

Inquiries:
Responsible Care Division
1239, Shinzaike, Aboshi-ku, Himeji-shi,
Hyogo 671-1281, Japan
Tel: +81-79-273-7584
Fax: +81-79-273-7911

Corporate Compliance Program Division
JR Shinagawa East Bldg., 2-18-1, Konan,
Minato-ku, Tokyo 108-8230, Japan
Tel: +81-3-6711-8110
Fax: +81-3-6711-8138

<http://www.daicel.co.jp>



Making Social Contributions through the Dynamism of Chemicals



Carrying out CSR Initiatives

Environmental, Safety and Social Report 2009

The Daicel Group is making global contributions through its **top-quality** materials and products.

The Daicel Group's Leading Materials and Products Are Attributable to Its 90-Year History of Innovation—Underpinned by Its Passion for Creation.

The Daicel Group is a chemical company that was established in 1919 through the merger of eight celluloid producers, and a century has passed since the foundation of its original celluloid company. Starting with celluloid (natural plastic), the Group gained world recognition for various items encompassing triacetyl cellulose (TAC), chiral columns, polyacetal resin (POM) and automobile airbag inflators based on its mainstay technologies in cellulose chemistry, organic synthetic chemistry, high polymer chemistry and explosives engineering.

Chemistry serves as a backbone of every manufacturing business, and our daily lives, indeed, are closely intertwined with chemistry. To that end, the Daicel Group makes consistent efforts in the creation of user- and environment-friendly as well as safe products. Through these endeavors, the Group will contribute extensively to the development of society through its innovative materials and products.



No.1 in the World

* In sales and market share (Daicel survey)

TAC (triacetyl cellulose)

TAC is adopted for polarizing protection films necessary for LCD TV displays, laptop computers and mobile phones. On the back of an expanding LCD market and advances in product functions, new applications for TAC are expected to be discovered.



No.1 in the World

* In sales and market share (Daicel survey)

Chiral Columns

Chiral compounds (optical isomers) are compounds with molecular structure pair (real and mirror images). When used in pharmaceutical products, it is necessary to separate and extract useful compounds out of the chiral compound. Daicel Chemical's chiral columns contribute to pharmaceutical development around the world.



No.1 in the World

* In production capacity (Daicel survey)

POM (polyacetal resin)

With excellent characteristics such as metal-like strength, heat resistance and abrasion resistance, POM is a kind of engineering plastics utilized in automobiles and office equipment.



No.1 in Japan and No.3 in the World

* In sales and market share (Daicel survey)

Automobile Airbag Inflators

On the back of rising use of airbag equipment mandated by regulations for automobiles, Daicel Chemical offers inflators for driver, front passenger, thorax, curtain and knee airbags. In order to protect lives, Daicel Chemical engages in the development of quick airbag responses of less than 0.1 seconds, as well as the establishment of global supply systems.

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About the Daicel Group

Major Applications of Daicel Group Products

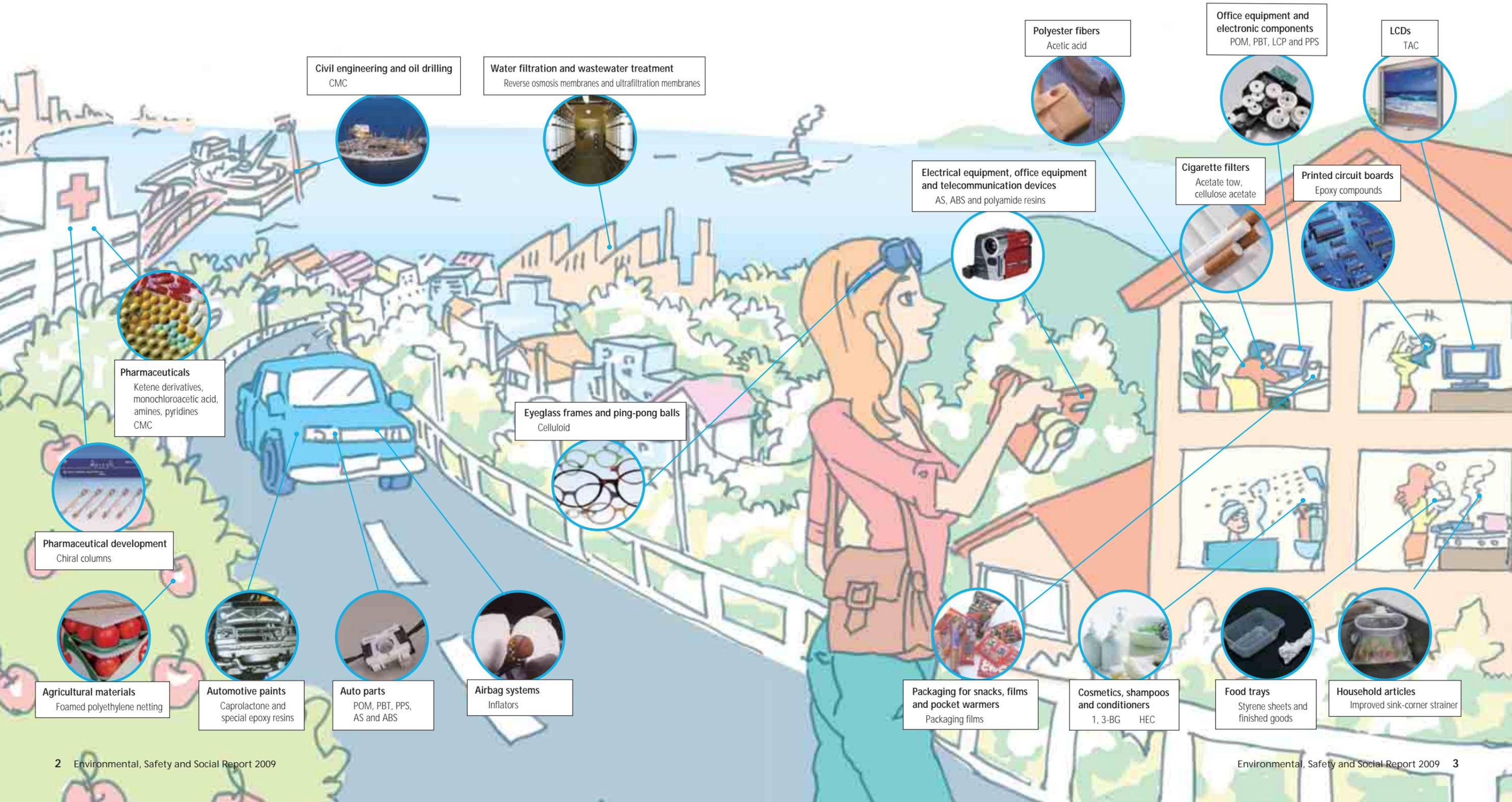
Many of the products of the Daicel Group have been developed for specific applications—such as acetate tow for cigarette filters and cellulose acetate for LCD films—and offer the high added value for which the Daicel Group is renowned. We boast industry-leading technologies and raw materials for the pharmaceutical and agricultural chemical industries as well as the automotive and electronic device industries, which represent

the strongest sectors of the Japanese economy. However, many of the products manufactured by our Group are basic materials, and the general public has little opportunity to see or know about them.

Here, we introduce the familiar products we make that have been developed with our own materials and technologies.

- : Organic chemicals
- : Cellulosic derivatives
- : Plastics and films
- : Pyrotechnic devices
- : Others

(Legend) Main product application ———— LCDs
 Segment and product ———— Cellulose acetate



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About the Daicel Group

Chronology of the Daicel Group

The Daicel Group is a chemical maker that was established in 1919 as Dainippon Celluloid Company Limited through the merger of eight celluloid producers. Today, we lead the industry in terms of both product quality and production volume. Since our earliest days, we have engaged in the R&D of natural high-polymer resins that would replace celluloid. In

1935, we succeeded with the integrated production of cellulose acetate and thus contributed to the development of incombustible photographic films. We also developed technology used for organic chemicals such as fine chemicals and active pharmaceutical ingredients.

With the emergence of the petrochemical boom in the 1960s, we par-

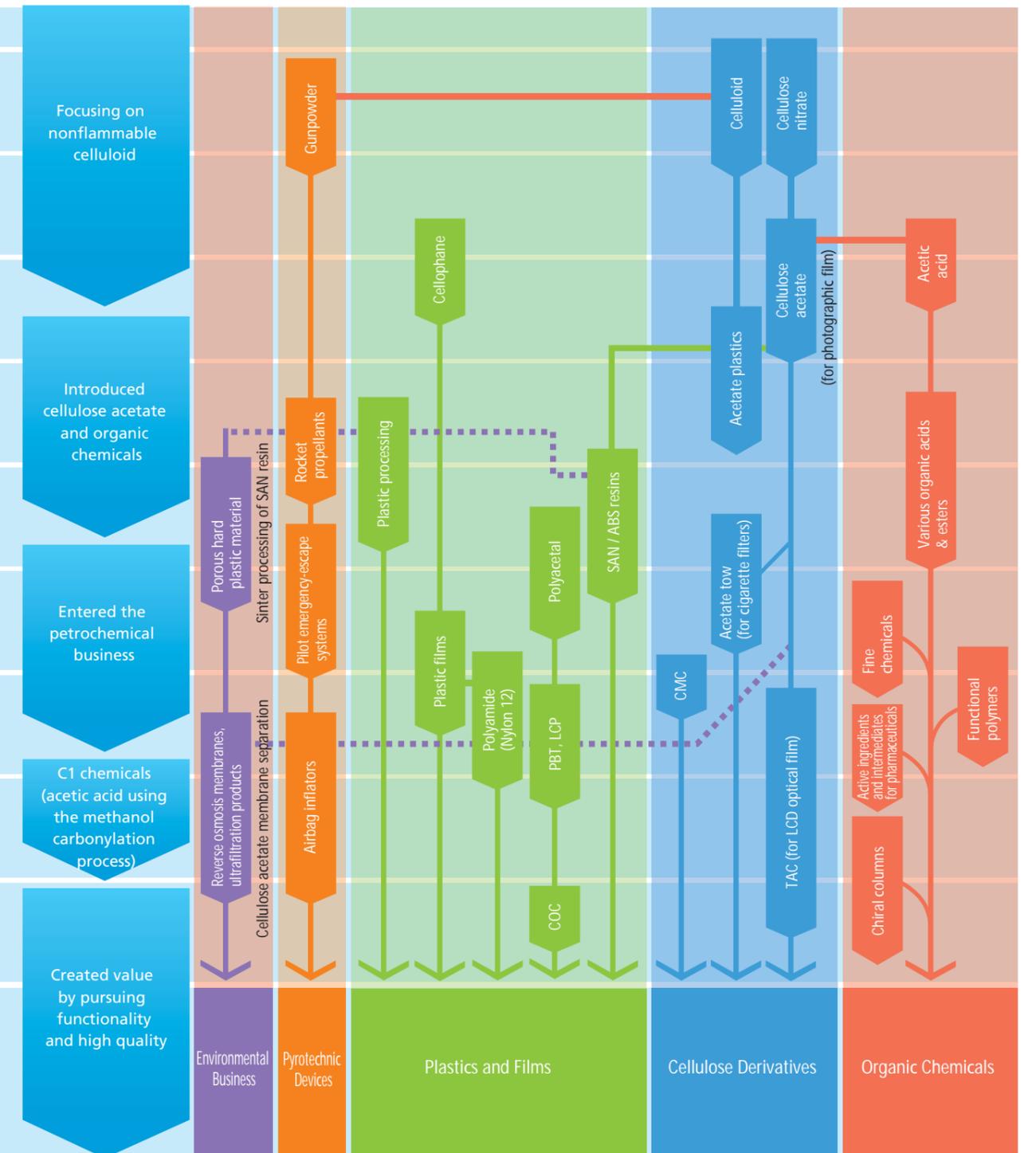
ticipated in a petrochemical complex project and initiated the production of plastics. Building on our celluloid technology, we entered the pyrotechnic devices business with products such as gunpowder. This segment eventually bore fruit with the development of automobile airbag inflators. In addition, we have been promoting decreased dependence on petroleum-based

raw materials by using methanol produced mainly from natural gas in the manufacture of acetic acid. And in 2007, we began operation of an ethylamine plant using ethanol produced from biomass. Clearly, the Daicel Group is doing more than simply providing materials needed by society—it is also contributing to the development of a sustainable chemical industry.

Daicel Chronology

1908	<ul style="list-style-type: none"> Games of the IV Olympiad are held. 	History before the Company Establishment Sakai Celluloid Company and Japan Celluloid Jinzo Kenshi Co., Ltd. are established.	
1910s	<ul style="list-style-type: none"> The end of the First World War leads to a postwar recession. 	Dainippon Celluloid Company Limited is established in 1919 through merger of eight celluloid producers. Plants are established in Sakai, Kanzaki, Aboshi and Tokyo.	
1920s	<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). 	Amid a severe economic climate, the company undertakes research on photographic films as a successor to the celluloid business.	Our Aboshi Plant, a source of high-quality celluloid
1930s	<ul style="list-style-type: none"> World War II breaks out (1939). 	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.	
1940s	<ul style="list-style-type: none"> World War II ends (1945). 	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 goods for the peacetime economy. The Company overcomes the challenges of designated compensation payments and a crisis involving a call for the breakup of the company.	Film Research Center established in our Tokyo Plant
1950s	<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). 	The acetate business 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. The plastics business is expanded.	
1960s	<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). 	With the rise of the petrochemical industry, Daicel becomes a member of the Iwakuni-Otake petrochemical complex and enters the petrochemical business. The high-polymer business is expanded through the establishment of Polyplastics Co., Ltd.	Daicel enters the petrochemical business by establishing the Ohtake Plant.
1970s	<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). 	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.	
1980s	<ul style="list-style-type: none"> The Equal Employment Opportunity Law is enacted (1986). The Japanese economy enters the "bubble" phase. 	The use of non-petroleum-based raw materials is promoted and 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.	Acetic acid production facility in the Aboshi Plant employs the methanol carbonylation process.
1990s	<ul style="list-style-type: none"> End of the Cold War. The Great Hanshin Earthquake strikes (1995). 	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.	Production of acetate tow for cigarette filters in China is begun.
2000s	<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, China and South Africa. 	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. This increases the plant's production capacity and supplants the Sakai Plant's production following its closure.	Automotive airbag inflator business is launched in the U.S.A.

Process of Business Development



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Environmental, Safety and Social Report 2009
—Carrying out CSR Initiatives

This report is primarily a compilation of the environmental, safety and social initiatives of Daicel Chemical Industries, Ltd. for fiscal 2008 (ended March 31, 2009). We have listed detailed data separately at the following website (Japanese version only): it includes a breakdown of substances subject to the PRTR as well as the environmental impact of our plants and research center.

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

In order to ensure the accuracy of this report, Daicel has been submitting it to the Japan Responsible Care Council (JRCC) for third-party verification annually since 2004.

Organizations Responsible for Calculating Environmental Performance

Unless otherwise stated, the data contained in this report cover the workplaces (plants and research center) of Daicel Chemical Industries, Ltd. and the workplaces of the Daicel Group companies located within Daicel Chemical Industries.

• Plants and research center of Daicel Chemical Industries, Ltd.

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

• Workplaces of the Daicel Group companies located within Daicel Chemical Industries, Ltd. (Plants)

(Within the Himeji Production Sector/Aboshi Plant)

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

(Within the Himeji Production Sector/Hirohata Plant)

Daicel Polymer Ltd.
Toyo Styrene Co., Ltd.

(Within the Harima Plant)

Daicel Safety Systems Inc.
Daicel Logistics Service Co., Ltd.

(Within the Ohtake Plant)

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

(Within the Arai Plant)

Daicel FineChem Ltd.
Daicel Logistics Service Co., Ltd.
Daicel Arai Chemical, Ltd.

(Within the Kanzaki Plant)

Daicel Pack Systems Ltd.*
Daicel Value Coating Ltd.

* Daicel Pack Systems is integrated in the Isezaki Plant as of March 31, 2009.



Daisuke Ogawa
President and Chief Executive Officer

The Aboshi Plant—Daicel Chemical Industries Ltd.'s flagship plant which began operations in 1908 as part of Japan Celluloid Jinzo Kenshi Co., Ltd.'s operations—reached its 100th anniversary last year, while the Company, which began operating as Dainippon Celluloid Co., Ltd. in 1919, turned 90 this year. With nearly 100 years of history supporting us, we are moving forward, committed to exhibiting our creativity by developing new products useful to all.

Staying abreast of changing social trends, it is precisely due to our ceaseless production of innovations in order to create products suited to the times—in other words, creating significant value—that we have garnered the trust of the market and society. And it is through such achievements over nearly a century that we owe our continued existence as a chemical company. In light of global business development that expanded rapidly, particularly during the 1990s, the Daicel Group has prioritized three types of innovation as a strategy that it continues to follow: product innovation (as applied to commercial products); process innovation (as applied to production and process); and management innovation (as applied to management systems).

Amid the severe economic storm said to be a once-in-a-century event that began in earnest during the later half of 2008, the Daicel Group was no exception in being forced to take stern measures in response. Despite these economic conditions—or because of them—rather than suspend its commitment to innovation, the Group will expand its innovations to create products that make an ongoing contribution to the global environment as well as social growth and development.

We believe that business activities that take the environment and society into consideration are indispensable for the sustainable development of business and society. Another basic philosophy of the Daicel Group is “to continue to grow and develop together with society as an attractive people- and environment-friendly chemical company.” In this spirit, we have prepared the Daicel Code of Conduct as our approach to corporate social responsibility, which focuses on Responsible Care activi-

ties and corporate ethics initiatives.

In order to fulfill its responsibility to society, the Daicel Group Conduct Policy was formulated by the Company as a necessary set of behavioral guidelines that all Group employees understand and can put into practice. In addition, the Group is promoting CSR initiatives as it raises awareness of all employees via in-house training sessions and educational activities.

In June 2008, Daicel Chemical Industries approved and signed a declaration to support the Responsible Care Global Charter established by the International Council of Chemical Associations (ICCA). This global charter embraces such challenges as enhancing the management of chemicals, bolstering these activities on a global scale and promulgating responsible care activities throughout the supply chain. The Company also participates in and undertakes activities related to the Japan Chemical Industry Association's voluntary action plan regarding such critical worldwide issues as combating global warming (reducing CO₂ and other measures). Daicel Chemical Industries is redoubling its efforts to address these issues and carry out the Responsible Care Initiative.

Looking back at almost 100 years of history as we contemplate the future of Daicel Chemical Industries, the Company cannot continue to exist if it does not maintain a harmonious relationship and carry out a meaningful dialogue with society. As we face the next 100 years, we will continue to cultivate a vibrant corporate culture that remains in step with everyone by maintaining an attitude that is always forward looking.

The Company's Responsible Care activities and various initiatives designed to justify the public's confidence in the Company were outlined in the fiscal 2008 report. Through our ongoing CSR management initiatives, we wish to grow as a business group that is attractive to all of our stakeholders. I invite the reader to become more informed about the scope of our efforts in this report, and I look forward to receiving your candid comments and opinions.

Basic Approach to Corporate Social Responsibility (CSR)

Daicel's CSR mission is to contribute to the development of a sustainable society through its daily business operations. Based on our rigorous ethical standards, we provide high-performance, high-quality chemical products to customers on a stable basis. Such chemical products should reflect our attention to environmental, safety and health concerns throughout the entire product lifecycle, from planning, R&D, raw material procurement, and production, to product usage and disposal.

