, 13, 16, 17

\*Please refer to other governance reports

## What are the SDGs?

In 2015, the United Nations adopted 17 "Sustainable Development Goals (SDGs)" to be attained by 2030, including elimination of poverty, inequality, and injustice, response to climate change, etc. The SDGs are not merely a set of promising goals, but an actual specific action plan that seeks broad-based cooperation from corporations, governments, and regional societies around the world, aiming for realization of prosperity for humankind and the globe.



# Initiatives in Business Areas

Through manufacturing based on automation technology and fluid control technology, we shall promote activities toward attainment of the "Sustainable Development Goals (SDGs)" and contribute to the achievement of a more prosperous society and the creation of a new era.



Contribution to food safety/long-term storage  
Research and development through industry-academia cooperation



Components for food manufacturing processes and food packaging machinery

Pages 5-6



Contribution to improved agricultural productivity

Automatic watering control systems

Page 6



Elimination of air pollution through conversion to EVs

Components for rechargeable battery manufacturing processes and lithium-ion battery winding machines

Page 8



Contribution to stable supply of pharmaceutical products

Components for life science and pharmaceuticals packaging machinery

Page 7



Contribution to world automation  
Development of low-environmental load products



Contribution to waste reduction

Semiconductor-related components, fluid control components, electric motors, high durability components, sensor components, image processing tools, Gripper for cooperative robot and handling device

Pages 10-14



Promotion of a worker-friendly labor environment  
Promotion of a safe and secure labor environment



PowerArm Assistive Device

Page 9







Contribution to food **safety/long-term storage**  
Promotion of **research and development** based  
on cooperation with industrial associations  
Contribution to **waste reduction**



■ Components for food manufacturing processes FP Series

A broad standard lineup ranging from air filters to actuators that can be used safely and securely in food manufacturing processes. Eliminates concerns over lubricant contamination, and supports food manufacturing based on use of materials compatible with the Food Sanitation Act.



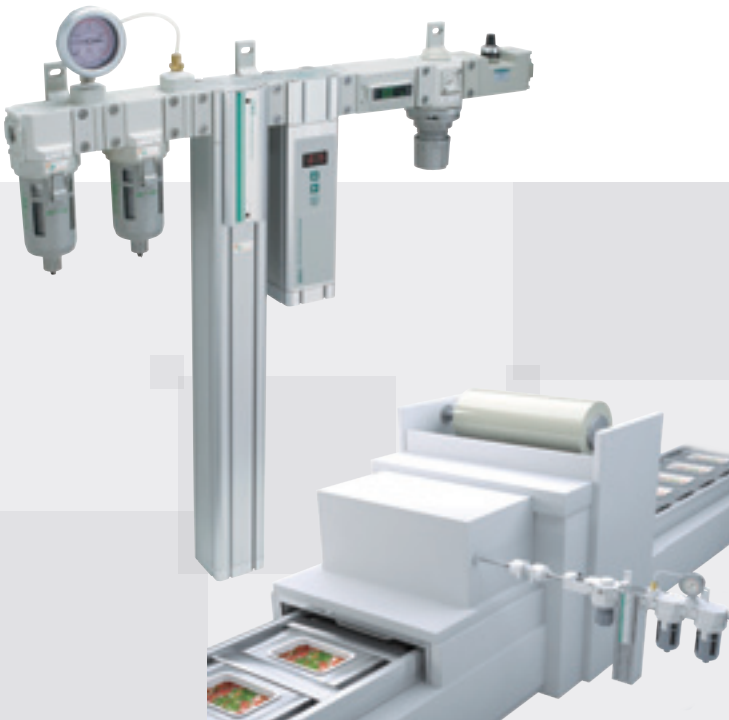
■ Food grade packaging machine Eco Blister CFF Series

Blister packaging machinery for foodstuffs pursues food safety, hygiene, human safety, and friendly use. Suppresses wasteful use of packaging resources to an absolute minimum, contributing to reduction of waste.



■ Nitrogen Gas Extraction Unit NS Series

Nitrogen gas can be extracted easily from compressed air. To prevent the oxidative degradation of food, a nitrogen gas extraction unit is used to extract and fill nitrogen-enriched gas, extending the shelf-life of foods.



■ Antibacterial/Bacteria-removing filter SFC Series

The non-woven fabric element uses a silver-based anti-bacterial agent and a hollow fiber membrane with removal rate 99.999999% to comprehensively suppress and remove bacteria. Compressed air that has been filtrated with an anti-bacterial/bacteria removing filter is used to contribute to removal, etc., of food deposits, water drops, and crumbs.




