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The Daicel Group CSR Report 2010

Making Social Contributions through the Dynamism of Chemicals

The Daicel Group CSR Report 2010



The Daicel Group has sustained its **passion for creation** throughout its history.

Behind the Worldwide Recognition for Daicel Group Products Is Its 90-Year History of Innovation—Underpinned by Its Unwavering Passion for Creation.

The Daicel Group has its roots in Dainippon Celluloid Co., Ltd., which was established in 1919 through the merger of eight celluloid producers. Specializing in the manufacture and sales of chemical products, the Daicel Group marked its 90th anniversary in September 2009.

Daicel's history of innovation started with efforts to realize the domestic production of celluloid. And while achieving a series of notable technological developments—such as the domestic production of photographic films, production of acetic acid using methanol and the establishment of Daicel production innovations—the Daicel Group has contributed to the development of society through the provision of advanced chemical products. Today, the Company commands high global market shares for tricetyl cellulose (TAC), chiral columns, polyacetal (POM) and automobile airbag inflators.

The Daicel Group will continue to contribute to the development of society through the creation of innovative materials and products.



Chronology of the Daicel Group —90-Year History of Innovation

The Daicel Group has its roots in Dainippon Celluloid Co., Ltd., which was established in 1919 through the merger of eight celluloid producers. Today, the Group specializes in the manufacture and sales of a wide variety of chemical products.

Since our earliest days, we led the industry in the quality and volume of the celluloid we produce, while engaging in research and development on natural, high-polymer resins, which would eventually replace celluloid. In 1929, we succeeded in the development of acetate plastics, and in 1935, we took a bold step to commercialize cellulose acetate. In doing

so, we decided to produce acetic acid—a raw material of cellulose acetate—in-house from carbide. This decision led to the handling of acetic acid derivatives products as well, and with this significant step we entered the organic chemicals field.

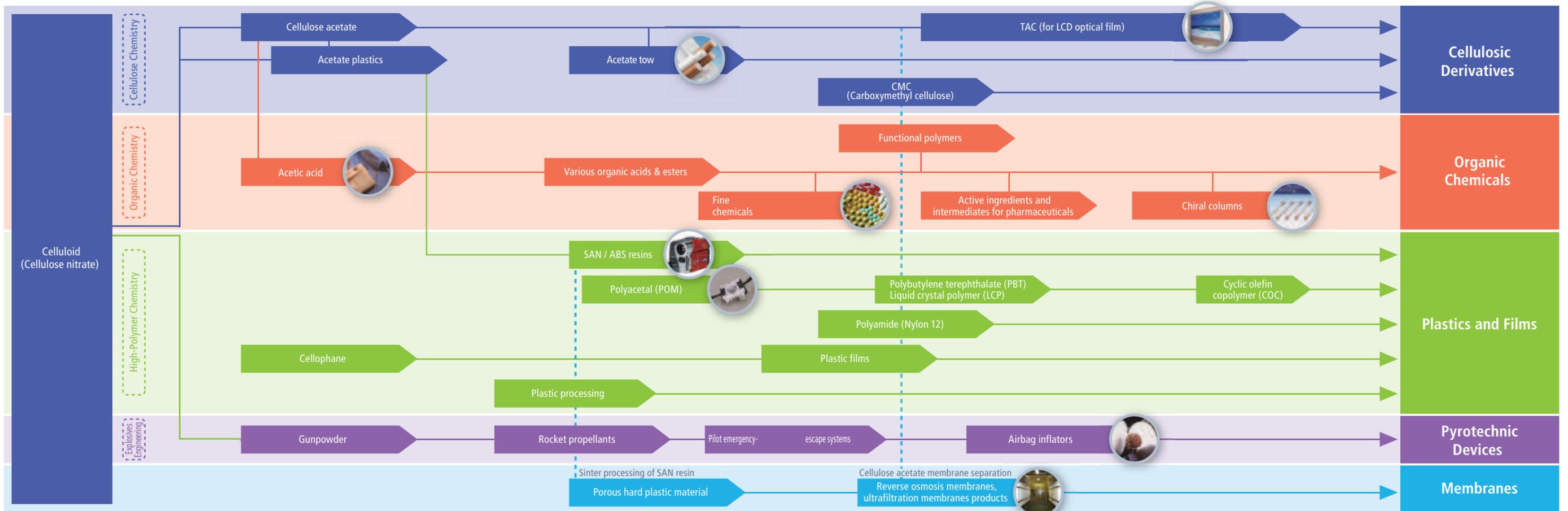
With the emergence of the petrochemical boom in the 1960s, we began participation in a petrochemical complex project, and in 1964, we established Polyplastics Co., Ltd. through a joint venture and, accordingly, launched an engineering plastics business. Meanwhile, ascertaining the fact that celluloid serves as a raw material for gunpowder, we

entered the pyrotechnic devices business that provides gunpowder and other products. This segment eventually bore fruit with the development of automobile airbag inflators.

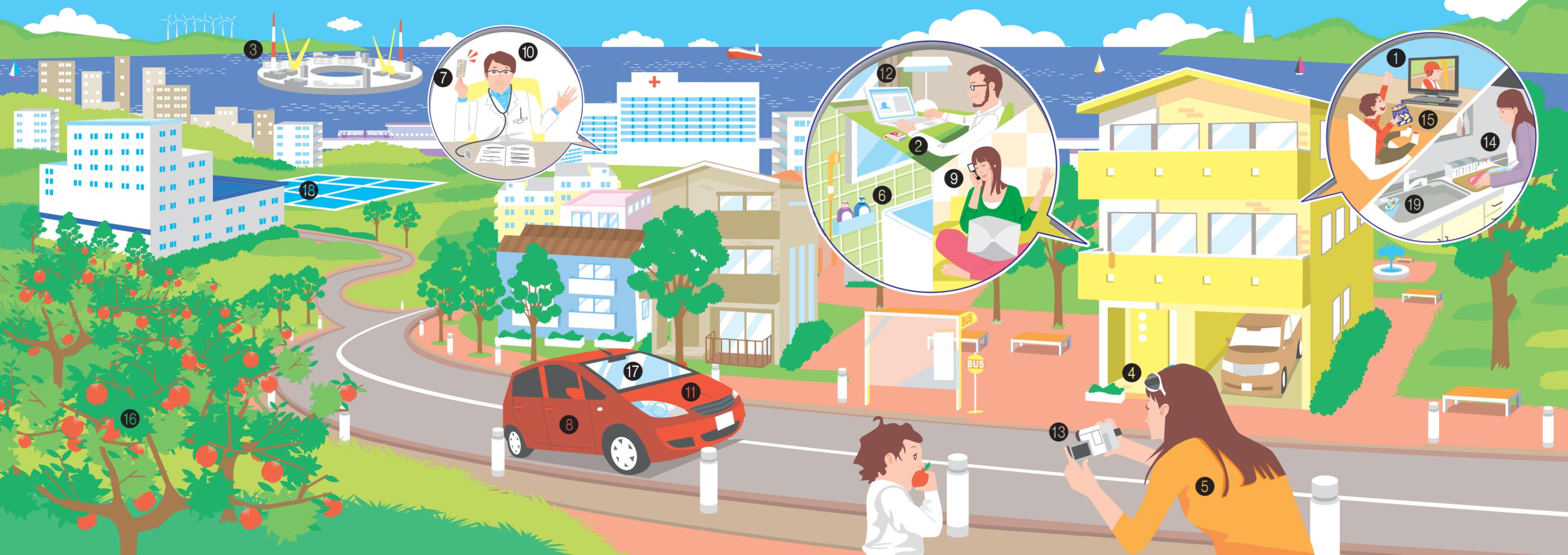
With the onset of the first oil crisis, we strove to promote decreased dependence on petroleum-based raw materials through such means as using methanol produced from natural gas in the manufacture of acetic acid. In recent years, with an eye on the establishment of a sustainable chemical industry, we are increasing the use of bioethanol. In line with such environmental efforts, an ethylamine plant and an ethyl acetate

plant began commercial production in 2007 and 2009, respectively.

Having marked its 90th anniversary, the Daicel Group has established the four flagship businesses of cellulose derivatives, organic chemicals, plastics and films, and pyrotechnic devices. Through these businesses, the Company has attained high global market shares for such products as tricetyl cellulose (TAC) for use as a raw material of films for liquid crystal displays, chiral columns, polyacetal (POM) and automobile airbag inflators. And through the provision of these and many other products, we are contributing to the development of society.



1908–	1920s	1930s	1940s	1950s	1960s	1970s	1980s	1990s	2000 – 2010
<p>History before Establishment of the Company: Sakai Celluloid Company and Japan Celluloid Jinzo Kenshi Co., Ltd. are established.</p> <p>Company establishment: Dainippon Celluloid Company Limited is established in 1919 through merger of eight celluloid producers. Plants are established in Sakai, Kanzaki, Aboshi and Tokyo.</p> <ul style="list-style-type: none"> • Games of the IV Olympiad are held. • The end of the First World War leads to a postwar recession. 	<p>Amid a severe economic climate, the company undertakes research on photographic films as a successor to the celluloid business.</p> <ul style="list-style-type: none"> • The Great Kanto Earthquake strikes (1923). • The crash of the New York Stock Exchange triggers a global depression (1929). 	<p>Fuji Photo Film Co., Ltd. (currently FUJIFILM Corporation) is established and is spun off as a photographic film business. The company begins integrated production of cellulose acetate from its raw material, acetic acid, as part of a research project undertaken soon after the Company's establishment.</p> <ul style="list-style-type: none"> • World War II breaks out (1939). 	<p>The entire plant focuses on production of materials for the war effort, and some plants are damaged. After the war, plants that remain free from damage return to production of civilian goods. The Company overcomes the challenges of designated compensation payments and a crisis involving a call for the breakup of the company.</p> <ul style="list-style-type: none"> • World War II ends (1945). 	<p>The business of acetate tow for cigarette filters begins full-scale production. Cellulose acetate replaces cellulose nitrate as the base for photographic film, which renders film incombustible. Synthetic high-polymer plastics are introduced, and demand for celluloid declines.</p> <ul style="list-style-type: none"> • Japan signs a peace treaty and regains its independence (1951). • TV broadcasting begins (1953). • Japan's first petrochemical complex opens in Iwakuni (1958). 	<p>With the rise of the petrochemical industry, Daicel becomes a member of the Iwakuni-Ohtake petrochemical complex and enters the petrochemical business. The high-polymer business is expanded through the establishment of Polyplastics Co., Ltd.</p> <ul style="list-style-type: none"> • The Japanese economy enters a period of rapid growth. • The Tokaido Bullet Train line opens (1964). • The Tokyo Olympics are held (1964). • The first manned moon landing takes place (1969). 	<p>Excessive competition emerges in the petrochemical industry, resulting in low revenues, and 20% of employees accept an offer of voluntary retirement. The oil crisis dampens economic growth and the cellophane business undergoes reorganization.</p> <ul style="list-style-type: none"> • Expo 70 is held in Japan (1970). • Okinawa is returned to Japanese control (1972). • The first oil crisis occurs (1973). 	<p>The use of non-petroleum-based raw materials is promoted as the manufacture of products using acetic acid from the methanol carbonylation process is expanded. A foundation for the production of functional chemicals and fine chemicals is created. The company enters the automobile airbag inflator business in earnest.</p> <ul style="list-style-type: none"> • The Equal Employment Opportunity Law is enacted (1986). • The Japanese economy enters the "bubble" phase. 	<p>The Responsible Care Initiative is introduced. The company enters the chiral chromatography business in earnest. The development of functional chemicals and fine chemicals is promoted. Domestic production of acetate tow for cigarette filters is increased and offshore production in China is begun.</p> <ul style="list-style-type: none"> • End of the Cold War. • The Great Hanshin Earthquake strikes (1995). 	<p>The Integrated Production Center is completed in the Aboshi Plant. The automobile airbag inflator business is launched internationally, starting in the U.S.A. Cellulose acetate production is begun in China. In Japan, manufacturing facilities for cigarette filter tow and cellulose acetate, along with a circulation fluidized bed boiler, are installed at the Ohtake Plant.</p> <ul style="list-style-type: none"> • Japan and Korea jointly host the World Cup of Soccer (2002). • The Kyoto Protocol comes into force (2005). • Economic growth accelerates in the EU and in the economies of Brazil, Russia, India and China.



1 About the Daicel Group Major Applications of Daicel Group Products —Some Are

around Us and Others Command a High Global Market Share

(Legend)
Main product application — ① LCDs
Segment and product — ● TAC

Many of the Daicel Group products are basic materials, and, as such, the general public may come in contact with them without even knowing it. Here we introduce

finished goods around you that are produced using Daicel Group products and materials.

World's **No. 1**
*Sales share (Daicel estimate)



① LCDs
● TAC



② Cigarette filters
● Acetate tow, Cellulose acetate



③ Civil engineering and oil drilling
● CMC



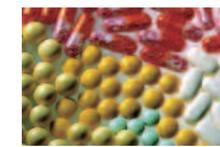
④ Eyeglass frames and ping-pong balls
● Celluloid



⑤ Polyester fibers
● Acetic acid



⑥ Cosmetics, shampoos and conditioners
● 1, 3-BG ● HEC



⑦ Pharmaceuticals
● Ketene derivatives, monochloroacetic acid, amines and pyridines ● CMC



⑧ Automotive paints
● Caprolactone and special epoxy resins



⑨ Printed circuit boards
● Epoxy compounds



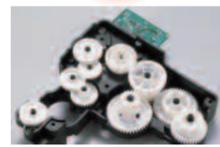
⑩ Pharmaceutical development
● Chiral columns

POM World's **No. 1**
*Production capacity (Daicel estimate)



⑪ Auto parts
● POM, PBT, PPS, SAN and ABS

POM World's **No. 1**
*Production capacity (Daicel estimate)



⑫ Office equipment and electronic components
● POM, PBT, LCP and PPS



⑬ Electrical equipment, office equipment and telecommunication devices
● SAN, ABS and polyamide resins



⑭ Food trays
● Styrene sheets and finished goods



⑮ Packaging and films for snacks and pocket warmers
● Packaging films



⑯ Agricultural materials
● Foamed polyethylene netting



⑰ Airbag systems
● Inflators



⑱ Water filtration and wastewater treatment
● Reverse osmosis membranes and ultrafiltration membranes



⑲ Household articles
● Improved sink-corner strainer

● Cellulosic derivatives
● Organic chemicals
● Plastics and films
● Pyrotechnic devices
● Others

1 About the Daicel Group Contents

1 About the Daicel Group

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The Daicel Group CSR Report 2010

Daicel Chemical Industries, Ltd. has published an annual Environmental and Safety Report since fiscal 2000 (ended March 31, 2001). Each of these reports served as a compilation of the Company's Responsible Care Initiatives, focusing on the reporting of environmental and safety activities implemented each fiscal year. From fiscal 2007, the scope of reporting has been expanded to include social activities, and the report title was changed accordingly to Environmental, Safety and Social Report. Furthermore, from last fiscal year, the subtitle, "Carrying out CSR Initiatives," has been added, and the reporting on the Company's CSR Initiatives has been enhanced.

From this report onward, we will use the new title, The Daicel Group CSR Report. We published *The Daicel Group CSR Report 2010*—and will publish all future CSR reports—with due consideration given to reader-friendliness, understandability and proactive disclosure.

This report is primarily a compilation of the Daicel Group's activities in the areas of social contribution, environmental preservation and safety.

Also, in order to ensure the reliability of its reports, Daicel has submitted them to the Japan Responsible Care Council (JRCC) for third-party verification annually since 2004.

*CSR Activities of Polyplastics Co., Ltd.
Details of Group company Polyplastics' CSR activities are provided on their website at:

 <http://www.polyplastics.com/en/company/csr/index.vm>

1 About the Daicel Group A Message from the Chairman of the Board



Daicel Chemical Industries, Ltd. marked its 90th anniversary in September 2009. In the past, some argued that the standard corporate lifespan is around 30 years. Daicel has grown over a period three times longer than that standard lifespan since its founding in 1919. Such a feat has been possible only because Daicel has continued to face up to the challenge of creation and provide products and services that are valuable to society at large. We will keep embracing such an attitude in our future endeavors.

The past year has been an extremely difficult period due to the negative impact of the global recession that started in the second half of 2008. Fortunately, the Daicel Group was able to achieve better-than-expected results, supported by a mild recovery in demand and by all Group employees joining forces to reduce costs. Still, considering everyday reports on the state of the world, it is certain that economic uncertainties persist, and no optimism is warranted on the future course of the global economy. Thus, we must maintain a corporate culture that promotes innovation in every facet of our activities. In this way, we will work to establish a firm corporate structure immune to the vagaries of economic conditions.

Meanwhile, global warming has become a worldwide environmental concern. The Daicel Group has undertaken several initiatives aimed at reducing the greenhouse gases that it generates through its business operations. However, the expectations of society are still strong, indeed heightening even more, for all industries to reduce greenhouse gas emissions. Taking such expectations seriously, we must not be satisfied with merely promoting more efficient energy use. We must keep contributing to the realization of a low-carbon society through the provision of products and services

that help reduce energy use in society.

At the Daicel Group, each member company practices its own code of conduct with particular emphasis placed on its "Responsible Care" and "Corporate Ethics" Initiatives, and this is synonymous with implementing CSR activities. In order for us to keep fulfilling our social responsibility, we must prioritize safety- and quality-related initiatives. At the same time, all Group employees must conduct their daily operations with a strong sense of compliance and integrity. The Daicel Group aims to remain a corporation that is trusted by society. Furthermore, we will always strive to exist as an attractive, people- and environment-friendly corporate group that continues to grow together with society. To this end, we will further accelerate and upgrade our CSR activities.

This report outlines the Daicel Group's CSR activities during fiscal 2009. I invite the reader to become more informed about the Group's CSR activities, and we look forward to receiving your candid comments and advice.

Daisuke Ogawa
Chairman of the Board

The Daicel Group's Basic Approach to CSR and CSR Initiatives

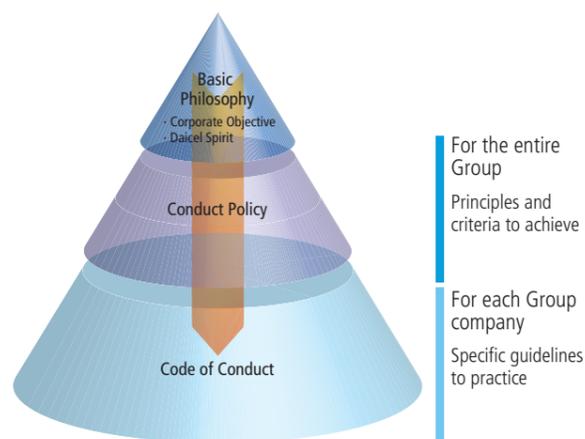
Our Basic Philosophy—"Ceaseless Approach to Creation"—represents the ideals of utmost importance held by the Daicel Group. Keeping to the essence of this philosophy, the Daicel Group formulated a Corporate Objective and the "Daicel Spirit" under the Basic Philosophy in April 2010. The Corporate Objective can be interpreted as the reason for the Daicel Group's existence, while the Daicel Spirit can be perceived as a sense of values shared within the Group.

To enable ourselves to conduct daily operations in accordance with the Basic Philosophy, the Daicel Group has formulated the Daicel Group Conduct Policy and the Daicel Code of Conduct. The Daicel Group Conduct Policy serves as the guidelines that all Group members must understand, base their proactive thinking on and practice through their daily operations. The Daicel Code of Conduct gives shape to the Daicel Group Conduct Policy and clearly defines the code for members of each division in carrying out corporate affairs.

The Daicel Group Conduct Policy and the Daicel Code of Conduct have been formulated to cover the requirements of CSR activities.

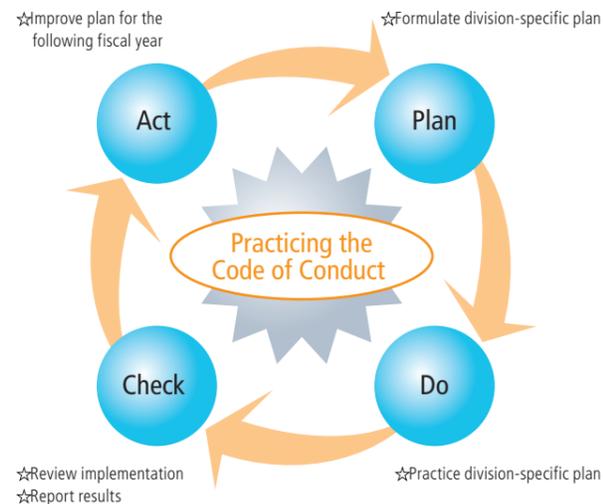
The Daicel Group focuses on Corporate Ethics Initiatives (see page 28 for details), such as the securing of compliance with laws and regulations—a prerequisite for any going concern—and on the Responsible Care Initiatives (see page 31 for details) that is an integral part of activities aimed at creating materials and products. At Daicel, putting into practice the Daicel Group Conduct Policy and the Daicel Code of Conduct constitutes CSR Initiatives. Also, all Daicel Group employees are expected to participate in our CSR Initiatives. In other words, our CSR Initiatives are not to be promoted only by some particular individuals or organizations within the Group.

Basic Philosophy, Conduct Policy and Code of Conduct



CSR Initiatives implemented within Daicel each year are reported and discussed at the year-end top management review to identify issues concerning these initiatives. Based on the report and discussion, new priority CSR Initiatives are established. Each division then formulates its own action plans at the beginning of each fiscal year in line with those priority CSR Initiatives (Plan). Following the implementation of these action plans (Do), divisions review the implementation of their action plans (Check). Finally, they apply the outcome of such review in their action plans for the next fiscal year (Act). While ensuring the proper functioning of this Plan-Do-Check-Act (PDCA) cycle, each division appoints a CSR Promotion Chief, and it promotes various measures, such as providing educational and training programs on CSR subjects.

To make the practice of the Daicel Code of Conduct a goal for every member, each division, or even smaller business unit, creates specific behavioral guidelines that meet its business descriptions at the beginning of each fiscal year. At the end of every fiscal year, their daily business operations are reviewed based on the specific behavioral guidelines.



In addition, utilizing such Companywide functions as the Intranet and meetings of CSR Promotion Chiefs, we work to share information regarding social trends, revision of laws and regulations and educational and training materials, while promoting the mutual reporting of CSR Initiatives.

The Daicel Group Conduct Policy and the Daicel Code of Conduct are listed on Daicel's website.

The Daicel Group Conduct Policy:

<http://www.daicel.co.jp/profile/index2.html> (Japanese language only)

The Daicel Code of Conduct:

<http://www.daicel.co.jp/profile/index8-2.html> (Japanese language only)

Basic Philosophy

1. Corporate Objective
We contribute to a better quality of life by developing and manufacturing products that society needs and values.
2. The Daicel Spirit
 - (1) Integrity and Ceaseless Efforts
 - (2) Focus on Creation of New Value (*Monozukuri*)
 - (3) Respect for Individuality and Achievements

Conduct Policy

We, the Daicel Group, have established the following Conduct Policy in order to realize our Basic Philosophy. Every member of the Daicel Group shall fully understand and voluntarily consider this Conduct Policy and shall put it into practice in a tangible way through their daily activities.

1. We shall not only comply with all laws and regulations but also act with high ethical standards and sound judgment.
2. We shall contribute to the development of society as good corporate citizens.
3. We shall offer safe, high-quality products and services that satisfy and gain the trust of our customers.
4. We shall contribute to the development of local communities by complying with international rules and each country's laws and regulations and by respecting local cultures and customs.
5. We shall willingly and justly disclose reliable corporate information.
6. We shall conduct honest trade in accordance with the basic principles of fair and free competition.
7. We shall work positively to conserve the natural environment and to ensure safety.
8. We shall properly manage corporate assets and information.
9. We shall respect the diversity, personality and individuality of every member of the Daicel Group and shall maintain a healthy and comfortable work environment that is free from discrimination and harassment.

We carry out the Daicel Group Conduct Policy and the Daicel Code of Conduct with the belief that we can further enhance our corporate value and become an attractive corporate group for stakeholders by making wider contributions to social development.

The truth is, however, we can not fulfill our social responsibility alone, as our business operations and CSR Initiatives inevitably involve suppliers. Recognizing this fact, the Raw Material Purchasing Center in charge of the purchase of raw materials and the Engineering Center Procurement Group responsible for the purchase of machinery have worked together to formulate the Basic Purchasing Policy. This Basic Purchasing Policy helps the suppliers who provide us with raw materials, equipment and services in the supply chain to better understand Daicel's approach to purchasing, while encouraging them to cooperate with us in fulfilling our social responsibility throughout our supply chain. The Basic Purchasing Policy has been formulated in accordance with the Daicel Group Conduct Policy.