With the aim of achieving this goal, we stated "ceaseless approach to creation" in our Basic Philosophy. For the Daicel Group, "creation" means to originate significant new value. Amid the growing social demand for eco-friendly and safe products, Daicel believes that accurately meeting such social demand will result in the creation of significant new value.

In accordance with the three ideas in its Basic Philosophy, the Daicel Group established the Conduct Policy and the Code of Conduct to engage in daily CSR activities. The Conduct Policy defines principles and criteria to realize the Basic Philosophy. To further clarify the Conduct Policy, each Group company set up its own Code of Conduct.

Based mainly on corporate ethics activities and Responsible Care ("RC") initiatives, we positioned the implementation of the Code of Conduct as our CSR initiatives, and we work actively to promote Companywide activities.

The Code of Conduct was formulated to cover the requirements of CSR activities. With the aim of enhancing CSR awareness and strict compliance with the Code of Conduct on the part of the individual employee, Daicel distributes a printed copy of the Basic Philosophy, the Conduct Policy and the Code of Conduct to all the employees. Daicel also issued small booklets of the Code of Conduct for all the employees so that they can refer to it when they have questions about the propriety of their behavior.

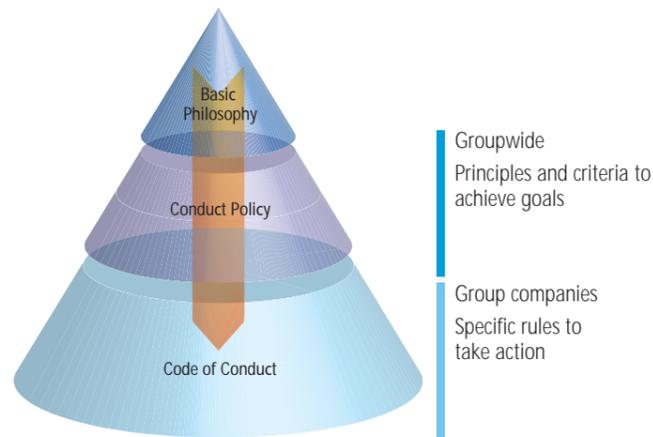
For each item in the Daicel Code of Conduct, all of the Daicel employees

participated to create specific behavioral checklist that meet each division's business descriptions. At the end of every year, daily business operations are reviewed based on the specific behavioral checklist, and results of the review will be reflected in the following year's checklist.

Each division appoints a CSR Promotion key person and they hold a meeting annually to share information regarding social trends and report activities by division, as well as to discuss future CSR activities.

Furthermore, Daicel utilizes its intranet to disclose information regarding social trends, activities at Daicel and other companies, the revision of laws and regulations, and to post educational and training materials for the purpose of active utilization.

The Daicel Group Structure of Basic Philosophy and Code of Conduct



Basic Philosophy

Ceaseless Approach to Creation

The Daicel Group maintains respect for and is committed to the creation of significant new value. We believe that we can contribute widely to society and receive the world's total trust through this practice. We believe that there are three important aspects the Group needs to carry out to pursue this Basic Philosophy:

1. Aim for the realization of a society that is friendly to both the environment and humankind
2. Utilize personnel and technological strengths
3. Join forces as the Daicel Group

When we say "creation," we mean "business activity in total, regarding the innovation and creation of significant values."
We believe that through this creation, we can improve our corporate value to become a business group attractive to various stakeholders and further contribute widely to the growth and progress of society.

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.

Code of Conduct

This Code of Conduct gives shape to the Daicel Group Conduct Policy and clearly defines the code for carrying out corporate affairs for everyone working at Daicel. The first item of each chapter is described, and only the titles are listed in parentheses for the following items.

- 1-1 Respond with integrity to stakeholders**
We shall respond with integrity, respect and gratitude to all people connected to Daicel customers, shareholders, business partners, employees and local society.
(1-2 Compliance with laws and ethics/1-3 Maintenance of effective internal systems and training/1-4 Response to antisocial influences)
- 2-1 Social contribution activities**
We shall make social contributions from the viewpoint of trying to coexist in mutual prosperity with society through corporate activities, through cultural and sporting events, as well as by assisting in rescue and relief operations in the event of an emergency such as an accident or natural disaster.
- 3-1 Offer of products and services that are of use to society**
We shall always listen to the opinions of each of our customers, such as consumers and users and shall develop and offer products and/or services that are of use to society. We shall thereby contribute significantly to the realization of a society that is affluent and pleasant to live in.
(3-2 Safety and quality assurances of products and services/3-3 Provision of product quality information/3-4 Response to incidents involving products)
- 4-1 Compliance with international rules and the laws of each country**
In conducting our international business affairs, we shall fully look into and comply with international rules and the laws of each country.
(4-2 Coexistence with society at national and local levels/4-3 Contribution to the development of local society)
- 5-1 Disclosure of corporate information**
We shall actively disclose to actors in the financial markets, such as shareholders and investors, information concerning our corporate finances and the status of our business activities in an appropriate, timely and clear manner.
(5-2 Fair accounting procedures/5-3 Prohibition of insider trading/5-4 Communication with society)
- 6-1 Compliance with antitrust laws**
We shall not act in breach of antitrust laws and shall compete equitably and freely.
(6-2 Compliance with laws relating to imports/exports/6-3 Advertisements/6-4 Highly transparent political and government relationships/6-5 Procurement transactions/6-6 Business entertainment, etc.)
- 7-1 Reduction of environmental impact**
We shall address the reduction of environmental impact by such measures as preventing global warming through reduced energy consumption, activities aimed at saving natural resources, managing chemical substances, effective utilization of resources and reducing waste.
(7-2 Realization of a sustainable society/7-3 Safe working environments)
- 8-1 Effective use of corporate resources**
We shall not use corporate resources such as people, materials, financing, information and time for private purposes, and shall make effective use of them.
(8-2 Handling of confidential information/8-3 Maintenance and protection of intellectual property (IP) rights/8-4 Control of personal information/8-5 Appropriate use of information systems/8-6 Behavior causing damage to the Company)
- 9-1 Human rights/discrimination, harassment**
Our basic position shall be to respect humanity. We shall never violate human rights through such acts as discrimination on the grounds of ethnicity, nationality, creed, religion or gender, or through harassment.
(9-2 Lively workplace environment/9-3 Respect for individual ability/9-4 Healthy workplace environment)

1 About the Daicel Group

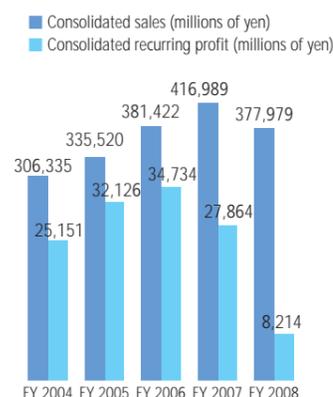
Outline of the Daicel Group

The Daicel Group includes Daicel Chemical Industries, Ltd., its 56 subsidiaries, and 14 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.

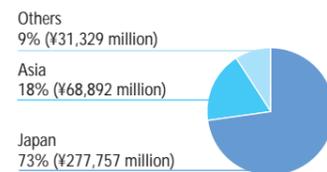
Daicel Chemical Industries, Ltd. (as of March 31, 2009)

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

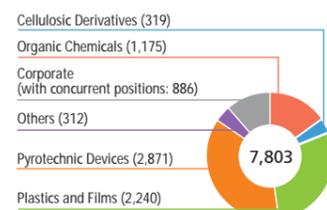
Sales and Recurring Profit



Sales by Region



Number of Employees by Segment



List of Products by Segment and Manufacturer

Segment	Principal Products	Share of Total Consolidated Sales by Business Segment	Principal Group Companies
Cellulosic Derivatives	Cellulose acetate, acetate tow for cigarette filters, CMC and other products	19%	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, chiral columns and other products	24%	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/ABN resins, engineering plastic alloys, various synthetic resins for molding products, and other products	39%	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, gunpowder and other products	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 and other products	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 35 international affiliates. For the fiscal year ended March 31, 2009, international sales totaled ¥146,600 million, or 38.8% of total consolidated sales, a percentage that has been growing annually. Clearly, our international business operations are increasing in importance.

Principal International Affiliates of the Daicel Group

Germany

- 1 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

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

France

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

India

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

Singapore

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

Malaysia

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

Thailand

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

Taiwan

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

Hong Kong

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

Guangxi, China

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

Zhejiang, China

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

Shanghai, China

- 13 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

- 14 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

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

Kentucky, U.S.A.

- 16 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.

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

New Jersey, U.S.A.

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

Principal Domestic Locations

- 1 **Osaka Head Office:** Mainichi Intecio, 4-5, Umeda 3-chome, Kita-ku, Osaka 530-0001
- 2 **Tokyo Head Office:** JR Shinagawa East Bldg., 2-18-1, Konan, Minato-ku, Tokyo 108-8230
- 3 **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, styrene resins
- Harima Plant:** 805, Umaba, Ibo-gawa-cho, Tatsuno-shi, Hyogo 671-1681
- Principal products: Automobile airbag inflators, pilot emergency-escape systems, rocket propellants, gunpowder
- Himeji Research Center:** 1239, Shinzaike, Aboshi-ku, Himeji-shi, Hyogo 671-1283
- 4 **Nagoya Sales Office:** Horiuchi Bldg., 25-9, Meieki 3-chome, Nakamura-ku, Nagoya-shi, Aichi 450-0002
- 5 **Fukuoka Office:** Hakata Eki Minami MT Bldg., 8-12, Hakata Eki Minami 1-chome, Hakata-ku, Fukuoka-shi, Fukuoka 812-0016
- 6 **Kanzaki Plant:** 12-1, Kanzaki-cho, Amagasaki-shi, Hyogo 661-0964
- Principal products: Packaging films, adhesive films
- 7 **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
- 8 **Ohtake Plant:** 1-4, Higashisakae 2-chome, Otake-shi, Hiroshima 739-0695
- Principal products: 1,3-butylene glycol, butyl acetate, caprolactone, acetate tow, cellulose acetate
- 9 **H.R. Training Center:** 14-1, Kouto 3-chome, Kamigori-cho, Akou-gun, Hyogo 678-1205
- 10 **Polyplastics Co., Ltd./Fuji Plant:** 973, Miyajima, Fuji-shi, Shizuoka 416-8533
- Principal products: POM, PBT resins, LCP

2

Special Feature: A Ceaseless Approach to Creation

In this special feature, we will introduce various initiatives the Daicel Group has taken to help solve issues facing society in accordance with its basic philosophy characterized as “a ceaseless approach to creation.” 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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2

Special Feature: A Ceaseless Approach to Creation

1

Close Up Productivity

Daicel Production Innovations for a Cutting-Edge, Stable Production Structure

New production innovations needed in the process industry contribute to strengthening international competitiveness.

After 1991, the Japanese chemicals industry saw an increase in the ratio of product exports due in part to growth in Asian markets. Competition from abroad intensified as established companies from the United States and Europe, as well as newcomers from Asia and the Middle East, vied for positions on the Japanese market. Against a backdrop of sharply rising raw material prices, it became an urgent matter to establish production innovations to realize a high-quality structure and to create a basic cost structure resilient to the yen's appreciation in order to prosper amid international competition.

The Toyota Production System (TPS) is a well-known example of a production innovation system. With an assembly and processing production system, employees are able to confirm all production processes with their own eyes and are empowered to halt the production line if they find a defective product. A chemicals company like Daicel is a part of the process industry, where production from raw materials to final product takes place within pipelines and storage tanks. For this reason, operators are unable to “eyeball” the production process, and instead manage data on monitors (called “board work”) that reflect conditions such as

temperature, pressure, and fluid levels throughout the chemical plant for each production process.

In an assembly and processing production system, employees can halt a process at the first sign of trouble and then resume production after the problem is solved. At a chemicals plant, however, it is unsafe to restart operations after halting them, and it also requires a lot of time and energy. Therefore, any trouble causes a major drop in productivity.

The process industry needed new production innovations that would enable continuous, stable operations. Tackling this problem, Daicel created the First Long-Term Plan in the 1990s and set the goal of doubling productivity. In 1998, we began to develop Daicel production innovations at the Aboshi Plant, which had room for improvements in terms of international competitiveness at the time.

Innovative Activities Centered on People

The chemical process industry monitors conditions on displays to detect abnormalities, investigate and solve any problems. We thought of a new way for these operators to make decisions. In other words, we undertook unprecedented innovations by having our operators think mechanically, based on strict standards.

In the past, improvements took into account every aspect of how people worked. Today, advancements in IT have made work more efficient, but at the cost of systems becoming black boxes and people not engaging in face-to-face communication as much as before.

Daicel's initiatives began with a strengthening of communication between people, starting with simply saying hello. With our production innovation initiatives, we started by identifying waste and loss within work and by thinking of each other's positions in regular work activities (“general work inspection methods,” described later in this report).

Creating an environment conducive to dialogue implies that people must present themselves and acknowledge others, a prerequisite to developing a standardization of operations later. It is also important to train employees in production innovation initiatives, and only then can we expect their behavior to change.



Daicel Production Innovations Center on the Basic Philosophy of Being Kind to People

Daicel Chemical Industries, Ltd.
Executive Officer Yoshimi Ogawa

I used to be a process engineer who designed chemical plants. Through my experience as head of the executive committee affiliated with the labor union at the Ohtake Plant, I gained the opportunity to think about how to increase production competitiveness from the standpoint of operating a chemical plant.

After transferring to the Aboshi Plant, I approached work from the technological point of view of an engineer technician and also from a detailed plant operations and management perspective, with the desire to clarify the source of competitiveness at production sites. Japan has a unique approach to detailed plant operations and management, and I thought that this could be a source of competitive strength if it were possible to create a Japanese business model. Taking a fresh look at the relationship between people and systems and machinery, I decided to shift people to more creative work and decision-making functions. I think this reflects the core philosophy of Daicel—to treat people kindly, and to avoid the simpler solution of restructuring.

Benefits of Production Innovations: Tripling Productivity, Stronger International Competitiveness

Production innovations at the Aboshi Plant aimed to double productivity but in the end did more than we expected. We were able to cut overall costs by 20%, triple productivity (added value per employee), reduce the factory workforce by 60%, lower the workload of operators by more than 90%, and cut down the number of alarms by over 90%, greatly boosting our international competitiveness.

Our achievement of stable operations has been admired by overseas customers, and we have extended it out to supply chains in 23 countries.

As a result of this success, we moved displaced workers to the newly launched automobile airbag inflator business and were able to benefit from the development of new products in a short time span and their early commercialization.

A Cutting-Edge Production System at the Integrated Production Center

Daicel built the Integrated Production Center in the heart of its 800,000 square meter Aboshi Plant. Four teams of 20 employees each take turns monitoring operations throughout the entire plant in real time, creating a cutting-edge production system.

Daicel has recently finished installing an energy optimization system that centralizes all information about the plant, and the system constantly calculates how to conserve energy while operating the plant.

Lowering the Workload of Operators by More Than 90%: Stepping Up Efforts to Remove Barriers to Productivity

Production innovations took a four tier approach from step zero (identifying waste and loss) to step three (Intellectual and Integrated Production System). For more details, please turn to page 17. Operator workload was the benchmark we used to measure production innovation.

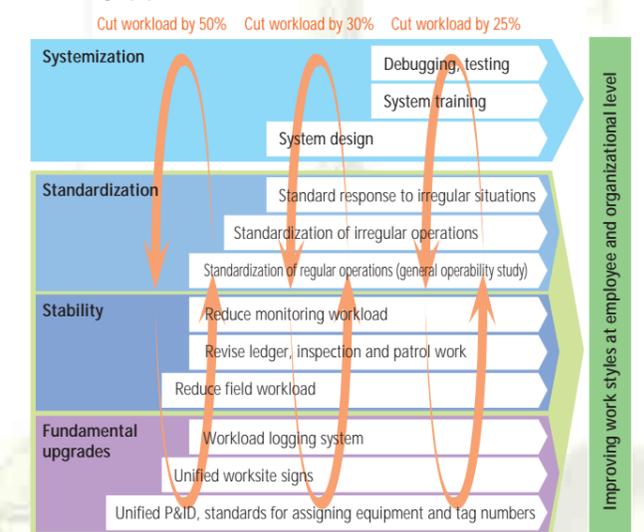
Operator work is broadly divided into monitoring and field work. Monitoring work occurs indoors and involves controlling and keeping a watch on the plant. During normal operations, it entails the monitoring of operations and avoiding modulations, and during irregular operations, it entails the switching of product types, load balancing, operational stops and starts, and other work via the monitors. On the other hand, field work occurs outdoors, and mainly entails equipment inspections, checking onsite instruments, manipulating valves, starting pumps and other manual operations.

In order to remove all impediments to productivity enhancements, we focused on work processes that were considered normal, such as voluntary maintenance and conventional work, and we also took a closer look at problems that arose and caused trouble in the past. We identified potential problems and worked to prevent them, thereby alleviating operator workload.

In addition to reducing operator workload, we have also advanced several other initiatives. In the past, operator workload was increased and operations improved, but in order to implement a new activity, the first necessity is to create the time to do it.

In conclusion, by reducing the operator workload by more than 90% at all of our plants, our production innovations realized not only productivity enhancements but also afforded a review of our work styles in a way that led to further optimizations overall.

Powering up production innovation



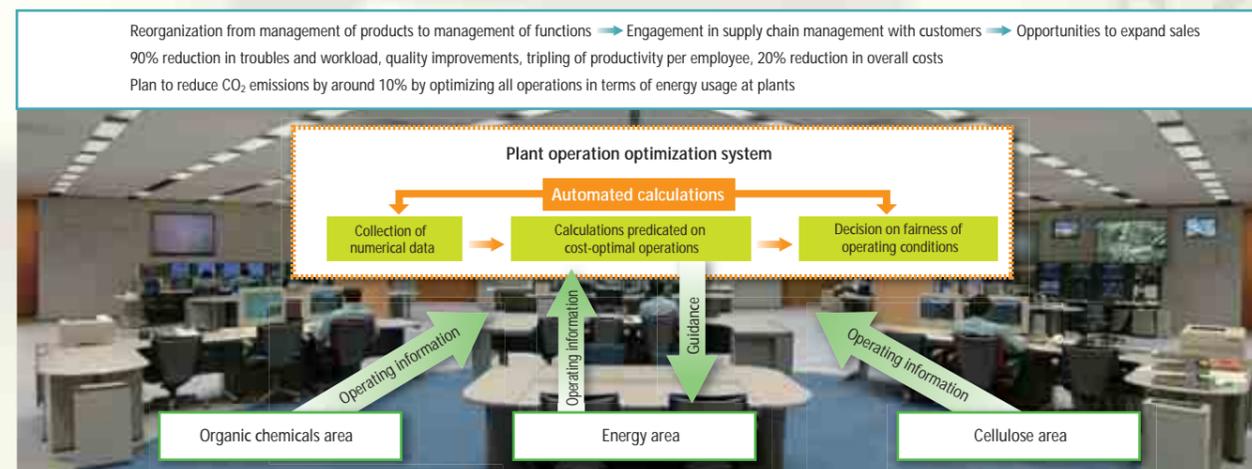
Impact from Next-Generation Chemical Plants

Direct impact		Benefits of Standardization	
Stable production, quality improvement, cost reductions, higher production volume, a tripling in productivity per employee, 20% reduction in overall costs, etc		Stabilization and a better foundation, facility management system	
(1) Workload	90% reduction	(1) Standardization of know-how	Millions of cases/plant
(2) Scope of monitoring per employee	3x	Advanced operational support system	General operability study method
(3) Number of alarms	Down 90%	Alarm aggregation function	Hands-on Operation Training Center
(4) Startup period	Reduced by half	MSD and ESD systems	System-based methods Intellectual and Integrated Production System
(5) Product switching time and workload	Reduced by 50% and 90%, respectively	Irregular operation automation system	
(6) Number of control units	Reduce 80%	Single window operation system	
Indirect Benefits		Sales growth in existing businesses	
Displaced employees reassigned to accelerate the development and launch of new businesses			

Supply chain management in 23 countries

Crossover to all plants
Business innovation from production to sales and distribution

Next-Generation Chemical Plant/Intellectual and Integrated Production System



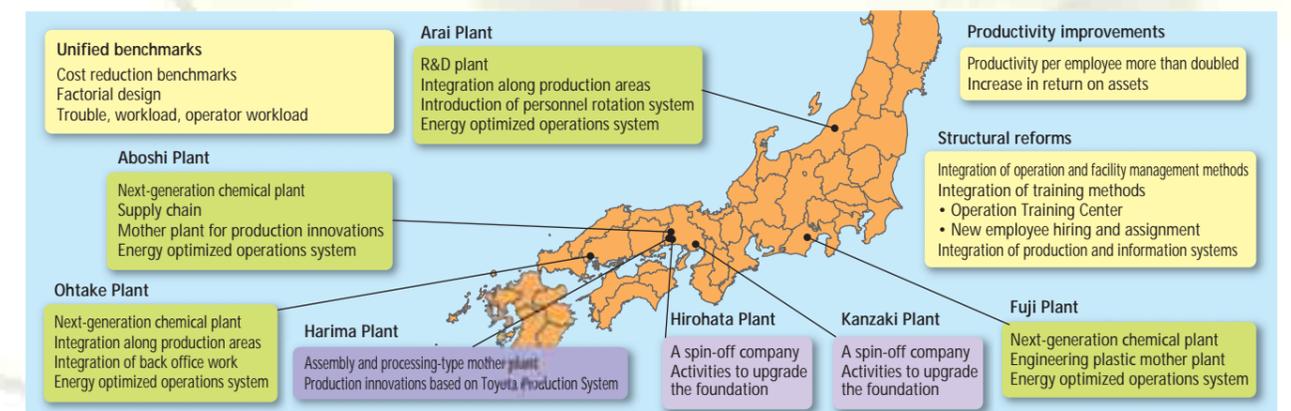
Daicel Production Innovations Expanded to All Plants

Daicel has expanded its production innovations to all plants, after proving at the Aboshi Plant that it can boost international competitiveness and improve productivity considerably.

