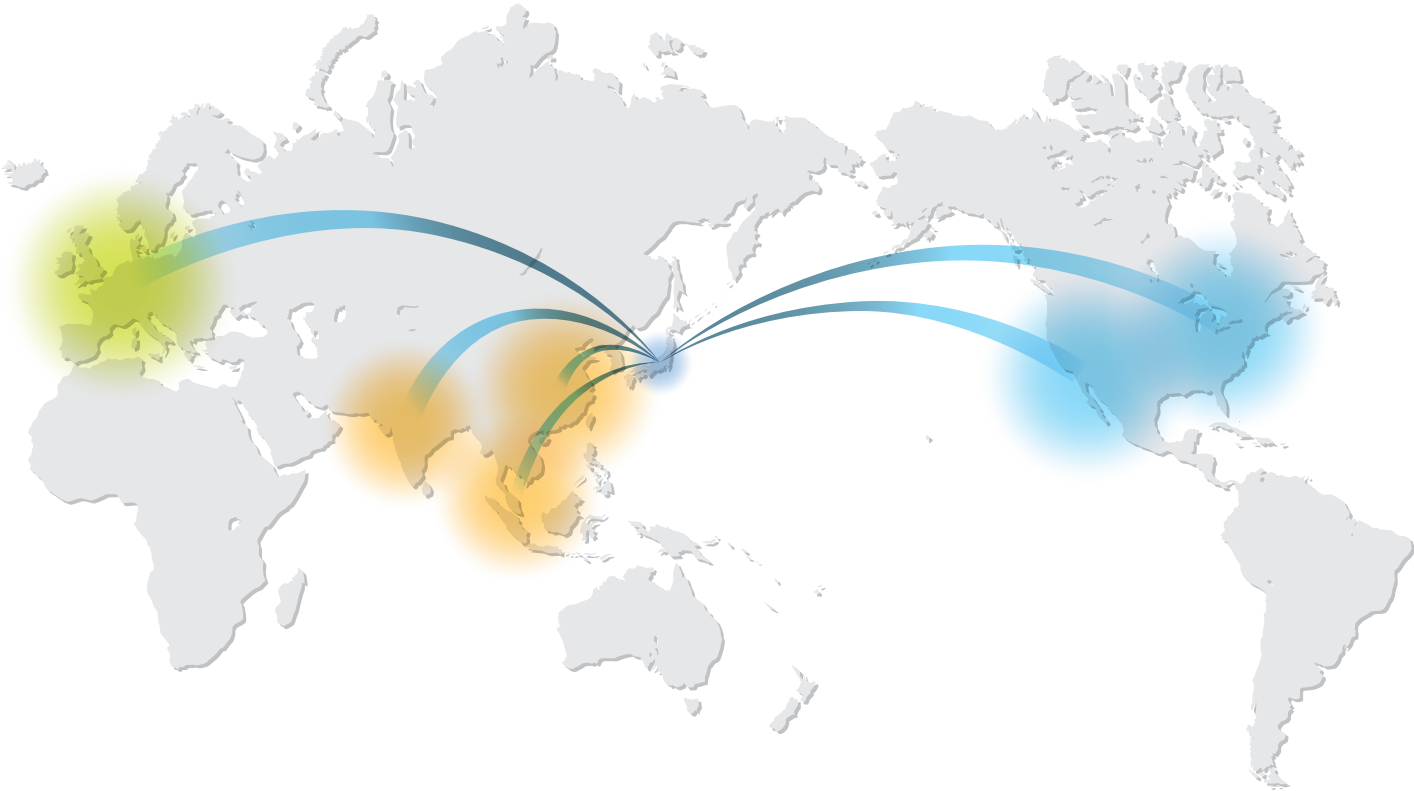




Corporate Data

Corporate Name	Daicel Corporation
Incorporated	September 8, 1919
Head Office	Osaka Grand Front Osaka Tower-B, 3-1, Ofuka-cho, Kita-ku, Osaka, Japan Tokyo JR Shinagawa East Bldg., 2-18-1, Konan, Minato-ku, Tokyo, Japan



