

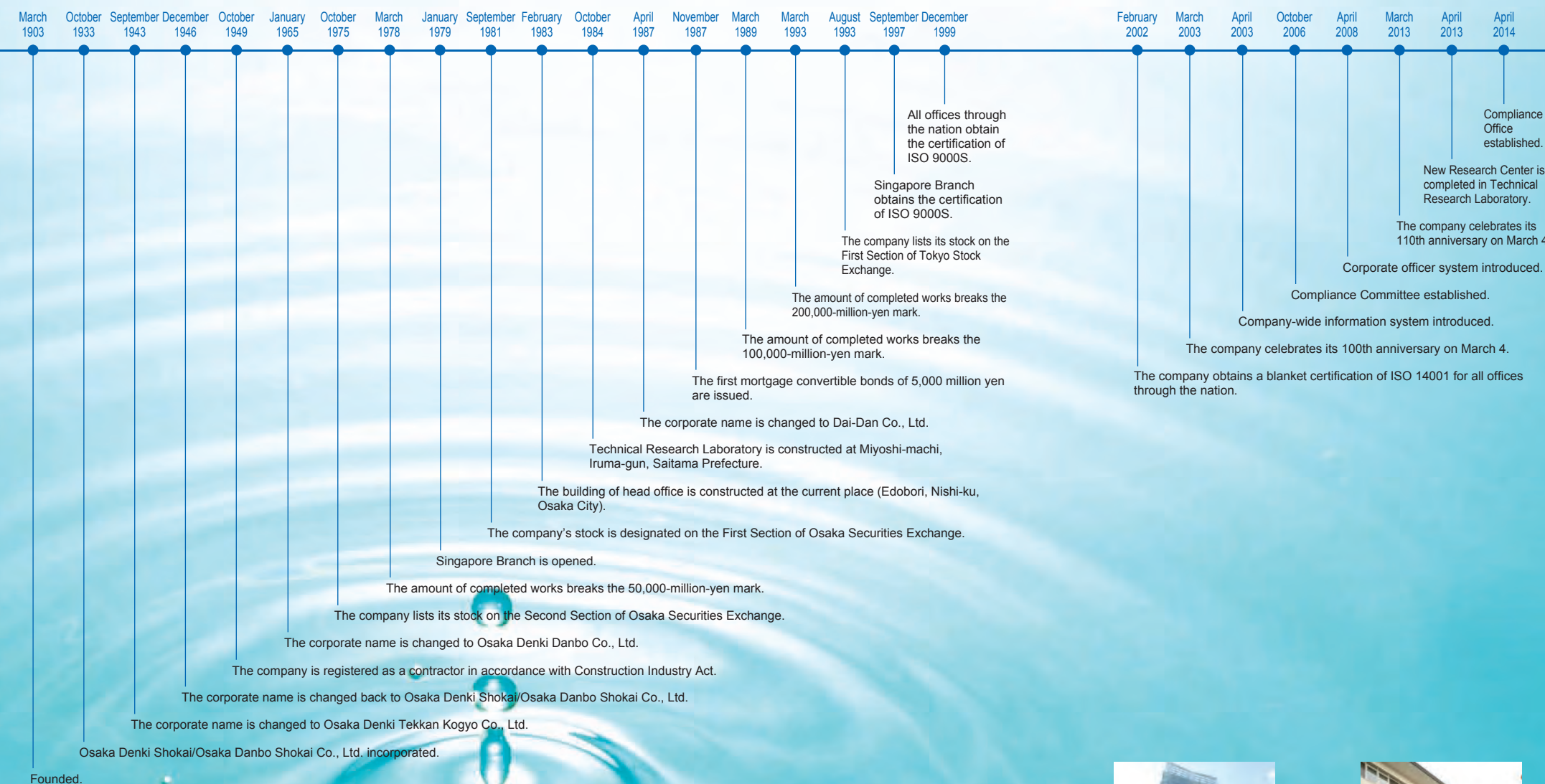
# DAI-DAN REPORT 2015



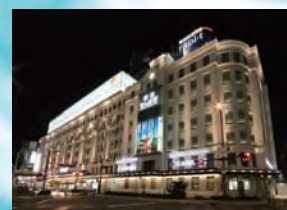


# Inspired by Light, Air & Water

As a comprehensive building services engineering and installation provider, Dai-Dan has continued to use its advanced technology to add comfort and vibrancy to interior spaces where people gather. For more than a century, we have been expanding the breadth of our expertise and securing the trust of our customers. At the same time, we are helping to achieve greater harmony with nature.



Kansai International Airport  
Control Tower &  
Passenger Terminal (1994)



Renovated Takashimaya  
Department Store in  
Osaka & Nankai Terminal (2010)



Labs and Center Building of Okinawa  
Institute of Science and Technology  
Graduate University (2010)



CREATE (2011)



JP Tower (2012)



Medical Innovation  
Center Building,  
Kyoto University (2013)

## Contents

Messages from the CEO and COO .....	03
Dai-Dan's Businesses .....	05
Corporate Profile / Financial Highlights .....	05
Operational Highlights .....	06
Our Services .....	07
Mid-Term Management Plan .....	09
Stakeholder Relations / Dai-Dan's Responsibility .....	11
Driving Innovation with Next-Generation Buildings and Facilities .....	12
Pallet Renewal .....	13
ZERO CUBIC .....	15
Dai-Dan's Developmental Technologies .....	17
Pharmaceutical Plants, Food-processing Plants, and Research Laboratories .....	19
Electronic and Precision Device Plants .....	21
Medical Facilities .....	23
Automobile and Machinery Manufacturers .....	25
Various Facilities .....	26
Focus on Technical Development .....	27
Dai-Dan's Practical Competence .....	28
Introducing Our Installations .....	29
Greater Ability to Provide Design Solutions and Installation Expertise .....	33
Ongoing Improvement of Site Management Methods .....	35
Application of the Meister System and Establishment of Partnerships with Our Subcontractors across Japan .....	38
FY2014 CSR Performance and FY2015 Targets .....	39
Fair and Transparent Business Practices .....	41
Environmental Contribution .....	47
Meeting Customer Expectations .....	51
Valuing Our Employees .....	54
Meeting Local Expectations .....	60
Financial Report .....	63
Third Party Opinion .....	67
Site List .....	68

### ● Editorial Policy

Since fiscal 2008, we have been publishing our CSR report as a means of informing our stakeholders of our business operations and CSR initiatives. Beginning in fiscal 2014, we renamed this publication the *Dai-Dan Report*. Compiled as an integrated corporate report, it contains both financial and non-financial data in addition to the conventional content. Moreover, this edition contains a feature article titled "Driving Innovation with Next-Generation Building and Facilities," in which we focus on a list of initiatives related to innovative buildings.

### ● Scope of This Report

#### Target organization

This report covers the operations of Dai-Dan Co., Ltd. All financial information is reported on a consolidated basis.

#### Period

This report covers the fiscal year spanning April 1, 2014, to March 31, 2015. Some data refers to activities after April 1, 2015.

### ● Report Guideline References

Japanese Standards Association "ISO26000:2010"  
Ministry of the Environment "Environmental Reporting Guidelines (2012)"  
GRI Sustainability Reporting Guidelines, 4th edition (G4)



# Seeking continuous value creation in order to a better environment and the development of contribute to society

At Dai-Dan, we believe it is our duty to maintain an environment in which people can live their lives in safety and comfort. Our efforts are guided by our management principles of creating value for our customers while contributing to the development of a better environment and stronger communities in our role as a building services engineering and installation provider.

## Dai-Dan's CSR

*"Satisfying our customers and improving the happiness of our employees."*  
These words represent the valued legacy of our founder, Motoji Sugaya.

More than a century ago, before the phrase "corporate social responsibility" came into common use, our founder talked about the satisfaction and happiness of our stakeholders, then expressed as our customers and employees.

The origins of our CSR are found in our spirit of entrepreneurship, an attitude that we have inherited and maintained at the forefront to the present day. It is linked to the commitment reflected in our current management principles, stated as follows: "as a building services engineering and installation provider, we continually take on the challenge of creating value for our clients while contributing to the development of a better environment and stronger communities."

Throughout our more than 100-year history, we have expanded both the scale and scope of our business while encompassing a broader range of stakeholders who now include customers, employees, shareholders, investors, and subcontractors as well as business partners and community members. The "spirit of our CSR" is reflected in the entrepreneurial approach that remains deeply rooted in Dai-Dan and underpins the continuity of our business. As long as we can meet the expectations of our stakeholders, we are confident that this commitment will support our goal of sustainably creating corporate value.

## Ensuring Customer Satisfaction

*Inspired by Light, Air & Water*  
As a building services engineering and installation company focused on construction related to electricity, air conditioning, and sanitation, we have long specialized in various building installations. One of our most important assets is the great variety of technology and expertise we have developed in the area of energy generation, conservation and storage.

As the innovator who introduced the model office incorporating the breakthroughs of "Palette Renewal" and "ZERO CUBIC" in our Technical Research Laboratory, Dai-Dan has been introducing technology and expertise to our customers through such technical innovations, which have proven to be effective.

Palette Renewal is a technical approach for upgrading existing facilities to their next-generation equivalents by combining diverse technologies that meet a variety of needs. ZERO CUBIC, on the other hand, is designed to reduce resident stress, ensure zero functional failure during emergencies, and eliminate the consumption of all fossil-fuel-based energy in office buildings. Our technical suggestions contribute to resource conservation as well as the greater comfort and safety of office buildings.

All these initiatives reflect our commitment to customer satisfaction.

## Improving the Happiness of Our Employees

As an installation company, we also create value through our field engineers, the only frontline employees directly involved in meeting the needs of our customers.

In order to reward the initiative and performance of field engineers engaged in installation, Dai-Dan has adopted a policy of career advancement, a promotion system, and a salary system that do not adhere to rigid standards. We introduced this policy in April 2014 as part of our new personnel system.

Through this policy, our field engineers are able to pursue the same career advancements and promotions as department managers, section managers, and other managerial-level positions. We have also promoted increased feedback from both inside and outside the company. This policy is intended to inspire our field engineers with even greater motivation.

As the first step in the implementation of this policy, we appointed our first Grand Project Master, Project Master, and Technical Master in August 2015.

This system reflects our commitment to "improving the happiness of our employees" by enabling them to demonstrate their abilities to the maximum while experiencing the joy of work.



**Setsu Sugaya**  
Representative Director,  
Chairman and CEO  
Dai-Dan Co., Ltd.



**Shohei Kitano**  
Representative Director,  
President and COO  
Dai-Dan Co., Ltd.

## Sustainably Creating Corporate Value and Contributing to Social Development

In June 2015, Japan's Corporate Governance Code took effect under the regulations of Tokyo Stock Exchange.

Dai-Dan recognizes that the intention of this code is to help improve medium- and long-term corporate value in response to the expectations of all stakeholders, which include employees, customers, and shareholders.

We believe that the application of this code provides an excellent opportunity for us to enhance our corporate value as we seek to further strengthen our corporate governance. We recognize that meeting the expectations of all stakeholders through constructive dialogue will contribute to the emergence of a sustainable society.

Going forward, we intend to continue implementing fair and transparent business dealings while earning the trust of society and attracting new orders.

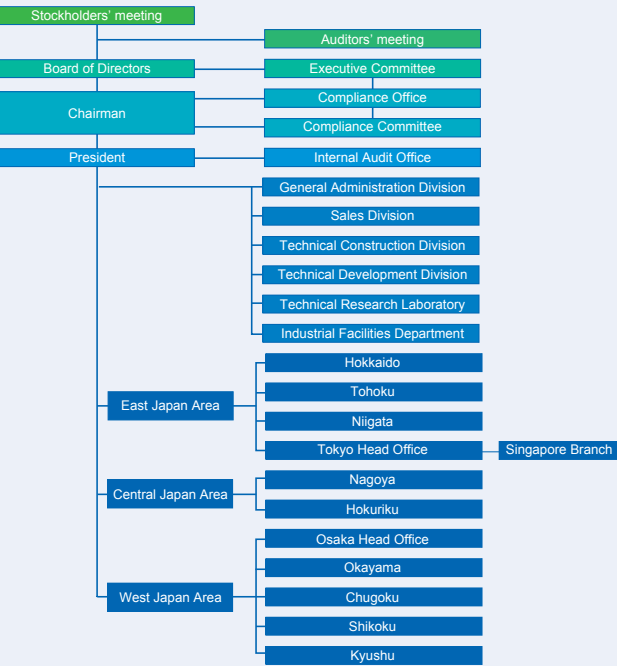
We very much look forward to your ongoing support and cooperation.



Corporate Profile

Company name	Dai-Dan Co., Ltd.
Head office	1-9-25 Edobori, Nishi-ku, Osaka, Japan
Founded	March 4, 1903
Incorporated	October 10, 1933
Capital fund	4,479,725,988 yen
Employees	1,498 (as of March 31, 2015) consolidated
Stock listing	The first section of Tokyo Stock Exchange

Organization Chart



Financial Highlights

Accounting Year

	FY2010	FY2011	FY2012	FY2013	FY2014
Orders received	110,751	119,233	119,980	127,394	131,633
Net sales	109,224	122,109	121,919	124,445	121,780
Selling, general and administrative expenses	9,574	9,684	9,992	9,966	10,016
Operating income (loss)	1,236	2,692	2,749	4,171	4,547
Ordinary income (loss)	1,343	2,736	3,278	4,471	4,875
Net income (loss)	565	1,175	1,599	1,670	2,921
Return on assets (ROA) (%)	1.4	2.7	3.1	4.1	4.3
Return on equity (ROE) (%)	1.4	2.8	3.7	3.7	5.9
Cash flows from operating activities	(4,758)	876	1,261	3,117	2,427
Cash flows from investing activities	(848)	(397)	(740)	(172)	(401)
Cash flows from financing activities	(427)	(1,619)	(955)	(892)	(2,344)
Cash and equivalents at end of period	23,911	22,635	22,420	24,598	24,358
R&D expenses	314	315	417	430	461
Capital expenditures	455	190	968	90	428

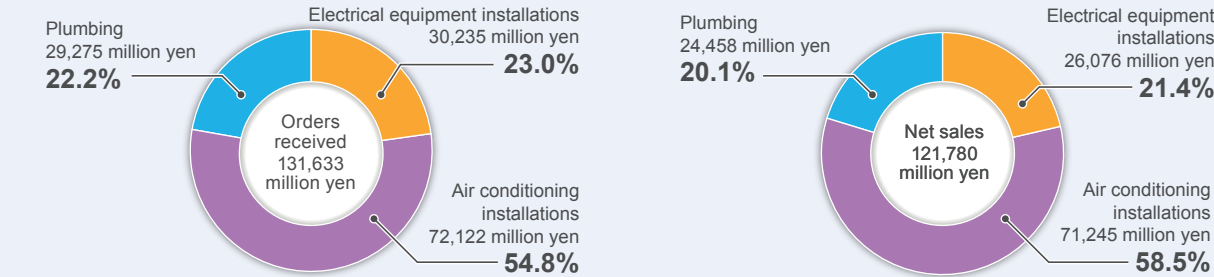
Fiscal Year-End

	FY2010	FY2011	FY2012	FY2013	FY2014
Total assets	96,306	103,345	106,155	111,347	113,440
Net assets	41,259	42,197	44,988	46,609	53,462
Equity capital ratio (%)	42.8	40.8	42.3	41.7	46.9

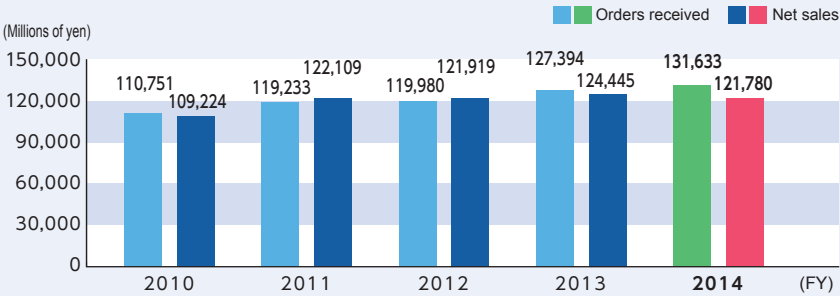
Per Share Data

	FY2010	FY2011	FY2012	FY2013	FY2014
Net income	12.65	26.32	35.83	37.45	65.50
Net assets	921.90	943.57	1,005.38	1,040.67	1,193.61
Dividends	16.00	16.00	19.00	16.00	18.00

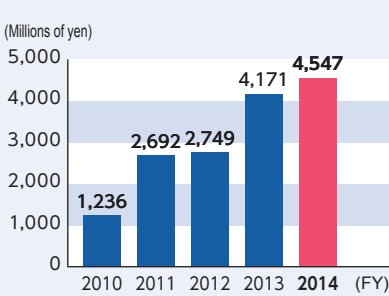
Fiscal 2014 Orders Received and Net Sales Ratios by Segment



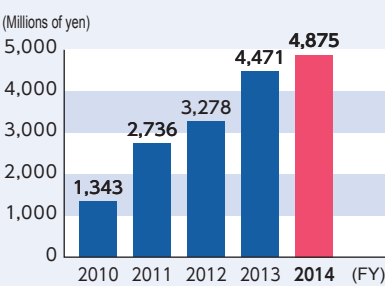
Orders Received/Net Sales



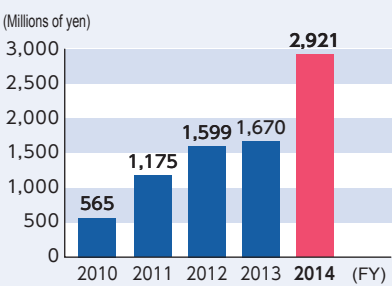
Operating Income



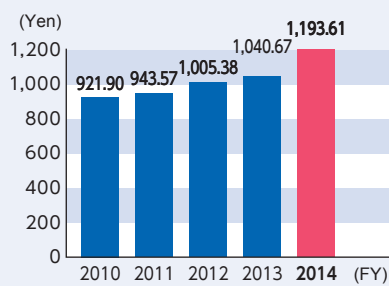
Ordinary Income



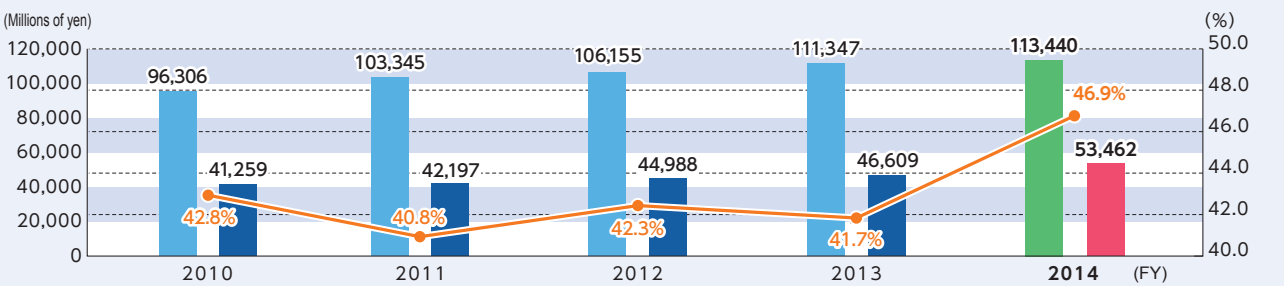
Net Income



Net Assets per Share



Total Assets/Net Assets/Equity Capital Ratio



Operational Highlights

Non-Financial Data

	FY2010	FY2011	FY2012	FY2013	FY2014
Number of employees (consolidated)	1,413	1,435	1,445	1,472	1,498
Number of workplace accidents	27	42	29	38	36
Frequency rate of workplace accidents*	0.26	0.25	0.52	0.54	0.46
Severity rate of workplace accidents**	0.02	0.65	0.06	0.08	0.02
CO <sub>2</sub> emissions from offices (tonnes)	1,753	1,499	1,421	1,428	1,745***

\* Number of workplace accidents per million work hours \*\* Number of workdays lost per thousand work hours  
\*\*\* Beginning in fiscal 2014, the target was changed to reflect the new CO<sub>2</sub> equivalent.



## Major Projects Completed in FY2013 and FY2014

### ● Projects completed in FY 2014



SHINAGAWA SEASON TERRACE  
(air conditioning installation)



Pharmaceutical Building,  
National University of Singapore  
(electrical equipment installation)



International Center for Science and Innovation,  
Shinshu University  
(plumbing and air conditioning installation)



Akita University Hospital (upgrading of air conditioning)



Kagoshima City Hospital (plumbing)

### ● Projects completed in FY 2013



Kagawa  
Prefectural  
Central Hospital  
(air conditioning  
installation)



Tachikawa Regional  
Joint Government  
Building  
(plumbing and air conditioning  
installation)



Kanagawa  
Cancer Center  
(air conditioning  
installation)



NTT Cred Motomachi  
Building  
(RIHGA Royal Hotel  
Hiroshima)  
(upgrading of plumbing and  
air conditioning)

## Electrical equipment installations

Electricity and the electrical equipment on which it flows are the lifeblood of a building. They supply the power to equipment and services that allows a building to fulfill its function.

Electrical equipment installations involve the installation of a high-voltage transformer, a distribution board and the wiring that supplies electricity to lighting, outlets, pumps and fans.

Electrical equipment is crucial to the saving, generation and storage of energy. Dai-Dan converts ordinary buildings to smart buildings by, for instance, reducing power consumption through LED lighting installations, generating electricity by installing solar panels and enabling energy storage that is critical for the efficient use of solar generated electricity.

Dai-Dan's electrical equipment technology is not limited to energy-efficiency applications; it also extends into diverse areas such as supporting business continuity plans (BCP) that take effect during times of disaster.

## Air conditioning installations

The temperature, humidity, flow and purity of air are indispensable to maintaining a comfortable interior environment in a building. Air conditioners help to create and maintain this environment.

Air conditioners vary from general-purpose types for office buildings to precision models used in semiconductor fabrication plants. At Dai-Dan, we respond to the needs of our customers by applying expertise gained through long experience and developing advanced air conditioning technologies at our Technical Research Laboratory.

Our air conditioning systems have been installed in many advanced facilities, including energy-efficient green data centers, hybrid operating rooms, and cell-processing facilities (CPF) required for regenerative medicine.

## Plumbing

Water is a precious resource. Plumbing components are used to supply safe, clean water and facilitate appropriate drainage of dirty water. In addition to making possible this supply and drainage, plumbing components now play an important role in the reuse of wastewater. Today, we install plumbing systems designed to help preserve the environment.

We also strive to ensure safety and protect building assets with sprinkler facilities that reduce the possibility of fire as well as indoor and outdoor fire hydrants that provide water.

## Renovations

Renovations to buildings and other facilities add value to customer assets by extending their service life while increasing energy efficiency.

Our renovation work includes installations that accommodate existing needs as well as follow-up service. We also draw up plans to meet the needs of our customers by applying our unique equipment diagnosis technology and utilizing the installation experience we have gained from comprehensive installations of building equipment in our role as a building services engineering and installation provider.

## Overseas operations

Dai-Dan has operations in Singapore and other countries where we provide services to factories and research centers that can fully utilize our expertise.

We have completed a number of contracts overseas, primarily in our field of expertise. We have built cleanrooms and installed energy saving systems that have been very well regarded by our customers.

Dai-Dan provides high quality systems and strives to establish a strong presence in each of the respective countries.



# Mid-Term Management Plan

In April 2014, two years after the adoption of the company's Mid-Term Management Plan, we instituted a major revision to the plan with the title "Dai-Dan to Challenge a New Era." It includes new strategies and measures targeting our ongoing corporate development.

In May 2015, we formulated and publicly announced a new profit target. Going forward, we will promote sweeping reforms that address our entire management structure according to the terms of this Mid-Term Management Plan.

## Dai-Dan to Challenge a New Era

### Management Principles

As a building services engineering and installation provider, we continually take on the challenge of creating value for our clients while contributing to the development of a better environment and stronger communities.

### Management Policies

- 1 We maintain focus on our customers as the business environment changes so that we can meet all their needs.
- 2 We operate the business in compliance with all legal and regulatory requirements.
- 3 We ensure that our corporate activities assure the safety and quality of products and services and contribute to environmental preservation.
- 4 We attain our corporate targets by pursuing both our strategies and policies.

### Basic Policies of Mid-Term Management Plan

- Maintain a customer first attitude as we conduct our corporate activities and accurately identify our customers' needs and changes in the market.
- Strengthen practical competence empowered by the expertise and experience of individual employees and strengthen practical competence of the organisation empowered by ongoing improvement of management methods to provide the quality and service that meet our customers' needs.
- Strengthen the capability for the field of growth in order to secure revenue for the next generation, and promote creation of greater value.
- Reinforce the management and education system so that all officers and employees comply with relevant laws and regulations and conduct corporate activities based on high ethical standards.

### Targeted Earnings

	FY2015 (87th term)	
	Consolidated	Non-consolidated
Orders received	131 billion yen	130 billion yen
Net sales	131 billion yen	130 billion yen
Operating income	5 billion yen	5 billion yen

## Key Strategies and Measures



### Confidence

#### 1. Strategies and measures for a customer first attitude

- (1) More orders from customers through strengthening of our "customer-oriented one stop service"
  - With our strength as a building facility provider, the "customer-oriented one stop service" is reinforced through a stronger focus on building life-cycle.
  - Orders for renovations should be increased through closer relationship with customers.
  - With the reinforced support system for customers after completion and handover, we satisfy various customer needs and provide services more speedily.
- (2) Promoting provision of technical solutions
  - We leverage our development technology and related technology to positively promote provision of technical solutions according to customers' needs and market trends.

### Quality

#### 2. Strategies and measures for strengthening practical competence

- (1) Greater ability to provide design solutions and installation expertise
  - We strengthen our formula, "practical competence" = "knowledge" x "experience" x "autonomy."
  - The mobility of design engineers/construction engineers should be more flexible nationwide to smoothly respond to changes in the market trends.
  - We restructure the company-wide training system to strengthen "practical competence."
  - We work on training of general engineers for electricity/air conditioning systems/sanitary installations to strengthen the one stop service.
- (2) Ongoing improvement of site management methods
  - Through promoting information technology at the site, we aim for effective improvement in site management methods.
  - We reduce risks and prevent troubles with regard to safety, quality and cost.
- (3) Utilization of Dai-Dan Meister System and establishment of partnership with subcontractors nationwide
  - We implement and utilize the Dai-Dan Meister System established for the purpose of training and development of subcontractors.
  - We value the excellent staff of subcontractors, and aim for secured safety, improved quality and cost reduction through closer relationship between such staff and our engineers.
  - We rebuild the nationwide network of subcontractors.