Among our production bases, we introduced the Daicel production innovations to the Aboshi Plant, Arai Plant and Ohtake Plant, which are modeled after the process industry, and at the Fuji Plant operated by Polyplastics Co., Ltd., and we are now striving to build the Intellectual and Integrated Production System.

At the Hirohata Plant and Kanzaki Plant, Daicel has had success in improving productivity and restructuring operations by working to put in place a foundation for production innovations. At the assembly and processing Harima Plant, which makes automobile airbag inflators, the company has implemented the Toyota Production System and is working to instill production innovations.

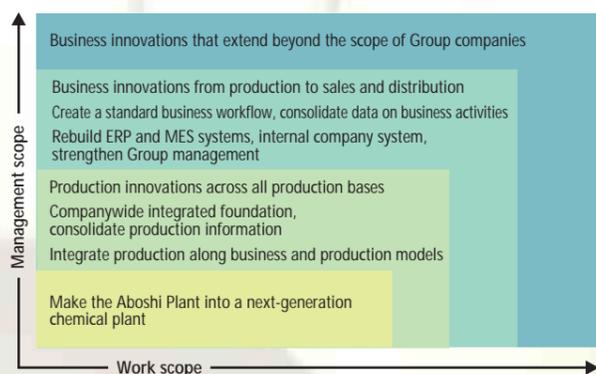
Initiatives at All Production Bases



Expanding Efforts to Business Innovation Activities

After advancing production innovations across the company, Daicel has begun to reform sales and distribution as the next step. The Company was able to consolidate information on its business activities as a result of improving communication at plants and unifying production information. Daicel has a supply chain that extends beyond Group companies, as its customers in Japan and overseas have recognized its accomplishments through the realization of stable operations, the standardization of distribution workflow and the rebuilding of its enterprise resource planning (ERP) systems.

Efforts at production innovations and business innovations



Helping to Reinforce the Competitiveness of Japan's Process Industry

Daicel's new production innovations for the process industry have also had an impact on other industries, including the petroleum, chemicals, pharmaceuticals, food and textile sectors. About 5,000 representatives from 500 companies have toured the Aboshi Plant. Many of these companies, including Mitsui Chemicals, Inc., Sumitomo Chemical Co., Ltd., Daikin Industries, Ltd., Toyobo Co., Ltd. and Zeon Corporation have introduced Daicel production innovations. In 2002, the Society of Chemical Engineers, Japan presented Daicel with a technological award for establishing the Intellectual and Integrated Production System for the creation of next-generation chemical plants.

Based on the idea that techniques decay without use, Daicel agreed in 2005 to share its production innovation techniques and committed itself to providing consulting to other interested companies. Through this consulting, Daicel also submits to the learning process all over again and thus tries to help increase the competitiveness of Japan's process industry.

Improvement in operational safety and product quality with stable plant operations

Daikin Industries, Ltd. Chemical Business Production Innovations Project
Division Manager Tomohisa Noda

Daikin Industries aims to be the largest company in the world in the fluorine chemicals category in the 21st century. In order to further strengthen our competitiveness, we prioritized the safety and stability of our operations. We made improvements after trouble arose in the past, but the ad hoc nature of our production sites remained, and the onsite workload was too heavy. However, we saw the challenges of continuing in this fashion and decided to introduce Daicel production innovations because they are a good fit for the process industry.

After introducing production innovations, Daikin Industries saw increases in the safety and stability of its plants, owing to a reduced workload for operators, including the identification of potential trouble, and also an improvement in product quality. In addition, communication improved within our plants and we were able to return to the basics of production, which in turn led to a more robust structure.

Honestly, patiently and thoroughly

Mitsui Chemicals, Inc. Executive Officer and Iwakuni Ohtake Plant Manager
Yoshiteru Yamaguchi

At the Iwakuni Ohtake Plant, a wave of veteran baby-boomer employees are approaching mandatory retirement age, making it imperative for the company to maintain safe and stable operations without relying on the skills and experience of these retiring veterans.

We were impressed with how well Daicel Chemical Industries executed a generational change of hands in August 2004 at its Aboshi Plant. We enlisted Daicel's support and began our own innovations with the aim of replicating this success at our Iwakuni Ohtake Plant.

Starting with upgrades to our corporate foundations, we created more time for innovations by reducing operator workload, and by standardizing operations, we tapped into the decision-making abilities of our veteran operators. Mitsui Chemicals started its first stage of integrated operations in November 2008 after building an Intellectual and Integrated Production System as a framework, and there is no turning back now.

We will continue to honestly, patiently and thoroughly continue with our innovations, and we plan to use the Iwakuni Ohtake Plant as a model of innovation for all of our other plants.

2

Special Feature: A Ceaseless Approach to Creation

Close Up

Skill Transfer and Technician Training

Daicel Production Innovations Enable Skill Transfer and Technician Training

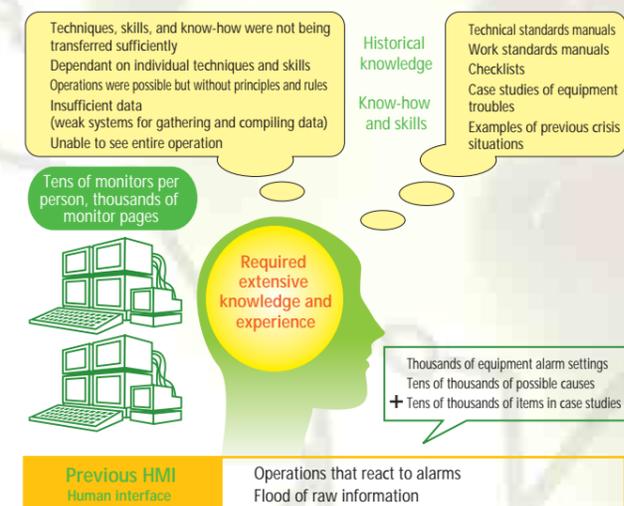
The Issue of Transferring Skills that Affect Quality

The establishment of production innovations has led to the creation of an internationally competitive cost structure and a high-quality production system.

In the process industry, operators check data on monitors that show the operating conditions of a chemical plant and respond to any alarms, so the quality of products tends to be affected by the skills and abilities of operators.

At one plant, before an Intellectual and Integrated Production System was implemented, each operator was in charge of checking several thousand items on tens of monitors. Alarms are installed on thousands of pieces of equipment, and when an alarm went off, operators had to deduct the cause of the alarm from tens of thousands of possibilities and reach a decision immediately about what measures to take based on hundreds of thousands of case studies.

Previous methods of operations at a certain plant



Having started out in smaller-scale plants in the 1950s, veteran operators have built up advanced skills in this area based on their extensive experience with a variety of irregularities and changes.

The process industry faces the perplexing challenge of how to best transfer the skills of these veteran operators on to new and mid-career operators.

This "2007 Problem" of transferring skills as the baby-boomer generation enters mandatory retirement came 10 years earlier at the Aboshi Plant than other chemical complexes, because a large number of technicians were hired in 1951 when production of cellulose acetate started.

To solve the problem of skill transfer, Daicel codified and systemized with IT the advanced skills of its veteran operators and incorporated this knowledge into production innovations, in an attempt to homogenize product quality by letting anyone leverage the skills of veteran operators through IT.

Stages in Creating Production Innovations to Enable Skill Transfer and Technician Training

• Stages Zero and One: Affirmation of Necessity; Upgrading and Stabilizing the Foundation

Reassessing Current Conditions to Upgrade the Foundation and Cut Out Waste and Loss

At stage zero, efforts began with analysis of the workload of operators during regular and irregular operations, continued with the thorough examination of how work was performed, and finished with the assignment of responsibility to middle management (product line managers) to identify areas of waste and loss at the plant.

Daicel uses a general inspection approach to dissecting how work is performed. This approach maps out the workflow, and in this process, identifies issues (waste and loss) with the current division of labor and decision-making system. In addition, the approach formulates an ideal workflow and clarifies information needed for decision-making and reassessing the division of roles and responsibilities. In a general inspection, it is important to rebuild communication within plants while analyzing processes. Improving communication is crucial to making progress on the steps that follow stage one.

Plant waste and loss identified at stage zero is thoroughly removed 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); and (3) fostering logical thinking based on analysis of the facts in order to solve problems that have been discovered.

The company prioritizes the reduction of operator workload and unifies the terminology and language used to describe their work. This common language serves to enhance communication between the production and facility management divisions and also helps to foster a corporate culture that encourages dialogue on principles and rules using schematics. By debating logically in the same language, the company prevents the emergence of new waste and loss.

• Stage Two: Standardization

General Operability Studies Codify the Knowledge of Veteran Operators

Before proceeding to the next stage, it is necessary to achieve the goal of reducing operator workload, as explained previously. Only then is it possible to start standardizing operations (standards for regular and irregular operations), beginning with the decision-making methods of operators. In creating standards for regular operations, a general operability study is conducted on the decision-making processes of operators.

General operability studies are a way of standardizing operations that was developed independently by Daicel. Teams of technical staff interview operators highly skilled in plant operations from the perspective of safety, stability, quality and cost, asking questions about their decision-making processes when changes in plant conditions occur, from how they deduce the cause of the change to how they avoid its impact on operations.

As a result, the tens of thousands of decision-making processes of operators at the Aboshi Plant were recorded, and in this process a number of issues were resolved, leading to better safety, quality and energy conservation in operations. By standardizing operations, Daicel was able to formulate a manual of design specifications for the Intellectual and Integrated Production System.

Interviewers comprised only technical staff who had passed certification for certain technical skills. In order to eliminate waste and loss, the interviewers were required to perform their duties at a certain speed and come up with creative ideas for improving productivity while creating rules and implementing them. This process was effective in training technical staff by fostering a logical approach to solving issues.

• Stage Three: Systemization

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

At stage three, after the waste and loss was thoroughly eliminated in work and decision-making processes identified at all plants 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.

The Intellectual and Integrated Production System is a conceptual framework for showing the required information to the required people at the required time.

Operators manage related plant functions on one monitor. When an irregularity or change occurs, the screen color changes so that the operator can quickly identify the affected process and the degree of impact. By clicking the button flashing next to the problem area on the screen, a list of keywords about the irregularity or change for the process is shown, with color codes to indicate its severity. Clicking the keyword will show the information required to make a decision and take action, such as (1) the type of irregularity, (2) the recommended way to solve the problem, and (3) the possible causes. This information helps the operators to reach an appropriate decision and to control the facilities in a timely and precise manner.

The Intellectual and Integrated Production System also has a function for searching past examples of changes and principles and rules relevant to the context of the alarm, thereby reducing the physical and emotional load on operators and improving product quality via more stable operations.

The Operation Training Center Teaches Technicians Advanced Skills

The Operation Training Center was established in 2002 for the purpose of nurturing independent professionals by training new employees and technical-related staff, along with training new operators on basic skills and mid-career operators on more advanced techniques.

Daicel's technician training curriculum is a combination of on-the-job training in plant operations and off-the-job training at the Operation Training Center. Installed within the Operation Training Center are a number of small-scale plants for training purposes, featuring a breakdown of operations required to run chemical plants, namely, liquid transfer, heat transfer, evaporation and condensation. It also has a training simulator for advanced technicians so that they can learn principles and rules.

Daicel's chemical plants, which effectively operate on the Intellectual and Integrated Production System, are extremely stable in their operations, but there is a large experience gap between veteran and novice operators in terms of handling problems. For this reason, the training plants simulate problems for novice operators so that they can gain experience solving problems and acquire the advanced skills of the veterans.

At the Operation Training Center, two-night, three-day camps are held for teams of five people from different divisions, who train by simulating ways of reporting, communicating and consulting between their divisions. Three instructors are assigned to each five-person team to help them become better communicators.

Technician Training Curriculum

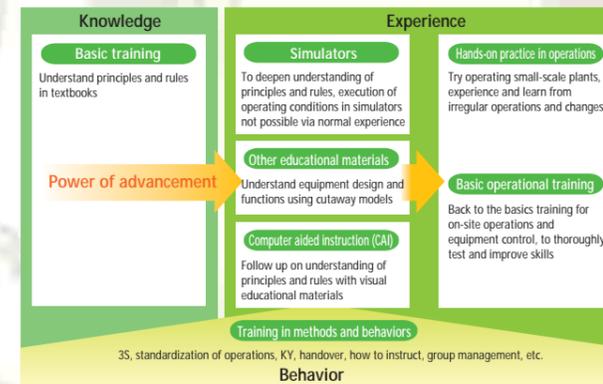
Daicel's operators undergo a training curriculum based on three elements: required knowledge, desired behavior, and minimum necessary experience. In addition to traditional cutaway models and textbooks, the curriculum also focuses on hands-on training at small-scale plants.

The curriculum is composed of (1) teaching the basics of chemicals and chemical engineering required for operations, (2) teaching methods and behaviors necessary for operations, and (3) teaching basic operations based on the rules of operations standardized in production innovation initiatives through practical training for operations.

Each educational program combines on-the-job training and off-the-job training for a curriculum of standards and frameworks derived from production innovation initiatives. The curriculum at the Operation Training Center will be changed to accommodate new rules created from ongoing production innovation initiatives.

As a result, Daicel has been able to pass on valuable skills from generation to generation, through educational programs and daily production activities.

Basic structure of the training curriculum



Comment by a Veteran Employee



Daicel Chemical Industries, Ltd.
Cellulose Company
Production Management, Aboshi Cellulose Production,
Yasushi Kurokawa

Good Communication Is a Critical Element of Reducing Operator Workload
When three plant managers were performing a general work inspection, they used different terminology to describe work procedures and equipment types, making it difficult to understand each other. The managers from the Cellulose Acetate Group and the Acetic acid & Acetic anhydride Group in particular were really having a hard time communicating where waste was identified in a work process, even though they were in charge of plants that made similar products.

During the process of upgrading the operational foundations, at first the plant managers wondered "why now?" and were stubbornly proud of the way they worked, but communication improved dramatically after they started learning the principles and rules and began using the same terminology to describe equipment names, etc., as the cellulose acetate plant manager.

At stages zero and one, improving communication was a crucial step in reducing the physical and emotional workload of operators.

Comment by a Mid-Career Employee



Daicel Chemical Industries, Ltd.
Organic Chemical Products Company
Production Management,
Aboshi Production Center, Masahiro Iwanishi

Creating a Great Cycle for Improving Operator Skills

General operability studies are undertaken to firmly understand the cause of changes in production processes and their impact on operations, as well as to hammer out the best ways to solve problems. Through these studies, a large volume of data is obtained and confirmed, allowing for the cataloging of points that are not controlled sufficiently and points needed for the standardization of work procedures.

After embedding this data in IT systems, the amount of information available on one screen increases, and the impact of changes on upstream and downstream processes becomes more visible. In addition, the screen you want comes up faster, making it easier to operate.

At the production site, the company frequently upgrades facilities and software. When this happens, a general operability study is done to review operations, and this process becomes a positive cycle for improving the skills of operators and standardizing operations.

Comments by Young Employees



Daicel Chemical Industries, Ltd.
Organic Chemical Products Company, Production Management,
Ohtake Production Center, Tatsuya Kayahara

With the Intellectual and Integrated Production System, the screen changes color to indicate the severity of a change of a process at the affected plant, and double-clicking the area will take you to the screen you want to see, making it much faster to detect changes and prevent problems in plant operations.



Organic Chemical Products Company, Production Management,
Ohtake Production Center, Ken Matsumura

Work methods and execution timing were integrated, eliminating individual differences and streamlining the time required to make a product. Also, when changes emerge, it is now possible to handle it on my own, without waiting for instructions from a veteran operator.



Cellulose Company, Production Management, Ohtake Cellulose
Production Division, Keitarou Hirata

It is now possible to monitor the safety and stability of operations at many plants with a minimal number of operators, because the system (1) enables plant monitoring with alarms concentrated at the upper portion of the screen, (2) shows all the relevant information for a process on the process monitoring screen, and (3) shows multiple trends on a single screen.

2 Special Feature:
A Ceaseless Approach to Creation

3 Close Up Safety and Quality

Gathering, Competing, and Learning at the Global Improvement Contest

Advanced Technologies Contribute to Saving Lives in less than 0.1 Seconds

Automobile airbag inflators inflate airbags with gas in less than a second. At about 0.02 seconds, these devices are literally faster at inflating an airbag with gas than the blink of an eye (which is 0.1 seconds). In recent car models, airbags are increasingly installed in places other than the driver's seat. Airbags are broadly categorized into three types according to customer needs and application, namely pyro (light weight), stored gas (high-speed gas inflator) and hybrid (light weight and high speed).



Profile of the Inflator Business

In 1988, the subsidiary Daicel Safety Systems Inc. was established to specialize in the production of inflators, and it began commercial operations the following year. By the late 1990s, the subsidiary had expanded its customer base to all Japanese automakers. From 2002 to 2006, Daicel Safety Systems built up overseas production bases in order to speedily deliver products to the overseas subsidiaries of Japanese automakers. The subsidiary has grown to rank third in terms of global market share, with a supply system in five major countries of Japan, the United States, Thailand, Poland and China.



The Daicel Group will continue to help saving people's lives around the world with its airbag inflators, which were made possible by its advanced explosives and combustion technologies.