Contribution to **improved agricultural productivity**

■ Automatic watering control systems

Watering system components ideal for automation of water supplies, watering and irrigation. Realizes economic watering in glass and vinyl greenhouses and other institutional horticulture, as well as orchards, farmlands, etc., in tune with the era of power and energy conservation to protect the environment.








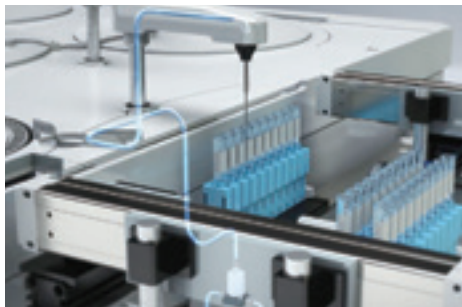
Contribution to **stable supply** of pharmaceutical products

Contribution to world **automation**



### ■ Components for Life Science MP Series

Components for Life Science contribute to artificial ventilators, biochemical analysis, sterilization, dialysis, dental treatment, and many other devices. They control various fluids at high purity from collection through dispensing, cleaning, and disposal, with metal-free or high corrosion resistance, to support the medical field.



### ■ Pharmaceuticals packaging machine Eco Blister FBP Series

Blister packaging machinery for pharmaceuticals packages tablets safely and securely, while eco-friendly with reduced air consumption/electric power. Improves operability, workability, safety, maintainability, and cleaning, while eliminating defective tablets or foreign matter contamination in the packaging process through an inline automatic inspection system which serves to control quality and realize stable pharmaceuticals supply.



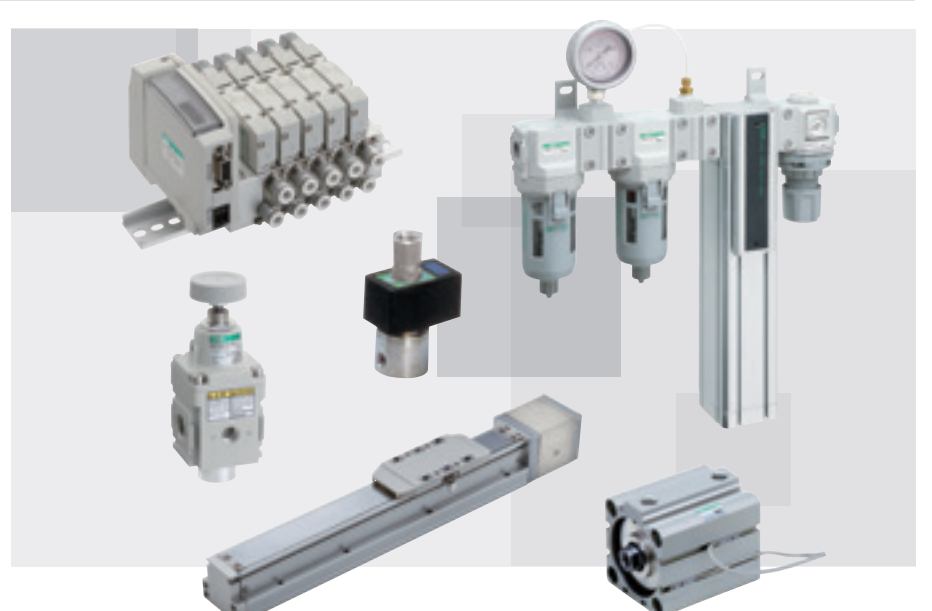
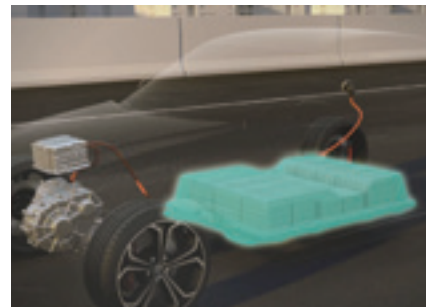


Elimination of **air pollution** through conversion to EVs



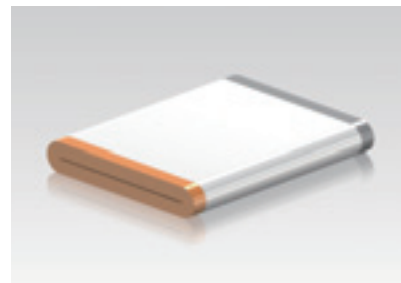
### ■ Components for rechargeable battery manufacturing process P4 Series

Comprehensive support for rechargeable battery manufacturing, from electrode manufacturing to packaging. Within each manufacturing process, support such as dust and dust generation countermeasures, ultra-dry environments, and restricted materials contribute to production safety in the rechargeable battery manufacturing process.

