

DISCO

CORPORATE REPORT

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English



Message from the President

Aiming for Excellence in Corporate Activities

Business conditions in economic and global environments as well as in science and technology have been recently changing at a dizzying pace. The expected content and quality of the corporate activities and the social responsibilities that companies are being called upon to fulfill are continually evolving. DISCO has established "DISCO Values" - an ethos intended for application throughout the organization. The aim in so doing is to clarify the future direction of the corporation under rapidly changing conditions, without being sidetracked by superficial changes.

DISCO Values clearly states: "By achieving excellence in all of our corporate activities, our existence will be welcomed by our stakeholders and society." This indicates that DISCO is a corporation which aspires for technology and services regarded as an international standard. As such, we must show strong determination to respond flexibly to changes in society and to enhance every aspect of our corporate activities which meets our corporate values.

Since 2003, DISCO has been introducing activities known as Performance Innovation Management (PIM). These activities involve setting target values on the basis of a desired future state formulated individually by different units and for different types of work, and then reflecting at brief intervals to see whether these values have in fact been achieved. The aim of these reviews is to ensure that the organization as a whole is able to evolve through a process of self-awareness concerning matters such as how improvements can be made. In order to achieve "Excellence in corporate activities," (a target of DISCO Values) it is indispensable that each individual employee act to ensure that improvements can be made by reflecting on and learning from these activities. Our everyday PIM activities have allowed us to streamline operations throughout the corporation, making DISCO a dynamic, evolving organization.

Since implementing our original management accounting system, Personal Will, throughout the company, the work performance of individuals has become visible, and it is being used to manage profits and expenditures. Employees are able to choose the work that they want to do through this system, and their job satisfaction is increasing. Furthermore, employees are able to think and make decisions for themselves by refining their ability to make logical decisions in order to make a profit. As a result, DISCO is becoming an even stronger organization than it has been in the past.

DISCO intends to continue to evolve by aiming for true excellence in all our corporate activities. We look forward to your continued support and cooperation.

Kazuma Sekiya

President, CEO and COO

Corporate Philosophy

DISCO Values

The following are examples of DISCO Values:

DISCO Values represent the corporate philosophy that identifies the ideal from various perspectives, including the direction in which the company should progress, the basic approach of management, and the manner in which each and every employee works. DISCO Values stipulate over 200 items, systematically organized so they may be reflected in actual activities. Specifically, they document general corporate social responsibility (CSR) concepts by which we aim to exchange value with our stakeholders, all the while fulfilling the company's social mission. DISCO strives to conduct all of our activities from management decisions to day-to-day business in line with DISCO Values.

Bringing science to comfortable living through advanced Kiru, Kezuru and Migaku technologies

"Advanced Kiru, Kezuru and Migaku technologies" is DISCO's business domain. In other words, DISCO will never deviate from the three technology fields of Kiru (cutting), Kezuru (grinding) and Migaku (polishing) in our business activities. The company's social mission is to connect the ever-advancing science to bountiful and comfortable lifestyles via these core technologies.

Our growth is defined as our increase in mission-achievability and value-exchangeability

The management of a company can significantly change depending on how it defines its growth. DISCO does not think of growth in terms of expansion of sales, scale, or market share. For DISCO, growth is measured by how close we come to achieving our Mission and by the increase in our exchange of value with and satisfaction for our stakeholders, such as the customers, employees, stockholders, and suppliers.

Always the best, always fun

DISCO's motto is "Always the best, always fun." We feel that, as professionals, it is a given that we thoroughly pursue the highest level of quality in the performance of our work. Also, it is just as important that we enjoy our work. These do not contradict each other, but rather we feel that their compatibility contributes to a fulfilling work experience.

Structure of DISCO Values



Value and Solutions Provided by DISCO

The precision processing equipment, consumable products and applications know-how provided by DISCO enable Kiru, Kezuru, Migaku solutions.





DISCO Processes

Kiru, Kezuru and Migaku - our three core

technologies.







DISCO Consumable Products

Abrasive blades and wheels attached to equipment for processing.



DISCO Equipment

Equipment that processes the workpiece through fine control of size and thickness.

What is processed?

We mainly process silicon, sapphire, gallium arsenide, and other raw materials which become the materials used for semiconductors and electronic components. There are many various types of these raw materials. However, the majority are round disks called "wafers," such as silicon wafers and sapphire wafers. Semiconductors and electronic components function inside devices including smartphones and also computers, IC cards, medical devices, and automotives. All of the essential products around us are processed with DISCO's technology.

Processed for what?

In order to manufacture smaller and thinner digital products such as smartphones and PCs, the components that are found inside must also be made smaller and thinner. This allows for many components in the same space as well as enhanced functionality. DISCO contributes to the advancement of digital products, contributing to comfort in people's lives.





How is it processed?

Fine Cutting



DISCO can finely cut material to micrometer accuracy (1/1000 of a

millimeter). This is precision to the point of being able to groove a human hair crosswise 30 times.

Thin Grinding to the Point of Transparency



We are able to thinly grind material to 5 micrometers (copy paper is 100

micrometers thick). In addition, we are able to maintain a thickness variation less than 1.5 micrometers in a 300 mm diameter wafer.

Mirror-Like Polishing



A mirror polish greatly improves the strength of

Relationship between Semiconductor Manufacturing Process and DISCO's Technologies

The majority of DISCO products, which incorporate a broad number of engineering disciplines, such as mechanical, electrical, physical, chemical and IT, are currently used for manufacturing high-value-added semiconductors.

Wafer Manufacturing and Semiconductor Manufacturing Processes

DISCO's Processing Technology

Wafer Manufacturing Process

The process of manufacturing silicon wafers, the substrate material used in manufacturing semiconduc-



Grinders are used to thin wafers cut

from silicon ingots. As semiconductors

have become thinner with enhanced functionality, the precision of flatness in the thinning process has become more important.

Semiconductor Manufacturing: Front-End Process

The process of making semiconductor die by form ing transistors on the substrate wafer



The backside of the wafer is ground (in a process called backgrinding) in order to thin it while protecting the circuit on the front side. End products like smartphones and computers have become even

thinner thanks to this process.



The damage layer is removed for the purpose of improving the strength of the thinned wafer (stress relief). As the thinning of end-products progresses, demand for stress relief is increasing.

Semiconductor Manufacturing: Final-Assembly Process

The process of assembling semiconductor die via wiring and packaging





Semiconductor die are cut from the thinned wafers in a process



DISCO's equipment is also used to cut the package after it is enclosed in



Semiconductors are used in the latest digital equipment that facilitates our comfortable lifestyles.



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Four Business Fields, Our Unique Total Solutions

DISCO's greatest strength lies in our four distinct business fields, each interwoven to provide total solutions.



Precision Processing Consumable Products

Cutting-Edge Technology Honed Since our Founding in 1937

Our consumable products can be characterized by our abrasive blades and wheels made with synthetic diamonds. When installed on the equipment and rotated at high speeds, they cut, grind, and polish materials. We manufacture various consumable products including dicing blades and grinding/polishing wheels. Users can make different selections in terms of shape, thickness, bonding material, and diamond size according to their processing needs.

DISCO was originally established in 1937 as a manufacturer of abrasive cutting wheels. Ever since, we have continued to develop these products to find solutions for the needs of our customers, and we now have tens of thousands of high-precision processing tools in our line-up.

Precision Processing Equipment

Limitless Innovation and Application of Advanced *Kiru*, *Kezuru* and *Migaku* Technologies

Precision Processing Equipment is the general term we use to describe the machines that perform our *Kiru*, *Kezuru* and *Migaku* technologies. DISCO has primarily been involved in the development of equipment such as dicing saws and grinders mounted with blades and wheels. However, the processing methods have expanded significantly in recent years beyond our original abrasive equipment to include dicing saws that cut using lasers, and surface planers that employ a diamond bit. Most DISCO equipment is customized to meet our customers' wide-ranging requirements regarding not only device quality and equipment productivity, but also effective use of space and low environmental impact.

DISCO will continue to evolve our core technologies of *Kiru*, *Kezuru* and *Migaku* to contribute to comfort in peoples' lives.



Application Know-How

Solutions that Truly Meet Our Customers' Needs

Precision equipment, consumable products, and processing parameters can be combined in a myriad of ways. This can make it difficult for our customers to make equipment selections that are best for them. The facilities in our application laboratory can solve this problem as our application engineers perform test cuts with the materials provided by the customer in order to recommend solutions that will produce the best processing results.