Global Improvement Contest 2008

The purpose of the Global Improvement Contest, which takes place with the spirit of gathering, competing and learning, is to help build a production structure that excels in safety and quality and gives customers enhanced assurance. All bases of the pyrotechnic devices business held preliminary contests in July, covering safety, 3S and the Toyota Production System, and the winning teams from all the bases battled it out at the Global Improvement Contest held at the Harima Plant in October.

At the contest, the teams picked from all global bases gathered together for a lively face-to-face discussion. With communication centered on safety and quality, they contributed significantly to the fostering of a spirit of unity among the Daicel Group.

	First Place World Champion	Second Place	Third Place	Number of participating teams
Safety Award Safety System Technological Development Center Team (Daicel Chemical Industries)	Returning to the basics, the team worked at better ways of disposing of chemical waste.	Production Technology Division (Daicel Chemical Industries)	Safety Team (DSST)	47
3S Award Logistics / Production Planning Team (DSEE)	The team worked at reducing inventories and workload in logistics processes by using 3S.	Hongetsu Team (DSSC)	CA Team (DSSA)	50
TPS Award E1 Line Team (DSSE)	The team focused on ongoing improvements to the flow of goods and information.	LE Team (DSSA)	Tonbo Team (DSSC)	27

(America) DSSA / DSTA

Communication is the key to improvement. We launched our improvement initiative in April 2007, held training seminars to strengthen the foundation further, and aimed to restore an awareness of making improvements among members. The secret to making improvements happen is enabling communication between people. With a "never give up" mentality, we are taking it to the next stage while working together as a team.



(Poland) DSSE

The secret to success is full participation by all members. We felt the importance of strong leadership and having members being fully engaged in projects. As improvements are constantly made, we learned that awareness of the flow of goods and information will lead to better productivity. We think the most important element in advancing a project is persistence. We aim to improve productivity further by striving for zero defects.



(China) DSSC

Keep working on a project without forgetting the basics. Efforts to improve will fail unless all project members fully understand the objective and significance of the task at hand. While coordinating at production sites and throughout the organization, we realized the importance of being highly aware that our improvements will lead to better services for our customers. We will continue working on improvements without forgetting this basic tenet.



(Thailand) DSST / DSTT

Investigating problems with cooperation from back-office operations. There are many areas with room for improvement at a plant. However, we discovered that it is also crucial to investigate problems in back-office operations, in addition to the plant. Improvements are unlikely to really take hold unless people are persistent. We will continue to make improvements while discussing issues across various divisions.



(Japan) DSS

Maximizing efforts at improving operations while collaborating with other divisions. We think it is important to set specific goals when working to implement improvements. In order to achieve these goals, we felt it was essential to collaborate with other divisions. We hope to pool our efforts toward achieving a single goal while creating an atmosphere that encourages people to work harder at making improvements.



Japan Shotshell Ltd. and Daicel Chemical Industries' Harima Plant
Be a self-starter and help improve your own area!

We took on 3S activities to improve our work environment. We dramatically rearranged the layout of machinery in the plant and improved productivity by enhancing traffic flow lines. It is important to make improvement from the perspective of the local employee. We will take an active, not a passive, role in trying to make improvements.



Daicel Chemical Industries Harima Plant (Safety System Technological Development Center)

Having everyone participate in creating a safe workplace is important. "Prioritize safety over production" is a slogan common to all internal companies. Safety is also essential in research and development activities. R&D into new explosives and other products often involves irregular work, making it imperative to create a safe workplace for everyone.

2 Special Feature:
A Ceaseless Approach to Creation

4 Close Up The Environment

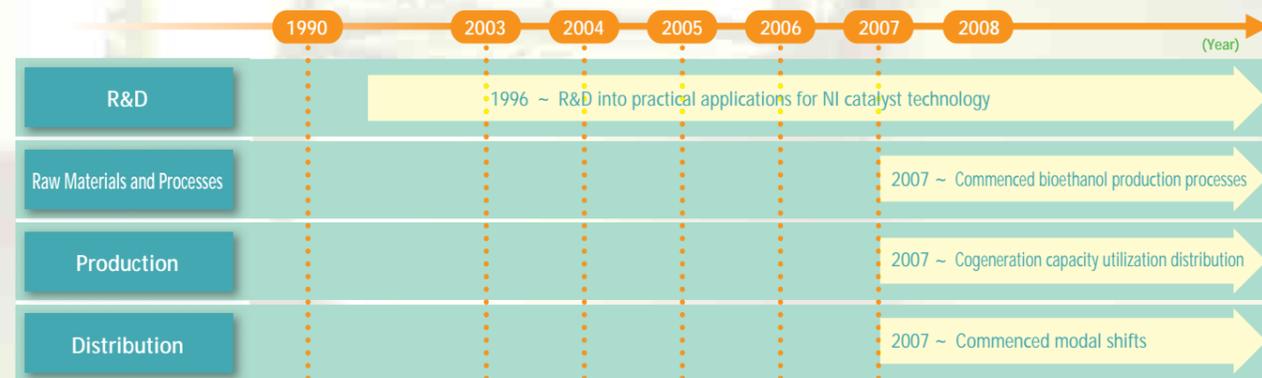
Realizing a Low-Carbon Society via Product-Lifecycle Initiatives

Initiatives Undertaken throughout Product Lifecycles

Daicel Chemical Industries is undertaking measures to reduce environmental impact, treating the elimination of crude oil usage, reduction of greenhouse gas emissions, management of chemical substances and reduction of waste materials as priority issues. Among these, the

Company is tackling the issue of greenhouse gas emission reduction throughout the lifecycle of its products, from R&D through to the production and distribution phases.

Major Initiatives



R&D NI Catalyst Technology

At the research stage, Daicel is studying the development of a wide array of practical applications that encompass everything from the bulk product field to specialty chemicals utilizing N-hydroxyphthalimide catalyst aerobic oxidation technology ("NI catalyst"), invented by Prof. Yasutaka Ishii of Kansai University in 1994. NI catalyst technology is a revolutionary technology that radically reduces greenhouse gasses and hazardous substances produced by conventional manufacturing processes by making it possible to manufacture a variety of chemical substances under moderate conditions in comparison with conventional methods (Please refer to the 2008 edition of the Environmental, Safety and Social Report for more details).

In the field of functional materials that have special material properties, the development of semiconductor photoresists is already being promoted through the start of practical manufacturing of adamantane oxides with NI catalyst technology. Moreover, a commercial plant has been constructed in the Arai Plant, and the manufacture and sales of photoresist polymer¹ for ArF excimer lasers²—recognized as the leading technology in the semiconductor manufacturing process—is underway.

*1: Polymer-coated membrane
*2: Laser light generators that use argon fluoride

Comment by Researcher



Daicel Chemical Industries, Ltd.
R&D Management
Corporate Research Center
Hiroki Takenaka

I am involved in the development of adipic acid production technology based on nickel (Ni) catalyst technology. Existing nitric acid oxidation methods release a significant amount of nitrous oxide (N₂O), which has 310 times the greenhouse effect of CO₂ (over 200 million tons when converted into CO₂). However, methods that use NI catalyst technology are capable of suppressing N₂O and other gasses.

Many companies worldwide have been unable to achieve manufacturing processes that utilize the NI method, resulting in difficulties at research facilities. However, thanks to the completion of a process design package, in collaboration with leading engineering manufactures, we are undertaking licensing activities in cooperation with other entities worldwide.

Feedstock and Processes Bioethanol

At the feedstock and process stages, efforts are being made to use bioethanol as a substitute raw material for petroleum, and these are part of Daicel's initiatives to find substitutes for crude oil and reduce CO₂ emissions. Bioethanol is an alcohol produced from biomass, a plant-derived organic resource. It is possible to create a variety of chemicals, including ethylamine and ethyl acetate, from the use of this raw material.

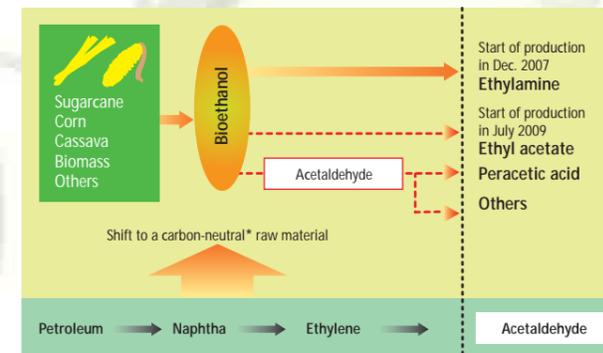
In December 2007, Daicel's Ohtake Plant began to use bioethanol in the production of ethylamine, which is used as a raw material in pharmaceuticals and agricultural chemicals, and it will be the first plant in Japan to begin producing ethyl acetate using bioethanol in July 2009. Daicel expects demand for the use of ethyl acetate as a solvent for adhesives

used in such electronic materials as flat panel displays to expand.

Furthermore, by continuing research into finding alternate raw materials for acetaldehyde, an intermediary material used in making peracetic acid, Daicel is focusing ever more on developing environmentally friendly materials.

*Carbon neutral: the amount of CO₂ released into the atmosphere through bio fuel combustion is equal to that which is absorbed during the biomass growth process.

Changing the Feedstock and Process



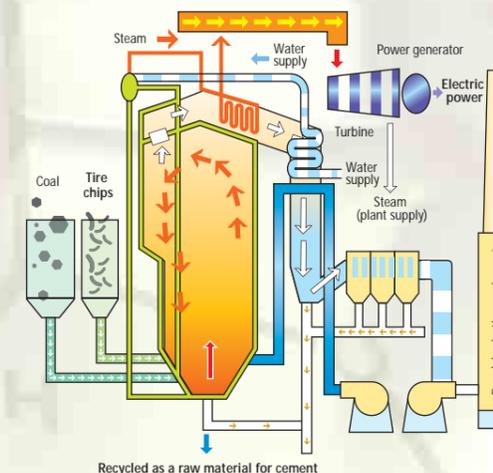
Production Cogeneration

At the production stage, the Ohtake Plant introduced a cogeneration system equipped with a circulation fluidized bed boiler, contributing to measures to conserve energy and reduce CO₂ emissions. Cogeneration is a highly efficient energy supply system that generates both heat and electric power, while utilizing exhaust heat from boilers and other sources.

Circulation fluidized bed boilers ensure good combustion even when burning a recycled fuel source such as used tires, by circulating hot sand in the combustion chamber. Utilizing used tires as a recyclable fuel, Daicel plans to make use of 25,000 tons tires during fiscal 2009. The Company's current targets aim to reach a mixed combustion rate of 30% during full boiler operations and to collect 67,000 tons of used tires. In addition, the ash that remains from the combustion process for used tires is being recycled outside the plant as a component of cement.

The Fuji Plant of Polyplastics Co., Ltd., a member of the Daicel Group, has introduced a gas engine cogeneration system fueled by city gas, a much cleaner energy source than petroleum.

Cogeneration with a Circulation Fluidized Bed Boiler



Comment by Energy Department Staff



Daicel Chemical Industries, Ltd.
Ohtake Plant
Energy Department
Energy Manager
Masahide Tomotoshi

Apart from periodic maintenance that occurs once per year (thirty days), the Company's circulation fluidized bed boiler is in continuous operation, 24 hours a day, 335 days a year. When it was first introduced, there was a problem initially due to a lack of knowledge of mixed tire combustion. Also, because of coal-related problems (the wear of transportation equipment and clogging due

to the accumulation of rainwater), transportation equipment was cleaned over a 24-hour period every three days in order to maintain continuous operations. Thanks to these experiences, we have not had any problems that could affect operations recently.

This boiler has enormous merits, including extremely stable combustion compared to conventional combustion-type burners, the ability to supply electricity to the entire plant, the ability to sell excess electricity and a system design that is unaffected by temporary power outages at the factory resulting from lightning and other factors.

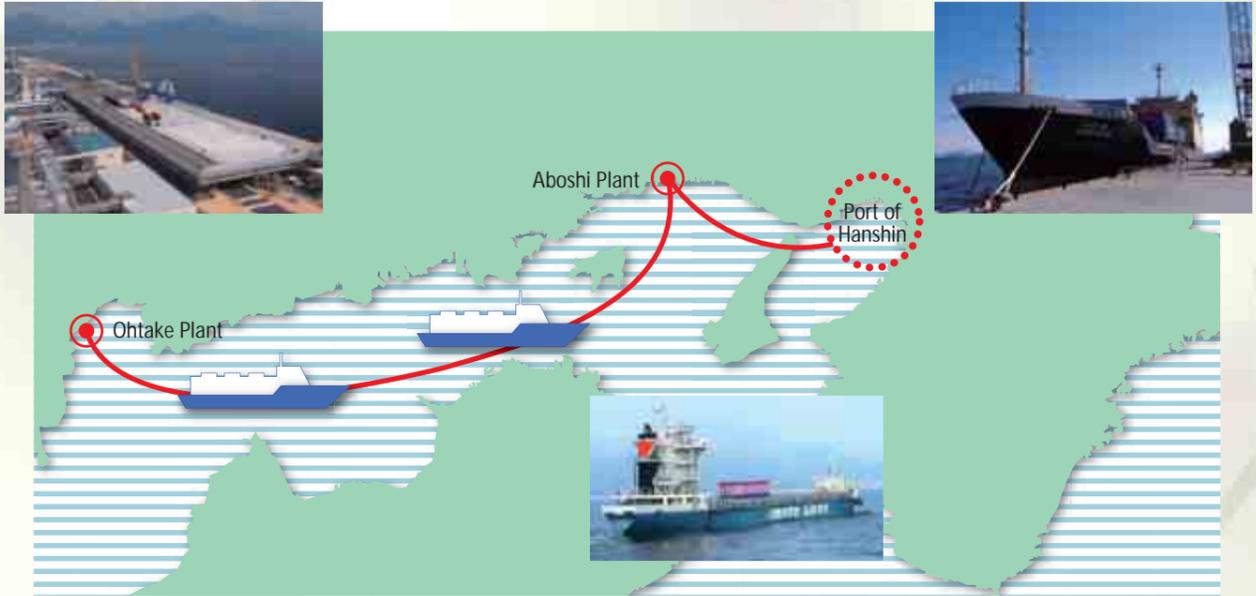
In the 2009 plan, by conserving 31,000 tons of coal, we will be able to reduce CO₂ by 75,000 tons.

Distribution Modal Shifts

At the distribution stage, in September 2007, Daicel implemented a modal shift for physical distribution from land transport to marine transport for the Hanshin-Himeji (Hyogo Prefecture)-Ohtake (Hiroshima Prefecture) route. Through these measures, the Company is taking steps to conserve energy and reduce CO₂ emissions.

By switching to marine transport not only for acetate tow product

shipments but also for receiving shipments of cellulose diacetate (the raw material used for acetate tow) and pulp (the raw material for cellulose acetate used in the manufacture of LCD films) in fiscal 2008, Daicel Chemical Industries, Ltd. and group company, Daicel Logistics Service Co., Ltd. have accomplished a 12,000-ton modal shift in transportation. As a result, CO₂ emissions were reduced by 3,800 tons.



Comment by Daicel Logistics Service Staff



Daicel Logistics Service Co., Ltd.
Himeji Distribution Center
In-Plant Distribution Group
Hiroshi Kata

I am engaged in the logistics operations of inland vessels (between domestic ports) primarily along the Kobe and Aboshi and Kobe and Ohtake routes. In container transport, shipping operations require half a day, and domestic shipping takes one day. Plans for container transport originating from the Port of

Kobe are made on the basis of proposals that are aligned with Daicel Chemical Industries' Production Planning Group. After plans have been proposed, domestic shipping companies are notified, and linkage is made with the Ohtake Distribution Center on the receiving end. Through these actions, we are making efforts to ensure transportation safety.

Although, logistics operations of inland vessels can be difficult in terms of aligning schedules due to such factors as irregularities between departments and poor weather, we are carrying out our duties, proud of the fact that the Daicel Group is a "window to the world."

Fiscal 2008 Highlights

April

Results and Future Countermeasures for Voluntary Soil Survey Conducted on Sakai Plant Site in Osaka

Accompanying the relocation of the Sakai Plant, we launched a voluntary soil survey of the site in October 2007. As a result, we discovered contaminants exceeding environmental standards on part of the site. We took the results of this survey very seriously and decided to implement measures to ensure that the contaminated soil is removed under the direction of the Sakai City government in order to avoid causing any difficulties for residents living near the site.

For additional details, please refer to our website, indicated below (Japanese version only)
<http://www.daicel.co.jp/news/data/08040101.pdf>

May

Daicel Chiral Technologies (India) Pvt. Ltd., Commences Operations as a Local Subsidiary

Daicel Chemical Industries established Daicel Chiral Technologies (India) Pvt. Ltd., which commenced business operations in May 2008. In addition to performing conventional services related to chiral columns, this new company will purchase and sell chiral columns as well as engage in chiral compound separation service. Owing to the establishment of this Indian subsidiary, Daicel Chiral Technologies has completed a framework that is capable of delivering high-quality products and services to customers worldwide through its global network covering Japan, the United States, Europe, China and India.

Completion Ceremony Held for the Cellulose Acetate (Used as Protective Film for LCD Polarizing Boards) Manufacturing Facility in the Ohtake Plant

With 180 participants in attendance—including such dignitaries as Yuzan Fujita, the governor of Hiroshima Prefecture, Yoshiro Iriyama, the mayor of Ohtake City, and Shigetaka Komori, President and CEO of FUJIFILM Holdings Corporation—a ceremony to commemorate the completion of the Ohtake Plant's cellulose acetate manufacturing facility was held in May 2008. Cellulose acetate is used as a protective film for LCD polarizing boards.

Owing to the completion of this manufacturing facility, Daicel Chemical Industries' production capacity of TAC (triacetyl cellulose) will increase to approximately 1.8 times of its current output.

June

Daicel Chemical Industries Signs the Responsible Care Global Charter

In June 2008, Daicel Chemical Industries approved and signed a declaration to support the Responsible Care Global Charter established by the International Council of Chemical Associations (ICCA), which promotes responsible care activities worldwide.

October

Mikuni Plastics Transferred to Aron Kasei

Mikuni Plastics Co., Ltd. engages in the manufacture, purchase and sales of plastic products primarily used in water piping and auto parts, as well as engineering, office equipment, construction machinery and household electric appliances components. Aron Kasei Co., Ltd. manufactures, purchases, and sells such product as joints and pipes made of vinyl chloride primarily for the sewer segment.

Based on the judgment that Mikuni Plastics core businesses could be developed even further by becoming a subsidiary of Aron Kasei, the Daicel Group transferred all of Mikuni Plastics' businesses to Aron Kasei in October 2008.

December

Purchase of Chrom Tech Ltd. by Chiral Technologies Europe S.A.S.

Chiral Technologies Europe S.A.S., a wholly owned subsidiary of Daicel Chemical Industries, purchased Chrom Tech Ltd. with the purpose of further strengthening the Daicel Group's chiral business.

This purchase has further solidified the Daicel Group's position as a leading global company in the chemicals field by enhancing its lineup of chiral compound separation products and services.

3 CSR Initiatives Report

Corporate Governance

Basic Approach

Daicel recognizes corporate governance as an important aspect of business that can contribute to improved corporate value. As a publicly listed enterprise, Daicel is committed to carrying out its social mission and responsibilities. We believe in the need to strengthen our relationships with various stakeholders.

By clarifying the role-sharing of various organs, we ensure our maneuverability, and we have implemented an agile management system capable of decision-making and execution in a timely manner. We can respond quickly to opinions from outside the Company and can apply them to our corporate operations. We intend to maintain our corporate management by improving transparency and fairness.