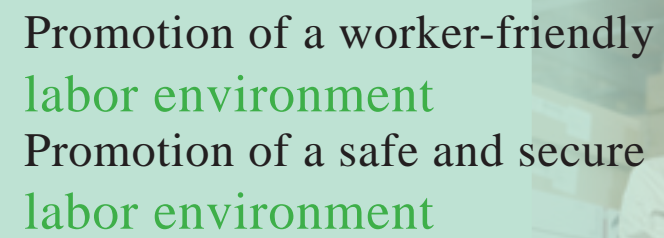


### ■ Lithium-ion battery winding machine PEW Series

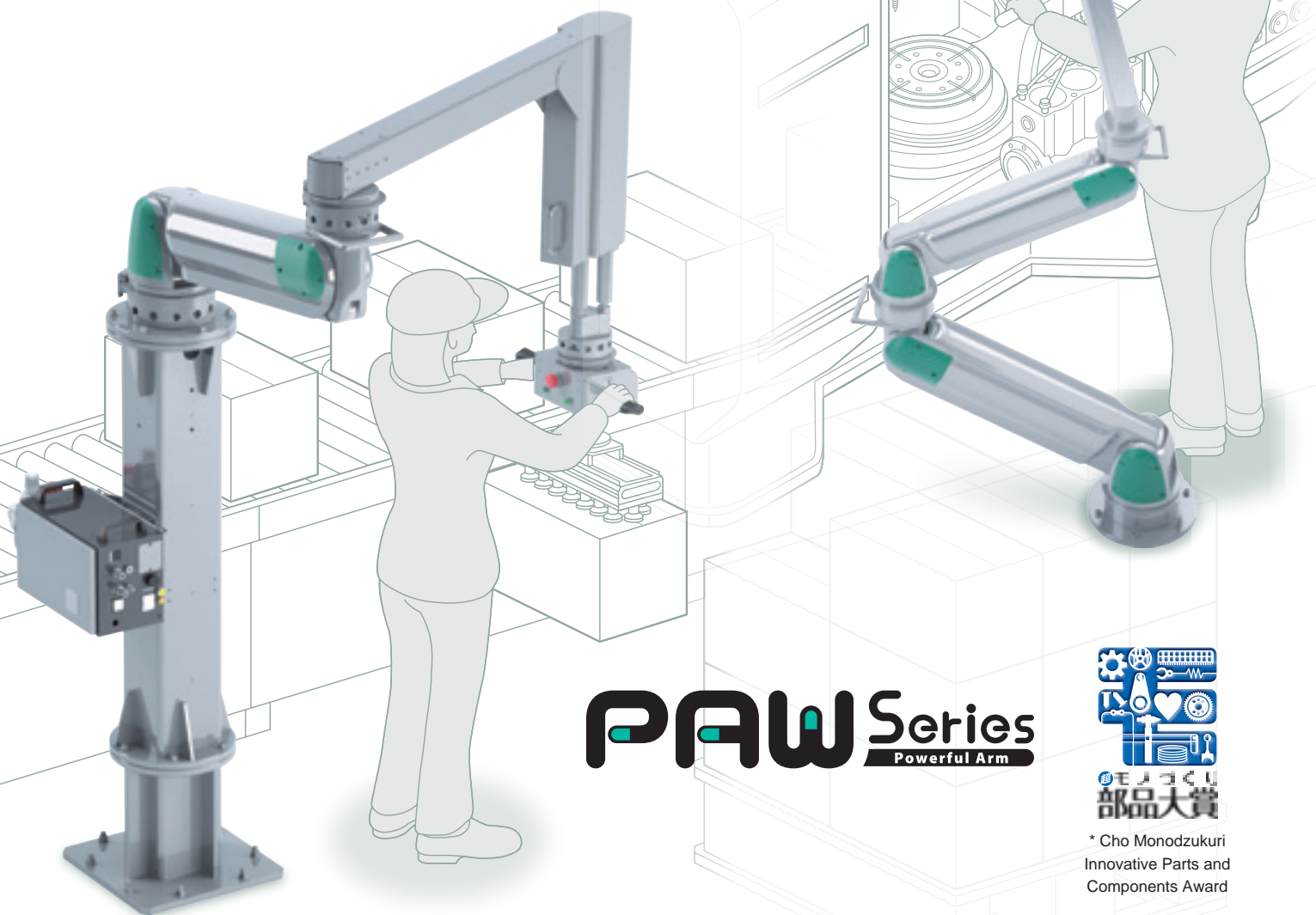
Automated machinery for high-speed, high-precision manufacturing of the lithium-ion batteries used in cellphones, automobiles, etc. Through integrating the servo control technology developed over long years with our own in-house pneumatic components and cam technology, we guarantee battery quality and safety.



