CKD Report 2019

Integrated Report 2019





Pioneering the Future with Automation

Having remained ahead of the needs of the times since its inception as a pioneer in automation technology, CKD has developed a variety of products centered on automatic machinery and component products. The technologies for these products have been cultivated and are continuing to evolve in keeping with the times. Boasting an extensive product lineup, CKD possesses a wide range of supporting technologies that extend across industrial fields.

In the years to come, we are aiming to become a total factory automation (FA) worldwide supplier by integrating technologies that have been refined over many years in both automatic machinery and component products.



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Disclaimer

Based on information currently available to the Company and certain information deemed reasonable, for example, the forward-looking statements with regard to the business forecasts contained in this report are not something that we as a company guarantee. Furthermore, actual results may differ significantly due to a variety of contributory factors.

About This Report

- In addition to the information that has previously been covered in CSR reports, this publication aims to provide all stakeholders with an understanding of the overall picture at CKD. Published as an integrated report, this report brings together summaries of financial information, such as medium- to long-term management strategies, value creation and business performance as well as non-financial information, including that relating to the environment, society and governance (ESG).
- This edition is based on international integrated reporting frameworks, such as the International Integrated Reporting Council (IIRC) and Global Reporting Initiative (GRI) standards.
- In the years to come, we will use integrated reports as a tool to communicate with our stakeholders to make social contributions through our business, to realize a sustainable society and to improve corporate value.

Communication Tools



Integrated Report

We compile and publish in areas such as performance highlights, messages from the president, business overviews. strategies and future directions, past performance trends, and financial information.



Corporate Governance

(Only available in Japanese) Contains the status of corporate governance.



Securities Report

(Only available in Japanese) Reports on the quarterly and annual results for the fiscal



CSR Report

(Only available in Japanese) Reports on the corporate activities of the CKD Group. Issued as an integrated report instead of the previous CSR Report.



Materials Related to **Business Results**

Posts quarterly reports and financial briefing materials.



the CKD website.

CKD Technical Journal

(Only available in Japanese) Introduces technical information about the technologies and the results of research and development that have been accumulated over many years through the resolution of challenges and problems related to innovating automation.



General Meeting of Shareholders Materials

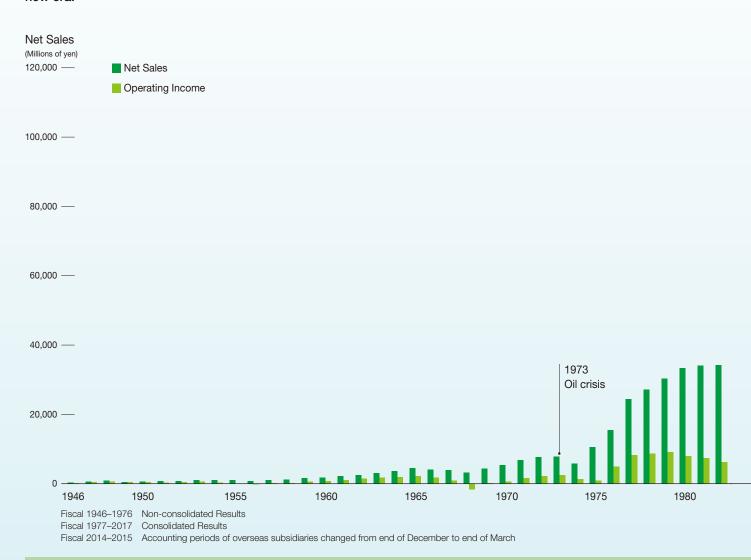
Contains materials relating to the General Meeting of Shareholders, such as convocation and resolution notices.



URL: https://www.ckd.co.jp/english/ir/

Continually Evolving CKD

Having been engaged in the research and development of automation and fluid control technologies for more than 75 years since its inception in 1943, CKD boasts a wide variety of products. These products have penetrated markets widely and are contributing to the realization of an affluent society and the creation of a new era.



Technologies and Management

1943

Established as Japan





Changed company name to Chukyo Electric Co., Ltd.

1947 Vacuum tube

manufacturing equipment Manufacture commenced as our first automatic machine



packaging machine Having entered the packaging market with the development of ampule filling machines developed from

vacuum tube manufacturing equipment, we developed strip packaging machines



Functional parts later become major pillars underpinning our company

AC solenoid development

Commenced manufacture

of our first functional parts

developed for automatic

1956

machinery.

Cylinder development Commenced production of cellular cylinders, the origin of pneumatic cylinders

1961

Plant relocated to city of Komaki, Aichi Prefecture



1963

Pneumatic index table Developed pneumatic index table with combined barrel cams and air cylinders

1968

Electrolytic capacitor element winding machine Developed electrolytic capacitor element winding machine because our functional parts are used in machines that manufacture electrolytic capacitors

Changed company name to CKD Corporation

1984

Established M-CKD PRECISION SDN. BHD. in Malaysia as first overseas sub-



Fine system components

Developed our first product for semiconductor manufacturing equipment



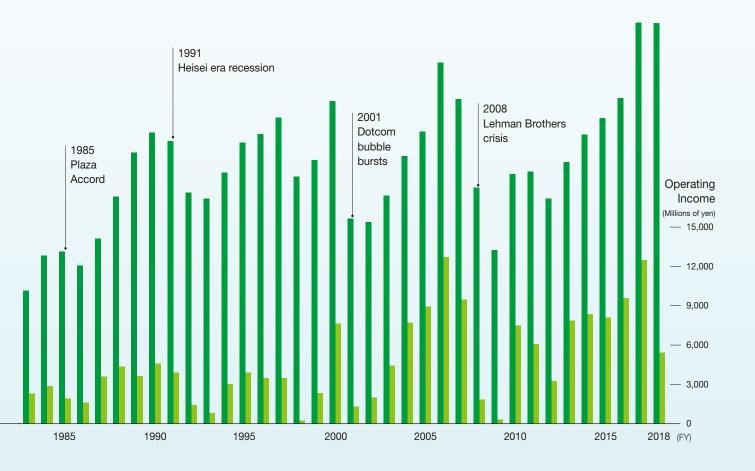
D 2021

Fiscal 2016–2018 Third Medium-Term Management Plan Challenge CKD 2018

Fiscal 2013–2015 Second Medium-Term Management Plan GLOBAL CKD 2015

Fiscal 2010–2012 First Medium-Term Management Plan NEW CKD 2012





1985 Established CKD USA CORPORATION



1988 Established CKD THAI CORPORATION LTD.



1989 Established CKD SINGAPORE PTE. LTD.

1992

3D solder paste inspection machine

Incorporated image processing technology from the 1970s, and developed equipment capable of high-speed 3D inspection via 1D and 2D image processing



2001

Established CKD (Shanghai) Corporation in China

2002

Established CKD Korea Corporation in South Korea

2003

Established CKD (China) Corporation

2007

Established TAIWAN CKD CORPORATION

2012

Established CKD Field Engineering Corporation as automatic machinery service company

2013

New CKD (China) Corporation plant completed

2014

Established PT CKD TRADING INDONESIA
Established CKD VIETNAM

ESTADISHED CKD VIETNAM
ENGINEERING CO., LTD.
ESTADISHED PT CKD
MANUFACTURING INDONESIA

2015

Established CKD MEXICO, S. de R.L. de C.V. Established CKD India Private Limited

2016

Established CKD Europe B.V. in the Netherlands as our 14th overseas subsidiary

2017

Integrated CKD Nikki Denso Co., Ltd. business

2019

Tohoku Plant completed in Ohira-mura, in Kurokawa district of Miyagi Prefecture



Tohoku Plant

Corporate Value Creation Model

Investing capital in each focus domain, CKD works on technological innovation and value creation to resolve various social issues through its automation and fluid control business domains. Going forward, we will continue to contribute to the realization of an affluent society, as outlined in our corporate philosophy, without ending the cycle of social value creation.

Social Issues

Business Domains

- Rapid changes in business environment
- Increasing sophistication/diversification of manufacturing (monozukuri) due to
- Increasing need for automation
- Increasing demand for unit systems due to equipment standardization and labor shortages
- Collaboration between humans and robots, fully unmanned factories, full utilization of Al
- Increasing pace of electrification
- Burgeoning demand for semiconductors

ESG Fields

- Climate change
- Environmental pollution
- Energy problems
- Depletion of water resources
- Waste management
- Labor shortages
- Promotion of diversity

Inputs

Manufacturing capital

Financial capital

Human capital

Intellectual capital

Social and relationship capital

Natural capital

Focus Domains

Food

Pharmaceuticals

Rechargeable

batteries

Electronic components



Machine tools

Semiconductors

FPD ____

Core Technologies

Automation technologies

Fluid control technologies

Corporate Philosophy

With creative knowledge and technology, we shall innovate fluid control and automation, and thus contribute to building a rich society

Materiality

Social issues
CKD has aimed
to solve
P26











President's Message



In 2016, having formulated our 10-year long-term management vision, CKD is strengthening efforts with an eye on 2025 to respond to market environments that are set to undergo significant changes in the years to come. As a pioneer in fluid control and automation, we are aiming to become a Total FA Worldwide Supplier in 10 years while realizing automation for customers in Japan and overseas. We believe that realizing our 10-Year Vision will contribute to the creation of an affluent society, meet the expectations of our shareholders and lead to the happiness of our employees and their families. To realize a sustainable society, we will also continue to grow into a "people-friendly company" and make efforts to contribute to society through our businesses.

CKD's Value Creation Process

Based on our corporate philosophy, "With creative knowledge and technology, we shall innovate fluid control and automation, and thus contribute to building a rich society," we are identifying and addressing materiality among social issues from the perspective of CKD and social importance. Spanning a wide range of industries that require automation and labor savings—such as food, pharmaceuticals, rechargeable batteries, electronic components, automobiles, machine tools, semiconductors and FPDs—our customers are aiming to resolve problems through fluid control and automation technologies.

The roots of value creation lie in the Company being founded on automatic machinery, where the necessary components were grown to form businesses. This spirit is being handed down to this day. For example, we are producing automatic machinery for food and rechargeable batteries and offer a wide range of products—such as the pioneering FP Series components for food production equipment and P4 Series components that are compatible with rechargeable batteries—by quickly incorporating the demands required into equipment. In this way, our automatic machinery and the equipment business are two halves of a whole and are contributing to the creation of an affluent society.

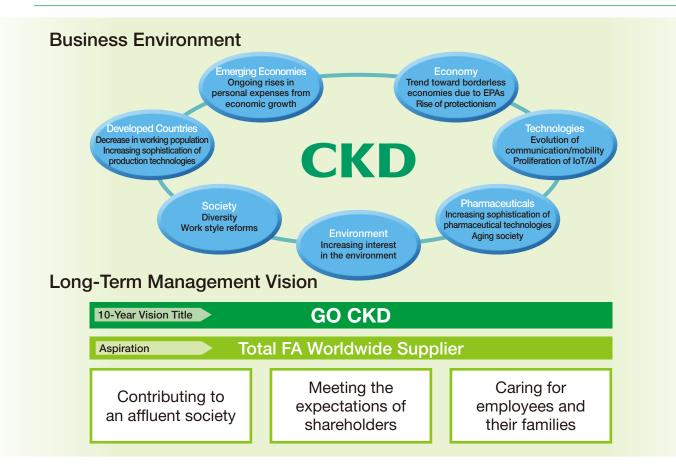
With regard to the Sustainable Development Goals (SDGs), I would like to promote activities so that the 17 goals and 169 targets can be fully understood, incorporated into the business, and lead to the resolving of social issues.

Fiscal 2018 Results

The consolidated financial results for fiscal 2018 include net sales of ¥115.7 billion (edging down 0.03% year on year), operating income of ¥5.4 billion (down 56.5%), ordinary income ratio of 4.7% (down 6.1 points), and ROE of 6.0 % (also down 6.1 points).

Sales grew strongly in the first half of fiscal 2018 but declined in the second half due to a decrease in semiconductor capital investment and a slowdown in Chinese investment in automation. Profits decreased due to the costs for transitioning to the new core system, as well as to the capacity expansion costs to cope with future increases in production.

Since the market environments in the first half of fiscal 2019 have been weaker than expected at the beginning of the fiscal year due to the impact of U.S.-China trade friction and delays in semiconductor capital investment, we revised our earnings forecast at the end of the first quarter. In addition to strengthening our foundations, over the medium to long term we will promote initiatives for new businesses to firmly capture future demand that can be expected to expand the market. These include capital investments in automation for labor saving, 5G communications as well as further investment geared toward the more widespread use of electric vehicles (EVs), the demand for which is increasing.



Looking Back on Challenge CKD 2018

Formulated in 2016, the Third Medium-Term Management Plan was deemed the first three years to realize our 10-Year Vision. The thinking behind its title, Challenge CKD 2018, was to respond quickly to changes and lead to significant business opportunities. Cumulative net sales over the three years from fiscal 2016 to fiscal 2018 were ¥325.4 billion, an increase of 31% compared with the result of the Second Medium-Term Management Plan.

In addition to the development of products that can contribute to labor saving in both the pharmaceutical industry and in the packaging machinery sector of the automatic machinery business, we commenced sales of service products, such as preventive maintenance. In the food market, we developed new forms of packaging and initiated sales of packaging machinery and special materials as a set. In industrial machinery, we captured the strong demand from the automobile industry that led to the sales of 3D solder paste inspection machines and winding machines for lithium-ion batteries.