Osaka Head Office



Tokyo Head Office

DAICEL Corporate Website
<https://www.daicel.com/en>



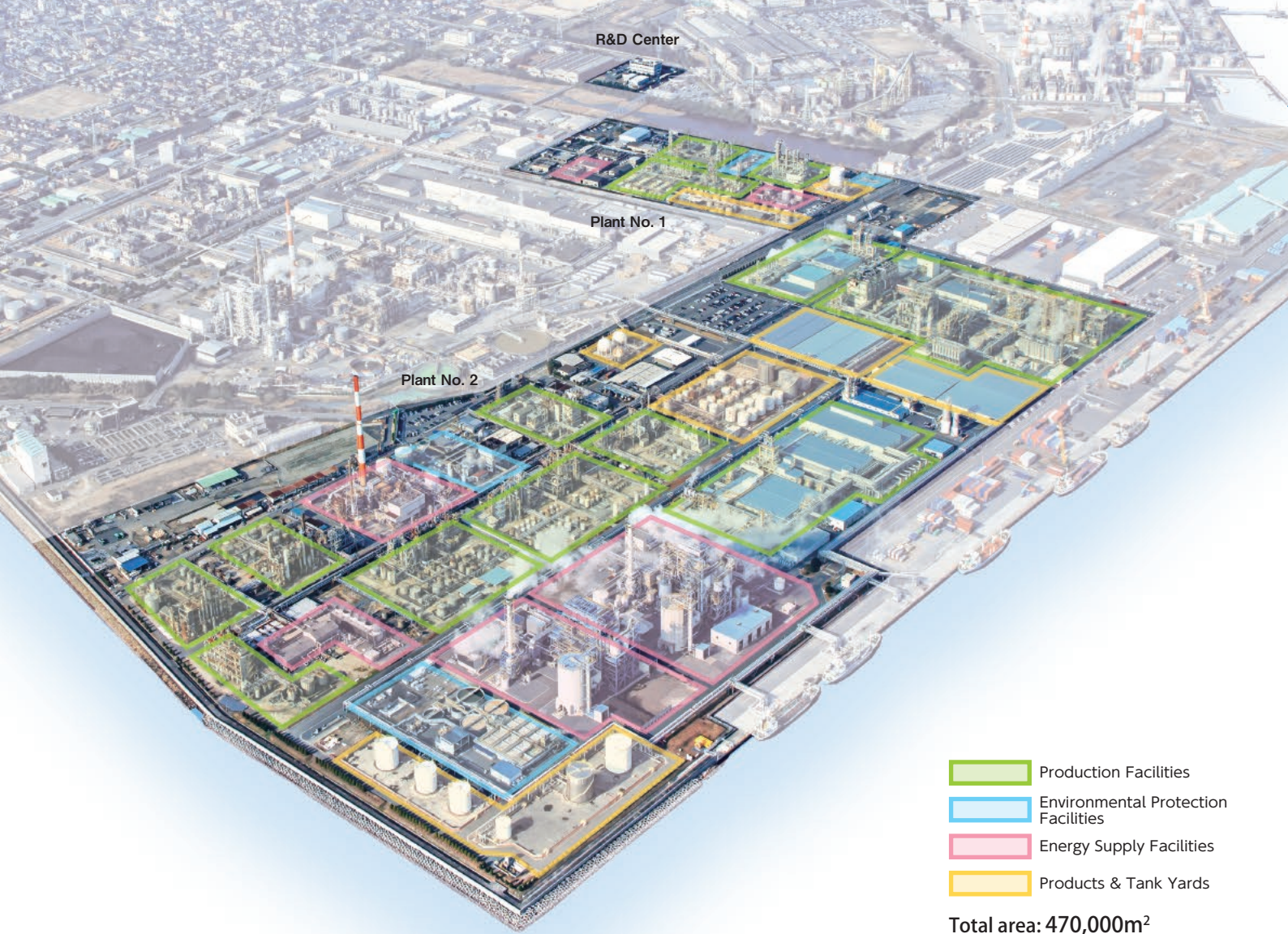
DAICEL CORPORATION
Ohtake Plant
1-4, Higashisakae 2-chome, Otake-shi, Hiroshima 739-0695, Japan
Tel: +81-827-53-2151
Fax: +81-827-53-1839