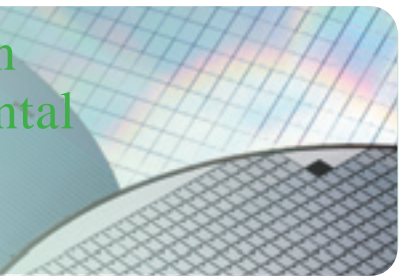
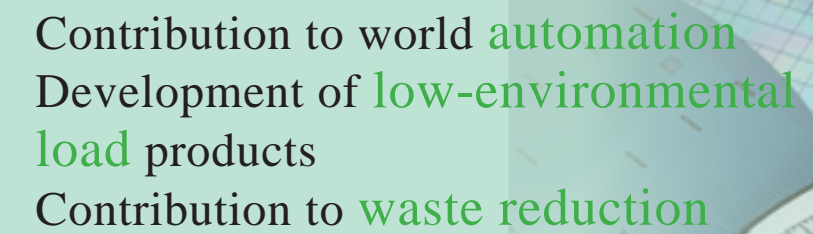




A Human Assist product that contributes to creation of a workplace environment where anyone can work safely and easily, based on the concept of "solidarity with workers." In processes handling heavy objects, such as cardboard box transport or switch-out of metal molds for machine tools, etc., a reduction of workplace loads can lead to improvement in general line productivity.



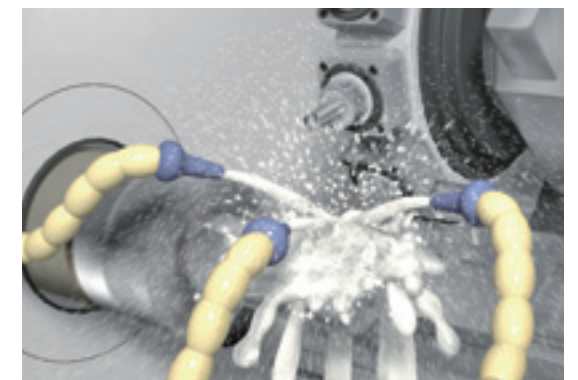
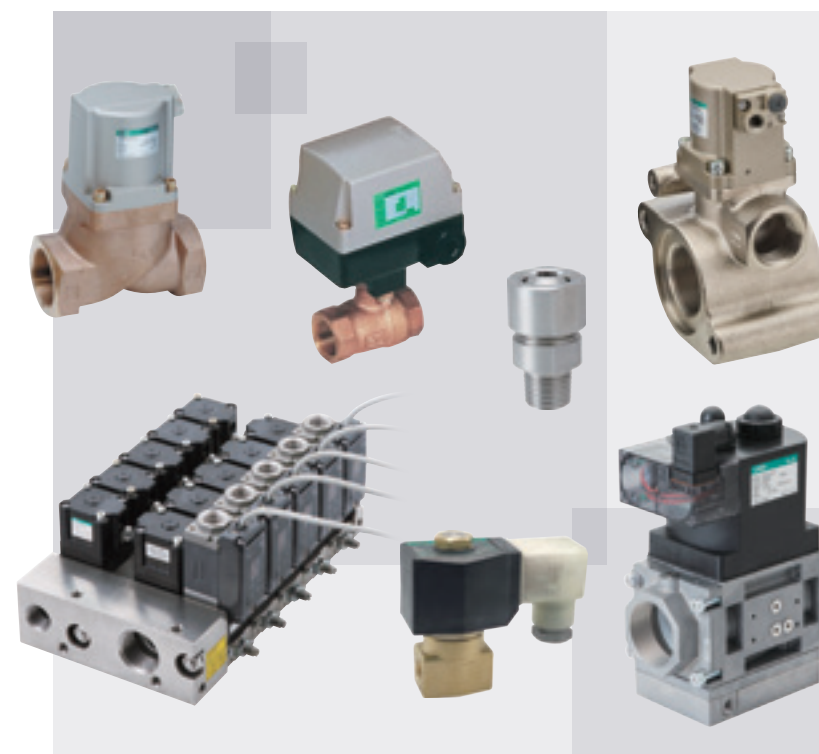
\* Cho Monodzukuri  
Innovative Parts and  
Components Award



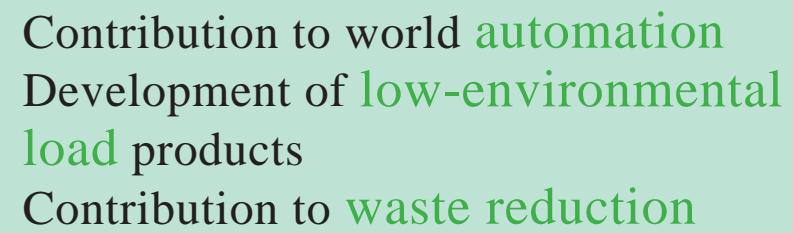
The use of wide variations covering supply systems to exhaust systems for chemical liquid, gas and vacuum control and other semiconductor/liquid crystal manufacturing realizes unprecedented process control. Contributing to clean support throughout manufacturing environments, production equipment, and devices in use, we support the electronic device industry as it continues to progress.