In the equipment business, to challenge both India, where growth is expected, and the European market, where there is great demand, we established local subsidiaries in each region. In the United States, a technology development base was created in Silicon Valley, where cutting-edge industries are concentrated. In the business alliance with Nikki Denso Co., Ltd., sales were greatly increased by leveraging mutual strengths. Among our initiatives, I have a special affection for the Tohoku Plant. As I have seen the damage wrought by the Great East Japan Earthquake, I felt a strong desire to build a plant in the Tohoku region to support recovery. I am very happy that, after eight years, we were able to complete the Tohoku Plant in January 2019. The Company's first new plant in Japan in 34 years, it is the first one located outside the Tokai region. Based on the concept of a "human-friendly plant," we remained aware of the necessity to provide environments that are conducive to work. The new plant is equipped with a state-of-the-art automatic warehouse, automatic assembly equipment and clean rooms. In addition to the decentralization of production plants using BCP, we expect to meet customers directly and reduce the distances between us.

Medium-Term Management Plan

Build-up CKD 2021

Basic Policy

Evolve products from being best in Japan to becoming globally recognized products

Challenge new business activities and markets

Strengthen our business foundations

Basic Requirement

Human resource development

Basic Policy 1

Evolve products from being best in Japan to becoming globally recognized products

Strengthen pharmaceutical products packaging machine business in China







New production building at our

Globally expand fluid control components business





Technical Center

for Chinese market

Tohoku Plant

New Medium-Term Management Plan Build-up CKD 2021

Geared toward the achievement of our 10-Year Vision. the Fourth Medium-Term Management Plan, which began in April 2019 and is called Build-up CKD 2021, is designed to build the foundation that will lead to the future of the Company while growing strongly for three years. Utilizing the newly introduced core system at the new plant in Tohoku and the new production building in China, we will promote activities to raise productivity. To form the core of our activities, we have adopted three basic policies: evolve products from being best in Japan to becoming globally recognized products; challenge new business activities and markets; and strengthen our business foundations. Believing that human resources are most important for the Company's continued development, we will develop strategic and systematic human resource development while creating environments in which national staff members can play active roles.

Evolve Products from Being Best in Japan to **Becoming Globally Recognized Products**

Developing products with a characteristically high market share in Japan, we will deploy those products in overseas markets while aiming for them to become the best in the world. In the automatic machinery business, we will work on machines developed specifically for the Chinese market and the use of the new production building at our China Plant to expand sales of our mainstay pharmaceutical packaging machines in the Chinese market. In the components business, we will expand fluid control equipment sales not only in Japan but around the world by launching the full-scale operation of the Tohoku Plant. In the United States, we will promote product planning and development closely related to customers by strengthening the functions of the Technical Center. Due to upcoming competition in the European market, an alliance will be an effective means to actively promote our products. In this way, we will develop products and deploy strategies tailored to each region and country, and promote activities rooted in the local area while incorporating the culture and human resources of that nation.

Basic Policy 2

Challenge New Business Activities and Markets

Integrate with partners, strengthen electric motion products business



- Development of machines compatible with new forms of packaging
- Expand business domains by means of new technologies

Basic Policy 3

Strengthen Our Business Foundations



- Establishment of overseas subsidiary Strengthening of development function
- ▲ Local production commenced ★ Sales network expansion
- Strengthening of control function

Challenge New Business Activities and Markets

We will take on many challenges to launch new businesses and develop new markets. The most important new business is the electric motion products business. Whereas pneumatic components are compact and powerful, electric components have different features that enable high precision and arbitrary position control. As we have both pneumatic and electric components (linear and rotating) we are able to cater to a variety of customer needs. To strengthen the electric motion products business we will use the know-how accumulated in pneumatic components and strengthen the utilization of synergistic effects in development and sales with CKD Nikki Denso Co., Ltd. We will also contribute to the creation of an affluent society by means of new technologies, such as the development of machines that support new packaging formats for the food industry, and assistive devices (PowerArm) to realize safe and comfortable working environments.

Strengthen Our Business Foundations

Under the previous Medium-Term Management Plan, we have been enhancing our production capacity and expanding our sales network, mainly in East Asia and ASEAN. During the course of the new Medium-Term Management Plan, we will strengthen local development functions in China and the United States while commencing local production in India and Italy. We will also establish new local subsidiaries in Germany and Italy, thereby strengthening our sales base.

To increase productivity, we will promote automation and loT while strengthening production methods that do not rely on people. Utilizing the newly introduced core system, we aim for more planned production activities. We will also actively incorporate digital technologies, such as information and communications technology (ICT) and artificial intelligence (AI), to improve work efficiency.

To resolve social issues and create an affluent society we have started activities for the SDGs that are required all over the world. We will do our utmost to do what we have to do for the children of the future.

Financial/Capital Strategies

Financial Strategy

The three-pillared basic policy of the financial strategy comprises: (1) improvement of corporate value, (2) the building of a sound financial base, and (3) shareholder return. In the fiscal year under review, capital investment for the purpose of expanding production capacity increased. In addition, interest-bearing debt increased as a result of raising capital investment, bringing the equity ratio to 58.6%. As a result of investing in the next generation, however, the net D/E ratio was +0.20 times and we are maintaining a sound financial position.

	FY Ended Mar. 2018	FY Ended Mar. 2019	YoY Comparison	Comment
Total assets	¥130.8 billion	¥136.9 billion	+¥6.0 billion	Business scale expanding
Total shareholders' equity	¥79.9 billion	¥80.3 billion	+¥0.3 billion	Increased by retaining part of net income
Cash and cash equivalents	¥14.7 billion	¥12.0 billion	-¥2.7 billion	Despite an increase due to interest-bearing debt, there was a decrease due to a decrease in working capital and an increase in capital investment
Interest-bearing debt	¥11.6 billion	¥28.6 billion +¥16.9 billion Increased mainly due to equipment	Increased mainly due to investments in plant and equipment	
Shareholders' equity ratio	61.1%	58.6%	-2.4 points	Decreased due to an increase in interest-bearing debt
Net D/E ratio	-0.04 times	+0.20 times	+0.25 points	Positive position maintained due to an increase in interest-bearing debt
ROE	12.1%	6.0%	-6.1 points	Declined in accordance with a decrease in profit

ROE

Strategically advancing investment based on our 10-Year Vision and the Medium-Term Management Plan—to challenge new business activities and markets while securing profits based on achieving the targets in the management plan of each business—we will strive to improve corporate value with the goal of stably maintaining ROE of 9% or more.

Building a Sound Financial Base

We are building a stable financial base that can flexibly respond to growth investments for business expansion. Since we are an equipment-related company and are influenced by economic conditions, we have set a capital adequacy ratio of 60% or more as the standard for optimal financial leverage. Not possessing excessive amounts of cash on hand, we raise funds on the basis of cost and convenience of procurement based on our management plan. External borrowing is managed so that the net D/E ratio remains at around 0.3 times to enable financial soundness to be maintained while we work to diversify financing.

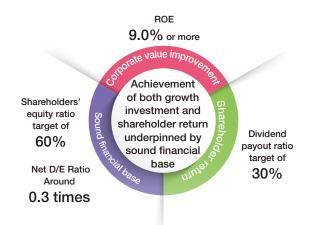
Shareholder Return Policy

The basic policy involves working to improve corporate value by investing in facilities and R&D to enhance the management base and further expand the business while providing stable dividends to shareholders.

Since we are pursuing a growth strategy based on our 10-Year Vision and the Medium-Term Management Plan, the plan is to mainly utilize reinvestment for capital investment and R&D. As a reference, the dividend payout ratio is set at 30% to ensure stable returns to shareholders after securing sufficient capital for growth investment.

Stockholdings

As a general rule, stockholdings are not maintained unless it is determined that they will contribute to the enhancement of our corporate value from the standpoints of business strategy, business alliances with business partners, and the maintaining and strengthening of business relationships. With regard to stocks of lesser significance, these will be sold in stages, taking into account the Company's situation. Should it be deemed necessary to maintain stockholdings for reasons such as business strategy, business alliances and the maintaining and strengthening of business relationships, the Board of Directors carefully examines the purpose of and verifies the rationality behind each stockholding every year.



CKD's Foundation to Realize Value Creation

While providing value to society and solutions to social issues through product development based on automation technology and fluid control technology, we aim to achieve sustainable development and enhance corporate value.





Our main plants in Japan are the three in Aichi Prefecture (in the cities of Komaki, Kasugai and Inuyama) and one plant in Yokkaichi, Mie Prefecture. Additionally, to strengthen production for the semiconductor market, in which growth in demand is expected over the medium to long term, and to promote a business continuity plan (BCP) for products manufactured in the Tokai region, we established our Tohoku Plant (Ohira-mura, Kurokawa-gun,



Miyagi Prefecture) in fiscal 2018. Adding Group companies CKD Shikoku Seikou Corporation (Sukumo City, Kochi Prefecture) and CKD Nikki Denso Co., Ltd. (Sakura City, Chiba Prefecture) makes a total of seven production bases.

Overseas, we supply products in a timely manner from production plants in five countries: China, Thailand, South Korea, Malaysia and Indonesia.



Dispatch of trainees from Japan to overseas bases Cumulative total:

50

(As of April 30, 2019)

Dispatch of trainees from overseas bases to Japan Cumulative total:

19

(As of April 30, 2019)

Number of non-Japanese employees

1,868

(As of March 31, 2019)

As further progress is made in globalization in the years to come, we will hire diverse human resources and allow them to demonstrate their capabilities to increase corporate competitiveness and bring about value creation. At the same time, a human resource strategy will become essential to maximize our performance as an organization.





We will conduct our overseas trainee system, which promotes the development of global human resources and national staff that form the core of value creation, undertake diversity promotion to encourage the active participation of each and every employee, and engage in increasing the sophistication of our human resources through specialized technical and skill training.







Number of patents held (As of March 31, 2019)

1,518

Maintaining departments that specialize in intellectual property, CKD works to further improve corporate value by managing intellectual property for all CKD Group companies and proposing/implementing intellectual property strategies. Our intellectual property strategies involve implementing detailed measures that reflect CKD business strategies based on close collaboration

between intellectual property departments and development/technology departments. In addition, we are establishing a foundation for CKD Group production and sales overseas by increasing overseas patent filings targeting important regions as we expand abroad. As a result, the number of intellectual property rights we hold abroad is increasing annually.

Social and Relationship Capital

CKD continues to co-create various forms of value for society through its businesses. To this end, we pursue high quality and safety by providing customers in various industries with controllers and drive components installed in automatic manufacturing equipment as well as automatic equipment including packaging machines. In addition, we are upgrading systems to meet the

various needs of our global customers by establishing facilities worldwide and building an elaborate network in Japan and abroad. The relationships of trust with our customers we have fostered to date not only enable steady operations but have also become a key asset we will develop further going forward.



Developing Products that Reduce Environmental Burdens

CKD believes that developing products that are more eco-friendly requires consciously formulating targets for environmental burden levels at the planning and development stages. With this in mind, we are developing products that reduce environmental burdens using our unique Environmental Acceptability Assessment Form*.

* Environmental Acceptability Assessment Form: Evaluates environmental burden levels in four areas—energy conservation, resource conservation, waste, environmental pollution both in terms of customer and internal environments.



Component products



Karman vortex flow rate sensor for water FLUEREX WFK2 Series (IO-Link compatible)

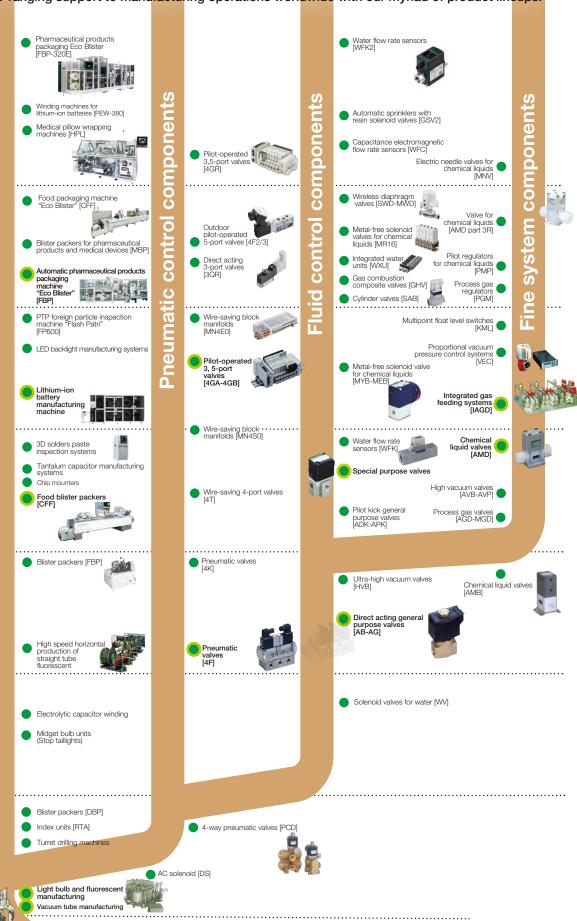
Compact Flow Rate Sensor Rapiflow FSM3 Series (plastic body type)





Pilot-operated 3, 5-port valves (4GR Series)

Our pursuit of automatic machinery development and diversification sprung from the seeds of vacuum tube appliance manufacturing. We have used our core technologies as a platform to establish new machinery product fields and continue to develop technologies that meet customer needs. Going forward, we will provide wide-ranging support to manufacturing operations worldwide with our myriad of product lineups.