OHTAKE PLANT



Daicel Corporation
Ohtake Plant





Two innovations that made us the industry leader in production technology

Since its establishment in 1961, Daicel's Ohtake Plant has grown by increasing both its manufacturing capacity and the scope of products manufactured as the plant has continued to expand in scale. Today, this plant manufactures organic synthetic products used as raw materials for paints, semiconductors, pharmaceuticals, and cosmetics and the like as well as cellulose products used as raw materials for LCDs, photographic films, and cigarette filters. With sales exceeding 80 billion yen, this facility has risen to become one of Daicel's main manufacturing plants.

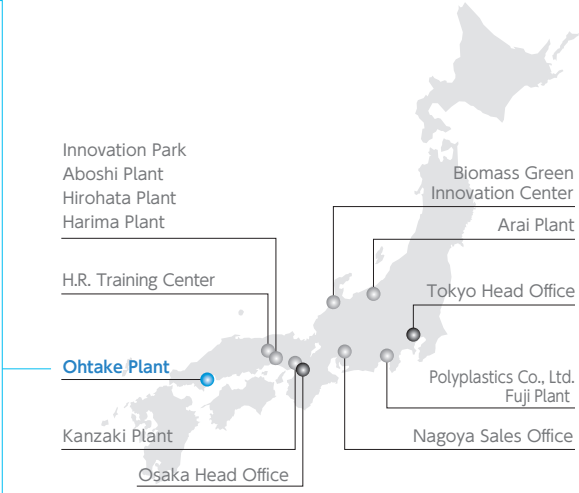
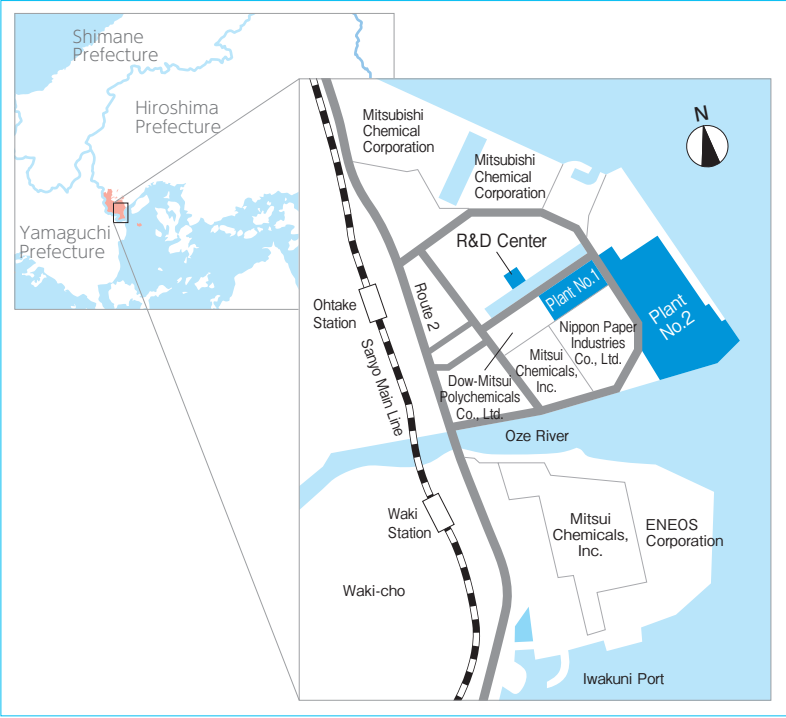
The Ohtake Plant has adopted an unprecedented manufacturing method we call DAICEL Production Innovation. The plant is also focusing on Process Innovation as a means of improving its material development and manufacturing methods. Through these two innovations, the Ohtake Plant is developing and adopting innovative technologies that build on

industry-leading production technology, promote human resource development, and contribute to a rapidly changing society.