### Growth

#### 3. Strategies and measures for securing revenue for the next generation

- (1) Strengthening our capabilities regarding facilities requiring advanced equipment technology
  - We focus on projects that require the high level of technology for facilities, such as battery-related plants, pharmaceutical plants, facilities for experimental animals, regenerative medical facilities, data centers and plant factories.
  - In order to strengthen our competitiveness in the above field, we acquire construction skills and promote the development of exclusive technology to achieve recognition as a top company in technology.
- (2) Strengthening our capabilities in the field of medical care, an important component of social infrastructure
  - In order to sustain and enhance our brand recognition as "Dai-Dan of the medical field", we conduct marketing activities based on our top achievements in construction of hospitals and our skills, and promote to accumulate construction technology and develop exclusive technology.
- (3) Strengthening our capabilities in energy and environmental projects in green industries that are attracting investment
  - In order to become competitive in projects in green industries, we improve our technology to achieve "energy saving", "energy generation" and "energy storage" for facilities.
- (4) Promotion of cooperation among companies of various fields, aiming for continued growth and creation of new value
  - We promote cooperation among companies of various fields by leveraging our strength in facility technology to achieve innovation for creation of new value.

### Responsibility

#### 4. Strategies and measures for satisfying social requirements

- (1) Strengthening of compliance system
  - We conduct ongoing trainings to ensure that all officers and employees of the Company comply with relevant laws including the Anti-Monopoly Act and the Construction Business Law, and voluntarily act in accordance with public decency.
  - We strengthen the management and education system to ensure fair and appropriate business transaction.
- (2) Promotion of activities to save resources and energy
  - We promote ongoing activities to save resources and energy based on our environment management system, and strengthen communications with society including stakeholders.
- (3) Promotion of social contribution activities as a corporate citizen
  - All officers and employees raise awareness of our responsibility to be a good corporate citizen, and continue to promote our social contribution activities in the neighbouring area.
  - In order to contribute to the development of the building facility industry, we provide technical information to the outside of the Company.



# Always With You.

**We strive to provide comfort that is friendly to both people and the environment.**

Dai-Dan believes that we play our part in the sustainable development of society by delivering safety, security and comfort to people's lives through our building services engineering and installation work.

CSR at Dai-Dan is about encouraging each employee to pursue the realization of a better environment and the development of society as they perform their tasks in keeping with the five Principles of Action of our Corporate Code of Ethics (p. 43).

## Stakeholder Relations

Customers, shareholders, employees, subcontractors, business partners and local communities — collectively, our stakeholders — are always the focus of any action we take when conducting our corporate activities. We believe that it is imperative that we accurately identify the expectations and requirements of our stakeholders through communication and respond to these needs, in order for us to grow as a company.

We therefore hold semiannual briefings on earnings for analysts in addition to communicating with stakeholders by offering tours of our facilities, issuing press releases, and disseminating information through our corporate website.



## Dai-Dan's Responsibility

### Environment

We strive to protect our environment and prevent global warming by strengthening our initiatives to develop low environmental impact installation processes and energy saving technology.

#### Customers

We strive to meet our customers' needs and provide them with high value-added solutions as well as high quality, comfortable spaces.

#### Shareholders

We recognize that it is our duty to enhance corporate value, maintain transparent and sound operations and disclose appropriate information in a timely manner.

#### Employees

We place priority on our employees' safety and health, and are committed to ensuring that their workplace is comfortable.

#### Subcontractors and Business partners

- We conduct business negotiations with our subcontractors and business partners while striving to adhere to principles of the utmost fairness and transparency.
- We are committed to improving safety and quality by building healthy partnerships with our subcontractors.

#### Local community

We recognize that we are a member of society and strive to exist in harmony with the local community through our social contributions in our position as a responsible corporate citizen.

## Feature

# Driving Innovation with Next-Generation Buildings and Facilities

Dai-Dan introduces distinctive next-generation buildings and facilities in response to contemporary demand for energy-efficient and resource-conserving innovations, all the while offering high levels of comfort and convenience.

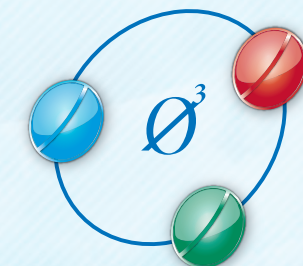
## Pallet Renewal

We have introduced the innovative concept of Palette Renewal as our approach to next-generation renovation work.



## Ø³ ZERO CUBIC

Building on our Palette Renewal approach, we created a model office incorporating our next-generation Zero Cubic office concept inside our Technical Research Laboratory.





# Pallet Renewal



## Background

Dai-Dan is proposing Palette Renewal as a next-generation approach to building renovation.

We have strengthened our efforts to protect energy resources, combat climate change and address other important social issues by using a new research center that was built two years ago at our Technical Research Laboratory as a platform

for testing a variety of energy-saving technologies. These energy-saving technologies have been added to an arsenal of technologies lying in the background of our extensive building renovation record, under the name of "Palette Renewal."

## Concept

Palette Renewal is how Dai-Dan renovates the customer's building into the next-generation vision they have of it, using a palette of technologies at our disposal.

### Energy savings coordinated with nearby buildings

- Heat sharing with nearby buildings
- Recovery and use of waste heat from nearby buildings
- Energy distribution based on priority and surplus on the consumption side



### Use of advanced energy-saving technologies

- Planning of optimized operating patterns
- Downsizing of equipment capacity/piping and ducts
- Task and ambient lighting and air conditioning (p. 16)
- Effective use of existing equipment

### Use of renewable/untapped energy sources

- Load balancing by micro-grid\*
  - Solar power
  - Geothermal
  - Solar heating
  - Trapped heat in air/water
- \* A well-balanced power supply network of solar and other small-scale power sources and storage batteries that follows demand

## First application at our Technical Research Laboratory

In 2014, we applied our Palette Renewal approach to building renovation to the research center of our Technical Research Laboratory that was built 23 years earlier in Miyoshi-machi, Iruma-gun, Saitama Prefecture.

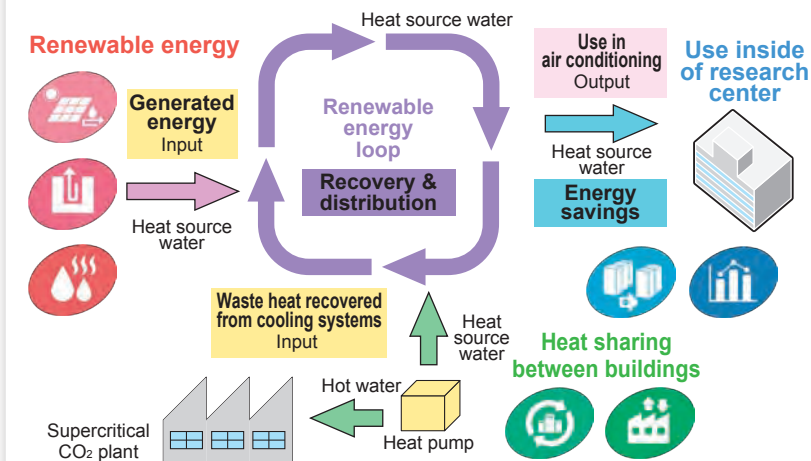
Working with Dr. Shinichi Tanabe of Waseda University and Dr. Tatsuo Nobe of Kogakuin University, Dai-Dan planned and built a "renewable energy loop" that tangibly realized the following concepts.

- Effectively incorporate and utilize renewable energies to the greatest extent possible.
- Utilize untapped energy sources.
- Renovate existing equipment and systems to minimize energy loss.

This renewable energy loop pools energy generated by renewable sources and heat sources, and distributes the required amount of heat to the required locations in the form of heat source water. All of the buildings are tied into a single network to maximize the use of renewable energies.



## Renewable energy loop



Equipment installed on roof

Palette Renewal work at our Technical Research Laboratory is expected to reduce building energy consumption by 30% compared to that before renovation.

## Technologies

### Water-source packaged air conditioning

Water-source packaged air conditioning is used to keep indoor environments comfortable. The system uses heat source water from the renewable energy loop. Compared to typical air-sourced equipment, the system is more efficient and, by nature thereof, can reduce power consumption.



Water-source packaged air conditioning

### Renewable energies

The renewable energy loop employs solar heat collectors, solar panels, geothermal harvesting and cooling towers. Renewable energies are prioritized as power sources in order to reduce gas and electricity consumption.



Solar heat collectors and solar panels

### Heat sharing between buildings

Large amounts of heat are needed by the supercritical CO<sub>2</sub> plant. In the renovations we did, heat pumps were introduced and connected to the renewable energy loop to use the heat from the loop. In summer, the heat and cold exchanged by the heat pumps are piped into the renewable energy loop for use in cooling other facilities.

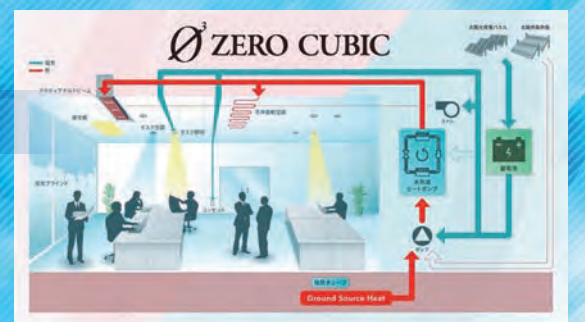


Water-source heat pump



## Next-generation office

# Ø<sup>3</sup> ZERO CUBIC



## Concept: 0 to the third power

Dai-Dan considers the following three concepts indispensable to proposing the next-generation office space. Testing aimed at materializing the supporting technologies of those concepts is underway day-in day-out at our Technical Research Laboratory.

### Zero Energy

Reduce **real** primary energy consumption to zero by effectively using energy from renewable sources.

#### Activities

- Power generation and air conditioning using solar energy
- Geothermal air conditioning

### Zero Stopping

Reduce office shutdowns to zero by **using renewable energies**.

#### Activities

- Power generation using solar energy and use of storage batteries as a power source
- Geothermal air conditioning

### Zero Stress

Reduce staff stress to zero by improving intellectual productivity.

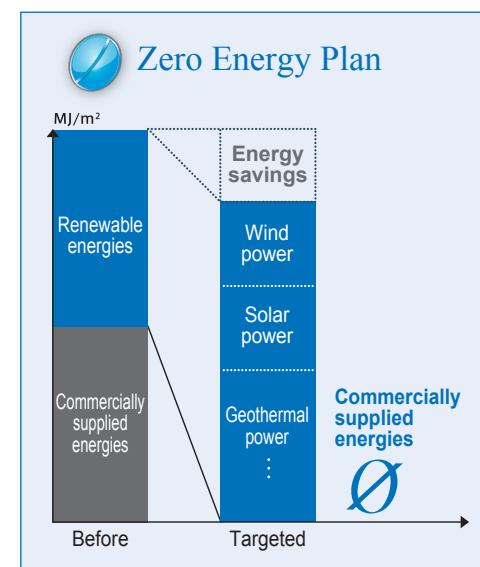
#### Activities

- Radiant air conditioning of minimal temperature variation
- LED lighting to minimize glare
- Task lighting and air conditioning of staff preference

A model of a next-generation office that realizes these three “zero” concepts is open at our Technical Research Laboratory. Come see for yourself.

## To reduce energy consumption to zero

- Solar energy is used.
- Storage batteries that store electricity are intelligently charged and discharged, to reduce dependence on electricity from the power company.
- Geothermal harvesting and natural light are used.



### Generating power from the sun

#### Solar panels

#### Solar heat collectors

Electricity generated from solar power is used for lighting, etc. Heat from the sun is used for air conditioning.



Solar panels



Solar heat collectors

### Generating power from the earth

#### Heat collecting tubes

#### Water-source heat pumps

Subterranean heat that remains a constant temperature throughout the year is harvested for use in air conditioning.

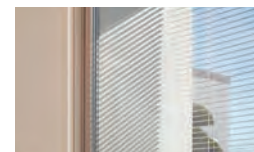


Water-source heat pump

### Introducing natural light

#### Light collecting blinds

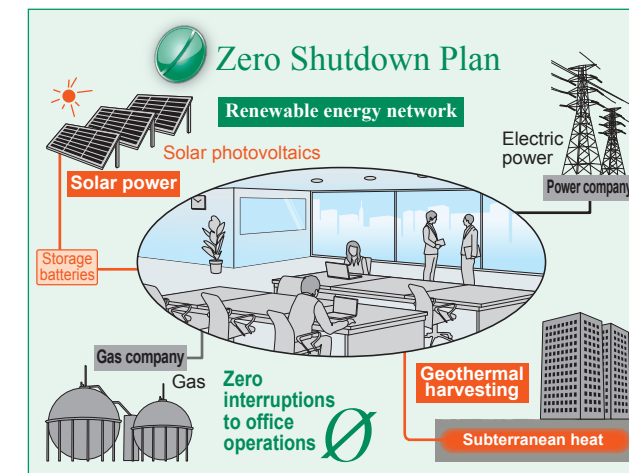
Sunlight is softened and directed indoors to save energy.



Light collecting blind

## To reduce office shutdowns to zero

- Solar energy is used to generate electricity, which is then stored in storage batteries.
- Geothermal harvesting is used.



## Securing lifelines in an emergency

### Storage batteries

A power storage system that optimally charges and discharges storage batteries using nighttime commercial supply and surplus solar power was built to function as a power source in emergencies.



Storage battery box

Storage batteries

## Generating power from the sun

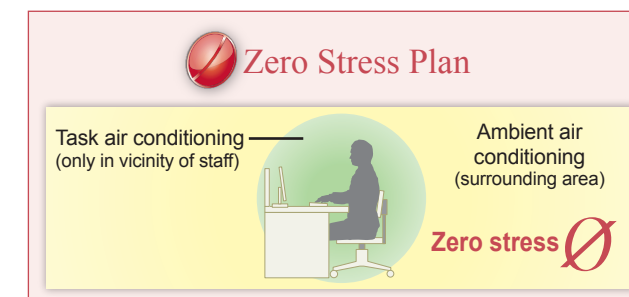
### Solar panels

### Solar heat collectors

Electricity generated from solar power is used for lighting, etc. Heat from the sun is used for air conditioning.

## To reduce staff stress to zero

- The Zero Stress concept is realized on an axis of task and ambient\* lighting and air conditioning.



Dai-Dan is focusing research and development on achieving both energy savings and a pleasant office environment via task and ambient lighting and air conditioning, and on effectively utilizing renewable energies.

\* Lighting and air conditioning methods for separately serving task space (only in the vicinity of staff) and ambient space (surrounding area).

## ● Ambient space Creating surrounding environments with people-friendly air conditioning and glare-free lighting

### Ambient lighting

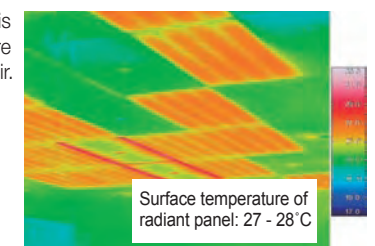
Light-guiding panels both diffuse light over a wide area and eliminate glare. Ambient lighting: Lighting designed according to the brightness of the target area



Light-guiding panel  
Desk surface 750 lx  
Brightness sensed at desk  
⇒5.2 w/m<sup>2</sup>

### Ambient air conditioning (indoors)

Radiant air conditioning is people-friendly because there is no uncomfortable blown air. Ambient air conditioning (indoors): Thermal image of radiant panels on the ceiling

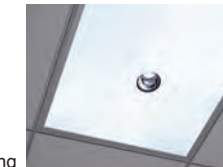


Surface temperature of radiant panel: 27 - 28°C

## ● Task space Adjusting temperature and brightness to personal preferences

### Task lighting

Work areas are effectively illuminated by downlights.



Task lighting

### Task air conditioning

Isothermal airflow is blown from the ceiling by operating a remote controller.



Task air conditioning



P. 19-20

## Pharmaceutical Plants, Food-processing Plants, and Research Laboratories

Maintaining clean spaces and preventing microbial contamination

### Main Developmental Technologies

- **Barrier Smart Series:** Chamber pressure control technology
- **iRack System:** Providing an optimal environment for animal experiments
- **Next-generation CPF:** Supporting the field of regenerative medicine
- Environmental control technology for **agricultural plants**
- **ARAPAC:** Automatic self-washing air conditioner for food-processing facilities



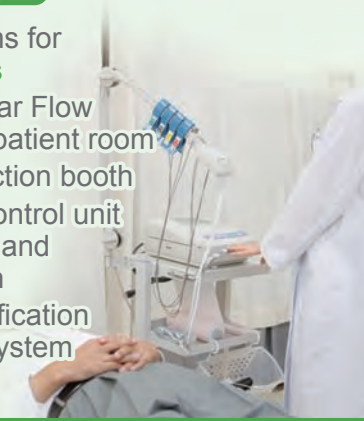
P. 23-24

## Medical Facilities

Supporting advanced medical care (covered by insurance), infection prevention, and improvement of patient comfort

### Main Developmental Technologies

- Air conditioning systems for **hybrid operating rooms**
- **BCC-P:** Vertical Laminar Flow immunocompromised patient room
- **DTB-02:** Sputum collection booth
- **INF Series:** Infection control unit for both air purification and negative pressurization
- **Chepas:** Clean Humidification Element Passing Air System



To meet the increasingly diverse needs of our customers and contribute to the emergence of a sustainable society, we employ light, air and water more organically and with greater functionality.

We create value with technology that is friendly to both people and the planet.

## Dai-Dan's Elemental Technologies (base technologies)

- |                                    |                                       |                             |                                            |
|------------------------------------|---------------------------------------|-----------------------------|--------------------------------------------|
| ● Fluid analysis                   | ● Water quality control               | ● Environmental measurement | ● Energy efficiency                        |
| ● Temperature and humidity control | ● Prevention of cross contamination   | ● Precision analysis        | ● Supercritical CO <sub>2</sub> processing |
| ● Air quality control              | ● Noise and vibration countermeasures |                             |                                            |

## P. 27 Focus on Technical Development

- Clean & Dry Experiment Room
- Experimental Plant Cultivation Room
- Chemical Experiment Room
- Large Experiment Room
- Sound Experiment Room



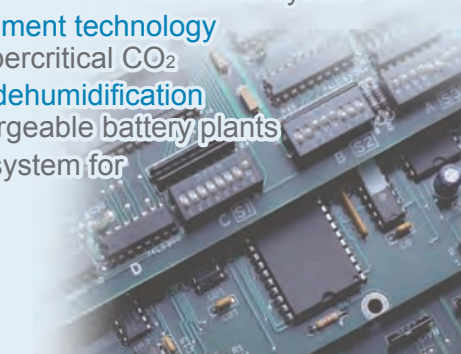
P. 21-22

## Electronic and Precision Device Plants

Contributing to an exceptionally clean environment and reducing operating costs through energy efficiency

### Main Developmental Technologies

- **Virtual Duct CR:** Ductless clean room system
- **Air filter refurbishment technology** incorporating supercritical CO<sub>2</sub>
- **Energy-efficient dehumidification system** for rechargeable battery plants
- Air conditioning system for **data centers**



P. 25

## Automobile and Machinery Manufacturers

Improving the work environment and energy efficiency

### Main Developmental Technologies

- **Optismart:** Optimum operating support system for multiple heat sources
- **Econo Spot:** Spot air conditioning system with fine mist
- **Oil mist countermeasure technology** based on airflow simulation



P. 26

## Various Facilities

Improving comfort and energy efficiency

### Main Developmental Technologies

- **Energy Consumption Visualization System**
- **Flow Smart:** Flow control system for pumps in refrigeration units
- **Open Degasifier:** Anti-corrosion technology for copper hot water supply pipes





# Pharmaceutical Plants, Food-processing Plants, and Research Laboratories

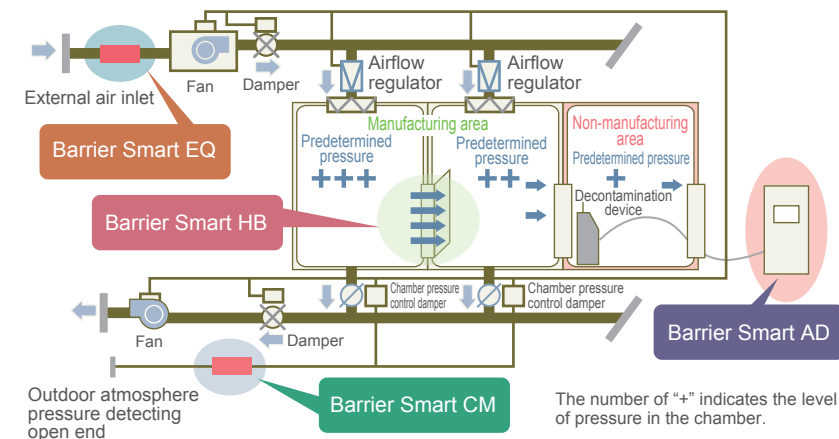
Maintaining clean spaces and preventing microbial contamination

## Barrier Smart Series: Chamber pressure control technology for pharmaceutical manufacturing plants

To keep cleanrooms free of pollutants, chamber pressure control technology that maintains chamber pressure is essential. Biological cleanrooms, which are found in pharmaceutical manufacturing plants, are particularly sensitive to changes in pressure and therefore cannot be subject to pressure changes outside of the specified range even when disturbances\* occur. The Barrier Smart Series employs the chamber pressure technology developed by Dai-Dan and is able to counterbalance disturbances.

\* Changes in chamber pressure caused by the opening and closing of doors, changes in the outside air pressure, and changes and switching of air intake and exhausts.

### Diagram of Barrier Smart Series



## iRack System: The optimum environment for animal experiments

Animal experiments are an inherent part of developing medical products and healthcare technologies. Animal enclosures for laboratory animals are predisposed to accumulation of allergens\* and objectionable odors, and are at risk of microbial contamination. Therefore, environmental control of animal enclosures has always been an issue.

Dai-Dan has developed a number of different animal housing options in an effort to improve animal housing environments, reduce energy consumption, and accommodate animal welfare standards.

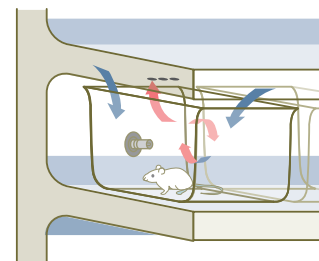
The iRack System offers enhanced ventilation efficiency and improved ease of use, thus creating a favorable environment for both laboratory animals and operators. Incorporating air conditioning technology featuring one-way airflow control, the ventilation system minimizes allergens and prevents objectionable odors and pathogens from spreading throughout the workspace.

\* Substances that cause allergies

### iRack System



### Diagram of animal enclosure



### Features

- Enclosure specific ventilation system
- Creates advanced one-way airflow.
- No shielding allows ease of use.
- Greater control of temperature and humidity within the enclosure
- Reduced frequency of bedding\* replacement
- Easy maintenance

\* Wooden or paper chips placed on the floor of the enclosure

## Trade Show Participation

### INTERPHEX JAPAN 2015

The 28th International Pharmaceutical R&D and Manufacturing Expo & Conference

#### Dates

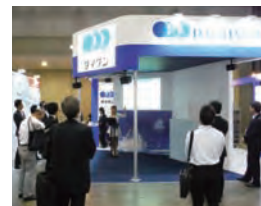
July 1-3, 2015

#### Venue

Tokyo Big Sight

#### Products on exhibit

- Barrier Smart Series: Chamber pressure control technology
- iRack System: Housing system for laboratory animals
- EZ-Scan: Automated scanning device for HEPA filter leak testing



## Introducing next-generation CPF for regenerative medical facilities

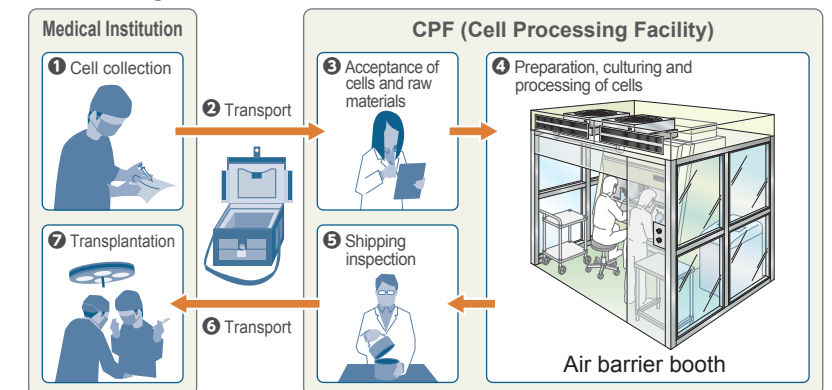
### Initiatives to promote widespread adoption of regenerative medicine\*

In regenerative medicine, cells derived from a patient or a provider are transplanted into a patient after preparation, culturing and processing in vitro.

The preparation, culturing, and processing of these cells is generally performed by what is known as a "cell processing facility" (CPF). The construction of these facilities generally resembles that of a pharmaceutical manufacturing plant. After examining the differences between regenerative medicine and pharmaceutical manufacturing, we began implementing various initiatives to construct a next-generation CPF whose construction and operating costs are significantly lower than those of a conventional CPF.

\* Medical care intended to promote the regeneration of cells, tissue and organs or to recover function lost to accident or disease

### Flow of regenerative medicine



### Features

- As a building services engineering and installation provider, we are focused on reducing the costs of CPFs while improving their productivity and usability.
- A key innovation in this effort is the "air barrier booth" we have developed.
- We are a participant in the Forum for Innovative Regenerative Medicine (FIRM), an organization focused on promoting the commercialization of regenerative medicine, and are examining structural standards for CPFs.

## Research on plant cultivation facilities: Environmental control technology

In recent years, interest in methods of artificially controlling the interior environment (including light, temperature, humidity, CO<sub>2</sub> levels, and density of culture medium) of plant cultivation facilities has been increasing among those who regularly supply farm products to market. Utilizing the expertise gained by our work on comfortable building environments, we are focused on facility construction and research into plant cultivation technology.

### Experimental plant cultivation room at our new Research Center



Using the environmental control technology that remains our specialty, we conduct innovative research on plant cultivation technologies involving facilities that utilize artificial light.