At a Glance

Automatic machinery

Main solutions, products

The Automatic Machinery segment offers a wide array of products, including packaging machines for medical, pharmaceutical and food products, as well as the image inspection technology equipped on those machines, printed circuit board solder paste image inspection machines, manufacturing machines for devices for vehicles that use lithium-ion battery, and other products.

Sales ratio 16% (Most recent three fiscal years, cumulative)

Packaging machines

Pharmaceutical products packaging machines

Medical-use packaging machines Food packaging machines

Industrial machinery

Lithium-ion battery manufacturing machines

Three-dimensional solder paste inspection machines

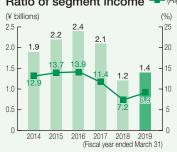
Lighting machines

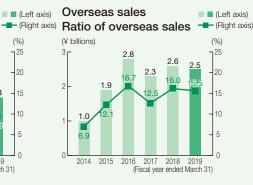
Lamp manufacturing equipment

Net sales



Segment income Ratio of segment income - (Right axis)





Component products

Main solutions, products

The component products segment consists of a diverse lineup of products, including pneumatic components and drive units equipped on automatic production equipment for a variety of industries, fluid control components used for semiconductor and medical processes, and other products.

Sales ratio 84% (Most recent three fiscal years, cumulative)

Pneumatic control components

Directional switching valves

Drive units

Pneumatic cylinders

Assistance devices Pneumatic auxiliary components

Refining and pressure adjusting components

Sensor components

Labor-saving compo-

Direct drive motors Index units

Electric actuators

Fluid control compo-

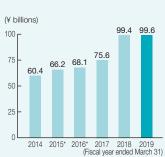
Fluid control valves Valves used in medical analysis

Combustion gas valves Explosion prevention valves

Fine system components

Process gas valves Chemical liquid valves Vacuum valves

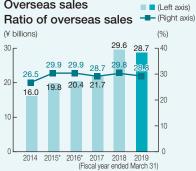
Net sales



Segment income Ratio of segment income - (Right axis)



Overseas sales (Left axis)



* Figures from fiscal years ended March 31, 2015 and March 31, 2016 exclude impact from accounting period changes.



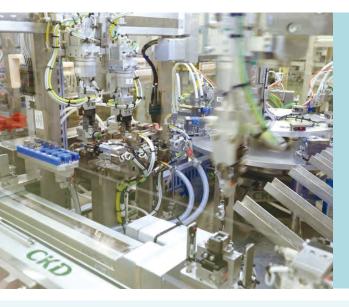
The food packaging machine, Eco Blister CFF-360E series was designed in pursuit of safety, simplicity, design and the environment based on the concept of meeting market demands for labor saving, reduced running costs and measures to prevent foreign particle contamination. These machines stand out for their exceptional environmental features as they apply PTP* system technology for pharmaceutical product packaging, thus reducing wasted film material by up to approximately 51% compared to conventional model types, and cut air usage by roughly 30%.

* PTP refers to "Press Through Package."









CKD products, from drive units to labor-saving components, fluid control components and numerous other components work in tandem to contribute to the manufacturing (monozukuri) that takes place at factories around the world. Recent years have seen factories make progress in incorporating IoT into their operations, and that has spurred demand for machinery capable of interacting within a variety of networks. In the component products segment, we are working to address a host of needs, including to respond to the advance of IoT technologies, automation and energy conservation, within a framework for development that leverages our core technologies while collaborating closely with our customers.

Drive units



Electric actuators

Fluid control components

Fine system components











Business Overview and Outlook

Automatic Machinery Business Division

Katsunori Hayashida

Director & Executive Officer General Manager of Automatic Machinery Business Division



Strategy

We in the Automatic Machinery Business Division welcome change and endeavor to evolve automation technology along a multitude of avenues as an organization that continually offers automatic machinery that satisfies customers around the world. This is our vision, and it is the basis for how we differentiate ourselves from competitors. We incorporate the requirements and requests of each individual customer into our automatic machinery, whether it be equipment that packages pharmaceutical or food products with heat-processed film, 3D solder paste inspection systems that feature image inspection technology, or lithium-ion battery manufacturing machines that perform high-speed wrapping of multiple ingredients. We strive to satisfy customers by providing quality products that meet their needs for delivery and cost.

Fiscal 2018 Report

In Fiscal 2018, sales of both lithium-ion battery production system machines and 3D solder paste printing inspection machines increased, although sales of pharmaceutical products packaging machines declined on the impact of a contraction in capital investments made by pharmaceutical manufacturers in Japan. Overall net sales in the segment fell year on year, however, an increase in orders and improved earnings for lithium-ion battery production system machines and 3D solder paste printing inspection machines lifted orders and segment income above that of the previous fiscal year.

The impact of pricing reform in the packaged drugs field has seen generic pharmaceuticals manufacturers in Japan cut back on capital investments, and for that reason we are making concerted efforts to expand sales in the Chinese market. Armed with the high-quality products cultivated in Japan, we initiated the deployment of Japanese engineers to China so as to introduce equipment models tailor-made for the Chinese market, strengthen production at the China

Plant, and to build a framework in which to offer services. In the food packaging field, we collaborated with package material manufacturers to develop a new machine model for the V-Pack, a novel type of packaging that can be opened with one hand, and we have since launched sales of the machine.

In industrial machinery, the global rollout of 3D solder paste inspection systems accelerated, and for that reason we are introducing new products, expanding production capacity in China, strengthening our sales structure in Europe and the US, and bolstering data management through intercommunication with pre and post processing. With regard to lithium-ion battery manufacturing machines, we are working to capture domestic demand and focusing our efforts on next-generation batteries. In China, the largest market, we have begun to collaborate with Chinese companies with the aim of growing sales channels and strengthening our ability to deal with price adjustments.

Value Provided through Business

	Main Products that Create Value				
Automatic packaging systems	These systems contribute to providing safe and secure products with equipment that packages pharmaceutical products (tablets, capsules) and food items.				
Inline medical product inspection systems	These systems facilitate safe and secure pharmaceutical products with high-speed and highly accurate inspections for tablet flaws, foreign particle contamination, torn sheets and other problems.				
Three-dimensional solder paste inspection machines	These machines contribute to raising productivity and quality guarantees for the printed circuit board mounting process with printed circuit board solder paste inspection machines.				
Lithium-ion battery manufacturing machines	These are systems that contribute to the spread of eco-friendly vehicles and countermeasures for the environment with machines to manufacture lithium-ion batteries for electric vehicles (EVs) and other automotive uses.				







V-Pack

MESH in CUP

Upcoming Topics

This business division's priority issue is to enhance the services provided to domestic pharmaceutical manufacturers and expand sales in the Chinese market so as to grow sales in the packaged drugs field. In the packaged food field, we are looking for sales growth in ASEAN and East Asia, and to increase business for V-Pack, a new and innovative form of packaging. With regard to industrial machinery, we are linking the pre- and post-processing in 3D solder paste inspection systems and seeking to capture market share in Europe and the US. Beyond these three fields, building other new pillars of business is another topic of discussion. In addition, as eliminating the use of plastic is becoming a global trend, we believe it is necessary to observe and respond to the actions taken by medical product and drug manufacturers and package material manufacturers.

Future Initiatives

Under our Medium-Term Management Plan, we embrace a basic policy of transforming our profit structure and accelerating entry into global markets, and we will take action to implement measures for priority topics. In the packaged drugs field, we will respond swiftly to market demands so as to speed our expansion into the Chinese market, and with the aim of cost competitive manufacturing (monozukuri) will bolster overseas production. In Japan, we are working to build a services business that leverages IoT. With food packaging we are moving forward to establish forming

technologies that will be essential to creating new packaging forms such as V-Pack. Moreover, to realize cost competitive production and sales of goods we aim to develop partnerships in and outside of Japan while seeking to expand our business. Operating plants in both Japan and overseas will not only mean manufacturing (monozukuri) that takes place in the optimal location for production but will also entrench the modularization of equipment to realize lot production and planned production, that will in turn lead to lower costs and higher profits.

Ever Further Evolution!

Development of the 3D solder paste inspection system, the VP9000 series

In the new VP9000 series, we have incorporated CKD's long-accumulated statistics management capabilities to enhance quality maintenance, and analytical and improvement functions. Then we went even further, equipping this model with multiresolution switching functionality where customers can at their own discretion set their preferred resolution to achieve a balance of addressing demands for printing pad miniaturization and inspection speed. In conjunction with this we have set our sights on capturing market share in Europe and the United States, a task that we have been considering. Aiming to improve legibility and operability, we have also revamped GUI and

enlarged the touch panel display. This represents an evolution that makes for an especially userfriendly inspection machine.

CKD's inspection machines are created with the customer's ease of use in mind, and are designed to be compact with consideration to ergonomicsbased monitor height, cover design and installation space. They also adopt full touch panel operations to obviate the need for the use of a mouse.

We will continue to pursue enhanced functionality and the user friendliness that satisfies customers worldwide, and will endeavor to raise the quality of the solder printing process.

Business Overview and Outlook

Component Products

Components Business Division

Katsuhito Okuoka

Director & Senior Managing Executive Officer General Manager of Components Business Division



Strategy

Having set the goal of achieving CKD's 10-Year Vision, namely becoming a "Total FA Worldwide Supplier," we in the components product segment strive to offer new value to customers. To this end, our response to the current dramatic period of transition where manufacturing (monozukuri) and technology are rapidly evolving and markets are becoming increasingly globalized, is to wield a robust lineup of FA systems, including pneumatic control components, labor-saving components, electric actuators, fluid control components, and fine system components. We develop products and offer services that respond to global needs, and work to bolster our worldwide production network and logistics framework.

Fiscal 2018 Report

In fiscal 2018, the market in Japan experienced what appeared to be a pause in demand for semiconductor manufacturing equipment, an area that had been a factor for favorable business conditions in fiscal 2017. Consequently, fine system components and the entire range of control components felt the impact. In addition, in overseas markets, sales declined due to the slowdown in capital investments in the Chinese market due to trade friction between the US and China.

To build a production network with an eye to the future, we are bringing online the Tohoku Plant and the new production site in China, and have strengthened collaboration with CKD Nikki Denso Co., Ltd., which is now a Group company. This fortified framework has enabled us to globally offer high-precision direct drive motor technology and products. Together with increasing the number of items produced at overseas plants to

respond to large-lot orders and short lead-time demands in markets outside of Japan, we have boosted overseas production capabilities by having facilitated local procurement of parts and materials for local processing. In order to establish CKD in new markets, we began offering a diverse lineup of new products that are able to meet the needs of customers. These include products geared toward food manufacturing processing, as well as the assistance device "PowerArm" that alleviates the burden of heavy labor and ensures safety to realize a more comfortable work environment, a carriable air supply unit that can provide compressed air as long as power is available, and an ample variety of components capable of interacting with increasingly prevalent IoT networks. Related to this, we have also rolled out services in collaboration with major communications device manufacturers.

Value Provided through Business

	Main Products that Create Value				
Pneumatic control components	These devices control the refinement of airflow, pressure adjustments, the driving of a cylinder, and so on. We develop automatic systems responding to a broad range of industrial needs and propose pneumatic technologies in consideration of environmental preservation and energy conservation.				
Drive units Electric actuator	As pneumatic cylinders are easily automatic, they are used in a wide range of industrial fields. Proposals are made using high precision and user-friendly electric actuators, and automation in line with customer needs is realized with control technologies that utilize air and electric motion.				
Fluid control components	Under the concept of high quality and wide variation, we are utilizing fluid control technologies to launch a broad range of products, from various types of valves, product series that meet the needs of medical and pharmaceutical processing, as well as food processing and environmental products such as water treatment systems.				
Fine system components	With a broad range of products covering supply systems to exhaust systems of semiconductor and flat panel displays, we are able to provide state-of-the-art process control. We support the electronic device industry with our fine system components which can be used in clean environments.				



CKD Nikki Denso Co., Ltd. Sakura Plant



Tohoku Plant Automatic manufacturing equipment

Upcoming Topics

Looking to the external environment where markets are in a constant state of change and Japan's working population is in decline, among other issues which must be dealt with, we see that it is essential to accelerate development speed, develop flexible production and strengthen a platform for global production. In our internal environment, tasks include development integrated with our group company, CKD Nikki Denso Co., Ltd., stable operation of the newly established plant, development strengthening overseas bases are required, and also to strengthen our efforts thus far. It will be necessary to become even more tenacious in the endeavors we have been undertaking until now. Moreover, we will conduct high level manufacturing (monozukuri) at respective production bases, both inside and outside of Japan, and develop these plants in a way that contributes to local communities.

Future Initiatives

Every year as the pace of business quickens, we work to build a structure capable of providing an early determination of the direction business will take so that we can deal with such changes in the external environment. By taking our current business model to a global level, we aim to scale up operations in new business areas. Moreover, in response to the growing trend toward smart factories that can be seen worldwide, we brought CKD Nikki Denso Co., Ltd. within the scope of consolidation and are developing and offering FA systems that lead to highly functional products and predictive detection. We are also boosting our efforts with regard to components for food

manufacturing equipment, components for medical-related use, products that work to reduce environmental burden, assistance devices, services and other offerings that are tied to our activities to achieve SDGs.

Responding to issues in the internal environment, we are proceeding to bring automation and streamline plants Groupwide, including the Tohoku Plant, the new production site in China, and at CKD Nikki Denso Co., Ltd. so that we can build a new foundation for the future. Together with raising production capacity, we are also promoting the creation of easy-to-work environments and CSR activities that are deeply rooted in local communities.