The Basic Purchasing Policy is listed on Daicel's website.

<http://www.daicel.co.jp/purchase/index.html> (Japanese language only)

Basic Purchasing Policy

Fair & Rational Transactions

- We provide fair participation opportunities for transactions.
- Our overall considerations are matters of quality, price, stability of supply, technological development capability, environmental consideration and efforts to ensure safety. We consider these aspects in a comprehensive manner based on their economic rationality.
- We conduct our purchasing activities in an open manner with no regard for previous dealings or for whether the provider is located inside or outside Japan.

Legal Compliance, Confidentiality and Information Disclosure

- Our business operations shall be based on legal compliance as well as corporate ethics.
- We strictly protect confidential information gained through businesses, and we never infringe third parties' intellectual property rights.

Establishing a Relationship of Trust

- We strive to establish better partnerships with our suppliers by pursuing mutual economic benefit.

Initiatives based on CSR perspectives

- We promote our CSR Initiatives with the aim of enhancing corporate value for both our suppliers and us.

1 About the Daicel Group

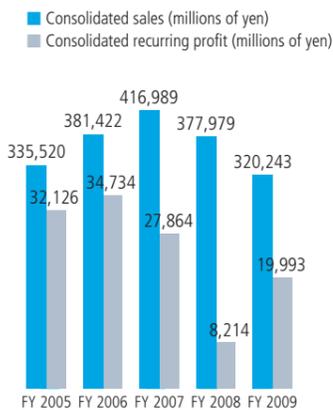
Outline of the Daicel Group

The Daicel Group includes Daicel Chemical Industries, Ltd., its 56 subsidiaries, and 13 affiliated companies. The Company's primary business is the manufacture and sales of cellulosic derivatives, organic chemicals, plastics and films, pyrotechnic devices and other products. The business segments of Daicel Chemical Industries, Ltd., its subsidiaries, and affiliated companies are shown below.

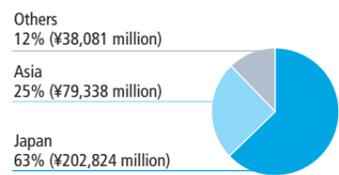
Daicel Chemical Industries, Ltd. (as of March 31, 2010)

Incorporated: September 8, 1919
 Paid-In Capital: ¥36,275,440,089
 Number of shares issued: 364,942,682

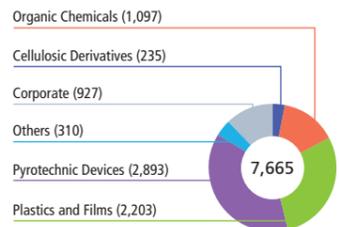
Sales and Recurring Profit



Sales by Region



Number of Employees by Segment



List of Products and Group Companies by Segment

Principal Products	Share of Total Consolidated Sales by Business Segment	Principal Group Companies
Cellulosic Derivatives Cellulose acetate, acetate tow for cigarette filters and CMC	24%	Domestic: Daicel Chemical Industries, Ltd. / Daicel FineChem Ltd. Overseas: Xi'an Huida Chemical Industries Co., Ltd. Ningbo Da-An Chemical Industries Co., Ltd.
Organic Chemicals Acetic acid and its derivatives, caprolactone derivatives, epoxy compounds, photoresist materials for semiconductors and chiral columns	23%	Domestic: Daicel Chemical Industries, Ltd. / Kyodo Sakusan Co., Ltd. / Dainichi Chemical Corp. Overseas: Chiral Technologies, Inc. Chiral Technologies Europe S.A.S. Daicel Chiral Technologies (India) Private Ltd. Daicel Chiral Technologies (China) Co., Ltd.
Plastics and Films POM, PBT resins, SAN/ABS resins, engineering plastic alloys, various molded products based on synthetic resins	35%	Domestic: Polyplastics Co., Ltd. / Daicel Polymer Ltd. / Daicel Pack Systems, Ltd. / Daicel Value Coating Ltd. / Daicel-Evonik Ltd. / Daicel Novafoam Ltd. Overseas: Shanghai Daicel Polymers, Ltd. Daicel Chemical (Asia) Pte. Ltd.
Pyrotechnic Devices Automobile airbag inflators, emergency-escape systems for aircraft crew and gunpowder	16%	Domestic: Daicel Chemical Industries, Ltd. / Daicel Safety Systems Inc. / Japan Shotshell Ltd. Overseas: Daicel Safety Systems America, LLC Daicel Safety Systems (Thailand) Co., Ltd. Daicel Safety Systems Europe Sp. z o.o. Daicel Safety Systems (Jiangsu) Co., Ltd.
Others Membrane separation modules for water treatment, transportation & storage services	2%	Domestic: Daicel Chemical Industries, Ltd. / Daicel Membrane-Systems Ltd. / Daicel Aboshi Sangyo Co., Ltd. / Daicel Ohtake Sangyo Co., Ltd. / Daicel Arai Chemical, Ltd. / Daicel Logistics Service Co., Ltd. Overseas: Daicel Chemical (China) Investment Co., Ltd.



Global Network

The Daicel Group has continued its global expansion since Daicel (U.S.A.), Inc., our first international affiliate, was established in Los Angeles, U.S.A. in 1984. The Group now lists 37 international affiliates. For the fiscal year ended March 31, 2010, international sales totaled ¥117,400 million, which represented a large percentage—36.7%—of total consolidated sales. Clearly, our international business operations are increasing in importance.

Principal International Affiliates of the Daicel Group

Germany

- Daicel (Europa) GmbH: Purchase and sales of products in the European market
- Topas Advanced Polymers GmbH: Production, sales and research on cyclic olefin copolymer

Poland

- Daicel Safety Systems Europe Sp. z o.o.: Manufacture and sales of automobile airbag inflators

France

- Chiral Technologies Europe S.A.S.: Sales of chiral columns and provision of chromatographic enantioselective separation services on consignment

India

- Polyplastics Marketing (India) Private Ltd.: Sales of engineering plastic products
- Daicel Chiral Technologies (India) Pvt. Ltd.: Sales of chiral columns and technical services for chiral businesses

Singapore

- Daicel Chemical (Asia) Pte. Ltd.: Purchase and sales of products in Asian markets
- Polyplastics Asia Pacific Singapore Pte. Ltd.: Sales of engineering plastics

Malaysia

- Polyplastics Asia Pacific Sdn. Bhd.: Manufacture and sales of engineering plastics

Thailand

- Daicel Safety Systems (Thailand) Co., Ltd.: Manufacture and sales of automobile airbag inflators
- Polyplastics Marketing (T) Ltd.: Sales of engineering plastics

Taiwan

- Polyplastics Taiwan Co., Ltd.: Manufacture and sales of engineering plastics

Hong Kong

- Daicel Polymer (Hong Kong) Ltd.: Sales of flame-resistant ABS, ABS alloys and other products
- Polyplastics (China) Ltd.: Sales of engineering plastics

Guangxi, China

- Daicel Nanning Food Ingredients Co., Ltd.: Manufacture and sales of sorbic acid and potassium sorbate

Zhejiang, China

- Ningbo Da-An Chemical Industries Co., Ltd.: Manufacture and sales of cellulose acetate and acetic anhydride

Shanghai, China

- Daicel Chemical (China) Investment Co., Ltd.: Hub of the production and sales organization in China
- Shanghai Daicel Polymers, Ltd.: Manufacture and sales of flame-resistant ABS, ABS alloys, etc.
- Daicel Trading (Shanghai) Ltd.: Purchase and sales of products in the Chinese market
- Polyplastics Trading (Shanghai) Ltd.: Sales of engineering plastics
- Polyplastics (Shanghai) Ltd.: Sales of engineering plastics
- Daicel Chiral Technologies (China) Co., Ltd.: Sales of chiral columns and technical services for chiral businesses
- Shanghai Da-shen Cellulose Plastics Co., Ltd.: Production and sales of celluloid and acetate plastic sheet

Jiangsu Province, China

- Daicel Safety Systems (Jiangsu) Co., Ltd.: Manufacture and sales of automobile airbag inflators
- PTM Engineering Plastics (Nantong) Co., Ltd.: Manufacture and sales of engineering plastics

Shaanxi Province, China

- Xi'an Huida Chemical Industries Co., Ltd.: Manufacture and sales of acetate tow for cigarette filters

Kentucky, U.S.A.

- Daicel Safety Systems America, LLC: Manufacture and sales of automobile airbag inflators
- Topas Advanced Polymers, Inc.: Sales of cyclic olefin copolymer

Pennsylvania, U.S.A.

- Chiral Technologies, Inc.: Sales of chiral columns and technical services for chiral businesses

New Jersey, U.S.A.

- Daicel (U.S.A.), Inc.: Purchase and sales of products in the U.S. market

Principal Domestic Locations

- Osaka Head Office:** Mainichi Intecio, 4-5, Umeda 3-chome, Kita-ku, Osaka 530-0001
- Tokyo Head Office:** JR Shinagawa East Bldg., 2-18-1, Konan, Minato-ku, Tokyo 108-8230
- Himeji Technology Head Office:** 1239, Shinzaike, Aboshi-ku, Himeji-shi, Hyogo 671-1281
Himeji Production Sector / Aboshi Plant: 1239, Shinzaike, Aboshi-ku, Himeji-shi, Hyogo 671-1281
 Principal products: Acetic acid, cellulose acetate, acetate tow, CMC, HEC
- Himeji Production Sector / Hirohata Plant:** 12, Fuji-cho, Hirohata-ku, Himeji-shi, Hyogo 671-1123
 Principal products: PS sheet, SAN resins
- Harima Plant:** 805, Umaba, Ibogawa-cho, Tatsuno-shi, Hyogo 671-1681
 Principal products: Automobile airbag inflators, pilot emergency-escape systems, rocket propellants, gunpowder
- Central Research Center:** 1239, Shinzaike, Aboshi-ku, Himeji-shi, Hyogo 671-1283
- Nagoya Sales Office:** Horiuchi Bldg., 25-9, Meieki 3-chome, Nakamura-ku, Nagoya-shi, Aichi 450-0002
- Fukuoka Office:** Hakata Eki Minami MT Bldg., 8-12, Hakata Eki Minami 1-chome, Hakata-ku, Fukuoka-shi, Fukuoka 812-0016
- Kanzaki Plant:** 12-1, Kanzaki-cho, Amagasaki-shi, Hyogo 661-0964
 Principal products: Packaging films, adhesive films
- Arai Plant:** 1-1, Shinko-cho, Myoko-shi, Niigata 944-8550
 Principal products: Ketene derivatives, active ingredients and intermediates for pharmaceuticals and agrochemicals, chiral columns, synthetic resin emulsions
- Ohtake Plant:** 1-4, Higashisakae 2-chome, Otake-shi, Hiroshima 739-0695
 Principal products: Ethyl acetate, 1,3-butylene glycol, butyl acetate, caprolactone, acetate tow, cellulose acetate
- H.R. Training Center:** 14-1, Kouto 3-chome, Kamigori-cho, Akou-gun, Hyogo 678-1205
- Polyplastics Co., Ltd. / Fuji Plant:** 973, Miyajima, Fijii-shi, Shizuoka 416-8533
 Principal products: POM, PBT, LCP

2 Focusing on Creation of New Value

In this special feature, we will introduce various initiatives the Daicel Group has taken to help solve issues facing society in accordance with the essence of the "Daicel Spirit," which is a sense of values shared among all Daicel Group members. We will focus in particular on four matters of the highest importance: (1) productivity; (2) skill transfer and technician training; (3) safety and quality; and (4) the environment.

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1 Productivity

Companywide Production Innovations

—10-Year History of Production Innovations and FY2009 Initiatives



Himeji Production Sector / Aboshi Plant

The Aboshi Plant at the Himeji Production Sector has served as the Company's flagship plant for over a century, since its opening in 1908. Today, the Aboshi Plant supplies acetic acid, cellulose acetate, acetate tow and other raw materials for use in various finished products that now play an integral role in modern daily life.



comment

Daily Improvements over the Past 10 Years Led to the Reinforcement of Our Foundation for Safe, Stable Production Operations.

Hidetoshi Kozono
General Manager, Production Innovation Center,
Daicel Chemical Industries, Ltd.



Daicel has continued its production innovations as a Companywide project over the past 10 years. The outcome of our previous initiatives—namely, upgraded production foundation and stabilized and standardized production processes—has been incorporated into our Intellectual and Integrated Production System. This system provides a framework that obviates the need to turn back to previous processes.

In our daily production activities, we work to identify new irregularities, and even subtle changes, at an early stage. Identified irregularities and changes are analyzed to determine their impact on safety, stability, quality and costs, using an operational standardization operability sheet. Through such analytic processes, we strive to cultivate new expertise, while adding such know-how to our work standards manuals, technical standards manuals and actual operational systems. In this way, our production operations are improved on a daily basis. We can proudly say that by continuing production innovations we are making significant contributions to Daicel's efforts in constantly reinforcing the foundation for safe and stable production activities.

Production Innovations Established through Volunteer Activities and Top Management's Bold Decision

The Daicel Group began its production innovations in response to both external and internal factors. External factors included issues that needed to be addressed urgently to survive international competition, such as establishing a basic cost structure resilient to the yen's appreciation and building the production structure required to produce high-quality products. Internal factors included the emergency issue of promoting the inter-generation transfer of skills in line with the fact that many of the Company's veteran operators were approaching their retirement age.

The Company's Aboshi Plant, in particular, faced these issues in the mid-1990s and was forced into the position of solving them quickly, all at the same time. And in solving these issues, the Aboshi Plant had to implement bold initiatives that went beyond its conventionally adopted measures.

In general, our chemical plants at that time were feeling that they had reached their limit in enhancing productivity, having completed a round of cost-reduction efforts and improvement activities. In addition, operations of these chemical plants at the time were based on a demerit system and the notion that it is a given requirement to always conduct stable operations. Consequently, many plant workers left their jobs, and the scale of the plant workforce contracted. These conditions were also attributable to a sense of uncertainty regarding our production technologies. Furthermore, as each of our chemical plants had promoted independent optimization and nurtured their individual plant cultures, these plants had come to an almost unanimous conclusion that it would be extremely difficult to implement further innovations.

At the Aboshi Plant around the same time, newly appointed section leaders in production frontlines got together and started to have serious discussions about the future of their plants. They started such discussions voluntarily.

Proposals made through these discussions effectively overlapped with the passion of the Company's top management at the time in strengthening the foundation of the creation of

Next-Generation Chemical Plant Project: Major Achievements

■ Stable production, quality improvement, cost reductions, higher production volume, threefold increase in productivity per employee, 20% reduction in overall costs, etc.			Establishment of a supply chain involving 23 countries
(1) Workload	Down 90%	Stabilization and improvement of foundation, facility management system	
(2) Scope of monitoring per employee	3x	Advanced operational support system	
(3) Number of alarms	Down 90%	Alarm aggregation function	
(4) Startup period	Down 50%+	Mild Shutdown (MSD) and Emergency Shutdown (ESD) systems	
(5) Product switching time and workload	Down 50%+	Irregular operation automation system	
(6) Number of control units	Down 80%	Single window operation system	Crossover to all plants
■ Benefits of standardization			
(1) Standardization of know-how	Millions of cases/plant	General operability study method Hands-on Operation Training Center	Business innovation from production to sales and distribution
(2) Simplification of software	Streamlined to 40 icons/plant	System-based methods/Intellectual and Integrated Production System	

1 Productivity

materials and products. As a result, the Daicel Group launched its Next-Generation Chemical Plant Project, dubbed the "R21 Project," which is the very origin of its production innovation initiatives.

Through initiatives under its R21 Project, the Daicel Group has managed to accomplish tangible achievements, including cutting overall costs by 20%, realizing a threefold increase in productivity per employee and codifying the advanced skills of its veteran operators. Furthermore, the benefits of the R21 Projects are expanding, enabling the Company to establish a supply chain involving other global companies and covering 23 countries, spread the project throughout its production network and promote innovation in production, distribution and sales processes. (For details of the Daicel Production Innovation, please refer to *Environmental, Safety and Social Report 2009*.)

10-Year History of Production Innovations

The Aboshi Plant launched the R21 Project in 1997. Following this, Daicel launched its Production Innovation Project to promote production innovation Companywide.

Through Production Innovation Project I, launched in 1999, the Company formulated a master plan for future production innovations. Based on this master plan, from 2000, the Company focused on upgrading and stabilizing its production foundation through Production Innovation Project II, while advancing operational standardization and systemization and intellectual integration through Production Innovation Project III. From 2005 to 2006, we established the Intellectual and Integrated Production System at the Aboshi Plant, the Ohtake Plant and the Arai Plant. Throughout these years, the Company has placed particular emphasis on the strengthening of maintenance operations with the aim of eradicating troubles in production processes.

The Company's next step was to educate its employees on operational processes that have been standardized and systemized through these production innovation projects. The Company accordingly launched an Operation Training Center Project, which led to the establishment of the current Operation Training Center. At the same time, through the promotion of stable plant operations and the consolidation of production information, a newly formed Informatization Action Team built a supply chain that involved other global manufacturers. These activities have been taken over by the Business Innovation Project in the areas of

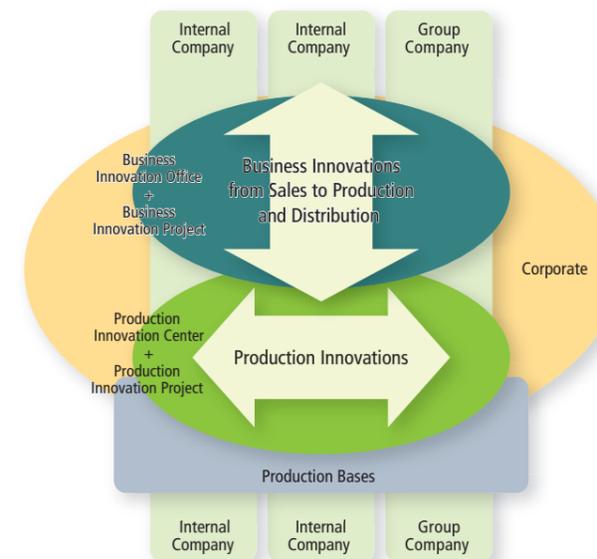
production, distribution and sales, and through this project we have reestablished our enterprise resource planning (ERP) system.

Also, in order to expand the scope of these projects and activities to Group and affiliate companies, the Company has begun Intelligent Production Support Consulting based on its accumulated knowledge and expertise. From 2006, through the MSD Production Innovation Project, the Company introduced the Toyota Production System (TPS) at its assembling and processing plants. At present, we are promoting Production Innovation Project IV as a means of facilitating R&D activities and product commercialization.

Outline of Organizations in Production Innovations

Daicel adopted an internal company system in 2002. For each of its internal companies, Daicel has worked to strengthen processes relating to production, distribution and sales. However, a plant often belongs to several internal companies. Reflecting on such a structural complexity, the Company has organized its production innovation activities, which must spearhead all plants, through the Production Innovation Center and the Production Innovation Project. Plans for production innovation activities are formulated from the perspective of comprehensive optimization, and based on these plans we are tackling the upgrading of our production mechanisms.

By effectively coordinating "horizontal" production innovations with "vertical" business innovations, the Company makes it possible to provide high-quality products with stability, thereby responding to the trust of its customers.



Production Innovations Project Procedure

Through the Production Innovation Project, the Company has held a camp every month since 1999, and all project members participate in these camps to assess the progress of the project following the Check-Act-Plan-Do (CAPD) cycle* from the perspective of comprehensive optimization. These camps require a two-days and one-night or three-days and two-night stay to allow all participating members to engage in thorough discussions and reach conclusions. Based on these discussions and conclusions, they formulate the next action plans. Once they return to their respective plants, each plant simultaneously starts implementing those action plans. Themes for discussions to be held at each camp are presented by



each participant, and these themes are selected from the areas of safety, quality, delivery and costs. The priority in these themes is determined in line with the degree of their importance for the entire Company, and discussions at the camps follow this priority. Results of these camps are reported to the Company's top management if deemed necessary.

*C : CHECK
A : ACTION
P : PLAN
D : DO

Through the Production Innovation Project, Daicel prioritizes the "Check" function to identify issues first, using the standards common to the entire Company.

Aiming for Companywide Optimization

- All project members participate in monthly camps to review related activities together.
- The Company establishes the Production Innovation Center, categorizing its production technologies into the two fields of production and process innovation.
- The Production Innovation Project is composed of a Companywide project and a plant innovation project.

Making Progress in Stages

- Participants have increased gradually from Project I to Project IV. The Production Innovation Project started out with participants mainly from production and facility management divisions but now includes staff from headquarters and R&D divisions.
- The Production Innovation Project is linked with the Business Innovation Project. Through collaboration, the scope of innovation has expanded to include order reception, procurement, planning, shipment and distribution.

Crossover to Plants and Group and Affiliate Companies

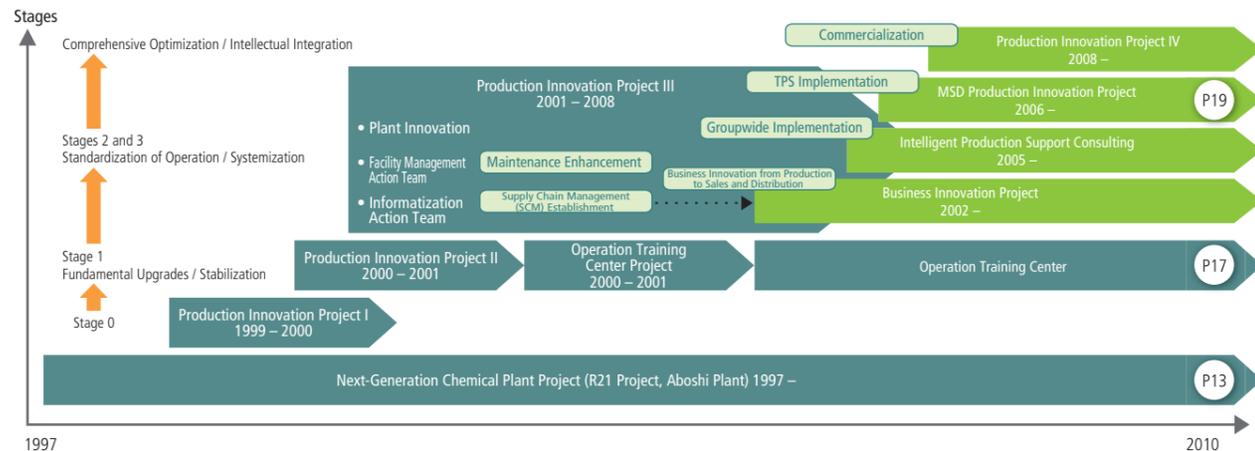
The Company is spreading the production innovations that it realized at the Aboshi Plant to other plants and Group companies. Aiming to transform all of its plants into ideal production bases, the Company is implementing various initiatives.

	Plant	Major Initiatives
Innovation in Process	Aboshi Plant	Next-Generation Chemical Plant Project, supply chain, mother plant for production innovations, energy-optimized operations system
	Ohtake Plant	Next-Generation Chemical Plant Project, integration by production area, integration of back-office work, energy-optimized operations system
	Arai Plant	R&D plant, integration by production area, introduction of personnel rotation system, energy-optimized operations system
	Polyplastics Co., Ltd./Fuji Plant	Next-Generation Chemical Plant Project, engineering plastic mother plant, energy-optimized operations system
	Hirohata Plant	Fundamental upgrades, stabilization, productivity enhancement
	Kanzaki Plant	Fundamental upgrades, stabilization, productivity enhancement
Innovation in assembling and processing	Harima Plant	Assembly and processing-type mother plant, production innovations based on Toyota Production System

In an effort to spread our production innovations to other companies, we have promoted Intelligent Production Support Consulting for Daikin Industries, Ltd., Toyobo Co., Ltd., Zeon Corporation, Mitsui Chemicals, Inc. and Mitsubishi Rayon Co., Ltd. These companies have adopted Daicel's production innovation method.

More recently, in August 2009, the Company started a Production Innovation Pilot Survey using the Daicel Production Innovation method at Mitsubishi Chemical Corporation's Yokkaichi Works. This survey was conducted as the first collaborative step with Japan Management Association (JMA).

Development of Companywide Production Innovations



comment

Workplace Creation Based on Rules Common to the Entire Company

Naohide Hakushi
General Manager, Production Management,
Organic Chemical Products Company,
Daicel Chemical Industries, Ltd.