Establishment of Internal Control System

State of the Internal Control System

According to the Financial Instruments and Exchange Act enacted in June 2006, the submission of an Internal Control Report has been required from corporations with publicly listed shares beginning in fiscal 2008. In order to ensure the reliability of the financial reports of the Daicel Group, Daicel established the Project to Implement Internal Controls for Financial

Reporting and undertook full-scale implementation of this initiative in April 2007.

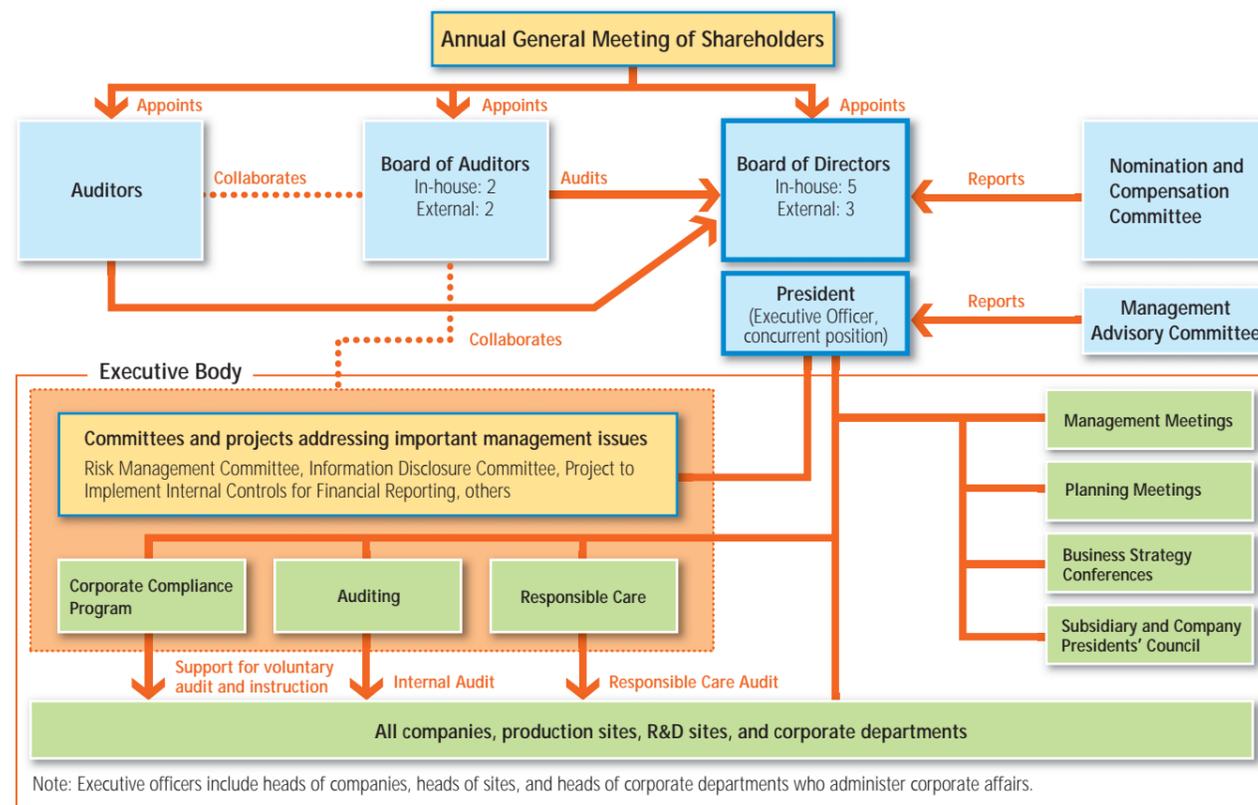
This project not only supports the legal requirement for enhanced reliability of financial reporting, but also addresses risk management as the Daicel Group expands its business. In order to strengthen the foundation for risk management and devise an improved system that will enable us to accommodate growth with peace of mind, we must take a medium- to long-term perspective. In this light, the Group first commenced the establishment of a system that can further enhance the reliability of its financial reporting.

During fiscal 2008, the first year after the introduction of the system, the Group assessed the state of its internal control system and actual operations related to financial reporting of the entire Group in pursuit of submitting the Internal Control Report.

The Daicel Group will continue to improve, and it will continue to utilize this effective internal control system, which supports the Group's healthy and sustainable development. With this in mind, the Group will execute matters resolved at its Board of Directors' meeting with regard to the Basic Guidelines for Development of an Internal Control System in accordance with the Corporation Law.

* The Internal Control Report for fiscal 2008 financial reporting is disclosed on EDINET, a corporate disclosure system established by the Financial Services Agency.

Corporate Governance Framework



Risk Management

Progress in Implementing Risk Management

In April 2006, Daicel adopted a Risk Management Code stipulating a company-wide risk management policy. In addition, we formed a Risk Management Committee framed by executives of the corporate departments in order to control and promote company-wide risk management. In November 2006, the Company created its first risk inventory as instructed by the Risk Management Committee, which thoroughly investigated and shed light on significant challenges in that area. We assigned priority levels to the significant risks we had identified, considered appropriate countermeasures, and adopted initiatives to limit exposure to risk. We promoted this activity throughout our domestic Group companies in November 2007 and among overseas Group companies in April 2008.

Furthermore, regulations responding to risk identification were established in January 2008. These regulations set out the initial response to be undertaken for establishing networks and an emergency measures headquarters when a significant risk is identified. According to these regulations, we provided training at the end of 2008 for all Group companies by conducting drills that assume the realization of significant risks. We will continue to improve our initial response in the case of an emergency.

In our fiscal 2006 Medium-term Plan, we targeted the reinforcement of our foundation and identified two key initiatives: risk management and internal controls. We will continue to improve these initiatives and link them to the creation of a foundation for our corporate social responsibility.

In-House Audits

Internal Audits by the Auditing Office

In accordance with the basic principles of the internal control system, we are striving to ensure appropriate business operation.

The Auditing Office draws up audit master plans relating to the principles, scope, period, and target items of internal audits, carries out internal audits, and makes suggestions for correcting problems. The office supports appropriate business activities and reports to management with the results of the audit.

Voluntary Audits and Company-wide Reviews Relating to Corporate Ethics

In order to ensure the establishment, practice, and continuous improvement of corporate ethics, we have employed a PDCA cycle to create a corporate ethics management system through which all divisions operate independently.

To verify that our corporate ethics are appropriate and that their practice is effective, each division conducts voluntary audits. The Corporate Compliance Program uses the results of these audits to carry out a company-wide review. Management responds by undertaking a top management review. These results are incorporated in corrective and preventive actions relating to corporate ethics, and then the courses of action, rules of conduct, and corporate ethics management system are revised accordingly.

RC Audit

In conformity with the Guideline for Implementation of Responsible Care Internal Audits established by the Japan Responsible Care Council (JRCC), we undertake an annual audit of the status of implementation of RC activities and the status of compliance with RC-related laws and regulations. Daicel's plants and research center conduct annual reviews of their RC activities, while an audit team appointed by the RC Council set up within Responsible Care Division as a secretariat carries out an RC audit, draws up a report on the results of the RC audit, and provides feedback to the plants & research center. These audit results are reported to management.

The RC audit results are incorporated in the action plan for the Company's subsequent fiscal year, including the plants & research center, and are reflected in continuous improvements and enhancement of RC activities.

The in-house audits have been carried out jointly (Auditing, Responsible Care Division, Corporate Compliance Program Division, and Personnel Group) since fiscal 2006 as efficient and effective audits of our plants & research center. In examining the effectiveness of these joint audits, we were able to exclude items common to the audits and reduce the burden on the audited divisions. In addition, the audited divisions made use of this opportunity to exchange information, resulting in a deeper understanding of the scope of the audits.

Our Commitment to Corporate Ethics

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 company-wide.

This is not a temporary initiative. In order to ensure that this initiative is practiced continuously, we established our Corporate Ethics Management System by following 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.

Promotion System

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

In order not to be involved in the illegal export of goods and technologies regulated within the framework of export control-related laws for international security, we set up In-house rules on export management to guarantee security, and we have set up the Export Management Committee for inspections and audits. Together with this, we established in-house rules on personal information protection (by the Personal Information Protection Committee) for appropriate management and handling of personal information, as well as in-house rules on information disclosure (by the Information Disclosure Committee) for appropriate disclosure and provision of corporate information. Each committee is promoting the employees' compliance with relevant laws and regulations.

Corporate Ethics Training Programs

Daicel provides position-specific corporate ethics training to union members, leaders, directors, and presidents of Group companies. Moreover, corporate ethics training is provided at important occasions when employees are promoted. During fiscal 2008, Daicel offered training seminars for its leaders and those in higher positions with regard to CSR and corporate ethics, with a resulting participation rate of 98%.

Daicel is also offering in-house seminars to impart the knowledge of laws and regulations required for business operations.

Implementation Themes Extracted from In-house Seminars (Number of seminars held)

Antitrust Law (2); Regulations on Insider Trading (1); Export Management (14); Labor Relations Law (2); Product Liability Law (1); Act against the Delay in Payment of Subcontract Proceeds, etc., to Subcontractors (5); Law Concerning Securing the Proper Operation of Worker Dispatch Operations and Improved Working Conditions for Dispatched Workers (3); Unfair Competition Prevention Law (3); Intellectual Property Rights (9)



Training seminar for freshmen

For those who are unable to attend in-house seminars due to their work situation, Daicel provides necessary educational materials and manuals throughout the Company on the intranet. Such materials can also be used at seminars held by each division.

Extracts of Educational Manual

Legal restrictions in relation to government employees; Prevention of deceptive contracts; What is the Personal Information Protection Law?; Unfair Competition Prevention Law; Export Management; Manual for Compliance with Antitrust Laws; Practical guide to U.S. antitrust law; Outline of cartel regulations according to the EU Competition Law; Legal points to remember upon participation in overseas markets

During fiscal 2008, we reviewed the Daicel Group's information security policies. Based on this revision, we make efforts to establish the further reinforcement of systems, while thoroughly controlling information system-related equipment as well as business and personal information. Together with this, we are constantly providing educational seminars to maintain our credibility from society.

The Consultation and Report 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, where circumstances prevent a superior from devising a quick solution, 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. We have ensured that the Corporate Ethics Help Line addresses the following items, and we regularly monitor issues such as dismissal, adverse treatment, and harassment of individuals for having submitted a report ("whistleblowers") or having attended consultations.

- Protection of the personal information and privacy of whistleblowers and those who attended consultations
- Ban on adverse treatment in response to whistleblowers and those who attended consultations
- Feedback on whistleblowers and those who attended consultations

An external Corporate Ethics Help Line was launched in fiscal 2007 for the principal domestic companies of the Daicel Group.

Fair Transactions

Revision to the Policies Stipulating the Purchase

During fiscal 2008, 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 worked together to revise the Basic Purchasing Policy in accordance with the Daicel Group Conduct Policy.

On the back of the diversification of stakeholders in recent years, corporate evaluation criteria have changed. Therefore, it is increasingly important for any company to fulfill its corporate social responsibility. Given this trend, we redefined our motto, "creation," as "action to create new, meaningful value for society." We carry out the Daicel Group Conduct Policy with the belief that we can further enhance our corporate value through our approach to materials creation and become an attractive corporate group for stakeholders by making wider contributions to social development.

However, our business operations and CSR initiatives are carried out with our suppliers, who provide us with raw materials, equipment and services in the supply chain. Therefore, Daicel revised its policy to pursue a better understanding of such suppliers.

Our policies for purchasing fuels, equipment and raw materials are available to the public on our website at the following link (Japanese version only): <http://www.daicel.co.jp/purchase/index.html>

Basic Purchasing Policy

Following courses of action taken to realize the Daicel Group's basic philosophy, the Raw Material Purchasing Center and the Engineering Center Procurement Group will comply with the following Basic Purchasing Policy in their purchasing activities from suppliers.

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.

* These policies have not been set forth in the form of a contract and should not be construed as an offer of a contract.

Safety and Quality Assurance for Our Products

Product Safety

For safe handling of our products, Daicel has undertaken a range of measures for our customers, including the formulation and provision of Material Safety Data Sheets (MSDS). This sheet covers not only information regarding chemical substance subject to laws and regulations, but also all of the chemical materials used in products. In addition, we have created yellow cards that show emergency measures to secure the distribution safety of products and oblige distributors to keep it with them at the time of transportation.

Quality Assurance

Each company is responsible for the quality of their products. All of Daicel's workplaces have acquired the ISO9001 certification, an international standard for quality management systems, and they offer products that satisfy customers and meet their needs. At regular quality assurance meetings held at each workplace, responsible officials from each company's headquarters attend the meetings to share information, including customer requests. By doing so, we leverage our quality management

system for the maintenance and improvement of product quality in close liaison between the headquarters and each division at workplaces.

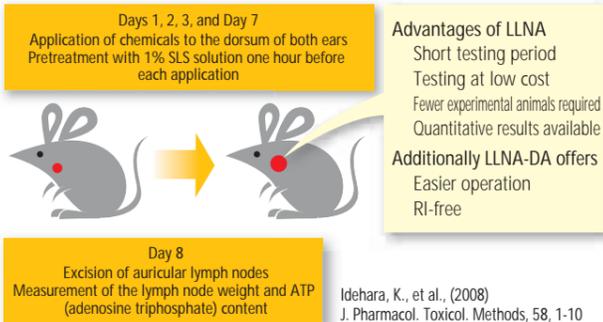
Furthermore, we are addressing the issue of acquiring certifications of quality management standards as well as meeting the legal requirements in each field for the following product lineups, in pursuit of safer and more user-friendly products.

- Airbag inflators: Acquired the ISO/TS 16949 certification (quality management system standards for the automobile industry)
- Special machinery products: Acquired the JISQ 9100 certification (quality management system standards for the aerospace industry)
- Medical and pharmaceutical products: Implementing production and quality control under the 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): Meeting the AIB Consolidated Standards for Food Safety

Products and Technologies that Contribute to a Healthier Environment

Daicel Chemical Industries, Ltd. Establishment of the LLNA-DA, a Modified Skin Sensitization Test

Skin allergy caused by sensitization potential of chemicals may lead to health problem such as contact dermatitis. As a method to detect the skin-sensitizing substances, the murine local lymph node assay (LLNA) is currently viewed as the preferred assay. However, LLNA requires radioactive isotope (RI). Given this, Daicel has developed the modified LLNA of Daicel based on ATP content (LLNA-DA) that does not need RI, and is making use of this skin sensitization test method to evaluate their products and chemical substances used in its business operations. It has been confirmed that the results of the LLNA-DA are almost equivalent to that of the original LLNA. In addition, a validation study conducted with the support of the Japanese Society for Alternatives to Animal Experiments (JSAAE) confirmed satisfying inter-laboratory reproducibility. These results are currently being evaluated by the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM). It is also expected that the LLNA-DA become an international regulatory standard as the skin sensitization test in the future, and the preparations for it are now making progress.



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 34% 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 inflator recovery and processing system demonstrated and established 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 safely recycled.



Automobile airbag inflators



Processing facility for recovered airbag inflators

Daicel Pack Systems Ltd. Celcompact

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

Although quite thin, this plastic container does not break easily. This innovative plastic container is unlike others, as 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.

To reduce the environmental impact, we have made efforts to conserve the resources used to produce containers. As a result, we developed containers that are 20% to 30% lighter than conventional containers produced in 2005.

Furthermore, owing to efforts in switching from existing products to Celcompact from the end of fiscal 2007, total sales surged 150% compared with the fiscal 2006 sales.

Daicel Pack Systems Ltd. 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, and Saitama.

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

http://www.diet-youki.jp/activity_report_list/activity_report_detail.php?uid=25



Celcompact



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

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. ECOBRID is expected to be applied to environment-friendly labels.



Easy-to-remove ECOBRID labels realize effortless garbage separation



Labels using ECOBRID

Daicel Membrane-Systems Ltd. Cellulose Acetate Hollow Fiber Membrane

In October 2008, the company's cellulose acetate hollow fiber membrane was certified as a product appropriate to bear the Biomass Mark, owing to the high evaluation for its application as a water purification filter.

In addition to this achievement, the new FT50 membrane module launched in fiscal 2008 featuring this cellulose acetate hollow fiber membrane had its weight reduced to 70% of the older model, offering an all-new, eco-friendly module.

The membrane device equipped in the module has been delivered to users and is now in full operations.



Water purification system using separation membranes



Biomass certification



Biomass Mark

* The Biomass Mark is given to eco-friendly products that meet relevant laws, regulations, standards and requirements concerning quality by utilizing biological materials. As of January 30, 2009, 193 items have been certified by the Japan Organics Recycling Association.

Daicel Polymer Ltd. PLASTRON

To protect the Earth from the threat of global warming, the automobile industry is now developing lighter weight vehicles that consume less fuel. As part of this effort, metal auto parts are now being replaced with plastic parts. At the same time, wind power generation systems are now attracting considerable attention as an eco-friendly source of power. Since larger wind power generators are needed for such systems, it is necessary to manufacture increasingly lightweight generators. For this reason, generators are now being made with plastic parts. However, wind power generators are used under difficult conditions, and thus demand has grown significantly for stronger and more heat-resistant plastics.

PLASTRON exhibits high mechanical strength, excellent heat-resistance, and outstanding weatherability. Previously, it had been difficult to use plastics for vehicle bodies, engine parts, and wind power generators. However, because of its outstanding strength, PLASTRON is now being used for such parts.



Wind power generator made of PLASTRON (Manufactured by Nasu-Denki Tekko Co., Ltd.)

Daicel Polymer Ltd. CELLROOT, an Innovative Resin Ingredient for Plating

Although hexavalent chromium is toxic to humans, it is still in wide use in industry. In the process known as etching, which makes use of metal-plated plastic, hexavalent chromium is indispensable for strengthening the adhesive bond between the plastic substrate and the metal. Daicel Polymer Ltd., in collaboration with Okuno Chemical Industries Co., Ltd., has developed an innovative new product known as CELLROOT resin (trademark pending) for use with plating. This innovative product has made it possible to perform resin plating without the use of any hexavalent chromium, even though it is not significantly different from the conventional process. This product has garnered a tremendous response from those customers who are highly focused on environmental concerns.

Applying this excellent plating to the exterior adds outstanding heat resistance (200°C). Plated resin decorated components are used in a wide range of useful applications such as sports equipment: as parts for plumbing, bathrooms and kitchens. They are also used for auto parts such as emblems and radiator grilles and the like.



Maintaining Communication with Local Communities

The Daicel Group remains aware of the importance of maintaining harmony with local communities. In order to earn the confidence of local residents, we carry out a variety of communication activities, such as supporting and participating in local events and volunteer activities, hosting plant tours for local residents and students of local elementary and junior high schools and dispatching lecturers to universities. In this way, we are proactively engaging in a dialogue with local residents.

Cultivating Next-Generation Human Resources

Supporting Career Start Week at the Ohtake Plant to Nurture Career Perspectives among Junior High School Students

In cooperation with Career Start Week, sponsored by Ohtake City, the Ohtake Plant opened its doors to three male from the second grade Ohtake Junior High School students for five days in August 2008.



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 proactively cooperating with this program since its inception.

Ohtake Plant Holds Classes Related to Environmental Issues at Nearby Junior High Schools

In response to a request made by neighboring Kuba Junior High School, staff members of the Ohtake Plant's Environment and Safety Division taught a class on environmental issues as a science lesson for third-grade Kuba Junior High School students in classroom two in December 2008. In order to familiarize students with the concept of environmental preservation, the staff used their ingenuity to raise such themes as introducing energy conservation activities that can be done at home.