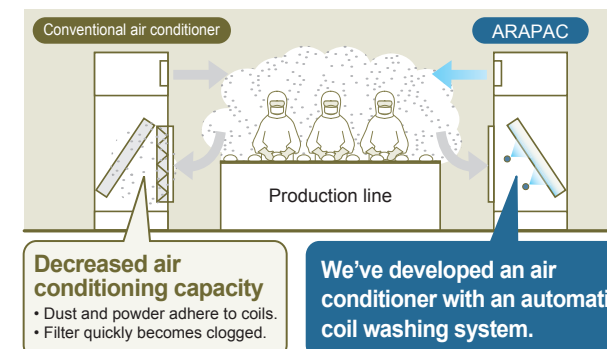
## ARAPAC: Automatic self-washing air conditioner

Food processors involved in flour milling and the production of bread and confectionery products typically generate large quantities of airborne dust and powder in their facilities as a result of their manufacturing processes. The dust and powder tends to accumulate on air conditioner filters and coils, causing problems such as decreased

air conditioning capacity and equipment deterioration. In addition, they can serve as a growing medium for molds and bacteria. Therefore, it is frequently necessary to replace the filters and wash the coils, tasks that are burdensome to the customer.

In response, Dai-Dan has developed the ARAPAC air conditioner featuring an automatic internal washing package designed to reduce the burden on the customer, extend the service life of the air conditioner, and maintain a clean and stable production environment. Customers mainly in the food processing sector who have installed this product have already seen its benefits.

### ARAPAC vs. Conventional air conditioners





# Electronic and Precision Device Plants

Contributing to an exceptionally clean environment and reducing operating costs through energy efficiency

## Virtual Duct Clean Room (VD-CR) System: Making cleanrooms duct-free

Cleanrooms at sites such as electronic device factories require many ventilation outlets to maintain a high level of air purity and precise temperature as well as humidity control. This results in a longer work period, a greater number of ducts and HEPA filters\*, and a subsequent increase in costs.

Dai-Dan has developed a system that reduces the number of

ducts and HEPA filters through innovative ventilation outlet design and installation methods. Our virtual duct clean room (VD-CR) system has often been installed in ISO class 6\*\* (class 1,000) to ISO class 8 (class 100,000) cleanrooms.

\* High-efficiency particulate air filter

\*\* Numerical value indicating the cleanliness class of a particular space

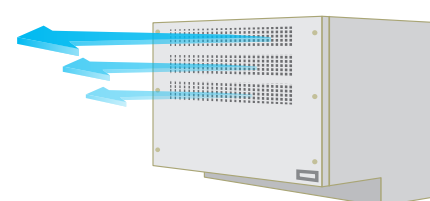
### Features

- Enables superior temperature and purity control at low cost.
- The system creates high-speed pure airflow along the ceiling, which extends the distance that the airflow vented from air conditioning equipment travels, resulting in a duct-free cleanroom.
- Contributes to the construction and prevalence of quick-to-build and cost-efficient cleanrooms.
- Reduced amount of material used for ductwork results in reduced environmental impact.

### Example of a VD-CR cleanroom



### Ventilation airflow diagram



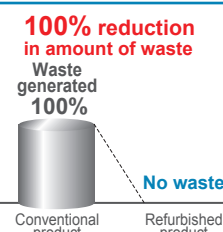
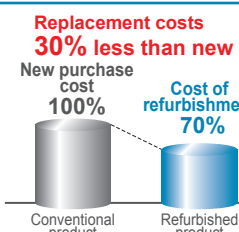
Air vents for ventilation are designed to extend the range of the airflow.

## Using supercritical CO<sub>2</sub> to clean and refurbish air filters

Factories and other facilities typically dispose of large quantities of used air filters. Dai-Dan was the first company to successfully use supercritical CO<sub>2</sub> technology for commercial purposes to clean and refurbish air filters employed to remove organic gas\*.

These refurbished filters are now being used in a variety of applications in the electronics and food processing industries and by the Research Institute for Quality Living Co., Ltd. (an inspection organization of the Aeon Group). With this innovation, we are contributing to the environmental and cost-cutting goals of our customers by offering these filters as a means of improving organic gas processing facilities and businesses employing gas analysis technology.

### Advantages of refurbishment



### Features

- Reduced filter replacement costs
- Reduced waste
- No initial investment required for environmental protection

\* Toluene and other volatile organic compounds (VOCs) that contribute to air pollution and odor-causing ingredients included in kitchen exhaust



Supercritical CO<sub>2</sub> cleaning and refurbishment apparatus

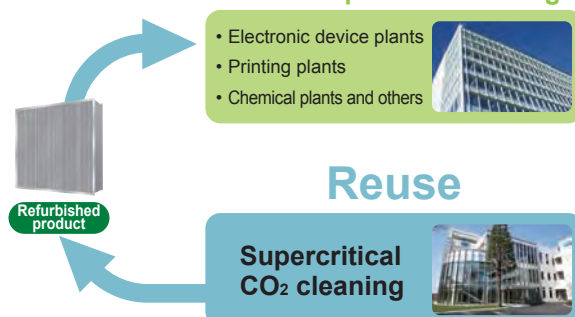
### Air Filter Cleaning and Refurbishing Project

#### Customer plants & buildings

- Electronic device plants
- Printing plants
- Chemical plants and others

### Reuse

Supercritical CO<sub>2</sub> cleaning



## Development of an energy-efficient dehumidification system for rechargeable battery manufacturing plants

Lithium-ion batteries and other types of rechargeable batteries are manufactured under very dry conditions, otherwise known as "low dew point" environments. Exposing a lithium-ion rechargeable battery to water can result in an intense reaction that generates explosive gas.

It is important to consider energy efficiency when developing air conditioning technology intended to maintain an environment with a low and stable dew point. Maintaining energy efficiency when dehumidifying air has proved to be a major challenge.

Dai-Dan has developed technologies that conserve energy while maintaining high quality by employing a hot-air generator

incorporating a CO<sub>2</sub> heat pump and using an innovative approach to control dehumidification.

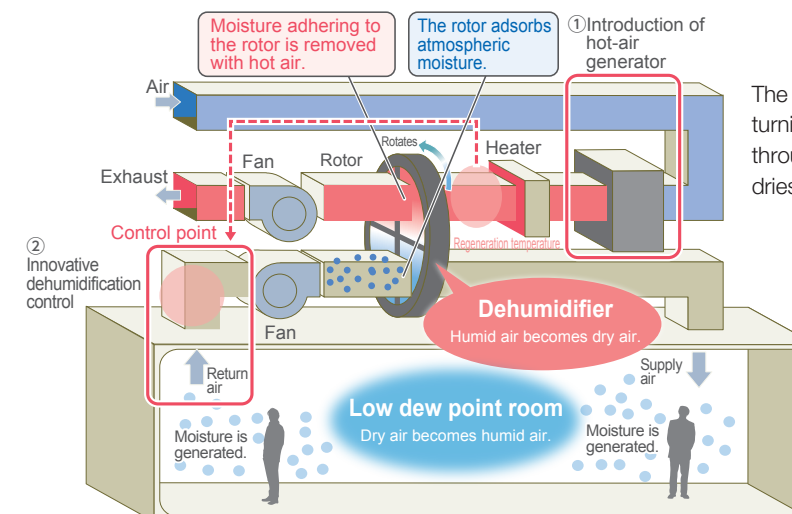
In the rechargeable battery industry, research and development of next-generation technologies are being pursued, and we are promoting the development of technologies that respond to changing needs.

### Features

- 1 Introduction of a hot-air generator incorporating a CO<sub>2</sub> heat pump
- 2 Innovative dehumidification control

**Combining the two innovations above has achieved a 42% reduction in energy consumption.**

### Energy-efficient dehumidification system



The dehumidifier that dries the air incorporates a slowly turning rotor that adsorbs water as indoor air passes through it. As the hot air passes across the damp rotor, it dries the rotor and restores its capacity to adsorb moisture.

## Research related to data centers

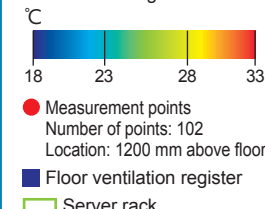
Data centers, which manage customer data, are required to maintain their interior environments at appropriate temperature and humidity levels in order to reduce the risk of server malfunction. The required air conditioners and electrical equipment consume a great deal of energy, creating a cost burden for customers, so energy conservation presents a major challenge.

### Dai-Dan's Initiatives

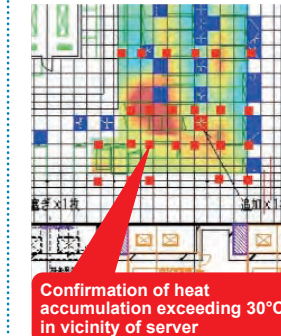
We conduct research through environmental measurement and airflow simulation to identify technical issues related to data center facilities. We help to maintain interior environments at the appropriate temperature and humidity levels and conserve energy by formulating and implementing appropriate measures.

### Example of environmental measurement

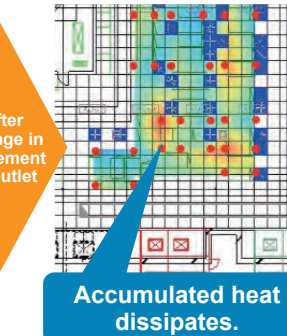
Measurement of temperature distribution in the server room before and after change (reduction) in number of air conditioner units and position of ventilation registers



### Surface temperature distribution (before reduction in number of air conditioners)



### Surface temperature distribution (after reduction in number of air conditioners)



### Results

- Heat accumulation is eliminated through optimal placement of floor registers (adding, closing, and changing position).
- Server inlet temperatures throughout the room are reduced to within acceptable range.
- Uniform room temperature results in reduced operation of air conditioners, contributing to a 12% power savings.



# Medical Facilities

Supporting advanced medical care (covered by insurance), infection prevention, and improvement of patient comfort

## Development and introduction of air conditioning systems for hybrid operating rooms

In recent years, hospital facilities have introduced hybrid operating rooms integrating both operating room functions as well as cardioangiography functions in order to provide a safer and more appropriate treatment environment.



Hybrid operating room with HEPA filter unit featuring built-in dimmable LED lamp

A conventional hybrid operating room cannot be used for general surgery because of the configuration of the operating field and air conditioning vents.

We have developed an air conditioning system for hybrid operating rooms incorporating air vents as well as our own HEPA filter\* unit with integrated dimmable LED lamp. It can be mounted over an operating table in the same manner as in a conventional operating room.

The improved environment of the operating field enables surgery to take place in a constantly aseptic environment during angiographic catheter treatment\*\* for aortic aneurysm or emergency surgery for ruptured aortic aneurysm and when used as a general operating room.

### Feature

- It is possible to provide vertical laminar flow through the screen-mesh blowing unit incorporating a dimmable LED lamp for improved surgical environment in a hybrid operating room (cleanliness, illuminance).

\* High-efficiency particulate air filter

\*\* Detailed examination of cardiac function through insertion of a slim tube-like catheter and measurement of blood pressure and cardiac output of each intracardiac site. Various other treatments can be performed through this catheter.

## BCC-P: Immunocompromised patient room

These rooms have been designed to protect patients with weakened immune systems due to, for example, hematopoietic stem cell transplant (bone-marrow transplant) or acute leukaemia, from pathogens. We have successfully created sterile environments in rooms that appear almost identical to typical patient rooms. The rooms have been designed with consideration given to comfort for patients and accessibility for healthcare practitioners.

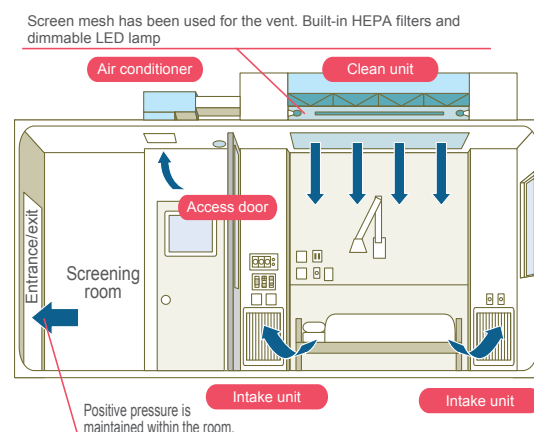
### Features

- These rooms are Sterile Room Administration Fee 1\* facilities according to the government's revised fee schedule for medical services issued in 2012.
- The rooms are equipped with a vertical laminar flow system that makes use of a screen-mesh blowing unit incorporating a dimmable LED lamp. This design is able to maintain positive pressure\*\* compared to its surrounding rooms and prevent the entrance of pathogens.

### Vertical Laminar Flow immunocompromised patient room



### Diagram of Vertical Laminar Flow



\* Under the 2012 revision of medical treatment fees by the Ministry of Health, Labour and Welfare, this standard has been adopted in response to the initiative to address nosocomial infection measures to enhance the assessment of preventive measures against hospital infections.

\*\* A state in which pressure is higher than the surroundings

## DTB-02: Sputum collection booth

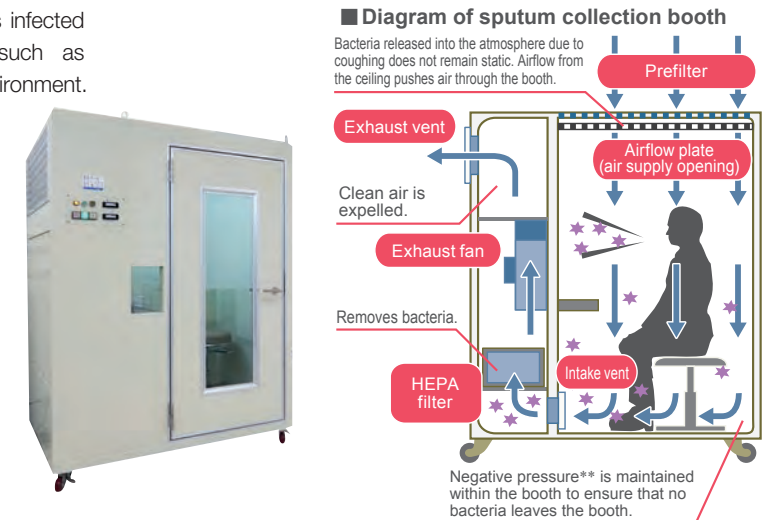
The booth is designed to collect sputum from patients infected with droplet nuclei infection (airborne infection), such as tuberculosis, without compromising the surrounding environment.

### Features

- Prevents spread of the tuberculosis bacteria by coughing patients.
- HEPA filters completely remove the bacteria passing through the exhaust, and purify the air that leaves the booth.
- An after-clean mechanism\* has been added to reduce the infection risk to healthcare workers from opening and closing doors.

\* Fan operation is continued for a specific period of time after sputum collection.

\*\* A state in which pressure is lower than the surroundings



## INF Series: Infection control unit

The unit is able to simultaneously complete both air purification and negative pressurization to prevent airborne infection. The unit is suitable for simplified infection control in infection wards, waiting rooms and consultation rooms.

### Features

- Does not require major renovation.
- Compact size that takes up little floor space
- Quiet, producing less than 40 dB when the unit is running in low power mode
- HEPA filters purify circulated and exhaust air.

### Infection control unit: INF-101



### Infection control unit: INF-201\*



\* The installation of INF-201 requires only the opening of existing windows and does not require installation of an exhaust duct.

## Chepas: Clean Humidification Element Passing Air System

In recent years, the vapor humidification method has become popular for humidification in many air conditioning systems. This approach requires less installation space and is more energy-efficient than the steam humidification method. On the other hand, the drawbacks of the vapor humidification method include bacteria propagation and the generation of odors when maintenance is lacking. Our Chepas product uses slightly acidic electrolytic water to solve the hygiene side issues associated with vaporizing humidifiers.

The Chepas unit sterilizes by adding slightly acidic electrolytic water to the humidification element. This water is nontoxic and is used for hand washing in hospitals and for food sterilization. This product contributes to hygienic environments in both medical and food-processing facilities.

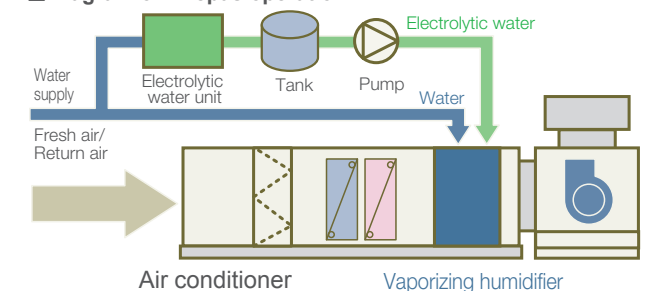
### Front view



### Features

- Controls outbreaks of bacteria and objectionable odors in the main units and drain pans of humidifiers.
- Clean air is supplied to rooms.

### Diagram of Chepas operation





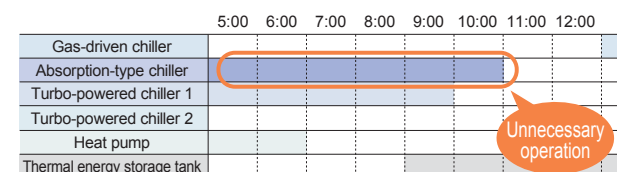
# Automobile and Machinery Manufacturers

Improving the work environment and energy efficiency

## Optismart: Heat source optimum operating support system

Optismart is a system that provides heat source system operators with signals indicating the ideal time to turn on or shut down a system's various heat sources based on computer simulations. This enables the heat source system operator to operate the heat source equipment in a way that provides the optimum combination of heat sources. Our Optismart system also has a simulation function that enables calculation of estimated annual operating costs of heat source equipment.

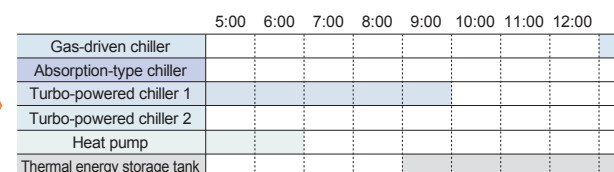
### Conventional operations based on human judgment



### Features

- Improved efficiency for large-scale heat source
- Reduced environmental impact through energy efficient operation
- Standardization of operational pattern based on objective conclusions
- Optimized gas consumption level
- Improved efficiency of operational management work

### Operation calculated by Optismart system



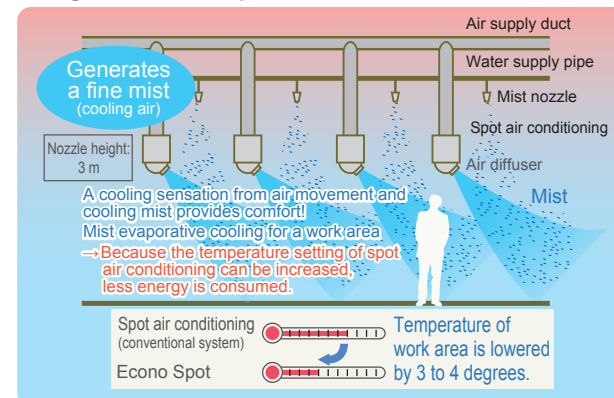
## Econo Spot: Spot air conditioning system used together with fine mist

Our "Econo Spot," which employs evaporative cooling using fine mist along with conventional spot air conditioning, is a system for machinery plants and other factories that efficiently improves the environment in the hot spots of a work area.

### Features

- An efficient, environmentally friendly system
- Cooling sensation provided by nozzle sprayed water mist and air
- Reduced installation and running costs
- Water mist is regulated by monitoring of room humidity and temperature
- Can be easily relocated for repositioned production lines

### Diagram of Econo Spot

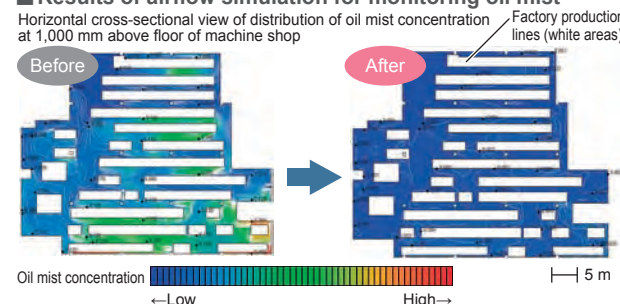


## Oil mist countermeasure technology

In machine shops, cutting oil tends to splatter and evaporate, forming an oil mist that drifts throughout the plant. Although this oil mist is not directly harmful to human health, manufacturing facilities voluntarily adopt their own oil mist standards and manage the density of this oil mist in order to promote comfortable working conditions.

We currently offer solutions to provide effective ventilation using airflow simulation technology. We then verify the design and installation with precision.

### Results of airflow simulation for monitoring oil mist



# Various Facilities

Improving comfort and energy efficiency

## Energy Consumption Visualization System

The Energy Consumption Visualization System we offer displays the consumption of renewable energy by building facilities. We can relay this information to building users in real time through digital signage\* and the like. In addition, building users can confirm the amount of CO<sub>2</sub> emissions and the building's energy efficiency from any location through the cloud (accessible via the web).

\* Displays of information, ads and the like on devices such as monitors and lamps

### Sample visualization screen



### Features

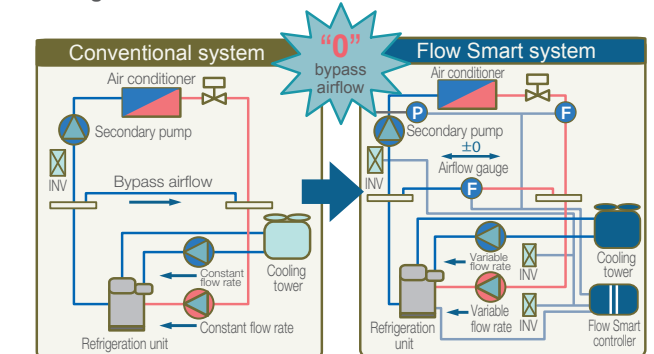
- Highly scalable  
Supports open systems and is designed for interoperation with other systems.
- Accessible via the cloud  
Allows for management of CO<sub>2</sub> emissions and energy consumption from anywhere in the world.
- Customizable screen  
Unique display screens can be created via web browser.

## Flow Smart: Flow control system for pumps in refrigeration units

Flow Smart is a system that reduces the cost of operating a facility by introducing inverter control of pumps for refrigeration units. Conventionally, these pumps have been operated at a constant speed. Flow Smart regulates so that no airflow goes through the bypass unless it is required to run the air conditioning system.

The introduction of Flow Smart enables a 60% reduction in the energy required to run the pump in refrigeration units. Through this technology, Dai-Dan provides comfortable living and working spaces and also contributes to the conservation of the environment.

### Diagram of Flow Smart



### Features

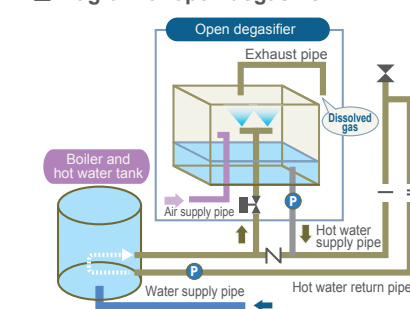
- Bypass airflow control technology developed by Dai-Dan
- Reduces energy consumption of water and coolant pumps in refrigeration units
- High energy saving performance, proven by strong demand

## Open Degasifier: Prevents corrosion of copper hot water supply pipes

UACJ Corporation (formerly Sumitomo Light Metal Industries, Ltd.) and Dai-Dan jointly developed an open degasifier to reduce the corrosion of central copper hot water supply pipes\*.

The device, which is connected to copper hot water supply piping, atomizes the hot water internally in order to extract and remove any residual chlorine, dissolved oxygen, free carbonates, and other corrosive elements that might be present. Atomizing the hot water increases the surface area of the water that is in contact with air, increasing the efficiency of extraction.

### Diagram of open degasifier



\* Hot water supply system with a hot water return pipe and a hot water supply circulation pump is known as a central hot water supply system. The return pipe is made of copper.

### Features

- Reduces residual chlorine, dissolved oxygen and free carbonates.
- Enables ample hot water pressure and volume.
- Easy installation
- Daily maintenance is not required.

### Hot water before and after degassing





## Focus on Technical Development

Creating value for our customers through validation and verification of experiments supporting fieldwork



The Technical Research Laboratory models its R&D on the following **three policies** in order to **create positive environments for people, property and the planet**.

- 1 Ensuring quality through primary research
- 2 Developing technologies that create greater value
- 3 Developing innovations that extend beyond building services

### Clean & Dry Experiment Room



This facility enables us to perform experiments on energy efficiency for clean rooms and low dew point rooms. It also allows us to carry out commissioned experiments in environments that simulate our customers' production environments.

### Experimental Plant Cultivation Room



We conduct research on plant cultivation and promote technologies used in the systems employed in plant cultivation facilities.

### Chemical Experiment Room



Our research and development benefits from the chemical ingredient analysis technology we have cultivated over the years. We can conduct environmental analyses on gases and fluids using high-precision analytical apparatuses.

### Large Experiment Room



This large space can be used to carry out multipurpose experiments. It was designed to accommodate various heat source connections and electrical wiring modifications, ensuring this facility is well prepared for a wide variety of experimental environments.

### Sound Experiment Room



This sound experiment room is designed for noise experiments on the sound generated by air conditioners. It is equipped with a silent air blowing apparatus used for research on ventilation noise.

Exceeding customer expectations with **knowledge, experience** and **autonomy**

# Dai-Dan's Practical Competence

The building facilities we deal with are mainly dissimilar, which requires us to employ flexibility and creativity when challenged with accommodating a variety of building structures, usage patterns and customer needs.

As a building services engineering and installation provider, we are committed to exceeding the expectations of our customers by applying the knowledge and experience we have gained throughout our history. Moreover, since our establishment, we have exhibited the ability to provide design solutions and installation expertise with inherent skill. This is Dai-Dan's practical competence in the field.

## Introducing Our Installations

Installation Project 1



Drug Preparation (Kanto) Factory  
Sawai Pharmaceutical Co., Ltd.

Installation Project 2



New K-1 Building, Nichia Corporation

Greater Ability to Provide  
Design Solutions and Installation Expertise

Ongoing Improvement of  
Site Management Methods

Application of the Meister System and  
Establishment of Partnerships  
with our Subcontractors across Japan



# Drug Preparation (Kanto) Factory Sawai Pharmaceutical Co., Ltd.



Generic drugs that have the same formulation and effect as brand name drugs are expected to spread as a way to lower healthcare costs. So, to increase production capacity and ensure a stable supply of high quality drugs ahead of potential spikes in demand, Sawai Pharmaceutical Co., Ltd. built a drug preparation factory at their Kanto Factory and started production operations in March 2013. Dai-Dan installed the new factory's air conditioning system under contract from the builder, Taisei Corporation. That project is introduced here.