Around 1997, I was involved with the manufacture of cellulose. It was then that I was first engaged in production innovation activities. In the early days of production innovation activities, employees involved with this endeavor had some difficulties in just communicating with each other, because each production section used its own work processes, and even equipment and facility names. These differences resulted from the individual optimization that was promoted within each production section. So, through the first stage of production innovations, which was centered on the upgrading of the production foundation, we worked to standardize such differences from the perspective of comprehensive optimization. Naturally, newly standardized processes and names often differed from those that each production section was familiar with. Therefore, we had to strengthen communication with other production sections and sites. In fact, our efforts in upgrading the production foundation were closely linked with the creation of materials and products. We soon understood that our efforts in this regard had significantly beneficial effects on the safety, quality and costs of our operations. The Aboshi Plant as we see today has been made possible through our serious, easy-to-approach undertaking toward establishing a plant that is friendly even to new employees.

Stage Zero (Affirmation of Necessity)

Reassessing Current Conditions

At this stage, efforts began with analysis of the workload of operators during regular and irregular operations and continued with the thorough examination of how work was performed. These analyses and examinations are conducted in line with the standards common to the entire Company. This stage ends with the assignment of responsibility to middle management (product line managers) to identify areas of waste and loss at the plant. At the same time, a master plan to realize an ideal production site is formulated.

Stage One (Upgrading and Stabilization of Foundation)

Upgrading Foundation / Eliminating Waste and Loss

Identified areas of waste and loss at the plant are completely eliminated in stage one. In reducing the workload of operators, Daicel pays particular attention to: (1) building new systems (jointly by the production and facility management divisions); (2) starting with the improvement of work methods instead of facilities (efforts that do not require investment are prioritized); and (3) fostering logical thinking through the identification of issues and the analysis of true factors.

Stages Two and Three (Standardization and Systemization of Operation)

General Operability Studies Codify the Knowledge of Veteran Operators

At this stage, we tackle the standardization of both regular and irregular operations, focusing on the decision-making processes used by operators.

Single Window Operations as a Framework that Prevents Non-Standard Methods

At stage three, after areas of waste and loss identified at all plants were thoroughly eliminated in work and decision-making processes in stage two, IT is leveraged to create an Intellectual and Integrated Production System that prevents operators from using methods outside the standardized workflows and operational procedures.

1 Productivity

<Topics>

Principal FY2009 Initiatives



During fiscal 2009, the Company promoted its production innovations with the two major themes of “zero-based thinking” and “establishing a more flexible production framework that can respond to fluctuating demand.” We decided on these themes to better prepare ourselves for the uncertainties of future demand and social changes, attributable to the ongoing global economic slowdown, the spread of the new influenza virus and many other incidents.

In this section, we provide an overview of our “earnings improvement plan” and “countermeasures for the new influenza outbreak.”

Earnings Improvement Plan: Emergency Measure in Response to the Current Global Recession

At the beginning of 2009, Daicel formulated an Earnings Improvement Plan as an emergency measure aimed at responding to the current global recession. Following the formulation, the Company immediately started implementing the plan with the goal of maintaining operational safety and product quality, reviewing its production processes, facilities and inventory management and improving its break-even point.

With the themes of “zero-based thinking” and “establishing a more flexible production framework that can respond to fluctuating demand” in mind, the entire Company undertook more than 1,000 projects to enhance its earnings power. First, we classified our processes into two categories: those associated with operational and maintenance costs that fluctuate in proportion with our production volume, and those associated with fixed operational and maintenance costs (attributable to statutory inspection, etc.). For each category, we worked to establish an optimal cost structure. As a result, we have been able to conduct high-quality maintenance operations at minimum cost, while building a flexible production structure that can effectively respond to demand fluctuations. Furthermore, we reviewed our processes for managing parts used in facility maintenance as well as the status of our inventories at internal and external warehouses and our office supplies management. These reviews were conducted with the aim of completely eliminating waste and loss within the Company.

Also, the Company reassessed the operations of all its plants through the use of the general operability studies method on the assumption that these plants may have to suspend their operations or operate at a low capacity in line with the Company’s sales volume. In doing so, we reconfirmed the history of past troubles at each plant, verified the procedures for stopping or resuming plant operations and checked potential problems in conducting low-capacity operation.

Meanwhile, we verified the volume of steam and electricity used in low-capacity operation to understand the boiler operation capacity in relation to our plant operations. These activities are helping us to implement environmental initiatives.

Through the implementation of its Earnings Improvement Plan, Daicel has been able to reduce costs by ¥12.3 billion, a much greater reduction than its original target of ¥10.4 billion. This is one tangible benefit of implementing our production innovations over the past 10 years.

Countermeasures for a New Influenza Outbreak as a Risk Management Initiative

In early summer of 2009, Daicel held a two-day and one-night camp to estimate the impact of the new influenza outbreak on production. Information concerning the estimated impact was immediately disseminated throughout the Group.

Each of Daicel’s plants has a production structure under which four teams work in three shifts. So, we examined the impact of possible infections in terms of the number of teams, individuals and lost working days on our production activities. In this examination, we had each division throughout the Company use more than 20 case studies. These activities enabled us to establish certain countermeasures, which would allow us to continue to produce a stable supply of products without having extra inventories, even in the case of a group infection.

H.R. Training Center

The Company’s H.R. Training Center is located within the Harima Science Garden City, which houses the SPring-8 large-scale photon source, the NewsUBARU medium radiation facility, the Hyogo Ion Beam Medical Center and other facilities. Opened in 1998, the H.R. Training Center has welcomed more than 9,000 Daicel employees, and these employees are helping to disseminate production innovations throughout the Company and to affiliates and companies outside.



2 Skill Transfer and Technician Training

Operation Training Center Underpinning Production Innovations



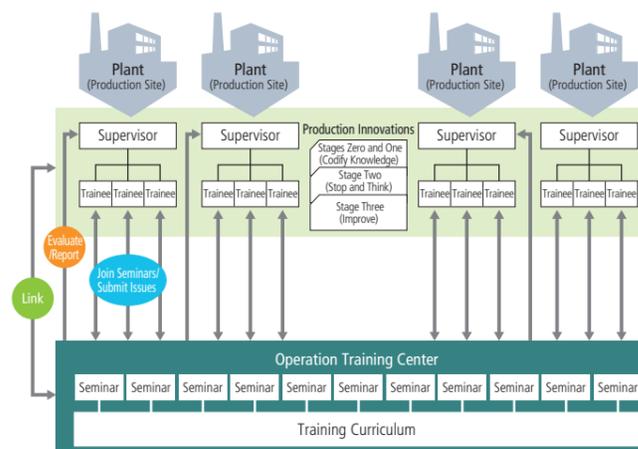
Daicel’s Operation Training Center Promoting Personnel Development and Supporting the Creation of New Value through Its Knowledge, Actions and Experience

As the Daicel Group has steadily promoted production innovations, it has gradually stabilized its production operations. In line with the increased stability, the Company anticipated that opportunities for employees to learn through production troubles would decrease. Based on such expectations, the Company established its Operation Training Center in 2002 through the Operation Training Center Project launched in 2001. More than 1,400 operators and engineers have participated in seminars held at the Operation Training Center to date.

The Operation Training Center’s overarching philosophy is “Always start with basics and go back to basics.” In accordance with this philosophy, the Operation Training Center educates and trains operators and engineers in such areas as basic actions expected at the frontlines of manufacturing, manufacturing principles and rules, and standardized processes, as well as countermeasures to be taken in emergency situations, which are difficult to experience under normal conditions.

With the aim of effectively promoting personnel education and training, the Operation Training Center has adopted a training curriculum which can be completed only through three-way cooperation among trainees, their supervisors at work and the Operation Training Center.

Operation Training Center Closely Linked with Production Innovations



Operation Training Center

Located within the Company’s Aboshi Plant, the Operation Training Center offers such facilities as a small-scale plant, which houses a reactor, evaporator and distiller, and training labs. Since this small-scale plant was originally constructed as a test plant 19 years ago, education and training programs can be conducted under practical operating conditions.



comment

People Underpin the Stable Production Operations

Kunio Fukunishi
General Manager, Operation Training Center,
Production Technology Management,
Daicel Chemical Industries, Ltd.



At the Operation Training Center, we strictly adhere to the training curriculum and focus on the basics in production operations, including knowledge, principles, rules, and basic actions expected, as well as practicing group operations through role-playing. In addition to operators and engineers, the Operation Training Center has recently begun accepting trainees from plant operation support divisions and even Group companies. As a result, the Operation Training Center is now serving as a forum for exchange among participants having various backgrounds. We are committed to nurturing human resources that underpin the Daicel Group’s creation of new value.

2 Skill Transfer and Technician Training

Training Curriculum Supporting Production Innovations

The training curriculum adopted at the Operation Training Center has the three sections of "knowledge," "action" and "experience." Through training in the "knowledge" section, trainees learn basic knowledge about materials manufactured by the Company, chemicals and chemical engineering and facilities and measuring instruments. They also learn about the basic rules and methodology that the Company has established through its production innovations. In the "action" section, trainees learn basic behaviors necessary to secure operational safety and product quality. Based on training in these sections, trainees accumulate experience in plant operations and troubleshooting, and through the simultaneous upgrading of knowledge and "behavioral backbone," the techniques and skills required in plant operations are strengthened. At Daicel, production innovation initiatives and training programs complement each other, and this, in turn, has realized the transfer of invaluable skills.

Training Aimed at Instilling Production Basics, Principles and Rules from a Long-Term Perspective

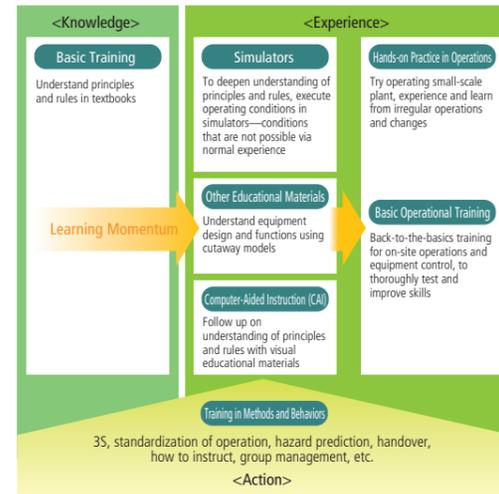
The training curriculum is different for operators and engineers. The operators' curriculum is further classified into three levels, depending on the trainee's experience and ability. The first-level curriculum is used with newly hired employees. While it covers such general subjects as maintaining a professional attitude as a working member of society, it also covers such specific subjects as: (1) principles and rules in chemical plants; and (2) hazard prediction, verbal confirmation through finger pointing and other basic behaviors expected at production frontlines. Practical training based on the first-level curriculum is conducted at the small-scale plant over a three-month period.

The second-level curriculum is used with employees who have worked for Daicel for about five years and gained sufficient familiarity with production operations. Through this mid-level curriculum, trainees acquire basic knowledge, principles and rules concerning machinery and electrical instrumentation over any six days within a one-year period. Also, this curriculum allows participants to review and reconfirm the basic in-plant behaviors learned through the first-level curriculum.

The third-level curriculum is applied to team leader candidates who have worked for Daicel for around a dozen years. Through this top-level curriculum, trainees gain experience in a breakdown of operations required to run chemical plants: namely, liquid transfer, heat transfer, evaporation and condensation, as well as practical operation of the small-scale plant (including simulated operation using a plant simulator) over any nine days within a one-year period. Practical training using the small-scale plant is basically conducted by trainees in groups, and each trainee in a group plays the role of a group leader, control panel operator, field operator or other operator. These operators simulate ways of reporting, communicating and consulting through practical training, while strictly following the rules of basic in-plant behaviors.

Hands-on training provided at the Operation Training Center is basically conducted in an interactive manner. Two instructors teach a group of five trainees. Instructors work to understand the strengths and weaknesses of each trainee and report the results of the practical training sessions to trainees' supervisors at their workplaces. This process allows trainees to proactively keep improving even through their daily work operations. Also, trainees, once they go back to their workplace, set their own targets through discussions with their supervisors. Then the trainees strive to actualize the principles and rules instilled in them through practical training at the Operation Training Center, assessing their own behaviors through daily operations and reporting assessment results to their supervisors.

Training Title	Main Goal	Training Description	Trainee
3-Day Basic Behavior Course	Promote understanding of basics and operational rules for chemical plants to familiarize trainees with plants in general	Learn basic behaviors expected in chemical plants and gain hands-on experience in plant operations	Newly hired employees Employees of their supervisors' choice
45-Day Basic Operation Course		Acquire basic knowledge about chemical plant operations and experience common processes	Newly hired employees
Basic Facility Management Course (Machinery)	Promote understanding of chemical plant facilities and basics in facility maintenance and enhancement of facility handling and management capabilities	Participate in hands-on practical training on facility maintenance and learn how to handle and manage metal and other materials and machinery	Employees of their supervisors' choice
Basic Facility Management Course (Electrical Instrumentation)		Participate in hands-on practical training to learn various types of electrical equipment, and measuring instruments, their architecture and how to handle them	Employees of their supervisors' choice
3-Day Practical Plant Operation Course (Liquid Transfer)	Promote understanding of principles, rules and processes for each stage of plant operation and enhancement of ability (monitor, judgment and control) required for running each stage	Understand principles and rules of liquid transfer, conduct on-site experiments, participate in practical training on responding to irregular operations and repeat practice of basic in-plant behaviors	Employees of their supervisors' choice
3-Day Practical Plant Operation Course (Heat Transfer)		Understand principles and rules of heat transfer, participate in hands-on practical training on evaluating heat exchanger capacity, conduct on-site experiments, participate in practical training on responding to irregular operations, repeat practice of basic in-plant behaviors and learn heat transfer methods (through general operability studies, etc.)	Employees of their supervisors' choice
3-Day Practical Plant Operation Course (Evaporation and Condensation)		Learn principles and rules of evaporation and condensation and basics of evaporation and condensation operations, participate in practical training on responding to irregular operations and repeat practice of basic in-plant behaviors	Employees of their supervisors' choice

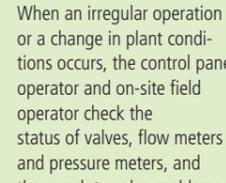


Scenes from Actual Training Sessions

3-day engineer training uses a simulator that enables hands-on experience of plant operations. Each trainee analyzes irregularities and changes in conditions of a condensation tower and tries to understand the principles and mechanisms of the condensation tower.



Using a plant distributed control system (DCS) and work standards manuals, trainees conduct practical training for the operation of a small-scale plant. A control panel operator and on-site field operator use wireless pagers to report to and communicate and consult with their group leader to ensure stable plant operation.



When an irregular operation or a change in plant conditions occurs, the control panel operator and on-site field operator check the status of valves, flow meters and pressure meters, and they work to solve problems through constant communication and appropriate actions.



The small-scale plant has many idle pipes and, therefore, enables practical training under realistic conditions, including a sense of tension. In line with the rules common to the entire Company, each pipe has a label indicating the type and destination of the liquid chemical flowing inside the pipe. Pipes delivering particularly hazardous liquid chemicals have labels in red and other alerting colors.

3 Safety and Quality

Realizing Universal Product Quality / Global Improvement Contest Facilitating Personnel Development



Spark of Sophisticated Technologies Occurs in Less than One-Tenth of a Second—Automobile Airbag Inflator Contributing to Safety of Car Drivers and Passengers

Global motorization continues. Accordingly, calls are heightening for ensuring the safety of car drivers and passengers—the ultimate objective to be fulfilled by automobile airbags.

The Company and subsidiary Daicel Safety Systems Inc. (DSS) are fully aware of such societal demand and, in response, have developed a five-point production and sales structure, based in the United States, Thailand, Poland, China and Japan, for automobile airbag inflators. Daicel's airbag inflators now command the world's second largest global market share for this product.

An airbag system is based on: (1) a sensor that detects a collision; (2) an inflator that activates the airbag in response to a sensor signal; and (3) an airbag that expands like a balloon. Airbags actually expand in just less than one-tenth of a second. Within a shorter timeframe than the blink of an eye, the Daicel Group's sophisticated technologies create a life-saving a spark.

Harima Plant

Located in Hyogo Prefecture's Tatsuno-shi, which is surrounded by mountains, Daicel's Harima Plant began the manufacture of gunpowder in 1954. Later, the Harima Plant began the manufacture of products that take advantage of gunpowder's high-energy properties. These products include rocket propellants and pilot emergency-escape systems. Another characteristic of gunpowder—i.e. gas generation—has been applied in automobile airbag inflators.



comment

Transforming Ourselves into a Group of Sophisticated Thinkers

Takayuki Matsumoto
General Manager, TPS Promotion Division,
Aerospace & Defense Systems/Safety Systems Company,
Daicel Chemical Industries, Ltd.



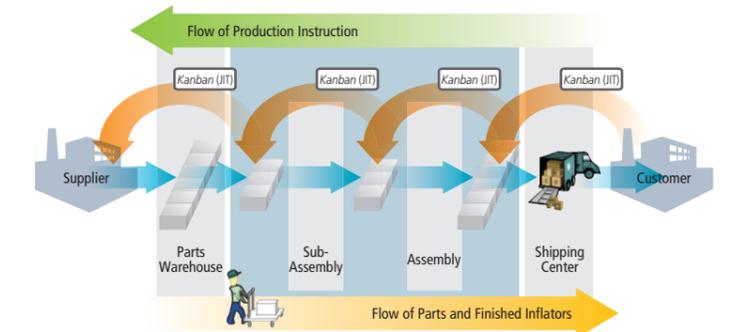
Through Daicel's inflator business, we are always working to reinforce our production structure under which we manufacture reliable products that realize superior customer satisfaction. From 2006, in order to remain a winner through ever-intensifying international competition, the Company has promoted the MSD Production Innovation Project aimed at bringing innovations to its assembly and processing production systems. We have worked on the project for four years now. Today, improvement activities are still accelerating, being promoted by each production line team, rather than by teams of staff in charge of these activities.

Meanwhile, the Company has expanded the scope of the project to its overseas bases, where Japanese and local personnel are working in tandem to promote improvements toward becoming a highly capable manufacturer. Also, the Global Improvement Contest has invigorated communication among the Company's business bases worldwide. Daicel's principal five global business centers are simultaneously strengthening their functions, and the entire Company is growing into a group of sophisticated thinkers through these improvement activities.

From now on, we plan to include our suppliers in the scope of the project. In cooperation with our suppliers, and through the provision of automobile airbag inflators, we aim to keep contributing to the safety of car drivers and passengers throughout the world.

Inflator Production Processes

As shown in the chart below, the production of inflators is divided into four stages, namely: (1) parts; (2) sub-assembly; (3) assembly; and (4) shipment. Due to the important function of the product which is to ensure the ultimate safety of car drivers and passengers, Daicel gives priority to achieving the best quality possible in each production stage. Through such an approach, the Company is advancing activities aimed at realizing universal inflator quality. Also, production innovations play a significant role in improving both productivity and inflator quality. Specifically, we have introduced a framework that enables the timely production of inflators in the volume required and the efficient handling of parts and finished inflators, while establishing a methodology for making improvements to the construction of such a framework itself. In fact, efforts made to realize these improvements are helping the Company to develop its human resources.



3 Safety and Quality

DSSA (America)

We focus on improvement activities aimed at reducing costs. With particular attention paid to waste in the seven areas of production, work in process, handling, processing, inventories, behaviors and defective products, we have promoted our improvement activities. We hold a 15-minute improvement meeting every morning with the participation of all employees at DSSA, including even the accounting and general affairs back-office staff. Through these improvement activities, we have established strong ties among ourselves.



We learned a lot at the 2nd Global Improvement Contest. The greatest reward for our participation in the contest was to learn ways to apply the Kanban (Just-in-time [JIT] production) system in fixed-pattern and lot production. We intend to introduce the Kanban system in our operations and aim to take the championship of the 3rd Global Improvement Contest.

DSSE (Poland)

Participating in the 2nd Global Improvement Contest was a very stimulating experience for us in that we could compare our improvement activities with those of our counterparts. Particularly striking was DSSA's approach of involving everybody, including foremen and operators. Personnel management and education are permanent issues for those of us who are involved with manufacturing. Looking ahead, we would like to provide on-site plant workers with opportunities to prepare and make their own presentations.



Change requires long-term goals. Without the accurate understanding and sharing of such goals, employees cannot motivate themselves. Therefore, we will work to strengthen our involvement with colleagues and continue to achieve improvements in our operations.

DSST / DSST (Thailand)

Compared with last year's Global Improvement Contest, every participating team made more effective, detailed presentations. Surely, we learned a lot from their presentations. We believe that it is important to disseminate what we learned at the event throughout our workplace. At DSST and DSST, we are tackling the issue of improving our operational processes by systemizing them through the use of various tools. Right after we returned to Thailand, we started restudying improvement tools such as "The Seven Quality Control Tools," which was presented at the event. We would like to begin using our own tools as early as possible.



Honesty is indispensable in making improvements. Everyone makes mistakes and naturally feels like hiding the fact that they made mistakes. The important thing here is to have a working environment where we can be honest about our mistakes. Accordingly, we are emphasizing the creation of such a workplace environment, thereby making problems and issues easily identifiable.

DSSC (China)

The level of improvement activities was extremely high for every participating team. We clearly saw that they are aggressively promoting their own proactive initiatives through their production operations. It is relatively easy to start an improvement activity, but it is difficult to maintain the momentum. We learned again that the most important thing is to share a sense of commitment and work together. In order to realize such a working environment, DSSC has held study sessions aimed at understanding methods for improvement after the event. At the same time, we have conducted a training program based on the role-playing method, which allows participants to think from the perspective of other participants.



It is clear that DSSC must upgrade the quality of its improvement activities. With an eye on the future expansion of our production lines, we will continue to aim for zero facility breakdown and failure in years to come.

DSS (Japan)

Our motto at DSS is "Full Participation." In tackling a large project, communication among project members is an absolute requirement. We decided to have a meeting in the morning and early evening, and at these meetings we ensure that everybody, without exception, has an opportunity to speak out. Throughout the 2nd Global Improvement Contest, the biggest achievement we made was establishing a collaborative relationship between our production and support divisions. Meanwhile, it was really stimulating to see many female leaders taking initiative at overseas bases.



We must keep asking ourselves the question, "Why do we need to keep improving?" Each of us must try to understand the benefits of and necessity for improvements. Based on this belief, DSS will continue its improvement activities by facilitating the involvement of all divisions.

Japan Shotshell Ltd.

We are currently promoting "3S" activities. 3S stands for *seiri* (tidying), *seiton* (putting everything in order) and *seisou* (cleaning). We have to admit that we started these activities by imitating our counterparts. Today, however, we have our own 3S tools and initiatives, and the majority of our employees at Japan Shotshell are involved in 3S activities. We are feeling the steady development of our improvement activities. Still, we have a pile of issues to address, such as differences in the general awareness of operators and supervisors and the persistence of a passive attitude on the part of our employees. To make improvements in a team, every team member must be an integral part of the endeavor. With one piece missing, the jigsaw puzzle will not be completed. So, we aim to create a corporate culture that promotes the unification of awareness of all Japan Shotshell members. In addition, we plan to hold study sessions on methods for improvement, thereby upgrading the quality of our improvement activities.



Gathering, Competing and Learning at the Global Improvement

From September 30, 2009 to October 8, 2009, Daicel held its 2nd Global Improvement Contest at the Harima Plant.

The concept of this year's contest was, "Gathering, Competing, Learning and Connecting." "Connecting" was added to the concept of last year's event. This newly added word delineates the Company's commitment in three areas: (1) promoting improvements through inter-divisional efforts; (2) nurturing respect for overseas counterparts through improvement activities; and (3) continuing to improve in the years to come.

Strong Support for the "Connecting" Concept

The quality of improvements made by each team has been enhanced compared with fiscal 2008. In fact, a customer invited to the 2nd Global Improvement Contest commented, "All presentation made at the event this year were more detailed. I could see that everyone at the Daicel Group has continued to make improvements in various areas. I could also see that the new concept, 'Connecting,' has been put into practice. I hope that the Daicel Group will include a larger number of younger employees in this endeavor."

President Ogawa also commented, "I have to admit that I had some doubt in holding the contest this year under the current severe economic conditions. But I was right in holding the event. I was moved by seeing contestants presenting themselves with confidence." With this comment, he showed his commitment to continuing to promote "Connecting" throughout the Daicel Group in the future.