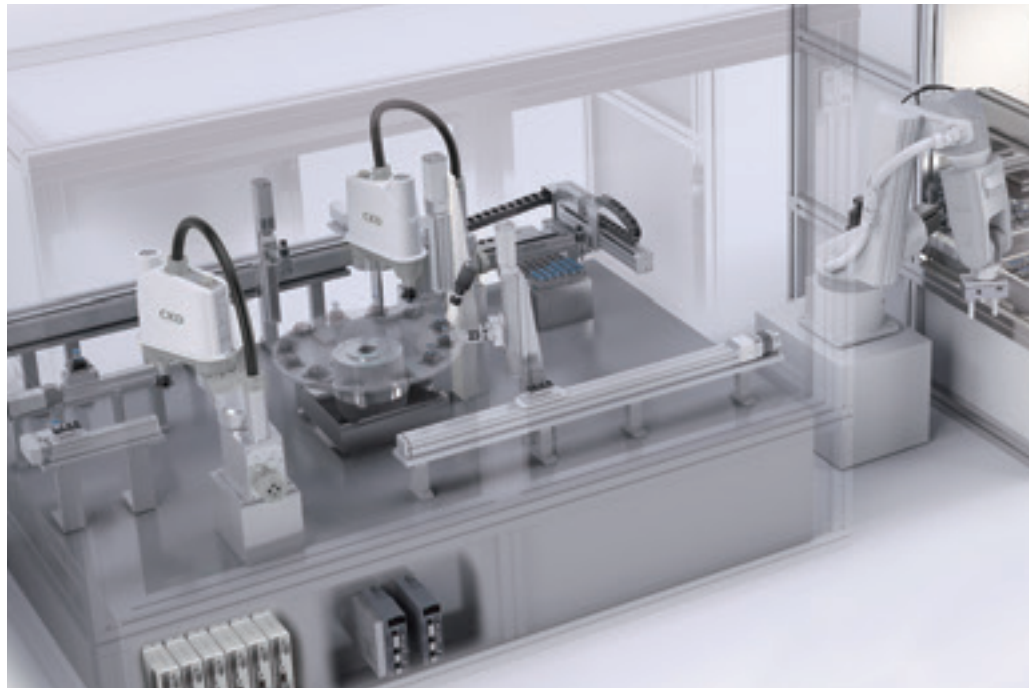
Components for optimum control of water/air/gas/steam/oil and other fluids, spanning a broad range of applications from all types of cleaning equipment to water processing systems and other environmental components. A wide variety of products with high quality, environmental countermeasures, and awareness of energy saving supports the industries which enhance our lives.







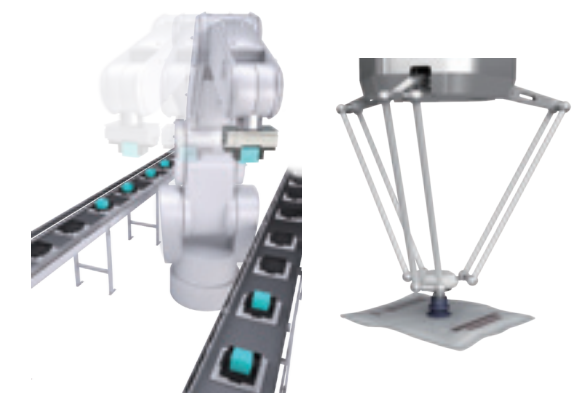
Electric actuator that drives at high speed and precision the "grab," "move," "rotate" and other actions essential for automation of manufacturing plants for automobiles or daily necessities. The supply of components optimized for facilities with ongoing robotization, environmental countermeasures, and energy saving supports automation.



This pneumatic gripper is dedicated for collaborative robots that share work space with other people without a safety fence and allows for various kinds of work. Contributes to increased productivity through the introduction of collaborative robots and automation of manufacturing sites.

[illegible]

Handling Components corresponding to various power sources such as Electric, Air and Vacuum that can be used for "Gripping". Supports essential robot peripheral devices for equipment where automation needs are ever increasing .