## Factory overview (As of March 31, 2015)

Location	Mobara, Chiba Prefecture
Operations	Production of solid pharmaceutical preparations for ingestion
Total floor space	24,551 m <sup>2</sup>
Construction	Steel frame aseismic construction Administration & Quality Management Bldg.: 3 stories Factory Bldg.: 5 stories
Production capacity (Kanto Factory)	3.5 billion pills/year
(Sawai Pharmaceutical)	10 billion pills/year

## Factory features

### 1. Built to increase production capacity

The factory is currently capable of turning out 3.5 billion pills a year, but can increase turnout to 4 billion to address any future increases in demand.

### 2. Risk diffusion promoted amongst factories

Risk diffusion mechanisms are being built so that existing factories can supplement production for one another. Moreover, the new factory has an aseismic design, redundant power supplies and other disaster preparation features.

### 3. High quality and high productivity

The factory is designed to ensure Japan's GMP (Good Manufacturing Practices).

### 4. Environment-friendly

The factory is environment-friendly in many ways, which includes energy-efficient facilities and equipment, LED lighting for utilities, green tracts on the premises, and more.

## Comment of the customer

## Dai-Dan's quick action is greatly appreciated.

We feel that choosing modular chillers as the cold/heat source was the right decision because that ensured us numerous backup units that can keep production lines up and running. There was trouble in the beginning with unstable cooling water temperatures and uncertainties over humidity control, but after several adjustments, everything started running perfectly. We learned a lot about managing validation documents and other things in this project.

We are grateful for the way that Dai-Dan was thorough and quick.

Toshio Sugawara

Leader, Facility Control Section, Administration Department, Kanto Factory  
Sawai Pharmaceutical Co., Ltd.

## Air conditioning overview and energy-saving technologies

Cold/Heat sources	<b>Factory air conditioning system:</b> Air-cooled modular chiller × 32 <b>Factory production system:</b> Air-cooled modular chiller × 8 <b>Administration Bldg. air conditioning system:</b> Air-cooled modular chiller × 3
High-temperature heat source	<b>Factory:</b> Compact gas-fired, once-through boiler × 8 Plate-type heat exchanger × 2
Monitoring system	<b>Part 11* compliant paperless recorder</b>



Through ducts and pipes installed in outer wall early into construction



Equipment being lowered into place during construction



Pump unit for air conditioning machine room

\* Regulation of the U.S. Food & Drug Administration (FDA). Specifies the electronic data and signature required to apply for permission to sell medicines and foods.

## Comment of the field representative

## Careful attention was given to working fast and adjusting room pressure.

This project regarded one of the largest and representative pharmaceutical factories in Japan. With no time to spare, we examined various ways to reduce labor, which we then used cautiously so as not to create delays. During the day, construction work was done and equipment was transported to the site, installed and connected, while at night, room pressure and the pressure differences between rooms were adjusted. Given that there were more than 200 production rooms with six different pressure levels, we were at it every night for two-and-a-half months during the test-run and adjustment phase making sure that pressure differences were just right.

It was a very challenging project, but the fact that we were able to complete work without any major accidents owes greatly to the customer, the construction company staff and our subcontractors. Another reason for our success was the internal operating system we built beyond the barriers of divisions and branches. I am very grateful to everyone.

Takahiko Shimaoka

Manager of Engineering Division 2, Engineering Department 2, Tokyo Head Office





# New K-1 Building, Nichia Corporation



Nichia Corporation is a leading company that manufactures and sells LEDs. They recently built a new semiconductor factory on the grounds of their Tokushima headquarters to increase their capacity to produce LEDs. Dai-Dan installed the new factory's air conditioning system under contract from the builder, Takenaka Corporation. That project is introduced here.

## Factory overview

Location	Anan, Tokushima Prefecture
Operations	Manufacture of phosphors, LEDs and other semiconductors
Total floor space	33,670 m <sup>2</sup>
Construction	Steel frame construction 8 stories above ground



Production room (Clean room)

## Factory features

### ● Indoor environmental management, removal of chemical contaminants, etc.

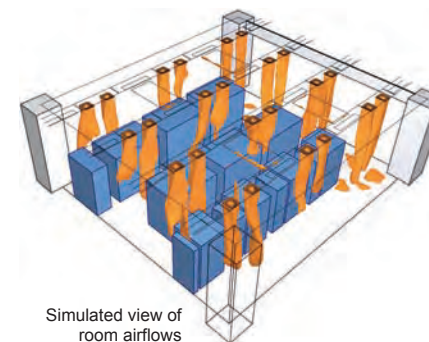
In their technological pursuits of luminescent materials, Nichia Corporation announced the blue LED to the surprise of the world in 1993. From that point forward, they have greatly expanded the field of LED application by developing a white LED and a slew of nitride LED products from ultraviolet to yellow. They also have developed a variety of manufacturing technologies for general-purpose LEDs of good color rendering, high efficiency and long service-life, and a wide lineup of customized LED lighting in various color gradations and light distributions.

Dai-Dan helped to build the clean rooms where these high quality products are made, by providing indoor environmental control technology. This included technology used to manage clean factor by removing chemical contaminants, and temperature and humidity management against room load fluctuations.

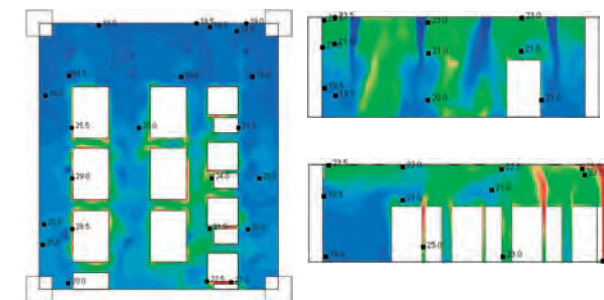
## Special installation efforts

### ● Analysis by airflow simulation

Before installing clean room air systems, indoor airflow simulations were done to pinpoint the required air conditioning and ventilation performance levels. The temperature, airflow direction and speed, and ventilation cycle distributions that were obtained from that were analyzed to determine the best location for air blow and intake ports, and other matters that would ensure the required indoor environment.



Simulated view of room airflows



Planar and cross-sectional views of room temperature distribution

### ● Riser unit installation

In consideration of work safety and the shorter installation time it promised, it was decided to install the wide diameter risers as a preassembled unit. As such, the pipes were assembled first at the factory and secondarily in the work yard at the site, then transported to the installation site and erected in place. This process greatly reduced the amount of on-site work.

Also, because riser pipes were used, a great deal of attention went into improving quality and ensuring work safety.



Riser unit in place

## Comment of the project leader

## We put every ounce of effort into providing the best system.

Because we were dealing with a semiconductor factory, the concepts we had to work with for the new K-1 Building included a clean room-level clean factor, temperature and humidity management, stable operation of heat sources, energy efficiency by utilizing the waste heat of double-bundle condenser type chillers, and stable utility supply, but the greatest challenge was in building a system that was expandable and could accommodate future production line changes, all the while fitting in the space above the ceiling. We came up with a system that provided more-than-adequate flexibility against future changes by installing slim clean fan coil units that projected no lower than ceiling beams and thus secured space below the beams, and adopting flexible ducts between the fan coil units and air blow ports.

Another major component of the Nichia project was that this equipment did not evolve as a unilateral proposal by any one company but resulted from the collaborative atmosphere that was created by Nichia, Takenaka and Dai-Dan. Within Dai-Dan, it was an all-out effort that garnered support from our Industrial Facilities Development Department and drew from our various fields of expertise. As we undertake new projects, I want to find ways for our technological expertise to help customers grow their business.

In closing, I wish to thank everyone at Nichia, Takenaka, Dai-Dan, and our subcontractors, manufacturers and dealerships for each the part they played in bringing this project to completion without any trouble or accidents.

Shuichi Okawa

Manager of Engineering Division 1, Engineering Department, Shikoku Branch





# Greater Ability to Provide Design Solutions and Installation Expertise

## Sharing and utilizing the enhanced value generated by our on-site expertise

### ● Case study presentations to spread expertise and integrity throughout Dai-Dan

In November 2014 we held the Seventh Case Study Presentation. This event gives our employees an opportunity to present the achievements they have made through expertise and integrity in the course of their day-to-day work. Awards are also presented.

The presentations are broadcast live via our teleconference system to allow all employees across the country to participate.

These case studies typically address topics such as improvement of conventional installation methods; efficiency improvements through adoption of new installation methods and equipment; energy-efficient and environment-friendly design; learning from past shortcomings; cost reduction; and examples of improved safety and quality management methods. Among the 166 case studies, 42 passed the first assessment, with 25 passing the second assessment to receive the following awards: one Chairman's Award, two President's Awards, two Head of Technical Construction Division Awards, five Outstanding Performance Awards, ten Good Effort Awards, and five Encouragement Awards (resulting in 16 awards to groups and nine awards to individuals). The recipients were presented with award certificates.

The Chairman's Award, the highest award, was presented to

the Osaka Head Office for its case study on "Upgrading cool and warm water vertical pipes without stopping the fan coil unit."

The case studies recognized at the presentation are shared at each office and site and utilized as excellent achievements suitable for internal training purposes. Through this initiative, we expect to enhance our employees' skills and improve Dai-Dan's technology as well as our safety management and quality control.



Award recipients

## VOICE Comment of the winner of the Chairman's Award

Considering all the excellent cases of improved installation efficiency, design and technology improvements, cost reductions, and enhanced work supervision throughout Japan, I feel extremely honored to have been selected for the Chairman's Award at the Seventh Case Study Presentation.

My case study — which involved the unique situation of undertaking repair work in an existing building that remained occupied — presented an approach to satisfying customer demands and demonstrating installation efficiency and the ability to reduce costs.

The content of my case was not in itself particularly difficult, but I took past cases into account and exhibited sufficient familiarity with the systems in the building in question. I combined both my experience and my expertise as a Dai-Dan engineer.

I advocated a customer-first policy and, as a result, I received a high evaluation. Perhaps that's why I was selected for the Chairman's Award. I intend to pursue courses through continuing education in order to flexibly respond to a greater variety of customer demands as a Dai-Dan engineer.

Kohei Naka

Deputy Manager of Engineering Division 3, Renovation Department, Osaka Head Office



### ● Technical Reports

Our technology is supported by the results of a combination of ingenuity, hardship, failures and successes in the field.

When an individual engineer writes and illustrates a document of his or her experiences, a sense of commonality is achieved and the personal experience contributes to our company's technical capabilities. These examples of expertise and ingenuity are incorporated into the Technical Reports, which are made available to all engineers.



### ● Technology Information Hour

The Technology Information Hour takes place after work through our teleconference system to provide opportunities for sales, design, and engineering staff to share information on ceaselessly advancing technology. Topics include the latest technology information, quality management, safety measures, and energy efficiency. The Technology Information Hour was started five-and-a-half years ago; as of this writing, 148 sessions have been broadcast to a total of 11,718 participants.

Topic selection and session leadership are undertaken by engineering staff of the Technical Development Division, the Technical Research Laboratory and the Industrial Facilities Department. In addition, external lecturers present some talks in these sessions, and study group meetings are held at each office. Sessions are recorded and distributed to those who are unable to attend the sessions due to work-related reasons, in order to provide greater opportunities for self-education.

#### Major topics of sessions held throughout the previous year

- Causes of and countermeasures for quality incidents and industrial accidents
- Energy consumption visualization system with demand controller
- Subsidies for energy conservation
- Promoting the use of IT in the field
- Study meeting for automated control
- Trends in LED usage
- Community TV reception technology
- Introduction to the Clean & Dry Lab of the Technical Research Laboratory's new Research Center
- Using supercritical technologies
- Basic introduction to plans for medical product manufacturing facilities
- Technical seminar on top runner secondary standard and transformer deterioration

## Training engineers and passing on skills applicable to work in the field

### ● New personnel system launched to review appointments of field specialist engineers

We launched a new personnel system in April 2014 intended to support appropriate evaluation and job promotion of engineers engaged in installation in the field.

In our previous system, only employees in the management division could be promoted to the position of section manager or department manager. Therefore, for engineers specializing in on-site work, we established the positions of Grand Project Master (GPM) and Project Master (PM), which are equivalent to the position of section manager or department manager in the management division.

These engineers can choose the desired approach in either the management section or in field specialization; a promotion track (GPM or PM) is provided for field specialization.

After the Technical Master (TM) position was established in April 2015 as a posting for field specialist engineers ranked below section manager, we reviewed our employee appointment

system. In August 2015, we made appointments of 5 GPMs, 33 PMs and 23 TMs.

Installation experience is evaluated according to its application to medical, industrial or other types of facilities, and a special allowance is paid to GPMs, PMs and TMs in recognition of their achievements. A special promotion may be awarded depending on the number of special allowances paid.

As a design and installation company, Dai-Dan needs to cultivate outstanding engineers capable of performing installations in the field and willing to pass on their skills. We are taking steps to enhance their technical skills by accurately evaluating skilled engineers capable of working on-site and increasing their motivation.

With this new personnel system, we are helping to ensure that the skills of outstanding engineers in charge of installation will be passed on.

## Flexible assignment and capitalization of skilled personnel through understanding of specialized installation skills

### ● Engineer Ranking Chart according to area of specialization (Committee for Living in the New Era)

Our greatest asset, our employees, must demonstrate their abilities to the maximum as they meet the variety of demands that arise with advanced building facilities while continuing to provide a level of quality that exceeds customer expectations.

Our Engineer Ranking Chart, organized by area of specialization, does not rank our engineers in any way, but accurately determines the areas with which an individual is familiar or has installation experience. Its aim is to place the right engineer in the right post in order to create the ideal installation system.

Our Committee for Living in the New Era, which reviews

personnel assignments to avoid stereotyping, prepared the Engineer Ranking Chart in December 2011 and updated it as of July fiscal 2014 according to the area of specialization of current technical employees (810 in installation divisions and 192 in development design divisions).

We are currently using this resource mainly for the purpose of providing engineer support across office boundaries, and we believe that its adoption across a wider range of applications, including for systematic staff assignment, will enable us to pass on skills to future employees.



## Creating value by providing solutions with a flexible approach

Dai-Dan is involved in providing electricity, air conditioning and plumbing, and our engineers are diverse in terms of their learning as well as their gender. This diversity generates value created by “outside the box” thinking fused with a flexible approach.

While the strong showing of Dai-Dan’s female employees is attracting attention, many are active on our front lines in the field. We intend to further strengthen female recruitment in the future in addition to revitalizing our organization by creating an appealing work environment for women.

## VOICE Skills of our female employees in the field

I sought to join the building facilities industry in order to make use of the university research I undertook in the area of facility energy efficiency. When I was looking for work, I considered human relations to be almost as important as the nature of the work itself. This proved to be the decisive factor when I chose to accept Dai-Dan’s offer, largely because of the personality of the employees and the welcoming atmosphere.

I now work as a field representative for machinery installations. The most impressive project I have been involved in so far is the extension and alteration of the emergency and critical care center of a municipal hospital in Gifu.

Because my first project was as a field representative for a joint venture project, I started as an inexperienced employee doing everything for the first time. I managed to complete the project on-site somehow by relying heavily on those around me.

This was my first experience being in charge of hospital facilities or participating in medical gas fitting. Importantly, during repair of the existing medical gas system, it was necessary to formulate an installation plan using portable apparatuses and temporary tanks in order to avoid affecting patients should the medical gas supply be interrupted during the medical gas switchover. I conducted interviews and field research many times and took all possible measures to ensure everything went according to plan.

With the cooperation of hospital staff, I was able to complete the switchover and restoration safely on the scheduled day. I felt strongly that I was responsible for the lives of the patients, and I was keenly aware that no mistakes could be permitted. I also gained valuable experience on this project.

I was able to gradually establish a relationship of mutual trust with our customers through repeated trial and error. My work was

very much appreciated by my counterparts at the other companies and by the joint venture employees. In the end, all my colleagues said they wanted to work together again. Even now, whenever I encounter hardships, I remember this encouraging experience.

I never thought that I was the only woman who could have provided such meticulous attention to detail. But because many women were employed as nurses at the hospital, I was able to understand their requests. Because of this, I have very happy memories of the words of direct thanks that I still treasure.

When I joined the company, I had to deal with the negative image of the construction business, particularly the “scary jobsite” image that tends to cause women to avoid sitework. However, now that I have been engaged in many on-site projects as an engineer, it can be said that both men and women in this industry can play an active role with confidence.

If you have the courage to enter this industry, I think that you will gain a sense of accomplishment and experience joy that is hard to emulate elsewhere. I encourage everyone who is interested but hesitant to please take every opportunity to step into this industry without hesitation.



**Akiko Tsuruta**  
Deputy Manager of Engineering Division 1  
Engineering Department 3  
Nagoya Branch

## Ongoing Improvement of Site Management Methods

### Continuously improving health and safety initiatives with the goal of eradicating industrial accidents

#### Workplace health and safety management system (COHSMS\* compliant)

Recognizing that ensuring health and safety is clearly one of our social obligations under the leadership of our executive management, Dai-Dan places the highest priority on the health and safety of our employees and implements health and safety initiatives involving facility sites\*\*, worksites, and subcontractors. We continuously endeavor to remove or reduce potential hazards and minimize the harm of workplace accidents as we strive to maintain and enhance health; promote the creation of more comfortable work environments; and ultimately improve health and safety standards.

More specifically, each year our headquarters formulates a Company-wide Health and Safety Management Plan. The plan is based on Our Policy for Health and Safety developed by our president and incorporates quantitative and priority goals after they are revised

through an assessment of past results. Under this plan, each office then formulates and implements an Office Health and Safety Management Plan that includes its respective priority goals. Each worksite also develops Installation Management Targets (safety, quality and environmental) outlining specific hazardous and harmful factors with respect to each project. They are implemented with appropriate revisions to accommodate the progress of the project.

We evaluate the enforcement of these Health and Safety Management Plans, including the health and safety audits and patrols that are regularly conducted by our offices and headquarters. We are maintaining and anchoring the system as we continue to revise and improve it.

## Our Policies for Health and Safety

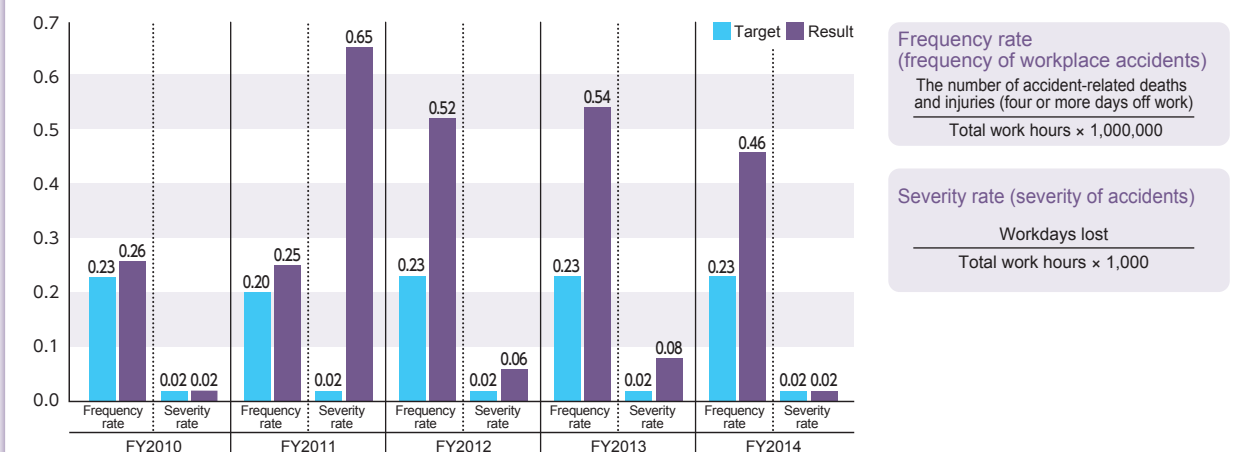
### Health and Safety Philosophy

“Ensuring Health and Safety” is our obligation to all the employees of our companies, their families and the society. In DAI-DAN, we give top priority to “Safety” and “Health”. We strive to be the corporation which the society trusts, with DAI-DAN’s top management and employees working together to enhance the safety and comfortable working environment.

### Action Statements

- 1 We utilize “Health and Safety Management Systems” to eradicate all industrial accidents. We endeavor to eliminate dangers from potential hazards and harmful characteristics in all work activities and continuously improve and enhance the health and safety of our workplace.
- 2 We promote cooperation among offices, work-sites, associate companies, with good communication and participation in health and safety activities, and defining each role independently.
- 3 We observe work-safety and health-related laws including our company’s internal health & safety management systems regulations for the enhancement of health and safety standard of our employees and staff, preserving and improving their health.
- 4 We educate all people working for DAI-DAN in our policies for health and safety and also disclose them to the public.

## Safety results



\* The abbreviation for the Construction Occupational Health and Safety Management System, which is based on the Guidelines on Occupational Health and Safety Management Systems announced by the Minister of Health, Labour and Welfare. COHSMS outlines the health and safety management system required to accommodate the specific characteristics of the construction industry.

\*\* Facilities such as our head offices and branches

### Initiatives for fiscal 2014

In fiscal 2014, we experienced 36 industrial accidents, for a 0.46 frequency rate and 0.02 severity rate. The main accidents were those involving falling from height, which arose from use of prefabricated and portable scaffoldings; and accidents involving tripping and falling resulting from impractical working methods during water tank panel assembly. New employees and those with around five years of work experience accounted for more than 40% of the accidents.

We have identified the following focal points and are striving to achieve company-wide improvements during this fiscal year.

- (1) Instruction in basic actions to be taken when working at height as well as basic rules and implementation of training
- (2) Provision of health and safety training for new or less-experienced employees
- (3) Company-wide implementation of finger-pointing and calling as well as risk identification for each worker

### Target

Reduction of workplace accidents

### Priority items

- Prevention of accidents involving falls
- Prevention of accidents involving pinching and entanglement
- Adoption of “finger-pointing and calling” as well as risk identification for each worker



## Industrial Injury Prevention Rally

We held Industrial Injury Prevention Rallies at 11 locations across Japan during National Health and Safety Week in order to raise awareness of health and safety.

About 2,700 people participated in the 2015 rallies, including the chairman, president, executive officers, our employees, and employees of our subcontractors. Certificates were presented to worksites, individuals, and groups who promoted outstanding health and safety initiatives.

Each of the venues delivered safety lectures, presented case studies on the introduction of safety initiatives at their worksites, and renewed their commitment to safe operations.



Fiscal 2015  
Industrial Injury  
Prevention Rally

## Safety inspections and health and safety education

We undertake safety inspections and health and safety education through cooperation with the Health and Safety Association of our subcontractors in our effort to enhance health and safety standards.



Morning meeting



Routine inspection

## Using information technology to increase efficiency of fieldwork and improve installation quality

### Initiatives incorporating tablets

In April 2014, tablets were introduced company-wide and many technical staff are now using the tablets regularly.

By using the cloud\* to store information, everyone can share technical data such as safety data, installation plans, and installation procedures and specifications. This enables workers to continue enjoying work mobility while using the tablet as an important tool to perform work on schedule because it promotes fast and accurate communication.

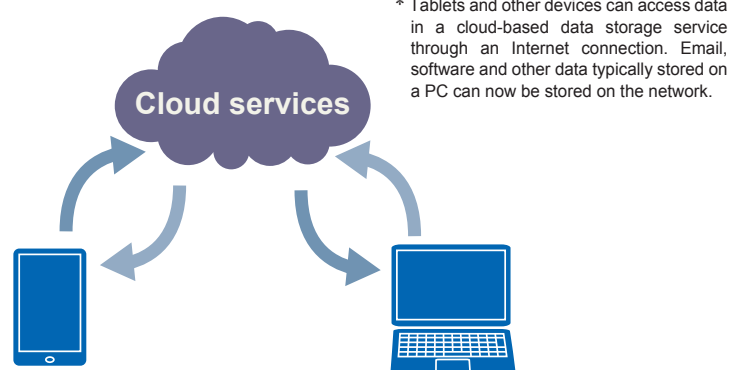
Drawings and meeting documents that were conventionally printed on paper are now digitized for easy access and editing on tablets. This approach can also be considered an environmental initiative.

We are now working to firmly establish and further effectively utilize tablets for field applications. We are also employing them for horizontal business networks by introducing usage examples through videoconferencing and are working to increase the number of ways tablets can be used effectively. This is an urgent challenge and is accompanied by an effort to continuously examine the effectiveness of tablet use. We intend to address ways to increase work efficiency and improve installation quality by utilizing tablets in more innovative ways.



Tablet case study conference

### Cloud services



## Application of the Meister System and Establishment of Partnerships with Our Subcontractors across Japan

### Maintaining quality assurance through strong partnerships with our subcontractors

#### Dai-Dan Meister System

##### Revision of the system

We began implementing the Dai-Dan Meister System in 2011 with the objective of providing excellent foremen for our subcontractors to support our ultimate goals of improving work quality and ensuring safe and efficient field operations. Installation work — particularly in the areas of electronic devices, biotechnology and other leading-edge technologies on which we plan to focus our resources — requires a high degree of expertise in order to maintain high quality.

In October 2012, we revised the regulations in order to train more excellent foremen and high-level foremen under our Meister System. One of the revisions entails providing subsidies for acquisition of higher certifications such as registered essential technicians. In addition, we decided to pay cash rewards for Meisters and excellent foremen for their fieldwork.

In July 2015, commendations and excellent foremen rewards were presented to 92 certified foremen from 44 companies as well as 78 Meisters.

##### Meister Approval Ceremony

The 4th Meister Approval Ceremony was held in October 2014. 999 foremen serving at Dai-Dan sites were designated high-level foremen, 48 of whom were named excellent foremen following thorough assessments by each office. Furthermore, the eight best foremen were certified as Meisters. Each Meister was presented with a certificate, Meister helmet and a testimonial shield.

So far, a total of 23 Meisters have been approved: five electrical workers, nine plumbers, six duct installers, one refrigerant piper, and two insulation workers by trade.



Meister Approval Ceremony

### VOICE

#### Comment of a Meister

Thanks to the training provided by my peers and many more senior employees, I was recently recognized as a Meister.

In my earliest years when I was just starting out as an electrician, I was told "You must 'steal' the skills you seek," and I spent my days merely moving tools and materials. I thought about what I had to do to smoothly drive the operation forward, and I immersed myself in the work while always having questions.

Eventually, I became a foreman, and I was committed to providing safer and higher quality electrical work by seeking out hidden malfunctions that cannot normally be uncovered except through fieldwork. I employed my judgment, knowledge, and experience as well as my five senses.