	Safety Award	3S Award	TPS Award
First Place	Plant No.2 Team A, DSS	Team "Almighty Hands," DSSC	Team "FM/YM No.5," DSS
Second Place	Team E&M, DSST/DSST	Team CA No.5, DSS	Team E1, DSSE
Third Place	Maintenance Group, Production Technology Division, DSSC	Personnel Development Center, DSS	Team D1, DSSA

Improvement Activities at DSS (Japan)

At DSS, we started with the upgrading of operational foundations through the promotion of "3S" and "codification of work knowledge and processes." Then, we moved to the next steps, improving the level of our quality assurance and reinforcing our creative framework. In promoting improvements, we formed a project structure that integrated the production and support divisions. Also, as a mother plant within the Daicel Group, DSS tackled the systemization of project procedures and the preparation of project tools. Using these procedures and tools, we are now expanding our initiatives to overseas bases. Each action team holds a camp each month to formulate project plans, check project status and share information. Through these activities, DSS is working to ensure steady project development.



Monthly improvement camp (held over an average period of two to three days)



On-site improvement team discussing the improvement of operational foundations, quality assurance and productivity)

comment

Promoting Improvements by Balancing Theoretical and Practical Approaches

Shinya Kanzaki
Team Leader, Production Innovation Team, TPS Promotion Division, Aerospace & Defense Systems / Safety Systems Company, Daicel Chemical Industries, Ltd.



In the early days of our improvement activities, I was not so sure about the benefits of implementing the Toyota Production System (TPS). Still, we tried to have trust in TPS and moved to put it into practice.

By practicing TPS, we actually gained technological expertise, while absorbing theories about how to make improvements by facing and then overcoming obstacles. We repeated this cycle and eventually felt the benefits of practicing TPS.

Based on our experience in the past, we are always working to balance knowledge acquisition with the practical application of acquired knowledge in our operations.

<Topics>

Improvement Activities at DSSE (Poland)



Daicel Safety Systems Europe Sp. z o.o. had striven to learn ways to improve its operations through a practical approach, and at the 1st Global Improvement Contest held during fiscal 2008, DSSE won the 3S Award and the TPS Award. Throughout fiscal 2009, aiming to instill a companywide stance toward continual improvement, DSSE restudied basic methods for improvement and worked to realize improvements through the use of the Kanban system, while inviting back-office staff to participate in this endeavor.

	Fiscal 2009												
	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	
Global Improvement Contest			Qualifying Contest ●										
							2nd Global Improvement Contest ●						
Improvement Activity Structure	Involved back-office staff and non-production divisions												
Monthly Improvement Camps	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶	▶
Production Line Improvement	Restudied methods for improvement			Improvement activities based on Kanban system									
Back-Office Improvement	Implemented "3S" and "Before & After" companywide												
	Introduced a process improvement method based on visual management												
	Standardized staff operations												
Exchange with Counterparts	Held monthly TV conferences with DSSC and DSSA on improvement-related subjects												
	Held an improvement-focused exchange event with DSSC in China ●												

Examples of DSSE Improvement Activities

Example 1: Reduction of Defective Products

Before	<ul style="list-style-type: none"> Because DSSE had established standardized procedures for countering the occurrence of defective products, it assumed that every DSSE employee learned those procedures and gained the same level of capabilities in procedure implementation. The lower limit of the percentage of defective products stood at 0.2%.
Methods Used	<ul style="list-style-type: none"> DSSE videotaped and analyzed operations and identified the fact that operators implemented and used the procedures differently. DSSE prepared checklists with photo explanations to standardize the implementation of the procedures to be taken by operators. Using the checklists, DSSE provided an educational program on the standardized procedures.
After	<ul style="list-style-type: none"> By making the details of conditions and procedures in the case of defective product occurrence easily identifiable, DSSE improved the level of analytical processes to identify true causes. As a result, the lower limit of the percentage of defective products dropped to 0.07%.

Example 2: Improvement of Processes through Visual Management

Before	<ul style="list-style-type: none"> DSSE launched activities aimed at encouraging each employee to eliminate waste in his or her own operations without a clear view of the proper procedures. Each division worked independently, and issues that were not visible between divisions were overlooked.
Methods Used	<ul style="list-style-type: none"> DSSE selected the processes involving all divisions, and using the selected processes as case examples, it held study sessions aimed at improving those processes with the participation of all divisions. DSSE created a map of current operational processes and identified redundancies and the absence of checking functions in order to eliminate them. DSSE clarified items requiring better management (aimed at preventing omissions, mistakes and delays in operations) and incorporated those items into a new map of operational processes.
After	<ul style="list-style-type: none"> DSSE eliminated redundancies across divisions and enabled the more effective quality and process management in operations, using standardized indicators. By eliminating redundant processes for confirmation, adjustment and correction between divisions, DSSE shortened lead times.

Daicel Safety Systems Europe Sp. z o.o.

DSSE is located in Zarow, the Republic of Poland, a farming area approximately 40 km southwest of the country's fourth largest city, Wroclaw. DSSE began the commercial production of pyro inflators for driver airbags installed in front of driver's seats in April 2006. Since then, it has expanded its product portfolio to include inflators for front passenger airbags and side airbags.



comment

Yosuke Omae
Senior Coordinator, Kaizen Promotion Department, Daicel Safety Systems Europe Sp. z o.o.

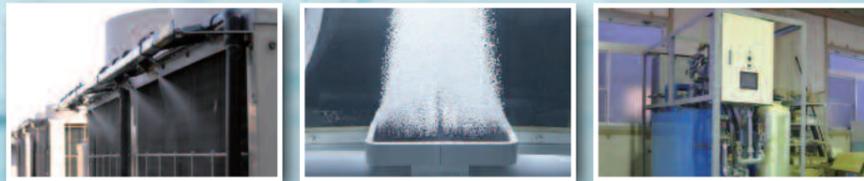


I was assigned to DSSE in May 2005. Over the past five years, I have been involved with plant construction, production process establishment, local staff training and activities aimed at improving the level of quality assurance and productivity. More recently, in line with the progress made at DSS (Japan) toward realizing universal product quality, DSSE started related improvement activities in October 2007.

At the beginning, we experienced stagnation in improvement-making due to the lack of communication with and accurate understanding of improvement activities among local staff. Today, however, we are promoting independent initiatives and making steady improvements, supported by employees' mutual understanding of different opinions and positions.

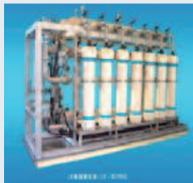
4 Environment

Reducing CO₂ Emissions and Tackling Worldwide Water-Related Issues



Daicem Membrane-Systems Ltd.

Since its establishment in May 1994, Daicem Membrane-Systems has specialized in the water treatment business. Its water treatment business is divided into three major divisions. Through its Membrane Division, the company sells separation membrane modules and systems for use in the water treatment and industrial processing fields. Through its Medical Division, the company conducts sale and maintenance of medical-use water purification systems. Through its PERALCOMB Division, the company sells air diffusers used for the treatment of sewage and industrial wastewater. Through its wide-ranging water treatment business, Daicem Membrane-Systems is contributing to the preservation of the global environment and a better quality of life for people.



Helping Comply with the Revised Energy Saving Law Daicem Membrane-Systems' Outdoor-Unit Water Sprinkler System Helps Offices and Convenience Stores Reduce Annual Power Consumption by 5%

In April 2010, Japan's revised Law Concerning the Rational Use of Energy, also known as the revised Energy Saving Law, took effect. Under this law, businesses (those using offices and operating convenience stores) that consume energy in an amount equivalent to 1,500 kiloliters of crude oil are required to report the status of their energy use to the Regional Bureau of Economy, Trade and Industry.

With the aim of helping those businesses reduce their energy use and, consequently, their CO₂ emissions, Daicem Membrane-Systems Ltd. has launched an outdoor-unit water sprinkler system. The water sprinkler system sprinkles reverse osmosis (RO) water on outdoor units of air-conditioning systems, refrigerators and freezers to enhance the efficiency of heat exchangers.* In line with enhanced heat exchanger efficiency, annual power consumption of those facilities can be reduced by approximately 5%. In addition, the water sprinkler system is expected to contribute to the reduction of CO₂ emissions by those facilities. Daicem Membrane-Systems aims to help achieve a 25% reduction in such CO₂ emissions.

RO water is a type of water treated through the RO membrane processing technology, which Daicem Membrane-Systems has long nurtured for the production of medical-use water. Through RO membrane processing, ions, bacteria, viruses and chlorine-resistant pathogenic microorganisms contained in water are removed.** When non-processed tap and well water is sprinkled on the aluminum fins of outdoor units for those facilities, scale (thin layer of metallic oxide) is formed. The use of RO water prevents this phenomenon, thereby preventing the degradation of heat exchanger efficiency and corrosion.

Daicem Membrane-Systems is working to expand the business of this water sprinkler system both in Japan and overseas to better contribute to the reduction of CO₂ emissions by society at large.

* Sprinkled water evaporates and removes heat from surrounding objects and decreases ambient temperature.

** RO membrane processing is applied in such fields as the desalination of seawater and the production of water used for dialysis treatment.

Outdoor-Unit Water Sprinkler System

Daicem Membrane-Systems' water sprinkler system is programmed with data on annual trends in temperature, precipitation and other climatic conditions in the region where it is installed. The program optimizes the sprinkling of RO water. Various sprinkler nozzle types are available, enabling versatility in the system's installation.



<Example of Outdoor-Unit Water Sprinkler System Adoption>

Commercial complex in Sagami-hara City, Kanagawa Prefecture (May 1, 2009)

	Before Introduction	After Introduction
Max. Demand Power (kW)	950	740 (-22.1%)
Charge for Max. Demand Power Usage (Yen/Year)	19,956,300	15,531,600
Actual Power Usage (kWh)	4,270,094	4,047,534 (-5.2%)
Charge of Actual Power Usage (Yen/Year)	51,241,122	48,570,409
Aggregate Charge for Power Usage (Yen/Year)	71,197,422	64,102,009
Decrease in Charge (Yen/Year)		7,095,413 (-10.0%)
Decrease in Annual CO ₂ Emissions (kg-CO ₂)		104,603

Meeting the Automobile Industry's Wastewater Treatment Needs Wastewater Recycling System Enables Energy-Efficient Operations

The recycling of oil-wastewater generated through car washing, incinerator dismantling and die-casting* has become a significant societal issue. Daicem Membrane-Systems has established a hybrid wastewater processing technology based on coagulation agents and ultrafine filtration membranes.** This technology has been applied in the treatment of automotive wastewater, and the company continues to build a solid track record in wastewater treatment technology.

The ultrafine filtration membranes used in our wastewater recycling system are based on the cellulose acetate hollow fiber membranes that have been widely used in water purification. Cellulose acetate hollow membranes are immune to contamination, which, in turn, more effectively prevents a drop in filtration speed and enables low-pressure (energy-efficient) operations of the wastewater treatment system.

We will work to spread the use of our technologies and wastewater treatment systems in the automobile industry and, ultimately, continue to provide solutions for wastewater-related issues throughout the world.

* A method of mass-producing a high-precision casting within a short timeframe by injecting molten metal and other materials into a mold. Engines, transmissions and other auto parts, as well as PCs and camera components, are manufactured using the die-casting method.

** Membranes with a pore size ranging from 2 to 20 nanometers. Pore sizes are larger than those of RO membranes.



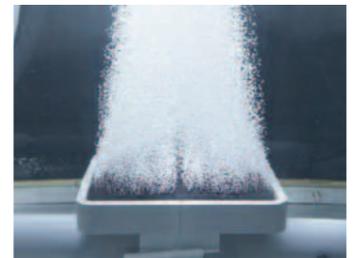
Application Spreading in China, Southeast Asia, Other Regions Ultrafine Foam Membrane Diffuser Reduces Aeration Blower Air Volume by 30%

In sewage treatment facilities, where activated sludge treatment* is performed, the aeration blower** is the process for which energy-saving is most required.

Daicem Membrane-Systems' ultrafine foam membrane diffuser generates ultra-fine bubbles, each measuring less than 1 millimeter, uniformly throughout the entire treatment tank. Thanks to this feature, the company's diffuser boasts higher oxygen transfer efficiency than conventional air diffusers, which generate bubbles measuring about 4 millimeters, enabling a 30% reduction in aeration blower air volume.

Building on a track record that includes the installation of its powerful diffusers at approximately 100 facilities throughout Japan, Daicem

Membrane-Systems will work to sell these diffusers, along with its wastewater recycling systems and membrane bioreactor (MBR) systems,*** in China, Southeast Asia and other countries and regions. Through activities targeting wastewater treatment markets in these countries and regions, we aim to contribute to the prevention of further advances in global warming.



* A wastewater purification method in which organic substances in water are absorbed and dissolved by microorganisms, which continue respiration and multiplication. This method is used in sewage and industrial wastewater treatment.

** A water purification method in which oxygen is supplied in water to promote the dissolution of organic substances by microorganisms in the water.

*** Membrane bioreactor method uses a membrane separation method to improve the efficiency of activated sludge treatment.

MBR System Realizes Treatment of High-BOD Wastewater

In recent years, laws and regulations regarding dialysis and other wastewater drainage have become more stringent. Daicem Membrane-Systems has launched an MBR system that effectively treats such wastewater with high biological oxygen demand (BOD).

In addition to more than 1,000 medical institutions to which it has delivered its medical-use water production equipment, the company will strive to expand the application of its MBR systems into such fields as human waste, food waste and industrial wastewater treatment. In this way, Daicem Membrane-Systems will continue to address water pollution issues and the securing of water resources.



comment

We Are Helping to Secure Safe Water through the Purification of Scarce Freshwater Resources



Shuji Nakatsuka
Managing and Research Director, R&D Center,
Daicem Membrane-Systems Ltd.

At present, the earth's freshwater resources available for people's use—such as rivers, lakes and underground water—account for approximately 0.01% of all water resources. Water shortages are becoming a growing concern on a global scale, and some data show that the number of people who do not have access to safe drinking water has reached the 1.5 billion level. In such an environment, seawater desalination has drawn attention as a solution for the general water shortage. However, considering the energy efficiency of seawater desalination, under current circumstances, it is more rational to secure safe drinking water by purifying the existing freshwater resources.

Currently, the prevalent method of water purification uses the coagulation, sedimentation and filtration processes. In the United States, about 400 people lost their lives in 1993 due to pathogenic microorganisms, measuring 5 micrometers, left in the water treated through these processes. To secure safer drinking water, the increased use of the membrane filtration process is required. In fact, acceleration of the switch to this process is occurring throughout the world.

Daicem Membrane-Systems is tackling solutions to the water-related issues the world is now facing. For example, we have developed a cellulose acetate hollow fiber membrane with a pore size of 0.01 micrometers. With this innovative product, pathogenic microorganisms can be removed from water. By promoting the use of our membrane products, we are contributing to worldwide efforts to accelerate initiatives aimed at securing safe water.

Fiscal 2009 Highlights

2009/4

The Company held the 8th Daicel Group Responsible Care Promotion Assembly on April 7, 2009 at its Tokyo Head Office.

The Company tries to raise employee awareness of the Responsible Care Initiatives—one of the two pillars of its CSR Initiatives—and it holds this event every year.

2009/7



The Company's Ohtake Plant began operation of Japan's first ethyl acetate manufacturing facility using the ethanol method. This facility boasts an annual production capacity of 50,000 tons. Ethyl acetate has wide-ranging applications, including uses in inks, paints and pharmaceutical and agricultural chemicals, and demand is expected to grow as the substance replaces toluene and provides for many other useful applications.

Under the ethanol method, bioethanol and acetic acid are used as the raw materials of ethyl acetate. As worldwide concern about global warming continues to balloon, the increased use of such natural products as bioethanol can help reduce CO₂ emissions. Also, with ethyl acetate being a derivative of acetic acid, the establishment of the new facility has led to the strengthening of the Company's acetyl business.

2009/7

Having identified soil contamination through its voluntary soil survey conducted on the Sakai Plant site in Osaka, the Company has undertaken a soil improvement project under the direction of the Sakai City government. The project has been successfully completed. For details about the soil contamination and project, please see our website at:

<http://www.daicel.co.jp/news/data/09072801.pdf>
(Japanese language only)

2009/9

Daicel marked the 90th anniversary since its establishment on September 8, 2009. The Company was established through the merger of eight celluloid makers in 1919. Since then, building on its initial business in celluloid, the Company has developed its multifaceted operations based on core technologies in cellulose chemistry, organic chemistry, high-polymer chemistry and explosives engineering.

2009/10

The Company transferred its water-soluble polymer business, centered on carboxymethyl cellulose (CMC) and hydroxyethyl cellulose (HEC), to Group company Daicel FineChem Ltd., with the aim of strengthening its cost competitiveness through business streamlining.

2009/12

The Ohtake Plant started the commercial production of CELLOXIDE 2021P, a cycloaliphatic epoxy compound, using the expanded facilities.

Cycloaliphatic epoxy compounds have been used in cationic ultra-violet (UV) coating and electric and electronic materials, and demand is increasing for such new high-value-added applications as carbon fibers and light-emitting diodes (LEDs). Thus, CELLOXIDE 2021P has high potential for growth as a business. In particular, the Company's cycloaliphatic epoxy compounds boast high viscosity and transparency, resulting in superior competitiveness over competitors' products.

2010/1

At the Company's Aboshi Plant in the Himeji Production Sector, production facilities dedicated to the production of acetate tow for super-slim cigarette filters started commercial operations. With the additional production capacity, the Company's total capacity for the production of acetate tow for cigarette filters increased approximately 10%.

The global consumption of super-slim cigarettes is growing at a rate 10% per annum, compared with a 1% rate for cigarettes in general, and the Company aims for business expansion in this growing field.



2009

External Recognitions

★ Security Merits Award

Mr. Shigetoshi Nakamura (Organic Chemical Production Division No. 2, Ohtake Production Center, Organic Chemical Products Company) received the award from the Japan Petrochemical Industry Association (JPIA).

His tireless activities aimed at disseminating knowledge and techniques regarding safety management and raising safety awareness among his colleagues have been commended by JPIA.

★ Chairman's Award—High Pressure Gas Safety Institute of Japan

Mr. Takashi Inoue (Production Technology Division, Ohtake Plant) received this award from the High Pressure Gas Safety Institute of Japan (KHK).

KHK recognized his extensive experience in operating high-pressure gas manufacturing facilities as well as his long-accumulated achievements in ensuring safety in production operations.



★ Enzyme Engineering Encouragement Award



Mr. Hiroaki Yamamoto (Corporate Research Center, R&D management, Central Research Center, Daicel Chemical Industries, Ltd.) received the Enzyme Engineering Encouragement Award from the Japanese Society of Enzyme Engineering (JSEE) in connection with his research on the synthesis of optically active compounds using Daicel's enzyme library.

Unlike other typical chemical reactions, the enzymatic reaction is an eco- and human-friendly "green" process that does not require the use of high temperature, high pressure or hazardous chemical agents. Accordingly, this enzymatic reaction is drawing attention as a means of helping to establish a recycling-oriented society with low environmental impact.

The Company's enzyme library has joined the world's top tier in terms of quality and quantity, and it has become a core technological asset of the intermediate pharmaceuticals business within the Chiral Pharmaceutical Ingredients (CPI) Company.

★ ABC Activity Award

Daicel received the Accelerated by Chemical Industry for Cool Earth (ABC) Activity Award from the Japan Chemical Industry Association (JCIA).

The ABC Activity is promoted by JCIA with the aim of reducing CO₂ emissions made by the household sector and advancing government-led national energy-saving initiatives in cooperation with employees of member companies. Based on the government's documents, the Company has prepared an original "My Challenge Sheet," which lists environmental goals and targets. Families of Daicel employees have proactively participated in this initiative, making it a family project.

Nine companies, including Daicel, have been presented with the award this year in recognition of their industry-leading activities.



★ The Society for Chromatographic Sciences Contribution Award

Daicel received this award at the 20th commemorative symposium of the Society for Chromatographic Sciences (SCS).

The SCS serves as a forum for exchange in the wide-ranging chromatographic separation analysis field, which covers everything from liquid chromatography and gas chromatography to electrophoresis. The history of SCS goes back to 1959, when the first liquid chromatography research took place in Japan.

Since the launch of SCS, the Company has continued to participate in the group's management as a leader in the chiral chromatographic separation field and as a supporting company. By presenting the award, the SCS recognized the Company's long-standing contributions.



3 CSR Initiatives Report

Upgrading CSR Foundations

1 Corporate Governance Framework

Daicel has adopted a corporate auditor system. Also, by welcoming external directors and allowing them to provide opinions and advice based on their expertise, the Company is working to ensure that the decisions made by its Board of Directors are appropriate and the execution of director duties is effectively supervised. The Company has also adopted an executive officer system. The adoption of the executive officer systems has enabled the Company to clearly separate its decision-making, supervisory and business execution functions. Such a clear division of roles has allowed us to bolster our business management structure and, consequently, corporate activities.

In addition, Daicel has adopted an internal company system. Through this system, the Company is promoting various initiatives aimed at strengthening collaboration among its production, sales and R&D functions, improving productivity and strategic functions within its corporate departments, and reestablishing its R&D structure.

Based on its corporate auditor system, the Company has established a corporate framework under which its Board of Directors makes management decisions in an efficient manner and fulfills its supervisory functions, and its Board of Corporate Auditors accomplishes its auditing functions. Such a framework has enabled us to keep reinforcing our corporate governance.

• Board of Directors

Daicel's Board of Directors consists of seven directors, three of whom have been externally appointed. The Board of Directors meets, in principle,

once a month to make decisions concerning important management issues in line with the regulations for the Board of Directors meetings. Furthermore, the Board of Directors supervises the management of corporate affairs.

At Daicel, external directors are tasked with providing advice and supervisory functions based on their experience and expertise. Two of the Company's external directors have been designated as independent directors, as defined under the "Securities Listing Regulations" of the Tokyo Stock Exchange and other bourses in Japan.

The four in-house directors have concurrent positions as executive officers. Their responsibilities as executive officers are limited to those relating to Daicel's president, who provides supervisory functions for all business divisions and corporate departments. This means that their responsibilities have been separated from those of the Company's internal companies, which conduct actual business operations.

The term of office for Daicel's directors is one year. Such a short term of office enables Daicel shareholders to be better involved with the appointment of directors. At the same time, it allows us to better clarify the management responsibilities of our directors and thereby reinforce our corporate governance.

The Company does not have any executive and managing directors. This is to strengthen the decision-making and supervisory functions of the Board of Directors and to clearly separate the Board of Directors' responsibilities from those relating to the management of corporate affairs.

• Management Meetings

Daicel has established the Management Meeting as a body to have

deliberations and make decisions prior to its president implementing the basic corporate management policies formulated by the Board of Directors. The Management Meeting consists of the president, Management Advisory Committee members and the executive officers selected by the president as its members. The Management Meeting convenes, in principle, twice a month.

• Board of Corporate Auditors

Daicel currently has four corporate auditors, two of whom have been externally appointed. All corporate auditors are required to attend Board of Directors' meetings. In addition, full-time corporate auditors are required to attend meetings of the Management Meeting, the Risk Management Committee and other important organizations, thereby auditing the management of corporate affairs in general.

Meanwhile, the Company's corporate auditors all together form the Board of Corporate Auditors. The Board of Corporate Auditors holds meetings to report, deliberate and make decisions on important issues relating to the Company's audits.

Corporate auditors regularly receive reports from the Company's internal auditing division and independent auditors. In addition, on an as-required basis, they collaborate—through the exchange of information and opinions—with the internal auditing division and the independent auditors in promoting audits of the Company. The two external corporate auditors have been designated as independent corporate auditors, as defined under the "Securities Listing Regulations" of the Tokyo Stock Exchange and other bourses in Japan.

Also, as an organization to support audits by corporate auditors, the Company has established the Office of Corporate Auditors. The Office of Corporate Auditors has its own dedicated officers who are independent from divisions promoting business affairs.

• Auditing Office

As an organization to conduct internal audits, Daicel has established the Auditing Office in charge of internal auditing functions within its overall executive body. The Auditing Office conducts regular internal audits of business divisions and Group companies.

solidify the foundation necessary to create a corporate culture in which all laws and regulations are accurately understood and strictly observed through business activities. The Company also endeavored to enhance the foundation required to promote the appropriate management of information—one of its important management resources.

From fiscal 2010 onward, Daicel will keep reinforcing its internal control systems. At the same time, to enable the Daicel Group to sustain steady growth, the Company will continue to administer and enhance its efficient and effective internal systems in line with its basic policies concerning the development of internal control systems formulated by the Board of Directors.