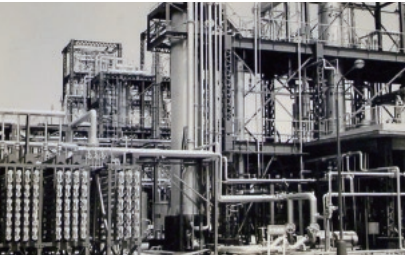
As chemistry continues to reshape our future, the Ohtake Plant will never cease its willingness to take on new challenges.



Cellulose triacetate (TAC) production facility



Ohtake Plant at the time of its establishment



Acetic Acid Plant at the time of its establishment

History of the Ohtake Plant

Year	Event	= Remarks
1961	Dainippon Kasei Co., Ltd. is established as a wholly owned subsidiary of Daicel.	
1962	Dainippon Kasei Co., Ltd. establishes the Ohtake Plant and begins production of acetic acid.	
1965	Land is acquired for a second plant and the plant area is expanded.	
1968	Dainippon Kasei Co., Ltd. is acquired and its Ohtake Plant becomes Daicel's Ohtake Plant.	
1969	The plant begins production of 1,3-butylene glycol.	=Used in cosmetics as a moisturizer.
1970	The peracetic acid plant begins operation.	
1979	Production of peracetic acid derivatives and caprolactone begins.	=Used as a raw material for automotive paints.
1983	Production of functional epoxy resin begins.	=Used for circuit wiring boards and other products.
1992	The Functional Product Development Center (currently R&D Center) is completed.	
2004 ~ 07	Industrial-use land is acquired adjacent to the second plant.	
2007	The circulating fluidized bed boiler begins operation.	=Disused tires as well as coal are incinerated to generate electricity and steam.
	Production of acetate tow for cigarette filters begins.	
2008	Production of cellulose acetate as a film for LCDs begins.	
2009	The conversion to a new manufacturing method for ethyl acetate is completed.	=Instead of relying on crude oil, the plant converted its manufacturing operations to renewable energy resources of natural origin.
2015	Production of cellulose acetate for Acetate Tow begins.	
2018	Self-consignment of generated electric power begins.	=Surplus electricity produced at the Ohtake Plant is transmitted to our plant in Hyogo Prefecture.

Products

Products of the Ohtake Plant

Organic Synthetic Products

We offer a variety of chemical materials used in a wide range of applications.

Organic Products

We offer a variety of chemical materials used in a wide range of applications.

In these applications



Paints



Clothing

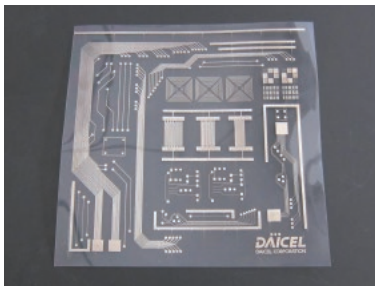
Organic Functional Products

These products are used in a broad range of industries as coating materials and electronic materials.

In these applications



Automotive paints



Printed circuit boards



Golf balls

Electronic Materials

We provide high-performance materials developed from our proprietary technology for use as electronic materials.

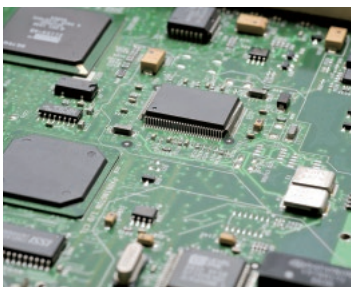
In these applications



LED lighting



Smartphone lenses



Semiconductors

Cosmetics

We contribute to improved health and beauty with hydrating cosmetics that imbue the skin with moisture and function as a barrier.

In these applications



Cosmetics



Daily necessities such as shampoos

Cellulosic Derivatives

We use cellulose, a plant fiber, to create a broad range of consumer products.



Cellulose Acetate

This environment-friendly material decomposes after use into cellulose and acetic acid, substances naturally present in the natural world, by the action of water. It is resistant to heat and chemicals and is employed in many applications

In these applications



LCD films



Eyeglass frames



Cosmetic foundations

Acetate Tow

Manufactured from cellulose acetate. This product is used in cigarettes around the world as a raw material for filters that allow smoke to pass through the unlit end of a cigarette.