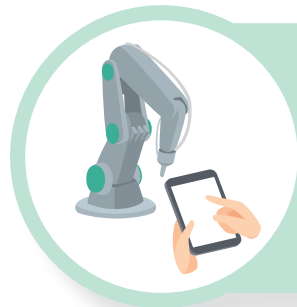


***ABSODEX***



# ROBODEX





Contribution to world automation  
Development of low-environmental  
load products  
Contribution to waste reduction



■ High-durability components HP Series

High-durability components such as long service life cylinders and environmental resistance cylinders enable stable operation due to their long service lives, preventing production losses caused by suspension of equipment operations after device breakdown or by equipment maintenance time. To improve productivity in places with high usage frequency and high-stress environments, the series serves to create a "production facility that never stops" and "achieves stable operation."

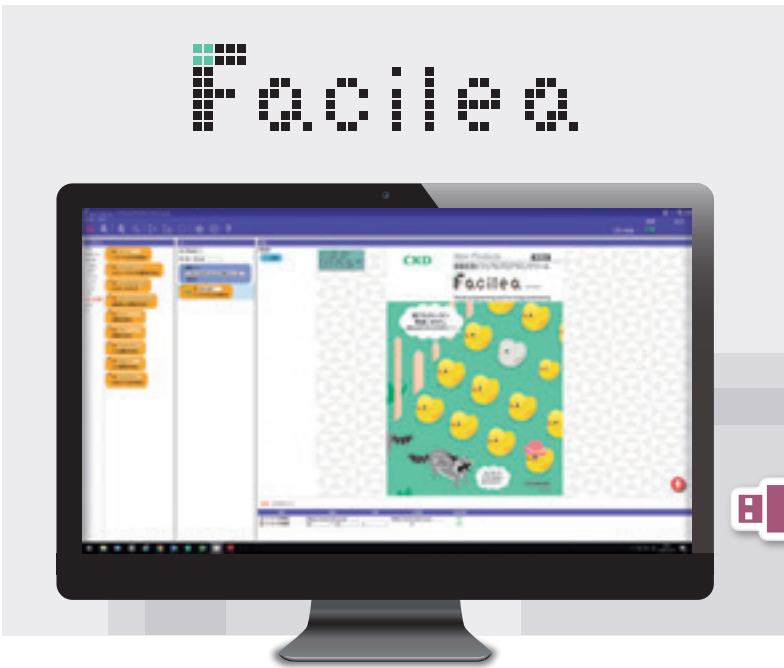


■ Sensors

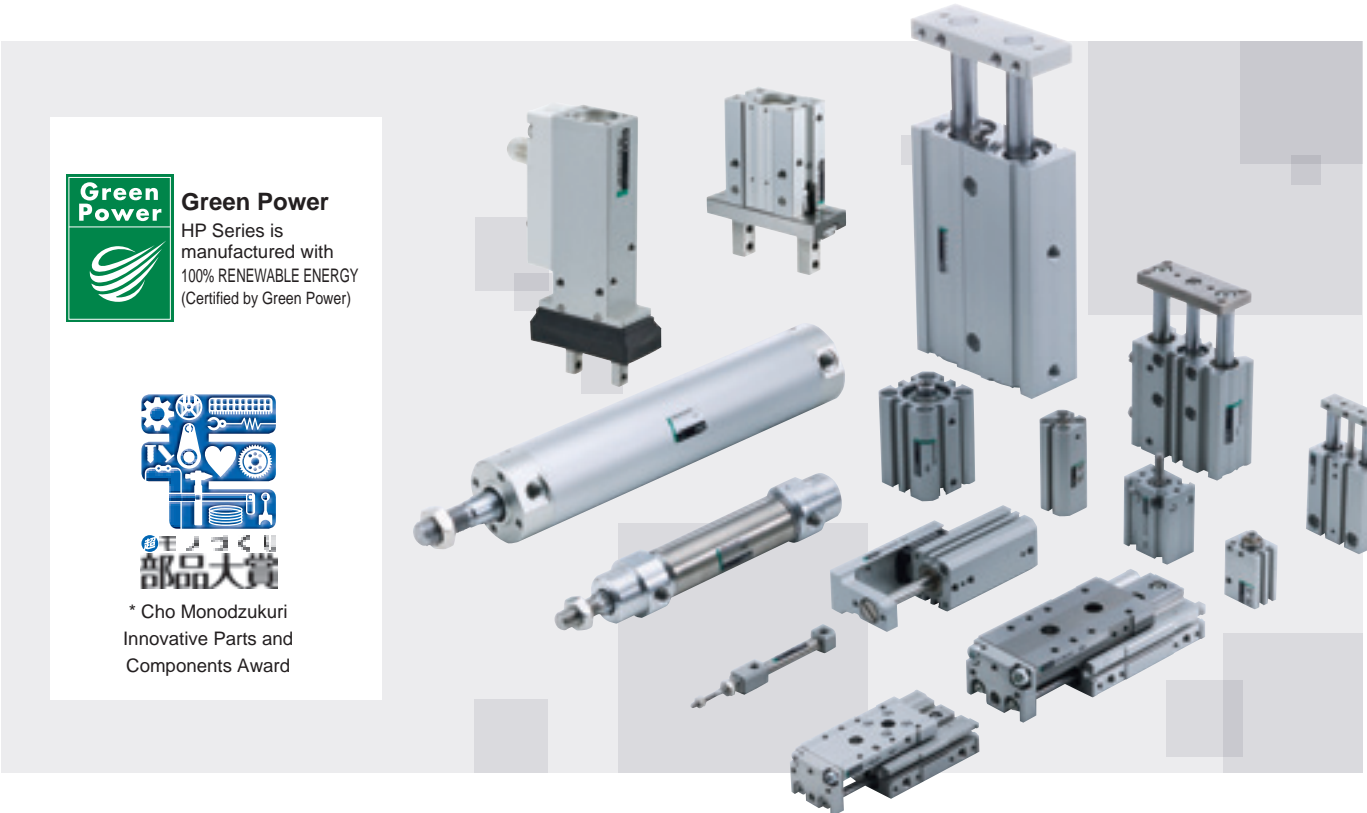
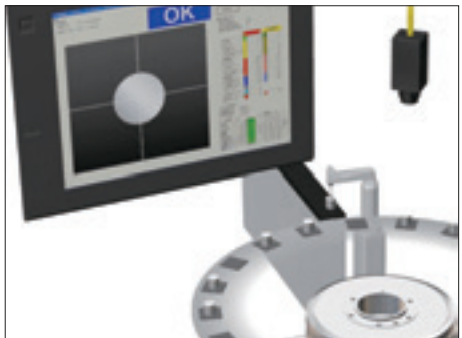
Enabling status monitoring (visualization), breakdown detection and remote operation through communication/sensors, in accordance with the spread of production facility automation and IoT. Improves plant productivity, quality and equipment operating rate to contribute to the realization of the Smart Factory.