*Daicel's report on internal control over financial reporting for fiscal 2009 is disclosed on EDINET, a corporate disclosure system established by FSA at the following URL: <http://info.edinet-fsa.go.jp/> (Japanese language only)

3 Risk Management

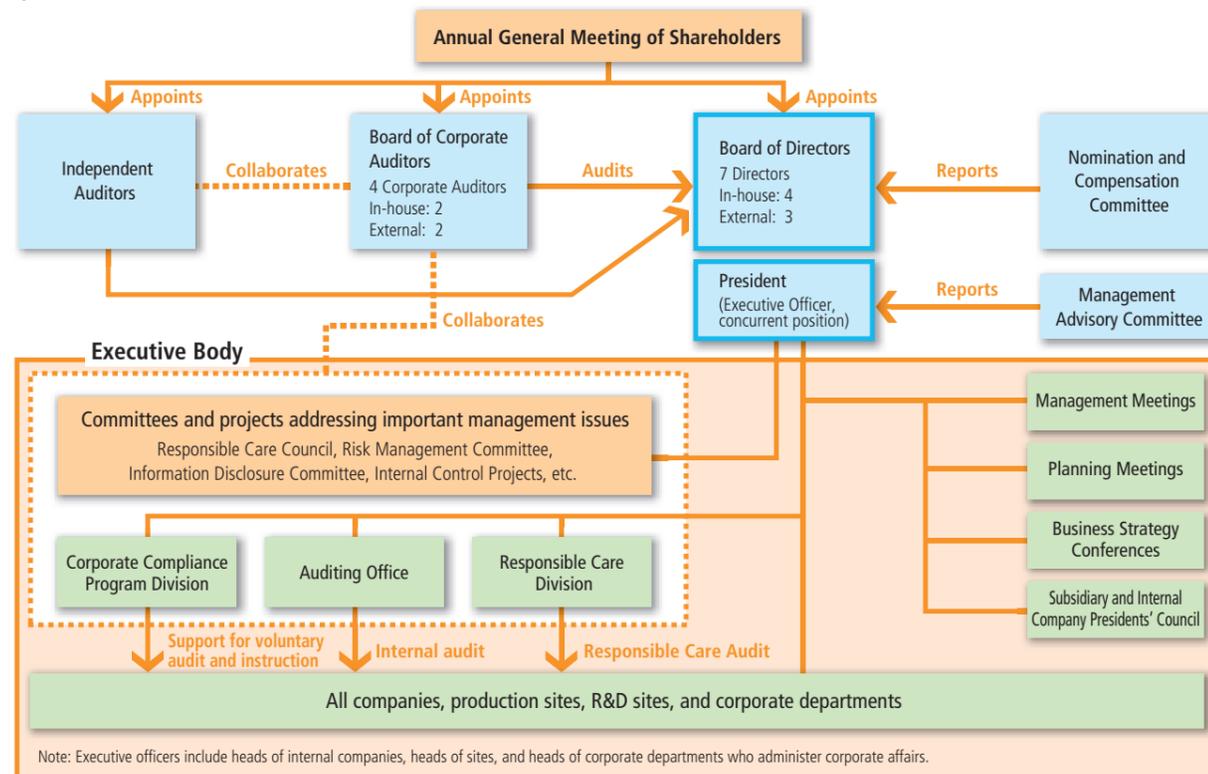
Daicel established the Risk Management Committee in 2006 as an organization to coordinate and promote companywide risk management activities. The Risk Management Committee consists of executive officers in charge of corporate departments. Since its establishment, the Risk Management Committee has guided the entire Company in aggressively conducting risk management activities.

Through its annual risk inventory clearance, the Company first identifies risks that can materially affect its business performance and assigns priority levels to examine possible countermeasures. Then, following the Plan-Do-Check-Act (PDCA) cycle, each division promotes activities aimed at preventing those identified risks from materializing or minimizing the impact of those risks when materialized. More than 30 Group companies in Japan and overseas have also promoted similar activities. During fiscal 2009, the Company added two new domestic Group companies in the scope of these Groupwide risk management activities. Through these activities, Daicel and its Group companies are working to enhance the risk intelligence of all Group employees.

Also, with the aim of improving employees' capabilities to make effective initial responses in case of accidents and natural disasters, Daicel formulated the Emergency Risk Management Guidelines in January 2008. Based on these guidelines, the Company has continually held drills that assume the occurrence of significant risks. During fiscal 2009, these drills focused on information sharing through initial responses in case of an accident at one of the Company's plants. Issues identified through these drills are examined, and the results of this examination have been incorporated into the revision of applicable rules to ensure practical initial responses.

In its 2006 Medium-Term Business Plan, Daicel recognized risk management as an important internal control initiative. The Company has accordingly promoted risk management activities since then and thereby continued to reinforce its risk management foundation. Looking ahead, we aim to further strengthen the monitoring of risk management activities and facilitate the integration of risk management with internal control. In this way, we will keep bolstering the effectiveness of our risk management and, consequently, our corporate governance, thereby further solidifying our CSR foundations.

Corporate Governance Framework



2 Internal Control Systems

Daicel has worked to establish an internal control structure aimed at enhancing the reliability of its financial reporting. Fiscal 2008, ended March 31, 2009, was the first year that the Company introduced systems aimed at ensuring effective internal control over its financial reporting. As a result of all Daicel employees having followed the systems, the Company has been able to submit its report to the Financial Services Agency (FSA), which stated that internal control over its financial reporting was functioning effectively for fiscal 2008.

During fiscal 2009, Daicel focused on continuing the effective administration of its internal control systems aimed ensuring reliable financial reporting. Corporate departments led all activities in this area.

In addition to the area of financial reporting, Daicel has worked to reinforce internal control over its business activities through improvements of existing frameworks. More specifically, the Company strove to

3 CSR Initiatives Report

Initiatives Relating to Corporate Ethics

The Daicel Group has recognized complying with corporate ethics as an integral part of its CSR program, and individual divisions and Group companies are strategically promoting related initiatives.

Daicel's Corporate Ethics Management System

We believe that each employee's adherence to corporate ethics is an essential management issue, and we are promoting this initiative companywide.

This initiative is not a temporary measure. In order to ensure that corporate ethics is practiced continuously, we have formulated our Corporate Ethics Management Regulations. In addition, we have established our Corporate Ethics Management System based on processes that incorporate the Plan-Do-Check-Act (PDCA) cycle, and through activities involving the participation of all employees, we are striving to maintain and improve this system.

Corporate Ethics Promotion System

We established the Corporate Compliance Program Division to promote corporate ethics activities and appointed our representative director as our Corporate Compliance Officer. The Corporate Compliance Program Division supports the independent initiatives of each division and Group company based on the Corporate Ethics Management System and continuously promotes activities to ensure compliance.

Each division appoints a CSR Promotion Chief, and CSR Promotion Chiefs lead various CSR-related activities, including corporate ethics activities. Meanwhile, through the use of our Intranet and CSR Promotion meetings, CSR Promotion Chiefs are working to share information regarding specific initiatives taken, issues identified and difficulties experienced at each division. Such information sharing has enabled us to keep improving our corporate ethics activities.

Also, the Company establishes committees dedicated to individual issues in accordance with related in-house regulations, thereby promoting compliance with related laws and regulations.

Examples of Committees

Regulation	Committee	Goal
Regulations on Export Controls	Export Controls Committee	To ensure that the Company and its Group companies do not engage in illegal export or provision of goods and technologies that are prohibited under security trade-related laws and regulations for the purpose of maintaining international peace and security
Regulations on Personal Information Protection	Personal Information Protection Committee	To acquire, manage and use personal information appropriately
Regulations on Information Disclosure	Information Disclosure Committee	To disclose corporate information appropriately

The Legal Group under the Corporate Support Center and 13 other groups and divisions have been designated as an organization in charge of ensuring compliance with laws and regulations. This organization is working to promote companywide compliance with laws and regulations through the establishment of necessary structures and systems. Specific initiatives undertaken by the organization include: (1) understanding the latest legislative movements, such as enactment and revision of laws and regulations; (2) disseminating the latest legislative movements throughout the Company and to applicable divisions and departments; (3) establishing in-house rules and regulations; and (4) holding in-house seminars.

Corporate Ethics Training Programs

Daicel provides position-specific corporate ethics training to new employees, union members, leaders and directors, as well as presidents of Group companies. Moreover, corporate ethics training is provided strategically on important occasions—for example, when employees are promoted. Also, in line with its technician training programs aimed at familiarizing technicians and engineers with basic techniques required for fulfilling a manufacturer's responsibility—achieving safe production and stable product supply—the Company offers educational programs in such areas as legal compliance. (See page 45 for more details.) Individual divisions are tasked with obtaining information regarding the laws and regulations directly linked with their operations and educating their personnel. In addition, corporate departments hold regular seminars on subjects of their respective fields of expertise. For example, the Personnel Group offers open seminars on personnel matters. If necessary, these seminars are provided on a divisional basis.

Examples of In-House Seminars

Antitrust Law (9)	Act against the Delay in Payment of Subcontract Proceeds, etc., to Subcontractors (11)	Credit Management (5)
Regulations on Export Controls (8)	Confidential Information Management (10)	Regulations on Insider Trading (2)
Basics of Laws and Contracts (7)	Basics of International Contracts (2)	United Nations Convention on Contracts for the International Sale of Goods (2)
Intellectual Property (IP) Rights (14)		

Figures in parentheses indicate the number of seminars held during fiscal 2009.

For those employees who are not able to participate in these seminars for work-related reasons, the educational materials and manuals used in these seminars are made available throughout the Company via the intranet. These materials and manuals are also used in training and educational programs conducted independently by each division.

Examples of Educational Materials (Mostly Prepared by the Legal Group)

Regulations on Export Controls / Guide to Stamp Tax / Regulations Concerning Relationships with Government Employees / Antitrust Law Case Studies / Confidential Information Management / Law Concerning Securing the Proper Operation of Worker Dispatch Undertakings and Improved Working Conditions for Dispatched Workers / Guide to Act against the Delay in Payment of Subcontract Proceeds, etc., to Subcontractor / Basics of Contracts / Credit Management / Guide to Terms of Transaction Contracts / Act on the Protection of Personal Information / Product Liability / Basics of International Contracts / United Nations Convention on Contracts for the International Sale of Goods/Regulations on Insider Trading



Comment by a Legal Seminar Instructor

Takuji Tokoro
Legal Group, Corporate Support Center, Daicel Chemical Industries, Ltd.

The Legal Group provides various legal seminars. These seminars are offered not only to Daicel employees but also to employees of Daicel Group companies and are designed to match various learning needs of participants, which tend to vary according to their positions and job descriptions. Our seminars use various formats. In addition to normal lectures, participants are provided with opportunities to have discussions and learn through case studies for more participatory experience. We try to make our seminars easy to understand, beneficial and enjoyable.

Other than the basic function of facilitating the understanding of subject matter, our legal seminars have another function: establishing closer ties between the Legal Group and Daicel Group companies. Many

participants from Daicel Group companies have familiarized themselves with the faces of Legal Group members through these seminars. As a result, those who used to have little contact with the Legal Group in the course of day-to-day activities now proactively ask legal questions and consult with us on legal issues. Consultation through e-mail is not as fulfilling as face-to-face consultation. Through face-to-face consultation, we can build relationships of trust with those who approach us. I believe that such relationships are actually helping Daicel and its Group companies to nurture employee awareness toward corporate ethics.



Comment by a Legal Seminar Participant

Tomomasa Inoue
General Affairs Group, Corporate Support Center, Daicel Membrane-Systems Ltd.

As a member of the Daicel Group, I participated in a legal seminar provided by Daicel's Legal Group.

Also, during fiscal 2009, Daicel Membrane-Systems invited an instructor from Daicel's Legal Group to hold lectures on credit management. These lectures were held in line with our sales meetings. Through these meetings, our sales personnel learned the legal knowledge and stance required for conducting sales activities. I believe that what they

learned is contributing to our companywide risk management.

I would like to proactively participate in future seminars. By disseminating what I learn through future seminars for those who cannot attend, I would like to keep striving to raise the awareness of corporate ethics at Daicel Membrane-Systems.



Report and Consultation System (Corporate Ethics Help Line)

With the intent of establishing a system to protect whistleblowers who act in the public interest, Daicel is taking steps to ensure that the employees of each workplace are able to issue reports and hold consultations without difficulty. However, for circumstances where corporate ethics-related issues cannot easily be solved through ordinary reporting to supervisors, we have put in place a Corporate Ethics Help Line—a unique in-house reporting system—to ensure that appropriate advice is available. To further promote use of this initiative, we have also provided an external Corporate Ethics Help Line.

Through the administration of the Corporate Ethics Help Line, whistleblowers and those who request consultations must be protected from the consequences of their actions. Daicel's Corporate Ethics Management Guidelines clearly state that: (1) the personal information and privacy of whistleblowers and those who request consultations must be protected; (2) adverse treatment in response to whistleblowers and those who request consultations must be banned; and (3) results of related investigations must be fed back to whistleblowers and those who requested consultations. Furthermore, the Company has formulated Detailed Guidelines for the Administration of the Corporate Ethics Help Line to ensure appropriate administration of this initiative.

Also, Group companies in Japan have established both an internal and external Corporate Ethics Help Line and are promoting similar initiatives.

CSR Promotion through Corporate Communication Magazine

Daicel publishes a Groupwide communication magazine, entitled PALETTE, three times a year. From the November 2008 edition, the magazine has included corporate ethics-related articles in the "What's Ethics" section.

The "What's Ethics" section changed its title to "What's CSR" from the October 2009 edition. Through this section, which elaborates on the theme of "Toward becoming a corporation trusted by society," we are working to disseminate the essence of CSR throughout the Daicel Group, including overseas Group companies.

Daicel publishes Japanese-English and Japanese-Chinese versions of PALETTE, and these magazines are distributed to domestic and overseas Group companies.



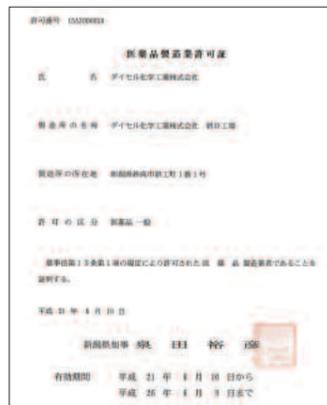
3 CSR Initiatives Report Quality Assurance

All of Daicel's plants have acquired ISO9001 certification, a set of international standards for quality management systems. Each constantly works to offer products that satisfy customers and meet their needs.

Each internal company is responsible for the quality of their products. Relevant officials from plants and corporate departments attend regular quality assurance meetings held at each internal company to share information, including customer requests. Moreover each internal company works closely with Daicel's headquarters and plants to leverage the Group's quality management system and thus ensure the maintenance and improvement of product quality across the Group.

Furthermore, in pursuit of safer and more user-friendly products, we are addressing the issue of acquiring certifications of quality management standards as well as meeting the legal requirements in each field for the following product lineups:

- Airbag inflators: Acquired ISO/TS 16949 certification (quality management system standards for the automobile industry)
- Special machinery products: Acquired JISQ 9100 certification (quality management system standards for the aerospace industry)
- Medical and pharmaceutical products: Implementing production and quality control under an organization and administration standard based on Good Manufacturing Practice (GMP) rules for the manufacturing, management and quality control of pharmaceutical products
- Food additives (sorbic acid and potassium sorbate): Meeting the AIB Consolidated Standards for Food Safety



Pharmaceutical Manufacturer's License (renewed in June 2009)



AIB Certificate (sorbic acid and potassium sorbate) (March 5, 2009)

Status of ISO9001 Acquisition and Updating to 2008 Edition (As of March 31, 2010)

Plant/Group Company	Certificate No.	Certificate / Edition	Expiration	Updating Status
Aboshi Plant, Himeji Production Sector	JQA-0953	ISO9001:2008	2012.9.18	Completed
Hirohata Plant, Himeji Production Sector, Daicel Polymer Ltd.	JQA-QM4647	ISO9001:2008	2013.2.26	Completed
Harima Plant, Aerospace & Defense Systems Division, Aerospace & Defense Systems / Safety Systems Company	BSK0027 / BSKA0028	JISQ9100:2004 JISQ9001:2008	2011.4.14	Completed
Harima Plant, MSD Division, Aerospace & Defense Systems / Safety Systems Company	JQA-2448	ISO9001:2008	2013.4.22	Completed
Kanzaki Plant, Daicel Value Coating Ltd.	JCQA-0530	ISO9001:2008	2011.8.1	Completed
Arai Plant	JCQA-0136	ISO9001:2008	2011.6.2	Completed
Ohtake Plant	JQA-1023	ISO9001:2000	2010.10.26	2010.9
Polyplastics Co., Ltd.	JQA-1283 / QA-AU0071	ISO9001:2008 ISO/TS16949:2009	2012.12.25 2012.12.10	Completed Completed
Daicel Safety Systems Inc.	JQA-AU0033	ISO/TS16949:2009	2013.4.15	Completed
Daicel Pack Systems Ltd.	JQA-QMA-11465	ISO9001:2008	2013.7.1	Completed
Aboshi Plant, Daicel-Evonik Ltd.	JQA-2481	ISO9001:2000	2010.8.5	2010.7
Nagano Plant, Daicel Novafoam Ltd.	PJRC2008-01246	ISO9001:2008	2011.7.7	Completed
Okayama Plant, Daicel Novafoam Ltd.	PJRC2007-01222	ISO9001:2008	2013.6.24	Completed
Daicel Logistics Service Co., Ltd.	JCQA-0568	ISO9001:2008	2011.10.17	Completed
Dainichi Chemical Corp.	JCQA-0689	ISO9001:2008	2012.4.16	Completed
Japan Shotshell Ltd.	JQA-QMA-13973	ISO9001:2008	2012.8.20	New
Aboshi Plant, Daicel Membrane-Systems Ltd.	JQA-1577	ISO9001:2008	2011.2.6	Completed

Introduction of Leading-Edge Quality Inspection Equipment

The Organic Chemical Products Company has introduced the latest in inductively coupled plasma mass spectrometry (ICP-MS) equipment at the Ohtake Plant. This equipment is capable of the ultratrace analysis of metallic elements at a concentration level lower than can be analyzed with conventional ICP-MS equipment. We are taking advantage of this powerful equipment in process management and quality improvement.



Comment by Quality Assurance Officer

Reflecting on FDA Inspection at the Arai Plant

During the four-day period from April 6, 2009 to April 9, 2009, an inspection was carried out at the Arai Plant by the U.S. Food and Drug Administration (FDA). It is said that the FDA conducts the most stringent inspections in the world. The FDA adheres to the maxim, "Without proof, it is just hearsay." Therefore, we had to be prepared: we explained everything with records and documents. It was the first time we had ever undergone an FDA inspection. Nevertheless, despite some suggestions made by inspectors, we were able to acquire a letter of compliance after submitting improvement reports. We will do our best to maintain our compliance with the Current Good Manufacturing Practice (CGMP) guidelines of the United States.



Nobuhiro Katsumata
General Manager,
Quality Assurance, CPI Company

The Responsible Care Initiative

Scope of Environmental Performance Data Calculation

In the presentation of environmental performance data, "Daicel," or "the Company," includes:

- Plants and research centers of Daicel Chemical Industries, Ltd.
- Workplaces of domestic Group companies located within Daicel plants that are promoting the Responsible Care Initiative jointly with Daicel

In the presentation of environmental performance data, "Other Group Companies" include:

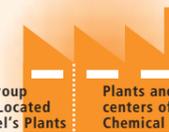
- Workplaces of domestic Group companies located outside Daicel's plants

More details on the scope of calculation are shown below.

Detailed data, including the breakdown of the pollutant release and transfer register (PRTR) and the environmental impact of each plant and research center, is available on Daicel's website at:

<http://www.daicel.co.jp/rescare/index.html> (Japanese language only)

Domestic Group Companies Located within Daicel's Plants



Plants and research centers of Daicel Chemical Industries, Ltd.

Other Group Companies



Daicel (or the Company)

- Plants and research centers of Daicel Chemical Industries, Ltd.

Aboshi Plant, Himeji Production Sector
Hirohata Plant, Himeji Production Sector
Harima Plant
Kanzaki Plant
Arai Plant
Ohtake Plant
Central Research Center

- Domestic Group Companies Located within Daicel's Plants (Within Aboshi Plant, Himeji Production Sector)

Kyodo Sakusan Co., Ltd.
Daicel-Evonik Ltd.
Daicel FineChem Ltd.
Daicel Membrane-Systems Ltd.
Daicel Logistics Service Co., Ltd.

- (Within Hirohata Plant, Himeji Production Sector)

Daicel Polymer Ltd.
Toyo Styrene Co., Ltd.
(Within Harima Plant)
Daicel Safety Systems Inc.
Daicel Logistics Service Co., Ltd.

- (Within Kanzaki Plant)

Daicel Value Coating Ltd.
(Within Arai Plant)
Daicel FineChem Ltd.
Daicel Logistics Service Co., Ltd.
Daicel Arai Chemical, Ltd.

- (Within Ohtake Plant)

Daicel-Cytec Company Ltd.
Daicel Ohtake Sangyo Co., Ltd.
Daicel Logistics Service Co., Ltd.

Other Group Companies

Polyplastics Co., Ltd.

- Fuji Plant
- R&D Center
- Technical Solution Center

(Data on Polyplastics Co., Ltd. covers the period from January 1, 2009 to December 31, 2009)

Daicel Pack Systems, Ltd.

- Isezaki Plant

Daicel Novafoam Ltd.

- Nagano Plant

- Okayama Plant

Daicel Logistics Service Co., Ltd.

- Kanto Logistics Center

- Chubu Logistics Center

- Kansai Logistics Center

Dainichi Chemical Corp.

- Iwaki Plant

Japan Shotshell Ltd.

- Takasaki Plant

- Gunma Giant Shooting Practice Range

3 CSR Initiatives Report

The Responsible Care Initiative

Responsible Care: Basic Policies and Implementation System

We will strive to implement Responsible Care Initiatives throughout our operations in order to contribute to a viable sustainable society.

In 1995, Daicel established its Basic Policies for Responsible Care based on the guiding principles for improvement of environmental, health and safety conditions of the Japan Chemical Industry Association. Daicel is deeply aware of its responsibility as a corporate citizen to protect the environment and ensure the health and safety of all those involved with the Company in whatever capacity and whatever stage of its

operations—from the design of products to their manufacture and disposal. With this in mind, Daicel is promoting across-the-board RC activities.

In April 2009, the Daicel Group Responsible Care Promotion Assembly was held. At the venue, all the participants confirmed details of the Daicel Group action guidelines for fiscal 2009, which were approved by the Company's Management Meeting.

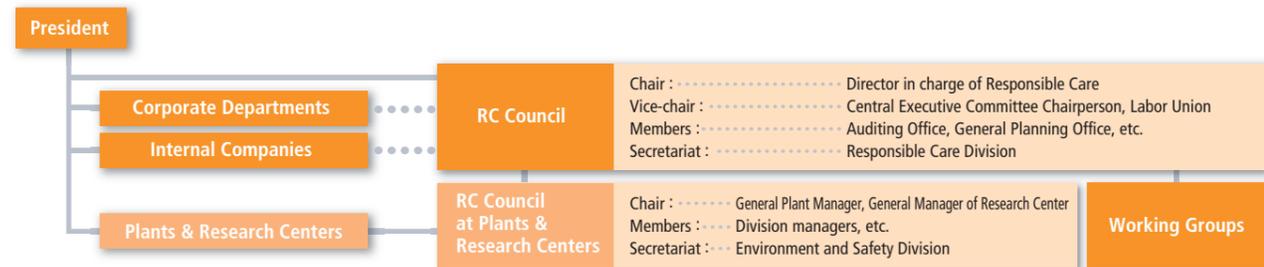
Basic Policies for Responsible Care

In all aspects of its business operations, Daicel is making the utmost efforts to ensure environmental preservation, process safety and disaster prevention, occupational health and safety, chemical and product safety, distribution

safety, and dialogue with society in accordance with the Responsible Care Standards of the Japan Chemical Industry Association (JCIA). Daicel is making steady and continuous progress in all of these areas.