Ever Further Evolution!

Development of IoT Products for Agriculture

As an IoT business for agriculture, services that indicate optimal growth conditions are becoming increasingly ubiquitous. These agriculture-focused services include using sensors to collect environmental information, such humidity and sunlight in farm fields, as well as the temperature and water content volume in soil, or carbon dioxide within greenhouses, which are analyzed with Al based on plant science.

CKD has also collaborated with ICT partners, and has begun endeavors with the aim of automating operations needed for cultivation by communicating various environmental data and other information through the cloud and performing operations using remote control.

As a first step in our efforts we have developed a number of new products, such as an irrigation valve for greenhouses that enables operations to be conducted remotely, a liquid fertilizer mixture unit that mixes, dilutes, and controls the supply of liquid fertilizer, a motor that automates the opening and closing of windows, and a valve unit that selects and controls supply and location.

Being part of the agriculture business has been a great education for us with regard to building IoT systems and the telecommunications technology suited to IoT-based remote control. Our future goal is to be a solutions provider that can use the technical expertise gained in the field to solve problems of worker shortages and other issues.

Business Overview and Outlook

Component Products

Sales and Marketing Division

Shinji Yuhara

Director & Executive Officer General Manager of Sales and Marketing Division



Strategy

Utilizing our track record accumulated in pneumatic components, fluid control components and fine system components—areas at which we excel—and by adding new electric actuators to our lineup, we will proceed with comprehensively bringing together the automation and labor-saving technologies that will give rise to a sustainable society. Moreover, we are working to become a truly global company by promoting a five-zone overseas strategy that will work to strengthen our global sales operations. We in the Sales and Marketing Division are working toward the 10-Year Vision of becoming an "FA Total Consultant."

Fiscal 2018 Report

One of the key issues facing the world economy that continues to grow is a shortage of labor, and that is why we believe the wave of automation will only pick up pace. This was the situation in fiscal 2018 when we took action to move into global growth markets that were demonstrating real vitality in terms of capital investments. One particular example was the automotive industry. There, we welcomed a once in a century period of transition, namely, a shift toward electric vehicles (EV), and investment is ongoing. We also project further growth with the introduction of 5G telecommunications, IoT, Al and other new technologies in the semiconductor and electronic component industry. We are moving forward on product planning underpinned by an enhanced marketing function that will enable us to respond to the myriad of growing automation needs. Accompanying this is the nurturing of our human talent to raise their ability to conduct quality sales, to seize upon those strengths that are unique to CKD, and to work aggressively to establish ourselves in growth markets.

Another issue with regard to fiscal 2018 was that, being in the midst of a business climate known as a "semiconductor super cycle," we had forecast increased sales for components targeting the semiconductor industry. However, impacted by falling memory costs, lagging sales of smartphones and other factors made for a noticeable delay in investments by chipmakers. The adoption of electrification in the automotive industry is gaining speed, and there is firm demand for machine tools

that are compatible with IoT, while the situation in the food and medical industries is stable. Outside of Japan, in addition to the impact of lower capital investments in the semiconductor industry, we have also been hit by a decline in automation-related investments in China. The result of these factors is that sales will decrease temporarily, although we do project that over time we will trend toward recovery. One new initiative that we are undertaking is working toward the integration of activities with CKD Nikki Denso Co., Ltd., which has become a Group company. We have made its flagship products, high-precision direct drive servo motors and linear servo motors, available through CKD's network, and in so doing have enabled proposals to new customers, which in turn has allowed us to build upon our business results. As a lineup compatible with nextgeneration FA systems, we have announced motorless-type electric actuators that enable customers to integrate and use their own existing motor. This new concept has proved popular in the market. We are showcasing these new products at trade shows and other venues, and working to have them accepted into the FA market.

The Sales and Marketing Division has proclaimed its 10-Year Vision of how it sees itself as a "FA Total Consultant." In addition to proposals for automation and labor saving that leverage a diverse array of products in its lineup, we are planning and promoting expanded sales for products that facilitate a reduction to environmental burden. In this way we are working to develop sales activities that contribute to realizing a sustainable society.



A meeting being held overseas



Overseas trade show

Upcoming Topics

The FA industry is transitioning to a new stage, given the surging automation needs in global markets and the consideration given to environmental matters such as creating a low-carbon society. Major topics for the Sales and Marketing Division are to have a firm grasp of this change, and to develop an organization that can be quick off the mark in responding to the voices in the market, and to develop our human resources.

Future Initiatives

New ideas on consideration for the environment are coming out of the FA industry as well. Among those, one notable trend is the integration of electric motion equipment. More and more, conventional equipment that utilizes hydraulics or pneumatics is being combined with electric components. In response to this, we are introducing direct drive actuators as new products, in addition to rotary-type direct drive motors. By taking into consideration customer needs when we propose pneumatic and electric motion components, which are our strengths, we are conducting sales that provide the solutions to issues that arise on the frontlines of production.

Our global sales activities are built on a production and sales network that extends worldwide, and each region has an area-specific strategy. We provide an ample amount of sales promotion equipment that is in high demand, and have national staff as the main drivers of sales activities. In addition, we are also aggressively working to promote our brand by taking part in overseas trade shows. We are striving to continue to meet customer demands, and we hope that you will anticipate great things from CKD.

Ever Further Evolution!

Expanding nitrogen gas applications for food manufacturing processes -Nitrogen gas extraction unit-

As safety considerations rise in the food industry, nitrogen gas applications are growing with the objective of preventing oxidation in food processing and in the packaging process. CKD seeks to enhance its Food Process series of components for food manufacturing processes with the launch of a nitrogen gas extraction unit. This product separates oxygen and nitrogen from compressed air and can refine highly pure nitrogen gas up to a 99.9% concentration. It also uses materials that conform to the Food Sanitation Act and consequently contributes to the acquisition of HACCP and FSSC certifications.

Alleviating back pain that occurs when handling heavy loads -PowerArm-



Production processes very often entail activities for lifting, supporting or transferring heavy loads. There are cases where performing such repetitive tasks results in lower back pain and industrial injuries, making this a critical issue at production sites. To solve this problem, we developed PowerArm, an air-powered balancing product that supports human movement and that can smoothly make light work of up to 75kg. We are presenting this product at trade shows and exhibiting it at CKD's showroom, offering a hands-on trial to experience its high degree of operability.

SDGs Initiatives in the ESG Field

Along with building relationships of trust among our stakeholders through various activities, we maximally leverage the technologies and experience we have accumulated over the years as we work with our stakeholders to solve the challenges faced by society, thereby contributing to the future of society and continuing to develop together.

Scope of Contribution	Society's Challenges	CKD's Materiality
Environment	 Climate change Environmental pollution Energy issues Water resources Waste management 	 Development of low environmental load products Reduction of CO₂ emissions and prevention of environmental pollution Response to resource and energy issues
S Social	 Health issues Food issues Labor shortages Diversity Work-life balance Local communities Work safety 	 Respect for human rights Promotion of diversity Work-style reforms (promote work-life balance) Fair, just procurement Contribution to local society
G Governance	Corporate governanceComplianceRisk management	 Corporate governance Compliance Stakeholder engagement Risk management



Primary Initiatives and Results During Fiscal 2018





We work to develop low environmental load products.



Our efforts to reduce CO₂ emissions resulted in a 19% decrease (per unit of production) compared with fiscal 2013.



Our efforts to reduce water usage resulted in a 20% decrease (per unit of production) compared with fiscal 2013.

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We formulated the "CKD Health Management Declaration," under which we work to create healthy, energetic workplaces for both the mind and body.

We promote diversity for employing a wide range of human resources, regardless of gender, nationality, or age.



Human Resource Development

We strengthen initiatives that enable a diverse range of human resources to maximize their potential and excel.

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Uncompromising Governance

We appointed three directors and three auditors as independent officers as part of our efforts to ensure transparent, healthy management.

Risk Management

In preparation for the event of major losses due to large-scale natural disasters, we formulate BCPs that prioritize human life and that ensure continuity of recovery support and CKD's businesses.

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ESG Summary

ESG Initiatives

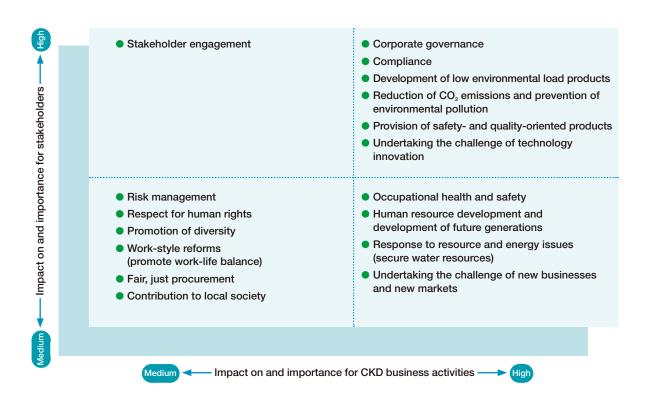
Based on our corporate philosophy, "With creative knowledge and technology, we shall innovate fluid control and automation, and thus contribute to building a rich society," we conduct our business activities from a long-term perspective that takes into account changes in the social and business environments. As a global company, we also promote initiatives for the critical themes of environment, social and corporate governance by considering the impacts on society and CKD, tackling materiality, and creating economic and social value.

Corporate Commitment

Recognition of Corporate Social Responsibility	Each corporate member recognizes Corporate Social Responsibility, complies with all laws and regulations, discloses information, and acts in good faith to gain the trust of society.
Care for the Global Environment	We shall propose eco-friendly products and strive for environmental conservation through corporate activities.
Thorough Customer Orientation	We shall always correspond with a customer oriented and modest mindset, offering products and services to promote customer satisfaction.
Challenge to Technology Innovation	We shall take a leadership role in the industry by identifying global trends, striving for technology innovation, and offering effective products in a timely fashion.
Corporate Culture with Faith in Human Resource	We shall build a corporate culture with faith in human potential and satisfaction upon achievement of each member, courageously challenge innovation in operation, and capability to demonstrate maximum strength of organization.

Materiality

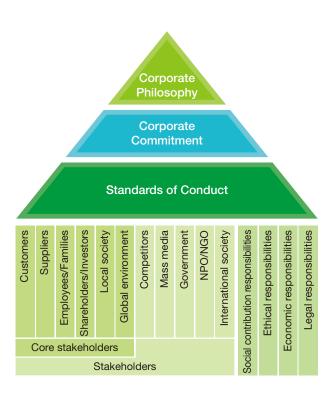
Among the many issues that exist within society, we define materiality from the perspectives of "importance for CKD" and "importance for society," and undertake initiatives to enhance sustainability in aims of ensuring the sustainable development of the world and society, as well as ensuring the further growth of CKD.



Stakeholder Engagement

Policies and Initiatives

In order to contribute to the realization of a sustainable society through our main businesses, based on our Corporate Philosophy, Corporate Commitment, and Standards of Conduct, we precisely execute the "social contribution responsibilities," "ethical responsibilities," "economic responsibilities," and "legal responsibilities" that we, as a company, must fulfill for our stakeholders. Within each department, we also utilize communication tools and provide opportunities to communicate with our stakeholders as part of our efforts to gain an understanding among our stakeholders regarding our activities.



Stakeholder Engagement Initiatives

Stakeholder Engagement Initiatives					
Stakeholders	Primary Dialogue Methods	Primary Responsibilities and Challenges			
Customers	 Inquiry forms and other inquiry contact points Product information provided through websites and SNSs Showrooms and seminars 	We consistently address our customers with a customer-oriented and modest mindset, prioritize safety, quality, and the environment, and offer products and services that satisfy our customers.			
Suppliers Shared procurement policies Production trend briefings		We establish principles and basic policies for procurement activities, strengthen partnerships through fair, just transactions with our suppliers, and aim for mutual prosperity.			
Employees/Families	 In-house publications, intranet Employee awareness surveys Opportunities to converse with top management Internal whistleblowing system Discussions with labor unions Safety and health committee 	We aim to create healthy workplaces in which all employees can work safely and with a sense of purpose.			
Shareholders/ Investors	General meeting of shareholders Consolidated financial results briefings IR events/Individual meetings IR information website Consolidated reports/Annual reports/Shareholder communications	We strive to actively disclose information and conduct dialogues in order to ensure transparency.			
Contribution activities for local communities (science classes, forestation activities, etc.) Dispatch of instructors to lectures and educational sites Information broadcasting through websites and SNSs Social contribution activities in regions throughout the world		We aim to be an "open" company that coexists with local communities and contributes to society.			
Global Environment	Environmental management framework Environmental education Compliance with environmental regulations Development of low environmental load products	We comply with environmental laws and regulations, work to prevent environmental pollution and reduce CO ₂ emissions, and undertake environmental management activities.			

Corporate Governance

We strive to ensure and strengthen the feasibility of corporate governance from the perspectives of "ensuring transparent, healthy management" and "appropriate cooperation with stakeholders" for the purpose of realizing a greater level of sustainable corporate value.

Outside Director Messages

Junichi Kagawa, Outside Director



The environment in which companies are situated is in constant flux. Various conditions are changing, including changes in business due to politics and the economy, and changes in technology needs due to technological progress. And companies encounter various situations, at times taking every chance to grow and at other times prioritizing preparation for the future by quietly accumulating technology. Another important challenge is making improvements to regular operations.