Providing processing solutions, namely, in achieving the best processing results, is the core element offered by DISCO. In an effort to provide free application testing close to our customers, we have application laboratories in our domestic and overseas offices, in addition to the Application Laboratory at our Head Office/R&D center in Tokyo with its 70-plus private test booths.

Service Support

Enthusiasm for Craftsmanship Embodied in Our Service

We at DISCO consider the services we provide after product delivery to be a very important aspect of our business. Our service is primarily comprised of after-sales service which may involve regular equipment spot checks or repairs, as well as training services to provide our users with opportunities to acquire the necessary operation/maintenance skills. We have created a six-level in-company certification program for our Customer Engineers who are in charge of after-sales service allowing us to provide uniform global service support. When it comes to our training service, we put into practice feedback obtained via questionnaires filled out by the participants in an effort to provide service and support that delight our customers.

The very thing that defines the DISCO spirit is our belief that the care we put into the craftsmanship of our equipment and consumable products must also be fully reflected in our application know-how and service support.

DISCO's Kiru, Kezuru, Migaku Products That Create Comfortable Living

We at DISCO want to use our advanced Kiru, Kezuru and Migaku technologies to create comfort in the lives of people. Let us take a look at some of the DISCO products that allow us to do this.

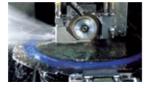




Dicing Saws

Equipment that cuts materials with an abrasive blade. They are categorized into two types: compact semi-automatic dicing saws for specialized applications and fully-automatic dicing saws, which are high-productivity models that include automatic handling, alignment and cleaning.





Dicing Blades

These are thin abrasive wheels used for cutting, created by molding synthetic diamond grains with bonding materials such as phenolic resin.





Equipment that cuts material using a laser. Depending on the material, it can be more productive $% \left(1\right) =\left(1\right) \left(1\right$ than a blade dicing saw. We offer both manual and fully automatic models.





Dicing Engines

These are dicing sub-systems that are integrated with a handling system, and cut chip scale packages (CSP) covered with resin in order to protect the semiconductor die from external impact, contamination and water.







Grinders

Equipment that grinds materials with a grinding wheel. We offer semi-automatic grinders for specialized applications and high-productivity fully automatic models that include automatic handling and





Grinding Wheels

Grinding wheels used for kezuru processes. These products are used to make wafers and other workpieces thin and flat.

Kezuru & Migaku





Grinder-Polishers

Equipment configured for both grinding and polishing in one integrated unit which also offers a selection of specific polishing methods, including dry polishing and chemical mechanical polishing (CMP).





Surface Planers

Equipment that uses a hard milling bit to flatten the material. These products are used to cut the surface of malleable materials (such as gold and copper) and LED resins, planarizing with high







Dry Polishers

Equipment used for polishing materials. They do not use any chemicals or water during processing, thus minimizing the impact on the environment.



Dry Polishing Wheels

Used with polishing pads for dry polish to produce a mirror finish on the processed surface.

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Major R&D Center in Tokyo

DISCO's Head Office/R&D Center is located in the Omori region of Tokyo, which has easy access to Haneda Airport as well as Shinagawa Station, where the Shinkansen stops. The site was chosen for our R&D center to be more convenient for our customers to visit us for technological discussions. The content of these early engagements provides a major source of ideas for DISCO's next generation of R&D, and represents a valuable asset to our company.



An R&D Environment that Places Importance on Inspiration and Challenges

Building B in the Head Office/R&D Center is primarily our R&D facility. This places our engineers' desks adjacent to the area where the R&D equipment is located. The creation of an environment that allows for an immediate examination of the engineers' inspiration using close-by equipment enables DISCO to continue to provide invaluable creative solutions and products even in the rapidly changing semiconductor industry.



Turning Customer Needs into Innovation

What our customers want is not the product itself, but the processing solutions, and we at DISCO place great importance on this approach. Testing helps determine whether the solutions required by our customers can be realized. This testing takes place in the application laboratories of not only our Head Office/R&D Center, but also in our branch, affiliate, and agent offices worldwide, which create stronger relationships of trust with our customers. The cycle that contributes to the processing results provides DISCO with a high level of expertise and know-how, and the accumulation of this knowledge helps us to respond to even more complex requirements.





Monozukuri* in Pursuit of Customer Satisfaction

DISCO was established as a grinding wheel manufacturer originally named Dai-Ichi Seitosho in the city of Kure, Hiroshima Prefecture in 1937. Although our products have evolved, our stance regarding *monozukuri* to respond to customers' needs and continue to provide them with true and lasting satisfaction has continued unchanged since the first day. DISCO works out of three different production sites including two in its city of inception, Kure, and one in Chino City in Nagano Prefecture.



* Craftsmanship, pride in manufacturing

Producing Custom-Built Products

Although DISCO's equipment comes with standard specifications, most customers require customization for their specific processing needs. Several of DISCO's departments and divisions, such as Sales, Engineering, Purchasing, Manufacturing, and Applications, collaborate to ensure that the specifications requested by the customers are precisely reflected in our products. Particularly when it comes to the important components that directly affect the processing results, we at DISCO make continuing efforts to increase the in-house manufacturing ratio to allow us to provide our customers with a more reliable product.



Creating Customer Delight via Our Evolving Activities

Even at the manufacturing site, we actively utilize PIM* activities that are being developed and expanded throughout the company in our affiliate offices throughout the world. Our zero defect activities in blade manufacturing and reduction of assembly man-hours in equipment manufacturing have directly contributed to customer satisfaction in terms of faster delivery of products and a stable supply.



* PIM: Performance Innovation Management

This specifically refers to a program where each department or division sets targets based on the desired future state. The group subsequently looks back over short intervals to detect any gaps between the targets and the current state in an effort to obtain $\it Kizuki$ ("lightbulb" moment) for the end purpose of evolving. Visibility of the targets and current state via the abundant use of notices, posters, and Post-it notes encourages all of us to increase our awareness in our daily



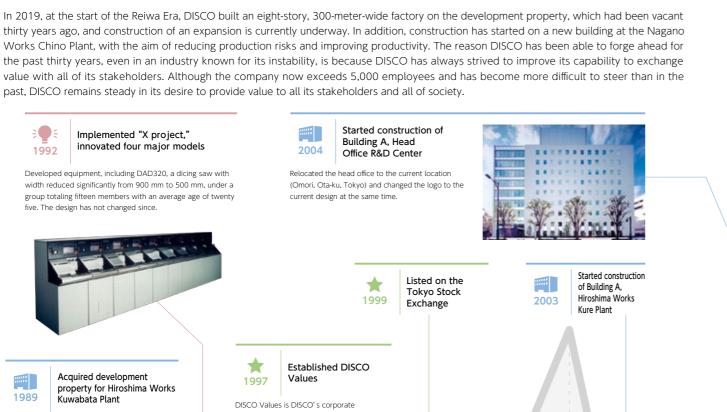
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Changing Times and Steady Thoughts -The Past Thirty Years at DISCO

At the beginning of the Heisei Era (1989), DISCO acquired an approximately 31,000 m² development property in Kure City, Hiroshima, and commenced over-the-counter trading of its stock in the same year. With a future manufacturing site to be built on the sprawling vacant property and a decision that could contribute significantly to recognition and trust in the company, the start of the Heisei Era began with a new step forward for DISCO.

However, the business environment into which DISCO had ventured continued to fluctuate. While DISCO was forced to retreat from unprofitable projects, in 1992, with the goal of improving product competitiveness, DISCO experienced success with its "X project," which had gathered members with an average age of twenty-five to innovate four major equipment models over a year. Around this time, the total number of employees exceeded 1,000, and issues caused by expansion of the company began to show. In response, in 1997, DISCO released DISCO Values, a corporate philosophy clearly outlining the direction the company wanted to travel, and in 1999, DISCO debuted on the Tokyo Stock Exchange. However, DISCO's sales suddenly plummeted when the IT bubble burst two years later in 2001 and were also down directly before the 2008 recession, due to the Lehman Brothers collapse. However, thanks to the expansion of the smartphone market and the subsequent increase in demand for cloud services, DISCO was able to end the Heisei Era with strong sales.