- 1 While strictly abiding by laws and regulations currently in effect, in its business operations, Daicel will strive to uphold the principles of environmental preservation and attention to safety. All employees will be made aware of policy measures and their assistance will be secured during implementation to ensure sustained effort.
- 2 Daicel will conduct a thorough assessment of its new products' impact on health, safety, and the environment at every stage—development, manufacture, distribution, use, and disposal—prior to installing facilities for their production and introducing them to the market. Daicel will also strive to produce and offer products that take people's health, safety, and the environment into consideration.
- 3 Daicel will collect and maintain a database of information regarding environmental and safety issues that relate to its products and the substances it handles. To ensure their safe handling and use, the Company will provide all necessary information to users and distributors.
- 4 Daicel will promote raw material-saving and energy-saving initiatives as well as the recycling of waste products and restraints on their production to protect the environment and economize on the use of limited raw materials.
- 5 Daicel will seek to constantly raise safety standards to achieve a no-accident, no-disaster record at the manufacturing stage. The Company will ensure that appropriate emergency response procedures are in place, training is undertaken, and, in the event of an accident, appropriate countermeasures are taken at once.
- 6 Daicel will research, develop, and introduce technologies and products that are healthier, safer, and more environment-friendly than ever.
- 7 Daicel pledges to strictly abide by regulations in force in the relevant jurisdictions and give due attention to the environmental and safety concerns of the other parties involved when engaging in international transactions involving chemical products, conducting international business, and transferring technologies abroad.
- 8 Daicel will actively lead and support the environment- and safety-related activities of the Daicel Group companies with the aim of securing a better and safer environment for all.
- 9 Daicel will participate in and cooperate with environmental preservation activities undertaken by the communities in which it operates and seek to gain the trust and understanding of society as a whole by establishing a dialogue with it on safety and environmental matters.

Organizational Structure for Responsible Care



The Responsible Care Initiative

Total Environment, Health and Safety Assessment System for New Projects

Since 1995, Daicel has administered its unique Total Environmental, Health and Safety (EHS) Assessment System ("Total EHS Assessment"). Assessments based on this system are undertaken in accordance with the Basic Policies for Responsible Care.

Under the Total EHS Assessment System, a prior assessment of diverse risks associated with all business operations—including planning, R&D, production, consumption, and disposal—is initiated in order to ensure thorough consideration of environmental, health and safety issues. From a risk management perspective, the implementation of Total EHS Assessment is indispensable to ensuring effective corporate management.

The total number of assessments to date stands at around 490 for Class I plans (new plans with a profound impact on corporate management). The Company has introduced the Total EHS Assessment at Other Group Companies, and they are promoting the implementation.

<Total EHS Assessment: Its Mechanisms>

- 1 The implementation of the Total EHS Assessment is a precondition for receiving approval for new plans.
- 2 New plans are categorized by rank according to importance, which allows for the implementation of a method of rank-specific Total EHS Assessment.
- 3 The Total EHS Assessment is performed at each pivotal stage (basic, detailed and follow-up assessments according to stage).

Model Flow Chart of Total EHS Assessment



Details of New Projects

- New projects
- Changes in matters (e.g. processes) related to manufacturing
- New contracts/changes in distributors, customers and product applications
- New contracts/changes in manufacturing outsourcing
- Establishment, expansion and renovation of facilities
- Acquisition and transfer of properties and equipment
- New/change in waste management

Items in Prior Assessments

- Legal compliance
- Operational safety at facilities
- Safety handling of chemical substances
- Product safety
- Environmental preservation
- Distribution safety
- Occupational health and safety
- Safety in manufacturing outsourcing, purchasing and sales

Award-winning poster (Fiscal 2009 Responsible Care Poster Contest) (created by Norichika Ura, Takanori Kobatake, Yuuichirou Hirai, Ohtake Plant)



The Responsible Care Initiative

Environmental Management Systems

Environmental management systems support our Responsible Care Initiative.

We have committed ourselves to a program aimed at ensuring that all of Daicel's plants as well as its research centers acquire certification under ISO14001, a set of international standards for environmental management systems. This is intended to promote environmental preservation, an important aspect of Responsible Care.

Daicel is promoting the spread of environmental management systems throughout Other Group Companies. To date, two among Other

Group Companies have acquired the ISO14001 certification. During fiscal 2009, Dainichi Chemical Corp. advanced activities aimed at acquiring Eco Action 21 certification.*

Furthermore, the workplaces of Group companies within the premises of Daicel plants are engaged in targeted ISO 14001 activities specific to each plant. These workplaces have been certified together with the Daicel plants in which they operate.

ISO14001 Certification Status (Plants and Research Centers)

Plant / Research Center	Acquisition Date	Certificate No.
Ohtake Plant	August 1999	JQA-EM0492
Central Research Center	June 2000	JQA-EM0894
Aboshi Plant	December 2000	JQA-EM1229
Hirohata Plant (as Daicel Polymer Ltd.)	April 2001	JQA-EM1511
Harima Plant	July 2001	JQA-EM1683
Kanzaki Plant	December 2001	JCQA-E-0329
Arai Plant	December 2001	JCQA-E-0339

ISO14001 Certification Status (Other Group Companies)

Group Company	Acquisition Date	Certificate No.
Polyplastics Co., Ltd. (R&D Center)	February 1999	JQA-EM0337
Polyplastics Co., Ltd. (Fuji Plant)	April 1999	JQA-EM0414
Daicel Novafoam Ltd. (Head Office and Nagano Plant)	February 2003	C2003-00362 / Perry Johnson Registrars Inc.
Daicel Novafoam Ltd. (Okayama Plant)	June 2004	C2004-01523 / Perry Johnson Registrars Inc.

*Eco Action 21: Environmental management systems promoted by the Ministry of the Environment of Japan. These systems are designed for easy implementation by small- and medium-sized corporations. The Institute of Global Environmental Strategies Center for Sustainability (IGES-CfS) serves as the registrar of the certification.

Daicel Group's Responsible Care Initiatives in Fiscal 2009 and Targets for Fiscal 2010

From fiscal 2009, Daicel started to set targets for Other Group Companies in the areas of "environmental preservation," "occupational health and safety" and "process safety and disaster prevention" and promoted related activities.

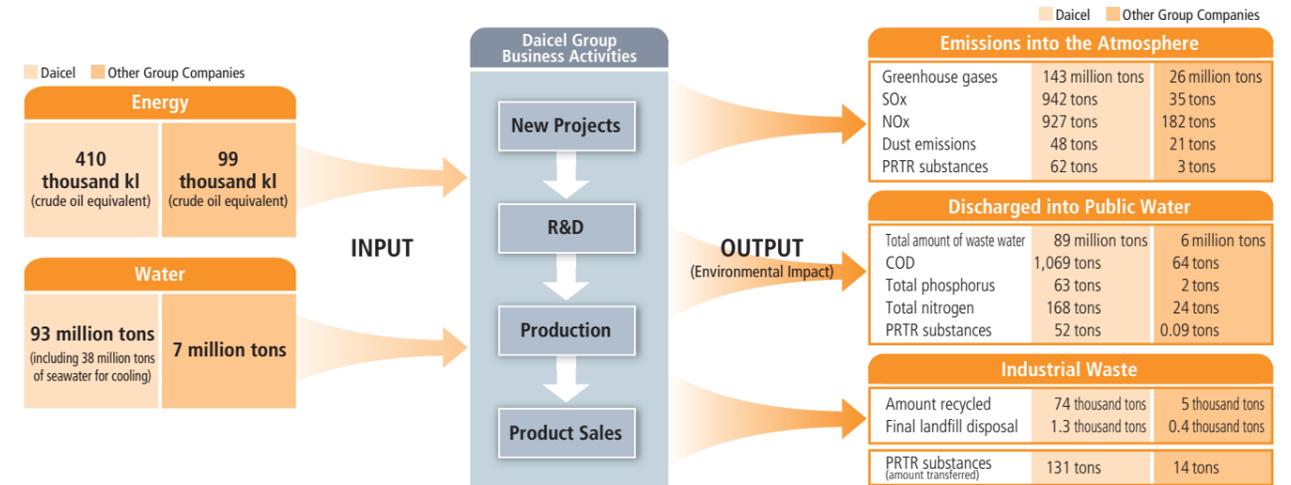
Daicel's Responsible Care Initiatives in Fiscal 2009 and Target for Fiscal 2010

Area	Fiscal 2009 Initiative		Fiscal 2010 Target
	Target	Result	
Environmental Preservation • Respond to the Kyoto Protocol Target Achievement Plan • Implement a medium-term plan to reduce the amount of waste	Promote activities to improve our average energy consumption rate for fiscal 2008-2012 by 20% compared with the 1990 level	Improved the energy consumption rate in fiscal 2009 down to 90 points (with the 1990 level set at 100)	Continue activities to improve our average energy consumption rate for fiscal 2008-2012 by 20% compared with the 1990 level
	Aim to achieve the target of CO ₂ emissions reduction at the Aboshi Plant through participation in the Trial Implementation of an Integrated Domestic Market for Emissions Trading (Target year: Fiscal 2010)	Participated as a joint target-setter in the Trial Implementation of an Integrated Domestic Market for Emissions Trading in December 2008; reported results to the Ministry of Economy, Trade and Industry	Promote the achievement of targets (at the Aboshi Plant) under the Trial Implementation of an Integrated Domestic Market for Emissions Trading
	Promote energy-saving activities at employees' households	Organized activity framework and held briefing sessions for applicable divisions; full-scale energy-saving activities started at Daicel employees' households	Continue energy-saving activities and report results to the Japan Chemical Industry Association
	Keep the final landfill disposal index below 20% (with the 1990 level set at 100)	Recorded the final landfill disposal index of 6% in fiscal 2009	Keep the final landfill disposal index below 20% (with the 1990 level set at 100)
Chemical and Product Safety • Comply with European regulations on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) • Reduce emissions of pollutant release and transfer register (PRTR) substances and volatile organic compounds (VOCs)	REACH Regulations: Continue to comply with REACH Regulations with the aim of completing registration	Worked toward the finalization of registration policies for participants in substance information exchange forums and testing plans as a preparatory process prior to REACH registration	Monitor the status of substance information exchange forums and complete the REACH registration for the first such Daicel products
	Reduce VOC emissions by 30% from the fiscal 2000 level (Target year: fiscal 2010)	Reduced VOC emissions by 27% from the fiscal 2000 level through capital investments	Reduce VOC emissions by 30% from the fiscal 2000 level
	Reduce the emissions of prioritized PRTR substances	Reduced the emissions of PRTR substances	Continue reducing the emissions of PRTR substances
Occupational Health and Safety • Eliminate labor accidents	Eliminate labor accidents	Reduced both the number of significant labor accidents and the number of labor accidents, by 40% year on year for the latter	Promote 3S, hazard prediction and crisis-situation identification activities
	Prevent similar accidents by promoting the use of the Safety Alert Database	Formulated the Safety Alert Database Administration Guidelines for the companywide network for emergencies	Continue to administrate the Safety Alert Database to prevent similar accidents
	Continue the standardization of basic actions and safety rules across the board	Standardized companywide rules for the use of protective glasses and for high-place work Formulated (or revised) the Protective Glass Use Guidelines and the High-Place Work Safety Guidelines	Continue standardization processes
Process Safety and Disaster Prevention • Eliminate all fire, explosion, leakage accidents	Promote practical companywide measures against accidents and disasters	Conducted companywide disaster drills and revised the Disaster Response Rules based on the issues identified	Continue to strengthen disaster response capabilities
Distribution Safety • Eliminate at-fault logistics accidents	Commence the practical administration of the Logistics Safety Control Rules and implement distribution accident drills	Comprehensively revised the companywide Logistics Safety Control Rules and implemented distribution accident drills in line with the revised rules	Disseminate and administer the Logistics Safety Control Rules at internal companies, plants, Group companies and Daicel Logistics Services Co., Ltd.
	Establish a new energy-saving plan for shippers and continue to receive reports periodically	Established a new energy-saving plan and received reports regularly (reduced energy consumption by approximately 39% from the fiscal 2008 level)	Establish and implement a new energy-saving plan jointly with Daicel Logistics Service and report results regularly Halve the number of logistics-related troubles
Dialogue with Society • Publish reports and promote communication with local communities	Further enhance the disclosure of CSR practices to ensure accurate evaluation	Enhanced CSR disclosure by adding information relating to utilization of human resources and other initiatives to reports	Include information relating to Group companies' Responsible Care Initiatives to make a report covering the entire Daicel Group

Other Group Companies' Responsible Care Initiatives in Fiscal 2009 and Targets for Fiscal 2010

Area	Fiscal 2009 Initiative		Fiscal 2010 Target
	Target	Result	
Environmental Preservation	Promote energy-saving activities	Established targets at Other Group Companies and promoted related activities	Continue to set targets at Other Group Companies and promote related activities
	Promote energy-saving activities at employees' households	Promoted preparation for energy-saving activities at employees' households	Start energy-saving activities at employees' households and report as the Daicel Group to the Japan Chemical Industry Association
	Promote 3R for industrial waste	Established targets at Other Group Companies and started related activities	Continue related activities
Occupational Health and Safety	Promote activities aimed at eliminating labor accidents and facilitating greeting and 3S	Reduced the number of labor accidents compared with fiscal 2008 (four Other Group Companies achieved a zero accident rate)	Promote 3S, crisis-situation identification and hazard prediction activities
Process Safety and Disaster Prevention	Promote practical implementation of the Total ESH Assessment	Organized and attempted small-scale assessments	Establish (or renew) guidelines and systems for emergency responses and continue implementing small-scale assessments

Business Activities and Their Environmental Impact (Results for Fiscal 2009)



Environmental Accounting

Daicel has introduced an environmental accounting system with the goal of implementing efficient environmental preservation activities, ensuring further corporate transparency, and quantitatively assessing and evaluating the investments, costs, and effectiveness of our environmental preservation activities.

With the aim of contributing to the prevention of global warming, the entire Daicel Group promoted energy-saving activities. As a result of these activities, the Daicel Group was able to cut energy-related costs by ¥290 million. This figure roughly matches an amount of energy used in production equivalent to 13 thousand kiloliters of crude oil, which accounts for 3.2% of total energy used in the Daicel Group's business activities during fiscal 2009.

The Daicel Group will continue to aggressively promote energy-saving activities through such means as the establishment of an Energy-Saving Council (provisional name).

Quantitative results (effects on environmental preservation) are summarized in the sections, "Daicel Group's Responsible Care Initiatives in Fiscal 2009 and Targets for Fiscal 2010" (page 34) and "Environmental Preservation" (pages 36 to 38).

Environmental Preservation Costs

Classification	Major Initiatives	Amounts Invested (¥ million)	Cost (¥ million)	
1. Environmental preservation costs of controlling the environmental impact of our production service business activities that occur within business areas (business area costs)		231	3,159	
Breakdown	(1) Pollution prevention costs	Prevention of air and water pollution, control of harmful substances, levies for pollution-related health damages	201	2,017
	(2) Global environmental preservation costs	Energy conservation, capital expenditures for fuel conversion, cost of thermal pinch analysis	0	11
	(3) Resource recycling costs	Appropriate treatment and disposal of industrial waste	30	1,131
2. Costs of controlling the environmental impact of production and service activities occurring upstream or downstream (upstream and downstream costs)	Costs of recycling containers and packing materials and green purchasing	0	38	
3. Environmental preservation costs in management activities (environmental management costs)	Labor costs of environmental management, expenses for EMS operations and maintenance, costs of environmental education, costs of environmental impact alleviation	0	522	
4. Environmental preservation costs in R&D activities (R&D costs)	R&D work for reducing the environmental impact of products and technologies	26	105	
5. Environmental preservation costs in community activities (community activities costs)	Costs of environmental promotion activities and participation in community events	0	32	
6. Costs of environmental damage (environmental damage costs)	Environmental remediation costs, compensation for damages related to environmental preservation, and insurance premiums and transfers to reserves for environmental damage	0	2,265	
Total		257	6,121	

Item	Amount (¥ million)	Environmental Rate (%)
Capital expenditures in the applicable period	11,423	2.2
R&D expenditures in the applicable period	7,635	1.4

Economic Effects (Monetary Benefits) Resulting from Environmental Preservation Activities

Item	Amount (¥ million)
1. Cost reduction through energy conservation	294
2. Improvement of total thermal efficiency through in-house power generation	2,170
3. Cost reduction through resource conservation	834
4. Benefits obtained by recycling	422
5. Reduction of expenses for waste treatment or disposal	12
Total	3,732

Time period for reported totals: April 2009 - March 2010
 Calculation method for reported totals: Calculated according to the Environmental Accounting Guidelines, Year 2005 Edition, published by the Ministry of the Environment of Japan, and the Environmental Accounting Guidelines for the Chemical Industry, published by the Japan Chemical Industry Association (JCIA)
 Amounts invested: Actual sums for capital investment in environmental preservation in fiscal 2009 (settlement basis)
 Cost amounts: The totals for actual expenses of equipment depreciation, maintenance, management, and labor related to environmental preservation
 Economic effects resulting from environmental preservation activities: Indicated as monetary benefits only and does not include risk avoidance effects or de facto effects. Economic effects attributable to reductions in energy costs are presented by annualizing the effects of energy cost reductions realized through energy-saving initiatives actually implemented during fiscal 2009.

Environmental Preservation

- As an initiative to help prevent global warming, Daicel started the manufacture of ethyl acetate based on bioethanol in fiscal 2009. Also, the Company began energy-saving activities involving employees' households in line with the Accelerate by Chemical Industry for Cool Earth (ABC) Activity promoted by the Japan Chemical Industry Association (JCIA).
- From this report on, environmental performance of Other Group Companies is included.

Energy Conservation and the Prevention of Global Warming

Daicel continued to promote energy-saving activities in fiscal 2009. As a result, the Company's CO₂ emissions attributable to its energy consumption totaled 1,230 thousand tons, down 80 thousand tons compared with fiscal 2008. Also, the total greenhouse gas emissions amounted to 1,430 thousand tons, down 70 thousand tons year on year.

The energy consumption rate index for fiscal 2009 declined 7 points from fiscal 2008 to 90 (with the fiscal 1990 level set as 100), owing to the improvement in capacity utilization and the promotion of the use of recycled fuels. Similarly, the CO₂ emissions rate index dropped 10 points year on year to 92 (with the fiscal 1990 level set as 100).

In addition to its energy-saving activities, Daicel is promoting the "carbon neutral" initiative,*¹ through which petroleum-based fuels and raw materials are replaced with biomass-based fuels and raw materials. Based on its success in the manufacture of ethylamine, the Company started the manufacture of ethyl acetate based on bioethanol in July 2009.

With the aim of accomplishing the Voluntary Action Plan for Environmental Conservation,*² Daicel will continue to further promote the use of recycled fuels and more stringent energy-saving activities.

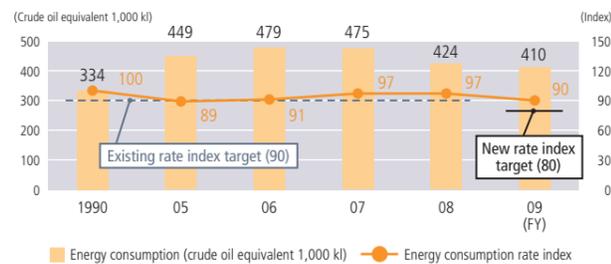
Energy consumption and greenhouse gas emissions by Other Group Companies totaled 99 thousand tons (crude oil equivalent) and 260 thousand tons, respectively. The largest portion of the greenhouse gas emissions was CO₂ emissions attributable to their energy consumption.

Participation in the Trial Implementation of an Integrated Domestic Market for Emissions Trading

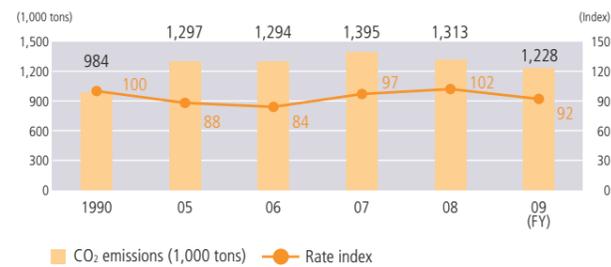
The Trial Implementation of an Integrated Domestic Market for Emissions Trading has been promoted by the Cabinet Office of the Government of Japan since October 2008, following the July 29, 2008 cabinet approval of the Action Plan for Achieving a Low-Carbon Society. This government-led program is aimed at clarifying systematic issues prior to the full-scale introduction of the emissions trading scheme. Daicel's flagship Aboshi

Plant has participated in this program as a target-setting company. The Aboshi Plant is advancing activities aimed at reducing CO₂ emissions, including fuel conversion and waste heat recovery, in order to achieve the fiscal 2010 target of 0.60 ton-CO₂/ton of production.

Energy Consumption and Rate Index



Amount and Rate Index of CO₂ Emissions



Amounts of CO₂ emissions as far back as fiscal 1990 have been recalculated in line with the Act on the Promotion of Global Warming Countermeasures.

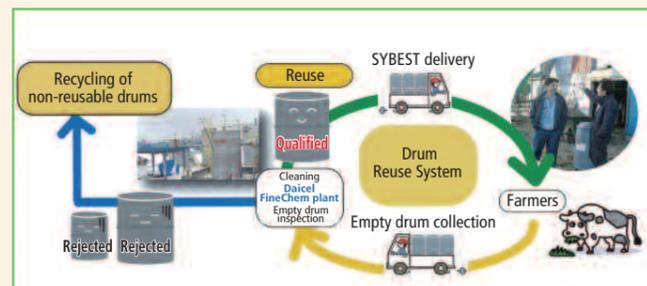
- Notes:
- Carbon neutral is the concept that the CO₂ absorbed by biomasses through their growth processes balances with the CO₂ emitted through the use of biomass-based fuels.
 - The Voluntary Action Plan for Environmental Conservation is promoted by the Japan Chemical Industry Association (JCIA) to reduce the average industrywide energy consumption rate over the period from fiscal 2008 to fiscal 2012 by 80% from the 1990 level. Daicel has participated in this initiative.

T O P I C S

Reuse and Recycling of SYBEST Containers

Daicel FineChem Ltd. started the reuse and recycling of containers (drums) for its mainstay SYBEST, a feed-crop additive, in fiscal 2009.

For fiscal 2010, Daicel FineChem plans to reuse and recycle a total of 7,000 drums throughout Hokkaido. The reuse and recycling of the drums in that quantity reduce CO₂ emissions by approximately 100 tons annually, contributing to environmental preservation and global warming prevention.



Energy-Saving Activities at Employees' Households

In Japan, CO₂ emissions in the household sector have increased approximately 40% from the 1990 level. Today, the annual CO₂ emissions from this sector amount to approximately 180 million tons, accounting for 14% of the total CO₂ emissions in Japan. Accordingly, energy-saving activities at homes are becoming increasingly important.

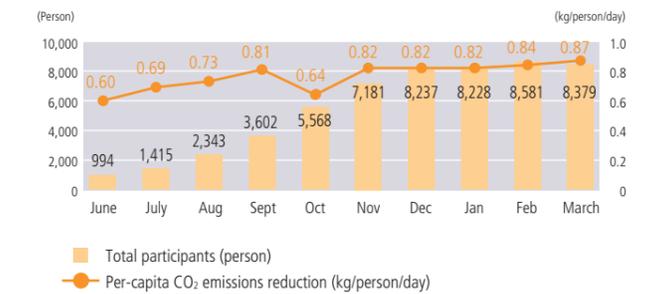
The "Team Minus 6%" program was launched in 2005 as a government-led initiative to promote voluntary activities among Japanese people. Also, in the chemical industry, JCIA started the promotion of household energy-saving activities in 2008 through the ABC Activity. Following the trial implementation in fiscal 2008, Daicel began the full-scale promotion of energy-saving activities at employees' households in fiscal 2009.

As of March 31, 2010, the number of participants in the Company's undertaking, including family members of Daicel employees, exceeded

8,000. The aggregate CO₂ emissions reduction since the start of this initiative totaled 1,322 tons.

From April 2010, Daicel has been working to expand this initiative throughout the entire Group, including its Group companies.

Fiscal 2009 Results of Energy-Saving Activities at Employees' Households



Polyplastics Co., Ltd.

CSR and Corporate Communications General Administration Department, Corporate Support Division

Erina Endoh (Left)
Kaori Jindai (Right)



Polyplastics Co., Ltd. Started Energy-Saving Activities at Employees' Households in April 2010.

We have prepared a checklist consisting of those action items that may be especially confusing to understand and that may need family discussions prior to actual implementation. This checklist helps program participants to better understand all the action items and to facilitate cooperation among family members. Polyplastics is committed to strengthening its energy-saving activities at employees' households.