I have experienced a wide range of business, including management, technology development, research, intellectual property, and quality assurance. And I have also experienced intense front-line situations during negotiations with customers. As CKD advances with its globalization, I hope to contribute to the further development of its business based on the experience I have accumulated. And I will strive in earnest to maintain and ensure the critical management issues of validity and transparency.

Noriko Asai, Outside Director



In today's world, where technological innovation as typified by AI, IoT, and robotics is evolving at an accelerated pace, CKD appears to be blessed with the opportunity to achieve greater growth. The world is also undertaking the challenge of the SDGs in order to realize a sustainable society, and within the trend towards implementing Society 5.0, CKD stands on the precipice of making a further leap. Along with those in the industrial world I have analyzed the management condition of more than 2,000 manufacturing sites in 32 countries around the world and in Japan, and have served as a member of new technology screening committees and policy deliberation committees. During this time, I have come into contact with technological changes and work-style reforms. Leveraging this expertise, I will spare no effort in contributing to greater corporate value by raising issues and offering advice to help CKD make and supervise decisions that ensure objectivity and transparency from an external perspective.

Kazumasa Uemura, Outside Director



Until I was appointed as a director last year, I served as the assistant director of a nearby national university hospital, where I oversaw the education and training department for doctors and other medical professionals. This department was deeply involved in human resource and labor management, where the recent pressure from society for work-style reforms, particularly the mental health maintenance of our staff, was an extremely important issue.

CKD contributes to the creation of social value in Japan's industrial world through the provision of machinery and components that form the foundation of a wide range of industries, particularly that of the manufacturing industry, from perspectives that go beyond those of pursuing corporate profits and greater scale. However, these social contributions are only made possible when the mental and physical health of each employee is maintained. Therefore, I will contribute to management from the perspective of industrial safety and health management, including work practice management and work environment management.

Outside Audit & Supervisory Board Member Messages

Koichi Hayashi, Outside Audit & Supervisory Board Member



I have been involved with finance, accounting, and auditing for roughly 30 years. After acquiring experience in audit work in the US and returning to Japan, I have participated in multiple M&As, including cross-border M&As, and the accompanying PMI (Post Merger Integration) work. Meanwhile, as CKD aims for greater global business growth, it has been actively promoting capital partnerships outside of Japan and business acquisitions within Japan. Based in part on my past experience, I intend to constantly verify whether CKD's management control framework corresponds to its growth. Only when this appropriate control framework is in place can CKD achieve sustainable business growth and build winwin relationships with its stakeholders.

Naotaka Nanya, Outside Audit & Supervisory Board Member



Ever since becoming an attorney in 1993, I have experienced many cases involving corporations. And I have experienced first-hand how the environment encompassing corporations is now changing more dramatically than a decade earlier. The roles demanded of companies from the perspectives of corporate governance and compliance have also expanded to encompass a broader scope, and we can assume that this trend will only evolve to a higher level. In order to meet these requirements, it is essential to ensure balanced management for the interests of shareholders as well as employees, suppliers, local society, the global community, and a wide range of other stakeholders in order to enhance corporate value. I will play my part in ensuring that my experience, however modest, connects to the growth and improvement of the Group in this respect.

Takeshi Sawaizumi, Outside Audit & Supervisory Board Member



Against the backdrop of emerging disturbances in the post-cold war global system, the world economy is now faced with numerous geopolitical risks, including trade disputes coinciding with US-China power struggles, the issue of Brexit, and the destabilization of EU politics and economics triggered by immigration issues. Despite this situation, CKD is aiming to champion its position as a "Total FA Worldwide Supplier" and further advance its globalization. Based on my experience and involvement in the management of many companies from the stance of finance, I will maintain my gaze on these numerous changes at the global level, while at the same time, as an auditor, ensuring credibility among all stakeholders and striving to contribute, however modestly, to the achievement of the corporate targets established by CKD.



CKD Group endeavors to further enhance corporate governance as a mechanism to realize management that is healthy and efficient, and that has a character of

transparency which earns the ongoing trust and goodwill of all stakeholders, with their diverse range of vested interests.

Status of Internal Control System and Risk Management Structure Development

CKD's basic policy for putting in place an internal control system and risk management structure is determined, and executed, by its Board of Directors. Details of the basic policy are as follows.

a) Ensuring conformity to laws and regulations, as well as the Articles of Incorporation

To be sure that directors and employees comply with laws and regulations, as well as the Articles of Incorporation in the performance of their duties, we maintain Standards of Conduct and internal regulations, and have put in place a system that prohibits relations with antisocial forces and offers a way to report illegal activities. We have also established a Nomination, Remuneration Advisory Committee to designate directors and determine their compensation, among other duties.

b) Preserving and managing information

Proposal approval forms, the minutes of various meetings, and other information associated with the execution of duties by directors are appropriately preserved and managed in accordance with laws and internal regulations.

c) Risk management

In tandem with seeking to raise awareness of compliance among all employees, the risk management sections of each business division work in close cooperation and under the primary authority of the divisions tasked with risk management (General Affairs Department, Information Resource Management Department, Internal Control Audit Office and Legal Department) at headquarters, which promotes Companywide risk management. In addition, to respond promptly and with precision to risks that are increasingly complex, we have established the Risk Management Committee under the auspices of the Board of Directors as an entity that manages risks laterally throughout the Company. The Risk Management Committee deliberates and decides upon matters relating to Companywide risk management.

d) Ensuring efficient execution of duties by directors As a general rule, the Board of Directors convenes once per month, and the Board of Managing Directors, comprised primarily of Company officers, convenes on an as needed basis. This enables swift decision making by management. The Company also holds management meetings for matters that impact operations at each business division. These meetings are attended by officers and division heads who share information through reports and discussions on the analysis of the business environment and the progress of financial planning, and also reflect management decisions. In addition, the introduction of an executive officer system has effectively separated the management decision making, as well as supervisory and operational execution functions, responsibilities that had previously been held by the Board of Directors. This enables precise and prompt decision making, and agility in executing business operations.

e) Ensuring appropriate operations within the corporate structure

CKD promotes efficient subsidiary management based on regulations for the control of subsidiaries both in and outside of Japan. In tandem with this, as subsidiaries fall under the scope of Standards of Conduct and within the risk management structure, we pursue proper business operations with subsidiaries by having a thorough system of reporting to headquarters and providing advance approval concerning important matters.

f) Matters related to employees assigned to auditors
The Company assigns employees to assist the auditors in the
performance of their duties, as necessary, and grants such
employees the authority to conduct investigations as
directed by the auditors. In such a case directors and
auditors deliberate, in advance, concerning human resources.

g) Reporting to auditors

At the request of auditors, directors and employees of the Company and its subsidiaries shall provide required reporting, and share information regarding Groupwide management conditions and status of business execution, in accordance with laws and regulations and as stipulated by the Audit & Supervisory Board. In addition, employees who are assigned to auditors are not to be the subject of disadvantageous treatment due to sharing information and reporting to auditors.

h) Structure to ensure the effective execution of other auditor audits

To raise the effectiveness of the Group's audit structure, we have established the Internal Control Audit Office under the direct control of management, and ensure opportunities for information exchange by auditors, accounting auditors and the Internal Control Audit Office. In addition, auditors may consult with external experts in the legal, accounting or other fields as necessary, and the payment of related expenses will be the responsibility of the Company.

Oversight Functions

The Company has adopted a board of auditors' system, and its Audit & Supervisory Board is comprised of four auditors, three of whom are outside auditors. Each auditor attends Board of Directors' meetings and other important meetings based on the audit policies, formulated by the Audit & Supervisory Board, and audit plans, and conducts audits of directors' execution of duties through surveys on the status of business tasks and financial conditions. Auditors work closely with the Internal Control Audit Office and accounting auditors, and exchange information on an as needed basis.

Also attending the Board of Managing Directors and management meetings is the standing auditor who deliberates on the management matters of each business division, analyzes the business climate, and works to understand the status of business planning progress so as to provide appropriate audits.

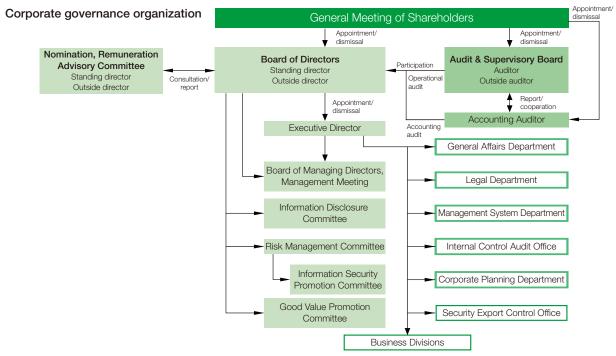
Accounting audits are conducted under an audit contract with Deloitte Touche Tohmatsu LLC for Companies Act audits and Financial Instruments and Exchange Act audits. We request accounting audits that are fair and unbiased.

Promotion Structure

In addition to its responsibilities as determined by laws and regulations, the Board of Directors is positioned as an entity that determines basic policy and important matters concerning management. We believe that it is essential to have leadership driven by top management and decision making that is both transparent and fair. Based on this thinking, as a company that has adopted a board of auditors' system, we entrust to administrative personnel the execution of those routine duties as would be permitted within the scope of the law, and we work toward management that is transparent and objective owing to strengthened management oversight conducted by auditors. In addition, together with appointing three independent outside directors, we have established a Nomination, Remuneration Advisory Committee as an advisory body to the Board of Directors to strengthen the independence, objectivity and accountability of Board of Directors' functions associated with director nomination and compensation. The committee is convened as needed, and based upon the results of deliberation on matters related to nomination and compensation, committee members report to the Board of Directors.

Areas of expertise held by outside directors

	Business adminis- tration	Technology develop- ment	Healthcare, medical matters	Human resource development
Junichi Kagawa	0	0		
Noriko Asai	0			0
Kazumasa Uemura			0	0



Risk Management

CKD considers risk management as an important operational activity to be a company that continues to earn the trust of society, and together with maintaining this management structure, the Company strives to mitigate serious risk and to minimize loss that results from risk.



CKD identifies various risks ancillary to business activities so as to ensure business continuity and to raise corporate value, and based upon the proper assessment of such

risks, undertakes efficient and effective management activities.

Risk Management Promotion Structure

CKD formulates risk management regulations that define a structure of risk management promotion. In conjunction with this, the Company positions the Risk Management Committee directly under the Board of Directors, which serves to promote risk management. The Risk Management Committee performs the following duties.

- a) Considers methods of risk identification, assessment and response, and makes the decision on how to respond to risk
- b) Assesses the effective results of the risk response method, and based upon this, considers corrective measures
- c) Provides guidance, communicates and makes requests in relation to matters for thorough Companywide implementation
- d) Audits and monitors matters decided upon by the Risk Management Committee
- e) Reports to the Board of Directors

Formulation of Business Continuity Plans (BCP)

We make preparations for events such as large-scale earthquakes, fires, typhoons or other enormous disasters, and believe that the safety of human life is of the utmost priority. We therefore formulate BCP that serve to aid in the recovery of the local community and our business partners, and keep our business in operation.

Main Initiatives

- Educate all employees and conduct training for workinglevel responders
- Implement an array of drills (drills for initial response, business recovery, evacuation, first aid, fire extinguishing, and others)
- Prepare supplies (home return support sets, stored rice and water, electricity generators, and others)
- Hold BCP formulation seminars for business partners

Mindset on Information Security

Information security refers to securing the safety of computers and information for conditions that enable information to be used properly, and can be categorized into three elements, namely, confidentiality, integrity, and availability. At CKD we strive to heighten the level of information security for technical data, engineering drawing information and other material of a classified nature. We also introduce security measures to efficiently protect information assets, and define related points and operational processes. Moreover, under our information security framework we take measures such as conducting drills, seek to educate all employees, and bring together a range of related information in order to clarify laws and regulations that pertain to information security, various rules and guidelines.

Compliance

We at CKD have a high sense of ethics, and strive to put into practice fair and legitimate business activities that follow the dictates of common sense. In addition, we have in place Standards of Conduct, and thoroughly communicate these to guide the actions that each and every employee should take in the course of their daily duties.



Each and every employee shall adhere to the laws and regulations that pertain to their duties, as well as to our Corporate Philosophy. We work to fulfill our

responsibility to society through fair and sound business activities.

Promotion of Compliance Inside and Outside of Japan

The Standards of Conduct that define our fundamental principles of employee behavior stipulate adherence to laws and regulations, and we undertake a number of initiatives in our pursuit of raising an awareness of compliance throughout the Group worldwide.

Whistleblower System

Discovering problems associated with compliance at an early stage is critical. For that reason, we have established a system whereby employees and others who work in the CKD Group can report illegal activities. In addition to this internal reporting system, we have in parallel established an external reporting system, staffed by an independent

attorney-at-law, and together with care made to protect those making reports we strive to quickly discover, and correct, compliance problems. We continuously work to make employees aware of this whistleblower system, and are making progress on creating a structure which enables reports from overseas-based employees by developing the ability to handle reports in English and multiple other languages. The details of reports are made available to the president without delay, and investigation and deliberations are made at the Good Value Promotion Committee, with measures being taken to correct the problem and ensure that it does not reoccur.