In the future, I will be required to manage fieldwork as an assistant to a supervisor while training the personnel who will serve as the next generation. After having understood all aspects of installation work, I will make an effort to push forward with fieldwork by positively communicating with other workers as well.

The younger workers, for their part, should understand the purpose and significance of every process related to their work. I will continue to convey the importance of performing all tasks oneself and adopting repeated improvements.



Kazumasa Yoshida  
Fukuokadenko Co., Ltd.



### Dai-Dan's network of subcontractors






















In the business environment surrounding the building installation service industry, large regional differences exist in the availability of personnel, and the situation can be considered unstable. Under these circumstances, we have taken steps to establish a nationwide network of subcontractors that extends beyond the scope of individual offices. It is capable of dispatching workers from around the country to offices where a lack of workers is expected. In future, we will effectively utilize this network to secure an installation system at each site; at the same time, we will increase opportunities to improve the skills of our subcontractors. We will continue to provide our customers with safe and high-quality building installation services.



# FY2014 CSR Performance and FY2015 Targets

In order to enable continued improvement of our CSR activities, we set targets for each fiscal year and complete the PDCA cycle accordingly. In this report, the FY2014 performance and the FY2015 targets are summarized according to the seven core subjects of ISO 26000\*.

Self evaluation  Target achieved  Target not achieved

Subject	Items	Target/Task	FY2014 performance	Self evaluation	FY2015 targets	Core subjects of ISO 26000							Page
						Organizational governance	Human rights	Labor practices	The environment	Fair operating practices	Consumer issues	Community involvement and development	
Fair and Transparent Business Practices	Corporate governance	Build and maintain a system to ensure ethical execution of operations	Corporate law internal control system functioned appropriately		Strengthen corporate governance to meet changes in social trends	✓							41
	Compliance (Legal compliance and corporate ethics)	Strengthen the compliance system (conformity with the Anti-Monopoly Act and other relevant laws and regulations) and promote sound corporate management	<ul style="list-style-type: none"> <li>Group training sessions, briefings, and seminars were held to familiarize attendees with the importance of compliance with laws and regulations</li> <li>Issue No. 14 of Compliance News was published to raise awareness</li> </ul>		Perform ongoing awareness-raising activities targeting compliance and enforce compliance with the Anti-Monopoly Act and other relevant laws and regulations in our business activities	✓	✓			✓			43
	Risk management (Improving the business environment)	Instill and entrench the business continuity plan (BCP) within the company	<ul style="list-style-type: none"> <li>Protective equipment was distributed to employees</li> <li>Emergency drills were conducted</li> <li>Training was strengthened to enhance safety confirmation services (by email, with a 100% response rate)</li> <li>IT-BCP (Business Continuity Plan Encompassing Information Technology) was formulated</li> </ul>		<ul style="list-style-type: none"> <li>Conduct emergency drills</li> <li>Consider extending the safety confirmation system to include subcontractors in the office</li> </ul>	✓				✓			45
	Disclosure (Proactive and timely disclosure of information)	Disclose information appropriately and in a timely manner	Complied with laws and regulations and swiftly disclosed information		Proactively disclose information						✓		46
Environmental Contribution	Environmental management system	Achieve environmental management system plan targets  * Refer to page 48 for FY2014 environmental targets and results.	Propose Plan Design Number of solutions that leverage Dai-Dan technology adopted CO <sub>2</sub> emission reduction through design solutions CO <sub>2</sub> emission reduction through adopted solutions		Achieve environmental management system plan targets  * Refer to page 48 for FY2015 environmental targets.								47
			Installation Promoted sustainable procurement Promoted sorting and recycling of industrial waste Adopted laminate ducts Removed thermal insulation of drainpipes						✓				
			Office initiatives Energy consumption Copy paper usage Introduced hybrid vehicles										
Meeting Customer Expectations	Quality management system	Achieve quality management system plan targets	<ul style="list-style-type: none"> <li>Maintained quality assurance in the field</li> <li>Increased technical expertise of engineers and passed on these skills</li> <li>Reduced quality issues</li> </ul>		Achieve quality management system plan targets						✓		51
	Initiatives with subcontractors	Continue the activities of the sectional committee	Implemented the activities of the sectional committee		Continue the activities of the previous fiscal year						✓		53
Valuing Our Employees	Respect for human rights	Continue initiatives to raise awareness of human rights	Raised awareness through new employee training session		Continue initiatives to raise awareness of human rights		✓						54
	Human resource development	Check and review the effectiveness of the Dai-Dan Mentor System	Under the Dai-Dan Mentor System, expanded the training period with mentors to three years		Confirm and review the effectiveness of the Dai-Dan Mentor System			✓					
		Strengthen technical expertise	<ul style="list-style-type: none"> <li>Published the DAI-DAN Technical Current News</li> <li>Continued skill development through the CPD system</li> </ul>		Continue to strengthen technical expertise			✓					
	Working environment for employees	Follow up on employees working long hours	Decreased the percentage of employees working long hours engaging in face-to-face consultations with a doctor to 68.8%		Achieve a 100% doctor consultation rate for employees working long hours			✓					57
		Initiatives to address mental health issues	Percentage of employees working long hours (0.3%)  <ul style="list-style-type: none"> <li>Conducted mental health seminars</li> <li>Introduced the seminar into the curriculum for new employee training and position-specific training</li> <li>Conducted stress checks for all employees</li> </ul>		Decrease the percentage of employees working long hours to below 0.3%			✓					
			<ul style="list-style-type: none"> <li>Conducted mental health seminars</li> <li>Introduced the seminar into the curriculum for new employee training and position-specific training</li> <li>Conducted stress checks for all employees</li> </ul>		Continue the activities of the previous fiscal year			✓					
Meeting Local Expectations	Dissemination of technical information to external parties	Contribution to the construction industry	<ul style="list-style-type: none"> <li>Delivered three lectures at the nationwide meeting of the Institute of Electrical Installation Engineers of Japan</li> <li>Delivered nine lectures at meetings of the Society of Heating, Air-Conditioning and Sanitary Engineers of Japan</li> </ul>		Continue the activities of the previous fiscal year							✓	60
	Social contribution initiatives	Targeted number of activities: more than 440	Dai-Dan's offices across Japan voluntarily conducted 440 activities		Continue the activities of the previous fiscal year							✓	61
Dai-Dan's Practical Competence	Sharing of technical information	Share information obtained at workshops	Held the Case Study Presentation		Continue the activities of the previous fiscal year						✓		33
			Presented activity outcomes via teleconference		Continue the activities of the previous fiscal year						✓		34
	Workplace health and safety management system	Achieve workplace health and safety management system plan targets	<ul style="list-style-type: none"> <li>Work-related accidents decreased relative to the previous fiscal year</li> <li>Safety results (frequency and severity rates)</li> </ul>		Achieve workplace health and safety management system plan targets			✓					36
	Partnerships with subcontractors	Firmly establish the Dai-Dan Meister System	Held the 4th annual Dai-Dan Meister Approval Ceremony		Improve and entrench the Dai-Dan Meister System						✓		38

\* A guide on how businesses can operate in a socially responsible way



# Fair and Transparent Business Practices

In order to ensure the sustainable creation of corporate value, we seek to improve and strengthen our corporate governance system in a sustainable manner. In addition, our executive officers and other employees uphold the highest ethical standards when conducting the corporation's business.

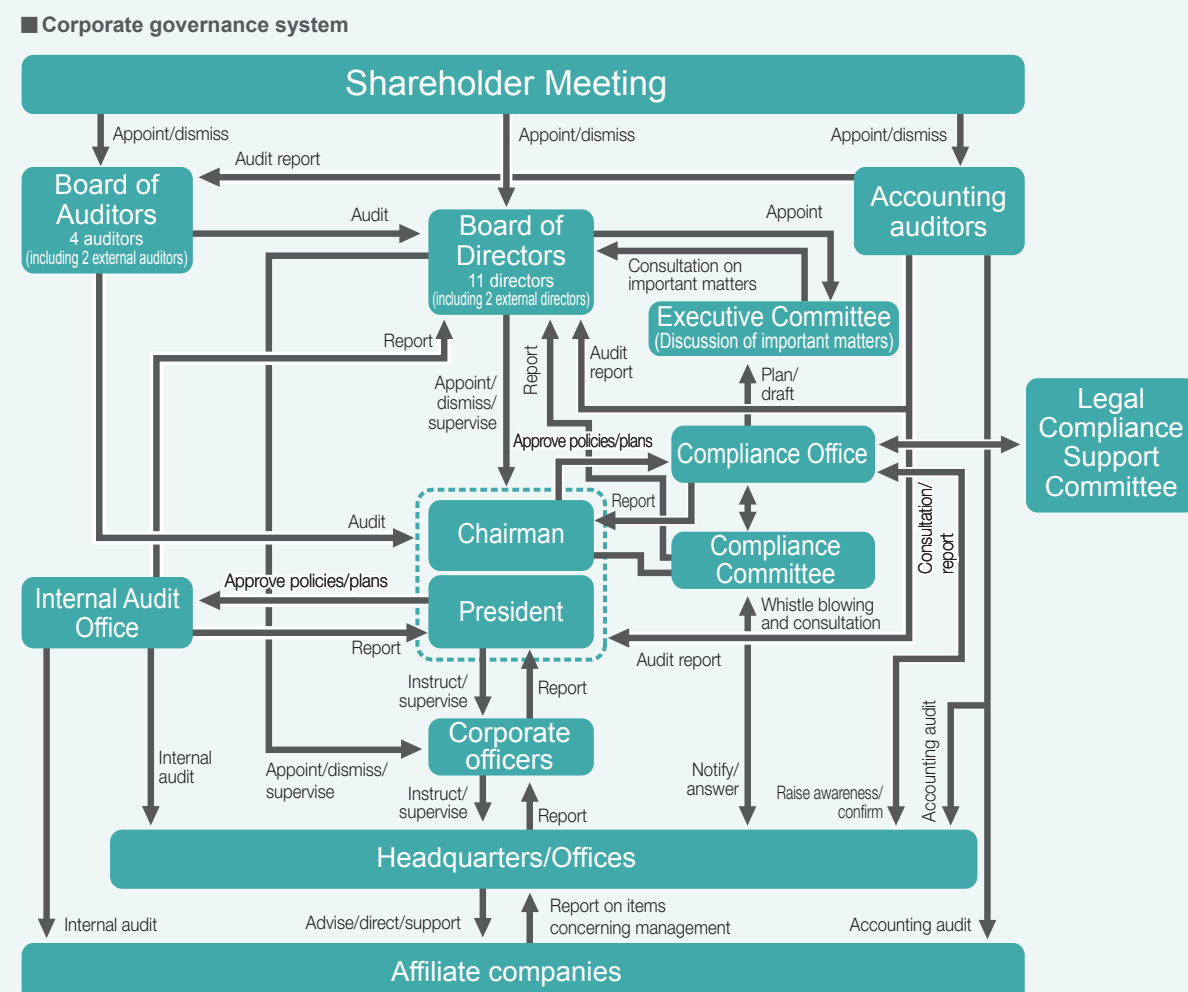
## Corporate Governance

### Our approach to corporate governance

As a building services engineering and installation provider, Dai-Dan is committed to the management principles of always taking on the challenge of creating value for our customers while contributing to the development of a better environment and stronger communities. In justifying the trust placed in us by stakeholders, we intend to maintain our effective management

practices.

Our policy regarding corporate governance is to ensure important management issues are addressed with sound and transparent operations and decision-making in addition to ensuring thorough compliance.



### Our corporate governance system

The objective of Dai-Dan's corporate governance system is to ensure appropriate and efficient management by maintaining discrete decision-making, oversight, and administrative functions, thereby enabling swift and appropriate deliberation and implementation of decisions.

In June 2015, we elected two external directors known for their varied experience and wide-ranging viewpoints in order to add a broader perspective to the discussions of the Board of Directors while also strengthening our management's monitoring functions.

Our auditors help to ensure sufficient monitoring by implementing audits by both internal and external auditors and by contributing their own objective questions and views from their neutral positions on the Board of Directors.

We believe that our current system comprising a Board of Directors and Board of Auditors provides us with capable corporate governance. Moreover, the application of the Corporate Governance Code formulated by the Tokyo Stock Exchange is further strengthening our corporate governance and creates an opportunity for us to strengthen our corporate constitution in order to enhance our enterprise value.

#### Board of Directors

The Board of Directors comprises 11 directors, two of which are external directors. It convenes monthly and holds special meetings as necessary. In addition to overseeing business operations, the board deliberates on important matters related to corporate management, including subjects discussed in Executive Committee meetings. The articles of incorporation of Dai-Dan provide that the Board of Directors should consist of 12 people or less.

#### Internal control system

Dai-Dan has developed an internal control system that focuses on the improvement of internal rules. This is intended to ensure compliance across our entire company and subsidiaries and includes the execution of tasks by directors in compliance with laws and the articles of incorporation as well as appropriate performance of all tasks. We continue to revise and improve this system in the interests of efficiency and fairness.

#### Executive Committee

Executive Committee meetings are held when necessary. The committee comprises regular members who are appointed by the Board of Directors and temporary members selected according to the subject of the agenda. The committee develops management policies and other policies for Dai-Dan and its group subsidiaries, and extensively examine the progress of goal achievement. In addition, the committee members discuss important matters concerning management strategy and management of the company itself. The committee then makes recommendations to the Board of Directors as needed.

#### Board of Auditors

The Board of Auditors consists of four auditors (two of whom are external auditors), and they meet, in principle, prior to Board of Directors' meetings. They thoroughly examine subjects discussed in the Board of Directors' meetings, attend the meetings in person, and contribute their views as necessary.

#### Corporate Officers' Committee

The Corporate Officers' Committee, in principle, meets once a month. The committee members meet to discuss management policies, important operational policies and decisions made by the Board of Directors. The committee members also report on work carried out by corporate officers.

#### General Managers' Committee

General Managers' Committee meetings are, in principle, held once a month to ensure that tasks are being executed in an integrated manner. Management policies and measures are explained, and the state of business operation of each office and their respective issues are discussed, and prompt solutions sought.

#### Internal control system for financial reporting

In April 2008, we implemented an internal control system for financial reporting under the Financial Instruments and Exchange Act. The Internal Audit Office under the president examines and assesses the effectiveness of the system.

The fiscal 2014 assessment concluded that, as at the end of fiscal 2014, our internal control system for financial reporting is effective. An independent auditor also provided a similar opinion.

### Upholding the Corporate Governance Code

While giving due consideration to the purpose and spirit of the Corporate Governance Code formulated by the Tokyo Stock Exchange and enforced on June 1, 2015, we are undertaking effective corporate governance to meet our responsibilities to our various stakeholders, including our fiduciary responsibility to our shareholders.

Moreover, we will continue to disclose information and report on our corporate governance initiatives in our "Report on Corporate Governance."



# Compliance (Legal Compliance and Corporate Ethics)

## Corporate Code of Ethics

We have developed five Principles of Action and 14 Standards of Action to guide our executives' and other employees' compliance with laws and regulations and support their demonstration of good social conscience. The Principles of Action summarize the concepts to be kept top of mind during the performance of day-to-day tasks.

■ **Excerpt from our Corporate Code of Ethics** Our Standards of Action serve as practical guidelines to the Principles of Action on which they are based.

### Principles of Action

1. Observe laws and social norms and conduct business activities in a sensible manner.
2. Participate in the building of a society that can sustain its development.
3. Respect the fundamental human rights of all.
4. Maintain a fair and transparent relationship with stakeholders.
5. Recognize our place in society and strive to contribute.

### Standards of Action

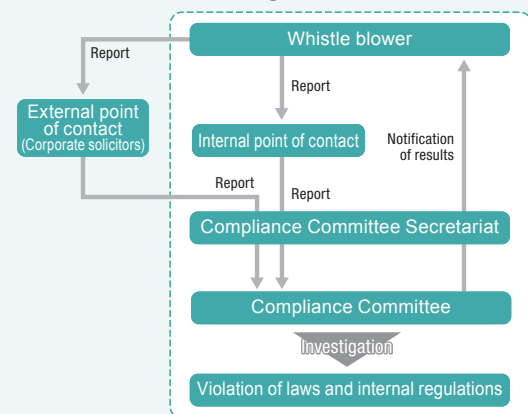
1. Maintain positive relationships with customers and users
2. Ensure safety and quality
3. Ensure fair and open competition
4. Engage in ethical business transactions
5. Fairly disclose corporate information
6. Ethically manage critical information
7. Protect and respect intellectual property rights
8. Improve working conditions and work environments
9. Respect human rights and individuality
10. Address environmental issues
11. Practice proper accounting and tax payment
12. Maintain sound relationships with politicians and the government
13. Eliminate any dealings with antisocial forces
14. Avoid engaging in self-serving actions

## The whistle blowing system and consultation system

Dai-Dan has established a whistle blowing system and consultation system with the purpose of swiftly identifying issues in the workplace, which are otherwise difficult to identify (behavior or actions that contravene laws, internal regulations or social ethics), by providing a means independent from the regular chain of command, to report such issues. Reports can be made internally through these systems, but they can also be made externally via our corporate solicitors.

Any individuals that file a report are guaranteed by the Corporate Code of Ethics that they will not be subjected to any unfair treatment. Reports can also be submitted anonymously to ensure the privacy of the whistle blower.

### Internal whistle-blowing and consultation flowchart



The Compliance Committee Secretariat acts as an internal point of contact.

## Compliance Committee

The Compliance Committee was established to ensure compliance with laws and internal regulations, and to strengthen fair and ethical company operations with strong compliance. The committee is chaired by the president and is responsible for boosting executives' and other employees' compliance awareness, receiving and investigating reports of violations, and developing preventive measures. During fiscal 2014 the committee met on six occasions.

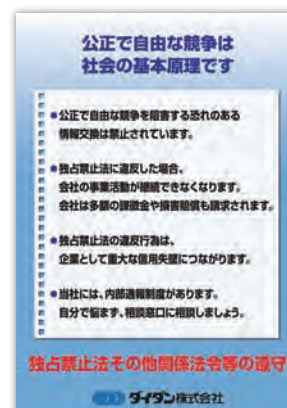
## Promoting awareness and practice of compliance

Dai-Dan takes the following measures in promoting awareness and practice of compliance.

Compliance education is provided during new employee training, position-specific training session, and the training programs of each office allowing many executives and other employees to receive compliance training.

- We publish a Compliance News semiannually.
- All executives and other employees carry a Compliance Card.
- Posters highlighting the importance of compliance are posted in all offices, including field offices: "Fair and open competition is the foundation of society."
- In April 2012, the Compliance Statutes were developed for our Japanese consolidated subsidiaries to improve their compliance systems.
- Furthermore, contracts signed by subcontractors include items concerning compliance in order to develop a strong compliance system throughout the supply chain encompassing installation subcontractors, material suppliers, and facility equipment suppliers.
- Every April, designated as "Compliance Month" in our Corporate Code of Ethics, we implement the following initiatives.
  - Distribute a message from management.
  - Hold study sessions on details of our Corporate Code of Ethics and compliance with the Anti-Monopoly Act and other relevant laws and regulations; submit written oaths testifying to our compliance.
  - Present workshops by lawyers in compliance with the Anti-Monopoly Act and other relevant laws and regulations.

Compliance poster



## Compliance Office

Dai-Dan established the Compliance Office in April 2014 to help ensure that our business activities comply with the Anti-Monopoly Act and other relevant laws and regulations. The Compliance Office is under the direct control of the Chairman and is independent from the headquarters and offices. In cooperation with the Compliance Committee, this office plans, drafts and implements enhancements to the compliance system and recurrence prevention measures. In addition, the Compliance Office confirms that the measures implemented are functioning effectively.

The plans and drafts prepared by the Compliance Office are implemented with the approval of the Board of Directors following discussion of their content by the Executive Committee.

## Legal Compliance Support Committee

In April 2014, we established the Legal Compliance Support Committee, a professional facility supporting the Compliance Office. It holds seminars on legal compliance and conducts awareness-raising activities.

### — Regarding violations of the Anti-Monopoly Act —

Under a judgment of the Tokyo District Court, Dai-Dan was confirmed as violating the Anti-Monopoly Act regarding our submission of a bid for installation of facilities for the Hokuriku Shinkansen railway line. Accordingly, on January 14, 2015, we were subject to a 60-day suspension of business (January 29, 2015, to March 29, 2015) under the terms of the Construction Industry Act concerned with public-sector or private-sector construction benefiting from grants such as subsidies from the Ministry of Land, Infrastructure, Transport and Tourism for operations associated with our plumbing business in Japan.

On October 9, 2015, the Japan Fair Trade Commission issued Dai-Dan a Cease and Desist Order and a Surcharge Payment Order.

We deeply regret causing distress to our shareholders, customers, and other concerned parties.

Because we view such matters with the utmost seriousness and address them with sincerity, we took various steps to strengthen our compliance system and prevent any repeat of such incidents as we disclosed on April 9, 2014, in the "Notification on formulation of recurrence countermeasures regarding alleged violations of the Anti-Monopoly Act."

In the future, we will strive to prevent a recurrence and will continue to engage in awareness-raising activities for executives and employees in an effort to conduct our business in strict compliance with the Anti-Monopoly Act and other relevant laws and regulations.

## Prevention of insider trading

To prevent unjust share trading by corporate insiders, protect shareholders and contribute to a stable and fair securities market, strict rules are imposed on share transactions as per our Insider Trading Control Ordinances.

Additionally, to establish an environment in which executives and employees have a good understanding of insider trading, the Introduction on Insider Trading Ordinance for Executive Officers and Employees of Listed Companies created by the Tokyo Stock Exchange is available on our corporate intranet.

## Registration with J-IRISS

Dai-Dan's executive officers are registered with the Japan-Insider Registration & Identification Support System (J-IRISS), which is operated by the Japan Securities Dealers Association. Through these initiatives we have in place a system to prevent insider trading, including unintended insider trading.

## Protection and respect for intellectual property

Dai-Dan believes that intellectual property can be developed both in the lab and the field. Therefore we proactively apply for patents on inventions and designs by both our Technical Research Laboratory and our on-site workers. In fiscal 2014, we were granted a total of 11 patents related to clean rooms. Furthermore, we have been undertaking risk management initiatives to ensure that we do not infringe on the intellectual property of other companies.

## Initiatives to counter antisocial forces

Dai-Dan is firmly opposed to antisocial forces and is committed to avoiding any relationship with such entities. Our Corporate Code of Ethics clearly sets forth this principle, and our training reinforces the need to uphold it. In addition, the contracts we enter into with subcontractors clearly state that the contract will be terminated if the subcontractor is found to be substantively involved with antisocial forces. This is intended to effectively exclude antisocial forces from our business dealings from the outset.



## Risk Management (Improving the Business Environment)

### Risk Management Regulations

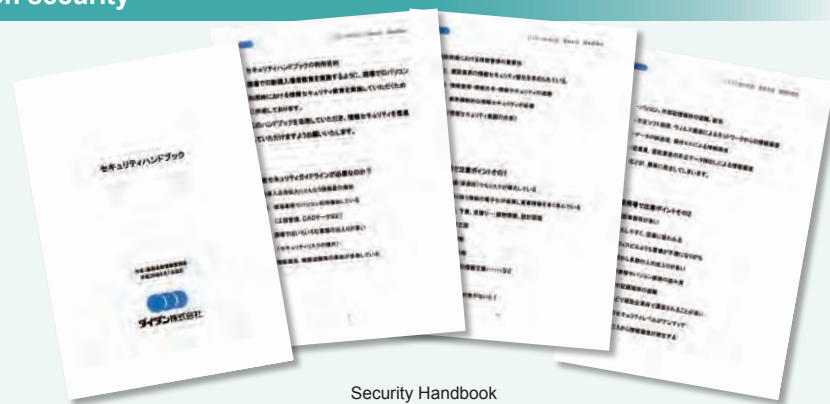
Dai-Dan introduced Risk Management Regulations in April 2001 to prepare for potential risks such as natural disasters, the leaking of confidential information that could damage the company, and to keep damages to a minimum.

In the event that an identified risk becomes reality, a “countermeasures headquarters” is established to allow all employees to work as one to identify the problem(s) and share information.

### Initiatives to strengthen information security

The Information System Usage Guidelines are made available for viewing by executives and other employees on the corporate intranet. Additionally, education on the handling of electronic information is provided during new employee and position specific training sessions.

Moreover, we provide information security training to the employees of our subcontractors using the Security Handbook to strengthen our information security.



Security Handbook

### Formulation of a Business Continuity Plan Encompassing Information Technology (IT-BCP)

In July 2014, we established our Business Continuity Plan Encompassing Information Technology. It lists the specific measures and procedures required to prevent malfunctions of our information systems, early restoration of these systems following a disaster or other emergency, and continuous reliable operation of all our information systems.

#### Basic Policy

In addition to conducting drills and reviews, we shall improve the system of directives to be issued during a disaster or extraordinary malfunction. We shall continue to implement our business continuity initiatives for our information systems following disasters or other emergencies. We have established the following items as our basic policy.

- ① We shall implement preventive measures to address any scenario involving a shutdown of our information systems.
- ② We shall seek to minimize the damage to our managers, employees, and customers.
- ③ We shall promptly determine the scope of the systems affected or damaged and apply emergency measures and restoration protocols to support continuation of our business operations.
- ④ We shall seek to gain the capability to respond quickly to disasters and other emergencies and shall regularly review and improve our Business Continuity Plan Encompassing Information Technology.

### Emergency drills to support our business continuity plan (BCP)



Osaka Head Office



Tokyo Head Office

In September 2015, to coincide with a disaster drill conducted by Osaka Prefecture, Dai-Dan completed an emergency drill according to our business continuity plan at all our workplaces throughout Japan. By following the action manual (specifying initial response) for each office, which outlines the delegation of roles, we completed an earthquake drill that included first aid, evacuation, safety confirmation, posting of emergency stockpiles, and verification of our satellite-phone-based communications system while incorporating the lessons learned in previous years' drills.

We will continue to conduct drills, promote executive and employee awareness and improve the effectiveness of our BCP.

### Initiatives to protect personal information

We recognize that the leakage of personal information is a risk that has potential to cause a loss of trustworthiness. As such, we have strengthened our internal systems in order to protect personal information, and have posted the Personal Information Protection Policy on our corporate website.

Furthermore, we have created a manual based on our Personal Information Protection Regulations and distributed the manual to all executives and employees in order to ensure the protection of personal information.