In these applications



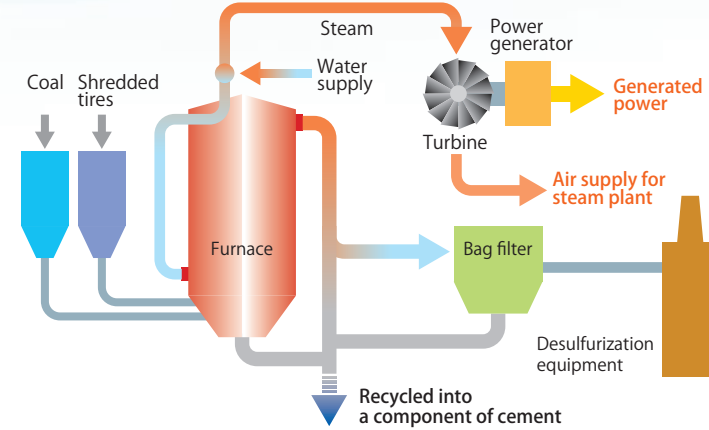
Cigarette filters



Consideration for the environment

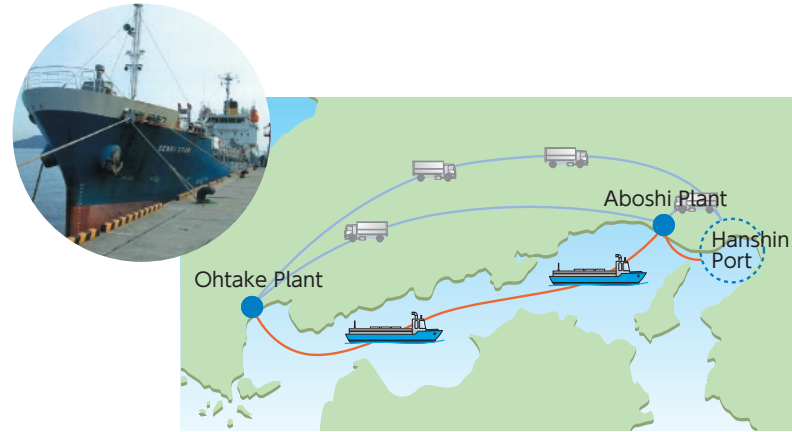
Circulating fluidized bed boiler

In addition to burning coal, we incinerate disused tires that have a low environmental impact to generate the electricity and steam required for various manufacturing processes.



Modal shift

By switching from trucks and other conventional land transportation to transportation by marine vessels, we have increased the amount of cargo moved per trip. This energy-efficient approach significantly reduces carbon dioxide emissions.



Working together with the community

We value our connections with our local communities, and we actively participate in opportunities for close communication.



Science experiment class for elementary school students (Ranran College)



Tree planting ceremony as part of the Native Forests for Life Initiative



Plant and community cleanup



Company tour for high school students

Production and Process Innovation Initiatives

The goal of our plant is to develop and adopt innovative technologies with industry-leading production expertise.

Production Innovation

- Minimizing costs by optimizing the operation of energy plants
- Developing industry-leading production expertise; improving productivity through integration of the entire plant

Process Innovation

- Using bench and pilot testing equipment to commercialize innovative technologies and reduce costs
- Expanding our business with new production processes based on innovative technologies
- Deploying innovative technologies company-wide

Developing personnel who can assume a lead role in manufacturing

Utilizing acquired expertise and technology to quickly launch a business

DAICEL Production Innovation

In order to reduce the burden on operators and encourage them to engage in more creative tasks such as quality improvement, we first introduced plant stabilization and other infrastructure improvements. Moreover, we have simplified and standardized decision-making from an examination of driving information to determining actions. This enabled us to devise a system to support operator decision-making. These efforts have resulted in a roughly 80% reduction in alarms, greater production stability, and an approximate doubling of productivity.



Process Innovation

In order to achieve resource and energy efficiency through new process innovation technologies, we have introduced a small-scale plant with research facilities and are conducting demonstration tests. As a means of achieving the most efficient manufacturing, we will determine which products and processes will be applied to the verification results of these process innovation technologies. We believe this will strengthen our international competitiveness.