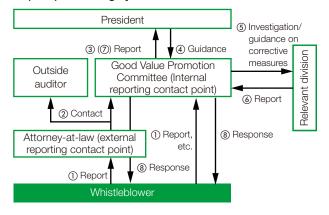
Protection of Personal Information

It is incumbent upon companies to properly manage and protect personal information in the course of conducting business operations. Based on the CKD privacy policy put in place to fulfill such a duty, we have defined regulations pertaining to personal information protection, and work to properly protect personal information.

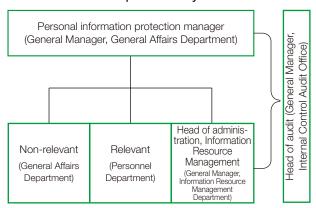
CKD Privacy Policy URL: https://www.ckd.co.jp/english/privacy/



Report processing system



Personal information protection system





Implementation of compliance training

CKD systematically conducts compliance training for employees with the aim of evoking and entrenching compliance awareness. In Japan, training is provided in accordance with employee role when first entering the Company, when being promoted, when taking up an overseas posting, and other occasions. Employees at sites outside of Japan are also periodically provided with training and given information on laws and regulations. Training content consists of the basics of calling attention to issues of harassment, managing confidential information, measures to prevent cartels and other topics, and is well-crafted in line with the roles that trainees perform.

We at CKD keep firmly in mind that sincere and fair conduct, thoroughly engrained in compliance, is precisely the way that we will earn the trust from all our stakeholders, and the education we provide will work to this end.

Board of Directors, Audit & Supervisory Board Members



Kazunori Kajimoto

President

Apr. 1980 Joined the Company Jun. 2004 Director & Executive Officer General Manager, Sales and Marketing Division Jun. 2005 Director & Managing Executive Officer

Jun. 2008 President (to the present)

Katsuhito Okuoka

Director and Senior Managing Executive Officer

Apr. 1991 Joined the Company Jun. 2014 Deputy General Manager, Components Business Division, General Manager, Administration Department Jun. 2015 Executive Officer General Manager, Components Business Division (to the present) Jun. 2016 Director & Executive Officer

Jun. 2018 Director & Managing Executive Officer Jun. 2019 Director and Senior Managing Executive Officer (to the present)

Masafumi Kokubo

Director and Senior Executive Officer

Apr. 1983 Joined the Company Oct. 2005 General Manager, Sales and Planning Department, Sales and Marketing Division Oct. 2008 Chairman and President, TAIWAN CKD CORPORATION Sep. 2012 General Manager, Corporate Planning

Department (to the present) Jun. 2015 Executive Officer

Jun. 2018 Director & Executive Officer General Manager, Security Export Control Office (to the present) General Manager, Internal Control and Auditing Office (to the present)

Jun. 2019 Director and Senior Executive Officer (to the present)



Junichi Kagawa

Outside Director

Apr. 1977	Joined NGK Spark Plug Co., Ltd.
Jun. 2003	Director
Jun. 2007	Managing Director
Jun. 2009	Senior Managing Director
Jun. 2011	Advisor & Senior Technical Executive
Jun. 2012	Director, the Company (to the present)
Jul. 2014	Commissioned by NGK Spark Plug Co

Ltd. (to the present)

Koichi Hayashi

Outside Audit & Supervisory Board Member

Oct.	1990	Joined KPMG LLP, New York Office
Apr.	1997	Registered as a certified public
		accountant (to the present)
Mar.	2008	Representative Director, Attax Co., Ltd.
		(to the present)
Jun.	2010	Audit & Supervisory Board Member, the
		Company (to the present)
Jun.	2013	Outside Auditor, Plaza Create Co. Ltd.
Jun.	2018	Outside Director, Plaza Create Co. Ltd.
		(to the present)

Noriko Asai

Outside Director

Apr.	1997	Research Assistant, School of
		Economics, Nagoya University
Mar.	1999	Received Ph.D. (Economics)
Apr.	2003	Assistant Professor, School of
		Management, Chukyo University
Apr.	2007	Professor, School of Management,
		Chukyo University (to the present)
Jun.	2015	Director, the Company (to the preser

Naotaka Nanya

Outside Audit & Supervisory Board Member

Apr.	1993	Registered as attorney at law (to the present)
Sep.	1999	Opened Nanya Law Firm
Jun.	2006	Alternate Auditor of the Company
May	2011	Corporate Auditor of UNY Group Holdings Co., Ltd.
Jun.	2012	Audit & Supervisory Board Member, the Company (to the present)
May	2013	Auditor of Circle K Sunkus Co., Ltd.
Sep.	2016	Outside Auditor of FamilyMart UNY Holdings Co., Ltd.

Shinji Yuhara

Director and Executive Officer

Apr. 1986	Joined the Company
Oct. 2007	General Manager, Nagoya Sales Department, Nagoya Branch, Sales and Marketing Division
May 2012	Osaka Branch Manager, Sales and Marketing Division
Jun. 2013	Executive Officer
Apr. 2014	Deputy General Manager, Sales and Marketing Division
Apr. 2015	General Manager, Sales and Marketing Division (to the present)

Jun. 2018 Director & Executive Officer (to the present)

Kazumasa Uemura

Outside Director

Mar.	1990	Received Ph.D. (Medicine) from Nagoya University
Aug.	2005	Professor, Medical Education Center, School of Medicine, Nagoya University
Apr.	2009	Advisor to President, Nagoya University
Apr.	2017	Professor, Faculty of Health and Medical Sciences Aichi Shukutoku University (to the present)
May	2017	Professor Emeritus of Nagoya University (to the present)
Jun.	2017	Director, the Company (to the present)

Takeshi Sawaizumi

Outside Audit & Supervisory Board Member

Apr.	1974	Joined The Sumitomo Bank, Limited (currently Sumitomo Mitsui Banking
		Corporation)
Jun.	2002	Executive Officer
		General Manager, Osaka Second
		Corporate Business Office (Sumitomo
		Mitsui Banking Corporation)
Jun.	2003	Executive Director, Sumitomo Mitsui
		Card Company, Limited
Oct.	2006	President, Alpha REIT Advisors Co., Ltd.
Jun.	2008	President, SMBC Consulting Co., Ltd.
Jun.	2014	Audit & Supervisory Board Member, the
		Company (to the present)
Oct.	2014	Advisor, Laox Co., Ltd. (to the present)

Katsunori Hayashida

Director and Executive Officer

Apr.	1984	Joined the Company
Jun.	2006	General Manager, Production
		Department, Automatic Machinery
		Business Division
May	2009	General Manager, Battery Engineering
		Department, Automatic Machinery
		Business Division
Apr.	2011	General Manager, Procurement
		Department, Purchasing Division
Jun.	2018	Executive Officer
		General Manager, Automatic Machinery
		Business Division (to the present)
Jun.	2019	Director and Executive Officer (to the
		present)

Shigeru Ohmori

Standing Audit & Supervisory Board Member

		Joined the Company General Manager, Sales and Planning Department, Sales and Marketing Division
Apr.	2012	General Manager, Nagoya Branch, Sales and Marketing Division
Apr.	2014	General Manager, Osaka Branch, Sales and Marketing Division
Jun.	2016	Standing Audit & Supervisory Board Member (to the present)

Human Resources

Human resources development putting the abilities of employees to their best use

We believe the realization of "A Corporate Culture That Places Faith in Human Resources" requires us to develop global human resources and create a working environment where employees can challenge themselves and pursue self-fulfillment. We value the potential of each of our employees, regardless of gender, age, or nationality, and are focused on strengthening our human resources development efforts so that each worker can make the most of his or her abilities.



One of our key corporate commitments is creating a "Corporate Culture That Places Faith in Human Resources." Quite simply, we believe human resources represent

human capital and are accordingly viewed as a key management resource for the sustained development and growth of the Company.

Developing the abilities of our employees is a key theme for management at CKD, and our goal is to create a lineup of human resources that can provide products and services of great value to our customers while simultaneously expanding our business on a global basis.



We are focused on the strategic and systematic creation of a production system in which workers are eager to tackle the challenges of a new business while

maintaining the strengths inherent in our core technologies and technical abilities, and a sales system where our employees can meet the needs of our customers not only in Japan, but around the world.

A Corporate Culture That Places Faith in Human Resources

We place a high value on the motivation and potential of each of our employees, and are focused on enacting business reforms without fear of failure and creating a corporate culture that maximizes the strengths of the organization.

Career Planning Sheets

In order to better create a workplace motivating to employees, CKD supervisors and managers use a "Career Planning Sheet" as a means of communication in assisting subordinates in their career planning efforts.

Promoting Work-Life Balance

We are working to improve the lives of our workers both at home and in the workplace, as we believe a fulfilling life in both these locations contributes to a working environment where employees can achieve self-fulfillment.

Reducing Working Hours Through Improved Operational Efficiency and Time Management

- Reduce use of outside labor through the implementation of operational improvements
- Establishment of a set day once a week where workers leave at a specified time
- Setting specified days when all employees use paid time off
- Creation of an hourly paid leave system

■ Childcare Support System

CKD has created a system for childcare leave that is open to all our employees. We have also established a system where workers can be exempt from overtime work and a system in which employees can work shorter hours until their child reaches their fourth year in elementary school. CKD is creating a working environment in which our female employees can give birth with peace of mind, and where male and female employees raising their children can balance their work and home responsibilities.

Nursing Care Support System

We have also created an environment in which employees taking care of family members at home can balance their work and home responsibilities. In general, CKD employees may take leave for up to one year to care for their spouses and children, the parents of either the employee or their spouse, as well as grandchildren, siblings or grandparents with whom they are living with and for whom they are providing care.

Creating a Corporate Culture That Puts Faith in Human Resources

Kazuhide Okada, Executive Officer, General Manager of the Personnel Department



The CKD Group had 4,582 employees, including those overseas, as of March 31, 2019. Under the CKD flag, these employees of various nationalities are focused on improving their individual skills, technical abilities and productivity while providing high added-value products and services to our customers. In order to meet the growing needs of our customers as well as support the work-life balance of our employees, CKD is actively implementing workstyle reforms and pledges to maintain its efforts to build a corporate culture that places faith in human resources.

Promoting Diversity

CKD is promoting a workforce that makes the best use of its diversity and does not discriminate on the basis of gender, nationality, or age.

Measures Aimed at Empowering Women

We believe the creation of an environment in which women can play an active role and fully demonstrate their abilities will contribute to a workplace where every employee can provide their best contribution.

With this in mind, we opened a daycare center at the Head Office and Komaki Plant location in April 2018. We also established at the same time a system that provides support to employees working in areas where daycare is not available for their child in non-licensed daycare centers.

Promoting the Active Participation of Foreign Employees

In order to further promote diversity and globalization, the CKD Group is actively hiring foreign employees, including 35 foreign nationals employed in Japan. We are also actively engaged in the Technical Intern Training Program, and as of March 31, 2019, accepted 198 technical intern trainees, mainly from China, the Philippines, and Indonesia.

■ Broadening the Re-employment System

We broadened our system for re-employing retired employees in April 2012. With the goal of increasing the number of options available for workers after they reached the retirement age of 60, we established a lifetime employment program allowing employees to continue working regardless of their age while simultaneously maintaining our existing re-employment system.

Human Resources Development

Bolstering our efforts to allow our diverse employees to play an active role and make the most of their abilities.

Education and Training

Using a level-specified system for all employees, we are providing educational programs according to each worker's role in the Company and educational support for self-development in line with that worker's particular business. Moreover, each department engages in programs and initiatives designed to improve the skills of their employees and the environment in which they work.

System for Overseas Trainees

We have established an overseas trainee system allowing the exchange of employees for training. The fostering of a global workforce and the promotion of enhanced understanding over how the businesses work is contributing to improvements in our business.

Skill Training Facility

We launched a skill training dojo (facility) in fiscal 2016 with the aim of teaching employees how to best use measuring equipment and machine tools for metals processing. In the parts processing department, the goal is to improve the skill level of young employees and to further improve the skill level of processing by passing on the skill level of senior employees.

In-house Language Courses

CKD conducts in-house language learning courses to support the language skills of our employees, something necessary as our business becomes increasingly globalized. In addition, we offer opportunities for further self-development by holding language learning seminars and providing support for external courses and correspondence learning.

Occupational Safety and Health

With the goal of achieving zero accidents, we are focused on creating a "safety first" corporate culture, including through the implementation of safety and health activities in which all Company employees participate.

Basic Philosophy

We put safety first and follow correct procedures in manufacturing operations.

Maintaining a safe and healthy workplace allows us to provide products that our customers can use with peace of mind.

Policies

- 1. We will maintain healthy minds and bodies.
- 2. We will make safety a priority and raise safety awareness among all employees.
- 3. We will comply with all laws, internal rules and specified work procedures.
- 4. We will work to predict and avoid risks.
- 5. We will produce safe and secure products.

Promoting Health Management

We believe the health of our employees is a key issue for management, and we are working accordingly to improve health awareness among the employees and create a working environment conducive to healthy minds and bodies.

■ The CKD Health Management Declaration

We believe the health of our employees is a key issue for management and in cooperation with health insurance societies and labor unions, we are working to improve health awareness among the employees, building a working environment conducive to healthy minds and bodies, and promoting "health management."

Key Initiatives

- Work-life balance
 (workstyle reforms, management of time spent working)
- Prevention of lifestyle-related diseases (improving diet, sleep, exercise habits, preventing smoking and passive smoking)
- 3. Creating a comfortable working environment (promoting mental health, improving the working environment, supporting for balancing treatment and work)

Quality Management System

Focused on manufacturing products of even higher quality

With the goal of more efficiently and effectively supplying products and services that satisfy our customers, we have made a commitment to continually improve product quality and environmental management practices throughout the company. In line with this commitment, we have established annual quality and environmental policies and promoted their awareness not only within CKD but also among those working with the Company.