Reduction and Recycling of Industrial Waste

In accordance with JCIA's Voluntary Action Target for Environmental Conservation (to reduce the amount of final disposal by landfill below 20% of the 1990 level by the end of fiscal 2010), Daicel has been striving to recycle its industrial waste. Reflecting these endeavors, we attained our target in 2005 ahead of schedule and are further accelerating our recycling efforts.

In fiscal 2009, the total amount of industrial waste generated by Daicel declined approximately 2,000 tons compared with the previous fiscal year, to 103,044 tons. Total final disposal by landfill also decreased 124 tons year on year to 1,265 tons.

Furthermore, the Aboshi, Ohtake, Hirohata and Harima plants recorded less than 1% of final waste disposal by landfill to total industrial waste, achieving zero emissions again, as done in the previous fiscal year. Daicel will make further efforts in its 3R (Reduce, Reuse and Recycle) activities to enhance the industrial waste recycling rate.

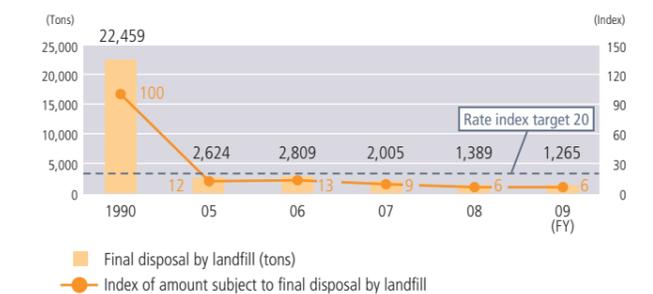
The total amount of industrial waste generated by Other Group Companies amounted to 6,122 tons, and the total final disposal by landfill attributable to Other Group Companies stood at 449 tons. Also, Polyplastics has achieved zero emissions.

Amount of Industrial Waste Generated and Recycling Rate



Recycling Rate
This term represents the ratio of the amount of reused and recycled waste to the amount of waste generated or emitted. Daicel defines the term as the ratio of the amount of reused and recycled waste (including heat recovery) by Daicel and by treatment contractors to the amount of industrial waste generated.

Amount of Final Disposal by Landfill and Rate Index

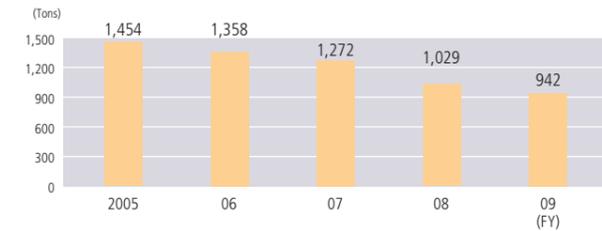


Environmental Management to Prevent Air and Water Pollution

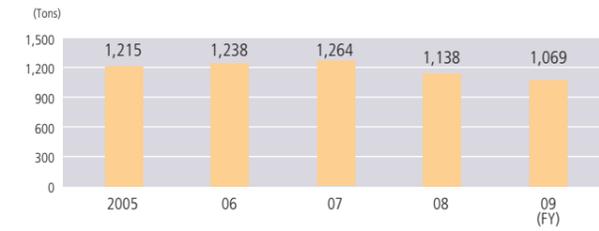
For fiscal 2009, Daicel's emissions of SOx, NOx, chemical oxygen demand (COD), total phosphorus and total nitrogen were almost on par with the fiscal 2008 levels.

Daicel will continue to reinforce its environmental management

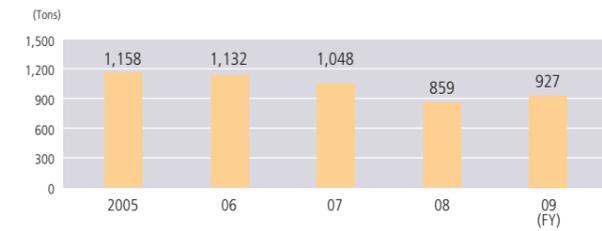
SOx Emissions



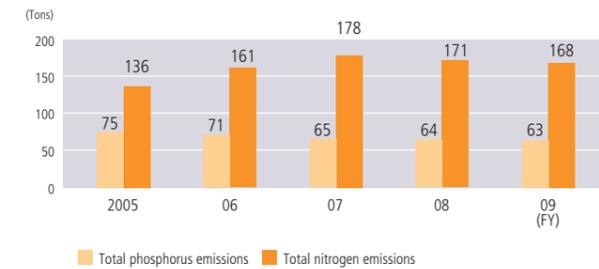
COD Emissions



NOx Emissions



Total Phosphorus and Total Nitrogen Emissions



Dust Emissions



Figures for Other Group Companies are presented as totals for individual emissions categories on page 35.

T O P I C S

Initiatives Aimed at Preserving Biodiversity

In our daily life, we receive direct or indirect benefits from a diverse range of living organisms on the earth. Today, the earth's biodiversity is at risk, as seen in an increase in endangered species due to changes in the global environment often caused by human activities. In response, representatives of nations throughout the world will gather in Nagoya City, Aichi Prefecture, Japan, in October 2010 to hold the Conference of the Parties 10 (COP 10), an international conference on biodiversity and other environmental subjects.

Biodiversity: Movements in Japan

- Enactment of the Basic Law on Biodiversity (June 2008)
- Japan Business Federation's Biodiversity Declaration (March 2009)

At Daicel, we are promoting initiatives aimed at protecting the global environment, facilitating the appropriate control of chemical substances and reducing the emissions of such substances. In addition, the Company has promoted R&D activities that comply with the Cartagena Protocol on Biodiversity, which seeks to protect biological diversity from the potential risks posed by the modification of living organisms resulting from modern biotechnology.

Currently, Daicel is working to accurately assess the impact of its Groupwide activities on the ecosystem and raising the awareness of all Group employees toward the protection of biodiversity. In line with these activities, the Company plans to establish basic policies for related activities in fiscal 2010.



Award-winning poster (Fiscal 2009 Responsible Care Poster Contest; created by Masahiko Ueda, Daicel Value Coating Ltd., and his family members)

systems to prevent pollution, thereby better preparing itself for the strengthening of regulations such as the revision to the Air Pollution Control Law and Water Pollution Prevention Law of Japan. More specifically, the Company will work to reduce emissions of substances that cause air and water pollution.

The Responsible Care Initiative

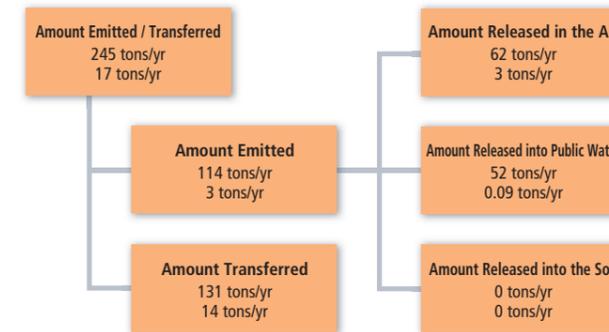
Chemical and Product Safety

Appropriate Management and Controlled Emissions of Chemical Substances

Management of PRTR Substances' Emissions and Transfers and Reduction of Their Emissions

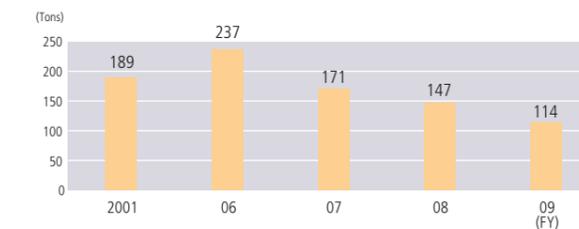
Since 1996, Daicel has been voluntarily participating in the Pollutant Release and Transfer Register (PRTR) project of JICA to control PRTR substance emissions and amounts transferred. In fiscal 2009, the Company selected certain substances for which it prioritizes emissions reduction in accordance with the toxicity classification established by the non-profit Organization for Research and Communication on Environmental Risk of Chemicals. We have promoted related activities to reduce the emissions of the selected substances. As a result, the Company was able to reduce the emissions of pyridines, monochloroacetic acid and other applicable substances in fiscal 2009.

Emissions and Transfers of PRTR Substances (Fiscal 2009 Results)



*Upper figure: Daicel Lower figure: Other Group Companies

PRTR Substance Emissions



Fiscal 2009 results are disclosed on our website. (Japanese language only)

<http://daicel.co.jp/rescare/index.html>

Also, amounts of PRTR substances transferred or released into the water by Other Group Companies are presented as totals for individual transfer and release categories on page 35.

Glossary

Pollutant Release and Transfer Register (PRTR): A system to calculate the extent to which the production, use, and storage of chemical substances result in the release and transfer of those substances into the environment.

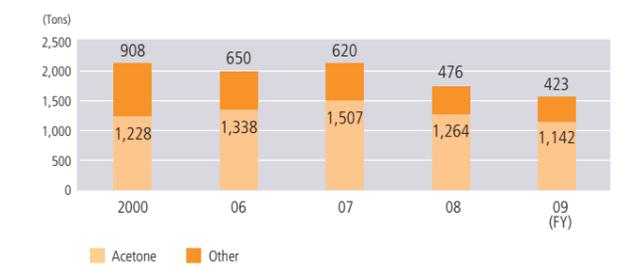
Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) Regulation: An EU regulation obliging producers to register, evaluate, authorize and restrict the use of chemical substances

Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation: An EU system for classifying, labeling and packaging substances and mixtures

Reduction of VOC Emissions

In accordance with the Voluntary Action Plan for Environmental Conservation promoted by JICA, Daicel has set the target of reducing its volatile organic compound (VOC) emissions 30% from the level that it recorded in fiscal 2000 by the end of fiscal 2010. Related activities are being implemented to achieve this target. During fiscal 2009, the Company made investments to improve the solvent recovery processes at its Aboshi Plant and, consequently, reduced the emission of acetone. Also, at the Arai Plant, we continued facilities investment to reduce methanol emissions into the air, and the new facilities started operations. As a result, we have reduced our VOC emissions by 175 tons year on year, or by 27% from the fiscal 2000 level.

Daicel's VOC Emissions



Appropriate Control of Polychlorinated Biphenyls (PCBs)

In compliance with the Law Concerning Special Measures against PCB Waste, Daicel's workplaces practice the appropriate storage of capacitors, transformers and heavy machinery containing PCBs as well as objects contaminated with PCBs. These waste PCBs will be registered to the Japan Environmental Safety Corporation and treated appropriately.

Safety Assessments of Daicel Products

Daicel is proactively promoting safety assessment of its products, while responding to legal controls

To ensure the safety of the chemical products we supply to our customers, Daicel has incorporated Product Safety Assessment Standards and Chemical Substance Safety Assessment Standards under the Total Environmental, Health and Safety (EHS) Assessment System and has been actively promoting product safety assessments. We are also participating in the High Production Volume (HPV) Program and the Japan Challenge Program, both of which are designed to compile information on chemical substances, with the cooperation of the government and the public. Through these activities, we are promoting the collection and improvement of safety data for chemical substances.

Responding to the EU's REACH and CLP Regulations

Daicel is advancing activities to ensure that its products exported to the EU in the volume of 1,000 tons or larger are compliant with the REACH Regulation. With the aim of completing the registration processes for applicable products by the end of November 2010, the Company is strategically conducting necessary safety assessments. In addition, Daicel is accelerating initiatives to make its products compliant with the EU's new CLP Regulation.

Occupational Health and Safety

The Number of Total Accidents with/without Lost Workdays Declined for the Third Consecutive Year

At all of its workplaces, Daicel has promoted activities to upgrade its operational foundations, 3S activities (*seiri* [tidying], *seiton* [putting everything in order] and *seisou* [cleaning]), crisis-situation identification activities and hazard prediction activities through the use of the PDCA cycle. In addition to these activities, Daicel started the full-scale utilization of its Safety Alert Database through work-employer cooperation during fiscal 2009. Based on this database, the Company promoted initiatives to prevent accidents similar to those listed in the database.

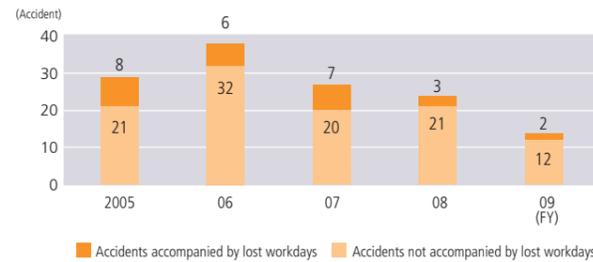
As a result, the number of labor accidents accompanied by lost workdays (including partner companies on plant premises) stood at 2 during fiscal 2009. The number of labor accidents not accompanied by

lost workdays was 12. In the past three years, the Company has reduced these figures while significantly improving its accident frequency rate.

For Other Group Companies, the Company has also promoted 3S and other safety activities at their production sites as well as the use of a trouble checklist. As a result, the labor accident status is improving, with the number of labor accidents with and without lost workdays standing at 0 and 4, respectively, during fiscal 2009.

These activities, aimed at raising workplace awareness toward hazard prediction, are contributing to the improvement of our occupational safety performance. We will continue to implement related activities in fiscal 2010.

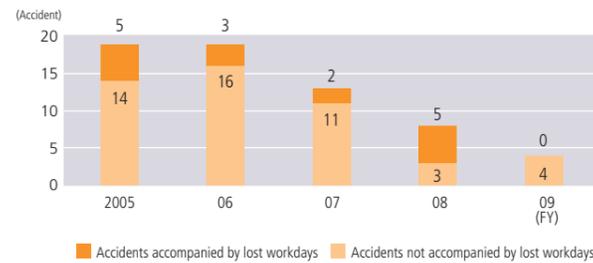
■ Labor Accidents at Daicel (including partner companies on plant premises)



■ Accident Frequency Rate at Daicel (including partner companies on plant premises)



■ Labor Accidents at Other Group Companies



■ Accident Frequency Rate at Other Group Companies



Accident frequency rate: A safety index to show the labor accident occurrence rate calculated with the following formula:
 Accident frequency rate = Number of people involved in labor accident/Number of total extra working hours (unit: millions of hours)

Replacement of Asbestos-Based Gasket Completed

In its facilities, Daicel had used spiral wound gaskets containing asbestos. These gaskets are included in the approved asbestos-based product list created by the Ministry of Health, Labour and Welfare of Japan. However, the Company has replaced all applicable spiral wound gaskets with non-asbestos gaskets, ending all asbestos replacement processes in fiscal 2009.

T O P I C S

We Create Our Original Responsible Care Calendars Based on Posters and Slogans Submitted by Our Employees

We welcome posters and slogans created and submitted by employees of Daicel, Group companies and partner companies as well as by their family members. The Company encourages the creation and submission of posters and slogans as part of efforts to raise the Groupwide safety awareness. Outstanding posters and slogans are used in the Company's original calendars, and these calendars are posted in each workplace.



Process Safety and Disaster Prevention

Continued Achievement of Zero Fire, Explosion and Leakage Accidents

During fiscal 2009, certain other chemical companies experienced large-scale explosions and fire accidents. On the other hand, Daicel achieved zero explosions and fire accidents. This was attributable to our stable plant operations thanks to the Company's promotion of various safety improvement activities and implementation of general operability studies* as well as to other activities aimed at reducing plant troubles and risks. These activities were promoted at all of the Company's workplaces.

In particular, our implementation plans for fiscal 2009 included activities to reduce risks relating to fire, explosion and natural disasters such as earthquakes. The progress of the implementation plans was frequently confirmed at meetings on the Company's Responsible Care Initiatives and through Responsible Care Audits. Also, each workplace conducted practical safety and emergency drills to strengthen the emergency response capabilities of employees.

Meanwhile, Daicel's head offices undertook the comprehensive revision of the Company's Disaster Response Guidelines with the aim of realizing practical responses to various disasters. The revised guidelines were tested for their effectiveness through the Companywide safety and emergency drills.



Safety and Emergency Drill at the Ohtake Plant

In fiscal 2010, the Company will examine the viability of establishing an inter-workplace wireless communication network and the introduction of a safety confirmation system in preparation for large-scale regional disasters.

* General operability studies: Daicel's proprietary method of codifying the advanced skills of veteran operators from safety, stability, quality and cost perspectives and standardizing team operations in case of occurrence of changes in plant operation status. Under this method, decision-making processes after finding irregular plant operations are codified for different stages, from identifying possible causes for irregular operations to minimizing the impact of irregular operations.

Distribution Safety

We Are Continuing Activities Aimed at Reducing Logistics-Related Troubles

Daicel Logistics Service Co., Ltd. is in charge of the logistics operations of the Daicel Group. In line with the Companywide Logistics Safety Control Rules, Daicel Logistics Service has pursued the clear division of operational functions and established related internal rules and guidelines, while promoting such safety activities as distribution accident drills. In fiscal 2010, Daicel Logistics Service will work to halve the number of logistics-related troubles. To this end, Daicel Logistics Service will reinforce its supervision of the partner companies it uses in such areas as problem recurrence prevention.

In response to the revised Energy Saving Law of Japan, Daicel, as the shipper, has formulated energy-saving plans for its logistics operations in cooperation with Daicel Logistics Service. In fiscal 2008, the Company achieved an approximate 39% reduction in energy used in its logistics

operations from the fiscal 2007 level (comparison of the energy consumption rates based on each year's transportation volume). Specific initiatives behind this achievement included the implementation of modal shifts, the constant utilization of containers at full capacity and the expansion of the unit of transportation. Daicel reported this achievement to applicable authorities.

Total transportation volume in fiscal 2009 was 217 million ton/kilometer, and total CO₂ emissions attributable to logistics operations were 13.6 thousand tons. Total transportation volume increased 32 million ton/kilometer from the fiscal 2008 level, owing to a recovery in economic conditions. Total CO₂ emissions attributable to logistics operations showed a mere 1-thousand-ton increase from the fiscal 2008 level, reflecting the Company's promotion of modal shift, such as increased use of ship transportation and other modes.

Daicel Logistics Service Co., Ltd.

Organic Chemicals Team, In-Plant Distribution Group, Ohtake Distribution Center

Yoshihiro Fujinaka



Ship Loading and Unloading Operations at the Ohtake Plant

I am in charge of ship loading and unloading operations at the Ohtake Plant. Specifically, I am tasked with receiving the raw materials and shipping finished products. In addition to these responsibilities, I am involved with the maintenance and management of storage yards.

Most of the raw materials used at the Ohtake Plant are received at the dock. So, this dock can be viewed as an entrance to the plant. In ship loading and unloading operations, many hazardous substances in large volumes are handled. Therefore, they are tension-intensive work processes but, at the same time, offer a significant sense of accomplishment when the job is completed. In cooperation with HAYASHI SHIPPING CO., LTD., which handles Daicel's marine transport, we are tackling daily operations by prioritizing safety.



Daicel Chemical Industries, Ltd.

• Airbag Inflators

An airbag inflator, a central component of automobile airbag systems, dispenses gas to the protective airbag at the moment of impact during a collision.

Daicel has been actively involved in environmental measures since inflators were first developed. In order to contribute to improved automobile fuel consumption, we have been developing lightweight inflators. This effort has achieved a 35% weight reduction compared to our 2001 product. The Law Concerning Recycling Measures for End-of-life Vehicles (The End-of-life Vehicle Recycling Law) came into effect in Japan on January 1, 2005. In response, we launched the full-scale operation of our inflator recycling business. This business utilizes the airbag inflator recovery and processing system demonstrated and prescribed for industry use by the Japan Automobile Manufacturers Association, Inc., the Japan Auto Recycling Partnership, and other organizations in 1998. As a result, inflators that have been removed and recovered from end-of-life vehicles can be completely recycled.



Automobile airbag inflators

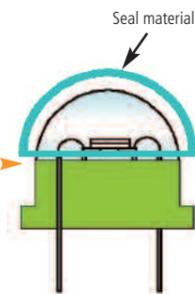
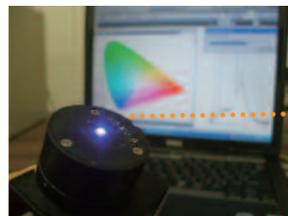


Used inflator recycling facilities

• CELVENUS

CELVENUS is a light-emitting diode (LED) seal material based on Daicel's CELLOXIDE 2021P, an alicyclic epoxy compound. This compound is highly resistant to the deterioration attributable to light irradiation and maintains transparency over an extended period of time.

Daicel is committed to the stable supply of seal materials that protect eco-friendly LEDs, thereby contributing to the spread of LED applications. In this way, we are helping to preserve the global environment.



• Chiralscreen Biocatalyst

Chiralscreen is an enzyme-based biocatalyst used in the synthesis of optically active materials, which are materials used for pharmaceuticals.

Conventional catalysts use organic solvents and hydrogen gas and require heating and pressurizing processes. On the other hand, most biocatalysts are based on water and therefore produce a reductive reaction at a normal temperature and pressure. Accordingly, biocatalysts are drawing attention as a "green" chemical process.

Chiralscreen not only enables safe and eco-friendly processes, but also the synthesis of high-purity optically active materials, which, in turn, realizes cost reductions in the synthesis of these materials.



Chiralscreen OH

Daicel FineChem Ltd.

• ECOBRID

ECOBRID is an eco-friendly thermosensitive adhesive (delayed tack) for labels with the following three characteristics.

1. Heating the coating side activates adhesion, so ECOBRID does not need backing paper that ends up as trash. This will contribute to the reduction of garbage.
2. The water-based emulsion used in ECOBRID produces hardly any volatile organic compound (VOC) as solvent-based adhesive in the coating process.
3. Labels made from ECOBRID can be easily peeled off by hand. This feature makes it easier to recycle labeled containers and separate garbage.



Easy-to-remove ECOBRID labels realize effortless garbage separation



Labels using ECOBRID

Daicel Pack Systems Ltd.

• Celcompact

Celcompact is an eco-friendly, lightweight, and volume-reducible plastic container.

Although quite thin, this innovative plastic container does not break easily, and unlike others, it can be easily twisted and crushed by hand. In addition, a crushed container retains its crushed shape. Consumers frequently complain that plastic containers are too bulky to dispose of and require a great deal of storage space. Celcompact, however, overcomes these problems. In addition, this plastic container contributes to the efficient collection of waste plastic containers.

Daicel Pack Systems is participating in the "Container & Package Diet" initiative promoted by the prefectures of Saitama, Chiba, Tokyo, and Kanagawa, and the cities of Yokohama, Kawasaki, Chiba, Saitama and Sagamiara.

For a detailed description of our lightweight container manufacturing operations, refer to the following website on the "Container & Package Diet" initiative:

http://www.diet-youki.jp/activity_report_list/activity_report_detail.php?uid=25 (Japanese language only)



Celcompact



Logo of "Container & Package Diet" initiative being promoted by nine cities and prefectures

• ECOFANTASY

ECOFANTASY is a biomass-based plastic which generates CO₂ throughout its production processes in a volume that is approximately 50% of that generated through polystyrene production. Boasting superior resistance to heat, impact and oil, ECOFANTASY enables a wider range of applications than conventional biomass-based plastics.



Daicel Novafoam Ltd.

• NOVAL C Carrier for Combined Septic Tanks

NOVAL C is non-chlorofluorocarbon (CFC) foam that Daicel Novafoam has developed using its proprietary foaming technologies. Based on non-crosslinked polyethylene, NOVAL C does not contain chlorine—a cause of dioxin generation—and is used for recyclable water treatment carriers.

NOVAL C has solved such carrier-related issues as liquidity, hydrophilic property and abrasion resistance. At the same time, this product has a structure which enables oxygen and sludge to easily get inside of carriers, where there are a great number of microorganisms.



• NOVAL ECO Shock-Absorbing Material

As part of its efforts to find substitutes for crude oil and reduce CO₂ emissions, Daicel Novafoam is accelerating the use of biomass in its products. For example, Daicel Novafoam has developed the NOVAL ECO starch-based shock-absorbing material and is advancing sales activities for this product.



Basic Policies for Personnel Training

Through the creation of chemical materials and other high-value-added products, the Daicel Group is aiming to help build a society friendly to people and the environment. To that end, the Group recognizes the importance of personnel training and takes initiatives based on the following policies.

- **Nurturing personnel will help the Company grow.**

Employees can gain true knowledge and skills through their job. Any attempt to achieve better results will nurture employees.

- **Personnel training shall be conducted on a Companywide, division and individual basis, reflecting trainees' roles and responsibilities.**

Based on a corporate culture that trusts and values "people," all Daicel employees—both trainers and trainees—shall undergo personnel training in line with their respective posts and responsibilities.

- **Human Resources That the Daicel Group Is Seeking**

We are aiming to attain a professional status in each position. We define a professional as a person who is trustworthy and reliable and someone who gains the recognition of customers as their "best partner." As a group of professionals, Daicel is working to provide the best solutions to its customers from the customers' point of view.