In January 2016, Japan will introduce the “My Number System.” We will therefore comply with the “Act on the Use of Numbers to Identify a Specific Individual in the Administrative Procedure” and other relevant laws by taking the necessary and appropriate safety management measures to prevent leakage, loss, and unauthorized use of an individual's number and personally identifying information. We remain committed to ensuring appropriate handling of each individual's number and other personal data.

## Disclosure (Proactive and Timely Disclosure of Information)

### Shareholder meeting

The 86th annual shareholder meeting was held at the Osaka Head Office on June 26, 2015. We recognize the shareholder meeting as a valuable venue for communicating with our shareholders. Business reports are displayed on a large screen and accompanied by a narrative to give our shareholders a clearer understanding. Additionally, we send out our shareholder meeting notifications early in order to provide sufficient time for shareholders to consider the reports and matters related to resolutions. Prior to the meeting, we screened a video entitled “Dai-Dan's Technology” that focused on technological developments at our Technical Research Laboratory.

### Briefing session on financial results and analyst tour

Dai-Dan holds briefing sessions on its financial results twice a year. Our previous consolidated full-year briefing session was held on December 10, 2014, and our second-quarter financial results were presented on June 11, 2015. The sessions present an overview of financial results, the business environment, and performance prospects as well as the state of progress of our Mid-Term Management Plan. Furthermore, we respond appropriately to individual interviews from analysts and institutional investors.

On July 22, 2015, we held an analyst tour at our Technical Research Laboratory. At that time, we introduced the smart energy refurbishment of our Technical Research Laboratory and a model of a next-generation office.

### IR tools

The investor information page on our corporate website allows investors to view earnings summaries, securities report and other important items. The page also provides information such as business reports, medium-term business reports and notifications of shareholder meetings. This information is provided in the form of IR news available on the main page of the website and is updated as necessary.



### DAI-DAN REPORT

Dai-Dan began publishing an annual CSR report with our fiscal 2008 issue. In 2014, we introduced the “DAI-DAN REPORT” as an integrated corporate report in order to provide stakeholders with a broader array of public information. All our CSR reports are available on our corporate website. For our international stakeholders, we prepare an English edition of our CSR Report that is available on our global website.

#### Japanese edition

<http://www.daidan.co.jp/csr/report.html>

#### English edition

<http://www.daidan.co.jp/english/eco21/index.html>



# Environmental Contribution

To help improve the environment, Dai-Dan implements effective environmental conservation activities through our Environmental Management System.

## Environmental Initiatives

### Environmental Management System (ISO 14001)

Dai-Dan has built and implemented the Dai-Dan Environmental Management System, which is compliant with the ISO 14001 Environmental Management System. In February 2002, all departments became ISO 14001 certified and have since undertaken ongoing resource and energy saving activities.

Our activities include:

- Reducing CO<sub>2</sub> emissions through development of technologies and design solutions
- Reducing resource and energy consumption during installation
- Sorting and recycling of waste
- Company-wide social contribution activities such as clean-up days

Furthermore, in 2006 Dai-Dan integrated the administration of our environmental management system and quality management system (p. 53). Our quality assurance and environmental protection policies have been unified as our quality and environmental policies. Consequently, our regular

internal audit is now known as our Quality and Environmental Audit, which audits both systems concurrently. Furthermore, in terms of organizational structure, the supervising bodies for quality management and environmental management have been consolidated and operational efficiency is being facilitated.



ISO 14001 registration certificate  
For further details on registration, see the registration list on the website of the accrediting organization (<http://www.jtcm.or.jp/>).

### Our Policies for Quality Assurance and Environmental Protection

Our management principles are as follows: As a comprehensive facility works company, we always strive to create new value. We always seek to contribute toward the realization of a better global environment and sustainable social development. As a responsible member of society, we are committed to quality assurance and environmental impact reduction in our corporate activities. We also aim to be a vibrant company by gaining customers' satisfaction and trust.

1. We strive to contribute to social development and environmental preservation by complying with laws and norms of society regarding quality and environmental standards as well as regulations established by our company.
2. We strive to enhance the skills of our employees and establish partnerships with our cooperative companies, to meet with customers' quality requirements and ensure their satisfaction.
3. We are dedicated to developing and providing energy-saving, environmentally friendly technologies. We assess the environmental impact of building facilities and offer proposals for impact reduction and energy efficiency.
4. We, as a good corporate citizen, carry out social contribution activities and positive information disclosure, to enhance communications with society.
5. We set objectives and targets for improvement of work quality and environmental measures, and we educate our employees thoroughly about them. We appropriately maintain system operations and continuously improve "Our Quality and Environmental Management Systems" based on results.

### Quality and Environmental Management System



### FY2014 environmental targets and results/FY2015 environmental targets

○: Target achieved △: In progress

Activities and responsible departments		Main target or item to be monitored	FY2014 target	FY2014 result	Assessment	FY2015 target
Proposal, planning, designing	Sales department	Number of solutions that leverage Dai-Dan technology adopted	More than 60	70	○	More than 70
	Design department	CO <sub>2</sub> emission reduction through design solutions	More than 50,000 tonnes	39,990 tonnes	△	More than 50,000 tonnes
		CO <sub>2</sub> emission reduction through adopted solutions	More than 15,000 tonnes	19,853 tonnes	○	More than 20,000 tonnes
Installation	Installation department Procurement department	Energy consumption converted to CO <sub>2</sub> emissions	—	1,296 tonnes	—	—
		Promotion of sustainable procurement	More than 40%	38.9%	△	More than 40%
		Promotion of sorting of industrial waste    Quantity sorted in the field	—	2.7/workplace	—	More than 3.5/workplace*
		Promotion of recycling    Proceeds of sale of recycled materials	More than 80 million yen	82.184 million yen	○	More than 83 million yen
		Adoption of laminate ducts	More than 30,000 m <sup>2</sup>	25,919 m <sup>2</sup>	△	More than 30,000 m <sup>2</sup>
		Removal of thermal insulation of drainpipes	More than 35,000 m	74,173 m	○	More than 75,000 m
Office activities	All employees	Energy consumption converted to CO <sub>2</sub> emissions	Less than 1,800 tonnes	1,745 tonnes	○	Less than 1,710 tonnes
		Water consumption	—	16,754 m <sup>3</sup>	—	—
		Copy paper usage	Less than 58 tonnes	63.7 tonnes	△	Less than 58 tonnes
		Introduction of hybrid vehicles	35%	42%	○	45%
		Improvement of sorting rate of general waste	—	66.3%	—	—

\* Adopted as the target beginning in FY2015.

### Quality and environmental auditing and the development of quality and environmental auditors

#### Quality and environmental auditing

In order to check that the quality and environmental management system, which is the combination of the former quality and environmental management systems, is properly operated and maintained, periodic quality and environmental audits of offices and fields are conducted at least once per year.

#### Development of quality and environmental auditors

Our quality and environmental auditors include the following: "central quality and environmental auditors," who create audit plans and are responsible for conducting audits; and our "local office quality and environmental auditors," who conduct audits for their respective departments and publish audit reports. To enhance our quality and environmental auditing, we provide the training programs listed on the right.

#### Auditor training

- Overview of ISO 9001 and ISO 14001 requirements
- Outline of the quality and environmental management policy, its attached documents and demonstration audits and creation of mock audit reports
- Investigation of the causes of audit findings and prevention of recurrence
- Demonstration and evaluation of quality and environmental audit

Training for central quality and environmental auditor (candidates are selected from staff with more than five years of service):  
One training session held in fiscal 2014 (22 participants)

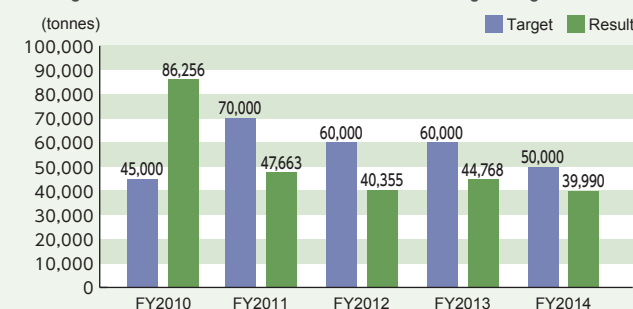
Training for local office quality and environmental auditor (candidates are selected from staff with more than three years of service):  
One teleconference training session held in fiscal 2014 (65 participants)

### Initiatives to provide energy saving solutions

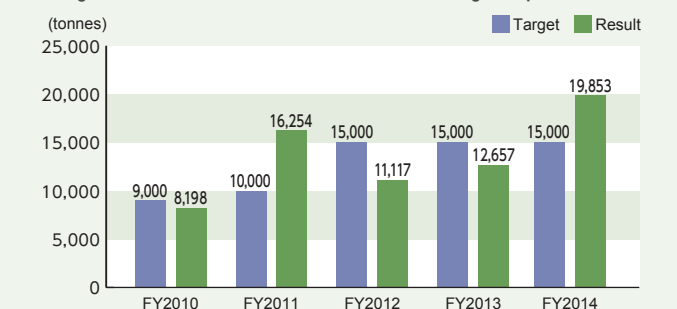
During the design phase, we proactively provide customers with energy-efficient solutions, which are predominately based on technologies developed by Dai-Dan to contribute to reduced CO<sub>2</sub> emissions.

Throughout fiscal 2014, we offered solutions that would have reduced CO<sub>2</sub> emissions by 39,990 tonnes, with customers adopting energy-efficiency options that saw a total reduction of 19,853 tonnes of CO<sub>2</sub>.

#### Targets and results of CO<sub>2</sub> emission reduction through design solutions



#### Targets and results of CO<sub>2</sub> emission reduction through adopted solutions

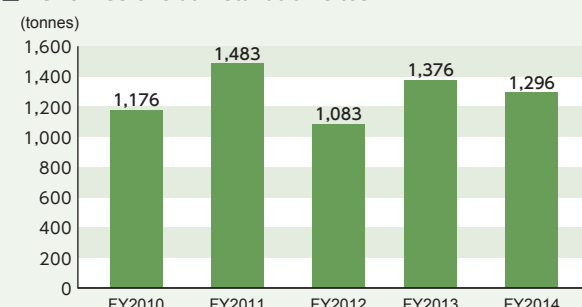




## Initiatives to reduce energy consumption

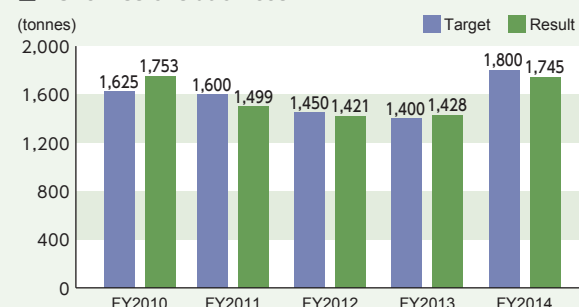
We are committed to reducing energy consumption, such as electricity and gas, and reducing use of copy paper at installation sites and offices. In fiscal 2014, our energy

### CO<sub>2</sub> emissions at installation sites



consumption converted to CO<sub>2</sub> emissions totaled 1,296 tonnes and 1,745 tonnes at installation sites and offices, respectively.

### CO<sub>2</sub> emissions at offices



Note: The CO<sub>2</sub> conversion value was revised in FY2014.

## Response to environment-related accidents

During fiscal 2014, a total of two instances of environmental accidents occurred at properties at which we had completed installations. We have responded to each of the cases appropriately, and in line with all legal requirements.

Type of accident	Details	Result of response
Refrigerant leakage (accident arising from installation)	Three months after completion of an office renovation, failure of flared joint in refrigerant piping led to leakage of refrigerant.	After the leak was repaired and subjected to a pressure test, the piping was charged with refrigerant.
Refrigerant leakage (accident caused by a manufacturer's product)	Seven years and one month after completion of a plant, the quantity of refrigerant in the air conditioning unit installed outdoors fell to zero. An investigation revealed a refrigerant leak from the outdoor air conditioning unit.	The leak in the outdoor air conditioning unit was repaired and the unit was recharged with refrigerant.

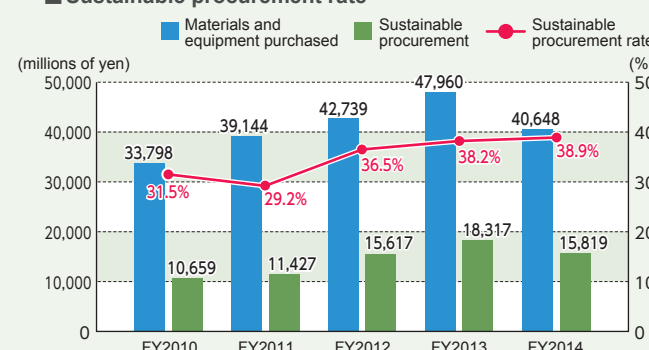
### Responding to and preventing recurrence of accidents caused by poor quality workmanship

- The accident and complaint report is created each month to share information about, and prevent recurrence of accidents caused by, poor quality workmanship. The report outlines the details of the accidents and preventative measures, and is used to ensure that those incidents are well known at each worksite.
- Each worksite also holds meetings and training sessions to inform its employees of accidents and complaints.

## Initiatives to promote sustainable procurement

Dai-Dan promotes sustainable procurement to our customers, and has designated items that are applicable to sustainable procurement in the following five areas: Introduction of energy saving, high efficiency equipment; use of environmentally friendly material; introduction of highly durable equipment; introduction of low emission devices; and introduction of water saving equipment. Sustainable procurement rate during fiscal 2014 was 38.9%.

### Sustainable procurement rate



## Contribution made by research on reducing environmental impact

### Reduction of waste using supercritical CO<sub>2</sub>

Factories and department stores dispose of large volumes of used deodorizing air filters.

Dai-Dan was the first company to successfully use supercritical CO<sub>2</sub> technology for commercial purposes to clean and refurbish deodorizing air filters.

The use of this refurbishment technology, co-developed by the Tohoku University and the National Institute of Advanced Industrial Science and Technology, provides benefits such as reduced waste and reduced CO<sub>2</sub> emissions, and therefore has been highly praised by our customers and related academia.



Japan's largest supercritical CO<sub>2</sub> cleaning and refurbishment equipment

### Conserving resources through duct size optimization and the use of laminate ducts

We reconfirm the quantity of air moving in the ducts following their installation. We then proceed to save resources by optimizing the size of ducts determined to be wasteful.

We also promote resource conservation by introducing laminate ducts made with specially reinforced steel sheet that is 10% to 30% thinner than conventional duct materials.

Before laminate ducts are installed, they are subjected to leakage tests\* and tests to ensure durability and resistance to vibration at the Technical Research Laboratory.

\* Tests to ensure that no air leaks from the joints



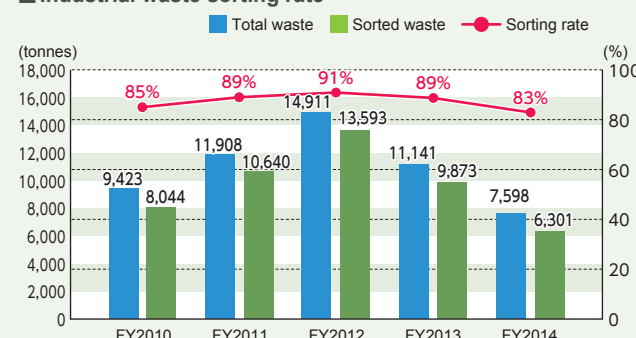
Performance evaluation testing of laminate ducts

## Initiatives to sort industrial waste

Dai-Dan implements activities to encourage sorting at all of its installation sites. Throughout fiscal 2014, Dai-Dan produced approximately 7,589 tonnes of industrial waste, of which 83% was sorted.

Furthermore, we promote awareness of reducing industrial waste at our offices and encourage sorting. In fiscal 2014, our offices produced approximately 110 tonnes of general waste, of which 66% was sorted.

### Industrial waste sorting rate



## Introduction of hybrid vehicles

For some time, we have been proactively introducing fuel-efficient models for our company-owned and leased company cars. By the end of fiscal 2011, 97% of all company cars were fuel-efficient models.

In fiscal 2012, we introduced hybrid vehicles, and we aim to

achieve further savings of resources and energy. As of the end of fiscal 2014, 42% of company vehicles were hybrid models, and we expect to increase this rate to 45% in fiscal 2015.



# Meeting Customer Expectations

In order to maintain and improve the quality of building services, Dai-Dan implements quality management systems, strengthens support systems and advances cooperation with our subcontractors.

## Quality Management System

### Quality Management System (ISO 9001)

Dai-Dan has built and implemented the Dai-Dan Quality Management System, which is compliant with the ISO 9001 Quality Management System. Before December 1999, each office was independently certified; in 2006, however, all workplaces collectively acquired ISO 9001 certification. We have been working to maintain and improve the quality of our work at installation sites.

Our activities include:

- Ensuring quality of work carried out on-site
- Enhancing the skills of engineers and passing on expertise
- Reducing quality-related problems

To ensure the effectiveness of the above activities, we are implementing the following.

#### Operational procedures of the installation department

Discuss details of installation work prior to commencement	<ul style="list-style-type: none"> <li>• Hold project meetings prior to commencement</li> <li>• Formulate installation plans</li> </ul>
Management while work is in progress	<ul style="list-style-type: none"> <li>• Promote standardization across all installations to ensure high quality</li> <li>• Conduct inspection by a team of specialists with technical expertise</li> </ul>
Inspection and completion	<ul style="list-style-type: none"> <li>• Inspection in line with legal requirements</li> <li>• Dai-Dan's own final inspection of functionality</li> </ul>



ISO 9001 registration certificate  
For further details on registration, see the registration list on the website of the accrediting organization (<http://www.jtccm.or.jp/>).

### Project meetings

Throughout our long history we have provided building services to customers in various industries with diverse building applications. In order to capitalize on our long track record of installations and our knowledge of customer facilities, we hold project meetings for each project with the attendance of the sales departments, engineering departments and other specialized departments concerned. We strive to provide high-quality facilities that best serve our customers from the perspectives of functionality, quality, cost and energy efficiency.

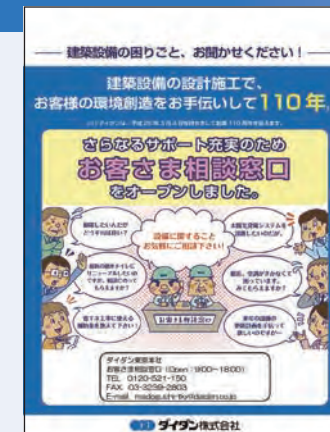
### Building Chart System

We have been using a Building Chart System, an internal information system, since May 2010 in order to make the most of our installation experiences. The Building Chart System is used to record the details of the installation, the details of recommendations, and customer requirements for each building. We enhance customer satisfaction by recommending detailed renovation options that contribute to comfortable use of a building.

### Customer Consultation Office

At the completion of a project, Dai-Dan conducts a status review of major equipment and provides ongoing advice to improve performance. This work is carried out by the project manager, who can offer insights into the building services even after the handover.

Dai-Dan opened its Customer Consultation Office in November 2012. Customers are welcome to contact us for information on building maintenance and to submit cost estimate requests. Our effective customer support system is prepared to meet a wide range of customer needs without delay.



Brochure advertising the establishment of a Customer Consultation Office

### Customer evaluations

Dai-Dan conducts customer satisfaction surveys after we have completed installations. We verify the points to review or to keep in mind during follow-up service through a customer evaluation survey involving all parties concerned at the internal completion evaluation meeting.

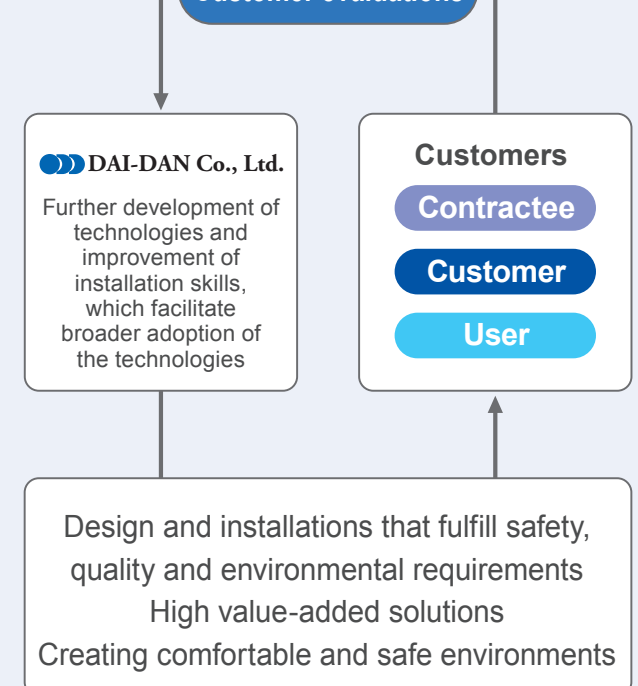
Over the lengthy lifecycle of a building, despite changes in those representing both Dai-Dan and the customer, we are able to provide facilities that satisfy our customers over the long term. We are also able to ensure follow-up service by passing on the information available in our information systems.

#### Customer satisfaction survey results (Perfect score = 4)

Item	FY2012	FY2013	FY2014
Installer capacity	3.41	3.42	3.50
Installation management	3.37	3.39	3.46
Creativity and solution proposals	3.34	3.38	3.44
Backup capacity	3.34	3.33	3.42
Overall evaluation	3.41	3.44	3.51

Number of surveys completed: FY2012; 678/FY2013; 583/FY2014; 577

#### Customer evaluations



### Development technology information desk

Our development technology information desk, which assists each office in quickly and accurately handling customer inquiries and requests, was launched in fiscal 2012. The service works in cooperation with internal specialist engineering teams to provide support for each office in resolving issues submitted by customers. It encompasses the latest technological trends and can utilize Dai-Dan's technologies involving, for example, the application of government subsidies, advanced environmental

factory control, leading-edge medical facilities and devices, and projects requiring analysis and measurement.



## Initiatives with Subcontractors

### Activities with subcontractors

Our construction projects entail many different trades and enormous amounts of manpower. Because we provide single build-to-order projects, many issues arise during the construction process. We solve each of these by applying the knowledge and experience of our engineers, by employing advanced technologies, and by utilizing the skills that individual craftspeople have acquired from their predecessors. Through this approach, we construct safe and highly reliable lifeline structures for those who live and work in them. We aim to provide facilities with the capacity to ensure effective energy management, a theme of modern society.

Our production system, which responds to the needs of the

construction market and customer requirements, is organized by Dai-Dan and our subcontractors who belong to a Dai-Gen Kai and Health and Safety Association. We remain committed to improving mutual trust and work efficiency. One area of cooperation encompasses the activities of Dai-Gen Kai sectional committees that are engaged in applying proposals in the field that incorporate the skills of craftspeople, knowledge and experience, and the advanced technologies possessed by each company. This contributes to a realization of the need to strengthen practical competence and improve productivity through interaction between Dai-Dan and each subcontractor.

### FY2013 and FY2014 initiatives of the sectional committees of the Tokyo Dai-Gen Kai

Sectional committee	Main focus
Electrical	Reducing costs of site management <ul style="list-style-type: none"> <li>Creation and application of a Material Management Table to reduce or prevent waste of materials</li> </ul>
Accident Prevention (Quality)	Proposal of measures to prevent quality issues caused by human error <ul style="list-style-type: none"> <li>Identification of quality issues caused by human error</li> <li>Creation of accident prevention publication incorporating analysis of causes of quality issues</li> </ul>
Accident Prevention (Safety)	Promotion of effective ways to eliminate work-related injuries <ul style="list-style-type: none"> <li>Spreading knowledge and implementing the practice of "finger-pointing and calling"</li> <li>Publication of a manual on "finger-pointing and calling"</li> </ul>
Installation Efficiency I	Effective compilation, adoption and implementation of practical installation management guidelines <ul style="list-style-type: none"> <li>Compilation and adoption of effective demonstration examples</li> <li>Verification of work efficiency and effectiveness of scaffolding materials</li> <li>Investigation of compaction of surplus material after installation of thermal insulation</li> <li>Verification of labor efficiency of indoor installation of protective surfaces</li> </ul>
Installation Efficiency II	Promotion of work efficiency through data utilization <ul style="list-style-type: none"> <li>Research on ways to benefit from utilizing various types of data</li> </ul>

### VOICE

#### Comment of a subcontractor

The Tokyo Dai-Gen Kai collaborates with Dai-Dan to take on the challenges of a new era.

Dai-Dan's management principle is to seek to create value. Toward this end, we as subcontractors are working together with Dai-Dan to ensure the safety of the installation site, to maintain or even improve quality, and to research new installation methods.

Among our specific activities over the past two years are the establishment of five sectional committees and the devising of the agenda for various themes such as accident prevention and installation efficiency. We compiled the results in "The Fourth Sectional Committee Activity Report," a publication of more than 130 pages issued in September 2015.

In the lead-up to the Tokyo Olympics, we expect to encounter major challenges due to an anticipated labor shortage, but I am convinced that we can apply the results of the sectional committee activities to enable subcontractors of the Tokyo Dai-Gen Kai to more effectively collaborate with Dai-Dan.

Subcontractors of the Tokyo Dai-Gen Kai will continue to play the role of specialists and will justify the trust placed in us as a good partner of Dai-Dan.



**Isamu Kajino**  
Chairman of the Board  
SHINFUJI KUUCHOU CO., LTD. (HVAC)  
Chairperson of Tokyo Dai-Gen Kai

### Sectional committee activities undertaken by Dai-Dan and subcontractors

By developing strong partnerships with Dai-Gen Kai and the Health and Safety Association, organizations comprising Dai-Dan subcontractors, we are safely providing building installation services at appropriate cost while maintaining high quality. The results of the annual activities carried out by the sectional committees in the areas of specialization of Dai-Gen Kai are compiled in the "Sectional Committee Activity Report." It harmonizes the results of the activities of each district across the country and publicizes them.



Sectional Committee Activity Report

## Valuing Our Employees

Dai-Dan respects each of our employees and encourages them to take on the challenge of creating greater value, and also promotes positive work-life balance.



## Respect for Human Rights and Development of Human Resources

### Initiatives to address human rights issues

Dai-Dan's Corporate Code of Ethics clearly states the importance of respect for human rights and individuality. We value personal dignity and make efforts to improve work environments. During our new employee training sessions, we raise awareness for respecting basic human rights.

#### – Respect for human rights and individuality – Excerpt from the Standards of the Corporate Code of Ethics

- All executives and employees must respect all human rights and individuality, and create work environments that do not tolerate actions that may harm human dignity.
- All executives and employees must strive to improve work environments and systems to create a workplace that allows our diverse human resources to exploit their skills to the fullest extent.