In 2019, at the start of the Reiwa Era, DISCO built an eight-story, 300-meter-wide factory on the development property, which had been vacant thirty years ago, and construction of an expansion is currently underway. In addition, construction has started on a new building at the Nagano Works Chino Plant, with the aim of reducing production risks and improving productivity. The reason DISCO has been able to forge ahead for the past thirty years, even in an industry known for its instability, is because DISCO has always strived to improve its capability to exchange value with all of its stakeholders. Although the company now exceeds 5,000 employees and has become more difficult to steer than in the





1998

1993



KABRA process is a new laser slicing technology that irradiates a laser vertically from the upper surface of the ingot, forming a flat separation layer at a specified depth to produce a wafer. This technology contributes to the acceleration of next-generation semiconductor and SiC wafer production, increases the number of die, and improves productivity



With the goals of preparing for future increases in demand by expanding production capacity and of improving BCM.



2017

Awarded "Excellent Workplace Award" for high productivity and high employee satisfaction

Established Nagano

Works Chino Plant

DISCO's organizational management development was evaluated and awarded the "Excellent Workplace Award" at the Minister of Health, Labour and Welfare award level, which is the highest level.



2012

2008

2005

Started construction of Building B, Head Office R&D Center

Completed construction of

Building C, Hiroshima

Established a system to produce all precision

processing tools in a seismically isolated building.

Works Kuwabata Plant

In addition to the goal of enhancing the head office, the building was constructed to improve BCM with implementation of earthquake resistant seismic isolation.

Developed surface

Merged with maintenance and service-related

Acquired BS25999-2:2007, Business

2008

Continuity Management system

standard

certification organization SGS Japan)

DISCO was the first company to be certificated in the

domestic semiconductor industry. (Investigated by the

subsidiaries

With the aim of providing better service by

2008

merging the service department into the

head office.

planer, DFS8910

(started sales)

cutting technology utilizing diamond bits.



Completed construction of Zone A in Building A, Hiroshima Works Kuwabata Plant

DISCO successfully improved its BCM system by implementing seismic isolation at its equipment production site.



Acquired first ISO22301:2012 (BCM International Recognition Standard) in Japan

Net sales

(Millions of ven)

180,000

160,000

140 000

120,000

100.000

80.000

60.000

40 000

20,000

2011

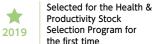
Launched first BCM team in Japan

The BCM team was established to enhance and promote further business management continuity measures against risks such as



Completed construction of Zone C in Building A, Hiroshima Works Kuwabata Plant

In 2015, construction started on Zone C in Hiroshima Works Kuwabata Plant in order to increase precision processing tool productivity.



DISCO was selected by METI and the Tokyo Stock Exchange for the "Health and Productivity Stock Program" as a listed company that cultivates corporate value with a long-term perspective and in particular has achieved excellence in health and productivity management.



Started construction of both Building B, Nagano Works Chino Plant and Zone D in Building A, Hiroshima Works





2018

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2013 (The thirtieth year of the Heisei era)

(The first year of the Heisei era) *Performance

2003

Aiming towards a Greater Exchange of Value with DISCO Customers and Suppliers

DISCO strives for essential customer satisfaction (CS) in an effort to delight our customers. We are also committed to establishing strong relationships of trust with our suppliers.

Improving Customer Satisfaction

DISCO has established a customer satisfaction (CS) charter and facilitates the development of a corporate culture in which activities to improve CS can be proactively deployed.

In order to improve CS, an internal support system for responding to customers' true needs is required, and all employees must endeavor to act with an awareness for the customer.

For this reason, the opinions and comments we receive from customers through the CS survey results, the activities which adopt those results, and the Short Interval Feedback conducted after delivering equipment to customers is shared not just with the sales departments, but also with the departments that play a supporting role.

Furthermore, DISCO strives to implement company-wide activities to improve CS from a variety of perspectives, such as requiring all supporting departments to receive training in CS.

DISCO Customer Satisfaction Charter

DISCO strives to be a true partner to our customers by supplying the most advanced, effective, and reliable Kiru (Cutting), Kezuru (Grinding), and Migaku (Polishing) technologies possible.

n doing so.

-We always listen to the voice of the customer.
-We provide first-class quality products and services that truly satisfy our

ive provide first-class quality products and services that truly satisfy ou ustomers' needs.

-We, as individuals and collectively, always act sincerely and honestly.
 -We are not satisfied with the status quo and always strive to improve.
 -We regard our mission with excitement and enthusiasm and seek to convey this positive energy to our customers.

Customer Satisfaction Survey

We believe that advice and suggestions from our customers provide us with the opportunity to evolve so that we can better respond to their expectations.

The CS survey is a questionnaire we have been conducting since 1999 and is one of the most important tools for knowing our customers' opinions. In 2014, the content in our CS survey was changed from content shared across all DISCO affiliates throughout the world to individual content suited to the business style of each region. Since the change, the CS survey has been helping each of our affiliates to grow, and uncovers customer needs which remained unnoticed.

The results and opinions acquired through the survey play an important role when investigating how to improve existing products and develop new ones, provide new services, etc. The survey findings also are used to examine whether the current activities to improve CS are functioning as planned. The examination findings are subsequently fed back to the related departments such as Sales, Engineering, and Service in order to allow for more precise

CS-improvement activities. Furthermore, the thoughts and opinions of our customers are passed onto our employees through applications on their iPhones (which are used for internal communications), successfully achieving high CS awareness, including in our administrative departments.

■Uses for the CS Survey Results



Short Interval Feedback

A majority of DISCO's precision processing equipment is made to order and delivered to the customer after pre-shipment testing. This is done to ensure the equipment provides the processing results desired by the customer. After the equipment is delivered to the customer's production site, it must be checked to make sure it is providing satisfactory processing results, and if adjustments are needed, they must be made quickly. DISCO has launched the Short Interval Feedback system that assesses the individuality of the equipment delivered to each customer.

Under the system, a questionnaire is sent to customers immediately after the equipment is delivered. The questionnaire asks about equipment usage, quality of support by sales staff or agents, and other related matters. The views and comments of customers who respond to the questionnaire are shared with relevant employees within the company, and, as necessary, a coordinated response is

provided by the Sales, Engineering, and Service Departments as well as other divisions.

Excellence in Understanding Customers

Customers who mass produce devices everyday make time for test cuts and negotiations despite their busy schedules. Since a late response can adversely affect the customer's production schedule, I always try to respond with speed more than anything else. In order to do this, I engage in close communication to quickly and correctly grasp the customers' needs and the hidden intention of their inquiry.

I would like to understand the customer better than anyone else by finding a solution to the problem, together with the customer, no matter how difficult the problem is.



VOICE

omestic Sales Departme

Thorough Quality Control

Quality control is essential to deliver true satisfaction to customers. DISCO establishes an annual quality policy and, in order to ensure that it is achieved, we have acquired ISO 9001 certification (an international standard for quality management systems). The organizations to which the certification applies do not only include the departments directly involved with the products, but also the indirectly-related departments that support these departments. Our overseas affiliates have also acquired ISO 9001 certification in their effort to make improvements on a sustained basis.

We are attempting to create a comprehensive system to prevent any quality issues. But, in the event a problem does arise, we are also forging a system that allows for a prompt investigation of the causes and resolution of the issue. With regard to particularly important issues, we form a solutions committee, which consists of the president and the managers of each relevant department such as the Engineering and Sales Departments, to deliberate on radical solutions.

■ System to Respond to Quality Issues



Export Control System

In order to ensure our products are provided to customers promptly, DISCO is striving to improve logistic efficiency.

One way this is achieved is by outsourcing most export declarations to a company that specializes in them. However, DISCO has received AEO (Authorized Economic Operator) system qualifications, which enables implementation of export customs clearance operations inside the company. Because products can be transferred directly to the airlines, the lead time is reduced.

In September 2018, when Kansai International Airport was closed due to Typhoon Jebi, delivery delays to customers were minimized by promptly switching to an alternative delivery route out of Narita Airport and ensuring an

alternative land transportation route.

Thanks to a recommendation from the Ministry of Land, Infrastructure, Transport, and Tourism in 2017, DISCO was audited and received a very favorable evaluation from the United States Department of Homeland Security as a representative for Japanese shipments. The Ministry of Land, Infrastructure, Transport, and Tourism thanked DISCO with a letter of appreciation.