Personnel System to Support Personnel Development

- **"Management by Objectives" (MBO)**

MBO is a management system which enables both personnel and the organization to grow together through efforts aimed at achieving established targets. Through biannual meetings, each individual, under the direction of a superior, sets his or her goals in line with the targets of divisions and the entire Company. Individual employees then work to accomplish their goals. In terms of evaluation, we focus not only on results but also on the processes used. We use dialogues between superiors and subordinates as opportunities to allow people to develop their skills and ability.



- **System to Hear Employees' Thoughts (Voluntary Reporting System)**

The self-evaluation system gives employees an opportunity to express their wishes in career development. Once a year, all employees express their frank thoughts and opinions regarding their current job, future posting preferences and work locations. Through dialogues with them, their supervisors consider each subordinate's optimal placement and personnel training programs based on their wishes and aptitude, to make the most of their capabilities.

Educational and Training System to Support Personnel Development

- **Introductory Training for New Employees (Training for Manufacturing)**

We provide all new employees with one year of training for manufacturing operations. Through group seminars, each trainee initially learns basic corporate knowledge as well as company policy and various company systems. Following this, trainees will acquire basic knowledge about actions and behaviors required in manufacturing workplaces through on-the-job training at the Operation Training Center and a production site, where they will become acclimated to the eight-hour-shift system.



Group seminar at the H.R. Training Center



Educational program held at the Operation Training Center

- **Our Commitment to Our Technicians**

For Daicel, a manufacturing-oriented company, the development of technicians is an important management issue, because they underpin the foundations of the Company's manufacturing operations. Starting with the first-year training for manufacturing, technicians continue to receive education aimed at allowing them to acquire various specialized techniques, modes of action and other knowledge required when they become managers in the future.



OJT training at production sites and the Operation Training Center

- **Overseas Training Program**

As Daicel expands its overseas operations, it must develop personnel who have global business capabilities. Selected employees who wish to work at overseas locations and conduct overseas-related operations participate in an overseas training program that extends over several months. Program participants decide their destination and goals by themselves. They are required not only to acquire language skills, but also to eagerly engage in study of specialized knowledge and market information. Once they return from overseas, they apply the skills, knowledge and information acquired in their operations, regardless of their work locations.

Training and Educational Facility

Daicel's H.R. Training Center is located within the Harima Science Garden City (Kamigori-cho, Akou-gun, Hyogo Prefecture), which houses the SPring-8 large-scale photon source, the NewSUBARU medium radiation facility, the Hyogo Ion Beam Medical Center and other facilities. The Company opened the H.R. Training Center in 1998 in order to provide a facility in which Daicel employees can study together, communicate and refresh themselves. Since its opening, the H.R. Training Center has been used by many Daicel employees for a number of purposes, including educational seminars, companywide projects and improvement activities.



After Completing the Training for Manufacturing (Comments by Fiscal 2009 New Employees)



Takeshi Yagi (received training at the Arai Plant)
Corporate Research Center, R&D Management Division,
Daicel Chemical Industries, Ltd.

The department to which I was assigned through my training involves the manufacture of food additives. Therefore, everybody there is highly aware of the importance of product quality. Although they may have been manufacturing the same products over a long time, they have continued to reinforce their management standards in order to keep improving product quality. Through the training program, I learned the real importance of product quality in manufacturing operations.



Mami Nobutani (received training at the Aboshi Plant)
Corporate Research Center, R&D Management Division,
Daicel Chemical Industries, Ltd.

The department I was assigned to conducts stringent hazard prediction activities prior to the beginning of everyday operations and frequently holds safety meetings. I clearly understood that everyone there was fully aware of the safety of each worker in every facet of operations. Also, department members proactively communicate with one and other. I learned that the establishment of such communicative processes helps realize safety operations and stable production.



Yuichiro Hirai (received training at the Ohtake Plant)
Corporate Research Center, R&D Management Division, Daicel Chemical Industries, Ltd.

My first task through the training program was to stand at the main gate of the Ohtake Plant and greet everybody in the morning. I was impressed by the fact that everybody greeted me warm-heartedly in return. After this experience, I have always taken extra care to greet people appropriately at any workplace and to maintain such an attitude. In addition, through the program, I learned the purpose and processes of the 3S of *seiri* (tidying), *seiton* (putting everything in order) and *seisou* (cleaning). Today, I use the 3S principle as the basis of my work processes.

Approach to Diversity

Employment of Persons with Disabilities

As a part of its social responsibility activities, Daicel worked hard to achieve a fiscal 2009 official disabled persons employment rate of 1.8%, while proactively hiring persons with disabilities to support the aspirations of these individuals to participate in social activities and to provide motivation in life. We pay utmost attention in assigning jobs according to the degree of disability, in order to help each of these individuals to accomplish their best.

Continued Employment System

With the aim of promoting the employment of people of 60 and older, Daicel introduced a system for continued employment in 2003 for retired employees and has reemployed 137 corresponding people so far. The limit for reemployment is up to 65 years old and is made through a labor-management agreement. We will continue to offer a work environment where veteran employees can make use of their knowledge and experience.

Employment and Training of the Overseas Local Staff

In order to promote global management, Daicel applies its policy on human resources to its 37 overseas subsidiaries to employ local people without discrimination. When a new overseas office is established, we work to nurture local personnel by taking them to Japan for education and training.

Efforts to Balance Work and Private Life

Productivity Enhancement Committee Plant

Committees set up at each comprise representatives of employees and management. By continuously addressing issues, including a review of operations from the viewpoint of work-hour management and overtime reduction to enhance productivity, these committees are helping to promote a more comfortable work environment that strikes a balance between work and private life.

Leave-of-Absence and Labor System to Support Employee's Personal Life

Amid the progression of a declining birthrate and an aging population, Daicel established the following systems to develop a comfortable environment in which employees can work at ease.

- **Child-rearing leave**
Employees can take a leave to focus on child rearing until the day before their child has reached the age of one (or up to 18 months in certain cases).
- **Nursing care leave**
Employees can take nursing care leave up to 93 calendar days when fulltime nursing care is necessary for family members.

- **Special leave due to private accident or sickness**
Employees can acquire special leave of up to 20 days per year in the event they have a non-work accident or sickness and have to be absent from work for over one week.
- **Family care leave**
Employees can shift special leave due to non-work accident or sickness to family care leave of up to 10 days per year when a family member becomes sick for over one week and needs full-time care.
- **Reduced work-hour system**
Employees can reduce work hours by up to two hours per day when they need to limit service hours due to pregnancy, childbirth (within one year from delivery), child rearing (for preschool-age children) or nursing care (of family members).

Labor and Management Relationship to Support Various Initiatives

Daicel considers the labor union to be an important stakeholder and, accordingly, has established the Labor and Management Charter. With respect to the respective positions of labor and management, management carries out discussions with labor in good faith in order to best develop the Company's business. Through these efforts, we are maintaining and reinforcing a healthy relationship between labor and management.

Information Regarding Human Resources and Labor Service (As of March 31, 2010)

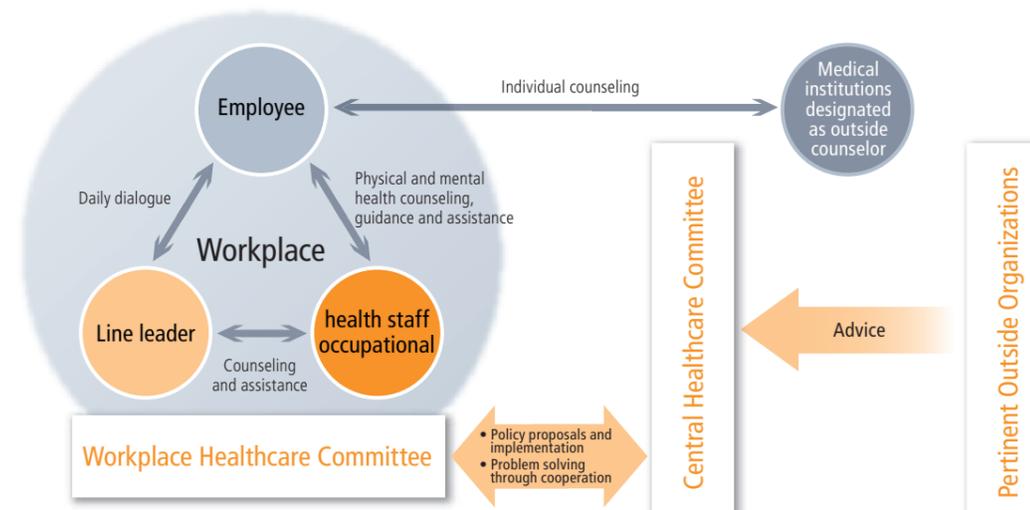
1. Number of employees			
Full-time employees	Regular employees	Male	1,526
		Female	172
	Managers and above	Male	704
		Female	6
	Total	Male	2,230
	Female	178	
Grand total			2,408
Part-time employees	Contract employees		134
	Temporary staff		56
	Total		190
2. Average age:			41.1
3. Average service years:			17.4
4. Average number of dependents:			1.1
5. Average annual salary:			¥6.802 million
6. Paid-holiday consumption rate:			69.42% (estimate)
7. Personnel turnover rate (fiscal 2009):			0.54%
8. Employment (fiscal 2009):		New graduates:	38
		Mid-career:	63
9. Disabled persons employment rate:			1.92%
10. Number of reemployed persons (fiscal 2009):			52
11. Number of employees who used child-rearing/nursing-care leave (fiscal 2009):		Child-rearing leave:	5
		Nursing care leave:	0
12. Number of union members:			1,698
13. Ratio of union members to total employees:			66.80%
14. Average age of union members:			38.2

The abovementioned data is based solely on Daicel Chemical Industries, Ltd.

In 2003, Daicel established a Healthcare Committee, which represents both labor and management. This committee is working to create workplaces within Daicel where individual Daicel employees can exert their individuality and capabilities and promote health throughout the Company's workplaces.

The Healthcare Committee helps employees who have developed physical or mental disorders to return to work. More specifically, in line

with its policy of providing physical and mental care, the committee formulates and implements plans for various activities aimed at identifying such employees. These activities include the offering of educational programs to prevent physical and mental disorders and the construction of necessary systems. In this way, the committee is striving to promote improved physical and mental health of Daicel employees.



Initiatives of the Healthcare Committee

- **Providing Mental Health Checkups**
Daicel offers its employees mental health checkups with the intention of enabling all Daicel employees to maintain good mental and physical health through a clearer understanding of their own mental health. These checkups have been offered since 1999. By analyzing checkup results for each workplace and obtaining feedback, an understanding of the overall healthcare situation and identification of problems in each workplace are realized, leading to continual implementation of improvement activities.
- **Providing Healthcare Education**
Daicel distributes the Stress Management Handbook to all employees with the goal of deepening awareness of the importance of mental and physical health and increasing the employee's ability to cope with stress. Using the Stress Management Handbook, we provide new employees with introductory healthcare training, other employees with position-specific healthcare training and plant staff with healthcare educational programs so that they can maintain their health and enliven their workplace. In addition, each plant has a health counselor's office so that employees can easily talk with the counselor whenever they want.

- **Utilizing a Psychiatrist Employed Exclusively by Daicel**
Daicel began employing its own psychiatrist in 2007 in order to bolster its follow-up care system for employees who have developed mental disorders, a situation that has been on the increase. This psychiatrist implements consultation services for employees who have developed mental disorders, provides operational assistance to the workplace return program and mental health training, while disseminating related information to employees.
- **Providing Specific Medical Checkups and Health Guidance**
From fiscal 2008, Daicel has incorporated a specific medical checkup program into its regular medical checkup program, in line with the guidance of Japan's Ministry of Health, Labour and Welfare to promote specific medical checkups and health guidance throughout the country.
In addition, from fiscal 2009, the corporate health insurance society and health staff at each workplace have begun a new collaborative initiative, providing those applicable among employees aged 40 and above with specific health guidance.



3 CSR Initiatives Report

Maintaining Communication with Local Communities

The Daicel Group remains aware of the importance of maintaining harmony with local communities. As a member of communities, the Group conducts various CSR-oriented activities. These activities include participating in and providing assistance for local events and volunteer activities, offering students of junior-high schools, high schools and universities the opportunity to experience Daicel operations at actual workplaces, donation activities, and contributing PET bottle caps to non-profit organizations (NPOs). Through these activities, we are constantly strengthening our relations with local communities.

The following are recent examples of the Company's activities in this regard.

Activities of Daicel's Plants

Kanzaki Plant

Ensuring Traffic Safety of Local Children



There is an elementary school near the Kanzaki Plant, and the road in front of the plant is designated as a school-commuting road. In cooperation with local residents, the Kanzaki Plant conducts crossing safety monitoring by positioning a guard at the plant's central and west entrances from 7:30 am to 8:30 am every morning.



The Kanzaki Plant has safeguarded local children through this program for over 10 years. The plant will continue this program in order to ensure the safety of the local children and protect the cheerful smiles on their faces.

Ohtake Plant

Assisted Career Start Week

Through the provision of assistance to Ohtake City's Career Start Week, we are contributing to the healthy development of local children. Comprised of Ohtake City businesses commissioned by the Ministry of Education, Culture, Sports, Science and Technology, Career Start Week is an educational program, which began in 2006, that gives junior high school students an opportunity to experience a workplace environment for five days or more in order to nurture perspectives of work and careers among children.

The Ohtake Plant has been involved with this undertaking from the start. During fiscal 2009, we accepted three second-grade male students from Ohtake Junior High School. These students underwent a tour of facilities while taking part in trials and analysis operations that cannot be experienced in school classrooms.



Arai Plant

Participated in Regional Disaster Prevention Campaign to Promote the Use of Fire Alarms at Households

Employees of the Arai Plant volunteered to participate in this campaign hosted by a regional fire department.

At a supermarket near the plant, household-use fire alarm demonstration was given. In this demonstration, the plant's workers, along with their family members, provided assistance under the guidance of fire department officials.



Participated in Regional Summer Festival



About 100 employees joined this festival. The Arai Festival has long been loved by local residents from the time of the former Arai City (current Myoko City after the consolidation of several municipalities),

and towns and corporations in the city collaborate to promote this summer event.

In planning the event, there was concern that not so many corporations would participate in the event this year due to the ongoing recession. However, the Kyoko City government worked hard to attract the participation of regional corporations. In response, the Arai Plant cooperated with other regional corporations to promote the festival. As a result, we were able to deepen our ties with these corporations.

Brick Structures Opened to the Public

Daicel's Sakai Plant discontinued its operations in December 2007. As a way of expressing its gratitude for the support provided by local communities until the plant closure, Daicel opened the plant's brick structures to the public in cooperation with AEON RETAIL Co., Ltd.

Sakai City's deputy mayor and other local government officials as well as representatives of local community associations attended the opening ceremony. Also, many local residents visited these brick structures.

At the venue, many events were held, including a brick structure drawing contest and a brick bridge construction demonstration, which was

provided by Hanshin Expressway Company Limited. Also, a brass band performance by local elementary and junior-high school students added a boisterous mood to the venue. Approximately 1,200 people visited the brick structures.



Activities of Domestic Group Companies

Polyplastics Co., Ltd.

Joined in Local Environmental Preservation Program

Polyplastics employees have continued to participate in the environmental preservation program hosted by Fuji City, where the company's Fuji Plant is located. The program involves activities aimed at restoring natural forests and cleaning on and around Mt. Fuji.

Polyplastics also cooperates with local residents in cleaning beaches nearby. As such, we are promoting activities by taking the stance, "Let's start by doing all that we can do." We will more proactively participate in this and other environmental preservation programs.



Nurturing the Next Generation

In light of nurturing the next generation, Polyplastics has provided students of local junior high schools and high schools with opportunities to experience a workplace environment while accepting selected students as interns.

Also, Polyplastics has accepted university students as interns at its sales and R&D divisions, depending on their field of study.

Through workplace experience and Q&A sessions, we are helping students to understand what work involves.



Kyoei Shokusan Co., Ltd.

Social Contribution through Donations

Kyoei Shokusan is serving as the life and non-life insurance agent for domestic Group companies, employees working for these companies and their family members. We are promoting social contribution activities through donations.

More specifically, we donate a portion of our insurance service fees to the Aflac Parents House and the Aflac Scholarship Fund for Children of Cancer Victims. The Aflac Parents House is a facility run by Aflac Japan that provides medical support to children who suffer from childhood cancer and other intractable diseases and their family members. The Aflac Scholarship Fund for Children of Cancer Victims offers financial support to high school students who have lost a parent due to cancer and, consequently, schooling opportunities due to financial difficulties.

Also, employees at Kyoei Shokusan proactively collect money on their own to make donations to these Aflac-affiliated initiatives.

Website of the Aflac Parents House:

http://www.aflac.co.jp/corp/mesena/parents_house_01.html
(Japanese language only)

Website of the Aflac Scholarship Fund for Children of Cancer Victims:
http://www.aflac.co.jp/corp/mesena/mesena_kids_02/
(Japanese language only)

Daicel-Evonik Ltd.

Joined in Kids' Summer Vacation Chemistry Laboratory Show

In line with its policy to contribute to society through chemistry, Daicel-Evonik volunteered to participate in this event hosted by Dreams and Chemistry 21: Kids' Summer Vacation Chemistry Laboratory Show Organizing Committee.



By exhibiting an experiment that demonstrates the specific characteristics of powders, we allowed participating children to experience the wonders of chemical substances.

The children at the venue were excited to watch and help conduct the experiment. We hope that maybe some of these children will be involved in jobs relating to chemistry.

Daicel Safety Systems Inc.

Social Welfare Activity through PET Bottle Cap Collection

Daicel Safety Systems collects PET bottle caps and contributes these caps to a non-profit organization (NPO), Ecocap Movement.



Ecocap Movement sells the PET bottle caps it collects to recycling companies. Proceeds from the sale of the PET bottle caps are used to deliver vaccines to underprivileged children throughout the world.

Daicel Safety Systems will maintain this initiative and thereby continue to contribute to society.

Website of NPO Ecocap Movement

<http://www.ecocap007.com/aboutecocap.html>

Activities of Overseas Group Companies

Daicel Safety Systems Europe Sp. z o.o.

• Collaboration with NPO

Daicel Safety Systems Europe has collaborated with the Voluntary Fire Service, an NPO operating with the aim of eliminating sources of hazards and preventing hazards. Specific activities include the provision of relief supplies and the offering of educational programs to students.

For example, Daicel Safety Systems Europe and the NPO jointly implement a program to disseminate a sense of responsibility and self-awareness among students living in today's automotive-oriented society. Through this program, Daicel teaches students traffic safety regulations and emergency treatment methods, while explaining the functions of automobile airbags.

Xi'an Huida Chemical Industries Co., Ltd.

• Received an Award from the Shaanxi Province Government

In recognition of its proactive participation in non-profit activities and the provision of its support to disaster relief efforts in Shaanxi Province, Xi'an Huida Chemical Industries has been presented with the Sanqin Friendship Award from the Shaanxi Province government. President Fumito Yanase attended the award ceremony.



The Sanqin Friendship Award is given to non-Chinese specialists who have made significant contributions to the culture, education and sanitation efforts of Shaanxi Province.

TOPAS Advanced Polymers, Inc.

• Participated in the Buddy Walk Fund-Raising Event

TOPAS Advanced Polymers participates in Buddy Walk every autumn. This fund-raising event is aimed at supporting children with Down's syndrome and is held every year at more than 280 locations throughout the world.

More than 5,500 people joined the fall 2009 event in Cincinnati. The participants walked on a scenic path along the Ohio River and collected money from onlookers. Through the event, TOPAS Advanced Polymers collected a total of \$680, and to date, the company has collected a total of more than \$2,000 through the past Buddy Walk events in which it participated.



Activities of the Daicel Chemical Worker's Union

• Conducted Volunteer Activity at Welfare Institution

The Daicel Chemical Worker's Union's Himeji Branch participated in a summer festival held at the Masago En welfare institution, located near Daicel's Aboshi Plant. Volunteer union members served as the staff at a booth there.



In the severe midsummer heat, volunteer union members cooperated with local elementary school students and members of a women's organization to run a booth offering pan-fried noodles. While they kept themselves busy cooking and serving, they enjoyed the event together with welfare institution residents and community participants.



In addition to this activity, the Daicel Chemical Worker's Union is promoting the following activities in cooperation with Daicel's managerial, general and temporary staff as well as with employees of Daicel Group companies and other interested parties.

• Social Contribution through Pull-Tab Collection

The Daicel Chemical Worker's Union collects used pull-tabs as recyclable resources. The collected pull-tabs are handed over to an external organization, which sells these pull-tabs and donates the proceeds to a welfare organization. This welfare organization promotes welfare activities through the use of the donations.

• Waste Postcard Collection Campaign

The Daicel Chemical Worker's Union recovers waste postcards. The postcards recovered are donated to the HUNGER FREE WORLD—an NPO working to build a world free of hunger—through the Japanese Federation of Chemical Workers' Unions (JFCWU). The Daicel Chemical Worker's Union is a member of JFCWU.

• Donations for Disaster Victims

The Daicel Chemical Worker's Union made a monetary donation for the victims of the typhoon that hit Hyogo prefecture during 2009 through the Japan Red Cross Society Hyogo Prefectural Chapter.

• Year-End Charity Event

Through the Japanese Trade Union Confederation (JTUC-RENGO) and JFCWU, the Daicel Chemical Worker's Union makes donations to welfare and other institutions. The Daicel Chemical Worker's Union is a member of JTUC-RENGO.

Opinions of Third Parties



ダイセル化学グループ CSR報告書2010
第三者検証 意見書

2010年6月2日

日本レスポンシブル・ケア協議会
レスポンシブル・ケア検証センター長
中田 三郎

ダイセル化学工業株式会社
代表取締役社長 小川 大介 殿

■検証の目的
本検証は、ダイセル化学工業株式会社が作成した「ダイセル化学グループ CSR報告書2010」(以後、報告書と略す)を対象として、下記の事項について、化学業界の専門家としての意見を表明することを目的としています。

- 1) パフォーマンス指標(数値)の算出・集計方法の合理性及び数値の正確性
- 2) 数値以外の記載情報の正確性
- 3) レスポンシブル・ケア活動内容
- 4) 報告書の特徴

■検証の手順
・本社において、各サイト(事業所、工場)から報告される数値の集計方法の合理性、及び数値以外の記載情報の正確性について調査を行いました。調査は、報告書の内容について各業務責任者及び報告書作成責任者に質問すること、およびそれぞれの責任者より資料提示と説明を受けることにより行ないました。
・サイトにおいて、本社に報告する数値の算出方法の合理性、数値の正確性及び数値以外の記載情報の正確性の調査を行いました。サイトの調査は、各業務責任者及び報告書作成責任者への質問とその資料提示及び説明を受けること、並びに証拠物件との照合することにより行ないました。
・数値及び記載情報の調査についてはサンプリング手法を適用しました。

■意見
1) パフォーマンス指標(数値)の算出・集計方法の合理性及び数値の正確性について
・数値の算出・集計方法は、本社および大竹工場において合理的な方法を採用しています。
・調査した範囲では数値は正確に算出・集計されています。
・特に算出・集計方法のエラー発生防止法については数値の過去2年度比較、ダブルチェック、読み合せ等工夫していることを評価します。
2) 記載情報の正確性について
・報告書に記載された情報は、正確であることを確認しました。原案段階では表現の適切性、文章のわかりやすさについて若干の指摘をしましたが、現報告書では指摘事項は修正されています。
3) レスポンシブル・ケア活動内容について
・廃棄物削減の取組において、4工場が2年継続してゼロエミッションを達成していることを評価いたします。
・大竹工場において1992年7月以降17年間、社員の休業災害ゼロを継続していることを評価いたします。RC活動の今後のレベルアップを期待します。
4) 報告書の特徴について
・今年度の報告書は、CSR報告書として発行し、企業倫理、RC活動、人材育成、人事諸制度の充実、ヘルスケア活動、コミュニケーション等幅広いCSR活動を取上げ、その内容が充実・強化されています。
・ダイセル化学が、「モノづくり」を事業活動の中心において生産革新とRC活動を結びつけた取組への記載は評価できます。今後一層、生産革新と充実したCSR活動を一体化し、より安全・安心で社会から信頼されるグローバルな「モノづくり」企業への発展を期待します。
・一般市民(読者)には表現方法に「少し難しいところがあり、今後わかり易い報告書とされることを期待します。」

以上