Our product quality and environmental policies focus on more efficiently and effectively supplying products and services that satisfy our customers. Accordingly, we

have established the following policies and remain committed to continuously improving the quality management system throughout the Company.

[Quality]

- We will conduct activities aimed at achieving zero complaints and zero product defects.
- We will build an innovative and global structure that:a) Improves the overseas production and sales ratios
 - b) Identifies optimal quality and boosts product quality
 - c) Improves cost competitiveness
 - d) Enhances productivity

Our policy on quality centers on quality targets aimed at preventing defects, and sustained improvements through a focus on productivity, cost competitiveness, quality, and overseas operations.

Our ongoing efforts to enhance quality include ISO 9001-based quality management, and evaluating operational conditions through internal audits and management reviews twice a year. Moreover, all



employees, including those at overseas subsidiaries, participate in efforts aimed at raising quality awareness each year in November, which we have selected as our month to focus on quality.

Quality and Environmental Policies





ISO Certification for CKD Group Companies in Japan and Overseas

ISO 9001, ISO 14001 Certification

	Certification	Certification Date
CI/D Corporation	ISO 9001	Jun. 24, 1994
CKD Corporation	ISO 14001	Dec. 8, 2000
CKD THAI CORPORATION LTD.	ISO 9001	Jan. 14, 2004
CKD THAI CORPORATION LTD.	ISO 14001	
CIAD (China) Corresponding	ISO 9001	lan 4 0000
CKD (China) Corporation	ISO 14001	Jan. 4, 2009
CKD Nikki Denso Co., Ltd.	ISO 9001	Mar. 16, 2018



Case Study ①: Implementing Own Process Completion Activities

Don't create or continue to make defects, and don't allow defects to move to postprocessing

With the aim of zero complaints and zero defects, we are promoting a quality policy that includes own-process completion*1 activities.

We are continuously engaged in a variety of activities aimed at ensuring own-process completion becomes deeply rooted, focusing on following established guidance, with a key theme of not creating or continuing to make defects, and not allowing defects to move to post processing.

The main activities focus on improvements to the organization as a whole, including on-site education for managers and supervisors in regard to the importance of own-process completion.

As a more specific activity within the organization, we launched Challenge 1000*2 from fiscal 2016 as a medium-term plan aimed at reducing the Company's process



Guidance provided on location at the Challenge 1000

defect rate. Efforts include on the-job training (OJT) for leaders in own process completion and improvements through process failure QC stories. These activities are being carried out not only in domestic plants, but also in overseas production bases, with a focus on improving plant capabilities so that consumers around the world can use our products with confidence and peace of mind.

Case Study 2: Using QC Testing to Improve Skills

Raising quality awareness on a companywide basis through QC certification

With the goal of boosting quality awareness companywide, we launched activities promoting QC testing in fiscal 2010 and over the nine years through fiscal 2018, 1,398 people had taken and passed the exam, including not only those working in technology, production, and purchasing, but also those focused in sales and working in the head office. One positive result of many people taking the exam was an increased basic knowledge of quality and the formation of a common language, which has contributed to ongoing improvements and effective management. QC certification exams are planned each year as part of the company's training plan, and have become entrenched on a sustained basis at a companywide level.

We are also engaged in activities designed to contribute to those taking the exam to successfully pass it, including seminars conducted by an in-house instructor being held immediately before the exam.

Number of people passing the QC exam



Case Study 3: Efforts during Quality Month

Putting quality first in the provision of products and service

November is "Quality Month" at CKD, with all employees participating in related activities, which include quality month messages from the Company, executive QC patrols, reports and evaluations on quality-related activities, and the creation of quality slogans, with the best of these being recognized with awards.

Quality Month includes national events, and our checks on progress toward meeting quality targets and daily improvement activities not only raise awareness, but allow the company to recognize successful efforts and improve on-site operations.

With the goal of deepening quality awareness, we also communicate our ideas on quality to employees both in Japan and overseas through Quality Month messages.

Finally, the company president and executives

participate in QC patrols, demonstrating their commitment to quality by directly observing quality conditions at the company's production and manufacturing facilities.



QC Patrol

Case Study 4: Quality Awareness Activities for Suppliers

Quality policy briefings and quality improvement activities

As part of Quality Month, the Company holds briefings for its major suppliers. In addition to explaining current quality policy details and reporting on the state of quality over the past year, the Quality Assurance Department provides an explanation on the importance of modification control*3. We conduct a survey after the briefing, focusing on the quality control status of each supplier and explanations



that have been provided to secondary suppliers. We also conduct follow-up activities to ensure the implementation of content provided during the briefings.

^{*1} Own-process completion: Centers on the idea that a manufacturer can guarantee the product quality of items produced in-house through the incorporation of machine and line quality measures.

^{*2} Challenge1000: CKD has established a policy of designating the mass production line at a plant with a high defect rate as a priority line, and set a defect rate reduction target of 1,000ppm (0.1%). The idea is for all departments to work together to make continuous improvements, and through these activities provide OUT for own process completion and improve the quality control process (QC story).

^{*3} Modification Control refers to efforts aimed at minimizing risk of defects in products delivered to customers as the company or supplier makes shifts in manufacturing methods, materials, or machinery.

Environmental Management System

Living in harmony with the environment

CKD is engaged in companywide efforts to improve the environment, including efforts in regard to pollution and in ensuring compliance with product-based environmental regulations, such as the European RoHS Directive. We recognize that the realization of a low-carbon society is indispensable to the needs of the international community, and believe that not only can business be conducted while maintaining the environment in a beautiful state, but that the environmental activities undertaken by each of our employees can produce significant positive results. CKD will continue to contribute to the preservation of the environment by developing and supplying to our customers environmentally friendly products that comply with relevant laws and regulations thanks to our years of experience in automation and fluid control technologies.



We have established our environmental policies in line with our commitment to ensure that CKD business activities, products, and services have an appropriate

environmental impact and contribute to the prevention and reduction of pollution.

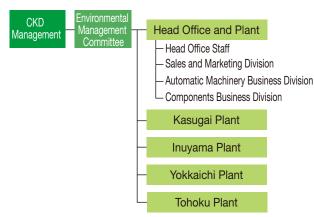
[Environment]

- 1. We will promote the development and expanded sales of environmentally friendly products.
- 2. We will clarify and comply with all environmental laws and regulations, while working to prevent pollution and CO₂ emissions, including by those working at CKD in their social life.
 - a) We will promote the conservation of energy and resources and build energy-saving production lines
 - b) We will reduce environmental pollutants
 - c) We will reduce waste

We are developing and expanding sales of environmentally friendly products, focusing not only on the conservation of energy and resources, but also on the environmental impact of the product throughout its life cycle. While maintaining compliance with all environmental laws and regulations, we are also working to reduce our environmental impact as much as possible by conducting our business in recognition of our social responsibilities and continually striving to reduce CO₂ emissions and pollution.



Companywide efforts to reduce our environmental impact.



Environmental Regulations and Compliance

There are a number of environmental laws and regulations that apply to CKD operations, including the Air Pollution Control Law, the Water Pollution Control Law, and the Waste Disposal and Public Cleansing Act. In addition to complying with these laws and regulations, we continue to work on improving the environment.

Environmental targets and results

	Townst	Decult
	Target Develop and release environmentally friendly products in line with our standards	Result Established annual development and sales targets. Achievement rate in fiscal 2018 was 87%.
Develop and expand sales of products with	Expand sales of products with low environmental impacts	
low environmental impacts	Collect requests from customers for improvements in products with low environmental impacts, and propose development and improvement plans	Established sales division targets. Achievement rate in fiscal 2018
Reduce environmental pollutants	Accumulate data related to chemical substances within products in line with REACH regulations	Promoting the collection of substance data in order to comply with customer requests.
Promote the conservation of energy and resources	Improve infrastructure and reduce energy consumption	Targeting 1% reduction in energy consumption per unit. While energy consumption volume increased 0.2% compared to the previous fiscal year in fiscal 2018, energy consumption per unit was down 1.1%. We achieved our target in reducing energy consumption per unit by an average of 3.6% each year between fiscal 2014 and fiscal 2018.

Initiatives Aimed at Combatting Global Warming

Targeting a reduction in CO₂ emissions intensity by enacting continuous improvement activities, including the introduction of energy-saving equipment and the construction of energy-saving production lines.

■ CO₂ emissions volume increased 15% compared to fiscal 2013 (3,631 tCO₂), but decreased per unit of sales by 19% over the same period.

Note: Domestic plants and sales offices

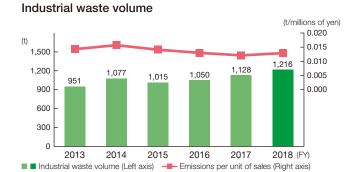


Initiatives Aimed at Reducing Industrial Waste

CKD is working to reduce and recycle waste, including by managing the separation, discharge, storage and consigned processing of any waste generated at the company's plants.

Industrial waste volume increased 28% compared to fiscal 2013 (266t), but decreased per unit of sales by 10% over the same period.

Note: Domestic plants

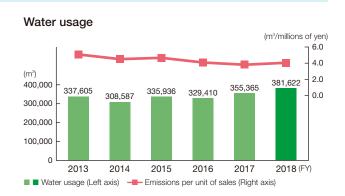


Initiatives Aimed at Reducing Water Consumption

CKD is promoting the effective use of water resources at its plants, by working to reduce overall water use and improve the processes in which it is used.

■ Water use increased 13% compared to fiscal 2013 (44,017 m³), but decreased per unit of sales by 20% over the same period.

Note: Domestic plants



Environment-related Capex

The figure to the right shows capital expenditures and related details for the four domestic plants targeted for environmental conservation improvements. Investment amounts are focused primarily on equipment expenditures and do not include costs such as personnel expenses.

Fiscal Year	Investment Amount (millions of yen)	Details
2014	253	Energy source conversion (from heavy oil, LP gas to City gas) Updating to highly efficient air conditioning equipment
2015	310	Updating to highly efficient air conditioning equipment Introduction of cogeneration equipment
2016	111	Improving operational methods for air conditioning equipment Improving operational methods for power control equipment
2017	111	Shift to LED lighting Introduction of water recycling equipment Updating compressor equipment
2018	314	Updating to highly efficient air conditioning equipment Introduction of cogeneration equipment Shift to LED lighting Updating compressor equipment

Local Society

CKD aims to be an "open" company that can contribute to society and operate in harmony with local society.

Our policy is based on "contributions to environmental preservation," "contributions to the nurturing of the next generation," and "contributions to social and cultural development," and since the Great East Japan Earthquake in 2011, CKD has been a continuous supporter of those impacted by the disaster. Together with local society both in Japan and overseas, we will continue to strive toward building a sustainable society.

Basic Policies As a good corporate citizen, we value engagement with local communities, promote social contribution activities, and strive to play our part in creating an affluent

society. (Based on the Corporate Philosophy, Corporate Commitment, and Standards of Conduct)

Courses of action



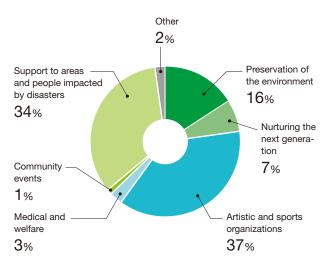
CON

Initiatives

CSR Funding

With the aim of contributing to society, CKD launched the CSR Fund in June 2006.

In fiscal 2018, we provided active support to children impacted by the 2011 Great East Japan Earthquake and donated to artistic and sports organizations.



Creating a System Allowing Time off for Volunteer Activities

With the goal of supporting employees in their social contribution activities, CKD created a system allowing 3-5 days off per year for volunteer-related activities.

This allows each employee to contribute to society in an area in which they feel familiar, with possible fields for action including welfare activities, disaster relief and recovery efforts, and activities aimed at preserving natural habitats.

Contributing to the Preservation of the Environment

CKD forestation activities



CKD employees and their families participate in volunteer activities to preserve forest areas in the Kaisho Forest area of Seto City, Aichi Prefecture. This area has volunteer activities

throughout the year, including pruning and trimming, maintaining the trees and bushes around the viewing area, and preserving the promenade.

■ Clean-up activity around the Oyama River



CKD sponsors the Oyama River clean-up activity, in which employees and local residents work together, every September. The effort serves to revitalize the area around the Oyama River that

runs through Komaki City, Aichi Prefecture, where the Company's head office and factory are located, and contributes to the preservation of a rich environmental area.

Clean-up activity in the Owari Pedestrian Parkway Area

CKD every month conducts clean-up activities in the Owari Pedestrian Parkway Area, which is located adjacent to the Inuyama Plant. Related activities include cleaning of the park and the multi-purpose area along the pathway, which is used as a venue for dancing to celebrate the O-Bon holidays every summer.

Nurturing the Next Generation

Teaching science through manufacturing (monozukuri)



CKD sponsors a science class for elementary school students in the area around the Komaki facility, where the head office is located. Noting that children are becoming increasingly

distanced from science, our goal is to increase their interest in science and nurture those who will be the leaders in the years ahead.

Practical training for those studying pharmaceuticals

CKD also conducts practical training for pharmacy students in their fifth year of study. The training centers of the theme of deepening knowledge related to PTP* sheets, including how to operate the PTP for pharmaceuticals packaging machines and how PTP sheets are manufactured.