Harima Plant Holds Classes at Neighboring Kouchi Elementary School

Staff members of the Harima Plant taught a class on airbag systems to all 17 fifth-grade students at nearby Kouchi Elementary School in November 2008. Given that a description of airbags is included in the school's textbooks, this class was taught three times as part of the school's social studies class. Cutaway models of steering wheels and automobile airbag inflators were ingeniously used to allow students to not only view these

objects, but to touch them as well.

In addition, students also learned about the proper use of automobile safety devices, including a talk about how airbags are made more effective by wearing seatbelts. The children were captivated by the slow motion video showing an airbag being inflated, exclaiming: "So that's how they work!"



Arai Plant Displays Artificial Salmon Egg-Making Experiment at Youth Science Festival

Arai Plant staff members displayed their artificial salmon egg-making experiment using sodium alginate and calcium chloride at the Youth Science Festival, hosted by Myoko City in July 2008. The purpose of this festival is to teach children the wonders of science. On the day of the festival, 426 children and their families participated. At the Arai Plant booth, participants were given the chance to go beyond being observers and actually participate in the experiments. In addition, participants wore protective glasses and all waste materials produced during the experiment were brought back to the plant in a plastic tank. Through all this, the Company was able to communicate the measures it takes and the level of awareness it has about safety and the environment.



Himeji Research Center Hosts Workplace Tour for Employee Families

Inviting 97 research staff family members to the Himeji Research Center in August 2008, Daicel introduced the business operations of this center, beginning with its R&D activities, as it conducted a tour of the facilities and demonstration experiments.



Participating family members had an opportunity to observe research staff perform their assignments as well as the actual facilities in which they work. Staff members were also thrilled to be able to show their loved ones their place of work. Given these positive results, Daicel will continue to promote similar communication activities in the future.

Contribution Activities via Radio Programs

Daicel Sponsors Kobe Radio Program for People Aged 60 and Older

Believing that communication activities through the media are important, Daicel Chemical Industries sponsors a 15-minute radio program geared towards listeners 60 years old and older entitled, *60 (Roku ju) Sai Kara Genki Kobe* (Lively Kobe for 60 Years Plus), and broadcast by Radio Kansai weekly on Sundays starting at 5:45 a.m. Fully agreeing with this program's purpose of encouraging senior citizens to carry out a daily life that is healthy, cheerful, and full of appreciation and hope, as well as instilling in them the courage to enjoy life, the Company will continue to support this program.

60 Sai Kara Genki Kobe website: www.genki-kobe.com

Supporting Cultural Activities

Steeped in History and Culture, the Daicel Ijinkan Opens to the Public Free-of-Charge

Back in the early days, when its business was built on celluloid, Daicel Chemical Industries received technical assistance from engineers hailing from countries including Great Britain and Germany. Serving as accommodations for these engineers at that time, the Daicel Ijinkan was selected as one of Hyogo Prefecture's One Hundred Best Residential Buildings, and the City of Himeji designated the building as an important urban landscape structure.

At present, the exhibition section within this building displays a variety of celluloid products from that era, including a black Kewpie doll (one of only several known to exist in Japan), ping-pong balls, patterns for pachinko machines and a celluloid telephone with a checked pattern. This exhibition is now open free-of-charge to the many people who visit this facility.



Brick Structures to Be Preserved on the Sakai Plant Site

The Sakai Plant, where Daicel Chemical Industries began, was closed in 2008 to accommodate construction of the Hanshin Expressway Yamatogawa line. However, the brick structures that were built during the establishment of the plant in 1908 will be preserved as a monument to commemorate that era, which was marked by struggles in the production of domestic celluloid. Extending beyond the standpoint of Japan's recent industrial history, an appreciation of the value of structures made of brick over the last century and up to the present day will be undertaken as Daicel investigates



meaningful uses for these brick structures under the guidance of various local organizations, communities, and regional governments.

Local Exchanges and Volunteer Activities

Instruction for Safeguarding Local Children Provided at the Kanzaki Plant

Instruction sessions are held at the west and central entrances of the Kanzaki Plant every morning at 7:30 with the purpose of safeguarding children attending neighboring elementary and junior high schools.

Encouraged by the hearty greetings and smiling faces of the children every morning, Daicel highly values its connection to the local community.



Interaction with Local Residents at the Cosmos Festival, Held Near the Harima Plant

Sweeping cosmos fields of approximately five hectares, where five million cosmos flowers grow, are located in front of the Harima Plant. Harima Plant staff participated in the 13th Annual Baba Cosmos Festival, held in October 2008, and will participate in this year's event as well by selling Daicel Group products at a stand and operating a shooting gallery. While both of these attractions were well attended, the shooting gallery in particular was popular, with children busily lining up to take part. During the festival, staff members from the Harima Plant deepened the plant's connection with local residents amid the magnificent, sweeping cosmos fields and placid weather.



Exchanges with Local Elementary School Students via the Event to Release Salmon Fry

Staff members from the Arai Plant volunteered at the 9th annual Salmon Fry Release Event held this year as part of an education program run by a neighboring elementary school. At this event-hosted by the volunteer group, Friends of Sekigawa River, students from Arai Kita Elementary School released approximately 10,000 Salmon Fry into the Sekigawa River.

As a member of the community that uses this water system, the Arai Plant has supported this event since its inception. As a result of these activities, salmon have been returning to this river over the past several years.



Human Resource Management

Respect for Human Rights

The Daicel Group thinks highly of human rights in the course of pursuing its basic philosophy. Therefore, we clearly state that fact in our rules of conduct in order to raise employees' awareness, while strictly prohibiting any type of discrimination or harassment associated with race, nationality, personal philosophy, religion or gender in all business activities, including recruitment, employment, job placement, working conditions, education and retirement.

Human Resource Cultivation Efforts —Source of Corporate Value

Through creation activities, 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.

Basic Policies for Personnel Training

- Nurturing personnel will help the Company grow. Employees can gain true knowledge and skills through their job. An attempt to achieve higher results will nurture employees.
- Personnel training shall be conducted on a Company-wide, division and individual basis, reflecting trainee's roles and responsibilities. Based on a corporate culture that trusts and values "people," all Daicel employees shall be responsible for personnel training from each position.

Human Resources that the Daicel Group Is Seeking:

People who can Gain Trust from Customers Based on Fundamental Knowledge and Skills

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."

In order to gain trust and high evaluation from customers, each one of us must have the basic knowledge and skills necessary as a member of society, while strictly meeting delivery deadlines. In addition, we must be responsible for addressing issues from the customers' point of view in order to solve these issues.

Personnel System to Support Personnel Development

Management by Objectives ("MBO")

MBO is a management system that maximizes each employee's capability by leveraging their individuality, to lead to greater achievements. MBO has been established for the purpose of developing both personnel and the organization through efforts to achieve established targets.

When setting targets biannually, a leader and each individual will have thorough discussions so that everyone can work to attain goals based on mutual understanding. Based on these discussions, individual goals are reflected in the targets of groups, divisions, and the entire Company.

In terms of evaluation, we focus not only on results but also on the planning and business operation processes. Through dialogues between leaders and subordinates, we evaluate employees' competence and aptitude to provide appropriate training and job placement. By doing so, we aim to nurture human resources. Furthermore, Daicel has introduced a performance-based system for all employees, and therefore, evaluation results will be reflected in wages and promotions.

Self-Evaluation System (A System to Hear Employees' Thoughts)

The self-evaluation system gives employees an opportunity to express their wishes in career development. Once a year, employees fill in a form called the "Personnel Development Report," in order to express their frank thoughts and opinions regarding their current job, future posting preferences and their career design. Each employee submits the report to their division manager. Then division managers consider each employee's career development based on their wishes and aptitude, along with optimal placement to make the most of their capabilities.

Educational and Training System to Support Personnel Development

Our Commitment to Our Technicians

Continuous growth is the responsibility of all companies, and product innovation and process innovation are the driving forces that provide this continuous growth. Our technicians play very important roles in promoting product innovation and process innovation. It is, therefore, indispensable that we train our technicians to become a group of professionals. We have established a technician training system (described below) to support the development of each technician.

Technicians Eligible for Training

The technicians we train are employees working in our technical divisions (our Production Technology, Engineering, and R&D divisions) as regular employees (below leadership rank) and graduates of a technical college or better. Even those technicians who do not meet the above conditions can attend training courses if a superior recommends them for such training.

Special Training for Technicians

Starting with the first-year course to experience and acquire the basics required for manufacturing, technicians will gain the following skills before being promoted to a leadership role.

1. Common basic skills	Minimum required skills currently being taught in training for manufacturing and the like (common to all fields and job types).
2. Common application skills	Depending on the field or job type, some technicians may be required to refine some common basic skills (the target level is above that of common basic skills).
3. Specialized skills	This is our company's expertise as required in the R&D, production technology, and product manufacturing technology divisions.
4. Official qualifications	These include licenses (a hazardous substance handling license and the like) that employees of a chemical company should obtain as well as licenses that should be obtained as specific requirements of certain divisions.
5. Knowledge other than technical knowledge	This includes basic knowledge (knowledge of financial affairs, legal affairs, corporate ethics, languages, etc.) needed for all fields and job types, excluding technical knowledge.

Various Educational and Training Curriculums

Daicel provides a wide variety of educational programs: "Corporate Ethics & Compliance Training," "Responsible Care," "Safety" and "Mental Health and Management," which have the purpose of instilling corporate policies and the operational skills indispensable for the finance & accounting, legal, intellectual property and business globalization. In addition, we implement training curriculum suitable for each position, such as career development and career assessment.

Introductory Training for New Employees (Training for Manufacturing)

We provide all new employees with one year of training (six months for administrative employees) for manufacturing. The curriculum starts with a group seminar (including external practical training courses with the Self-Defense Force) to teach common sense and knowledge as a member of society and a corporate employee, as well as company policy and the personnel system. Following this, trainees will acquire basic knowledge about the worksite through on-the-job training at the training center and the production site where they get acclimated to the eight-hour-shift system. Trainees ultimately learn to associate their newly acquired knowledge with the four key words of plant operations, namely safety, quality, cost and environment, to fully understand the basic operations

Training and Educational Facility

(H.R. Training Center)

Our H.R. Training Center is located in Harima Science Garden City, which houses SPring-8 (large radiation facility), New SUBARU (medium radiation facility), the Hyogo Ion Beam Medical Center, and others. Daicel 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. Today, in total, more than 8,000 employees use this training center on an annual basis. In addition to providing education and training, this center is used for company projects and improvement activities and the like.



For details, please refer to page 18 "The Operation Training Center Teaches Technicians Advanced Skills."

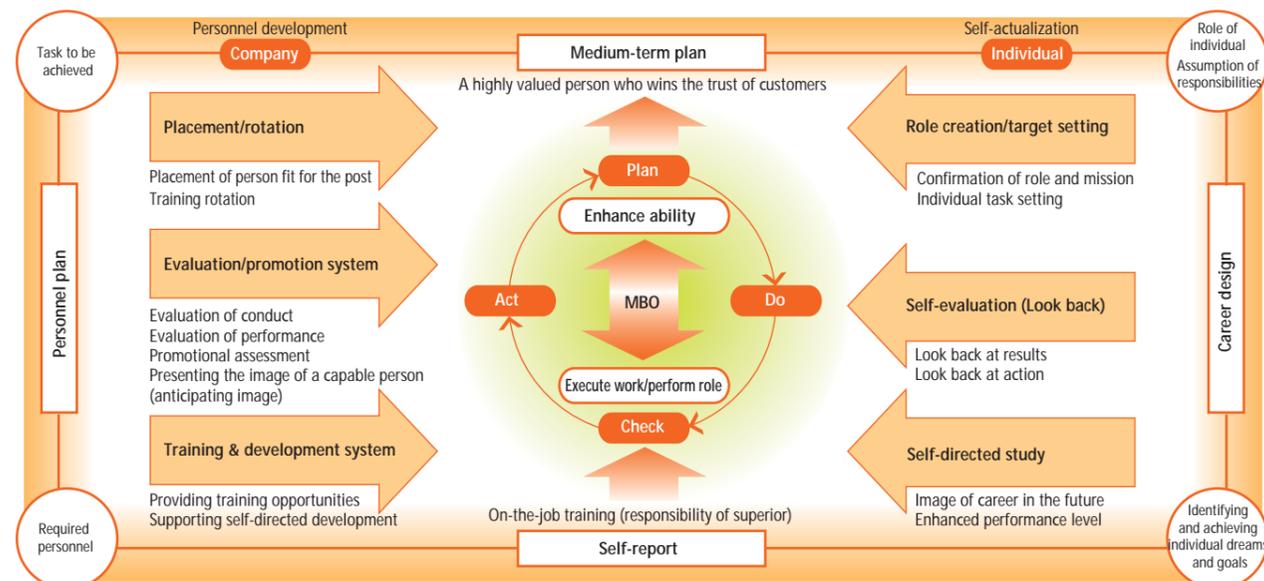
Approach to Diversity

Employment of Persons with Disabilities

As a part of its social responsibility, Daicel worked hard to achieve a fiscal 2008 official 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 bring out the best in them.

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 85 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.



3 CSR Initiatives Report

Promoting Good Health

Employment and Training of the Overseas Local Staff

In order to promote global management, Daicel applies its policy on human resources to its 35 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

Committees set up at each workplace comprise representatives of employees and management. By continuously addressing issues, including a review of operations from the viewpoint of working 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 Personal Lives

Amid the advancement 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 the case where there are certain other reasons).
- **Nursing care leave**
Employees can take nursing care leave up to 93 calendar days when full-time 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. 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.

The labor and management charter

Daicel Chemical Industries, Ltd. (the "Company") and the Daicel Labor Union ("Union") made and entered into the Labor Charter based on mutual trust with the aim of developing the Company's business and improving labor conditions.	managerialism and respect employees' humanity. Employees shall contribute to the Company's business on their own will through efforts to enhance productivity.
Article 1. Negotiating Body The Company shall confirm the Union as a rightful body with which to negotiate matters such as labor conditions and other relevant items.	Article 5. Principle of Human Resource Management The Company shall treat employees in a fair and appropriate manner with the aim of making the maximum use of the capabilities of each employee.
Article 2. Definition of Decisions between Labor and Management The Company and the Union shall understand each other's position and make decisions through negotiations and discussions based on respect for human life and dignity.	Article 6. Establishment of Corporate Culture The Company and the Union shall strive to establish corporate culture in which each employee can exercise his or her potential.
Article 3. Principle of Union Activities The Company employees shall be Union members, except for those who are deemed by the Company and the Union not to be admitted as members. The Company shall give latitude to the Union activities and will not discriminate against its employees due to such Union activities.	Article 7. Job Security The Company and the Union shall endeavor to develop the Company's business and improve labor conditions based on job security.
Article 4. Principle of Human-Centered Business Operations The Company and the Union shall eliminate	Article 8. Compliance with Agreement The Company and its employees shall comply with items mutually agreed on by the Company and the Union, based on negotiations or discussions.
	Article 9. Priority on Agreement Rules related to labor conditions shall be determined by employees and management in principle, and be included in the agreement.

Information regarding Human Resources and Labor Service

(As of March 31, 2009)

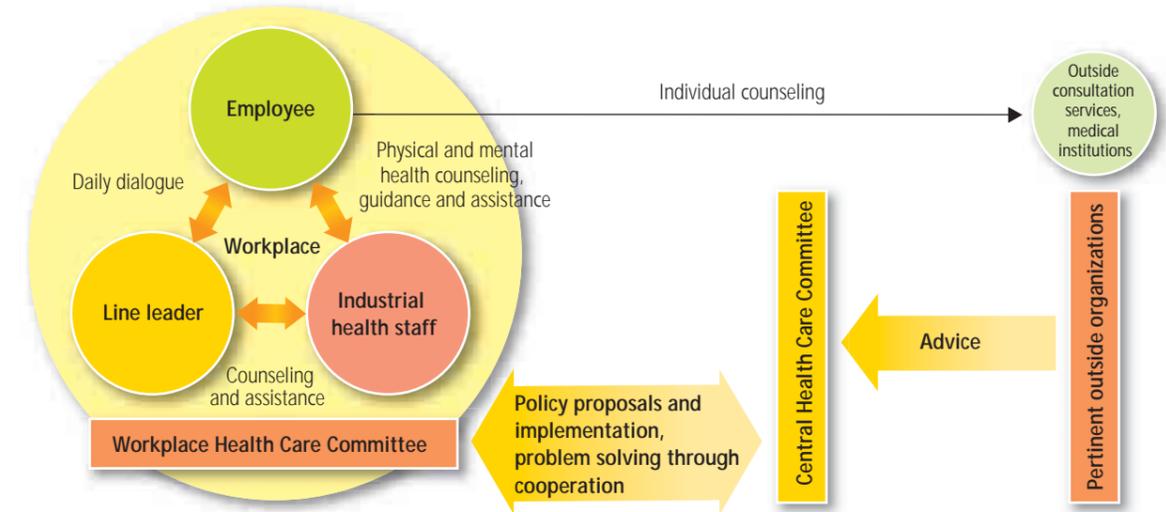
Number of employees	Full-time employees	Regular employees	Male	1,579
			Female	176
		Managers and above	Male	724
			Female	3
		Total	Male	2,303
		Female	179	
	Grand total			2,482
Part-time employees	Contract employees			123
	Temporary staff			79
	Total			202

Average age:	41.1	Handicapped persons employment rate (as of February 2009):	1.84%
Average service years:	17.5	Number of reemployed persons (fiscal 2008):	23
Average number of dependents:	1.1	Number of employees who acquired child-rearing/nursing-care leave	Child-rearing leave: 5 Nursing-care leave: 0
Average annual salary: ¥7.209 million		Personnel turnover rate (fiscal 2008):	0.80%
Paid-holiday consumption rate: 62.40%		Number of union members:	1,755
Personnel turnover rate (fiscal 2008): 0.80%		The ratio of union members to total employees:	67.40%
Employment (fiscal 2008)	New graduates: 44 Mid-career: 81	Average age of union members:	38.3

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

Established in 2003, Daicel's Health Care Committee, which represents both labor and management, is promoting company-wide health management of mental and physical health issues. It encourages the creation of a

pleasant environment in the workplace while contributing to worker health. The following describes the good health promotion system of the Health Care Committee.



Health Care Committee Activity Promotion System

Central Health Care Committee

1. Planning and promoting policies associated with the maintenance and promotion of company-wide health
 - (1) Provision of mental and physical checkups and company-wide provision of treatments for any resulting diagnoses
 - (2) Enlightenment activities for maintaining and improving employee mental and physical health
 - (3) Reinforcement of systems for enhancing skill development of industrial health staff
2. Support and assessment of activities of the Workplace Health Care Committee

Workplace Health Care Committee

1. Promoting mental and physical health for a positive worksite
 - (1) Guidance regarding treatment of any diagnoses resulting from routine health checkups
 - (2) Provision of workplace initiatives regarding mental health diagnoses
 - (3) Creating an environment and system that simplify consultations for employees
2. Supporting the return to work of employees who have developed mental disorders
 - (1) Relevant management and assessment of the workplace return program

Committee members set an action plan each fiscal year via the above systems to maintain and promote the physical and mental health of employees.

Health Checkups Initiated as an Initiative of the Health Care Committee

Providing Mental Health Check Ups

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 every two years 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.

Utilizing Psychiatrists Employed Exclusively by Daicel

Daicel began employing its own psychiatric staff 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. These specialists implement consultation services for employees who have developed mental disorders, operational assistance to the workplace return program, mental health training and disseminate related information to employees.

Distribution of Stress Management Handbook

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 their ability to cope with stress. Providing easy-to-understand explanations including procedures related to stress management to carry out on one's own and stress management at the plant, this handbook is used in a variety of different training sessions.

