

Research and Development

The DAIKEN Group has aimed at realizing a regenerative society with a focus on the R&D Center and has been proceeding with research and development aimed at creating new shared value that will lead to the resolution of social issues and at expanding new technologies and new businesses for the next generation. In addition, to speed up the far-sighted research and development and expand the domains, we proactively put effort into the co-creation activities with various stakeholders.

Direction based on the pioneer of untrodden, which is the philosophy of research and development

DAIKEN R&D Vision

To become a company where resources circulate by making innovations in industrial materials

We will maximize the possibilities of resources and build a society where resources will sustainably circulate through technological development for industrial materials that support people's lives and the environment.

Areas of research

- Utilization of plant-derived industrial materials
- Restoration and conservation of the natural environment
- Development of unused resources
- Redesign of the construction processes

Bring comfort to daily lives by studying minds and bodies scientifically

We will analyze people, things, and spaces scientifically and deliver comfortable daily lives to everyone through manufacturing and spatial design that will bring new value to people's lives.

Areas of research

- Creation of the comfortable indoor environment
- Environmental design that supports health
- Life sound design
- Design to shape safety



R&D center, a research facility that disseminates the creation of new shared value

Promotion of new business aimed at sustainable value creation

The department in charge of developing the next-generation business has been proceeding with new business development under the theme of digging deep into the existing businesses and searching for new domains. They make full use of various business development methods, such as co-creation with other companies, re-acknowledging our strengths, and the internal venture system, and aim at promptly creating new business. While building schemes that will not be influenced by experience or hunches even in the external environment with a high uncertainty, they conduct flexible activities outside the boundaries of existing businesses. By promoting development and widely cooperating in and outside the company, they will put effort into the creation of new value and creation of new businesses.

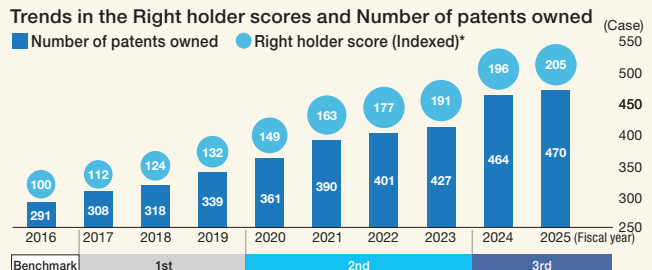


Creation of ideas with other industries



Strategic co-creation and the value creation type of intellectual properties that support sustainable growth

At the intellectual property department, those in charge of management who acquire rights for new value and protect business profits and those in charge of strategies who contribute to the creation of new value toward the realization of new technology and new business come together and put effort into the utilization of intellectual properties as the strategic assets that lead business growth, instead of just using intellectual properties, which are management resources, as the means of protection. Furthermore, in April 2025, to increase inventors' motivation in addition to the strengthening of the quality and quantity of patents, we revised the intellectual property reward system for the first time in seven years. From now on, by formulating intellectual property strategies and linking to the management and development policies, they will support our business cycles from the inside and realize the value creation type of intellectual properties to aim for expansion.



*Right holder score: One of the indices to evaluate the value of the entire patent group owned. The right graph shows values by indexing fiscal 2016, which is the benchmark, as 100 to indicate the changes over the years. Created by using Patent Result Co., Ltd.'s Biz Cruncher.

Initiatives linked to DAIKEN R&D Vision

Areas of research
Utilization of plant-derived industrial materials

Established the manufacturing technology for environment-conscious MDF using the wood-derived adhesive

We developed technologies for industrial materials and building materials that effectively use timber with no waste since the founding of our company. Since 2019, we have been proceeding with the initiatives toward the establishment of the production technology for the environment-conscious MDF without using the petrochemical-based adhesives, and in fiscal 2023, we succeeded at manufacturing MDF prototype using the adhesive made of wood-derived component. We aim to introduce MDF of which the natural resource ratio is 98% to the market within fiscal 2026, and currently, we have been manufacturing prototypes toward the establishment of specifications and the development of the mass production system. Furthermore, we started developing technology for converting wood resources, which have not been used, into raw materials and are enhancing our initiatives for the MDF business to be able to contribute to the reduction of the environmental load and carbon neutrality more than ever.



Naturally derived adhesive



Acacia bark

Areas of research
Life sound design

Acoustics Laboratory (OTOLABO), a new development and design base for acoustic technology

We not only pursue the possibilities of industrial materials but also put effort into research and development aimed at creating comfortable spaces by adding new functions to industrial materials and building materials. We have particularly focused on sound, which is an important element of comfort, and deployed the sound environmental solution business by taking advantage of our actual results in the development, manufacturing, and sales of architectural acoustic products over 40 years. We make full use of simulation technology and measurement technology and contribute to the resolution of the issues in the sound environment with a focus on public and commercial buildings. Furthermore, in anticipation of the expansion of acoustic business, construction of a new development base Acoustics Laboratory (OTOLABO) will complete in November 2025. We will introduce equipment that can conduct high-precision measurements compliant with the Japan Industrial Standards and evaluate performance, such as sound absorbing performance, soundproof performance, and floor impact sound and accelerate the sophistication of acoustic technology and the realization of a comfortable spatial design.



Exterior image of OTOLABO



Voice of an Executive

Since the founding of the company, we have developed many eco-friendly industrial materials and building materials through continuous efforts in research and development as an industry leader. Among the many sustainable industrial materials, one of the greatest of our achievements in recent years is the new wood board "DIO woodcore" (to be released in spring of 2026)", which was created through basic research at the R&D Center. This product draws attention as a substitute for lauan plywood, which has been difficult to replace for quality reasons. At present, DNAL, which is based in Canada, is preparing for mass production. Our research and development efforts are not limited to the development of industrial materials and building materials. We are working on diverse themes that will contribute to the creation of comfortable spaces in expanded research areas in support of the provision of experience in order to offer solutions and contribute to well-being as a pillar of the next long-term vision. As part of these efforts, the completion of the OTOLABO

is slated for November 2025, which will kick off the project to create a new sound environment business. Improving the sound environment is an important factor in enhancing the quality of life. Because interest in sound problems is rising in East Asia and other emerging markets, the demand for soundproofing materials is expected to grow. In order to cater to the ever-changing needs for improving living spaces in Japan and overseas, we aim to achieve a more comfortable and sustainable lifestyle with a focus on research and development related to comfort in the sound environment and other aspects.

Akihiro Takehara
Executive Officer and CTO