* PTP stands for "Press Through Package", where medicine can be taken out by pressing it through the enclosing package material.





PTP Sheet

Sponsoring Science Inkare



CKD is a sponsor of Science Inkare, which supports the independent research of students. In fiscal 2018, one of 100 student presentations from around Japan was selected to receive the CKD award.

Contributing to Social and Cultural Development

Eco-cap and used stamp collection activities

CKD is involved in the collection of PET bottle caps and used stamps. The collected caps are sold to recycling companies, with the profits donated to provide vaccines to children around the world. Used stamps are donated to organizations providing medical support overseas or sold to collectors, with gains of sales used to fund activities.

Efforts aimed at promoting blood donations

CKD has conducted blood drives since 2006. In fiscal 2018, 253 people took part.

■ Table for Two

Table for Two is a project that sends meals to children in Africa, funded through a donation of ¥20 per meal at the Company's cafeteria. Cafeterias at four domestic CKD plants take part in the program.

Cooperating with the "Kodomo 110-ban no ie" program As part of the Company's commitment to the safety of children, CKD cooperates with the "Kodomo 110-ban no ie" program, which is a network of safe houses children can run to during an emergency, including to find protection from a suspicious stranger.

Social Contributions Overseas

■ Efforts to preserve the environment in China

CKD China participates in efforts to preserve the environment in that country in cooperation with companies located around the plant. Some of the company's efforts include promoting eco-activities and cleaning up refuse around local roads.

Efforts to preserve the environment in Thailand



CKD Thailand employees have participated in coral reef preservation activities, which include planting coral, at the Sattahip Naval Base.

Efforts to preserve the environment in the US

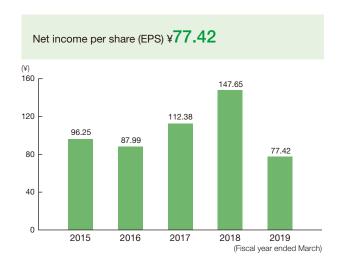
CKD USA participates in the Christmas tree decorating event at the Brookfield Zoo in Chicago, Illinois. A portion of the participation fee is donated to fund the protection of wildlife and forests. The company's social contribution efforts also include participation in Toys for Tots, which provides Christmas presents for underprivileged children.



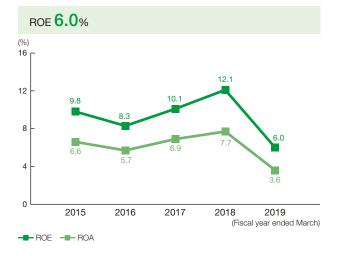
Financial/Non-Financial Highlights

Earnings

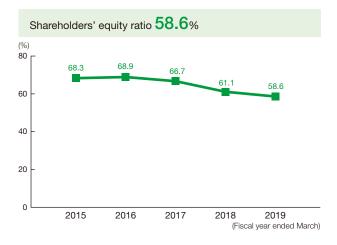




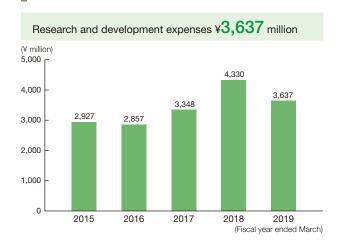
Corporate value



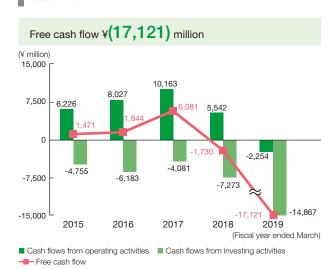
Financial foundation



Research and development

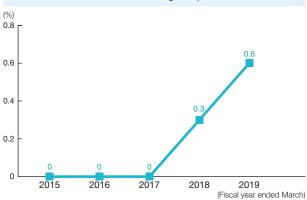


Cash flow



Diversity

Ratio of female workers in managerial positions* 0.6%



* CKD Corporation employees as of March 31

Employees

Ratio of overseas employees 40.1%



■ Number of employees (Left axis) → Ratio of overseas employees (Right axis)

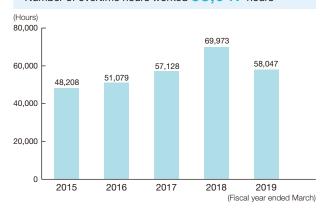
Diversity

Ratio of disabled employees 2.21 %



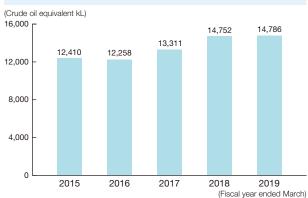
Labor health and safety

Number of overtime hours worked 58,047 hours



Environment

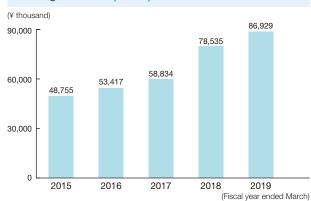
Energy usage volume 14,786 crude oil equivalent kL



Note: Scope of aggregation: Domestic plants, sales offices

Human resources

Training costs ¥86,929,000



11-Year Financial Summary

		Medium-	Геrm	NEW CKD 2012	2	
		Managem	ent Plan			
	(Unit)	2009	2010	2011	2012	
Business results						
Net sales	(¥ million)	68,175	50,035	72,020	72,804	
Gross profit	(¥ million)	15,796	11,421	20,657	19,655	
Selling, general and administrative expenses	(¥ million)	13,969	11,087	13,154	13,588	
Operating income	(¥ million)	1,826	333	7,502	6,067	
Ordinary income	(¥ million)	872	711	7,528	6,213	
Net income attributable to owners of parent	(¥ million)	(2,849)	1,494	4,577	3,741	
Cash flow						
Cash flows from operating activities	(¥ million)	2,183	7,775	4,048	3,775	
Cash flows from investing activities	(¥ million)	(2,276)	(831)	(1,048)	(3,020)	
Cash flows from financing activities	(¥ million)	1,312	(5,838)	(766)	(2,450)	
Free cash flows	(¥ million)	(92)	6,944	2,999	754	
Financial position						
Total assets	(¥ million)	62,802	62,869	72,171	70,079	
Net assets	(¥ million)	39,594	41,480	45,335	48,322	
Cash and cash equivalents	(¥ million)	4,458	5,581	7,728	5,961	
Interest bearing debt	(¥ million)	11,281	6,012	5,851	4,040	
Investment	<u> </u>					
Depreciation	(¥ million)	3,314	2,918	2,639	2,769	
Capital investment	(¥ million)	1,879	597	2,180	2,963	
Research and development expense	(¥ million)	2,149	1,731	2,245	2,151	
Per share information						
Net income per share (EPS)	(¥)	(45.28)	24.04	73.40	58.96	
Dividends per share	(¥)	16	6	14	12	
Net assets per share (BPS)	(¥)	636.90	667.24	714.46	761.54	
Key performance indicators						
Sales by products						
Automatic machinery business	(¥ million)	16,731	11,967	13,061	14,762	
Components business	(¥ million)	51,443	38,068	58,959	58,041	
Ratio of overseas sales	%	21.9	15.8	20.6	20.3	
Sales by areas						
Japan	(¥ million)	53,212	42,122	57,155	58,043	
Rest of Asia	(¥ million)	13,305	6,907	13,080	12,712	
Other	(¥ million)	1,658	1,006	1,785	2,047	
ROE	%	(6.7)	3.7	10.5	8.0	
ROA	%	(4.1)	2.4	6.8	5.3	
Shareholders' equity ratio	%	63.0	66.0	62.8	69.0	

Note: Accounting year figures have been revised for the accounting year ended on March 31, 2018 to reflect changes in accounting policies from April 1, 2018.

Long-term vision

10-Year Vision

GLOBAL CKD 2015

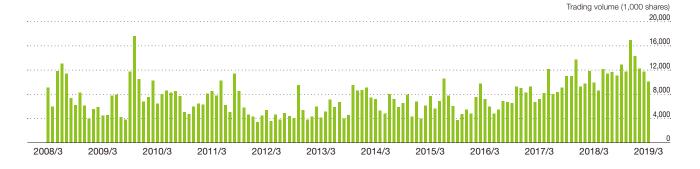
Challenge CKD 2018

Build-up CKD 2021

					(Fiscal	year ended March)
2013	2014	2015	2016	2017	2018	2019
65,031	75,491	83,379	88,117	94,012	115,700	115,665
17,022	23,151	25,439	26,734	28,727	35,835	28,510
13,778	15,268	17,076	18,627	19,146	23,363	23,081
3,244	7,883	8,363	8,107	9,580	12,472	5,429
3,517	8,136	8,735	8,094	9,771	12,469	5,425
2,452	5,456	6,010	5,459	6,958	9,142	4,793
7,008	9,754	6,226	8,027	10,163	5,542	(2,254)
(5,017)	(6,224)	(4,755)	(6,183)	(4,081)	(7,273)	(14,867)
(57)	(2,330)	618	(3,329)	(2,505)	2,559	14,374
1,990	3,530	1,471	1,844	6,081	(1,730)	(17,121)
71,742	86,711	96,018	96,412	106,361	130,887	136,961
50,852	57,712	65,555	66,419	70,957	80,058	80,444
8,180	9,831	12,290	10,342	13,905	14,799	12,028
5,070	3,446	5,411	4,391	3,602	11,684	28,627
		·				·
2,619	2,485	3,188	4,060	3,964	4,230	5,173
2,710	5,800	5,454	7,801	4,864	9,422	14,843
2,336	2,709	2,927	2,857	3,348	4,330	3,637
38.99	87.36	96.25	87.99	112.38	147.65	77.42
10	18	24	26	30	37	28
814.25	924.09	1,049.70	1,072.72	1,146.02	1,291.26	1,296.94
14,202	15,113	15,920	16,954	18,380	16,344	16,027
50,828	60,377	67,458	71,163	75,631	99,355	99,638
20.8	22.6	27.6	29.7	25.5	27.8	26.9
51,499	58,461	60,352	61,907	70,046	83,518	84,515
11,966	14,815	20,455	22,469	20,772	28,529	27,253
1,565	2,214	2,571	3,741	3,193	3,652	3,897
4.9	10.1	9.8	8.3	10.1	12.1	6.0
3.5	6.9	6.6	5.7	6.9	7.7	3.6
70.9	66.6	68.3	68.9	66.7	61.1	58.6

Share Information

Share price (*) 3,000 2,500 2,000 1,500 1,000

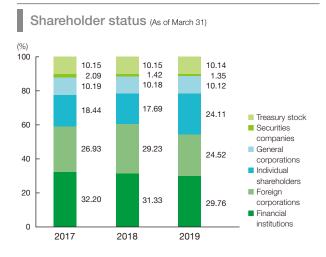


Stock status (As of March 31, 2019)

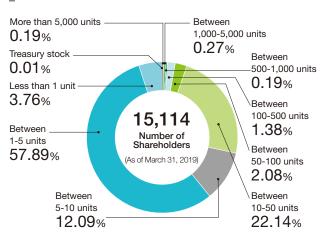
Total number of authorized shares	233,000,000 shares
Total number of shares outstanding	68,909,449 shares
Number of shareholders	15,114

Dividends/dividend payout ratio (Fiscal year ended March)

	Dividends (¥)	Dividend payout ratio (%)
2019	28	36.2
2018	37	25.1
2017	30	26.7
2016	26	29.5
2015	24	24.9
2014	18	20.6
2013	10	25.6
2012	12	20.4
2011	14	19.1
2010	6	25.0
2009	16	_
2008	22	25.9



Shareholder ratio by number shares held (Unit: 100 shares)



Corporate Data

Corporate profile

Company name	CKD Corporation
Establishment	April 2, 1943
Paid-in capital	¥11,016 million
Consolidated number of employees	4,582 (March 31, 2019)
Net sales	¥115.7 billion (March 31, 2019)
Listed on	First Section of the Tokyo Stock Exchange and Nagoya Stock Exchange
Securities code	6407

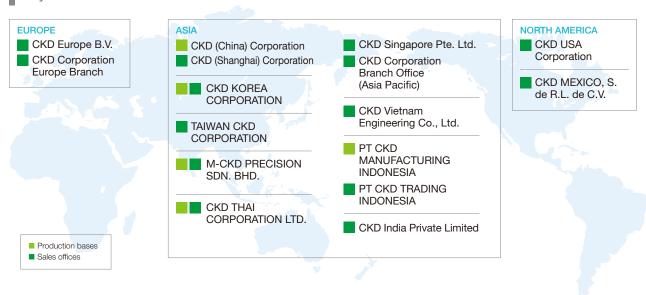
Lines of Business

Development, manufacture, sale, and export of machinery that includes automatic machinery, labor-saving components, pneumatic control components, pneumatic auxiliary devices, drive components, pneumatic auxiliary components, fine system components, fluid control components

Headquarters Address: 2-250 Ouji, Komaki City, Aichi 485-8551, Japan

Telephone: +81 (568) 77-1111

Key overseas business facilities and overseas subsidiaries



Editorial policy

CKD Report 2019 is an integrated report that the CKD Group has published for the first time in order to contribute to engagement with its various stakeholders. The report has been edited in a manner to facilitate understanding of CKD's business profile, management strategies, and growth strategies.

Organizations covered in the report: In principle consolidated CKD Group companies

Scope of the report: In principle from April 1, 2018 to March 31, 2019 but includes certain periods before and after in order to provide more detailed information.



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