Health Care Course

Using the Stress Management Handbook, we provide position-specific health care training to new and existing employees and to employees at each plant so that they can maintain their health and make their workplace lively. In addition, each plant has a health counselor's office so that employees can easily talk with the counselor whenever necessary.

The Responsible Care Initiative

Responsible Care: Basic Policies and Implementation System

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

In 1995, Daicel established its basic policies for Responsible Care ("RC") 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 2008, the Daicel Group Responsible Care Promotion Assembly was held at the Osaka Head Office with the presidents of Daicel and its Group companies in attendance. At the venue, all the participants confirmed details of the Daicel Group action guideline for fiscal 2008.

Basic Policies for Responsible Care

In all aspects of our 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

- 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.

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.

- 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.

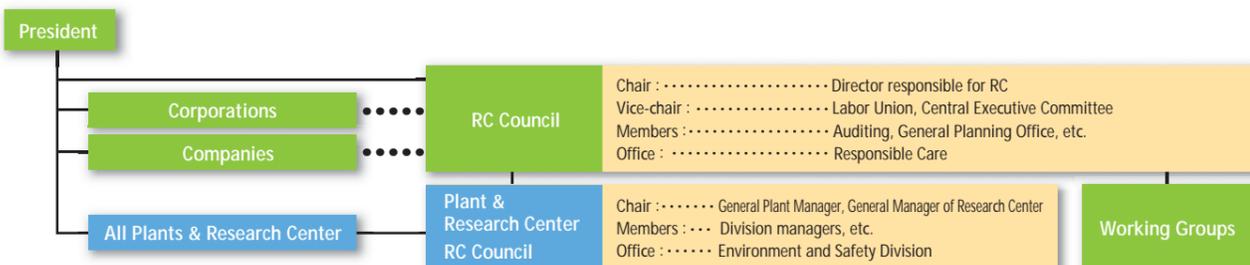
Signing a Declaration for the Responsible Care Global Charter

The International Council of Chemical Associations ("ICCA"), an organization conducting RC activities around the world, established the Responsible Care Global Charter ("RCGC") based on its experiences. Daicel agreed with the tenets of the charter and signed a written declaration of support.

The RCGC Overview

1. Adoption of the Basic Principles of Responsible Care (common action guidelines for each association)
2. Implementation of RC program's basic requirements in each country
3. Promotion of "sustainable development"
4. Ongoing improvement and disclosure of results
5. Reinforcement of global chemical substance management
6. Promotion of RC in the chemical industry supply chain
7. Support and cooperation in the reinforcement of global management activities promoted by ICCA to fulfill corporate accountability
8. Expansion of dialogues with local communities, national governments and global communities to widely meet stakeholders' expectations both in Japan and overseas
9. Provision of appropriate resources to effectively implement Responsible Care activities

Organizational Structure for Responsible Care



The Responsible Care Initiative

Total Environmental, Health and Safety Assessment System for New Projects

Since 1995, Daicel has undertaken prior assessments based on the unique Total Environmental, Health and Safety (EHS) Assessment System. Such assessments, which are undertaken right from the project planning stage, are intended to ensure that all new projects follow Responsible Care policies. Under this system, a prior assessment of diverse risks associated with the implementation of a plan is initiated at the planning stage for all business operations—including planning, R&D, production, consumption, and disposal—in order to ensure thorough environmental, health and safety planning. From a risk management perspective, the

implementation of the total assessment system is indispensable to ensuring effective company management.

New plans are categorized by rank according to importance, which allows for the implementation of a method of total assessment by rank. Moreover, the implementation of the total assessment system has become a precondition for the issuance of an approval. The total number of assessments to date exceeds 470 for Class I plans (new plans with a profound impact on management).

Model Flowchart of Total EHS Assessment



Details of New Projects

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

Items in Prior Assessments

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

The Responsible Care Initiative

ISO 14001 International Standards for Environmental Management Systems

We have committed ourselves to a program to ensure that all of Daicel's plants as well as its research center acquire certification of registration with ISO 14001, the international standards for environmental management systems. This is intended to promote environmental preservation, an important aspect of Responsible Care. Consequently, by the end of 2001, all of Daicel's plants as well as its research center had acquired certification of registration. As of April 2006, all of Daicel's plants as well as its research center had passed assessments based on the revised 2004

versions of the standards.

Daicel Group companies are committed to acquiring certification of ISO 14001 registration. Three companies have already acquired this certification.

Furthermore, the workplaces of Group companies within the premises of Daicel plants are engaged in ISO 14001 activities targeting each plant. Group companies involved in manufacturing activities are certified as associated companies on the premises of Daicel plants.

Certification Acquisition Dates and Certificate Numbers (Plants & Research Center)

Workplace	Year and Month	Certificate No.
Ohtake Plant	August 1999	JQA-EM0492
Himeji Research Center	June 2000	JQA-EM0894
Aboshi Plant	December 2000	JQA-EM1229
Hirohata Plant (Acquired under the name of Daicel Polymer Ltd.)	April 2001	JQA-EM1511
Harima Plant	July 2001	JQA-EM1683
Kanzaki Plant	December 2001	JCOA-E-0329
Arai Plant	December 2001	JCOA-E-0339

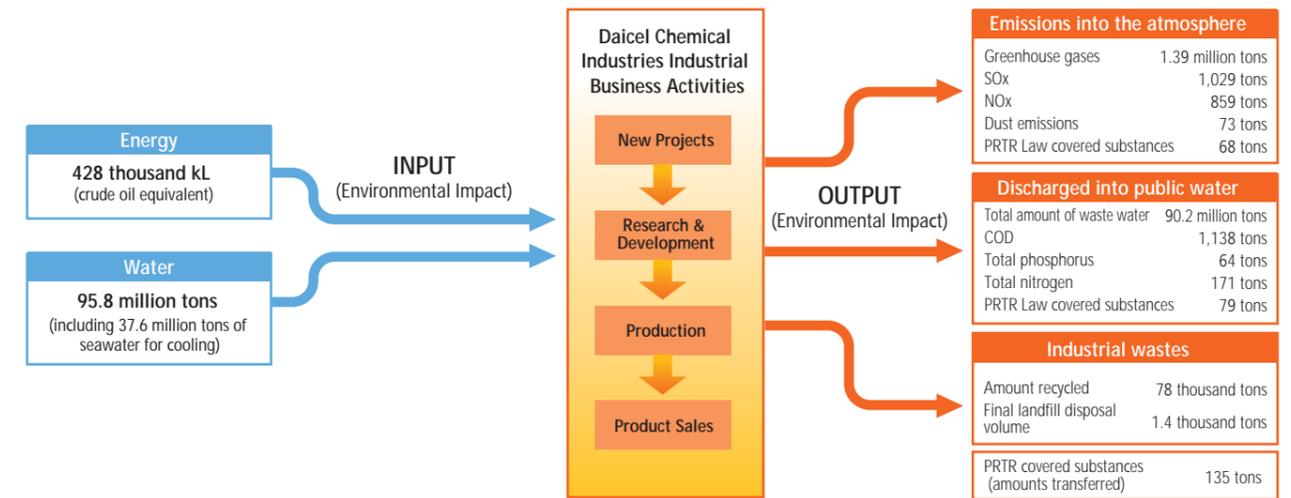
Certification Acquisition Dates and Certificate Numbers (Group Companies)

Name of Group Companies	Year and Month	Certificate No.
Polyplastics Co., Ltd. (R&D Division)	February 1999	JQA-EM0337
Polyplastics Co., Ltd. (Fuji Plant)	April 1999	JQA-EM0414
Daicel Polymer Ltd. (Hirohata Plant)	April 2001	JQA-EM1511
Daicel Novafoam Ltd. (Head Office, Nagano Workplace)	February 2003	C2003-00362/Perry Johnson Registrars Inc.
Daicel Novafoam Ltd. (Okayama Workplace)	June 2004	C2004-01523/Perry Johnson Registrars Inc.

Responsible Care Initiatives for Fiscal 2008 and Targets for Fiscal 2009

Measures	Initiatives for Fiscal 2008			Targets for Fiscal 2009	Targets in the RC Medium-term Plan (Fiscal 2007-09)
	Targets	Results	Reference Page		
Environmental Preservation • Respond to the Kyoto Pro-ocol Target Achievement Plan. (Achieve and maintain the targets of our voluntary action plan for environmental conservation) • Implement a medium-term plan to reduce the amount of waste	Improve the energy consumption rate by 20% compared with the fiscal 1990 level • Operation Division: Review energy conservation activities in offices and report energy consumption results • Household Division: In response to a request made by the JCIA, declare our participation in the ABC activity and, as a part of our CSR initiative, conduct a trial run of energy conservation activities in households	The energy consumption rate for fiscal 2008 was 98% compared with the fiscal 1990 level and failed to achieve the target decrease. We will continue to take initiatives in energy consumption reduction. Participated in the Trial Implementation of an Integrated Domestic Market for Emissions Trading • Operational division: We set up an energy conservation action plan. • Household: RC Council members promoted energy-saving activities in cooperation with the Labor Union.	P42	• Promote 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 major plants through participation in the Trial Implementation of an Integrated Domestic Market for Emissions Trading • Reinforce energy conservation activities in the Tokyo and Osaka Head Offices as well as the Himeji Research Center • Conduct full-scale promotion of energy-saving activities at employees' households	Maintain the level of the energy consumption rate index below 90% of the 1990 level
	Manage the amount of industrial waste according to the unit rate and set specific unit rate targets.	Set specific unit rate targets based on the industrial waste amount at each workplace. These targets will be included in the next medium-term plan.	P42-43	• Limit final landfill disposal index to a maximum of 20% (relative to the fiscal 1990 level of 100) • Review the contract and costs of industrial waste treatment	Limit final landfill disposal index to a maximum of 20 (relative to the fiscal 1990 level of 100).
Chemical and Product Safety • Comply with European REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) regulations	Improve the company-wide system to comply with REACH regulations: complete pre-registration of applicable products; prepare for registration	• Completed pre-registration by proceeding with the selection of applicable products from each company; preparation for contracts between designated organizations; and process of pre-registration application • Established a progress management system on the intranet to prepare for the registration	P44	Comply with REACH regulations • Continue to comply with REACH regulations with the aim of completing registration Establish a chemical substance information management system • Upgrade the Material Safety Data Sheet (MSDS) creation system and establish a chemical substance information management system	Register products exported to EU under the REACH regulations and implement safety tests
Occupational Health and Safety • Eliminate labor accident	To attain zero labor accidents, review the accident information system; standardize basic actions and occupational safety rules (criteria); and standardize and establish the "Why & Why Analysis" technique	The number of significant labor accidents continued to decrease, and the total number of accidents declined from the previous fiscal year. • Commenced operation of the Safety Alert Database using the "Why & Why Analysis" to prevent the occurrence of similar accidents	P45	• Prevent similar accidents by promoting the use of the Safety Alert Database • Continue the standardization of basic actions and safety rules across the board	Eliminate labor accidents
Process Safety and Disaster Prevention • Eliminate all fire, explosion, and leakage accidents	To achieve zero fire, explosion, and leakage accidents, take steps to prevent accidents similar to large-scale accidents that have occurred at other companies and conduct drills to improve company-wide emergency preparedness according to disaster response rules	We achieved the target of zero fire, explosion, and leakage accidents over three consecutive years. • Given that large-scale accidents happened at other companies, we confirmed the status of our measures against static electricity, deposition of dust and implementation of safety measures in the use of manual valves with opening/closing assist devices • Tested the company-wide network for emergencies, based on the disaster response rules	P46	• Ensure the assessments and response to risks associated with safety and disaster prevention • Plan and implement drills to set up company-wide emergency headquarters	Zero accidents leading to fire, explosion or leakage
Distribution Safety • Eliminate at-fault accidents to achieve zero logistics accidents	Maintain zero at-fault logistics accidents. Clarify the main activities of Daicel Logistics Service Co., Ltd. and the responsibilities of shippers. Begin implementing the revised Logistics Safety Control Rules and aim to inculcate the rules	Achieved zero at-fault logistics accidents over two consecutive years. Clarified role and responsibility of shippers, workplaces, corporate departments and Daicel Logistics Service, while revising the Logistics Safety Control Rules. In fiscal 2009, we will aim to commence the practical operation and infiltration of the revised rules.	P46	• Commence practical operation of the Logistics Safety Control Rules and implement distribution accident drills	Elimination of at-fault accidents for zero logistics accidents
	To comply with the revised Law Concerning the Rational Use of Energy and to promote energy conservation measures as a shipper, follow up on energy conservation plans and confirm achievement of CO ₂ reduction targets.	Submitted reports about shippers to the Kansai Bureau of Economy, Trade and Industry on a regular basis. Achieved the CO ₂ emissions reduction target in the energy-saving plan.		• Establish a new energy-saving plan for shippers and continue to submit reports periodically	
Dialogue with Society • Publish reports and promote communication with local communities	Strengthen the system to create reports and review and improve their content	• Included a Corporate Compliance Program and Human Resources Group in the system creation team to reinforce the structure. Made a drastic change in the structure in pursuit of enhanced social activities.	P32-33	Further enhance items (activities) requested from society and furthers build Daicel's reputation based on its CSR activities	Clarify and publicly disclose Daicel's CSR policy

Business Activities and Their Environmental Impact (Results for Fiscal 2008)



Environmental Accounting

Daicel introduced an environmental accounting system in fiscal 2001 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.

Regarding results for fiscal 2008, there was a significant increase in environmental damage expenses compared with the previous fiscal year,

primarily related to soil pollution clean-up expenses at the Sakai Plant. In addition, upstream and downstream costs have increased compared with such costs to date due to the recall of airbags which is currently underway.

Quantitative results are summarized in the sections Responsible Care Initiatives for Fiscal 2008 and Targets for Fiscal 2009 (page 40) and Environmental Preservation (pages 42-43).

Environmental Preservation Costs

Classification	Major efforts	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)		520	3,165	
Breakdown	(1) Pollution prevention costs	Prevention of air and water pollution, control of harmful substances, levies for pollution-related health damages	69	2,406
	(2) Global environmental preservation costs	Energy conservation, capital expenditures for fuel conversion, cost of thermal pinch analysis	393	8
	(3) Resource recycling costs	Appropriate treatment and disposal of industrial waste	58	751
(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	58	
(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	572	
(4) Environmental preservation costs in R&D activities (R&D costs)	R&D work for reducing the environmental impact of products and technologies	0	104	
(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	594	
	Total	520	4,525	

Item	Amount (¥ million)	Environmental rate (%)
Capital expenditures in the applicable period	15,130	3.4
R&D expenditures in the applicable period	8,089	1.3

Economic Effects (Monetary Benefits) Resulting from Environmental Preservation Activities

Item	Amount (¥ million)
(1) Cost reduction through energy conservation	2,873
(2) Improvement of total thermal efficiency through in-house power generation	2,884
(3) Cost reduction through resource conservation	447
(4) Benefits obtained by recycling	18
(5) Reduction of expenses for waste treatment or disposal	91
Total	6,312

Time period for reported totals: April 2008 - March 2009
 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 2008 (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.

Environmental Preservation

Energy Conservation and the Prevention of Global Warming

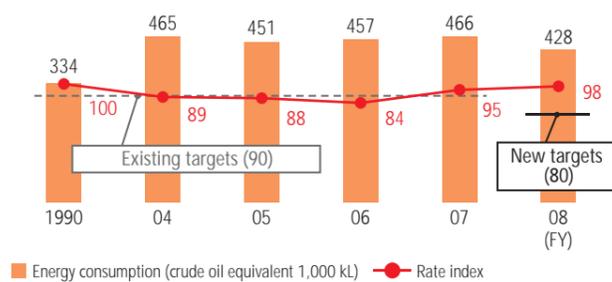


In order to achieve the targets set in the Kyoto Protocol, Daicel strived to improve its energy consumption rate as stated in its voluntary action plan for environmental conservation, while participating in the Trial Implementation of an Integrated Domestic Market for Emissions Trading. Against the backdrop of the rapid economic downturn on a global scale since the end of last year, our production volume in fiscal 2008 declined. Accordingly, our emissions of energy-derived CO₂ totaled 1.2 million tons, down approximately 0.2 million tons from the previous fiscal year. In addition, the total greenhouse gas emissions, including five types of gases (excluding CO₂), amounted to 1.39 million tons, down around 0.16 million tons year on year.

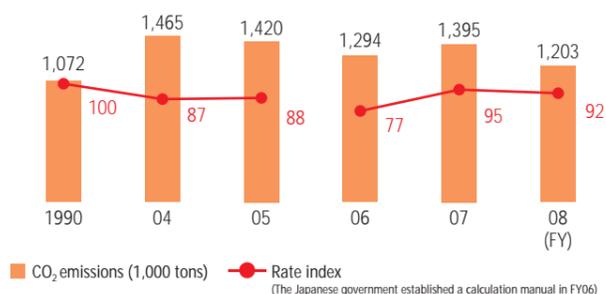
The energy consumption rate index for fiscal 2008 declined three percentage points to 98 (relative to the fiscal 1990 level of 100) due to low-load operations reflecting decreased production. On the other hand, the CO₂ emissions rate index did not deteriorate year on year and recorded 92 (relative to the fiscal 1990 level of 100) despite the decrease in production. This was attributable to our efforts in controlling CO₂ emissions by switching fuel usage to city gas.

In pursuit of achieving the target in our voluntary action plan for environmental conservation, Daicel is promoting the use of alternate energy sources to replace coal in circulation fluidized bed boilers. Furthermore, we proactively engage in the cultivation of energy-saving measures by applying the thermal pinch analysis technique (an energy

Energy Consumption and Rate Index



Amounts and Rate Index of CO₂ Emissions



* Daicel is working to achieve the voluntary action target for environmental conservation (to reduce the average energy consumption rate of fiscal 2008–2012 to 80% of the 1990 level) set by JCIA.

conservation technique for optimizing the recovery and utilization of thermal energy); shifting to recyclable raw materials; and developing the latest technologies to integrate plants and research facilities.

TOPICS

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

Daicel participated in the "Trial Implementation of an Integrated Domestic Market for Emissions Trading" established by the Global Warming Prevention Headquarters in October 2008 as a target-setting company. Currently we are aggressively reducing CO₂ emissions at our major plants to meet the target for fiscal 2010.

Energy Conservation Activities at Office and Home



With the aim of achieving the targets set in the Kyoto Protocol, the Japan Chemical Industry Association ("JCIA") decided to set up its voluntary action plan for environmental conservation. According to this plan, JCIA will promote energy conservation activities at corporate sector headquarters and offices where stagnant energy-saving progress has been observed. Against this backdrop, Daicel has reinforced its eco-office activities at its Tokyo and Osaka Head Offices as well as the Himeji Research Center since fiscal 2008. Owing to these efforts, the two headquarters succeeded in reducing electricity consumption by approximately 40% in total.

In addition, we facilitated energy-saving activities at our employees' households to take part in countermeasures against global warming through the Household Division.

Daicel will spread these activities throughout the Group to realize an eco-lifestyle.

Reduction and Recycling of Industrial Waste



Strong proponents of the "3Rs"—Reduce, Reuse and Recycle

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.

In fiscal 2008, the total amount of industrial waste increased approximately 1,000 tons compared with the previous fiscal year, to 105,196 tons. Total final disposal by landfill, however, decreased over 600 tons year on year to 1,389 tons.

Furthermore, the Aboshi, Ohtake, Hirohata and Harima plants recorded less than 1% final disposal by landfill to total industrial waste, achieving zero emissions for the second consecutive year.