### New employee technical training

New employee technical training is the very beginning of the training we provide. It consists of introductory technical training and fundamental technical training, both of which together allow new employees to learn and put into practice their fundamental knowledge.

In fiscal 2012, the training duration was extended by one month to five months. It is taught using a curriculum that goes beyond the boundary of job types. The training not only offers lectures, but also provides greater opportunities for new

employees to see and experience new things to enhance efficiency and deepen learning of new knowledge of technical skills. It also equips new employees with the ability to immediately contribute to the company.

Through this five-month training, new employees not only acquire specialized knowledge and technical skills, they also develop a strong bond with their fellow new employees, with whom they will grow together in friendly competition.



Training in developing installation plans



Checking air conditioning piping



Tour of a panel fabrication facility



Safety experience training



Installation workshop



## VOICE

### Reflecting on my new employee training

The new employee technology training I undertook from April until the end of August was very informative and substantial. After completing this lengthy training, I was impressed by the company's policy of emphasizing the instruction of new employees in this way. The worries I had before joining the company evaporated. I'm glad I decided to enter Dai-Dan again.

Now that I've finished my training, I have the strong sense that I must do my best to help the company in the future with gratitude for having given me the time to train.

When I first entered the company, I sometimes felt unease about my studies. Thanks to a curriculum that

allowed me to learn a topic repeatedly and in depth, I began to think I might actually acquire sufficient knowledge to participate actively in this business.

When I remember the days we spent working with my colleagues and competing, or the days we helped each other and underwent testing, I realize that I will one day treasure these fine memories.

In conclusion, I'd like to thank the more senior employees who instructed me as lecturers despite their busy schedules, as well as the training center staff who prepared meals every day at the training center and kept the dormitory clean.

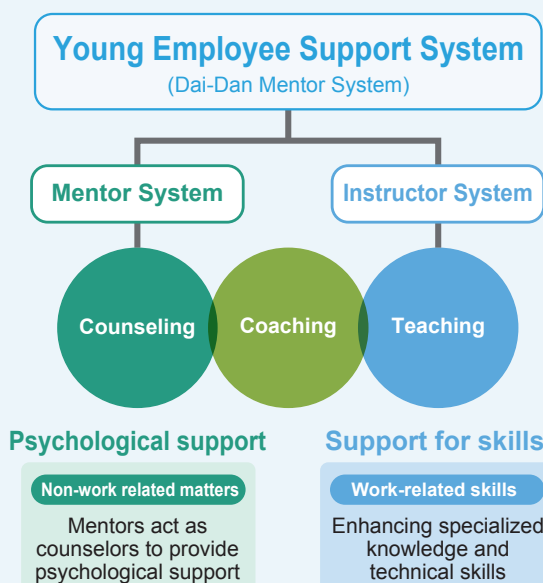


**Shogo Okabe**  
(joined in 2015)  
Engineering Division 1  
Engineering Department  
Kumamoto Branch

## Young Employee Support System (Dai-Dan Mentor System)

The Dai-Dan Mentor System consists of two systems: the Instructor System, which supports the enhancement of specialist knowledge and technical skills, and the Mentor System, which provides psychological support and assists career development. These two types of mentors (instructors and mentors) provide comprehensive support to new employees. With 2015 marking the sixth anniversary of the system, nine employees who had achieved growth with the support of mentors became mentors themselves capable of supporting the new employees.

This chain of personnel development reflects our human resource development belief that people grow as they assist in the development of others.



## VOICE

### My experience in receiving mentor support

During the period leading up to my posting to the Technical Research Laboratory in September, I felt great unease about whether I could become accustomed and adapt to a new workplace environment, new duties and a new living environment.

It was explained to me during my training that an instructor and a mentor providing support would be assigned to new employees. Because I received regular support from my mentor soon after I was posted, my unease dissipated early on.

My mentor told me that he too experienced various worries when he was assigned a post. He also asked if there were any areas where I felt at a loss, which enabled me to smoothly become accustomed to my workplace environment. Because he created an atmosphere where I felt free to talk, I was able to overcome the difficult period, just after my posting, when I was the most uneasy.

My mentor talked with me on a regular basis even outside my monthly interview. At other times as well, he would talk to me and create an environment in which I could comfortably consult about private matters, even though I tended to hesitate raising certain subjects.

In addition, he invited me to meals with other senior employees with whom I would normally have had little interaction. This gave me a chance to establish a good rapport with senior employees other than mentors.

My mentor and I were posted in different departments, but I was able to consult with him regarding my duties and was able to learn about work processes and gain advice on qualifications as well. It felt reassuring to have a mentor in the workplace with whom I could talk about everything from work-related topics to career building.

Through this experience, it became clear that the Dai-Dan Mentor System was an effective support that fills in the gaps between training and being posted to an assignment. I recommend that all new employees make the most of this system and use it to dispel any misgivings about their duties.



**Takuma Shinohara**  
(joined in 2014)  
Environmental System Development Division  
Technical Research Laboratory

## Official qualification acquisition scheme

Official qualifications can be the foundation for individuals as they go about their work, and they also significantly influence the credibility and authority of knowledge.

They are especially important for engineers as whether or not an engineer has a qualification is closely related to on-site work. Therefore, the acquisition of official qualification is indispensable.

In order to support our employees' commitment to enhance their technical skills and in order to secure qualified engineers and improve the overall technical level of the company, Dai-Dan encourages and provides support for the acquisition of official qualifications.

For those who acquire official qualifications recognized as necessary by Dai-Dan, we subsidize course fees and also offer incentives and official qualification acquisition benefits.

### Number of employees who have major qualifications

Qualification	Number	Qualification	Number
Doctorate	5	First grade instrumentation engineer	299
Professional engineer	30	Energy manager	54
First-class architect (qualified architect and building engineer)	20 (13)	First-type electrical work engineer	240
First-class electrical work operation and management engineer	218	Building service engineer (air conditioning)	498
First-class plumbing work operation and management engineer	768	Building service engineer (plumbing)	478
Building services architect	142	First grade construction industry accountant	16

Notes:

- Figures pertaining to the number of people who have acquired the above qualifications are current as of the end of March 2015.
- The number of qualified individuals includes duplicated qualifications due to the multiple fields covered by each qualification.

## CPD scheme designed to improve technical skills

There are no limits to the specialization and improvement of technical skills. In order to support our employees' on-going commitment to skills improvement, we maintain a database on employee educational history using the Dai-Dan CPD\* scheme and utilize it for human resource development.

The educational history of each employee is reported to the Society of Heating, Air-Conditioning and Sanitary Engineers of Japan (SHASE). It is then assessed and verified for the appropriateness of our education and human resource development.

\* Abbreviation for Continuing Professional Development, which refers to the continued development of skills and knowledge throughout an individual's professional career.

\*\* Quantified figures of an individual's continuing professional development record in accordance with category specific point standards. They are used as official evidence of CPD history (performance results).

### CPD status of company-wide initiatives

Category	Previous CPD points**	Current CPD points	Major programs
I. Technical information learning	16,662	14,889	Attending external lectures, including those related to acquiring qualifications, and participating in exhibitions, product information sessions and tours
II. In-house training/OJT	19,258	20,714	Attending in-house training and OJT
III. Self-education	3,997	5,829	Taking recommended correspondence courses and self-education using specialized books
IV. Work experience	9,180	12,940	Successful work, winning of internal awards, installation review session, on-site inspections, safety inspections, teaching study groups, checking of patent-pending content, and serving as a committee member for creating internal technical documents
V. Research and technology/reporting	950	609	Publication of research papers, contributing to journals and other publications
VI. Provision of information and technical instructions	1,353	876	External provision of information and technical instructions, participation in academic conferences and research committees, and serving as an instructor for official qualification courses
VII. Instructor	2,786	3,359	In-house training instructor, part-time lecturer at a university or technical college
VIII. Winning of an award, acquisition of qualification, others	5,580	5,293	Winning of an external award, acquisition of a technical and safety plumbing related official qualification, acquisition of a degree, and obtaining a patent
<b>Total</b>	<b>59,766</b>	<b>64,509</b>	

Notes:

- Previous points are those points acquired between April 2013 and March 2014.
- Current points are those points acquired between April 2014 and March 2015.
- Categories II, III, IV, VII and category V have annual maximum points of 20 and 40 respectively.

## Publication of the DAI-DAN Technical Current News

With the objective of publicizing the technology we develop and our research initiatives, we publish the DAI-DAN Technical Current News every September. The publication gives comprehensive explanations of experiments, assessment methods and analysis results using charts and images. The 109th edition was published in September 2015. Copies of these publications are donated to the National Diet Library.





## Work-Life Balance and the Work Environment

### Holidays

Dai-Dan has established various holiday systems to allow our employees to make the most of their holidays to refresh themselves.

Since fiscal 2011, employees have been encouraged to take summer holidays at the same time as part of our efforts to reduce electricity consumption. Employees are also encouraged to take paid annual leave and refreshment holidays before or after their summer holiday to have their body and mind refreshed.

Many employees make the most of an extended break as a refreshment holiday to travel abroad or take the time to enjoy hobbies that they did not typically have time for.

Long-service employees are not only entitled to holidays, but are also given a travel coupon depending on the duration of their service, making their family trips and other trips more fulfilling.

#### ■ Major holidays (excluding statutory paid annual leave)

Type of holiday	Details
Summer holiday	Three consecutive days in summer
Refreshment holiday	Seven consecutive days (annual)
Long service leave	10 years: 3 days 20 years: 5 days 30 years: 7 days 40 years: 5 days
Congratulatory or condolence leave	Predetermined number of days for occasions such as weddings

#### ■ Summer holiday usage rate

Fiscal year	Rate
FY2013	91.2%
FY2014	92.2%
FY2015	90.0%

### Continued employment scheme

Dai-Dan has introduced a continued employment scheme as part of our initiatives to meet the needs of Japan's aging and declining population. Under this scheme, we extend the employment of staff who reach retirement age but desire to keep working. Through this we are leveraging skills and expertise acquired over many years, and enabling those skills to be passed on to the next generation of workers.

In fiscal 2013, we employed all staff who desired to continue working until the age specified by the transitional measures following the amendment of the Act on Stabilization of Employment of Elderly Persons.

#### ■ Continued employment rate for persons of retirement age

	FY2012	FY2013	FY2014
Persons of retirement age	29	26	25
Persons continuing employment	26	25	24
Continued employment rate	89.7%	96.2%	96.0%

### A workplace that proactively employs females

Dai-Dan has continued to employ female workers for main career track positions when hiring recent graduates, and we provide technical training for new employees without discrimination by gender. Engineers who have acquired the necessary basic knowledge through this training are now playing an active role in design departments and at field installation sites.

#### ■ Employee breakdown

	As of March 31, 2013		As of March 31, 2014		As of March 31, 2015	
	Male	Female	Male	Female	Male	Female
Number of employees	1,236	128	1,259	130	1,273	136
Average years of service	18.8	11.7	18.8	12.3	19.1	12.5
Average age	42.8	33.9	43.0	34.5	44.0	35.0
Female main career track positions	—	28	—	30	—	33

In addition, we switch employees from minor career track positions to main career track positions using the Main Career Track Position Switching System as needed, and our primarily female main career track positions remain active in sales departments and official and administrative departments.

### Supporting the balance between work and home

Dai-Dan has developed an action plan in line with the Act on Advancement of Measures to Support Raising Next-Generation Children, in order to enable employees to achieve the best balance between work and home, to create a pleasant work environment for all employees, and to ultimately allow staff to use their skills to their fullest extent.

#### Action Plan (April 1, 2015–March 31, 2020)

- Target 1** To improve the workplace environment to ensure that childcare leave is easy to take and the staff easy to return
- Target 2** To have at least one or more male employees take childcare leave while the action plan is in operation
- Target 3** To introduce a system of reduced working hours that exceeds the provisions of the Child Care and Family Care Leave Act

#### ■ Parental leave take-up rate

	FY2012	FY2013	FY2014
Number of female employees who gave birth	3	4	4
Number of female employees who took childcare leave	3	4	4
Number of female employees on reduced schedules for childcare	2	2	TBD*
Percentage of female employees who took childcare leave	100%	100%	100%
Percentage of female employees on reduced schedules for childcare	67%	50%	TBD*
Number of male employees who took childcare leave	0	0	0

\* For 4 people on childcare leave in FY2014, the application of the childcare reduced working hours system has not been determined.

### Initiatives to address mental health issues

Maintaining a healthy mind helps keep you highly motivated for work and vitalizes the company.

In order to ensure the mental health of employees and establish an employee-friendly workplace, Dai-Dan offers mental health education.

New employee training teaches the basics of mental health to equip staff with the knowledge to allow them to identify and cope with their own stresses.

Furthermore, as part of our efforts to fulfill our company's duty of considering employee safety, during new deputy manager and managerial staff training sessions, participants have the chance to develop a better understanding of mental health from a legal perspective, and the means to identify

### VOICE

#### Comment of an employee on childcare leave

I took maternity leave and childcare leave from February 2013 to March 2014.

I was able to devote myself to childcare during my leave, but I began to feel a bit uneasy when the time to return to my job approached. I was concerned about whether I would be able to continue my job in a main career track position. My greatest anxieties concerned my husband, who has to work much overtime and on holidays, and both our parents, who live far away. Therefore, I could not work overtime without having someone who could take care of my child. Also, I might have to take time off suddenly should my child become sick. However, my boss and my superiors were very kind, listened to my concerns, and gave me much advice. I was able to think about my concerns positively and try hard to make sure that work and childcare could be compatible despite the time pressures.

I was able to return to my previous job and follow a reduced work schedule to allow for childcare. I am very grateful to my co-workers and more senior employees for their understanding and cooperation. Now I work as a member of a team so that even when I'm absent, customers are not inconvenienced. My co-workers and more senior employees will assist me with my work when I don't have time.

The number of co-workers who take childcare leave or parental leave with reduced work hours under the childcare system is increasing. The various systems that support working women are in full force. One can obtain understanding and cooperation from both inside and outside the company, so I feel that the workplace environment is changing for women, allowing them to work with confidence while achieving a balance among work, home life, and childcare.



Hiroko Kanou  
Deputy Manager of Design Division 4  
Design Department  
Tokyo Head Office

potential stressors for staff. They also learn to address the issues as an organization.

In December 2015, checking the stress levels of workers became obligatory following revisions of the Occupational Safety and Health Act. In fiscal 2013, all Dai-Dan employees began to undergo stress level checks, enabling them to identify their own level of stress and understand their mental condition. This has contributed to early diagnoses of any mental health issues.

Dai-Dan provides an environment where each employee is able to work with a healthy body and mind to ultimately build an energetic company.

### Following up on employees working long hours

Dai-Dan provides employees working long hours, as defined by the Industrial Safety and Health Act (those who have worked more than 100 hours over the legally defined monthly work hour limit) and those who have worked more than 80 hours of the legally defined monthly work hour limit for three consecutive months, with consultations with medical doctors once per

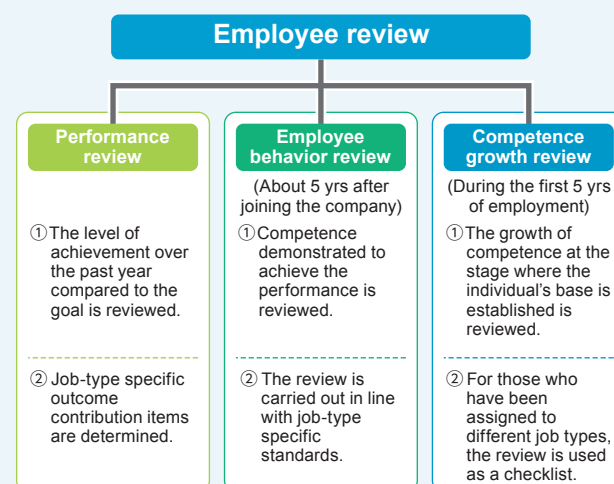
month. Through this, we are managing the health condition of our employees and make improvements in line with advice from doctors.



## Employee review system

The outline of our employee review system is as shown below and is utilized depending on the objectives of implementation.

Through communication between supervisors and subordinates (interviews, etc.), and regular provision of feedback on evaluation results, we attempt to enhance target achievement levels, determine skills put into practice, and develop staff through guidance.



## VOICE

### Comment of the Labor Union

Established in 1973, the Dai-Dan Labor Union began its 42nd year in August 2015.

This year, union members will make concerted efforts to achieve even better working conditions and environments.

We believe the union leadership should turn out at gatherings in each workplace across the country in order to better appreciate the opinions of each member.

The union has all along been engaged in discussions with the company and has undertaken union activities while recognizing the difficulty of reconciling diverse views expressed by personnel from many offices both inside and outside Japan.



Takuma Kishimoto Vice-Chairperson  
Kazuhiko Matsuura Chairperson  
Hiroshi Sasaki General Secretary

# Meeting Local Expectations

We undertake a variety of initiatives to make contributions to the industry and community in our position as a responsible corporate citizen.

## Dissemination of technical information to external parties

In order to contribute to the development of Japan's building services industry, Dai-Dan supports the running of academic conferences and dispatches lecturers to external organizations. In particular, Dai-Dan's engineers are dispatched to external training centers and educational institutions across Japan as lecturers to provide classes on building service technologies.

### External organization memberships and positions (as of September 2015)

Organization	Position
Society of Heating, Air-Conditioning and Sanitary Engineers of Japan	Auditor-secretary
Institute of Electrical Installation Engineers of Japan	General Director
Air-conditioning & Plumbing Contractors Associations of Japan	General Director
Japan Electrical Construction Association	Advisory committee member
Association of Japan Instrumentation Industry	Administration council member
Japanese Association of Building Mechanical and Electrical Engineers	General Director
Association of Building Engineering and Equipment	General Director
Japan Architecture Facilities Inspection Association	General Director
Japan Electrical Engineer Association	General Director
Osaka Electrical Construction Association	General Director
Aichi Electrical Construction Association	General Director
Tokyo Electrical Construction Association	General Director

### Organizations to which Dai-Dan employees are dispatched as lecturers

Organization	Position
Kanto Gakuin University	Part-time lecturer
Society of Heating, Air-Conditioning and Sanitary Engineers of Japan	Lecturer
Preparatory Course for Examination Committee, Building Mechanical and Electrical Engineers	Lecturer
School of Tokyo Electrical Construction Association	Lecturer
Osaka Piping Higher Training School	Lecturer
Institute for Aerial Studies Foundation	Lecturer
Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers	Lecturer

## Dai-Dan Alumni Association



94 participants from the West Japan region at the Swissotel Nankai Osaka (Nov. 14, 2014)



93 participants from the East Japan region at the Hotel New Otani (Apr. 10, 2015)



39 participants from the Central Japan region at the Chunichi Palace (Oct. 16, 2014)

The Dai-Dan Alumni Association is an organization for Dai-Dan employees who have retired after working together for many years. They typically get together once a year. These gatherings enable them to renew their old friendships and talk about the company's current situation with current directors and executive officers.

These gatherings took place 40 times this year.

Parties were held at venues in Tokyo (East Japan region), Nagoya (Central Japan region), and Osaka (West Japan region). A total of 226 participants attended these events, where participants were able to hear updates from one another and engage in recollections in good cheer while enjoying delicious dishes.

During the year ahead, we look forward to welcoming the cheerful alumni members, including those members who were unable to participate this past year, to hear their yearly updates.

## Signing of the Disaster Prevention Agreement (cooperation with local communities)

If a large-scale disaster strikes, we are, as a member of the construction industry, required to aid the swift recovery of electricity, water and social infrastructure, while at the same time ensuring the continuation of our business and that of our customers.

Dai-Dan has, through its industrial associations, signed a Disaster Prevention Agreement with local governments concerning post-disaster emergency activities. We have also entered into agreements directly with some municipalities and industry organizations, and have established a system that allows for the swift provision of post-disaster emergency assistance.

We aim to assist with the swift recovery of the local community and local businesses by proactively participating in reconstruction efforts of the affected region.

## Assistance through the Dai-Dan Society Activity Fund

In April 1993, as part of our social contribution activities for our 90th anniversary, the Dai-Dan Society Activity Fund was established in the Osaka Community Foundation. From returns on fund assets, we support social welfare enhancement activities especially for persons with physical disabilities.

- FY2013:** Support for investigative interview session to prevent deaths in solitude among single elderly people
- FY2014:** Development program for at-home care provider volunteers (former nurses)
- FY2015:** Music Atelier "Echo"  
(Local community music therapy to promote personal exchanges and vitalization of community members through the power of song)



## Donations

Dai-Dan contributes financial support for various causes to help create and build a better community.

Our contributions include donations to geoenvironmental protection organizations, university scholarship funds and artistic activities, as well as sponsoring community events in areas across the country where our sites are based.

Part of sales proceeds from beverage vending machines used by Dai-Dan employees is donated to the Central Community Chest of Japan, National Land Afforestation

Promotion Organization, TABLE FOR TWO International (NPO) and others.

We have also been donating to the areas affected by the Great East Japan Earthquake every year since immediately after the disaster happened.

As for emergency stockpiles of items under the company's business continuity plan, contributions are being made partly through NPOs.

## Social contribution activities (initiatives by each site)

Dai-Dan promotes social contribution activities. Our major activities are clean-up of the local community, which we encourage all employees to participate in. All the activities we run are published on the intranet notice board to raise awareness of social contribution activities.

### Community cleanups

Sites	Names of the projects or details
Hokkaido Branch	<ul style="list-style-type: none"> <li>Love Earth Cleanup in Hokkaido 2014 Trash Pickup Beach Walk (Ishikarihama cleanup)</li> <li>Volunteer cleanup of a dry riverbed on the Toyohira River</li> </ul>
Tohoku Branch	<ul style="list-style-type: none"> <li>Sendai City Beautification Support Program (Ichibancho, Aoba Ward)</li> </ul>
Niigata Branch	<ul style="list-style-type: none"> <li>Cleanup in the area surrounding the Niigata Branch</li> <li>Shinano River Clean Mission</li> </ul>
Tokyo Head Office General Administration Division (Tokyo) Sales Division Industrial Facilities Department Compliance Office	<ul style="list-style-type: none"> <li>Tokyo Fureai Road Program</li> </ul>
Yokohama Branch	<ul style="list-style-type: none"> <li>Cleanup in the area surrounding the Yokohama Branch</li> <li>Port City Yokohama Beautification Cleanup Project</li> <li>Clean road-building activities (Kanagawa prefecture)</li> </ul>
Kanto Branch	<ul style="list-style-type: none"> <li>Street cleaning in Sakuranamiki-dori, Sakuragi-cho, Saitama-shi</li> </ul>
Nagoya Branch	<ul style="list-style-type: none"> <li>Cleanup in the area surrounding the Nagoya Branch</li> </ul>
Shizuoka Office	<ul style="list-style-type: none"> <li>Cleanup of Morishita Park in Suruga-ku, Shizuoka</li> <li>Trash retrieval on Mount Fuji</li> </ul>
Hokuriku Branch	<ul style="list-style-type: none"> <li>Volunteer Support Program</li> <li>Picking up Trash and Love the City Campaign (Area surrounding Kohrinbo of Kanazawa City and Tsuruga City of Fukui)</li> <li>Clean Beach Ishikawa</li> </ul>

Sites	Names of the projects or details
Toyama Office	<ul style="list-style-type: none"> <li>Big cleanup project</li> <li>Our Hometown Toyama Beautification Blitz</li> <li>"Zero Waste Day" in Toyama to promote beautification</li> </ul>
Fukui Office	<ul style="list-style-type: none"> <li>Fukui City Beautification Partner Scheme</li> <li>Participation in "Cleanup Fukui"</li> </ul>
Osaka Head Office Internal Audit Office General Administration Division Sales Division (Osaka) Technical Development Division (Osaka) Industrial Facilities Department (Osaka)	<ul style="list-style-type: none"> <li>Osaka City Beautification Partner Scheme (Footpaths in Yotsubashi area)</li> <li>Participation in Minoh Mountain Patrol Clean hiking</li> </ul>
Okayama Branch	<ul style="list-style-type: none"> <li>Cleanup in the area surrounding the Okayama Branch</li> <li>Cleanup in the area surrounding the Korakuen Garden</li> </ul>
Chugoku Branch	<ul style="list-style-type: none"> <li>Cleanup in the area surrounding the Chugoku Branch</li> <li>Peace Memorial Park Cleanup Volunteers</li> <li>Hiroshima Municipal Girls High School, Volunteer cleanup of the memorial to victims of the atomic bomb</li> </ul>
Shikoku Branch	<ul style="list-style-type: none"> <li>Intensive cleanup at Sunport Takamatsu, Chuo-dori and other areas</li> </ul>
Kyushu Branch	<ul style="list-style-type: none"> <li>Ohori Park Cleanup Team</li> <li>Fukuoka Castle Cleanup Project</li> </ul>
Kumamoto Branch	<ul style="list-style-type: none"> <li>Pick-and-Love-the-Town Movement</li> <li>Ozu-machi, Kumamoto Cleanup Activity</li> </ul>

In addition to the above activities, we also participate in cleanups led by each site and individuals.



Port City Yokohama Beautification Cleanup Project



Street cleaning in Sakuranamiki-dori, Sakuragi-cho, Saitama-shi



Cleanup in the area surrounding the Nagoya Branch



Intensive cleanup at Sunport Takamatsu, Chuo-dori and other areas



Osaka City Beautification Partner Scheme (footpaths in Yotsubashi area)

### Forestry care and tree planting

Sites	Names of the projects or details
Tohoku Branch	Osaki Hachimangu Shrine forest revegetation project
Chugoku Branch	Peace Memorial Park Active Volunteers
Technical Construction Division Technical Development Division Technical Research Laboratory	<ul style="list-style-type: none"> <li>Miyoshi Green Support Squad (Tree planting in woodlands and forests care)</li> <li>Young Pine Tree Growing Campaign</li> </ul>



Osaki Hachimangu Shrine forest revegetation project



Miyoshi Green Support Squad

### Company-wide activities

Name	Details
Eco-cap Project	In FY2014, 307,000 caps were collected (equivalent to vaccines for 358 people).
Charity Calendar Market	In January 2015, 1,379 calendars and diaries were donated from throughout Japan.

### Recycling of office uniforms

In November 2014, in response to the "Cool Biz" summer air conditioning campaign, we adopted a new design for the female office uniform we had been using for 30 years. As a result, we collected all available old surplus office uniforms and sent them to an NPO for donation to people in developing countries.