Letter of appreciation from the Ministry of Land, Infrastructure, Transport and Tourism

Activities to Improve Suppliers' Satisfaction

Our suppliers are our valued business partners which we could not do without. The ideal method with which DISCO should pursue purchasing activities is contained within the Buyer's Oath. Every employee who comes in contact with a supplier must sign the Oath.

Also, in order to build a better partnership with all of our suppliers, every year we undertake a supplier satisfaction survey. For items which we receive many requests for improvement for, we will investigate the root cause and carry out activities to correct any problems.

In the future, we will continue to put our best efforts into being a good partner to our suppliers by making best use of the survey.

■ Buyer's Oath

- 1. Buyers are the face of the company.
- 2. Suppliers are equal partners.
- 3.1 will not accept gifts.
- 4.1 will refuse business entertainment as much as possible.
- 5. I will determine the validity of the price.
- 6. I will strive to take transparent and honest business endeavors.
- 7. I will not conduct any behavior that may result in my dismissal by a supplier.
- 8. I will always end all business interactions with a smile and in a friendly mood, regardless of how rigorous the preceding negotiations were.

DISCO has developed and issued JSA-S1001, an employee satisfaction standard.

TOPICS

DISCO has issued JSA-S1001, "Human Resource Management - Employee Satisfaction - Guidelines for Codes of Conduct for Organizations," an employee satisfaction standard based on the standard system managed by the Japanese Standards Association. This standard conceptualizes various activities to improve employee satisfaction and summarizes them so

that companies and organizations can easily implement and adopt the standard.

In addition, there are no other standards dedicated to employee satisfaction in the world. This is the first time that JSA-S has developed and issued a standard through the suggestion of an individual company.



Aiming for a Pleasant Work Environment

We at DISCO strive to implement policies and develop the work environment so that each and every employee can work actively and comfortably, as well as provide them with opportunities for growth.

Provision of Opportunities to Diverse Personnel

Regardless of gender, age, nationality, ethnicity, religion, or academic record, DISCO actively employs individuals who empathize with DISCO Values and wish to utilize their own individuality to realize DISCO's mission together.

For example, DISCO holds life-plan seminars which provide employees with the opportunity to think about how they will work and their lifestyle once they have retired. Healthy employees over 60 years of age who wish to keep working at DISCO can use the re-employment system until the age of 65. We also offer counseling

services from re-employment specialist agencies and special paid leave even for employees who do not wish to continue working at DISCO

DISCO is recruiting people with disabilities from the Recruit Support Center for People with Disabilities, special support schools, etc.

With the increasing globalization of our business activities, we are also proactively seeking to hire foreign employees, and we are putting great effort into building an environment in which workers of all nationalities will find it easy to work.

Supporting Skill Development

In this ever-changing society, both companies and individual employees must adapt to change. Displays of originality and capability depend on each individual's intent. In order to support those intents, DISCO has various educational programs.

In recent years, not only have the educational program (DISCO Career Academy) and online courses and classes intended for all employees expanded, but the number of skill improvement opportunities, e.g., an employee planning and conducting communication or programming training or inviting celebrities to seminars, have also increased. Tateshina Study, a program designed

to improve the quality of relationships between employees through use of one of DISCO's employee benefits.

This program allows employees to hold work-related discussion and



Training session

study sessions as a department at a company-owned lodge, and 1,184 employees participated in this program in FY2018.

Support for Balance between Child-Rearing and Work

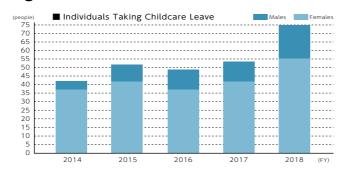
We are committed to promoting a work-life balance so that our employees are able to demonstrate their abilities while balancing their jobs with their private lives. As part of these efforts, we introduced the Child-Rearing Assistance Program based on the concept of "Creating an environment where employees with different ways of thinking can work with confidence while balancing their work and child-rearing commitments." Since the introduction of the program in 2005, use of the program is being aggressively promoted as it is continually improved.

As a result of this, 75 employees, both men and women, were able to take childcare leave in 2018.

■ Aspects of the Child-Rearing Assistance Program

- Maternity leave
 (Can be taken prior to childbird)
- Leave to support the balance between child-rearing and work (100% of the normal salary is paid during the leave in combination with other programs)
- · Childcare leave until the child is 3 years of age
- Shortened work hours until the child graduates from elementary school
- $\cdot \ \text{Nursing leave} \\$
- $\boldsymbol{\cdot}$ Daycare center inside the company
- · Working from home while required to provide nursing care

DISCO has expanded our definition of childcare support to extend the scope of child-rearing assistance measures. In fiscal 2007, we introduced a program to subsidize the cost of fertility treatments for employees who would like children but are having difficulty conceiving. Assistance of 100,000 yen (max.) is provided up to twice a year for a total of 5 years.



Comments from a Male Employee Who Took Childcare Leave

VOICE

My first child was prematurely born, so he had to stay at the hospital for two months after the birth. Since my wife and I had to raise our child with various concerns right from the start, I decided to take childcare leave for three weeks after our son was discharged from hospital.

During the leave, we shared our concerns and discussed what we can do to overcome those concerns. Because I understood what was difficult for $\,$

her through the time we spent together and the discussions we had during the leave, we now cooperate even better when we have any issues or concerns. For me, childcare leave was a very important time which made me review how I spend time with my family, helped us to deepen our family bonds, and motivated me to work, all at the same time.

When I took the childcare leave, my colleagues warmly encouraged me and wished me "Good luck." I strongly recommend that other male employees also take childcare leave.

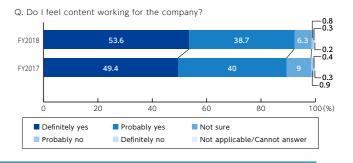


Corporate Support Division

Employee Satisfaction Survey

DISCO has conducted the Employee Satisfaction Survey anonymously every year since fiscal 2003 in order to translate the views and feelings of employees into the creation of an even better work environment. In 2018, 4,900 associate employees, part-time employees, and employees in overseas offices were surveyed. The response rate was 89%, and the percentage of those who responded positively of the overall satisfaction was 92.3%. The Employee Satisfaction Committee, which is made up of members of management, discusses company-wide issues raised by the survey and works to make related improvements.

■ Some Results from Employee Satisfaction Survey



Creating a Safe Workplace

In order to create a workplace where everyone can work comfortably, we at DISCO put a great deal of effort into not only facilities and equipment, but also disaster contingency planning in terms of individual actions and dissemination of information

We have focused on eliminating all accidents in an effort to establish health and safety as part of our corporate culture and create a "zero accident" environment. DISCO proactively provides employees with opportunities to think about safety by means of safety education and training for new employees called KYT (Kiken Yochi [Danger Prediction] Training) and discussions on the creation of an accident-free workplace.

Health and Safety Committee (HSC) meetings are held every month at all DISCO affiliates, both in Japan and overseas, to realize a safe and comfortable working environment. Committee members patrol each workplace, recording processes that demonstrate excellent safety or ways in which to improve them, and then report back to the HSC. When a

work-related accident occurs, after a countermeasure has been proposed by the applicable departments, the HSC discuss the validity of the countermeasure and how to apply it in other departments. All of the committee members are thorough in sharing accident details and implementing countermeasures, regardless of how large or small the accident was.

Since April 2016, DISCO has implemented a "Company driver's license

system." Even if an employee possesses a public driver's license, an in-house driver's license is also required to drive for work purposes. A course and driving test are offered, helping every employee to reflect on their driving habits.



Internal driver's license test

Employee Health and Well-Being

DISCO provides a number of facilities and programs so that all employees can maintain and improve their health and live happily each and every day.

We have implemented "Excellence in Health" activities company-wide, and the departments that manage employee health have been cooperating with the Health Insurance Society since FY2013. In FY2018, employees formed their own teams and competed in "Better Health through Team Competition" by conducting health-promotion and health-improvement activities, as well as competing to improve their health checkup results. In addition, we support the health of our employees by giving incentives to employees who provide feedback from their follow-up examinations to the company nurses in order to improve the rate of follow-up examinations after regular health checkups.

The Head Office and R&D Center is equipped with a fitness center, yoga studio, swimming pool and massage area, and Hiroshima Works is equipped with a futsal court, swimming pool, yoga studio, and tennis courts.