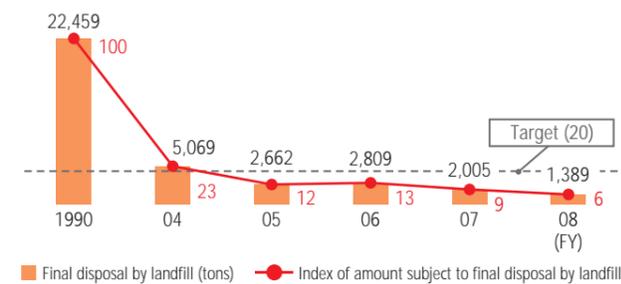
Daicel will make further efforts in its 3R activities to enhance the industrial waste recycling rate.

Amount of Industrial Waste Generated and Recycling Rate



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

Amount of Final Disposal by Landfill and Index Value



Environmental Management to Prevent Air and Water Pollution

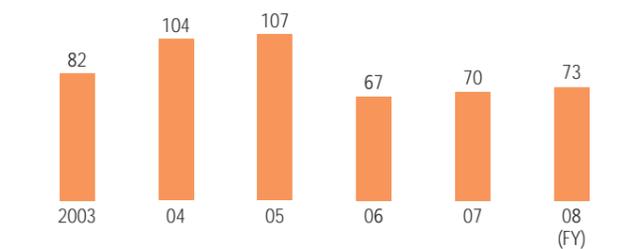


Daicel is striving to maintain an appropriate environmental management system while complying with laws and regulations concerning air and water pollution as well as negotiations concerning proper values. Daicel established an environment management system to prevent air and water pollution. In fiscal 2008, there was no deviance from the values stipulated in laws and regulations as well as the values negotiated with local municipalities in which plants are located, and Daicel carried out reporting to local governments in an appropriate manner.

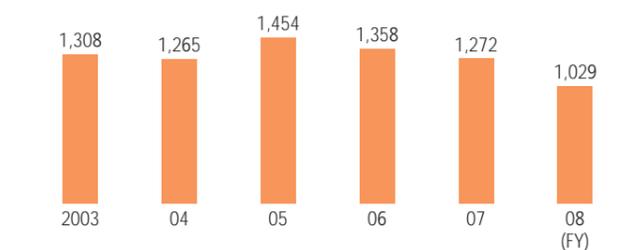
As for air pollutants, Nitrogen Oxide (NOx) emissions declined compared with the previous fiscal year due to shortened boiler operating hours that reflect the sharp slowdown in the global economy. Sulfur Oxide (SOx) emissions also decreased owing to the shorter operating hours of boilers as well as the conversion of fuel to natural gas.

For water pollutants, the total amount of wastewater declined, while the amount of COD, total phosphorus and total nitrogen emissions also edged down.

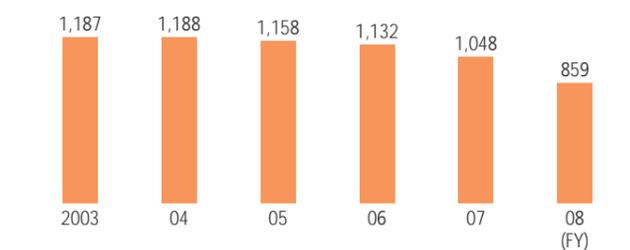
Dust Emissions (Tons)



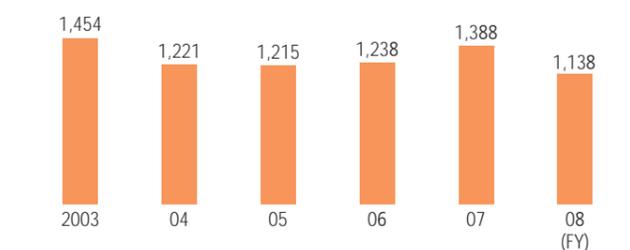
SOx Emissions (Tons)



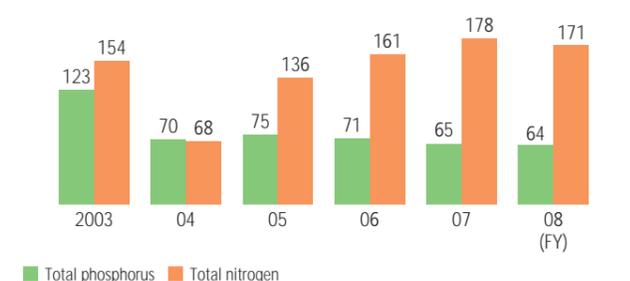
NOx Emissions (Tons)



COD Emissions (Tons)



Total Phosphorus and Total Nitrogen Emissions (Tons)



Chemical and Product Safety

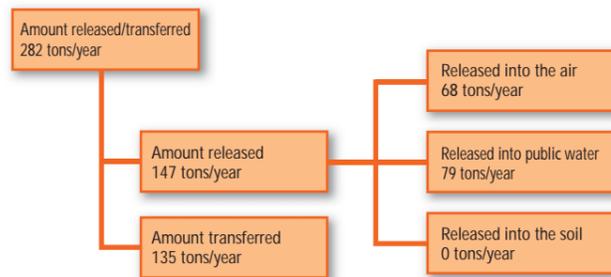
Relevant Management and Controlled Emissions of Chemical Substances

Management and reduction of PRTR substances' emissions and amounts transferred

Since 1996, Daicel has been voluntarily participating in the Pollutant Release and Transfer Register (PRTR) project of JCIA to control PRTR substance emissions and amounts transferred. In accordance with Daicel's original plan, we are working to reduce chemical substance emissions to the environment.

For Class 1 Designated Chemical Substances subject to the Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management ("PRTR Law"), Daicel appropriately reports the amounts emitted and transferred.

Fiscal 2008 results are disclosed on our Website (<http://www.daicel.co.jp/rescare/index.html>).



Under its priority initiative, the Air Pollution Control Law specifies a number of air pollutants that are considered to be a significant health risk. Daicel handles seven of these substances: acrylonitrile, acetaldehyde, ethylene oxide, 1,3-Butadiene, 1,2-dichloroethane, benzene, and formaldehyde. We have devised systematic emissions reduction measures for these seven substances. The amounts of these substances released into the atmosphere in fiscal 2008 totaled 17.3 tons, representing a reduction of 6.6% from the total at the initial implementation of this initiative in fiscal 1996. We will continue to make efforts in further reducing the emission of these substances.

Reducing VOC Emissions

According to JCIA's voluntary management target, Daicel set up a goal to reduce VOC emissions by 30% and is making every effort to achieve it. In addition, in order to meet the standard emission value of 600 ppmC for

"drying facilities for the chemical products manufacturing" stipulated in the Air Pollution Control Law, we made a capital investment for facilities in the Arai Plant in fiscal 2008 to reduce methanol emissions into the air.

We plan to implement the second-stage of construction to complete it in fiscal 2009.

Appropriate Control of Polychlorinated Biphenyls (PCBs)

In compliance with the Law Concerning Special Measures against PCB Waste, Daicel's workplaces practice appropriate storage of capacitors and transformers containing PCBs as well as objects contaminated with PCBs. For waste PCBs stored in the Sakai Plant, which ceased operations at the end of 2007, they were transferred to a nearby plant in accordance with the local government's instructions. 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 REACH Regulation

The European Union regulation on chemicals, known as REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), entered into force in June 2007. The regulation requires the registration and safety assessment of all chemical substances that are newly manufactured in or imported into the EU, as well as those chemical substances already on the market, if they are manufactured or imported in quantities of one ton or more.

To comply with this regulation, we have been taking appropriate steps for products we export to the EU. In the previous fiscal year, we completed the pre-registration of products as planned. As the next step, we will prepare to register for implementation of safety tests and the like.

public-sector interests. In order to accelerate the collection of safety information regarding existing chemical substances, the Japanese government voluntarily established a program to gather and distribute such safety information in liaison with business and industry. This program gives particular priority to the collection of safety information on organic compounds of over 1,000 tons that are produced or imported.

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

Glossary

PRTR (Pollutant Release and Transfer Register): 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.

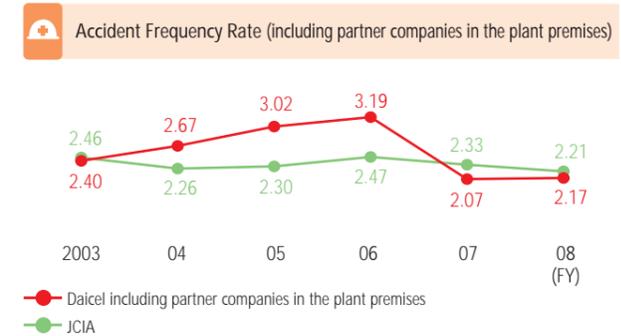
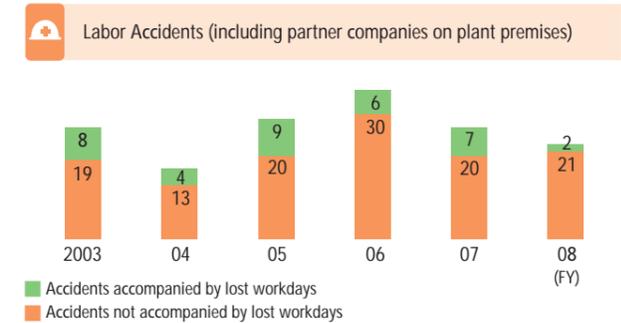
HPV (High Production Volume) Program: A global activity in the chemical industry to collect reliable toxicity information regarding the production and import of existing chemical substances of over 1,000 tons per year to conduct risk assessment of the collected data.

Japan Challenge Program: A framework to gather and distribute safety information regarding existing chemical substances composed jointly of governmental and

Occupational Health and Safety

The number of total accidents with/without lost workdays declined for the second consecutive year

In fiscal 2008, Daicel recorded the smallest number of accidents accompanied by lost workdays in the last six years, including partner companies. The number of serious accidents also decreased. The number of accidents not accompanied by lost workdays also declined in the last two years, recording an accident frequency rate below JCIA's average figure.



Accident frequency rate: A safety index to show the labor accident occurrence rate calculated with the following formula.
 Accident frequency rate = the number of people involved in labor accidents ÷ the number of total working hours (millions of hours)

Each workplace has established its own industrial health and safety initiatives according to its size and manufacturing pattern and repeatedly implements the PDCA cycle to promote continual improvement.

In addition to this initiative, we developed a "Safety Alert Database" in close cooperation with labor and management and made a trial run in August 2008. This was for the purpose of immediately informing other offices and plants of accidents to prevent similar cases from occurring. We also introduced the "Why & Why Analysis" to determine the cause of accidents and countermeasures to be taken. Together with the activities related to 3S—*seiri* (tidying), *seiton* (putting everything in order) and *seisou* (cleaning)—at production sites, this database is contributing to a decrease in the number of accidents. In fiscal 2009, we will further lessen the number of accidents by upgrading the Safety Alert Database and leveraging it on a full-time basis.

* "Why & Why Analysis": A technique that repeatedly asks "Why?" in order to determine the cause of an accident

Measures against Asbestos

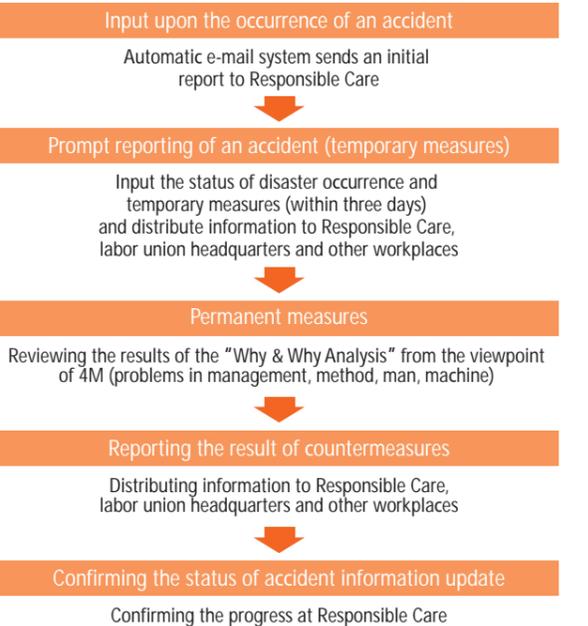
We conduct medical examinations of all workers, including those who were previously engaged in tasks that resulted in exposure to asbestos. We also carried out demonstration tests of spiral wound gaskets used as a substitute for asbestos gaskets registered in the Health, Labour and Welfare Ministry's positive list. According to the tests, Daicel confirmed that spiral wound gaskets can be used as an asbestos gasket substitute, and we will use them in place of asbestos gaskets in order to produce safer items.

TOPICS

Countermeasures against the New Influenza

Reflecting the outbreak of the new influenza strain, there is concern that a large number of people will be infected. With the aim of fulfilling its social responsibility while placing importance on employees' health and safety, Daicel set up a task force to establish an action plan including rules for response to the new strain of influenza. Based on this, we are promoting preventive measures within the Daicel Group, while reserving infectious disease prevention instruments.

The Structure of the "Safety Alert Database" of Disaster Prevention Measures both for Labor and Management



Process Safety and Disaster Prevention

Process Safety, Disaster Prevention and Emergency Response

Consecutive achievement of zero fire, explosion and leakage accidents

Owing to each workplace's efforts in promoting security improvement activities (plant stabilization, trouble and risk reduction activities through a general operability studies), we succeeded in achieving zero fire, explosion and leakage accidents in consecutive years.

In fiscal 2008, we confirmed the status of our measures against static electricity, deposition of dust and implementation of safety measures in the use of manual valves with opening/closing assist devices. Based on this research, we conducted necessary improvements.

In addition, we strengthened our emergency response capability through practical safety and emergency drills at each workplace, while testing the company-wide network for emergency measures to develop and improve the communications process for disaster response.

In fiscal 2009, we will comprehensively review accident and disaster-related risks (including countermeasures to promote operational safety) once again to further improve our level of security. Then, we will accurately reflect the results of such review in an action plan and implement it. In this manner, we will reduce risks associated with accidents and disasters.

Aboshi Plant Certified as a Volunteer Fire Corps Cooperation Office

The Aboshi Plant in the Himeji Production Sector received certification as a volunteer fire corps cooperation office from the Fire and Disaster Management Agency. The Volunteer Fire Corps Cooperation Office Certification Mark System was established in 2007 with the aim of further enhancing the local disaster prevention system with the cooperation of public-sector companies.



Award-Winning

• Harima Plant

The Economy, Trade and Industry Minister's Prize for Excellent Handling of Explosives Received

Mr. Masanori Ohishi, Aerospace & Defense Systems Manufacturing Engineering Group, Aerospace & Defense Systems Company, received an award from the Minister of Economy, Trade and Industry for his longstanding efforts in disaster prevention at workplaces involved with explosives.

Comment from Mr. Ohishi

Compared with other award-winners, I hardly dared to receive such an honorable commendation, given my position and age. I will make ongoing efforts to maintain a safe and comfortable working environment at the Harima Plant.



• Ohtake Plant

The Excellent Safety Manager Award Received from the Special Disaster Prevention Zone Council in the Iwakuni and Ohtake Areas

Mr. Yasuo Nagata of the Ohtake Production Division received an award from the Special Disaster Prevention Zone Council in the Iwakuni and Ohtake areas. This was owing to a number of efforts and contributions he made, including: his service as a chief safety management staff member at high-pressure gas manufacturing facilities for over 20 years after he joined Daicel; continuously upgrading his skills regarding high-pressure gas manufacturing; and taking a leading position in workplace education of other staff members to improve safe handling of technology.



Distribution Safety

Distribution Safety Initiatives

Achieving zero at-fault logistics accidents

Daicel has continued its initiatives to ensure distribution safety; in fiscal 2008, we again achieved zero at-fault logistics accidents.

Based on the total prime contractor system in Daicel Logistics Service Co., Ltd., we worked to clarify the roles and responsibilities of shippers, workplaces, corporate departments and Daicel Logistics Service in fiscal 2008. Together with this, we revised the Logistics Safety Control Rules.

In fiscal 2009, we will aim for consecutive achievement of zero at-fault logistics accidents again, commencing the practical operation and dissemination of the revised rules.

On the energy-saving front, we established an energy conservation plan for energy-saving in the logistic field jointly with Daicel Logistics Service, and we reported the fiscal 2007 results to the Kansai Bureau of Economy, Trade and Industry.

Total transportation volume in fiscal 2008 was 185 million ton/kilometers, and total CO₂ emissions were 12.6 thousand tons. Reflecting the modal shift effect (shifting to more environment-friendly means of transportation, such as ship transportation), both figures significantly dropped compared with those in fiscal 2007.

TOPICS

Energy Conservation Initiatives through Modal Shifts

Daicel Logistics Service Co., Ltd. participated in the feeder service (domestic vessel transportation) business at the Kobe and Ohtake Ports. To that end, the company was selected to receive a subsidy from the Kobe City Modal Shift Subsidy System for fiscal 2008.

The Daicel Group will continue to make efforts in reducing energy consumption in transportation.

The Excellent Safety Manager Award for Hazardous Substances Handling Received from the Ohtake City Association for the Safety of Hazardous Materials
Mr. Shigetoshi Nakamura of the Ohtake Production Division received an award from the Ohtake City Association for the Safety of Hazardous Materials. This was on the back of his longstanding contribution to the hazardous substances handling business as well as the ongoing proactive efforts he made to improve operational processes.



• Arai Plant

The Chairman's Award for Excellent Management from the High Pressure Gas Safety Institute of Niigata Prefecture Received

Mr. Kiichi Tsuchida, Arai Production Division (Daicel Arai Chemical, Ltd.), received an award from the High Pressure Gas Safety Institute of Niigata Prefecture. Mr. Tsuchida has long been engaged in the operation and management of high-pressure gas manufacturing facilities, and he always secured safe and stable operations, while training his juniors in terms of safety techniques and measures to ensure operational safety, thus contributing to the prevention of accidents and troubles associated with high-pressure gas handling. Such efforts were highly evaluated and therefore resulted in this commendation.



Opinions of Third Parties

This document contains the opinions (in Japanese) of third parties regarding the 2009 edition of this report.

ダイセル化学 環境安全・社会報告書 2009
第三者検証 意見書

2009年6月3日

レスポンシブル・ケア
ダイセル化学工業 株式会社
代表取締役社長 小川 大介 殿

日本レスポンシブル・ケア協議会
検証評議会議長
山本 明夫
レスポンシブル・ケア検証センター長
中田 三郎

■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 環境安全・社会報告書 2009」(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、並びに彼らより資料提示・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に質問すること、資料提示・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、本社及び広畑工場において、合理的な方法を採用しています。
・調査した範囲に於いて、パフォーマンスの数値は正確に算出・集計されています。

- 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あるいは文章の分かり易さに関し、若干問題があることを指摘しましたが、現報告書では修正されており、現在修正すべき重要な事項は認められません。
- 3) レスポンシブル・ケア活動内容について
・協力業者を含め全従業員がRC大会に参加できるよう、広畑工場でRC大会を複数回(4回)開催されている点を評価します。
・広畑工場でPRTR算出に際し、根拠としているマスバランス算出方法について文書化されることを希望します。
- 4) 報告書の特徴について
・本年度ダイセル化学グループは、製品及びCSRへの取組みを強調するよう編集方針を変えられています。
・ダイセル式生産革新をどのように行ってきたかを詳しく説明し、ダイセル化学が「ものづくり」にこだわり続けてきたことを社会に示す姿勢を評価します。一方、一般市民にとって内容的に少し難しいところがあります。わかり易い表現を工夫されると更に効果が上がると思います。

以上