



Feature Amidst expansion of fields contributing to air quality control

Creating Spaces That Meet the Needs of Society by Integrating Technologies of Air Conditioning and Filter with Engineering Prowess

DAIKIN'S APPROACH

In Pursuit of Better Air through Technologies of Air Conditioning and Filter

Recent years have seen growing demand for better air environments as emerging countries experience air pollution due to economic development, and industries like pharmaceuticals and food processing become subject to increasingly stricter sanitary regulations. Against this background, Daikin has been boosting its filter business that remove pollutants in the air, including dust, such as PM2.5, various bacteria, and viruses.

Using the filter and air conditioning technologies it has gained for controlling factors such as temperature and humidity, Daikin globally pursues air environments that ensure safety, health, and comfort from the standpoint of cleanliness, airflow, and odor.

Daikin Group's Filter Business Production Bases

33 bases (As of end of March 2017)



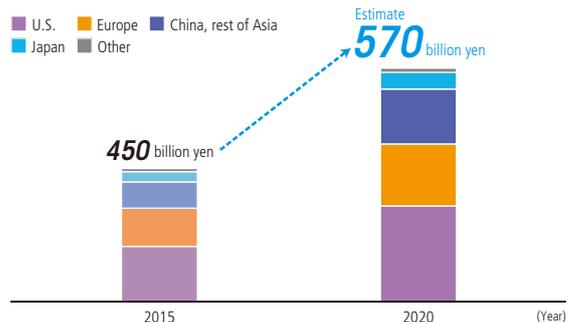
DAIKIN'S PERFORMANCE

Boost Filter Business to Develop Diverse Range of Products Worldwide

Daikin has been expanding its existing filter business and adding more and better products through acquisitions over the years. In 2006, we acquired AAF International, in 2009 Nippon Muki Co., Ltd., and in 2016 Flanders Holdings LLC and Dinair AB.

Today, we boast an extensive lineup: filters for office and residential air conditioners, ultra-high-performance filters for clean rooms that trap 99.9% of particles 0.1µm in size, and massive 100-m² filters used for gas turbines at power plants. These are just some of the ways we contribute to improving air environments in a wide range of settings around the world.

Air Filter Market Size by Region



Note: Compiled by Daikin based on data from "Global Air Market 2014-2018," published by TechNavio

Filters are Ubiquitous



Offices, Homes

Combining a filter with an air conditioner makes it possible to clear the room air of matter such as PM2.5, pollen, and disease-causing bacteria and viruses.



Hospitals, Pharmaceutical Plants

A high level of hygiene management can be achieved by combining ultra-high-performance filters and filters for preventing the breeding of bacteria.



Metal Processing Plants, Cement Plants

Grit, dust, and other harmful substances generated in plants can be removed from the air by dust-collecting systems. This helps to prevent air pollution both inside and in the vicinity of the plant.



Power Stations

By removing dust from the air, filters prevent pressure loss in turbines. This helps maintain power generating efficiency and saves energy.

Bringing Customers Optimal Air by Utilizing Daikin Equipment and Engineering Prowess

We do more than just sell air conditioners, filters, and other equipment. We hold comprehensive discussions with customers, and we leverage our engineering prowess to combine technologies and product systems so that we can provide the air environment that meets their exact needs.

For example, at the Gijón steel plant of ArcelorMittal S.A. in Spain, we are engaged from designing the air conditioning system to constructing the dust collection system utilizing filters. Once the system was installed, the plant was able to prevent the dispersion of dust from the steel-making process, thus preventing air pollution in the area surrounding the plant and providing a healthy and comfortable working environment for employees.

Takara Bio Inc. of Shiga, Japan, won a 2016 Facility of the Year Award (FOYA)* in the facility integration category for its Center for Gene and Cell Processing Construction Project. The center required a highly advanced closed antibacterial area for stem cell production. Daikin proposed an overall building layout that matched the production process, as well as air conditioning technology to control the cleanliness, temperature, humidity, and pressure in the room. By designing facilities free of bacterial and viral crossover and having no contact between differing products, workers, and air environments, we are contributing to higher quality pharmaceuticals and safe environments.



* Sponsored by the International Society for Pharmaceutical Engineering (ISPE), the Facility of the Year Awards are an annual program that recognizes state-of-the-art projects utilizing new, innovative technologies to improve the quality of products, to reduce the cost of producing high-quality medicines, and demonstrate advances in project delivery.

Stakeholder's Comment

Hopes That Daikin Will Contribute to Energy Efficiency and Better Indoor Environments

An important part of achieving a sustainable society is maintaining a healthy and comfortable indoor environment that contributes to productivity. People generally spend more than 90% of their time indoors and breathe 15 kg of air each day. I hope that Daikin, as an air conditioning manufacturer, will make further advances in air purification technology and contribute to improved indoor environments.



Dr. Bjarne W. Olesen
Professor,
Technical University
of Denmark

NEXT CHALLENGE

Offering Total Support for Creation of New Value in Air and Our Surroundings

Daikin continuously strengthens its capabilities in the development, engineering, and maintenance of equipment so that it can offer customers air environments that meet their complete range of needs.

Our next step is to continue creating new value. Besides working to meet conventional needs such as preventing air pollutants and meeting the hygiene management needs for pharmaceutical, healthcare, and food processing industries, we will exceed existing market needs to further raise air quality in offices and homes so that people can enjoy a higher level of health and comfort that enables greater concentration and relaxation.