The fitness center allows us to support employee efforts to improve both their mental and physical health in an environment developed to allow each employee to casually ask dedicated instructors about suitable fitness programs. A medical treatment room was established inside the company, allowing employees to receive counseling from an industrial physician and company nurses.

Selected for "Health and Productivity Stock Program" for First Time

TOPICS

DISCO was selected for the "2019 Health and Productivity Stock Selection Program," which is jointly managed by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange. The company has not only implemented "Excellence in Health" activities throughout the entire company, as mentioned previously, but has also created an app in-house so that employees can track weight and BMI weekly and become

more aware of daily health management. Moreover, with the recent increase in female employees, action regarding health risks particular to women has become increasingly necessary. In 2018, health literacy improvement and behavior modification were actively promoted through free-of-charge, internally held gynecological exams and seminars conducted by a gynecologist.



What We Can Do to Improve Safety

DISCO always aims to be a company which customers trust and feel secure doing business with. Disasters are not just thought of as emergencies, but events that could happen at any time, and DISCO continues to make efforts to create a system that minimizes their impact on our business.

Establishing Affiliate Offices That Can Withstand Disasters

Japan is a country with many earthquakes. Thus, DISCO has enhanced BCM (Business Continuity Management) by adopting seismically-isolated structures at the Head Office and R&D Center and every production site. With the completion of Zone B, which included a seismically-isolated structure, at Kuwabata Plant in January 2015, all systems for production of precision processing tools and precision processing equipment in buildings with seismically-isolated structures were established. In order to continue production and shipping during power outages, an elevator for transferring equipment, which operates using power from a private generator, was constructed in the new building. In addition to Zone C, which was completed in January 2019, construction will begin for Zone D in September. As a result, production systems and BCM support capabilities will be further improved.

Kure Plant, where precision processing tools are produced, is located on the coast of the Seto Inland Sea. Thus, DISCO has implemented measures to minimize damages from tsunamis and storm surges. In case of flooding, product shipment and inspection areas are located on the upper floor, and breakwaters and vertical damp proof barriers have been built around the factory to prevent damages due to tsunamis.

In addition, Nagano Works Chino Plant was opened in April 2018 with the goal of further improving production and BCM support

capabilities. Construction of the new building (with seismically-isolated structure) will start July 2019. Currently, most of the main products are manufactured in Kure and Kuwabata Plants in Hiroshima. However, enhancing the production systems for precision processing equipment and precision processing tools in Chino Plant may further reduce risks in preparation for disasters.



Tide protection gate



Chino Plant

Creating Disaster-Resistant People

DISCO considers the main point of BCM to be "Everyone being able to protect themselves." Thus, we strive to predict risks such as natural disasters and epidemics, educate our employees, and promote activities that encourage employees to be able to protect themselves.

As an example, the most important part of minimizing the effect of the seasonal flu or other infectious diseases, even more so than treating them, is preventing infection. DISCO is also working to strengthen its infection and epidemic countermeasures, one of its many daily activities aimed at pandemic prevention, and part of an effort to raise awareness.

\blacksquare Examples of Risk Countermeasures

Creation of DISCO's pandemic levels	We have, in greater detail, determined the risk level that take into consideration even highly-virulen influenza as well as the corresponding actions.
Utilization of colored masks	Those who are in close contact with infected individual and those in poor condition are obligated to wear pinl masks to help visualize the respective risk.
Establishing a telecommuting program	DISCO has established a program and conducted corresponding exercises that allow for telecommuting equivalent to working in the office.
Support for employees who unable to return home	DISCO has developed a support system in which essential foods, items required to stay at the company, and other supplies are stored at the company for employees who are unable to return home after a disaster.

TOPICS

DISCO was certified as a model company for promotion of Tokyo stranded commuter prevention.

In addition to a three-day supply of emergency water and food for all employees, air mattresses, blankets, and hygiene products are stored at the Head Office and R&D Center. DISCO utilizes the rolling stock method, in which approximately one ton of surplus rice is purchased along with the rice regularly used in the company cafeteria. Additionally, the water in the swimming pool, which is part of the company benefit package, can also be used as a cleaning water supply in case of emergency.

If employees can confirm that their families are safe and that there are enough emergency supplies at home, they do not have to risk going home immediately during a disaster and can stay at the company. DISCO is trying to encourage employees to prepare emergency supplies at home by informing employees on how to contact their families and use Disaster Emergency Message Dial, as well as providing employees incentives for preparing a one-month supply of emergency water and food for their families.



Activities that Contribute to the Local Community

Based on the belief that good social relations starts with good corporate citizenship, DISCO strives to create better relationships with the general public.

Providing Company Tours and Lectures on Demand

Based on DISCO's desire to contribute to the local community, DISCO has made efforts to communicate with local elementary and junior high school students regarding how advanced Kiru, Kezuru, Migaku technologies are used in society.

Elementary school students in the Ota Invention Club for Boys and Girls and their parents were invited to the head office to provide them an opportunity to learn about semiconductor systems through disassembling digital equipment such as smartphones, and cutting workpiece using our dicing saws.

In addition, DISCO gave lectures at two junior highschools in Kure City explaining DISCO's role in the semiconductor manufacturing process, what DISCO has produced in Kure City (the land of creation), and how DISCO has contributed to society in order to give

them an opportunity to become familiar with the appeal of manufacturing.



Lecture at a junior high school



Elementary school students taking a company tour

DHA Food Drive

Employees at DISCO HI-TEC AMERICA, INC., DISCO's American Subsidiary in California, held a food drive to benefit the community.

Employees donated canned food, seasoning, and other items to welfare facilities through a food bank to support foster homes, single-parent families, and people with disabilities. They also volunteered to sort the food that was not distributed to the market due to packaging defects and collected at the food bank distribution warehouse

This event provided an opportunity to consider what we can and should do, not just while volunteering, but in our everyday lives .



Employees sorting food

Implementation of Programming Contest in Hiroshima and Nagano

Excellent programmers are essential to the realization of a future society with technologies like IoT, AI, and self-driving. For the purpose of discovering and supporting excellent programmers, DISCO held programming contests in Hiroshima and Nagano Works. Approximately 132 people gathered in both locations, with people from 12 to 63 years old participating in the event, and prizes were awarded to the winners. Supporting individuals' professional development will help in fostering the people who will shape the future.





TOPICS In

Water Supply Support in Kure City

In response to the prolonged water outage in Kure City caused by the heavy rain in Western Japan from July to August 2018, a total of 170 DISCO employees engaged into water supply support for people in the community near the

In addition to providing emergency drinking and cleaning water in cooperation with Kure City and the local community, we assisted in supplying and transferring water from DISCO's plants to washing machines donated by the

Japanese Red Cross Society

DISCO employees provided unique support by not only providing emergency water, but directly transporting water for washing machines and bathtubs to those who could not go to the water supply points.

Even after the water outage was over, DISCO employees continued providing water to those living in areas with a smaller water supply and also provided drinking water to volunteers.



Water Supply Acitivities in Kure City

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Principle-Based Organizational Management

We at DISCO fully recognize that preservation of nature and the global ecosystem is vital, and we are dedicated to creating a sustainable business that is appropriate for a member of a recycling-based society.

Environmental Vision

DISCO is continuously pursuing initiatives aimed at reducing our environmental footprint and has established a mid-and-long term roadmap in the form of our Environmental Vision.

The Environmental Vision 2020, enacted in April 2011, outlines

the desired state with regard to the environment for fiscal 2020 and sets out the main targets to be achieved, namely, Reduction of CO₂ Emissions, Resource Saving Activities, Pollution Prevention, and Conservation of Biodiversity.

■ Environmental Vision 2020

Achieving Environmental Corporate Excellence by FY2020

Reduction of CO₂ Emissions

•3.8% reduction in DISCO's CO₂ emissions for business activities by FY2020 compared to FY2010 levels (sales basis).

Resource Saving Activities

•Elimination of all forms of *mottainai* from all business activities

Elimination of mottainai means not wasting finite and valuable resources such as water, electricity, gas, paper and waste used or emitted by business activities, and using them wisely, not only subjectively but objectively.

Pollution Prevention

- ·Continued preservation of zero environmental accidents
- ·Forward-looking collection of information regarding hazardous substances and related requirements, and taking prompt and appropriate action

Conservation of Biodiversity

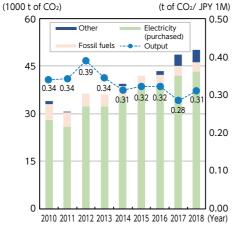
Contribution to local nature conservation activities

Note: Targets may be revised or amended as necessary every fiscal year based on the circumstances.