In addition to providing these surplus office uniforms overseas, we contributed to delivering polio vaccine to local children as well.



Recycling of office uniforms

### Donating to areas affected by the Great East Japan Earthquake

It is clear that recovery from the Great East Japan Earthquake of March 11, 2011, will exceed the four-and-a-half years that have since passed. We believe that ongoing support for recovery will be needed. Every year since the earthquake disaster, we donate to orphans from the stricken areas in order to provide some support. We remain dedicated to providing ongoing support toward the earliest possible recovery of the stricken areas.



# Financial Report

Page

Consolidated Balance Sheets .....	P63
Consolidated Income Statements .....	P64
Consolidated Statements of Comprehensive Income .....	P64
Consolidated Statements of Changes in Net Assets .....	P65
Consolidated Statements of Cash Flows .....	P66

## Consolidated Balance Sheets

(in million yen)

Assets		
Accounts	Previous Consolidated Accounting Year (As of March 31, 2014)	Current Consolidated Accounting Year (As of March 31, 2015)
<b>Current assets</b>		
Cash and deposits	24,626	24,385
Notes receivable, accounts receivable from completed construction contracts and other	57,189	52,802
Costs on uncompleted construction contracts	152	424
Raw materials and supplies	0	0
Deferred tax assets	1,273	1,278
Other	2,488	1,945
Allowance for doubtful accounts	(6)	(5)
<b>Total current assets</b>	<b>85,724</b>	<b>80,831</b>
<b>Noncurrent assets</b>		
<b>Property, plant and equipment</b>		
Buildings and structures	5,409	5,371
Accumulated depreciation	(2,862)	(2,737)
Buildings and structures, net	2,546	2,633
Machinery, equipment and vehicles	154	177
Accumulated depreciation	(123)	(132)
Machinery, equipment and vehicles, net	31	44
Tools, furniture and fixtures	780	800
Accumulated depreciation	(624)	(619)
Tools, furniture and fixtures, net	155	180
Land	1,054	1,048
Construction in progress	—	11
<b>Total property, plant and equipment</b>	<b>3,788</b>	<b>3,919</b>
<b>Intangible assets</b>	<b>260</b>	<b>156</b>
<b>Investments and other assets</b>		
Investment securities	13,229	17,494
Deferred tax assets	1	1
Net defined benefit assets	6,921	9,633
Other	2,086	1,595
Allowance for doubtful accounts	(665)	(190)
<b>Total investments and other assets</b>	<b>21,574</b>	<b>28,533</b>
<b>Total noncurrent assets</b>	<b>25,623</b>	<b>32,609</b>
<b>Total assets</b>	<b>111,347</b>	<b>113,440</b>

## Liabilities and Net Assets

(in million yen)

Accounts	Previous Consolidated Accounting Year (As of March 31, 2014)	Current Consolidated Accounting Year (As of March 31, 2015)
<b>Liabilities</b>		
<b>Current liabilities</b>		
Notes payable, accounts payable for construction contracts	40,007	37,937
Short-term loans payable	5,686	4,379
Income taxes payable	1,381	990
Advances received on uncompleted construction contracts	3,124	1,500
Provision for warranties for completed construction	92	85
Provision for loss on construction contracts	130	480
Loss reserve related to antimonopoly law	771	390
Other	7,346	6,550
<b>Total current liabilities</b>	<b>58,539</b>	<b>52,312</b>
<b>Noncurrent liabilities</b>		
Long-term loans payable	1,903	1,583
Deferred tax liabilities	2,304	4,237
Net defined benefit liability	1,398	1,377
Provision for environment measures	220	107
Provision for overseas investment loss	18	6
Long-term accounts payable	352	352
Other	0	0
<b>Total noncurrent liabilities</b>	<b>6,197</b>	<b>7,665</b>
<b>Total liabilities</b>	<b>64,737</b>	<b>59,978</b>
<b>Net Assets</b>		
<b>Shareholders' equity</b>		
Capital stock	4,479	4,479
Capital surplus	4,809	4,809
Retained earnings	34,597	36,186
Treasury stock	(666)	(669)
<b>Total shareholders' equity</b>	<b>43,221</b>	<b>44,807</b>
<b>Accumulated other comprehensive income</b>		
Valuation difference on available-for-sale securities	3,690	6,797
Foreign currency translation adjustment	68	39
Remeasurements of defined benefit plans	(559)	1,592
<b>Total accumulated other comprehensive income</b>	<b>3,199</b>	<b>8,429</b>
<b>Minority interests</b>	<b>189</b>	<b>225</b>
<b>Total net assets</b>	<b>46,609</b>	<b>53,462</b>
<b>Total liabilities and net assets</b>	<b>111,347</b>	<b>113,440</b>

## Consolidated Income Statements

(in million yen)

Accounts	Previous Consolidated Accounting Year (From April 1, 2013 to March 31, 2014)	Current Consolidated Accounting Year (From April 1, 2014 to March 31, 2015)
Net sales of completed construction contracts	124,445	121,780
Cost of sales of completed construction contracts	110,307	107,216
Gross profit on completed construction contracts	14,137	14,563
Selling, general and administrative expenses	9,966	10,016
<b>Operating income</b>	<b>4,171</b>	<b>4,547</b>
<b>Non-operating income</b>		
Interest income	16	15
Dividends income	181	209
Real estate rent	33	34
Insurance fee	91	105
Foreign exchange gain	155	139
Other	3	3
<b>Total non-operating income</b>	<b>482</b>	<b>507</b>
<b>Non-operating expenses</b>		
Interest expenses	150	157
Guarantee commission	18	6
Other	13	14
<b>Total non-operating expenses</b>	<b>182</b>	<b>179</b>
<b>Ordinary income</b>	<b>4,471</b>	<b>4,875</b>
<b>Extraordinary income</b>		
Income on sales of noncurrent assets	2	1
Gain on reversal of provision for environment measures	—	105
<b>Total extraordinary income</b>	<b>2</b>	<b>107</b>
<b>Extraordinary loss</b>		
Impairment loss	—	5
Loss on retirement of noncurrent assets	0	105
Loss on sales of noncurrent assets	4	—
Loss on valuation of investment securities	0	5
Loss on valuation of golf club membership	1	0
Provision of loss reserve related to antimonopoly law	771	92
Provision of loss reserve on overseas investment	17	—
<b>Total extraordinary loss</b>	<b>797</b>	<b>210</b>
<b>Income before income taxes and minority interests</b>	<b>3,676</b>	<b>4,771</b>
<b>Income taxes—current</b>	<b>1,781</b>	<b>1,796</b>
<b>Income taxes—deferred</b>	<b>184</b>	<b>45</b>
<b>Total income taxes</b>	<b>1,965</b>	<b>1,842</b>
<b>Income before minority interests</b>	<b>1,710</b>	<b>2,929</b>
<b>Minority interests in income</b>	<b>39</b>	<b>7</b>
<b>Net income</b>	<b>1,670</b>	<b>2,921</b>

## Consolidated Statements of Comprehensive Income

(in million yen)

Accounts	Previous Consolidated Accounting Year (From April 1, 2013 to March 31, 2014)	Current Consolidated Accounting Year (From April 1, 2014 to March 31, 2015)
<b>Income before minority interests</b>	<b>1,710</b>	<b>2,929</b>
Other comprehensive income		
Valuation difference on available-for-sale securities	1,278	3,106
Foreign currency translation adjustment	45	0
Remeasurements of defined benefit plans, before tax	—	2,151
<b>Total other comprehensive income</b>	<b>1,323</b>	<b>5,258</b>
<b>Comprehensive income</b>	<b>3,034</b>	<b>8,188</b>
(Particulars)		
Comprehensive income attributable to owners of the parent	2,976	8,151
Comprehensive income attributable to minority interests	57	36



## Consolidated Statements of Changes in Net Assets

■ Previous Consolidated Accounting Year (From April 1, 2013 to March 31, 2014)

(in million yen)

	Shareholders' equity					Accumulated other comprehensive income				Minority interests	Total net assets
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
<b>Balance at the beginning of current period</b>	4,479	4,809	33,774	(660)	42,403	2,412	40	—	2,453	131	44,988
Cumulative effect of changes in accounting policies			—		—						—
<b>Restated balance</b>	4,479	4,809	33,774	(660)	42,403	2,412	40	—	2,453	131	44,988
<b>Changes of items during the period</b>											
Dividends from surplus			(847)		(847)						(847)
Net income			1,670		1,670						1,670
Purchase of treasury stock				(5)	(5)						(5)
Disposal of treasury stock		—		—	—						—
Increase that results from exclusion of subsidiaries from consolidation			—		—						—
Net changes of items other than shareholders' equity						1,278	27	(559)	746	57	803
<b>Total changes of items during the period</b>	—	—	823	(5)	817	1,278	27	(559)	746	57	1,621
<b>Balance at the end of current period</b>	4,479	4,809	34,597	(666)	43,221	3,690	68	(559)	3,199	189	46,609

■ Current Consolidated Accounting Year (From April 1, 2014 to March 31, 2015)

(in million yen)

	Shareholders' equity					Accumulated other comprehensive income				Minority interests	Total net assets
	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income		
<b>Balance at the beginning of current period</b>	4,479	4,809	34,597	(666)	43,221	3,690	68	(559)	3,199	189	46,609
Cumulative effect of changes in accounting policies			(618)		(618)						(618)
<b>Restated balance</b>	4,479	4,809	33,979	(666)	42,602	3,690	68	(559)	3,199	189	45,991
<b>Changes of items during the period</b>											
Dividends from surplus			(713)		(713)						(713)
Net income			2,921		2,921						2,921
Purchase of treasury stock				(4)	(4)						(4)
Disposal of treasury stock		0		0	0						0
Increase that results from exclusion of subsidiaries from consolidation			0		0						0
Net changes of items other than shareholders' equity						3,106	(28)	2,151	5,230	36	5,266
<b>Total changes of items during the period</b>	—	0	2,207	(3)	2,204	3,106	(28)	2,151	5,230	36	7,471
<b>Balance at the end of current period</b>	4,479	4,809	36,186	(669)	44,807	6,797	39	1,592	8,429	225	53,462

## Consolidated Statements of Cash Flows

(in million yen)

Accounts	Previous Consolidated Accounting Year (From April 1, 2013 to March 31, 2014)	Current Consolidated Accounting Year (From April 1, 2014 to March 31, 2015)
<b>Net cash provided by (used in) operating activities</b>		
Current net income before tax adjustments, etc.	3,676	4,771
Depreciation and amortization	425	345
Increase (decrease) in allowance for doubtful accounts	33	(475)
Increase (decrease) in provision for retirement benefits	(1,328)	—
Increase (decrease) amount of net defined benefit liability	1,268	(89)
Increase (decrease) in provision for environmental measures	—	(112)
Interest and dividends income	(198)	(225)
Interest expenses	150	157
Increase (decrease) in reserve for overseas investment loss	16	(7)
Loss (gain) on valuation of investment securities	0	5
Loss (gain) on sales of noncurrent assets	2	(1)
Loss on retirement of noncurrent assets	0	105
Impairment loss	—	5
Increase (decrease) in loss reserve related to antimonopoly law	771	92
Loss on valuation of golf club memberships	1	—
Reversal of foreign currency translation adjustment entailed in exclusion of consolidation	—	(73)
Decrease (increase) in notes and accounts receivable—trade	(884)	4,387
Decrease (increase) in costs on uncompleted construction contracts	162	(271)
Decrease (increase) in other current assets	(141)	476
Decrease (increase) in other noncurrent assets	6,586	475
Increase (decrease) in net defined benefit asset	(7,666)	(381)
Increase (decrease) in notes and accounts payable—trade	27	(2,070)
Increase (decrease) in advances received on uncompleted construction contracts	689	(1,623)
Increase (decrease) in other current liabilities	695	(450)
Increase (decrease) in other noncurrent liabilities	(24)	—
<b>Subtotal</b>	<b>4,265</b>	<b>5,041</b>
Interest and dividends income received	198	225
Interest expenses paid	(150)	(154)
Loss related to antimonopoly act paid	—	(473)
Income taxes (paid) refund	(1,195)	(2,210)
<b>Net cash provided by (used in) operating activities</b>	<b>3,117</b>	<b>2,427</b>
<b>Net cash provided by (used in) investing activities</b>		
Proceeds from withdrawal of time deposits	27	27
Payments into time deposits	(27)	(27)
Proceeds from sales and redemption of securities	49	—
Purchase of property, plant and equipment	(125)	(391)
Proceeds from sales of property, plant and equipment	3	3
Purchase of investment securities	(255)	(4)
Proceeds from sales and redemption of investment securities	30	13
Payments of loans receivable	(4)	(2)
Collection of loans receivable	4	2
Expenditures by acquiring of other noncurrent assets	(68)	(166)
Revenue by sales of other noncurrent assets	192	144
<b>Net cash provided by (used in) investing activities</b>	<b>(172)</b>	<b>(401)</b>
<b>Net cash provided by (used in) financing activities</b>		
Increase in short-term loans payable	34,570	34,680
Decrease in short-term loans payable	(35,070)	(36,170)
Proceeds from long-term loans payable	2,600	1,950
Repayment of long-term loans payable	(2,139)	(2,087)
Purchase of treasury stock	(5)	(4)
Proceeds from sales of treasury stock	—	0
Cash dividends paid	(847)	(713)
<b>Net cash provided by (used in) financing activities</b>	<b>(892)</b>	<b>(2,344)</b>
<b>Effect of exchange rate change on cash and cash equivalents</b>	<b>126</b>	<b>78</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>2,178</b>	<b>(239)</b>
<b>Cash and cash equivalents at beginning of period</b>	<b>22,420</b>	<b>24,598</b>
<b>Decrease in cash and cash equivalents resulting from exclusion of subsidiaries from consolidation</b>	<b>—</b>	<b>(0)</b>
<b>Cash and cash equivalents at end of period</b>	<b>24,598</b>	<b>24,358</b>



Third Party Opinion

This opinion statement expresses views on this report. The statement has been completed by going through 28 questions in cooperation with attorneys (Daisuke Inayoshi, Ryota Matsui and Yasuko Fujii) belonging to the Kinki Branch of the Japan Federation of Bar Associations based on the associations’ “Corporate Social Responsibilities (CSR) Guideline 2009.” The process for completing the statement also included reviews of internal regulations and other related documents, as well as interviews with department managers.

Dai-Dan’s continuous efforts made this year in its PDCA cycle-based initiatives and feedback of its employees’ opinions, including responses of those who read the report, deserve recognition as a noteworthy challenge to firmly establishing their CSR activities. Additionally, last year Dai-Dan began to incorporate financial information into the report. I expect the company to further exercise its ingenuity in enhancing non-financial information and the like.



**Tsuneo Yamada**  
Attorney/Former Chairman of  
Osaka Bar Association  
Director of Japan CSR Promotion  
Association  
Branch Manager of Kinki Branch

Initiatives to respect human rights and improve the workplace environment for employees

Dai-Dan provides position-specific training sessions on harassment, which I highly endorse. I trust that the company’s goal is to maintain a cheerful workplace free from harassment.

Regarding promotion of female employees, initiatives are planned to create an enhanced environment in which female employees can work and care for their children. Additionally, initiatives are being advocated to achieve the 5-year target of 1% of managerial posts being held by women. I anticipate that the company will consider initiatives to realize this goal.

Although an improvement trend is apparent regarding employment of persons with disabilities, the legally obligated employment rate has not been achieved and there is room for improvement.

Regarding paid leave, the take-up rate was 19.5% in fiscal 2014. (According to Ministry of Health, Labour and Welfare statistics, the rate is 40.3% for the entire construction industry.) Improvement is needed regarding paid leave, as 59% of employees did not take even a single day of paid leave.

As for employees working long hours, simply encouraging employees who have already worked long hours to consultant with medical doctors after the fact as a followup response is not sufficient. Some challenges in this area may be specific to the construction industry, however.

I hope they will take concrete steps to improve the paid leave take-up rate and reduce long working hours in harmony with social trends.

Initiatives to conserve the environment

Dai-Dan’s ongoing and unique CSR initiatives regarding environmental conservation are worthy of praise as they are performed continuously according to the PDCA cycle.

Regarding the table accompanying this report, in some places the reduction in environmental impact for each initiative is difficult to discern. In consideration of all stakeholders, I hope they will apply greater ingenuity when selecting which fields to cover and describing the state of achievement.

Initiatives to ensure compliance

The anti-monopoly case involving bid-rigging by Dai-Dan and other industry-leading companies that occurred two years ago is extremely regrettable. On January 14, 2015, the Ministry of Land, Infrastructure, Transport and Tourism imposed penalties. Nevertheless, it should be recognized that, in the interests of information disclosure, the company detailed the nature of the penalty in their report.

Moreover, the company continued to make efforts by establishing a Compliance Office and a Legal Compliance Support Committee in response to their violation of the Anti-Monopoly Act two years ago.

They have undertaken an employee training initiative regarding the Anti-Monopoly Act and the Corporate Code of Ethics. They also hold study sessions, publish the Compliance News, conduct questionnaires, and are committed to establishing and instilling a high level of compliance awareness in the company. They are also fostering a corporate constitution and culture. These efforts should be commended.

I trust the company will continue its efforts toward comprehensive business operations in observance of the Anti-Monopoly Act and other relevant laws and regulations.

As for the Corporate Governance Code published this year, I hope they will prepare a governance report and that the company’s governance — as well as its dialogue with stakeholders — will be further enhanced.

VOICE

Reflecting on the Third Party Opinions

I would like to express my sincere appreciation for the opinions and suggestions regarding our DAI-DAN REPORT 2015 provided again this year by attorney at law Mr. Tsuneo Yamada in the form of a Third Party Opinion.

In response to the issues that have been pointed out, we have decided to take specific measures toward solutions and will implement improvements. We will disclose this information to stakeholders.

We remain committed to further enhancing and strengthening our corporate governance and our compliance system while addressing corporate initiatives to contribute to a better global environment and stronger communities as set forth in our Corporate Principles.

**Takayuki Ikeda**  
Director, Corporate Officer  
Head of General Administration Division

Site List

Headquarters Organizations							
Name	Zip Code	Address	Telephone Number	Name	Zip Code	Address	Telephone Number
General Administration Division	550-8520	1-9-25 Edobori, Nishi-ku, Osaka City	06-6447-8000	Technical Development Division	354-0044	390 Kita-Nagai, Miyoshimachi, Iruma-gun, Saitama Prefecture	049-258-1891
Sales Division	102-8175	2-15-10 Fujimi, Chiyoda-ku, Tokyo	03-3261-8231	Technical Research Laboratory	354-0044	390 Kita-Nagai, Miyoshimachi, Iruma-gun, Saitama Prefecture	049-258-5725
Technical Construction Division	354-0044	390 Kita-Nagai, Miyoshimachi, Iruma-gun, Saitama Prefecture	049-258-1891	Industrial Facilities Department	102-8175	2-15-10 Fujimi, Chiyoda-ku, Tokyo	03-5276-4710
Internal Audit Office	550-8520	1-9-25 Edobori, Nishi-ku, Osaka City	06-6447-8065	Compliance Office	102-8175	2-15-10 Fujimi, Chiyoda-ku, Tokyo	03-3261-8231
Branch/Office Organizations							
Name	Zip Code	Address	Telephone Number	Name	Zip Code	Address	Telephone Number
Hokkaido Branch	001-0020	5-1-43 Nishi, Kita 20, Kita-ku, Sapporo City	011-716-9116	Osaka Head Office	550-8520	1-9-25 Edobori, Nishi-ku, Osaka City	06-6441-8231
Obihiro Office	080-0010	4F Aobatokachi Bldg., 12-20 Odoriminami Obihiro City, Hokkaido	0155-25-3559	Tenri Branch	632-0012	4-228 Toyoda-cho, Tenri City, Nara Prefecture	0743-63-1231
Hakodate Office	041-0851	4-17-40 Hondori, Hakodate City, Hokkaido	0138-55-7086	Kobe Branch	651-0088	7F Nihon Seimei Sannomiya Ekimae Bldg., 7-1-1 Onoe-dori, Chuo-ku, Kobe City	078-221-7777
Tohoku Branch	980-0811	1-15-17 Ichiban-cho, Aoba-ku, Sendai City	022-225-7901	Kyoto Branch	604-8186	2F Urbanex Oike Bldg. East Wing, 361-1 Umeya-cho, Kurumayaoike-sagaru, Nakagyo-ku, Kyoto City	075-251-6411
Aomori Office	030-0802	4F Tanuma Bldg., 2-4-10 Hon-cho, Aomori City	017-773-1582	Wakayama Office	640-8203	6F Nankai Wakayama Bldg., 3-6 Higashikuramae-cho, Wakayama City	073-433-9431
Akita Office	010-0951	6F Sanno Piales Bldg., 2-2-17 Sanno, Akita City	018-824-6491	Shiga Office	527-0025	#11 Janty 21, 6-55 Yokaichi Higashihonmachi, Higashi-omi City, Shiga Prefecture	0748-25-5400
Morioka Office	020-0032	Hiramatsu Bldg., 2-16 Yugaose-cho, Morioka City	019-654-3023	Okayama Branch	700-0984	6-10 Kuwada-cho, Kita-ku, Okayama City	086-223-3106
Fukushima Office	960-8031	4F Fukushima Sakaemachi Bldg., 10-21 Sakaemachi, Fukushima City	024-521-4213	Chugoku Branch	730-0812	2-22 Kakomachi, Naka-ku, Hiroshima City	082-241-4171
Yamagata Office	990-0043	1F Honcho Bldg., 2-4-3 Hon-cho, Yamagata City	023-634-2620	Yamaguchi Office	754-0011	4F Sanyo Bldg. Ogori, 4-6 Ogorimiyukimachi, Yamaguchi City	083-976-0121
Niigata Branch	950-0088	2-4-3 Bandai, Chuo-ku, Niigata City	025-247-0201	San-in Office	690-0015	#103 Heights Shalom, 2-29-13 Agenogi, Matsue City	0852-27-5890
Tokyo Head Office	102-8175	2-15-10 Fujimi, Chiyoda-ku, Tokyo	03-3261-8231	Shikoku Branch	760-0018	11-20 Tenjinmae, Takamatsu City	087-861-6030
Kanto Branch	330-0854	3F GINZA YAMATO 3 Bldg., 1-10-2 Sakuragi-cho, Omiya-ku, Saitama City	048-644-8468	Matsuyama Office	790-0065	2-208-1 Miyanishi, Matsuyama City	089-922-7161
Gunma Office	371-0805	7F Daidoseimei Maebashi Bldg., 3-9-5 Minami-cho, Maebashi City, Gunma Prefecture	027-226-7720	Kochi Office	780-0088	10-16 Kitakubo, Kochi City	088-884-8231
Tochigi Office	321-0953	6F Yamaguchi Bldg., 4-1-20 Higashishukugo, Utsunomiya City	028-637-3380	Tokushima Office	770-0872	4-1-10 Kitaokinuso, Tokushima City	088-664-8121
Ibaraki Office	300-0037	7F Regal Tsuchiura Bldg., 1-16-12 Sakuramachi, Tsuchiura City, Ibaraki Prefecture	029-825-6656	Kyushu Branch	810-0041	7F ND Bldg., 1-4-1 Daimyo, Chuo-ku, Fukuoka City	092-771-4361
Chiba Office	261-0023	25F NTT Makuhari Bldg., 1-6 Nakase, Mihama-ku, Chiba City	043-211-8881	Kumamoto Branch	862-0941	1-7-6 Izumi, Chuo-ku, Kumamoto City	096-364-7134
Yokohama Branch	231-0062	24F Nisseki Yokohama Bldg., 1-1-8 Sakuragi-cho, Naka-ku, Yokohama City	045-683-1050	Miyata Office	823-0016	680-1 Shiromaru, Miyawaka City, Fukuoka Prefecture	0949-33-2602
Nagoya Branch	461-0005	16F Urbannet Nagoya Bldg., 1-1-10 Higashisakura, Higashi-ku, Nagoya City	052-973-4750	Saga Office	841-0031	#101 Sungarden Yarita, 436-1 Yaritamachi Tosu City, Saga Prefecture	0942-84-2350
Toyota Branch	471-0835	1-20 Akebono-cho, Toyota City, Aichi Prefecture	0565-28-1841	Nagasaki Office	850-0027	8F Dejima Asahiseimei Aoki Bldg., 1-14 Dejimamachi, Nagasaki City	095-828-0772
Mikawa Office	448-0011	5-6-4 Tsuiji-cho, Kariya City, Aichi Prefecture	0566-27-0324	Oita Office	870-0033	#402 Matsumoto Bldg., 1-3-22 Chiyomachi, Oita City	097-532-4350
Nagano Office	380-0824	5F Choeidaichi Bldg., 1282-11 Minamiishido-cho, Nagano City	026-228-3820	Miyazaki Office	880-0933	#201 Inoue Bldg., 2189-2 Kusabazaki, Otsubo-cho, Miyazaki City	0985-54-6382
Matsumoto Office	390-0811	2F Orii Bldg., 1-1-2 Chuo, Matsumoto City, Nagano Prefecture	0263-33-7016	Kagoshima Office	890-0046	1F San Laqua Bldg., 2-25-12 Nishida, Kagoshima City	099-256-3662
Shizuoka Office	422-8067	17F-1704 South Pot Shizuoka Bldg., 18-1 Minami-cho, Suruga-ku, Shizuoka City	054-281-3501	Okinawa Office	900-0015	4F Arute Bldg. Naha, 3-15-9 Kumoji, Naha City	098-868-1700
Mie Office	514-0004	2F-B Kasama Bldg., 3-261 Sakaemachi, Tsu City	059-225-3840				
Gifu Office	500-8175	2F Daini-nagazumi Bldg., 1-9 Nagazumi-cho, Gifu City	058-265-8224				
Hokuriku Branch	920-0902	1-6-15 Owari-cho, Kanazawa City	076-261-6147	Singapore Branch	—	315 Outram Road #15-09, Tan Boon Liat Building, Singapore 169074	010-65-62218488
Toyama Office	930-0019	1-10-20 Yayoi-cho, Toyama City	076-441-3371	Hong Kong Branch	—	21F Edinburgh Tower, The Landmark, 15 Queen’s Road Central, Hong Kong	010-852-22898888
Fukui Office	910-0005	4F Fukui Hosokaikan, 3-4-1 Ote, Fukui City	0776-23-2166	Malaysia Branch	—	No.75-2 Jalan SS 23/15, Taman SEA, 47400 Petaling Jaya, Selangor, Malaysia	010-60-3-78055443

\* The blue shading indicates regional headquarters.





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