■ Image Processing Visual Programming Tool Facilea



Programming tool that enables anyone to perform image processing with simple operations and settings. Realizes increased production efficiency on automated lines through improving the quality and speed of product inspections of dimension, position, color identification, etc., as well as barcode reading and individual entry checks.





# Initiatives in ESG Areas

"With creative knowledge and technology, we work to revolutionize fluid control and automation to contribute to the creation of a prosperous society." With this as our corporate philosophy, we perform corporate activities from a long-term perspective, with consideration for changes in the societal situation and business environment. In addition, with consideration for our influence as a global corporation on society and the company, we approach critical issues (materiality) to create economic value and societal value, promoting initiatives on the critical topics of Environment/Social/Governance.

## Environment

### Development of low-environmental load products

We are engaged in the development of ecological products, considering that consciously setting environmental level goals from the development and planning stage is a necessity for creation of products at a higher environmental level.

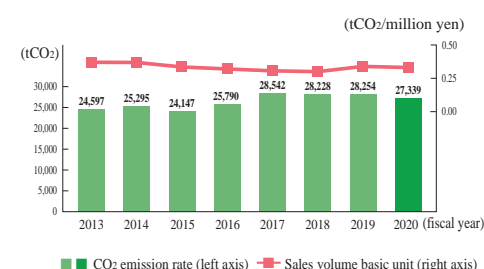


### CO<sub>2</sub> emission suppression

We continually implement improvement activities such as the introduction of energy-saving facilities and construction of energy-saving lines.

Compared with FY2013, sales volume basic unit

## 17% reduction

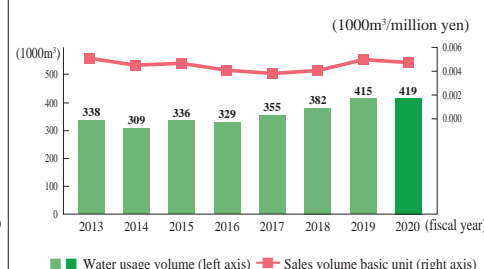


### Reduction of water usage volume

We effectively use water resources in plants, and are engaged in improvement of usage processes and water economization.

Compared with FY2013, sales volume basic unit

## 7.5% reduction

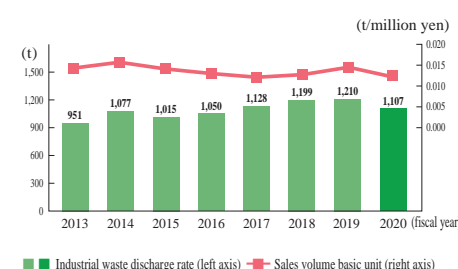


### Prevention/reduction of waste generation

We manage the sorting, discharge, storage, and consignment processes for industrial waste generated in plants, and are engaged in resource recycling.