Environmental Performance Data

DISCO engages in CO₂ reduction and resource saving activities as part of its "Environmental Vision." Due to increased production in recent years, energy usage (CO₂ emission) has also increased. However, our environmental efforts have been effective, and our environmental performance, (i.e., output divided by sales) has improved as a whole. Although disposal has also increased, zero emissions (Recycling ratio: 99.5% or more) has been achieved by promoting recycling and reducing landfill disposal.

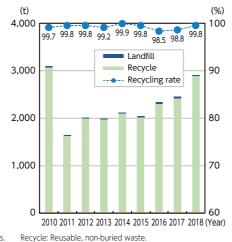
Transition of Greenhouse Gas Emissions



Electricity (purchased): Electricity purchased from power companies. Fossil fuels: Fuels such as city gas, gasoline, lamp oil, etc. Other: Non-energy such as Freor

Output: Total amount of greenhouse gas emission divided

Transition of Waste Volume



Landfill: Waste to be disposed as landfill. *Recycling rate: recycled waste divided by the total amount

TOPICS

Ranked 14th out of 360 companies in the Environment Management Index Ranking

Environment Management Index Ranking announced greenhouse gas. DISCO will continue its annually by Nikkei. This program evaluates the overall efforts to conduct business operations environmental management of companies, and DISCO was rated highly for engaging in environmental measures,

DISCO ranked 14th out of 360 companies in the such as the reduction of waste and



Environmental Considerations in Business Activities

DISCO engages in various activities to reduce its environmental load and realize a sustainable business. For example, aimed at efficient utilization of water resources, DISCO has installed facilities which can reproduce and circulate drainage generated during the production process in the Head Office R&D Center and Hiroshima Works. The reproduced water covers more than 40% of the water usage volume for the entire company, including branch offices and regional offices. (Recycle ratio in FY 2018: 35%) Because a large amount of clean water is used in the manufacturing of precision processing tools and equipment, this activity not only reduces the financial impact, but also contributes to regional drought management.

Furthermore, DISCO proactively adopts solar power generation and uses the generated power to conduct business activities, helping us to contribute to greenhouse gas reduction. (Power generated in FY 2018: 1,864 MWh) In addition, DISCO is also working on continued environmental performance improvement, such as making its production process efficient and conducting production activities with an awareness for saving resources.



Solar power system (Kuwabata Plant)



Waste water recycling equipment Maximum solar output

Location	Maximum output		
Head Office/R&D Center	40 kW		
Kuwabata Plant	1,200 kW		
Kure Plant	315 kW		
Chino Plant	140 kW		
DISCO HI-TEC Singapore	75 kW		

Expansion of Environmentally Friendly Products

When designing and developing new products, DISCO considers methods to reduce the environmental burden for each product life cycle. Additionally, we use the Green Product Guideline as the core tenet of our standards to avoid the use of chemicals or materials harmful to the environment or human health.

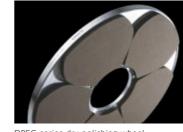
Precision Processing Equipment

When purchasing parts and raw materials for our products, based on the Green Procurement List of DISCO Restricted Substances prepared in 2003, we preferentially procure raw materials and parts that do not contain 15 hazardous substances, including the 6 substances specified by the RoHS Directive.

Although precision processing equipment (or large-scale stationery industrial tools) falls outside the scope of the RoHS Directive, we consider this to be part of the social responsibility of a corporation, and arrangements for green procurement have been completed for almost all of our products.

Precision Processing Tools

DISCO is also engaged in efforts to reduce the environmental burden of our consumable products. For example, we have introduced our own unique dry polishing process as a stress relief process used to remove damage caused by backgrinding.



DPEG series dry polishing whee

Compared to other processes which require the use of chemicals, the dry polish process has a much smaller impact on the environment. We currently offer the DP08 series and the DPEG series dry polishing wheels as part of our product lineup, and we promote more environmentally friendly processing methods to our customers.

Accessory Equipment

For accessory equipment, our DWR series lineup, which is capable of the production and recycling of DI water for both dicing and grinding, has been expanded.

In the dicing of devices such as image sensors or other devices which use very fine wiring rules, due to the demand for removal of particles and high cleanliness level during cleaning, there has

been a tendency towards increasing DI water consumption. The DWR series circulates and reuses nearly 100% of the cutting wastewater from the dicing saw, effectively using a limited supply of water.



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Principle-Based Organizational Management

DISCO is also devoted to organizational management in order to continuously communicate and improve our corporate culture and values.

Instilling the Corporate Philosophy

To enable all of our employees to understand DISCO Values (our corporate philosophy) and to implement and realize them in their daily activities, DISCO has initiated shared activities within the company. We engage in a number of activities, large and small, ranging from level-based training, in which all officers and employees participate in study sessions conducted on a departmental basis.

Each of the employees participates in activities such as discussions and case studies so that they may gain an essential understanding of the meaning of the DISCO Values, allowing them all to share ways of thinking that prove to be helpful in their work at

DISCO. We have been taking part in these activities for over twenty years as a fundamental aspect of our management operations, endeavoring to link them to stronger organizational capabilities. The shared activities of DISCO Values has been established at our affiliates in Japan as well as overseas.



Discussion

DISCO Vision

The DISCO Vision plays the role of a milestone to specifically define what we want to be or what we should aim for in achieving our mission.

The DISCO Vision was established in 1997 when we started our activities aiming at 2010. In 2010, when we reached the achievement year, aiming at further evolution, we reviewed our progress and established DISCO Vision 2020 for where we want to be in the future.

As with the original DISCO Vision, DISCO Vision 2020 provides quantitative targets such as sales and profits along with qualitative targets. In addition, this new Vision defines the goals for 2020 from multiple angles. The Element Angle elucidates what the corporation is based on its main elements, such as the business, organization and human resources, while the Stakeholder Angle focuses on the relationship between DISCO and our predominant stakeholders.

In this way, it is not a DISCO management plan starting from the present, but a management plan reversely formulated from the desired future state, established to achieve a higher level of ideals.

Promoting growth Operational Management Formulation of Vision 2020 Review of achievement status of Vision 2010 Preparatory period for achieving DISCO Vision 2010 The formulation of DISCO Values started Adhievement of Vision 2020 Instilling evolutionary DNA 2011

1995

Will Accounting

Will Accounting, which is a unique managerial accounting system, was implemented in 2003. With Department Will accounting, prices are set for all items related to jobs (including income generated through internal jobs and expenditures such as labor and equipment costs) using Will price values. Each department utilizes this system to manage their own income and expenditures.

Since 2011, the managerial accounting system was expanded to individual employees as Personal Will. Using these systems, tasks are chosen and performed by means of employees' intentions, not

through commands or orders, because all tasks are offered by supervisors, coworkers, or members of other departments, who also establish the price.

The development of Personal Will improves job satisfaction and performance, accelerates the speed of decision making, and eventually leads to increased productivity.

DISCO will continue enhancing organizational management by utilizing Will Accounting in the future.

PIM (Performance Innovation Management)

In order to increase the strength of our organization, we must not only execute strategies based on our corporate philosophy and vision, but also strengthen our ability to take action.

Since 2003, DISCO has promoted routine business improvement activities called PIM in all of its offices, including overseas offices, to increase our operational performance and to enhance our potential for improvement on a daily basis. We perform PIM activities by producing improvement plans (method changes) based on ideas obtained through work and executing the plans so that DISCO can continuously evolve.

Since 2012, we have been holding PIM matches to present our

method changes. The presenters compete by utilizing their presentation materials in a limited time in a dedicated space called "PIM Coliseum." Then, management and the employees vote for the better method change. Presenters cultivate their ability to think of high-quality method changes in order to win the PIM matches and polish their presentation skills to gain more votes. Audiences also polish their ability to judge whether a method change is good or not by voting on the presentations using Will. Continuous PIM activities makes the employees devise better ideas every day. Polishing everyone's ability helps us to become a stronger organization, resulting in evolution as a company.

Corporate Governance

DISCO has adopted a corporate auditor and director-based system of corporate governance. The boards consist of four internal board members* and six independent board members* (two external directors* and four external auditors).