Compared with FY2013, sales volume basic unit

## 13% reduction



\*The Tohoku Plant, which was completed in January 2019, is included in the results for FY2018.

\*Scope of data aggregation: Domestic plants and sales offices for CO<sub>2</sub> emissions, domestic plants for water consumption and industrial waste emissions.

### Products that emphasize safety and quality

The QC patrols conducted by the president and executives include direct inspections of the quality status at manufacturing sites in each production plant, committing ourselves to quality.



### Taking on new businesses/new markets

We continue to venture into new sectors previously considered unrelated to automation. One example is our entrance into the agricultural sector. At present, CKD is cooperating with major solution providers to develop IoT solution services for agriculture.



## Social



### Promotion of health management

Given that employee health is an important management issue, we have issued a "CKD Health Management Declaration," collaborating with health insurance associations and labor unions to boost health awareness among employees, and are working to create a workplace that is healthy for both mind and body and encourages enthusiastic work.



Certified as a Health & Productivity Management Organization 2021 (Large enterprise category)

### Human resource development

Realization of human resource development that encourages capabilities

To build a "corporate culture with emphasis on human resources," we are implementing a workplace that encourages development of global human resources, and challenges to individual self-realization.



Overseas trainee system



Career plan sheet

### Diversity promotion

Initiatives toward promotion of women's participation

We nurture a corporate culture where each and every employee can make their presence felt, through developing an environment where women can demonstrate their strengths and continue to participate.



Nursery room opened at Headquarters Komaki Plant in April 2018

Promoting the Active Participation of Foreign Employees

We continue to recruit foreign nationals and presently have 36 employees working in our facilities in Japan. (As of March 31, 2020)

Broadening the Re-employment System

While maintaining the current re-employment system, we have also established a lifelong employment system that allows employees to work without age limitations.

### Contribution to regional societies



CKD forest creation activities



Environmental conservation activities in Thailand

### Next-generation development



Science classes that learn from manufacturing

## Governance



### Corporate governance

To improve our sustainable corporate value, we strive for assurance and enhancement of the execution of corporate governance from the perspectives of "assurance of management transparency and soundness" and "suitable cooperation with stakeholders."

### Compliance

We strive to maintain high ethical views, and practice corporate activities that are just and legal in accordance with conscience. In addition, we are working to regulate and thoroughly establish standards of behavior for each employee in their daily lives.



Implementation of compliance training





**CKD Corporation**  
<https://www.ckd.co.jp/en/>



#### Automated machinery and equipment

Headquarters/Plant	〒 485-8551	2-250 Oujii, Komaki City, Aichi
		TEL : 0568-77-1111 FAX : 0568-77-1123
Sales Administration Department	〒 485-8551	2-250 Oujii, Komaki City, Aichi
		TEL : 0568-74-1316 FAX : 0568-77-3412
Tokyo Branch Office	〒 105-0013	Bunkahousou Media Plus 4F, Hamamatsu-cho 1-31-1, Minato-ku, Tokyo
Automated Machines Sales Dept.		TEL : 03-5402-3626 FAX : 03-5402-0121
Nagoya Branch Office	〒 485-8551	2-250 Oujii, Komaki City, Aichi
Automated Machines Sales Dept.		TEL : 0568-74-1357 FAX : 0568-77-3317
Osaka Branch Office	〒 550-0001	Tosabori 1-3-20, Nishi-ku, Osaka
Automated Machines Sales Dept.		TEL : 06-6459-5773 FAX : 06-6446-1945
Overseas Sales Dept.		2-250 Oujii Komaki, Aichi 485-8551, Japan
		TEL : 0568-74-1336 FAX : 0568-74-3412

#### Component products

Headquarters/Plant	〒 485-8551	2-250 Oujii, Komaki City, Aichi
		TEL : 0568-77-1111 FAX : 0568-77-1123
Sales Division	〒 485-8551	2-250 Oujii, Komaki City, Aichi
		TEL : 0568-74-1303 FAX : 0568-77-3410
Tokyo Branch Office	〒 105-0013	Bunkahousou Media Plus 4F, Hamamatsu-cho 1-31-1, Minato-ku, Tokyo
		TEL : 03-5402-3620 FAX : 03-5402-0120
Osaka Branch Office	〒 550-0001	Tosabori 1-3-20, Nishi-ku, Osaka
		TEL : 06-6459-5770 FAX : 06-6446-1945
Overseas Sales Dept.		2-250 Oujii Komaki, Aichi 485-8551, Japan
		TEL : 0568-74-1338 FAX : 0568-77-3461

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