The board of directors contains a limited number of members (internal members as well as six external members) in order to make prompt corporate decisions. The external directors have the right to vote, ensuring the effectiveness of corporate management. The board of auditors is comprised exclusively of external members, ensuring fairness and neutrality of audits.

By actively implementing an external perspective, we aim to ensure validity.

By actively implementing an external perspective, we aim to ensure validity from multiple perspectives and improve the transparency of our corporate decisions.

DISCO has appointed a board of executive officers consisting of three members* who make decisions as members of management and are officially responsible for the continued improvement of management operations. Furthermore, the company president supervises and directs the board of executive officers, and the board of directors oversees the board of executive officers.

A "Nomination and Compensation Advisory Committee" has been established as an advisory body to the Board of Directors. The committee consists of the President, Outside Directors, Outside Corporate Auditors, and Former Directors, and discusses and reports on member appointments and dismissals and compensation for each candidate for the Board of Directors and company executive officers. In addition, they provide advice regarding appointment and dismissal for candidate for auditor, as well as compensation. Since fiscal 2018, DISCO has appointed a "Representative Director Evaluation"

Committee" which evaluates the appropriateness of the representative directors' management of operations. The committee consists solely of independent members, ensuring objectivity, fairness, and transparency when dismissing a representative director based on the results of an evaluation.

Furthermore, DISCO has established a "Basic Policy on Internal Control" designed to maintain and improve internal control. DISCO's internal control also aims to comply with laws and improve the effectiveness and efficiency of operations in addition to achieving the legal obligation of ensuring reliability of financial reporting. To accelerate the accomplishment of these aims, a team dedicated to supervising internal control guides the company in promoting activities to internally disseminate the concept and significance of internal control and the keypoints regarding the evaluation of internal control, while also conducting internal control evaluations and supporting the establishment of internal control systems for the DISCO Group worldwide.

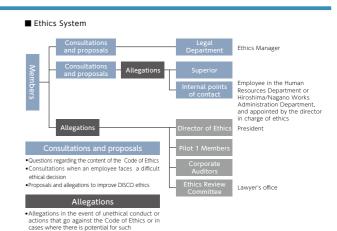
■ Corporate Governance Model Diagram

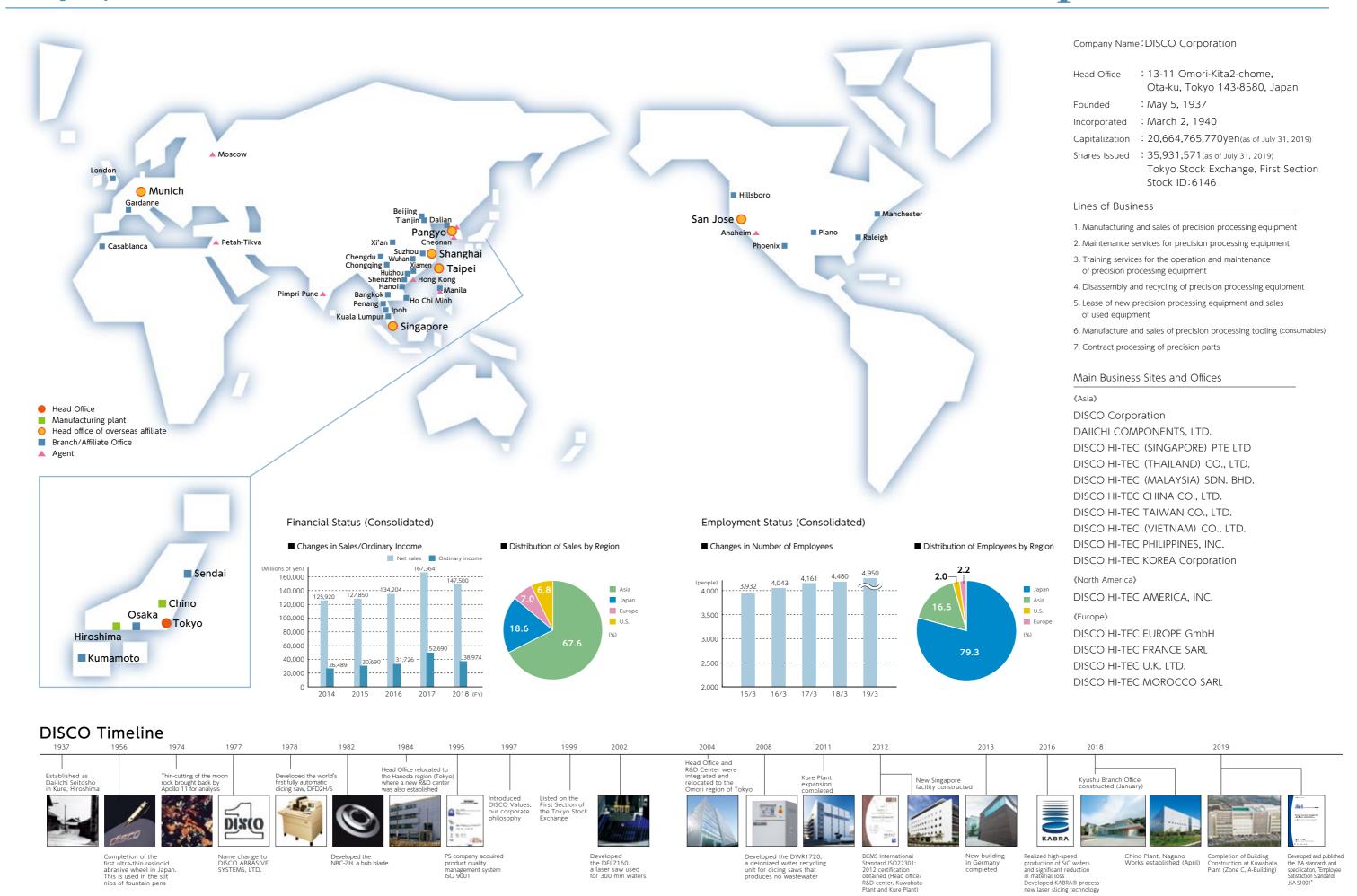
*As of June 30, 2019

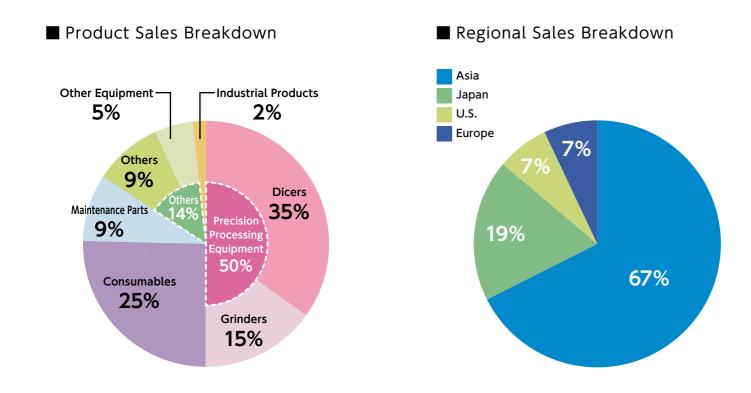


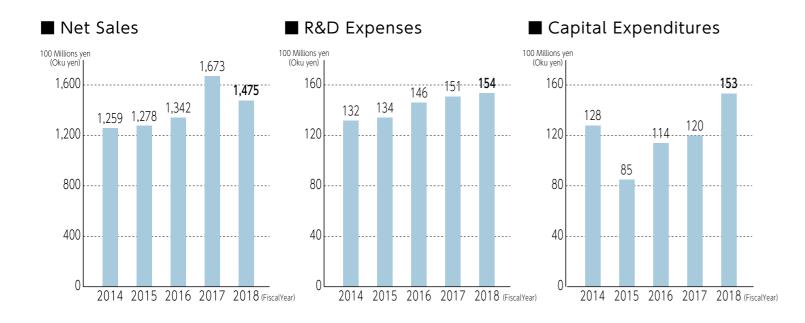
Corporate Ethics

DISCO's Code of Ethics has been established due to our strong desire not only to obey the law, but also to never become involved in matters considered to be unethical by society at large. The Code of Ethics clarifies what must not be done from an ethical standpoint. The Code is explained and distributed to all employees, and all employees are obligated to follow the Code in all activities and in their everyday behavior. In order to assess whether our approach to ethics has been fully embedded in the mindset of each employee, the Employee Satisfaction Survey includes questions on ethics. Additionally, we provide counseling for employees facing difficult ethical decisions.









Summary

100 Millions yen (Oku yen)

	FY2014	FY2015	FY2016	FY2017	FY2018
Net Sales	1,259	1,278	1,342	1,673	1,475
Operating Income	267	303	313	509	386
Ordinary Income	264	306	317	526	389
Net Income	200	230	242	371	288
Capital Expenditures	128	85	114	120	153
Depreciation	60	65	59	60	60
R&D Expenses	132	134	146	151	154
Total assets	2,019	2,079	2,257	2,563	2,581
Total liabilities	500	399	444	510	380
Total net assets	1,519	1,680	1,813	2,052	2,201
Gross Profit Margin	54.1%	56.5%	55.5%	59.2%	58.9%
Operating Income Margin	21.3%	23.7%	23.4%	30.5%	26.2%
Ordinary Income Margin	21.0%	24.0%	23.6%	31.5%	26.4%
Net Income Margin	15.9%	18.1%	18.0%	22.2%	19.5%
4-year accumulated ordinary income margin	16.1%	19.1%	21.6%	25.5%	26.7%
ROE	14.7%	14.5%	13.9%	19.3%	13.6%
Equity Ratio	74.8%	80.4%	79.9%	79.7%	84.8%

■ Consolidated Balance Sheets

(Millions of yen)

	FY2017	FY2018
Assets		
Current assets		
Cash and deposits	91,574	91,380
Notes and accounts receivable-trade	43,647	34,900
Merchandise and finished goods	7,093	6,940
Work in process	9,656	12,585
Raw materials and supplies	16,943	19,066
Other	5,809	4,979
Allowance for doubtful accounts	(52)	(57)
Total current assets	174,673	169,795
Non-current assets		
Property, plant and equipment		
Buildings and structures, net	33,129	45,584
Machinery, equipment and vehicles, net	9,383	8,630
Tools, furniture and fixtures, net	706	787
Land	13,797	14,610
Construction in progress	12,248	7,256
Total property, plant and equipment	69,264	76,868
Intangible assets	511	400
Investments and other assets		
Investment securities	3,746	2,875
Deferred tax assets	4,262	4,122
Retirement benefit asset	612	821
Other	3,300	3,314
Allowance for doubtful accounts	(23)	(17)
Total investments and other assets	11,897	11,116
Total non-current assets	81,673	88,384
Total assets	256,347	258,180

,		, ,
	FY2017	FY2018
iabilities		
Current liabilities		
Notes and accounts payable-trade	6,286	3,368
Electronically recorded obligations-operating	14,230	13,178
Income taxes payable	10,209	1,782
Provision for bonuses	8,651	7,790
Provision for bonuses for directors(and other officers)	159	177
Provision for product warranties	487	453
Asset retirement obligations	_	27
Other	10,280	10,838
Total current liabilities	50,306	37,616
Non-current liabilities		
Asset retirement obligations	215	207
Other	560	247
Total non-current liabilities	776	454
Total liabilities	51,082	38,071
Net assets		
Shareholders' equity		
Capital stock	20,651	20,663
Capital surplus	22,639	22,651
Retained earnings	157,919	173,739
Treasury shares	(25)	(25)
Total shareholders' equity	201,184	217,029
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	1,498	476
Foreign currency translation adjustment	1,619	1,320
Remeasurements of defined benefit plans	(47)	26
Total accumulated other comprehensive income	3,070	1,823
Share acquisition rights	899	1,108
Non-controlling interests	110	148
Total net assets	205,264	220,109
Total liabilities and net assets	256,347	258,180

■ Consolidated Statements of Income

(Millions of yen)

	FY2017	FY2018
Net sales	167,364	147,500
Cost of sales	68,239	60,589
Gross profit	99,125	86,910
Selling, general and administrative expenses	48,130	48,264
Operating income	50,995	38,645
Non-operating income		
Interest income	57	93
Share of profit of entities accounted for using equity method	177	293
Rent income	71	63
Subsidy income	1,629	490
Other	173	215
Total non-operating income	2,110	1,156
Non-operating expenses		
Interest expenses	22	3
Sales discounts	63	52
Foreign exchange losses	260	751
Depreciation	49	9
Other	19	11
Total non-operating expenses	415	828
Ordinary income	52,690	38,974
Ordinary income Extraordinary income	52,690	38,974
•	52,690 16	38,974
Extraordinary income		
Extraordinary income Gain on sales of non-current assets	16	19
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights	16 1	19 2
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income	16 1 87	19 2 208
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income	16 1 87	19 2 208
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses	16 1 87 105	19 2 208 229
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets	16 1 87 105	19 2 208 229
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets Impairment loss	16 1 87 105 85 1,191	19 2 208 229
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets Impairment loss Loss on sales of investment securities	16 1 87 105 85 1,191	19 2 208 229 63 58 -
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets Impairment loss Loss on sales of investment securities Loss on valuation of investment securities	16 1 87 105 85 1,191 1 26	19 2 208 229 63 58 -
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets Impairment loss Loss on sales of investment securities Loss on valuation of investment securities Loss on sales of shares of subsidiaries and associates	16 1 87 105 85 1,191 1 26 680	19 2 208 229 63 58 - 0
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets Impairment loss Loss on sales of investment securities Loss on valuation of investment securities Loss on sales of shares of subsidiaries and associates Special retirement expenses	16 1 87 105 85 1,191 1 26 680	19 2 208 229 63 58 - 0 - 88
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets Impairment loss Loss on sales of investment securities Loss on valuation of investment securities Loss on sales of shares of subsidiaries and associates Special retirement expenses Loss on disaster	16 1 87 105 85 1,191 1 26 680	19 2 208 229 63 58 - 0 - 88 533
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets Impairment loss Loss on sales of investment securities Loss on valuation of investment securities Loss on sales of shares of subsidiaries and associates Special retirement expenses Loss on disaster Demolition cost	16 1 87 105 85 1,191 1 26 680 86 —	19 2 208 229 63 58 - 0 - 88 533 202
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets Impairment loss Loss on sales of investment securities Loss on valuation of investment securities Loss on sales of shares of subsidiaries and associates Special retirement expenses Loss on disaster Demolition cost Total extraordinary losses	16 1 87 105 85 1,191 1 26 680 86 - - 2,070	19 2 208 229 63 58 - 0 - 88 533 202 946
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets Impairment loss Loss on sales of investment securities Loss on valuation of investment securities Loss on sales of shares of subsidiaries and associates Special retirement expenses Loss on disaster Demolition cost Total extraordinary losses Profit before income taxes	16 1 87 105 85 1,191 1 26 680 86 - - 2,070 50,724	19 2 208 229 63 58 - 0 - 88 533 202 946 38,256
Extraordinary income Gain on sales of non-current assets Gain on reversal of share acquisition rights Insurance income Total extraordinary income Extraordinary losses Loss on sales and retirement of non-current assets Impairment loss Loss on sales of investment securities Loss on valuation of investment securities Loss on sales of shares of subsidiaries and associates Special retirement expenses Loss on disaster Demolition cost Total extraordinary losses Profit before income taxes Income taxes - current	16 1 87 105 85 1,191 1 26 680 86 - - 2,070 50,724 13,794	19 2 208 229 63 58 - 0 - 88 533 202 946 38,256

■ Consolidated Statements of Cash Flows

(Millions of yen)

	FY2017	FY2018
Cash flows from operating activities	50,731	27,311
Profit before income taxes	50,724	38,256
Depreciation	6,053	6,095
Decrease (increase) in notes and accounts receivable-trade	(4,974)	8,695
Decrease (increase) in inventories	(2,981)	(3,744)
Increase (decrease) in notes and accounts payable-trade	2,714	(3,785)
Income taxes (paid) refund	(6,952)	(17,204)
Other	6,146	(1,001)
Cash flows from investing activities	(12,673)	(14,513)
Purchase of property, plant and equipment	(11,494)	(14,436)
Other	(1,178)	(76)
Cash flows from financing activities	(24,053)	(12,982)
Cash dividends paid	(15,492)	(13,001)
Repayments of long-term loans payable, other	(8,561)	18
Net increase (decrease) in cash and cash equivalents	13,854	(193)
Cash and cash equivalents at beginning of period	71,690	85,545
Cash and cash equivalents at end of period	85,545	85,351